2022 ANNUAL REPORT

Achieving a State of Healthy Weight

College of Nursing

UNIVERSITY OF COLORADO **ANSCHUTZ MEDICAL CAMPUS**

University of Colorado Anschutz Medical Campus College of Nursing

ACKNOWLEDGEMENTS

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Executive Summary

What is this report?

Overweight and obesity often begin in early childhood and can have lifelong negative effects on health and quality of life. Early care and education (ECE) programs serve millions of very young children each week and may promote development of healthy lifestyles to prevent obesity. States can support these programs by establishing child care licensing regulations that encourage recommended infant feeding practices; healthy nutrition standards and mealtime practices; opportunities for active play; and less screen time. *Achieving a State of Healthy Weight (ASHW) 2022* reports the level of support, nationally, for 47 high-impact obesity prevention standards (HIOPS) in new child care licensing regulations in 2022.

Use ASHW 2022 to:

1. **Determine** how state regulations support obesity prevention in licensed ECE programs
2. **Highlight** state successes
3. **Identify** opportunities for ECE regulations to improve support of obesity prevention in young children

States can strengthen obesity prevention policies and practices in ECE regulations by:

- Maintaining past improvements to state child care regulations that support obesity prevention in ECE.
- Adopting regulations that explicitly align with CACFP meal patterns.
- Adopting regulations consistent with CFOC standards for physical activity and screen time.
- Adopting regulations that support obesity prevention practices in Centers and Home-based care types.
- Consulting with local public health officials or licensed child health providers during the revision process.

ECE Matters

Evidence-based statewide interventions can help ECE programs improve their policies, practices, and nutrition and physical activity offerings.

Introduction

Pediatric overweight and obesity continues to be a public health crisis in the United States with 1 in 5 children and adolescents considered obese[1] and higher rates in children from low-income families and children from Black, Native American, and Hispanic Populations.

Approximately 25% of 2-5 year old children are overweight or obese.[1,2] Obesity often persists through adolescents[3,4] and into adulthood and is associated with increased morbidity and mortality.[5,6] New studies described how the COVID-19 pandemic has negatively impacted and increased childhood obesity rates across age groups.[7] Preventive interventions in early childhood are crucial for creating behaviors that support healthy weight practices.[8,9]

Why ECE?

There are more than 10.5 million licensed child care slots across the nation.[10] These are filled mainly by young children, including vulnerable and at-risk children who receive federally subsidized child care.[11] In licensed child care, children have opportunities to engage in active play, learn healthy mealtime practices, and share daily meals and snacks.[12-18] These critical early care and education (ECE) programs are important environments for teaching behaviors and building a foundation for healthy living.[18-21] The CDC developed the *Spectrum of Opportunities for Obesity Prevention in Early Child Care and Education* to identify target areas, such as child care licensing, for actions to support healthy growth in young children. The CDC also recognizes *Caring for Our Children (CFOC)* as the gold standard in high-quality health and safety policies and practices for ECE programs.[22]

History of ASHW

The National Resource Center (NRC) for Health and Safety in Child Care and Early Education at the University of Colorado College of Nursing conducted a 2010 baseline child care licensing study, *Achieving a State of Healthy Weight: A National Assessment of Obesity Prevention Terminology in Child Care Regulations.*[23]

The ASHW study team rated all 50 states and the District of Colmbia on inclusion of the 47 science-based standards for obesity prevention in state licensing regulations across child care types. The 47 High-Impact Obesity Prevention Standards (HIOPS) were derived from the CFOC health and safety standards presented in P*reventing Childhood Obesity in Early Care and Education Programs: Selected Standards from Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs, 3rd edition (PCO)*.[24]

The HIOPS address infant feeding, nutrition, physical activity and screen time practices. Experts in children's health from the American Academy of Pediatrics, American Public Health Association, CDC Division of Nutrition, Physical Activity and Obesity, USDA Center for Nutrition Policy and Promotion, other federal agencies, national organizations and leading universities, as well as child care and licensing stakeholders assisted the University of Colorado study team in selecting and defining the HIOPS.[25]

The 2010 baseline study revealed limited support of the HIOPS on a national level. Annual ASHW reports examine new and revised state licensing regulations (see Table 1). The *Achieving a State of Healthy Weight: 2022* report is the 12th update of the 2010 study. Each update has documented changes and improvements of the HIOPS in state child care licensing regulations since 2010. However, work remains in states and communities to embed healthy eating, physical activity, and obesity prevention strategies within ECE regulations to benefit our youngest children.

The HIOPS were defined with input from representatives from:

- American Academy of Pediatrics
- American Public Health Association
- CDC Division of Nutrition, Physical Activity, Obesity
- USDA Center for Nutrition Policy and Promotion

Table 1. State Assessment Years: 2010 to 2022

The table below shows years in which states were rated based on revised child care licensing regulations.

State	Years Rated													State	Years Rated											
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Alabama	X		X						X	X		X		Montana	X		X					X				X	
Alaska	X		X					X						Nebraska	X		X	X				X					
Arizona	X	X								X	X			Nevada	X		X						X				
Arkansas	X	X				X		X			X			New Hampshire	X							X					X
California	X		X					X						New Jersey	X			X				X					
Colorado	X		X			X	X	X				X		New Mexico	X		X		X			X					
Connecticut	X		X					X				X		New York	X			X	X	X		X					
Delaware	X		X			X		X		X	X	X		North Carolina	X		X	X				X	X				
D.C.	X						X	X						North Dakota	X	X									X		
Florida	X		X	X				X		X				Ohio	X		X				X					X	
Georgia	X		X		X			X			X		X	Oklahoma	X						X	X					X
Hawaii	X		X					X						Oregon	X		X					X				X	
Idaho	X												X	Pennsylvania	X										X		
Illinois	X				X									Rhode Island	X		X	X				X				X	
Indiana	X												X	South Carolina	X		X					X					
Iowa	X		X					X						South Dakota	X												
Kansas	X		X	X										Tennessee	X								X				X
Kentucky	X			X					X			X		Texas	X		X		X							X	
Louisiana	X		X			X		X				X		Utah	X		X					X					
Maine	X		X					X				X		Vermont	X						X	X					
Maryland	X		X			X		X						Virginia	X		X					X					
Massachusetts	X													Washington	X		X					X		X			
Michigan	X		X		X			X		X				West Virginia	X		X		X								
Minnesota	X		X					X						Wisconsin	X		X							X			
Mississippi	X		X	X							X			Wyoming	X		X	X									X
Missouri	X						X																				

State assessed at baseline (2010) for all regulated child care types

State assessed due to new or revised child care licensing

State assessed due to national CACFP updates

Status of High-Impact Obesity Prevention Standards (HIOPS): 2022

This report describes the degree to which the 50 states and the District of Columbia have included the 47 evidence-based HIOPS for obesity prevention into licensing regulations for Child Care Centers and Family Child Care Homes.

In 2022, the ASHW study team screened 59+ revised regulatory documents. Seven states (**Georgia, Idaho, Indiana, New Hampshire, Oklahoma, Tennessee, and Wyoming**) made changes that impacted the HIOPS in one or more licensed child care types. This report describes these changes and their impact on state rankings of the HIOPS nationally.

Nationally, HIOPS are supported by licensing regulations in:

- 64% of Child Care Centers
- 58% of Large Family Child Care Homes
- 55% of Small Family Child Care Homes

The most supported HIOPS remain unchanged and are:

- Provide children with space for play (PA1)
- Make water available inside and outside (ND1)
- Serve small-sized, age-appropriate portions (NF1)

The least supported HIOPS are:

- Limit oils and avoid fried foods (NA1)
- Limit salt by avoiding salty foods (NG1)
- Provide staff orientation and training opportunities for physical activity (PA2)

Status of New + Revised State Licensing Regulations: 2022

Of the rating changes made in 2022, 82% strengthened and 18% weakened support for obesity prevention in early care and education programs nationwide compared to 2010.

Georgia's revised regulations now require consultation for introduction of solid foods with both the infant's parents and health care provider.

Tennessee's revisions now prohibit serving sugar sweetened beverages, enhancing the CACFP meal patterns already in place.

Wyoming's revisions now mention serving human milk in child care settings and include rules prohibiting the restriction of physical activity.

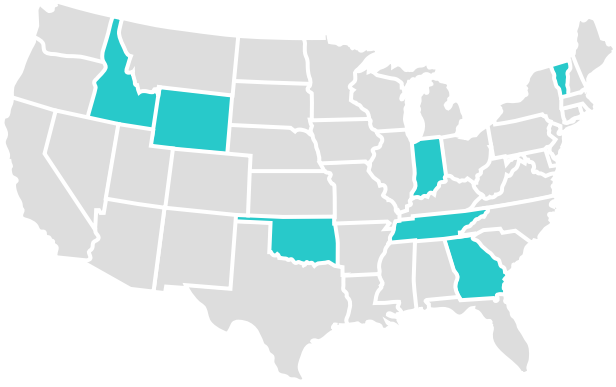
New Hampshire's revisions impact healthy mealtime practices and prohibit the restriction of physical activity for all child care types.

Oklahoma's revised regulations improved in several areas, including physical activity rules and screen time limits.

Indiana made many positive changes, including that water be made freely available. Rules for child care centers and homes now better align.

States + Care Types Rated in 2022:

- **Georgia:** Centers
- **Idaho:** Centers, Large Family, Small Family
- **Indiana:** Centers, Large Family, Small Family
- **New Hampshire:** Centers, Large Family, Small Family
- **Oklahoma:** Centers, Large Family, Small Family
- **Tennessee:** Centers, Large Family, Small Family
- **Wyoming:** Centers, Large Family, Small Family



What's New in 2022

Tennessee leads the nation in support of the HIOPS, followed by Texas and Washington (see Figure 4).

Since 2010, 46 states have adopted licensing regulations that affect High-Impact Obesity Prevention Standards (HIOPS) and help prevent childhood obesity in Early Care and Education (ECE) programs.

Status of New + Revised State Licensing Regulations

- Since 2010, states with the most improved support of the HIOPS are: District of Columbia, Florida, Tennessee, Nevada, Texas, and Vermont (see Figure 6)
- The states with the fewest amount of changes across child care types are: Massachusetts, South Dakota, and Pennsylvania
- Of the 2022 ratings, the most positive changes were seen across physical activity HIOPS.
- Among the 2022 ratings, 54% of these ratings resulted in positive changes.

Support for the following HIOPS improved the most across all care types:

- Serve no juice to children younger than 12 months of age (ID3)
- Serve skim or 1% pasteurized milk to children two years of age and older (NA5)
- Offer juice (100%) only during meal times (NC2)
- Serve whole fruits, mashed or pureed, for infants 6 months up to 1 year of age (ID2)

State Licensing Support

This chart shows changes over time, comparing state child care licensing regulation support of the HIOPS at baseline (2010) to current ASHW study year (2022). More states now fully support the HIOPS and fewer states fail to address or contradict the HIOPS than in 2010.

***In 2022, less than 0.5% of the HIOPS contradicted current best practices nationally.**

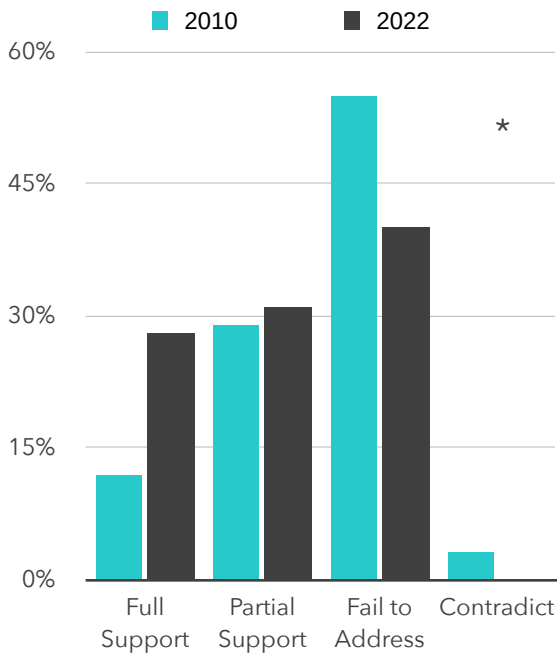
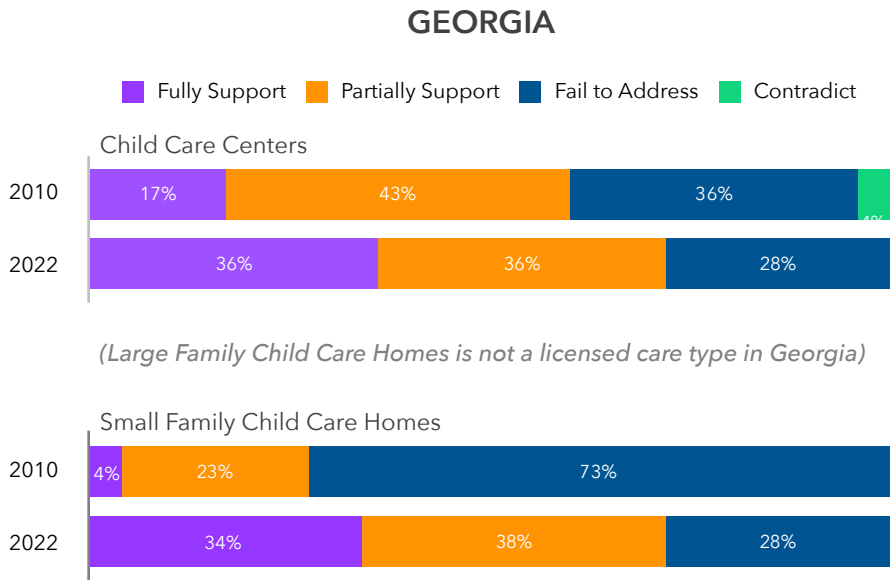
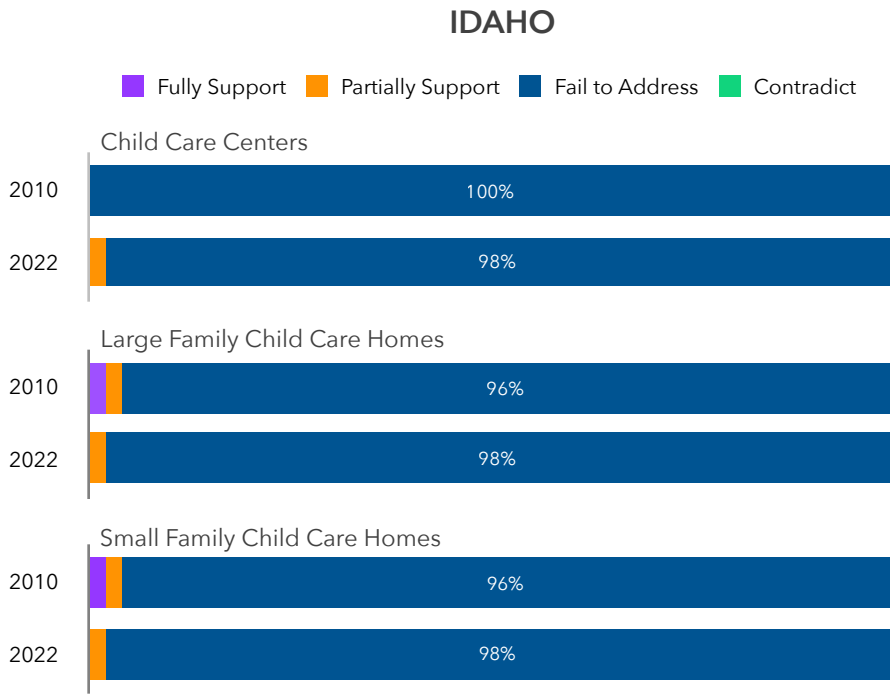


Figure 1. State Progress in 2022

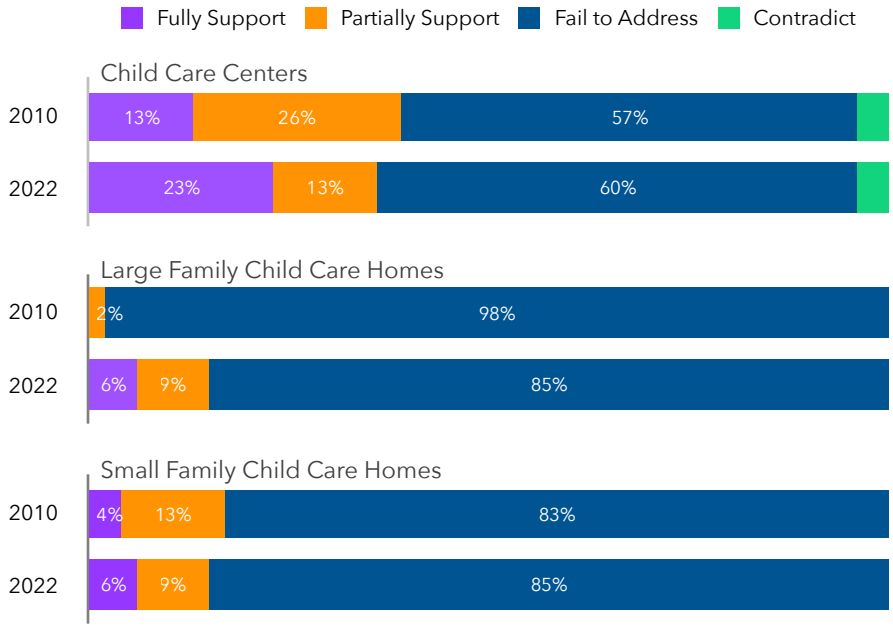
The figures that follow illustrate differences among states and their support of High-Impact Obesity Prevention Standards (HIOPS) in licensing regulations for different child care types (2010 vs. 2022).



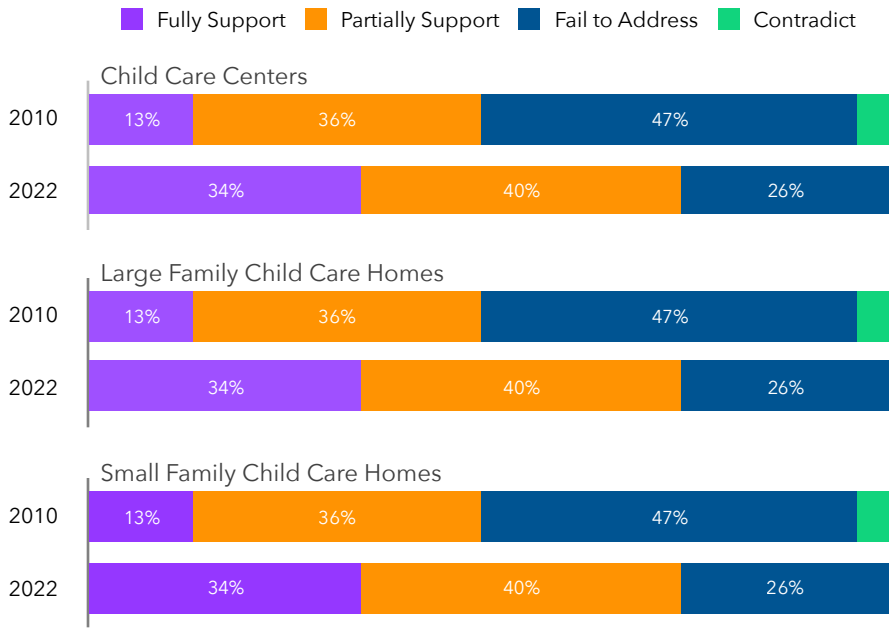


WHAT'S NEW IN 2022

INDIANA

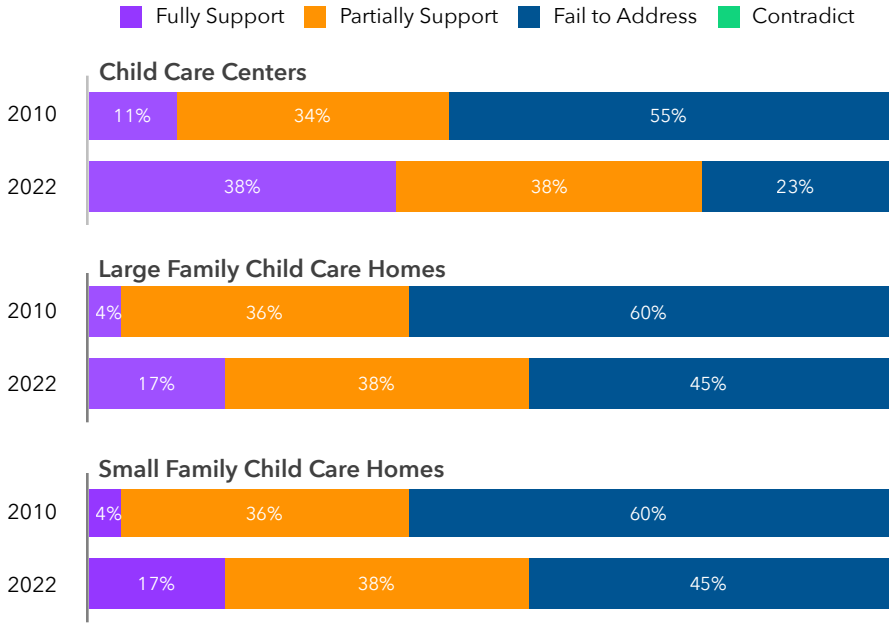


NEW HAMPSHIRE

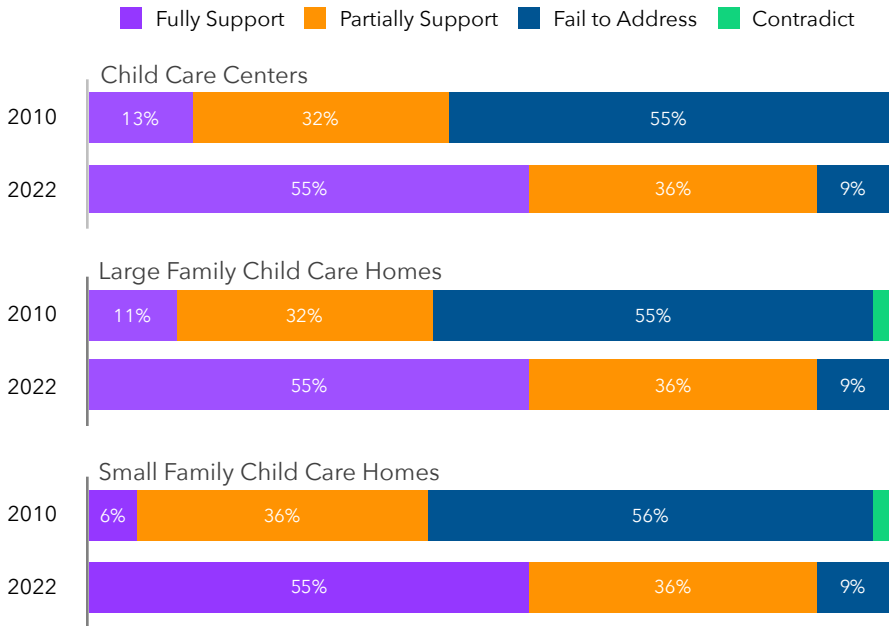


WHAT'S NEW IN 2022

OKLAHOMA



TENNESSEE



WHAT'S NEW IN 2022

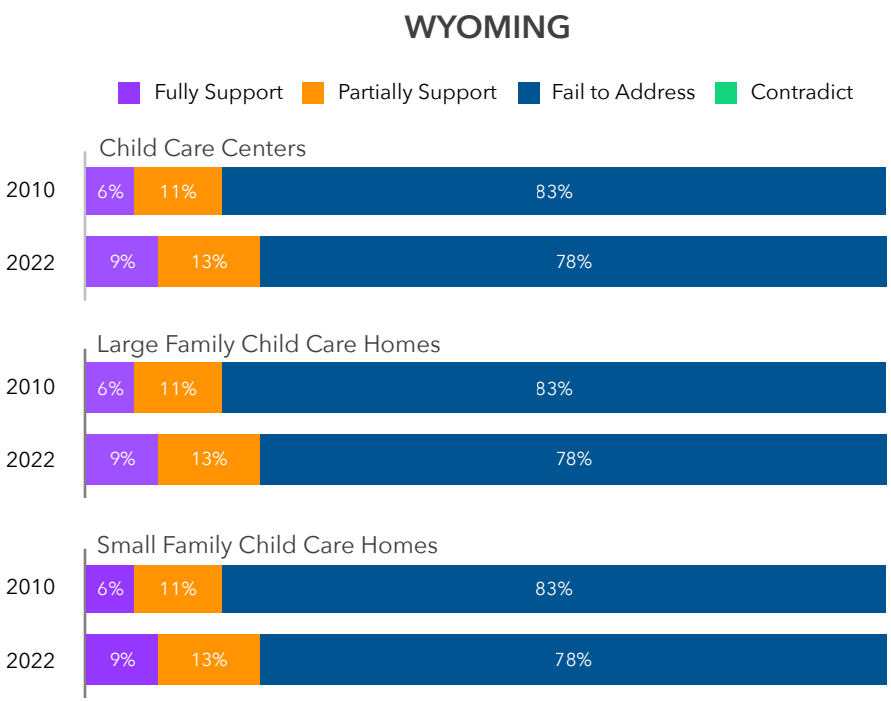


Table 2. State Support Across All Care Types

This table shows the number and percentage of ratings per state, across licensed child care types, that a) contradict, b) fail to address, c) partially support, or d) fully support High-Impact Obesity Prevention Standards (HIOPS).

State	Contradict		Fail to Address		Partially Support		Fully Support		Total Ratings
ALABAMA	0	0%	30	21%	46	33%	65	46%	141
ALASKA	0	0%	36	26%	54	38%	51	36%	141
ARIZONA	2	2%	48	51%	31	33%	13	14%	94
ARKANSAS	0	0%	30	21%	60	43%	51	36%	141
CALIFORNIA	0	0%	94	67%	25	18%	22	16%	141
COLORADO	0	0%	37	26%	51	36%	53	38%	141
CONNECTICUT	0	0%	76	54%	32	23%	33	23%	141
DELAWARE	0	0%	22	16%	57	40%	62	44%	141
DISTRICT OF COLUMBIA	0	0%	27	19%	60	43%	54	38%	141
FLORIDA	0	0%	40	28%	53	38%	48	34%	141
GEORGIA	0	0%	26	28%	35	37%	33	35%	94
HAWAII	0	0%	49	35%	43	30%	49	35%	141
IDAHO	0	0%	138	98%	3	2%	0	0%	141
ILLINOIS	8	6%	45	32%	47	33%	41	29%	141
INDIANA	2	1%	108	77%	14	10%	17	12%	141
IOWA	0	0%	52	37%	44	31%	45	32%	141
KANSAS	3	2%	86	61%	43	30%	9	6%	141
KENTUCKY	3	2%	57	40%	39	28%	42	30%	141
LOUISIANA	1	2%	9	19%	21	45%	16	34%	47
MAINE	0	0%	61	43%	44	31%	36	26%	141
MARYLAND	0	0%	34	24%	56	40%	51	36%	141
MASSACHUSETTS	0	0%	102	72%	24	17%	15	11%	141
MICHIGAN	0	0%	38	27%	57	40%	46	33%	141
MINNESOTA	0	0%	45	32%	56	40%	40	28%	141
MISSISSIPPI	6	4%	28	20%	54	38%	53	38%	141
MISSOURI	0	0%	82	58%	41	29%	18	13%	141
MONTANA	0	0%	53	38%	46	33%	42	30%	141
NEBRASKA	0	0%	57	40%	42	30%	42	30%	141
NEVADA	0	0%	45	32%	51	36%	45	32%	141
NEW HAMPSHIRE	0	0%	36	26%	57	40%	48	34%	141
NEW JERSEY	0	0%	41	44%	26	28%	27	29%	94
NEW MEXICO	0	0%	42	30%	48	34%	51	36%	141
NEW YORK	0	0%	59	42%	48	34%	34	24%	141
NORTH CAROLINA	0	0%	33	23%	45	32%	63	45%	141
NORTH DAKOTA	0	0%	86	61%	32	23%	23	16%	141
OHIO	0	0%	87	62%	30	21%	24	17%	141
OKLAHOMA	0	0%	53	38%	54	38%	34	24%	141
OREGON	4	3%	87	62%	39	28%	11	8%	141
PENNSYLVANIA	0	0%	100	71%	27	19%	14	10%	141
RHODE ISLAND	0	0%	28	20%	55	39%	58	41%	141
SOUTH CAROLINA	0	0%	77	55%	37	26%	27	19%	141
SOUTH DAKOTA	0	0%	124	88%	9	6%	8	6%	141
TENNESSEE	0	0%	12	9%	51	36%	78	55%	141
TEXAS	0	0%	21	15%	41	29%	79	56%	141
UTAH	0	0%	36	26%	57	40%	48	34%	141
VERMONT	0	0%	33	23%	54	38%	54	38%	141
VIRGINIA	0	0%	36	26%	54	38%	51	36%	141
WASHINGTON	0	0%	18	13%	51	36%	72	51%	141
WEST VIRGINIA	4	3%	82	58%	37	26%	18	13%	141
WISCONSIN	0	0%	26	28%	36	38%	32	34%	94
WYOMING	0	0%	111	79%	18	13%	12	9%	141
All States	**33**	**0%**	**2783**	**40%**	**2135**	**31%**	**1958**	**28%**	**6909**

NATIONAL OVERVIEW: 2010 VS. 2022

Figure 2. States Requiring CACFP Meal Patterns

Figure 2 shows the states (dark blue) that explicitly cite USDA Child and Adult Care Food Program (CACFP) meal patterns in their child care licensing regulations for at least one licensed care type, regardless of whether the program formally participates in CACFP.

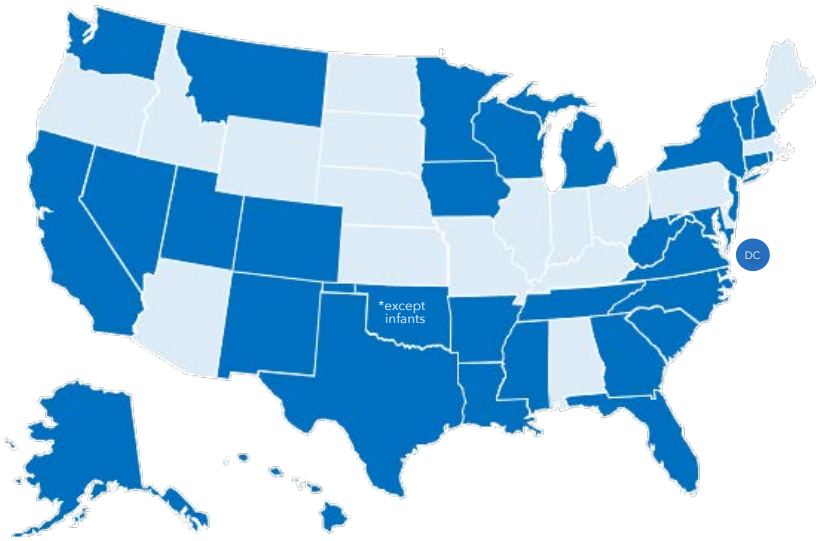


Figure 3. National Rankings by Care Type

Figure 3 shows the extent to which licensing regulations differ by care type in their support of High-Impact Obesity Prevention Standards (HIOPS) nationally, 2010 vs. 2022.

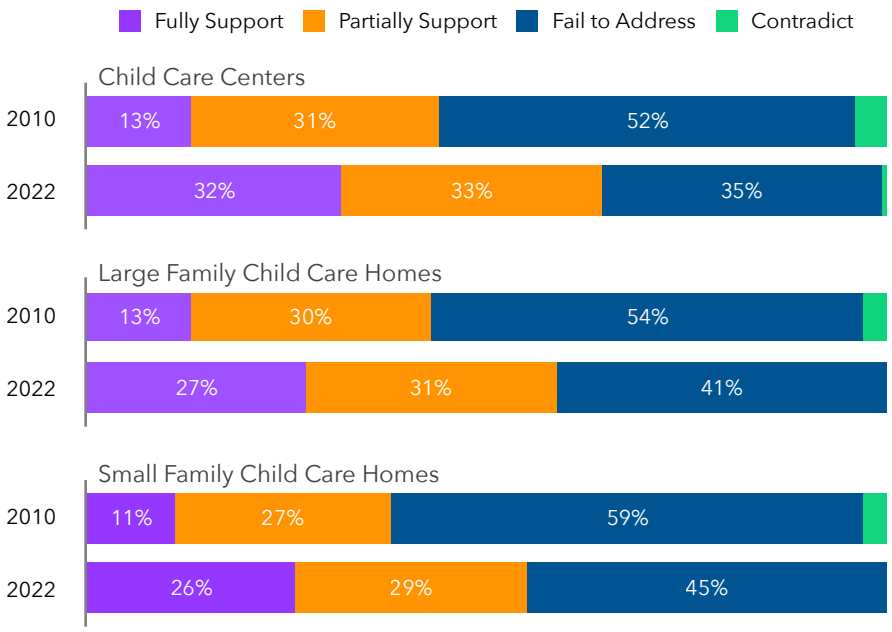


Figure 4. Ranking of State Obesity Prevention Summary Score (Highest to Lowest) as of 2022

This figure illustrates national rankings of state Obesity Prevention Summary cores (OPSS) across all child care types (i.e., Child Care Centers, Large Family Child Care Homes, and Small Family Child Care Homes) as of 2022. *NOTE: States with lighter, dotted bars were rated in2022. See Appendix C for state score calculation*

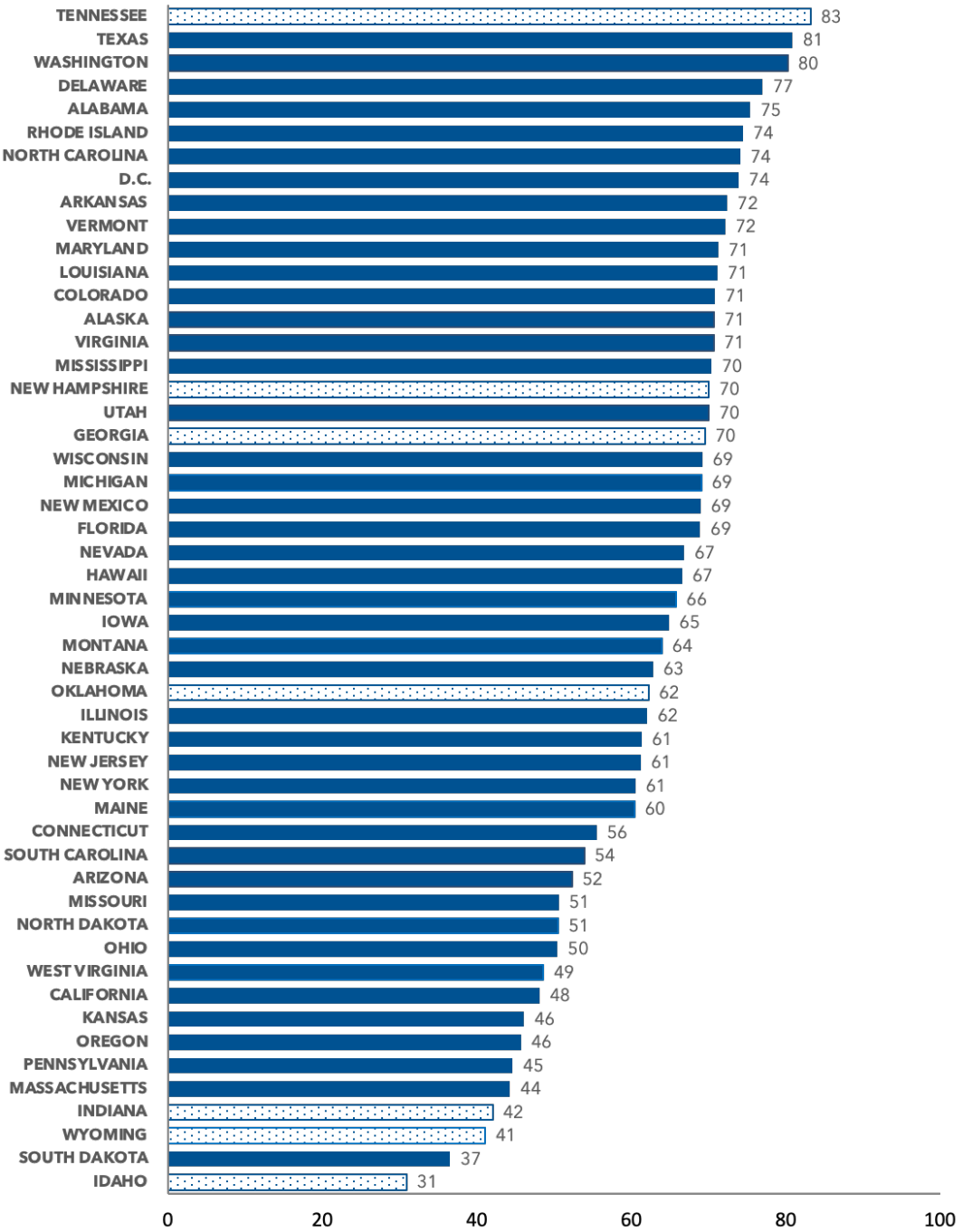
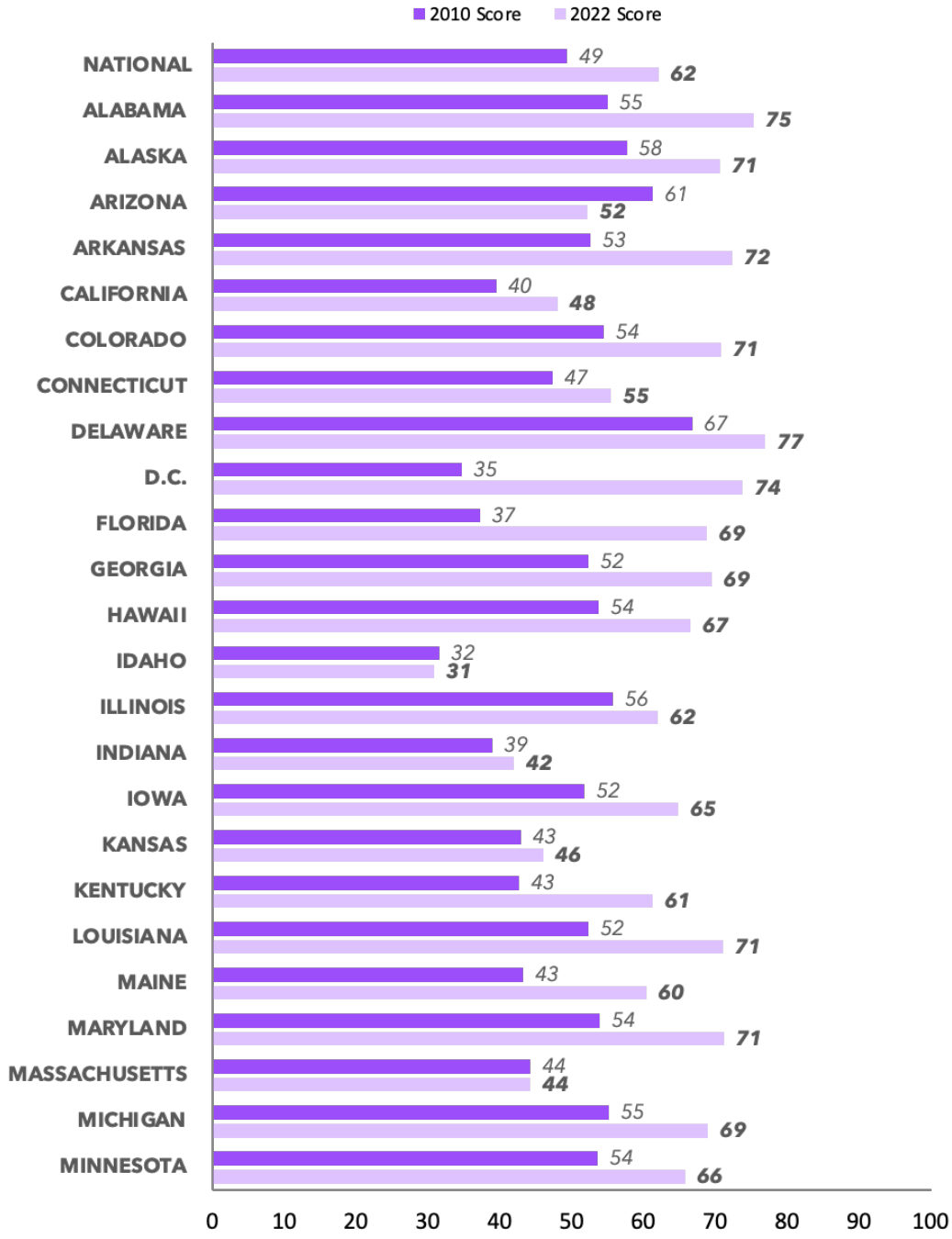


Figure 5. Changes in State Obesity Prevention Summary Scores, 2010 vs. 2022

This figure illustrates changes in state Obesity Prevention Summary Scores (OPSS) across all child care types (i.e., Centers, Large Family Child Care Homes, and Small Family Child Care Homes) from 2010 to 2022. *NOTE: See Appendix C for state score calculation.*



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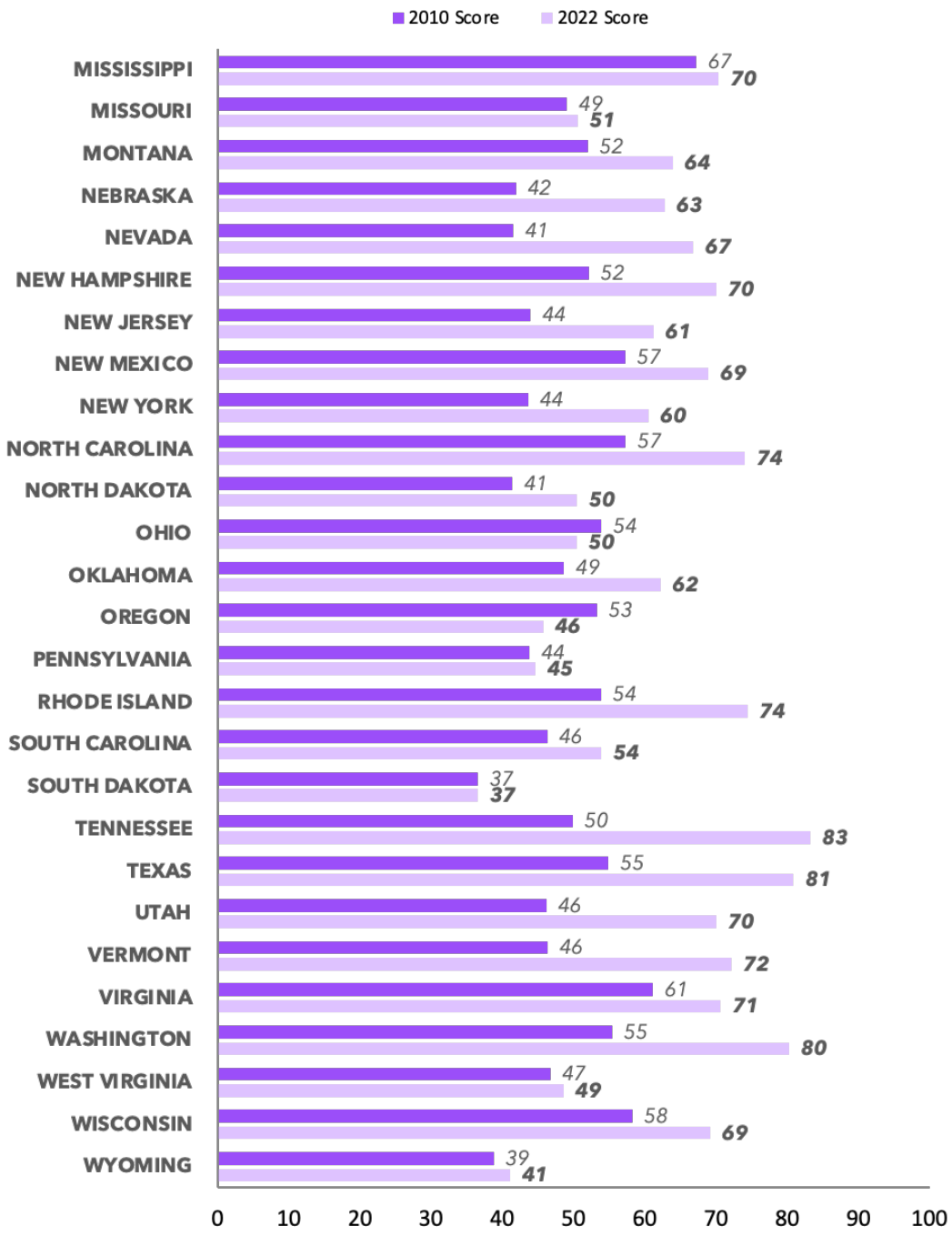
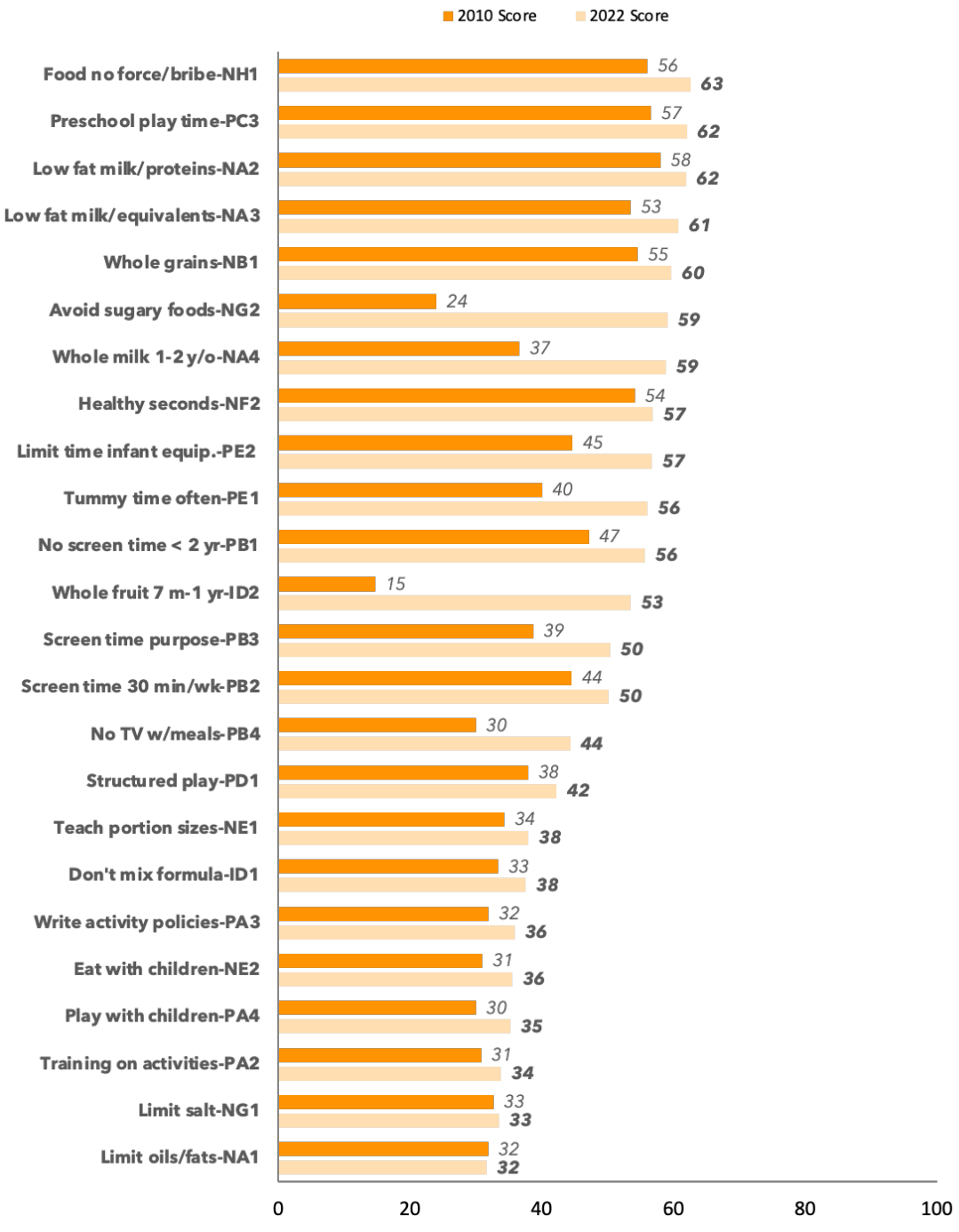


MOST TO LEAST SUPPORTED STANDARDS

Figure 6. Support of Individual High-Impact Obesity Prevention Standards in Licensing Regulations, 2010 vs. 2022

This figure shows the most to least supported High-Impact Obesity Prevention Standards (HIOPS) in licensing regulations across all child care types in 2010 versus 2022. *NOTE: See Appendix C for state score calculation.*



MOST TO LEAST SUPPORTED STANDARDS

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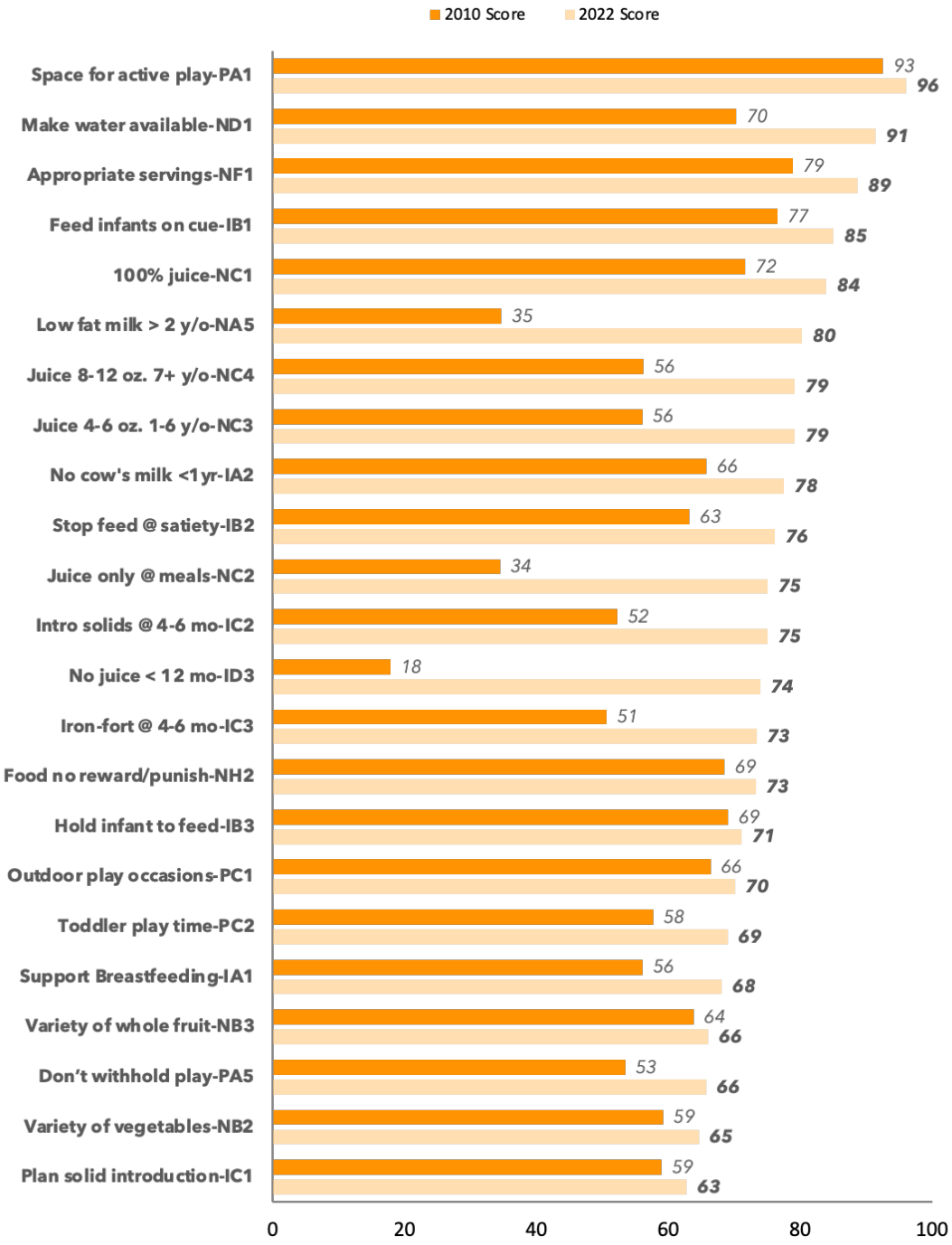

- **67% of states align their infant feeding and nutrition standards with USDA's CACFP meal patterns.**
- **The most positive rating changes in 2022 were seen in states' physical activity rules.**

Discussion

In 2022, seven states (Georgia, Idaho, Indiana, New Hampshire, Oklahoma, Tennessee, and Wyoming) made regulatory changes that impacted High-Impact Obesity Prevention Standards (HIOPS) in child care licensing. The majority of the changes made by states positively impacted the HIOPS; however, approximately 18% negatively impact the HIOPS.

2022 States Changes

Tennessee now leads the nation in support of the HIOPS by improving ratings related to healthy mealtime practices, such as teaching children appropriate serving sizes and strengthening the regulations regarding sugar sweetened beverages. Tennessee's revised regulations also include new rules for developing written policies to promote physical activity and not withholding active play opportunities as a disciplinary measure. **Oklahoma** made changes to better support physical activity and screen times practices, while aligning changes across licensed child care types. Oklahoma requires adherence to CACFP meal patterns, except for infant feeding practices. Ratings were adjusted in 2022 to remove CACFP credit for the infant feeding HIOPS. **Georgia** made a revision to child care center regulations that requires both an infant's parent/guardian and primary healthcare provider be consulted when assessing developmental readiness to introduce age-appropriate solid foods. New Hampshire made revisions that affect the HIOPS in healthy mealtime and physical activity practices. All licensed child care types must now use plates, bowls, and cups that are developmentally suited to children's nutritional needs. Removing language related to using food as a reward ultimately lowered their rating for this HIOPS. **Indiana** was rated for the first time since the baseline ASHW study in 2010. Positive changes were made related to feeding infants on cue for child care centers and establishing flexible feeding schedules for family child care homes. Like Georgia, Indiana now requires the infant's parent and primary care provider establish a recommended feeding plan for child care centers. Another positive change was seen across all care types that drinking water be made freely available. Additionally, an update was made to child care centers against withholding physical

activity as a disciplinary measure. In summary, Indiana's 2022 revisions included positive changes for several HIOPS in family child care homes that were not previously present. **Idaho** was another states rated for the first time since 2010. Of the 47 HIOPS, the only HIOPS Idaho's child care regulations address is having adequate indoor play space. **Wyoming** received two rating increases, as their 2022 revisions do not allow withholding physical activity and now mention the feeding of human milk across all child care types. Wyoming also received several rating decreases due to the evolution of public health practice and how current ratings are now determined compared to the baseline ASHW study in 2010.

Lessons Learned

Over the last 12 ASHW reports, the study team has found that states' revisions have largely strengthened early care and education (ECE) programs in four ways. First, states have made regulatory changes more consistent across all licensed care types. Second, states have better aligned infant feeding and nutrition requirements with USDA's Child and Adult Care Food Program (CACFP)[12] meal patterns, regardless of if they participate in the program or not. This means that licensed care types must serve foods that meet the meal patterns even if they do not formally participate in the CACFP program. Third, states have maintained licensing changes that positively impact the HIOPS during rule revisions. Finally, collaboration with collaborating with subject matter experts in their states has helped improve regulations that support the HIOPS. Although no state has achieved an Obesity Prevention Summary Score (OPSS) of 100, many positive changes have been documented over the past 12 years.

Resources and Strategies for Improvement

There are specific strategies and resources available for states to help strengthen obesity prevention in licensed ECE programs:

- **Use ASHW 2022 State Supplements.** Identify states' strengths and areas for improvement across the 47 HIOPS. The three ASHW Supplements for Child Care Centers, Large Family Child Care Homes, and Small Family Child Care Homes present each state's current ratings for 47 HIOPS in each care type.[27-29] The ASHW state supplements show current state ratings and provide comparison to 2010 to assess progress over time. The University of Colorado ASHW Website also presents a list of the state documents rated for ASHW.[30]

- **Review CDC's State Licensing Scorecards on Obesity Prevention in Child Care Centers:**[31] Each state's licensing scorecard provides center-based ECE regulations subdomain scores for areas within the high-impact obesity prevention standards. State scores are calculated with a point-based

algorithm and can be used to compare a state's progress to other states and nationally and identify areas for improvement. The algorithm used for the scorecards is the same formula used to produce the ASHW obesity prevention summary scores (OPSS) for all licensed child care types in this Report. These score cards have been produced by CDC twice, in 2019 and 2022.

- **Collaborate with state public health departments**. CDC's Division of Nutrition, Physical Activity, and Obesity funds state health departments, land grant institutions, and local communities for obesity prevention efforts.[32] If not already engaged, licensing professionals can reach out to public health and health care professionals to access additional expertise. Together with other state and local organizations, agencies can work collectively to coordinate obesity prevention efforts (e.g., in Quality Rating Systems, built environments for encouragement of physical activity, early learning collaboratives).

- **Review the Caring for Our Children updated special collection, *Preventing Childhood Obesity in Early Care and Education Programs (PCO).***[33] PCO presents the HIOPS in context with rationales for the expert and evidence-based best practices, and can help licensing professionals revise regulations to support obesity prevention in all four ASHW domains.

To strengthen support of Nutrition and Infant Feeding Standards, include CACFP meal pattern requirements in regulations for all licensed child care types.

- **Cite current CACFP Meal and Snack Patterns,** or include statements requiring following CFR 226.20 (Code of Federal Regulations of CACFP), in text and/or embedded tables. This strategy of linking to the most up-to-date meal patterns overcomes lags between CACFP changes and updates of state regulations. States that rely upon outdated, unidentified, or adapted meal pattern charts, or have rules based upon older versions of CACFP have not received ratings associated with the most recent (2017) CACFP revisions.

- **Include rules for infant feeding and nutrition HIOPS that CACFP does not fully support or does not address at all (**see Appendix F. CACFP ASHW Ratings). CACFP does not address all HIOPS in their meal patterns. Ratings are assigned by also reviewing additional state text that may impact the level of support for HIOPS.

Note to States: Starting with this annual report (ASHW 2022), states must have explicitly mentioned USDA CACFP in their child care regulations to receive CACFP ratings for the HIOPS. Regulations that included only "USDA Guidelines," outdated meal pattern charts, or reproducing similar meal pattern charts did not receive CACFP credit for 2022.

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Key findings for regulations and regulatory changes related to ASHW High-Impact Obesity Prevention Standards (HIOPS) are reported below.

ASHW 2010 & ASHW 2011

- 2010 baseline study rated all states' regulations for HIOPS in Nutrition, Infant Feeding, & Physical Activity/ Screen Time
- In both 2010 & 2011:
  - HIOPS were not substantially better regulated for one care type vs. others
  - Only 13% all ratings nationally indicated regulations fully supporting HIOPS
  - More than half of the ratings indicated no relevant HIOPS text was identified
  - Physical Activity/Screen Time was the least regulated domain
  - Leading states (with strongest HIOPS regulations) were DE & MS
- AZ, AR & ND enacted 2011 regulatory changes – 88% of changes improved HIOPS

ASHW 2012

- 12 states (CA, CO, FL, IA, KS, MD, NV, NM, NC, TX, WA & WY) enacted regulatory changes – 94% of rated changes improved HIOPS
- 15% of all ratings nationally indicated regulations fully supporting HIOPS
- Physical Activity/Screen Time HIOPS remained largely unregulated
- Child and Adult Care Food Program (CACFP) guidelines newly supported 2 HIOPS:
  - Serve 1% or skim milk to children 2 and older—30 states received higher ratings
  - Make water available both inside and outside—25 states received higher ratings
- Leading states were DE, MS

ASHW 2013

- 10 states (FL, KS, KY, MS, NE, NJ, NC, ND, RI & WY) enacted regulatory changes – 94% of rated changes improved HIOPS
- 16% of all ratings nationally indicated regulations fully supporting HIOPS
- Physical Activity/Screen Time HIOPS remained least regulated
- COPR scores (weighted summary scores) were introduced to compare states regulations and treatment of HIOPS
- Leading states were DE, MS, NC & RI

ASHW 2014

- 7 states (GA, IL, MI, NM, NY, TX & WV) enacted regulatory changes – 100% of rated changes improved HIOPS
- 17% of all ratings nationally indicated regulations fully supporting HIOPS
- Most improved HIOPS were for infant tummy time and prohibiting juice for infants
- Physical Activity/Screen Time HIOPS remained largely unregulated
- Leading states remained DE, MS, NC & RI
- 23 states' regulations re: HIOPS were unchanged since 2010

ASHW 2015

- 6 states (AR, CO, DE, LA, MD & NY) enacted regulatory changes – 91% of rated changes improved HIOPS
- 17% of all ratings nationally indicated regulations fully supporting HIOPS
- Most improved HIOPS were serving low-fat milk for children 2+, and use screen media only for educational and physical activity purposes
- Leading states remained DE, MS, NC & RI
- 23 states' regulations re: HIOPS remained unchanged since 2010
- Physical Activity/Screen Time changed more than Infant Feeding and Nutrition

ASHW 2016

- 6 states (CO, DC, MO, OH, OK & VT) enacted regulatory changes – 76% of rated changes improved HIOPS
  - o DC's HIOPS changes yielded vast "state" improvements
- 18% of all ratings nationally indicated regulations fully supporting HIOPS
- Leading states were DE, MS, NC, & CO
- Regulations often contradict 3 HIOPS: Avoid sugar, No juice under 12 months, and Serve mashed/pureed whole fruit 6-12 mos.

ASHW 2017

- 7 states (DE, FL, ME, NH, NJ, RI & UT) enacted regulatory changes – 83% of rated changes improved HIOPS
- 24% of all ratings nationally indicated regulations fully supporting HIOPSs; 1% contradict HIOPS
- Leading "states" were DC, NC, CO, VT & MD
- Most improved states since 2010 were DC, FL, NJ, VT & UT
- 29* states earned nearly 600 positive changes in 2017 to due to mandatory CACFP Meal Pattern improvements
- Most improved HIOPS were Serve no juice before age 12 mos. (ID3) and Serve low-fat milk age 2+ (NA5), due to CACFP changes since 2010
- 15 states' regulations re: HIOPS remained unchanged 2010-2017

**Reflects correction to national dataset in which 2017 CACFP improved ratings were applied for Oregon Small Family Child Care Home regulations that were not reported in ASHW 2017*

ASHW 2018

- 5 states (AL, KY, NV, NC & TN) enacted regulatory changes – 83% of rated changes improved HIOPS
- Leading states were TN, NC, DC, CO
- HIOPS were strengthened by 83% of state changes; HIOPS were weakened by 17% of state changes
- HIOPS were most fully supported in TN, NC & NV
- From 2010 to 2018:
  - o Full regulatory support of HIOPS increased from 12% to 26%
  - o Licensing regulations contradicting HIOPS decreased from 3% to 1%
  - o Failure to address HIOPS in licensing regulations declined from 55% to 43%
- Most improved HIOPS were feed infants on cue (IB1), use only 100% juice…(NC1), make water available… (ND1), serve small-sized, age-appropriate portions (NF1) and provide children with adequate space…(PA1)
- Least supported HIOPS were limit oils…and fried foods (NA1), limit salt…(NG1), provide orientation and annual training opportunities for caregivers/teachers to…promote physical activity (PA2), develop written policies on the promotion of physical activity…(PA3), and require caregivers/teachers to…participate in active games (PA4)

ASHW 2019

- 7 states (AL, AZ, DE, FL, MI, WA & WI) enacted regulatory changes – 74% of these revisions increased support for obesity prevention, while 26% weakened support
- Infant Feeding HIOPS were most successfully included in new 2019 ECE regulations
- Washington led the nation in ECE regulations that support obesity prevention
- States that most fully supported HIOPS across licensed child care types were WA, TN, DE, with more than 10 states following closely behind
- From 2010 to 2019:
  - o Full regulatory support of HIOPS increased from 12% to 26%
  - o Licensing regulations contradicting HIOPS decreased from 3% to 1%
  - o Failure to address HIOPS in licensing regulations declined from 55% to 42%

ASHW 2019 (continued)

- Most supported HIOPS were provide children with adequate space…(PA1), make water available…(ND1), and serve small-sized, age-appropriate portions (NF1)
- Least supported HIOPS were limit salt…(NG1), develop written policies on the promotion of physical activity…(PA3), and limit oils…and fried foods (NA1)

ASHW 2020

- 7 states (AZ, AR, DE, GA, MS, ND & PA) enacted regulatory changes – 81% of these revisions increased support for obesity prevention, while 19% weakened support
- The majority of state revisions to licensing regulations impacted Large and Small Family Child Care Homes.
- Washington continued to lead the nation in ECE regulations that support obesity prevention, followed by Tennessee and Delaware.
- Georgia's Small Family Child Care Homes were required to comply with CACFP, which strengthened their infant feeding and nutrition practices.
- Delaware made revisions that prohibited serving juice to any infant in Child Care Centers.
- Mississippi made positive changes impacting physical activity practices for infants and toddlers, and limited the use of infant equipment, such as swings and strollers.
- From 2010 to 2020, states with the most improved support of the HIOPS were:
  - District of Columbia, Florida, Tennessee, Nevada, Vermont, and Utah
- The most supported HIOPS continued to be provide children with adequate space…(PA1), make water available…(ND1), and serve small-sized, age-appropriate portions (NF1)
- The least supported HIOPS continued to be limit salt…(NG1), develop written policies on the promotion of physical activity…(PA3), and limit oils…and fried foods (NA1)

ASHW 2021

- 12 states (AL, CO, CT, DE, KY, LA, ME, MT, OH, OR, RI & TX) enacted regulatory changes –76% of these revisions increased support for obesity prevention, while 24% weakened support
- In 2021, the highest number of state licensing regulations were rated since 2012
- Texas led the nation in ECE regulations that support obesity prevention
- In Alabama, all three care types were required to comply with CACFP, strengthening infant feeding and nutrition practices
- Rhode Island made substantial positive changes to family child care regulations impacting infant feeding, nutrition, and physical activity practices for the first time since 2010
- From 2010 to 2020, states with the most improved support of the HIOPS were:
  - District of Columbia, Florida, Tennessee, Nevada, Texas, and Vermont
- The most supported HIOPS continued to be provide children with adequate space…(PA1), make water available…(ND1), and serve small-sized, age-appropriate portions (NF1)
- The least supported HIOPS were limit oils…and fried foods (NA1, limit salt…(NG1), and require adults to eat items that meet nutrition standards (NE2)

Notes

- Several states made changes each year that were not pertinent to ASHW.
- See prior ASHW reports @ https://nursing.cuanschutz.edu/research/healthy-weight/healthy-weight-archives
- Annual %s of positive change listed below may differ from reports accessed above, as %s were recalculated to account for data adjustments described in *ASHW 2017*, Appendix C.

Achieving a State of Healthy Weight Methodology

The National Resource Center for Health and Safety in Child Care and Early Education (NRC) based at the University of Colorado College of Nursing designed the Achieving a State of Health Weight (ASHW) methodology in 2010 to assess all states' licensing regulations that were in effect for early care and education (ECE) programs during calendar 2010. Licensing regulations of all states and the District of Columbia (the states, for convenience) for child care centers (CTRS), large or group family child care homes (LFCCHs), and small family child care homes (SFCCHs) were reviewed and rated. In annual updates, the ASHW study team screens new and revised licensing documents and rates those with new or changed rules that pertain to the ASHW 47 high-impact obesity prevention standards (HIOPS).

Note: *The NRC was funded to complete the annual ASHW study from 2010 to 2021. As of October 1, 2022, the NRC left the University of Colorado; however, the ASHW study and key team members remained at the University of Colorado. Starting with this annual report (ASHW 2022), the University of Colorado College of Nursing's Office of Research and Scholarship is now funded to complete this work. All past and present ASHW publications are now housed on the University of Colorado College of Nursing research page: https://nursing.cuanschutz.edu/research/healthy-weight. Although the Caring for Our Children (CFOC) database, where the 47 High-Impact Obesity Prevention Standards were derived, remains with the NRC, the ASHW study team continues to monitor CFOC changes to assess impact on future ASHW study years.*

The ASHW study team applies the following method in annual reassessments as described below. Modifications are identified with the year of adoption.

1. **Identification of new and revised child care regulations.** The ASHW study team assesses regulations for CTRs, LFCCHs and SFCCHs for licensure or mandatory registration. New and revised regulations made effective January 1 – December 31 of a given year are identified by monitoring states' child care licensing websites and through outreach to state licensing agencies as needed. Final website checks occur by mid-January of the following year (e.g., January 2023 for *ASHW 2022*). The ASHW study team downloads regulatory documents directly from the state website. Documents posted after the final check (which occurs in mid-March of the publication year) are screened in the next study. Periodically, the National Center for Early Childhood Quality Assurance state pages are reviewed to identify new/revised or previously missed documents (practice formally adopted 2018). Missed documents are screened and reported in the year of discovery.

2. **Categorization of documents by care type.** Most states define care types consistent with the *Caring for Our Children (CFOC)* definitions (see https://nrckids.org/files/CFOC4GuidingPrinciples.pdf). In other cases, the ASHW study team categorizes documents according to the best logical fit with CFOC. Prior to *ASHW 2019*, some states' center ratings also were assigned to LFCCHs if there were not separate LFCCH rules and the center definition could encompass care provided in a residence for approximately 7 – 12 children. The ASHW study team discontinued this procedure as a general practice in 2019 in collaboration with the CDC Division of Nutrition Physical Activity and Obesity (DNPAO). Exceptions

[1] HIOPS were referred to as ASHW variables or Healthy Weight Practices until the nomenclature was changed to HIOPS in ASHW 2019. This revised appendix replaces previous nomenclature with the term HIOPS. For more information on the HIOPS, see Origin of Achieving a State of Healthy Weight high-impact obesity prevention standards: https://nursing.cuanschutz.edu/docs/librariesprovider2/research/ashw/hiopsorigin.pdf

remain for center regulations that recognize a subtype of care that aligns substantially with the LFCCH definition (specifying location in a residence and similar group size). In these cases, center ratings remain assigned to the LFCCH category. Two examples are North Carolina (10A NCAC Chapter 9 - Child Care Rules, effective September 1, 2019) and Kentucky (922 KAR 2:090. Child-Care Center Licensure, updated August 2018). States for which the center definition could, but does not specifically, align with the CFOC LFCCH definition, no longer have LFCCH ratings. The policy change was not retroactive, so that 2010-2018 LFCCH ratings remain in the historical ASHW data sets and in prior reports and supplements.

3. **Document screening.** The ASHW study team screens regulatory documents visually and electronically. Revised documents are compared to the most recently rated version using Adobe® Acrobat Pro to identify new and altered text. If extensive revisions make the Adobe comparison difficult to decipher, screeners scan and search the revised document for key ASHW terms. Screeners scan new documents visually for general organization and information, and follow up with electronic searches. Review of specific sections (e.g., infant care, nutrition, prohibited practices, screen time, and physical activity) often are reread for related language not identified in searches. The ASHW study team screens numerous documents each year (typical range = 40-60). Since the majority of revisions are not relevant to HIOPS, a state may issue several unrated versions.

4. **Rater training.** New raters are trained to use the ASHW Rating Manual on previously assessed documents and by observing procedures and decisions during rating of a new document by an experienced rater. In the latter case, the new rater would not be assigned to rate a document used for training. ASHW rating teams achieve high inter-rater reliability (typically $r_s > 0.90$).

5. **Document rating and data entry.** Two raters independently rate each regulatory document on 47 ASHW HIOPS using the ASHW Rating Manual (last updated October 2018). The manual defines rules for assignment of rating values, with specific guidelines for each HIOPS. The manual uses a four-point scale (1 to 4), where:

   1 = Regulation contradicts the HIOPS
   2 = Regulation does not address the HIOPS
   3 = Regulation partially supports the HIOPS
   4 = Regulation fully supports the HIOPS

   If a state does not regulate a specific child care type, ratings of "0" are displayed for the care type for all HIOPS on the state profile page in ASHW Supplements. In instances where states have more than one relevant document for a child care type, all of the documents are rated and entered into an ASHW database, a Microsoft Access database management system. Both raters record her/his ratings for a document in the database, along with text justifying the rating.

6. **Resolution of discrepant ratings.** When raters disagree, the raters meet with the study team arbitrator to determine the appropriate value. Occasionally, the conferences point to the need to include a new search term or more clarification in the ASHW Rating Manual. If new search terms or guidance are added to the manual, the amended guidance is not applied to past ratings. The update rating rules would be applied the next time a state's documents are rated.

7. **"CACFP States."** CFOC standard 4.2.0.3: Use of US Department of Agriculture Child and Adult Care Food Program Guidelines (CACFP) encourages following CACFP guidelines. Many states align some nutrition and infant feeding regulations with CACFP by requiring licensed programs to follow the guidelines, whether or not they formally participate in CACFP. The ASHW study team refers to these states as "CACFP states." The CACFP Meal and Snack Patterns include guidance related to ASHW HIOPS in nutrition and infant feeding. The ASHW study team rated the patterns in 2010 (with subsequent adjustments for CACFP updates in 2011 and 2017). The ASHW study team assigns the ratings earned by the CACFP to selected HIOPS for the impacted care type(s), taking into account any state specific regulatory text that may raise or lower the rating. Where CACFP lacks related content, ratings are based upon state text alone.

   In 2011, CACFP added new for the availability of water and serving only skim or 1% milk to children age 2 years and older. The ASHW study team revised the ASHW Rating Manual, and improved ratings for "CACFP states in *ASHW 2012*. More CACFP updates became mandatory for participating programs in October 2017. The ASHW study team again revised the ASHW Rating Manual in *ASHW 2017*, and CACFP states were assigned improved ratings (no CACFP ratings declined), contingent upon additional state text and the following decision rules.

   ASHW 2017 CACFP DECISION RULES

   CACFP 2017 improvements were assigned to states that:

   - Reproduced the new patterns or cited the new requirements in regulatory text;
   - Directed the reader to a source for the updated materials (either a state source or the USDA FNS CACFP website);
   - Specified the need to follow the current or most up-to-date Meal Patterns (or similar verbiage), regardless of any out-of-date Meal and Snack Pattern reproductions or text; or,
   - Specified only the CACFP program name or identification in Federal Code (7 CFR § 226.20 - Requirements for meals), requiring the reader to seek the information. requiring the reader to seek the information.

   States with older regulations that included only reproduced versions of the earlier Meal Patterns, or only outdated text from the Meal Pattern with no additional information encouraging the reader to seek out updates did not receive the 2017 CACFP improvements. They retained their ratings based on CACFP as of 2012. The ASHW study team's 2017 CACFP decision rules remain in effect for regulatory revisions going forward (adopted 2018).

   Starting with *ASHW 2022*, the criteria used to identify a state as a "CACFP state" was modified. State child care regulations that included only "USDA Guidelines," outdated meal pattern charts, or reproduced similar (but not verbatim) meal pattern charts do not receive CACFP credit. Previously, the ASHW study team gave states credit that verbally confirmed that "USDA Guidelines" was equivalent to CACFP, when there was an absence of meal pattern charts or further clarification in the regulations. This change of methodology to determine CACFP status was announced in the *ASHW 2021* Annual Report.

8. **Establishment of annual "final ratings."** ASHW calculations use a single score for each HIOPS for each regulated care type. Where multiple documents regulate a given care type in a state and the ratings differ among documents, the highest rating for the HIOPS prevails as the "final rating" (an *ASHW 2010* policy). The rationale for the policy is that providers must observe all existing pertinent regulations, so the regulation that rates higher supplants a lower-rated one.

9. **Data corrections.** Three types of past errors account for most corrections of previously published data. They are: 1) single rating errors such as data entry errors; 2) missed documents; and, 3) inappropriate award in 2010 of CACFP values based on reference to USDA Dietary Guidelines rather than CACFP. When past erroneous ratings are identified, the ASHW study team updates the ASHW database to reflect the corrected values. Through *ASHW 2018*, when the ASHW study team formalized its Data Quality Assurance (QA) Plan, data corrections were retroactive from the year in which they occurred through subsequent years until replaced by ratings of a later revision. From *ASHW 2019* onward, data corrections are no longer retroactive. A correction is made in the year of identification (as determined in collaboration with the CDC DNPAO, 2019). Earlier published ASHW reports and supplements do not reflect subsequently corrected data.

10. **Data analysis and presentation.** The ASHW study team exports annual ratings from the ASHW Database to Excel for generation of charts and tables and comparison of current year data to baseline data. Team members review the output to determine key findings for the ASHW reports. *ASHW 2010* through *ASHW 2012* were single volume presentations of national findings and included state profile pages (tables of each state's ratings for all 47 HIOPS and all care types). For *ASHW 2013* through *ASHW 2018*, the yearly changes and current national overview were retained in an ASHW report, and the state profile pages were presented separately in an ASHW supplement. Beginning with *ASHW 2019*, state profiles appear in a supplement for each care type (i.e., three supplements): centers, large family child care homes and small family child care homes.

11. **Computation of Summary Scores.** Beginning with *ASHW 2013*, the ASHW study team developed formulas to facilitate comparisons of states' support of HIOPS, and comparisons of support for each HIOPS across all states. Through *ASHW 2018*, the formula computed Childcare Obesity Prevention Regulation Scores, or COPR Scores. In 2019 in collaboration with the CDC DNPAO, the ASHW study team adopted a new formula to calculate summary scores, replacing the COPR Scores with Obesity Prevention Summary Scores, or OPSS.[2] The calculation serves the same functions as COPR Scores, allowing comparisons of the states and national treatment of the HIOPS. The OPSS formula weights ASHW ratings as follows, in the formula presented below:

Ratings = 1 (contradict the HIOPS) are weighted 0 points
Ratings = 2 (fail to address the HIOPS) are weighted 30 points
Ratings = 3 (partially support the HIOPS) are weighted 70 points
Ratings = 4 (fully support the HIOPS) are weighted 100 points

[2] See the COPR formula in the Methodology/Appendices of the 2015-2018 reports. When used on the same data, COPR Score and OPPS formulas produced very similar, but not identical rankings, of states and HIOPS.

Example of OPSS calculation:

For example, State X regulates two care types, earning a total of 94 ratings

(i.e., 2 care types x 47 HIOPS = 94 ratings), which are distributed as below:

4 ratings = 1
60 ratings = 2
20 ratings = 3
10 ratings = 4
94 total ratings

Applied to these data, the OPSS for State X equals 45 (44.68, rounded) of a possible 100.

$$\text{OPSS} = \frac{(4 \text{ ratings } x\ 0) + (60 \text{ ratings } x\ 30) + (20 \text{ ratings } x\ 70) + (10 \text{ ratings } x\ 100)}{94 \text{ total ratings}}$$

Regardless of the number of regulated care types, the OPSS range remains 0 - 100 (i.e., OPSS = 0 if all ratings = 1, to OPSS = 100, if all ratings = 4). Currently, no state has either extreme score for all of their cumulative child care regulations. Similarly, when OPSS are calculated for each HIOPS nationally, the range remains 0 to 100. Nor is any HIOPS completely supported nor unsupported across the nation at present.

Steps 1 -11 were applied as described in *ASHW 2019* and continue for future ASHW updates unless further modifications are deemed necessary.

Source of ASHW Health Weight Practices in PCO/CFOC Online Standards

The tables below display ASHW High Impact Obesity Prevention Standards (HIOPS) in PCO/CFOC standards. Links to the searchable CFOC Online Standards Database (@ https://nrckids.org/CFOC) enable viewing the complete standard, rationale, references and related standards for each of the HIOPS.

Multiple-sourced HIOPS. The concepts captured in some ASHW HIOPS appear in different contexts in more than one PCO/CFOC standard. For example, the Infant Feeding HIOPS IB2: do not feed beyond satiety, is a core concept that is addressed slightly differently in two standards: 4.3.1.2 - Feeding Infants on Cue by a Consistent Caregiver/Teacher ("observing satiety cues can limit overfeeding") and 4.3.1.8 - Techniques for Bottle Feeding ("Allow infant to stop the feeding"). Therefore, some ASHW HIOPS have more than one linked standard in the tables below.

INFANT FEEDING		
HIOPS	**ASHW HIOPS Text**	**Source of HIOPS in PCO/CFOC Standards**
IA1	Encourage and support breastfeeding and feeding of breast milk by making arrangements for mothers to feed their children comfortably on-site.	4.3.1.1 - General Plan for Feeding Infants
IA2	Serve human milk or infant formula to at least age 12 months, not cow's milk, unless written exception is provided by primary care provider and parent/ guardian.	4.3.1.7 - Feeding Cow's Milk & 4.2.0.4 - Categories of Foods
IB1	Feed infants on cue.	4.3.1.2 - Feeding Infants on Cue by a Consistent Caregiver/Teacher & 4.3.1.8 - Techniques for Bottle Feeding
IB2	Do not feed infants beyond satiety; Allow infant to stop the feeding.	4.3.1.2 - Feeding Infants on Cue by a Consistent Caregiver/Teacher & 4.3.1.8 - Techniques for Bottle Feeding
IB3	Hold infants while bottle feeding; Position an infant for bottle feeding in the caregiver/teacher's arms or sitting up on the caregiver/teacher's lap.	4.3.1.8 - Techniques for Bottle Feeding
IC1	Develop a plan for introducing age-appropriate solid foods (complementary foods) in consultation with the child's parent/guardian and primary care provider.	4.3.1.11 - Introduction of Age-Appropriate Solid Foods to Infants
IC2	Introduce age-appropriate solid foods no sooner than 4 months of age, and preferably around 6 months of age.	4.3.1.11 - Introduction of Age-Appropriate Solid Foods to Infants
IC3	Introduce breastfed infants gradually to iron-fortified foods no sooner than four months of age, but preferably around six months to complement the human milk.	4.3.1.11 - Introduction of Age-Appropriate Solid Foods to Infants
ID1	Do not feed an infant formula mixed with cereal, fruit juice or other foods unless the primary care provider provides written instruction.	4.3.1.5 - Preparing, Feeding, and Storing Infant Formula
ID2	Serve whole fruits, mashed or pureed, for infants 6 months up to one year of age.	4.2.0.4 - Categories of Foods 4.3.1.11 - Introduction of Age-Appropriate Solid Foods to Infants
ID3	Serve no fruit juice to children younger than 12 months of age.	4.2.0.4 - Categories of Foods & 4.2.0.7 - 100% Fruit Juice

NUTRITION		
HIOPS	**ASHW HIOPS Text**	**Source of HIOPS in PCO/CFOC Standards**
NA1	Limit oils by choosing monounsaturated and polyunsaturated fats (such as olive oil or safflower oil) and avoiding trans fats, saturated fats and fried foods.	4.2.0.4 - Categories of Foods
NA2	Serve meats and/or beans - chicken, fish, lean meat, and/or legumes (such as dried peas, beans), avoiding fried meats.	4.2.0.4 - Categories of Foods
NA3	Serve other milk equivalent products such as yogurt and cottage cheese, using low-fat varieties for children 2 years of age and older.	4.2.0.4 - Categories of Foods
NA4	Serve whole pasteurized milk to twelve to twenty-four month old children who are not on human milk or prescribed formula, or serve reduced fat (2%) pasteurized milk to those who are at risk for hypercholesterolemia or obesity	4.3.2.3 - Encouraging Self-Feeding by Older Infants and Toddlers
NA5	Serve skim or 1% pasteurized milk to children two years of age and older.	4.3.2.3 - Encouraging Self-Feeding by Older Infants and Toddlers
NB1	Serve whole grain breads, cereals, and pastas.	4.2.0.4 - Categories of Foods
NB2	Serve vegetables, specifically, dark green, orange, deep yellow vegetables; and root vegetables, such as potatoes and viandas.	4.2.0.4 - Categories of Foods
NB3	Serve fruits of several varieties, especially whole fruits.	4.2.0.4 - Categories of Foods
NC1	Use only 100% juice with no added sweeteners.	4.2.0.7 - 100% Fruit Juice
NC2	Offer juice only during meal times.	4.2.0.7 - 100% Fruit Juice
NC3	Serve no more than 4 to 6 oz juice/day for children 1-6 years of age.	4.2.0.4 - Categories of Foods & 4.2.0.7 - 100% Fruit Juice
NC4	Serve no more than 8 to 12 oz juice/day for children 7-12 years of age.	4.2.0.4 - Categories of Foods & 4.2.0.7 - 100% Fruit Juice
ND1	Make water available both inside and outside.	4.2.0.6 - Availability of Drinking Water
NE1	Teach children appropriate portion size by using plates, bowls and cups that are developmentally appropriate to their nutritional needs.	4.3.2.2 - Serving Size for Toddlers and Preschoolers & 4.7.0.1 - Nutrition Learning Experiences for Children
NE2	Require adults eating meals with children to eat items that meet nutrition standards.	4.5.0.4 - Socialization During Meals
NF1	Serve small-sized, age-appropriate portions.	4.3.2.2 - Serving Size for Toddlers and Preschoolers
NF2	Permit children to have one or more additional servings of the nutritious foods that are low in fat, sugar, and sodium as needed to meet the caloric needs of the individual child; Teach children who require limited portions about portion size and monitor their portions.	4.3.2.2 - Serving Size for Toddlers and Preschoolers & 4.5.0.4 - Socialization During Meals
NG1	Limit salt by avoiding salty foods such as chips and pretzels.	4.2.0.4 - Categories of Foods
NG2	Avoid sugar, including concentrated sweets such as candy, sodas, sweetened drinks, fruit nectars, and flavored milk.	4.2.0.4 - Categories of Foods
NH1	Do not force or bribe children to eat.	4.5.0.11 - Prohibited Uses of Food
NH2	Do not use food as a reward or punishment.	4.5.0.11 - Prohibited Uses of Food

PHYSICAL ACTIVITY/SCREEN TIME		
HIOPS	**ASHW HIOPS Text**	**Source of HIOPS in PCO/CFOC Standards**
PA1	Provide children with adequate space for both inside and outside play.	3.1.3.1 - Active Opportunities for Physical Activity
PA2	Provide orientation and annual training opportunities for caregivers/teachers to learn about age-appropriate gross motor activities and games that promote children's physical activity.	3.1.3.4 - Caregivers'/Teachers' Encouragement of Physical Activity
PA3	Develop written policies on the promotion of physical activity and the removal of potential barriers to physical activity participation.	9.2.3.1 - Policies and Practices that Promote Physical Activity
PA4	Require caregivers/teachers to promote children's active play, and participate in children's active games at times when they can safely do so.	3.1.3.4 - Caregivers'/Teachers' Encouragement of Physical Activity
PA5	Do not withhold active play from children who misbehave, although out-of-control behavior may require five minutes or less calming periods to help the child settle down before resuming cooperative play or activities.	3.1.3.1 - Active Opportunities for Physical Activity
PB1	Do not utilize media (television [TV], video, and DVD) viewing and computers with children younger than two years.	2.2.0.3 - Screen Time/Digital Media Use
PB2	Limit total media time for children two years and older to not more than 30 minutes once a week. Limit screen time (TV, DVD, computer time).	2.2.0.3 - Screen Time/Digital Media Use & 3.1.3.4 - Caregivers'/Teachers' Encouragement of Physical Activity
PB3	Use screen media with children age two years and older only for educational purposes or physical activity.	2.2.0.3 - Screen Time/Digital Media Use
PB4	Do not utilize TV, video, or DVD viewing during meal or snack time.	2.2.0.3 - Screen Time/Digital Media Use
PC1	Provide daily for all children, birth to six years, two to three occasions of active play outdoors, weather permitting.	3.1.3.1 - Active Opportunities for Physical Activity
PC2	Allow toddlers sixty to ninety minutes per eight-hour day for vigorous physical activity.	3.1.3.1 - Active Opportunities for Physical Activity
PC3	Allow preschoolers ninety to one-hundred and twenty minutes per eight-hour day for vigorous physical activity.	3.1.3.1 - Active Opportunities for Physical Activity
PD1	Provide daily for all children, birth to six years, two or more structured or caregiver/ teacher/ adult-led activities or games that promote movement over the course of the day—indoor or outdoor.	3.1.3.1 - Active Opportunities for Physical Activity & 3.1.3.4 - Caregivers'/Teachers' Encouragement of Physical Activity
PE1	Ensure that infants have supervised tummy time every day when they are awake.	3.1.3.1 - Active Opportunities for Physical Activity
PE2	Use infant equipment such as swings, stationary activity centers (ex. exersaucers), infant seats (ex. bouncers), molded seats, etc. only for short periods of time if at all.	3.1.3.1 - Active Opportunities for Physical Activity

Documents rated in 2022 are highlighted.

Although the ASHW study team makes extensive efforts to discover new and revised documents each year through website searches, email request, and calls to state child care licensing agencies, a new regulation may go undiscovered and unrated in the year it is made effective. In such cases, the study team will screen and/or rate the document as appropriate for inclusion in the ASHW report for the year of discovery. If state licensing personnel are aware of missed documents, please inform the study team at alison.pilsner@cuanschutz.edu.

CTR=Child Care Centers, LRG=Large Family Child Care Homes, SML=Small Family Child Care Homes

State & Document Status	Document Title	Revision Date	Previous Rated Version*	Child Care Types		
				CTR	LRG	SML
AZ	**Arizona**					
Screened	Arizona Administrative Code and Arizona Revised Statues for Child Care Facilities (Title 9 Ch 5)	9/30/2022		X		
Screened	Arizona Administrative Code and Arizona Revised Statues for Child Care Group Homes (Title 9 Ch 3)	9/30/2022			X	
CA	**California**					
Screened	Title 22, Div 12, Chap 1, Art 3 - Child Care Centers	4/1/2022		X		
Screened	Title 22, Div 12, Chap 3, Family Child Care Homes	4/1/2022			X	X
Screened	Chapter 3.4 California Child Day Care Act	9/27/2022		X	X	X
CO	**Colorado**					
Screened	Child Care Facility Licensing: 12 CCR 2509-8	9/30/2022		X	X	X
Screened	7.701 General Rules for Child Care Facilities	1/19/2022		X	X	X
DE	**Delaware**					
Screened	DELACARE: Regulations for Early Care and Education and School-Age Centers	6/10/2022		X		
Screened	DELACARE: Regulations for Family and Large Family Child Care Homes	8/10/2022			X	X
FL	**Florida**					
Screened	Chapter 65C-22 Child Care Standards	1/9/2022		X		
Screened	Chapter 65C-20 Family Day Care Standards and Large Family Child Care Homes	1/9/2022			X	X
GA	**Georgia**					
Rated	Rules and Regulations Child Care Learning Centers: Chapter 591-1-1	10/1/2022	3/2014	X		
Screened	Rules and Regulations Family Child Care Learning Homes: Chapter 290-2-3	10/1/2022				X
ID	**Idaho**					
Rated	16.06.02 Rules Governing Standards for Child Care Licensing	3/15/2022	7/1/2010	X	X	X

State & Document Status	Document Title	Revision Date	Previous Rated Version*	Child Care Types		
				CTR	LRG	SML
IN	**Indiana**					
Rated	IC 12-17.2-4 Chapter 4. Regulation of Child Care Centers	7/1/2022	2010	X		
Rated	470 IAC 3-4.7 Rule 4.7 Child Care Centers; Licensing	8/11/2003	2010	X		
Rated	IC 12-17.2-5 Chapter 5. Regulation of Child Care Homes	7/1/2022	2010		X	X
Rated	470 IAC 3-1.2 Rule 1.2 Infant and Toddler Services in a Child Care Home	7/12/2001	2010		X	X
Rated	470 IAC 3-1.3 Rule 1.3 Class II Child Care Homes	8/11/2003	2010		X	X
Rated	470 IAC 3-1.1 Rule 1.1 Child Care Homes	7/12/2001	2010		X	
IA	**Iowa**					
Screened	Chapter 109 Child Care Centers	10/5/2022		X		
LA	**Louisiana**					
Screened	Bulletin 137 – Early Learning Site Licensing Regulations	10/2022		X		
ME	**Maine**					
Screened	10-148, Chapter 33 - Family Child Care Provider Licensing Rule	5/27/2022			X	X
MD	**Maryland**					
Screened	Title 13A State Board of Education Subtitle 16 Child Care Centers	4/28/2022		X		
Screened	Title 13A State Board of Education Subtitle 18 Large Family Child Care Homes	4/28/2022			X	
Screened	Title 13A State Board of Education Subtitle 15 Family Child Care	4/28/2022				X
Screened	Title 13A State Board of Education Subtitle 17 Letters of Compliance	4/28/2022		X	X	X
MI	**Michigan**					
Screened	Licensing Rules for Child Care Centers	2/22/2022		X		
MS	**Mississippi**					
Screened	Regulations Governing Licensure of Child Care Facilities	2/12/2022		X		
Screened	Child Care Regulations: 12 or Fewer Children in the Operator's Home (Complete)	2/12/2022			X	X
MO	**Missouri**					
Screened	Chapter 500–Licensing Rules for Group Child Care Homes and Child Care Centers	5/30/2022		X	X	
Screened	Chapter 400–Licensing Rules for Family Child Care Homes	5/30/2022				X

State & Document Status	Document Title	Revision Date	Previous Rated Version*	Child Care Types		
				CTR	LRG	SML
NH	**New Hampshire**					
Rated	PART He-C 4002 NH CHILD CARE PROGRAM LICENSING RULES	4/21/2022	5/17/2017	X	X	X
NM	**New Mexico**					
Screened	Title 8 Social Services Chapter 9 Early Childhood Education and Care Part 4 Child Care Licensing; Child Care Centers, Out of School Time Programs, Family Child Care Homes, and other Early Care and Education Programs	11/1/2022		X	X	X
NY	**New York**					
Screened	Part 413: Child Day Care Definitions, Enforcement and Hearings	9/7/2022		X	X	X
NC	**North Carolina**					
Screened	Chapter 9 - Child Care Rules	4/1/2022		X	X	X
ND	**North Dakota**					
Screened	Chapter 75-03-10 Child Care Center Early Childhood Services	1/1/2022		X		
Screened	Chapter 75-03-09 Group Child Care Early Childhood Services	1/1/2022			X	
Screened	Chapter 75-03-08 Family Child Care Early Childhood Services	1/1/2022				X
OK	**Oklahoma**					
Rated	Licensing Requirements for Child Care Programs	6/1/2022	11/1/2016	X		
Rated	Licensing Requirements for Family Child Care Homes and Large Child Care Homes	6/1/2022	11/1/2016		X	X
OR	**Oregon**					
Screened	Rules For Certified Child Care Centers (OCC-0084)	11/1/2022		X		
Screened	Rules For Certified Family Child Care Homes	11/1/2022			X	
Screened	Rules for Registered Family Child Care Homes	11/1/2022				X
RI	**Rhode Island**					
Screened	218-RICR-70-00-1 Child Care Center and School Age Program Regulations for Licensure	11/2/2022		X		
Screened	218-RICR-70-00-7 Group Family Child Care Home Regulations for Licensure	2/2/2022			X	
Screened	218-RICR-70-00-2 Family Child Care Home Regulations for Licensure	2/2/2022				X
TN	**Tennessee**					
Rated	Chapter 1240-04-01 Licensure Rules For Child Care Agencies	6/2022	7/30/2018	X	X	X

State & Document Status	Document Title	Revision Date	Previous Rated Version*	Child Care Types		
				CTR	LRG	SML
TX	**Texas**					
Screened	Chapter 746: Minimum Standards for Child-Care Centers	12/2022		X		
Screened	Chapter 747: Minimum Standards for Licensed and Registered Child-Care Homes	12/2022			X	X
UT	**Utah**					
Screened	381-100. Child Care Centers	6/2022		X		
Screened	R430-90. Licensed Family Child Care	6/2022			X	
Screened	R430-50. Residential Certificate Child Care	6/2022				X
VT	**Vermont**					
Screened	Child Care Licensing Regulations: Center Based Child Care and Preschool Programs	4/17/2022		X		
Screened	Child Care Licensing Regulations: Registered and Licesned Family Child Care Homes	4/17/2022			X	X
WA	**Washington**					
Screened	Chapter 110-300 WAC Foundational Quality Standards for Early Learning Programs (Formerly: Chapter 170-300 WAC)	7/25/2022		X	X	X
WI	**Wisconsin**					
Screened	DCF 251 Licensing Rules for Group Child Care Centers and Child Care Programs Established or Contracted for by School Boards	11/2022		X		
Screened	DCF 250 Licensing Rules for Family Child Care Centers	6/2022				X
WY	**Wyoming**					
Rated	Rules for Certification for Family Child Care Home (FCCH), Family Child Care Center (FCCC), OR Child Care Center (CCC)	2/2022	12/2013	X	X	X

Achieving a State of Healthy Weight Rating of the Child and Adult Care Food Plan

U.S. Department of Agriculture (USDA) Food and Nutrition Service (FNS) Child and Adult Care Food Program (CACFP, also referred to as CFR 226.20) offers reimbursement to eligible programs to provide nutritious meals and snacks for children from low income families in child care programs (as well elderly adults in day care programs). Participating programs must follow age-specific CACFP Meal and Snack Patterns that define types of food and appropriate serving sizes. As CACFP offers guidance specific to early care and education (ECE), many states' child care licensing regulations require some or all categories of ECE programs to adhere to CACFP guidelines, whether or not the individual programs formally participate in CACFP.

Caring for Our Children Standard 4.2.0.3 - *Use of US Department of Agriculture Child and Adult Care Food Program Guidelines* encourages adoption of the CACFP food guidance by all child care programs.[1] In 2010, the ASHW study team's 2010 external expert workgroup rated Standard 4.2.0.3 as high in impact upon obesity prevention, as part of the process to inform selection of ASHW variables (now HIOPS, or High Impact Obesity Prevention Standards).[2] Since CACFP Infant and Child Meal and Snack Patterns often constitute or enhance states' nutrition regulations, the ASHW study team rated CACFP on all ASHW Nutrition and Infant Feeding variables. When states reproduce CACFP requirements as part of licensing regulations for a given care type, or specify/confirm with the ASHW study team a licensing requirement for adherence to CFR 226.20/CACFP guidelines, the ASHW study team regards these states as ASHW "CACFP states." CACFP ratings are taken into account in rating the associated regulations. If there is no additional state text, the state receives the ASHW CACFP ratings for select HIOPS. If regulations include supplementary relevant text, that text is reviewed to determine whether it raises or lowers the CACFP rating.

Two CACFP updates occurred since 2010 that required revision of ASHW CACFP ratings. In 2012, the ASHW study team applied the improved ratings for two HIOPS to all CACFP states. In 2017, newly updated Meal and Snack Patterns were made mandatory for CACFP participants, improving ASHW ratings for four Infant Feeding and five Nutrition HIOPS. To identify states that should be assigned the improvements, the ASHW study team reviewed the 2010 categorization of CACFP states. The deciding factor for improved ratings was the clarity of the need to follow current CACFP guidelines. (See the *ASHW 2017 Report*, Appendix C. Methodology.[2]) State regulations vary in the ways they present the requirement to align nutrition practices with CACFP. Some cite CFR 226.20 or explicitly name CACFP. Others refer the reader to the USDA FNS CACFP website or instate CACFP contacts. Some reproduce the patterns with or without identification as CACFP materials. Some states use some combinations of the preceding.

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[1] See Standard 4.2.0.3 @ https://nrckids.org/CFOC/Database/4.2.0.3

[2] National Resource Center for Health and Safety in Child Care and Early Education. Origin of Achieving a State of Healthy Weight high-impact obesity prevention standards. University of Colorado Anschutz Medical Campus College of Nursing; 2020. https://nursing.cuanschutz.edu/docs/librariesprovider2/research/ashw/hiopsorigin.pdf

[3] ASHW 2017 Report, Appendix C: ASHW 2017 Method Notes (p.33-34) @ https://nursing.cuanschutz.edu/docs/librariesprovider2/research/ashw/ashw-2017-report.pdf

The ASHW study team's general rule is that reference to the federal code, to the CACFP program name or website, and/or reproductions of current Meal Patterns are sufficient to award improved CACFP ratings. When there are ambiguities (e.g., "USDA Guidelines" only), the ASHW study team typically reaches out to the state licensing agency for clarification. If no response is obtained, the ASHW study team uses best judgement. When a state newly requires adherence to CACFP guidelines, the state's ratings are adjusted accordingly. Tables 1 and Table 2, list the Infant Feeding and Nutrition HIOPS, respectively, and present the rating CACFP receives for each. CACFP Best Practices,[4] introduced in the second CACFP update, provide stronger support for a few HIOPS than the basic Meal and Snack Patterns. They also are identified in Tables 1 and 2. However, through 2022, no state's regulations required adherence to the CACFP Best Practices.

ASHW RATING SCALE
1 = Content contradicts the HIOPS
2 = Content does not address the HIOPS
3 = Content partially supports the HIOPS
4 = Content fully supports the HIOPS

Table 1. Infant Feeding

Table 1 summarizes Infant Feeding ratings assigned to states' regulations that require licensed programs to follow CACFP. The ratings for 2010 versus 2017 updates are displayed (e.g., 3/4). 2017 CACFP Best Practice ratings are noted in the last column where applicable.

HIGH-IMPACT OBESITY PREVENTION STANDARDS (HIOPS)	ASHW CACFP Rating 2010/2017	ASHW CACFP Best Practice Rating
IA1. Encourage and support breastfeeding and feeding of breast milk by making arrangements for mothers to feed their children comfortably on-site.	3/3	4
IA2. Serve human milk or infant formula to at least age 12 months, not cow's milk, unless written exception is provided by primary care provider and parent/guardian.	4/4	-
IB1. Feed infants on cue.	4/4	-
IB2. Do not feed infants beyond satiety; Allow infant to stop the feeding.	4/4	-
IB3. Hold infants while bottle feeding; Position an infant for bottle feeding in the caregiver/teacher's arms or sitting up on the caregiver/teacher's lap.	2/2	-
IC1. Develop a plan for introducing age-appropriate solid foods (complementary foods) in consultation with the child's parent/guardian and primary care provider.	3/3	-
IC2. Introduce age-appropriate solid foods no sooner than 4 months of age, and preferably around 6 months of age.	3/4	-
IC3. Introduce breastfed infants gradually to iron-fortified foods no sooner than four months of age, but preferably around six months to complement the human milk.	3/4	-
ID1. Do not feed an infant formula mixed with cereal, fruit juice or other foods unless the primary care provider provides written instruction.	2/2	-
ID2. Serve whole fruits, mashed or pureed, for infants 6 months up to one year of age.	1/3	-
ID3. Serve no fruit juice to children younger than 12 months of age.	1/4	-

Table 2. Nutrition

Table 2 summarizes Nutrition ratings assigned to states' regulations that require licensed programs to follow CACFP. The ratings for 2010 versus 2017 updates are displayed (e.g., 3/4). 2017 CACFP Best Practice ratings are noted in the last column where applicable.

HIGH-IMPACT OBESITY PREVENTION STANDARDS (HIOPS)	ASHW CACFP Rating 2010/2017	ASHW CACFP Best Practice Rating
NA1. Limit oils by choosing monounsaturated and polyunsaturated fats (such as olive oil or safflower oil) and avoiding trans fats, saturated fats and fried foods.	2/2	3
NA2. Serve meats and/or beans - chicken, fish, lean meat, and/or legumes (such as dried peas, beans), avoiding fried meats.	3/3	-
NA3. Serve other milk equivalent products such as yogurt and cottage cheese, using low-fat varieties for children 2 years of age and older.	3/3	-
NA4. Serve whole pasteurized milk to 12-24 month old children who are not on human milk or prescribed formula, or serve reduced fat (2%) pasteurized milk to those who are at risk for hypercholesterolemia or obesity.	2/3	-
NA5. Serve skim or 1% pasteurized milk to children two years of age and older.	4*/4	-
NB1. Serve whole grain breads, cereals, and pastas.	3/3	4
NB2. Serve vegetables, specifically, dark green, orange, deep yellow vegetables; and root vegetables, such as potatoes and viandas.	3/3	4
NB3. Serve fruits of several varieties, especially whole fruits.	3/3	4
NC1. Use only 100% juice with no added sweeteners.	4/4	-
NC2. Offer juice only during meal times.	2/4	-
NC3. Serve no more than 4 to 6 oz juice/day for children 1-6 years of age.	3/4	-
NC4. Serve no more than 8 to 12 oz juice/day for children 7-12 years of age.	3/4	-
ND1. Make water available both inside and outside.	4*/4	-
NE1. Teach children appropriate portion size by using plates, bowls and cups that are developmentally appropriate to their nutritional needs	2/2	-
NE2. Require adults eating meals with children to eat items that meet nutrition standards.	2/2	-
NF1. Serve small-sized, age-appropriate portions.	4/4	-
NF2. Permit children to have one or more additional servings of the nutritious foods that are low in fat, sugar, and sodium as needed to meet the caloric needs of the individual child; Teach children who require limited portions about portion size and monitor their portions.	3/3	-
NG1. Limit salt by avoiding salty foods such as chips and pretzels. (Selected to complete the food groups)	2/2	-
NG2. Avoid sugar, including concentrated sweets such as candy, sodas, sweetened drinks, fruit nectars, and flavored milk.	1/3	-
NH1. Do not force or bribe children to eat.	2/2	-
NH2. Do not use food as a reward or punishment.	2/2	-

** NA5 and ND1 2010 values = 2. Starred rating values were effective in ASHW 2012 due to CACFP improvement.*

ACHIEVING A STATE OF HEALTHY WEIGHT

2022