

Alberta Child Care

Facility-Based Child Care Licensing Key Indicator Predictor Rule Results
April 21, 2021

Introduction

This report provides the methodology and results from the data analysis in developing the Alberta Child Care's (Alberta) licensing Key Indicator System (KIS) as well as additional analyses and recommendations based on the findings.

The methodology used for this project was initially developed by Dr. Fiene in 1985 and continuously refined since that time. It is the industry standard for KIS development. The identified licensing key indicators were very similar to other licensing key indicators generated in other provinces in Canada and in states in the United States.

The data provided by Alberta for analysis was such that it allowed for extremely reliable results. Because of having such a preponderance of fully compliant programs (65 – 84%) it was possible to utilize this rather large group of programs as a statistical high compliant group. By doing this, it eliminates any false negatives in the data analyses when comparing high and low compliant groups with individual rule/regulation/standard compliance. Also, the large number of programs provided a much higher threshold for licensing key indicator inclusion or exclusion, and the licensing key indicators demonstrated significant level of variance and regulatory non-compliance without being overly out of compliance nor being overly compliant.

The facility-based programs for which indicators were identified included Child Care Centers, Preschool Programs, and Out of School Care (OSC). There was a great deal of consistency across each services type. which adds to the stability of the data demonstrates that the identified licensing key indicators are consistent with previous studies.

Methodology

The number of programs included in the analysis was as follows:

- Child Care Centers = 1.078
- Preschool Programs = 693
- OSC = 1.177

The first key step in the methodology is determining the data distribution to ascertain the variance in the data and the skewness of the data distribution. Once that is determined, the thresholds for the high and low groups for regulatory compliance can be determined. It is also prudent to determine the data distributions for the individual rules but that is not as critical as determining the data distribution in the total levels of regulatory compliance. Regulatory compliance levels will be dominated by full (100%) regulatory compliance.

Once the data distribution is determined a 2 x 2 matrix is constructed in which the top 25% and the bottom 25% of the data distribution is used to construct the matrix. Each rule or regulation or standard is than compared to the overall regulatory compliance levels, i.e., high vs low compliance. A statistic called the phi coefficient is used to describe the relationship. In some jurisdictions, they have used the "Fiene Coefficient or Indicators" to describe the relationship since it is being used for licensing key indicators. Washington state and the province of British Columbia have used these designations in the past.

The resulting licensing key indicators should constitute approximately 10% of the overall number of rules or regulations. In Alberta's case it was within the appropriate threshold. The addition of specific risk assessment rules and randomly-selected rules will achieve the desired 10% threshold. The key indicator rules are those that statistically predict overall regulatory compliance. If a program is in compliance with all the licensing key indicator rules than they statistically predict overall regulatory compliance with all the rules. And the opposite is true, if non-compliance is found with any of the licensing key indicator rules than it statistically predicts overall regulatory non-compliance with all the rules.

Results

The following three tables show the rules that were statistically significant and reached threshold level for licensing key indicator rules. All the results are statistically significant at a p < .0001 level.

Table 1: Child Care Centers (n = 1,078 facilities)

Rule	Brief Content
DC2.1	Program/Needs of Children
DC23.1.a	Daily attendance for children: Arrival and departure
DC23.1.b.i	Daily attendance for staff: Arrival and departure
DC24.a	Portable Record
DC25.1.a.ii	Current Criminal Records Check
DC27.1.a	Staff child ratios
DC28.1.b	Supervision of children at all times
DC30.2	Staff Qualifications

Table 2: Preschool Programs (n = 693 facilities)

Rule	Brief Content
PS10.1.c	Medication: Written Consent of Children's Parent
PS17.1.d	Children's Record: Emergency Contact Information
PS19.a	Portable Records
PS20.1.a.ii	Criminal Records Current
PS20.1.b	First Aid Certificate

Table 3: OSC (n = 1,177 facilities)

Rule	Brief Content
OSC.2.1	Program/Needs of Children
OSC20.1.a	Daily attendance record for each child
OSC20.1.b.i	Daily attendance for staff: arrival and departure
OSC20.1.b.ii	Daily attendance for staff: Hours providing child care
OSC21.a	Portable Record
OSC22.1.a.ii	Criminal records check
OSC24.1.a	Staff child ratio
OSC25.1.b	Supervision of children at all times
OSC27.2	Staff qualifications

Analysis and Recommendations

This report provides specific results for the province of Alberta while also providing some very enticing results that can be added to the RIKI/ECPQI2M International Regulatory Compliance Database maintained at the Research Institute for Key Indicators/Penn State. The data analyses from this report clearly support the identification of either similar or the same licensing key indicators that have been identified in several other studies conducted in the United States and in Canada over the past two decades.

Alberta currently has the necessary elements for the design and implementation of a differential monitoring approach with all their early care and education facilities. By using the licensing key indicators generated by each of the service types, staff can begin to use these core rules for program monitoring. These data will need to be coupled with the work tools, policies and procedures that are being crafted to complement these results by both Alberta staff and NARA consultants. The resulting system will provide both an effective and efficient approach to monitoring which provides a more targeted program monitoring focus. Differential or targeted monitoring is very different from the general variety program monitoring approach that emphasizes a one-size fits all focus.

A second consideration in how to use this report and data analyses is for Alberta to collaborate with the other provinces in Canada that have also developed similar differential monitoring systems in British Columbia, Saskatchewan, and Ontario. In Ontario, they call their differential monitoring system "Tiered Licensing" rather than differential monitoring but it is basically the same approach. By doing this, Canada can begin to move on a national level to identifying generic licensing indicators similar to what has been done in the USA. In fact, the Canadian generic licensing indicators are very similar to what has already been developed in the USA. For example, although the specific language may vary from the USA to Canada, the essence of the rules/regulations are basically the same. Some examples are the following: hazard free environment, staff-child ratios, outdoor playgrounds are safe, child abuse prevention strategies are in place, proper supervision of children is present, and staff qualifications are emphasized.

And lastly, Alberta could join in a coalition with their other provinces in applying the new Child Care Aware of America (CCAoA) Licensing Benchmarks to their own rules/regulations. This would help to provide an international perspective on this new CCAoA project and study. As I have encouraged the broad adaption or

adoption of Caring for Our Children Basics in many ECE jurisdictions, I will be encouraging jurisdictions to begin assessing their rules/regulations with the CCAoA Licensing Benchmarks.

For next steps, once the policies and procedures as well as the training of licensing staff occurs it will be time to validate the licensing key indicator approach. The suggested methodology for doing validation studies will be drawn from Zellman & Fiene's (2012) research monograph on how to conduct validation studies (please see the Appendices for a publication that describes the methodology). In this research brief is a conceptual framework for doing validation studies. The research brief has been used by Georgia, Washington and the province of Saskatchewan in validating their respective differential monitoring systems. The validation study for Alberta will begin the end of this year and run into the beginning part of 2022. Once the validation study is completed the licensing key indicator approach will be able to go to scale throughout the province.

In the following Appendices, there are several examples and supportive publications for the above analyses and recommendations. These publications provide the context for what is being suggested in the previous paragraphs.

APPENDICES

Regulatory Compliance + Licensing Key Indicator Regression Analyses: How well the Key Indicators predict overall regulatory compliance

Caring for Our Children Basics: Voluntary national standards in the USA

Instrument Based Program Monitoring and Key Indicator Systems: The original article describing the Key Indicator Methodology

Quality Indicators: ASPE research brief describing the 13 Key Indicators

International Study Using CCAoA Licensing Benchmarks: Article describing an international study utilizing the 13 Key Indicators

CCAoA Licensing Benchmarks Project: New licensing benchmarking study

Validation Framework Research Brief: The OPRE research brief describing the validation framework to be utilized in Alberta

Rule Compliance & Rule Performance: Paper describing the balancing of regulatory compliance and program quality that can be used in Alberta

Key Licensing Measurement Parameters: Paper describing some key issues related to licensing measurement to be addressed in developing the Alberta system

REGRESSION

REGRESSION

/VARIABLES= DC2_1 DC23_1_a DC23_1_b_i DC24_a DC25_1_a_ii DC27_1_a DC28_1_b DC30_2

/DEPENDENT= NC

/METHOD=ENTER

/STATISTICS=COEFF R ANOVA.

Model Summary (NC)

R	R Square	Adjusted R Square	Std. Error of the Estimate
.83	.68	.68	1.25

ANOVA (NC)

	Sum of Squares	df	Mean Square	F	Sig.
Regression	3587.85	8	448.48	288.28	.000
Residual	1663.08	1069	1.56		
Total	5250.92	1077			

Coefficients (NC)

	Unstandardized		Standardized		
	Coefficients		Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.17	.04	.00	4.12	
DC2 1	1.39	.15	.17	9.21	000
	1.00	.10	•17		000
DC23_1_a	2.12	.17	.23	12.49	
DC23 1 b i	2.38	.21	.22	11.45	000
					000
DC24_a	2.87	.16	.33	17.47	000
DC25 1 a ii	2.96	.22	.23	13.38	
					000
DC27_1_a	.93	.21	.08	4.39	000
DC28 1 b	1.10	.18	.12	6.02	
		10	10	40.00	000
DC30_2	2.07	.19	.19	10.62	000
					000

REGRESSION

REGRESSION

/VARIABLES= OSC2_1 OSC20_1_a OSC20_1_b_i OSC21_a OSC22_1_a_ii OSC25_1_b OSC27_2 OSC24_1_a OSC20_1_b_ii /DEPENDENT= NC

/METHOD=ENTER

/STATISTICS=COEFF R ANOVA.

Model Summary (NC)

R	R Square	Adjusted R Square	Std. Error of the Estimate
.83	.70	.69	.78

ANOVA (NC)

	Sum of Squares	df	Mean Square	F	Sig.
Regression	1619.23	9	179.91	296.29	.000
Residual	708.63	1167	.61		
Total	2327.86	1176			

Coefficients (NC)

	Unstandardized		Standardized		
	Coefficients		Coefficients		
	B	Std. Error	Beta	t	Sig.
(Constant)	.11	.02	.00	4.33	000
OSC2_1	1.22	.14	.16	8.93	000
OSC20_1_a	.79	.14	.10	5.62	000
OSC20_1_b_i	1.64	.14	.20	11.60	000
OSC21_a	2.24	.11	.34	19.61	000
OSC22_1_a_ii	1.58	.15	.17	10.30	. 000
OSC25_1_b	1.23	.14	.16	8.91	000
OSC27_2	2.02	.14	.24	14.31	000
OSC24_1_a	1.39	.20	.12	6.98	
OSC20_1_b_ii	2.60	.21	.21	12.17	000
					000

GET

GET FILE="/home/MyDropbox/-1aNARA AL SAV Files/NARA AL ps nc hilo1.sav".

REGRESSION

REGRESSION

/VARIABLES= PS10_1_c PS17_1_d PS19_a PS20_1_a_ii PS20_1_b /DEPENDENT= NC /METHOD=ENTER /STATISTICS=COEFF R ANOVA.

Model Summary (NC)

R	R Square	Adjusted R Square	Std. Error of the Estimate
.83	.69	.69	.48

ANOVA (NC)

	Sum of Squares	df	Mean Square	F	Sig.
Regression	357.19	5	71.44	307.68	.000
Residual	159.51	687	.23		
Total	516.70	692			

Coefficients (NC)

	Unstandardized Coefficients		Standardized Coefficients		
	В	Std. Error	Beta	t	Sig.
(Constant)	.11	.02	.00	5.52	•
DC10 1 -	1 4 4	1.0	2.2	10.00	000
PS10_1_c	1.44	.13	.23	10.90	000
PS17_1_d	1.69	.20	.29	8.59	
PS19 a	1.54	.16	.33	9.85	000
F519_d	1.54	.10	.33	9.03	000
PS20_1_a_ii	1.32	.11	.26	11.87	
DG00 4 1		0.4	0.4	40.00	000
PS20_1_b	2.93	.21	.31	13.86	000
					000

2015

Caring for Our Children Basics Health and Safety Foundations for Early Care and Education



Administration for Children and Families

U.S. Department of Health and Human Services

6/25/2015



Contents

Acknowledgements	4
Introduction	5
Staffing	8
1.1.1.1-1.1.1.5 Ratios for Centers and Family Child Care Homes	8
1.2.0.2 Background Screening	8
1.4.1.1/1.4.2.3 Pre-service Training/Orientation	9
1.4.3.1 First Aid and CPR Training for Staff	9
1.4.4.1/1.4.4.2 Continuing Education for Directors, Caregivers/Teachers in Centers, and Family Child Care Homes	9
1.4.5.2 Child Abuse and Neglect Education	9
Program Activities for Healthy Development	10
2.1.1.4 Monitoring Children's Development/Obtaining Consent for Screening	10
2.1.2.1/2.1.3.1 Personal Caregiver/Teacher Relationships for Birth to Five-Year-Olds	10
2.2.0.1 Methods of Supervision of Children	10
2.2.0.4 Supervision near Water	10
2.2.0.8 Preventing Expulsions, Suspensions, and Other Limitations in Services	11
2.2.0.9 Prohibited Caregiver/Teacher Behaviors	11
Health Promotion and Protection	12
3.1.3.1 Active Opportunities for Physical Activity	12
3.1.4.1 Safe Sleep Practices and SIDS Risk Reduction	12
3.1.5.1 Routine Oral Hygiene Activities	12
3.2.1.4 Diaper Changing Procedure	12
3.2.2.1 Situations that Require Hand Hygiene	13
3.3.0.1 Routine Cleaning, Sanitizing, and Disinfecting	13
3.2.3.4 Prevention of Exposure to Blood and Body Fluids	13
3.4.1.1 Use of Tobacco, Alcohol, and Illegal Drugs	13
3.4.3.1 Emergency Procedures	14
3.4.4.1 Recognizing and Reporting Suspected Child Abuse, Neglect, and Exploitation	14
3.4.4.3 Preventing and Identifying Shaken Baby Syndrome and Abusive Head Trauma	14
3.4.5.1 Sun Safety Including Sunscreen	14
3.4.6.1 Strangulation Hazards	14

	3.5.0.1 Care Plan for Children with Special Health Care Needs	14
	3.6.1.1 Inclusion/Exclusion/Dismissal of Children	15
	3.6.1.4 Infectious Disease Outbreak Control	15
	3.6.3.1/3.6.3.2 Medication Administration and Storage	15
	3.6.3.3 Training of Caregivers/Teachers to Administer Medication	16
١	lutrition and Food Service	16
	4.2.0.3 Use of U.S. Department of Agriculture (USDA), Child and Adult Care Food Program (CACFP) Guidelines	
	4.2.0.6 Availability of Drinking Water	16
	4.2.0.10 Care for Children with Food Allergies	16
	4.3.1.3 Preparing, Feeding, and Storing Human Milk	17
	4.3.1.5 Preparing, Feeding, and Storing Infant Formula	17
	4.3.1.9 Warming Bottles and Infant Foods	18
	4.5.0.10 Foods that Are Choking Hazards	18
	4.8.0.1 Food Preparation Area Access	18
	4.9.0.1 Compliance with U.S. Food and Drug Administration (FDA) Food Code and State an Local Rules	
F	acilities, Supplies, Equipment, and Environmental Health	18
	5.1.1.2 Inspection of Buildings	18
	5.1.1.3 Compliance with Fire Prevention Code	18
	5.1.1.5 Environmental Audit of Site Location	18
	5.1.6.6 Guardrails and Protective Barriers	19
	5.2.4.2 Safety Covers and Shock Protection Devices for Electrical Outlets	19
	5.2.4.4 Location of Electrical Devices near Water	19
	5.2.8.1 Integrated Pest Management	19
	5.2.9.1 Use and Storage of Toxic Substances	19
	5.2.9.5 Carbon Monoxide Detectors	19
	5.3.1.1/5.5.0.6/5.5.0.7 Safety of Equipment, Materials, and Furnishings	19
	5.3.1.12 Availability and Use of a Telephone or Wireless Communication Device	20
	5.4.5.2 Cribs and Play Yards	20
	5.5.0.8 Firearms	21
	5.6.0.1: First Aid and Emergency Supplies	21
	lay Areas/Playgrounds and Transportation	21

6.1.0.6/6.1.0.8/6.3.1.1 Location of Play Areas near Bodies of Water/ Enclosures for Outdoo	
Play Areas/Enclosure of Bodies of Water	
6.2.3.1 Prohibited Surfaces for Placing Climbing Equipment	. 21
6.2.5.1 Inspection of Indoor and Outdoor Play Areas and Equipment	. 22
6.3.2.1 Lifesaving Equipment	. 22
6.3.5.2 Water in Containers	. 22
6.5.1.2 Qualifications for Drivers	. 22
6.5.2.2 Child Passenger Safety	. 23
6.5.2.4 Interior Temperature of Vehicles	. 23
6.5.3.1 Passenger Vans	. 23
Infectious Disease	. 23
7.2.0.1 Immunization Documentation	. 23
7.2.0.2 Unimmunized Children	. 24
7.2.0.3 Immunization of Caregivers/Teachers	. 24
Policies	. 25
9.2.4.1 Written Plan and Training for Handling Urgent Medical Care or Threatening Inciden	
	. 25
9.2.4.3/9.2.4.5 Disaster Planning, Training and Communication/Emergency and Evacuation Drills	
9.2.4.7 Sign-In/Sign-Out System	
9.2.4.8 Authorized Persons to Pick Up Child	. 26
9.4.1.12 Record of Valid License, Certificate, or Registration of Facility or Family Child Care Home	
9.4.2.1 Contents of Child Records	. 26
10.4.2.1 Frequency of Inspections for Child Care Centers and Family Child Care Homes	. 26
Resources Consulted in Development	. 27

Acknowledgements

Caring for our Children Basics is based on Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs, Third Edition. We would like to acknowledge the extensive work of the American Academy of Pediatrics; American Public Health Association; National Resource Center for Health and Safety in Child Care and Early Education; and Maternal and Child Health Bureau, Department of Health and Human Services in developing these standards. We would also like to especially thank the following experts for their help in this effort:

Abbey Alkon, RN, Ph.D.
School of Nursing
University of California, San Francisco

Judy Collins Consultant

Richard Fiene, Ph.D. Research Institute for Key Indicators

Walter Gilliam, Ph.D.
Edward Zigler Center in Child Development and Social Policy
Yale University Child Study Center

Danette Swanson Glassy, MD, FAAP American Academy of Pediatrics

Barbara Hamilton, MA
Maternal and Child Health Bureau
Health Resources and Services
Administration
U.S. Department of Health and Human
Services

Pauline D. Koch Koch Consulting

Marilyn Krajicek, Ed.D., RN, FAAN National Resource Center for Health and Safety in Child Care and Early Education College of Nursing University of Colorado Denver

Beverly Schmalzreid, Ph.D. Department of Child Development South Texas College

Nancy Von Bargen, MS
Office of Child Care National Center for
Child Care Quality Improvement

Jeanne VanOrsdal, M. Ed. Early Education and Child Care Initiatives American Academy of Pediatrics

Marcus Williams National Association for Regulatory Administration

Introduction

Evidence continues to mount that demonstrates the profound influence children's earliest experiences have on later success. Nurturing and stimulating care given in the early years builds optimal brain architecture that allows children to maximize their potential for learning. Interventions in the first years of life are capable of altering the course of development and shift the odds for those at risk of poor outcomes toward more adaptive ones.

To meet the needs of our nation's most vulnerable children and families, the early care and education programs administered by the Administration for Children and Families (ACF) are designed to both provide enriching early childhood experiences that promote the long-term success of children and assist low-income working parents with the cost of child care. In partnership with families, all early care and education programs should support children's needs and age-appropriate progress across domains of language and literacy development; cognition and general knowledge; approaches to learning; physical health and well-being and motor development, and social and emotional development that will improve readiness for kindergarten. Head Start, Early Head Start, pre-Kindergarten, and child care programs aim to support the ability of parents, teachers, child care providers and other community members to interact positively with children in stable and stimulating environments to help create a sturdy foundation for later school achievement, economic productivity, and responsible citizenship.

ACF strives to achieve the following goals in all early childhood programs:

- Build successful Early Learning and Development Systems across Early Head Start, Head Start, child care, and pre-Kindergarten.
- Promote high quality and accountable early learning and development programs for all children.
- Ensure an effective early childhood workforce.
- Improve the physical, developmental, mental health, and social well-being of children in early learning and development settings.
- Promote family engagement and support in a child's development with the recognition that parents are their children's primary teachers and advocates.
- Build on the strengths and address the needs of culturally and linguistically diverse children and families.
- Improve the health and safety of early learning and development settings

While high quality early care and education settings can have significant developmental benefits and other positive long term effects for children well into their adult years, poor quality settings can result in unsafe environments that disregard children's basic physical and emotional needs leading to neglect, toxic stress, injury, or even death. As a result, it is not surprising that health and safety has been identified in multiple parent surveys as one of the most important factors to consider when evaluating child care options (Shlay, 2010). Health and

safety practices provide the foundation on which states and communities build quality early care and education settings.

Licensing of center-based care and family child care homes is a process that establishes the minimum requirements necessary to protect the health and safety of children in care. State licensing requirements are regulatory requirements, including registration or certification requirements, established under State law necessary for a provider to legally operate and provide child care services.

From 2009 to 2011, more than half of states made changes to licensing regulations for center-based care and family child care homes. For example, states increased the pre-service training requirements for center directors, and increased the number of ongoing training hours for all center staff roles, as well as family child care providers. Specifically, 47 States require center staff and 37 States require family child care providers to complete first aid training. With respect to CPR, 46 States require training of center staff and 36 require it of family child care providers. More than half of States require center staff to complete training on child abuse and neglect (27 States) or the prevention of communicable diseases (25 States). The number of States requiring fingerprint checks of federal records and checks of sex offender registries has increased since 2007. All States that license centers and more than 85% that license family child care homes have requirements about the nutritional content of meals and snacks served to children. States have added requirements about fences for outdoor space, transportation, and emergency preparedness, and more States prohibit firearms in child care centers (Office of Child Care National Center on Child Care Quality Improvement and National Association for Regulatory Administration, 2013).

Great progress has been made in States to safeguard children in out of home care, yet more work must be done to ensure children can learn, play, and grow in settings that are safe and secure. States vary widely in the number and content of health and safety standards as well as the means by which they monitor compliance. Some early care and education programs may receive no monitoring while others receive multiple visits. Further, some programs who receive funding from multiple sources may receive repeated monitoring visits that evaluate programs against complicated, and sometimes conflicting, standards. While there are differences in health and safety requirements by funding stream (e.g. Head Start, Child Care Development Fund, Individuals with Disabilities Education Act, and Title I), early childhood program type (e.g. center-based, family child care homes) and length of time in care, there are basic standards that must be in place to protect children no matter what type of variation in program. Until now, there has been no federal guidance that supports States in creating basic, consistent health and safety standards across early care and education settings.

ACF is pleased to announce Caring for Our Children Basics: Health and Safety Foundations for Early Care and Education. Caring for our Children Basics represents the **minimum** health and safety standards experts believe should be in place where children are cared for outside of their homes. Caring for our Children Basics seeks to reduce the conflicts and redundancy found in program standards linked to multiple funding streams. Caring for our Children Basics should not

be construed to represent all standards that should be present to achieve the highest quality of care and early learning. For example, the caregiver training requirements outlined in these standards are designed only to prevent harm to children, not to ensure their optimal development and learning.

Caring for our Children Basics is the result of work from both federal and non-federal experts and is founded on Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs, Third Edition, created by the American Academy of Pediatrics; American Public Health Association; and National Resource Center for Health and Safety in Child Care and Early Education with funding from the Maternal and Child Health Bureau. The Office of Child Care, Office of Head Start, Office of the Deputy Assistant Secretary for Early Childhood, and the Maternal and Child Health Bureau were instrumental in this effort. Although use of Caring for our Children Basics is not federally required, the set of standards was posted for public comment in the Federal Register to provide ACF with practical guidance to aid in refinement and application. The standards, regulations, and guidance with which Caring for our Children Basics was produced are located at the end of this document.

Quality care can be achieved with consistent, basic health and safety practices in place. Though **voluntary**, ACF hopes *Caring for Our Children Basics* will be a helpful resource for states and other entities as they work to improve health and safety standards in both licensing and quality rating improvement systems (QRIS). As more states build their QRIS, it is hoped that *Caring for Our Children Basics* will support continuous quality improvement in programs as they move to higher levels of quality and improve the overall health and well-being of **all** children in out-of-home settings. In addition, ACF anticipates *Caring for Our Children Basics* will support efficiency and effectiveness of monitoring systems for early care and education settings. A common framework will assist the Nation in working towards and achieving a more consistent foundation for quality upon which families can rely.

Staffing

1.1.1.1-1.1.5 Ratios for Centers and Family Child Care Homes

Appropriate ratios should be kept during all hours of program operation. Children with special health care needs or who require more attention due to certain disabilities may require additional staff on-site, depending on their needs and the extent of their disabilities.

In center-based care, child-provider ratios should be determined by the age of the majority of children and the needs of children present.

	Child Care Centers
Age	Maximum Child: Provider Ratio
≤ 12 months	4:1
13-23 months	4:1
24-35 months	4:1-6:1
3-year-olds	9:1
4- to 5-year-olds	10:1

In family child care homes, the provider's own children under the age of 6, as well as any other children in the home temporarily requiring supervision, should be included in the child: provider ratio. In family child care settings where there are mixed age groups that include infants and toddlers, a maximum ratio of 6:1 should be maintained and no more than two of these children should be 24 months or younger. If all children in care are under 36 months, a maximum ratio of 4:1 should be maintained and no more than two of these children should be 18 months or younger. If all children in care are 3 years old, a maximum ratio of 7:1 should be preserved. If all children in care are 4 to 5 years of age, a maximum ratio of 8:1 should be maintained.

1.2.0.2 Background Screening

All caregivers/teachers and staff in early care and education settings (in addition to any individual age 18 and older, or a minor over age 12 if allowed under State law and if a registry/database includes minors, residing in a family child care home) should undergo a complete background screening upon employment and once at least every five years thereafter. Screening should be conducted as expeditiously as possible and should be completed within 45 days after hiring. Caregivers/teachers and staff should not have unsupervised access to children until screening has been completed. Consent to the background investigation should be required for employment consideration. The comprehensive background screening should include the following:

a) A search of the State criminal and sex offender registry or repository in the State where the child care staff member resides, and each State where such staff member resided during the preceding 5 years;

- A search of State-based child abuse and neglect registries and databases in the State where the child care staff member resides, and each State where such staff member resided during the preceding 5 years; and
- c) A Federal Bureau of Investigation fingerprint check using Next Generation Identification.

Directors/programs should review each employment application to assess the relevancy of any issue uncovered by the complete background screening, including any arrest, pending criminal charge, or conviction, and should use this information in employment decisions in accordance with state laws.

1.4.1.1/1.4.2.3 Pre-service Training/Orientation

Before or during the first three months of employment, training and orientation should detail health and safety issues for early care and education settings including, but not limited to, typical and atypical child development; pediatric first aid and CPR; safe sleep practices, including risk reduction of Sudden Infant Death Syndrome/Sudden Unexplained Infant Death (SIDS/SUID); poison prevention; shaken baby syndrome and abusive head trauma; standard precautions; emergency preparedness; nutrition and age-appropriate feeding; medication administration; and care plan implementation for children with special health care needs. Caregivers/teachers should complete training before administering medication to children. See Standard 3.6.3.3 for more information. All directors or program administrators and caregivers/teachers should document receipt of training.

Providers should not care for children unsupervised until they have completed training in pediatric first aid and CPR; safe sleep practices, including risk reduction of Sudden Infant Death Syndrome/Sudden Unexplained Infant Death (SIDS/SUID); standard precautions for the prevention of communicable disease; poison prevention; and shaken baby syndrome/abusive head trauma.

1.4.3.1 First Aid and CPR Training for Staff

All staff members involved in providing direct care to children should have up-to-date documentation of satisfactory completion of training in pediatric first aid and current certification in pediatric CPR. Records of successful completion of training in pediatric first aid and CPR should be maintained in the personnel files of the facility.

1.4.4.1/1.4.4.2 Continuing Education for Directors, Caregivers/Teachers in Centers, and Family Child Care Homes

Directors and caregivers/teachers should successfully complete intentional and sequential education/professional development in child development programming and child health, safety, and staff health based on individual competency and any special needs of the children in their care.

1.4.5.2 Child Abuse and Neglect Education

Caregivers/teachers should be educated on child abuse and neglect to establish child abuse and neglect prevention and recognition strategies for children, caregivers/teachers, and parents/guardians. The education should address physical, sexual, and psychological or

emotional abuse and neglect. Caregivers/teachers are mandatory reporters of child abuse or neglect. Caregivers/teachers should be trained in compliance with their state's child abuse reporting laws.

Program Activities for Healthy Development

2.1.1.4 Monitoring Children's Development/Obtaining Consent for Screening

Programs should have a process in place for age-appropriate developmental and behavioral screenings for all children at the beginning of a child's enrollment in the program, at least yearly thereafter, and as developmental concerns become apparent to staff and/or parents/guardians. Providers may choose to conduct screenings, themselves; partner with a local agency/health care provider/specialist who would conduct the screening; or work with parents in connecting them to resources to ensure that screening occurs. This process should consist of parental/guardian education, consent, and participation as well as connection to resources and support, including the primary health care provider, as needed. Results of screenings should be documented in child records.

2.1.2.1/2.1.3.1 Personal Caregiver/Teacher Relationships for Birth to Five-Year-Olds

Programs should implement relationship-based policies and program practices that promote consistency and continuity of care, especially for infants and toddlers. Early care and education programs should provide opportunities for each child to build emotionally secure relationships with a limited number of caregivers/teachers. Children with special health care needs may require additional specialists to promote health and safety and to support learning.

2.2.0.1 Methods of Supervision of Children

In center-based programs, caregivers/teachers should directly supervise children under age 6 by sight and sound at all times. In family child care settings, caregivers should directly supervise children by sight or sound. When children are sleeping, caregivers may supervise by sound with frequent visual checks.

Developmentally appropriate child-to-staff ratios should be met during all hours of operation, and safety precautions for specific areas and equipment should be followed. Children under the age of 6 should never be inside or outside by themselves.

2.2.0.4 Supervision near Water

Constant and active supervision should be maintained when any child is in or around water. During swimming and/or bathing where an infant or toddler is present, the ratio should always be one adult to one infant/toddler. During wading and/or water play activities, the supervising adult should be within an arm's length providing "touch supervision." Programs should ensure that all pools have drain covers that are used in compliance with the Virginia Graeme Baker Pool and Spa Safety Act.

2.2.0.8 Preventing Expulsions, Suspensions, and Other Limitations in Services

Programs should have a comprehensive discipline policy that includes developmentally appropriate social-emotional and behavioral health promotion practices as well as discipline and intervention procedures that provide specific guidance on what caregivers/teachers and programs should do to prevent and respond to challenging behaviors. Programs should ensure all caregivers/teachers have access to pre- and in-service training on such practices and procedures. Practices and procedures should be clearly communicated to all staff, families, and community partners, and implemented consistently and without bias or discrimination. Preventive and discipline practices should be used as learning opportunities to guide children's appropriate behavioral development.

Programs should establish policies that eliminate or severely limit expulsion, suspension, or other exclusionary discipline (including limiting services); these exclusionary measures should be used only in extraordinary circumstances where there are serious safety concerns¹ that cannot otherwise be reduced or eliminated by the provision of reasonable modifications.

2.2.0.9 Prohibited Caregiver/Teacher Behaviors

The following behaviors should be prohibited in all early care and education settings:

- a) The use of corporal punishment\ including, but not limited to:
 - i. Hitting, spanking, shaking, slapping, twisting, pulling, squeezing, or biting;
 - ii. Demanding excessive physical exercise, excessive rest, or strenuous or bizarre postures;
 - iii. Compelling a child to eat or have in his/her mouth soap, food, spices, or foreign substances;
 - iv. Exposing a child to extremes of temperature.
- b) Isolating a child in an adjacent room, hallway, closet, darkened area, play area, or any other area where a child cannot be seen or supervised;
- c) Binding, tying to restrict movement, or taping the mouth;
- d) Using or withholding food or beverages as a punishment;
- e) Toilet learning/training methods that punish, demean, or humiliate a child;
- f) Any form of emotional abuse, including rejecting, terrorizing, extended ignoring, isolating, or corrupting a child;
- g) Any abuse or maltreatment of a child;;
- h) Abusive, profane, or sarcastic language or verbal abuse, threats, or derogatory remarks about the child or child's family;
- i) Any form of public or private humiliation, including threats of physical punishment (1);
- j) Physical activity/outdoor time taken away as punishment;
- k) Placing a child in a crib for a time-out or for disciplinary reasons.

¹ Determinations of safety concerns must be based on actual risks, best available objective evidence, and cannot be based on stereotypes or generalizations.

Health Promotion and Protection

3.1.3.1 Active Opportunities for Physical Activity

Programs should promote developmentally appropriate active play for all children, including infants and toddlers, every day. Children should have opportunities to engage in moderate to vigorous activities indoors and outdoors, weather permitting.

3.1.4.1 Safe Sleep Practices and SIDS Risk Reduction

All staff, parents/guardians, volunteers, and others who care for infants in the early care and education setting should follow safe sleep practices as recommended by the American Academy of Pediatrics (AAP). Cribs must be in compliance with current U.S. Consumer Product Safety Commission (CPSC) and ASTM International safety standards. See Standard 5.4.5.2 for more information.

3.1.5.1 Routine Oral Hygiene Activities

Caregivers/teachers should promote good oral hygiene through learning activities including the habit of regular tooth brushing.

3.2.1.4 Diaper Changing Procedure

The following diaper changing procedure should be posted in the changing area and followed to protect the health and safety of children and staff:

- Step 1: Before bringing the child to the diaper changing area, perform hand hygiene and bring supplies to the diaper changing area.
- Step 2: Carry/bring the child to the changing table/surface, keeping soiled clothing away from you and any surfaces you cannot easily clean and sanitize after the change. Always keep a hand on the child.
- Step 3: Clean the child's diaper area.
- Step 4: Remove the soiled diaper and clothing without contaminating any surface not already in contact with stool or urine.
- Step 5: Put on a clean diaper and dress the child.
- Step 6: Wash the child's hands and return the child to a supervised area.
- Step 7: Clean and disinfect the diaper-changing surface. Dispose of the disposable paper liner if used on the diaper changing surface in a plastic-lined, hands-free, covered can. If clothing was soiled, securely tie the plastic bag used to store the clothing and send home.
- Step 8: Perform hand hygiene and record the diaper change, diaper contents, and/or any problems.

Caregivers/teachers should never leave a child unattended on a table or countertop. A safety strap or harness should not be used on the diaper changing table/surface.

3.2.2.1 Situations that Require Hand Hygiene²

All staff, volunteers, and children should abide by the following procedures for hand washing, as defined by the U.S. Centers for Disease Control and Prevention (CDC):

- a) Upon arrival for the day, after breaks, or when moving from one group to another.
- b) Before and after:
 - Preparing food or beverages;
 - Eating, handling food, or feeding a child;
 - Brushing or helping a child brush teeth;
 - Giving medication or applying a medical ointment or cream in which a break in the skin (e.g., sores, cuts, or scrapes) may be encountered;
 - Playing in water (including swimming) that is used by more than one person; and
 - Diapering.
- c) After:
 - Using the toilet or helping a child use a toilet;
 - Handling bodily fluid (mucus, blood, vomit);
 - Handling animals or cleaning up animal waste;
 - Playing in sand, on wooden play sets, and outdoors; and
 - Cleaning or handling the garbage.

Situations or times that children and staff should perform hand hygiene should be posted in all food preparation, diapering, and toileting areas.

3.3.0.1 Routine Cleaning, Sanitizing, and Disinfecting

Programs should follow a routine schedule of cleaning, sanitizing, and disinfecting. Cleaning, sanitizing, and disinfecting products should not be used in close proximity to children, and adequate ventilation should be maintained during use.

3.2.3.4 Prevention of Exposure to Blood and Body Fluids

Early care and education programs should adopt the use of Standard Precautions, developed by the Centers for Disease Control and Prevention (CDC), to handle potential exposure to blood and other potentially infectious fluids. Caregivers and teachers are required to be educated regarding Standard Precautions before beginning to work in the program and annually thereafter. For center-based care, training should comply with requirements of the Occupational Safety and Health Administration (OSHA).

3.4.1.1 Use of Tobacco, Alcohol, and Illegal Drugs

Directors, caregivers, volunteers, and staff should not be impaired due to the use of alcohol, illegal drugs or prescription medication during program hours. Tobacco, alcohol, and illegal drug use should be prohibited on the premises (both indoor and outdoor environments) and in any vehicles used by the program at all times. In family child care settings, tobacco and alcohol should be inaccessible to children.

 $^{^2}$ Family child care homes are exempt from posting procedures for hand washing but should follow all other aspects of this standard.

3.4.3.1 Emergency Procedures

Programs should have a procedure for responding to situations when an immediate emergency medical response is required. Emergency procedures should be posted and readily accessible. Child-to-provider ratios should be maintained, and additional adults may need to be called in to maintain the required ratio. Programs should develop contingency plans for emergencies or disaster situations when it may not be possible to follow standard emergency procedures. All providers and/or staff should be trained to manage an emergency until emergency medical care becomes available

3.4.4.1 Recognizing and Reporting Suspected Child Abuse, Neglect, and Exploitation

Because caregivers/teachers are mandated reporters of child abuse and neglect, each program should have a written policy for reporting child abuse and neglect. The written policy should specify that in any instance where there is reasonable cause to believe that child abuse or neglect has occurred, the individual who suspects child abuse or neglect should report directly to the child abuse reporting hotline, child protective services, or the police, as required by state and local laws.

3.4.4.3 Preventing and Identifying Shaken Baby Syndrome and Abusive Head Trauma

All programs should have a policy and procedure to identify and prevent shaken baby syndrome and abusive head trauma. All caregivers/teachers who are in direct contact with children, including substitute caregivers/teachers and volunteers, should receive training on preventing shaken baby syndrome and abusive head trauma; recognition of potential signs and symptoms of shaken baby syndrome and abusive head trauma; strategies for coping with a crying, fussing, or distraught child; and the development and vulnerabilities of the brain in infancy and early childhood.

3.4.5.1 Sun Safety Including Sunscreen

Caregivers/teachers should ensure sun safety for themselves and children under their supervision by keeping infants younger than six months out of direct sunlight, limiting sun exposure when ultraviolet rays are strongest and applying sunscreen with written permission of parents/guardians. Manufacturer instructions should be followed.

3.4.6.1 Strangulation Hazards

Strings and cords long enough to encircle a child's neck, such as those on toys and window coverings, should not be accessible to children in early care and education programs.

3.5.0.1 Care Plan for Children with Special Health Care Needs

Children with special health care needs are defined as ". . . those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally" (McPherson, 1998).

Any child who meets these criteria in an early care and education setting should have an up-todate Routine and Emergent Care Plan, completed by their primary health care provider with input from parents/guardians, included in their on-site health record and readily accessible to those caring for the child. Community resources should be used to ensure adequate information, training, and monitoring is available for early care and education staff. Caregivers should undergo training in pediatric first aid and CPR that includes responding to an emergency for any child with a special health care need.

3.6.1.1 Inclusion/Exclusion/Dismissal of Children

The program should notify parents/guardians when children develop new signs or symptoms of illness. Parent/guardian notification should be immediate for emergency or urgent issues. Staff should notify parents/guardians of children who have symptoms that require exclusion, and parents/guardians should remove children from the early care and education setting as soon as possible. For children whose symptoms do not require exclusion, verbal or written notification to the parent/guardian at the end of the day is acceptable. Most conditions that require exclusion do not require a primary health care provider visit before re-entering care.

When a child becomes ill but does not require immediate medical help, a determination should be made regarding whether the child should be sent home. The caregiver/teacher should determine if the illness:

- a) Prevents the child from participating comfortably in activities;
- b) Results in a need for care that is greater than the staff can provide without compromising the health and safety of other children;
- c) Poses a risk of spread of harmful diseases to others;
- d) Causes a fever and behavior change or other signs and symptoms (e.g., sore throat, rash, vomiting, and diarrhea). An unexplained temperature above 100 °F (37.8 °C) (armpit) in a child younger than 6 months should be medically evaluated. Any infant younger than 2 months of age with fever should get immediate medical attention.

If any of the above criteria are met, the child should be removed from direct contact with other children and monitored and supervised by a staff member known to the child until dismissed to the care of a parent/guardian, primary health care provider, or other person designated by the parent. The local or state health department will be able to provide specific guidelines for exclusion.

3.6.1.4 Infectious Disease Outbreak Control

During the course of an identified outbreak of any reportable illness at the program, a child or staff member should be excluded if the local health department official or primary health care provider suspects that the child or staff member is contributing to transmission of the illness, is not adequately immunized when there is an outbreak of a vaccine-preventable disease, or the circulating pathogen poses an increased risk to the individual. The child or staff member should be readmitted when the health department official or primary health care provider who made the initial determination decides that the risk of transmission is no longer present. Parents/guardians should be notified of any determination.

3.6.3.1/3.6.3.2 Medication Administration and Storage

The administration of medicines at the facility should be limited to:

- a) Prescription or non-prescription medication (over-the-counter) ordered by the prescribing health professional for a specific child with written permission of the parent/guardian. Prescription medication should be labeled with the child's name; date the prescription was filled; name and contact information of the prescribing health professional; expiration date; medical need; instructions for administration, storage, and disposal; and name and strength of the medication.
- b) Labeled medications (over-the-counter) brought to the early care and education facility by the parent/guardian in the original container. The label should include the child's name; dosage; relevant warnings as well as specific; and legible instructions for administration, storage; and disposal.

Programs should never administer a medication that is prescribed for one child to another child. Documentation that the medicine/agent is administered to the child as prescribed is required. Medication should not be used beyond the date of expiration. Unused medications should be returned to the parent/guardian for disposal.

All medications, refrigerated or unrefrigerated, should have child-resistant caps; be stored away from food at the proper temperature, and be inaccessible to children.

3.6.3.3 Training of Caregivers/Teachers to Administer Medication

Any caregiver/teacher who administers medication should complete a standardized training course that includes skill and competency assessment in medication administration. The course should be repeated according to state and/or local regulation and taught by a trained professional. Skill and competency should be monitored whenever an administration error occurs.

Nutrition and Food Service

4.2.0.3 Use of U.S. Department of Agriculture (USDA), Child and Adult Care Food Program (CACFP) Guidelines

Programs should serve nutritious and sufficient foods that meet the requirements for meals of the child care component of the USDA CACFP as referenced in 7 CFR 226.20.

4.2.0.6 Availability of Drinking Water

Clean, sanitary drinking water should be readily accessible in indoor and outdoor areas, throughout the day. On hot days, infants receiving human milk in a bottle may be given additional human milk, and those receiving formula mixed with water may be given additional formula mixed with water. Infants should not be given water, especially in the first six months of life.

4.2.0.10 Care for Children with Food Allergies

Each child with a food allergy should have a written care plan that includes:

a) Instructions regarding the food(s) to which the child is allergic and steps to be taken to avoid that food;

b) A detailed treatment plan to be implemented in the event of an allergic reaction, including the names, doses, and methods of prompt administration of any medications. The plan should include specific symptoms that would indicate the need to administer one or more medications.

Based on the child's care plan and prior to caring for the child, caregivers/teachers should receive training for, demonstrate competence in, and implement measures for:

- a) Preventing exposure to the specific food(s) to which the child is allergic;
- b) Recognizing the symptoms of an allergic reaction;
- c) Treating allergic reactions.

The written child care plan, a mobile phone, and the proper medications for appropriate treatment if the child develops an acute allergic reaction should be routinely carried on field trips or transport out of the early care and education setting.

The program should notify the parents/guardians immediately of any suspected allergic reactions, as well as the ingestion of or contact with the problem food even if a reaction did not occur. The program should contact the emergency medical services system immediately whenever epinephrine has been administered.

Each child's food allergies should be posted prominently in the classroom and/or wherever food is served with permission of the parent/guardian.

4.3.1.3 Preparing, Feeding, and Storing Human Milk

Programs should develop and follow procedures for the preparation and storage of expressed human milk that ensures the health and safety of all infants, as outlined by the Academy of Breastfeeding Medicine Protocol #8; Revision 2010, and prohibits the use of infant formula for a breastfed infant without parental consent. The bottle or container should be properly labeled with the infant's full name and date; and should only be given to the specified child. Unused breast milk should be returned to parent in the bottle or container.

4.3.1.5 Preparing, Feeding, and Storing Infant Formula

Programs should develop and follow procedures for the preparation and storage of infant formula that ensures the health and safety of all infants. Formula provided by parents/guardians or programs should come in sealed containers. The caregiver/teacher should always follow the parent or manufacturer's instructions for mixing and storing of any formula preparation. If instructions are not readily available, caregivers/teachers should obtain information from the World Health Organization's Safe Preparation, Storage and Handling of Powdered Infant Formula Guidelines. Bottles of prepared or ready-to-feed formula should be labeled with the child's full name, time, and date of preparation. Prepared formula should be discarded daily if not used.

4.3.1.9 Warming Bottles and Infant Foods

Bottles and infant foods can be served cold from the refrigerator and do not have to be warmed. If a caregiver/teacher chooses to warm them, or a parent requests they be warmed, bottles should be warmed under running, warm tap water; using a commercial bottle warmer, stove top warming methods, or slow-cooking device; or by placing them in container of warm water. Bottles should never be warmed in microwaves. Warming devices should not be accessible to children.

4.5.0.10 Foods that Are Choking Hazards

Caregivers/teachers should not offer foods that are associated with young children's choking incidents to children under 4 years of age. Food for infants should be cut into pieces ¼ inch or smaller, food for toddlers should be cut into pieces ½ inch or smaller to prevent choking. Children should be supervised while eating, to monitor the size of food and that they are eating appropriately.

4.8.0.1 Food Preparation Area Access

Access to areas where hot food is prepared should only be permitted when children are supervised by adults who are qualified to follow sanitation and safety procedures.

4.9.0.1 Compliance with U.S. Food and Drug Administration (FDA) Food Code and State and Local Rules

The program should conform to applicable portions of the FDA Food Code and all applicable state and local food service rules and regulations for centers and family child care homes regarding safe food protection and sanitation practices.

Facilities, Supplies, Equipment, and Environmental Health

5.1.1.2 Inspection of Buildings

Existing and/or newly constructed, removated, remodeled, or altered buildings should be inspected by a building inspector to ensure compliance with applicable state and local building and fire codes before the building can be used for the purpose of early care and education.

5.1.1.3 Compliance with Fire Prevention Code

Programs should comply with a state-approved or nationally recognized fire prevention code, such as the National Fire Protection Association (NFPA) 101: Life Safety Code.

5.1.1.5 Environmental Audit of Site Location

An environmental audit should be conducted before construction of a new building; renovation or occupation of an older building; or after a natural disaster to properly evaluate and, where necessary, remediate or avoid sites where children's health could be compromised. A written report that includes any remedial action taken should be kept on file. The audit should include assessments of:

a) Potential air, soil, and water contamination on program sites and outdoor play spaces;

- b) Potential toxic or hazardous materials in building construction, such as lead and asbestos; and
- c) Potential safety hazards in the community surrounding the site.

5.1.6.6 Guardrails and Protective Barriers

Guardrails or protective barriers, such as baby gates, should be provided at open sides of stairs, ramps, and other walking surfaces (e.g., landings, balconies, porches) from which there is more than a 30 inch vertical distance to fall.

5.2.4.2 Safety Covers and Shock Protection Devices for Electrical Outlets

All accessible electrical outlets should be "tamper-resistant electrical outlets" that contain internal shutter mechanisms to prevent children from sticking objects into receptacles. In settings that do not have "tamper-resistant electrical outlets," outlets should have "safety covers" that are attached to the electrical outlet by a screw or other means to prevent easy removal by a child. "Safety plugs" may also be used if they cannot be easily removed from outlets by children and do not pose a choking risk.

5.2.4.4 Location of Electrical Devices near Water

No electrical device or apparatus accessible to children should be located so it could be plugged into an electrical outlet while a person is in contact with a water source, such as a sink, tub, shower area, water table, or swimming pool.

5.2.8.1 Integrated Pest Management

Programs should adopt an integrated pest management program to ensure long-term, environmentally sound pest suppression through a range of practices including pest exclusion, sanitation and clutter control, and elimination of conditions that are conducive to pest infestations.

5.2.9.1 Use and Storage of Toxic Substances

All toxic substances should be inaccessible to children and should not be used when children are present. Toxic substances should be used as recommended by the manufacturer and stored in the original labeled containers. The telephone number for the poison control center should be posted and readily accessible in emergency situations.

5.2.9.5 Carbon Monoxide Detectors

Programs should meet state or local laws regarding carbon monoxide detectors, including circumstances when detectors are necessary. Detectors should be tested monthly, and testing should be documented. Batteries should be changed at least yearly. Detectors should be replaced according to the manufacturer's instructions.

5.3.1.1/5.5.0.6/5.5.0.7 Safety of Equipment, Materials, and Furnishings

Equipment, materials, furnishings, and play areas should be sturdy, safe, in good repair, and meet the recommendations of the CPSC. Programs should attend to, including, but not limited to, the following safety hazards:

a) Openings that could entrap a child's head or limbs;

- b) Elevated surfaces that are inadequately guarded;
- c) Lack of specified surfacing and fall zones under and around climbable equipment;
- d) Mismatched size and design of equipment for the intended users;
- e) Insufficient spacing between equipment;
- f) Tripping hazards;
- g) Components that can pinch, sheer, or crush body tissues;
- h) Equipment that is known to be of a hazardous type;
- i) Sharp points or corners;
- j) Splinters;
- k) Protruding nails, bolts, or other parts that could entangle clothing or snag skin;
- Loose, rusty parts;
- m) Hazardous small parts that may become detached during normal use or reasonably foreseeable abuse of the equipment and that present a choking, aspiration, or ingestion hazard to a child;
- n) Strangulation hazards (e.g., straps, strings, etc.);
- o) Flaking paint;
- p) Paint that contains lead or other hazardous materials; and
- q) Tip-over hazards, such as chests, bookshelves, and televisions.

Plastic bags that are large enough to pose a suffocation risk as well as matches, candles, and lighters should not be accessible to children.

5.3.1.12 Availability and Use of a Telephone or Wireless Communication Device

The facility should provide at all times at least one working non-pay telephone or wireless communication device for general and emergency use on the premises of the child care program, in each vehicle used when transporting children, and on field trips. While transporting children, drivers should not operate a motor vehicle while using a mobile telephone or wireless communications device when the vehicle is in motion or traffic.

5.4.5.2 Cribs and Play Yards

Before purchase and use, cribs and play yards should be in compliance with current CPSC and ASTM International safety standards that include ASTM F1169-10a Standard Consumer Safety Specification for Full-Size Baby Cribs, ASTM F406-13, Standard Consumer Safety Specification for Non-Full-Size Baby Cribs/Play Yards, , or the CPSC 16 CFR 1219, 1220, and 1500—Safety Standards for Full-Size Baby Cribs and Non-Full-Size Baby Cribs; Final Rule.

Programs should only use cribs for sleep purposes and ensure that each crib is a safe sleep environment as defined by the American Academy of Pediatrics. Each crib should be labeled and used for the infant's exclusive use. Cribs and mattresses should be thoroughly cleaned and sanitized before assignment for use by another child. Infants should not be placed in the cribs with items that could pose a strangulation or suffocation risk. Cribs should be placed away from window blinds or draperies.

5.5.0.8 Firearms

Center-based programs should not have firearms or any other weapon on the premises at any time. If present in a family child care home, parents should be notified and these items should be unloaded, equipped with child protective devices, and kept under lock and key with the ammunition locked separately in areas inaccessible to the children. Parents/guardians should be informed about this policy.

5.6.0.1: First Aid and Emergency Supplies

The facility should maintain up-to-date first aid and emergency supplies in each location in which children are cared. The first aid kit or supplies should be kept in a closed container, cabinet, or drawer that is labeled and stored in a location known to all staff, accessible to staff at all times, but locked or otherwise inaccessible to children. When children leave the facility for a walk or to be transported, a designated staff member should bring a transportable first aid kit. In addition, a transportable first aid kit should be in each vehicle that is used to transport children to and from the program. First aid kits or supplies should be restocked after each use.

Play Areas/Playgrounds and Transportation

6.1.0.6/6.1.0.8/6.3.1.1 Location of Play Areas near Bodies of Water/ Enclosures for Outdoor Play Areas/Enclosure of Bodies of Water

The outdoor play area should be enclosed with a fence or natural barriers. Fences and barriers should not prevent the supervision of children by caregivers/teachers. If a fence is used, it should be in good condition and conform to applicable local building codes in height and construction. These areas should have at least two exits, with at least one being remote from the buildings.

Gates should be equipped with self-closing and positive self-latching closure mechanisms that are high enough or of a type such that children cannot open it. The openings in the fence and gates should be no larger than 3 ½ inches. The fence and gates should be constructed to discourage climbing. Outside play areas should be free from unsecured bodies of water. If present, all water hazards should be inaccessible to unsupervised children and enclosed with a fence that is 4 to 6 feet high or higher and comes within 3 ½ inches of the ground.

6.2.3.1 Prohibited Surfaces for Placing Climbing Equipment

Equipment used for climbing should not be placed over, or immediately next to, hard surfaces not intended for use as surfacing for climbing equipment. All pieces of playground equipment should be placed over a shock-absorbing material that is either the unitary or the loose-fill type extending beyond the perimeter of the stationary equipment. Organic materials that support colonization of molds and bacteria should not be used. This standard applies whether the equipment is installed outdoors or indoors. Programs should follow CPSC guidelines and ASTM International Standards F1292-13 and F2223-10.

6.2.5.1 Inspection of Indoor and Outdoor Play Areas and Equipment

The indoor and outdoor play areas and equipment should be inspected daily for basic health and safety, including, but not limited to:

- a) Missing or broken parts;
- b) Protrusion of nuts and bolts;
- c) Rust and chipping or peeling paint;
- d) Sharp edges, splinters, and rough surfaces;
- e) Stability of handholds;
- f) Visible cracks;
- g) Stability of non-anchored large play equipment (e.g., playhouses);
- h) Wear and deterioration
- i) Vandalism or trash

Any problems should be corrected before the playground is used by children.

6.3.2.1 Lifesaving Equipment

Each swimming pool more than six feet in width, length, or diameter should be provided with a ring buoy and rope, a rescue tube, or a throwing line and a shepherd's hook that will not conduct electricity. This equipment should be long enough to reach the center of the pool from the edge of the pool, kept in good repair, and stored safely and conveniently for immediate access. Caregivers/teachers should be trained on the proper use of this equipment. Children should be familiarized with the use of the equipment based on their developmental level.

6.3.5.2 Water in Containers

Bathtubs, buckets, diaper pails, and other open containers of water should be emptied immediately after use.

6.5.1.2 Qualifications for Drivers

In addition to meeting the general staff background check standards, any driver or transportation staff member who transports children for any purpose should have:

- a) A valid driver's license that authorizes the driver to operate the type of vehicle being driven;
- b) A safe driving record for more than 5 years, with no crashes where a citation was issued, as evidenced by the state Department of Motor Vehicles records;
- No use of alcohol, drugs, or any substance that could impair abilities before or while driving;
- d) No tobacco use while driving;
- e) No medical condition that would compromise driving, supervision, or evacuation capability;
- f) Valid pediatric CPR and first aid certificate if transporting children alone.

The driver's license number and date of expiration, vehicle insurance information, and verification of current state vehicle inspection should be on file in the facility.

6.5.2.2 Child Passenger Safety

When children are driven in a motor vehicle other than a bus, all children should be transported only if they are restrained in a developmentally appropriate car safety seat, booster seat, seat belt, or harness that is suited to the child's weight and age in accordance with state and federal laws and regulations. The child should be securely fastened, according to the manufacturer's instructions. The child passenger restraint system should meet the federal motor vehicle safety standards contained in 49 CFR 571.213 and carry notice of compliance. Child passenger restraint systems should be installed and used in accordance with the manufacturer's instructions and should be secured in back seats only.

Car safety seats should be replaced if they have been recalled, are past the manufacturer's "date of use" expiration date, or have been involved in a crash that meets the U.S. Department of Transportation crash severity criteria or the manufacturer's criteria for replacement of seats after a crash.

If the program uses a vehicle that meets the definition of a school bus and the school bus has safety restraints, the following should apply:

- a) The school bus should accommodate the placement of wheelchairs with four tie-downs affixed according to the manufactures' instructions in a forward-facing direction;
- b) The wheelchair occupant should be secured by a three-point tie restraint during transport;
- c) At all times, school buses should be ready to transport children who must ride in wheelchairs;
- d) Manufacturers' specifications should be followed to assure that safety requirements are met.

6.5.2.4 Interior Temperature of Vehicles

The interior of vehicles used to transport children for field trips and out-of-program activities should be maintained at a temperature comfortable to children. All vehicles should be locked when not in use, head counts of children should be taken before and after transporting to prevent a child from being left in a vehicle, and children should never be left in a vehicle unattended.

6.5.3.1 Passenger Vans

Early care and education programs that provide transportation for any purpose to children, parents/guardians, staff, and others should not use 15-passenger vans when avoidable.

Infectious Disease

7.2.0.1 Immunization Documentation

Programs should require that all parents/guardians of enrolled children provide written documentation of receipt of immunizations appropriate for each child's age. Infants, children, and adolescents should be immunized as specified in the "Recommended Immunization Schedules for Persons Aged 0 Through 18 Years," developed by the Advisory Committee on

Immunization Practices of the CDC, the American Academy of Pediatrics, and the American Academy of Family Physicians. Children whose immunizations are not up-to-date or have not been administered according to the recommended schedule should receive the required immunizations, unless contraindicated or for legal exemptions.

7.2.0.2 Unimmunized Children

If immunizations have not been or are not to be administered because of a medical condition, a statement from the child's primary health care provider documenting the reason why the child is temporarily or permanently medically exempt from the immunization requirements should be on file. If immunizations are not to be administered because of the parents'/guardians' religious or philosophical beliefs, a legal exemption with notarization, waiver, or other state-specific required documentation signed by the parent/guardian should be on file. Parents/guardians of an enrolling or enrolled infant who has not been immunized due to the child's age should be informed if/when there are children in care who have not had routine immunizations due to exemption.

The parent/guardian of a child who has not received the age-appropriate immunizations prior to enrollment and who does not have documented medical, religious, or philosophical exemptions from routine childhood immunizations should provide documentation of a scheduled appointment or arrangement to receive immunizations. Children who are in foster care or experiencing homelessness as defined by the McKinney-Vento Act should receive services while parents/guardians are taking necessary actions to comply with immunization requirements of the program. An immunization plan and catch-up immunizations should be initiated upon enrollment and completed as soon as possible.

If a vaccine-preventable disease to which children are susceptible occurs and potentially exposes the unimmunized children who are susceptible to that disease, the health department should be consulted to determine whether these children should be excluded for the duration of possible exposure or until the appropriate immunizations have been completed. The local or state health department will be able to provide guidelines for exclusion requirements.

7.2.0.3 Immunization of Caregivers/Teachers

Caregivers/teachers should be current with all immunizations routinely recommended for adults by the Advisory Committee on Immunization Practices (ACIP) of the Centers for Disease Control and Prevention (CDC) as shown in the "Recommended Adult Immunization Schedule" in the following categories:

- a) Vaccines recommended for all adults who meet the age requirements and who lack evidence of immunity (i.e., lack documentation of vaccination or have no evidence of prior infection); and
- b) Recommended if a specific risk factor is present.

If a staff member is not appropriately immunized for medical, religious, or philosophical reasons, the program should require written documentation of the reason. If a vaccine-preventable disease to which adults are susceptible occurs in the facility and potentially exposes the unimmunized adults who are susceptible to that disease, the health department

should be consulted to determine whether these adults should be excluded for the duration of possible exposure or until the appropriate immunizations have been completed. The local or state health department will be able to provide guidelines for exclusion requirements.

Policies

9.2.4.1 Written Plan and Training for Handling Urgent Medical Care or Threatening Incidents

The program should have a written plan for reporting and managing any incident or unusual occurrence that is threatening to the health, safety, or welfare of the children, staff, or volunteers. Caregiver/teacher and staff training procedures should also be included. The management, documentation, and reporting of the following types of incidents should be addressed:

- a) Lost or missing child;
- b) Suspected maltreatment of a child (also see state's mandates for reporting);
- c) Suspected sexual, physical, or emotional abuse of staff, volunteers, or family members occurring while they are on the premises of the program;
- d) Injuries to children requiring medical or dental care;
- e) Illness or injuries requiring hospitalization or emergency treatment;
- f) Mental health emergencies;
- g) Health and safety emergencies involving parents/guardians and visitors to the program;
- Death of a child or staff member, including a death that was the result of serious illness or injury that occurred on the premises of the early care and education program, even if the death occurred outside of early care and education hours;
- i) The presence of a threatening individual who attempts or succeeds in gaining entrance to the facility.

9.2.4.3/9.2.4.5 Disaster Planning, Training and Communication/Emergency and Evacuation Drills

Early care and education programs should consider how to prepare for and respond to emergency situations or natural disasters that may require evacuation, lock-down, or shelter-in-place and have written plans, accordingly. Written plans should be posted in each classroom and areas used by children. The following topics should be addressed, including but not limited to regularly scheduled practice drills, procedures for notifying and updating parents, and the use of the daily class roster(s) to check attendance of children and staff during an emergency or drill when gathered in a safe space after exit and upon return to the program. All drills/exercises should be recorded.

9.2.4.7 Sign-In/Sign-Out System³

Programs should have a sign-in/sign-out system to track those who enter and exit the facility. The system should include name, contact number, relationship to facility (e.g., parent/guardian, vendor, guest, etc.), and recorded time in and out.

-

³ Family Child Care is exempt.

9.2.4.8 Authorized Persons to Pick Up Child

Children may only be released to adults authorized by parents or legal guardians whose identity has been verified by photo identification. Names, addresses, and telephone numbers of persons authorized to pick up child should be obtained during the enrollment process and regularly reviewed, along with clarification/documentation of any custody issues/court orders. The legal guardian(s) of the child should be established and documented at this time.

9.4.1.12 Record of Valid License, Certificate, or Registration of Facility or Family Child Care Home

Every facility and/or child care home should hold a valid license, certificate, or documentation of registration prior to operation as required by the local and/or state statute.

9.4.2.1 Contents of Child Records

Programs should maintain a confidential file for each child in one central location on-site and should be immediately available to the child's caregivers/teachers (who should have parental/guardian consent for access to records), the child's parents/guardians, and the licensing authority upon request. The file for each child should include the following:

- a) Pre-admission enrollment information;
- b) Admission agreement signed by the parent/guardian at enrollment;
- c) Initial and updated health care assessments, completed and signed by the child's primary care provider, based on the child's most recent well care visit;
- d) Health history completed by the parent/guardian at admission;
- e) Medication record;
- f) Authorization form for emergency medical care;
- g) Results of developmental and behavioral screenings;
- h) Record of persons authorized to pick up child;
- i) Written informed consent forms signed by the parent/guardian allowing the facility to share the child's health records with other service providers.

10.4.2.1 Frequency of Inspections for Child Care Centers and Family Child Care Homes

Licensing inspectors or monitoring staff should make on-site inspections to measure program compliance with health, safety, and fire standards prior to issuing an initial license and no less than one, unannounced inspection each year thereafter to ensure compliance with regulations. Additional inspections should take place if needed for the program to achieve satisfactory compliance or if the program is closed at any time. The number of inspections should not include those inspections conducted for the purpose of investigating complaints. Complaints should be investigated promptly, based on severity of the complaint. States should post results of licensing inspections, including complaints, on the internet for parent and public review. Parents/guardians should have easy access to licensing rules and made aware of how to report complaints to the licensing agency.

Sufficient numbers of licensing inspectors should be qualified to inspect early care and education programs and trained in related health and safety requirements among other requirements of the State licensure.

Resources Consulted in Development

- American Academy of Pediatrics, American Public Health Association, National Resource Center for Health and Safety in Child Care and Early Education. (2011). Caring for our children: National health and safety performance standards; Guidelines for early care and education programs. 3rd edition. Elk Grove Village, IL: American Academy of Pediatrics; Washington, DC: American Public Health Association. http://nrckids.org
- American Academy of Pediatrics, American Public Health Association, National Resource Center for Health and Safety in Child Care and Early Education. (2013). Stepping Stones to Caring for Our Children, Third Edition. Elk Grove Village, IL: American Academy of Pediatrics; Washington, DC: American Public Health Association. Also available at http://nrckids.org/index.cfm/products/stepping-stones-to-caring-for-our-children-3rd-edition-ss3/

ASTM International.

http://www.astm.org/

California Childcare Health Program. (2014). Health and Safety Checklist for Early Care and Education Providers: Based on Caring for Our Children National Health and Safety Performance Standards, Third Edition.

http://ucsfchildcarehealth.org/html/pandr/formsmain.htm#hscr

Child Care Development Block Grant Act of 2014. http://www.acf.hhs.gov/programs/occ/ccdf-reauthorization

Fiene, Richard. (2014). Key Indicators from Stepping Stones, Third Edition. http://rikinstitute.wikispaces.com/file/view/77SS3KI+2013.pdf

McPherson, M., Arango, P., Fox, H., Lauver, C., McManus, M., Newacheck, P., Perrin, J., Shonkoff, J., Strickland, B. (1998). A new definition of children with special health care needs. *Pediatrics*, 102(1):137–140.

National Association for the Education of Young Children Early Childhood. (2014). NAEYC Accreditation Standards and Criteria. http://www.naeyc.org/academy/primary/viewstandards

National Fire Protection Association.

http://www.nfpa.org/

National Association of Family Child Care Accreditation. (2013). Quality Standards for National Association of Family Child Care Accreditation, Fourth Edition. (2013). http://www.nafcc.org/file/35a7fee9-1ccf-4557-89d4-973daf84a052

- Office of Child Care National Center on Child Care Quality Improvement and National Association for Regulatory Administration. (2013). Research Brief #1 Trends in Child Care Center Licensing Regulations and Policies for 2011.
- Shlay, A. (2010). African American, White and Hispanic child care preferences: A factorial survey analysis of welfare leavers by race and ethnicity. Social Science Research, 39(1), 125-141.
- Strong Start for America's Children Act of 2013, S. 1697, 113th Cong. (2013). https://www.congress.gov/bill/113th-congress/senate-bill/1697
- U.S. Consumer Products Safety Commission. http://www.cpsc.gov/
- U.S. Department of Agriculture. Child and Adult Care Food Program Regulations, 7 CFR Ch. II (1–1–13 Edition). (2013). http://www.fns.usda.gov/cacfp/regulations
- U.S. Department of Health and Human Services, Administration for Children and Families. (2014). Head Start Key Indicator-Compliant Monitoring Protocol. http://eclkc.ohs.acf.hhs.gov/hslc/grants/monitoring/intro-to-monitoring.html
- U.S. Department of Health and Human Services, Administration for Children and Families. (2015). Head Start Performance Standards. 45 CFR Chapter XIII. (Current through 2015). http://eclkc.ohs.acf.hhs.gov/hslc/standards/hspps
- U.S. Department of Health and Human Services, Food and Drug Administration. Food Code. (2013). http://www.fda.gov/downloads/Food/GuidanceRegulation/RetailFoodProtection/FoodCode/UCM374510.pdf
- World Health Organization in collaboration with Food and Agriculture Organization of the United Nations. (2007). Safe preparation, storage and handling of powdered infant formula: Guidelines.

http://www.who.int/foodsafety/publications/micro/pif_guidelines.pdf

The Instrument Based Program Monitoring Information System and the Indicator Checklist for Child Care

Richard Fiene

Office of Children Youth and Families Commonwealth of Pennsylvania

Mark Nixon

Children's Services Monitoring Transfer Consortium, Washington, D.C.

ABSTRACT: The Instrument Based Program Monitoring Information System (IPM) and the Indicator Checklist (IC) are two tools for the state management of child day care services. A methodology for monitoring interviews and site visits to child day care programs is described. An integral feature of IPM is a system of assigning weights to the questions or items so that scores reflect the relative importance of state regulations. An Indicator Checklist is a questionnaire or checklist that contains selected, predictive items from a longer, comprehensive instrument that a state uses to monitor child day care providers' conformance to state day care regulations. An Indicator Checklist contains items that have been determined to be most effective in discriminating between providers that typically receive high overall scores on the comprehensive instrument and providers that typically receive low overall scores.

For nearly half a century, state governments have accepted responsibility for ensuring that those who care for children in their home and in day care centers meet minimum requirements for health and safety. During the past decade as the amount of state and federal funds for day care have grown, states have taken an active role in monitoring (1) the ways in which day care providers administer their programs, and (2) the quality of the services provided to children for whose care the state is paying.

Nationally, day care is big business. It is estimated that currently there are more than 118,000 licensed providers who serve an estimated 1.2 million children every day. The stakes in assuring that these children are well served are high, both in terms of public health and safety and from the viewpoint of enhancing the growth and development of America's most precious resource, its children. It is estimated that \$6.3 billion dollars are spent annually on day care services.

Reprints should be requested from Richard Fiene, Directory of Research and Information Systems, Office of Children, Youth, and Families, 1514 North Second Street, Harrisburg, PA 17102.

¹ Day care services include group day care centers serving 12 or more children, group day care homes serving 6-11 children, and family day care homes serving 5 or fewer children. Head Start & nursery school programs that operate for part day are included in day care services definition.

However, in monitoring these services, states spend less than one percent of their day care funds each year to ensure that providers comply with regulations or meet quality guidelines.

This article describes an approach in monitoring child day care services called: Instrument Based Program Monitoring (IPM). An IPM differs substantially from the more common approach to monitoring: narrative site visit reports used by most states. The narrative report approach usually includes a site visit to each provider and the preparation of a summary of observations and interpretive and evaluative comments about the monitor's findings. These reports are time consuming to prepare, and often difficult to summarize succinctly for policy makers and administrators. This article describes an alternative to the narrative site report.

Forces Changing the Regulatory Environment

The job of state agencies in program monitoring is currently changing in response to powerful forces in American society, especially at the level of state government.

First, there is the continuing need to assure parents that their children will not be subjected to unsafe day care environments and that day care providers who receive state funds are meeting the terms of their contracts with the state by providing quality services. Quality services are defined as day care services that promote sound child development principles and do not only ensure that children are in healthy and safe child care environments. Public accountability requires that the state entertain a dual purpose, one is to monitor compliance with state regulations; but secondly and equally important, there is a strong need for the state to ensure that quality child development services are supported and provided.

Gwen Morgan's (1980) work is particularly helpful in providing direction regarding the relationship between licensing and funding criteria. A Model presented by Morgan (1980) clearly delineates a regulatory continuum where day care licensing is considered as the floor to quality with accreditation as the standard of quality for which model day care programs strive. Recent efforts by the National Association for the Education of Young Children (Center Accreditation Project (1983)) and the Children's Services Monitoring Consortium (Child Development Program Evaluation Scale (1984)) have helped to support this move towards accreditation and the measurement of quality in early childhood programs. These efforts take on additional meaning given the direction from the federal government to pass as much of the responsibility for monitoring early childhood programs to the states.

Second, the fiscal cutbacks that are now occurring in many states will almost certainly increase the pressure on state agencies to operate as efficiently as possible. Cutbacks in staff across agencies are likely, even as workloads increase. These factors will force states to streamline their regulatory enforcement and monitoring efforts in all areas, including day care and children's services. A promising approach attempted in some states is moving from a licensing to a registration system. In a registration system, the locus of control for the regulatory process is shifted from the state to the provider level—the provider is responsible for assuring that s/he meets all registration requirements.

Third, the role of the state in regulating private sector organizations is changing. There are now active pressures to reduce the general level of state regulation with a view toward encouraging private market forces in the production and allocation of goods and services. Further, there is a commitment in a growing number of states to reduce the extent of the Federal Government's involvement, including federal funding and accompanying regulatory requirements, in several areas, notably human services (The moratorium placed on the Federal Interagency Day Care Requirements is a specific example which was supported by a number of states).

Fourth, many states are actively seeking ways to reduce the burden on the private sector of the compliance monitoring activities that are performed by the state. For those regulations that continue in force, many states will be examining approaches that simplify monitoring procedures and make them less onerous for providers. This is particularly true for day care services, which are often provided by individuals or organizations that may have little experience coping with regulations.

IPM as a Response to These Forces

One approach that states have used to cope with these forces is the development of Instrument-Based Program Monitoring Systems—(IPMs).

As the name implies, an IPM system incorporates three distinguishing characteristics: First, it is instrument-based. The system uses checklists or questionnaires that contain highly specific questions. These questions usually correspond directly to the state's regulations or other requirements (e.g., fiscal requirements). Second, it supports program monitoring. In its broadest sense, program monitoring is the management process of conducting periodic reviews

or inspections to ensure that certain activities, such as the provision of day care service, meet acceptable criteria, and the process of effecting corrective action where required. Program monitoring may include one or some conbination of:

- 1. Licensing reviews (Table 1 gives a listing of items taken from Pennsylvania's IPM at the licensing and minimal standards level);
- 2. Contract compliance reviews; and
- 3. Evaluations of program quality that go beyond minimum requirements to health and safety. A specific example that may be helpful is taken from the *California Child Development Program Quality Review* (1982) Instrument. What follows is a sampling of the Table of Contents:

PROGRAM QUALITY SUB SCALE

- A. GOALS AND OBJECTIVES OF CHILD DEVELOPMENT PROGRAM ARE EVALUATED AT LEAST ANNUALLY BY THE STAFF AND PARENTS AND ARE MODIFIED AS NEEDED
- B. TEACHING STAFF HIGHLIGHTS EACH CHILD BY SHARING INDIVIDUAL ETHNIC AND CULTURAL BACKGROUNDS—EMPHASIS IS PLACED ON CAREGIVER OBSERVATIONS.
- C. THE GOALS, OBJECTIVES, AND PROCEDURE FOR IDENTIFICATION OF CHILDREN'S NEEDS ARE EVALUATED AT LEAST ANNUALLY BY STAFF AND PARENTS (Fiene, 1984).

Third, IPM is a comprehensive system. It is part of a group of related steps such as on-site reviews, corrective action, follow-up reviews, and summarizing and reporting results that are used recurrently to accomplish the task of compliance monitoring. Program, fiscal, and statistical components can be linked quantitatively to constitute a comprehensive IPM system for day care. A new software decision support system (Watson, Fiene, & Woods, 1984) based on IPM is being developed for micro-computer technology and is being pilot tested in Michigan Department of Social Services, and Texas Department of Human Resources. When the IPM system is used in this linked fashion, it provides the basis for monitoring child day care Vendor & Voucher Delivery systems.

The advantages of an IPM system that are responsive to the changes mentioned earlier include: consistency, coverage of all regulatory areas, clear expectations simplified monitoring procedures,

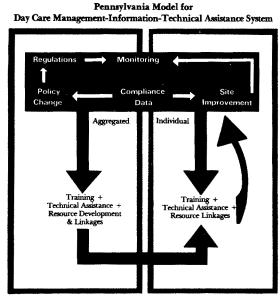
TABLE 1

Pennsylvania Child Development Program Evaluation Specific Items Within Identified General Areas

General Requirements			
1. Relevant approvals	4. Child abuse reporting procedures		
2. Insurance coverage	5. Provision for special services		
3. Parent participation			
Staffing	Standards		
1. Qualifications of staff	staff requirements		
2. Responsibilities	4. Staff health requirements		
3. Adult/child ratio and minimum			
Employe	e Records		
1. Evidence of qualifications and			
references for staff			
Buildin	g & Site		
1. Appropriate indoor and outdoor	materials		
square footage per child	5. Cleanliness		
2. Characteristics of play areas 3. Sanitary facilities	6. Screening of windows and doors 7. Heating apparatus		
4. Storage of medicine and	8. Educational materials available		
	oment		
	···		
1. Condition and placement of	2. Swimming regulations		
equipment	3. Napping rules		
	or Children		
1. Evidence of written program plan	special needs children		
with developmental activities 2. Discipline	4. Sanitary habits developed 5. Infant/toddler stimulation		
3. Identification and referral of	6. School-age requirements		
	Nutrition		
1. Menu requirements 2. Infant formula rules	Utensils Special diet considerations		
<u>.</u>	ortation		
1. Vehicles all licensed and inspected	4. Restraint of children		
2. Insurance coverage 3. Adult/child ratio	5. First-aid kit materials		
	Health		
1. Requirements of health records	4. Medications		
Emergency contact information Medical emergency procedures	Procedure for ill children First-aid requirements		
	Health		
1. Procedures for staff illness	2. Physical requirements for infant		
	caregivers		
Procedures 8	Applications		
1. Pre-admission policy	3. Requirements of day care agreement		
2. Requirements for child's application			
Child Records			
1. Frequency of updating records	4. Parental rights to records		
2. Confidentiality	5. Procedure for release of information		
3. Information to be included in	6. Use of records after termination of service		
child's records	SCIVICE		

and potential for cost efficiencies. With an IPM system, the same questionnaire or checklist is used with all providers, and there is less opportunity for individual bias in reporting results. Similarly, basing the questions or checklist items explicitly on the regulations or other requirements makes it possible to ensure that all areas are covered adequately. Having a clear set of questions that are known to both monitoring staff and providers reduces the possibility of misunderstandings and misinterpretations concerning the results of the review. Finally, standardized procedures for administering the questionnaire and processing the results can simplify the state's monitoring task and reduce the time, cost, and burden of monitoring both to the provider and to the state.

Four agencies (Pennsylvania's Office of Children Youth and Families, West Virginia's Office of Social Services, California's Office of Child Development, and New York City's Agency for Child Development) that are part of a consortium for improving the monitoring of children's services (Children's Services Monitoring Transfer Consortium) have experienced significant improvements in provider satisfaction with monitoring efforts and have, in some cases, achieved more efficient allocations of resources for day care and day monitoring. Pennsylvania has experienced substantial cost savings by linking the results of their IPM system to the state's fiscal and statistical information systems (See Figure 1). The state was able to set a ceiling on



Local, State & Federal Level

Day Care Program Level

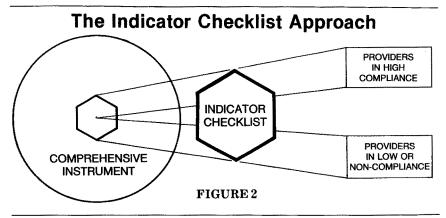
FIGURE 1

day care funding that did not jeopardize program quality, and used the funds that were formerly given to high-cost providers to improve services of other providers on a targeted basis. The state saved approximately \$5 million in day care funds while maintaining the quality of day care services, and it did so without major resistance from the provider groups. California has been able with its IPM system to begin automation of its licensing and program quality instruments and linking these data with unit cost and service information on providers. In the development of the program quality instruments, a representative sample of providers from across the state played a critical role in the development and implementation of California's IPM system. These links are providing the basis for a child development, decision support system for the Office of Child Development in California.

Indicator Checklist Improves IPM Systems

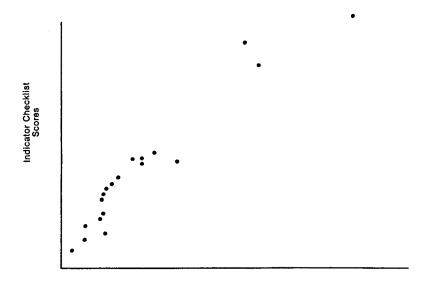
Very recently, a number of states (Pennsylvania, West Virginia, Michigan, California, Texas, and New York) have begun experimenting with what has been called an "Indicator Checklist." Simply defined, an indicator checklist is a questionnaire or checklist that contains selected items or indicators from a longer, comprehensive instrument that is used as part of an IPM system. The items on the checklist are those that have been determined to be most effective in discriminating between providers that typically receive high overall scores on the comprehensive instrument or provide a high level of quality care and providers that typically receive low overall scores or provide low level of care (Figure 2).

Because of their value in distinguishing between providers who are in compliance and those that are out of compliance, the items on the in-



dicator checklist have been called "predictor" items. That is, they are a subset of items from the longer instrument that have a strong ability to "predict" the results that would have been obtained had the comprehensive instrument been administered to a given provider. In four of the states mentioned above, the average length of their respective Indicator Checklist's have been approximately 25 items. This compares with the average of approximately 200 items on their respective comprehensive instruments. The relationship between the scores obtained on the state's Indicator Checklists and their comprehensive instruments have been extremely high. When a Pearson's Product Correlation Coefficient was calculated on the Indicator Checklist and the comprehensive instrument for each state the correlation coefficients were always at a r=+.80 or higher (See Figure 2a for a graphic display of West Virginia's data).

Correlation
Indicator Checklist and Comprehensive Instrument



Comprehensive Instrument Scores

FIGURE 2a

Based on the results of Pennsylvania's, West Virginia's, California's and New York City's Indicator Checklists, certain common items were consistently showing up as predictor items that were separating those good providers from those problem providers. In other words, the following items were always in compliance for the good providers and were always out of compliance for the problem providers:

LICENSING SUBSCALE

A. GROUP SIZE AND ADULT CHILD RATIOS:

INFANTS 1 STAFF TO 5 CHILDREN

10 INFANTS IN A GROUP

TODDLERS 1 STAFF TO 4 CHILDREN

8 TODDLERS IN A GROUP

PRESCHOOLERS 1 STAFF TO 10 CHILDREN

20 PRESCHOOLERS IN A

GROUP

SCHOOL AGE 1 STAFF TO 15 CHILDREN

30 SCHOOL AGE CHIL-

DREN IN A GROUP

- B. SUFFICIENT SPACE—MINIMUM OF 40 SQ FT PER CHILD:
- C. EQUIPMENT IS EASILY ACCESSIBLE TO CHILDREN:
- D. ALL VEHICLES ARE EQUIPPED WITH AGE-APPRO-PRIATE SAFETY CARRIERS;
- E. CLEANING MATERIALS ARE INACCESSIBLE TO CHILDREN:
- F. EMERGENCY CONTACT INFORMATION IS AVAILABLE FOR ALL CHILDREN;
- G. ALL STAFF HAVE HAD PERIODIC HEALTH APPRAISALS:
- H. ACTIVITIES PROMOTE: DEVELOPMENT OF

SKILLS

SELF-ESTEEM

POSITIVE SELF-IDENTITY CHOICE OF ACTIVITIES. (Fiene, 1984)

To most administrators and policymakers, the advantages of a shorter form will be readily apparent. The short form extends the general advantages of an IPM system in three key ways.

First, it substantially reduces the burden on providers, especially those providers that have a record of high compliance and are judged

suitable for use of the short form—it is proposed that these providers be visited once every three years using the comprehensive instrument. In the intervening years, the indicator checklist should be used.

Second, the indicator checklist approach can further reduce a state's cost of monitoring and permit the more efficient reallocation of staff resources to other activities. A cost effectiveness study conducted in West Virginia utilizing their indicator checklist resulted in a savings of 50% staff time in determining the level of compliance of providers (in dollars, this translated to \$800 annually per visit saved (Peat, Marwick, & Mitchell 1983). With such a substantial savings in time, program monitors/evaluators could be freed to act more as consultants in providing technical assistance to providers.

Third, reviews of providers may be consolidated where appropriate. For example, state staff who perform fiscal/contract compliance audits of providers might be trained to administer the indicator checklist during their audit.

The total effect of maintaining a strong compliance monitoring capability that is less of a burden on providers and that achieves greater efficiency with lower cost is a higher quality monitoring system.

What is Needed to Develop an Indicator Checklist?

An indicator checklist is constructed as follows (See Figure 3):

- 1) Begin with an existing, comprehensive instrument that has a sufficiently large number of items so as to make greater efficiency desirable. The relative importance of each item as reflected in some kind of scoring or weighting system must have been established. Many criteria may be used for weighting the individual items. One criterion that is particularly useful for weighting purposes is the extent to which a particular item is related to health, safety, or developmental risks to children.
- 2) Your state should have used the comprehensive instrument long enough so that it is considered reliable for monitoring purposes; the instrument should have generated data that can be used to distinguish among providers in substantial compliance and weak or non-compliant providers.
- 3) With an existing, comprehensive instrument and some historical score information, it is possible to use a simple arithmetical formula (phi coefficient) to select those items from the long questionnaire that are most useful in distinguishing be-

- tween good and inadequate programs. These distinguishing or "predictor" items form the basis of the indicator checklist (See Fiene & Nixon, 1983) for a detailed explanation of the formula for developing an indicator checklist).
- 4) The final step is to include on the short form particular questions or items from the comprehensive instrument that are of critical importance to the health and safety of children. Typically, these are items which, if violated, would be sufficient basis for denying or revoking a license for a day care program. Usually, such items are few in number. They are added to the short form with the predictor items to ensure that children will not be jeopardized by any statistical errors that might occur if only the "predictor" items were used.

From this description of the procedure for developing the shortened instrument, it is clear that the essential prerequisites for such a checklist are: 1. a long, comprehensive instrument in which state administrators have confidence; 2. items on the comprehensive instrument that are weighted to indicate their relative importance; 3. sufficient score data from use of the comprehensive instrument to differentiate among better and worse programs; and 4. state commitment to developing a short form instrument.

Specific Concerns of Administrators and Policymakers

It may be useful to address particular concerns of administrators and policymakers who may be interested in or even actively considering developing a shortened form of their state's monitoring or

Constructing The Indicator Checklist

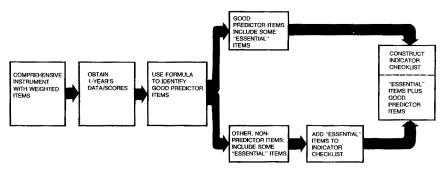


FIGURE 3

licensing questionnaire or checklist. In particular, administrators will need to know: how their state can make use of an indicator checklist; whether indicator checklists have been tried by other states; how the quality of monitoring can be ensured; and whether there are potential drawbacks.

Can My State Make Use Of An Indicator Checklist?

Practically every state that presently has some form of questionnaire or checklist can potentially profit from using a shortened form of the instrument. Naturally, if your state's instrument is already sufficiently short, then little will be gained by being more selective about questions or items to include. Many states are confronted, however, with lengthy instruments that cover a wide range of requirement areas. These states are prime candidates for short-form instruments.

Similarly, perhaps obviously, if your state does not currently have an instrument-based system, then consideration of an indicator checklist/short form is premature.

In order to develop a successful indicator checklist, it is important that the items on your state's current instrument be clearly linked to:

- 1. Your state's requirements (regulations); and
- 2. The results or outcomes that are considered desireable with respect to the providers' performance in such areas as licensing, contract monitoring, and program quality.

Unless there is a clear correspondence between intrument items and requirements, there is a danger that the items selected for inclusion on the short form will be only loosely tied to regulations and may be perceived by providers as improper or illegal. Similarly, if there is only a weak link between items on your state's comprehensive instrument and the results that you expect from providers, then the ground for selecting particular items as good predictors will not be solid enough.

Have Indicator Checklists Been Tried By Other States?

The concept of an indicator checklist may be appealing, but administrators are usually hesitant to take risks that could jeopardize systems that have been developed through years of work. It is often satisfying to know that other states have already tested the concept in practice.

At present, the indicator checklist concept is still an innovation that holds great promise but has been fully implemented in only four states; Pennsylvania, West Virginia, New York, and California have developed an indicator checklist/short form and are testing the concept. Because the initial analyses conducted by these states suggest that the short form can work, other states such as Michigan and Texas have declared their intention to develop a shortened instrument by using these states' experiences as a guide. Clearly though, the indicator checklist/short-form methodology is still in the experimental stage.

How Can The Quality Of Monitoring Be Ensured?

Top administrators may wonder whether the shortened instrument presented here will compromise the quality of their state's current monitoring effort. Our view is that the short form will enhance current monitoring efforts by increasing the efficient and effective utilization of monitoring staff. But there are precautions that states should take in developing and using indicator checklists.

The indicator checklist/short instrument should not be used as a substitute for the comprehensive instrument, but rather as its complement. If the short form is viewed as the monitoring instrument, then there may be a tendency over time for providers to meet only the requirements covered on the short form. This situation could, indeed, compromise the quality of monitoring.

On the contrary, we would anticipate that states might keep their comprehensive instruments as the definitive set of compliance expectations and administer them for the initial review (e.g., licensing review) of a provider, and could use the indicator checklist/short form as:

- 1. A screening device to determine whether, for a given provider, it is necessary to administer the longer version; and
- 2. An interim review instrument to be used as the principal tool for providers who have a good record of compliance.

For example, the comprehensive instrument might continue to be used for "problem" providers and on a periodic basis, say, every three years for good providers. Naturally, if the short form were used with a provider and problems were discovered, then the comprehensive instrument, or some portions of it, could be administered.

Over time, as conditions change, it will be necessary to update and revise both the comprehensive and short instrument. Using the comprehensive instrument at least periodically with all providers will provide a basis for modifying the short form to reflect changing compliance patterns.

We expect that both versions of the instrument would be used by state staff who are trained and competent to assess compliance. These staff would certainly not limit themselves to using the short form if they determined, on site, that conditions warranted using the comprehensive instrument. The purpose of the indicator checklist/short form is to increase the options available to the state for monitoring in a flexible and cost-effective manner, not to put unreasonable constraints or "blinders" on monitoring staff.

What Are The Potential Drawbacks?

As with all innovations, the introduction of an indicator checklist as the basis for routine monitoring in a state may create some problems. Because so few states have introduced indicator checklists on a widespread basis, it is difficult to identify all of the concerns that may arise in practice. However, a few potential problems can be anticipated. (See Table 2).

First, some states' regulations require that all providers be reviewed every year in all regulatory areas. That is, the state insists that a comprehensive review, for example, using the comprehensive form of a state's monitoring instrument, take place for each provider. If this is the situation in your state, then the use of a shortened instrument may depend on changing the current regulatory provisions concerning the frequency and scope of reviews. A strong basis for making such a change is the cost effectiveness of the indicator checklist/short form, that is, its potential for reducing monitoring costs substantially without reducing the quality of the monitoring effort.

TADIDO

Potential Drawbacks	Possible Solutions
Regulatory Requirement for Annual Comprehensive Review	 Change Regulatory Requirements
Staff Resistance	Educate Staff
State's Lack of Prerequisites	 Seek Assistance in Obtaining Prerequisites

Second, the state's staff who are responsible for monitoring may resist the introduction of the indicator checklist/short form. From their viewpoint, it may appear that the use of indicator checklists is a reduction in the importance of their professional roles and that the state's cost savings may take the form of fewer jobs for day care monitors.

In our view, states may need to assure their staff that the indicator checklist/short form is not intended to reduce either the professional judgments involved or the scope of the monitoring function. As mentioned earlier, the comprehensive and short instruments must be used in a complementary way, not as substitutes, in order for the short form to have validity. If anything, the judgment of the monitors may be expanded as it becomes necessary to decide whether, in a particular case, the short instrument will be sufficient to measure compliance with state requirements, and/or program quality criteria. Monitors must be persuaded that the short form is an aid that is designed to reduce the monitors' workload for those providers with whom the short form is appropriate.

The reduction in workload may gradually change the relationship of monitors to providers from one of regulation to one of active support in improving the health and safety of the day care environment and encouraging child development. This change in the monitors' role could enable the state to make even better use of the current monitoring staff's knowledge and experience.

With respect to costs and staff reduction, there is little question that substantial decreases in workload could also result in reduced staffing levels. However, before considering cutbacks in staff, we would encourage states to consider reallocating staff time that is saved because of the short form to other monitoring activities such as technical assistance to providers involving program quality issues.

Third, a state may discover that it does not have the necessary prerequisites, described earlier, to develop and implement an indicator checklist. If your state lacks these prerequisites—in particular a comprehensive instrument, reports of scores, and a system of weighting items on the instrument—then it may be advantageous for you to examine other reports prepared by the Children's Services Monitoring Transfer Consortium that describe how these prerequisites can be met. You may be interested in obtaining the Consortium's series of Guide Books. The three volumes of this series describe in detail how to develop a comprehensive instrument from which an indicator checklist/short form can be derived.

Conclusion

The art of monitoring has evolved considerably in recent years as more highly trained staff have been given responsibility for monitoring, and as clearer procedures, such as instrument-based program monitoring, have been implemented. This evolution has contributed positively to achieving the desirable outcomes of improved day care for children for which the state has developed regulations. At the same time, the evolution has, we hope, made it possible for providers to operate more effectively with the minimum necessary oversight by the state.

Instrument Based Program Monitoring Systems are now being developed in other children's services such as MH/MR services. Pennsylvania has developed its child welfare information system based on the instrument based program monitoring concept. This system meets two needs for Pennsylvania: it tracks children through its foster care system; and it complies with PL 96-272—the Adoption Assistance and Foster Care Act—a federal law. West Virginia is attempting to use the IPM methodology in monitoring its family day care home programs.

Also, a micro-computer, decision support system based on the Instrument Based Program Monitoring and Indicator Checklist methodology is being developed by the Children's Services Monitoring Transfer Consortium (CSMTC). The CSMTC is a group of states (Pennsylvania, West Virginia, California, New York, Michigan, and Texas) who have been disseminating exemplary monitoring techniques from state to state. Based on the combined efforts of these states, a generic indicator checklist that measures compliance with state regulations as well as program quality has been developed (Fiene, 1984). The CSMTC feels that this generic indicator checklist can be used by states who have not developed an instrument to assess providers, or as a model instrument to assist states in developing their own instruments.

The real potential of monitoring in achieving social goals, (such as protecting the health and safety of young children, ensuring quality child development programs, and tying these to child development outcomes), will be better realized through continuing research and development of improved monitoring procedures. It is in this context that the development of the indicator checklist represents a major advance in monitoring children's services.

References

Aronson, S., Fiene, R. & Douglas, E. Pennsylvania Child Development Program Evaluation Instrument, Bureau of Child Development, Harrisburg, Pennsylvania, 1977.

Belsky, J.& Steinberg, L. The effects of day care: A critical review, *Child Development*, 1978, 49, 929-949.

Class, N. & Orton, R. Day care regulation: The limits of licensing, *Young Children*, Vol. #2, 1980, September, 12-17.

Collins, R. Child care and the states: The comparative licensing study, Young Children, Vol. #2, 1983, July, 3-11.

- Cohen, M. New York City Indicator Checklist, NYC Agency for Child Development, New York City, 1983.
- CWLA, Day Care Standards Revisions, Child Welfare League of America, New York City, 1983.
- Douglas, E. & Fiene, R. Making the almost impossible—possible: Evaluation of a human service (Ecological Paradigm for child care monitoring), paper presented at National Association for the Education of Young Children, November 1979, Atlanta, Georgia.
- Ferrar, H., Gleason, D. & Smith, B. A State-of-the-Art Report on State Monitoring of Child Care Facilities, Social Services Research Institute, Washington, D.C., 1980.
- Fiene, R., The two year old: Characteristics and management of his play, *Dimensions*, 1974, 2, 2, 46-58.
- Fiene, R., Current trends in research, Children, 1975, Spring, 15-18.
- Fiene, R. Child Development Program Evaluation Scale, Children's Services Monitoring Consortium, Washington, D.C., 1984.
- Fiene, R., Douglas, E., & Kroh, K. Child Development Program Evaluation, Bureau of Child Development, Harrisburg, Pa., 1977.
- Fiene, R., Douglas, E. & Nixon, M. System Documentation for Pennsylvania's Instrument Based Program Monitoring Information System, Children's Services Monitoring Services Consortium, Washington, D.C., 1983.
- Fiene, R. & Nixon, M. Instrument Based Program Monitoring System, Children's Services Monitoring Consortium, Washington, D.C., 1981.
- Fiene, R. & Nixon, M. *Indicator Checklist Methodology*, Children's Services Monitoring Consortium, Washington, D.C., 1983.
- Harms, T. & Clifford, R. Early Childhood Environment Rating Scale, Teachers College, Columbia University, New York, 1980.
- HEW, FIDCR Report of Findings and Recommendations, U.S. Department of Health Education and Welfare, Washington, D.C., 1978.
- Lazar, I. Lasting Effects After Preschool, U.S. Department of Health, Education and Welfare, Washington, D.C., 1979.
- Merrill, B. West Virginia Indicator Checklist, West Virginia Department of Social Services, Charleston, W.V., 1981.
- Morgan, G. Regulation of Early Childhood Programs, Washington, D.C.: Day Care and Child Development Council of America, Inc., 1971.
- Morgan, G. Alternatives for Regulation of Family Day Care Homes for Children, Washington, D.C.: Day Care and Child Development Council of America, Inc., 1974.
- Morgan, G. Regulating early childhood programs in the eighties, unpublished manuscript, 1980.
- NAEYC, Criteria for quality early childhood programs, National Association for the Education of Young Children, Washington, D.C., 1983.
- Peat, Marwick, & Mitchell, Assessment of the inplementation of the indicator checklist for day care centers in West Virginia, *Children's Services Monitoring Consortium*, September, 1983.
- Poole, J. Child Development Program Quality Review, California State Department of Education, Sacramento, CA., 1982.
- Ruopp, R. Children at the Center, Cambridge, MA: Abt Books, 1979.
- Watson, S., Fiene, R., & Woods, L. Kids MicroComputer Software, Children's Services Monitoring Consortium, Washington, D.C., 1984.
- Zigler, E. & Gordon, E. Day Care: Scientific and Social Policy Issues, Boston, Massachusetts: Auburn House Publishing Company, 1982.

ASPE

OFFICE OF THE ASSISTANT SECRETARY FOR PLANNING AND EVALUATION

13 INDICATORS OF QUALITY CHILD CARE: RESEARCH UPDATE 04/01/2002

HOME • 13 INDICATORS OF QUALITY CHILD...

13 INDICATORS OF QUALITY CHILD CARE: RESEARCH UPDATE

Presented to: Office of the Assistant Secretary for Planning and Evaluation and Health Resources and Services Administration/Maternal and Child Health Bureau U.S. Department of Health and Human Services

Presented by: Richard Fiene, Ph.D. Pennsylvania State University National Resource Center for Health and Safety in Child Care, University of Colorado

2002

CONTENTS

- Overview
- Introduction
- · Child Abuse Indicator
- · Immunizations Indicator
- · Staff Child Ratio and Group Size Indicator
- Staff (Director and Teachers) Qualifications Indicators (Two Indicators)
- Staff Training Indicator
- · Supervision/Discipline Indicator
- · Fire Drills Indicator
- · Medication Indicator
- Emergency Plan/Contact Indicator
- · Outdoor Playground Indicator

- Toxic Substances Indicator
- · Handwashing/Diapering Indicator
- Conclusion
- References

To order more copies of this report, contact:

U.S. Department of Health and Human Services Office of the Assistant Secretary for Planning and Evaluation 200 Independence Ave. SW, Room 450G Washington DC 20201 Fax: (202) 690-5514

Or, this report may be downloaded off the Internet at: http://aspe.hhs.gov/hsp/ccquality-ind02

OVERVIEW

The purpose of this research brief is to provide guidance for state child care agencies as they think about revising their state child care regulations. The brief is based upon a synthesis of literature around the health and safety standards for out-of-home child care found in *Stepping Stones to Using Caring for Our Children*, using 13 predictor/indicator topics to provide focus. The brief examines evidence that exists to support how these standards protect children from harm. The audiences for this research brief are state administrators and policymakers, child care providers, and early childhood researchers. It combines two licensing measurement methodologies (Fiene & Kroh, 2000): 1) Licensing weighting and 2) indicator systems. Licensing weighting and indicator systems are two licensing measurement tools that have been utilized in the licensing literature for the past 20 years. These two methodologies are part of the *Licensing Curriculum* developed by the National Association for Regulatory Administration. These methodologies constitute the most researched tools for conducting inferential inspections by licensing agencies.

The National Resource Center for Health and Safety in Child Care utilized the two licensing measurement methodologies to develop a user-friendly, shortened assistance tool based upon *Caring for Our Children: National Health and Safety Performance Standards for Out-of-Home Child Care*, a comprehensive standards document containing over 900 standards. The shortened assistance tool, *Stepping Stones to Using Caring for Our Children*, is a statistically determined version of *Caring for Our Children*, based upon the most critical standards to protect children from harm in out-of-home child care. Employing the indicator system methodology, this research brief builds upon *Stepping Stones* by focusing on those standards that protect children from harm in child care. These standards are also key predictors regarding childrens positive outcomes while in child care and are statistical indicators of overall compliance with child care regulations. The indicators in this brief contain a reduced number of standards from those presented in *Stepping Stones*. These standards have gone through a weighting consensus based on risk factors as well as an indicator methodology that selects standards on the basis of being able to predict overall compliance with standards and positive outcomes for children. As state regulations are rewritten, this brief will constitute a major step forward in support of state child care agencies as they attempt to ascertain which standards are the keys to protecting children.

This research brief is the final product of a lengthy process that started in 1979, when the Federal Interagency Day Care Requirements (FIDCR) were being drafted and the Department of Health, Education and Welfare (HEW) was looking for a streamlined tool for conducting monitoring reviews. The weighted licensing indicator system was just being developed in Pennsylvania (Fiene & Nixon, 1981) and this new methodology looked like a potential solution for the FIDCR standards. Although the FIDCR standards went through several drafts, the standards were never finished and implemented. However, the interest of HEW (became the Department of Health and Human Services (HHS) in

1980) in the weighted licensing indicator system methodology never wavered. A federal demonstration grant was given to Pennsylvania to further develop this methodology and begin pilot testing it in a consortium of states from 1980-1985 (Fiene, 1988). After 1980 it became clear that the monitoring focus for child care programs was shifting from the federal government to the states. HHS wanted to assist states in their monitoring efforts and felt that the weighted licensing indicator system was an innovative means for doing this.

During 1980s and early 1990s, many states utilized this methodology to help streamline their licensing enforcement systems. In 1994, a study from the U.S. General Accounting Office (GAO) estimated that 30 states were using the methodology in one form or another. The methodology has been used in child care and in other human services areas as well, including: mental health, early intervention, child welfare, and youth services (Fiene, 1988). During this time, a national data base was established at the Pennsylvania State University in order to track the various state regulations that constituted respective states weighted licensing indicator systems. The remarkable aspect of this data collection effort and data base was that a core set of indicators began to appear. Although the wording was not exact from state to state, every state had the same indicators appearing on their indicator checklists in some fashion. Thirteen key indicators consistently appeared. The 13 indicators were the following: child abuse reporting and clearances, proper immunizations, staff child ratio and group size, director and teacher qualifications, staff training, supervision/discipline, fire drills, administration of medication, emergency plan/contact, outdoor playground safety, inaccessibility of toxic substances, and hand washing/diapering.

From the early 1990s, the methodology began to gain the attention of national organizations that were interested in utilizing it outside of the licensing domain. For example, the National Child Care Association was interested in using it for their newly developing accreditation system (Fiene, 1992). In 1994, the Maternal and Child Health Bureau and the National Resource Center for Health and Safety in Child Care became interested in exploring a means for targeting certain standards in *Caring for Our Children* based upon the methodology. *Stepping Stones* is the product of that endeavor. However, only the weighting consensus portion of the methodology was utilized in the development of *Stepping Stones*. This research brief completes that process by incorporating the key indicator portion of the methodology.

This research brief updates reviews of recent research that is related to the 13 indicators that form the basis of the national database maintained at the Pennsylvania State University. It also lists the standards from *Caring for Our Children* that correspond to the 13 indicators. In many of the indicators, several standards are listed because the indicator was represented by different wording or emphases in the various state regulations. Therefore, when the comparison between the *Caring for Our Children* standards and the national data base of the state child care regulations was completed, many variations on each specific indicator were included.

The research brief then summarizes the research that has been completed in the 1990s and identifies gaps where additional research is needed. Following that, a summary table gives additional detail in an annotated bibliographic fashion on key studies that demonstrate the importance of the particular indicator. This research base and review clearly documents the importance of the 13 indicators when determining the health and safety of young children in child care and the overall quality of a program.

These key indicators support and embrace the overall research literature related to child care quality. Many of the indicators have been identified as key surrogates of child care quality that have an impact on young children and as being a reliable tool for identifying high compliant versus low compliant programs. The research literature over the past 20 years has demonstrated that these indicators accomplish two things. One, they statistically predict overall compliance with regulations in particular states. And two, a significant relationship exists between compliance with these indicators and positive outcomes for young children (Fiene, 1994).

INTRODUCTION

The Office of the Assistant Secretary for Planning and Evaluation and the Bureau of Maternal and Child Health in the U.S. Department of Health and Human Services have commissioned this research brief through an interagency agreement; it was developed from a comprehensive literature search conducted by the National Resource Center for Health and Safety in Child Care.

The purpose of this research brief is to review and to provide an analysis of the research literature focused on 13 key licensing indicators of quality in child care. These 13 indicators were used in the development of *Stepping Stones to Using Caring for Our Children* (1997). *Stepping Stones* is a publication developed from the *National Health and Safety Performance Standards: Guidelines for Out-of-Home Child Care Programs* [Caring for Our Children(CFOC)] to identify those standards most needed for the prevention of injury, morbidity, and mortality in child care settings. The National Resource Center developed *Stepping Stones* and is currently revising the *National Health and Safety Performance Standards*.

The 13 key licensing indicators, empirically identified in the research literature (Fiene & Nixon, 1981, 1983; Fiene, 1988; Fiene, 1994), have been part of a generic child care regulatory database for the past two decades. This database has been used by many states in the development of their respective licensing indicator systems.

This research brief will highlight the latest pertinent research studies related to the 13 indicators that have been completed since the publication of the *National Health and Safety Standards*in 1992. The research brief will also focus on gaps in the research literature where additional empirical research needs to occur. In some cases, research going back further than the last decade was used because of the classic nature of the studies and their significance to the 13 key indicators. The 13 indicators are the following: child abuse reporting and clearances, proper immunizations, staff:child ratio and group size, director and teacher qualifications (two indicators), staff training, supervision/discipline, fire drills, administration of medication, emergency contact/plan, outdoor playground safety, inaccessibility of toxic substances, and handwashing/diapering. The order in which the indicators are reviewed in this research brief is arbitrary and does not reflect the degree of risk associated with an indicator.

This research brief is organized by indicator, followed by each related standard from *Caring for Our Children*. Next, the latest empirically-based research that demonstrates the importance of the indicator and any noted gaps in the research literature are listed. Finally, a summary table that lists pertinent research citations related to each indicator is included. When fewer research citations were available, the summary table of research selections mirrors the research cited in the review section. When many research selections were available, the summary table and the research review sections are very different due to the large number of research citations. A conclusion summarizing the results of this research brief concludes the document.

[Go To Contents]

CHILD ABUSE INDICATOR

The following list of standards based upon *Caring for Our Children* (CFOC) are taken from the National Data Base of Key Weighted Licensing Indicators that is maintained at the Pennsylvania State University. This national data base maintains all the state licensing regulations that fall under this particular indicator. State regulations are sometimes worded a bit differently or emphasize different aspects of this indicator. Therefore, in comparing the national data base

of state regulations with CFOC standards, several different standards are selected for inclusion under this particular indicator. Twelve standards from CFOC were selected because states measure the child abuse indicator in 12 different ways.

CARING FOR OUR CHILDREN (CFOC) STANDARDS (1992):

HP 094: The facility shall report to the department of social services, child protective services, or police any instance where there is reasonable cause to believe that child abuse, neglect, or exploitation may have occurred.

HP 095: Caregivers and health professionals shall establish linkages with physicians, child psychiatrists, nurses, nurse practitioners, physicians' assistants, and child protective services who are willing to provide them with consultation about suspicious injuries or other circumstances that may indicate abuse or neglect. The names of these consultants shall be available for inspection.

HP 096: Caregivers must be aware of the common behaviors shown by abused children and, if many such children are in the center, make special provisions for them by the addition of staff.

HP 097: Caregivers who report abuse in the settings where they work shall be immune from discharge, retaliation, or other disciplinary action for that reason alone, unless it is proven that the report was malicious.

HP 098: Employees and volunteers in centers shall receive an instruction sheet about child abuse reporting that contains a summary of the state child abuse reporting statute and a statement that they will not be discharged solely because they have made a child abuse report.

HP 099: All caregivers in all settings and at all levels of employment shall know the definitions of the four forms of child abuse and shall be able to give examples. They shall know the child abuse reporting requirements as they apply to themselves, and how to make a report.

HP 100: Caregivers with a year of experience in child care, and all small family home caregivers, shall know the symptoms and indicators of abuse that abused children may show. They shall know the common factors, both chronic and situational, that lead to abuse, and some ways of helping persons who are prone to abuse to avoid committing abuse. These symptoms and indicators shall be listed in the written policies.

HP 101: Center directors shall know methods for reducing the risks of child abuse. They shall know how to recognize common symptoms and signs of child abuse.

HP 102: Caregivers shall have ways of taking breaks and finding relief at times of high stress (e.g., they shall be allowed 15 minutes of break time every four hours, in addition to a lunch break of at least 30 minutes).

HP 103: The physical layout of facilities shall be arranged so that all areas can be viewed by at least one other adult in addition to the caregiver at all times to reduce the likelihood of isolation or privacy for individual caregivers with children, especially in areas where children may be undressed or have their genitals exposed.

HP 104: Caregivers shall be knowledgeable about the symptoms and signs caused by sexually transmitted diseases (STDs) in children. They must refer such children for care by calling the health care provider as well as the parent in order to be certain that the child is taken for care. They must determine from the health care provider when the child may return to the site and what precautions, if any, are needed to protect other children. Caregiver training on these items shall be documented.

ST 034: Directors and large family home caregivers shall check references and examine employment history before employing any staff, including substitutes, who will be alone with a child or a group of children in child care.

RESEARCH REVIEW/GAP ANALYSIS:

A major concern of parents when they drop their children off at child care is the safety of their children in the hands of the caregivers. The abuse of children in out-of-home settings has generated a good deal of concern. However, all documented research in this area indicates that fewer instances of abuse occur in child care programs than in homes or residential facilities (Finkelhor & Williams, 1990; Goldman, 1993; Margolin, 1991). If abuse does occur, though, parents must be aware of several signs that are cause for concern. According to research, physical abuse most frequently occurs in the form of excessive discipline, often as a response to prior conflict with the child. Sometimes, excessive discipline may have been inadvertently supported by parental permission for corporal punishment. Although sexual abuse occurs less frequently in centers than in homes, the effects of sexual abuse on the child seems worse in centers. Sexual abuse often involves physical abuse (Schumacher & Carlson, 1999).

Several things that a program can do to foster an effective and harm-free child care experience include increased caregiver support (high staff-child ratios, sufficient breaks, etc.), a model of care, a focus on positive behavior, a consumer orientation, training opportunities, program evaluation, and an internal program audit (Daly & Dowd, 1992). Any effective staff development program incorporates these elements. When the staff is fully supported with these elements, the risk for abusive behavior decreases substantially. Research (Reyome, 1995) has also shown that satisfaction in the role of child care worker is inversely related to abusive attitudes. However, overall competence and feelings of efficacy in the role of child care worker are not significantly related to abusive attitudes.

Other research (Thompson, Laible, & Robbennolt, 1997) indicates that child maltreatment might be prevented through child care programs that offer social support, parent networking, child-rearing advice, and informal counseling to troubled parents. This idea is attractive in the abstract, but it is often difficult to implement. The Thompson et al. study examines the nature of social support and its efficacy in preventing child abuse and neglect, the characteristics and needs of abuse-prone parents, the roles of child care providers, and the institutional and economic conditions that can make child care programs uniquely valuable but challenging settings for assisting families at risk.

Another area that should be addressed is the caregivers ability to recognize abuse when it has occurred. Research (Wurtele & Schmitt, 1992) indicates that child care personnel know significantly less about the procedures for reporting suspected abuse and their protection under the law when compared to child sexual abuse experts. While child care staff are potential resources for abused children, they may fail to report suspected abuse if they do not know their legal responsibilities and their rights and protections under the law. These researchers have made suggestions for improving child care workers knowledge about reporting suspected sexual abuse cases. A basic educational program clearly delineating the legal responsibilities of staff, including requirements for reporting, is needed.

Linking nurses with child care programs seems to be a viable alternative (Mondor & Wray, 1994). Such an innovative program was implemented in Edmonton, Alberta, Canada, in which a health program focusing on child abuse and neglect was linked with local child care programs. This program grew out of a study done by OMara and Chambers in which 53 percent of child care operators felt they needed more information on child abuse and how to detect potential abuse related to children in their care.

User manuals can also be excellent training tools. One user manual of particular note was developed by the National Center on Child Abuse and Neglect, titled *Caregivers of Young Children: Preventing and Responding to Child Maltreatment*. Another good user manual is the *Arkansas Healthy Children Handbook (1998*), which has an excellent section on Child Maltreatment. The American Camping Association has an excellent guide, *For Their Sake:*

Recognizing, Responding to, and Reporting Child Abuse (1992). Additionally, a Teaching Strategies text called Caring for Infants and Toddlers: A Supervised, Self-Instructional Training Program (Volume I) (1991) has an exceptional chapter that recognizes child abuse and neglect. All of these handbooks, texts, and manuals are useful tools to be used for training child care staff on what to look for and how to report suspected child abuse and neglect. These tools also provide directors of child care programs with helpful information on designing a prevention program at their child care centers.

The community context in which child abuse and neglect takes place may influence both reporting and outcomes of investigations into such incidents (Craft & Staudt, 1991). The general purpose of the Craft & Staudt (1991) study was to determine if two types of communities (rural and urban) would present differences in the reporting and substantiating of possible child neglect situations. For example, although where one lives (rural or urban) does not significantly influence the projected likelihood of a situation being reported as neglect; considerable agreement exists between urban and rural respondents on what should be reported as neglect. Even so, workers in both communities did not agree about what would be substantiated in those communities. To further clarify this issue, Groeneveld and Giovannoni (1977) found that if a complaint was reported by a professional source it was more likely to be substantiated than if reported by a relative or neighbor.

SUMMARY TABLE:

Citation: Margolin (1991), Abuse and neglect in non parental child care: a risk assessment, *Journal of Marriage & the Family*, 53(3):694-704.

Summary: Interviews were conducted with 982 mothers of young children to assess factors related to childrens risk of abuse and neglect by non parents temporarily responsible for child care. The target populations consisted of mothers who had given birth to at least one child during the previous six years (May 1984 through April 1990). Mothers were identified through certificates of live births located in the courthouse of a Midwestern county. Equal numbers of mothers were randomly selected from each month of the survey years. One hundred twenty-five mothers (13% of those surveyed) said that one or more of their children had been harmed or neglected by a nonparental caregiver. The strongest correlates of child abuse were caregiver gender and age. Although males were responsible for only 6.1% of non parental child care, they committed 40% of the child abuse. Adolescents performed 8.5% of non parental child care but committed 44% of the child abuse. Children were significantly less likely to be abused in a day care center or preschool than in home-based child care. The strongest correlates of neglect were the childs age, the caregivers age, and the child care setting. Babies under the age of one year were three times more likely to be neglected, adolescent caregivers were twice as likely to be neglectful, and as was true of child abuse, home-based care was the setting with the greatest risk.

Citation: Bybee & Mowbray (1993), An analysis of allegations of sexual abuse in a multi-victim day care center case, *Child Abuse and Neglect*, 17(6):767-83.

Summary: This study applied criteria from Statement Validity Analysis (SVA) protocols to aggregate record review data of alleged sexual abuse of over 100 children in a day care center. The use of SVA criteria supported the veritability of allegations in this case, with the data analysis reflecting consistency, logical structure, and spontaneity of allegations.

Citation: Wurtele & Schmitt (1992), Child care workers knowledge about reporting suspected child sexual abuse, *Child Abuse & Neglect*, 16(3):385-90.

Summary: As reports of the sexual abuse of preschool aged children increase and the number of children in day care expands, it is important to recognize child care workers as potentially important resource persons for sexually abused preschoolers. Although they are potential resources for abused children, they may fail to report suspected abuse if they do not know their legal responsibilities and their rights and protections under the law. The purpose of this study was to determine child care workers knowledge about their reporting rights and responsibilities. Relative to child sexual abuse experts, day care personnel knew significantly less about the procedures for reporting suspected abuse and their protection under the law. Suggestions for improving child care workers knowledge about reporting suspected sexual abuse cases are provided.

Citation: Bassoff & Willis (1991), Requiring formal training in preventive health practices for child day care providers, *Public Health Reports*, 106(5):523-9.

Summary: The study was a test of the feasibility of mandating training in preventive health practices for child day care providers in California. Three approaches were taken to determining the feasibility of mandatory training. They were (a) to identify persons and groups with the capability to provide training, (b) to identify systems and networks for communication and collaboration on health issues related to day care at the local level, and (c) to determine the child day care providers concerns, needs, and future interests regarding child health. Information was collected on relevant courses offered by universities, colleges, and adult education programs; on training offered by child health authorities; and on formal curriculums offered by local and national sources. Day care center and family day care home providers were surveyed to determine their knowledge of child health issues, their concerns, and their future needs. The providers surveyed cared for a total of 14,340 children. Information on local networks was obtained from the surveys, from interviews, and from a special task force that had been set up to advise the State legislature. Study results supported the conclusion that a coordinated system of State-wide training was feasible, given the existing networks of training and educational resources, the number of day care providers who had already been motivated to seek some training in child health practices, and the almost unanimous interest among day care providers in obtaining training. Mandatory training in child health for day care providers will require a commitment in the form of new legislation outlining basic requirements and allocating funding. The implementation and costs of such a mandate at the State and local level are discussed.

Citation: Craft & Staudt (1991), Reporting and founding of child neglect in urban and rural communities, *Child Welfare*, 70(3):359-70.

Summary: The community context in which child abuse and neglect takes place may influence both reporting and outcomes of investigations into such incidents. This study examines and contrasts urban versus rural community perceptions of neglect by lay citizens and protective service workers.

Citation: Cohen (1998), Bettering your odds of not getting sued, Child Care Information Exchange, 123, 74-78.

Summary: Reviews five serious issues that can result in lawsuits against child care centers and suggests ways directors can make them less likely. Discusses suits resulting from: injuries to a child; sexual abuse of a child; contractual matters with parents; wrongful termination of employees; and failing to care for a child with special health needs.

Citation: Goldman (1995), Recognizing child abuse and neglect in child care settings, *Day Care & Early Education*, 22(3):12-15.

Summary: Draws attention to the prevalence of child abuse in homes, and discusses the extent of the problemits definition and its physical, behavioral, and environmental indicators. Discusses the child care workers role in knowing how to report the crime, teaching a child how to prevent it, and combating it by being informed and aware personnel.

Citation: Daly & Dowd (1992), Characteristics of effective, harm free environments for children in out of home care, *Child Welfare*, 71(6):487-96.

Summary: Discusses specific elements that can foster effective and abuse free out of home care, increase program effectiveness, and reduce negative outcomes such as staff burnout. Elements include caregiver support, a model of care, a focus on positive behavior, a consumer orientation, training, program evaluation, and an internal program audit.

Citation: Mondor & Wray (1994), Whats the matter with Johnny? telltale signs of child abuse and neglect, *Canadian Nurse*, 90(4):35-8.

Summary: Day care workers must be able to recognize and respond to the telltale signs of child abuse and neglect. They also need a sound understanding of the services available to these children and their families. Nurses can help.

Citation: Schumacher & Carlson (1999), Variables and risk factors associated with child abuse in day care settings, *Child Abuse & Neglect*, 23(9):891-898.

Summary: Identified variables associated with abuse of children in day care centers and homes and specified risk factors. Literature regarding physical (PA), sexual (SA) and ritual child abuse (RA) was reviewed, focusing on identification of variables associated with victims, perpetrators, and settings. PA most frequently occurred in the form of over discipline, was a response to prior conflict with the child, and may have been inadvertently supported by parental permission for corporal punishment. SA often include PA and occurred less frequently in centers than in homes, but effects on the victim seemed worse in centers because severity was worse. A Satanic overtone frequently associated with RA, and RA with SA was most devastating. Effects were not temporary. Males predominated the perpetrator profile. Multiple perpetrator abuse was worse. Failure of center staff to report suspicion of abuse by fellow staff or parents was cited as a worry by several researchers.

Citation: Thompson, Laible, & Robbennolt (1997), Child care and preventing child maltreatment, in Dunst & Wolery (Ed.), Advances in early education and child care, Vol. 9, 173-202.

Summary: Examines the nature of social support and its efficacy in preventing child abuse and neglect, the characteristics and needs of abuse prone parents, the roles of child care providers, and the institutional and economic conditions that can make child care programs uniquely valuable but challenging settings in which to assist families at risk.

Citation: Zellman (1992), The impact of case characteristics on child abuse reporting decisions, *Child Abuse & Neglect*, 16(1):57-74.

Summary: Surveyed 1196 mandated reporters (physicians, social workers, psychologists, principals) about their child abuse reporting behavior, using vignettes in which case and characteristics were systematically varied. Data reveal that abuse relevant judgments and reporting intentions varied as a function of case characteristics. Three case characteristics (previous abuse, severity of abuse, and recantation) were powerful predictors of vignette outcomes. Previous abuse led to judgments of greater seriousness. When the alleged victim retracted his/her accusation on questioning by an authority figure, respondents were significantly less likely to intend a report. Child age, perpetrator intent, and family socioeconomic status also influenced abuse relevant judgments and reporting intentions. Respondents were more likely to intend a report (make a report) when younger children, lazy or angry perpetrators, and children from poorer families were portrayed.

Citation: Haldopoulos & Copeland (1992), Case studies of child care training volunteers found to be at risk for abuse, *Early Child Development & Care*, 68, 149-158.

Summary: Conducted a comprehensive screening and training program designed to train women interested in obtaining jobs as infant caregivers. Over 100 women registered for training over a three year period, most of them low socioeconomic status urban dwellers seeking minimum wage jobs in the suburbs. Subjects were administered an open ended screening interview that assessed past history, child care knowledge, and individual personality dynamics. Ten percent of subjects were screened out of the program because they were rated as being high risk for child abuse. The case histories of six subjects are presented to illustrate the dynamics involved in the high risk rating, which included history of physical abuse, potential emotional abuse, and sources of anger. All of the high risk subjects sincerely saw themselves as potentially good child care providers, indicating the need for effective screening of potential child care providers.

ADDITIONAL RESOURCES:

Child Welfare Information Gatewaywww.childwelfare.gov 1250 Maryland Avenue, SW Eighth Floor Washington DC 20024 1.800.394.3366info@childwelfare.gov

National Committee for the Prevention of Child Abuse PO Box 2866 Chicago, IL 60690-9950 Phone: 312-663-3520 http://childabuse.org

[Go To Contents]

IMMUNIZATIONS INDICATOR

This indicator only has one standard selected because the ACIP and AAP are the standards in the field related to immunizations for young children.

CFOC STANDARD (1992):

APP 26the latest version of the Advisory Committee on Immunization Practices (ACIP) of the U.S. Public Health Service and the American Academy of Pediatrics (AAP) immunization schedule.

RESEARCH REVIEW/GAP ANALYSIS:

Since child care settings are associated with outbreaks of illness, and attendees have more frequent and severe infectious illnesses and receive more antimicrobial agents than children cared for at home, the increased use of child care has significantly impacted the epidemiology and cost to society of infectious diseases in the United States (Holmes, Morrow, & Pickering, 1996).

Immunizations are both a process indicator and an outcome indicator, which help protect children not just during childhood but for the rest of their lives. Immunizations are one of the most effective means for controlling the spread of infectious diseases in child care. Young children in child care face a greater risk of acquiring infectious diseases as compared to older children and adults (Pickering & Solomon, 1994). Licensed child care facilities typically require upto-date immunizations for entrance, so vaccine-preventable diseases should have a reduced incidence compared to the general population. For example, the use of the Hib vaccine has led to a dramatic decline in the incidence of invasive disease caused by haemophilus influenzae type B.

Though immunization rates in child care have increased over the years, higher overall immunization rates are still needed. Linking child care payments to immunizations is one approach. Most parents believe immunizations should be undertaken for health reasons rather than monetary reasons and are ambivalent about linking child care payments to immunizations. However, research (Bond, Nolan, & Lester, 1999) has shown that immunization levels in child care could be increased by as much as 10% with this strategy. Responses from parents indicate that opportunistic immunizations (e.g., immunizations given at child care facilities or in a mobile immunization van) and evening immunization services would be welcome changes to current immunization services. This study suggests that both flexible immunization provision and government incentives may work together to increase immunization rates.

Statewide systems can help by keeping track of immunization rates and enacting systems for continued improvement. ECELSEarly Childhood Education Linkage System, in Pennsylvania, is a very effective and highly evaluated program where the licensing inspection system shares data with ECELS on a quarterly basis so that ECELS can follow up with sites that are having difficulty meeting immunization standards. This is a unique partnership between a state agency and one of its contractors (Fiene, 1995). Another study (OMara & Isaacs, 1993) demonstrated that reviewing and monitoring child care center records increases the reported rate of correctly immunized preschool children. Other studies have also shown that monitoring records increases compliance with guidelines (Aronson & Aiken, 1980). ECELS has utilized the latest computer technology by using software algorithms to determine vaccine compliance for children. Not only does this technology track childrens immunization status, it holds particular promise in producing positive change by following up with programs that have low compliance levels.

Two very important studies regarding illnesses in child care that have been conducted by the Washington Department of Public Health and the Centers for Disease Control and Prevention (MacDonald et al. 1997, Cordell et al. 1997). These studies address illnesses and absence due to illness among children who attend child care facilities in Seattle-

King County, Washington. The first study (Cordell et al., 1997) compared incidence of illness and absence among children attending child care homes and child centers. The other study (MacDonald et al., 1997) explored passive surveillance for communicable diseases, seeking to develop and evaluate models for public health surveillance of illnesses among children in out-of-home child care facilities. States can consider the alternative models that these two studies provide when attempting to establish and implement a statewide surveillance system for tracking illnesses in child care.

SUMMARY TABLE:

Citation: Bond & Lester (1999), Immunization uptake, services required and government incentives for users of formal day care, *Australian & New Zealand Journal of Public Health*, 23(4):368-76.

Summary: To determine immunization uptake in children attending formal day care prior to the introduction of certificates and parent incentives, and to document parent and child caregivers attitudes to these strategies. In 1997, 60 child care centers and 300 family day care providers in suburban Melbourne were randomly sampled. Immunization dates, service use and preference, and views on government incentives were obtained from parents of children under three years of age. Providing client focused, flexible immunization services and government incentives and legislation may work together to boost immunization levels for those in formal child care.

Citation: Ferson (1997), Infection control in child care settings, Communicable Diseases Intelligence, 21(22):333-7.

Summary: Over one-third of all under 5-year-old Australian children use some form of licensed child care. The majority of research on infectious diseases in children using care, mainly emanating from North American and Scandinavia, suggests that children in preschool or long day care suffer more frequent infections and more days of illness than those cared for a home or in family day care. In order to minimize these risks it is necessary to apply infection control principles. In this study infection risk factors are outlined and recommendations for immunization, preventative practices, the use of antibiotics and outbreak management are presented.

Citation: OMara (1993), Evaluation of registered nurses follow-up on the reported immunization status of children attending child care centers, *Canadian Journal of Public Health*, 84(2):124-7.

Summary: The purpose of this study was to evaluate whether follow up by nurses increased the reported rate of correctly immunized preschoolers in child care centers. Records from 14 randomly selected child care centers from the Hamilton-Wentworth area (n=514 records) were assessed for the number of correctly immunized preschoolers by two nurses operating in different centers. The nurses advised the centers about all incomplete records and reminded parents to update their childs immunization status. One nurse revisited all her assigned centers two to five weeks later. Both nurses returned to the child care centers to reevaluate the records two to eight months after the initial contact. Three hundred and eighty-two records were available for the second review (25% drop out rate). The reported rates increased significantly for all immunizations. There was no difference when the follow up intervention was greater. This study suggests that monitoring records improves the completeness of records in child care centers.

Citation: Fiene (1995), Utilizing a statewide training system to improve child day care quality, *Child Welfare*, 74(6):1189-1201.

Summary: Describes Pennsylvanias comprehensive child day care and early childhood development training system, focusing on the Early Childhood Education Linkage System (ECELS) and its immunization initiative. The initiative was established to improve the overall immunization status of all children in child day care in the state.

Citation: Carter & Bumpers (1992), We must immunize every child by two, Dimensions, 20(2):5-6.

Summary: Discusses the development and initial implementation of the Every Child By Two project. The project is designed to immunize as many newborn through two year old children in the United States as possible against communicable childhood diseases and to create a program to systematically immunize this age group in the future.

Citation: Middleton (1995), Child care diseases: the risksand how to minimize them, Consultant, 35(2):195-8.

Summary: Is it safe to send a child with a temperature of 100 degrees F to child care? How soon after the start of therapy can a preschooler with conjunctivitis return to child care? As the number of children attending such facilities rises, you can expect to hear more of these questions form anxious parents. You can help reduce the risk of infectious disease transmission by making sure that vaccination is up to date in all preschoolers; also, pneumococcal vaccination is mandatory for children 2 years and older with serious pulmonary, cardiac, or hematologic illnesses. Give parents a checklist of safety features to consider when they are looking for a child care center; remind them that the risk of injury can be lowered by such measures as continuous staff supervision, use of child safety devices, and provision of foods and toys that cannot easily be aspirated.

Citation: Pickering & Solomon (1994), Day care infections: children at risk, Patient Care, 28(9):118-21.

Summary: Day care centers provide a setting for transmission of respiratory and GI infections. Proper immunization, preventive measures, and prompt reporting of outbreaks are the keys to control.

Citation: MacDonald, Boase, Stewart, Alexander, Solomon & Cordell (1997). Active and passive surveillance for communicable diseases in child care facilities, Seattle-King County, Washington. *American Journal of Public Health*, 87(12), 1951-55.

Summary: This study presents the results of a 1992 project by the Seattle-King County Department of Public Health and the Centers for Disease Control and Prevention to develop and evaluate models that could be used for public health surveillance in child care settings. The study was to determine the feasibility of active public health surveillance in child care settings. The surveillance objectives were to 1) rapidly detect illness outbreaks in particular facilities, 2) give local health officials information on the scope and patterns of illnesses among children in child care, and 3) create a channel for information sharing between child care providers and the Department of Public Health. The study was conducted from July 1992 through March 1994. It began with active surveillance, but changed to passive surveillance based upon the increased effort needed from both child care and the Department of Public Health staff to maintain the system. The study discusses the implementation of the two surveillance models pointing out the pluses and minuses of both approaches.

Citation: Cordell, MacDonald, Solomon, Jackson, & Boase (1997). Illnesses and absence due to illness among children attending child care facilities in Seattle-King County, Washington, *Pediatrics*, 100(5), 850-855.

Summary: Although much of the economic impact of child care associated illness in the U.S. is due to parents time lost from work, there are no data on the incidence of absence due to illness among children in various types of out-of-home child care settings. The goals of this study were to compare the incidence of illness and absence due to illness among children attending child care centers and child care homes. From July 1992 through June 1993, child care providers from 91 child care homes and 41 child care centers in Seattle-King County, Washington, provided information on absenteeism and illness for 96,792 child-weeks of observation. The age-adjusted incidence of provider-reported illness episodes among children in child care homes was greater than that among children in child care centers. The age-adjusted incidence of absence due to illness among children in child care homes was less than that among children in child care centers. Results comparing the incidence of illness between children in various types of child care settings may be influenced by information sources. The incidence of illness among children in child care homes may be greater than that among children in child care centers due to illness among children in child care centers compared with that among children in child care homes probably reflects differences in exclusion and attendance policies and practices between there two types of settings.

ADDITIONAL RESOURCES:

American Academy of Pediatrics (AAP) 141 Northwest Point Boulevard Elk Grove Village, IL 60007-1098 Phone: 847-228-5005 Fax: 847-228-5097http://www.aap.org/

Centers for Disease Control National Immunization Program 1600 Clifton Road Building 16, D25 Atlanta, GA 30333 Hotline: 1-800-232-2522 http://www.cdc.gov/nip/

[Go To Contents]

STAFF CHILD RATIO AND GROUP SIZE INDICATOR

These indicators only have one standard represented because in the national data base a specific state regulation that deals with staff child ratio and group size exists. Even so, the variation of these regulations among the states is great. While some states meet or almost meet these standards for staff child ratio and group size, many states do not. Of all the indicators, the greatest variation occurs in how state regulations match up with the national standard for staff child ratio and group size.

CFOC STANDARD (1992):

ST 002Child:staff ratios for centers and large family child care homes shall be maintained as follows during all hours of operation:

Age	Child-staff ratio	Maximum group size
Birth-12 months	3:1	6

13-24 months	3:1	6	
25-30 months	4:1	8	
31-35 months	5:1	10	
3 year olds	7:1	14	
4 year olds	8:1	16	
5 year olds	8:1	16	
6-8 year olds	10:1	20	
9-12 year olds	12:1	24	

When there are mixed age groups in the same room, the child:staff ratio and group size shall be consistent with the age of the majority of the children when no infants or toddlers are in the mixed age group. When infants or toddlers are in the mixed age group, the child:staff ratio and group size for infants and toddlers shall be maintained.

RESEARCH REVIEW/GAP ANALYSIS:

HFAITH

Review of all the major research in child care clearly demonstrates the importance of maintaining appropriate child:staff ratios and group sizes. Child:staff ratios and group sizes are two of the best indicators for determining the quality of a child care program and they significantly effect many other health and safety issues. Smaller group size is associated with a lower risk of infection in child care. The risk of illness in children between the ages of one and three years of age increases as the group size increases to four or more, whereas children in groups of three or fewer have no more risk of illness than children cared for at home (Bartlett, Orton, & Turner, 1986; Bell, Gleiber, Mercer, Hifer, Guinter, Cohen, Epstein, & Narayanan, 1989). The risk of repeated ear infections increases in one- to six-year-old children who attend child care in groups of more than six children (Hardy & Fowler, 1993).

The risk of hemophilus influenzas increases for children one year of age or older in a child care setting with four or more children, and the risk of infection peaks in settings with 21 or more children. Research indicates that group size should be limited to twice the maximum number of children allowed per adult. Smaller child care centers, not just those with smaller class sizes, have lower rates of disease. Outbreaks of Hepatitis A occur at the rate of 3% in centers that enroll less than 20 children but 53% in those that enroll 51 or more children (Hadler, Erben, Francis, Webster & Maynard, 1982). Children in small child care centers in France had two to three times the risk of repeated infections (e.g., upper respiratory tract infections, otitis media, conjunctivitis) than children in family child care settings with no more than three children (Collet, Burtin, Kramer, Bossard & Ducruet, 1994).

Lower child:staff ratios reduce the transmission of disease. Although there is little research available that examines the relationship between particular child:staff ratios and childrens health (a major gap that needs to be addressed), the research that is available suggests that fewer children per adult reduces the transmission of disease because

caregivers are better able to monitor and promote healthy practices and behaviors (Bredekamp, 1990; Hayes, Palmer, & Zaslow, 1990).

SAFETY

Smaller group size improves the caregiving behaviors of staff and the safety of children. The North Carolina Office of Child Care Licensing found that the severity and frequency of complaints (such as reports of severity and frequency of complaints or reports of abuse and neglect) were higher in child care centers serving 30 or more children (Russell & Clifford, 1987). Caregivers in small groups spend substantially more time interacting (praising, responding, comforting, questioning, and instructing) with children and are more actively involved with the children in their care (Ruopp, Travers, Glantz, & Coelen, 1979).

Lower child:staff ratios are associated with fewer situations involving potential danger (such children climbing on furniture (Hayes, Palmer & Zaslow, (1990); and child abuse (Howes, 1990). Having a second adult in a child care facility reduces the chances for child abuse (Howes, 1990). When centers and family child care homes have insufficient staff, caregivers are often burdened with the care of more children than they can manage, which increases their stress and makes it more likely that they will abuse the children (Deitch, 1987). Additional staff enables teachers to leave stressful situations until they are ready to cope with and respond to the children in a manner that does not inflict harm.

MENTAL HEALTH/SCHOOL READINESS

Research suggests that children in groups of 12-14 with two caregivers are more cooperative, compliant, and exhibit more reflection/innovation than children in groups of 24-28 with four caregivers. Children in smaller groups also exhibit more social competence than children in larger groups (Clarke-Stewart, Gruber, & Fitzgerald, 1994). Children become securely attached to individuals whom they trust to care for them in a responsive and sensitive manner. Caregivers with small groups are more actively involved and spend more time interacting with children; they are more responsive, more socially stimulating, and less restrictive than caregivers in larger groups (NICHD Early Child Care Research Network, 1996). These behaviors correspond to those found in caregivers of securely attached children. Securely attached children tend to be more advanced in their play, less aggressive and withdrawn, and more socially competent than children who are insecurely attached (NICHD Early Child Care Research Network, 1996).

Children receive less attention, affection, responsiveness, and stimulation from caregivers each time a single child is added to a group (Clarke-Stewart, Gruber, & Fitzgerald, 1994). Caregivers have more positive, nurturing interactions with children and provide children with more individualized attention when they are in charge of smaller groups of children with smaller child:staff ratios (Dunn, 1993). Children who have highly involved caregivers tend to exhibit behaviors suggestive of secure attachment (e.g., they explore unfamiliar surroundings more, have more contact with the caregiver, and orient more to the caregiver than to a stranger) more than children with less involved caregivers (Anderson, Nagle, Roberts, & Smith, 1981).

Children who are members of larger groups and receive less individual attention show lower gains in PSI (Preschool Inventory) scores than children who are members of smaller groups and receive more individual attention. Children with higher language development scores tend to have caregivers who are more responsive, more sensitive, and less detached (Whitebook, Howes, & Phillips, 1989).

Smaller group size is associated with more developmentally appropriate classroom activities than larger group size. Groups of six or fewer infants, 12 or fewer toddlers, and 18 or fewer preschoolers are more likely to engage in developmentally appropriate activities than children in groups that exceed these numbers (Howes, Phillips, &

Whitebook, 1992). When children are expected to perform at unattainable levels, they may feel overwhelmed and thus be less motivated to excel at academic pursuits (Eccles, Wigfield, & Schiefele, 1998).

Lower child:staff ratios are associated with less distress in toddlers, less apathy and distress in infants (Hayes, Palmer, & Zaslow, 1990), and greater social competence (Clarke-Stewart, Gruber, & Fitzgerald, 1994). Children in classrooms with lower child:staff ratios engage in more talk and play (Howes & Rubenstein, 1981) and display more gestural and vocal imitation (Francis & Self, 1982) than children in classrooms with higher child:staff ratios. Children who engage more frequently in conversations with caregivers tend to develop better socially (Clarke-Stewart, 1987).

Children in classrooms having lower child:staff ratios (i.e., 3:1 for infants, 4:1 for toddlers, 9:1 for preschoolers) are more likely to have positive interactions with caregivers, be properly supervised, and be engaged in activities rated as good or very good (NICHD Early Child Care Research Network, 1996; Howes, Phillips, Whitebook, 1992). Lower child:staff ratios relate to more developmentally appropriate caregiving and sensitivity (Whitebook, Howes, & Phillips, 1989); more contact (e.g., talking, playing, touching, and laughing) with children (Smith & Connolly, 1981); more responsive and stimulating behavior (NICHD Early Child Care Research Network, 1996); and less restriction of childrens behavior (e.g., less commanding, correcting (Howes, 1983). Additional caregivers reduce the amount of irritability and restrictiveness that caregivers express to the children in their care (Rubenstein, Howes, & Pederson, 1982). Lower child:staff ratios are associated with higher rates of secure attachments between toddlers and their caregivers (Howes, Rodning, Galluzzo, & Myers, 1988).

Lower child:staff ratios are associated with more verbal communication between caregivers and children, which appears to foster language development in children. Adults and children talk to one another more when there is a lower child:staff ratio (Palmerus, 1996), and caregivers engage in more dialogues (i.e., verbal communications between a caregiver and child that involve an exchange of at least three turns) and fewer monologues (i.e., verbal communications between a caregiver and child that contain only one or two sentences and involve only one or two turns (Palmerus, 1996)). More adult-child verbal interactions predict better scores on language inventories, whereas more peer verbal interactions predict lower scores on these measures (McCartney, 1984). Lower child:staff ratios allow caregivers to engage in more educational activities (e.g., teaching, promoting problem-solving) with children (Palmerus, 1991).

SUMMARY TABLE:

Citation: NICHD Team (1999), Child outcomes when child care center classes meet recommended standards for quality, *American Journal of Public Health*, 89(7):1072-7.

Summary: This study assessed outcomes for children when child care centers meet recommended care standards. Data from the NICHD study of early child care were used to examine the association between meeting standards for child staff ratios, group sizes, caregiver training, and caregiver education and childrens development at 24 and 36 months of age. There were five major findings: 1) most classes observed did not meet all four recommended standards; 2) linear associations were found between number of standards met and child outcomes, and this was more the case at 36 months than at 24 months of age; 3) there was no evidence of threshold effects; 4) children in classes that met more standards had better school readiness and language comprehension scores as well as fewer behavior problems at 36 months of age; 5) child outcomes were predicted by child staff ratio at 24 months and caregiver training and education at 36 months of age. Outcomes were better when children attended classes that met recommended child staff ratios and recommended levels of caregiver training and education.

Citation: Moore (1996), Substitute child care at different ages: relationship to social emotional functioning in preschool, *American Journal of Orthopsychiatry*, 66(2):305-8.

Summary: In a pilot study based on parent and teacher ratings, the number of hours spent in substitute care during the first three years of life correlated with childrens levels of behavior problems in preschool. The developmental period from 18 to 24 months was the most sensitive to the use of substitute care, and boys were more negatively affected than girls. The child adult ratio and setting were not significant factors. Results suggest reconsideration of parental leave policies and direction for future research.

Citation: Deater-Deckard, Kinkerton, & Scarr (1996), Child care quality and childrens behavioral adjustment: a four year longitudinal study, *Journal of Child Psychology & Psychiatry & Allied Disciplines*, 37(8):937-48.

Summary: Studies of extensive, full time child care in infancy and early childhood have shown negative, positive and no effects on childrens social emotional development. The current study explored the prediction of childrens behavioral adjustment four years after assessments of day care center quality and of the home and family environment. Participants included 141 school age children and their employed mothers who had made use of full time child care when the children were toddlers or preschoolers. Home environment factors and earlier behaviors were predictive of individual differences in adjustment four years later, particularly for maternal ratings of child behaviors. By contrast, indicators of center quality were generally unrelated to mother and teacher ratings of behavioral adjustment.

Citation: Rosenthal & Vandell (1996), Quality of care at school aged child care programs: regulatable features, observed experiences, child perspectives, and parent perspectives, *Child Development*, 67(5):2434-45.

Summary: This study investigates childrens experiences at 30 school aged child care programs. Regulatable features such as total enrollment, child staff ratio, and staff education were assessed via director report. Observers recorded positive/neutral and negative interactions, and rated programs in terms of flexibility and age appropriateness. Negative staff child interactions were more frequent when child staff ratios were larger and when staff had less formal education. The presence of a greater number of different types of program activities was associated with staff having more frequent positive interactions with children and with observers rating programs as flexible and age appropriate.

Citation: Burchinal, Roberts, Nabors, & Bryant (1996), Quality of center child care and infant cognitive and language development, *Child Development*, 67(2):606-20.

Summary: The relations between quality of center based child care and infant cognitive and language development were examined in a sample of 79 African-American 12 month old infants. Both structural and process measures of quality of child care were collected through interviews with the center director and observation of the infant classroom. Results indicated that quality of infant care positively correlated with scores on standardized assessments of cognitive development, language development, and communication skills. These findings, in conjunction with the growing child care literature, suggest that researchers and policymakers should focus on how quality of child care can be improved to enhance, not impair, infant development.

Citation: Osguthorpe & Parsons (1995), Day care and the incidence of otitis media in young children, *Otolaryngology-Head and Neck Surgery*, 112(6):695-9.

Summary: This study assesses whether day care is a significant risk variable for otitis media in children younger than 2 years in the United States after controlling for the number of children in the day care group. After controlling for the total size of the day care group for children younger than 12 months, the previously established relationship between attending a day care center and frequent ear infections is reduced from an odds ratio of 3.17 to an odds ration of 1.34. The total size of the day care group is an important intervening variable in the relationship between attending day care and frequent ear infections for children younger than 12 months. The size of the day care group rather than the day care per se is the primary modifiable risk variable for many working parents.

Citation: Laborde, Weigle, Weber, & Kotch (1993), Effect of fecal contamination on diarrheal illness rates in day care centers, *American Journal of Epidemiology*, 138(4):243-55.

Summary: Contact spread of enteropathogens in day care centers is supported by the recovery of fecal coliforms from hands and day care center formites. This prospective study was conducted to determine what, if any, quantitative measures of fecal coliforms predict the risk of diarrhea among day care center attendees. Diarrheal illness without concomitant respiratory symptoms was monitored among 221 children under 3 years of age in 37 classrooms through biweekly parental telephone interviews from 10/88 to 5/89 in Cumberland County, North Carolina. This was the first study to demonstrate an increased risk of diarrhea associated with fecal contamination and the frequent sink contamination in day care centers.

Citation: Howes & Whitebook (1992), Thresholds of quality: implications for the social development of children in center based child care, *Child Development*, 63(2):449-60.

Summary: The quality of center child care relationships with adults and peers for 414 children (ages 14 to 54 months) were assessed. Classrooms were classified by ratio and group size provisions of the FIDCR and by the ECERS and ITERS. Children cared for in classrooms meeting the FIDCR ratios were more likely to be in classrooms rated as good or very good in caregiving and activities. Children in classrooms rated as good or very good in caregiving were more likely to be securely attached to teachers. Securely attached children were more competent with peers. Children cared for in classrooms meeting FIDCR group size were more likely to be in classrooms rated higher in activities. Children in classrooms rated high in activities were likely to orient to both adults and peers. Children with social orientations to adults and peers were more competent with peers.

Citation: Phillips, Howes, & Whitebook (1992), The social policy context of child care: effects on quality, *American Journal of Community Psychology*, 20(1):25-51.

Summary: Examined effects on the quality of childrens child care environments of a) the stringency of state child care regulations; b) voluntary compliance with proposed federal child care standards; and c) the legal auspice of the center. Quality of care was assessed in 227 child care centers in five metropolitan areas. Centers in states with more stringent child care regulations tended to have better staff child ratios, staff with more child related training and lower staff turnover rates. Similarly, centers that more fully complied with the ratio, group size, and training provisions of a set of proposed federal child care standards had significantly lower staff turnover rates, more age appropriate

classroom activities, less harsh and more sensitive teachers, and more teachers with specialized training. For profit centers offered children less optimal care than did nonprofit centers. These findings are placed in the context of ecological models of research and of contemporary policy debates about child care.

Citation: Fiene (1997), Searching for a solution to the child care trilemma, *Child Care Information Exchange*, 117:57-60.

Summary: Describes the trilemma of inadequate quality, accessibility, and affordability of American child care. Proposes addressing the quality sector by utilizing a model which determines adult child ratios based upon quality of staff. Model argues the more highly qualified the program staff, the higher the quality of the overall program.

Citation: Howes (1997), Childrens experiences in center based child care as a function of teacher background and adult child ratio, *Merrill-Palmer Quarterly*, 43(3):404-25.

Summary: Two studies examined impact of teacher background and teacher child ratio on child and teacher behavior in a child care environment. Both studies indicate more effective performances produced by teachers with higher degrees. One study suggests lower ratios are more effective. No interactive effect of ratio and background was noted.

Citation: Kontos & Wilcox (1997), Teachers interactions with children: why are they so important: research in review, *Young Children*, 52(2):4-12.

Summary: Reviews research demonstrating a positive relationship between childrens quality interactions with teachers and their enhanced cognitive, socio-emotional, and language development. Discusses most frequently studied aspects of teacher behavior including roles, sensitivity/detachment, involvement and teacher talk. Describes influences on interactions including child characteristics, training, ratio, group size and curriculum. Summarizes implications for teachers, and lists recommended adult child ratios.

Citation: Howes & Marx (1992), Raising questions about improving the quality of child care, *Early Childhood Research Quarterly*, 7(3):347-66.

Summary: Describes and contrasts aspects of child care systems in France and the US to stimulate discussion of child care standards. French child care is characterized by highly trained and reasonably compensated teachers who work in classrooms with class sizes and child adult ratios considered excessive by US standards.

Citation: Howes et al. (1992), Thresholds of quality: implications for the social development of children in center based child care, *Child Development*, 63(2):449-60.

Summary: Examined thresholds for two aspects of child care: adult child ratio and group size. Investigated associations among different levels of these variables and with quality of care and childrens social development. Findings suggest that meeting licensing standards for ratios and groups has a positive effect on ratings of the quality of care provided for children.

Citation: Essa (1998), When, how and why child caregivers respond to childrens behaviors, *Early Child Development* and Care, 141, 15-29.

Summary: Forty-two female child caregivers participated in one of six focus groups to examine how, when, and why they discipline young children. Aggressive behavior, not listening, and sexually related behaviors were the most likely behaviors to concern caregivers. These behaviors most frequently elicited the disciplinary strategies of time out, explanations, and redirection. How caregivers respond to misbehaviors was analyzed in terms of the attributions the caregivers make in regard to these misbehaviors. Age, gender, home, family, society, caregiver emotion, and child care setting circumstances were the most frequently mentioned factors to affect caregiver discipline. Results also indicate that caregivers with higher levels of early childhood education and experience, and those working with smaller group and adult to child ratios provide more thoughtful answers that are more congruent with developmental appropriateness.

Citation: McCartney, Scarr, Rocheleau, Phillips (1997), Teacher child interaction and child care auspices as predictors of social outcomes in infants, toddlers, and preschoolers, *Merrill Palmer Quarterly*, 43(3):426-450.

Summary: Examined 718 infants, toddlers and preschoolers who were enrolled in 120 child care centers from Massachusetts, Virginia, and Georgia to determine the effects of quality of care on childrens social outcomes. Four auspices of child care centers were sampled: nonprofit, local for profit, national chains for profit, and church sponsored. Social outcomes included mothers ratings of attachment, observations of social skills in classroom, and parents rating of behavior problems. Quality of care assessment was based on teacher characteristics, teacher child ratio, and teacher child interactions. Results show that there were few associations between teacher child interaction and childrens social outcomes. Higher work family interference was associated with poorer social outcomes generally. Children in nonprofit centers had better social outcomes on some measures.

Citation: Palmerus (1996), Child caregiver ratios in day care center groups: impact on verbal interactions, *Early Childhood Development and Care*, 118, 45-57.

Summary: Explored the effect of caregiver child ratio on verbal interactions in six public day care center groups for preschool children in Sweden. Detailed records of verbal interactions were studied in one group where the number of children/caregiver had changed from 4.25 to 5.67. Caregivers were the main target for observation. Audio recorded verbal communications were coded and analyzed. Data were collected on three occasions in year 1 and on three occasions in year 2. With a high ration the proportion of child initiated verbal activities to the caregivers decreased, the proportion of adult initiated verbal activities increased, and the amount of verbal interaction between caregivers decreased.

Citation: Scarr, Eisenberg, & Deater-Deckard (1994), Measurement of quality in child care centers, *Early Childhood Research Quarterly*, 9(2):131-151.

Summary: Assessment of quality of care in 363 classrooms with infants, toddlers, and preschool children was conducted in 120 child care centers in three states. Assessment measures included the ITERS, ECERS, and the Assessment Profile. Regulatable aspects of quality of child care included: ratio of caregivers to children, group size, teacher training in child development or child care, teacher education, highest wage paid to a center teacher, and staff turnover. Process measures proved to be highly redundant, both internally and with each other. Much smaller sets of items, drawn randomly from the instruments item pools were found to be perfectly acceptable measure of quality. Regulatable measures did not prove to be acceptable measure of quality, except for teachers wages, which were highly correlated with process measures of quality.

Citation: Dunn (1993), Ratio and group size in day care programs, Child & Youth Care Forum, 22(3):193-226.

Summary: Reviews literature on the influences of ratio and group size on childrens development in day care. When measured separately, ratio and group size are sometimes, but not always related to childrens development. When included as variables in quality clusters, ratio and group size are more likely to be related to developmental outcomes. Group size more consistently influences development in the expected direction than ratio. This suggests the need for increased attention to group size in the policy arena. Ratio and group size have been found to have both direct and indirect effects on development indicating that they are potentially valuable as proxy measures of childrens experience in day care programs.

ADDITIONAL RESOURCES:

National Association for the Education of Young Children (NAEYC) 1509 16^{th} Street, NW Washington DC 20036 1-800-424-2460http://www.naeyc.org

[Go To Contents]

STAFF (DIRECTOR AND TEACHERS) QUALIFICATIONS INDICATORS

These two indicators overlap some with the next indicator that deals with training. Separating out state regulations that deal with these two indicators is difficult because qualifications and training form a continuum. Therefore, drawing a line between these indicators is generally arbitrary. Fifteen standards are related to this indicator and four standards are related to the training indicator.

CFOC STANDARDS (1992):

ST 006: The director of a center enrolling fewer than 60 children shall be at least 21 years old and shall have an undergraduate degree in early childhood education, child development, social work, nursing, or other child related field, or a combination of college coursework and experience under qualified supervision. Education shall include a course in business administration or equivalent on the job training in an administrative position; a minimum of four courses in child development and early childhood education; and 2 years' experience as a teacher of children of the age group(s) in care.

ST 007: The director of a center enrolling 60 or more children shall be at least 21 years old and shall have an undergraduate degree in early childhood education, child development, social work, nursing, or other child related field, or a combination of college coursework and experience under qualified supervision. Education shall include one course in administration or at least 6 months' experience in administration, and 3 years' experience as a teacher of children of the age group(s) in care.

ST 008: Centers enrolling 30 or more children must employ a non-teaching director. Centers with fewer than 30 children may employ a director who teaches as well.

ST 009: In addition to the credentials listed in Appendix A, a director of a center or a small family child care home system enrolling 30 or more children shall provide documentation of one course or 26 to 30 clock hours of training in health and safety issues for out of home facilities, in addition to other educational qualifications, upon employment. This training requirement shall be reduced to a minimum of 17 clock hours for directors of facilities caring for fewer than 30 children. This training shall include at least the following content:

- 1. Mechanisms of communicable disease spread.
- 2. Procedures for preventing the spread of communicable disease, including handwashing, sanitation, diaper changing, health department notification of reportable disease, equipment, toy selection and proper washing, disinfecting to reduce disease and injury risk, and health related aspects of pets in the facility.
- 3. Immunization requirements for children and staff.
- 4. Common childhood illnesses and their management, including child care exclusion policies.
- 5. Organization of the facility to reduce illness and injury risks.
- 6. Training child care staff and children in infection and injury control.
- 7. Emergency procedures.
- 8. Promotion of health in the child care setting.

ST 010: In addition to the general requirements in Qualifications of Directors of Centers, the director of a facility for children under 5 years of age shall have not less than 2 to 3 years of experience, depending on the size of the center, as a teacher of infants, toddlers, and preschoolers. Directors of facilities for children ages 0 to 35 months shall have their 2 to 3 years of experience with infants and toddlers. Directors of facilities for children ages 3 to 5 years shall have their 2 to 3 years of experience with preschoolers.

ST 011: In addition to the general requirements in Qualifications of Directors of Centers, the director of a school-age child care facility shall hold an undergraduate degree in early childhood education, elementary education, child development, recreation, or other child related field, or a combination of college coursework and experience under qualified supervision, and not less than 2 years' experience working with school-age children.

ST 034: Directors and large family home caregivers shall check references and examine employment history before employing any staff, including substitutes, who will be alone with a child or a group of children in child care.

ST 012: Caregivers shall have knowledge of child development and early childhood education; an undergraduate degree in early childhood education, child development, social work, nursing, or other child related field, or a combination of experience under qualified supervision and college coursework; 1 year's experience (or the equivalent as specified in Appendix A); and on the job training to provide a nurturing environment and to meet the child's out of home needs.

ST 013: Centers shall employ licensed, certified teaching, caregiving staff for direct work with children in a progression of roles such as the following:

- aides.
- 2. assistant teachers.
- 3. associate teachers,
- 4. teachers,
- 5. lead teachers, and;
- 6. education coordinators; Each role with increased responsibility shall have increased educational qualifications as outlined in Appendix A.

ST 014: Every center, regardless of setting, shall have at least one licensed/certified lead teacher (or mentor teacher) who has a Bachelor of Arts, Bachelor of Science, Bachelor of Education, or Master of Education degree in early childhood education, child development, social work, nursing, or other child-related field, in addition to at least 1 year of experience working in child care serving this age group. All teachers in charge of a group shall be licensed/certified as lead teachers, teachers, or associate teachers, with education and experience related to the care and development of infants and toddlers, as well as supervised experience with this age group.

ST 015: Caregivers shall want to work with infants and toddlers when asked and shall know what the job entails-fostering interaction, diapering, bathing, feeding, holding, comforting, and responding.

ST 016: Every center, regardless of setting, shall have at least one licensed/certified lead teacher (or mentor teacher) who has a Bachelor of Arts, Bachelor of Science, Bachelor of Education, or Master of Education degree in early childhood education, child development, social work, nursing, or other child-related field, as well as at least 1 year of experience working in child care with this age group. All teachers in charge of a group shall be licensed/certified as lead teachers, teachers, or associate teachers, with education in child development and early childhood education specific to this age group, as well as supervised experience with preschool children.

ST 017: Caregivers shall demonstrate an ability to apply their understanding of the developmental characteristics of 3-to 5-year-olds. Caregivers shall demonstrate knowledge and understanding of these children's independence and social competence, more complex inner lives, and increasing ability to adapt to their environment and cope with stress.

ST 018: Every center, regardless of setting, shall have at least one licensed/certified group leader (or mentor teacher) who has a Bachelor of Arts, Bachelor of Science, Bachelor of Education, or Master of Arts degree in child development or early childhood education covering ages newborn to 8 or 3 to 8, elementary education, recreation, or a related field, as well as at least 1 year of experience working in child care. Teachers in charge of a group shall be licensed/certified as lead teacher, teacher, or associate teacher with education in child development and programming specific to this age group; they shall also have supervised experience with school-age children. Caregivers shall have training and supervised experiences in child development and education.

ST 019: Caregivers shall demonstrate knowledge about the social and emotional needs and developmental tasks of 5-to 12-year-old children, and shall know how to implement a nonacademic, enriching program.

RESEARCH REVIEW/GAP ANALYSIS:

Caregivers should be encouraged or required to have as much general education and/or specific training in child development, health, and safety as possible because educated and trained caregivers are more likely to promote the physical and mental health, safety, and cognitive development of the children in their care. Child care directors who have more experience and education are more likely to appropriately monitor staff, which promotes childrens health. Higher rates of diarrhea have been found in child care centers where the directors had less than eight years of experience (Soto, Guy, Deshaies, Durand, Gratton & Belanger, 1994). Caregivers are more likely to exhibit behaviors

that protect childrens health and safety if their behavior is monitored (Black et al., 1981). Staff surveillance requires knowledge of behaviors that reduce the transmission of disease; this suggests that child care directors should have as much or more education in child development and health than the direct caregivers they supervise.

Caregivers with a bachelors degree with or without specialized training or with no bachelors degree but with specialized training at the college level behave more sensitively and less harshly, engage in more positive interactions (more warmth, more enthusiasm, and more developmentally appropriate communication with children) and display less detachment (more involved with and interested in the children) and less punitiveness (less hostile, threatening, and harshly critical of children) (Arnett, 1989; Whitebook, Howes, & Phillips, 1989).

Caregivers with more education have children who are more compliant and socially competent (Clarke-Stewart, Gruber, & Fitzgerald, 1994). College-educated caregivers encourage children more, exhibit more teacher direction (developing goals for children without pressuring the children to accept them), and engage in less restrictive behavior with children than do high-school-educated caregivers (Berk, 1985). Caregivers who complete at least two child-related courses at the community college level hold less authoritarian attitudes (like strict rules, little give-and-take about rules, assertive discipline strategies, and emphasis on conformity) than those who have no training at all (Arnett, 1989). Such attitudes toward caregiving appear to influence the behavior exhibited by caregivers (Holden, 1995). The promotion of independence contributes to the development of social competence and school readiness in children.

Caregivers with more education are more likely to continue in child care employment (Berk, 1985), which promotes attachment and social development in children. Caregivers who plan to continue in child care employment are less restrictive, place a greater emphasis on the development of childrens verbal skills, and have better child-oriented attitudes than those who do not plan to continue working in child care. Children who have stable caregivers are more likely to engage in social activities, spend less time aimlessly wandering around the center (Whitebook, Howes, & Phillips, 1989), and are more likely to display secure attachments (Hayes, Palmer, & Zaslow, 1990), which is a major component of later healthy personal/social development.

Caregivers with college educations tend to engage children in interactions that expand upon and extend childrens ongoing activities and promote the development of verbal skills (Berk, 1985). College-educated caregivers are almost three times as likely to display behaviors that promote the development of verbal skills (such as encouraging children to express themselves verbally, explaining the meaning of words, giving factual information) than caregivers with only a high school diploma (Berk, 1985). Children who have caregivers who answer their questions, engage them in more informative talk, and give information to and request information from them have higher language competence and intelligence test scores (McCartney, 1984).

Children tend score higher on the Preschool Inventory (a measure of childrens knowledge of shapes, sizes, parts of the body, spatial relationships, etc.) and other measures of intellectual ability (like language comprehension, verbal fluency, memory, object recognition, and knowledge of concepts) when they are cared for by caregivers with more years of education (Clarke-Stewart & Gruber, 1984).

SUMMARY TABLE:

Citation: Bloom (1997), Navigating the rapids: directors reflect on their careers and professional development, *Young Children*, 52(7):32-38.

Summary: In an effort to address issues concerning credentialing early childhood directors, explores career decisions and provides a framework for understanding the growth and development of director competence through the career cycle. The career cycles of beginning, competent, and master directors, and the growth and change which occur, are detailed.

Citation: Phillipsen, Burchinal, Howes, & Cryer (1997), The prediction of process quality from structural features of child care, *Early Childhood Research Quarterly*, 12(3):281-303.

Summary: This study examined the structure of child care classrooms and centers to predict process quality. Costs and quality of early childhood center based care in four states with varying levels of regulation were analyzed to identify characteristics of the teacher, classroom, director, and center related to child care quality.

Citation: Galinsky, ODonnell, Sazer, & Boose (1996), Florida child care quality improvement study .

Summary: The ongoing Florida child care quality improvement study investigates how Floridas new ratios and education requirements for early education and care affect childrens development, parents lives, and the early childhood marketplace. The project consists of three interrelated studies: the childrens study, the parent study and the market study. The report summarizes the findings of all three studies in 1992 and 1994, and reports new findings from the 1996 children study. Among the findings noted are the following: 1) increased teacher education and ratio requirements significantly contributed to a number of positive outcomes in childrens development in 1994 and continue to improve in 1996; 2) in comparison with other national multi-site studies of the overall quality of early education and care, Florida has made positive strides; 3) increased staff education and more rigorous ratio requirements did not have a marked negative impact on the child care marketplace nor did requirements significantly affect consumer costs during the 1992-96 period; 4) the greatest gains in childrens development and in the quality of the early childhood education and care occurred when classrooms met professionally recommended ratios, which are higher then the new Florida ratios; and 5) teachers with an advanced education had the highest scores in terms of childrens development and classroom quality; however, in 1996, teachers with a CDA or equivalency were warmer and more sensitive as well as more responsive with children than those with less than a CDA.

Citation: Howes (1997), Childrens experiences in center based child care as a function of teacher background and adult child ratio, *Merrill-Palmer Quarterly*, 43(3):404-25.

Summary: Two studies examined impact of teacher background and teacher child ratio on child and teacher behavior in a child care environment. Both studies indicate more effective performances produced by teachers with higher degrees. One study suggests lower ratios are more effective. No interactive effect of ratio and background was noted.

Citation: Rodd (1997), The selection and preparation of early childhood teachers: perceptions of employers and teachers, *Early Child Development & Care*, 130, 99-110.

Summary: Studied perceptions of early childhood teachers and employers regarding early childhood teacher education. Found that previous experience with, attitudes toward, and understanding of children and entry qualifications were weighted higher than age and gender for teacher selection.

Citation: Kagan & Neuman (1997), Highlights of the quality 2000 initiative, Young Children, 52(6):54-62.

Summary: Describes the quality 2000 advancing early care and education initiativethe purpose is to address the quality crisis in early childhood education. Details eight areas of improvement and recommendations: quality, results, family engagement, staff credentialing, staff training, licensing, funding, and governance structures.

Citation: Snow et al. (1996), Child care center licensing standards in the United States, Young Children, 51(6):36-41.

Summary: Studied child care quality indicators via a comparison of state child care licensing requirements in three areas: child staff ratio, group size, and caregiver educational requirements. Compared these data to 1981 data to assess changes in licensing regulations. Found both positive and negative changes and that regulations vary greatly state by state.

Citation: Honig (1996), Early childhood education, training for the future, *Early Child Development & Care*, 121, 135-45.

Summary: Discusses the future training of early childhood educators, focusing on techniques for teachers to build prosocial skills, develop aesthetic appreciation, inculcate acceptance and inclusion, and develop a curiosity for learning among children.

Citation: Lowenthal (1995), Competencies of the early childhood special educator in the United States, *Early Child Development and Care*, 113, 59-64.

Summary: Discusses the kinds of competencies needed by educators to better assist young children with disabilities and their families. These competencies include: knowledge of early childhood as a distinct phase of development, experiences in working with families, skills in collaboration and coordination, developmentally appropriate intervention, and delivery of services in inclusive settings.

Citation: Bredekamp (1995), What do early childhood professionals need to know and be able to do?, *Young Children*, 50(2):67-69.

Summary: Describes the purpose and history of guidelines posed by NAEYC for teacher education in BA and advanced degree programs. Summarizes the result of the review processes, describing how the new curriculum guidelines differ from the earlier versions and how the guidelines can be used to shape programs and to influence policy.

Citation: Morgan et al. (1993), Making a career of it: the state of the states report on career development in early care and education.

Summary: Noting that 11 million children are involved in early care and education outside their homes, and that the quality of the services these children receive depends on the knowledge and skills of the people who care for and teach them, this report presents the results of the first national study of career development in early care and education. It examines regulations, training opportunities, and financial support that shape the preparation of center and home based practitioners. The study revealed the lack of a coordinated system to develop well trained practitioners to work with young children in homes, centers, Head Start programs, or schools. Millions of practitioners are not required to have early childhood training. Training that develops the full range of essential early care and education knowledge and skills is not consistently available or accessible.

ADDITIONAL RESOURCES:

The Center for Career Development in Early Care and Education Wheelock College 200 The Riverway Boston, MA 02215 617-734-5200 x2211http://ericps.ed.uiuc.edu/ccdece/ccdece.html

Center for the Child Care Workforce (CCW) 733 15th Street, NW Suite 1037 Washington, DC 20005-2112 Phone: 1-800-879-6784 Fax: 202-737-0370 E-mail: ccw@ccw.orghttp://www.ccw.org/

National Association for the Education of Young Children (NAEYC) 1509 16th Street, NW Washington DC 20036 1-800-424-2460http://www.naeyc.org

[Go To Contents]

STAFF TRAINING INDICATOR

This indicator overlaps with the previous indicators that deal with training. Separating out state regulations that deal with this indicator is difficult because qualifications and training form a continuum. Therefore, drawing a line between these indicators is generally arbitrary. A great deal of variability in this indicator is exhibited when state-to-state regulations are compared. These 11 standards encompass the essence of the regulatory citations.

CFOC STANDARDS (1992):

ST 039: Caregivers shall be educationally qualified in advance for the role they are entering and shall receive orientation training during the week immediately following employment. Caregivers shall also receive continuing education each year. In centers, directors shall ensure that 12 hours of staff meetings are held, in addition to the continuing education specified in Continuing Education.

ST 040: All new full-and part-time staff shall be oriented to, and demonstrate knowledge of, the following items a through o. The director of any center or large family-child-care home shall provide this training to newly hired caregivers. Small family home caregivers shall avail themselves of orientation training offered by the licensing agency, a resource and referral agency, or other such agency. This training shall include evaluation and a repeat demonstration of the training lesson. The orientation shall address, at a minimum:

- 1. The goals and philosophy of the facility.
- 2. The names and ages of the children for whom the caregiver will be responsible, and their specific developmental needs.
- 3. Any special adaptation(s) of the facility required for a child with special needs.
- 4. Any special health or nutrition need(s) of the children assigned to the caregiver.
- 5. The planned program of activities at the facility.

- 6. Routines and transitions.
- 7. Acceptable methods of discipline.
- 8. Policies of the facility about relating to parents.
- 9. Meal patterns and food-handling policies of the facility.
- 10. Occupational health hazards for caregivers.
- 11. Emergency health and safety procedures.
- 12. General health policies and procedures, including but not limited to the following:
 - 1. Handwashing techniques, including indications for handwashing.
 - 2. Diapering technique and toileting, if care is provided to children in diapers and/or needing help with toileting, including appropriate diaper disposal and diaper-changing techniques.
 - 3. Correct food preparation, serving, and storage techniques if employee prepares food.
 - 4. Formula preparation, if formula is handled.
- 13. Child abuse detection, prevention, and reporting.
- 14. Teaching health promotion concepts to children and parents as part of the daily care provided to children.
- 15. Recognizing symptoms of illness.

ST 041: Orientation training in centers shall be documented. The director shall document the topics covered and the dates on which the orientation was provided.

ST 042: During the first three months of employment, the center director or large family home caregiver shall document, for all full-time and part-time staff, additional orientation in and the employee's satisfactory knowledge of the following topics for the purpose of noting and responding to illness in the facility. Staff shall not be assigned to tasks involving these topic areas before receiving the orientation training.

- 1. Recognition of symptoms of illness and correct documentation procedures for recording illness symptoms.
- 2. Exclusion and readmission procedures.
- 3. Cleaning, sanitation, and disinfection procedures.
- 4. Procedures for administering medication to children and for documenting medication administered to children.
- 5. Procedures for notifying parents or legal guardians of communicable disease occurring in children or staff within the facility.
- 6. Procedures for performing the daily health assessment of children to determine whether they are ill and whether they need to be excluded from the facility.

ST 043: Staff members shall not be expected to take responsibility for any aspect of care for which they have not been oriented and trained.

ST 044: The director of a center or a large family-child-care home shall ensure that all staff involved in the provision of direct care are certified in pediatric first aid that includes rescue breathing and first aid for choking. At least one certified staff person shall be in attendance at all times and in all places that children are in care.

ST 045: Small family home caregivers should be certified in pediatric first aid training that includes rescue breathing and first aid for choking.

ST 046: Pediatric first aid training, including rescue breathing and first aid for choking, shall be consistent with pediatric first aid training developed by the American Red Cross, the American Heart Association, or the National Safety Council for First Aid Training Institute, or the equivalent of one of the three. The offered first aid instruction shall include, but not be limited to, the emergency management of:

- 1. Bleeding.
- 2. Burns.

- 3. Poisoning.
- 4. Choking.
- 5. Injuries, including insect, animal, and human bites.
- 6. Shock
- 7. Convulsions or nonconvulsive seizures.
- 8. Musculoskeletal injury (e.g., sprains, fractures).
- 9. Dental emergencies.
- 10. Head injuries.
- 11. Allergic reactions.
- 12. Eye injuries.
- 13. Loss of consciousness.
- 14. Electric shock.
- 15. Drowning.

ST 047: Facilities that have a swimming pool or built-in wading pool shall require infant and child CPR training for caregivers. At least one of the caregivers, volunteers, and other adults who are counted in the child:staff ratio for wading and swimming (see standard ST4, p. 3) shall be trained in basic water safety and certified in infant and child CPR each year by a person certified as an instructor in water safety and in CPR. (For small family-child-care homes, the person trained in water safety and CPR shall be the caregiver.) Written verification of CPR and lifesaving certification, water safety instructions, and emergency procedures shall be kept on file.

ST 048: Facilities that serve children with special needs shall have at least one caregiver certified in infant and child CPR. Written verification of CPR certification shall be kept on file.

ST 049: Records of current certification of pediatric first aid including rescue breathing and first aid for choking (and infant and child CPR, when indicated) shall be maintained in the files of the facility.

ST 050: Directors and all caregivers shall have at least 30 clock hours per year of continuing education in the first year of employment, 16 clock hours of which shall be in child development programming and 14 of which shall be in child health, safety, and staff health; and 24 clock hours of continuing education based on individual competency needs each year thereafter, 16 of which shall be in child development programming and 8 of which shall be in child health, safety, and staff health.

RESEARCH REVIEW/GAP ANALYSIS:

Staff training in procedures meant to reduce the transmission of infectious disease reduces the number of pathogens present in child care (Bartlett, et al., 1988), including the number of intestinal illnesses (Butz, Larson, Fosarelli & Yolken, 1990), the number of cases of diarrhea (Soto, Guy, & Belanger, 1994), the number of upper respiratory infections (Gillis, Holaday, Lewis & Pantell, 1989), and the frequency of illness symptoms (Ulione & Donovan, 1996; Ulione, 1997). After receiving training in hand washing, those who earned the best scores for hand washing had children with lower rates of diarrhea. Further, implementing a health education program reduced the incidence of diarrhea (from 72.7 to 20.4 cases per 100 child-years) and colds (from 208.7 to 94.5 cases (Soto, Guy, Deshaies, Durand, Gratton, & Belanger, 1994). After participating in training to reduce the transmission of infectious diarrhea, 41 of 44 caregivers passed an examination of the procedures they had just been taught. Eight months later, 28 of the 44 originally trained workers and 14 subsequently trained workers were given the same examination. None of the caregivers passed the examination (Bartlett, Jarvis, Katz, Dalia, Englender, & Anderson, 1988). One might infer that caregivers did not practice the behaviors they initially learned. Conversely, instituting a hand washing program for

caregivers and following it up with continuous monitoring of caregivers hand washing practices was associated with a 50% decrease in the incidence of diarrhea in two child care centers (Morrow, Townsend, & Pickering, 1991). Monitoring appears to remind staff of their training and promotes implementation of healthy practices.

Staff training programs reduce the number of accidental injuries in child care centers (Ulione, 1997). Significant decreases in the number of accidental injuries occur after child care staff have been trained in identifying signs and symptoms of childhood illnesses and infection control, preventing child and staff injuries, and providing basic first aid for children (Ulione, 1997). Staff training programs may be more effective when accompanied by staff monitoring. Two years after receiving an intervention that taught child care directors about the specific hazards found on their playgrounds, explained why these problems were dangerous, and distributed educational materials about child safety, inspectors returned to the centers and found that the intervention playgrounds were no less hazardous than centers that did not receive the intervention (Sacks, Brantley, Homgreen, & Rochat, 1992). The intervention might have been more effective if it had been accompanied by monitoring.

Caregivers who receive specialized training are better able to facilitate a positive learning and socialization environment, and tend to have children who are more compliant, more cooperative, less aggressive, and who exhibit fewer negative (i.e., uncooperative, unpleasant, and avoidant) behaviors with an unfamiliar peer in a laboratory playroom (Clarke-Stewart, Gruber, & Fitzgerald, 1994; Kontos, Hsu, & Dunn, 1994). Caregivers with more training tend to stimulate childrens cognitive and language development and have children with higher cognitive competence who display more complex cognitive play (Kontos, Hsu, & Dunn, 1994). When caregivers receive specialized training in facilitating language interactions, such interactions increase in frequency, which result in childrens accelerated language acquisition (Tennant, McNaughton, & Glynn, 1988).

The American Public Health Association and American Academy of Pediatrics in *Caring for Our Children* suggest that child care directors and caregivers should have at least 30 hours per year of continuing education in their first year of employment (16 hours in child development and 14 in safety, child health, and staff health). Each year thereafter, directors and staff should obtain 24 hours of training (16 in child development and eight in health). New staff should receive an orientation to the policies and procedures (including childrens needs, discipline, relating to parents, emergency procedures, basic hygiene practices, and child abuse) of the center. Within the first three months, they should also receive training in infection control procedures and daily health assessments.

Caregivers should receive training on sanitary procedures, the early assessment of certain illnesses, child development and developmental disabilities, general first aid, rescue breathing, and first aid choking (Lie, Runyan, Petridou, & Chang, 1994). Training should include sanitary procedures that reduce the spread of disease (e.g., staff and child hand washing, food preparation and service), which have been shown to reduce diarrheal illnesses. Three out of four child care centers report a need for more information on infectious diseases (OMara & Chambers, 1994). First aid training should be consistent with that of the American Red Cross, the American Heart Association, or the National Safety Council. It should be more child-focused than standard first aid courses (Lie, Runyan, Petridou, & Chang, 1994). Child care center staff should be trained to detect developmental disabilities and to make referrals for appropriate intervention (Parrino & Thacker, 1994).

Child care directors and staff should be trained to assess childrens daily health. Training in daily health assessments should include detection of signs and symptoms of common childhood diseases. If childhood professionals are trained to observe the signs and symptoms of various childhood diseases, they may be better able to enable infected children to seek professional medical help earlier and to limit the transmission of infectious disease (Morgan, Stevenson, Fiene, & Stephens, 1986).

Training programs should be practical and cumulative in nature (Kendrick, 1994) and should be structured to promote the acquisition and retention of information. Coherent, cumulative training programs appear to be more effective than single sessions that do not build upon one another (Copple, 1991). The most preferred forms of training are those that actively involve students in learning, such as small group discussions, demonstrations and modeling, role playing, games and simulation, observations of actual procedures, and video presentations (Kendrick, 1994). A mentoring model appears to be most effective. Changes in caregivers behavior are most often seen when the content of training is focused and meets a specific need, when handouts are disseminated for later reference, when the administration supports the training, and when a variety of training techniques are used. In contrast, caregivers may not learn much from training that consists of charts, research data, and foreign terminology. Changes in caregivers behavior are not as likely to be seen following training that is based on work sheets, panel discussion, and homework assignments.

Effective training conveys information in the same context in which caregivers work every day. Trainers must speak in the same language and be able to understand the day-to-day dilemmas faced by child care providers. Nurses are effective trainers of health and safety practices in child care centers (Peterson-Sweeney & Stevens, 1992; Ulione, 1997; Ulione & Donovan, 1996). Some professionals suggest that schools of nursing contract with child care centers to have nursing students gain clinical experience through implementing training programs for child care providers (Ulione, 1997).

An area for additional research involves the assessment of how staff monitor their own health care needs. This is critical given the lack of proper health care coverage for the majority of staff employed in child care. Training or mentoring programs and monitoring systems might be important additions in order to find out how this potentially very vulnerable group of individuals is dealing with their health needs. The accessibility and adequacy of child care training is an area that needs to be addressed in the research literature. Acknowledging the importance of staff training in these particular areas is one thing, but providing easy access to these trainings so that they are truly available and affordable is another issue.

SUMMARY TABLE:

Citation: Cassidy, Hicks, Hall, & Farran (1998), The North Carolina child care corps: the role of national service in child care, *Early Childhood Research Quarterly*, 13(4):589-602.

Summary: Evaluated the impact of training and experience on the knowledge, beliefs, and practices of AmeriCorps child care volunteers in North Carolina. Found that Corps members completed successful training, but, after nine months of service, showed a decline in the appropriateness of their interactions with children.

Citation: Honig & Hirallal (1998), Which counts more for excellence in child care staffyears in service, education level or early childhood education coursework?, *Early Child Development & Care*, 145, 31-46.

Summary: Observed 81 caregivers from 24 urban centers interacting with 3 and 5 year olds. Interactions were categorized into negative/positive, language facilitation, concept promotion, and care giving and cleaning up domains. When all positive teacher interactions were combined, found that early childhood education/child development course work accounted for over 62% of variance in teacher inputs.

Citation: Espinosa, Busch, Patterson (1998), Evaluation of an in-service model to train child care providers about inclusion, *Journal of Research in Childhood Education*, 12(2):130-42.

Summary: Home and center based child caregivers were randomly assigned to training and control groups. Caregivers who received training on inclusion attended group meetings and observed either live, or videotaped, on-site demonstrations. Caregivers who received training scored significantly higher on an observation scale and self-rating questionnaire than control caregivers, but there were no significant differences between video versus live training presentations.

Citation: Miller & Stayton (1998), Blended interdisciplinary teacher preparation in early education and intervention, *Topics in Early Childhood Special Education*, 18(1):49-58.

Summary: A survey of 41 faculty explored interdisciplinary teacher preparation programs that blend personnel standards from early childhood special education and early childhood education. The benefits and barriers to interdisciplinary, blended programs are discussed, along with the many concerns among faculty who are members of interdisciplinary teams in these programs.

Citation: Sumsion (1997), Early childhood teacher education programs, *Early Child Development and Care*, 129, 129-41.

Summary: This study addressed whether early childhood teacher education programs can effectively prepare graduates to work with children across the entire 0-8 years age span. Data from the students practicum suggested that generalist programs can offer effective preparation for entry into the early childhood teaching profession.

Citation: Bloom (1996), The quality of work life in NAEYC accredited and non accredited early childhood programs, *Early Education & Development*, 7(4):301-7.

Summary: Compared work environments of NAEYC accredited and non accredited centers using the early childhood work environment survey. Found that innovativeness, goal consensus, opportunities for professional growth, and clarity accounted for the greatest differences between accredited and non accredited centers. Also found differences in staffs commitment, turnover, and teachers current and desired levels of decision making influence.

Citation: Davis et al. (1996), Training determinants for quality infant child care, *Early Child Development and Care*, 124, 25-32.

Summary: Examined the associations among infant caregivers training and the quality of care they provide. Found through observation and rating of 50 caregivers that as infant caregiver training levels increased, so did mean scores on some dimensions of quality, such as personal care routines and learning activities.

Citation: Haskell (1992), Using training as a means to improve the level of quality in child care facilities .

Summary: This practicum as designed to increase the quality of service in five day care centers in a metropolitan Florida county, as evidence by increase in the ECERS scores of early childhood teacher participants. A ten week teacher education program for five early childhood teachers was developed. Pre- and post-intervention ECERS scores were developed by observing the participants in their day care center classrooms. All five participants made significant improvements in their ECERS scores, especially in the areas of furnishings/displays and creative activities.

Citation: Galinsky et al. (1995), The family child care training study, Families and Work Institute .

Summary: The family work institute conducted a study in San Francisco Valley, California; Dallas, Texas; and Charlotte, North Carolina, to examine the effects of child care awares family to family training program on 130 child care providers. These providers were compared to 112 regulated providers not participating in family to family training. Results show that 1) after training, children behaved in ways demonstrating that they are more securely attached to their providers; 2) training improved the overall quality scores of sites; 3) after training, 97% of providers reported increased their commitment to their jobs and began to seek out additional training; and 4) providers increased their involvement in family child care associations, the family child care community, and the child and adult care food program. Recommendations include the following: 1) increase provide and public investment in child care; 2) develop beginning, intermediate, and advanced family child care training; and 3) develop strategies for improving the quality of nonregulated providers.

Citation: Whitebook et al. (1995), *Mentoring in early care and education*, National Center for the Early Childhood Work Force.

Summary: This report describes the nature of the mentoring relationship between mentors and protégés, the goals common to all mentoring programs, and some general principles that can serve to guide program development. The successes and barriers faced by seven mentoring programs are presented. Successes are related to the ability to provide relevant training to committed teachers and providers, and the chance to recognize mentors skills and commitment. Obstacles are centered around the availability of and access to resources. The last part of the report cites the need for a national early childhood mentoring alliance, resource materials for mentoring programs, a program developers network, and a mentor network.

Citation: Fiene (1993), Pennsylvania early childhood/child care training system model, EDRS ED350080.

Summary: A multi-dimensional training program is being implemented in Pennsylvania to improve the quality of early childhood and child care programs. Training opportunities are provided for early childhood program and day care center staff, group and family home day care providers, and unregulated child care providers. The overall training plan is designed to offer a variety of training options and topics so staff can choose those most closely suited to their level of knowledge and experience. Training covers developmentally appropriate practice; health and safety; separation and loss; emergent literacy; intergenerational programming; observation and evaluation skills; administration of early childhood and child care programs; childrens literature; use of community resources; working with parents; discipline; growth-promoting relationships; and interpersonal skills.

Citation: Krajicek & Moore (1993), Child Care for Infants and Toddlers with Disabilities and Chronic Illnesses, *Focus on Exceptional Children* .(25)8:1-16.

Summary: This paper discusses the need for child care for infants and toddlers with disabilities and chronic illnesses; types of child care; shortage of and need for specially trained caregivers; influence of federal programs; the importance of family involvement; and a program providing preservice training to caregivers in public and private child care facilities, called First Start.

Citation: Shirah et al. (1993), Preservice Training Fosters Retention: The Case for Vocational Training, *Young Children*, (48)4:27-31.

Summary: The lack of adequate training contributes to a high turnover rate among child care employees. A training program developed by the University of South Alabama reduced turnover in the Mobile, Alabama, area. Among caregivers who received training, 68% were still employed in the field one year after graduation.

Citation: Palmerus, & Pramling (1995), Increasing the Competence of Staff Dealing with Young Children .

Summary: This paper reports on a study designed to increase the psychological and educational knowledge of day care staff and develop content and methods appropriate for toddlers in day care settings. Preschool teachers and nursery nurses in three day care centers participated. They were interviewed at the beginning of the study, and 19 months later at the study's end. The interviews dealt with their experience of working with toddlers, expectations for the project, knowledge of child development, work as caregivers and educators, and attitudes toward work. At the beginning of the study, subjects attended a one-week course that covered theories and knowledge about child development and information about the Swedish preschool program. Mediated Learning Experiences (MLE), an intervention program based on adult mediation between the child's experiences and the surrounding environment, was implemented. Every four weeks, interactions between children and staff were videotaped and analyzed. Results indicated that MLE, and the teaching and guidance of the staff, increased the staff's capacity to interact in a stimulating way with children. The interviews indicated changes in staff attitudes about the education of toddlers. Viewings of the videotapes enabled staff members to understand their own behavior and increased their ability to individualize and to take the viewpoint of the toddler.

Citation: Eggbeer & Pratt, Establishing statewide systems of inservice training for infant and family personnel, *Infants & Young Children*, 5(3):49-56.

Summary: In accordance with Part H of the Individuals with Disabilities Education Act (IDEA), states are required to ensure that all professionals and paraprofessionals serving infants, toddlers, and their families are adequately trained. This article discusses the experience of two states -- Massachusetts and Hawaii -- in establishing statewide, inservice training programs for personnel serving children under the age of 3 years and their families. It also relates their efforts to the work of ZERO TO THREE/National Center for Clinical Infant Programs (NCCIP) Training Approaches for Skills and Knowledge (TASK) project, in which professionals from both states participated.

Citation: Peisner-Feinberg, & Burchinal (1997), Relations between preschool children's child-care experiences and concurrent development: The Cost, Quality, and Outcomes Study, *Merrill-Palmer Quarterly*, 43(3):451-477.

Summary: As part of the Cost, Quality, and Outcomes Study, child and family characteristics were tested to see whether they moderated the relation between center-based child care quality and preschool children's concurrent cognitive and socioemotional development. Analyses included a multisite sample of 170 child-care centers of varying quality and 757 children (mean age 4.3 yrs). Results provide further evidence that there is a positive relation between child-care quality (both observed classroom practices and teacher ratings of teacher-child closeness) and children's cognitive and socioemotional outcomes. Moderating influences of family characteristics were observed for some outcomes, indicating stronger positive effects of child-care quality for children from more at-risk backgrounds. Further, there was no evidence that children from more advantaged families were buffered from the effects of poor-quality care.

Citation: McCartney, et al. (1997), Teacher-child interaction and child-care auspices as predictors of social outcomes in infants, toddlers, and preschoolers, *Merrill-Palmer Quarterly*, 43(3):426-450.

Summary: Examined 718 infants (aged 11-17.9 mo), toddlers (aged 18-35.9 mo), and preschoolers (aged 36-61.7 mo), who were enrolled in 120 child-care centers from Massachusetts, Virginia, and Georgia, to determine the effects of quality of care on children's social outcomes. Four auspices of child-care centers were sampled: nonprofit, local forprofit, national chains for-profit, and church-sponsored. Social outcomes included mothers' ratings of attachment, observations of social skills in classroom, and parents' rating of behavior problems. Quality of care assessment was based on teacher characteristics, teacher:child ratio, and teacher-child interactions. In addition, child developmental patterns and family characteristics, such as work-family interference and family stress, were tested. Results show that there were few associations between teacher-child interaction and children's social outcomes. Higher work-family interference was associated with poorer social outcomes generally. Children in nonprofit centers had better social outcomes on some measures, although effects were small.

ADDITIONAL RESOURCES:

The Center for Career Development in Early Care and Education Wheelock College 200 The Riverway Boston, MA 02215 617-734-5200 x2211http://ericps.ed.uiuc.edu/ccdece/ccdece.html

Healthy Child Care America American Academy of Pediatrics (AAP) 141 Northwest Point Boulevard Elk Grove Village, IL 60007-1098 Contact HCCA Program Manager, American Academy of Pediatrics, for information on potential state training linkages: 888-227-5409 or email childcare@aap.org http://www.aap.org/

National Association for the Education of Young Children (NAEYC) 1509 16th Street, NW Washington DC 20036 1-800-424-2460 http://www.naeyc.org

The National Association of Child Care Resource and Referral Agencies (NACCRRA) 1319 F. Street, NW Suite 500 Washington, DC 20004-1106 Phone: 202-393-5501http://www.naccrra.net/

[Go To Contents]

SUPERVISION/DISCIPLINE INDICATOR

These standards are based on state regulations that deal with general supervision, discipline, and in some cases, basic programming related to developmentally appropriate practices. Characteristic of state regulations, the supervision and discipline aspects are emphasized rather than the developmental program aspects. Eight standards are listed for this indicator.

CFOC STANDARDS (1992):

AD 009: Each facility's supervision policy shall specify a) That no child shall be left alone or unsupervised while under the care of the child care staff. Caregivers shall supervise children at all times, even when the children are sleeping (a caregiver must be able to both see and hear infants while they are sleeping). Caregivers shall not be on one floor while children are on another floor. School-age children shall be permitted to participate in activities and visit friends off premises as approved by their parents and by the caregiver(s) b) That developmentally appropriate child:staff ratios shall be met during all hours of operating, including field trips. The policy shall include specific procedures governing supervision of the indoor and outdoor play spaces that describe the child:staff ratio, precautions to be followed for specific areas and equipment, and staff assignments for high-risk areas. The supervision policies of centers and large family-child-care homes shall be written policies.

PR 028: Facilities shall maintain supervision of children at all times as specified in Supervision Policy (AD 009).

PR 031: Discipline shall include positive guidance, redirection, and the setting of clear-cut limits that foster the child's ability to become self-disciplined. Disciplinary measures shall be clear and understandable to the child, shall be consistent, and shall be explained to the child before and at the time of any disciplinary action.

PR 032: Caregivers shall guide the child to develop self-control and orderly conduct in his/her relationships with peers and adults. Caregivers shall show children positive alternatives rather than just telling children "no." Good behavior shall be rewarded. Caregivers shall work with children without recourse to physical punishment or abusive language.

PR 033: The facility shall use the teaching method described in standard PR 032 immediately when it is important to show that aggressive physical behavior toward staff or children is unacceptable. Caregivers shall intervene immediately when children become physically aggressive.

PR 034: Disciplinary practices established by the facility shall be designed to encourage the child to be fair, to respect property, and to assume personal responsibility and responsibility for others.

PR 035: The following behavior shall be prohibited in all child care settings and by all caregivers:

- 1. Corporal punishment, including hitting, spanking, beating, shaking, pinching, and other measures that produce physical pain.
- 2. Withdrawal or the threat of withdrawal of food, rest, or bathroom opportunities.
- 3. Abusive or profane language.
- 4. Any form of public or private humiliation, including threats of physical punishment.
- 5. Any form of emotional abuse, including rejecting, terrorizing, ignoring, isolating, or corrupting a child.

PR 036: Children shall not be physically restrained except as necessary to ensure their own safety or that of others, and then only for as long as is necessary for control of the situation. Children shall not be given medicines or drugs that will affect their behavior except as prescribed by their health care provider and with specific written instructions from their health care provider for the use of the medicine.

PR 037: "Time out" that enables the child to regain control of himself or herself and that keeps the child in visual contact with a caregiver shall be used selectively, taking into account the child's developmental stage and the usefulness of "time out" for the particular child.

RESEARCH REVIEW/GAP ANALYSIS:

Supervision and discipline of children are clearly intertwined in the research literature (Gross et al., 1999; Arnold et al., 1998). Proper supervision can lessen certain behavioral problems and has a direct impact on injury rates with young children (Wills et al., 1997). Supervision varies with childrens age, self-help skills, and activity. The influence of child care teachers lax and over-reactive discipline on childrens behavior problems was examined in a study (Arnold et al., 1998) in which teachers laxness strongly influenced child misbehavior, and child misbehavior influenced both teachers over-reactivity and laxness. Teachers over-reactivity did not influence child misbehavior. Caregivers who attribute misbehaviors to factors internal to the child and controllable by the child responded to the misbehaviors with more power-assertive discipline strategies than did caregivers who offered external or uncontrollable attributions (Scott-Little & Holloway, 1992). Encouraging caregivers to reflect on why children misbehave could influence their responses to childrens misbehaviors. In particular, teacher education could be directed toward increasing the salience of environmental factors as an explanation for misbehaviors (Scott-Little & Holloway, 1992).

Most injuries occur to children in unsupervised group situations (Wills et al, 1997). This research suggests that the occurrence of physical injury may be associated with peer presence as well as with lack of supervision, and that having a supervisor present does not guarantee protection from injury. The association between the supervisors age and peer presence may be important for interpreting future findings about injury risk. The age of directors has dropped in recent years, which causes concern that children may be at greater risk in programs with younger, less experienced staff.

Noncompliance in preschool children is a common problem in child care and results in increased controlling behaviors by caregivers, which is the most frequent complaint of parents of children referred to clinics for treatment of behavior problems. Noncompliance also underlies, or is associated with, a number of other childhood disorders and appears to be a significant predictor of maladjustment later in life. A study (MacKenzie-Keating et al., 1996) showed that the mean rate of compliant behavior for preschool children in child care centers was 84%. Overall compliance increased with age from 2 years to 4 years of age. Children were more responsive to direct requests than to indirect or group requests. Overall, girls were not significantly more compliant than boys, regardless of age or type of request. Teachers delivered more direct requests than either group or indirect requests. Having teachers focus on these cues might help teachers meet the individual needs of children more effectively. This is an area that needs additional research.

Another major concern with discipline is the misinterpretation of punishment as discipline and the resultant negative effects of verbal reprimands and corporal punishment. Many parents, for example, use disapproving verbal statements as a form of punishment to alter undesirable behaviors. If used frequently and indiscriminately, verbal reprimands lose their effectiveness and become reinforcers of undesired behavior. Corporal punishment, especially spanking, is equally less effective as a strategy to eliminate undesired behavior. For example, spanking children under 18 months of age increases the chance of physical injury and the child is unlikely to understand the connection between the behavior and the punishment. Although spanking may result in a reaction of shock by the child and cessation of the undesired behavior, repeated spanking may result in agitated, aggressive behavior in the child that may lead to a physical altercation between parent and child. Spanking models aggressive behavior as a solution to conflict and has been associated with increased aggression in preschool and school children (American Academy of Pediatrics, 1998). Corporal punishment and frequent and indiscriminate verbal reprimands should never occur in any child care setting.

SUMMARY TABLE:

Citation: Gross, Sambrook & .Fogg (1999), Behavior problems among young children in low-income urban day care centers, *Research in Nursing & Health*, 22(1):15-25.

Summary: The purposes of this study were to describe: (a) the frequency and correlates of behavior problems among a sample of 2- and 3-year-old children from low-income families as seen by their parents and day care teachers, (b) the degree to which parents and teachers agree about the children's behavior problems in their respective contexts, and (c) family characteristics that distinguish toddlers with behavior problems both at home and at day care from the rest of the sample. Parents of 133 toddlers from ten Chicago day care centers completed measures of child behavior problems, child behavioral intensity, parenting self-efficacy, discipline strategies, and stress. Children's day care teachers also completed a measure of child behavior problems. Parent-reported behavior problems were associated with higher child behavioral intensity, greater parent stress, lower self-efficacy, and discipline strategies characterized by irritability, coercion, and inconsistency. Parent and teacher ratings on child behavior were correlated for boys' behavior problems only. Parents reported more child behavior problems than teachers. Approximately 8% of the children were rated as having behavior problems at home and at day care. Although most of the children are functioning well, many of these parents and toddlers are engaged in highly stressful and coercive relationships.

Citation: Arnold, McWilliams, & Arnold (1998), Teacher discipline and child misbehavior in day care: untangling causality with correlational data, *Developmental Psychology*, 34(2):276-87.

Summary: Day-care centers provide an ideal, underused setting for studying the developmental processes of child psychopathology. The influence of day-care teachers' lax and over-reactive discipline on children's behavior problems was examined, as was the influence of children's behavior problems on teachers' discipline. Participants were 145 children and 16 day-care teachers from eight classrooms in a day-care center for children from low-income families. Two techniques are presented for estimating causal relations based on correlational data gathered from day-care centers: 2-stage least squares and simultaneous structural equation modeling. Across techniques, teachers' laxness strongly influenced child misbehavior, and child misbehavior influenced both teachers' over-reactivity and laxness. Teachers' over-reactivity did not influence child misbehavior.

Citation: Wills et al. (1997), Supervision in childhood injury cases: a reliable taxonomy,

Accident Analysis & Prevention, 29(1):133-7.

Summary: This paper describes the development of the "Chicago Children's Supervision Taxonomy" which operationally defines supervision based on the age of an injured child and the ages, familiarity, and proximity of that child's companions. The reliability, coverage, and utility of this taxonomy are illustrated by its application to 142 cases of urban childhood pedestrian injury. All cases were unambiguously classified with good interrater reliability. Most injured children were in unsupervised groups (42%) but 36% had supervisors nearby, thus, supervisor presence does not guarantee protection. Supervising more than one child (especially likely when the supervisor was a teenager) may increase injury risk compared with one-to-one supervision. The taxonomy provides a needed framework adaptable for describing direct supervision in most child injury situations and can facilitate studies of more complex aspects of supervision.

Citation: Wills et al. (1997), Patterns and correlates of supervision in child pedestrian injury, *Journal of Pediatric Psychology*, 22(1):89-104.

Summary: Described supervision in 142 child pedestrian injuries (PI), based on presence and proximity of supervisors and/or peers. Children (5-12 years), families, sites, and PI events were described via record reviews, interviews, questionnaires, and site investigation. Supervision of PI victims varied with family size and cohesion, and with children's age, self-help skills, nearness to home, and activity (playing or journey). Peer presence was associated with more impulsive behavior among supervised (but not among unsupervised) PI victims. Definitions of supervision parameters offered here can aid research on the complex relationship between supervision and PI risk.

Citation: Arnold et al. (1998), Teacher Discipline and Child Misbehavior in Day Care: Untangling Causality with Correlational Data, *Developmental Psychology*, 34(2):276-87.

Summary: Used least squares analysis and simultaneous structural equation modeling to examine the bi-directional relationship between day-care teachers' lax, over reactive discipline and young children's behavior problems. Found that teachers' laxness strongly influenced child misbehavior and child misbehavior influenced teachers' over reactivity and laxness. Teachers' over-reactivity did not influence child misbehavior.

Citation: Watson (1995), Behaviour Management in Context.

Summary: Based upon the belief that what children learn from adult responses to their early behavior sets the foundations on which they will build all future learning, this publication provides information for teachers on the appropriate guidance and management of children's behavior in early childhood settings using a contextual approach. Issues discussed in the document include: 1) setting a behavior policy for the institution; 2) building positive relationships with children; 3) using a knowledge of child development to create appropriate expectations for behavior; 4) considering developmental issues in responding to children's behavior; 5) understanding the impact of changes and loss on children's behavior; 6) examining the variety of family lifestyle issues, such as family routines, living situations, and family tensions; 7) identifying the effects of sociocultural backgrounds on children's behavior, including Aboriginal and Torres Strait Island children; 8) understanding the personal characteristics of each child; 9) realizing the impact of various chronic or acute illness on children's behavior; 10) dealing with children's aggression; 11) creating behavior-friendly classroom environments; 12) developing a plan when behavior problems arise; 13) working with parents; 14) responding to particular behavior problems, such as out of control feelings, emotional stress, regression, and separation anxiety; 15) talking to a child when there is a problem; and 16) using a checklist to identify and evaluate possible strategies for guiding children's behavior.

Citation: MacKenzie-Keating et al. (1996), Natural Rates of Compliant Behavior in Preschool Children in Day Care Settings, *Early Child Development & Care*, 124, 91-103.

Summary: Collected data on natural rates of compliance of preschool children in day care centers. Found a mean rate of 84%. Also found that overall compliance increased with age, that children were more compliant to direct requests (of which teachers gave more) than to indirect or group requests, and that girls were not significantly more compliant than boys.

Citation: Couchenour (1994), Bright Ideas: Learning All Day. Curriculum for Infants and Toddlers.

Summary: Using as a framework concerns and problems which two early childhood educators encountered in connection with curriculum in programs for infants and toddlers, this guide focuses on common questions about child developmental needs shared by caregivers and parents. The chapters consider the following questions: 1) "What Is Curriculum?" attempts to come up with a working definition of curriculum for infants and toddlers; 2) "What Kind of Curriculum Should We Use?" asserts that play is the primary teaching method; 3) "What Will the Children Learn?" includes a discussion of physical-motor development, cognitive and language development, and social and emotional development; 4) "What Kinds of Discipline Will We Use?"; and 5) "How Do We Measure the Child's Development?" includes running records, time samples, developmental checklists, and formal measures. A reproducible letter to parents concerning parent participation and understanding of the child care program is included, as is a list of nine teacher resources.

Citation: Robinson (1996), Aggressive Behavior in the Pre-Verbal Child.

Summary: Directors, teachers, parents, and mental health professionals in child care centers were interviewed about aggressive behavior of pre-verbal children to determine the caregivers' level of understanding about children's emotional development. The definition of aggressive behavior included hitting, biting, pushing, scratching, pinching, grabbing, tantrums, whining or screaming, pulling hair, walking on another child, and running into people. Hitting, biting, and pushing were the mostly commonly observed problems. Ways that aggressive behaviors were handled by the centers were analyzed in terms of intervention techniques, center rules and procedures, and parent roles. The various approaches illustrated helplessness toward and misunderstanding of children's emotions. It was concluded that caregivers need more knowledge of children's emotional development. Commentary is offered about the intervention strategies employed, and examples are given to show the extent of parent anger, guilt, and stress over handling aggressive children. An eight-point plan is suggested for centers to use when confronted with aggressive behavior. The plan includes adapting the curriculum, recognizing the value of calm adult reactions, taking care of both victims and aggressors, keeping logs of behavioral problems, and establishing a cooperative relationship between the center and the parent.

Citation: Kuhns et al. (1992), Mothers' and Child-Care Providers' Cognitive, Affective, and Behavioral Responses to Children's Misbehavior, *Early Education & Development*, (3)3:232-43.

Summary: Mothers and caregivers responded to hypothetical incidents in which a four-year-old child misbehaved. Mothers and caregivers differed in their causal attributions for children's misbehavior and their affective and behavioral responses to children's failures to be altruistic. Assertions of power were likely when respondents believed misbehavior was caused by stable personality factors.

Citation: Scott-Little, & Holloway (1992), Child care providers' reasoning about misbehaviors: Relation to classroom control strategies and professional training, *Early Childhood Research Quarterly*, 7(4):595-606.

Summary: Explored the relationship between causal explanations or attributions caregivers form regarding aggressive and rebellious behaviors in their classrooms and their behavioral responses to the misbehaviors. Forty female caregivers (aged 21-54 yrs) were observed during classroom activities, and details about caregiver responses to two instances of child misbehavior were noted. Subsequent to the observation period, caregivers were asked to indicate why they thought a child had misbehaved. Attributions were coded along dimensions of locus of causality, controllability by the child, and stability over time. Caregivers who attributed misbehaviors to factors internal to the child and controllable by the child responded to the misbehaviors with more power-assertive discipline strategies than did caregivers who offered external or uncontrollable attributions.

Citation: Sternberg et al. (1991), Does out-of-home care affect compliance in preschoolers? *International Journal of Behavioral Development*, 14(1):45-65.

Summary: One hundred and forty first-born Swedish children (aged 11-24 months) were observed with their mothers in two situations (a problem-solving task and a clean-up session). Individual differences in their behavior were then related to measures of the quality of care received by them both at home and in alternative care settings when they averaged 16, 28, and 40 months of age; the amount of social support reportedly received by the mother; the children's ages; and the amount of early out-of-home care received. Analyses show that subjects were more compliant in the task situation at 40 months when they had experienced high quality care at home, when they were older, and when they had experienced less out-of-home care before 24 months of age.

ADDITIONAL RESOURCES:

American Academy of Pediatrics (AAP) 141 Northwest Point Boulevard Elk Grove Village, IL 60007-1098 Phone: 847-228-5005 Fax: 847-228-5097http://www.aap.org/

[Go To Contents]

FIRE DRILLS INDICATOR

This indicator had a relatively direct crosswalk between state regulations and CFOC standards. Most state regulations did not vary much with this indicator and that was reflected in the national database. Five standards are representative of this indicator.

CFOC STANDARDS (1992):

AD 031: The facility shall have a written plan for reporting and evacuating in case of fire, flood, tornado, earthquake, hurricane, blizzard, power failure, or other disaster that could create structural damages to the facility or pose health hazards. The facility shall also include procedures for staff training on this emergency plan.

AD 032: Evacuation drills shall be practiced as follows in areas where natural disasters occur: for tornadoes, on a monthly basis in tornado season; for earthquakes, every 6 months; and for hurricanes, annually.

AD 033: The center director shall use a daily class roster in checking the evacuation and return to a safe indoor space of all children in attendance during an evacuation drill. Small and large family home caregivers shall count to be sure that all children are safely evacuated and returned to a safe indoor space during an evacuation drill.

AD 034: A fire evacuation procedure shall be approved by a fire inspector and shall be practiced at least monthly from all exit locations at varied times of the day and during varied activities, including naptime.

AD 035: A fire evacuation procedure shall be maintained by the caregiver and practiced at least monthly from all exit locations at varied times of the day and during varied activities, including naptime.

RESEARCH REVIEW/GAP ANALYSIS:

Children under the age of 5 are 2.5 times more likely to die from fire than any other childhood age group. The vast majority of fire-related deaths occur in family residences, with the majority in one- and two-family dwellings. Unfortunately, not many recent empirical demonstrations or evaluations of fire-safety programs for preschool children exist. A program called Kid Safe was particularly successful. In this program, preschool children showed significantly greater knowledge gains from pre-test to post-test than did children who did not receive the program. Three-year-olds showed the greatest change of any age group. This program provides support for the value of training preschool children in fire safety as an important strategy for injury prevention in this age group. This is an area that needs additional research and program development.

The Kid Safe program is a 30-hour program with daily 20-minute sessions covering nine lessons presented over an 18-week period. Separate lessons teach children about hot and cold items, the use of matches and lighters, the proper procedure if clothing catches on fire, the difference between good fires and bad fires, the importance of smoke detectors, safe departure from a burning house, how to cool burns, and the role of the firefighter as a community helper. Much of the program emphasizes cognitive aspects of fire safety such as situations to avoid, things not to play with, etc. Other portions use behavioral techniques (such as modeling, role playing, and rehearsal during simulated emergency situations) to instruct children in specific behavior sequences, such as Stop, Drop, and Roll when their clothes catch on fire, or when there is smoke, Crawl Low.

SUMMARY TABLE:

Citation: Gielen, Dannenberg, Ashburn, & Kou (1996), Teaching safety: evaluation of a children's village in Maryland, *Injury Prevention*, 2(1):26-31.

Summary: The purpose of this study was to evaluate Children's Village, a life safety education facility for children. The study took place in Washington County, Maryland, a rural county. Eight elementary schools with 20 second grade classrooms (410 students aged 7 and 8) were selected to participate. Using a quasi-experimental design, tests were administered to two cohorts of children before (pre-test) and after (post-test) they attended the Children's Village during 1993-1994. Parent and teacher surveys were also completed after the program. Among children who attended in December 1993-January 1994, there was a significant improvement in average test scores between the pretest (58% correct) and post-test (78%). Among children who attended in April 1994, there also was a significant improvement in test scores between pretest (74%) and post-test (85%). Among parents, 70% reported that their child learned a great deal at Children's Village and 33% reported having made changes in their home as a result. The parent survey also revealed that 25% of children and 35% of adults did not always wear their seat belts, and 74% of children did not always wear bicycle helmets. Teachers' responses to the program were generally positive. Children's Village brought together an extensive network of community leaders, parents, and teachers dedicated to safety education of children. The curriculum had a positive impact on children's knowledge and, to a lesser extent, on parents' safety practices. Program impact could be enhanced by more emphasis on automobile restraints and helmets (behaviors that parents reported were not consistently practiced) and by expanding the village services to parents as well as children. Others considering creating similar programs need to identify community leaders willing to commit the time, effort, and resources required to develop and sustain such programs.

Citation: English, & Hendricks (1997), Learn Not To Burn, Children & Families, 16(2):40-41.

Summary: Describes the "Learn Not to Burn Preschool Program," a low-cost fire safety awareness and burn prevention curriculum for young children. The program promotes eight burn prevention methods--including practicing an escape plan--using developmentally appropriate learning objectives to increase children's fire safety knowledge, skill, and understanding. Evaluation data suggest that participating Head Start children increased their fire-safety skills.

Citation: McConnell, Leeming, & Dwyer (1996), Evaluation of a fire-safety training program for preschool children, *Journal of Community Psychology*, 24(3):213-227.

Summary: Described an empirical evaluation of a fire-safety program for preschool children ages 3, 4 and 5 years. Four hundred and forty-three subjects from ten child-care facilities participated. Children in six centers received an 18-week training program called Kid Safe. Children in four other centers were assigned to the delayed-treatment condition and constituted the comparison group. All subjects were pretested with a modified 48-question multiple choice comprehensive fire-knowledge test. The same test was re-administered to all subjects following presentation of the program to the treatment group. At each of the three ages, subjects in the treatment group showed significantly greater knowledge gains from pre-test to post-test than did subjects in the comparison group. Three year olds showed the greatest change of any age group. Findings provide support for the value of training preschool children in fire safety as an important strategy for injury prevention in this age group.

Citation: Bednarczyk, Alexander-Whiting, & Solit (1994), Guidelines for the adaptation of preschool environments to integrate deaf, hard of hearing, and hearing children, *Children's Environments Quarterly*, 11(1):6-15.

Summary: Discusses the integration of deaf and hard-of-hearing (HOH) children in the preschool environment. The authors suggest that a quality early childhood program can be successfully expanded to accommodate deaf, HOH, and hearing children with in-service training and the addition of staff who can communicate with the deaf and HOH children, and with additional physical and visual modifications. Recommended modifications to aspects of the environment include increased visual stimulation, safe physical layout, deaf/HOH staff and trained hearing staff to work with deaf and HOH children, an appropriate communication milieu, cultural sensitivity, knowledge of applicable laws, sign language training, and appropriate curriculum activities. Safety concerns should also be considered, especially for fire drills and alarms and for playground procedures.

ADDITIONAL RESOURCE:

National Fire Protection Association (NFPA) 1 Batterymarch Park Quincy, MA 02269-9101 617-770-3000http://www.nfpa.org

[Go To Contents]

MEDICATION INDICATOR

State regulations for this indicator were very specific and cross walked clearly to the seven standards listed here. Exact wording was not present in doing the crosswalk but the essence of the regulations is captured in these CFOC standards.

CFOC STANDARDS (1992):

HP 082: The administration of medicines at the facility shall be limited to: a) Those prescribed medications ordered by a health care provider for a specific child. b) Those nonprescription medications recommended by a health care provider for a specific child, with written permission of the parent or legal guardian referencing a written or telephone instruction received by the facility from the health care provider.

HP 083: Any prescribed medication brought into the facility by the parent, legal guardian, or responsible relative of a child shall be dated, and shall be kept in the original container labeled by a pharmacist with the child's first and last names; the date the prescription was filled; the name of the health care provider who wrote the prescription; the medication's expiration date; and specific, legible instructions for administration, storage, and disposal (i.e., the manufacturer's instructions or prescription label).

HP 084: Any over-the-counter medication brought into the facility for use by a specific child shall be labeled with the following information: the date; the child's first and last names; specific, legible instructions for administration and storage (i.e., manufacturer's instructions); and the name of the health care provider who made the recommendation.

HP 085: All medications, refrigerated or unrefrigerated, shall have child protective caps, shall be kept in an orderly fashion, shall be stored away from food at the proper temperature, and shall be inaccessible to children. Medication shall not be used beyond the date of expiration.

HP 086: There shall be a written policy for the use of any commonly used, nonprescription medication as specified in Medication Policy.

HP 087: Any caregiver who administers medication shall be trained to check for the name of the child, to read the label/prescription directions in relation to the measured dose, frequency, and other circumstances relative to administration (e.g., relation to meals); and to document properly that the medication was administered.

RESEARCH REVIEW/GAP ANALYSIS:

According to the Centers for Disease Control and Prevention, children in child care are 18 times more likely to acquire an infectious disease than children who are not. Group child care is perfect for spreading infectious organisms rapidlynot only the common cold and flu, but also Salmonella, the agents that cause meningitis, and even hepatitis viruses. According to the National Standards for Health and Safety *Caring for Our Children*, children with meningitis and Hepatitis A should be permitted to attend if prophylaxis has begun. Children with Hepatitis B or C should be permitted to attend if staff observe standard precautions.

Children in child care are more likely to be taking medicationboth over-the-counter preparations and prescription drugs (decongestants, expectorants, antihistamines, antibiotics, and inhalers) because of this increased risk of acquiring an infectious disease. Child care staff are often obligated to administer a variety of medications, often at inconvenient times, to a number of children (Moser, 1995).

Over-the-counter medications should be used in child care only with written permission of the parent or guardian and instructions from a physician. Because use of any medication in child care puts an increased burden on providers, parents should ask their physicians to modify dose schedules to avoid the hours that children are in child care

(Aronson, 1991).

The National Health and Safety Performance Standards, National Academy of Early Childhood Programs accreditation criteria, Head Start Performance Standards, and state licensing requirements specifically address administration of medicines in child care programs. It is essential that every child care program have a written policy and clear procedures on giving medicines. Delegation in medication administration is another key area that needs additional research to determine the impact of training programs in the actual administration of medications. The key to medication administration is the three-way collaborative alliance of the child care provider, a medical professional, and the parents.

In addition to the steps mentioned above, the several things can be done to assist in the administration of medication. Medicines must be stored in original, labeled containers in locked cabinets inaccessible to children. Parents should take home any medicines at the end of the day or end of the week. Each center should have designated staff members who are trained and authorized to give medicines. This indicator needs additional research to help fill in some of the gaps that presently exist in determining if training programs are truly effective with staff.

SUMMARY TABLE:

Citation: Slack-Smith, Read, & Stanley (1998), The use of medication in children attending childcare in Western Australia, *Journal of Pediatrics & Child Health*, 34(2):183-7.

Summary: This paper reports on medication use and factors affecting use in a cohort of preschool children attending long (seven hrs+) day care in centers and family day care in homes. A survey of parents representing 846 children under 6 years old in two types of childcare in Perth, Western Australia. The data were analyzed using descriptive and logistic regression techniques to elucidate factors associated with use of medication. Seventy-three per cent of the children were reported to have used over-the-counter medication at some time, while current regular use of prescribed medication was 11%. This proportion is comparable to the limited available data for children of similar ages in Western Australia. For both medication categories, the use of medication was higher in long day care than family day care. In addition, many other characteristics differed between children in long day care and family day care. Initial analysis showed a number of significant associations between child and family factors and both categories of medication. Multivariable analyses indicated that the most important associations with medication use were with children's illnesses. There was no significant difference between long day care and family day care for use of over-the-counter medication but attending long day care was significantly associated with increased use of prescribed medication (OR=2.13; 95% CI 1.24-3.67) after illnesses had been taken into account. Medication use in children attending childcare is closely related to reported illness in the child.

Citation: Hale, & Polder (1995), The ABCs of Safe and Healthy Child Care: A Handbook for Child Care Providers .

Summary: Recognizing the importance of maintaining a safe and healthy child care setting, this manual for home or center child care providers contains information and guidelines to help providers maintain child health and reduce sickness and injuries. Part 1, "Introduction," describes how diseases are spread and how to prevent and prepare for unintentional and intentional injuries, and provides guidelines for recognizing child abuse. Part 2 of the guide, "Establishing Policies to Promote Health and Safety," makes recommendations for developing written policies for health history and immunizations for day care children and care providers, exclusion for illness, incident reporting, emergency illness or injury procedures, children with special needs, medication administration, nutrition/foods brought from home, as well as smoking and the use of alcohol and illegal drugs. Part 3, "Following Protective Practices to Reduce Disease and Injury," describes basic disease and injury protection practices, including stress reduction,

handwashing and diapering routines, use of toilet training equipment, cleaning and disinfecting routines, use and handling of toothbrushes, and food safety and sanitation. Part 4, "Maintaining a Safe and Healthy Facility," details the contents of a written safety plan, including precautions, evaluation plan and drills pertaining to fire safety, electrical fixtures and outlets, stairways and walkways, indoor furnishings and equipment, outdoor play areas, small objects and toys, firearms, water temperatures, chemical toxins, lead poisoning, air pollution, pets, and exposure to electric and magnetic fields and to heat and ultraviolet rays. Part 5, "Fact Sheets on Childhood Diseases and Conditions," lists a variety of sicknesses and diseases, from asthma and the common cold to yeast infections, and gives the child care provider a general diagnostic description, as well as preventive measures for the illness. Appendices contain additional resources and contact information on regional poison control centers.

Citation: Aronson (1991), Ask Dr. Sue, Child Care Information Exchange, 77, 24-25.

Summary: Answers child care center directors' questions concerning the use of the Haemophilus influenza type b (Hib) vaccine and use of over-the-counter medication with children in child care.

ADDITIONAL RESOURCE:

American Academy of Pediatrics 141 Northwest Point Boulevard Elk Grove Village, IL 60007-1098 Phone: 847-228-5005 Fax: 847-228-5097http://www.aap.org/

[Go To Contents]

EMERGENCY PLAN/CONTACT INDICATOR

This indicator had only the one CFOC standard that represented the states regulations regarding emergency plans and contact information related to that emergency plan.

CFOC STANDARDS (1992):

APP 28The facility shall have a written plan for reporting and managing any incident or unusual occurrence that is threatening to the health, safety, or welfare of the children or staff. The facility shall also include procedures for staff training on this emergency plan. The following incidents, at a minimum, shall be addressed in the emergency plan: a) lost or missing child; b) sexual or physical abuse or neglect of a child; c) injuries requiring medical or dental care; d) serious illness requiring hospitalization, death of a child enrolled in the facility, or death of a caregiver, including deaths that occur outside of child care hours. The following procedures, at a minimum, shall be addressed in the emergency plan: e) provision for a caregiver to accompany a child to the emergency care source and remain with the child until the parent or legal guardian assumes responsibility for the child. Provision for a backup caregiver or substitute for large and small family child care homes to make this feasible. Child:staff ratios must be maintained at the facility during the emergency; f) the source of emergency medical carea hospital emergency room, clinic, or other constantly staffed facility known to caregivers and acceptable to parents; g) ensure that first aid kits are resupplied following each first aid incident, and that required contents are maintained in a serviceable condition, by a periodic review of the contents; h) the names and addresses of a least three licensed providers of dental services who have agreed to accept emergency dental referrals of children and to give advice regarding a dental emergency.

RESEARCH REVIEW/GAP ANALYSIS:

Quality child care must take place in safe and healthy settings. Because no environment can be absolutely safe, all staff must be prepared to handle medical emergencies and to use the appropriate emergency medical services (Wiebe & Fuchs, 1999). Staff need to be prepared for emergency situations and injuries, medical emergencies, and need to have emergency medical policies and procedures in place. All child care staff that provide direct care must have training in pediatric first aid, including rescue breathing and first aid for choking. At least one certified staff person should be with the children in care at all times and in all places. Additional research is needed to determine the effectiveness of training programs related to emergency contacts and planning. However, clear indicators of the types of information that child care programs should have readily available at all times are available.

Responding appropriately means preparing adequately through training, practice, and access to necessary information. Certain critical information should be gathered on all children and staff and readily available in an organized, easy-to-use file. Because information often changes, data on each child should be regularly updated. Examples of critical information include: accurate and current contract names and phone numbers, names and phone numbers of medical providers, preferred hospitals, copies of current insurance or Medicaid cards, parent/guardian signatures authorizing emergency care, and information on allergies or chronic health conditions. Emergency phone numbers, resources, and other information should be posted in a highly visible place, such as near the door. Emergency phone numbers and program addresses should be posted by the telephone. Location of the nearest phone, emergency assistance numbers, address of the child care program, name of caregiver, location of fire extinguishers, location of the first aid kit, child abuse hotline numbers, and basic first aid information should also be posted. However, even with all these resources in place, this indicator requires additional research to determine if training in these areas is really effective.

SUMMARY TABLE:

Citation: Copeland (1996), Code Blue! Establishing a Child Care Emergency Plan, *Child Care Information Exchange*, 107, 17-22.

Summary: Discusses steps necessary to develop an emergency preparedness plan for child care centers: (1) identifying the need for policies through brainstorming and reviewing previous emergencies; (2) identifying potential issues through consultation; (3) establishing center procedures; (4) identifying a spokesperson to present accurate public information; (5) preparing statements to prevent misinformation; and (6) preparing for ongoing support after the emergency.

Citation: Levin (1991), Your Center Needs an Emergency/Crisis Plan!, Child Care Information Exchange, 79, 34-37.

Summary: Describes the development of a five-part plan for dealing with emergencies and crises in day care centers. The plan involves a handout that provides general information about the program, the designation of spokespeople, procedures for responding to both common and extreme emergencies, and media guidelines.

Citation: Kelly, Kirkland, Holmes, Ellis, Delclos, & Kozinetz (1997), Assessing parental utilization of the poison center: an emergency center-based survey, *Clinical Pediatrics*, 36(8):467-73.

Summary: The purpose of this study was to identify and characterize caretakers who fail to utilize the poison center for unintentional poisonings involving children. The authors interviewed 210 caretakers of children evaluated for unintentional poisoning in the emergency center of an urban, university-based teaching hospital to determine 1)

whether demographic differences exist between those caretakers who contacted a poison center prior to the emergency center visit and those who did not and 2) whether differences exist in prevalence of poison prevention knowledge and behaviors between the two groups. Ninety-six (46%) of caretakers did not contact the poison center prior to the emergency center visit. Significant differences were found between the two groups for the following caretaker variables: race/ethnicity, language preference, age, level of education, country in which schooling occurred, and type of insurance coverage for the child. When logistic regression was used to control for confounding, the two variables associated with failure to use the poison center were black race and schooled outside the United States (primarily in Mexico). Poison center callers reported a higher prevalence of poison prevention knowledge and behaviors than non-callers. Educational interventions should be targeted to the groups of caretakers identified who do not use the poison center.

Citation: O'Connor, Boyle, O' Connor, & Letellier (1992), Self-reported safety practices in child care facilities, *American Journal of Preventive Medicine*, 8(1):14-8.

Summary: To determine the prevalence of safety hazards and current injury prevention practices in child care settings, we administered a structured telephone interview to a geographically stratified, randomly selected sample of licensed child care facilities. Representatives of 130 child care facilities responded to questions about current injury prevention practices. Specific hazards assessed were related to burns, falls, poisoning, playgrounds, and emergency telephone numbers. Results indicated that 26.8% of providers who knew the temperature of their tap water stated that it was over 130 degrees F.; 14.1% had space heaters accessible to children; 30.3% of those with stairs accessible to children lacked safety gates; 61.4% of those with playgrounds did not have an impact-absorbing surface under playground equipment; 16.9% of respondents had an unexpired bottle of syrup of ipecac; 55.8% demonstrated that a poison control center telephone number was available to them; and 80% of providers could demonstrate the availability of the telephone number of the local ambulance. We conclude that potential and remedial injury hazards exist in some licensed child care centers and that providers of child care within licensed facilities are a promising target for childhood injury prevention interventions.

ADDITIONAL RESOURCE:

Emergency Medical Services for Children National Resource Center 111 Michigan Avenue, N.W. Washington, DC 20010-2970 Phone: 202 884-4927http://www.ems-c.org/

[Go To Contents]

OUTDOOR PLAYGROUND INDICATOR

State regulations related to outdoor play areas varied greatly. As a result, many CFOC standards are listed in this indicator. These 29 standards capture the full scope of variation in all of the state regulations.

CFOC STANDARDS (1992):

FA 234: Sunlit areas and shaded areas shall be provided by means of open space and tree plantings or other cover in outdoor spaces.

FA 235: The outdoor play area shall be enclosed with a fence or natural barriers. The barrier shall be at least 4 feet in height and the bottom edge shall be no more than 3 1/2 inches off the ground. There shall be at least two exits from such areas, with at least one remote from the buildings. Gates shall be equipped with self-closing and positive self-latching closure mechanisms. The latch or securing device shall be high enough or of such a type that it cannot be opened by small children. The openings in the fence shall be no greater than 3 1/2 inches. The fence shall be constructed to discourage climbing.

FA 236: The soil in play areas shall not contain hazardous levels of any toxic chemical or substances. The facility shall have soil samples and analyses performed by the local health department, extension service, or environmental control testing laboratory, as required, where there is good reason to believe a problem may exist.

FA 237: The soil in play areas shall be analyzed for lead content initially. It shall be analyzed at least once every 2 years where the exteriors of adjacent buildings and structures are painted with lead containing paint. Lead in soil shall not exceed 500 ppm. Testing and analyses shall be in accord with procedures specified by the regulating health authority.

FA 238: Sandboxes shall be constructed to permit drainage, shall be covered tightly and securely when not in use, and shall be kept free from cat or other animal excrement.

FA 239: Sand used in sandboxes shall not contain toxic or harmful materials.

FA 240: Outdoor storage shall be available for equipment not secured to the ground, unless indoor storage space is available.

FA 241: Anchored play equipment shall not be placed over, or immediately adjacent to, hard surfaces.

FA 242: Outdoor play equipment shall be of safe design and in good repair. Climbing equipment and swings shall be set in concrete footings located below ground surface (at least 6 inches). Swings shall have soft and, or flexible seats. Access to play equipment shall be limited to age groups for which the equipment is developmentally appropriate.

FA 243: All pieces of playground equipment shall be designed to match the body dimensions of children.

FA 244: All pieces of playground equipment shall be installed so that an average adult will not be able to cause a fixed structure to wobble or tip.

FA 245: All pieces of playground equipment shall be surrounded by a resilient surface (e.g., fine, loose sand; wood chips; wood mulch) of an acceptable depth (9 inches), or by rubber mats manufactured for such use, consistent with the guidelines of the Consumer Product Safety Commission and the standard of the American Society for Testing and Materials, extending beyond the external limits of the piece of equipment for at least 4 feet beyond the fall zone of the equipment. These resilient surfaces must conform to the standard stating that the impact from falling from the height of the structure will be less than or equal to peak deceleration 200G(63). Organic materials that support colonization of molds and bacteria shall not be used.

FA 246: All pieces of playground equipment shall be designed so that moving parts (swing components, teeter totter mechanism, spring ride springs, etc.) will be shielded or enclosed.

FA 247: All pieces of playground equipment shall be free of sharp edges, protruding parts, weaknesses, and flaws in material construction. Sharp edges in wood, metal, or concrete shall be rounded to a minimum of 1/2 inch wide on all edges. Wood materials shall be sanded smooth and shall be inspected regularly for splintering.

FA 248: All pieces of playground equipment shall be designed to guard against entrapment or situations that may cause strangulation by being made too large for a child's head to get stuck or too small for a child's head to fit into. Openings in exercise rings shall be smaller than 4, inches or larger than 9 inches in diameter. There shall be no openings in a play structure with a dimension between 4 and 5/8 inches and 9 and 1/8 inches. In particular, side railings, stairs, and other locations where a child might slip or try to climb through shall be checked for appropriate dimensions. Protrusions such as pipes or wood ends that may catch a child's clothing are prohibited. Distances between vertical infill, where used, must be 4 and 5/8 inches or less to prevent entrapment of a child's head. No opening shall have a vertical angle of less than 55 degrees. To prevent finger entrapment, no opening larger than 3/8 inch and smaller than 1 inch shall be present.

FA 249: All bolts, hooks, eyes, shackles, rungs, and other connecting and linking devices of all pieces of playground equipment shall be designed and secured to prevent loosening or unfastening except by authorized individuals with special tools.

FA 250: Crawl spaces of all pieces of playground equipment, such as pipes or tunnels, shall be securely anchored to the ground to prevent movement, and shall have a minimum diameter that permits easy access to the space by adults in an emergency or for maintenance.

FA 251: The maximum height of any piece of playground equipment shall be no greater than 5 and 1/2 feet if children up to the age of 6 are given access to it, and no higher than 3 feet if the maximum age of children is 3 years.

FA 252: All paved surfaces shall be well drained to avoid water accumulation and ice formation.

FA 253: All walking surfaces, such as walkways, ramps, and decks, shall have a nonslip finish.

FA 254: All walking surfaces and other play surfaces shall be free of holes and sudden irregularities in the surface.

FA 255: Space used for wheeled vehicles shall have a flat, smooth, and nonslippery surface. There shall be a physical barrier separating this space from traffic, streets, parking, delivery areas, driveways, stairs, hallways used as fire exits, balconies, and pools and other areas containing water.

FA 256: All outdoor activity areas shall be maintained in a clean and safe condition by removing debris, dilapidated structures, broken or worn play equipment, building supplies, glass, sharp rocks, twigs, toxic plants, and other injurious material. The play areas shall be free from anthills, unprotected ditches, wells, holes, grease traps, cisterns, cesspools, and unprotected utility equipment. Holes or abandoned wells within the site shall be properly filled or sealed. The area shall be well drained with no standing water.

FA 257: Outdoor play equipment shall not be coated or treated with, nor shall it contain, toxic materials in hazardous amounts that are accessible to children.

FA 258: The center director and the large and small family home caregiver shall conduct inspections of the playground area and the playground as specified below.

FA 259: The general playground surfaces shall be checked every day for broken glass, trash, and other foreign materials (e.g., animal excrement).

FA 260: The playground area shall be checked on a daily basis for areas of poor drainage and accumulation of water and ice.

FA 261: Any particulate resilient material beneath playground equipment shall be checked at least monthly for packing due to rain or ice and, if found compressed, shall be turned over or raked up to increase resilience capacity. All particulate resilient material, particularly sand, shall be inspected daily for glass and other debris, animal excrement, and other foreign material. Loose fill surfaces shall be hosed down for cleaning and raked or sifted to remove hazardous debris as often as needed to keep the surface free of dangerous, unsanitary materials.

FA 262: The playground equipment shall be checked on a monthly basis for the following:

- 1. Visible cracks, bending or warping, rusting, or breakage of any equipment.
- 2. Deformation of open hooks, shackles, rings, links, and so forth.
- 3. Worn swings hangers and chains.
- 4. Missing, damaged, or loose swing seats.
- 5. Broken supports or anchors.
- 6. Cement support footings that are exposed, cracked, or loose in the ground.
- 7. Accessible sharp edges or points.
- 8. Exposed ends of tubing that require covering with plugs or caps.
- 9. Protruding bolt ends that have lost caps or covers.
- 10. Loose bolts, nuts, and so forth that require tightening.
- 11. Splintered, cracked, or otherwise deteriorating wood.
- 12. Lack of lubrication on moving parts.
- 13. Worn bearings or other mechanical parts.
- 14. Broken or missing rails, steps, rungs, or seats.
- 15. Worn or scattered surfacing material.
- 16. Hard surfaces, especially under swings, slides, and so forth (e.g., places where resilient material has been shifted away from any surface underneath play equipment).
- 17. Chipped or peeling paint.
- 18. Pinch or crush points, exposed mechanisms, juncture, and moving components.

RESEARCH REVIEW/GAP ANALYSIS:

Though child care center injury rates are relatively low, the majority of injuries occur on outdoor playgrounds. Many injuries that occur in this setting are minor. However, lowering the height of playground equipment and providing more resilient playground surfaces could further reduce injury risks in child care centers. The injury rate was 1.5 injuries per 100,000 child hours in child care. The most common injuries were cuts or lacerations (31%), bumps or bruises (15%), fractures (10%), and dental injuries (8%). Most injuries (51%) occurred on the playground. Many injuries (18%), and more than half of factures and concussions (53%) were due to falls from climbing equipment. (Briss, Sacks, Kresnow, & ONeill, 1993). The most important risk factor for injury was the height of the tallest piece of climbing equipment on the playground (Briss, Sacks, Addiss, Kresnow, & ONeill, 1995).

Previous research has documented that the majority of injuries occurring in child care involve falls, and that the most common consumer product associated with such falls is playground equipment. A recent study of children less than 5 years of age admitted to hospitals between 1979 and 1988 for injuries associated with playground equipment found that significantly more injuries occurred in the home than in child care facilities. Fractures were the most common injury, and the head was the most commonly involved body region. Lower limb injuries were usually the most severe. Among the differences between home and child care injuries were the type of equipment involved. For instance, swings were disproportionately associated with head injuries (Kotch, Chalmers, Langley, & Marshall, 1993).

Another study was conducted to determine the prevalence of safety hazards and current injury prevention practices in child care settings (OConnor, OConnor, Boyle, & Letellier, 1992). Results from this study indicated that 27% of providers who knew the temperature of their tap water stated that it was over 130 degrees F, 14% had space heaters accessible to children, 30% of those with stairs accessible to children lacked safety gates, 61% of those with playgrounds did not have an impact-absorbing surface under playground equipment, 17% had an unexpired bottle of syrup of ipecac, 56% demonstrated that a poison control center phone number was available to them, and 80% of providers could demonstrate the availability of the phone number of the local ambulance.

Concern for the safety of children in out-of-home care is growing along with the number of such children. The above studies clearly demonstrate that injuries among children in child care centers occur on playgrounds and are the results of falls affecting the head and upper limbs. Such injuries are often related to reversible hazards on child care playgrounds. Targeted funding might improve child care playground safety. It is also possible to conduct abbreviated playground safety surveys with minimal demand on the time of child care staff. Results from a study of Smart Start in North Carolina holds promise as a potential solution to improving playground safety (Kotch & Guthrie, 1998).

Several excellent resources can be used to help reduce the risks or at least be able to identify and respond to risks. The *National Playground Safety* manual developed by the University of North Iowa or CDCs *Handbook for Public Playground Safety* or NAEYCs *Healthy Young Children* include playground safety information. Other excellent resources are the *CPSC Handbook for Public Playground Safety, ASTM/CPSE Audit Guide* by Dr. Frances Wallach, published by Playworld Systems, and the National Playground Safety Institute of the National Parks and Recreation Association course to certify playground inspectors.

SUMMARY TABLE:

Citation: Ulione & Dooling (1997), Preschool injuries in child care centers: nursing strategies for prevention, *Journal of Pediatric Health Care*, 11(3):111-6.

Summary: Injuries to children 0 to 12 years of age pose a national health problem. Injuries are a particular problem in child care settings. Both research and anecdotal reports confirm that most injuries in the child care setting are cuts, scratches, and abrasions caused by falls indoors and in playgrounds. Other injuries are caused by human bites and motor vehicle pedestrian injuries. Child development centers are an obvious focal point to direct injury prevention services by nurses. The nurse's role in injury prevention is to educate the child care providers about injuries and then teach them the skills to assess and monitor injury prevention strategies. This article discusses the problem of injuries in child care centers in general and discusses injury prevention strategies the nurse can share with the child care provider. Educational resources are included to help the child care providers assess and monitor their own center's injury risk.

Citation: Cummings, Rivara, Boase, & MacDonald (1996), Injuries and their relation to potential hazards in child day care, *Injury Prevention*, 2(2):105-8.

Summary: To prospectively determine the incidence rate of injuries that required medical attention among children in day care and to identify possible hazards related to these injuries. Prospective cohort study of children in a sample of licensed day care facilities. From 1 July 1992 to 30 June 1993, 53 medically attended injuries were reported by 133 day care sites; incidence rate 1.9 per 100,000 hours of day care attendance. The rate of injury in 91 small family day care homes was essentially the same as that in 42 larger day care centers; relative rate 1.0 (95% confidence interval 0.6 to 1.9). Injuries that required sutures accounted for 39% of the cases, while 17% required a cast, splint, or sling. No child was hospitalized. Sixty-nine sites were inspected and all had potentially correctable physical hazards, with a

median of 15 hazards per site (range 7 to 26). These potential hazards had little relationship to the risk of injury and a case-by-case review identified only two injuries that might have been prevented by a more energy absorbent playground surface. The incidence of medically attended injuries found in this study is consistent with other studies from the United States. Most injuries were minor and had little relation to physical hazards at day care locations.

Citation: Browning, Runyan, & Kotch (1996), A statewide survey of hazards in child care centers, *Injury Prevention*, 2(3):202-7.

Summary: The purpose of this study was to determine adherence to selected recommended safety standards in North Carolina child care centers. A self administered questionnaire eliciting information about safety practices in child care was mailed to a randomly selected sample of 409 North Carolina child care centers. One hundred and ninety-five usable questionnaires were returned from child care centers in 75 counties. Results indicated that all of the standards included in the state's child regulations were being adhered to by at least 80% of the centers. However, adherence to recommended standards not included in the state's regulations was quite variable, with one standard implemented by less than 5% of the centers. The lowest rates of adherence were found for standards specifying that resilient surface material be used under playground equipment (4%) and that certain foods that may present a choking hazard to small children not be served (27%). Many hazards not addressed in North Carolina child care regulations are present in child care centers. Some safety standards are not adhered to due to lack of knowledge or limited resources. Inclusion of national standards in state child care regulations appears to reduce, but not eliminate, the likelihood of hazards being reported. Further research should include on-site inspections and attention to safety in family child care.

Citation: Briss, Sacks, Addiss, Kresnow, & O'Neil (1995), Injuries from falls on playgrounds. Effects of day care center regulation and enforcement, *Archives of Pediatrics & Adolescent Medicine*, 149(8):906-11.

Summary: To measure the incidence of playground fall injuries among children attending licensed U.S. day care centers and to evaluate how injury incidence varies with center characteristics and with the regulatory and enforcement climate in which centers operate. Telephone surveys of directors of day care centers and enforcement agencies and review of written day care regulations. Probability sample of licensed day care centers in 50 states and the District of Columbia. Children attending day care centers with playgrounds. Medically attended playground fall injuries. Among the 1740 day care centers studied, a weighted total of 89.2 injuries occurred during the 2-month study period (0.25/100,000 child-hours in day care). The most important risk factor for injury was height of the tallest piece of climbing equipment on the playground in both bivariate (P = .01) and multivariate (P = .02) analyses. Neither regulations addressing playground safety or playground surfaces nor enforcement patterns were associated with lower injury rates. Additional effort is needed to develop and evaluate regulations and enforcement that reduce injury risks for children while minimizing burden on day care centers. In the meantime, limiting climbing equipment heights may reduce playground injury rates.

Citation: Briss, Sacks, Addiss, Kresnow, & O'Neil (1994), A nationwide study of the risk of injury associated with day care center attendance, *Pediatrics*, 93(3):364-8.

Summary: Because an increasing proportion of U.S. children spends time in day care center environments, a national estimate of injury risks in day care centers is needed. Interviewed directors of 1797 day care centers from every state and the District of Columbia from October to December 1990 and analyzed medically attended injuries and center

characteristics reported by the directors. The centers were attended by 138,404 children. In the two months before the center directors were interviewed, 556 children sustained injuries requiring medical attention while attending the centers. The injury rate was 1.5 injuries per 100,000 child hours in day care. The most common injuries were cuts or lacerations (31%), bumps or bruises (15%), fractures (10%), and dental injuries (8%). Most injuries (51%) occurred on the playground. Many injuries (18%), and more than half of fractures and concussions (53%) were due to falls from climbing equipment. Day care center injury rates estimated by this study were relatively low. Many injuries that occur in this setting are probably minor. However, lowering the height of playground equipment and providing more resilient playground surfaces could further reduce injury risks in day care centers.

Citation: Kotch, Chalmers, Langley, & Marshall (1993), Child day care and home injuries involving playground equipment, *Journal of Pediatrics & Child Health*, 29(3):222-7.

Summary: The increasing number of children attending child day care has led to a corresponding concern for their safety in the absence of parental care. Previous studies have documented that the majority of injuries occurring in child day care involve falls, and that the most common consumer product associated with such falls is playground equipment. This study describes New Zealand children less than 5 years of age admitted to hospital between 1979 and 1988 for injuries associated with playground equipment located at home or a child care facility. There were 528 hospitalized home injuries involving playground equipment, and 145 such day care injuries. Fractures were the most common injury, and the head was the most commonly involved body region. Lower limb injuries were the most severe. Among the differences between home and day care injuries were the type of equipment involved. Swings were disproportionately associated with head injuries.

Citation: O'Connor, Boyle, O' Connor, & Letellier (1992), Self-reported safety practices in child care facilities, *American Journal of Preventive Medicine*, 8(1):14-8.

Summary: To determine the prevalence of safety hazards and current injury prevention practices in child care settings, the authors administered a structured telephone interview to a geographically stratified, randomly selected sample of licensed child care facilities. Representatives of 130 child care facilities responded to questions about current injury prevention practices. Specific hazards assessed were related to burns, falls, poisoning, playgrounds, and emergency telephone numbers. Results indicated that 26.8% of providers who knew the temperature of their tap water stated that it was over 130 degrees F; 14.1% had space heaters accessible to children; 30.3% of those with stairs accessible to children lacked safety gates; 61.4% of those with playgrounds did not have an impact-absorbing surface under playground equipment; 16.9% of respondents had an unexpired bottle of syrup of ipecac; 55.8% demonstrated that a poison control center telephone number was available to them; and 80% of providers could demonstrate the availability of the telephone number of the local ambulance. The authors conclude that potential and remedial injury hazards exist in some licensed child care centers and that providers of child care within licensed facilities are a promising target for childhood injury prevention interventions.

Citation: Sacks, Brantley, Holmgreen, & Rochat (1992), Evaluation of an intervention to reduce playground hazards in Atlanta child-care centers, *American Journal of Public Health*, 82(3):429-31.

A Comparison of International Child Care and US Child Care Using the Child Care Aware -**NACCRRA** (National Association of Child Care Resource and Referral Agencies) **Child Care Benchmarks**

Richard Fiene, Ph.D.

Affiliated Faculty Prevention Research Center The Pennsylvania State University

This is a first of its kind study comparing the USA to other world countries utilizing the Child Care Aware - NACCRRA Child Care Benchmarks related to health and safety rules and regulations. A team of researchers analyzed the child care/early care & education rules and regulations from the USA and a selected group of countries to do a comparative analysis using the Child Care Aware - NACCRRA benchmarking scoring protocol. The results from the analyses were somewhat unexpected in that the scores between the USA and the other countries were not as statistically significant in the overall scores. However, when more specific benchmarks were compared statistically significant differences did appear in the health & safety and professional development areas.

Key words: Child Care Quality, Comparisons of USA and International Child Care, Child Care Regulations.

Introduction

The purpose of this paper is to compare several countries (N =20) and the United States on the Child Care Aware - formerly NACCRRA (National Association of Child Care Resource and Referral Agencies) Child Care Benchmarks

41 Grandview Avenue Middletown, Pennsylvania USA 17057 717-944-5868 Phone and Fax Fiene@psu.edu March 2013 (revised and resubmitted July 2013) that have used extensively in the USA compare state regulatory monitoring policy and implementation. The use of these benchmarks has been very useful in comparing states in the USA on an agreed upon series of child care benchmarks that have a great deal of support in the research literature (AAP/APHA, 2012, 2013; NACCRRA 2007, 2009, 2011). Previous research (OCED, 2006) has focused on early care education policies in countries which was a very important first step in making comparisons across countries. This paper will expand upon this comparison in order to begin applying the NACCRRA benchmarks to other countries and establish a baseline between the USA and other countries related to regulatory review and analysis. This study is important because it provides a common rubric for making comparisons between the USA and other countries that is reliable and valid (NACCRRA 2007, 2009, 2011)

related to regulatory analysis. As far as the author can determine from his extensive review of the literature, similar studies of this type have not been attempted utilizing a standardized rubric created by a major national child care organization. There have been other studies completed in which comparisons were made of other countries, the OCED (2006) Starting Strong II study and report is an excellent example of this type of

DIFFERENTIAL MONITORING LOGIC MODEL & ALGORITHM (DMLMA©) (Fiene, 2012): A 4th Generation ECPQIM – Early Childhood Program Quality Indicator Model

$$CI \times PQ \Rightarrow RA + KI \Rightarrow DM$$

Definitions of Key Elements:

CI = Comprehensive Licensing Tool (Health and Safety)(*Caring for Our Children*)

PQ = ECERS-R, FDCRS-R, CLASS, CDPES (Caregiver/Child Interactions/Classroom Environment)

RA = Risk Assessment, (High Risk Rules)(*Stepping Stones*)

KI = Key Indicators (Predictor Rules)(13 Key Indicators of Quality Child Care)(NACCRRA Benchmarks)

DM = Differential Monitoring (How often to visit and what to review)

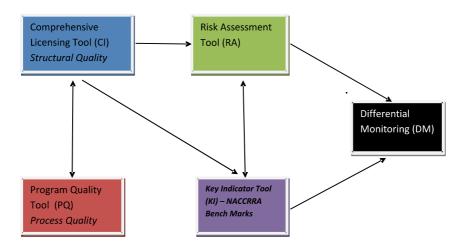


Figure 1.

analysis and is recommended reading for anyone interested in reviewing public policy analyses.

The child care benchmarks1 utilized in this study are based upon the following key indicators: prevention of child abuse, immunizations, staff child ratio, group size, staff qualifications and training, supervision/discipline, fire drills, medication administration, emergency plan/contact, outdoor playground, inaccessibility of toxic substances, and proper hand washing/ diapering (NACCRRA 2007, 2009, 2011). These benchmarks are more based upon the structural aspects of quality rather than on the process aspects of quality. This is an important distinction between the USA approach and the other countries approaches that becomes important in the explanation of results later in this paper.

This paper also supports and expands the development of an Early Childhood Program Quality Indicator Model (ECPQIM)(Fiene & Nixon, 1985) which is in a 4th generation (Fiene, 2013) as a differential monitoring logic model & algorithm helping to guide the program monitoring of child care/early care & education programs (see Figure 1).

Method

Data Collection Process

Data collection was done on a 100 point scale which is delineated in Appendix 1 as developed by the Child Care Aware - NACCRRA Research

Team. The same scoring protocol that was utilized in developing the 2007, 2009, and 2011 Reports and comparisons of states by Child Care Aware - NACCRRA employed in this study comparing the average scores of the states and the 20 countries. The 100 point scale consisted of 10 child care benchmarks each worth 10 points: ACR = Staff child ratios NAEYC Accreditation Standards met (R1); GS = Group size NAEYC Accreditation Standards met = Directors (R2);Director have bachelor's degree (R3); Teacher = Lead teacher has CDA or Associate degree (R4); Pre = Initial orientation training (R5); Inservice = 24 hours of ongoing training (R6); Clearance = Background check (R7); Devel = Six developmental domains (R8); Health = Health and safety recommendations (R9); and Parents = Parent Involvement (R10).

Data Scoring

The scoring protocol employed a total raw score approach of 100 points that was used to compare the countries on the 10 child care benchmarks in the aggregate. The scoring protocol also a standardized scoring employed approach (0 to 2 points) on each of the 10 child care benchmarks utilizing the following scale: 0.0 = Does not meet theChild Care Aware - NACCRRA Benchmarks; 0.5 = Marginally meets the Child Care Aware - NACCRRA Benchmarks; 1.0 = Partially meets the Child Care Aware - NACCRRA Benchmarks; 1.5 = Substantially meets the Child Care Aware - NACCRRA Benchmarks; 2.0 = Fully meets the Child Care Aware – NACCRRA Benchmarks.

Data Collectors

A team of undergraduate and graduate research assistants² at the Pennsylvania University were the collectors in which each of them reviewed the child care/early childhood rules/regulations/standards from a specific country and scored rules/regulations/standards the Child Care Aware - NACCRRA 100 point raw score protocol and the standardized (0 - 2) scoring approach.

Data Sources

The child care regulations selected were for preschool age children only in child care center setting in the 20 countries. Geographically the governmental jurisdiction closest to the national capital was used if applicable national regulations could not be found. More than the final 20 countries selected were reviewed but several countries needed to be dropped because they did not meet the above criteria or regulations could not be found in English. This was more a convenience sample rather than a stratified scientific sample, a limitation of this study.

Results

The results from this study and analysis were totally unexpected. The results indicated no statistically significant differences between the USA and the other countries selected (Australia, Belgium, Norway, Finland, Sweden, Ireland, United Kingdom, Italy, France, New Zealand, Mexico, Greece, Canada, Austria, Portugal, Philippines, Turkey, Pakistan, Nigeria, Denmark, and Spain - these countries were selected because of their availability of child care/early care & education rules and regulations as described previously above in Data Sources) when comparing the total scores on the 100 point scale; the USA average for all 50 states scored 58 while the 20 countries average score was 56. However, a very different scenario occurs when looking at the ten individual child care benchmarks using the standardized 0 - 2 scoring protocol. The 20 countries selected in this study scored statistically higher on following child care benchmarks: Director (t = 7.100; p < .0001) and Teacher (t =7.632; p < .0001) qualifications. The USA scored statistically higher on the following child care benchmarks: Health/Safety (t = 6.157; p < .0001), Staff Clearances (t = 3.705; p < .01), and Pre-Service (t = 4.989; p < .001) /In-Service training (t = 2.534; p < .02) (See Table 1 & Figure 2).

The results showed that both the USA and all other countries mean scores were 58 and 56 respectively on the 100 point scale – this is a raw scale score and not the standardized score (0 – 2 – see Table 1 and Figure 2) which was used in the comparisons for each benchmark. This is not a particularly good score if you think in terms of exams, but for states and countries with

Table 1
Mean Comparisons between USA and Twenty Countries on Child Care Aware – NACCRRA
Benchmarks

Benchmark	Countries	USA	Significance
ACR (R1)	1.122	0.8462	not significant
GS (R2)	0.4063	0.5865	not significant
Director (R3)	1.5625	0.5	t = 7.100; p < .0001
Teacher (R4)	1.6563	0.4038	t = 7.632; p < .0001
Preservice (R5)	0.9375	1.6731	t = 4.989; p < .001
Inservice (R6)	0.6563	1.0481	t = 2.534; p < .02
Clearances (R7)	0.6094	1.2404	t = 3.705; p < .01
Development (R8)	1.6406	1.4519	not significant
Health(R9)	0.9844	1.7404	t = 6.157; p < .0001
Parent(R10)	1.5000	1.5385	not significant

Legend:

Child Care Aware - NACCRRA Benchmarks:

Parent = Parent Involvement (R10)

Health = Health and safety recommendations (R9)

Development = Six developmental domains (R8)

Clearances = Background check (R7)

Inservice = 24 hours of ongoing training (R6)

Preservice = *Initial orientation training (R5)*

Teacher = *Lead teacher has CDA or Associate degree (R4)*

Director = Directors have bachelor's degree (R3)

GS = Group size NAEYC Accreditation Standards met (R2)

ACR = Staff child ratios NAEYC Accreditation Standards met (R1)

Scoring:

- 0.0 = Does not meet Child Care Aware NACCRRA Benchmarks.
- 0.5 = Marginally meets Child Care Aware NACCRRA Benchmarks.
- 1.0 = Partially meets Child Care Aware NACCRRA Benchmarks.
- 1.5 = Substantially meets Child Care Aware NACCRRA Benchmarks.
- 2.0 = Fully meets Child Care Aware NACCRRA Benchmarks.

vastly complex bureaucracies maybe this isn't as bad as it looks. Could it be that the USA is better than we think or is it that the USA and all other countries are providing just mediocre child care?!

The reason for using aggregate data in this study was to be consistent in how data have been collected in the USA utilizing the Child Care Aware – NACCRRA Scoring Protocol. This did delimit the potential analyses for this study and the recommendation would be made in future studies to unbundle

the results so that more detailed comparisons could be made. As mentioned in the introduction, the purpose of this study was to provide an initial baseline comparison between the USA and other countries on the Child Care Aware – NACCRRA Scoring Protocol.

Discussion

The purpose of this study was to extend the Child Care Aware - NACCRRA Child Care Benchmarks Scoring Protocol to an international sample comparison. As has been done by the National Science Foundation with math and science testing, these same types of comparisons have been made with the USA not fairing all that well on the math and science

comparisons.

It appears that when it comes to child care benchmarks the USA actually appears to be in better shape than many advocates and experts would have thought when compared to other countries or is it that the other countries are providing the same form of mediocre care as it relates to these child care benchmarks. Remember that these benchmarks are heavily weighted towards the structural side of quality

Legend:

Child Care Aware - NACCRRA Benchmarks:

Parents = Parent Involvement (R10)

Health = Health and safety recommendations (R9)

Devel = Six developmental domains (R8)

Clearance = Background check (R7)

Inservice = 24 hours of ongoing training (R6)

Pre = Initial orientation training (R5)

Teacher = Lead teacher has CDA or Associate degree (R4)

Director = Directors have bachelor's degree (R3)

 $GS = Group \ size \ NAEYC \ Accreditation \ Standards \ met \ (R2)$

ACR = Staff child ratios NAEYC Accreditation Standards met (R1)

Scoring:

- 0.0 = Does not meet Child Care Aware NACCRRA Benchmarks.
- 0.5 = Marginally meets Child Care Aware NACCRRA Benchmarks.
- 1.0 = Partially meets Child Care Aware NACCRRA Benchmarks.
- 1.5 = Substantially meets Child Care Aware NACCRRA Benchmarks. 2.0 = Fully meets Child Care Aware – NACCRRA Benchmarks.

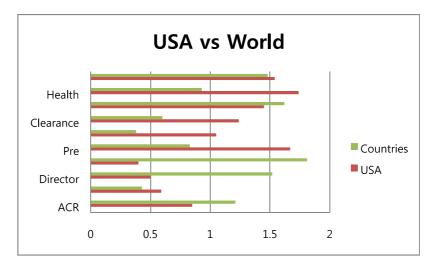


Figure 1. Mean Comparisons between USA and Twenty Countries on Child Care Aware – NACCRRA Benchmarks

rather than the process side of quality.

However, when the individual benchmarks are analyzed then certain patterns occur which seem very consistent with the previous research literature. The 20 countries scored higher on the staffing benchmarks while the USA scored higher on the training and health/safety benchmarks. Clearly this is an indication reflecting public policy in the other countries as versus the USA. Many other countries place more emphasis on the process aspects of quality which involve staff and staff interactions with children. The USA has focused more on the structural aspects of quality which involve health & safety especially in the state licensing of child care. These structural aspects of quality are more easily quantifiable in state rules and regulations which is the locus of control for the licensing of child care. Since the USA does not have national standards that are required (the USA does have national health and safety standards that are recommended practice, such as Caring for Our Children (2012)) as is the case in so many of the countries in this study, this may provide a possible explanation for the results of this study. It will be interesting to see how Quality Rating and Improvement Systems (QRIS) which usually have some process standards impact this overall balance of structural and process aspects of quality. This is an area that needs additional research and more indepth analysis.

So what does this tell us. I think it is a warning call as has been put forth by Child Care Aware - NACCRRA that we still have a lot of additional work to do in improving child care, not only in the USA, but worldwide. Just as the Child Care Aware -NACCRRA Report Cards (2007, 2009, 2011) have played a role in making positive change in the child care benchmarks over time; we need to expand this reporting and change to a world wide focus. There is clearly the need to expand from the present analysis of 20 countries and the USA to other countries throughout the world and to track changes over time as Child Care Aware/NACCRRA has done.

Another area of concern within the USA and I am sure in other countries as economies have begun their slow recovery from the economic downturn of 2008 - 2010 is to do more with less. One such approach being explored in the USA is called differential monitoring which helps to re-allocate limited resources in a more cost effective and efficient manner via a risk assessment and key indicator approach. I hope that this comparison utilizing the Child Care Aware - NACCRRA Benchmarking Scoring Protocol and introducing the Early Childhood Program Quality Indicator Model/Differential Monitoring Logic Model and Algorithm (Fiene, 2013) within an international context as first steps in making that happen.

References

- AAP/APHA (2012). Caring for our children, Washington, D.C.: American Public Health Association.
- AAP/APHA (2013). Stepping Stones, Washington, D.C.: American Public Health Association.
- Child Care Award NACCRRA, (2007). We Can Do Better: NACCRRA's Ranking of State Child Care Center Standards and Oversight, Washington, D.C.: National Association of Child Care Resource and Referral Agencies.
- Child Care Aware NACCRRA, (2009). We Can Do Better: 2009 Update: NACCRRA's Ranking of State Child Care Center Regulations and Oversight, Washington, D.C.: National Association of Child Care Resource and Referral Agencies.
- Child Care Aware NACCRRA, (2011).

 Leaving Children to Chance: NACCRRA's

 Ranking of State Standards and Oversight
 in Child Care Centers, Washington, D.C.:

 National Association of Child Care
 Resource and Referral Agencies

- Fiene, R. (2013). *Differential monitoring logic* model and algorithm. Middletown, Pennsylvania: Research Institute for Key Indicators.
- Fiene, R. & Nixon, M. (1985). Instrument based program monitoring and the indicator checklist for child care, *Child Care Quarterly*, 14(3), 198-214.
- OCED (2006). Starting strong II. Paris, France: Organization for Economic Co-Operation and Development Publishing.

Notes

.....

¹ In the licensing literature these child care benchmarks are usually referred to as key indicators (Fiene, 2013). Please see Figure 1 which delineates where within a program monitoring system these benchmarks would appear and could be utilized.

² The following individuals played key data collection roles as research assistants in the compilation of this study: Melissa Cave, Ashley Le, Breanna Green, Corrie Podschlne, Sherrie Laporta, Ashley Edwards, Laura Hartranft, Gissell Reyes, Janet Lazur, Kayma Freeman, Jessica White, Karen Mapp, and Lindsay Bitler.

Appendix 1

Benchmark criteria for *We Can Do Better: NACCRRA Ranking of State Child Care Center Regulations*:2011 *Update* were developed by Child Care Aware - NACCRRA and have been used for the 2007, 2009 and 2011 We Can Do Better reports. The rationale for each standard, including research evidence of its importance in quality care, is noted in each section of the report and in previous reports. Each of the 10 regulation benchmarks were scored with a value ranging from one to 10 points, depending on how closely the state met the benchmark, for a maximum total of 100 points. In cases where states permit several different options for complying (e.g., complying with director or teacher qualifications), the minimum allowed was used. This information was used to generate state sheets with scores for each standard.

	Scoring Methods for NACCRRA Ranking of State Child Care Center Regulations (R)							
	Question Scoring method							
Regulation 1. Staff:child ratio requirements comply with NAEYC accreditation standards.		C)	Number of ratios in compliance with NAEYC standards 7 ratios 10 6 ratios 9					
6	9	18	27	3	4	5	5 ratios	8
mo	mo	mo	mo	yr	yr	yr	4 ratios	7
							3 ratios	5
							2 ratios	3
1:4	1:4	1:4	1:4	1:9	1:10	1:10	1 ratios	1
R2. Group size requirements are in compliance with NAEYC Number of group sizes in			Number of group sizes in					
	editati						compliance with NAEYC standards	Score
6	9	18	27	3	4	5	7 ratios	10
mo	mo	mo	mo	yr	yr	yr	6 ratios	9
							5 ratios	8
							4 ratios	7
							3 ratios	5
8	8	8	8	18	20	20	2 ratios	3
							1 ratios	1

	Director education requirement	Score
	Bachelor's degree in any field	10
R3. Center directors are required to	College directors certification	7
have a bachelor's degree of higher	Any associate degree	5
in early childhood education or a related field.	CDA	5
Telateu lielu.	Clock hours/less than associate degree	2
	High school or less	0
	Load topphor advication requirement	Soore
R4. Lead teachers are required to	Lead teacher education requirement	Score
have a Child Development	CDA/associate degree or better State Credential	10 5
Associate (CDA) credential or an	Clock Hours in ECE	2
associate degree in early childhood	High School/GED	2
education or related field.	Less than High School	0
	Less than riigh deficer	
R5. Lead teachers are required to		
have initial training, including: Orientation.	Number of areas training is required	Score
Fire safety.	Five areas	10
Other health and safety issues.	Four areas	8
At least one staff member	Three areas	6
certified in first aid must be	Two areas	4
present when children are in care.	One area	2
At least one staff member who is	None	0
certified in CPR must be present when children are in care.		
	Ongoing training >	Score
	24 Hours	10
R6. Lead teachers are required to	18 hours	7
have 24 hours or more of annual	12 hours	5
training.	6 hours	2
	None	0
R7. A comprehensive background	Number of Background checks	Score
check is required for child care providers.	completed	4.0
Use of fingerprints to check state	Five checks	10
records.	Four checks	8
Check FBI records.	Three checks	6
Check state child abuse registry	Two checks	4
Check sex offender registry.	One check	2
 Criminal history check. 	None	0

R8. Child care centers are required		
to offer program activities that		
address all six child development		
domains		

- · Language/literacy.
- Cognitive.
- Social.
- Emotional.
- Physical.
- Cultural.

Score
10
9
7
5
3
1
0

R9. Child care centers are required to follow 10 recommended health and safety practices.

- Immunizations.
- Guidance/discipline.
- Diapering and handwashing.
- · Fire drills.
- Medication administration.
- SIDS prevention.
- Emergency preparedness.
- Playground surfaces.
- Hazardous materials.
- Incidence reporting.

Standards addressed	Score	Standards addressed	Score
10	10	5	5
9	9	4	4
8	8	3	3
7	7	2	2
6	6	1	1

Allowing corporal punishment is an automatic zero

R10. Child care centers are required to:

- Encourage parent involvement.
- Require daily or ongoing communication with parents.
- Allow parental access any time their children are in care.

Number of items required	Score
Three items	10
Two items	7
One item	3
None	0

Appendix 2

These were the countries included in these analyses: Australia, Belgium, Norway, Finland, Sweden, Ireland, United Kingdom, Italy, France, New Zealand, Mexico, Greece, Canada, Austria, Portugal, Philippines, Turkey, Pakistan, Nigeria, Denmark, Spain, and the USA which included all 50 states.





For 14 years, Child Care Aware® of America (CCAoA) has reviewed and reported on child care licensing regulations in every state and the District of Columbia. On alternate years between 2006 and 2013, we published two reports – <u>We Can Do Better</u> (about child care centers) and <u>Leaving Children to Chance</u> (about family child care homes).

When the Child Care and Development Block Grant (CCDBG) Act was reauthorized in 2014, it contained new, mandatory program (child care licensing) and oversight (compliance) requirements. In response, CCAoA developed and in 2017 launched the Child Care Licensing Database. The database allowed states and advocates to assess how state licensing standards aligned with <u>Caring for Our Children Basics</u>, a compendium of the minimum health and safety standards experts believe should be in place where children are cared for outside of their homes. The Child Care Licensing Database included standards alignment data for all 50 states and the District of Columbia.

Following the Child Care Licensing Database launch in 2017, CCAoA received feedback from states and advocates about the standards. Many noted that the dichotomous nature of the standards rating didn't offer an opportunity to show gradual improvement over time. We partnered with stakeholders to develop a new process for assessing state child care licensing standards.

The 2020 Child Care Licensing Benchmark Project marks an important step forward to help states not only gauge how well they align with federal requirements, but also guide them as they strive to increase the quality of their child care system. Project assets include:

- 1. Child care licensing benchmarks for basic and advanced quality standards.
- 2. A benchmarking tool for states, which they can use to self-assess their alignment with both basic and quality standards.
- 3. A scoring rubric, C-A-R-E, agreed upon by stakeholders. CCAoA will use the rubric to score each state's submission and classify the state along a continuum. A 'C' corresponds to minimal alignment and 'E' corresponds to perfect alignment.
- 4. A state report. Once the scoring for a state is finished, CCAoA will prepare a snapshot document summarizing the state's alignment on each individual benchmark and its overall alignment with all benchmarks.
- 5. Currently, CCAoA has data for five pilot states and has plans to gradually expand the project to all 50 states and the District of Columbia. CCAoA intends for stakeholders and advocates to use these Child Care Licensing Benchmark Project assets as a compass to guide everyone to higher-quality, affordable child care environments for all children.



All children and families deserve access to high-quality early childhood care and education options. The first five years of life are a time of tremendous brain development.^{1,2,3} There is a growing collection of evidence pointing to the impact of stable, enriched early childhood experiences on a host of outcomes, including child development, school readiness, mental health and economic stability in adulthood.⁴ Conversely, adverse early childhood experiences negatively impact a young child's development and those impacts persist into adulthood.^{5,6}

Evidence is also emerging that demonstrates poor outcomes for children who are subject to sub-standard care, and that the existing opportunity gaps for children of color and children from families with low incomes are made worse when low-quality care is used.⁷ On the other hand, quality child care can be a stabilizer for children in vulnerable families and can reduce the chances for development gaps.⁷ With an estimated 12.8 million children under the age of 6 in non-parental care each week⁸, we need to prioritize child care as a critical infrastructure necessity in the U.S. An increase in the supply of affordable, high-quality child care available to all families will contribute to the long-term success of our nation's children, and ultimately of our nation.

Child Care Aware® of America³ (CCAoA) works closely with a network of over 400 child care resource and referral (CCR&R) agencies across the nation. CCR&Rs are unique in that they work with both parents and child care providers. They offer local and state-based consumer education services to parents looking for child care. Through their efforts, and CCAoA's complementary work on a national level, we have learned that parents view a child care license as a "gold seal" from the state — that licensed child care programs have met a state-approved standard of quality. Most parents and families seeking child care are not aware that licensing standards vary widely in stringency from state to state. Moreover, in past assessments of the health of child care licensing systems in the U.S., most states received a failing grade.^{8,9}

For years, advocates from across the country strongly conveyed to policymakers the importance of a quality child care system. These efforts were rewarded in 2014, when Congress reauthorized the Child Care and Development Block Grant (CCDBG) Act. The reauthorization included substantial additions and updates to the federal regulations related to child care. One change is that all states are now required by federal law to have stronger licensing rules and monitoring.

High-quality early learning environments fuel the success of children and have positive social, economic and health impacts that last into adulthood. To meet the child care needs of families effectively, state systems must be child-centered, with the health and safety of all children at the forefront. This can, in part, be accomplished though strong licensing regulations.

In this report, we describe how CCAoA, in partnership with a diverse group of national stakeholders, developed a preliminary child care licensing database in 2017. We then share how we subsequently developed a new set of child care licensing standard benchmarks, a benchmark scoring rubric and a shareable state benchmark snapshot resource, collectively referred to as the 2020 Child Care Licensing Benchmark Project. All components of the 2020 Child Care Licensing Benchmark Project are consistent with 2014 CCDBG Act reauthorization requirements and best practice recommendations for quality advancement beyond basic standards.

a Child Care Aware® of America is a national membership-based nonprofit organization working to advance the affordability, accessibility and availability of child care in every community across the nation. CCAoA's vision is that every family in the United States has access to a high-quality, affordable child care system that supports children's growth, development and educational advancement and creates positive economic impact for families and communities.



CCAoA's Work in Child Care Licensing

For nearly 15 years, CCAoA has worked to improve child care licensing standards. Between 2006 and 2013, CCAoA reviewed each state's child care licensing regulations and reported the findings in two reports published on alternate years. "Leaving Children to Chance" addressed licensing standards for family child care homes and "We Can Do Better" addressed standards for center-based child care programs.

The reports ranked states and highlighted the poor alignment of state regulations with evidence-based best practice standards. "Leaving Children to Chance" and "We Can Do Better" were particularly useful for advocates and policy makers because they showed how state licensing standards align with one another and with federal requirements and offered insight into opportunities for quality improvement.

Standards were just part of the story the reports told. They also documented states' oversight of child care licensing, because infrequent or otherwise lax monitoring can undercut even the strongest of standards. "Leaving Children to Chance" and "We Can Do Better" provided the data necessary to support the need for a bolstered set of program (child care licensing) and oversight (compliance monitoring) requirements.

Stakeholders across the nation used data from the reports to advocate for stricter standards and to push for the reauthorization of the CCDBG Act, which occurred in November of 2014. The 2014 CCDBG Act was groundbreaking in that it contained comprehensive updates to federal regulations related to child care. The Administration for Children and Families clarified these new federal regulations in an addendum to the 2014 CCDBG Act – the 2016 Child Care and Development Fund (CCDF) Final Rule. Many of the changes to the regulatory language reflected the best practices highlighted in CCAoA's "Leaving Children to Chance" and "We Can Do Better" reports – including comprehensive background checks, inspections and monitoring and stronger training requirements for providers related to education and professional development.^a

a For a more comprehensive history of child care and federal supports for child care in the United States, see CCAoA's overview that is available at childcareaware.

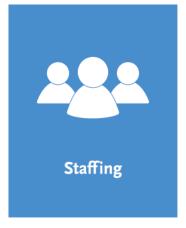


Post-CCDBG Act Reauthorization and the Child Care Licensing Database

Following the 2014 reauthorization of the CCDBG Act, CCAoA researchers set out to develop an interactive child care licensing assessment tool and reports. The goal was to build on our past work and identify areas where state regulations for center-based and family child care programs across the country aligned with current evidence-based standards for health and safety. In 2017, Child Care Aware® of America launched the Child Care Licensing Database to assess states' progress towards advancing the quality of their child care systems. The quality standards we used to measure progress represented the minimum health and safety standards experts believe should be in place where children are cared for outside of their homes. The standards are outlined in Caring for Our Children Basics¹¹, one of the child care industry's most respected resources.

"Caring for Our Children" (CFOC) and "Caring for Our Children Basics" (CFOC Basics)^{11, 12} are resources created by the American Academy of Pediatrics, the American Public Health Association and the National Resource Center for Health and Safety in Child Care and Early Education. CFOC came first. It's a collection of evidence-based, minimum standards that experts believe should be in place in all early care and education settings. CFOC Basics was developed to reduce conflicts and redundancies found in program standards linked to multiple funding streams.

We organized the 2017 Child Care Licensing Database by the eight main topics outlined in CFOC Basics. Each topic covered multiple standards. The topic categories for the standards were: Staffing, Program Activities for Healthy Development, Health Promotion and Protection, Nutrition and Food Service, Facilities, Supplies, Equipment and Environmental Health, Play Area/Playgrounds and Transportation, Infectious Disease and Policies.





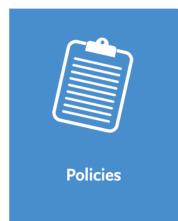












Through the 2017 Child Care Licensing Database, users accessed a comprehensive overview, as well as a snapshot, of each state's child care regulatory alignment with CFOC Basics. For each standard, users learned more about how a state could better align its regulations with CFOC Basics guidelines by exploring gaps identified in the database. For each standard, CFOC Basics language was included for easy reference. We also provided a grade for a state's center-based and family child care regulations, as well as recommendations for revising state regulations. The report and recommendations in the database served as guidelines for improving state licensing regulations with the end goal of helping to keep children safer while in early childhood care and education settings.

CCAoA's first-generation version of the licensing database, in 2017, offered a starting point for states and advocates to determine best practice alignment. Feedback from stakeholders on the first Child Care Licensing Database pointed to the need for an additional set of benchmarks that would allow states to assess alignment with basic health and safety program and oversight requirements included in the 2016 CCDF Final Rule. In response, CCAoA developed the 2020 Child Care Licensing Benchmark Project.

The Relevance of Caring for Our Children Basics

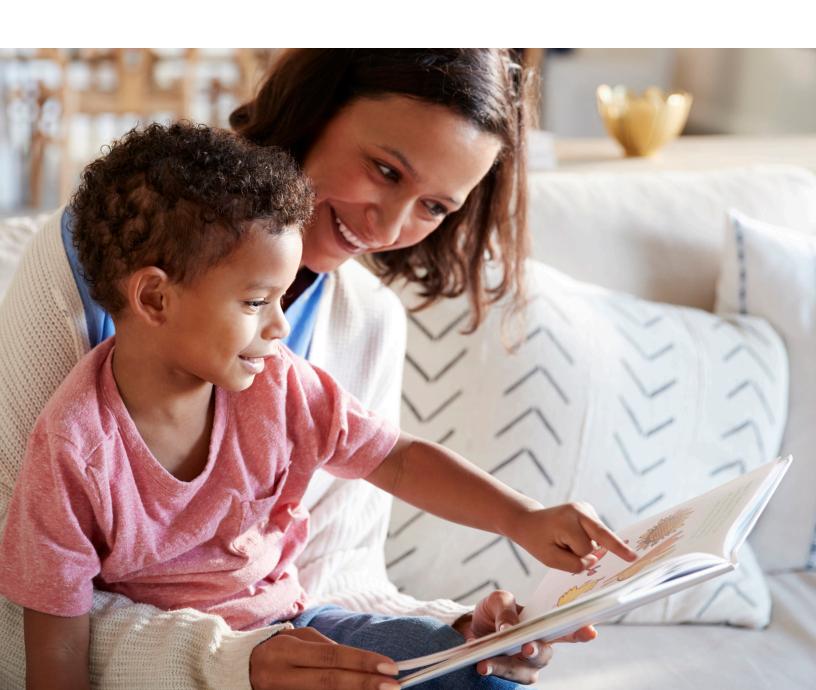
Caring for Our Children Basics is a collection of minimum standards that experts believe should be in place in all early care and education settings. It is the result of work from both federal and non-federal experts and is founded on Caring for our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs, now in its 4th edition (CFOC).

CFOC was created by the American Academy of Pediatrics, American Public Health Association and National Resource Center for Health and Safety in Child Care and Early Education with funding from the Maternal and Child Health Bureau. While CFOC is commonly considered to be the gold standard for child care licensing practices, CFOC Basics represents the minimum health and safety standards laid out in CFOC. Both resources present the best evidence, expertise and experience in the country on quality health and safety practices and policies that should be followed in today's early care and education settings. CFOC Basics is a useful resource for states as they work to improve health and safety standards in both licensing and quality rating and improvement systems (QRIS) to improve the quality of care for children in all types of child care settings. CFOC Basics recommendations move the bar of quality beyond what is required in federal requirements for states that are laid out in the 2016 Child Care and Development Fund Final Rule.

Reflections from the Field

Following the Child Care Licensing Database release in 2017, key stakeholders relayed their excitement for the perspective it offered on the state of child care licensing in their state. However, many noted that since standards were rated as either "meets" or "does not meet," states could not receive partial credit. The scoring also did not allow them to benchmark their progress over time toward meeting standards. Stakeholders preferred a scoring rubric that described how far along on a continuum they were to meet each standard. They also wanted guidance on how they should make and prioritize changes to licensing manuals.

As our team continued to share and report findings from the 2017 Child Care Licensing Database, we began to plan the next iteration of our child care licensing work. CCAoA wanted to develop a set of new child care licensing and oversight benchmarks to provide state partners with a clear snapshot of their strengths as they worked to align state standards with 1) CCDF Final Rule minimum requirements and 2) recommendations for advancing quality. CCAoA also aimed to offer simple-to-read companion state snapshot summaries from which stakeholders could identify areas that are ripe for improvement. CCAoA subsequently embarked on the Child Care Licensing Benchmark Project.







Child Care Licensing Benchmark Project

In November 2017, CCAoA extended an invitation to stakeholders from across the spectrum of early care and education to participate in the development of a licensing benchmark rubric. The rubric is intended to be used by states as a roadmap to advocate for change in state licensing standards to provide quality child care environments for young children. CCAoA offered stakeholders several options for how they could be involved. They could participate as a:

- 1. Child Care Licensing Database Benchmark Workgroup member (Workgroup)
- 2. Advisory/Review Panel member (Review Panel)
- 3. Pilot State/Tribe (Pilots)

Benchmark Development

THE BENCHMARK WORKGROUP

CCAoA convened a Workgroup to develop new benchmarks for the Child Care Licensing Benchmark Project that built upon the 2017 Child Care Licensing Database. The Workgroup included 27 individuals representing 20 organizations/entities. There was a cross-section of stakeholder representatives including state and national child care administrators, state licensing personnel, CCR&R leaders, national early care and education organizations, parents and other early childhood and licensing experts.

The Workgroup met seven times between December 2017 and September 2018. Workgroup members developed seven Oversight Standards and seven Program Standards. Based on prior stakeholder feedback on the need for basic benchmarks and benchmarks for advancing quality beyond the basics, the workgroup also worked collaboratively with the CCAoA team to create two levels of benchmarks for both Program and Oversight. Level 1 = CCDBG Act Alignment and Level 2 = Movement Towards Quality Improvement. Additional details surrounding the benchmark development process are contained in <u>Appendix B</u>.

ADVISORY/REVIEW PANEL

CCAoA added a Review Panel opportunity to allow additional stakeholders to participate in the benchmark development process. These stakeholders were individuals who were unable to commit to the rigorous schedule set for the 2020 U.S. Child Care Licensing Benchmark Workgroup but expressed an interest in reviewing the work of the Workgroup and providing additional feedback as CCAoA developed the Benchmarking Tool.

In September 2018, an additional eight advisory organizations and their representatives, along with original Workgroup members, formed the Advisory/Review Panel. Between October 2018 and May 2019 the Advisory/Review Panel provided valuable feedback on the proposed benchmarks that resulted in:

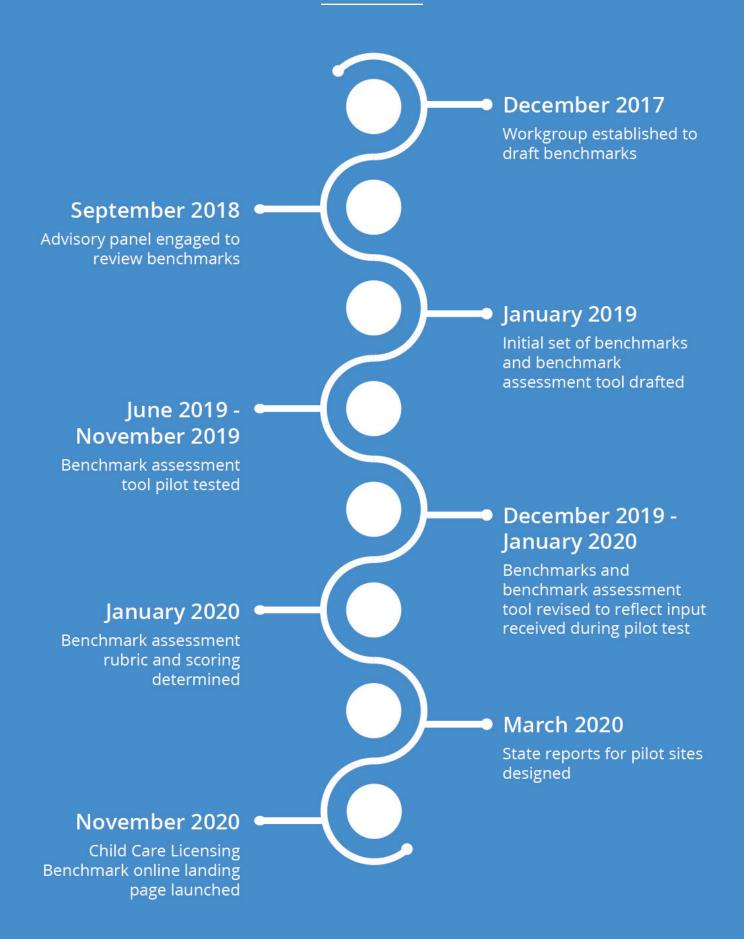
- Modified benchmarks to create a set of seven Program and seven Oversight Benchmarks with two levels for each benchmark.
- Feedback used to refine the benchmarks and develop the Benchmarking Survey Tool.
- Finalization of the Program Benchmarking Survey Tool and the Oversight Benchmarking Survey Tool.

Throughout the benchmarking process, the Workgroup and Advisory/Review Panel relied heavily on the following resources to guide their work:

We Can Do Better, Leaving Children to Chance, CCDBG Act and ACF Final Rule, CFOC Basics, National Association for the Education of Young Children (NAEYC) Standards, National Association for Family Child Care (NAFCC) Standards, and National Association for Regulatory Administration (NARA) Reports as well as other resources (see complete list of resources in Appendix C).

See <u>Appendix D</u> for a list of Workgroup and Advisory Panel member participants. For additional details about the Advisory/Review panel efforts, see <u>Appendix B</u>.

Benchmark Development Process



BENCHMARKS

There are seven benchmark categories for both Oversight and Program. In addition, Program Benchmarks include specific criteria for child care centers and family child care where appropriate.

- **Oversight Benchmarks** Oversight benchmarks reflect state policies, procedures and practices and the administration of child care licensing regulations.
- **Program Benchmarks** Program benchmarks reflect child care licensing regulations that specifically apply to the programs that directly provide direct care to children (i.e., child care centers and family child care programs).

BENCHMARK CATEGORIES

Oversight Benchmarks	Program Benchmarks
1. Licensing Requirements	1. Background Checks
2. Inspection Reports	2. Provider Qualifications
3. Monitoring	3. Professional Development
4. Program/Staff Ratio	4. Health and Safety
5. Licensing Staff Qualifications	5. Learning Activities
6. Background Check	6. Group Size and Ratios
7. Professional Development Implementation	7. Family Engagement/Access

You may view the language used for each Benchmark category in Appendix E.

BENCHMARK LEVELS

Each benchmark has two levels of criteria:

- **Level 1:** Focuses on how a state's licensing regulations align with the language of CCDBG Act requirements as applied to child care licensing standards.
- **Level 2:** Focuses on how a state's licensing regulations reflect movement towards quality improvement.

EXAMPLE: INSPECTION REPORTS

Level 1: Lead Agencies shall post results of full monitoring and inspection reports in a timely manner, either in plain language or with a plain language summary, for parents and child care providers to understand, and shall establish a process for correcting inaccuracies in the reports.

Level 2: Results of monitoring and inspection reports are made available to families at no cost if there is no access to the internet.

Level 1 and Level 2 are scored separately, with scores for each subcomponent adding up to the final score. Because

the scores are done separately, there may be cases where level 1 scores are less than level 2. For example, a state might not have 100% alignment with the elements in CCDBG Act (Level 1) but met several components in Level 2, where their standards are moving toward quality and are unrelated to the CCDBG Act.

PILOT TEST OF REVISED BENCHMARKS AND PROCESS

After 15 months of intense work, CCAoA began the 3rd phase of the benchmarking process — the piloting of the Benchmarking Tool. CCAoA recruited and selected states to participate in the pilot based on interest, size and geography. CCAoA selected five states to work with between June 2019 and November 2019: Delaware, Florida, Georgia, Oklahoma and Tennessee.

States created a team of experts to respond to the benchmarking tool to include representatives from:

- The state agency that oversees child care licensing.
- The state departments of health and education.
- Child care resource and referral agencies.

Pilot states were asked to:

- Participate in an introductory webinar about the process, check-in calls and a focus group.
- Determine whether benchmarks for center-based and family child care programs met the elements in the benchmarks by responding to guiding questions with a yes or no.
- Provide citations from state licensing manual(s) or other state documents for each of the elements of the 14 benchmarks.
- Agree to the CCAoA verification process to confirm citations.
- Agree to receive a final scorecard for the state's program and oversight licensing regulations and practices.

See Appendix B for details about the steps the five participating states took to pilot the benchmark survey process.

BENCHMARK PILOT AND IMPORTANT FEEDBACK

The pilot states provided feedback about the benchmarking tool, and CCAoA took action to address each area of feedback. Pilot states also had the opportunity to review the tool after CCAoA revised it based on their input.

Feedback	CCAoA Action
What is the purpose of the tool?	Created the one-pager and FAQ describing purpose
Who should collaborate to complete the tool?	Clarified the directions
The intent of the questions was unclear.	Streamlined and simplified language
Cautioned against weighting the individual components of a benchmark.	Equally valued the components of each benchmark
The formatting was confusing and redundant.	Revised format (e.g., added skip logic)

The Benchmark Tool

The Benchmark Tool was developed by breaking down each component of the benchmarks into a question to which states could respond either yes or no. Below we list some Benchmark Tool questions that pertain to inspection reports. If states respond yes to a question, they must provide documentation to prove they meet that component of the benchmark. Documentation may include licensing regulation manuals, state statutes and policies, state plans, official memos, etc.

BENCHMARK TOOL QUESTIONS PERTAINING TO THE INSPECTION REPORT BENCHMARK

Level 1:

- 1. Does the state require results of full monitoring and inspection reports?
- 2. Does the state require the monitoring and inspection reports to be posted in a timely manner?
- 3. Does the state require reports to be in plain language or with a plain language summary?
- 4. Does the state have an established process for correcting inaccuracies in the reports?
- 5. Does the state require that monitoring and inspections reports include:
 - · Date of inspection?
 - Corrective action taken by the state and child care provider?
 - Any health and safety violations (including any fatalities and serious injuries occurring at the provider)?
 - The aggregate number of deaths and serious injuries (for each provider category and licensing status) and instances of substantiated child abuse?
 - Referrals to local child care resource and referral organizations?
 - A minimum of 3 years?
 - By electronic means?
- 6. Does the state website include a description:
 - Of processes for licensing and monitoring child care providers?
 - Of processes for conducting criminal background checks?
 - Of the offenses that prevent individuals from being child care providers?

Level 2:

- 1. Do state licensing regulations require reports to be available:
 - To families at no cost if they have no access to the internet?
 - With easily accessible provider-specific information?

The Benchmark Tool represents a shift from the era of the" We Can Do Better" and" Leaving Children to Chance" reports. Overall, the tool builds upon the old reports by covering substantially more standards. This is especially true of the Oversight category, which went from four benchmark categories to seven benchmark categories. Some of the changes are due to the 2014 CCDBG Act Reauthorization and the fact that this tool is, in part, designed to measure effectiveness at implementing the requirements of the reauthorized statute.

Rubric and Scoring

Based on input from the Workgroup, Advisory/Review Panel and Pilot States, CCAoA concluded that all the benchmarks are equally important in determining compliance and quality standards (e.g., background checks are not more or less important than health and safety policies). Additionally, they suggested CCAoA weigh every component of the benchmarks equally for the purpose of scoring. Therefore, CCAoA counted each of the 'yes' data points (responses to the simplified questions) as one point towards a state's total score.

TOTAL BENCHMARK

The Benchmark Tool contains 290 total benchmark data points that are made up of both Oversight Benchmarks and Program Benchmarks.

Total Benchmark Data Points	Oversight	Program
290	77	213

OVERSIGHT BENCHMARKS

There are 77 possible Oversight data points — 49 are Level 1 and 28 are Level 2. No state has separate administrative oversight practices for child care centers and family child care. Thus, the Oversight Benchmarks do not contain separate criteria for child care centers and family child care programs.

Oversight	Level 1	Level 2
77	49	28

PROGRAM BENCHMARKS

There are 213 possible Program data points — 117 for child care centers and 96 for family child care homes (FCC). Of the 213 Program data points, 119 are Level 1 and 94 are Level 2. The table below shows how the points are distributed.

Program Data Points	Centers	FCC
213	117	96
Level 1 Data Points		
119	60	59
Level 2 Data Points		
94	57	37

The scoring rubric has four categories:



Scores for each state include:

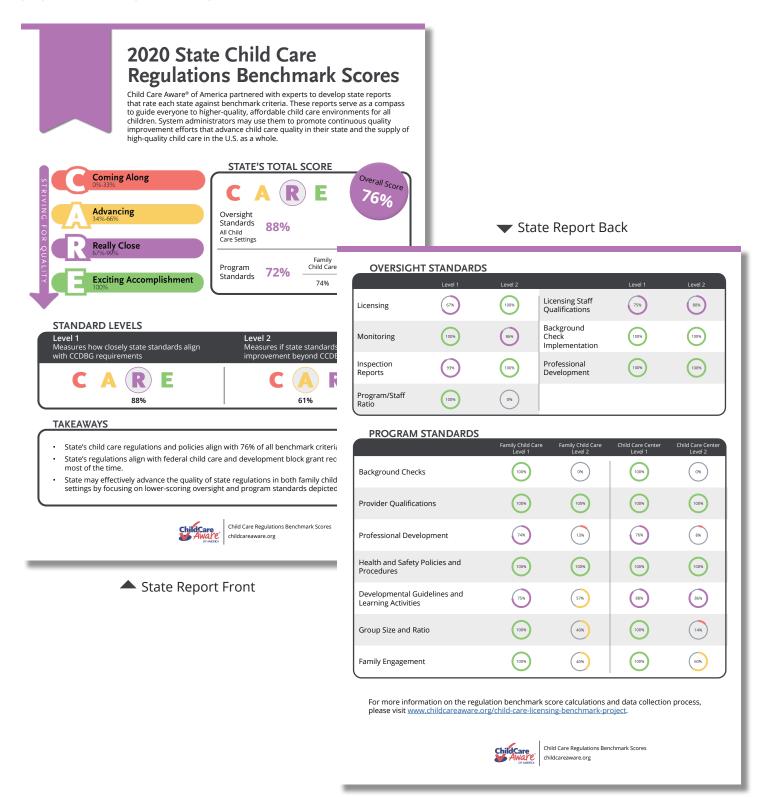
- An overall score for the state based on all data points.
- A separate score for both Oversight and Program Benchmarks, broken down by Level 1 and Level 2.
- Separate scores for child care centers and family child care homes (applicable to Program Benchmarks only).

Scores represent the percent of benchmark questions answered with a 'yes'.

The final 2020 Child Care Benchmark Tool is intended to be used by state leaders as a self-assessment of their child care licensing system and, when used repeatedly over time, to measure child care licensing system improvements and progress.

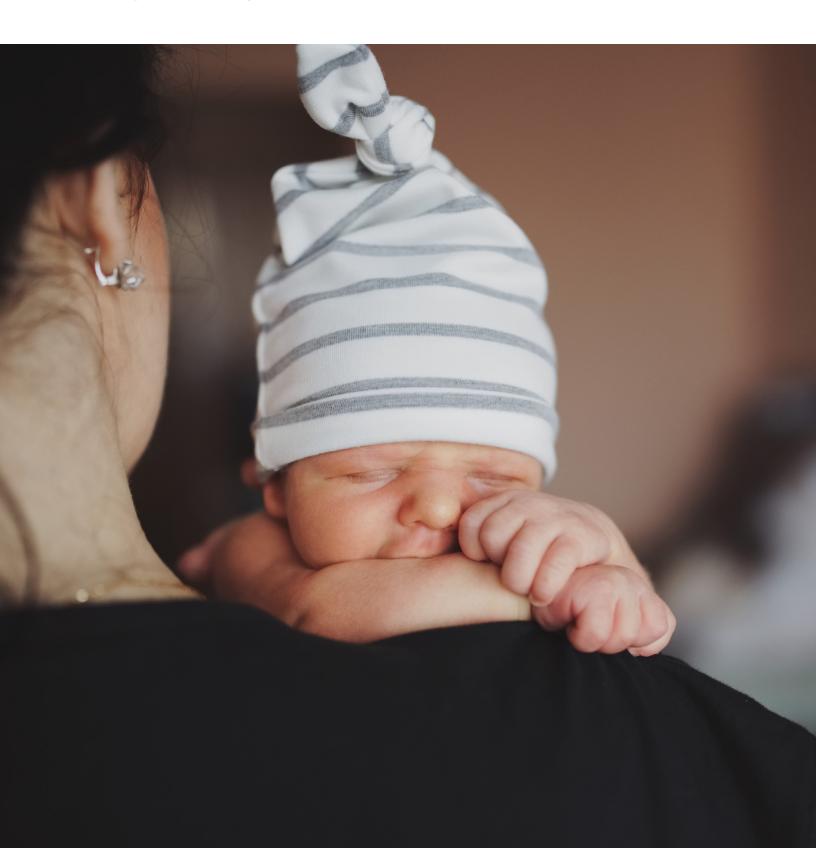
STATE REPORTS

State Reports summarize each state's alignment with the benchmarks. These state snapshots are a valuable tool for advocates and other stakeholders to share with policymakers. The State Reports also make it easier for state administrators to conduct comparisons with other states that share similarities such as geographic region, size, population density, early childhood state plan and system aspirations or political will to facilitate ideas for advancement. Existing State Reports may be found at www.childcareaware.org/child-care-licensing-benchmark-project. See a sample State Report below:



NEXT STEPS

At present, CCAoA has data from the five pilot states. We will continue to partner with additional states, between five and ten states at a time, to collect and verify their data. CCAoA will provide technical assistance throughout the state self-assessment process until all 50 states and the District of Columbia are complete. States that do not participate in the self-assessment process will be coded and scored by CCAoA staff. CCAoA also will develop a state report for each state. Once data are collected and analyzed for all 50 states and the District of Columbia, CCAoA will release a comprehensive ranking of all states.





The Child Care Licensing Benchmark Project translates current federal regulatory requirements (primarily CCDF) into minimally acceptable benchmarks (Level 1 benchmarks). In recognition of states' desires to advance beyond minimally accepted standards, stakeholders recommended adding a second benchmark tier that goes beyond CCDF requirements and includes additional health and safety standards recommended by a multidisciplinary panel of early childhood care and education experts. Thus, programs that have met Level 2 benchmarks may be considered as moving toward quality.

The Child Care Licensing Benchmark Project is a promising start to promoting continued quality improvements in early childhood settings. Partners involved in developing the assets contained in the Project include families, state and federal administrators, state licensing personnel, CCR&R leaders, national organizations serving children and families and early childhood and licensing experts. The diverse expertise represented on the benchmark Workgroup and Review Panel has been invaluable in shaping the work. The collaborative nature of the development process will help ensure the ongoing value and function of the benchmarking tool and rubric.

State advocates may want to consider a similar collaborative approach – transparency and inclusion of a wide array of stakeholders — as they work to advance the quality of child care in their state or locality. By including input and direction from stakeholders who mirror their own catchment area, the process of quality advancement will reflect community values; honor the communities, families and children served by the system; and result in more authentic, measurable and sustainable change. The Child Care Licensing Benchmark Project is a critical asset to ongoing measurement of advancements.





CCAoA intends to routinely publish child care program and oversight benchmarks and measure each state's alignment with the benchmarks. Over time, the Benchmarking Tool will lead to gradual advancements in child care quality for all children. When coupled with state licensing system leaders who are attentive to ongoing quality improvements and aligned with foundational and aspirational program and oversight standards, licensing benchmarks can improve services received by children and families, helping them to thrive.⁸ All children and families deserve access to high-quality early childhood care and education options — especially during the early years when unprecedented brain growth occurs.^{1,2,3}

Drastic variances in child care quality across the nation hurts children, who deserve safe and healthy places to develop when their parents are at work or school. As the early childhood care and education landscape continues to mature, it is critical to continually assess the efficacy of child care licensing and promote continued quality improvement. Both are necessary if we are to remediate the lack of high-quality, affordable and accessible child care in the U.S. Dismantling health and safety protections would be the wrong way to reduce the challenges providers face or increase the supply of child care. Rather, investments that support provider implementation of strong standards will serve children best. Meaningful and continual child care quality improvement that raises the quality of all programs equitably is possible with additional investments in our nation's early childhood care and education system.

As data are gathered from more states, the new Child Care Licensing Benchmark Project will provide state early childhood system leaders and policymakers with specificity on how to make all child care settings as safe, healthy, and nurturing as possible. CCAoA hopes this tool will allow everyone to envision a future when public and private supports for early childhood care and education are prioritized, thus enabling a pervasive culture of continuous quality improvement in all child care settings and equitable access for all families in need of child care. Just like the previously published "Leaving Children to Chance" and "We Can Do Better" reports, the new Child Care Licensing Benchmark Project tools (benchmarks, rubric and state reports) may be used by advocates to catalyze state and national policy advancements. CCAoA urges you to view the reports from the five pilot states and stay tuned for future updates by visiting the Child Care Licensing Benchmark Project landing page located at www.childcareaware.org/child-care-licensing-benchmark-project.

Acknowledgments

Along with our partners, CCAoA embarked upon a purposeful and transparent process in the hopes of creating a meaningful tool that will serve as a foundation for driving and measuring future advancements in the quality of child care in the U.S. CCAoA is grateful and appreciative of all the Workgroup members, Review Panel members and pilot states for their willingness to share their expertise and knowledge during this process. We also wish to acknowledge Dr. Veronica Fernandez's leadership of the University of Miami research team, as the team's collaboration and insight was instrumental throughout the multi-year process entailed in the U.S. Child Care Benchmark Project.

Contributors

AUTHORS

Dr. Kim Engelman, Dr. Dionne Dobbins, Sharon Veatch, and Jessica Tercha

EDITING & CONTENT REVIEW

Dr. Lynette M Fraga, Ami Gadhia JD, Kristina Haynie and Laurie Rackas

DESIGN & LAYOUT

Liz Twilley

COMMUNICATIONS SUPPORT

Meghan Cornwell and Toni Hunt





- 1 Bourgeois, J. (1997). Synaptogenesis, heterochrony and epigenesis in the mammalian neocortex. Supplement 422, 27-33
- 2 Huttenlocher, P., & Dabholkar, A. (1997). Regional differences in synaptogenesis in human cerebral cortex. 387, 167-178.
- 3 Harvard University Center on the Developing Child. (n.d.). Brain Architecture. Retrieved from https://developingchild.harvard.edu/science/key-concepts/brain-architecture/
- 4 Sandstrom, S and Huerta, H. (2013). The negative effects of instability on child development: A research synthesis. [Online] https://www.urban.org/sites/default/files/publication/32706/412899-The-Negative-Effects-of-Instability-on-Child-Development-A-Research-Synthesis.PDF.
- 5 Bethell, C., Jones, J., Gombojav, N., Linkenbach, J., & Sege, R. (2019). Positive childhood experiences and adult mental and relational health in a statewide sample: Associations across adverse childhood experiences levels. 173(11).
- 6 Campbell, F., Wasik, B., Pungello, E., Burchinal, M., Barbarin, O., Kainz, K., . . . Ramey, T. (2008). Young adult outcomes of the Abecedarian and CARE early childhood educational interventions. 23, 452-466.
- 7 Garcia, JL., Heckman, JJ., & Zill, AL. (2018). Gender differences in the benefits of an influential early childhood program. NBER Working Paper No. 23412. Retrieved from NBER: https://www.nber.org/papers/w23412.pdf
- 8 National Center for Education Statistics. (2016). Early Childhood Program Participation Survey of the 2016 National Household Education Surveys Program (ECPP-NHES:2016). U.S. Department of Education. Retrieved from: https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2017101REV
- 9 Child Care Aware of America. (2013). We can do better: Child Care Aware of America's ranking of state child care center regulations and oversight. Arlington: Child Care Aware of America. Retrieved from: https://www.childcareaware.org/wp-content/uploads/2015/10/wecandobetter_2013_final_april_11_0.pdf
- 10 Child Care Aware® of America. (2012). Leaving children to chance: NACCRRA's ranking of state standards and oversight for small family child care homes. Arlington: Child Care Aware of America. Retrieved from: https://www.childcareaware.org/wp-content/uploads/2015/10/lcc_report_full_april2012.pdf
- 11 American Academy of Pediatrics, American Public Health Association, National Resource Center for Health and Safety in Child Care and Early Education. (2019). Caring for our children: National health and safety performance standards; Guidelines for early care and education programs. Retrieved from National Resource Center for Health and Safety in Child Care and Early Education: https://nrckids.org/CFOC
- 12 US Department of Health and Human Services. (2015). Caring for our children basics: Health and safety foundations for early care and education. Retrieved from https://www.acf.hhs.gov/sites/default/files/ecd/caring_for_our_children_basics.pdf
- 13 Child Care Aware® of America. (2019). The child care supply crisis: Why deregulation is not the answer. Retrieved from https://info.childcareaware.org/blog/the-child-care-supply-crisis-why-deregulation-is-not-the-answer



Appendix A: Child Care Licensing Database Process

In 2017, Child Care Aware® of America launched the Child Care Licensing Database to assess progress towards advancing quality per best practice recommendations outlined in one of the child care industry's most respected resources, Caring for Our Children Basics (CFOC Basics). From February 2016 to May 2017, our research team compared licensing manual language to recommended minimum health and safety standards laid out in CFOC Basics. The team conducted a thorough review of each state's licensing standards to determine whether the states' regulations met or did not meet the standards delineated in CFOC Basics. CCAoA conducted separate reviews for child care centers and large family child care homes.

The National Center on Early Childhood Quality Assurance (NCECQA) tracks trends in child care licensing regulations and publishes updates every three years. The latest update shares trends from 2014-2017 in licensing requirements and policies for child care centers, family child care homes and group child care homes. The NCECQA report complement CCAoA's 2017 Child Care Licensing Database and Child Care Licensing Benchmark Project in that it offers a view of gradual changes in the licensing landscape. CCAoA's Child Care Licensing Benchmark Project illustrates how state regulations align with CCDBG requirements and evidence-based advanced quality markers. CCAoA's benchmarking tool, scoring rubric and state report assets are a compass to help guide child care quality improvements over time.

Our 2017 Child Care Licensing Database research team included CCAoA research and policy staff, a consultant with extensive Child Care Resource and Referral field experience and a University of Miami (UM) research team led by Drs. Veronica Fernandez and Johayra Bouza.

Researchers developed and followed a standard protocol to provide an explanation for each determination with the supervisory team. If state regulations met or exceeded the CFOC Basics standard, researchers referenced the state manual, page number and section that fulfilled the standard. If the state manual did not meet the CFOC Basics standard, the team specified whether it was because the state manual (1) did not mention the content of the standard, (2) mentioned the content of the standard but did not meet the criteria or (3) only partially met the criteria. For specifications 2 and 3, we quoted the section in the manual, along with the respective page number and section. CCAoA and UM established a process to ensure adequate interrater reliability, using three randomly chosen states. Our team compared consistency across the determinations, resulting in an overall initial agreement of 65%, which was considered inadequate. We flagged items with less than 80% agreement for discussion, leading to a more refined set of database items and determination protocol. A team of data entry research assistants (RAs) received training to review the state licensing manuals and follow the protocols developed by the supervisory team. The RAs first practiced data entry for one of the three pilot state manuals together. They discussed each standard with supervisors and thoroughly reviewed the state manual to make a tentative determination. The RAs then repeated this process for the two remaining pilot state manuals. The CCAoA Research Team reviewed the determinations and only the RAs who achieved an overall reliability of 80% or greater remained on the data entry team.

For each of the remaining states, a pair of reliable RAs completed the data entry. Together the RAs thoroughly reviewed the state manuals and came to an agreement on a determination for each CFOC Basics standard. The supervisory team was available daily to answer questions and provide clarification for the RAs; the team also met weekly to discuss and refine the process and protocol. For each state, the supervisory team randomly selected 15 standards (about 10%) and verified the accuracy of the data entry for both child care centers and homes. CCAoA launched the completed database in 2017.

Appendix B:

Licensing Benchmark Development Process

The Workgroup

The Child Care Licensing Benchmark Project Workgroup met seven times between December 2017 and September 2018 via six 90-minute conference calls/webinars and one face-to-face meeting in April 2018. Workgroup members also participated in various feedback activities between scheduled group meetings, allowing CCAoA to utilize the expertise of individual members through input and feedback as information was gathered. Over the 10-month period, the Workgroup worked diligently, produced several useful tools and had discussions resulting in:

- CCDBG Act Matrix (crosswalks of We Can Do Better/Leaving Children to Chance to CCDBG Act).
- CFOC Basics Matrix (crosswalk between We Can Do Better/Leaving Children to Chance and Caring for Our Children Basics).
- A rich discussion about the benchmarks and a direction for a benchmark tool, made possible via a face-to-face meeting of the Workgroup.
- Multiple surveys and feedback assignments to collect data and input from the Workgroup.
- Identification of new benchmark categories and revised descriptions.
- Benchmark refinement via sub-group meetings. *
- Development of resource lists and a description of sources used in developing each benchmark.
- Division of 14 original benchmarks to create: Oversight Benchmarks (seven) and Program Benchmarks (seven).

*The Workgroup conducted four sub-group meetings on specific topics, which resulted in additional revisions to the benchmarks based on the following rationale:

- 1. Benchmark Leveling: The Workgroup reviewed all the comments, feedback and discussion points that were gathered and began the process of breaking down, researching and refining each benchmark. During this process, it became evident that it would be difficult to measure all the benchmarks at the same level since some benchmarks are based on alignment with the 2014 CCDBG Act, and others are beyond the requirements of the Act. As a result, we created two levels of benchmarks for both Program and Oversight: Level 1 = CCDBG Act Alignment and Level 2 = Movement Towards Quality.
- 2. Ratio/Group Size Benchmark: Follow-up with Workgroup members to discuss the benchmark language for family child care resulted in the recommendation that CCAoA adopt the National Association of Family Child Care's newly released accreditation standard for Family Child Care ratios and group sizes.

- 3. Provider Qualifications Benchmark: During the development of this project, there was a lot work being done in the field around provider qualifications, including a nationwide Power to the Profession (P2P) process. CCAoA, guided by the Workgroup, decided not to recommend specific provider qualifications that may or may not be endorsed by P2P. Now that P2P is finalized, we will work with NAEYC, the lead agency for P2P, to update the benchmark to reflect NAEYC's recommendations. In the meantime, the benchmark reflects the specific criteria that are important in defining provider qualifications without specifying education levels and credentials.
- 4. Professional Development: While the CCDBG Act requires pre-service and annual training, it does not specify the number of hours to be completed. After much research and discussion, CCAoA made the decision to maintain its previous standards of 40 hours of pre-service training and 24 hours of annual training, reflected in our previous licensing reports (Leaving Children to Chance and We Can Do Better).

Advisory/Review Panel

Formation of the Review Panel extended participation to additional stakeholders that were unable to commit to the rigorous schedule set for the Benchmark Workgroup. Advisory/Review panel members expressed an interest in reviewing the work of the Workgroup and providing additional feedback as CCAoA developed the Benchmark Tool. In September 2018, an additional eight advisory organizations and their representatives, along with original Workgroup members, formed the Advisory/Review Panel. Between October 2018 and May 2019, the Advisory/Review Panel provided valuable feedback on the proposed benchmarks that resulted in:

- Modified benchmarks to create a set of seven Program and seven Oversight Benchmarks with two levels for each benchmark.
- Review and finalization of the Oversight Benchmark Survey Tool and the Program Benchmark Survey Tool.

BENCHMARK PILOT PROCESS

The five pilot states and CCAoA's Child Care Licensing Benchmark Project Team took the following steps during the Benchmark Pilot Process:

- **Step 1:** A minimum of one representative from each state participated in the introductory webinar on the Child Care Licensing Benchmark Project held on June 3, 2019.
- **Step 2:** Each state completed a Benchmark Team survey to identify team members for their state and a team contact. Throughout the pilot process, CCAoA remained in close contact with each state representative to assist with completing the process.
- **Step 3:** CCAoA sent a link to the Benchmark Tool Survey: Program Benchmarks to each state contact with a request to complete it within 3–4 weeks.
- **Step 4:** CCAoA conducted a check-in call between the state contact, other members of the state team and members of the CCAoA Benchmark Team 2–3 weeks after the surveys were sent.

- **Step 5:** Upon completion of Program Benchmarks by the pilot states, CCAoA sent the Oversight Benchmark Survey to each pilot state contact, who was asked to complete the survey within 3–4 weeks.
- **Step 6:** CCAoA offered a Survey check-in call opportunity to each state.
- **Step 7:** The CCAoA Benchmark Team reviewed each pilot state's responses to validate the documentation cited.
- **Step 8:** CCAoA provided each pilot state with a detailed set of questions about responses provided in the survey and gave each state the opportunity to answer and ask questions regarding the validation process.
- **Step 9:** CCAoA conducted a virtual focus group on September 9, 2019 to gather feedback, recommendations and comments from the pilot states regarding the survey tool and process.
- **Step 10:** The CCAoA Benchmark Team created a state benchmark profile based on a CCAoA Licensing Benchmark Rubric identifying how the state's licensing standards and practices aligned with Level 1 and Level 2 Benchmarks.
- **Step 11:** CCAoA shared the rubric and scores with each state individually. CCAoA offered each state an opportunity to provide feedback and comments on the rubric and scoring.
- **Step 12:** CCAoA revised the survey and scoring process based on the feedback received throughout the pilot process.

Appendix C:

Child Care Licensing Benchmark Resources

https://www.naeyc.org/our-work/families/10-naeyc-program-standards

The National Association for the Education of Young Children (NAEYC) has set 10 standards for early childhood programs that can help families make the right choice when they are looking for a child care center, preschool or kindergarten. The standards and criteria are also the foundation of the NAEYC Accreditation System for early childhood programs. To earn accreditation, programs must meet all 10 standards.

https://www.nafcc.org/file/631a54df-ba2e-4ddf-a3cf-bfd217fc4b36

Quality Standards for National Association for Family Child Care (NAFCC) Accreditation: Fourth Edition with 2013 Updates

https://childcareta.acf.hhs.gov/sites/default/files/public/cfocb_alignment_tool.pdf

Caring for Our Children Basics Alignment Tool for Centers and Family Child Care

https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/no-search/caring-for-our-children-basics-self-assessment-tool.pdf

Caring for Our Children Self-Assessment Tool

http://earlysuccess.org/home

The Alliance for Early Success is a catalyst for bringing state, national and funding partners together to improve state policies for children, starting at birth and continuing through age 8.

https://nwlc-ciw49tixgw5lbab.stackpathdns.com/wp-content/uploads/2017/09/NWLC-report-on-state-implementation-of-CCDBG-reauthorization.pdf

The Child Care and Development Block Grant Act of 2014: Uneven State Implementation of Key Policies

https://drfiene.files.wordpress.com/2015/12/13keyindicatorsofchildcarequalitychildcarequalityindicatorsccqicdpes2pc1scale.pdf

13 Key Indicators of Child Care Quality Child Care Quality Indicators (CCQI - CDPES2 PC1) Scale

https://aspe.hhs.gov/basic-report/13-indicators-quality-child-care-research-update#:~:text=The%2013%20indicators%20are%20the,%2Fplan%2C%20outdoor%20playground%20safety%2C

13 Indicators of Quality Child Care: Research Update

https://www.acf.hhs.gov/occ/resource/priorities-report-fy2017

Administration for Children and Families (ACF) Priorities Report

https://www.acf.hhs.gov/sites/default/files/occ/child_care_and_development_block_grant_markup.pdf

Child Care and Development Block Grant (CCDBG) Act

https://www.acf.hhs.gov/sites/default/files/occ/ccdf_final_rule_fact_sheet.pdf

Child Care and Development Fund (CCDF) Final Rule Sheet

https://www.acf.hhs.gov/occ/ccdf-reauthorization

Child Care and Development Fund (CCDF) Final Rule Resources

https://childcareta.acf.hhs.gov/ccdf-reauthorization

Administration for Children and Families Key Policy Resources

https://www.acf.hhs.gov/sites/default/files/ecd/caring for our children basics.pdf

Caring for Our Children Basics

https://www.acf.hhs.gov/archive/occ/resource/faqs-about-the-ccdf-2015-nprm

Child Care and Development Fund (CCDF) FAQ

Resources Specific to Child Care Licensing

http://www.naralicensing.org/child-care-licensing-study

National Association for Regulatory Administration (NARA) Child Care Licensing Studies

https://www.researchconnections.org/childcare/resources/35885

Understanding Licensed Child Care in Minnesota: 2016 Issue Brief

https://www.childandfamilydataarchive.org/cfda/cfda/series/231

Child Care Licensing Survey Series

https://childcareta.acf.hhs.gov/data

Data Explorer and State Profiles

https://childcareta.acf.hhs.gov/resource/guide-support-states-and-territories-use-child-care-licensing-data

A Guide to Support States' and Territories' Use of Child Care Licensing Data - highlights some licensing-related data elements

https://childcareta.acf.hhs.gov/sites/default/files/public/licensing_caseloads.pdf?utm_source=BUILD+Initiative+-+General+List&utm_campaign=35365d24b5-EMAIL_CAMPAIGN_2017_05_24_COPY_01&utm_medium=email&utm_term=0_48a0135618-35365d24b5-109582893 Licensing Caseload Report: National Center on Early Childhood Quality Assurance (NCECQA Center)

http://www.acf.hhs.gov/programs/occ/resource/ccdf-law

Child Care and Development Block Grant Act: The Child Care and Development Block Grant Act of 2014 and section 418 of the Social Security Act (42 USC 618), as amended, provide the statutory authority for implementation of the Child Care and Development Fund (CCDF) program as designated by the Administration for Children and Families.

https://www.acf.hhs.gov/occ/resource/ccdf-final-rule-faq

Office of Child Care, Administration for Children and Families, U.S. Department of Health and Human Services. Child Care and Development Block Grant Act (CCDBG) of 2014: Frequently Asked Questions. (2015).

https://www.acf.hhs.gov/occ/resource/ccdbg-act-of-2014-plain-language-summary-of-statutory-changes-tribes

Office of Child Care, Administration for Children and Families, U.S. Department of Health and Human Services. (2014). Child Care and Development Block Grant Act (CCDBG) of 2014: Plain Language Summary of Statutory Changes. (2014).

Resources Specific to Understanding the New CCDF Health and Safety Standards and Training Requirements

https://www.acf.hhs.gov/sites/default/files/occ/new_health_and_safety_regs_webinar_ppt.pdf

Understanding the New CCDF Health and Safety Standards and Training Requirements. Office of Child Care, Administration for Children and Families, U.S. Department of Health and Human Services

https://childcareta.acf.hhs.gov/licensing

National Database of Child Care Licensing Regulations

Appendix D:

Child Care Licensing Benchmark Resources

Child Care Aware® of America Child Care Licensing Benchmark Project Partners

Child Care Aware® of America is sincerely appreciative of the following organizations and individuals for providing invaluable feedback and support to the Child Care Licensing Benchmark Project.

Note: Review and feedback from individual members participating in the Child Care Licensing Benchmark Project may not necessarily represent the views of their organization.

WORKGROUP MEMBERS

American Academy of Pediatrics

Bright From the Start: Georgia Department of Early Care & Learning

Melissa Davis, Child Care Services Director of Quality Operations

Jennifer Bridgeman, Process & Quality Improvement Manager

Child Care Aware of Kansas

Leadell Ediger, Executive Director

Child Care Aware of Minnesota

Ann McCully, Executive Director

Collaboration for Early Childhood

John C. Borrero, Executive Director

Florida Office of Child Welfare

Samantha Wass de Czege

Florida Department of Children and Families, Office of Child Care Regulations

MBST Solutions, LLC

Mary Beth Salomone Testa, Policy Consultant

National Association for the Education of Young Children (NAEYC)

Lauren Hogan, Managing Director, Policy and Professional Advancement

National Association for Regulatory Administration

Tara Lynne Orlowski, M.Ed.

National Indian Child Care Association

Jennifer Rackliff, Executive Director Eloise Locust, Treasurer, Board of Directors

Office of Military Family Readiness Policy

Carolyn Stevens, Director

Oklahoma Child Care Resource & Referral Association

Paula Koos, Executive Director

Public Health Law Center

Natasha Frost, Senior Staff Attorney

SW TN CCRR

Katherine Cothern, Coordinator

The Cami Campaign

Elly Lafkin, Parent Representative

The Children's Cabinet

Marty Elquist, Department Director

ADVISORY REVIEW PANEL

Center for the Study of Child Care Employment, UC-

Berkeley

Caitlin McLean, Workforce Research Specialist

CEELO/Kid's Campus Early Learning Center

Tracy Jost, Advisor/Owner

National Center on Early Childhood Quality

Assurance

Rhode Island KIDS COUNT

Leanne Barrett, Senior Policy Analyst

CHILD CARE AWARE® OF AMERICA STAFF AND CONSULTANTS

Chair: Dionne Dobbins, Ph.D.

Sr. Director of Research

Kim Engelman, Ph.D.

Senior Advisor

Jasmin Springfield

GIS Research Assistant

Sharon Veatch

CCAoA Consultant/Facilitator

Johayra Bouza, Ph.D.

Consultant, University of Miami

Lynette Fraga, Ph.D.

CEO

Michelle McCready, M.P.P.

Deputy CEO

Ami Gadhia, JD

Senior Advisor, Policy, Research, & Programs

Steve Wood

Consultant

Veronica Fernandez, Ph.D.

Consultant, University of Miami

Karen Lange

Consultant

Appendix E: **Benchmark Category Language**

Oversight Benchmarks

BENCHMARK 1: LICENSING

Licensing Level 1: States have licensing regulations that are enforced to ensure compliance at the facility level.

Any licensing exemption(s) must demonstrate how such exemption(s) do not endanger the health, safety or development of children. Must include any exemptions based on:

- Provider category, type or setting.
- Length of day.
- Providers not subject to licensing because the number of children served falls below a Lead Agency-defined threshold.
- Any other licensing requirements.

Licensing Level 2: All facilities hold a valid license administered by state and territory governments that sets a baseline of requirements below which it is illegal for facilities to operate. All facilities must be licensed and state ensures all facilities are held to the same criteria of licensing by facility type (center or FCCH).

All facilities means programs that care for one or more unrelated children.

BENCHMARK 2: MONITORING

Monitoring Level 1: State regulations require at least one pre-licensure inspection for compliance with health, safety and fire standards, and at least one annual unannounced inspection for compliance with all child care licensing standards, which shall include an inspection for compliance with health and safety requirements and fire standards. Health and safety requirements include: 1. The prevention and control of infectious diseases (including immunizations and guidance for the provider to provide referrals and support to help families of children receiving services during a grace period to comply with immunizations and other health and safety requirements); 2. Prevention of sudden infant death syndrome and use of safe sleeping practices; 3. Administration of medication, consistent with standards for parental consent; 4. Prevention and response to emergencies due to food and allergic reactions; 5. Building and physical premises safety, including identification of and protection from hazards, bodies of water and vehicular traffic; 6. Prevention of shaken baby syndrome, abusive head trauma and child maltreatment; 7. Emergency preparedness and response planning for emergencies resulting from a natural disaster or a man-caused event (such as violence at a child care facility) that shall include procedures for evacuation, relocation, shelter-in-place and lock down, staff and volunteer emergency preparedness training and practice drills, communication and reunification with families, continuity of operations, and accommodation of infants and toddlers, children with disabilities and children with chronic medical conditions; 8. Handling and storage of hazardous materials and the appropriate disposal of biocontaminants; 9. Appropriate precautions in transporting children, if applicable; 10. Pediatric first aid and cardiopulmonary resuscitation; 11. Recognition and reporting of child abuse and neglect

Inspectors may inspect for compliance with all three standards (health, safety and fire) at the same time.

Monitoring Level 2: All facilities require at least one additional annual visit by licensing for compliance with all child care licensing standards, which shall include an inspection for compliance with health and safety and fire standards. The number of inspections should not include those inspections conducted for the purpose of investigating a complaint.

If needed, additional follow-up visits should be conducted for the program to achieve satisfactory compliance or if the program is closed at any time.

BENCHMARK 3: INSPECTION REPORTS

Inspection Reports Level 1: Lead Agencies shall post results of full monitoring and inspection reports in a timely manner, either in plain language or with a plain language summary, for parents and child care providers to understand, and shall establish a process for correcting inaccuracies in the reports.

Such results shall include: (1) Information on the date of such inspection; (2) Information on corrective action taken by the State and child care provider, where applicable; (3) Any health and safety violations, including any fatalities and serious injuries occurring at the provider, prominently displayed on the report or summary; (4) A minimum of three years of results where available.

Results of monitoring and inspection reports should be made available by electronic means with easily accessible provider-specific information.

Websites shall include description of processes for licensing and monitoring child care providers, conducting criminal background checks and offenses that prevent individuals from being child care providers; aggregate number of deaths and serious injuries (for each provider category and licensing status) and instances of substantiated child abuse that occurred in child care settings each year, for eligible providers; and referrals to local child care resource and referral.

Inspection Reports Level 2: Results of monitoring and inspection reports are made available to families at no cost if there is no access to the internet.

BENCHMARK 4: PROGRAM/STAFF RATIO

Program/Staff Ratio Level 1: State regulations ensure the ratio of licensing inspectors to such child care providers and facilities is maintained at a level sufficient to enable the State, Territory or Tribe to conduct effective inspections on a timely basis in accordance with the applicable Federal, State, Territory, Tribal and local law.

Program/Staff Ratio Level 2: Programs to licensing staff ratio does not exceed 50-60:1.

BENCHMARK 5: LICENSING STAFF QUALIFICATIONS

Licensing Staff Qualifications Level 1: State regulations ensure individuals who are hired as licensing inspectors are qualified to inspect those child care providers and facilities and have received training in related health and safety requirements appropriate to provider setting and age of children served. Training shall include, but is not limited to, those requirements described in § 98.41 (health and safety), and all aspects of the State, Territory or Tribe's licensure requirements.

Licensing Staff Qualifications Level 2: Licensing staff should have a bachelor's degree and appropriate training to include at least 50 clock hours of competency-based orientation training when hired and 24 annual clock hours

of competency-based continuing education. May include specialized training of licensing inspectors in health and safety in early care and education settings, as well as the consideration of cultural and linguistic diversity of caregivers when addressing competencies and trainings.

BENCHMARK 6: BACKGROUND CHECK IMPLEMENTATION

Background Check Implementation Level 1: States, through coordination of the Lead agency with other State agencies, shall have in effect: Requirements, policies and procedures to require and conduct criminal background checks for child care staff members (including prospective child care staff members) of all licensed, regulated or registered child care providers and all child care providers eligible for services for which assistance is provided under CCDBG. Requirements, policies and procedures in place to respond as expeditiously as possible to other States', Territories' and Tribes' requests for background check results in order to accommodate the 45-day timeframe.

Background Check Implementation Level 2: Background checks are verified by state licensing agency through a statewide background check "clearinghouse" system.

BENCHMARK 7: PROFESSIONAL DEVELOPMENT

Professional Development Level 1: The Lead Agency must describe in the Plan the State or Territory framework for training, professional development and postsecondary education for caregivers, teachers and directors, including those working in school-age care, that: (1) Is developed in consultation with the State Advisory Council on Early Childhood Education and Care; (2) May engage training and professional development providers, including higher education, in aligning training and education opportunities with the State's framework; (3) Addresses professional standards and competencies, career pathways, advisory structure, articulation and workforce information and financing; (4) Establishes qualifications in accordance with § 98.41(d)(3) designed to enable child care and school-age care providers that provide services for which assistance is provided in accordance with this part to promote the social, emotional, physical and cognitive development of children and improve the knowledge and skills of caregivers, teachers and directors in working with children and their families; (5) Includes accessible professional development conducted on an ongoing basis, aligned to a progression of professional development (which may include encouraging the pursuit of postsecondary education); (6) Reflects current research and best practices relating to the skills necessary for caregivers, teachers and directors to meet the developmental needs of participating children and engage families, including culturally and linguistically appropriate practices; and (7) Improves the quality, diversity, stability and retention (including financial incentives and compensation improvements) of caregivers, teachers and directors. (8) Establishes requirements for pre-service or orientation (to be completed within three months); and (9) Includes the minimum annual requirement for hours of training and professional development.

Professional Development Level 2: Professional development training system is accessible and fully implemented. Trainer qualification and training content is verified by the state or designee through a statewide tracking system (i.e., professional development registry, etc.).

Program Benchmarks

BENCHMARK 1: BACKGROUND CHECKS

Background Checks Level 1: A comprehensive background check is required, including: (1) Using fingerprints to check state criminal registry or repository and FBI records, using Next Generation identification; (2) Checking the child abuse registry, (3) Checking the National Crime Information Center's National sex offender registry for all child care providers and any adult, 18 years or older, in a program who may have unsupervised access to young children (Including any individual residing in a family child care home who is age 18 and older). Background checks must be completed within 45 days of hire and include any out-of-state residence for previous five years. New background checks must be completed for any staff separated from employment for 180 consecutive days or more. Individuals are ineligible for employment for child care services if they have been convicted of a barrier/disqualifying crime.

Background Checks Level 2: A comprehensive background check is required of all employees, including those under 18 years old. In family child care homes, all children over 12 years old residing in the home should have a background check.

BENCHMARK 2: PROVIDER QUALIFICATIONS

Provider Qualifications Level 1: State regulations include provider qualifications for child care and school-age providers.

Provider Qualifications Level 2: State regulations include staff qualifications for the following positions: center director/administrator, lead teacher, assistant teacher and family child care provider/caregiver. All staff qualifications include a high school diploma/equivalency plus one of the following: credentials (if applicable) or experience and skills required for each position. In addition, a timeline by when requirements must be met (i.e., at time of hire, within 30 days, etc.).

Note: Lead teacher refers to caregivers that are directly responsible for children in each classroom.

BENCHMARK 3: PROFESSIONAL DEVELOPMENT

Professional Development Level 1: State regulations include requirements for pre-service training for caregivers, teachers and directors, including those working in school-age care that must be completed within three months of employment. Critical health and safety training (pre-service training topics 1-11 below) must be completed before providers are allowed to care for children unsupervised. State regulations include ongoing training requirements for providers that provide a progression of professional development that reflects current research and best practices relating to the skills necessary to meet the developmental needs of children and to engage families, including culturally and linguistically appropriate practices. There is a minimum annual requirement of hours for ongoing training and professional development for eligible caregivers, teachers and directors, appropriate to the setting and age of children served, that maintains and updates health and safety training standards. Annual training should be accessible to providers.

Pre-service and ongoing professional development training address the following topics: (1) The prevention and control of infectious diseases (including immunizations and guidance for the provider to provide referrals and support to help families of children receiving services during a grace period to comply with immunizations and other health and safety requirements); (2) Prevention of sudden infant death syndrome and use of safe sleeping practices; (3) Administration of medication, consistent with standards for parental consent; (4) Prevention and response to emergencies due to food and allergic reactions; (5) Building and physical premises safety, including

identification of and protection from hazards, bodies of water and vehicular traffic; (6) Prevention of shaken baby syndrome, abusive head trauma and child maltreatment; (7) Emergency preparedness and response planning for emergencies resulting from a natural disaster or a man-caused event (such as violence at a child care facility) that shall include procedures for evacuation, relocation, shelter-in-place and lock down, staff and volunteer emergency preparedness training and practice drills, communication and reunification with families, continuity of operations, and accommodation of infants and toddlers, children with disabilities and children with chronic medical conditions; (8) Handling and storage of hazardous materials and the appropriate disposal of biocontaminants; (9) Appropriate precautions in transporting children, if applicable; (10) Pediatric first aid and cardiopulmonary resuscitation; (11) Recognition and reporting of child abuse and neglect; and (12) Child development, including the major domains (cognitive, social, emotional, physical development and approaches to learning).

Professional Development Level 2: State regulations require all child care providers to complete 40 hours of pre-service training (within 90 days of employment) and 24 hours of annual training. Annual training includes a minimum of 16 hours of early learning and child development training and 8 hours of health and safety training.

Additional pre-service and annual professional development training topics may include: (13) business practices (for directors and FCCH); (14) Prevention of child maltreatment; (15) Nutrition (including age-appropriate feeding); 16. Access to physical activity; (17) Caring for children with special needs.

BENCHMARK 4: HEALTH AND SAFETY POLICIES AND PROCEDURES

Healthy and Safety Level 1: State regulations include requirements for providers to develop policies and procedures that comply with health and safety requirements of the current CCDBG Federal Law. Requirements designed, implemented and enforced to protect the health and safety of children shall include: (1) The prevention and control of infectious diseases (including immunizations and guidance for the provider to provide referrals and support to help families of children receiving services during a grace period to comply with immunizations and other health and safety requirements.); (2) Prevention of sudden infant death syndrome and use of safe sleeping practices; (3) Administration of medication, consistent with standards for parental consent; (4) Prevention and response to emergencies due to food and allergic reactions; (5) Building and physical premises safety, including identification of and protection from hazards, bodies of water and vehicular traffic; (6) Prevention of shaken baby syndrome, abusive head trauma and child maltreatment; (7) Emergency preparedness and response planning for emergencies resulting from a natural disaster or a man-caused event (such as violence at a child care facility) that shall include procedures for evacuation, relocation, shelter-in-place and lock down, staff and volunteer emergency preparedness training and practice drills, communication and reunification with families, continuity of operations, and accommodation of infants and toddlers, children with disabilities and children with chronic medical conditions; (8) Handling and storage of hazardous materials and the appropriate disposal of biocontaminants; (9) Appropriate precautions in transporting children, if applicable; (10) Pediatric first aid and cardiopulmonary resuscitation; (11) Recognition and reporting of child abuse and neglect

Healthy and Safety Level 2: State regulations include for providers to develop policies and procedures that comply with health and safety requirements consistent with current CCDBG Federal Law as well as the following additional topics: (12) Nutrition (including age-appropriate feeding); (13) Access to physical activity; (14) Caring for children with special needs; (15) Corporal punishment/child guidance; (16) Firearms safety;)17) Use of tobacco, alcohol and controlled substances in child care settings.

BENCHMARK 5: DEVELOPMENTAL GUIDELINES AND LEARNING ACTIVITIES

Developmental Guidelines and Learning Activities Level 1: State regulations reference state early learning and developmental guidelines. State early learning and developmental guidelines (1) Are developmentally appropriate

for all children from birth to kindergarten entry; (2) Describe what children should know and be able to do; (3) Cover the essential domains of early childhood development (cognition, including language arts and mathematics; social, emotional and physical development; and approaches toward learning); (4) Are used statewide by child care providers and caregivers; (5) Reflect current research and best practices to meet the developmental needs of children and engage families, including culturally and linguistically appropriate practices.

Developmental Guidelines and Learning Activities Level 2: State regulations require all child care providers to have a plan that incorporates state early learning and developmental guidelines and includes activities that address the individual needs of each child and essential domains of early childhood development (approaches to learning, social and emotional development, language and literacy, cognition and perceptual, motor and physical). Activities should be culturally sensitive. The plan should also identify adequate resources to carry out activities. The provider limits exposure to screen time (i.e., restrictions based on exposure time, age of child, content, exceptions, etc.).

BENCHMARK 6: GROUP SIZE AND RATIO

Group Size and Ratio Level 1: State regulations include (1) Group size limits for specific age populations; (2) The appropriate ratio between the number of children and the number of caregivers, in terms of age of children in child care.

Group Size and Ratio Level 2: State regulations include child ratios and group size requirements that align with national recommendations by age for child care centers and family child care homes listed below:

	Child Care Centers	
Age Group	Staff: Child Ratio	Maximum Group Size
< 12 months	1:4	8
12 - 23 months	1:4	8
24 - 35 months	1:6	12
3-year-olds	1:9	18
4-year-olds	1:10	20
5-year-olds	1:10	20
School age 6+	1:12	24

Family Child Care: A qualified assistant is present when there are more than six children in care, and no more than 12 children are in care at any one time. When there are six or fewer children present, no more than two are under the age of two years. When there are seven or more children present, no more than four are under the age of two years. Note for both standards: Whenever present, the child care provider's own children under the age of six must be included in the count.

BENCHMARK 7: FAMILY ENGAGEMENT

Family Engagement Level 1: State regulations establish procedures to ensure that providers of child care services afford parents unlimited access to their children, and to the providers caring for their children, during normal hours of provider operations and whenever the children are in the care of the provider.

Family Engagement Level 2: State regulations require child care providers to have a plan to encourage family engagement opportunities that are linguistically and culturally responsive, communicate regularly with families and share written policies and information about a child's development and progress in the program with families on a regular basis.



Research-to-Policy, Research-to-Practice Brief OPRE2012-29
April 2012



DISCLAIMER:

The views expressed in this publication do not necessarily represent the views or policies of the Office of Planning, Research and Evaluation, the Administration for Children and Families or the U.S. Department of Health and Human Services.

ACKNOWLEDGMENTS

The authors would like to thank Ivelisse Martinez-Beck and Naomi Goldstein at the Office of Planning, Research and Evaluation, Kathryn Tout at Child Trends, and Laura Hamilton at RAND for their guidance and feedback on this paper.

Validation of Quality Rating and Improvement Systems for Early Care and Education and School-age Care

Research-to-Policy, Research-to-Practice Brief OPRE2012-29

April 2012

Submitted to:

Ivelisse Martinez-Beck, PhD., Project Officer
Office of Planning, Research and Evaluation
Administration for Children and Families
U.S. Department of Health and Human Services

Submitted by:

Gail L. Zellman, RAND Corporation
Richard Fiene, Pennsylvania State University

Contract Number: GS10F0030R Project Director: Kathryn Tout

Child Trends

4301 Connecticut Ave NW Washington DC, 20008

Suggested Citation:

Zellman, G. L. & Fiene, R. (2012). *Validation of Quality Rating and Improvement Systems for Early Care and Education and School-Age Care,* Research-to-Policy, Research-to-Practice Brief OPRE 2012-29. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

This Brief was developed by members of the Quality Initiatives Research and Evaluation Consortium (INQUIRE) which is designed to facilitate the identification of issues and the development and exchange of information and resources related to research and evaluation of quality rating and improvement systems (QRIS) and other quality initiatives. INQUIRE is funded by the Office of Planning, Research and Evaluation through the Child Care and Early Education Policy and Research Analysis and Technical Expertise contract with Child Trends.









Validation of Quality Rating and Improvement Systems for Early Care and Education and School-age Care

Quality Rating and Improvement Systems (QRIS) for early care and education and school age care programs are designed to collect information about quality and to use that information to produce program-level ratings, which are the foundation of a QRIS. The ratings are intended to make program quality transparent for parents and other stakeholders and to encourage the selection of higher-quality programs. The ratings also provide benchmarks that can support efforts to help programs improve their quality. *Validation* of a QRIS is a multi-step process that assesses the degree to which design decisions about *program quality standards* and measurement strategies are resulting in accurate and meaningful ratings. Validation of a QRIS provides designers, administrators and stakeholders with crucial data about how well the architecture of the system is functioning. A carefully designed plan for ongoing validation creates a climate that supports continuous quality improvement at both the program and system level.

To date, QRIS validation efforts have been limited. One reason may be that validation is a complex endeavor that involves a range of activities. In addition, there has been little guidance available that clarifies the purpose of QRIS validation or identifies the activities that comprise validation. At the same time, there is growing pressure to validate these systems as stakeholders seek evidence that QRIS are functioning as intended. The federal government has elevated QRIS validation by including it as a central component of the 2011 Race to the Top Early Learning Challenge and requiring state applicants to develop QRIS validation plans as part of their submissions.

The purpose of this Brief is to help QRIS stakeholders better understand validation and to outline a set of complementary validation activities. The Brief defines validation, describes different types of validation studies, and provides guidance on developing a validation plan, including tools to determine the appropriate scope and timing of validation activities. It also lists references and resources for those who wish to learn more. This Brief is aimed at readers in positions to authorize, finance, design, and refine QRISs and other quality improvement efforts, including state child care administrators, early education policy and program specialists, legislators, and other potential funders.



QRIS Validation and Its Role in Continuous System Improvement

Validation is a multi-step process that assesses the degree to which design decisions about QRIS program quality standards and measurement strategies are resulting in accurate and meaningful program ratings.¹

Validation is particularly important for QRISs because these systems at their core rely on ratings of program quality. They are built on the assumption that the quality of early childhood and school-age programs can be reliably measured and that differences in quality across these programs can be identified through the use of a set of quality indicators. Validity data can support conclusions about whether such quality indicators measure quality well and whether the strategies used to combine measures and develop ratings are working as intended (Cizek, 2007). 2 Valid ratings are critical to QRISs because parents and other stakeholders use these ratings to select the highest-quality care that they can afford. The overall quality rating also carries increasingly high stakes for programs. Indeed, the theory underlying QRISs intentionally creates those stakes to motivate both provider and parent behaviors in support of increased quality (e.g., Zellman et al., 2008; Zellman et al., 2011). In

Why QRIS validation is important. A QRIS is a primary strategy states employ to improve early childhood education and school-age care (ECE-SAC) program quality. Because ratings are a central element of a QRIS, it is important to collect data to establish that these ratings are accurate and meaningful indicators of quality. Validation studies can lend credibility to a QRIS, identify needed changes, and support continuous improvement of a QRIS.

addition to attracting more children, programs that score well may receive higher subsidies for subsidy-eligible children, and may qualify for grants, incentives, and tax credits.

Validity is not determined by a single study; instead, validation should be viewed as a continuous process with multiple goals: refining the ratings, improving system functioning, and increasing the credibility and value of rating outcomes and of the QRIS system as a whole. A carefully designed validation plan will promote the accumulation of evidence over time that will provide a sound theoretical and empirical basis for the QRIS (AERA, APA, & NCME, 1999; Kane, 2001). Ongoing validation activities that are carried out in tandem with QRIS monitoring activities (that aim to examine ongoing implementation of the QRIS) and evaluation activities (that examine the outcomes of QRIS) can help a QRIS improve its measures and effectiveness throughout its development and implementation (see Lugo-Gil et al., 2011 and Zellman et al., 2011 for guidance on developing a comprehensive QRIS evaluation).

¹ The definition of validation has changed over time. Rather than identifying separate types of validity (construct, predictive, face, concurrent and content), the current notion is that construct validity includes all evidence for validity, including content and criterion evidence, reliability, and the wide range of methods associated with theory testing (Messick, 1975, 1980; Tenopyr, 1977; Guion, 1977; Embretson, 1983; Anastasi, 1986). As a consequence, we do not differentiate types of validity in this brief.

² Reliability represents the ability of a measure to assess its target behaviors or characteristics consistently. In the case of QRISs, reliability refers to the extent to which independent raters produce similar ratings on individual QRIS elements and on the summary rating (interrater reliability) as well as the degree to which raters are consistent over time in their ratings (intra-rater reliability). Such consistency is a prerequisite for validity of any measure.

QRIS validation activities may produce three important benefits. First, validation evidence can promote increased support for the system among parents, ECE-SAC providers and other key stakeholders. Ratings that match the experiences of parents and providers can build trust in the ratings and increase the overall credibility of the system. Second, a system that is measuring quality accurately is better able to target limited quality improvement supports to those programs and program elements most in need of improvement. Third, validation evidence can be used to improve the efficiency of the rating process. If a QRIS is expending resources to measure a component of quality that is not making a unique contribution to a summary quality rating or that is not measuring quality accurately, it can be removed or revised. For example, measures that vary little if at all across providers whose quality varies substantially in other ways make little or no contribution to quality ratings. Measures of family engagement that include parent ratings are particularly prone to this problem, as parents who have chosen to use and continue to rely on a given provider are highly likely to see the care as good and to rate it according to their views (Zellman and Perlman, 2006; McGrath, 2007; Keyes, 2002; Kontos et al., 1987; Shimoni, 1992). If all or almost all programs receive high ratings on the family engagement measure, then that component of the rating may not be working to distinguish between lower-quality and higher-quality programs. It may be considered important to collect measures of family engagement to ensure that providers continue to focus on it. But knowing that a given measure is not contributing to an overall program quality rating may motivate program developers to consider another way to measure the concept, which might both increase the value of the measure and reduce measurement costs. Indeed, understanding the relationships among rating elements through validation studies can save substantial time and effort.

Despite the importance of validation activities to strengthen QRIS, support for these activities may be impeded by limited resources and concern about the value of validation activities. In states with more mature QRISs, there may be reluctance among stakeholders to assess an established system. In newer systems, policymakers may question the need for validation given the arguments recently offered in support of establishing the system. Validation plans can address each of these concerns by providing evidence to help the system run more efficiently and to establish a climate of continuous improvement. A validation plan will clarify that the system is open to change, intent on improvement, and dedicated to increasing the odds of reaching its goals.

Designing and Implementing Validation Efforts

A comprehensive validation plan includes multiple studies that rely on different sources of information and ask different but related questions. These can be understood and organized around four complementary and interrelated approaches to validation. In this section we provide details of the four approaches. Summaries of these details are provided in two tables. Table 1 presents an overview of the four approaches including the purpose of each approach, the activities that might be undertaken, the questions that are asked and the limitations of each approach. Table 2 presents the data needed, data sources, and analysis methods for selected studies within each approach.³

³ The four basic approaches described in the table are very similar to and compatible with those used in the QRIS Evaluation Toolkit (Lugo-Gil et al., 2011).

When reviewing the tables and the remainder of the Brief, it is helpful to be familiar with how three key QRIS terms – component, standard and indicator – are defined. The term quality **component** refers to the broad quality categories used in QRIS (such as staff qualifications, family engagement, and the learning environment). A quality **standard** is defined as a specific feature of quality such as specialized curriculum and assessment training in the staff qualifications component; a set of quality standards comprise each quality component. Quality **indicators** are metrics that can be measured or verified for each of the quality standards. A given quality standard could have one or multiple quality indicators that represent it in a QRIS. For example, in the category of staff qualifications, a standard may be "Teaching staff have specialized training in curriculum and assessment." An indicator related to this standard may be "At least 50% of teaching staff have completed the two-course statewide curriculum training session on curriculum and assessment."

Table 1. Four Related Approaches to Validating a QRIS

Approach	Activities and Purpose	Typical Questions Approach Addresses	Issues and Limitations
Examine the validity of key underlying concepts	Assess whether basic QRIS quality components and standards are the "right" ones by examining levels of empirical and expert support.	Do the quality components capture the key elements of quality? Is there sufficient empirical and expert support for including each standard?	Different QRISs may use different decision rules about what standards to include in the system.
2. Examine the measurement strategy and the psychometric properties of the measures used to assess quality	Examine whether the process used to document and verify each indicator is yielding accurate results. Examine properties of key quality measures, e.g., inter-rater reliability on observational measures, scoring of documentation, and inter-item correlations to determine if measures are psychometrically sound. Examine the relationships among the component measures to assess whether they are functioning as expected. Examine cut scores and combining rules to determine the most appropriate ways to combine measures of quality standards into summary ratings.	What is the reliability and accuracy of indicators assessed through program administrator self-report or by document review? What is the reliability and accuracy of indicators assessed through observation? Do quality measures perform as expected? (e.g., do subscales emerge as intended by the authors of the measures?) Do measures of similar standards relate more closely to each other than to other measures? Do measures relate to each other in ways consistent with theory? Do different cut scores produce better rating distributions (e.g., programs across all levels rather than programs at only one or two levels) or more meaningful distinctions among programs?	This validation activity is especially important given that some component measures were likely developed in low-stakes settings and have not been examined in the context of QRIS.¹

Approach	Activities and Purpose	Typical Questions Approach Addresses	Issues and Limitations
3. Assess the outputs of the rating process	Examine variation and patterns of program-level ratings within and across program types to ensure that the ratings are functioning as intended. Examine relationship of program-level ratings to other quality indicators to determine if ratings are assessing quality in expected ways. Examine alternate cut points and rules to determine how well the ratings distinguish different levels of quality.	Do programs with different program-level ratings differ in meaningful ways on alternative quality measures? Do rating distributions vary by program type, e.g., ratings of center-based programs compared to ratings of home-based programs? Are current cut scores and combining rules producing appropriate distributions across rating levels?	These validation activities depend on a reasonable level of confidence about the quality components, standards and indicators as well as the process used to designate ratings.
4. Examine how ratings are associated with children's outcomes.	Examine the relationship between program-level ratings and selected child outcomes to determine whether higher program ratings are associated with better child outcomes.	Do children who attend higher-rated programs have greater gains in skills than children who attend lower-quality programs?	Appropriate demographic and program level control variables must be included in analyses to account for selection factors. Studies could be done on child and program samples to save resources. Findings do not permit attribution of causality about QRIS participation but inferences can be made about how quality influences children's outcomes.

Table 2. Data Needs, Data Sources and Analysis Methods for Selected Studies

Approach	Data needed	Data sources	Analysis methods
1. Examine the validity of key underlying concepts	Evidence about the relationship between key quality standards and desired outcomes. Expert opinions about proposed quality standards and indicators.	Empirical literature on how proposed components contribute to high quality care and improved child outcomes. Experts in early childhood education who can provide input on the quality standards and indicators.	Synthesis of available data relating to each component; Analysis of degree to which evidence meets criteria for relatedness; Consensus process; Decision rules that specify the value of components without an established evidence base."
2. Examine the measurement strategies and psychometric properties of the measures used to assess quality.	Rating data from participating programs. Data from additional quality measures.	Most such data are collected as part of program ratings. Additional quality measures may be collected to allow comparisons with measures being used in the QRIS.	Distribution of provider scores on a given component; Correlations among components; Correlations of selected components with other measures.
3. Assess the outputs of the rating process	Program-level ratings from participating programs. Raw scores from measures of quality that are included in the rating. Data from additional quality measures that are not included in the rating.	Most of the necessary data are collected as part of program ratings. Another measure of quality may be administered to allow comparisons with program ratings.	Examination of rating distributions by program type; Correlations of program ratings with other measures; Changes in rating distributions using different cut scores.
4. Relate ratings to expected child outcomes.	Program rating data from participating programs. Assessments of child functioning.	Program rating data are collected as part of program ratings. Trained, reliable independent assessors collect data from individual children (may be a designated sample). Teacher reports on individual children.	Estimate the relationship between program ratings and child outcomes.

Approach 1: Examine the validity of key underlying concepts. This approach involves examination of the elements or concepts that are to be included in program ratings. It is an important validation activity because it provides the foundation for the quality components, standards and indicators that together will produce program-level ratings and that will be the focus of quality improvement activities. Together, the components included in ratings, (e.g., staff qualifications, learning environment, family engagement) define quality for the QRIS. This validation activity provides justification and support for the elements of the QRIS. If the examination includes stakeholders, the process can also promote buy-in for the QRIS.

This validation approach asks whether quality components, standards and indicators included in a QRIS are the "right" ones, and is similar to what is proposed in the Toolkit, under *Validating Quality Standards* (Lugo-Gil et al., 2011). Because this effort addresses the cornerstone concepts and measures of the QRIS, it ideally would be conducted prior to the implementation of the QRIS.

For QRISs, the key concept is quality of care. The quality of care in early childhood education and school-aged care (ECE-SAC) programs is a complex, multi-dimensional construct; this complexity is amplified in centers by the fact that programs are comprised of multiple classrooms staffed by multiple individuals. Quality can be operationalized using a number of specific quality components. However, most QRISs have adopted similar ones. The QRIS Compendium found that six quality components were included in the majority of the 26 QRIS that were examined (Tout et al., 2010). These categories include licensing compliance (26 QRISs), classroom environment (24 QRISs), staff qualifications (26 QRISs), family partnership (24 QRISs), administration and management (23 QRISs) and accreditation (21 QRISs). Three categories—curriculum (14 QRISs), ratios and group size (13 QRISs), and child assessment (11 QRISs)—are included in half or just under half of the QRISs assessed. However, while similarities exist in the general quality components included in QRISs, the way in which each of these components of quality is measured varies substantially.

One activity that can help to validate a QRIS' underlying concepts involves assessing the degree to which the quality components in the QRIS rating include standards and indicators that have an empirical base linking them to key program, family and child outcomes. This assessment might include an examination of the degree to which each element as operationalized in the QRIS is viewed by experts as a valid measure of the component. A number of states (including Delaware, Rhode Island, Minnesota and Virginia) have used a systematic expert review process to help identify which quality components (and the standards and indicators that comprise each component) to include in their QRIS. Attention might also be paid to the views of programs and parents about the degree to which selected components reflect their priorities. For example, focus groups with parents were conducted in Minnesota to inform the development of the final rating tool used in the QRIS pilot (Minnesota Department of Education and Minnesota Department of Human Services, 2007)

Another activity which is part of this approach involves examining the research literature to determine the level of empirical support for each proposed component. This review would examine the research base on the proposed standards and indicators selected to represent program quality. The review would weigh the existing evidence and provide arguments for why a particular quality component should be included or excluded from the QRIS.

Purdue University's scientific review of the quality standards contained in Paths to Quality, Indiana's QRIS, demonstrates this approach. The overall goal of the review was to conduct an "external evaluation of the scientific validity" of the Paths to Quality standards (Elicker et al., 2007). The study included review of available evidence for the importance of each of the four quality components--Health and Safety, Learning Environment, Planned Curriculum, and National Accreditation-- and the relationship of the standards and indicators of each component to other measures of quality and to children's development and well-being. The review used standards of evidence to classify each proposed indicator. For example, one or two well-designed studies that supported the indicator was classified as "some evidence;" "substantial evidence" required more than five such studies. For three-quarters of the indicators, researchers found "substantial evidence" that they supported children's development.

Like many validation activities, such reviews ideally would be updated from time to time to determine if revisions to the QRIS would be advisable in light of new research findings. Such a review might utilize such tools as the *QRS Compendium* (Tout et al., 2010) or *Caring for Our Children* (AAP/APHA/NRC, 2011) as well as other recently published findings.

Approach 2: Examine the measurement strategies and the psychometric properties of the measures used to assess quality. A second type of validation effort focuses on the attributes of the individual measures in the QRIS as well as on the way in which the measures are combined to produce the summary rating of program quality. This approach is similar to what is discussed in the QRIS Evaluation Toolkit under Validating the Construction of Quality Levels (Lugo-Gil et al., 2011). This approach addresses how well the measures are working in the context of the QRIS. These efforts ask questions such as, "is there evidence that a given indicator measures what it purports to measure?" "If it claims to have a specific number of dimensions, do we find those dimensions in our data?" "Is there sufficient variance in scores on this indicator to justify its inclusion in the QRIS?" "Do scores on the indicator covary in expected ways with other measures of quality?"

Efforts to address these issues might involve an assessment of the distribution of participating provider scores on a given rating element. For example, in Zellman et al.'s (2008) evaluation of Colorado's QRIS, initial work revealed that the measure of family engagement then in use produced very little variation across programs; all programs achieved the highest score possible on this measure. This meant that the QRIS was expending substantial resources to collect data on a measure that did not differentiate among programs. Another validation activity might involve an assessment of the relationship of a given indicator to other indicators of quality, both those included in the QRIS and others. In such studies, it is important to look at the degree of correlation found: ideally, measures would be moderately correlated so that each measure provides some non-redundant program quality information (see Zellman et al., 2008 for an example). Correlation patterns also should make sense. For example, two measures of interaction quality should be more closely related to each other than to a measure of ratios. If such studies reveal for example that the correlation between ratios and interaction processes is very high, this result might argue for eliminating one or the other indicator from the QRIS, as they may not be providing additional information (although some QRISs include certain elements to ensure that they are paid attention to, even if their psychometric properties are not ideal).

The research literature provides limited guidance concerning the most appropriate ways to combine measures of quality elements into summary ratings (Lugo-Gil et al., 2011; Tout et al., 2009; Zellman et al., 2008). Yet this process is crucial to producing meaningful program quality ratings, which are the key output of the rating process. States that are collecting and combining data could use these data to conduct studies that examine the effects of altering cut scores or combination rules, much as Karoly and Zellman (2012) have done in a "virtual pilot" for California's QRIS, using data collected for another purpose, or as was done in studies in Minnesota (Tout et al., 2011) and Kentucky (Isner et al., 2012). These efforts will help QRIS designers and policy makers consider how well indicators are working, which indicators appear to be picking up variations in quality, and how closely different indicators relate to each other.

A number of other existing studies examine the properties of proposed QRIS indicators and can provide guidance to QRIS validation efforts (Scarr, Eisenberg, & Deater-Decker, 1994; Zellman & Perlman, 2008; Tout et al, 2011; McWayne & Melzi, 2011). Additionally, tools exist to help QRIS stakeholders review the options for QRIS measures and to support decision-making about the inclusion of new measures. For example, a Quality Measures Compendium is available and updated on a regular basis (Halle, Vick-Whittaker, & Anderson, 2010). If promising new measures are developed, it might be worthwhile to examine the performance of a new measure against the measure in current use.

Approach 3: Assess the outputs of the rating process. A third validation approach focuses on assessing the outputs of the rating system: the scores and levels that are assigned to providers who undergo a rating. Studies conducted under this approach examine the degree to which the quality levels in the QRIS are meaningfully distinct from each other. The results of these studies may indicate that measures, cut scores, or rules for combining measures need changing in order to distinguish quality levels effectively. Because these studies can result in proposals for significant changes to the composition of QRIS levels, it is helpful for these studies to occur prior to studies that examine associations between quality levels and children's development.

Output studies may focus on individual indicator scores, such as how providers score on an environmental rating, as well as on the program-level score that is the final output of the rating process. Studies conducted as part of this approach ask questions like, "are providers that received four stars actually providing higher quality care than those that earned three stars?" Studies using this approach may also address questions about cut scores, e.g., "do different cut scores produce dramatically different program-level ratings, and if so, which cut scores produce distributions that most closely relate to other measures of quality?" These studies typically rely on a measure of quality not included in the QRIS to make this assessment, and examine whether assessments on both measures vary in predictable ways.

The University of Southern Maine is conducting a validation study of Maine's QRIS to assess similarities and differences across program ratings; the study is also examining what if any differences exist between similar types of programs at different step levels (see Lahti et al., forthcoming, for further details on this study and several others.) For example, researchers in Maine administer the Environment Rating Scales (ERS; Harms & Clifford; 1989; Harms, Clifford & Cryer, 2005; Harms, Cryer & Clifford, 2006; Harms, Cryer & Clifford, 2007), which are not used to establish a rating in Maine's QRIS, and examine whether there are statistically significant differences in ERS scores between programs at different rating levels. These findings help program designers determine if the quality levels determined by QRIS ratings relate in expected ways to an external measure of global quality.

As a second example of validation studies using this approach, Karoly and Zellman (2012) used data collected for another purpose to model some of the features of a newly-designed California QRIS. The data come from a 2007 survey of center-based providers that is representative of the state. Observations were conducted in 251 centers serving children birth to 5. The purpose of this "virtual pilot" study was to determine the likely distribution of programs across QRIS tiers using specified cut points, examine the association among quality components, and to identify "outlier" quality elements on which otherwise well-rated programs tend to score poorly. This information is very valuable at the design phase; data on "outlier" elements is particularly helpful in understanding what it will take for programs to improve their rating in a QRIS that uses a block design to designate ratings (in which all indicators at one level must be met before a rating at the next level is possible). By examining such things as the relationship between scores on the Classroom Assessment Scoring System (CLASS; Pianta, La Paro & Hamre, 2008) and the Early Childhood Environment Rating Scale - Revised (ECERS-R; Harms, Clifford & Cryer, 2005), and the relationship between staff education and training and other measures of quality, the work can help policymakers assess the value of different measures of quality, provide input into establishing cut scores, and suggest targets for technical assistance efforts.

Other states also have conducted validation studies that focus closely on differences in QRIS levels. For example, Pennsylvania has studied programs participating in the Keystone STARS QRIS (Fiene, Greenberg, Bergsten, Fegley, Carl, & Gibbons, 2002; Barnard, Smith, Fiene, & Swanson, 2006; OCDEL (Office of Child Development and Early Learning), 2010; Manlove, Benson, Strickland, & Fiene, 2011) to determine if their program ratings were indicative of quality differentials across program types and services. Similarly, recent work in Indiana (Elicker, Langill, Ruprecht, Lewsader & Anderson, 2011) found that ERS scores varied with program-level ratings, while research in Minnesota found significantly higher scores on the ERS and CLASS only between the highest level (4-star) of the QRIS and the other rating levels (2- and 3-stars) (Tout et al., 2011). These findings are being used by program developers to make needed adjustments to quality indicators, metrics and cut scores.

Approach 4: Relate ratings to children's development. A fourth approach to validation focuses on children's development. It is similar to the Toolkit's Linkages between quality levels and desired outcomes, although it focuses more narrowly on child outcomes. For QRISs, the logic model asserts that higher quality care will be associated with better child outcomes. Therefore, one important piece of validation evidence concerns whether children make greater developmental gains in programs with higher program-level ratings than in programs with lower ratings.

Studies using this approach do not attempt to identify causal linkages between *QRIS participation* and children's outcomes. Instead, they examine whether the QRIS ratings and quality components that comprise the ratings are related in expected ways to measures of children's development. Appropriate designs and controls could allow causal inferences to be made about how *quality* (as measured and rated by the QRIS) influences children's outcomes.

To date, few QRIS validation studies have incorporated children's outcomes as they are costly and difficult to conduct. As Elicker and Thornburg (2011) note, results from such studies are mixed, at least in part because of the challenges of conducting them. A primary challenge is the inability to control for all the factors that may vary between children whose families have selected different programs. Additional challenges include recruitment of programs and children across all quality levels; availability of appropriate outcome measures for children of diverse ages, abilities, cultures and linguistic backgrounds; and, lack of variation in the quality of participating QRIS programs.

In Missouri, children who participated in programs with higher quality ratings showed significantly greater gains on measures of social-emotional development compared to children in programs with lower ratings (Thornburg et al., 2009). These effects were even more pronounced for low-income children. However, in an evaluation of Colorado's QRIS, linkages between the ratings and children's outcomes were not found (Zellman et al., 2008). Recent reports from Indiana (Elicker, Langill, Ruprecht, Lewsader, & Anderson, 2011) and Minnesota (Tout et al., 2011) found no consistent relationships between program ratings and measures of child outcomes. A number of possible explanations were offered for the lack of expected linkages, including overall low levels of quality in participating QRIS programs (perhaps not meeting a threshold of quality necessary to detect linkages with child outcomes; see Zaslow et al., 2010 for further discussion of quality thresholds) and a lack of variation among participating programs and families. Yet, even with these limitations, program administrators in both Indiana and Minnesota have used the findings to recommend changes to the structure and content of the QRIS.

Developing a Validation Plan

Given the complexity of validation, it is advisable to develop a plan for system validation as early as possible in the QRIS design process. Ideally, the validation plan will be part of a larger evaluation plan designed to address a wider range of important questions the answers to which will guide refinement of the QRIS and its implementation. The plan should include the key questions that will be addressed and the methods to be used to address each one. One advantage of developing a plan early is that it may highlight opportunities to conduct a number of the proposed efforts as part of the implementation of the QRIS itself or as part of planned evaluation activities. A comprehensive approach to validating a QRIS ideally will include studies under each of the four approaches described above. Table 3 outlines issues in the timing of validation studies, discusses their relative cost, and suggests strategies for addressing validation questions if resources do not permit the implementation of validation studies.

Table 3. Considerations in Developing a Validation Plan

Approach	Timing and Duration	Cost considerations	Options to consider ^{IV}
1. Examine the validity of key underlying concepts	Ideally conducted prior to QRIS implementation. Study should be able to be completed within 3-6 months.	Relatively inexpensive. This work can be contracted to a local university, consultant or research firm.	Many states are using similar concepts and measures; their efforts will provide useful information. V
2. Examine the measurement strategies and psychometric properties of the measures used to assess quality	Must wait until ratings are implemented, although individual measures themselves might be available from other sources and could be examined earlier. VI	Depends on data quality and amount of analysis. Additional measures will increase costs, particularly if the measure is observational.	Can rely to some extent on existing research on each of the components. Consider using available data for a "virtual pilot." VII
3. Assess the outputs of the rating process	Must wait until ratings are implemented. Once data are available, several studies could be conducted using the same data set.	Depends on data quality and amount of analysis. Additional measures will increase costs, particularly if the measure is observational.	This work is state system- dependent so is not readily borrowed, though lessons learned about structure and cut-points can be shared across QRISs.
4. Relate ratings to children's development	Best to launch these studies when the QRIS rating process is stable and adequate numbers of programs have been rated.	Costs for the collection of child data are very high. Study could be done just with one cohort of children and two rounds of data collection (fall and spring) to assess developmental gains.	Requires significant funds, a powerful research design, and research expertise. Sampling children and programs will substantially reduce costs.

Summary and Conclusions

Validation is a complex, ongoing, iterative process. The objective of validation activities is to understand whether the rating process is able to distinguish among programs of different quality levels and whether program ratings are associated in meaningful ways to children's outcomes.

Validation activities help to determine whether key design decisions are working well in practice. States and localities that have implemented QRISs are expending substantial resources to train raters, fund ratings, support various forms of technical assistance, and provide a range of improvement incentives. All of these efforts assume that the ratings are accurate and the system is performing as intended. QRIS design decisions often rely heavily on the judgments of experts and on colleagues in other states, because there is limited empirical data on which to base them. For this reason, it is critical for states to set in place a process for assessing how well the design decisions underlying the system are working. Validation activities do this.

Ideally, validation is an ongoing process based on a carefully designed validation plan. The plan should include all four validation approaches, although resource constraints may limit these efforts, and may particularly limit studies that include child outcomes. A good validation plan, thoughtfully developed and implemented, can provide information critical to improving the system at many points in the process, and increase the odds of its ultimate success. Validation is unquestionably challenging, but no more so than the launch and operation of a QRIS or its evaluation. The networks and references in the next section can help states develop a deeper understanding of validation approaches and help them construct and implement validation plans that address stakeholder and system needs and produce timely and valuable information.

Resources and References

Resources

INQUIRE - Quality Initiatives Research and Evaluation Consortium

http://www.acf.hhs.gov/programs/opre/cc/childcare_technical/index.html

The purpose of INQUIRE is to support high quality, policy-relevant research and evaluation on Quality Rating and Improvement Systems and other quality initiatives by providing a learning community and resources to support researchers and evaluators. INQUIRE also provides input and information to state administrators and other policymakers and practitioners on evaluation strategies, new research, interpretation of research results, and implications of research for practice. Research briefs are available on topics related to QRIS evaluation issues and strategies.

CCEERC – Child Care and Early Education Resource Connections

http://www.childcareresearch.org/ search under Quality Rating and Improvement Systems.

This site has many additional reports and resources, such as:

Quality Rating Systems: A Key Topic Resource List. New York: Child Care & Early Education Research Connections.

http://www.researchconnections.org/files/childcare/keytopcis/QualityRatingSystems.pdf

This resource list is an annotated bibliography of selected research focused on the design, implementation, and evaluation of Quality Rating Systems and Quality Rating and Improvement Systems in early childhood and after school settings.

The Child Care Quality Rating System (QRS) Assessment

Tout, K., Starr, R., Soli, M., Moodie, S., Kirby, G. & Boller, K. (2010). *The Child Care Quality Rating System (QRS) Assessment: Compendium of Quality Rating Systems and Evaluations, OPRE Report.* Washington, DC:

Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

http://www.acf.hhs.gov/programs/opre/cc/childcare_quality/compendium_qrs/qrs_compendium_final.pdf

Describing 26 Quality Rating Systems nationwide (19 statewide and 7 local or pilot), the Compendium

presents comprehensive information through cross-QRS matrices and individual QRS profiles.

Lugo-Gil, J., Sattar, S., Boss, C., Boller, K. Tout, K., & Kirby, G. (2011). *The Quality Rating and Improvement System (QRIS) Evaluation Toolkit. OPRE Report #2011-31.* Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research, and Evaluation. http://www.acf.hhs.gov/programs/opre/cc/childcare quality/qris toolkit/qris toolkit.pdf

The QRS Assessment Toolkit will provide guidance, recommendations and evaluation support on a range of topics including: development of a logic model and research questions, evaluation design and methods, and selection of measures.

QRIS National Learning Network

http://grisnetwork.org/

The Network provides information, learning opportunities, and direct technical assistance to states that have a QRIS or that are interested in developing one. Its National Resource Library assists states in learning more about QRIS and their elements and in QRIS planning. The library contains, toolkits, handouts and published documents on a variety of searchable topic areas.

The Networks' State Resource Library contains detailed QRIS implementation information, including training guides, forms, and technical assistance materials that individual states have developed for their QRIS.

State QRIS Contacts who have agreed to serve as peer resources for one another are listed, as are Technical Assistance Providers.

Additional Resources

Lahti, M., Langill, C., Sabol, T., Starr, R., & Tout, K., (in progress). *Validating Standards in Child Care Quality Rating and Improvement Systems: Exploring Validation Activities in Four States, OPRE Report.* Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

This report will provide case studies of four states that have undertaken validation studies in their respective states. This report provides validation and evaluation approaches, identification of similar QRIS standards amongst the four states, description of cross case analysis QRIS validity issues and the results of the validation conceptual model from this brief examining the following: concepts of quality, measures used to assess quality, outputs or scores of the rating process, and if ratings are related to expected outcomes. It is the companion document to supplement this guide in which four states validation experiences are highlighted.

Halle, T., Vick Whittaker, J. E., & Anderson, R. (2010). *Quality in Early Childhood Care and Education Settings: A Compendium of Measures, Second Edition*. Washington, DC: Child Trends. Prepared by Child Trends for the Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

http://www.acf.hhs.gov/programs/opre/cc/childcare_technical/reports/complete_compendium_full.pdf

The Quality in Early Childhood Care and Education Settings: A Compendium of Measures, Second Edition was compiled by Child Trends for the Office of Planning, Research and Evaluation of the Administration for Children and Families, U.S. Department of Health and Human Services, to provide a consistent framework with which to review the existing measures of the quality of early care and education settings. The aim is to provide uniform information about quality measures. It is hoped that such information will be useful to researchers and practitioners, and help to inform the measurement of quality for policy-related purposes.

References

American Educational Research Association, American Psychological Association, National Council on Measurement in Education [AERA/APA/NCME]. (1999). *Standards for educational and psychological testing*. Washington, DC: American Psychological Association.

American Academy of Pediatrics, American Public Health Association, & National Resource Center for Health and Safety in Child Care (AAP/APHA/NRCHSCC) (2011). *Caring for our children: National health and safety performance standards guidelines for early care and education programs*. Elk Grove Village, Illinois: American Academy of Pediatrics.

Anastasi, A. (1986). *Psychological testing (5th ed.)*. NY: Macmillan.

Barnard, W., Smith, W., Fiene, R., & Swanson, K. (2006). *Evaluation of Pennsylvania's Keystone STARS quality rating system in child care settings*. Pittsburgh, Pennsylvania: University of Pittsburgh Office of Child Development.

Cizek, Gregory J. Introduction to Validity. Presentation to the National Assessment Governing Board of NAEP. August, 2007.

Elicker, J., Langill, C., Ruprecht, K., & Kwon, K. (2007). *Paths to quality: A child care quality rating system for Indiana: What is its scientific base.* West Lafayette, IN: Purdue University.

Elicker, J., & Thornburg, K. (2011). Evaluation of quality rating and improvement systems in early childhood programs and school age care: measuring children's development, research to policy, research to practice brief OPRE 2011-11c. Washington, DC: Department of Health and Human Services, Administration of Children and Families, Office of Planning, Research, and Evaluation.

Elicker, J., Langill, C.C., Ruprecht, K., Lewsader, J., & Anderson, T. (2011). Evaluation of "Paths to QUALITY", Indiana's child care quality rating and improvement system. West Lafayette, IN: Purdue University.

Embretson, S.E. (1983). Construct validity: Construct representation versus nomothetic span. *Psychological Bulletin*, 93(1), 179-197.

Fiene, R., Greenberg, M., Bergsten, M., Fegley, C., Carl, B., & Gibbons, E. (2002). *The Pennsylvania early childhood quality settings study*. Harrisburg, Pennsylvania: Governor's Task Force on Early Childhood.

Guion, R.M. (1977). Content validity - The source of my discontent. Applied Psychological Measurement, 1, 1-10.

Halle, T., Vick-Whittaker, J. E., & Anderson, R. (2010). *Quality in Early Childhood Care and Education Settings: A Compendium of Measures, Second Edition*. Washington, DC: Child Trends. Prepared by Child Trends for the Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Harms, T., & Clifford, R. (1989). *Family Day Care Environmental Rating Scale*. New York: Columbia University Teachers College Press.

Harms, T., Clifford, R., & Cryer, D. (2005). *Early Childhood Environmental Rating Scale – Revised*. New York: Columbia University Teachers College Press.

Harms, T., Cryer, D., & Clifford, R. (2006). *Infant Toddler Environmental Rating Scale – Revised*. New York: Columbia University Teachers College Press.

Harms, T., Cryer, D. & Clifford, R. (2007). *Family Day Care Environmental Rating Scale – Revised*. New York: Columbia University Teachers College Press.

Isner, T., Soli, M., Rothenberg, L., Moodie, S., & Tout, K. (2012). *Alternative rating structures for Kentucky STARS for KIDS NOW, Evaluation Brief #6*. Washington, D.C.: Child Trends.

Kane, M. T. (2001). Current concerns in validity theory. Journal of Education Measurement, 38, 319-42.

Kane, M. T. (2006). Validation. In R. Brennan (Ed.) Educational Measurement, 4th edition (pp. 17-64). Westport, CT: Praeger.

Karoly, L. A. and Zellman, G.L. (2012). How Would Programs Rate Under California's Proposed Quality Rating and Improvement System? Evidence from Statewide and County Data on Early Care and Education Program Quality. Santa Monica, CA: RAND Corporation.

Keyes, C. (2002). A way of thinking about parent/teacher partnerships for teachers. *International Journal of Early Years Education*, 10(3), 177 – 191.

Kontos, S. (1987). The attitudinal context of family day care relationships. In D. Peters & S. Kontos (Eds.), Continuity and discontinuity of experience in child care (pp. 91 - 113). Norwood, NJ: Ablex Publishing.

Lugo-Gil, J., Sattar, S., Boss, C., Boller, K., Tout, K., & Kirby, G. (2011). *The Quality Rating and Improvement System (QRIS) Evaluation Toolkit. OPRE Report #2011-31.* Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research, and Evaluation.

Manlove, E., Benson, M., Strickland, M., & Fiene, R. (2011). *A comparison of regulated child care in rural and urban Pennsylvania*. Harrisburg, Pennsylvania: The Center for Rural Pennsylvania.

McGrath, W. (2007). Ambivalent partners: Power, trust, and partnerships in relationships between mothers and teachers in a full-time child care center. *Teachers College Record*, 109(6), 1401 – 1422.

McWayne, C. & Melzi, G., (2011). Family engagement during preschool, paper presented to the Head Start Advisory Committee on Research and Evaluation, Washington DC.

Messick, S. (1975). The standard problem: Meaning and values in measurement and evaluation. *American Psychology*, 30, 955-966.

Messick, S. (1980). Test validity and the ethics of assessment. American Psychologist, 35, 1012-1027.

Minnesota Department of Education and Minnesota Department of Human Services. (January, 2007). *Child care information and rating system – parent focus group results*. DHS-4965-ENG 1-07. St. Paul, MN.

Office of Child Development and Early Learning (OCDEL) (2010). *Keystone STARS Program Report*. Harrisburg, Pennsylvania: Department of Public Welfare.

Pianta, R.C., La Paro, K.M., & Hamre, B.K. (2008). *Classroom Assessment and Scoring System (CLASS)*. Baltimore, MD: Paul H. Brookes Publishing Co, Inc.

Scarr, S., Eisenberg, M., & Deater-Deckard, K. (1994). Measurement of quality in child care centers. *Early Childhood Research Quarterly*, 9, 131-151.

Shimoni, R. (1992) Parent involvement in early childhood education and day care, *Sociological Studies of Child Development*, 5, 73–95.

Tenopyr, M.L. (1977). Content-construct confusion. *Personnel Psychology*, 30, 47-54.

Thornburg, K., Mayfield, W.A., Hawks, J.S., & Fuger, K.L. (2009). *The Missouri Quality Rating System School Readiness Study*. University of Missouri–Columbia. Center for Family Policy and Research.

Tout, K., Zaslow, M., Halle, T., & Forry, N. (2009). *Issues for the Next Decade of Quality Rating and Improvement Systems,* OPRE Issue Brief. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Tout, K., Starr, R., Soli, M., Moodie, S., Kirby, G. & Boller, K. (2010). *Compendium of Quality Rating Systems and Evaluations*. OPRE Report. Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Tout, K., Starr, R., Isner, T., Cleveland, J., Albertson-Junkans, L., Soli, M., & Quinn, K. (2011). *Evaluation of Parent Aware: Minnesota's Quality Rating and Improvement System Pilot, Final Evaluation Report*. Produced for the Minnesota Early Learning Foundation. Minneapolis, MN: Child Trends.

Zaslow, M., Anderson, R., Redd, Z., Wessel, J., Tarullo, L. & Burchinal, M. (2010). *Quality Dosage, Thresholds, and Features in Early Childhood Settings: A Review of the Literature*, OPRE 2011-5. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Zellman, G.L., Brandon, R.N., Boller, K., & Kreader, J.L. (2011). *Effective evaluation of quality rating and improvement systems for early care and education and school-age care, Research-to-Policy, Research-to-Practice Brief* OPRE 2011-11a. Washington, DC: Office of Planning, Research and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Zellman, G. L., & Karoly, L.A. (2012). *Incorporating Child Assessments into State Early Childhood Quality Improvement Initiatives*. Santa Monica, CA: RAND Corporation.

Zellman, G.L., & Karoly, L.A. (2012). *Moving to Outcomes: Approaches to Incorporating Child Assessments into State Early Childhood Quality Rating and Improvement Systems*. Santa Monica, CA: RAND Corporation, OP-364-PF.

Zellman, G.L. & Perlman, M. (2006). Parent involvement in child care settings: Conceptual and measurement issues. *Early Child Development and Care*, 176(5), 521-538.

Zellman, G. L., & Perlman, M. (2008). *Child-Care Quality Rating and Improvement Systems in Five Pioneer States: Implementation Issues and Lessons Learned*. Santa Monica, CA: RAND Corporation.

Zellman, G. L., Perlman, M., Le, V., & Setodji, C. M. (2008). *Assessing the validity of the Qualistar Early Learning quality rating and improvement system as a tool for improving child-care quality*. (MG-650-QEL). Santa Monica, CA: RAND Corporation.

Endnotes

- Validity is not attached to a measure, but to a measure used for a particular purpose in a particular context. This means that measures which may be valid for one use must be validated again for use in a different context (AERA, APA, & NCME, 1999). Measures developed in low-stakes contexts, e.g., for use in research or program self-assessments, must be validated again in high-stakes contexts because those being assessed may react in high-stakes contexts in ways that could undermine the meaningfulness of interpretations derived from those measures (AERA, APA, & NCME, 1999).
- "Some components such as parent involvement have been included in QRISs even when strong empirical support of the ability of measures to distinguish among programs of different quality was lacking because designers believed that if they were not, programs would ignore these components in favor of measured ones.
- Random assignment of children to programs with different quality ratings is not possible in QRIS. Alternative analytic approaches must be used that employ adequate controls for selection bias. See Zellman and Karoly (2012) for further discussion of this approach.
- This column recognizes that state budgets are limited and validation is rarely seen as the highest priority. Ideally, states might combine data and efforts to conduct some of these studies.
- ^v Ideally, states might combine data and efforts to conduct some of these studies.
- VI However, as noted above, measures collected in low-stakes and high-stakes settings cannot be assumed to be comparable.
- VII It may be possible to use existing data to test assumptions and measures. See, for example, Karoly and Zellman (2012), for a description of such work in California.

Regulatory Compliance, Licensing, and Monitoring Measurement Principles: Rule Compliance Versus Rule Performance

Richard Fiene, Ph.D.

January 2021

The purpose of this short paper is to delineate the parameters of regulatory compliance, licensing and monitoring measurement principles (throughout this paper the term "regulatory compliance" will be used to encompass these principles). Regulatory compliance is very unique when it comes to measuring it because it is very different from other measurement systems and this impacts how one uses various statistical analyses. In this paper, the limitations of the measurement system will be highlighted with potential solutions that have been devised over the past several decades. Hopefully this paper will add to the measurement and statistical analysis licensing research literature. It is meant for those agency staff who are responsible for designing regulatory compliance, licensing and monitoring systems. Its focus is the human services but the basic principles can be applied to any standards-based system that is based upon a compliance or performance model.

The organization of this paper is as follows. First, let's introduce what is included when we talk about measurement principles for regulatory compliance, licensing and monitoring systems. Second, provide examples that should be familiar to most individuals who have been involved in the human services, in particular the early care and education field. Third, what are the limitations of these various systems that have been identified in the research literature. Fourth, what are some potential solutions to these limitations. And, fifth, what are the next steps and where do we go to build reliable and valid measurement systems dealing with regulatory compliance, licensing, and program monitoring as these relate to the human services delivery system.

So, what is included in this approach. I can be any rule, regulation, or standard based measurement system. Generally, these systems are focused on a nominally based system, sometimes they will be ordinally based. By a nominally based system, either the facility being assessed is in compliance with a particular set of rules, regulations, or standards or it is not. In an ordinally based system, a facility may attain a score on a Likert scale, such as 1 through 5 where 1 is non-optimal and 5 is excellent. These types of measurement scales involve a performance component and are not limited to more of a compliance focus as is the case with a nominally based system. These distinctions are important as one will see later in this paper when it comes to the selection of the appropriate statistics to measure data distributions and the subsequent analyses that can be undertaken.

What are examples of these types of systems? For nominally based systems, just about all the licensing systems in the USA, Canada and beyond employ this type of measurement strategy. As has been said in the previous paragraph, either there is compliance or there is not. It is very black or white, there are not shades of gray. For ordinally based systems, these systems are a bit more diverse. Accreditation, Quality Rating and Improvement Systems (QRIS), the new Head Start Grantee Performance Management System (GPMS), the Environmental Rating Scales, and the CLASS are all examples of ordinally based systems based upon a Likert type measurement system. There are many others, but as

a research psychologist whose total career (50 years) has been spent in early care and education, this has been the focus of my research.

The limitations of the above systems are numerous and, in some ways, are difficult to find solutions. In the past, these measurement systems have focused more on the descriptive aspects of data distributions rather than attempting to be predictive or inferential. The first major limitation of the data from regulatory compliance systems is the fact that the data distribution is markedly skewed. What does skew data mean? Most data distributions are normally distributed with very few occurrences at the extremes with the majority of the cases in the middle section of the measurement scale. IQ is an example of a normally distributed data distribution. In a skew data distribution, the majority of data are at one end of the data distribution, either at the positive end or the negative end of the distribution. With regulatory compliance data, it is at the positive end with the majority of facilities being in full or 100% compliance with the rules. Very few of the facilities are at the negative end of the distribution.

What is the big deal? The big deal is that statistically we are limited in what we can do with the data analyses because the data are not normally distributed which is an assumption when selecting certain statistical tests. Basically, we need to employ non-parametric statistical analyses to deal with the data. The other real limitation is in the data distribution itself. It is very difficult to distinguish between high and mediocre facilities. It is very easy to distinguish between high and low performing facilities because of the variance between the high performing facilities and the low performing facilities. However, that is not the case between high and mediocre preforming facilities. Since the majority of facilities are either in full or substantial compliance with the rules, they are all co-mingled in a very tight band with little data variance. This makes it very difficult to distinguish differences in the facilities. And this only occurs with regulatory compliance data distributions. As will be pointed later in this paper, this is not the case with the second measurement system to be addressed dealing with ordinal measurement systems.

There is also a confounding factor in the regulatory compliance data distributions which has been termed the theory of regulatory compliance or the law of regulatory compliance diminishing returns. In this theory/law, when regulatory compliance data are compared to program quality data, a non-linear relationship occurs where either the facilities scoring at the substantial compliance level score better than the fully compliant facilities or there is a plateau effect and there is no significant difference between the two groups: substantial or fully compliant facilities when they are measured on a program quality scale. From a public policy stand point, this result really complicates how best to promulgate compliance with rules. This result has been found repeatedly in early care and education programs as well as in other human service delivery systems. It is conjectured that the same result will be found in any regulatory compliance system.

Another limitation of regulatory compliance data is the fact that it is measured at a nominal level. There is no interval scale of measurement and usually not even an ordinal level of measurement. As mentioned above, either a facility is in compliance or not. From a statistical analytical view, again this limits what can be done with the data. In fact, it is probably one of the barriers for researchers who would like to conduct analyses on these data but are concerned about the robustness of the data and their resulting distributions.

Let's turn our attention to potential solutions to the above limitations in dealing with regulatory compliance data.

One potential solution and this is based upon the theory of regulatory compliance in which substantial compliance is the threshold for a facility to be issued a license or certificate of compliance. When this public policy determination is allowed, it opens up a couple of alternate strategies for program monitoring and licensing reviews. Because of the theory of regulatory compliance/law of regulatory compliance diminishing returns, abbreviated or targeted monitoring reviews are possible, differential monitoring or inferential monitoring as it has been documented in the literature. This research literature on differential monitoring has been dominated by two approaches: licensing key indicators and weighted risk assessments.

A second solution to the above limitations deals with how we handle the data distribution. Generally, it is not suggested to dichotomize data distributions. However, when the data distribution is significantly skewed as it is with regulatory compliance, it is an appropriate adjustment to the data. By essentially having two groups, those facilities that are in full compliance and those facilities that are not in full compliance with the rules. In some cases, the fully compliant group can be combined with those facilities that are in substantial compliance but this should only be employed when there are not sufficient fully compliant facilities which is hardly never the case since population data and not sampled data are available from most jurisdictions. When data samples were drawn and the total number of facilities were much smaller, substantial compliant facilities were used as part of the grouping strategy. The problem in including them was that it increased the false negative results. With them not being included, it is possible to decrease and eliminate false negatives. An additional methodological twist is also to eliminate and not use the substantial compliant facilities at all in the subsequent analyses which again helps to accentuate the difference scores between the two groups of highly compliant and low compliant scoring facilities.

The next steps for building valid and reliable regulatory compliance systems are drawing upon what has been learned from more ordinally based measurement systems and applying this measurement structure to regulatory compliance systems. As such, the move would be away from a strict nominally based measurement to more ordinal in which more of a program quality element is built into each rule. By utilizing this paradigm shift, additional variance should be built into the measurement structure. So rather than having a Yes/No result, there would be a gradual Likert type (1-5) scale built in to measure "rule performance" rather than "rule compliance" where a "1" indicates non-compliance or a violation of the specific rule. A "5" would indicate excellent performance as it relates to the specific rule. A "3" would indicate compliance with the specific rule meeting the specifics of the rule but not exceeding it in any way.

This paradigm shift has led to the creation of Quality Rating and Improvement Systems (QRIS) throughout the USA because of a frustration to move licensing systems to more quality focused. The suggestion being made here is to make this movement based upon the very recent developments in designing such systems as is the case with Head Start monitoring. Head Start GPMS is developing an innovative Likert based ordinal system which incorporates compliance and performance into their monitoring system. Other jurisdictions can learn from this development. It is not being suggested as a replacement for QRIS or accreditation or ERS/CLASS assessments but as a more seamless transition from licensing to these various assessments. As indicated by the theory of regulatory compliance and the law of regulatory compliance diminishing returns, this relationship between licensing and program quality is not linear. By having this monitoring system approach in place, it may be able to reintroduce more of a linear relationship between licensing and program quality.

RIKI Technical Research Note on the Licensing Key Indicator Predictor Methodology Threshold Updates, Regulatory Compliance, False Positives & Negatives, Data Dichotomization, and Licensing Measurement

April 2021

The purpose of this technical research note is to provide the latest updates to the Key Indicator Predictor Methodology and associated measurement issues, such as eliminating or reducing false positives and negatives, the use of data dichotomization with regulatory compliance frequency distributions.

It has always been recommended that a data dichotomization model be employed in distinguishing between the highly regulatory compliant from the low levels of regulatory compliance. The suggested model was 25/50/25 in which the top 25% constituted the highly compliant group, the middle 50% constituted the substantial – mid range compliant group, and the bottom 25% constituted the low compliant group. This was different from what had been done in the past in which fully compliant (100%) facilities were compared with those facilities who had any violations of regulatory compliance. It was found that by utilizing the 25/50/25 model a clearer distinction could be made between the high and low compliant groups. Generally, the top 25% are those facilities that are in full (100%) compliance, with the middle 50% are those facilities that have regulatory non-compliance ranging from 1 – 10 violations. The bottom 25% are those facilities that have regulatory non-compliance of greater than 10 violations. In this dichotomization model, the middle 50% are not used in the calculations, only the top and bottom 25%.

The dichotomization model described in the above paragraph has worked very well in producing licensing key indicator predictor rules by eliminating false negatives and decreasing false positives in the resultant 2 x 2 Key Indicator Predictor Matrix. The Fiene Coefficients for the licensing key indicator predictor rules have been more stable and robust by utilizing this model. It was made possible because of the increasing sample sizes selected for analyses and in some cases where population data were available. Also, the overall level of full compliance in states/provinces has increased over time and that has been a contributing factor as well in eliminating false negatives. False positives have been decreased because of the same factors but will never be eliminated because of the nature of the data distribution being highly positive skewed. Because of this distribution, there will always be false positives identified in the analyses. But that is the lesser of two evils: a rule being in compliance although it is present in the low regulatory compliant group.

However, are there ways to mitigate the impact of false positives. Based upon results from the Early Childhood Program Quality Improvement & Indicator Model Data Base (ECPQI2MDB) maintained at the Research Institute for Key Indicators/Penn State, there appears to be several adjustments that can be made so that the impact of false positives is not as pronounce as it has been in the past. The first adjustment that can be made is to increase the sample size so that additional non-compliance is identified. This is difficult at times because the nature of licensing or regulatory compliance data trends towards very high compliance for most facilities with little non-compliant facilities. It is the nature of a regulatory compliance or licensing program; these are basic health and safety rules which have had a history of substantial to full compliance with the majority of the rules. The data are extremely positively skewed. There is little variance in the data. So, increasing the sample size should help on all these accounts. In addition to increasing the sample size, an additional methodology was developed in order to increase the variance in licensing/regulatory compliance data by weighting rules/regulations based upon the risk children are placed in because of non-compliance. This proposal makes a great deal of sense but its application in reality hasn't played out as intended. What most jurisdictions do in implementing the risk assessment methodology is to identify the most heavily weighted rules but then to deal with these rules as high risk rules and not using the weights assigned to them for aggregating regulatory compliance scores. The use of the methodology in this way is very effective in identifying the specific rules based upon risk, but does little to nothing in increasing the variance in the regulatory compliance data distribution. The data distribution remains severely positively skewed.

Another way to mitigate the impact of false positives is to increase the data dichotomization of the data distribution but this is recommended only with the increase sample size. If it is done without an increased sample size, the resultant Fiene Coefficients for the licensing key indicator predictor rules will be less robust and stable. For example, the data dichotomization model of 25/50/25 could be increased to a 10/80/10 model which should help in decreasing the false positives in the analyses. But this is cautionary, for example, in going to a 5/90/5 model could again make the resultant Fiene Coefficients for the licensing key indicator predictor rules less robust and stable. The sample size needs to be very large or the full population needs to be measured in order to do these analyses and co-balance the increased data dichotomization because the cell sizes will be decreasing significantly. The following 2 x 2 matrix will depict these relationships for generating the Licensing Key Indicator Predictor Fiene Coefficients (FC).

<u>Licensing Key Indicator Predictor Fiene Coefficient (FC) Table</u>

Individual Rules/Groups ->	High Compliant (Top 25%)	Low Compliant (Bottom 25%)
Rule In Compliance	FC (++)	FP (+)
Rule Out of Compliance	FN (-)	FC ()

$$((FC (++) + (FC (--)) > ((FN (-)) + (FP (+)))$$

where FC = Fiene Coefficient which results in Licensing Key Indicator Predictor Rules (FC = .25 or >);

FN (-) = False Negative; FP (+) = False Positive

The cells represented by the Fiene Coefficients should always be larger than the False Positive and Negative results in the above table. With the above dichotomization 25/50/25 model and high levels of full 100% regulatory compliance, false negatives can be eliminated and by increasing the sample size, false positives will be decreased but never fully eliminated. Full 100% regulatory compliance increased levels will help to eliminate false negatives, but it will also increase the chances of false positives. There is a delicate balance with confounding the increased sample sizes (false positives will decrease) and increased levels of full 100% regulatory compliance (false positives will increase). This will take a bit of adjusting to get this balancing just right.

By utilizing the *ECPQI2MDB* it has demonstrated that the above-mentioned dichotomization models may be difficult to hit the percentages exactly. The actual models may be more heavily weighted in the percent for the high group as versus the low because of the regulatory compliance data distribution being highly positive skewed as mentioned earlier. This may have an impact on the Fiene Coefficients (FC) for licensing key indicator predictor rules but it will not impact the actual selection of the licensing key indicators – they will remain the same, just the FCs will change.

One last footnote on the relationship between regulatory compliance and program quality. This relationship has been addressed several times over the past four decades in the regulatory science and human services regulatory administration fields; but it needs to be re-emphasized as it relates to this discussion about licensing measurement. Regulatory compliance and program quality are linear and non-random in moving from low regulatory compliance to mid-substantial regulatory compliance as with low program quality to mid program quality. However, when one moves from substantial regulatory compliance to full 100% regulatory compliance the relationship with program quality is more non-linear and random.

Province of Alberta Risk Assessment Rules

National Association for Regulatory Administration (NARA)

Research Report

June 2021

The purpose of this report is to present the results of the risk survey conducted in the Province of Alberta with all licensing staff. The risk survey was administered late Spring – early Summer 2021. Ninety-two staff members participated in completing the risk survey either in its entirety or partially. Eighty staff completed it in its entirety. The results are consistent with previous risk assessment rule studies conducted in Canada and the USA.

This report is organized by presenting the results of only those rules that had an average weight of 7.00 or higher based on all the rankings by the licensing staff (N = 80 - 92). There are three appendices in which the mean averages are provided for each rule (there were sixty-six rules rated: In the Appendices they are listed as Questions 1 - 66); the frequency counts for each rule with a graphic bar chart; and lastly the survey used in the data collection (the survey had 31 basic rules but this was broken out to 66 rules to measure all sub-paragraphs of the specific rules).

Risk assessment rules are one of two methodologies used to design and implement a differential monitoring approach. The province has already developed their key indicator rules. Now by having these risk assessment rules, they have the best of both worlds in having statistical predictor rules (the key indicators) and risk assessment rules (these rules). The next section provides the results of the analyses.

RESULTS

The results are based upon a Likert scale of 1-8 where 1 poses little risk to children while an 8 poses a great deal of risk to children (see the draft survey in the Appendix). Only those rules that were ranked at an average of 7.00 are included here. All the results are presented in the appendices. For a fuller description of each rule, please go to the respective appendix.

Rule	Brief Description	Weight
2	Child guidance methods are communicated to staff	7.09
4	Child guidance provided is reasonable	7.34
5	No physical punishment or emotional deprivation	7.78
6	Deny or threaten to deny any basic necessities	7.63
7	No use of any form of physcial restraint	7.77
9	All children are supervised at all times	7.49
20	In case of serious injury, child receives medical attention	7.12
28	For the administration of medications: Written consent of child's parents;	7.14
	Medication is in the original labelled container; Medication is administered	
	according to labeled directions.	

The above rules are clearly rules that would place children are substantial risk if they were not in full compliance. These rules are consistent with findings from previous studies conducted in Canada and USA. The next logical step is to combine these results with those of the key indicator report into a series of policies and procedures to be used throughout the Province of Alberta.

Appendices

Mean Averages for Risk Assessment Rules
Frequencies and Bar Charts for Risk Assessment Rules
Draft Risk Survey used for Data Collection

Pichard Fiana Dh D. Rasaarch Deuchologist. Pasaarch Instituta for Kay Indicators: Drofessor of Deuchology (rat). Drovention Pasaarch Center

Richard Fiene, Ph.D., Research Psychologist, Research Institute for Key Indicators; Professor of Psychology (ret), Prevention Research Center,
Penn State University; Senior Research Consultant, National Association for Regulatory Administration.

For additional information about the differential monitoring methodology, please go to the following website: http://RIKInstitute.com Or contact Dr Fiene directly at rfiene@NARALicensing.org

DESCRIPTIVES

DESCRIPTIVES

/VARIABLES= Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 Q10 Q11 Q12 Q13 Q14 Q15 Q16 Q17 Q18 Q19 Q20 Q21 Q22 Q23 Q24 Q25 Q26 Q27 Q28 Q29 Q30 Q31 Q32 Q33 Q34 Q35 Q36 Q37 Q38 Q39 Q40 Q41 Q42 Q43 Q44 Q45 Q46 Q47 Q48 Q49 Q50 Q51 Q52 Q53 Q54 Q55 Q56 Q57 Q58 Q59 Q60 Q61 Q62 Q63 Q64 Q65 Q66

/STATISTICS=MEAN.

Valid cases = 92; cases with missing value(s) = 29.

Variable	N	Mean
		i e
Q1	92	4.98
Q2	92	7.09
Q3	91	5.51
Q4	92	7.34
Q5	91	7.78
Q6	92	7.63
Q7	92	7.77
Q8	90	6.08
Q9	86	7.49
Q10	87	6.82
Q11	86	6.52
Q12	86	6.41
Q13	86	5.81
Q14	85	6.27
Q15	85	6.08
Q16	84	5.89
Q17	85	5.85
Q18	85	5.99
Q19	84	5.46
Q20	84	7.12
Q21	84	5.85
Q22	84	5.25
Q23	83	5.71
Q24	84	6.12
Q25	83	6.08
Q26	82	5.88
Q27	83	6.42
Q28	83	7.14
Q29	83	6.54
Q30	83	6.76
Q31	83	6.90
Q32	83	6.73

Variable	N	Mean
Q33	83	5.35
Q34	83	5.63
Q35	81	5.30
Q36	82	5.52
Q37	82	5.54
Q38	82	5.89
Q39	81	4.78
Q40	82	5.51
Q41	82	5.12
Q42	82	6.01
Q43	82	5.57
Q44	81	6.19
Q45	82	5.39
Q46	82	5.98
Q47	82	5.74
Q48	82	5.72
Q49	79	3.90
Q50	82	6.62
Q51	81	6.64
Q52	81	5.74
Q53	81	5.26
Q54	81	5.23
Q55	81	4.86
Q56	80	5.42
Q57	80	5.44
Q58	80	5.30
Q59	79	5.23
Q60	79	5.38
Q61	80	6.21
Q62	80	3.66
Q63	80	4.15
Q64	80	5.17
Q65	80	4.92
Q66	78	5.59

Summary report

Lists all the questions in the survey and displays a summary with chart for each question. Free text responses are not included.

Table of contents

Report info	1
Question 1: A licence holder must ensure that a) Child guidance methods utilized in the program are	2
Question 2: A licence holder must ensure that a) Child guidance methods utilized in the program are	3
Question 3: A licence holder must ensure that a) Child guidance methods utilized in the program are	4
Question 4: A licence holder must ensure that b) any child guidance provided is reasonable in the c	5
Question 5: A licence holder must not, with respect to a child in the program: a) inflict or cause	6
Question 6: A licence holder must not, with respect to a child in the program b) deny or threaten t	7
Question 7: A licence holder must not, with respect to a child in the program c) use or permit th	8
Question 8: At all times when a group of 7 or more children are receiving child care in a licenced fa	9
Question 9: Day Care, Out of School Care or Preschool At all times when a group of 7 or more child	10
Question 10: (1) A licence holder that provides day care must ensure that, for children receiving da	11
Question 11: (2) Despite subsection (1), a licence holder must ensure that, for all children receivin	12
Question 12: (3) Despite subsections (1) and (2), where a group of children receiving day care includ	13
Question 13: (4) Subject to subsections (5) and (5.1), a licence holder who is licensed to provide da	14
Question 14: A licence holder that provides out of school care must ensure that, for children receiv	15
Question 15: (1) A licence holder that provide s pre-school care must ensure that, for children rec	16
Question 16: (1) A licence holder may take a child to an activity off the program premises only where	17
Question 17: (1) A licence holder may take a child to an activity off the program premises only where	18
Question 18: 2) A licence holder must ensure that in the case of an activity off the program premises	19
Question 19: 1) A licence holder must ensure that the following telephone numbers are posted on the p	20
Question 20: Accident or Illness: In the case of an accident or serious illness involving a child, th	21
Question 21: Incident Reporting: A licence holder must report each incident to the statutory directo	22
Question 22: Smoking and Vaping: (1) A licence holder must ensure that no person smokes or vapes any	23
Question 23: Portable Record: A licence holder must maintain a portable record of emergency informat	24
Question 24: (1) Where a staff member knows or has reason to believe that a child is exhibiting signs	25
Question 25: (1) Where a staff member knows or has reason to believe that a child is exhibiting signs	26
Question 26: Supervised Care for Sick Children: A licence holder must ensure that a sick child is: k	27
Question 27: Supervised Care for Sick Children: A licence holder must ensure that a sick child is d	28
Question 28: (1) A licence holder may administer or allow the administration of medication or other h	29
Question 29: (2) Where the medication is administered to a child, the licence holder must ensure that	30
Question 30: (3) a licence holder must ensure that: a) all medications, other than medication referr	31
Question 31: (3) a licence holder must ensure that b) medication required to be used by a particula	32
Question 32: (3) a licence holder must ensure that b) medication required to be used by a particular	33
Question 33: A licence holder must a) provide or require parents to provide meals and snacks for c	34
Question 34: A licence holder must: b) where the licence holder provides meals and snacks, ensure th	35
Question 35: A licence holder must: ii) in accordance with a food guide recognized by Health Canada	36
Question 36: A licence holder must ensure that: a.) The manner in which children are fed is appro	37
Question 37: A licence holder must ensure that: b). Children are seated while eating and seati	38
Question 38: A licence holder must ensure that: c.) No beverages are provided to children durin	39
Question 39: Program Space and Equipment: A licence holder must provide a minimum net floor area of:	40
Question 40: Day Care: (1) A licence holder that provides day care must provide outdoor play space f	41
Question 41: Out of School Care A licence holder that provides out of school care must provide outdoo	42

Question 42: A licence holder must ensure that a.) all furnishings, play equipment and play materi	43
Question 43: A licence holder must ensure that a.) all furnishings, play equipment and play materia	44
Question 44: A licence holder must ensure: c.) each infant is provided with i.) a separate crib, c	45
Question 45: 1) A licence holder must, in respect of each child, maintain on the program premises an	46
Question 46: (1) A licence holder must, in respect of each child, maintain on the program premises a	47
Question 47: (1) A licence holder must maintain on the program premises up-to date administrative rec	48
Question 48: (1) A licence holder must maintain on the program premises up-to date administrat	49
Question 49: (2) A licence holder must ensure that a) the records referred to in subsection (1) are	50
Question 50: (1) A licence holder must ensure that a). Each staff member and each volunteer who has	51
Question 51: A licence holder must ensure that: (2) A new staff member or volunteer i). Must provi	52
Question 52: Day Care (1) A licence holder that provides day care must ensure that a program su	53
Question 53: Day Care A licence holder that provides day care (2) a program supervisor is not requi	54
Question 54: Out of School Care 1) a licence holder that provides out of school care must ensure tha	55
Question 55: Out of School Care (2) A program supervisor is not required to be on duty during any pe	56
Question 56: Day Care and/or Out of School Care A licence holder that provides day care or out of s	57
Question 57: Day Care (1) A licence holder that provides day care must ensure that, with respect to	58
Question 58: Out of School Care A licence holder that provides out of school care must ensure that, w	59
Question 59: Preschool (1) a licence holder that provides pre-school care must ensure that a). at	60
Question 60: Compliance with Program Plan: (1) A licence holder a.) must comply with the program	61
Question 61: Provisions of a Licence - Safety Codes: A licence holder must comply with all applicab	62
Question 62: A holder of a facility based licence must post, in a clearly visible and prominent place	63
Question 63: A holder of a facility-based licence must post, in a clearly visible and prominent plac	64
Question 64: A holder of a facility-based licence must post, in a clearly visible and prominent place	65
Question 65: A holder of a facility-based licence must post, in a clearly visible and prominent place	66
Question 66: A holder of a facility-based licence must post, in a clearly visible and prominent place	67

Report info

Report date: Start date: Stop date:

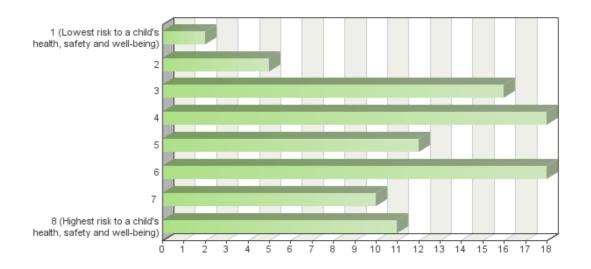
Stored responses:

Number of completed responses:

Friday, June 25, 2021 1:41:19 PM MDT Wednesday, June 2, 2021 6:00:00 AM MDT Friday, June 25, 2021 4:30:00 PM MDT

92 80

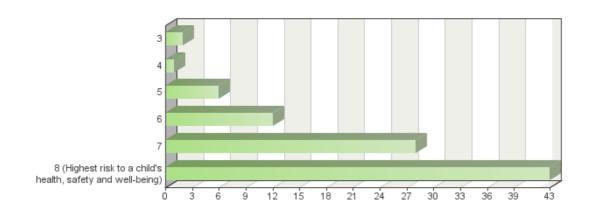
A licence holder must ensure that a) Child guidance methods utilized in the program are communicated to : (i). Parents



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	2	2.17%	2.17%
2	5	5.43%	5.43%
3	16	17.39%	17.39%
4	18	19.57%	19.57%
5	12	13.04%	13.04%
6	18	19.57%	19.57%
7	10	10.87%	10.87%
8 (Highest risk to a child's health, safety and well-being)	11	11.96%	11.96%
Sum:	92	100%	100%
Not answered:	0	0%	-

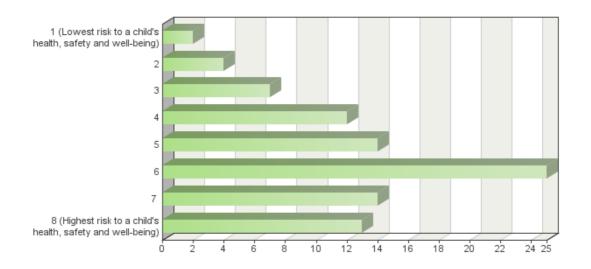
A licence holder must ensure that a) Child guidance methods utilized in the program are communicated to: (ii).staff



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
3	2	2.17%	2.17%
4	1	1.09%	1.09%
5	6	6.52%	6.52%
6	12	13.04%	13.04%
7	28	30.43%	30.43%
8 (Highest risk to a child's health, safety and well-being)	43	46.74%	46.74%
Sum:	92	100%	100%
Not answered:	0	0%	-

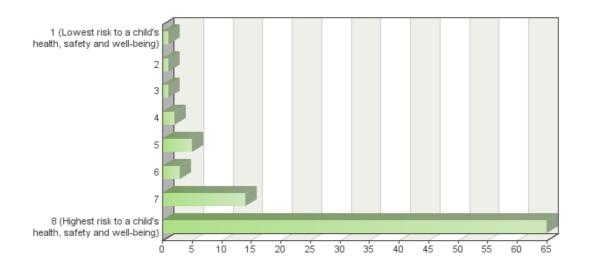
A licence holder must ensure that a) Child guidance methods utilized in the program are communicated to : (iii)children, where developmentally appropriate



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	2	2.17%	2.2%
2	4	4.35%	4.4%
3	7	7.61%	7.69%
4	12	13.04%	13.19%
5	14	15.22%	15.38%
6	25	27.17%	27.47%
7	14	15.22%	15.38%
8 (Highest risk to a child's health, safety and well-being)	13	14.13%	14.29%
Sum:	91	98.91%	100%
Not answered:	1	1.09%	-

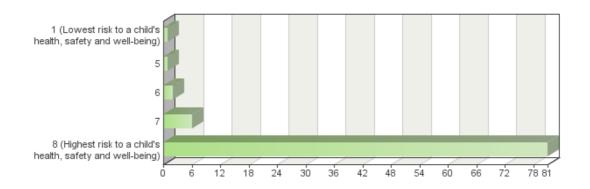
A licence holder must ensure that b) any child guidance provided is reasonable in the circumstances.



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	1	1.09%	1.09%
2	1	1.09%	1.09%
3	1	1.09%	1.09%
4	2	2.17%	2.17%
5	5	5.43%	5.43%
6	3	3.26%	3.26%
7	14	15.22%	15.22%
8 (Highest risk to a child's health, safety and well-being)	65	70.65%	70.65%
Sum:	92	100%	100%
Not answered:	0	0%	-

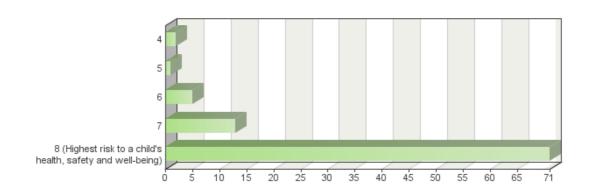
A licence holder must not, with respect to a child in the program: a) inflict or cause to be inflicted any form of physical punishment, verbal or physical degradation or emotional deprivation



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	1	1.09%	1.1%
5	1	1.09%	1.1%
6	2	2.17%	2.2%
7	6	6.52%	6.59%
8 (Highest risk to a child's health, safety and well-being)	81	88.04%	89.01%
Sum:	91	98.91%	100%
Not answered:	1	1.09%	-

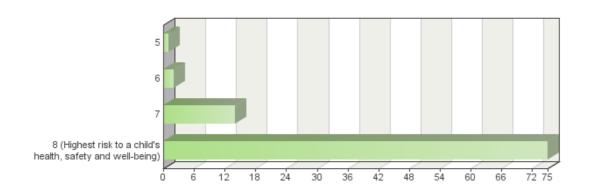
A licence holder must not, with respect to a child in the program b) deny or threaten to deny any basic necessity



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
4	2	2.17%	2.17%
5	1	1.09%	1.09%
6	5	5.43%	5.43%
7	13	14.13%	14.13%
8 (Highest risk to a child's health, safety and well-being)	71	77.17%	77.17%
Sum:	92	100%	100%
Not answered:	0	0%	-

A licence holder must not, with respect to a child in the program c) use or permit the use of any form of physical restraint, confinement or isolation



Frequency table

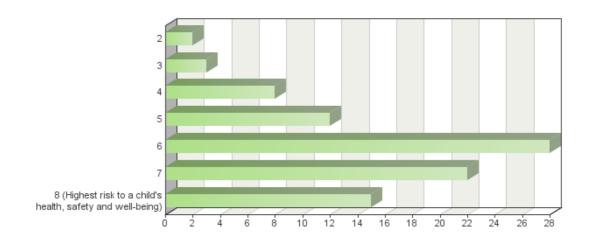
Trequeries table				
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency	
5	1	1.09%	1.09%	
6	2	2.17%	2.17%	
7	14	15.22%	15.22%	
8 (Highest risk to a child's health, safety and well-being)	75	81.52%	81.52%	
Sum:	92	100%	100%	
Not answered:	0	0%	-	

At all times when a group of 7 or more children are receiving child care in a licenced facility-based program, whether on or off program premises, the licence holder must ensure that:

a) despite subsection 27 of this Schedule, a minimum of 2 adults staff members, one of whom is a primary staff member, is on duty for any children in the group who are receiving day care, out of school care and preschool

Preschool

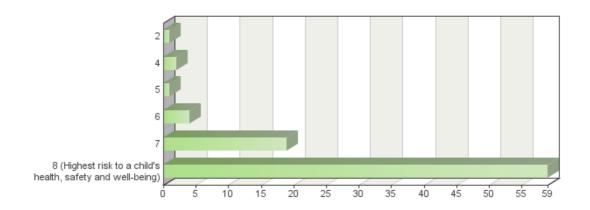
a) despite section 27.2 of this Schedule, a minimum of 2 staff members, at least one of whom is an adult, are on duty for any children in the group who are receiving pre school care,



Frequency table

		A allocational
Absolute frequency	Relative frequency	Adjusted relative frequency
2	2.17%	2.22%
3	3.26%	3.33%
8	8.7%	8.89%
12	13.04%	13.33%
28	30.43%	31.11%
22	23.91%	24.44%
15	16.3%	16.67%
90	97.83%	100%
2	2.17%	-
	2 3 8 12 28 22 15	frequency frequency 2 2.17% 3 3.26% 8 8.7% 12 13.04% 28 30.43% 22 23.91% 15 16.3% 90 97.83%

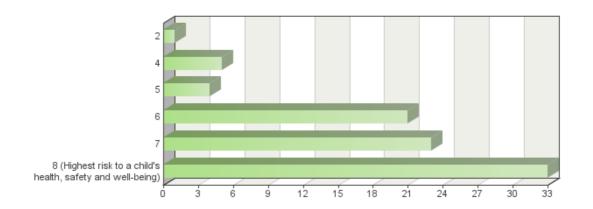
Day Care, Out of School Care or Preschool At all times when a group of 7 or more children are receiving child care in a licenced facility-based program, whether on or off program premises, the licence holder must ensure that: b) all the children are, at all times, under supervision that is adequate to ensure their safety, well-being and development



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
2	1	1.09%	1.16%
4	2	2.17%	2.33%
5	1	1.09%	1.16%
6	4	4.35%	4.65%
7	19	20.65%	22.09%
8 (Highest risk to a child's health, safety and well-being)	59	64.13%	68.6%
Sum:	86	93.48%	100%
Not answered:	6	6.52%	-

(1) A licence holder that provides day care must ensure that, for children receiving day care, the following requirements are met at all times with respect to: the minimum primary staff member to children ratio, and the maximum number of children who may be included in a group: Age of children Primary Staff Member to Children Ratio Maximum Number of Children in a Group Infants less than 12 months 1:3 Infants 12 months to less than 19 months 19 months to less than 3 years 3 years to less than 4 years 1:8 16 4 years and older 1:10 20

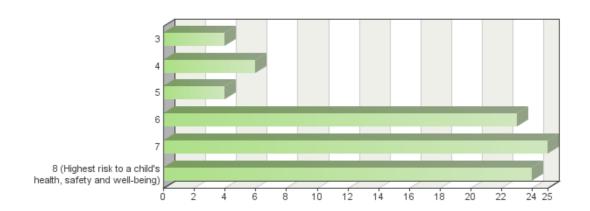


Frequency table

1.104.0.10			
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
2	1	1.09%	1.15%
4	5	5.43%	5.75%
5	4	4.35%	4.6%
6	21	22.83%	24.14%
7	23	25%	26.44%
8 (Highest risk to a child's health, safety and well-being)	33	35.87%	37.93%
Sum:	87	94.57%	100%
Not answered:	5	5.43%	-

(2) Despite subsection (1), a licence holder must ensure that, for all children receiving day care, the following requirements are met during all rest periods with respect to the minimum primary staff member to children ratio:

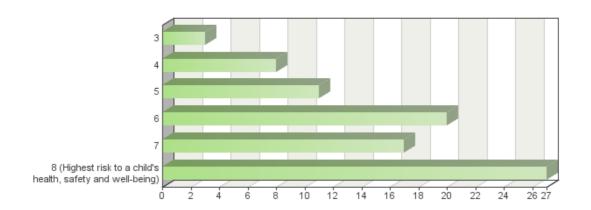
Age of Children Primary Staff Member to Children Ratio Infants less than 12 months 1:6 Infants 12 months to less than 19 months 1:8 19 months to less than 3 years 1:12 3 years to less than 4 years 1:16 4 years and older 1:20



Frequency table

1 requested table			
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
3	4	4.35%	4.65%
4	6	6.52%	6.98%
5	4	4.35%	4.65%
6	23	25%	26.74%
7	25	27.17%	29.07%
8 (Highest risk to a child's health, safety and well-being)	24	26.09%	27.91%
Sum:	86	93.48%	100%
Not answered:	6	6.52%	-

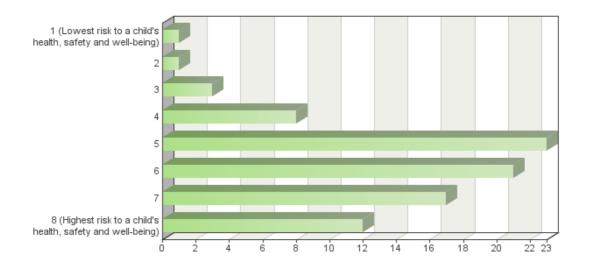
(3) Despite subsections (1) and (2), where a group of children receiving day care includes children from 2 or more of the age groups listed in column 1 of the table set out in subsection (1)(b), the minimum primary staff member to children ratio is i) during the children's rest period, the ratio set out in column 2 of the table set out in subsection (2) for the row of the table that describes the ages of the majority of the children in the combined group, or ii) at all other times, the ratio set out in column 2 of the table in subsection (1)(b) for the row of the table that describes the ages of the majority of the children in the combined group, and (b) the following requirements must be met at all times with respect to the maximum number of children who may be included in the Age of Majority of Children in the Combined Group Maximum Children in the Combined Group combined group: Less than 12 months 6 12 months to less than 19 months 19 months to less than 3 years 3 years to less than 4 years 16 4 years and older 20



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
3	3	3.26%	3.49%
4	8	8.7%	9.3%
5	11	11.96%	12.79%
6	20	21.74%	23.26%
7	17	18.48%	19.77%
8 (Highest risk to a child's health, safety and well-being)	27	29.35%	31.4%
Sum:	86	93.48%	100%
Not answered:	6	6.52%	-

(4) Subject to subsections (5) and (5.1), a licence holder who is licensed to provide day care for 3 or more infants must not allow an infant to be included in a combined age group referred to in subsection (3)(a)(i) or (ii) or (b)(i) or (ii) between the hours of 8:30a.m and 4:30p.m.



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	1	1.09%	1.16%
2	1	1.09%	1.16%
3	3	3.26%	3.49%
4	8	8.7%	9.3%
5	23	25%	26.74%
6	21	22.83%	24.42%
7	17	18.48%	19.77%
8 (Highest risk to a child's health, safety and well-being)	12	13.04%	13.95%
Sum:	86	93.48%	100%
Not answered:	6	6.52%	-

A licence holder that provides out of school care must ensure that, for children receiving out of school care, the following requirements are met at all times with respect to (a) the minimum primary staff member to children ratio, and (b) the maximum number of children who may be included in a group:

Age of Children

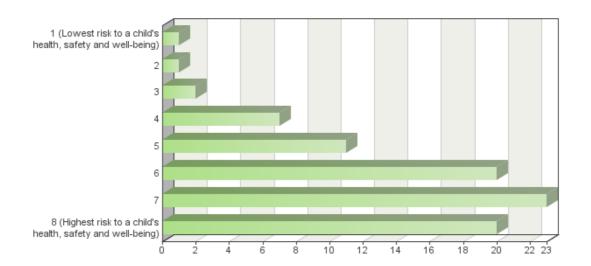
Primary Staff Member to Children Ration

Maximum Number of Children in a Group

Kindergarten Children and School-Aged Children

1:15

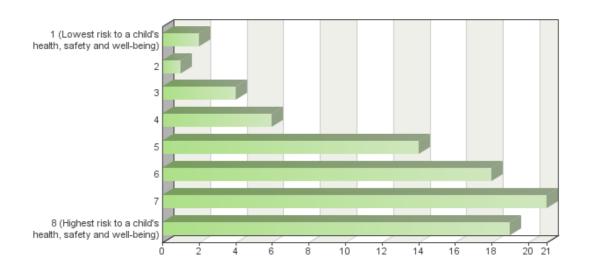
30



Frequency table

1 Toquoney table			
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	1	1.09%	1.18%
2	1	1.09%	1.18%
3	2	2.17%	2.35%
4	7	7.61%	8.24%
5	11	11.96%	12.94%
6	20	21.74%	23.53%
7	23	25%	27.06%
8 (Highest risk to a child's health, safety and well-being)	20	21.74%	23.53%
Sum:	85	92.39%	100%
Not answered:	7	7.61%	-

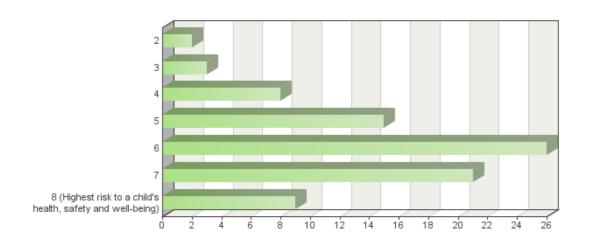
(1) A licence holder that provide s pre-school care must ensure that, for children receiving pre-school care, the following requirements are met at all times with respect to the minimum staff member to children ratio: Age of Children Staff Member to Children Ration 19 months to less than 3 years 1:6 3 years and older 1:12 (2) For the purposes of subsection (1), parent volunteers may be considered a staff member.



Frequency table

I requericy table			
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	2	2.17%	2.35%
2	1	1.09%	1.18%
3	4	4.35%	4.71%
4	6	6.52%	7.06%
5	14	15.22%	16.47%
6	18	19.57%	21.18%
7	21	22.83%	24.71%
8 (Highest risk to a child's health, safety and well-being)	19	20.65%	22.35%
Sum:	85	92.39%	100%
Not answered:	7	7.61%	-

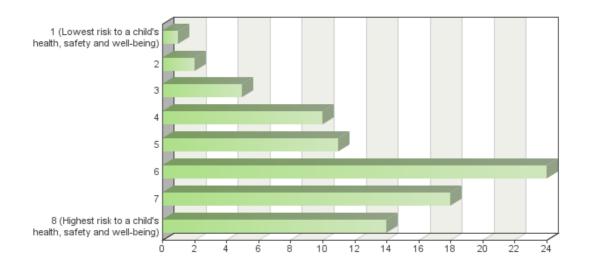
- (1) A licence holder may take a child to an activity off the program premises only where:
- a) the child's parent has been advised of the activity, including the transportation, contact information and supervision arrangements with respect to the activity,



Frequency table

· · · · · · · · · · · · · · · · · · ·			
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
2	2	2.17%	2.38%
3	3	3.26%	3.57%
4	8	8.7%	9.52%
5	15	16.3%	17.86%
6	26	28.26%	30.95%
7	21	22.83%	25%
8 (Highest risk to a child's health, safety and well-being)	9	9.78%	10.71%
Sum:	84	91.3%	100%
Not answered:	8	8.7%	-

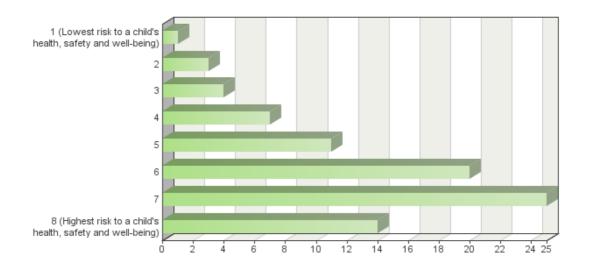
(1) A licence holder may take a child to an activity off the program premises only where: b) the child's parent has previously consented in writing to the child's participation in the activity and the consent has not been retracted.



Frequency table

Troquency task	-		
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	1	1.09%	1.18%
2	2	2.17%	2.35%
3	5	5.43%	5.88%
4	10	10.87%	11.76%
5	11	11.96%	12.94%
6	24	26.09%	28.24%
7	18	19.57%	21.18%
8 (Highest risk to a child's health, safety and well-being)	14	15.22%	16.47%
Sum:	85	92.39%	100%
Not answered:	7	7.61%	-

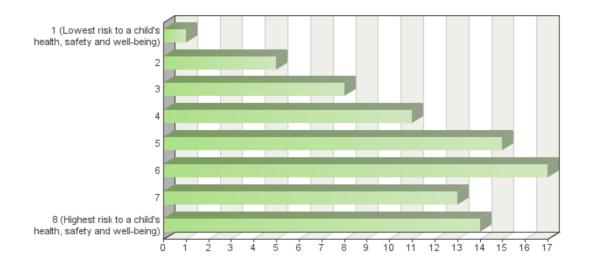
2) A licence holder must ensure that in the case of an activity off the program premises or an emergency evacuation a staff member takes the portable record referred to in section 24 of this Schedule in respect of each child to be taken off the program premises.



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	1	1.09%	1.18%
2	3	3.26%	3.53%
3	4	4.35%	4.71%
4	7	7.61%	8.24%
5	11	11.96%	12.94%
6	20	21.74%	23.53%
7	25	27.17%	29.41%
8 (Highest risk to a child's health, safety and well-being)	14	15.22%	16.47%
Sum:	85	92.39%	100%
Not answered:	7	7.61%	-

- 1) A licence holder must ensure that the following telephone numbers are posted on the program premises and are readily accessible:
 - a) emergency 911 service
 - b) poison control centre; and
 - c) child abuse hotline
- (2) A licence holder must ensure that the emergency evacuation procedures and the telephone number for an afterhours emergency program contact are posted on the program premises in a prominent place that is clearly visible from the outside of the program premises.
- (3) A licence holder must ensure that emergency evacuation procedures are made known to all staff, and to children where developmentally appropriate.



Frequency table

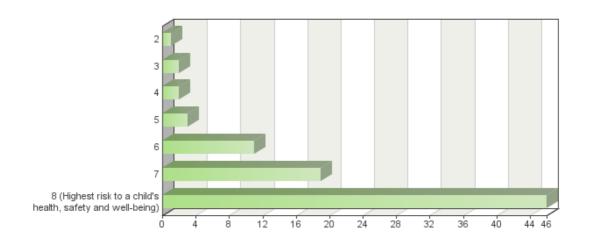
1 requeries table			
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	1	1.09%	1.19%
2	5	5.43%	5.95%
3	8	8.7%	9.52%
4	11	11.96%	13.1%
5	15	16.3%	17.86%
6	17	18.48%	20.24%
7	13	14.13%	15.48%
8 (Highest risk to a child's health, safety and well-being)	14	15.22%	16.67%
Sum:	84	91.3%	100%
Not answered:	8	8.7%	-

Accident or Illness:

In the case of an accident or serious illness involving a child, the licence holder must forthwith ensure that

the child's parent is notified, and

the child receives medical attention if necessary.

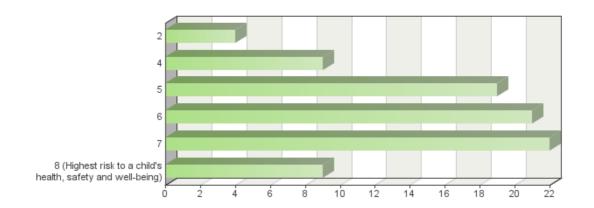


Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
2	1	1.09%	1.19%
3	2	2.17%	2.38%
4	2	2.17%	2.38%
5	3	3.26%	3.57%
6	11	11.96%	13.1%
7	19	20.65%	22.62%
8 (Highest risk to a child's health, safety and well-being)	46	50%	54.76%
Sum:	84	91.3%	100%
Not answered:	8	8.7%	-

Incident Reporting:

A licence holder must report each incident to the statutory director forthwith in the manner required by the statutory director.

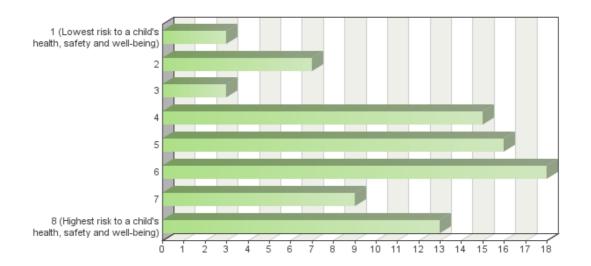


Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
2	4	4.35%	4.76%
4	9	9.78%	10.71%
5	19	20.65%	22.62%
6	21	22.83%	25%
7	22	23.91%	26.19%
8 (Highest risk to a child's health, safety and well-being)	9	9.78%	10.71%
Sum:	84	91.3%	100%
Not answered:	8	8.7%	-

Smoking and Vaping:

(1) A licence holder must ensure that no person smokes or vapes any substance on the program premises or at any time or place where child care is being provided. (2) No staff member or volunteer shall smoke or vape any substance on the program premises or at any other location where child care is being provided to the children in the program. (3) No staff member or volunteer shall leave any substance or material related to smoking or vaping in a place on the program premises that is accessible to children or at any other location where child care is being provided to the children in the program.



Frequency table

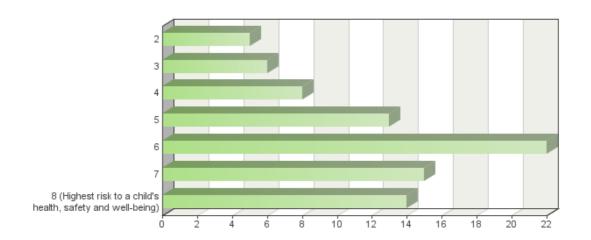
Absolute frequency	Relative frequency	Adjusted relative frequency
3	3.26%	3.57%
7	7.61%	8.33%
3	3.26%	3.57%
15	16.3%	17.86%
16	17.39%	19.05%
18	19.57%	21.43%
9	9.78%	10.71%
13	14.13%	15.48%
84	91.3%	100%
8	8.7%	-
	frequency 3 7 3 15 16 18 9 13	frequency frequency 3 3.26% 7 7.61% 3 3.26% 15 16.3% 16 17.39% 18 19.57% 9 9.78% 13 14.13% 84 91.3%

Portable Record:

A licence holder must maintain a portable record of emergency information, including the following:

in respect of each child, the information referred to in section 22(1)(a),(c),(d) and (g) of this Schedule,

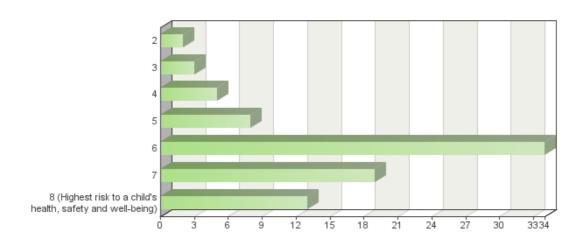
the telephone numbers of the local emergency response service and poison control centre



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
2	5	5.43%	6.02%
3	6	6.52%	7.23%
4	8	8.7%	9.64%
5	13	14.13%	15.66%
6	22	23.91%	26.51%
7	15	16.3%	18.07%
8 (Highest risk to a child's health, safety and well-being)	14	15.22%	16.87%
Sum:	83	90.22%	100%
Not answered:	9	9.78%	-

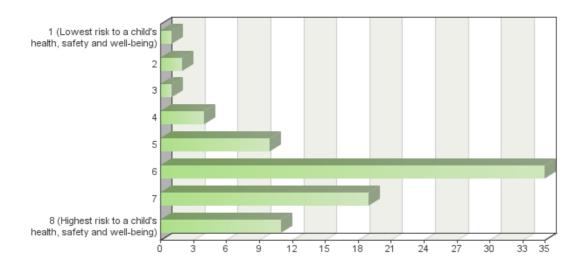
- (1) Where a staff member knows or has reason to believe that a child is exhibiting signs or symptoms of illness as set out in subsection (2), the licence holder must ensure:
- a) that the child's parent arranges for the immediate removal of the child from the program premises



Frequency table

1.104401103 44.510			
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
2	2	2.17%	2.38%
3	3	3.26%	3.57%
4	5	5.43%	5.95%
5	8	8.7%	9.52%
6	34	36.96%	40.48%
7	19	20.65%	22.62%
8 (Highest risk to a child's health, safety and well-being)	13	14.13%	15.48%
Sum:	84	91.3%	100%
Not answered:	8	8.7%	-

- (1) Where a staff member knows or has reason to believe that a child is exhibiting signs or symptoms of illness as set out in subsection (2), the licence holder must ensure:
- b) that the child does not return to the program premises until the licence holder is satisfied that the child no longer poses a health risk to the persons on the program premises.

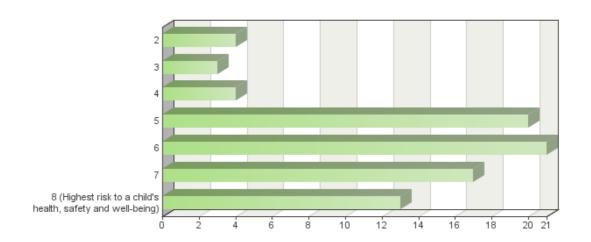


Frequency table

Absolute frequency	Relative frequency	Adjusted relative frequency
1	1.09%	1.2%
2	2.17%	2.41%
1	1.09%	1.2%
4	4.35%	4.82%
10	10.87%	12.05%
35	38.04%	42.17%
19	20.65%	22.89%
11	11.96%	13.25%
83	90.22%	100%
9	9.78%	-
	frequency 1 2 1 4 10 35 19 11 83	frequency frequency 1 1.09% 2 2.17% 1 1.09% 4 4.35% 10 10.87% 35 38.04% 19 20.65% 11 11.96% 83 90.22%

Supervised Care for Sick Children: A licence holder must ensure that a sick child is:

kept as far away as is practicable from other children,

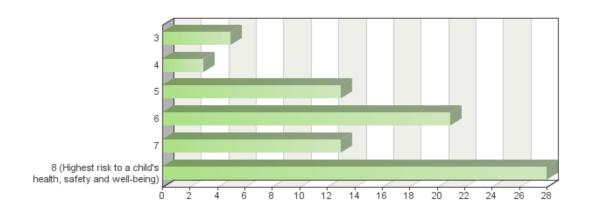


Frequency table

1 Toqueriey table	<u> </u>		
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
2	4	4.35%	4.88%
3	3	3.26%	3.66%
4	4	4.35%	4.88%
5	20	21.74%	24.39%
6	21	22.83%	25.61%
7	17	18.48%	20.73%
8 (Highest risk to a child's health, safety and well-being)	13	14.13%	15.85%
Sum:	82	89.13%	100%
Not answered:	10	10.87%	-

Supervised Care for Sick Children: A licence holder must ensure that a sick child is

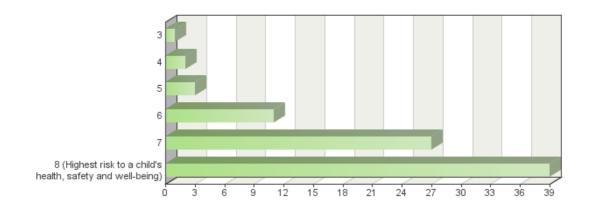
directly supervised by a primary staff member if the child is under the age of 6 or has a disability that requires direct care.



Frequency table

1.10440.109 14.010			
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
3	5	5.43%	6.02%
4	3	3.26%	3.61%
5	13	14.13%	15.66%
6	21	22.83%	25.3%
7	13	14.13%	15.66%
8 (Highest risk to a child's health, safety and well-being)	28	30.43%	33.73%
Sum:	83	90.22%	100%
Not answered:	9	9.78%	-

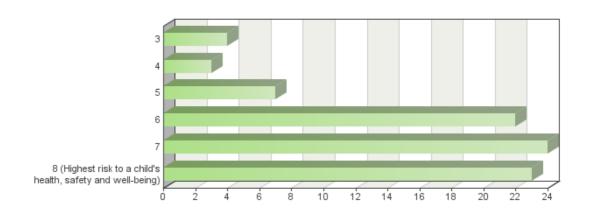
- (1) A licence holder may administer or allow the administration of medication or other health to a child only where
- a) the written consent of the child's parent has been obtained, and
- b) in the case of medication,
 - i) the medication is in the original labelled container, and
 - ii) the medication is administered according to the labelled directions.



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
3	1	1.09%	1.2%
4	2	2.17%	2.41%
5	3	3.26%	3.61%
6	11	11.96%	13.25%
7	27	29.35%	32.53%
8 (Highest risk to a child's health, safety and well-being)	39	42.39%	46.99%
Sum:	83	90.22%	100%
Not answered:	9	9.78%	-

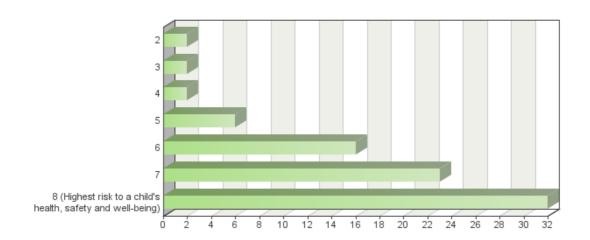
(2) Where the medication is administered to a child, the licence holder must ensure that the following information is recorded: a) the name of the medication; b) the time of administration c) the amount administered; d) the initials of the person who administered the medication



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
3	4	4.35%	4.82%
4	3	3.26%	3.61%
5	7	7.61%	8.43%
6	22	23.91%	26.51%
7	24	26.09%	28.92%
8 (Highest risk to a child's health, safety and well-being)	23	25%	27.71%
Sum:	83	90.22%	100%
Not answered:	9	9.78%	-

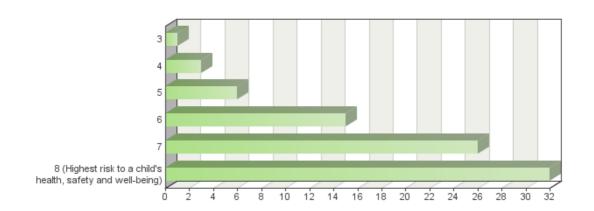
(3) a licence holder must ensure that: a) all medications, other than medication referred to in clause (b) is stored in a locked container that is inaccessible to the children



Frequency table

1 Toquoney table			
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
2	2	2.17%	2.41%
3	2	2.17%	2.41%
4	2	2.17%	2.41%
5	6	6.52%	7.23%
6	16	17.39%	19.28%
7	23	25%	27.71%
8 (Highest risk to a child's health, safety and well-being)	32	34.78%	38.55%
Sum:	83	90.22%	100%
Not answered:	9	9.78%	-

(3) a licence holder must ensure that b) medication required to be used by a particular child as needed to prevent a medical emergency is handled in accordance with a plan that i) ensures the medication is accessible by staff and the child but is not accessible by other children in the program,

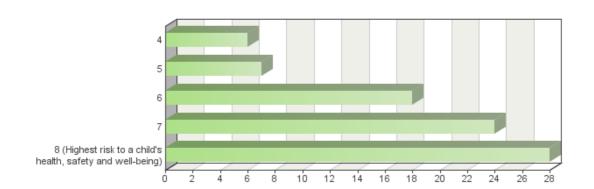


Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
3	1	1.09%	1.2%
4	3	3.26%	3.61%
5	6	6.52%	7.23%
6	15	16.3%	18.07%
7	26	28.26%	31.33%
8 (Highest risk to a child's health, safety and well-being)	32	34.78%	38.55%
Sum:	83	90.22%	100%
Not answered:	9	9.78%	-

(3) a licence holder must ensure that b) medication required to be used by a particular child as needed to prevent a medical emergency is handled in accordance with a plan that:

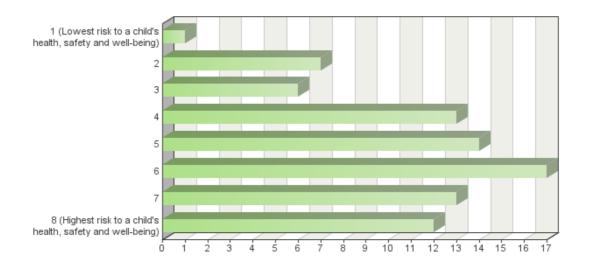
ii). has been agreed on by the licence holder and the child's parent or guardian.



Frequency table

		A 11 (1
Absolute frequency	Relative frequency	Adjusted relative frequency
6	6.52%	7.23%
7	7.61%	8.43%
18	19.57%	21.69%
24	26.09%	28.92%
28	30.43%	33.73%
83	90.22%	100%
9	9.78%	_
2	24 28 33	24 26.09% 28 30.43% 33 90.22%

A licence holder must a) provide or require parents to provide meals and snacks for children in the program

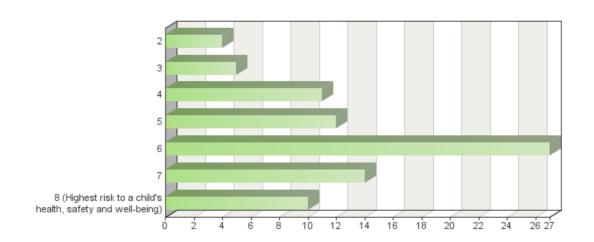


Frequency table

· · · · · · · · · · · · · · · · · · ·			
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	1	1.09%	1.2%
2	7	7.61%	8.43%
3	6	6.52%	7.23%
4	13	14.13%	15.66%
5	14	15.22%	16.87%
6	17	18.48%	20.48%
7	13	14.13%	15.66%
8 (Highest risk to a child's health, safety and well-being)	12	13.04%	14.46%
Sum:	83	90.22%	100%
Not answered:	9	9.78%	-

A licence holder must: b) where the licence holder provides meals and snacks, ensure that the meals and snacks are provided to children

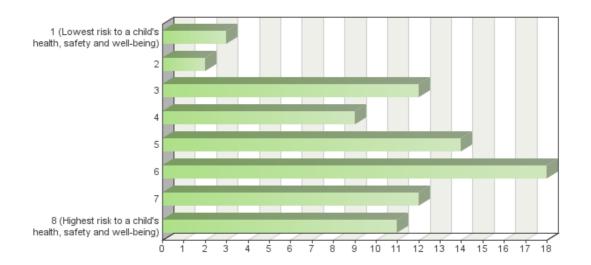
i.) at appropriate times and in sufficient quantities in accordance with the needs of each child



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
2	4	4.35%	4.82%
3	5	5.43%	6.02%
4	11	11.96%	13.25%
5	12	13.04%	14.46%
6	27	29.35%	32.53%
7	14	15.22%	16.87%
8 (Highest risk to a child's health, safety and well-being)	10	10.87%	12.05%
Sum:	83	90.22%	100%
Not answered:	9	9.78%	-

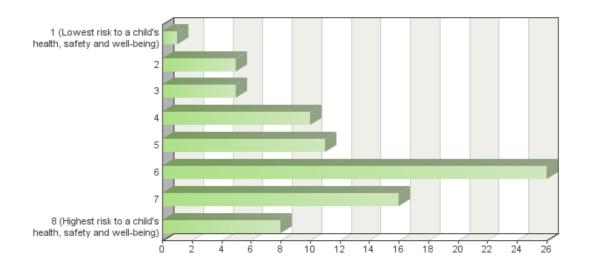
A licence holder must: ii) in accordance with a food guide recognized by Health Canada or Alberta Health, and c) ensure that infant nutrition provided by parents is clearly labelled with the infant's name



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	3	3.26%	3.7%
2	2	2.17%	2.47%
3	12	13.04%	14.81%
4	9	9.78%	11.11%
5	14	15.22%	17.28%
6	18	19.57%	22.22%
7	12	13.04%	14.81%
8 (Highest risk to a child's health, safety and well-being)	11	11.96%	13.58%
Sum:	81	88.04%	100%
Not answered:	11	11.96%	-

A licence holder must ensure that: a.) The manner in which children are fed is appropriate to their age and level of development

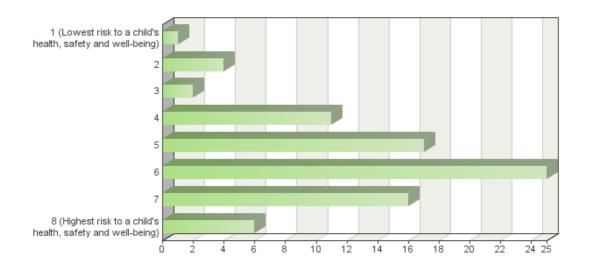


Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	1	1.09%	1.22%
2	5	5.43%	6.1%
3	5	5.43%	6.1%
4	10	10.87%	12.2%
5	11	11.96%	13.41%
6	26	28.26%	31.71%
7	16	17.39%	19.51%
8 (Highest risk to a child's health, safety and well-being)	8	8.7%	9.76%
Sum:	82	89.13%	100%
Not answered:	10	10.87%	-

A licence holder must ensure that:

b). Children are seated while eating and seating or standing while still drinking

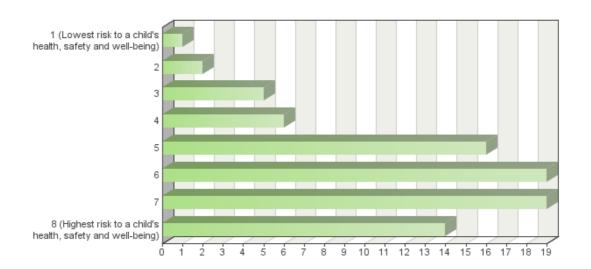


Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	1	1.09%	1.22%
2	4	4.35%	4.88%
3	2	2.17%	2.44%
4	11	11.96%	13.41%
5	17	18.48%	20.73%
6	25	27.17%	30.49%
7	16	17.39%	19.51%
8 (Highest risk to a child's health, safety and well-being)	6	6.52%	7.32%
Sum:	82	89.13%	100%
Not answered:	10	10.87%	-

A licence holder must ensure that:

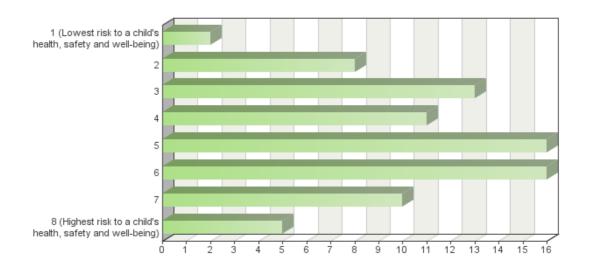
c.) No beverages are provided to children during their rest periods



Frequency table

i requericy table			
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	1	1.09%	1.22%
2	2	2.17%	2.44%
3	5	5.43%	6.1%
4	6	6.52%	7.32%
5	16	17.39%	19.51%
6	19	20.65%	23.17%
7	19	20.65%	23.17%
8 (Highest risk to a child's health, safety and well-being)	14	15.22%	17.07%
Sum:	82	89.13%	100%
Not answered:	10	10.87%	-

Program Space and Equipment: A licence holder must provide a minimum net floor area of: DAY CARE At least 3 square metres of primary play space multiplied by the licensed capacity for day care, if the licence holder provides day care, PRE-SCHOOL at least 2.5 square metres of primary play space multiplied by the licensed capacity for pre-school care, if the licence holder provides pre-school care, and OUT OF SCHOOL CARE at least 2.5 square metres of primary play space multiplied by the licensed capacity for out of school care, if the licence holder provides out of school care

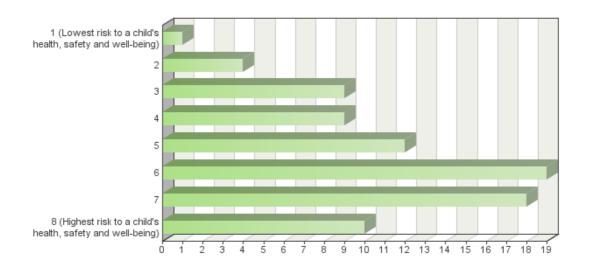


Frequency table

1 requested table			
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	2	2.17%	2.47%
2	8	8.7%	9.88%
3	13	14.13%	16.05%
4	11	11.96%	13.58%
5	16	17.39%	19.75%
6	16	17.39%	19.75%
7	10	10.87%	12.35%
8 (Highest risk to a child's health, safety and well-being)	5	5.43%	6.17%
Sum:	81	88.04%	100%
Not answered:	11	11.96%	-

Day Care: (1) A licence holder that provides day care must provide outdoor play space for children in day care that is on, adjacent to, or within easy and safe walking distance from the program premises and accommodates at least 50% of the licensed capacity at a level of not less than 2 square metres for each infant receiving day care and not less than 4.5 square metres for each child who is 19 months of age or over receiving day care. (2) The licence holder must ensure that

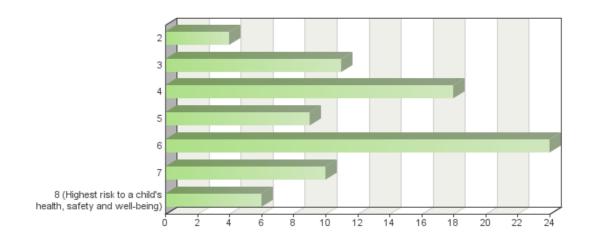
a) The outdoor play space referred to in subsection (1) is securely enclosed on all sides



Frequency table

Absolute frequency	Relative frequency	Adjusted relative frequency
1	1.09%	1.22%
4	4.35%	4.88%
9	9.78%	10.98%
9	9.78%	10.98%
12	13.04%	14.63%
19	20.65%	23.17%
18	19.57%	21.95%
10	10.87%	12.2%
82	89.13%	100%
10	10.87%	-
	frequency 1 4 9 9 12 19 18 10 82	frequency frequency 1 1.09% 4 4.35% 9 9.78% 9 9.78% 12 13.04% 19 20.65% 18 19.57% 10 10.87% 82 89.13%

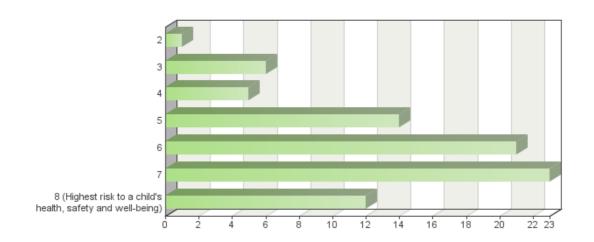
Out of School Care A licence holder that provides out of school care must provide outdoor play space for children in out of school care that is, to the satisfaction of the statutory director, within easy and safe walking distance from the program premises.



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
2	4	4.35%	4.88%
3	11	11.96%	13.41%
4	18	19.57%	21.95%
5	9	9.78%	10.98%
6	24	26.09%	29.27%
7	10	10.87%	12.2%
8 (Highest risk to a child's health, safety and well-being)	6	6.52%	7.32%
Sum:	82	89.13%	100%
Not answered:	10	10.87%	-

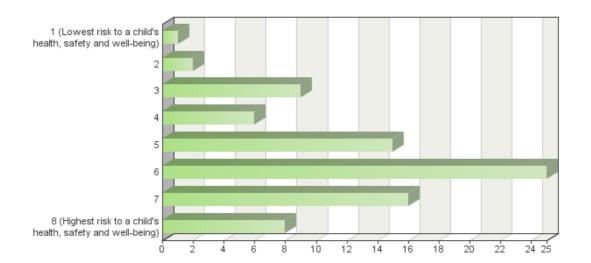
A licence holder must ensure that a.) all furnishings, play equipment and play materials, whether used indoors or outdoors, are: i). safe and maintained in good repair



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
2	1	1.09%	1.22%
3	6	6.52%	7.32%
4	5	5.43%	6.1%
5	14	15.22%	17.07%
6	21	22.83%	25.61%
7	23	25%	28.05%
8 (Highest risk to a child's health, safety and well-being)	12	13.04%	14.63%
Sum:	82	89.13%	100%
Not answered:	10	10.87%	-

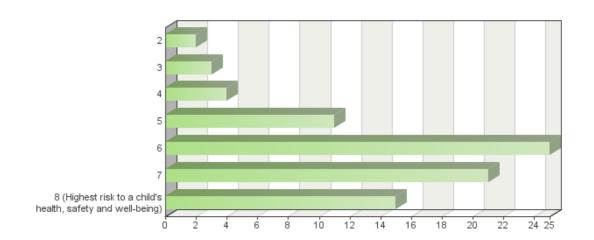
A licence holder must ensure that a.) all furnishings, play equipment and play materials, whether used indoors or outdoors, are: ii.) developmentally appropriate for children, and iii.) of sufficient quantity and variety for children, b). books, toys and play equipment that support early learning, literacy development, physical activity and child development are available to children,



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	1	1.09%	1.22%
2	2	2.17%	2.44%
3	9	9.78%	10.98%
4	6	6.52%	7.32%
5	15	16.3%	18.29%
6	25	27.17%	30.49%
7	16	17.39%	19.51%
8 (Highest risk to a child's health, safety and well-being)	8	8.7%	9.76%
Sum:	82	89.13%	100%
Not answered:	10	10.87%	-

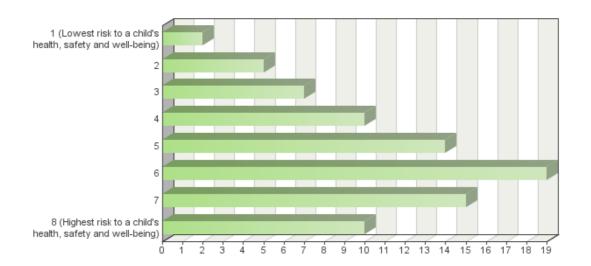
A licence holder must ensure: c.) each infant is provided with i.) a separate crib, cradle or bassinet that is used in accordance with the Canada Consumer Product Safety Act (Canada) and the regulations under that Act; ii.) a bed of a type approved by the statutory director that is used in accordance with the written directions of the manufacture and any additional written directions of the statutory director



Frequency table

1 requested table			
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
2	2	2.17%	2.47%
3	3	3.26%	3.7%
4	4	4.35%	4.94%
5	11	11.96%	13.58%
6	25	27.17%	30.86%
7	21	22.83%	25.93%
8 (Highest risk to a child's health, safety and well-being)	15	16.3%	18.52%
Sum:	81	88.04%	100%
Not answered:	11	11.96%	-

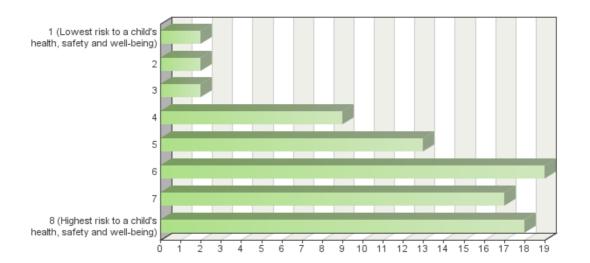
1) A licence holder must, in respect of each child, maintain on the program premises an up-to-date record containing the following information: a.) The child's name and date of birth and; b.) A completed enrolment form; c.) The parent's name and telephone number; d.) The name and telephone number of a person who can be contacted in case of emergency, if the child's parent cannot be contacted



Frequency table

I requericy table			
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	2	2.17%	2.44%
2	5	5.43%	6.1%
3	7	7.61%	8.54%
4	10	10.87%	12.2%
5	14	15.22%	17.07%
6	19	20.65%	23.17%
7	15	16.3%	18.29%
8 (Highest risk to a child's health, safety and well-being)	10	10.87%	12.2%
Sum:	82	89.13%	100%
Not answered:	10	10.87%	-

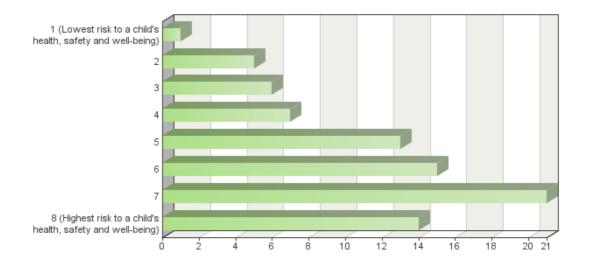
(1) A licence holder must, in respect of each child, maintain on the program premises an up-to-date record containing the following information: e.) If medication is administered i.) The written consent of the parent required under section 10(1) of this Schedule; and ii.) The information required under section 10(2) of this Schedule f. The particulars of any health care provided to the child, including the written consent of the child's parent required under section 10 of this Schedule g. Any other relevant health information about the child provided by the child's parent, including the child's immunizations and allergies, if any



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	2	2.17%	2.44%
2	2	2.17%	2.44%
3	2	2.17%	2.44%
4	9	9.78%	10.98%
5	13	14.13%	15.85%
6	19	20.65%	23.17%
7	17	18.48%	20.73%
8 (Highest risk to a child's health, safety and well-being)	18	19.57%	21.95%
Sum:	82	89.13%	100%
Not answered:	10	10.87%	-

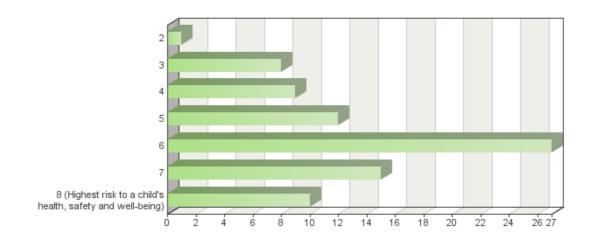
- (1) A licence holder must maintain on the program premises up-to date administrative records containing the following information:
- a) particulars of the daily attendance of each child, including arrival and departure times; b) particulars of the daily attendance of each primary staff member, including i). arrival and departure times, and ii.) hours spent providing child care;



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	1	1.09%	1.22%
2	5	5.43%	6.1%
3	6	6.52%	7.32%
4	7	7.61%	8.54%
5	13	14.13%	15.85%
6	15	16.3%	18.29%
7	21	22.83%	25.61%
8 (Highest risk to a child's health, safety and well-being)	14	15.22%	17.07%
Sum:	82	89.13%	100%
Not answered:	10	10.87%	-

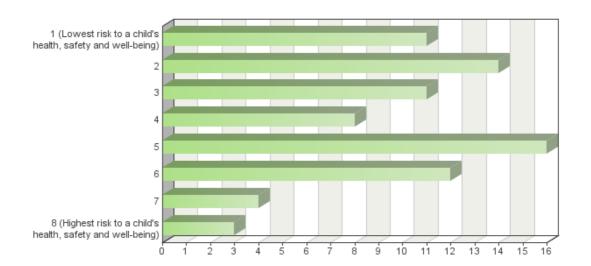
(1) A licence holder must maintain on the program premises up-to date administrative records containing the following information: c) with respect to the program supervisor and each primary staff member, i.) evidence of the supervisor's or member's child care certification, and ii.) a current first aid certificate, where applicable; d) with respect to each staff member and each volunteer referred to in section 25(1) (a) of this Schedule, verification that a current criminal record check required under that section has been provided to the licence holder



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
2	1	1.09%	1.22%
3	8	8.7%	9.76%
4	9	9.78%	10.98%
5	12	13.04%	14.63%
6	27	29.35%	32.93%
7	15	16.3%	18.29%
8 (Highest risk to a child's health, safety and well-being)	10	10.87%	12.2%
Sum:	82	89.13%	100%
Not answered:	10	10.87%	-

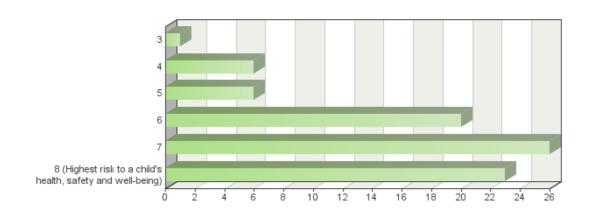
(2) A licence holder must ensure that a) the records referred to in subsection (1) are available for inspection by the statutory director at all times, b) the information referred to in subsection (1)(a) is available for inspection by the child's parent at reasonable times, and c) the information referred to in subsection (1)(a) and (b) is retained for a minimum period of 2 years.



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	11	11.96%	13.92%
2	14	15.22%	17.72%
3	11	11.96%	13.92%
4	8	8.7%	10.13%
5	16	17.39%	20.25%
6	12	13.04%	15.19%
7	4	4.35%	5.06%
8 (Highest risk to a child's health, safety and well-being)	3	3.26%	3.8%
Sum:	79	85.87%	100%
Not answered:	13	14.13%	-

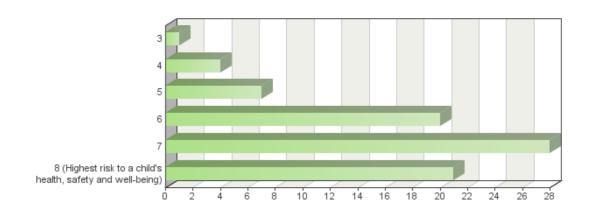
(1) A licence holder must ensure that a). Each staff member and each volunteer who has unsupervised access to children i). is an adult, and ii). provides to the licence holder a criminal record check, including a vulnerable sector search, dated not earlier than 6 months prior to the date of commencement with the program and every three years after that date, and b). A minimum of one in every 2 primary staff members has first aid certification acceptable to the statutory director



Frequency table

1 Toquolog table			
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
3	1	1.09%	1.22%
4	6	6.52%	7.32%
5	6	6.52%	7.32%
6	20	21.74%	24.39%
7	26	28.26%	31.71%
8 (Highest risk to a child's health, safety and well-being)	23	25%	28.05%
Sum:	82	89.13%	100%
Not answered:	10	10.87%	-

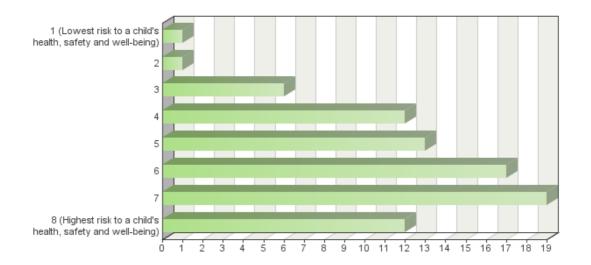
A licence holder must ensure that: (2) A new staff member or volunteer i). Must provide the criminal record check referred to in subsection (1)(a)(ii) within 8 weeks of commencement with the program, and ii). Must not have unsupervised access to children until the criminal record check has been provided (3) A licence holder must ensure that at least one staff member with first aid certification acceptable to the statutory director is on duty at all times



Frequency table

- Toque.ieg table			
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
3	1	1.09%	1.23%
4	4	4.35%	4.94%
5	7	7.61%	8.64%
6	20	21.74%	24.69%
7	28	30.43%	34.57%
8 (Highest risk to a child's health, safety and well-being)	21	22.83%	25.93%
Sum:	81	88.04%	100%
Not answered:	11	11.96%	-

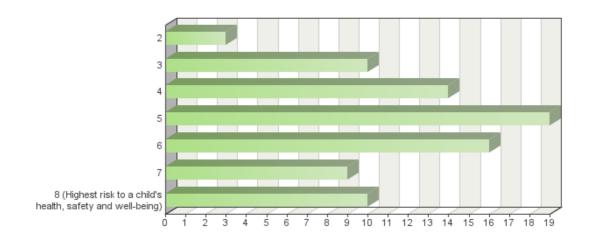
Day Care (1) A licence holder that provides day care must ensure that a program supervisor who is certified as a Level 3 early childhood educator a). is employed by the program at all times and b). is on duty at all times when children receiving daycare are on the program premises.



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	1	1.09%	1.23%
2	1	1.09%	1.23%
3	6	6.52%	7.41%
4	12	13.04%	14.81%
5	13	14.13%	16.05%
6	17	18.48%	20.99%
7	19	20.65%	23.46%
8 (Highest risk to a child's health, safety and well-being)	12	13.04%	14.81%
Sum:	81	88.04%	100%
Not answered:	11	11.96%	-

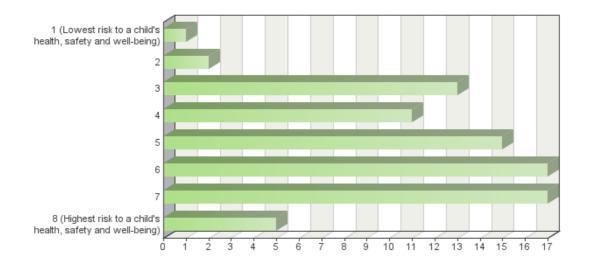
Day Care A licence holder that provides day care (2) a program supervisor is not required to be on duty during any period for which the program supervisor or the licence holder has designated a staff member to assume the responsibilities of the program supervisor during the program supervisor's absence, and in the case of an absence of one month or longer, obtained statutory director's approval with respect to the designation of any staff member under clause (a) of that staff member is not certified as a Level 3 early childhood educator.



Frequency table

The quality sales			
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
2	3	3.26%	3.7%
3	10	10.87%	12.35%
4	14	15.22%	17.28%
5	19	20.65%	23.46%
6	16	17.39%	19.75%
7	9	9.78%	11.11%
8 (Highest risk to a child's health, safety and well-being)	10	10.87%	12.35%
Sum:	81	88.04%	100%
Not answered:	11	11.96%	-

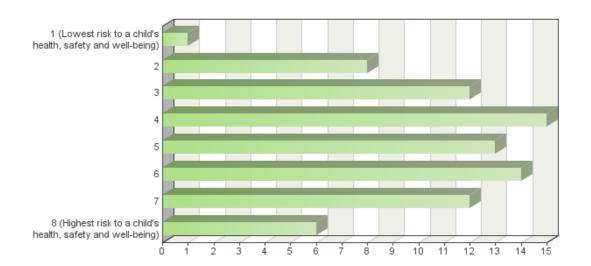
Out of School Care 1) a licence holder that provides out of school care must ensure that a program supervisor a) is employed by the program at all times and b) is on duty at all times when children receiving out of school care are on the program premises.



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	1	1.09%	1.23%
2	2	2.17%	2.47%
3	13	14.13%	16.05%
4	11	11.96%	13.58%
5	15	16.3%	18.52%
6	17	18.48%	20.99%
7	17	18.48%	20.99%
8 (Highest risk to a child's health, safety and well-being)	5	5.43%	6.17%
Sum:	81	88.04%	100%
Not answered:	11	11.96%	-

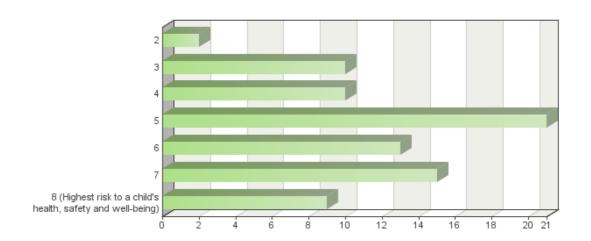
Out of School Care (2) A program supervisor is not required to be on duty during any period for which the program supervisor or licence holder has designated a staff member to assume the responsibilities of the program supervisor during the program supervisor's absence.



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	1	1.09%	1.23%
2	8	8.7%	9.88%
3	12	13.04%	14.81%
4	15	16.3%	18.52%
5	13	14.13%	16.05%
6	14	15.22%	17.28%
7	12	13.04%	14.81%
8 (Highest risk to a child's health, safety and well-being)	6	6.52%	7.41%
Sum:	81	88.04%	100%
Not answered:	11	11.96%	-

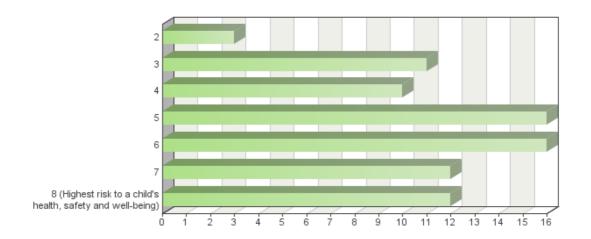
Day Care and/or Out of School Care A licence holder that provides day care or out of school care must ensure that all primary staff members involved in providing day care or out of school care hold a child care certification under Part 3 of this Regulation. (2) Despite subsection (1), in the case of a primary staff member who is hired as a Level 1 early childhood educator, the primary staff member a). must obtain a child care certification as a Level 1 early childhood educator within 6 months of commencement with the program, and b). must not have unsupervised access to children until the primary staff member has obtained a child care certification as a Level 1 early childhood educator.



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
2	2	2.17%	2.5%
3	10	10.87%	12.5%
4	10	10.87%	12.5%
5	21	22.83%	26.25%
6	13	14.13%	16.25%
7	15	16.3%	18.75%
8 (Highest risk to a child's health, safety and well-being)	9	9.78%	11.25%
Sum:	80	86.96%	100%
Not answered:	12	13.04%	-

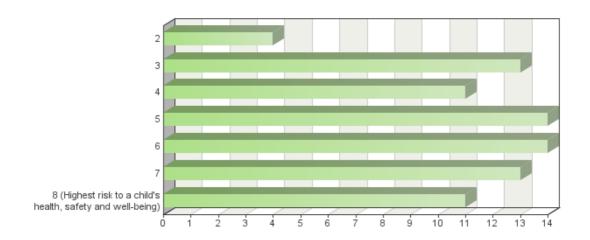
Day Care (1) A licence holder that provides day care must ensure that, with respect to the primary staff member to children ratios specified Section 27 of this Schedule, a). at all times between 8:30a.m. and 4:30p.m. i). at least one in every 3 of the primary staff member involved in providing day care is certified at minimum of Level 2 early childhood educator, and ii). the remaining primary staff members involved in providing day care are certified at minimum as level I early childhood educators, and; b). at all other times, every primary staff member involved in providing day care are certified at minimum as a level 1 early childhood educator



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
2	3	3.26%	3.75%
3	11	11.96%	13.75%
4	10	10.87%	12.5%
5	16	17.39%	20%
6	16	17.39%	20%
7	12	13.04%	15%
8 (Highest risk to a child's health, safety and well-being)	12	13.04%	15%
Sum:	80	86.96%	100%
Not answered:	12	13.04%	-

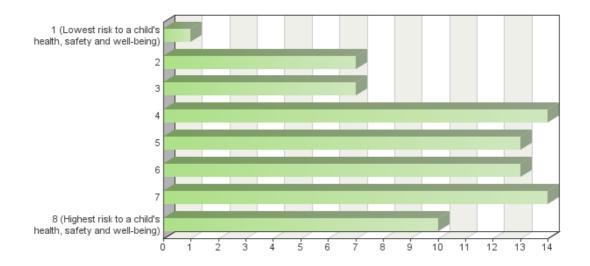
Out of School Care A licence holder that provides out of school care must ensure that, with respect to the primary staff member to children ratios specified in section 30.1 of this Schedule, a). at least one in every 4 staff members involved in providing out of school care is certified at minimum as a Level 2 early childhood educator, and b). the remaining staff members involved in providing out of school care are certified at minimum as Level 1 early childhood educators.



Frequency table

1 : oque: ity table			
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
2	4	4.35%	5%
3	13	14.13%	16.25%
4	11	11.96%	13.75%
5	14	15.22%	17.5%
6	14	15.22%	17.5%
7	13	14.13%	16.25%
8 (Highest risk to a child's health, safety and well-being)	11	11.96%	13.75%
Sum:	80	86.96%	100%
Not answered:	12	13.04%	-

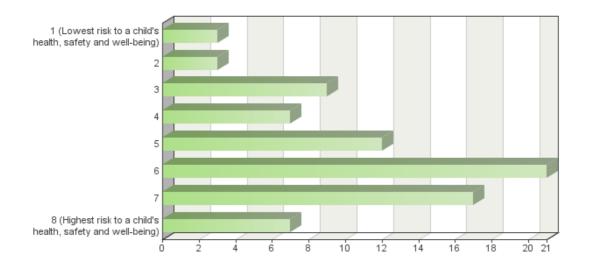
Preschool (1) a licence holder that provides pre-school care must ensure that a). at least one in every 4 staff members involved in providing pre-school care is certified at minimum as a Level 2 early childhood educator, and b). the remaining staff members involved in providing (2) Despite subsection (1)(b), a staff member who is to be involved in providing pre-school care may be hired before obtaining a child care certification as a Level 1 early childhood educator, but the staff member a.) must obtain that certification within 6 months of commencement with the program, and b.) must not have unsupervised access to children before obtaining that certification.



Frequency table

Absolute frequency	Relative frequency	Adjusted relative frequency
1	1.09%	1.27%
7	7.61%	8.86%
7	7.61%	8.86%
14	15.22%	17.72%
13	14.13%	16.46%
13	14.13%	16.46%
14	15.22%	17.72%
10	10.87%	12.66%
79	85.87%	100%
13	14.13%	-
	frequency 1 7 7 14 13 13 14 10 79	frequency frequency 1 1.09% 7 7.61% 7 7.61% 14 15.22% 13 14.13% 14 15.22% 10 10.87% 79 85.87%

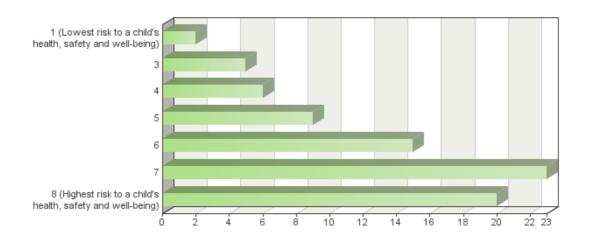
Compliance with Program Plan: (1) A licence holder a.) must comply with the program plan referred to in section 2(a) including any changes made under Section 5(b), and b.) must not make changes to the program plan without the prior approval of the director.



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	3	3.26%	3.8%
2	3	3.26%	3.8%
3	9	9.78%	11.39%
4	7	7.61%	8.86%
5	12	13.04%	15.19%
6	21	22.83%	26.58%
7	17	18.48%	21.52%
8 (Highest risk to a child's health, safety and well-being)	7	7.61%	8.86%
Sum:	79	85.87%	100%
Not answered:	13	14.13%	-

Provisions of a Licence – Safety Codes: A licence holder must comply with all applicable zoning, health and safety requirements

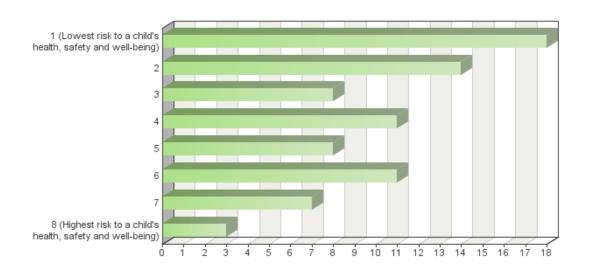


Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	2	2.17%	2.5%
3	5	5.43%	6.25%
4	6	6.52%	7.5%
5	9	9.78%	11.25%
6	15	16.3%	18.75%
7	23	25%	28.75%
8 (Highest risk to a child's health, safety and well-being)	20	21.74%	25%
Sum:	80	86.96%	100%
Not answered:	12	13.04%	-

A holder of a facility based licence must post, in a clearly visible and prominent place on the premises where the licensed facility-based program is being provided,

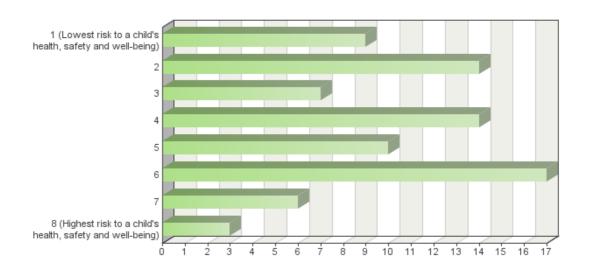
a) the licence



Frequency table

i requericy table			
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	18	19.57%	22.5%
2	14	15.22%	17.5%
3	8	8.7%	10%
4	11	11.96%	13.75%
5	8	8.7%	10%
6	11	11.96%	13.75%
7	7	7.61%	8.75%
8 (Highest risk to a child's health, safety and well-being)	3	3.26%	3.75%
Sum:	80	86.96%	100%
Not answered:	12	13.04%	-

A holder of a facility-based licence must post, in a clearly visible and prominent place on the premises where the licensed facility-based program is being provided, b). any report provided by the statutory director under section 10 (3)

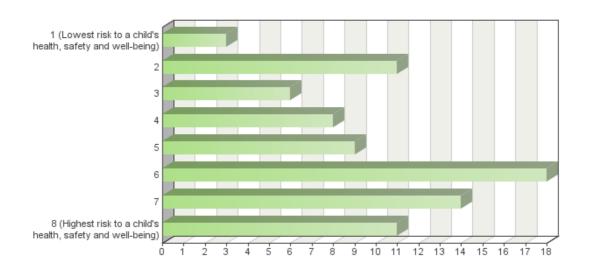


Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	9	9.78%	11.25%
2	14	15.22%	17.5%
3	7	7.61%	8.75%
4	14	15.22%	17.5%
5	10	10.87%	12.5%
6	17	18.48%	21.25%
7	6	6.52%	7.5%
8 (Highest risk to a child's health, safety and well-being)	3	3.26%	3.75%
Sum:	80	86.96%	100%
Not answered:	12	13.04%	-

A holder of a facility-based licence must post, in a clearly visible and prominent place on the premises where the licensed facility-based program is being provided,

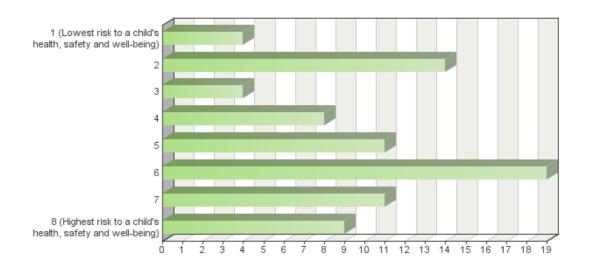
c). any conditions imposed on the licence under section 5(1) or 13



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	3	3.26%	3.75%
2	11	11.96%	13.75%
3	6	6.52%	7.5%
4	8	8.7%	10%
5	9	9.78%	11.25%
6	18	19.57%	22.5%
7	14	15.22%	17.5%
8 (Highest risk to a child's health, safety and well-being)	11	11.96%	13.75%
Sum:	80	86.96%	100%
Not answered:	12	13.04%	-

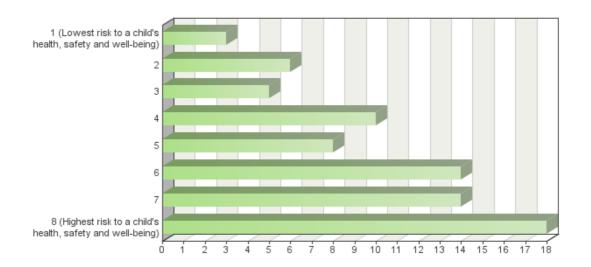
A holder of a facility-based licence must post, in a clearly visible and prominent place on the premises where the licensed facility-based program is being provided, d.) any provisions of the licence that are varied under section 12



Frequency table

i requericy table			
Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	4	4.35%	5%
2	14	15.22%	17.5%
3	4	4.35%	5%
4	8	8.7%	10%
5	11	11.96%	13.75%
6	19	20.65%	23.75%
7	11	11.96%	13.75%
8 (Highest risk to a child's health, safety and well-being)	9	9.78%	11.25%
Sum:	80	86.96%	100%
Not answered:	12	13.04%	-

A holder of a facility-based licence must post, in a clearly visible and prominent place on the premises where the licensed facility-based program is being provided, e.) any probationary licence issued under section 15



Frequency table

Levels	Absolute frequency	Relative frequency	Adjusted relative frequency
1 (Lowest risk to a child's health, safety and well-being)	3	3.26%	3.85%
2	6	6.52%	7.69%
3	5	5.43%	6.41%
4	10	10.87%	12.82%
5	8	8.7%	10.26%
6	14	15.22%	17.95%
7	14	15.22%	17.95%
8 (Highest risk to a child's health, safety and well-being)	18	19.57%	23.08%
Sum:	78	84.78%	100%
Not answered:	14	15.22%	-

Purpose of Survey: Children's Services is seeking feedback from the childcare sector on the regulations in the facility based inspection report, and which items you perceive as higher risk to a child's health and well-being.

Children's Services is undertaking a review of the monitoring system within the child care licensing system. The goal of the review is to increase the efficiency and effectiveness of the existing licensing system by refocusing the emphasis of the monitoring (licensing/inspection) process. We are seeking your feedback on which regulations from the facility based monitoring checklist you perceive as being higher risk to a child's health and safety.

Survey Organization: The survey uses the facility based monitoring checklist that licensing officers' use during inspection visits, with a rating scale attached to each checklist item. The rating scale is an eightpoint agreement scale, with 1 being low risk to the health and safety of children; and 8 being the highest risk to the health and safety of children.

Survey Questions

Тур	pe of facility
	Day Care Out of School Pre-school Care
De	pending on the type of facility they select, it will filter the survey to avoid non-applicable questions
1.	Child Guidance: A licence holder must ensure that (a) Child guidance methods utilized in the program are communicated to (i). Parents (ii). staff, and (iii). children, where developmentally appropriates, and (b) any child guidance provided is reasonable in the circumstances. 1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety
2.	 Child Guidance: A licence holder must not, with respect to a child in the program (a) inflict or cause to be inflicted any form of physical punishment, verbal or physical degradation or emotional deprivation, (b) deny or threaten to deny any basic necessity, or (c) use or permit the use of any form of physical restraint, confinement or isolation
	1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety
3.	Minimum Staff and General Supervision: At all times when a group of 7 or more children are

receiving child care in a licenced facility-based program, whether on or off program premises, the

licence holder must ensure that:

DAY CARE ONLY:

- (a) despite subsection 27 of this Schedule, a minimum of 2 adults staff members, one of whom is a primary staff member, is on duty for any children in the group who are receiving day care
- (b) all the children are, at all times, under supervision that is adequate to ensure their safety, well-being and development

1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety

OUT OF SCHOOL CARE ONLY:

- (a) despite subsection 27.1 of this Schedule, a minimum of 2 adult staff members, one of whom is a primary staff member, is on duty for any children in the group who are receiving out of school care,
- (b) all the children are, at all times, under supervision that is adequate to ensure their safety, well-being and development

1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety

PRE SCHOOL CARE ONLY:

- (a) despite section 27.2 of this Schedule, a minimum of 2 staff members, at least one of whom is an adult, are on duty for any children in the group who are receiving pre school care, and
- (b) all the children are, at all times, under supervision that is adequate to ensure their safety, wellbeing and development

1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety

4. Minimum Staff and General Supervision: Where children are being transported between the program premises and school, the statutory director may exempt the licence holder from the requirements of section 27 or 27.1 of this Schedule and subsection (1)(a) or (b), as the case may be, with respect to the children to being transported

1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety

DAY CARE ONLY:

- 5. Ratios and Maximum Group Size: (1) A licence holder that provides day care must ensure that, for children receiving day care, the following requirements are met at all times with respect to:
 - (a) the minimum primary staff member to children ratio, and
 - (b) the maximum number of children who may be included in a group:

Age of children	Primary Staff Member to	Maximum Number of
	Children Ratio	Children in a Group

Infants less than 12 months	1:3	6
Infants 12 months to less than 19	1:4	8
months		
19 months to less than 3 years	1:6	12
3 years to less than 4 years	1:8	16
4 years and older	1:10	20

6. Ratios and Maximum Group Size: (2) Despite subsection (1), a licence holder must ensure that, for all children receiving day care, the following requirements are met during all rest periods with respect to the minimum primary staff member to children ratio:

Age of Children		Primary Staff Member to Children Ration
Infants less than 12 months		1:6
Infants 12 months to less than 19 mo	nths	1:8
19 months to less than 3 years		1:12
3 years to less than 4 years		1:16
4 years and older		1:20

1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety

- 7. Ratios and Maximum Group Size: (3) Despite subsections (1) and (2), where a group of children receiving day care includes children from 2 or more of the age groups listed in column 1 of the table set out in subsection (1)(b),
 - (a) the minimum primary staff member to children ratio is
 - (i) during the children's rest period, the ratio set out in column 2 of the table set out in subsection (2) for the row of the table that describes the ages of the majority of the children in the combined group, or
 - (ii) at all other times, the ratio set out in column 2 of the table in subsection (1)(b) for the row of the table that describes the ages of the majority of the children in the combined group, and
 - (b) the following requirements must be met at all times with respect to the maximum number of children who may be included in the combined group:

Age of Majority of Children in the Combined Group	Maximum Children in the Combined Group
Less than 12 months	6
12 months to less than 19 months	8

19 months to less than 3 years	12
3 years to less than 4 years	16
4 years and older	20

8. Ratios and Maximum Group Size: (4) Subject to subsections (5) and (5.1), a licence holder who is licensed to provide day care for 3 or more infants must not allow an infant to be included in a combined age group referred to in subsection (3)(a)(i) or (ii) or (b)(i) or (ii) between the hours of 8:30a.m and 4:30p.m.

1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety

OUT OF SCHOOL CARE ONLY

- 5. Ratios and Maximum Group Size: A licence holder that provides out of school care must ensure that, for children receiving out of school care, the following requirements are met at all times with respect to
 - (a) the minimum primary staff member to children ratio, and
 - (b) the maximum number of children who may be included in a group:

Age of Children	Primary Staff Member to Children Ration	Maximum Number of Children in a Group
Kindergarten Children and School- Aged Children	1:15	30

1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety

PRE-SCHOOL CARE ONLY

5. Ratios and maximum group size: (1) A licence holder that provides pre-school care must ensure that, for children receiving pre-school care, the following requirements are met at all times with respect to the minimum staff member to children ratio:

Age of Children	Staff Member to Children Ration
19 months to less than 3 years	1:6
3 years and older	1:12

(2) For the purposes of subsection (1), parent volunteers may be considered a staff member.

- 6. Off-site Activity and Emergency Evacuation: (1) A licence holder may take a child to an activity off the program premises only where:
 - (a) the child's parent has been advised of the activity, including the transportation, contact information and supervision arrangements with respect to the activity, and
 - (b) the child's parent has previously consented in writing to the child's participation in the activity and the consent has not been retracted.
 - (2) A licence holder must ensure that in the case of an activity off the program premises or an emergency evacuation a staff member takes the portable record referred to in section 24 of this Schedule in respect of each child to be taken off the program premises.

- 7. Emergency and Safety Contacts and Procedures: (1) A licence holder must ensure that the following telephone numbers are posted on the program premises and are readily accessible:
 - (a) emergency 911 servicee
 - (e) poison control centre; and
 - (g) child abuse hotline
- (2) A licence holder must ensure that the emergency evacuation procedures and the telephone number for an after hours emergency program contact are posted on the program premises in a prominent place that is clearly visible from the outside of the program premises.
- (3) A licence holder must ensure that emergency evacuation procedures are made known to all staff, and to children where developmentally appropriate.

1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety

- 8. Accident or Illness: In the case of an accident or serious illness involving a child, the licence holder must forthwith ensure that
 - (a) the child's parent is notified, and
 - (b) the child receives medical attention if necessary.

1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety

9. Incident Reporting: A licence holder must report each incident to the statutory director forthwith in the manner required by the statutory director.

10. Smoking and Vaping: (1) A licence holder must ensure that no person smokes or vapes any substance on the program premises or at any time or place where child care is being provided. (2) No staff member or volunteer shall smoke or vape any substance on the program premises or at any other location where child care is being provided to the children in the program. (3) No staff member or volunteer shall leave any substance or material related to smoking or vaping in a place on the program premises that is accessible to children or at any other location where child care is being provided to the children in the program.

1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety

- 11. Portable Record: A licence holder must maintain a portable record of emergency information, including the following:
 - (a) in respect of each child, the information referred to in section 22(1)(a),(c),(d) and (g) of this Schedule,
 - (b) the telephone numbers of the local emergency response service and poison control centre

1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety

- 12. Potential Health Risk: (1) Where a staff member knows or has reason to believe that a child is exhibiting signs or symptoms of illness as set out in subsection (2), the licence holder must ensure
 - (a) that the child's parent arranges for the immediate removal of the child from the program premises, and
 - (b) that the child does not return to the program premises until the licence holder is satisfied that the child no longer poses a health risk to the persons on the program premises.

 $1-lowest\ risk\ to\ child's\ health\ and\ safety \qquad 2\qquad \qquad 3\qquad \qquad 4\qquad \qquad 5\qquad \qquad 6\qquad \qquad 7\qquad \qquad 8-highest\ risk\ to\ child's\ health\ and\ safety$

- 13. Supervised Care for Sick Children: A licence holder must ensure that a sick child is
 - (a) kept as far away as is practicable from other children,
 - (b) directly supervised by a primary staff member if the child is under the age of 6 or has a disability that requires direct care.

 $1-lowest\ risk\ to\ child's\ health\ and\ safety \qquad 2\qquad 3\qquad 4\qquad 5\qquad 6\qquad 7\qquad 8-highest\ risk\ to\ child's\ health\ and\ safety$

- 14. Medication and Health Care: (1) A licence holder may administer or allow the administration of medication or other health to a child only where
 - (a) the written consent of the child's parent has been obtained, and
 - (b) in the case of medication,

- (i) the medication is in the original labelled container, and
- (ii) the medication is administered according to the labelled directions.
- (2) Where the medication is administered to a child, the licence holder must ensure that the following information is recorded:
 - (a) the name of the medication;
 - (b) the time of administration
 - (c) the amount administered;
 - (d) the initials of the person who administered the medication
- (3) a licence holder must ensure that
 - (a) all medications, other than medication referred to in clause (b) is stored in a locked container that is inaccessible to the children and,
 - (b) medication required to be used by a particular child as needed to prevent a medical emergency is handled in accordance with a plan that
 - (i). ensures the medication is accessible by staff and the child but is not accessible by other children in the program, and
 - (ii). has been agreed on by the licence holder and the child's parent or guardian.

- 15. Nutrition: A licence holder must
 - (a) provide or require parents to provide meals and snacks for children in the program,
 - (b) where the licence holder provides meals and snacks, ensure that the meals and snacks are provided to children
 - (i) at appropriate times and in sufficient quantities in accordance with the needs of each child, and
 - (ii) in accordance with a food guide recognized by Health Canada or Alberta Health, and
 - (c) ensure that infant nutrition provided by parents is clearly labelled with the infant's name

1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety

16. Menus: If a licence holder provides meals or snacks for children in the program, the licence holder must ensure that menus for all meals and snacks are posted in a prominent place on the program premises

- 17. Manner of Feeding: A licence holder must ensure that
 - (a) The manner in which children are fed is appropriate to their age and level of development;
 - (b) Children are seated while eating and seating or standing while still drinking, and
 - (c) No beverages are provided to children during their rest periods

- 18. Program Space and Equipment: A licence holder must provide a minimum net floor area of
 - (a) DAY CARE ONLY At least 3 square metres of primary play space multiplied by the licensed capacity for day care, if the licence holder provides day care,
 - (b) PRE-SCHOOL ONLY at least 2.5 square metres of primary play space multiplied by the licensed capacity for pre-school care, if the licence holder provides pre-school care, and
 - (c) OUT OF SCHOOL CARE ONLY at least 2.5 square metres of primary play space multiplied by the licensed capacity for out of school care, if the licence holder provides out of school care

1- lowest risk to child's health and safety 2 3 4 5 6 7 8 - highest risk to child's health and safety

DAY CARE ONLY:

19. Outdoor Play Space for Day Care: (1) A licence holder that provides day care must provide outdoor play space for children in day care that is on, adjacent to, or within easy and safe walking distance from the program premises and accommodates at least 50% of the licensed capacity at a level of not less than 2 square metres for each infant receiving day care and not less than 4.5 square metres for each child who is 19 months of age or over receiving day care. (2) The licence holder must ensure that

- (a) The outdoor play space referred to in subsection (1) is securely enclosed on all sides, and
- (b) The entrances to and exits from the outdoor play space that do not lead into the interior of the program premises are kept closed at all times while children are using the outdoor play space
- (3) A licence holder must ensure that the number of children utilizing the outdoor play space at any given time does not exceed the number that can be accommodated in accordance with subsection (1)

1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety

OUT OF SCHOOL CARE ONLY

19. Outdoor Play Space for Out of School Care: A licence holder that provides out of school care must provide outdoor play space for children in out of school care that is, to the satisfaction of the statutory director, within easy and safe walking distance from the program premises.

1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety

20. Furnishings and Equipment: A licence holder must ensure that

- (a) all furnishings, play equipment and play materials, whether used indoors or outdoors, are:
 - (i) safe and maintained in good repair,
 - (ii) developmentally appropriate for children, and
 - (iii) of sufficient quantity and variety for children,
- (b) books, toys and play equipment that support early learning, literacy development, physical activity and child development are available to children, and
- (c) each infant is provided with
 - (i) a separate crib, cradle or bassinet that is used in accordance with the *Canada Consumer Product Safety Act* (Canada) and the regulations under that Act, or
 - (ii) a bed of a type approved by the statutory director that is used in accordance with the written directions of the manufacture and any additional written directions of the statutory director

- 21. Children's Records: (1) A licence holder must, in respect of each child, maintain on the program premises an up-to-date record containing the following information:
 - (a) The child's name and date of birth and;
 - (b) A completed enrolment form;
 - (c) The parent's name and telephone number;
 - (d) The name and telephone number of a person who can be contacted in case of emergency, if the child's parent cannot be contacted;
 - (e) If medication is administered
 - (i) The written consent of the parent required under section 10(1) of this Schedule; and
 - (ii) The information required under section 10(2) of this Schedule
 - (f) The particulars of any health care provided to the child, including the written consent of the child's parent required under section 10 of this Schedule
 - (g) Any other relevant health information about the child provided by the child's parent, including the child's immunizations and allergies, if any
- (2) a licence holder must ensure that a record referred to in subsection (1) is available for inspection
 - (a) by the statutory director at all times, and
 - (b) by the child's parent at reasonable times

- 22. Administrative Records: (1) A licence holder must maintain on the program premises up-to-date administrative records containing the following information:
 - (a) particulars of the daily attendance of each child, including arrival and departure times;
 - (b) particulars of the daily attendance of each primary staff member, including
 - (i) arrival and departure times, and
 - (ii) hours spent providing child care;
 - (c) with respect to the program supervisor and each primary staff member,
 - (i) evidence of the supervisor's or member's child care certification, and
 - (ii) a current first aid certificate, where applicable;
 - (d) with respect to each staff member and each volunteer referred to in section 25(1)(a) of this Schedule, verification that a current criminal record check required under that section has been provided to the licence holder
 - (2) A licence holder must ensure that
 - (a) the records referred to in subsection (1) are available for inspection by the statutory director at all times,
 - (b) the information referred to in subsection (1)(a) is available for inspection by the child's parent at reasonable times, and
 - (c) the information referred to in subsection (1)(a) and (b) is retained for a minimum period of 2 years.

- 23. Core Requirements: (1) A licence holder must ensure that
 - (a) Each staff member and each volunteer who has unsupervised access to children
 - (i) is an adult, and
 - (ii) provides to the licence holder a criminal record check, including a vulnerable sector search, dated not earlier than 6 months prior to the date of commencement with the program and every three years after that date, and
 - (b) A minimum of one in every 2 primary staff members has first aid certification acceptable to the statutory director
 - (2) A new staff member or volunteer
 - (a) Must provide the criminal record check referred to in subsection (1)(a)(ii) within 8 weeks of commencement with the program, and
 - (b) Must not have unsupervised access to children until the criminal record check has been provided
 - (3) A licence holder must ensure that at least one staff member with first aid certification acceptable to the statutory director is on duty at all times

1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety

DAY CARE ONLY

- 24. Program Supervisor: (1) A licence holder that provides day care must ensure that a program supervisor who is certified as a Level 3 early childhood educator
 - (a) is employed by the program at all times and
 - (b) is on duty at all times when children receiving daycare are on the program premises.

Classification: Protected A

- (2) a program supervisor is not required to be on duty during any period for which the program supervisor or the licence holder has
 - (a) designated a staff member to assume the responsibilities of the program supervisor during the program supervisor's absence, and
 - (b) in the case of an absence of one month or longer, obtained statutory director's approval with respect to the designation of any staff member under clause (a) of that staff member is not certified as a Level 3 early childhood educator

OUT OF SCHOOL CARE ONLY

- 25. Program Supervisor: (1) a licence holder that provides out of school care must ensure that a program supervisor
 - (a) is employed by the program at all times and
 - (b) is on duty at all times when children receiving out of school care are on the program premises.
- (2) A program supervisor is not required to be on duty during any period for which the program supervisor or licence holder has designated a staff member to assume the responsibilities of the program supervisor during the program supervisor's absence

1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety

DAY CARE ONLY AND OUT OF SCHOOL CARE ONLY

- 26. (1) A licence holder that provides day care or out of school care must ensure that all primary staff members involved in providing day care or out of school care hold a child care certification under Part 3 of this Regulation.
 - (2) Despite subsection (1), in the case of a primary staff member who is hired as a Level 1 early childhood educator, the primary staff member
 - (a) must obtain a child care certification as a Level1 early childhood educator within 6 months of commencement with the program, and
 - (b) must not have unsupervised access to children until the primary staff member has obtained a child care certification as a Level 1 early childhood educator.

1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety

DAY CARE ONLY

- 27. Staff Qualifications: (1) A licence holder that provides day care must ensure that, with respect to the primary staff member to children ratios specified Section 27 of this Schedule,
 - (a) at all times between 8:30a.m. and 4:30p.m.
 - (i) at least one in every 3 of the primary staff member involved in providing day care is certified at minimum of Level 2 early childhood educator, and

Classification: Protected A

- (ii) the remaining primary staff members involved in providing day care are certified at minimum as level I early childhood educators, and;
- (b) at all other times, every primary staff member involved in providing day care are certified at minimum as a level 1 early childhood educator

OUT OF SCHOOL CARE ONLY

- 27. Staff Qualifications: a licence holder that provides out of school care must ensure that, with respect to the primary staff member to children ratios specified in section X of this Schedule,
 - a. at least one in every 4 staff members involved in providing out of school care is certified at minimum as a Level 2 early childhood educator, and
 - b. the remaining staff members involved in providing out of school care are certified at minimum as Level 1 early childhood educators.

1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety

PRE-SCHOOL CARE ONLY

- 27. Staff Qualifications: (1) a licence holder that provides pre-school care must ensure that
 - a. at least one in every 4 staff members involved in providing pre-school care is certified at minimum as a Level 2 early childhood educator, and
 - b. the remaining staff members involved in providing
 - (2) Despite subsection (1)(b), a staff member who is to be involved in providing pre-school care may be hired before obtaining a child care certification as a Level 1 early childhood educator, but the staff member
 - a. must obtain that certification within 6 months of commencement with the program, and
 - b. must not have unsupervised access to children before obtaining that certification.
 - 1 lowest risk to child's health and safety 2 3 4 5 6 7 8 highest risk to child's health and safety
- 28. Exemptions: (1) The statutory director may exempt a licence holder from a qualification requirement in section 26(1) or 30 of this Schedule if the statutory director is satisfied that an exemption is appropriate in the circumstances.
 - (2) An exemption issued under subsection (1) must, be in writing, be for a specified period of time, and be accompanied with a plan, provided by the licence holder and approved by the statutory director, addressing how the licence holder will meet the qualification requirement in respect of which the exemption is granted.
 - (3) A licence holder must ensure that an exemption issued under subsection (1) and the plan referred to in subsection (2) are posted in a prominent place on the program premises

Classification: Protected A

1 - Lowest risk to child's health and safety	2	3	4	5	6	7	8 – highest risk to child's health and safety
--	---	---	---	---	---	---	---

- 29. Compliance with Program Plan: (1) A licence holder
 - a. must comply with the program plan referred to in section 2(a) including any changes made under Section 5(b), and
 - b. must not make changes to the program plan without the prior approval of the director.

30. Provisions of a Licence – Safety Codes: A licence holder must comply with all applicable zoning, health and safety requirements

1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety

- 31. Provisions of a Licence Duty to Post Information: A holder of a facility-based licence must post, in a clearly visible and prominent place on the premises where the licensed facility-based program is being provided,
 - (a) the licence
 - (b) any report provided by the statutory director under section 10 (3),
 - (c) any conditions imposed on the licence under section 5(1) or 13,
 - (d) any provisions of the licence that are varied under section 12, and
 - (e) any probationary licence issued under section 15.

1 – lowest risk to child's health and safety 2 3 4 5 6 7 8 – highest risk to child's health and safety

Alberta's Quality Indicators

National Association for Regulatory Administration (NARA)

Research Report

July 2021

This report will introduce for the first time the concept of quality indicators. These quality indicators utilize the same methodology employed in designing licensing key indicators. These indicators will form a comprehensive and balanced approach utilizing Alberta's Key Indicator and Risk Assessment Rules. This study began late Spring into early Summer 2021. It involved collecting data from approximately 100 early care and education programs across the province of Alberta. The specific tool, guidance, and instructions are provided in the appendices.

The quality indicators revolve around Alberta's program plan document which is a comprehensive and far reaching approach that encompasses several key aspects of an early care and education program, such as, developmental needs of children, educational philosophy, interaction with the local community, child guidance, staffing, accident and illness prevention, health care, & supervision policy and practices. See the appendices for the detailed explanation of all these key elements.

As with the licensing key indicator methodology specific standards were identified that correlated with the overall quality scores obtained by programs. The following standards were identified as being key quality indicators (all these results were significant at p < .0001 with correlations over .90):

3a: Mental Needs: A description of how the program will encourage nurturing relationships, create a safe positive environment, nurture confidence, and provide social opportunities.

Indicators:
\square Describes how nurturing relationships will be encouraged in the program
\square Describes how the environment will be safe and positive
☐ Describes how children's confidence will be nurtured
\square Provides examples of social opportunities the program will provide to children
3c: Spiritual: A description of how the program will support the spiritual needs of the children as appropriate(support them in finding meaning, purpose, structure and value in their life).
Indicators:
\square Describes how the program will support children in finding meaning, purpose, structure and value in
their lives

\Box Describes how the program will support the spirit of the child, honours children's identity and
encourages positive sense of self.
\Box If applicable, clarifies how they will meet the needs of children who may be at different development
ages and have varying needs, including the unique needs of infants
11: Staff Orientation:
Indicators:
\Box Describes how staff or volunteers are made aware of the Act, Regulation, Program Plan, and policies
and procedures
\square Demonstrates how the program will determine staff and volunteers' understanding of the Act,
Regulation, Program Plan, and policies and procedures

The above three standards were the top contenders when compared to the overall quality ratings. These quality indicators can now be combined with the licensing key indicators and risk assessment rules identified in two separate studies completed earlier in the province of Alberta. By doing this, Alberta will have the first of its kind comprehensive differential monitoring key risk and predictive rule based system dealing with both licensing and quality. It will provide a balance between regulatory compliance and program quality.

Appendices:

Inter-correlations with Standards and Scoring

Quality Program Plan Standard

Quality Program Plan Evaluation Guidance

Quality Program Plan Tool

Richard Fiene, Ph.D., Research Psychologist, Research Institute for Key Indicators; Professor of Psychology (ret), Prevention Research Center,
Penn State University; Senior Research Consultant, National Association for Regulatory Administration.

For additional information about the differential monitoring methodology, please go to the following website: http://RIKInstitute.com Or contact Dr Fiene directly at rfiene@NARALicensing.org

GET

GET FILE="/home/MyDropbox/1NARA AL/QIM/NARA AL QIM RC Study1b.sav".

CORRELATIONS

CORRELATION

/VARIABLES = QITotal Var1 Var2 Var3a Var3b Var3c Var3d Var4 Var5 Var6 Var7 Var8 Var9 Var10 Var11 Var12 Var13 Var14 Var15 Var16 Var17 Var18 Var19 Var20 Var21 Var22 Var23 Var24 Var25 Var26 Var27 Var28 Var29 Var30 Var31 Var32 Var33 Var34 /PRINT = TWOTAIL NOSIG.

Correlations

		QI	Var1	Var2	Var3a	Var3b	Var3c
		Total					
QI	Pearson	1.00	.78	.57	.99	.84	.96
Total	Correlation						
	Sig. (2-		.014	.111	.000	.004	.000
	tailed)						
	N	9	9	9	9	9	9
Var1	Pearson	.78	1.00	.78	.78	.66	.75
	Correlation						
	Sig. (2-	.014		.003	.003	.019	.005
	tailed)						
	N	9	12	12	12	12	12
Var2	Pearson	.57	.78	1.00	.59	.58	.66
	Correlation						
	Sig. (2-	.111	.003		.044	.048	.019
	tailed)	_					
	N	9	12	12	12	12	12
Var3a	Pearson	.99	.78	.59	1.00	.84	.87
	Correlation						
	Sig. (2-	.000	.003	.044		.001	.000
	tailed)						
	N	9	12	12	12	12	12
Var3b	Pearson	.84	.66	.58	.84	1.00	.88
	Correlation						
	Sig. (2-	.004	.019	.048	.001		.000
	tailed)						
	N	9	12	12	12	12	12

		QI	Var1	Var2	Var3a	Var3b	Var3c
		Total					4 0 0
Var3c	Pearson Correlation	.96	.75	.66	.87	.88	1.00
	Sig. (2- tailed)	.000	.005	.019	.000	.000	
	N	9	12	12	12	12	12
Var3d	Pearson Correlation	.77	.59	.47	.83	.87	.76
	Sig. (2- tailed)	.015	.044	.123	.001	.000	.004
	N	9	12	12	12	12	12
Var4	Pearson Correlation	.92	.60	.36	.94	.78	.80
	Sig. (2- tailed)	.001	.039	.252	.000	.003	.002
	N	9	12	12	12	12	12
Var5	Pearson Correlation	.52	08	15	.10	.03	.13
	Sig. (2- tailed)	.154	.812	.651	.746	.917	.689
	N	9	12	12	12	12	12
Var6	Pearson Correlation	.83	.59	.25	.86	.61	.60
	Sig. (2- tailed)	.005	.042	.426	.000	.036	.041
	N	9	12	12	12	12	12
Var7	Pearson Correlation	.42	.11	01	.27	.38	.47
	Sig. (2- tailed)	.258	.743	.972	.399	.226	.122
	N	9	12	12	12	12	12
Var8	Pearson Correlation	.67	.69	.31	.73	.67	.75
	Sig. (2- tailed)	.048	.013	.321	.007	.017	.005
	N	9	12	12	12	12	12
Var9	Pearson Correlation	.75	.82	.85	.63	.61	.73
	Sig. (2- tailed)	.020	.001	.000	.030	.036	.007
	N	9	12	12	12	12	12
Var10	Pearson Correlation	.88	.60	.48	.89	.84	.88

		QI	Var1	Var2	Var3a	Var3b	Var3c
		Total					
	Sig. (2- tailed)	.002	.037	.112	.000	.001	.000
	N	9	12	12	12	12	12
Var11	Pearson Correlation	.94	.61	.54	.94	.86	.90
	Sig. (2- tailed)	.000	.035	.069	.000	.000	.000
	N	9	12	12	12	12	12
Var12	Pearson Correlation	.46	.33	03	.49	.53	.62
	Sig. (2- tailed)	.215	.296	.914	.109	.078	.033
	N	9	12	12	12	12	12
Var13	Pearson Correlation	.84	.92	.76	.90	.82	.90
	Sig. (2- tailed)	.017	.000	.018	.001	.007	.001
	N	7	9	9	9	9	9
Var14	Pearson Correlation	.91	.80	.78	.88	.79	.88
	Sig. (2- tailed)	.005	.009	.013	.002	.012	.002
	N	7	9	9	9	9	9
Var15	Pearson Correlation	.76	.52	.28	.79	.60	.61
	Sig. (2- tailed)	.018	.082	.385	.002	.040	.034
	N	9	12	12	12	12	12
Var16	Pearson Correlation	.67	.64	.43	.71	.67	.66
	Sig. (2- tailed)	.050	.026	.161	.010	.018	.019
	N	9	12	12	12	12	12
Var17	Pearson Correlation	.67	.64	.43	.71	.67	.66
	Sig. (2- tailed)	.050	.026	.161	.010	.018	.019
	N	9	12	12	12	12	12
Var18	Pearson Correlation	.73	.47	.27	.78	.73	.74
	Sig. (2- tailed)	.025	.125	.387	.003	.007	.006
	N N	9	12	12	12	12	12

		QI Total	Var1	Var2	Var3a	Var3b	Var3c
Var19	Pearson	.73	.47	.27	.78	.73	.74
	Correlation						
	Sig. (2- tailed)	.025	.125	.387	.003	.007	.006
	N	9	12	12	12	12	12
Var20	Pearson Correlation	.73	.47	.27	.78	.73	.74
	Sig. (2- tailed)	.025	.125	.387	.003	.007	.006
	N	9	12	12	12	12	12
Var21	Pearson Correlation	.55	.42	.25	.70	.62	.62
	Sig. (2- tailed)	.155	.201	.467	.016	.040	.042
	N	8	11	11	11	11	11
Var22	Pearson Correlation	.82	.87	.51	.73	.72	.82
	Sig. (2- tailed)	.013	.001	.109	.010	.012	.002
	N	8	11	11	11	11	11
Var23	Pearson Correlation	.82	.87	.51	.73	.72	.82
	Sig. (2- tailed)	.013	.001	.109	.010	.012	.002
	N	8	11	11	11	11	11
Var24	Pearson Correlation	.82	.87	.51	.73	.72	.82
	Sig. (2- tailed)	.013	.001	.109	.010	.012	.002
	N	8	11	11	11	11	11
Var25	Pearson Correlation	.59	.62	.36	.68	.60	.53
	Sig. (2- tailed)	.095	.032	.244	.015	.039	.077
	N	9	12	12	12	12	12
Var26	Pearson Correlation	.59	.62	.36	.68	.60	.53
	Sig. (2- tailed)	.095	.032	.244	.015	.039	.077
	N	9	12	12	12	12	12
Var27	Pearson Correlation	13	.15	.17	.31	.20	.09

		QI Total	Var1	Var2	Var3a	Var3b	Var3c
	Sig. (2- tailed)	.741	.633	.590	.335	.530	.780
	N	9	12	12	12	12	12
Var28	Pearson Correlation	NaN	NaN	NaN	NaN	NaN	NaN
	Sig. (2- tailed)	NaN	NaN	NaN	NaN	NaN	NaN
	N	0	0	0	0	0	0
Var29	Pearson Correlation	NaN	NaN	NaN	NaN	NaN	NaN
	Sig. (2- tailed)	NaN	NaN	NaN	NaN	NaN	NaN
	N	0	0	0	0	0	0
Var30	Pearson Correlation	.74	.88	.55	.78	.73	.80
	Sig. (2- tailed)	.024	.000	.067	.003	.007	.002
	N	9	12	12	12	12	12
Var31	Pearson Correlation	.88	.59	.40	.90	.70	.69
	Sig. (2- tailed)	.002	.041	.195	.000	.010	.014
	N	9	12	12	12	12	12
Var32	Pearson Correlation	NaN	06	04	.34	.12	07
	Sig. (2- tailed)	NaN	.865	.905	.306	.733	.845
	N	8	11	11	11	11	11
Var33	Pearson Correlation	.84	.54	.71	.73	.70	.80
	Sig. (2- tailed)	.004	.070	.010	.007	.011	.002
	N	9	12	12	12	12	12
Var34	Pearson Correlation	.84	.69	.79	.79	.77	.88
	Sig. (2- tailed)	.004	.014	.002	.002	.003	.000
	N	9	12	12	12	12	12
		Var3d	Var4	Var5	Var6	Var7	Var8

		Var3d	Var4	Var5	Var6	Var7	Var8	Var9
QI Total	Pearson Correlation	.77	.92	.52	.83	.42	.67	.75

		Var3d	Var4	Var5	Var6	Var7	Var8	Var9
	Sig. (2- tailed)	.015	.001	.154	.005	.258	.048	.020
	N	9	9	9	9	9	9	9
Var1	Pearson Correlation	.59	.60	08	.59	.11	.69	.82
	Sig. (2- tailed)	.044	.039	.812	.042	.743	.013	.001
	N	12	12	12	12	12	12	12
Var2	Pearson Correlation	.47	.36	15	.25	01	.31	.85
	Sig. (2- tailed)	.123	.252	.651	.426	.972	.321	.000
	N	12	12	12	12	12	12	12
Var3a	Pearson Correlation	.83	.94	.10	.86	.27	.73	.63
	Sig. (2- tailed)	.001	.000	.746	.000	.399	.007	.030
	N	12	12	12	12	12	12	12
Var3b	Pearson Correlation	.87	.78	.03	.61	.38	.67	.61
	Sig. (2- tailed)	.000	.003	.917	.036	.226	.017	.036
	N	12	12	12	12	12	12	12
Var3c	Pearson Correlation	.76	.80	.13	.60	.47	.75	.73
	Sig. (2- tailed)	.004	.002	.689	.041	.122	.005	.007
	N	12	12	12	12	12	12	12
Var3d	Pearson Correlation	1.00	.81	14	.68	.35	.57	.46
	Sig. (2- tailed)		.002	.669	.015	.270	.053	.131
	N	12	12	12	12	12	12	12
Var4	Pearson Correlation	.81	1.00	.24	.87	.46	.70	.53
	Sig. (2- tailed)	.002		.452	.000	.131	.011	.077
	N	12	12	12	12	12	12	12
Var5	Pearson Correlation	14	.24	1.00	.31	.41	.00	.12
	Sig. (2- tailed)	.669	.452		.325	.182	1.000	.711
	N	12	12	12	12	12	12	12

		Var3d	Var4	Var5	Var6	Var7	Var8	Var9
Var6	Pearson Correlation	.68	.87	.31	1.00	.32	.50	.35
	Sig. (2- tailed)	.015	.000	.325		.308	.098	.269
	N N	12	12	12	12	12	12	12
Var7	Pearson Correlation	.35	.46	.41	.32	1.00	.16	.32
	Sig. (2- tailed)	.270	.131	.182	.308		.618	.308
	N	12	12	12	12	12	12	12
Var8	Pearson Correlation	.57	.70	.00	.50	.16	1.00	.50
	Sig. (2- tailed)	.053	.011	1.000	.098	.618		.098
	N	12	12	12	12	12	12	12
Var9	Pearson Correlation	.46	.53	.12	.35	.32	.50	1.00
	Sig. (2- tailed)	.131	.077	.711	.269	.308	.098	
	N	12	12	12	12	12	12	12
Var10	Pearson Correlation	.88	.86	01	.76	.49	.58	.46
	Sig. (2- tailed)	.000	.000	.982	.004	.109	.047	.130
	N	12	12	12	12	12	12	12
Var11	Pearson Correlation	.83	.92	.10	.70	.32	.73	.58
	Sig. (2- tailed)	.001	.000	.759	.011	.303	.007	.047
	N	12	12	12	12	12	12	12
Var12	Pearson Correlation	.44	.63	.17	.33	.54	.83	.33
	Sig. (2- tailed)	.149	.027	.603	.290	.072	.001	.290
	N	12	12	12	12	12	12	12
Var13	Pearson Correlation	.87	.79	20	.87	.80	.61	.67
	Sig. (2- tailed)	.003	.011	.606	.003	.009	.081	.048
	N	9	9	9	9	9	9	9
Var14	Pearson Correlation	.74	.90	.16	.70	.82	.70	.93

		Var3d	Var4	Var5	Var6	Var7	Var8	Var9
	Sig. (2- tailed)	.022	.001	.686	.035	.007	.036	.000
	N	9	9	9	9	9	9	9
Var15	Pearson Correlation	.65	.87	.44	.92	.61	.38	.49
	Sig. (2- tailed)	.023	.000	.149	.000	.036	.226	.109
	N	12	12	12	12	12	12	12
Var16	Pearson Correlation	.79	.72	36	.55	.46	.56	.55
	Sig. (2- tailed)	.002	.009	.243	.065	.133	.056	.065
	N	12	12	12	12	12	12	12
Var17	Pearson Correlation	.79	.72	36	.55	.46	.56	.55
	Sig. (2- tailed)	.002	.009	.243	.065	.133	.056	.065
	N	12	12	12	12	12	12	12
Var18	Pearson Correlation	.80	.90	.01	.65	.60	.65	.50
	Sig. (2- tailed)	.002	.000	.982	.023	.040	.023	.098
	N	12	12	12	12	12	12	12
Var19	Pearson Correlation	.80	.90	.01	.65	.60	.65	.50
	Sig. (2- tailed)	.002	.000	.982	.023	.040	.023	.098
	N	12	12	12	12	12	12	12
Var20	Pearson Correlation	.80	.90	.01	.65	.60	.65	.50
	Sig. (2- tailed)	.002	.000	.982	.023	.040	.023	.098
	N	12	12	12	12	12	12	12
Var21	Pearson Correlation	.70	.84	10	.52	.47	.69	.52
	Sig. (2- tailed)	.016	.001	.767	.100	.147	.019	.100
	N	11	11	11	11	11	11	11
Var22	Pearson Correlation	.70	.67	.00	.64	.75	.57	.64
	Sig. (2- tailed)	.016	.024	1.000	.032	.007	.065	.032
	N	11	11	11	11	11	11	11

		Var3d	Var4	Var5	Var6	Var7	Var8	Var9
Var23	Pearson Correlation	.70	.67	.00	.64	.75	.57	.64
	Sig. (2- tailed)	.016	.024	1.000	.032	.007	.065	.032
	N	11	11	11	11	11	11	11
Var24	Pearson Correlation	.70	.67	.00	.64	.75	.57	.64
	Sig. (2- tailed)	.016	.024	1.000	.032	.007	.065	.032
	N	11	11	11	11	11	11	11
Var25	Pearson Correlation	.66	.59	14	.57	04	.63	.36
	Sig. (2- tailed)	.019	.043	.662	.054	.905	.027	.249
	N	12	12	12	12	12	12	12
Var26	Pearson Correlation	.66	.59	14	.57	04	.63	.36
	Sig. (2- tailed)	.019	.043	.662	.054	.905	.027	.249
	N	12	12	12	12	12	12	12
Var27	Pearson Correlation	.43	.42	31	.29	.25	.00	.29
	Sig. (2- tailed)	.167	.174	.326	.356	.431	1.000	.356
	N	12	12	12	12	12	12	12
Var28	Pearson Correlation	NaN	NaN	NaN	NaN	NaN	NaN	NaN
	Sig. (2- tailed)	NaN	NaN	NaN	NaN	NaN	NaN	NaN
	N	0	0	0	0	0	0	0
Var29	Pearson Correlation	NaN	NaN	NaN	NaN	NaN	NaN	NaN
	Sig. (2- tailed)	NaN	NaN	NaN	NaN	NaN	NaN	NaN
	N	0	0	0	0	0	0	0
Var30	Pearson Correlation	.70	.64	25	.57	.18	.84	.57
	Sig. (2- tailed)	.012	.024	.428	.051	.575	.001	.051
	N	12	12	12	12	12	12	12
Var31	Pearson Correlation	.73	.87	01	.74	01	.77	.42

		Var3d	Var4	Var5	Var6	Var7	Va	r8	Va	 r9
	Sig. (2- tailed)	.007	.000	.981	.006	.963	.(004	.17	77
	N	12	12	12	12	12		12	1	12
Var32	Pearson Correlation	.36	.38	43	.38	38		.02	2	22
	Sig. (2- tailed)	.273	.243	.186	.246	.245	.9	943	.51	19
	N	11	11	11	11	11		11	1	11
Var33	Pearson Correlation	.52	.63	.35	.45	.13		.50	.6	<i>65</i>
	Sig. (2- tailed)	.083	.028	.271	.138	.697).)96	.02	23
	N	12	12	12	12	12		12	1	12
Var34	Pearson Correlation	.60	.70	.21	.45	.20		.63	3.	31
	Sig. (2- tailed)	.039	.012	.509	.140	.526).)27	.00)1
	N	12	12	12	12	12		12	1	12
		Var10	Var11	Var12	Var1	3 Var	14	Var	15	7
QI Total	Pearson Correlation	.88	.94	.46	.8	4	.91		.76	
	Sig. (2- tailed)	.002	.000	.215	.01	7 .0	005	.0	18	
	N	9	9	9		7	7		9	
Var1	Pearson Correlation	.60	.61	.33	.9	2	.80	•	.52	
	Sig. (2- tailed)	.037	.035	.296	.00	0. 0	009	0.	82	
	N	12	12	12		9	9		12	
Var2	Pearson Correlation	.48	.54	03			.78		.28	
	Sig. (2- tailed)	.112	.069	.914	.01	0. 8)13	.3	85	
	N	12	12	12		9	9		12	
Var3a	Pearson Correlation	.89	.94	.49			.88		.79	
	Sig. (2- tailed)	.000	.000	.109	.00	1 .0	002	0.	02	
	N	12	12	12		9	9		12	
Var3b	Pearson Correlation	.84	.86	.53	.8	2	.79		.60	

		Var10	Var11	Var12	Var13	Var14	Var15
	Sig. (2- tailed)	.001	.000	.078	.007	.012	.040
	N	12	12	12	9	9	12
Var3c	Pearson Correlation	.88	.90	.62	.90	.88	.61
	Sig. (2- tailed)	.000	.000	.033	.001	.002	.034
	N	12	12	12	9	9	12
Var3d	Pearson Correlation	.88	.83	.44	.87	.74	.65
	Sig. (2- tailed)	.000	.001	.149	.003	.022	.023
	N	12	12	12	9	9	12
Var4	Pearson Correlation	.86	.92	.63	.79	.90	.87
	Sig. (2- tailed)	.000	.000	.027	.011	.001	.000
	N	12	12	12	9	9	12
Var5	Pearson Correlation	01	.10	.17	20	.16	.44
	Sig. (2- tailed)	.982	.759	.603	.606	.686	.149
	N	12	12	12	9	9	12
Var6	Pearson Correlation	.76	.70	.33	.87	.70	.92
	Sig. (2- tailed)	.004	.011	.290	.003	.035	.000
	N	12	12	12	9	9	12
Var7	Pearson Correlation	.49	.32	.54	.80	.82	.61
	Sig. (2- tailed)	.109	.303	.072	.009	.007	.036
	N	12	12	12	9	9	12
Var8	Pearson Correlation	.58	.73	.83	.61	.70	.38
	Sig. (2- tailed)	.047	.007	.001	.081	.036	.226
	N	12	12	12	9	9	12
Var9	Pearson Correlation	.46	.58	.33	.67	.93	.49
	Sig. (2- tailed)	.130	.047	.290	.048	.000	.109
	N	12	12	12	9	9	12

		Var10	Var11	Var12	Var13	Var14	Var15
Var10	Pearson Correlation	1.00	.89	.47	.94	.73	.73
	Sig. (2- tailed)		.000	.119	.000	.026	.007
	N	12	12	12	9	9	12
Var11	Pearson Correlation	.89	1.00	.59	.79	.90	.67
	Sig. (2- tailed)	.000		.043	.011	.001	.017
	N	12	12	12	9	9	12
Var12	Pearson Correlation	.47	.59	1.00	.50	.71	.38
	Sig. (2- tailed)	.119	.043		.170	.031	.226
	N	12	12	12	9	9	12
Var13	Pearson Correlation	.94	.79	.50	1.00	.71	.80
	Sig. (2- tailed)	.000	.011	.170		.031	.009
	N	9	9	9	9	9	9
Var14	Pearson Correlation	.73	.90	.71	.71	1.00	.82
	Sig. (2- tailed)	.026	.001	.031	.031		.007
	N	9	9	9	9	9	9
Var15	Pearson Correlation	.73	.67	.38	.80	.82	1.00
	Sig. (2- tailed)	.007	.017	.226	.009	.007	
	N	12	12	12	9	9	12
Var16	Pearson Correlation	.77	.67	.53	.92	.80	.60
	Sig. (2- tailed)	.003	.018	.079	.000	.009	.041
	N	12	12	12	9	9	12
Var17	Pearson Correlation	.77	.67	.53	.92	.80	.60
	Sig. (2- tailed)	.003	.018	.079	.000	.009	.041
	N	12	12	12	9	9	12
Var18	Pearson Correlation	.81	.84	.73	.82	.96	.73

		Var10	Var11	Var12	Var13	Var14	Var15
	Sig. (2- tailed)	.001	.001	.007	.007	.000	.007
	N	12	12	12	9	9	12
Var19	Pearson Correlation	.81	.84	.73	.82	.96	.73
	Sig. (2- tailed)	.001	.001	.007	.007	.000	.007
	N	12	12	12	9	9	12
Var20	Pearson Correlation	.81	.84	.73	.82	.96	.73
	Sig. (2- tailed)	.001	.001	.007	.007	.000	.007
	N	12	12	12	9	9	12
Var21	Pearson Correlation	.67	.78	.74	.66	1.00	.68
	Sig. (2- tailed)	.024	.005	.009	.074	.000	.020
	N	11	11	11	8	8	11
Var22	Pearson Correlation	.83	.62	.54	1.00	.71	.69
	Sig. (2- tailed)	.002	.042	.085	.000	.031	.019
	N	11	11	11	9	9	11
Var23	Pearson Correlation	.83	.62	.54	1.00	.71	.69
	Sig. (2- tailed)	.002	.042	.085	.000	.031	.019
	N	11	11	11	9	9	11
Var24	Pearson Correlation	.83	.62	.54	1.00	.71	.69
	Sig. (2- tailed)	.002	.042	.085	.000	.031	.019
	N	11	11	11	9	9	11
Var25	Pearson Correlation	.55	.59	.36	.58	.49	.41
	Sig. (2- tailed)	.067	.043	.249	.104	.176	.186
	N	12	12	12	9	9	12
Var26	Pearson Correlation	.55	.59	.36	.58	.49	.41
	Sig. (2- tailed)	.067	.043	.249	.104	.176	.186
	N	12	12	12	9	9	12

		Var10	Var11	Var12	Var13	Var14	Var15
Var27	Pearson Correlation	.29	.30	.10	.40	.67	.44
	Sig. (2- tailed)	.360	.351	.763	.286	.048	.150
	N	12	12	12	9	9	12
Var28	Pearson Correlation	NaN	NaN	NaN	NaN	NaN	NaN
	Sig. (2- tailed)	NaN	NaN	NaN	NaN	NaN	NaN
	N	0	0	0	0	0	0
Var29	Pearson Correlation	NaN	NaN	NaN	NaN	NaN	NaN
	Sig. (2- tailed)	NaN	NaN	NaN	NaN	NaN	NaN
	N	0	0	0	0	0	0
Var30	Pearson Correlation	.74	.68	.56	.90	.64	.44
	Sig. (2- tailed)	.006	.015	.058	.001	.063	.152
	N	12	12	12	9	9	12
Var31	Pearson Correlation	.71	.90	.51	.69	.86	.58
	Sig. (2- tailed)	.009	.000	.090	.041	.003	.049
	N	12	12	12	9	9	12
Var32	Pearson Correlation	.25	.36	15	NaN	NaN	.22
	Sig. (2- tailed)	.464	.283	.662	NaN	NaN	.515
	N	11	11	11	8	8	11
Var33	Pearson Correlation	.61	.81	.28	.58	.82	.44
	Sig. (2- tailed)	.034	.001	.380	.104	.006	.149
	N	12	12	12	9	9	12
Var34	Pearson Correlation	.66	.86	.42	.69	.97	.48
	Sig. (2- tailed)	.021	.000	.172	.041	.000	.116
	N	12	12	12	9	9	12

		Var16	Var17	Var18	Var19	Var20	Var21
QI Total	Pearson Correlation	.67	.67	.73	.73	.73	.55
Total	Sig. (2- tailed)	.050	.050	.025	.025	.025	.155
	N	9	9	9	9	9	8
Var1	Pearson Correlation	.64	.64	.47	.47	.47	.42
	Sig. (2- tailed)	.026	.026	.125	.125	.125	.201
	N	12	12	12	12	12	11
Var2	Pearson Correlation	.43	.43	.27	.27	.27	.25
	Sig. (2- tailed)	.161	.161	.387	.387	.387	.467
	N	12	12	12	12	12	11
Var3a	Pearson Correlation	.71	.71	.78	.78	.78	.70
	Sig. (2- tailed)	.010	.010	.003	.003	.003	.016
	N	12	12	12	12	12	11
Var3b	Pearson Correlation	.67	.67	.73	.73	.73	.62
	Sig. (2- tailed)	.018	.018	.007	.007	.007	.040
	N	12	12	12	12	12	11
Var3c	Pearson Correlation	.66	.66	.74	.74	.74	.62
	Sig. (2- tailed)	.019	.019	.006	.006	.006	.042
	N	12	12	12	12	12	11
Var3d	Pearson Correlation	.79	.79	.80	.80	.80	.70
	Sig. (2- tailed)	.002	.002	.002	.002	.002	.016
	N	12	12	12	12	12	11
Var4	Pearson Correlation	.72	.72	.90	.90	.90	.84
	Sig. (2- tailed)	.009	.009	.000	.000	.000	.001
	N	12	12	12	12	12	11
Var5	Pearson Correlation	36	36	.01	.01	.01	10

		Var16	Var17	Var18	Var19	Var20	Var21
	Sig. (2- tailed)	.243	.243	.982	.982	.982	.767
	N	12	12	12	12	12	11
Var6	Pearson Correlation	.55	.55	.65	.65	.65	.52
	Sig. (2- tailed)	.065	.065	.023	.023	.023	.100
	N	12	12	12	12	12	11
Var7	Pearson Correlation	.46	.46	.60	.60	.60	.47
	Sig. (2- tailed)	.133	.133	.040	.040	.040	.147
	N	12	12	12	12	12	11
Var8	Pearson Correlation	.56	.56	.65	.65	.65	.69
	Sig. (2- tailed)	.056	.056	.023	.023	.023	.019
	N	12	12	12	12	12	11
Var9	Pearson Correlation	.55	.55	.50	.50	.50	.52
	Sig. (2- tailed)	.065	.065	.098	.098	.098	.100
	N	12	12	12	12	12	11
Var10	Pearson Correlation	.77	.77	.81	.81	.81	.67
	Sig. (2- tailed)	.003	.003	.001	.001	.001	.024
	N	12	12	12	12	12	11
Var11	Pearson Correlation	.67	.67	.84	.84	.84	.78
	Sig. (2- tailed)	.018	.018	.001	.001	.001	.005
	N	12	12	12	12	12	11
Var12	Pearson Correlation	.53	.53	.73	.73	.73	.74
	Sig. (2- tailed)	.079	.079	.007	.007	.007	.009
	N	12	12	12	12	12	11
Var13	Pearson Correlation	.92	.92	.82	.82	.82	.66
	Sig. (2- tailed)	.000	.000	.007	.007	.007	.074
	N N	9	9	9	9	9	8

		Var16	Var17	Var18	Var19	Var20	Var21
Var14	Pearson Correlation	.80	.80	.96	.96	.96	1.00
	Sig. (2- tailed)	.009	.009	.000	.000	.000	.000
	N	9	9	9	9	9	8
Var15	Pearson Correlation	.60	.60	.73	.73	.73	.68
	Sig. (2- tailed)	.041	.041	.007	.007	.007	.020
	N	12	12	12	12	12	11
Var16	Pearson Correlation	1.00	1.00	.87	.87	.87	.82
	Sig. (2- tailed)		.000	.000	.000	.000	.002
	N	12	12	12	12	12	11
Var17	Pearson Correlation	1.00	1.00	.87	.87	.87	.82
	Sig. (2- tailed)	.000		.000	.000	.000	.002
	N	12	12	12	12	12	11
Var18	Pearson Correlation	.87	.87	1.00	1.00	1.00	.97
	Sig. (2- tailed)	.000	.000		.000	.000	.000
	N	12	12	12	12	12	11
Var19	Pearson Correlation	.87	.87	1.00	1.00	1.00	.97
	Sig. (2- tailed)	.000	.000	.000		.000	.000
	N	12	12	12	12	12	11
Var20	Pearson Correlation	.87	.87	1.00	1.00	1.00	.97
	Sig. (2- tailed)	.000	.000	.000	.000		.000
	N	12	12	12	12	12	11
Var21	Pearson Correlation	.82	.82	.97	.97	.97	1.00
	Sig. (2- tailed)	.002	.002	.000	.000	.000	
	N	11	11	11	11	11	11
Var22	Pearson Correlation	.82	.82	.72	.72	.72	.56

		Var16	Var17	Var18	Var19	Var20	Var21
	Sig. (2- tailed)	.002	.002	.012	.012	.012	.094
	N	11	11	11	11	11	10
Var23	Pearson Correlation	.82	.82	.72	.72	.72	.56
	Sig. (2- tailed)	.002	.002	.012	.012	.012	.094
	N	11	11	11	11	11	10
Var24	Pearson Correlation	.82	.82	.72	.72	.72	.56
	Sig. (2- tailed)	.002	.002	.012	.012	.012	.094
	N	11	11	11	11	11	10
Var25	Pearson Correlation	.52	.52	.48	.48	.48	.47
	Sig. (2- tailed)	.086	.086	.112	.112	.112	.143
	N	12	12	12	12	12	11
Var26	Pearson Correlation	.52	.52	.48	.48	.48	.47
	Sig. (2- tailed)	.086	.086	.112	.112	.112	.143
	N	12	12	12	12	12	11
Var27	Pearson Correlation	.68	.68	.62	.62	.62	.72
	Sig. (2- tailed)	.015	.015	.032	.032	.032	.013
	N	12	12	12	12	12	11
Var28	Pearson Correlation	NaN	NaN	NaN	NaN	NaN	NaN
	Sig. (2- tailed)	NaN	NaN	NaN	NaN	NaN	NaN
	N	0	0	0	0	0	0
Var29	Pearson Correlation	NaN	NaN	NaN	NaN	NaN	NaN
	Sig. (2- tailed)	NaN	NaN	NaN	NaN	NaN	NaN
	N	0	0	0	0	0	0
Var30	Pearson Correlation	.75	.75	.60	.60	.60	.50
	Sig. (2- tailed)	.005	.005	.040	.040	.040	.118
	N	12	12	12	12	12	11

		Var16	Var17	Var18	Var19	Var20	Var21
Var31	Pearson Correlation	.58	.58	.73	.73	.73	.74
	Sig. (2- tailed)	.050	.050	.007	.007	.007	.009
	N	12	12	12	12	12	11
Var32	Pearson Correlation	.26	.26	.34	.34	.34	.46
	Sig. (2- tailed)	.434	.434	.313	.313	.313	.184
	N	11	11	11	11	11	10
Var33	Pearson Correlation	.21	.21	.43	.43	.43	.36
	Sig. (2- tailed)	.504	.504	.167	.167	.167	.279
	N	12	12	12	12	12	11
Var34	Pearson Correlation	.43	.43	.57	.57	.57	.55
	Sig. (2- tailed)	.165	.165	.051	.051	.051	.080
	N	12	12	12	12	12	11
		Var22	Var23	Var24	Var25	Var26	Var27
II.							
QI Total	Pearson Correlation	.82	.82	.82	.59	.59	13
QI Total	Correlation Sig. (2-	.82 .013	.82 .013	.82 .013	.59	.59	13 .741
_	Correlation						
_	Correlation Sig. (2- tailed)	.013	.013	.013	.095	.095	.741
Total	Correlation Sig. (2- tailed) N Pearson	.013	.013	.013 8	.095 9	.095	.741 9
Total	Correlation Sig. (2- tailed) N Pearson Correlation Sig. (2-	.013 <u>8</u> .87	.013 8 .87	.013 8 .87	.095 9 .62	.095 9 .62	.741 9 .15
Total	Correlation Sig. (2- tailed) N Pearson Correlation Sig. (2- tailed)	.013 <u>8</u> .87 .001	.013 <u>8</u> .87 .001	.013 <u>8</u> .87 .001	.095 9 .62 .032	.095 9 .62 .032	.741 9 .15 .633
Total Var1	Correlation Sig. (2- tailed) N Pearson Correlation Sig. (2- tailed) N Pearson	.013 8 .87 .001 11	.013 8 .87 .001 11	.013 8 .87 .001 11	.095 9 .62 .032	.095 9 .62 .032	.741 9 .15 .633
Total Var1	Correlation Sig. (2- tailed) N Pearson Correlation Sig. (2- tailed) N Pearson Correlation Sig. (2-	.013 8 .87 .001 11 .51	.013 8 .87 .001 11 .51 .109 11	.013 8 .87 .001 11 .51	.095 9 .62 .032 12 .36	.095 9 .62 .032 12 .36	.741 9 .15 .633 12 .17
Total Var1	Correlation Sig. (2- tailed) N Pearson Correlation Sig. (2- tailed) N Pearson Correlation Sig. (2- tailed)	.013 8 .87 .001 11 .51 .109	.013 8 .87 .001 11 .51 .109	.013 8 .87 .001 11 .51 .109	.095 9 .62 .032 12 .36	.095 9 .62 .032 12 .36 .244	.741 9 .15 .633 12 .17
Var1	Correlation Sig. (2- tailed) N Pearson Correlation Sig. (2- tailed) N Pearson Correlation Sig. (2- tailed) N Pearson N Pearson Pearson N Pearson	.013 8 .87 .001 11 .51 .109 11	.013 8 .87 .001 11 .51 .109	.013 8 .87 .001 11 .51 .109 11	.095 9 .62 .032 12 .36 .244 12	.095 9 .62 .032 12 .36 .244 12	.741 9 .15 .633 12 .17 .590

		Var22	Var23	Var24	Var25	Var26	Var27
Var3b	Pearson Correlation	.72	.72	.72	.60	.60	.20
	Sig. (2- tailed)	.012	.012	.012	.039	.039	.530
	N	11	11	11	12	12	12
Var3c	Pearson Correlation	.82	.82	.82	.53	.53	.09
	Sig. (2- tailed)	.002	.002	.002	.077	.077	.780
	N	11	11	11	12	12	12
Var3d	Pearson Correlation	.70	.70	.70	.66	.66	.43
	Sig. (2- tailed)	.016	.016	.016	.019	.019	.167
	N	11	11	11	12	12	12
Var4	Pearson Correlation	.67	.67	.67	.59	.59	.42
	Sig. (2- tailed)	.024	.024	.024	.043	.043	.174
	N	11	11	11	12	12	12
Var5	Pearson Correlation	.00	.00	.00	14	14	31
	Sig. (2- tailed)	1.000	1.000	1.000	.662	.662	.326
	N	11	11	11	12	12	12
Var6	Pearson Correlation	.64	.64	.64	.57	.57	.29
	Sig. (2- tailed)	.032	.032	.032	.054	.054	.356
	N	11	11	11	12	12	12
Var7	Pearson Correlation	.75	.75	.75	04	04	.25
	Sig. (2- tailed)	.007	.007	.007	.905	.905	.431
	N	11	11	11	12	12	12
Var8	Pearson Correlation	.57	.57	.57	.63	.63	.00
	Sig. (2- tailed)	.065	.065	.065	.027	.027	1.000
	N	11	11	11	12	12	12
Var9	Pearson Correlation	.64	.64	.64	.36	.36	.29

		Var22	Var23	Var24	Var25	Var26	Var27
	Sig. (2- tailed)	.032	.032	.032	.249	.249	.356
	N	11	11	11	12	12	12
Var10	Pearson Correlation	.83	.83	.83	.55	.55	.29
	Sig. (2- tailed)	.002	.002	.002	.067	.067	.360
	N	11	11	11	12	12	12
Var11	Pearson Correlation	.62	.62	.62	.59	.59	.30
	Sig. (2- tailed)	.042	.042	.042	.043	.043	.351
	N	11	11	11	12	12	12
Var12	Pearson Correlation	.54	.54	.54	.36	.36	.10
	Sig. (2- tailed)	.085	.085	.085	.249	.249	.763
	N	11	11	11	12	12	12
Var13	Pearson Correlation	1.00	1.00	1.00	.58	.58	.40
	Sig. (2- tailed)	.000	.000	.000	.104	.104	.286
	N	9	9	9	9	9	9
Var14	Pearson Correlation	.71	.71	.71	.49	.49	.67
	Sig. (2- tailed)	.031	.031	.031	.176	.176	.048
	N	9	9	9	9	9	9
Var15	Pearson Correlation	.69	.69	.69	.41	.41	.44
	Sig. (2- tailed)	.019	.019	.019	.186	.186	.150
	N	11	11	11	12	12	12
Var16	Pearson Correlation	.82	.82	.82	.52	.52	.68
	Sig. (2- tailed)	.002	.002	.002	.086	.086	.015
	N	11	11	11	12	12	12
Var17	Pearson Correlation	.82	.82	.82	.52	.52	.68
	Sig. (2- tailed)	.002	.002	.002	.086	.086	.015
	N N	11	11	11	12	12	12

		Var22	Var23	Var24	Var25	Var26	Var27
Var18	Pearson	.72	.72	.72	.48	.48	.62
	Correlation Sig. (2-	.012	.012	.012	.112	.112	.032
	tailed) N	11	11	11	12	12	12
Var19	Pearson	.72	.72	.72	.48	.48	.62
	Correlation Sig. (2- tailed)	.012	.012	.012	.112	.112	.032
	N N	11	11	11	12	12	12
Var20	Pearson Correlation	.72	.72	.72	.48	.48	.62
	Sig. (2- tailed)	.012	.012	.012	.112	.112	.032
	N	11	11	11	12	12	12
Var21	Pearson Correlation	.56	.56	.56	.47	.47	.72
	Sig. (2- tailed)	.094	.094	.094	.143	.143	.013
	N	10	10	10	11	11	11
Var22	Pearson Correlation	1.00	1.00	1.00	.44	.44	.25
	Sig. (2- tailed)		.000	.000	.170	.170	.457
	N	11	11	11	11	11	11
Var23	Pearson Correlation	1.00	1.00	1.00	.44	.44	.25
	Sig. (2- tailed)	.000		.000	.170	.170	.457
	N	11	11	11	11	11	11
Var24	Pearson Correlation	1.00	1.00	1.00	.44	.44	.25
	Sig. (2- tailed)	.000	.000		.170	.170	.457
	N	11	11	11	11	11	11
Var25	Pearson Correlation	.44	.44	.44	1.00	1.00	.18
	Sig. (2- tailed)	.170	.170	.170		.000	.584
	N N	11	11	11	12	12	12
Var26	Pearson Correlation	.44	.44	.44	1.00	1.00	.18

		Var22	Var23	Var24	Var25	Var26	Var27
	Sig. (2- tailed)	.170	.170	.170	.000		.584
	N	11	11	11	12	12	12
Var27	Pearson	.25	.25	.25	.18	.18	1.00
	Correlation Sig. (2- tailed)	.457	.457	.457	.584	.584	
	N	11	11	11	12	12	12
Var28	Pearson Correlation	NaN	NaN	NaN	NaN	NaN	NaN
	Sig. (2- tailed)	NaN	NaN	NaN	NaN	NaN	NaN
	N	0	0	0	0	0	0
Var29	Pearson Correlation	NaN	NaN	NaN	NaN	NaN	NaN
	Sig. (2- tailed)	NaN	NaN	NaN	NaN	NaN	NaN
	N	0	0	0	0	0	0
Var30	Pearson Correlation	.83	.83	.83	.67	.67	.09
	Sig. (2- tailed)	.001	.001	.001	.017	.017	.785
	N	11	11	11	12	12	12
Var31	Pearson Correlation	.39	.39	.39	.69	.69	.31
	Sig. (2- tailed)	.235	.235	.235	.014	.014	.323
	N	11	11	11	12	12	12
Var32	Pearson Correlation	22	22	22	.31	.31	.56
	Sig. (2- tailed)	.545	.545	.545	.353	.353	.074
	N	10	10	10	11	11	11
Var33	Pearson Correlation	.38	.38	.38	.38	.38	08
	Sig. (2- tailed)	.251	.251	.251	.219	.219	.801
	N	11	11	11	12	12	12
Var34	Pearson Correlation	.52	.52	.52	.46	.46	.09
	Sig. (2- tailed)	.105	.105	.105	.135	.135	.775
	N	11	11	11	12	12	12

		Var28	Var29	Var30	Var31	Var32	Var33
QI	Pearson	NaN	NaN	.74	.88	NaN	.84
Total	Correlation						
	Sig. (2- tailed)	NaN	NaN	.024	.002	NaN	.004
	N	0	0	9	9	8	9
Var1	Pearson Correlation	NaN	NaN	.88	.59	06	.54
	Sig. (2- tailed)	NaN	NaN	.000	.041	.865	.070
	N	0	0	12	12	11	12
Var2	Pearson Correlation	NaN	NaN	.55	.40	04	.71
	Sig. (2- tailed)	NaN	NaN	.067	.195	.905	.010
	N	0	0	12	12	11	12
Var3a	Pearson Correlation	NaN	NaN	.78	.90	.34	.73
	Sig. (2- tailed)	NaN	NaN	.003	.000	.306	.007
	N	0	0	12	12	11	12
Var3b	Pearson Correlation	NaN	NaN	.73	.70	.12	.70
	Sig. (2- tailed)	NaN	NaN	.007	.010	.733	.011
	N	0	0	12	12	11	12
Var3c	Pearson Correlation	NaN	NaN	.80	.69	07	.80
	Sig. (2- tailed)	NaN	NaN	.002	.014	.845	.002
	N	0	0	12	12	11	12
Var3d	Pearson Correlation	NaN	NaN	.70	.73	.36	.52
	Sig. (2- tailed)	NaN	NaN	.012	.007	.273	.083
	N	0	0	12	12	11	12
Var4	Pearson Correlation	NaN	NaN	.64	.87	.38	.63
	Sig. (2- tailed)	NaN	NaN	.024	.000	.243	.028
	N	0	0	12	12	11	12
Var5	Pearson Correlation	NaN	NaN	25	01	43	.35

		Var28	Var29	Var30	Var31	Var32	Var33
	Sig. (2- tailed)	NaN	NaN	.428	.981	.186	.271
	N	0	0	12	12	11	12
Var6	Pearson Correlation	NaN	NaN	.57	.74	.38	.45
	Sig. (2- tailed)	NaN	NaN	.051	.006	.246	.138
	N	0	0	12	12	11	12
Var7	Pearson Correlation	NaN	NaN	.18	01	38	.13
	Sig. (2- tailed)	NaN	NaN	.575	.963	.245	.697
	N	0	0	12	12	11	12
Var8	Pearson Correlation	NaN	NaN	.84	.77	.02	.50
	Sig. (2- tailed)	NaN	NaN	.001	.004	.943	.096
	N	0	0	12	12	11	12
Var9	Pearson Correlation	NaN	NaN	.57	.42	22	.65
	Sig. (2- tailed)	NaN	NaN	.051	.177	.519	.023
	N	0	0	12	12	11	12
Var10	Pearson Correlation	NaN	NaN	.74	.71	.25	.61
	Sig. (2- tailed)	NaN	NaN	.006	.009	.464	.034
	N	0	0	12	12	11	12
Var11	Pearson Correlation	NaN	NaN	.68	.90	.36	.81
	Sig. (2- tailed)	NaN	NaN	.015	.000	.283	.001
	N	0	0	12	12	11	12
Var12	Pearson Correlation	NaN	NaN	.56	.51	15	.28
	Sig. (2- tailed)	NaN	NaN	.058	.090	.662	.380
	N	0	0	12	12	11	12
Var13	Pearson Correlation	NaN	NaN	.90	.69	NaN	.58
	Sig. (2- tailed)	NaN	NaN	.001	.041	NaN	.104
	N	0	0	9	9	8	9

		Var28	Var29	Var30	Var31	Var32	Var33
Var14	Pearson Correlation	NaN	NaN	.64	.86	NaN	.82
	Sig. (2- tailed)	NaN	NaN	.063	.003	NaN	.006
	N	0	0	9	9	8	9
Var15	Pearson Correlation	NaN	NaN	.44	.58	.22	.44
	Sig. (2- tailed)	NaN	NaN	.152	.049	.515	.149
	N	0	0	12	12	11	12
Var16	Pearson Correlation	NaN	NaN	.75	.58	.26	.21
	Sig. (2- tailed)	NaN	NaN	.005	.050	.434	.504
	N	0	0	12	12	11	12
Var17	Pearson Correlation	NaN	NaN	.75	.58	.26	.21
	Sig. (2- tailed)	NaN	NaN	.005	.050	.434	.504
	N	0	0	12	12	11	12
Var18	Pearson Correlation	NaN	NaN	.60	.73	.34	.43
	Sig. (2- tailed)	NaN	NaN	.040	.007	.313	.167
	N	0	0	12	12	11	12
Var19	Pearson Correlation	NaN	NaN	.60	.73	.34	.43
	Sig. (2- tailed)	NaN	NaN	.040	.007	.313	.167
	N	0	0	12	12	11	12
Var20	Pearson Correlation	NaN	NaN	.60	.73	.34	.43
	Sig. (2- tailed)	NaN	NaN	.040	.007	.313	.167
	N	0	0	12	12	11	12
Var21	Pearson Correlation	NaN	NaN	.50	.74	.46	.36
	Sig. (2- tailed)	NaN	NaN	.118	.009	.184	.279
	N	0	0	11	11	10	11
Var22	Pearson Correlation	NaN	NaN	.83	.39	22	.38

		Var28	Var29	Var30	Var31	Var32	Var33
	Sig. (2- tailed)	NaN	NaN	.001	.235	.545	.251
	N	0	0	11	11	10	11
Var23	Pearson Correlation	NaN	NaN	.83	.39	22	.38
	Sig. (2- tailed)	NaN	NaN	.001	.235	.545	.251
	N	0	0	11	11	10	11
Var24	Pearson Correlation	NaN	NaN	.83	.39	22	.38
	Sig. (2- tailed)	NaN	NaN	.001	.235	.545	.251
	N	0	0	11	11	10	11
Var25	Pearson Correlation	NaN	NaN	.67	.69	.31	.38
	Sig. (2- tailed)	NaN	NaN	.017	.014	.353	.219
	N	0	0	12	12	11	12
Var26	Pearson Correlation	NaN	NaN	.67	.69	.31	.38
	Sig. (2- tailed)	NaN	NaN	.017	.014	.353	.219
	N	0	0	12	12	11	12
Var27	Pearson Correlation	NaN	NaN	.09	.31	.56	08
	Sig. (2- tailed)	NaN	NaN	.785	.323	.074	.801
	N	0	0	12	12	11	12
Var28	Pearson Correlation	NaN	NaN	NaN	NaN	NaN	NaN
	Sig. (2- tailed)		NaN	NaN	NaN	NaN	NaN
	N	0	0	0	0	0	0
Var29	Pearson Correlation	NaN	NaN	NaN	NaN	NaN	NaN
	Sig. (2- tailed)	NaN		NaN	NaN	NaN	NaN
	N	0	0	0	0	0	0
Var30	Pearson Correlation	NaN	NaN	1.00	.65	.00	.43
	Sig. (2- tailed)	NaN	NaN		.021	1.000	.167
	N	0	0	12	12	11	12

		Var28	Var29	Var30	Var31	Var32	Var33
					4.00		
Var31	Pearson	NaN	NaN	.65	1.00	.61	.66
	Correlation	NT - NT	NT - NT	021		040	020
	Sig. (2- tailed)	NaN	NaN	.021		.048	.020
	N	0	0	12	12	11	12
Var32	Pearson	NaN	NaN	.00	.61	1.00	.07
Va.152	Correlation	114411	114411	.00	.01	1.00	.07
	Sig. (2-	NaN	NaN	1.000	.048		.840
	tailed)						
	N	0	0	11	11	11	11
Var33	Pearson	NaN	NaN	.43	.66	.07	1.00
	Correlation						
	Sig. (2-	NaN	NaN	.167	.020	.840	
	tailed)		0	4.0	10	11	10
	N	0	0	12	12	11	12
Var34	Pearson	NaN	NaN	.57	.70	.03	.95
	Correlation						
	Sig. (2-	NaN	NaN	.051	.011	.926	.000
	tailed)			4.5	4.5	4.4	4.5
	N	0	0	12	12	11	12
		Var34					

		Var34
QI	Pearson	.84
Total	Correlation	
	Sig. (2-	.004
	tailed)	
	N	9
Var1	Pearson	.69
	Correlation	
	Sig. (2-	.014
	tailed)	
	$\mid N \mid$	12
Var2	Pearson	.79
	Correlation	
	Sig. (2-	.002
	tailed)	
	N	12
Var3a	Pearson	.79
	Correlation	
	Sig. (2-	.002
	tailed)	
	N	12

		Var34
Var3b	Pearson Correlation	.77
	Sig. (2- tailed)	.003
	N N	12
Var3c	Pearson Correlation	.88
	Sig. (2- tailed)	.000
	N N	12
Var3d	Pearson Correlation	.60
	Sig. (2- tailed)	.039
	N	12
Var4	Pearson Correlation	.70
	Sig. (2- tailed)	.012
	N N	12
Var5	Pearson Correlation	.21
	Sig. (2- tailed)	.509
	N	12
Var6	Pearson	.45
	Correlation Sig. (2- tailed)	.140
	N	12
Var7	Pearson Correlation	.20
	Sig. (2- tailed)	.526
	N	12
Var8	Pearson Correlation	.63
	Sig. (2- tailed)	.027
	N	12
Var9	Pearson Correlation	.81
	Correlation	

	=	1
		Var34
	Sig. (2- tailed)	.001
	N	12
Var10	Pearson Correlation	.66
	Sig. (2- tailed)	.021
	N	12
Var11	Pearson Correlation	.86
	Sig. (2- tailed)	.000
	N	12
Var12	Pearson	.42
	Correlation Sig. (2- tailed)	.172
	N	12
Var13	Pearson	.69
	Correlation Sig. (2- tailed)	.041
	N	9
Var14	Pearson Correlation	.97
	Sig. (2- tailed)	.000
	N	9
Var15	Pearson Correlation	.48
	Sig. (2- tailed)	.116
	N	12
Var16	Pearson Correlation	.43
	Sig. (2- tailed)	.165
	N	12
Var17	Pearson Correlation	.43
	Sig. (2- tailed)	.165
	N N	12

		Var34
Var18	Pearson Correlation	.57
	Sig. (2- tailed)	.051
	N	12
Var19	Pearson Correlation	.57
	Sig. (2- tailed)	.051
	N N	12
Var20	Pearson	.57
	Correlation Sig. (2- tailed)	.051
	N	12
Var21	Pearson	.55
	Correlation Sig. (2- tailed)	.080
	N N	11
Var22	Pearson	.52
	Correlation Sig. (2-	.105
	tailed) N	11
Var23	Pearson	.52
	Correlation Sig. (2- tailed)	.105
	N	11
Var24	Pearson	.52
	Correlation Sig. (2-	.105
	tailed) N	11
Var25	Pearson	.46
	Correlation Sig. (2-	.135
	tailed) N	12
Var26	Pearson Correlation	.46

		Var34
	Sig. (2- tailed)	.135
	N	12
Var27	Pearson	.09
	Correlation Sig. (2- tailed)	.775
	N	12
Var28	Pearson	NaN
	Correlation Sig. (2- tailed)	NaN
	N	0
Var29	Pearson	NaN
	Correlation Sig. (2- tailed)	NaN
	N	0
Var30	Pearson	.57
	Correlation Sig. (2- tailed)	.051
	N	12
Var31	Pearson	.70
	Correlation Sig. (2- tailed)	.011
	N	12
Var32	Pearson	.03
	Correlation Sig. (2- tailed)	.926
	N	11
Var33	Pearson	.95
	Correlation Sig. (2- tailed)	.000
	N	12
Var34	Pearson	1.00
	Correlation Sig. (2-	
	tailed) N	12



Early Learning and Child Care Program Plan Template

Public (when completed)

The personal information requested on this form is collected under the authority of the Early Learning and Child Care Act and is managed in accordance with the Freedom of Information and Protection of Privacy Act. If you have any questions about the collection or use of this information, contact your Early Learning and Child Care Staff member.

Introduction

Facility-Based program licence holders are required to understand and adhere to the *Early Learning and Child Care Act* (Act) and Regulation (Regulation). The Act and Regulation set out the minimum requirements that child care licence holders must follow to ensure the safety security, well-being, and development of children. This includes the development and submission of a Program Plan.

The Program Plan is designed as a tool to understand how programs will ensure children's needs are being met and quality programming is being delivered. It will also be used as a tool by Early Learning and Child Care Staff to monitor and support compliance to the Act and Regulation. To assist you in applying and operating a licenced facility-based child care program in Alberta you are encouraged to use this Ministry approved template to:

- submit your proposed Program Plan
- submit any proposed changes to the Program Plan during your licence period; and
- receive approval of the proposed Program Plan or any proposed changes.

The Program Plan is intended to be a dynamic document that is reviewed regularly with program staff, parents and Early Learning and Child Care staff to ensure the plan remains applicable, relevant, and to ensure the programs are implementing the statements, policies, and procedures in the approved Program Plan.

As you complete the Program Plan template, you may find the Early Learning and Child Care Licensing Handbook a helpful resource to support your understanding of the requirements and obligations for providing a quality licenced child care program.

If you require support or have questions when completing your Program Plan, an Early Learning and Child Care staff member can consult with you. You may contact your nearest Children's Services office and speak with an Early Learning and Child Care Staff member using the contact information found on our online look-up tool at the following link: Alberta Children's Services.

CDEV4018 Rev. 2021-01 Page 1 of 16



Early Learning and Child Care Program Plan Template

Public (when completed)

Do you provide a nap or rest period?

То

From

Yes

○ No

				Early Learning and Child Ca on or use of this information,			
Name of Lice	ence Holder			Name of Licence Holde	er Representative	e	
Program Na	ime						
D A-I							D stal Os da
Program Add	dress		City or T	own		Province	Postal Code
Program H	lours of Operation						J [
Sunday	То						
Monday	То						
Tuesday	То						
Wednesday	То						
Thursday	То						
Friday	То						
Saturday	То						
Period of C	Operation						
From Date		To Dat	ie				
Does your բ	program have planned	l/scheduled closure	es?				
○Yes	○No						
	es. example: we follow	the local school b	oard calendar a	and do not operate on o	days schools a	are closed (i.e	e. summer,

CDEV4018 Rev. 2021-01 Page 2 of 16

Early Learning and Child Care

1)	Describe the early learning and child care philosophy your facility-based child care program is based on.	
	Best Practice Examples:	

- The program implements Flight- Alberta's Early Learning and Care Framework Curriculum Framework, Reggio Emilia, Waldorf or Montessori.
- The philosophy is connected to the Principles and Matters to Be Considered stated in the Early Learning and Child Care
 Act.

2)	Please describe how your philosophy will be applied to encourage care and play experiences that support
	children's development and early learning in your program.

Best Practice Examples:

- Ensure that routines address children's daily care needs.
- Children participate within open, engaging, and responsive environments where exploration and play are encouraged and purposefully planned.
- Reflection using a Learning Story is used to document children's dispositions to learn within daily experiences of care, play, learning, and development.
- School-aged children are provided with the ability to learn and explore based on their age.
- Preschool children will be supported to build skills that will assist them when they go to school.

3) Describe how your child care program plans to meet, promote and nurture the developmental needs of children for each of the following needs.

*If providing child care to mixed-age groups, please clarify how you will meet the needs of children who may be at different developmental ages and have varying needs. This includes how you will ensure the unique developmental needs of infants are considered.

 Mental Needs: Describe how you will encourage nurturing relationships, create a safe positive environment, nurture confidence, and provide social opportunities.

Best Practice Examples:

- Children are co-constructors in developing intellectually by exploring and experimenting with the environment and by sharing ideas and information.
- Children have opportunities to develop thinking skills and language.
- Each child's care, play, learning, and development are nurtured as educators work within a practice of relationships, appreciating family, social, and cultural practices and traditions and embracing a strong capable image of the child, as a mighty learner and citizen.
- Children are supported to develop self-regulation skills- the ability to adapt their behavior, attention, emotions and thoughts in response to what is going on around them (sitting still when appropriate, the ability to defer reward and positive self-talk are a few examples).
- Children are supported to express pro-social behaviour- voluntarily choosing behaviours that help and benefit others, such as sharing and cooperation.

CDEV4018 Rev. 2021-01 Page 3 of 16

b) Emotional Needs: Describe how you will support the emotional needs of the child (encouraging positive self-esteem, creating a structured environment, being responsive to attention needs, encouraging children to be independent learners, supporting emotional intelligence).

Best Practice Examples:

- Children's security comes from knowing that the adults they depend on will care for and protect them. Self-esteem means
 that a child feels both lovable and capable.
- Children should be challenged to master progressively more complex levels of moving, thinking, feeling and creativity.
- School-aged children are supported to build skills in perseverance effort to achieve one's goals even in the face of setbacks. Focus encouragement on effort and perseverance rather than performance and abilities.
- Opportunities are provided for children to be mighty learners and allowed the freedom to express themselves in a safe, secure and non-judgmental environment.
- Based on development and age of the child, programs create an atmosphere that allows children to express their emotions & gives them a sense of belonging.
- Children are supported with opportunities to develop skills for initiating and maintaining healthy relationships with peers and adults in their lives such as awareness, empathy, kindness, and assertiveness.

c)	Spiritual Needs: Describe how you will support each child's spiritual needs as appropriate (support them in finding
-	meaning, purpose, structure and value in their life).

Best Practice Examples:

- In consultation with parents, each child will have available opportunities for spiritual development and growth to help support their understanding of the community and world in which they live in.
- Each child will be celebrated for their uniqueness and supported in their spiritual curiosities. Identify and celebrate
 differences and uniqueness of each child.
- Create a safe, open, welcoming environment for children to explore. Staff ask questions, actively listen, and build upon the
 information gathered.

 d) Physical Needs: Describe how you will encourage physical activity, develop age-appropriate skills, support proper nutrition, provide rest, and provide sensory experiences.

Best Practice Examples:

- Children have opportunities to use large and small muscles and to develop perceptual skills.
- Opportunities for play and playfulness with others in purposefully designed outdoor and indoor environments are constructed and provided.
- Children have space to freely move and explore while taking calculated risks to test the limits of their mind, body and environment.
- Programs provide opportunities for gross motor activities incorporated throughout the day (minimum of 1 hour full body, physical activity).
- Programs provide activities that focus on fine motor activities (minimum of 1 hour/day). Fine motor activities should be
 available throughout the day so that children may choose an activity that they want to explore.
- Children participate within open, engaging, and responsive environments where exploration and play are encouraged and purposefully planned.
- School-aged children have the opportunity to help plan after-school activities to reflect the things they are interested in participating in, and include ways to foster a sense of autonomy, belonging and competence.

F, 3,

CDEV4018 Rev. 2021-01 Page 4 of 16

4)	Describe how you will ensure your program will be inclusive and accommodate the needs of all children including children with exceptional needs.
	Best Practice Examples:
	 Every child has a unique personality and special skills. The primary focus is on each child's strengths and abilities as you work to make modifications and adjustments to their environment.
	 Each staff member comes to learn and understand each child as individuals and what works best for them. Plan ahead t identify and avoid barriers for participation.

5) Describe how you will incorporate and support the child's familial, Indigenous or other cultural, social, linguistic and spiritual heritage to ensure it is central to the child's safety, well-being, and development.

Best Practice Examples:

or the Autism Society.

• Opportunities to learn from elders and community leaders are provided to ensure authentic and meaningful experiences that connect curriculum to living and life.

Access support using the Getting Ready for Inclusion Today (GRIT) program, Access, Support & Participation (ASaP), and/

- All cultures of the program will be supported by books, photos and knowledge of each family.
- Statement of inclusion to focus on all children's backgrounds, family circumstances, including vulnerable children, where families are respected and valued.
- Programs will display pictures and provide access to literature to children and their families that reflect everyday cultural activities such as an eating or going for a walk.
- Children are enabled to grow their awareness of diversity and social responsibility, of their own and others' identities; their responsibility to themselves, one another, and the environment; and their emerging understanding of themselves as citizens.
- Children participate within socially inclusive and culturally sensitive environments in which social responsibility for self, others, and the world is enacted.

6) Child care programs should engage with community organizations, members and resources to support the child's optimal development. Describe how your child care program will engage with and access community organizations, resources, and members to promote positive connections.

Best Practice Examples:

- Programs work with the local public library to promote early literacy during story time once a week.
- Families are aware and connected with Provincial Family Resource Networks.
- Families and the local community are involved in decisions regarding the programs, procedures, and policies.
- Program will seek out other professional supports for children, families and staff to support development.

7) Relationships with families must be supportive and respectful. Describe the nature and scope of parental involvement in the child care program. The involvement and engagement of parents supports accountability of child care program providers, monitoring of child care programs and maintenance of quality child care programs.

Best Practice Examples:

- Parents are part of the program planning and provide insight and feedback into the activities that meet the unique/individual needs of their child(ren) create common/mutual goals.
- Creating a sense of community and partnership between program and family.

CDEV4018 Rev. 2021-01 Page 5 of 16

8)	Describe your process for ongoing evaluation and improvement of the child care program. Please ensure you describe how you will actively involve and engage parents and guardians to support accountability, monitoring, and maintenance of quality within your child care program.
	Best Practice Examples:
	 Creation of a parent board for the facility-based licence or having a parent night once/month to gather ideas and suggestions for improvement.
	 Installing a suggestion box, reviewing the suggestions monthly, provide parents and staff with the results of the month's suggestions and clarify how the program will progress based on the feedback.
∟ Sta	affing Plan
the	ild care programs must create a supportive work environment to maintain a qualified team of child care professionals and assist m in providing high quality child care services through its philosophy, policies, procedures, and practices. Please provide a list of staff positions (including certified Level qualification requirements based on your program) and list related duties and responsibilities.
	Best Practice Examples:
	 This list should include program directors, program supervisor(s), Level 1, 2 and 3 early childhood educator, cook(s) and any other applicable positions.
	 Licence holders should refer to the Regulation to understand the requirements for minimum staffing and general supervision.
	 Staffing plan must ensure that adequate staff are available to meet children's needs and to meet the minimum regulatory requirements, including relief staff available to cover staff breaks, illness and vacations.
 10)	Describe how you will ensure all staff and volunteers are screened. Please also provide a description of all other screening methods used (i.e. background checks, reference checks, interviews)
	Best Practice Examples:
	 Each staff member and/or each volunteer who has unsupervised access to children will have a current criminal record check which is dated not earlier than 6 months prior to the date of commencement with the program and updated every 3 years, before it expires.
	 Written evidence to verify the results of all required criminal record checks and vulnerable sector searches are satisfactory and demonstrate the staff member or volunteer has no criminal history that could impact the well-being of a child.
	• All staff and volunteers have had their background checked and confirmed to assess their suitability to care for children.
	 All staff and volunteers have provided at least three satisfactory personal references from non-relatives that corroborate the provider's suitability for working with children.
	A physician's note that states the applicant is mentally and physically able to care for children.
11)	Describe how staff will receive orientation to your program so they are aware of and understand the Act, Regulation, Program Plan and administrative policies and procedures.
	Best Practice Examples:
	 Signing and dating an orientation checklist or other documents that ensures they read and fully understand policies and procedures.
	 The program supervisor ensures plenty of time is spent with the new staff member so that training and orientation is thorough.
L_ 	

CDEV4018 Rev. 2021-01 Page 6 of 16

12) Please list the nun capacity proposed	nber of primary staff red l.	quired to meet the staff	f-to-child ratios for the	desired program
Proposed Total Capa	city			
Please select what progr	ram you provide	-		
Day Care Out of	School Preschool			
immediately when	s, staff must be on pren the rest period ends an to meet child ratios duri amples:	id/or children awake fr		
• Cover-off for sta	aff is available to allow for pl	anned breaks during rest p	periods.	
Ratio Group Size - Res	st Periods Primary Staff Member to	Maximum Number of	Number of Children	Minimum Primary Staff/
Age of Children	Children Ratio	Children in a Group	Cared for in Program	Volunteers Required
Infants Less than 12 Months	1:6	6		
Infants 12 Months to Less than 19 Months	1:8	8		
19 Months to Less than 3 Years	1:12	12		
3 Years to Less than 4 Years	1:16	16		
4 Years and Older	1:20	20		
requirements and	ovide care for mixed-ag the needs of the childre ned age groupings the major	en.	-	
all ages of children	tion, please provide you n in care, and your plan velopmentally appropria amples: uidance g plan evention methods	for how this policy wil		

CDEV4018 Rev. 2021-01 Page 7 of 16

Off-S	Site Activity
	escribe how you will you advise parents of an off-site activity and, collect required parent or guardian onsents.
	Best Practice Examples:
	 Parents will be provided a consent form at the time of registration for regular occurring off-site activities, (i.e. walking to park, access a sports field, etc.).
	 For specific field trips that are not a part of regular programming, parents are required to provide consent for each trip, and submit a signed consent form.
	 Parents know the whereabouts of their child at all times and have been adequately informed of all off-site activities they consent to.
	 Complete details of the off-site activity are provided, so that parents can make an informed decision: date of activity, (when leaving to and coming back from activity); how staff can be reached when off-site; how many children will be involved; supervision and transportation arrangements specific to the activity are completed before the parent gives written permission.
	 Description of how children will be transported to off-site activities, (i.e. Program owned buses/vans, city transit, hired bus services, parents transport, or walking only).
	you utilize an off-site outdoor space, please describe how the children will be adequately supervised, how
, t	neir safety will be ensured, how safe boundaries will be maintained, and how children will be protected on neir way to and from the outdoor play space.
ť	
t	
ti ti Med 18) F	neir way to and from the outdoor play space.
ti ti Med 18) F	cation and Health Care lease describe your policy that states that administration of medication to a child can only occur when the
ti ti Med 18) F	cation and Health Care lease describe your policy that states that administration of medication to a child can only occur when the critten consent of the child's parent is obtained and how you will receive and store these consent records.
ti ti Med 18) F	cation and Health Care lease describe your policy that states that administration of medication to a child can only occur when the critten consent of the child's parent is obtained and how you will receive and store these consent records. Best Practice Examples:
ti ti Med 18) F	cation and Health Care lease describe your policy that states that administration of medication to a child can only occur when the ritten consent of the child's parent is obtained and how you will receive and store these consent records. Best Practice Examples: • Medication is only administered to a child when written consent has been provided by the parent. • Parental consent for administration of medication is stored in an accessible location that is known to all staff and is portable
Med 118) F v	cation and Health Care lease describe your policy that states that administration of medication to a child can only occur when the ritten consent of the child's parent is obtained and how you will receive and store these consent records. Best Practice Examples: • Medication is only administered to a child when written consent has been provided by the parent. • Parental consent for administration of medication is stored in an accessible location that is known to all staff and is portable
Med 18) F v	cation and Health Care lease describe your policy that states that administration of medication to a child can only occur when the ritten consent of the child's parent is obtained and how you will receive and store these consent records. Best Practice Examples: • Medication is only administered to a child when written consent has been provided by the parent. • Parental consent for administration of medication is stored in an accessible location that is known to all staff and is portable to bring along on off-site trips.
Med 118) F v	cation and Health Care lease describe your policy that states that administration of medication to a child can only occur when the rritten consent of the child's parent is obtained and how you will receive and store these consent records. Best Practice Examples: • Medication is only administered to a child when written consent has been provided by the parent. • Parental consent for administration of medication is stored in an accessible location that is known to all staff and is portable to bring along on off-site trips. lease describe how you will ensure medication is stored in a locked container that is inaccessible to hildren, stored in its original labeled container, and administered according to the labeled directions.
Med 118) F v	cation and Health Care lease describe your policy that states that administration of medication to a child can only occur when the rritten consent of the child's parent is obtained and how you will receive and store these consent records. Best Practice Examples: • Medication is only administered to a child when written consent has been provided by the parent. • Parental consent for administration of medication is stored in an accessible location that is known to all staff and is portable to bring along on off-site trips. lease describe how you will ensure medication is stored in a locked container that is inaccessible to hildren, stored in its original labeled container, and administered according to the labeled directions. Best Practice Examples:
Med 118) F v	cation and Health Care lease describe your policy that states that administration of medication to a child can only occur when the ritten consent of the child's parent is obtained and how you will receive and store these consent records. Best Practice Examples: • Medication is only administered to a child when written consent has been provided by the parent. • Parental consent for administration of medication is stored in an accessible location that is known to all staff and is portable to bring along on off-site trips. lease describe how you will ensure medication is stored in a locked container that is inaccessible to hildren, stored in its original labeled container, and administered according to the labeled directions. Best Practice Examples: • All medication is kept in a cabinet that is inaccessible by children, and in a locked box inside the cabinet

CDEV4018 Rev. 2021-01 Page 8 of 16

prevent a me by staff and	ribe how you will ensure emergency medication to be used by a particular child as needed to edical emergency is stored in accordance with a plan that ensures the medication is accessible the child but is not accessible by other children in the program, and has been agreed on by the er and the child's parent.
Best Prac	tice Examples:
	ion required for an emergency is inaccessible to children, and can only be accessed by staff and the child who sthe medication in the case of an emergency.
	arents and licence holder, have mutually agreed in writing to the emergency medication plan that ensures the ar child who requires the medication and other children in the program have the well-being considered.
Menus	
21) Do you prov	ride meals and snacks for children in your program? Yes No
Please describe h	ow you will ensure that menus are posted in a prominent place on the program premises.
Best Prac	tice Examples:
	planned menu containing meal and snack items are posted near the program entrance where parents are able to em daily.
	posted align with a food guide recognized by Heath Canada or Alberta Health, and support appropriate nutrition if the children.
	are provided with a copy of the menu to ensure they are able to support the nutrition needs of the child when not g meals and snacks from the child care program.
Accident or Illi	ness ribe how parents will be notified in the case of an accident or serious illness involving their child.
•	tice Examples:
• In the ca	ase of an accident or a serious illness involving a child, the parent must be notified immediately. If parent cannot be if, the emergency contact person will be notified. Children will receive medical attention deemed necessary.
•	how you will respond to an accident or serious illness that involves a child. This includes at a child receives medical attention as necessary.
_	tice Examples:
	procedures are followed by a staff member with approved first aid certification, acceptable to the statutory director.
	alled immediately when required.
● Staff ca	n readily identify the parent or the emergency contact person who must be contacted.
24) Please state	how the program will track, review, analyze and respond to accidents. This includes identifying

24) Please state how the program will track, review, analyze and respond to accidents. This includes identifying of any trends or potential issues so that future accidents can be prevented and avoided.

Best Practice Examples:

• The program supervisor takes the lead and ensures all accidents are reviewed at regular staff meetings to receive feedback on how to be proactive instead of reactive.

CDEV4018 Rev. 2021-01 Page 9 of 16

Sı	pervision Policy and Practices
25) Please state your supervision policy and practices, including a description of the methods used to ensure that primary staff effectively supervise children's play and behavior in both indoor and outdoor settings. Effective supervision prevents injuries, accidents and reduces harm to children. It also promotes safe, positive, responsive and intentional learning environments for children and staff.
	Please also ensure you describe how you will ensure that primary staff are aware of the program's indoor and outdoor physical environments, and supervision policies.
	Best Practice Examples:
	 Staff are actively participating in, or guiding children's activities, while being attentive, alert and watchful of each child, as well as engaged with the group.
	 Supervision is adjusted to the specifics of the child care environment and the individual needs of the children attending the program.
	 Able to demonstrate that children are safe and are supervised in accordance with their developmental needs and that primary staff are aware of children at all times.
	 Supervision practices are reviewed every six months at staff meetings.
	 All children are accounted for both on and off program premises, when arriving or leaving the program premises or entering and leaving a vehicle.
	 At staff orientation, the program supervisor ensures new staff spend time in all the rooms where childcare is being provided and describes adequate supervision techniques in each room - and - spends times outdoors showing appropriate supervision techniques around play equipment.
	 Staff conduct regular safety checks of the program premises and equipment to remove hazards and complete safety assessment checklists as required.
	 Staff can identify where extra supervision is required to position equipment and arrange the environment to allow staff to supervise the children's indoor and outdoor play spaces, rest, and bathroom areas.
	 School aged children are provided guidance and are distally supervised based on their age and development.

CDEV4018 Rev. 2021-01 Page 10 of 16

Informing Parents of Postings

27) Please state how you will ensure parents or guardians are informed of all required information that is required to be posted as described in the Act and Regulations.

Best Practice Examples:

- A Licence holder of a facility-based licence notifies parents or guardians in writing of the new posting that is available for review in a clearly visible and prominent place on the premises where the licenced facility-based program is being provided.
- Parents are informed and aware of all changes to policies and procedures, including the Program Plan, through parent orientation at the time of registration and are provided updates on any changes throughout the year.
- Parents will be issued an email about any new postings to ensure they are informed of any changes to the program and updated on current events.
- Parents are issued a newsletter monthly of the programs plan for the next month and are informed of any plans, events or changes to the child care plan.

	i	Programs notify parents or guardians of all incidents and any planned or unplanned events that may impact or has mpacted the child's well-being but didn't not result in a hospital visit or physical injury. (i.e. Child was upset over fire drill, a shild showed anxiety when going down the slide).
Tran	spor	tation
28) D	oes t	he program provides transportation for children between school and the program's premises?
	◯ Ye	s ONo
Pleas	e des	cribe the following
	a.	the mode of transportation used (i.e. walking, program motor vehicle, 3rd party chartered school bus).
	b.	how you will ensure that a child's parent is informed and has provided consent in writing to be transported to and from school by the child care program.
	C.	the procedural steps that must occur when a child fails to show at the arranged pick-up time or location.
	Ве	st Practice Examples:
	• A	All drivers have appropriate class of licence and training to provide transportation.
	• [Details of transportation and supervision have been planned and documented, and communicated to parents or guardians.
		What time are they dropped off at school and where- on the playground when a teacher is on supervision or are they valked to their classroom.
	• V	Vhat time is dismissal and when are they picked up.
	• V	Vhere is the meeting spot or are they met at the classroom.
		The form usually includes a statement that it is the parent's responsibility to inform the program of any changes in their schedule.
	• T	he program must develop steps to follow if the child does not show up as arranged.

CDEV4018 Rev. 2021-01 Page 11 of 16

Overnight Child Care
29) Do you provide overnight child care?
Please describe how you will ensure the children are supervised and their needs met provided overnight child care.
Best Practice Examples:
 The licence holder has arranged to contact their health inspector concerning any pertinent regulations.
 Staff understand and can readily communicate emergency evacuation procedures.
 Staff are able to identify a critical incident and how to respond to it.
• Staff can articulate the process for reaching the program director for advice or support as required during overnight care.
 Supervision practices for overnight care are clearly defined and directly applicable.
• Staff must be aware of all medications that are required, including how to timely access emergency medications.
• Staff are able to apply developmentally appropriate routines to encourage sleep (i.e. playing music, lullabies, story book).
 Children's security, comfort, flexibility of times for sleep are considered in accordance with the individual needs and schedules of the child and/or their family.
 Children are provided developmental appropriate opportunities to address hygiene needs including bathing needs, brushing teeth, and changing into sleeping attire.
Records
30) Please describe your records policy including how records will be stored, kept up-to-date, and in which format(s) they are maintained (digital or paper).
Best Practice Examples:
 Director or assigned staff member completes regular reviews of information with the parents.
 A good record should be easily retrievable, kept up to date, and contains the information as indicated in the Early Learning and Child Care Act and Regulation.

CDEV4018 Rev. 2021-01 Page 12 of 16

Emergency Evacuation Procedures

31) Please describe your emergency procedure policy, including a description of how staff and children, where developmentally appropriate, will be informed and aware of emergency evacuation procedures and describe how and where this will be posted.

Best Practice Examples:

- Have consulted with local emergency services to implement recommended and approved practices (i.e. fire department).
- All emergency procedures are available and directly correspond with guidance from the local fire department.
- Fire drills will be scheduled and practiced at regular intervals (i.e. Quarterly).
- Staff have been oriented on all procedures.
- Policy and procedure on how to work with emergency service personnel if lock-down procedures are required due to a serious incident.
- Portable record is readily accessible in case of emergency evacuation.

Usable Play Space

32) Indoor usable play space includes all space that can be accessed by the children at any time during all operating hours for play purposes. When determining maximum capacity for children, it is important to understand what total usable play space is available. This may include areas that the children may access within the premises that allow room to play. This does not include staff rooms, supply rooms, kitchens, closets, or fixed storage furniture like cubbies, shelves, or cabinets that cannot be used as play space.

Please be aware that if you have a child care licence that was issued to prior to December 1, 1990, the floor space may be calculated by measuring the usable floor space, including unencumbered hallways, but not including stairwells, kitchens, offices, staff rooms or half the washroom. For more information on how to measure your program please contact your early learning and child care staff.

- 1. To ensure that each child has a minimum amount of primary play space available for playing, resting, eating, and learning purposes. According to the Early Learning and Child Care Regulation, a licence holder must provide a minimum net floor area of:
 - 3.0 square metres of primary play space multiplied by the licenced capacity for a day care, if the licence holder provides day care programming.
 - 2.5 square metres of primary play space multiplied by the licenced capacity for pre-school care, if the licence holder provides pre-school care programming.
 - 2.5 square metres of primary play space multiplied by the licenced capacity for out of school care, if the licence holder provides out of school care programming.

2.	Determine Total Square Metres. Please provide the Length and the Width of the usable indoor primary play space
	and subtract any areas that are unable to be used. (i.e. fixed shelves, rooms for staff only).

	Length	X Width	=	=	Total Usable Square Metres	0
3.	For the Total Square Metres of children are provided below.	alculated above, a max	imum numbe	er o	f Day Care children and Preso	chool/Out of School
	Maximum Number of Day Care	Children	0			
	Maximum Number of Preschoo	l or Out of School Childre	en		0	

CDEV4018 Rev. 2021-01 Page 13 of 16

	Please select group) Day Care	OPreschool or Out of S	School (Mixed	
	Number of Day Care Child	ren				
	Play Space Required (Day	Care)	0	—— Squ	are metres	
	Number of Preschool or O	ut of School	Children			
	Play Space Required (Pres	school or Out	of School Care)	0		Square metres
	Number of Day Care Child	ren				
	Number of Preschool or O	ut of School	Children			
	Play Space Required (Mixe	ed)	0		——— Square	e metres
an	d/or diagrams that illust Best Practice Examples:	iate now ti	ie layout of your muo	or play .		ted by your program.
	•					
	The primary indoor play s					
	The layout of the progran	n and fixtures	s allow for and promotes a	adequate	supervision (i.e	. no blind spots).
	 Staff are able to be strate 	gically place			lran'a naada	
	• Gtan are able to be strate	9.00, p.0.00	d to supervise and respor	nd to child	iren s rieeus.	
						il the layout of the indoor play space
						il the layout of the indoor play space
Outdo						il the layout of the indoor play space
	An attachment has been					il the layout of the indoor play space
	An attachment has been oor Play Space um Requirements					il the layout of the indoor play space
Minim Day C	An attachment has been oor Play Space um Requirements are Day care program licence hol	submitted to	Children's Services that a	m outdoo	r play space th	at is on, adjacent to or within easy licenced capacity at a level of:
Minim Day C	An attachment has been oor Play Space um Requirements are Day care program licence hol	submitted to	Children's Services that a	m outdoo ates at le	r play space that	at is on, adjacent to or within easy licenced capacity at a level of:

Minim

Day C

Example Calculation for 20 Children under 19 months

- = (20 Children under 19 months * 50%) * 2m2
- $= 10 * 2m^2$
- $= 20m^2$

Example Calculation for 20 Children 19 months and over

- = (20 Children months * 50%) * 4.5m²
- = 10 * 4.5m²
- = 45m² = total amount of outdoor play space required

Out of School Care

An out of school care licence holder must provide outdoor play space for children that is, to the satisfaction of the statutory director, within easy and safe walking distance from the program premises.

Preschool Care

A preschool program is not required to provide an outdoor play space. However, if your program provides an outdoor play space as part of your program plan, please fill in the following boxes to document your outdoor play space.

CDEV4018 Rev. 2021-01 Page 14 of 16 34) Based on your facility-based program, please fill in the box below to clearly identify how your outdoor space will be utilized by your program and provide a description on how the outdoor play space meets or exceeds the minimum requirements.

This includes submitting a visual to Early Learning and Child Care staff of clearly labeled images, and/or diagrams that illustrates the layout of the outdoor play space utilized by your program.

*If you have applied and received an exemption or variance to your license please ensure your plan represents those changes.

Best Practice Examples:

- The layout and equipment adheres to the different groups of children, and the maximum group sizes.
- The layout of the outdoor play space allows for and promotes adequate supervision (i.e. no blind spots).
- Staff are able to be strategically placed to supervise and respond to children's needs.
- An attachment has been submitted to Children's Services that accurately shows the layout of the outdoor play space.

Approval			
	have provided in this program plan pr by the Statutory Director or approved		accurate, and understand it must
	Licence Holder Rep	oresentative Signature	
Ministry Use Only			
Date Received yyyy-mm-dd	Date of Review yyyy-mm-dd	Decision	Date of Decision yyyy-mm-dd
		○ Approved ○ Refused	

Statutory Director's Delegate Signature

CDEV4018 Rev. 2021-01 Page 15 of 16

Resources

Programming:

Flight- Alberta's Early Learning and Care Framework - https://flightframework.ca/

Child Development Instruments:

Early Development Instrument: https://edi.offordcentre.com/

Middle Years Development Instrument - http://earlylearning.ubc.ca/mdi/

Improving Early Childhood Development and Learning (toolkits and resource sheets on various topics): https://www.edc.org/body-work/early-childhood-development-and-learning?gclid=EAlalQobChMlx_Dx4Ovc7AlVwRd9Ch2UhQ-LEAAYASAAEgJ-GvD_BwE

Center on the Developing Child Resource Library - https://developingchild.harvard.edu/resources/

Resources for Early Learning - http://resourcesforearlylearning.org/educators/

Creating Indoor Learning Environments for Young Children - http://www.earlychildhoodnews.com/earlychildhood/article_view.aspx? ArticleID=294

It takes a Community to Raise a Child - http://www.earlychildhoodnews.com/earlychildhood/article_view.aspx?ArticleID=589

Healthy Eating and Nutrition:

Canada Food Guide - https://food-guide.canada.ca/en/

Canada Food Guide for Indigenous/Inuit and Metis:

https://www.canada.ca/en/health-canada/services/food-nutrition/reports-publications/eating-well-canada-food-guide-first-nations-inuit-metis.html

Alberta Nutrition Guidelines for Children and Youth - https://open.alberta.ca/publications/5906406

Physical Activity:

Get Kids Moving in Child Care - https://healthykidshealthyfuture.org/5-healthy-goals/get-kids-moving/

Helping Children in Child Care Be Physically Active - https://childcare.extension.org/helping-children-in-child-care-be-physically-active/

Physical Activity for Children and Youth with a Disability - https://csepguidelines.ca/wp-content/uploads/2018/12/PA-New-Abilities-Toolkit-Final-ENG.pdf

Canadian 24 hour Movement Guidelines for Children 0-4 years - https://csepguidelines.ca/early-years-0-4/

Canadian 24 hour Movement Guidelines for Children 5-17 years - https://csepquidelines.ca/children-and-youth-5-17/

CDEV4018 Rev. 2021-01 Page 16 of 16

Evaluation Guide Instructions? Tip Sheet?

The licence holder must demonstrate how they will provide high-quality early learning and child care as guided by the Principles and Matters to be Considered stated within the Early Learning and Child Care Act, in every element of their program plan.

The Principles and Matters to be Considered have been listed in a drop down box within the Scoring Tables in each section. Licensing Staff can use this as a way of ensuring that these elements of quality have been embedded in the program plan to meet requirements. If applicable, select the one that best aligns with the response.

The Comments section can be used to document the strengths identified, as well as any considerations for the program to make in order to ensure ongoing evaluation and improvement.

***LOs to determine relevancy to the program – do the sections align/make sense? Does the response speak to all types of child care offered?

Scoring chart (appendix?)

Score	Descriptor	Description
0	Does not meet requirements	no indicators; no best practice embedded; no confidence in LH's response
1	Does not meet requirements	some indicators; very little best practice embedded; low confidence in LH's response
2	Does not meet requirements	some indicators; some best practice embedded; some confidence in LH's response
3	Meets requirements – bottom line	all indicators; little to no best practice embedded; moderate confidence in LH's response
4	Meets requirements	all indicators; best practice embedded; confidence in LH's response
5	Meets and exceeds requirements	all indicators; significant best practice embedded; high confidence in the LH's response

Description Definitions:

Indicators: The required information that must be included in order for the program plan to be approved.

Best Practice: Responses outline <u>how</u> the best practice examples in the Program Plan Template have been embedded, and the Principles & Matters to be Considered have been demonstrated.

Confidence: Based on Licence Holder's level of understanding of the template questions, required indicators, Principles and Matters to be Considered that has been demonstrated.

Program Plan Evaluation Guide

Classification: Protected A

1) Describes the early learning and child care philosophy the facility-based child care program is based on. Indicators: ☐ Philosophy describes the program's principles, beliefs, values or goals in regards to early learning and child care Principles: Select one. Matters to be Considered: Select one. Comments: Click or tap here to enter text. Minimum score of 3 required Score: Select one. 2) Describes how the philosophy will be applied to encourage care and play experiences that support children's development and early learning in the program. Indicators: ☐ Describes any curriculum or programming that promotes early learning ☐ Describes how care provided by the program supports children's development Principles: Select one. Matters to be Considered: Select one. Comments: Click or tap here to enter text. Minimum score of 3 required Score: Select one. 3) Describes how the child care program plans to meet, promote and nurture the developmental needs of children for each of the following needs: a. Mental needs A description of how the program will encourage nurturing relationships, create a safe positive environment, nurture confidence, and provide social opportunities. Indicators: Describes how nurturing relationships will be encouraged in the program ☐ Describes how the environment will be safe and positive ☐ Describes how children's confidence will be nurtured ☐ Provides examples of social opportunities the program will provide to children ☐ If applicable, clarifies how they will meet the needs of children who may be at different development ages and have varying needs, including the unique needs of infants b. Emotional needs A description of how the program will support the emotional needs of the children (encourage Classification: Protected A positive self esteem, creating a structured environment, being responsive to attention needs, encouraging children to be independent learners, and supporting emotional intelligence). Indicators: ☐ Describes how the program will encourage positive self-esteem in children ☐ Describes how the routine meets children's developmental needs

☐ Provides examples of how children will be encouraged to be independent learners

☐ Explains how staff will be responsive to children

☐ Describes how children's emotional intelligence will be s☐ If applicable, clarifies how they will meet the needs of c☐	hildren who may be at different development
ages and have varying needs, including the unique needs o	or infants
a. Spiritual needs	
A description of how the program will support the spi (support them in finding meaning, purpose, structure	
Indicators:	
\square Describes how the program will support children in find their lives	ing meaning, purpose, structure and value in
☐ Describes how the program will support the spirit of the encourages positive sense of self.	
☐ If applicable, clarifies how they will meet the needs of classes and have varying needs, including the unique needs of classes.	
b. Physical needs	
A description of how the program will encourage physokills, support proper nutrition, provide rest, and prov	
Indicators:	
 □ Describes how physical activity is encouraged (ex. gross □ Examples of opportunities that support children in deve □ Describes how the program will support proper nutrition □ Describes rest periods that promotes rest and relaxation 	loping age-appropriate skills n
. \square Examples of sensory experiences that are provided to ch	
\square If applicable, clarifies how they will meet the needs of clarges and have varying needs, including the unique needs α	hildren who may be at different development
Scoring for Section 3 (a,	, b, c, d)
Principles: Select one.	
Matters to be Considered: Select one.	
Comments: Click or tap here to enter text.	
Minimum score of 3 required	Score: Select one.
Classification: Protected A	3
What strategies will staff use to ensure safe & smooth tran need to be successful?	nsitions? How will staff receive the support they
4) Describes how the program will be inclusive a children including those with exceptional nee	
Indicators:	
☐ Describes how the program will be inclusive of all childrough	en (e.g. children with exceptional needs and
☐ Describes how the needs of all children will be accommo	
	odated
Principles: Select one.	odated
Principles: Select one. Matters to be Considered: Select one.	odated
•	odated

Minimum score of 3 required

Score: Select one.

5) Describes how the program will incorporate indigenous or other cultural, social, ling central to the child's safety, well-being a	guistic and spiritual heritage to ensure it is
Indicators:	
☐ Demonstrates how the program values all familie children's safety, well-being and development	s' cultural heritage within the program to support
Principles: Select one.	
Matters to be Considered: Select one.	
Comments: Click or tap here to enter text.	
Minimum score of 3 required	Score: Select one.
Describes how the program will engage resources, and members to promote po	with and access community organizations,
Indicators:	isitive connections.
☐ Provides examples of community organizations, re☐ Describes how community engagement will prom	. •
Principles: Select one.	ioto positivos confidencialis
Matters to be Considered: Select one.	
Comments: Click or tap here to enter text.	
Minimum score of 3 required	Score: Select one.
Indicators: ☐ Describes the methods that the program uses to	engage with and involve parents in the program
☐ Demonstrates how parental involvement support	s accountability, monitoring and quality child care
Principles: Select one.	
Matters to be Considered: Select one.	
Comments: Click or tap here to enter text.	
Minimum score of 3 required	Score: Select one.
program. Indicators: ☐ Describes the methods used for ongoing evaluation ☐ Describes how parents will be involved in the eva	
Principles: Select one.	
Matters to be Considered: Select one.	
Comments: Click or tap here to enter text.	
Minimum score of 3 required	Score: Select one.

□ Provides a list of staff positions□ Certification level requirement are included	
☐ Explains each position's duties and responsibilities	
Principles: Select one.	
Matters to be Considered: Select one.	
Comments: Click or tap here to enter text.	
Minimum score of 3 required	Score: Select one.
11) Screening of staff and volunteers	
Indicators:	
\square Describes process for ensuring all staff and volunteers	are screened
☐ Describes methods used to screen staff and volunteer Principles: Select one.	S
Matters to be Considered: Select one.	
Comments: Click or tap here to enter text.	
·	la su u
Minimum score of 3 required	Score: Select one.
12) Staff orientation	
•	
ndicators: □ Describes how staff or volunteers are made aware of teand procedures □ Demonstrates how the program will determine staff a Regulation, Program Plan, and policies and procedures	
ndicators: □ Describes how staff or volunteers are made aware of the procedures □ Demonstrates how the program will determine staff and Regulation, Program Plan, and policies and procedures Principles: Select one.	
Indicators: ☐ Describes how staff or volunteers are made aware of the procedures ☐ Demonstrates how the program will determine staff and Regulation, Program Plan, and policies and procedures ☐ Principles: Select one. Matters to be Considered: Select one.	
Indicators: Describes how staff or volunteers are made aware of the and procedures Demonstrates how the program will determine staff a Regulation, Program Plan, and policies and procedures Principles: Select one. Matters to be Considered: Select one. Comments: Click or tap here to enter text.	nd volunteers' understanding of the Act,
Indicators: ☐ Describes how staff or volunteers are made aware of the and procedures ☐ Demonstrates how the program will determine staff and Regulation, Program Plan, and policies and procedures Principles: Select one. Matters to be Considered: Select one. Comments: Click or tap here to enter text. Minimum score of 3 required	
Indicators: Describes how staff or volunteers are made aware of the and procedures Demonstrates how the program will determine staff a Regulation, Program Plan, and policies and procedures Principles: Select one. Matters to be Considered: Select one. Comments: Click or tap here to enter text. Minimum score of 3 required 13) Primary	nd volunteers' understanding of the Act,
Indicators: □ Describes how staff or volunteers are made aware of the and procedures □ Demonstrates how the program will determine staff a Regulation, Program Plan, and policies and procedures Principles: Select one. Matters to be Considered: Select one. Comments: Click or tap here to enter text. Minimum score of 3 required 13) Primary Indicators: □ States the proposed capacity	nd volunteers' understanding of the Act, Score: Select one.
Indicators: Describes how staff or volunteers are made aware of tand procedures Demonstrates how the program will determine staff a Regulation, Program Plan, and policies and procedures Principles: Select one. Matters to be Considered: Select one. Comments: Click or tap here to enter text. Minimum score of 3 required	nd volunteers' understanding of the Act, Score: Select one.
Indicators: Describes how staff or volunteers are made aware of tand procedures Demonstrates how the program will determine staff a Regulation, Program Plan, and policies and procedures Principles: Select one. Matters to be Considered: Select one. Comments: Click or tap here to enter text. Minimum score of 3 required 13) Primary Indicators: States the proposed capacity Lists the required staff-to-child ratios for requested ca	nd volunteers' understanding of the Act, Score: Select one.
Indicators: Describes how staff or volunteers are made aware of tand procedures Demonstrates how the program will determine staff a Regulation, Program Plan, and policies and procedures Principles: Select one. Matters to be Considered: Select one. Comments: Click or tap here to enter text. Minimum score of 3 required 13) Primary Indicators: States the proposed capacity Lists the required staff-to-child ratios for requested ca Principles: Select one.	nd volunteers' understanding of the Act, Score: Select one.

5

Indicators:

14) Staffing plan and staff-to-child ratios during rest periods

☐ Explains how staff will be readily available to meet	
☐ Lists the required staff-to-child ratios during rest pe Principles: Select one.	eriods
Matters to be Considered: Select one.	
Comments: Click or tap here to enter text.	
Minimum score of 3 required	Score: Select one.
15) Mixed-age groups – staff-to-child ratios and ı	
Indicators:	
 □ Describes how required ratios will be met □ Demonstrates how the needs and safety for the ch 	hildren in the mixed-age group will be
met Principles: Select one.	march in the mixed age group win be
Matters to be Considered: Select one.	
Comments: Click or tap here to enter text.	
Classification: Protected A	
Classification: Protected A	
Minimum score of 3 required	Score: Select one.
ndicators: ☐ States the child guidance policy including strategies ☐ Explains how the child guidance policy will be comr ☐ Parents ☐ Staff ☐ Children where developmentally appropria	municated to;
Principles: Select one.	
Matters to be Considered: Select one.	
Comments: Click or tap here to enter text.	
Minimum score of 3 required	Score: Select one.
17) – advising parents and consent	
Indicators:	
☐ Describes how parents will be advised of off-site ac	
\square Describes how the program will collect the required	u parentai consent
18) Off-site Activity - outdoor space	
Indicators:□ Describes how the children will be adequ	uately supervised
\square Describes how the program will ensure children's s	
☐ Outlines how safe boundaries will be maintained	
☐ Demonstrates how children will be protected on th	
Scoring for Section	ns 16 & 17
Principles: Select one.	
Matters to be Considered: Select one.	
Comments: Click or tap here to enter text.	
Minimum score of 3 required	Score: Select one.

Describes now program will continue to meet child ratios during rest periods

19) - consent	
Indicators:	
☐ Describes the medication policy that states that administration of written consent of the child's parent is obtained ☐ Explains how the program will receive and store consent records	medication can only occur when the
Explains now the program will receive and store consent records	
20) - storage & administration	
Indicators:	
$\hfill\square$ Describes how medication will be stored in a locked container and	l inaccessible to children
	7
Classification: Protected A	
☐ States that medication is stored in the original labeled container ☐ States that medication is administered according to the labeled direction.	roctions
States that medication is administered according to the labeled di	rections
21) - emergency medication plan	
Indicators:	
$\hfill\square$ States that emergency medication is stored in accordance with a p	olan
☐ Describes how the emergency medication plan is agreed on by	the Licence Holder and the
parentScoring for Sections 18-20 Principles: Select one.	
Matters to be Considered: Select one.	
Comments: Click or tap here to enter text.	
	Score: Select one.
22) Menus – if applicable	
Indicators:	
☐ States if the program provides meals and snacks	
Explains how the menu is posted in a prominent place on the prog	gram premises
Principles: Select one.	
Matters to be Considered: Select one.	
Comments: Click or tap here to enter text.	la a la la
Minimum score of 3 required	Score: Select one.
23) Accident or Illness – notifying parents	
Indicators:	
☐ Describes how parents will be notified of an accident or serious illi	ness involving their child
Describes now parents will be notified of all accident of schous illi	ness involving their child
24) Accident or Illness – responding to an accident or serious ill	Iness
Indicators:	
$\hfill\square$ Describes how the program will respond to an accident or serious	
☐ Explains how the program will ensure medical attention is provide	d if necessary
25) Accident or Illness – tracking & analyzing accidents	

7

☐ Describes how the program will track, review, analyze and respond to accidents

Indicators:

☐ Demonstrates how the program will		sues to prevent future accidents
Sco Principles: Select one.	oring for Sections 22-24	
Findiples. Selectione.		
Classification: Protected A		
Matters to be Considered: Select one		
Comments: Click or tap here to enter t	ext.	
Minimum score of 3 required		Score: Select one.
26) Supervision Policy and Practic	es – supervision methods	
Indicators:		
☐ Includes the program's supervision p☐ Describes the methods used to ensu☐ Describes how staff are made aware policies	re children are effectively sup	
27) Supervision Policy and Practic	es – promoting child safety	
Indicators:		
☐ Describes how supervision practices	promote child safety	
Describes how all children will be ac		
☐ Both on and off the program	•	
☐ When arriving or leaving the ☐ When entering and leav transport in vehicles)		e, program must state they do not
Sco	ring for Section 25 & 26	
Principles: Select one.		
Matters to be Considered: Select one	·.	
Comments: Click or tap here to enter t	ext.	
Minimum score of 3 required		Score: Select one.
28) Informing Parents of Postings		
Indicators:		
☐ Describe how parents are made awa	are of required postings	
Principles: Select one.		
Matters to be Considered: Select one		
Comments: Click or tap here to enter t	ext.	
Minimum score of 3 required		Score: Select one.

29) Transportation between School and the Program Premises - If Applicable

Indicators:

Classification: Protected A

8

☐ States if the program provides transport to and from school ☐ Describes mode of transportation	
Explains how parents are informed of transportation arrangemen	ts and written consent
☐ Outlines steps that will be followed when a child fails to show up	
Principles: Select one.	ar arrangea prox ap anne ar recalent
Matters to be Considered: Select one.	
Comments: Click or tap here to enter text.	
Minimum score of 3 required	Score: Select one.
30) Overnight Child Care – If Applicable	
Indicators:	
☐ States if the program provides overnight child care	
$\hfill\square$ Describes how children receiving overnight care will be adequate	y supervised
☐ Describes how children's needs will be met while receiving overni	ght care
Principles: Select one.	
Matters to be Considered: Select one.	
Comments: Click or tap here to enter text.	
Minimum score of 3 required	Score: Select one.
 The licence holder has arranged to contact their health is regulations. Staff understand and can readily communicate emergent. Staff are able to identify a critical incident and how to reduce the process for reaching the program required during overnight care. Supervision practices for overnight care are clearly defined. Staff must be aware of all medications that are required emergency medications. Staff are able to apply developmentally appropriate roum music, lullabies, story book. Children's security, comfort, flexibility of times for sleep of the individual needs and schedules of the child and/or the Children are provided developmental appropriate opportunities to an bathing needs, brushing teeth, and changing into sleeping attir 31) Records Indicators: 	cy evacuation procedures. spond to it. n director for advice or support as ed and directly applicable. n including how to timely access tines to encourage sleep (i.e. playing are considered in accordance with meir family.
☐ How records are stored and kept up-to-date☐ the format in which they are maintained (digital or paper	1
ine format in which they are maintained (digital of paper	1

Classification: Protected A

Principles: Select one		
Matters to be Consider		
Comments: Click or tap	here to enter text.	
Minimum score of 3 red		Score: Select one.
	•	ar reviews of information with the parents.
A good record should be the Early Learning and (and contains the information as indicated
Indicators:		
☐ How childrer evacuation pro	e informed and aware of emergency n, where developmentally appropria	te, are informed and aware of the emerger
Principles: Select one.		
Matters to be Consider	ed: Select one.	
Comments: Click or tap	here to enter text.	
Minimum score of 3 red	quired	Score: Select one.
Best Practice Examples		
 Have consulted practices (i.e. fi 	=	plement recommended and approved
 All emergency partment. 	procedures are available and directly	ocorrespond with guidance from the local (
 Fire drills will be 	e scheduled and practiced at regular	intervals (i.e. Quarterly)
Staff have been	oriented on all procedures.	
	edure on how to work with emergen e to a serious incident.	ncy service personnel if lock-down procedur
• Portable record	is readily accessible in case of emer	gency evacuation.
33) Useable Play S _l	pace	
Indicators:		
	eable play space in square metres er of children by child care type	
Principles: Select one.		
Matters to be Consider	'ed: Select one.	
Comments: Click or tap	here to enter text.	

Classification: Protected A

Minimum score of 3 required	Score:	Select one.

How does the physical layout meet the needs of the children in each age group/room? Best Practice Example:

The physical layout adheres to the different groups of children, and the maximum group sizes

11

- The physical layout danieres to the different groups of eliminari, and the maximum group sizes
- The layout of the program and fixtures allow for and promotes adequate supervision (i.e. no blind spots)

Staff are able to be strategically placed to supervise and respond to children's needs.

34) Primary indoor play space

Indicators:	
☐ Describes how the primary indoor space will be utilized	
☐ Describes how the primary indoor space meets or exceeds the	e minimum space requirements
\square The attached diagram clearly illustrates how the layout of the	e indoor play space is utilized
Principles: Select one.	
Matters to be Considered: Select one.	
Comments: Click or tap here to enter text.	
Minimum score of 3 required	Score: Select one.
35) Outdoor Play Space Indicators:	
☐ Describes how a primary outdoor space will be utilized ☐ Describes how the primary outdoor space meets or exceeds	·
☐ The attached diagram clearly illustrates how the layout of the *Must include the requirements of the Early Learning and Child care being offered	
Principles: Select one.	
Matters to be Considered: Select one.	
Comments: Click or tap here to enter text.	

Note: The reviewer must return to the applicant all documents submitted with the application that were not used to determine eligibility for a licence.

Date Received: Click or tap to enter a date.	Reviewed by: Click or tap here to enter text.
Date Approved: Click or tap to enter a date.	Approved by: Click or tap here to enter text.

Score: Select one.

12

Date Updated: Click or tap to enter a date.	Section Updated: Select one.

Classification: Protected A

Minimum score of 3 required

Date Updated: Click or tap to enter a date.	Section Updated: Select one.
Date Updated: Click or tap to enter a date.	Section Updated: Select one.

Best Practice Example:

- The physical layout adheres to the multiple groups of different children, and the maximum group sizes
- The layout of the program and fixtures allow for and promotes adequate supervision (i.e. no blind spots)
- Staff are able to be strategically placed to supervise and respond to children's needs.
- 13. During rest periods, staff must be on premise and available to meet children's needs and in-

Outline below how you will continue to meet child ratios during these periods.

What is your staffing plan to ensure that you will maintain the staff to child ratios? How will the program support children who do not sleep? What activities will be provided and where?

14) If you intend to provide care for mixed-age groups, please describe how you will align staff to meet the ratio requirements and the needs of the children.

*In the case of combined age groupings the majority age of the children in the group will be followed for ratio purposes

Best practice examples for this could include:

Information on meeting the needs of children in the group that do not nap (activities, designated areas etc.). Other considerations may include manner of eating and feeding schedules, toileting/diapering, programming and room setup to promote the safety of all ages in the group (ex. infants requiring tummy time).

Additional staff available to provide support in the room during transitions and children's varying daily routines/needs?

15. As per the Regulation, please provide your child guidance policy that describes child guidance strategies for all ages of children in care, and your plan for how this policy will be communicated to parents, staff and children where developmentally appropriate.

How will the licence holder ensure that primary staff are teaching and modelling positive self-regulation strategies for children?

How do primary staff engage children in the conflict resolution? What strategies do they use to manage the classroom effectively? Example: visual timers and schedules

When a child is experiencing a hard time how do you get down to their level be present with them? What strategies do you use to help children express their emotions safety?

How does the program design the classroom to provide calm

Classification: Protected A

Program Plan Reflection Tool

This document is intended to be used as a resource to assist in the development and implementation of the required Program Plan for Facility-Based Programs. This companion resource sheet is <u>not</u> required to be submitted with the Early Learning and Child Care Program Plan Template.

Before completing the program plan, you may want to consider reflecting on your program's vision, values and goals with respect to offering quality child care.

- What areas of the program plan do you feel confident in with regards to implementing quality and best practices?
- Are there any areas that you need to work on or gain a better understanding of in order to ensure quality child care in all aspects of your program?
- What supports do you anticipate you will need in order to be successful?

<u>The reflective questions and tips below will help guide you through each section of the Program Plan</u> Template:

Philosophy (refer to numbers 1 & 2)

What is it about the Early Learning and Child Care field that is important to you?

Have you implemented any curriculum? How is it reflected in your child-centered practices?

Check out pg. 18 of the Licensing Handbook on Program Plans.

How is your philosophy connected to the Principles and Matters to be Considered as per the <u>Early</u> <u>Learning and Child Care Act?</u>

How does your philosophy fit with the parents' beliefs and values?

Consider both child-led and staff directed activities, and how programming will meet the needs of the whole child.

What types of play experiences and opportunities will your program offer?

How will you offer flexibility in your programming to support each child's interests, needs and abilities?

Developmental Needs of the Children (refer to number 3)

Mental Needs

What are some ways that children will be given opportunities to build confidence?

Click <u>here</u> for information on Promoting Positive Mental Health in Children

What are some ways the program will support the growth of brain development skills such as: thinking, reading, learning, remembering, reasoning and focusing?

What are some ways that your program will support interpersonal and social skills with children?

What considerations would you make in your daily programming for the different age groups in regards to the children's intellectual/cognitive needs?

Click <u>here</u> for more information on early brain development.

What is important about creating a safe and positive environment for children?

What will your staff do to ensure children feel safe and secure?

Emotional needs

What are some ways that your program will promote self-regulation with children in their daily routines?

Learn about the importance of serve and return interactions with children.

What does being a "responsive caregiver" mean to you? What is important about this?

What do you hope the children would say about the staff?

How would parents describe the staff-child interactions?

How will the staff observe and adapt their practice to meet children's emotional needs?

How will staff help children recognize how they are feeling and label it?

What strategies and supports will staff use to nurture caring connections and meet children's emotional needs?

Consider how your program structure and room arrangement will support children's fluctuating needs throughout the day (e.g. calm and quiet sensory spaces, open spaces for gross motor games etc.).

Spiritual needs

Consider the impact on children's safety, security and well-being when their spiritual beliefs are reflected in the program.

What is important about ensuring children's spiritual needs are valued, protected and supported?

How will the program identify and celebrate the uniqueness of each child?

How will the program encourage and honour children's natural curiosity?

What are some ways that your program will provide children opportunities to explore individual belief systems and values?

How will you provide opportunities for children to learn about the influence of their community and the world in which they live in?

Physical needs

How will the staff provide intentional and meaningful activities both indoors and outdoors that promote physical activity (e.g. age appropriate fine and gross motor activities)?

How will the program encourage exploration in outdoor play environments which are safe and appropriate to the child's age and development?

Visit the Alberta Health

Services website to review the guidelines surrounding food handling, play equipment, sleeping areas and more.

How will the program provide flexibility within the daily routine based on the individual needs of each child?

How will the physical environment be set up to encourage rest (e.g. lighting, soft music, bedding etc.)?

How will the staff promote rest and relaxation based on children's physical needs?

What strategies will staff use to ensure safe & smooth transitions?

What is the program's approach to meal times (e.g. family style)?

What is the program's nutritional plan?

How will the unique nutritional needs for infants be communicated and carefully monitored?

Meal times are a great opportunity for building social-emotional connections, role-modelling appropriate behaviours, and supporting independence.

How will you ensure that the manner in which children are fed are appropriate to their age and development?

Inclusive of all children including those with exceptional needs (refer to number 4)

Consider the types of screening tools staff members have access to and/or training to identify the milestones of growth and development.

What is the importance of inclusion for all children in the program?

How will your program recognize and value diversity?

How will staff be supported during challenging situations or naturally demanding periods throughout the day?

What considerations will staff make for children with exceptional needs?

How will your program adapt to ensure children of all abilities are provided equal opportunity and are respected and valued (e.g. teaching sign language)?

How will the program collaborate with families in order to meet their child's exceptional needs?

 Supporting the child's familial, Indigenous or other cultural, social, linguistic and spiritual heritage (refer to number 5)

How will your program collaborate with families to ensure that each child's heritage, including a child's indigenous background, is honoured and respected?

It is a good idea to self-reflect on individual biases when it comes to diversity and cultural practices.

How will the children see themselves reflected in the program?

How are staff supported in their understanding of inclusion and cultural awareness?

What opportunities will children be offered in the program that honour and foster their individual values, beliefs and traditions?

Engaging with community organizations, members and resources to support the child's optimal development (refer to number 6)

What community connections does the program have that will support children's development?

What is the value and benefits in establishing community partnerships and resources?

How do you plan to support vulnerable families in your program?

Visit <u>www.alberta.ca</u> website for information on Family Resource Networks and to locate nearby supports and services.

What resources will you make available in the program for families?

How will the community and available resources enhance programming in your facility?

❖ Parental involvement and engagement (refer to number 7)

In what ways will parents be involved and engaged in the program?

What opportunities will the parents in the program have to provide feedback?

What would parents say is important about developing supportive and respectful relationships within their child care program?

How will families be supported in resolving conflicts within the program when they arise?

Think of accountability when it comes to developing your program plan. How might you involve staff, parents and stakeholders in this process?

vulnerabilities within the community

What engagement opportunities are available for staff and parents (e.g. open house, potlucks, cultural celebrations etc.)?

Ongoing evaluation and improvement of the child care program (refer to number 8)

What tools will your program use to gather feedback from staff, parents and stakeholders?

How will feedback be shared within the program?

How are you going to support staff to keep current with best practices and research in early childhood?

How would you know that you were successful in engaging parents to support accountability and monitoring of the program?

How will parents be informed on what quality child care looks like?

What would indicate that the program was successful in meeting goals for ongoing improvement?

It is important to ensure your goals are SMART:

S – Specifi

M – Measurable

A – Achievable

R - Relevant

T - Time

STAFFING PLAN

List of staff positions and responsibilities (refer to number 9)

The staffing plan should list <u>all</u>
staff positions (e.g. primary staff, program supervisor, cook, driver etc.) that will be needed to meet the operational requirements of your program.

What child care certification levels will be required in your program to meet the minimum staff qualifications?

What are the day-to-day responsibilities of each role?

What information would the staff need to be successful in their role?

How will the staff be monitored and assessed on their ability to perform in their role?

What would be important about obtaining staff feedback regarding their duties and responsibilities?

How will staff be provided time for program planning?

Information on Child Care Certification can be found on pg. 34 and 35 in the Licensing Handbook.

Screening of staff and volunteers (refer to number 10)

What is the program's process for hiring and screening staff and volunteers?

How do screening procedures ensure the safety, security and well-being of the children?

What would parents say is important about screening staff and volunteers?

What process will the program use to track criminal record checks including a vulnerable sector search for all staff and volunteers?

Who is responsible for overseeing the hiring and onboarding process for all staff?

What education and professional experience, over and above Regulation, will your program require for new staff?

Staff orientation (refer to number 11)

How is a staff member oriented to the program's administrative policies and procedures?

What is important about overseeing and supervising new staff in the program?

How will the staff be educated on the Early Learning and Child Care Act and Regulation?

What additional support and/or specialized training will be provided to staff?

How will staff be included in the ongoing development and implementation of the program plan?

What is important about staff member's values aligning with your program plan?

Primary staff required to meet the staff-to-child ratios for the desired program capacity proposed (refer to number 12)

What are some situations where your program might implement enhanced ratios (e.g. transitions, off-site activities etc.)?

How will your program ensure maximum group sizes are maintained with each age group when it comes to large play spaces (e.g. room set up, programming, small groupings)?

Consider that these ratios are the minimum, and that the staffing needs may fluctuate depending on the group and the children's mental, emotional, physical and spiritual needs.

Staffing plan and staff-to-child ratios during rest periods (refer to number 13)

Rest periods are an opportunity for nurturing and strengthening connections through one-on-one and small group interactions with children.

What is your staffing plan to ensure that the program will maintain the staff to child ratios during rest periods?

What is the plan if the children awaken and primary staff have not returned from breaks?

How will the program ensure the safety and well-being of all children in the group during rest periods (i.e. sleeping and awake)?

What developmentally appropriate activities will be provided to children that do not sleep?

What are the expectations of the primary staff during these periods?

What is the role of the Program Supervisor during rest periods to monitor the implementation of this plan?

Mixed-age groups – staff-to-child ratios and meeting the needs of the children (refer to number 14)

What age groups will be combined?

What times of the day will the program be mixing age groups?

What will the staffing plan be to ensure that the staff to child ratios are met?

What does the primary play space where mixed-age groupings will be offered look like?

Review the definition of Mixed-Age Groups on pg. 9 of the <u>Licensing Handbook</u> to determine whether you will need an exemption. What are the safety measures that will be put in place to address mixed-age groups and the differing needs based on their growth and development?

What is important about providing a secure environment that provides consistency for children (e.g. room staff, times of day, rooms used etc.)?

What developmentally appropriate toys and equipment will be provided to ensure safety in the group?

What is important about considering the differences in ages and varying abilities of children that will be combined (e.g. differing routines, programming, room setup etc.)?

ADMINISTRATIVE POLICIES AND PROCEDURES

Child Guidance Policy (refer to number 15)

Click <u>here</u> for a resource on positive Child Guidance.

What is important about positive child guidance?

How will children be <u>protected</u> from all forms of physical punishment, physical and verbal abuse, and emotional deprivation?

How do primary staff engage children in conflict

resolution and problem solving?

What prevention and intervention strategies do staff use?

What tools do staff use to manage the room effectively?

How can the environment be set up to support child guidance and meet children's developmental needs?

What strategies do staff use to manage challenging behaviours?

What Child Guidance training has been provided to staff?

How do staff support children and create an environment in which children can express their emotions safely?

How will the Child Guidance policy be shared with the parents, staff, and children in a developmentally appropriate way?

What is important about including parents in developing positive child guidance strategies that will be implemented with their children?

What is important about the children understanding expectations within the program?

What is the expectation should a parent or staff identify concerns with child guidance in the program? What steps will the Licence Holder take?

How will the program monitor the staff to ensure that the Guidance Policy is followed?

Licensing Handbook

for a definition on

Child Guidance.

7

Off-site Activity (refer to numbers 16 & 17)

What information will parents need to ensure that they have been fully informed of the off-site activity?

What is important about having a planned activity or purpose for the outing?

What is the staffing plan for off-site activities?

How will the program ensure the safety and well-being of children while off-site?

Describe in detail how the program will use one time consent forms for regularly occurring off-site activities (Who, what, when, where, why and how)? The requirements for written consent for off-site activities can be found on pg. 12 of the Licensing Handbook.

Consider sharing maps or photos of the location and/or the route that will be used to access the off-site space.

How will the program effectively supervise the children to ensure safety at all times?

How are you ensuring that the off-site outdoor space is safe and free of hazards prior to use?

What additional planning will be required when utilizing an off-site outdoor play space?

How will the staff maintain communication with the program while off-site?

How will the children be introduced to the space?

What guidelines will be shared with the children about safety?

How will the staff be made aware of which children have consent to go off-site to the outdoor play space?

Medication and Health Care (refer to numbers 18-20)

How are all staff (including relief staff) made aware of any children requiring medication and/or with allergies?

How are staff oriented to the medication policies and child-specific procedures (e.g. location of medication, consent etc.)?

What information is required to be documented after medication has been administered?

See pg. 12 of the <u>Licensing</u>
<u>Handbook</u> for the definition of
Written Consent for Medication and
Emergency Medication Plans.

How will the program communicate with parents about the administration of medication?

Consider storage for medications on-site that may need to be refrigerated as well as those that don't; multiple locked containers may be required.

Where is medication stored that will be inaccessible to the children?

Who will be responsible for overseeing medication accepted into the program and ensuring accurate documentation on the consent form?

What specific information would be important to obtain

regarding a child's emergency medication plan?

How will staff be made aware of emergency medication plans?

How will this medication be transported to ensure it is always accessible by the staff and child (e.g. off-site, school)?

Who is responsible for regularly reviewing and maintaining medication in the program (e.g. checking for expiry dates, assessing need for medication)?

Consider the child's age and developmental level when it comes to accessing their emergency medication. It is important to have ongoing communication with the child's parent when developing and implementing the plan.

Menus (refer to number 21)

Nutrition is required to be in accordance with a food guide recognized by <u>Health</u> Canada or Alberta Health.

Where will the menu be posted in the program?

How will parents be made aware of where the menus are posted and any changes?

How will you ensure that the menu meets the children's nutritional needs?

What food guide will be followed?

How will your menu reflect options for children with allergies and special dietary considerations?

Accident or Illness (refer to numbers 22-24)

How will parents and staff be informed of the program's Accident or Illness policy?

Who will be responsible for contacting parents in the case of an accident or serious illness?

What information will be documented in the case of an accident or serious illness of a child?

A "serious accident or illness" defined on pg. 11 of the Licensing Handbook.

Any incident that seriously affects the health or safety of a child must be reported to Child Care Licensing. Information on Reporting Incidents can be found on Pg. 33 of the Licensing Handbook.

How will staff receive assistance in the case of an accident or serious illness of a child to ensure the safety of all children in the group?

How will your program support staff in becoming equipped to respond to an accident or serious illness?

What is the program's system for reviewing, tracking and analyzing accidents?

What is important about including the primary staff in the analysis of accidents?

What strategies will the program use to encourage reflection and obtain feedback with regard to any accident or incident that occurs?

Supervision Policy and Practices (refer to numbers 25 & 26)

What does effective supervision look like?

How will the staff adapt their supervision practices based on the children's age, level of development, and environment?

What is the program's expectation of staff's level of engagement in play with the children?

How will staff be made aware of the program's effective supervision strategies?

Click <u>here</u> for a resource on Effective Supervision in Child Care Settings.

What are some circumstances or times during the day that present challenges for staff in regards to supervision?

Who will be responsible for monitoring primary staff member's supervision practices?

How will the staff ensure the indoor and outdoor environments are safe and hazard-free prior to use?

Discuss the program's supervision strategies for sick children?

What tools and systems will the staff use to track the children both on and off-site?

What is important about ensuring attendance documents are kept up-to-date?

How will the staff ensure adequate supervision to ensure safety when transporting children in a vehicle?

Informing Parents of Postings (refer to number 27)

Who will be responsible for maintaining these documents?

How will informing parents of required postings and Licensing reports increase children's safety?

How will your program's orientation process support parents in understanding the requirements to post, and what information is included?

Information on Duty to Post can be found on Pg. 29 of the <u>Licensing Handbook</u>.

Transportation – If Applicable (refer to number 28)

The requirements for written consent can be found on pg. 12 of the Licensing Handbook.

What is important about ensuring that parents are aware of the transportation policy?

What details will be included in transportation agreements to ensure parents are well-informed?

How will you be transporting children to and from school? (e.g.

walking, bus, van etc.).

What will be the expectations of the parents when it comes to informing the program of absences?

How will absences be documented and shared with staff?

What information will the program obtain from the parents regarding transportation to and from their child's school?

What is important about ensuring children have a clearly designated meeting spot?

What considerations will you make based on the children's age and level of development (e.g. meeting spot, walking arrangements etc.)?

What is important about establishing connections with the schools that your program provides transportation to and from?

When does the responsibility of the program start and end in regards to the care and supervision of children?

What is important about establishing clearly defined times and circumstances under which the transfer of care takes place?

How would the program respond to an unexpected absence of a child (i.e. missing child)?

How does the program ensure staff are familiar with the procedures for missing children?

What steps would staff take if an accident occurs while transporting children?

Visit the <u>Alberta</u>
<u>Transportation</u> website for information on commercial vehicle requirements.

Overnight Child Care – If Applicable (refer to number 29)

What is the need in the community you serve for overnight care?

How will the staff collaborate with families to ensure the individual needs of each child are met (e.g. bedtime routines, emotional comfort, nutritional needs, health considerations etc.)?

What will the program do to ease the transition for the children accessing overnight care?

What will the program do to support and reassure parents during the transition to overnight care?

What will parents be required to provide in a child's overnight bag?

Visit the Alberta Health Services website to review the guidelines or diapering, personal hygiene and sleeping requirements.

How will the program address situations where a child does not arrive with the appropriate belongings?

How might the crossover between day care and overnight care impact the children? (e.g. children sleeping in the program overlaps with when day care children arrive)

What is your staffing plan for overnight child care?

How will the program orientate the staff to overnight responsibilities and expectations?

How will staff be monitored and receive support when needed?

How will the program ensure smooth transitions and effective communication between staff on the night shift and day shift?

What is important about having an emergency plan for the child if parents are unreachable due to work restrictions?

Records (refer to number 30)

Consider how designated staff will have easy access to paper or digital files to ensure they are readily available for inspection.

What is important about ensuring records are up-to-date and accurate?

How will the program track and maintain up-to-date records?

Emergency evacuation procedures (refer to number 31)

What resources will you use to develop your emergency evacuation policy?

How will your plan differ for each age group or times of day (e.g. rest periods)?

What are some strategies that staff will use to teach children about evacuations and what to expect in an emergency?

How will the children's feelings of safety and security be considered in your evacuation procedures?

How will the program ensure staff are well-versed in and have a clear understanding of the emergency evacuation policy?

How will you meet the children's needs in all kinds of weather during an evacuation?

How will you communicate with staff both on and off the program premises to ensure all staff and children are accounted for during an emergency evacuation?

What is the process for informing parents of emergency evacuations?

Consider the means of communication that will be used between staff in an emergency, the methods used to track the children both indoors and outdoors, and the accessibility of portable records in each room.

Useable Play Space (refer to number 32)

Refer to pg. 40 of the Licensing Handbook for information on determining useable play space and diagram requirements.

How does the layout of the program support effective supervision?

How will the environment be set up to ensure children's safety (e.g. furniture and space considerations)?

How will each room differ in its physical layout to reflect the age of the children in the group?

How will the physical layout of the program support children's well-being and development (e.g. lighting, interest centres, and noise considerations)?

How would you know the physical layout of the program was successful in meeting the children's developmental needs?

How will your program adapt the environment to facilitate the varying activities throughout the day?

Outdoor Play Space (refer to number 33)

Day Care

How will staff incorporate meaningful programming in the outdoor environment that supports children's developmental needs?

Out of School Care

How will staff ensure children are safely transported to and from the outdoor play space?

What is important about providing opportunities for daily outdoor play?

outdoor play space and how it will support supervision practices, the age and development of children using it, the age appropriateness of toys & equipment, and how children's exploration and early learning will be promoted.

Preschool Care

"Safe and easy walking distance" is defined on pg. 11 of the Licensing Handbook.

If your program incorporates outdoor play, what will that look like?

What considerations would you make in regards to the suitability of the outdoor play space? (e.g. location, method of transport, age appropriate playground equipment etc.)

SCALING QUESTION:

On a scale of 0 to 10, how confident are you that the plan you have created will provide a quality program for children and families and can be implemented as described?

10 – you are very confident that your program plan can be implemented, you have the tools and supports you need in order to be successful, your program plan has embedded quality child care that aligns with the Principles and Matters to be Considered, and complies with the Early Learning and Child Care Act & Regulation.

0 – you are not at all confident that your program plan can be implemented, you do not have the necessary tools and supports in order to offer the described program plan, you are uncertain of how to implement quality child care in your program, and you are unsure if the plan complies with the *Early Learning and Child Care Act* & Regulation.

What brought you to your number? What can you do to bring your number higher?

Looking at the reflective questions at beginning of this document, how has your confidence and understanding changed?

What are your next steps?

For further assistance regarding the application process and required documents, please contact your <u>local Licensing Office</u>.