

2020

# EARLY CHILDHOOD NUTRITION AND PHYSICAL ACTIVITY STATEWIDE SURVEY REPORT



**TEXAS**  
Health and Human  
Services

Texas Department of State  
Health Services



## Table of Contents

<b>Introduction .....</b>	<b>2</b>
<b>Methods.....</b>	<b>2</b>
<b>Results.....</b>	<b>3</b>
Section 1: About You and Your Facility.....	3
Section 2: Outdoor Space.....	5
Section 3: Outdoor Play .....	7
Section 4: Physical Activity.....	8
Infant Physical Activity .....	8
Toddler Physical Activity .....	9
Preschool Age Children Physical Activity .....	10
Section 5: Screen Time.....	11
Section 6: Physical Activity Policy and Curriculum.....	12
Section 7: Nutrition.....	15
Section 8: Professional Development.....	18
<b>Conclusion .....</b>	<b>21</b>
<b>Appendix 1: 2020 Early Childhood Nutrition and Physical Activity Survey .....</b>	<b>23</b>
<b>Appendix 2: Tables .....</b>	<b>33</b>
<b>General Informational Page.....</b>	<b>35</b>
Author Information.....	35
Suggested Citation .....	35
Contact Information.....	35

## Introduction

The Texas Department of State Health Services (DSHS) Obesity Prevention Program (OPP) is currently implementing the Texas Physical Activity and Nutrition (TXPAN) program, funded by the Centers for Disease Control and Prevention State Physical Activity and Nutrition Program (CDC-RFA-DP18-1807). One of the TXPAN strategies includes implementing and integrating nutrition and physical activity standards into statewide early care and education (ECE) systems. To accomplish this, OPP designed a recognition program called Texas Healthy Building Blocks (THBB). Texas Healthy Building Blocks will recognize ECEs focused on improving nutrition and physical activity by assessing progress in implementing best practices through the use of the online program, Nutrition and Physical Activity Self-Assessment in Child Care (Go NAPSACC).

Go NAPSACC is an evidence-based program, complete with assessments and training tools, aimed at improving the health-related practices, policies, and environments at ECEs. The program includes a five-step implementation cycle for childcare facilities: assessment, planning, implementation, training, and continuation of improvement. The seven self-assessment topics are: breastfeeding & infant feeding, child nutrition, infant & child physical activity, farm to ECE, outdoor play & learning, screen time, and oral health.

The DSHS Chronic Disease Epidemiology (CDE) Branch conducted a survey of ECEs in Texas, including licensed care centers, homes, and registered homes, in October 2020. The survey was developed based on nationally recognized best practices from Caring for Our Children, Natural Learning Initiative, and the Child and Adult Care Food Program (CACFP). The purpose of this survey was to identify the current physical activity and nutrition policies and practices in place at ECEs, before implementing the pilot THBB recognition program. The THBB recognition program began November 2020.

The results of the survey serve as a baseline. A follow-up survey will be distributed following completion of the pilot. The survey will be supported by key informant interviews (KIIs) conducted by CDE with childcare facility directors, providers, and teachers involved in the pilot. These interviews will collect more details in addition to this survey, for example by providing more in-depth analysis of barriers or facilitators of implementing suggested policies or practices from Go NAPSACC. This report will be shared with internal stakeholders at DSHS and external ECE stakeholders, including the Texas Association for the Education of Young Children (TXAEYC), a key stakeholder in the development of the Go NAPSACC recognition program. Results of this survey will be used to inform the process evaluation of the pilot and assess ECE's progress through integrating best practices, policies and standards.

## Methods

CDE created the survey tool with input from OPP subject matter experts. CDE programmed the survey using Qualtrics. The survey contained 40 questions, including five open-ended questions. There were 18 core questions asked of all respondents and 22 questions displayed conditioned on previous responses. The survey was only available in English. The complete survey tool is in **Appendix 1**.

A listserv was created using publicly available e-mail addresses of licensed childcare facilities from the Department of Family and Protective Services (DFPS) website through the Child Care Licensing Search for Child Care Center or Home list in October 2020. There was a total of 7,537 public e-mail addresses available; after removing duplicates, the listserv totaled 6,599 unique email addresses. When CDE emailed the survey link, 153 e-mails bounced back as invalid or failed to send, meaning 6,446 addresses received the message. The

valid emails on the listserv represented 43.7 percent of the total 14,745 childcare facilities listed on the DFPS website that are currently open, although some e-mail addresses represented multiple facilities. The survey link was e-mailed to the listserv on October 1, 2020 and remained open through October 30, 2020. CDE sent reminders to complete the survey on October 28, 2020.

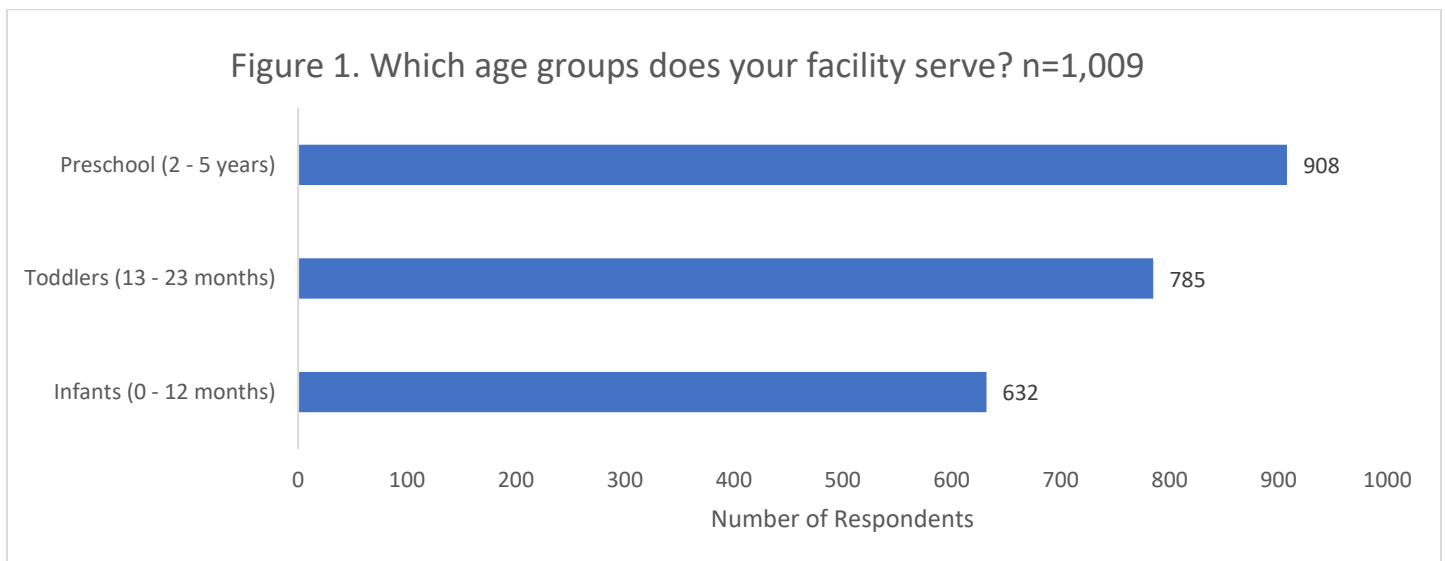
A CDE program evaluator analyzed the quantitative and qualitative data results using Microsoft Excel. Data were exported from Qualtrics to Microsoft Excel for cleaning. The dataset exported from Qualtrics included all complete and partially complete (non-submitted) responses. Surveys that were less than 40 percent complete were removed from the data set.

The results presented in this report include 1,061 complete or partially complete responses. The response rate for the survey was 16.5 percent of 6,446 public, valid e-mail addresses included in the listserv.

## Results

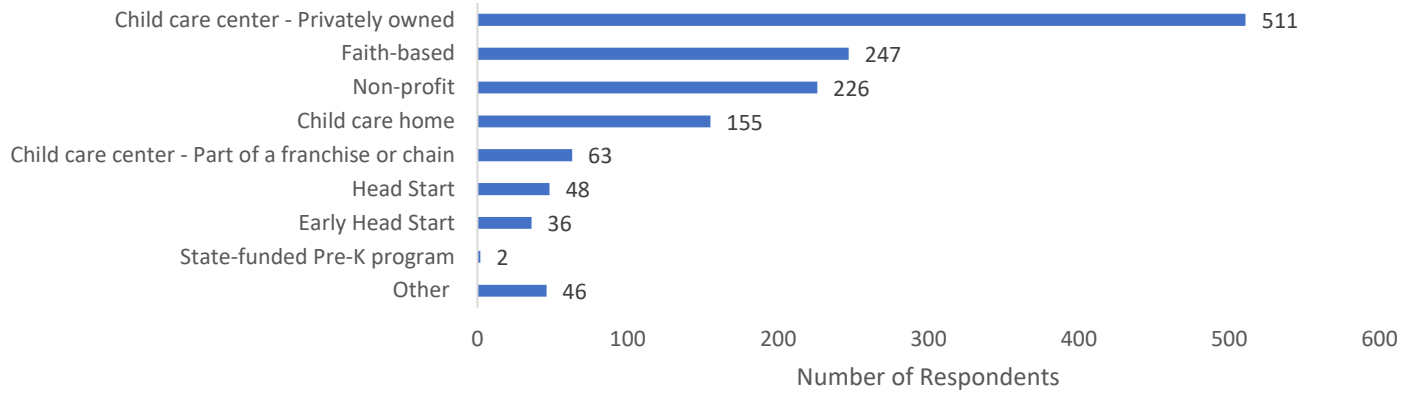
### Section 1: About You and Your Facility

Section 1 asked respondents for details about the function of their facility and the respondents' role. Among the 1,048 respondents who were able to select all that apply, 70.9 percent (n=744) were center directors, 21.5 percent (n=226) were owners and 13.2 percent (n=138) were child care home providers. The remaining respondents were made up of principles, teachers, and other administrative staff. They were then asked to report all age groups served. As seen in Figure 1, 908 (89.9 percent) facilities served preschool aged children, 785 (77.8 percent) served toddlers, and 632 (62.6 percent) served infants.



As shown in Figure 2, respondents were asked to select the option that best described their facility and select all that apply. Forty-nine percent of respondents (n=511) described their facility as a privately-owned child care center and 45.0 percent considered themselves faith based (n=247) or a non-profit (n=226) facility. Additionally, 14.7 percent of respondents considered their facility a child care home (n=155). Of those that selected "Other" (n=46), 15 reported they were part of employee-support through a school, business, or other company. Three reported they were a Montessori school.

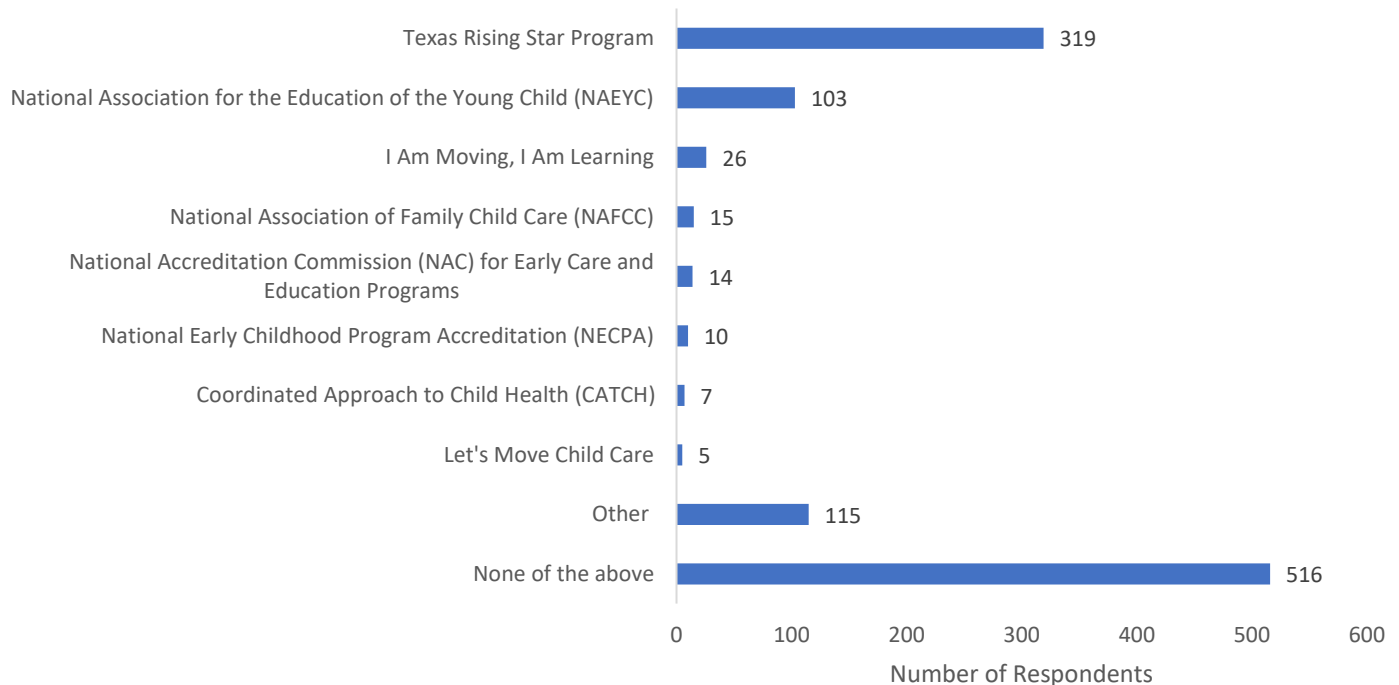
Figure 2. Which of the following best describes your facility? n=1,051



The next questions asked respondents to provide the availability of care. Respondents could select all responses that applied. Of 1,039 respondents, 90.1 percent (n=936) provided full day care and 27.0 percent (n=284) provided half-day care.

The final question in the section asked respondents to share the physical activity programs they participated in (Figure 3). Respondents could select as many as applied. Of 1,001 responses, 31.9 percent (n=319) participated in the Texas Rising Star program. The second most selected program was “Other” (n=115, 11.5%). The responses included: “Texas School Ready,” “Stretch N Grow,” “Cognia,” and programs offered through universities and other unspecified programming. Fifty-one percent (n=516) of respondents said their facility had not participated in any program.

Figure 3. Which, if any, physical activity programs does your facility participate in? n=1,001



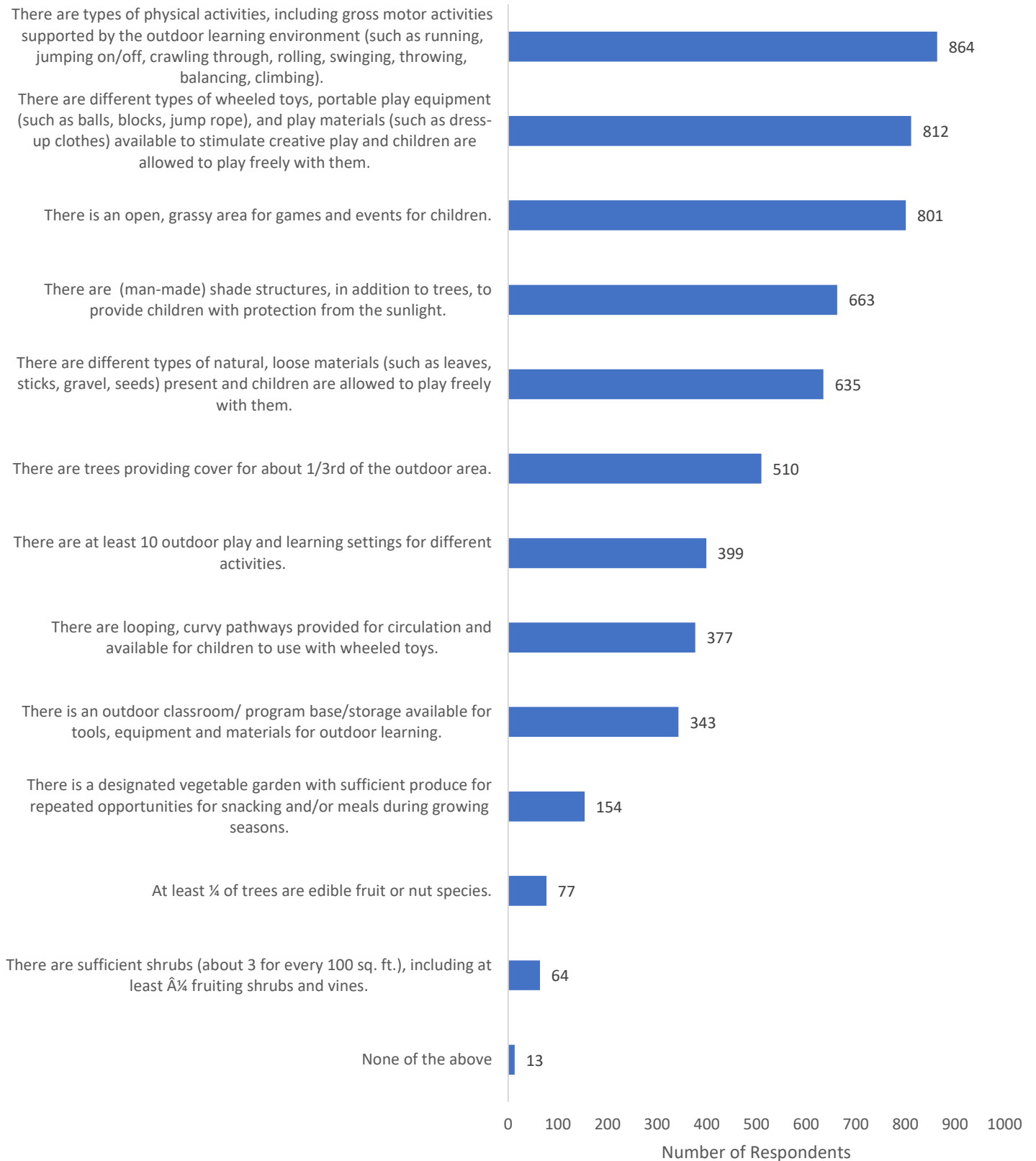
## Section 2: Outdoor Space

Section 2 asked respondents about features in their facility's outdoor learning environment. The response options were the best practice indicators for a model outdoor learning environment from the North Carolina State University - Natural Learning Initiative<sup>1</sup>. The indicators assess the quality of the childcare center outdoor learning environment. Respondents could select as many responses as applied. Figure 4 shows that 82.8 percent (n=864) of respondents offered "...types of physical activities." Seventy-five percent of respondents indicated "There are different types of wheeled toys, portable play equipment (such as balls, blocks, jump rope), and play materials (such as dress-up clothes) available to stimulate creative play and children are to play freely with them" and "There is an open, grassy area for games and events for children." Less than two percent (n=13) of respondents shared that their facility had "None" of these features.

---

<sup>1</sup> Moore, R. and Cosco, N. (2014). *Outdoor Learning Environment Toolkit Best Practice Indicators*. Natural Learning Initiative.

Figure 4. Which of the following features does your outdoor learning environment include? n=1,044





### Section 3: Outdoor Play

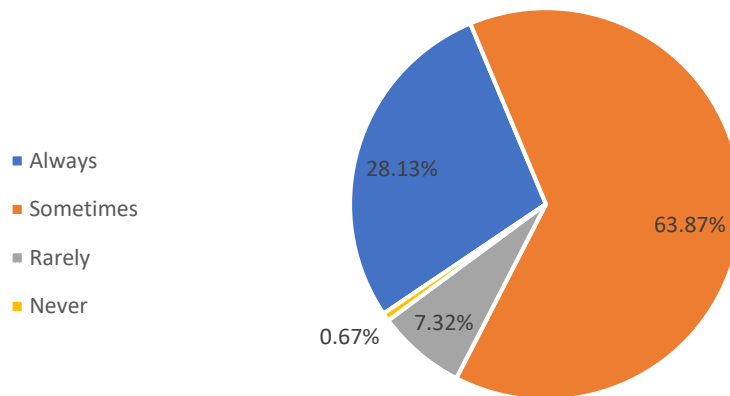
Section 3 asked respondents about the frequency and participation in outdoor play. The Caring for Our Children<sup>2</sup> National Health and Safety Performance standards state every child from birth to six years old should be permitted to have 2-3 occasions of active outdoor play a day.

The next question asked respondents how often children had outdoor active play. Of 1,041 respondents, 72.6 percent (n=756) of respondents' facilities had outdoor active play "2 or more times per day." Another 21.7 percent (n=215) had active play "1 time per day." Six percent (n=70) had outdoor active play less than one time per day.

The next question asked how often teacher or caregivers joined children during unstructured physical activity playtime. Of 1,036 respondents, 48.7 percent (n=505) selected "Sometimes," 44.4 percent (n=460) selected "Always," and 6.0 percent (n=62) selected "Rarely." One percent (n=11) of respondents selected they "Never" joined children during unstructured physical activity playtime.

The final question of this section asked respondents how often teachers linked the learning environment and activities to reinforce indoor learning. As shown in Figure 5, 63.9 percent (n=663) selected "Sometimes," 28.1 percent (n=292) selected "Always," and 7.3 percent (n=76) selected "Rarely." Less than one percent (n=7) said they "Never" linked outdoor learning environment activities to reinforce indoor learning.

Figure 5. How often are the outdoor learning environment and activities linked to reinforce indoor learning? n=1,038



<sup>2</sup> American Academy of Pediatrics, American Public Health Association, National Resource Center for Health and Safety in Child Care and Early Education. *Caring for Our Children: National Health and Safety Performance Standards; Guidelines for Early Care and Education Programs*. 4th ed. Itasca, IL: American Academy of Pediatrics; 2019; pages 97-101

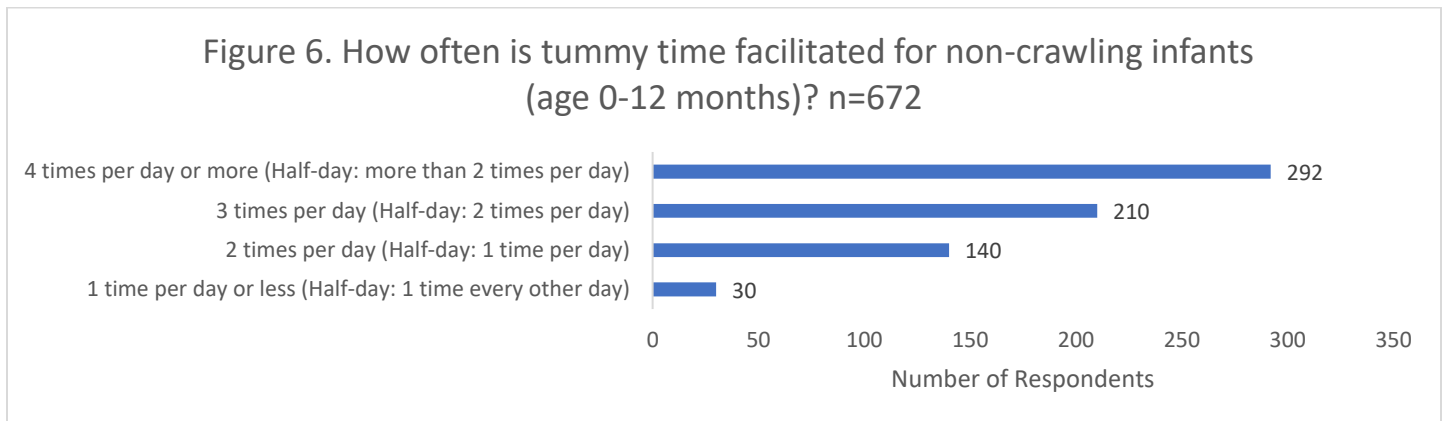
## Section 4: Physical Activity

Section 4 explored the physical activity practices of the facilities when addressing certain age groups. The questions populated for each age group that respondents indicated they served (Figure 1).

### Infant Physical Activity

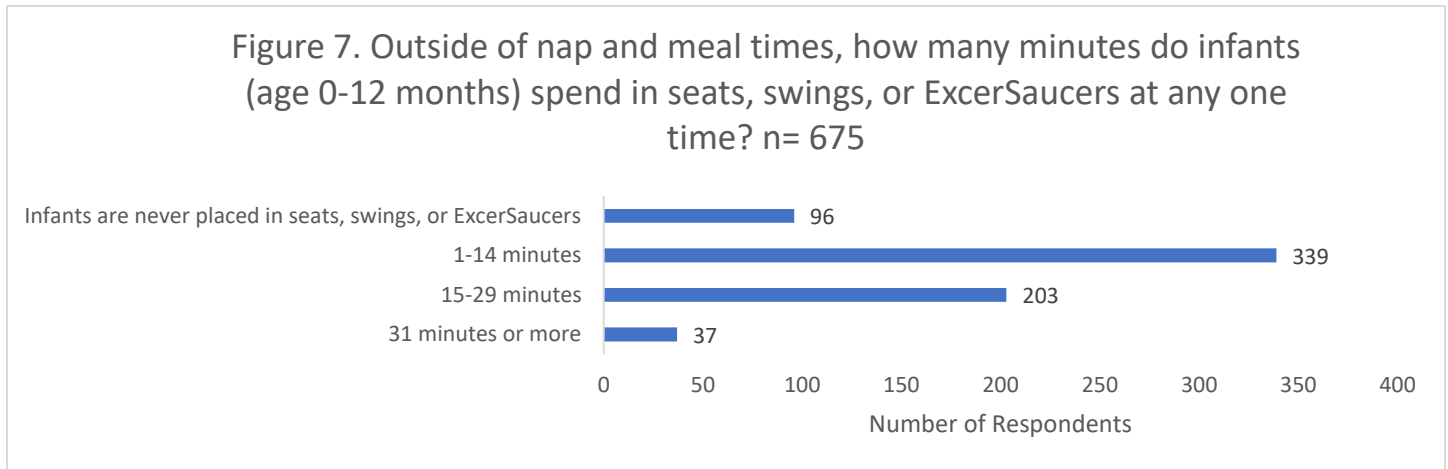
The Caring for Our Children National Health and Safety Performance standards state that infants should have supervised three 5-minute sessions of tummy time every day. When the infant becomes comfortable with tummy time the session frequency can increase.

As shown in Figure 6, respondents indicated the frequency of tummy time for non-crawling infants (age 0-12 months). Each answer choice had a corresponding amount for those facilities who offered full or half-day care., as represented in parenthesis. Of 672 respondents, 74.7 percent (n=502) facilitated tummy time at least three times per day for full-day care. The remaining respondents facilitated tummy time either two times per day for full-day care (n=140) or 0-1 time a day (n=30) for full-day care.



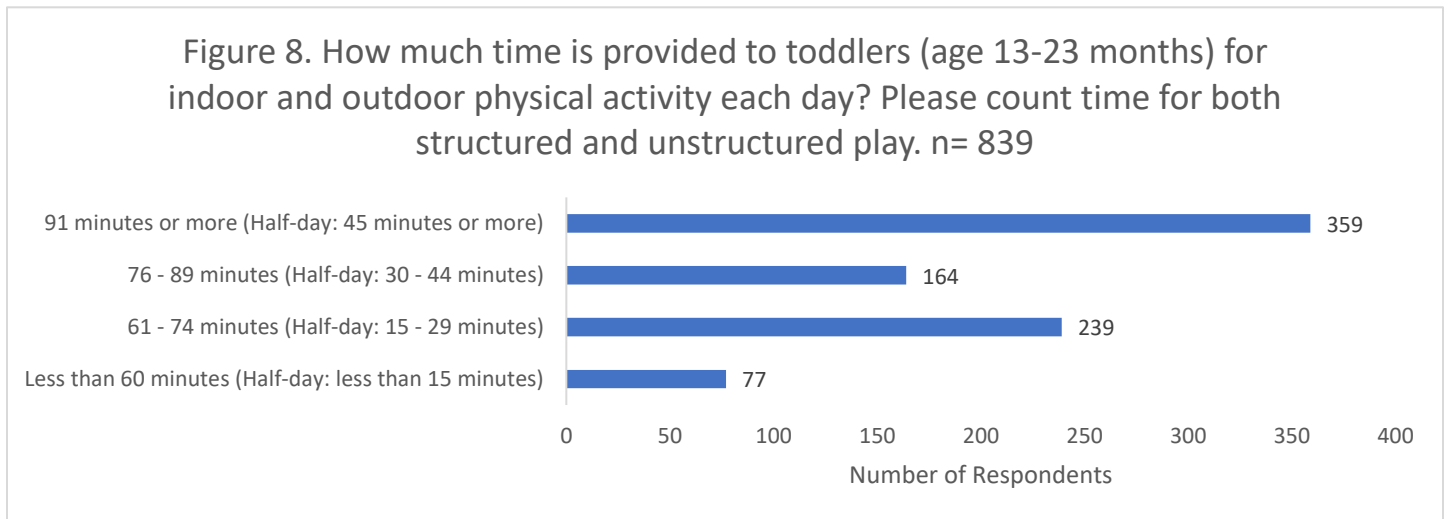
The second question asked respondents how often teachers at their facility offered developmentally-appropriate, portable play equipment to infants (age 0-12 months) during tummy time and other indoor activities. Definitions for both terms are in **Appendix 1**. Of 678 respondents, 90.1 percent (n=611) “Always” offered portable play equipment. Eight percent (n=57) “Sometimes,” and less than one percent “Rarely” (n=4) or “Never” (n=1) offered portable play equipment.

The last question asked respondents how many minutes infants spent in seats, swings, or ExerSaucers at any one time, outside of meal time. The Caring for Our Children, National Health and Safety Performance standards state that infants should not be seated for more than 15 minutes at any one time, except for meals and nap time. Figure 7 shows 50.2 percent (n=339) of respondents allowed 1-14 minutes at any one time. Another 30.0 percent (n=203) allowed 15-29 minutes and 5.4 percent (n=37) allowed 31 minutes or more. Lastly, 14.2 percent (n=96) of respondents never placed infants in seats, swings, or ExerSaucers.



### Toddler Physical Activity

The Caring for Our Children National Health and Safety Performance standards state toddlers should be allowed 60-90 minutes of physical activity per 8-hour day. Figure 8 shows the amount of time provided to toddlers for indoor and outdoor physical activity each day, including options for full- and half-day care. Half-



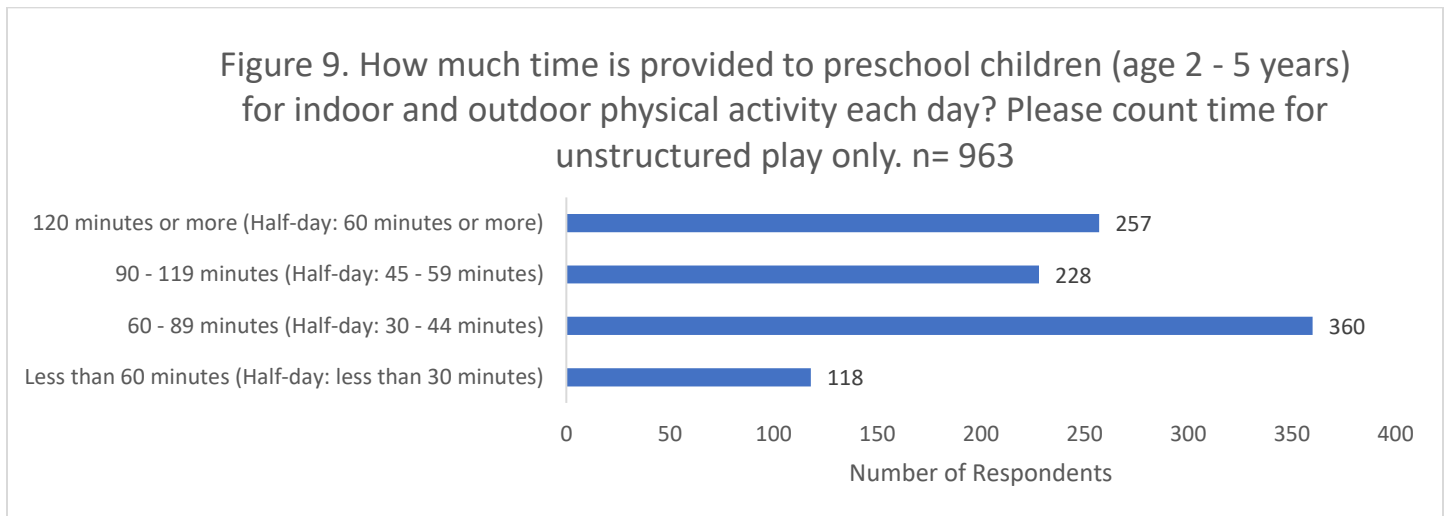
day care is represented in parenthesis. Respondents were instructed to count time for structured and unstructured play. Definitions were provided for both terms and referenced in [Appendix 1](#). Most respondents (n=359) stated their facility offered 91 minutes or more of physical activity. Twenty-eight percent (n=239) of respondents provided 61-74 minutes of physical activity and 19.5 percent (n=164) provided 76-89 minutes of physical activity. The least selected answer choice was “Less than 60 minutes (half-day: less than 15 minutes)” of physical activity provided a day (n=77).

Respondents were asked how long toddlers (age 13 to 23 months) were expected to remain seated at any one time, outside of nap and meal time. Of 837 respondents, 77.6 percent (n=641) stated toddlers remained seated less than 15 minutes at a time. Another 15.9 percent (n=133) stated toddlers may be seated for 15-19 minutes at a time. The last 7.5 percent (n=63) stated toddlers may be seated for 20 minutes or more.

### Preschool Age Children Physical Activity

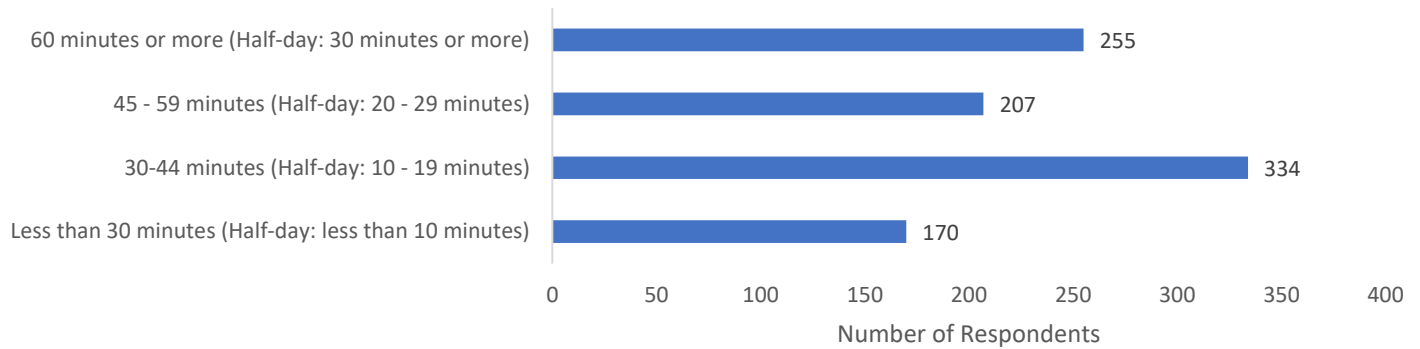
The Caring for Our Children National Health and Safety Performance standards state that preschool aged children should be allowed 90-120 minutes of physical activity per 8-hour day.

Figure 9 shows the amount of time provided to preschool children for indoor and outdoor physical activity each day, including options for full- and half-day care. Half day length was represented in parenthesis. Respondents were instructed to count time for unstructured play only. A definition is in **Appendix 1**. A majority of respondents (n=485) provided at least 90 minutes of unstructured play each day. Thirty seven percent (n=360) provided 60-89 minutes of unstructured play. The remaining 12.3 percent (n=118) offered less than 60 minutes of unstructured play to preschool age children each day.



Respondents were asked about the amount of structured physical activity time preschool children had each day. The Caring for Our Children, National Health and Safety Performance standard for structured play is for facilities to provide two or more activities or games daily. Full and half day length was provided in the same answer choice. Half day is represented in parenthesis. As shown in Figure 10, slightly more than one-third (34.6 percent) provided “30-44 minutes a day (Half-day: 10-19 minutes)”. Another 47.8 percent (n=462) provided 45 minutes or more of adult-led structured physical activity each day. The last 17.6 percent of respondents (n=170) provided less than 30 minutes a day of structured physical activity.

Figure 10. How much time of adult-led (structured) physical activity is provided to preschool children (age 2 - 5 years) each day? n= 966



The last question addressing physical activity for preschoolers covered the amount of time preschool children were expected to remain seated at any one time. Of 970 respondents, 36.7 percent (n=356) stated preschool children remained seated 15-19 minutes at most at one time. Another 34.9 percent (n=339) stated preschool children remained seated “Less than 15 minutes” at a time. Less than a quarter (n=211) stated preschool children remained seated “20-29 minutes” and 6.6 percent (n=64) said “30 minutes or more” at one time.

## Section 5: Screen Time

Section 5 asked respondents to provide information about their screen time practices for children at all age levels. The Caring for Our Children National Health and Safety Performance standard for screen time for ages two and younger is zero minutes and the standard for preschool children is one hour per day or less.

Table 1 shows information about the number of minutes the respondents’ facilities allowed screen time for education versus recreational purposes for infants, toddlers, and preschoolers.

Of 650 responses for infant screen time, the average educational screen time was 3.5 minutes and the recreational screen time average was 2.3 minutes. For both categories, the mode screen time was 0 minutes. The range of screen time reported for both categories was 0-360 minutes.

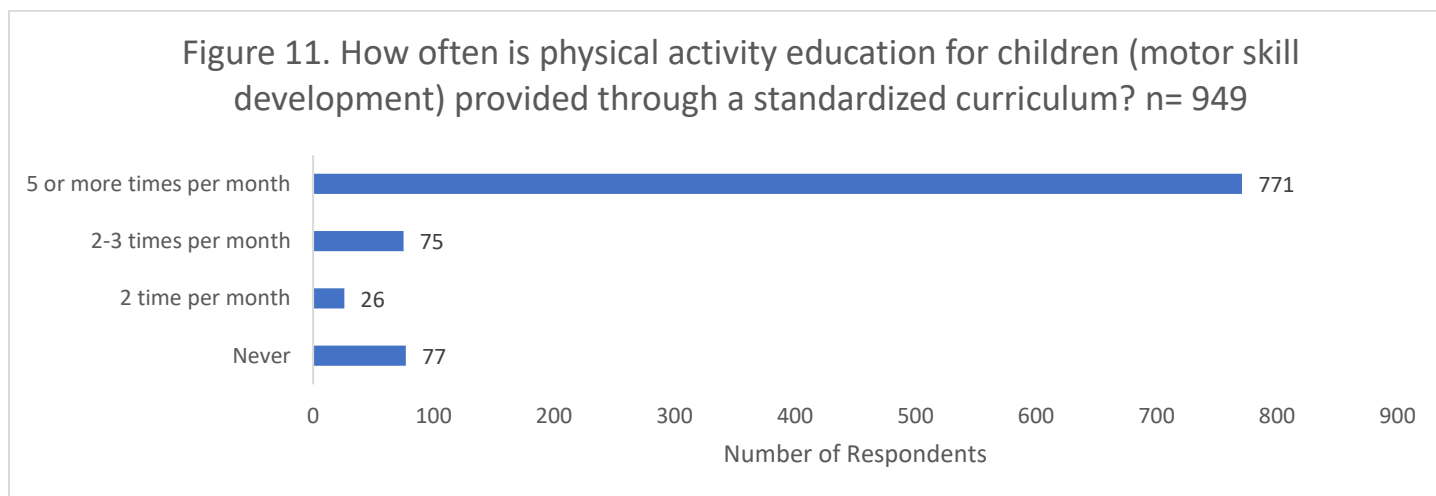
Educational screen time for toddlers received 805 responses. The average educational screen time was 11.2 minutes, and the range reported was 0-500 minutes. Of 808 responses received for recreational screen time, the average amount of screen time was 6.7 minutes, and the range was 0-300 minutes. For both categories, the median and the mode screen time was 0 minutes.

Educational screen time for preschoolers received 925 responses. The average educational screen time was 38.2 minutes, the range reported was 0-500 minutes, and the median was 10 minutes. Recreational screen time for preschoolers received 929 responses. The average recreational screen time was 22.3 minutes, the range reported was 0-500 minutes, and the median was 0 minutes. For both educational and recreational screen time for preschoolers the mode screen time was 0 minutes.

Age	N	Type of screen time	Mean	Median	Mode	Range: Highest	Range: Lowest
Infant (0-12 months)	650	Educational	3.5	0	0	360	0
	650	Recreational	2.3	0	0	360	0
Toddler (13-23 months)	805	Educational	11.2	0	0	500	0
	808	Recreational	6.7	0	0	300	0
Preschool (2-5 years)	925	Educational	38.2	10	0	500	0
	929	Recreational	22.3	0	0	500	0

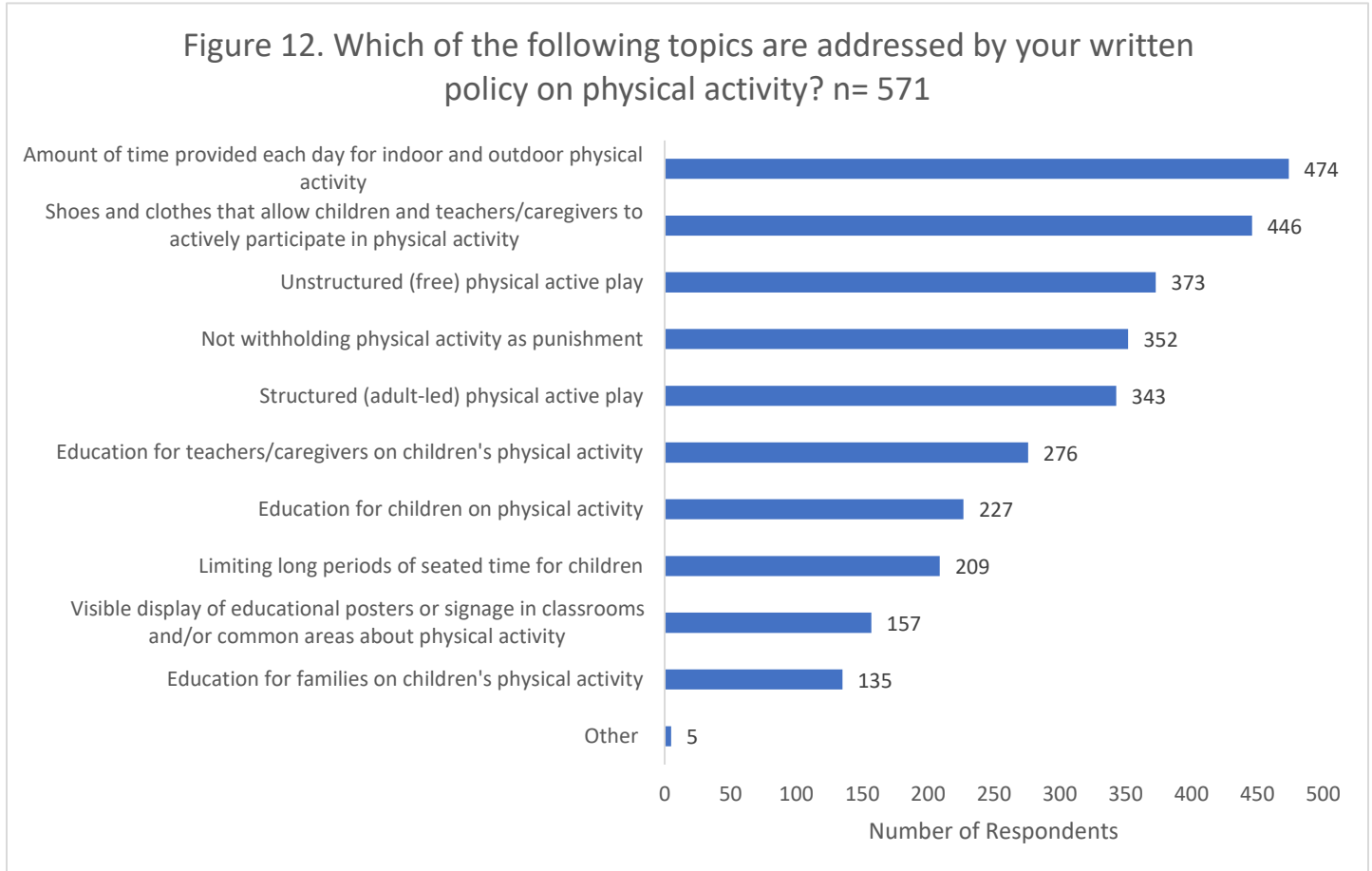
## Section 6: Physical Activity Policy and Curriculum

Section 6 asked respondents several questions on current physical activity policy and curriculum implementation at their facility. As seen in Figure 11, the survey asked respondents how often their facility provided physical activity education through a standardized curriculum. The definition of standardized curriculum is in **Appendix 1**. Of 949 respondents, 81.2 percent (n=771) provided standardized physical activity curriculum “5 or more times per month.” Another 10.6 percent (n=101) provided standardized physical activity curriculum 2-3 times per month. Eight percent (n=77) “Never” provided physical activity through a standardized curriculum.



The next question asked respondents if they had a written policy on physical activity and/or screen time. Respondents could select all responses that applied. Of 955 respondents, 64.6 percent (n=617) had a written policy on physical activity and 58.1 percent (n=555) had a written policy on screen time. Twenty-three percent (n=224) did not have a written policy on either physical activity or screen time.

Respondents that had a physical activity policy (n=617) indicated the topics their policy addressed. Respondents could select all responses that applied. As shown in Figure 12, 83.0 percent (n=474) included the “Amount of time provided each day for indoor and outdoor physical activity” in their policy. Many respondents (n=446, 78.1 percent) addressed “Shoes and clothes that allow children and teachers/caregivers to actively participate in physical activity” in their policy. The topic that was the least common to include was



“Education for families on children's physical activity” (n=135 23.6 percent). Of those that selected “Other” (n=5), two respondents noted additional education addressed in the policy that included: “Motor skills” and “Sun protection”. Another respondent stated they “Follow state guidelines”. On average, respondents included five of the given topics, and ranged from including 1-10 of the given topics provided, not including “Other”.

Respondents who had a screen time policy (n=555) indicated the topics addressed in their facility’s written policy. Respondents could select all responses that applied. Of 509 respondents, the most commonly included topics were “Amount of screen time allowed” (n=422), “Types of programming allowed” (n=285), and “Appropriate supervision and use of screen time in classrooms” (n=249) (Figure 13). The topic least commonly included was “Education for families on screen time” (n=93). Of those that selected “Other” (n=46), 36 responses stated that no screen time was allowed. The remaining eight respondents shared their guidelines for ages and screen use. Respondents included an average of 2.8 of the given topics, and they ranged from including 1-6 of the given topics provided, not including those that selected “Other”.

Figure 13. Which of the following topics are addressed by your written policy on screen time? n= 509

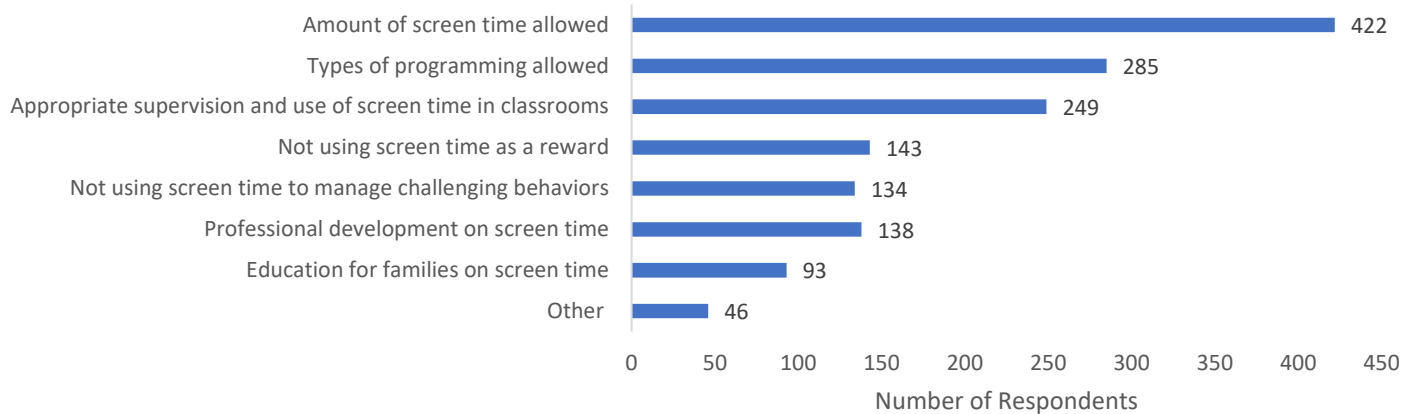
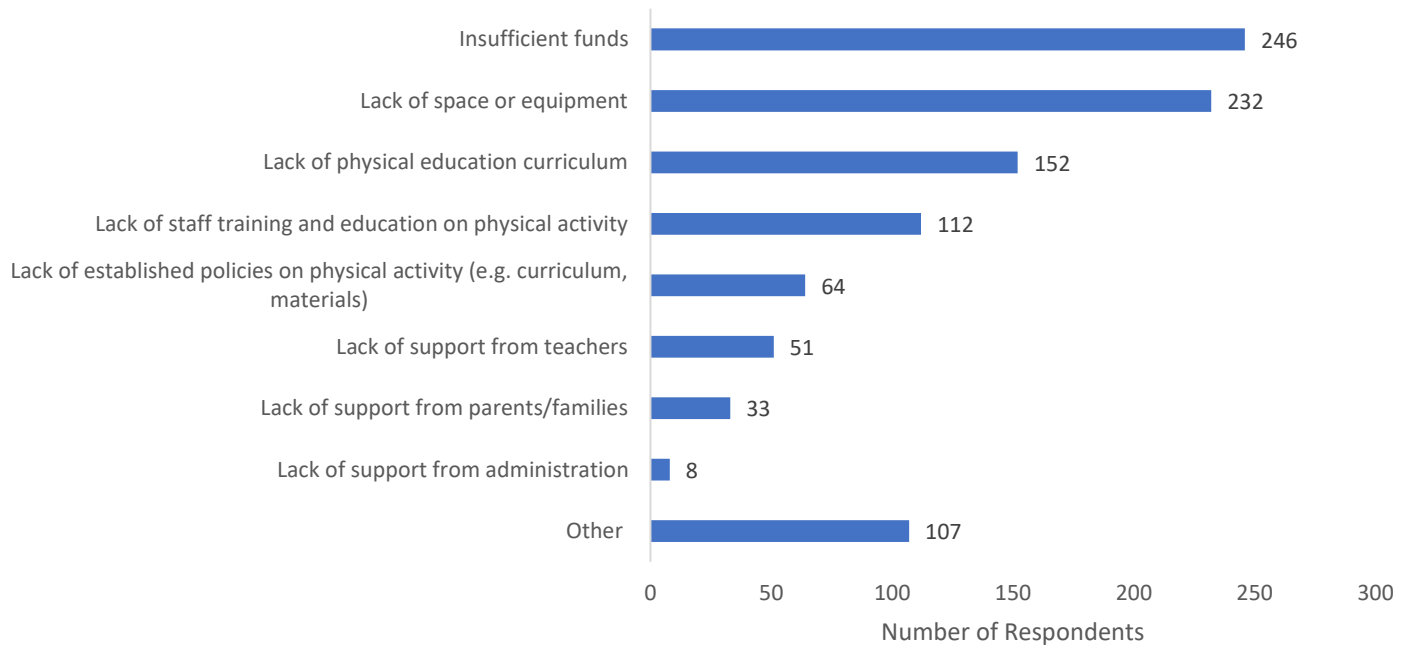


Figure 14 shows the barriers that prevented respondents from promoting physical activity. Respondents could select all responses that applied. The most common barrier was “Insufficient funds” (n=246), followed by “Lack of space or equipment” (n=232), “Lack of physical education curriculum” (n=152), and “Lack of staff training and education on physical activity” (n=112). The fewest respondents (n=8) identified “Lack of support from administration” as a barrier. Of those that responded “Other” (n=107), 70 respondents faced no barriers, 13 respondents addressed weather, and seven stated they did ample physical activity but do not promote it.

Figure 14. Which of the following prevent you from promoting physical activity in your facility? n= 571



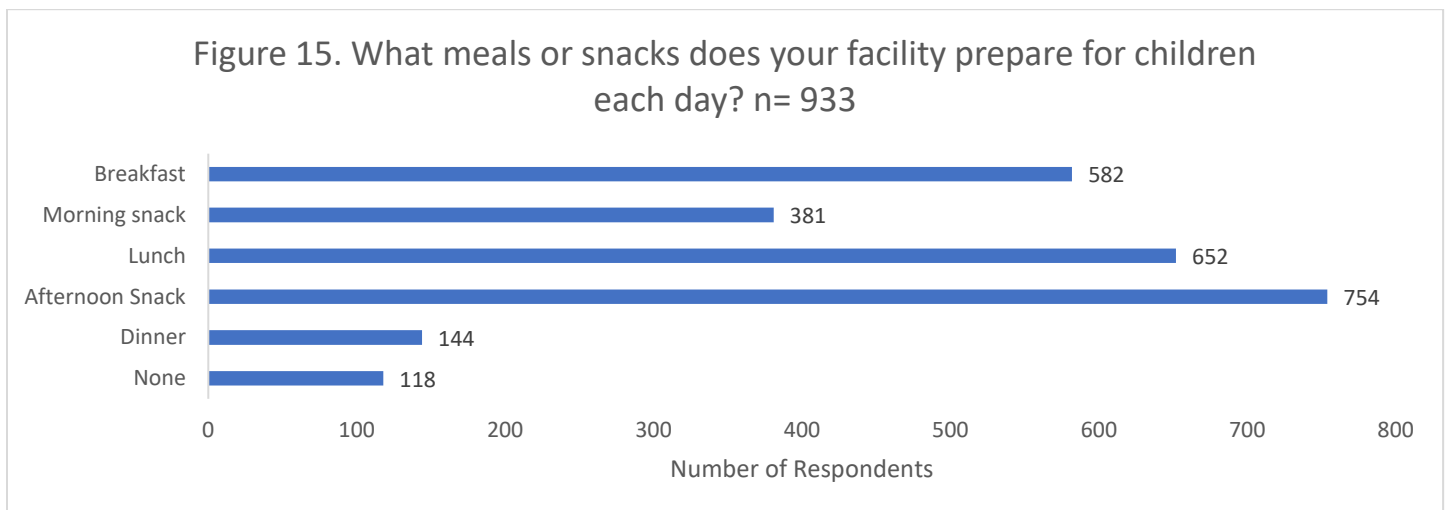


The final question of Section 6 explored the impact of COVID-19 on physical activity in the respondents' facilities. This was an open-ended response question. As shown in **Appendix 2**, seven themes emerged from the 632 responses provided, including:

- Social Distancing and Touch;
- No Change;
- Limited Use of Resources;
- Loss of Staff, Enrollment, and Money;
- Extra Cleaning/Stress;
- Increase Outdoor Play; and
- Loss of Physical Activity.

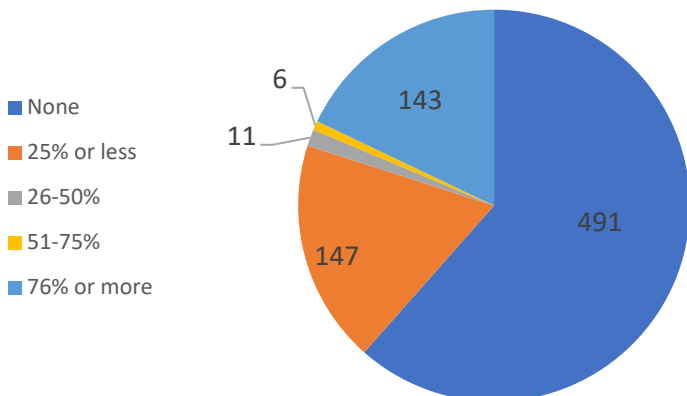
## Section 7: Nutrition

Section 7 focused on the nutrition practices of the respondents' facilities. The first question asked respondents about the meals or snacks prepared for the children each day. Respondents were able to choose all that applied. Of 933 respondents, 80.8 percent (n=754) prepared afternoon snack. A majority of respondents' facilities also prepared lunch (n=652) and breakfast (n=582) each day. Thirteen percent (n=118) prepared no meals or snacks.



The following question asked respondents about the percentage of children that brought their own snacks and/or meals every day (Figure 16). Of 798 responses, 61.5 percent (n=491) said children did not bring any snack or meal. Another 18.4 percent (n=147) of respondents stated that 25 percent or less of children brought a snack or meal to their facility. About 18 percent of respondents (n=143) said at least 76 percent of children brought a snack or meal every day.

Figure 16. What percentage of children bring their own meals and/or snacks every day? n= 798

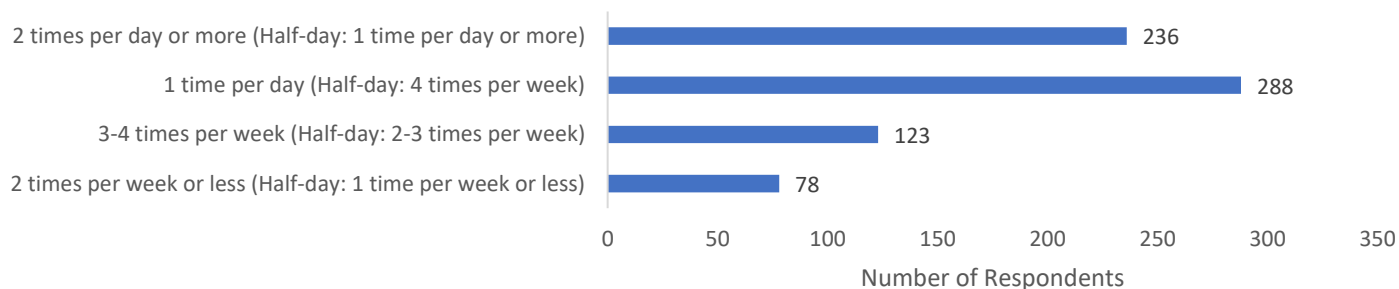


The next question asked respondents about the guidelines used when preparing meals. Respondents selected all that applied. Of 697 responses, 69.2 percent (n=482) used Child and Adult Care Food Program (CACFP) standards and 31.9 percent (n=222) used the MyPlate/USDA guidelines. Eighty-seven respondents chose “Other” and 34 of these responses included other guidelines used such as “minimum standards” and “state guidelines”. Few respondents (n=16) indicated they did not provide meals, and 13 required the children to bring their meals.

The following question asked respondents to share how often their facility offered vegetables. CACFP<sup>3</sup> recommends providing at least one serving each of dark green vegetables, red and orange vegetables, beans and peas (legumes), starchy vegetables, and other vegetables once per week.

Each answer choice had a corresponding amount for those facilities who offered full or half- day care. Half-day frequency is represented in parenthesis. As shown in Figure 17, 39.7 percent (n=288) of respondents offered vegetables once a day. A smaller proportion of respondents (n=236) offered vegetables two or more times per day. Seventeen percent (n=123) of respondents offered vegetables 3-4 times per week and 10.8 percent (n=78) offered vegetables “2 times per week or less”.

Figure 17. How often does your facility offer vegetables? n= 725



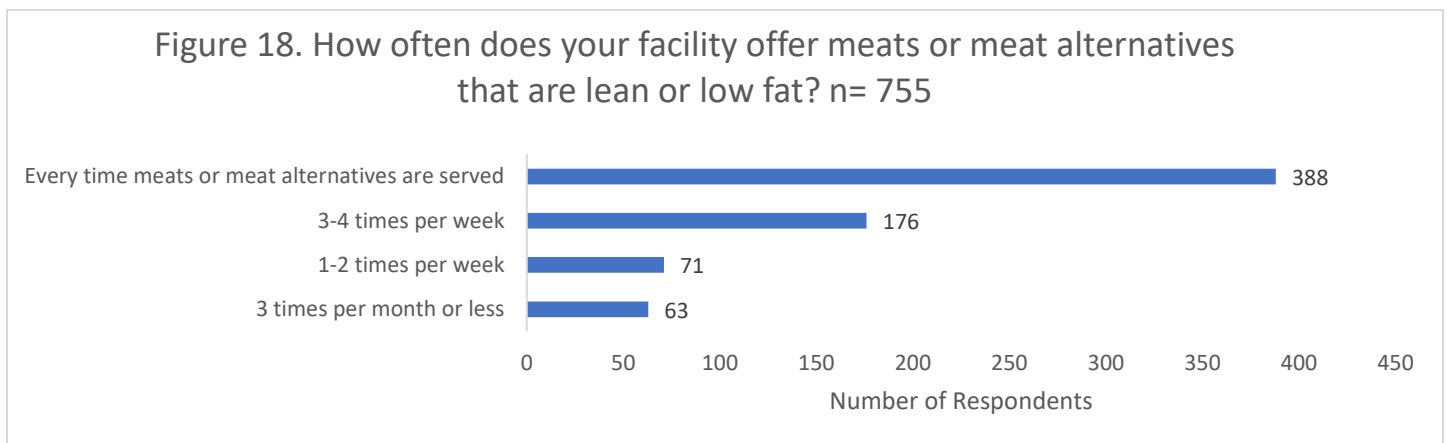
<sup>3</sup> U.S. Department of Agriculture (2017) *The Child and Adult Care Food Program*.

The next question asked respondents how often their facility offered fruit. CACFP recommends making “At least one of the two required components of a snack a fruit (or a vegetable) and serving a variety of fruits and choose whole fruits (fresh, canned, dried, or frozen) more often than juice.”

Each answer choice had a corresponding amount for those facilities who offered full- or half- day care. Of 755 respondents, 53.8 percent (n=406) offered fruit “2 times per day or more.” Less than one-fourth (n=140) provided fruit at once a day and another 15.1 percent (n=114) offered fruit four times per week. Ninety-five respondents (12.6%) offered it “3 times a week or less.”

The following question asked respondents how often their facility offered meats or meat alternative that were lean or low-fat. CACFP recommends three best practices: 1) Serve only lean meats, nuts, and legumes; 2) Limit serving processed meats to no more than one serving per week, and; 3) Serve only natural cheeses and choose low-fat or reduced fat-cheeses.

As shown in Figure 18, 51.4 percent (n=388) of respondents indicated that “Every time meats or meat alternatives were served” they were lean or low fat. A smaller proportion of respondents (n=176) offered lean or low-fat options “3-4 times per week”. Nine percent (n=71) of respondents’ facilities offered lean or low-fat meat or meat alternatives “1-2 times per week” and 8.3 percent (n=63) indicated their facility offered vegetables “3 times per month or less.”



The next question asked respondents how often their facility offered high-fiber, whole grain food. CACFP recommends providing “At least two servings of whole grain-rich grains per day.” Of 749 respondents, 38.3 percent (n=287) offered whole grains “2 times per day or more (Half-day: 1 time per day or more).” Similarly, 35.6 percent (n=267) stated they offered whole grains “1 time per day (Half-day: 2-4 times per week).” The final 26.0 percent (n=195) of respondents offered whole grains four times per week or less.

Respondents indicated how often their facility offered high-salt, high-fat snacks. Of 767 respondents, a majority (n=561) “Never” provided these types of snacks. Another 23.7 percent (n=182) offered them 1-2 times per week. The remaining 3.1 percent (n=24) offered high-salt, high-fat snacks three to four times a week or more.

Respondents who indicated that their facility served infants were asked if they had a designated breast milk-only refrigerator in the facility. CACFP recommends “Supporting mothers who choose to breastfeed their infants by encouraging mothers to supply breastmilk for their infants while in day care and offer a quiet, private area that is comfortable and sanitary for mothers who come to the center or day care home to

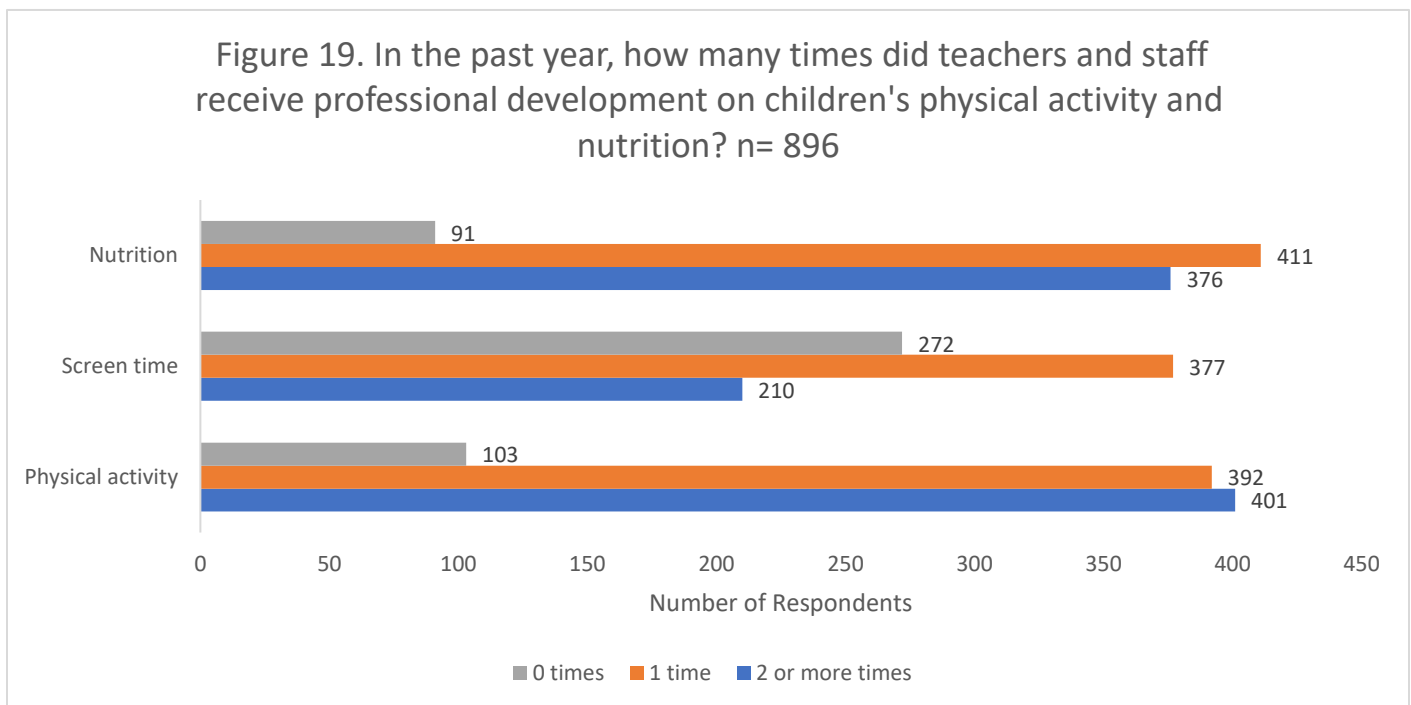
breastfeed.” Of 719 responses, 57.9 percent (n=416) did not have a designated breast milk-only refrigerator and 42.1 percent (n=303) did have a refrigerator available.

The final question of Section 7 explored the impact COVID-19 had on nutrition in the respondent’s facility. This was an open-ended response question. As shown in **Appendix 2**, five themes emerged from the 339 responses, including:

- No Change;
- Budget and Availability of Food;
- Meal Practices;
- Meals No Longer Provided / Home Packed lunch; and
- Extra Sanitizing.

## Section 8: Professional Development

Section 8 asked respondents several questions about professional development. First, respondents shared how many times teachers and staff received professional development on children's physical activity,



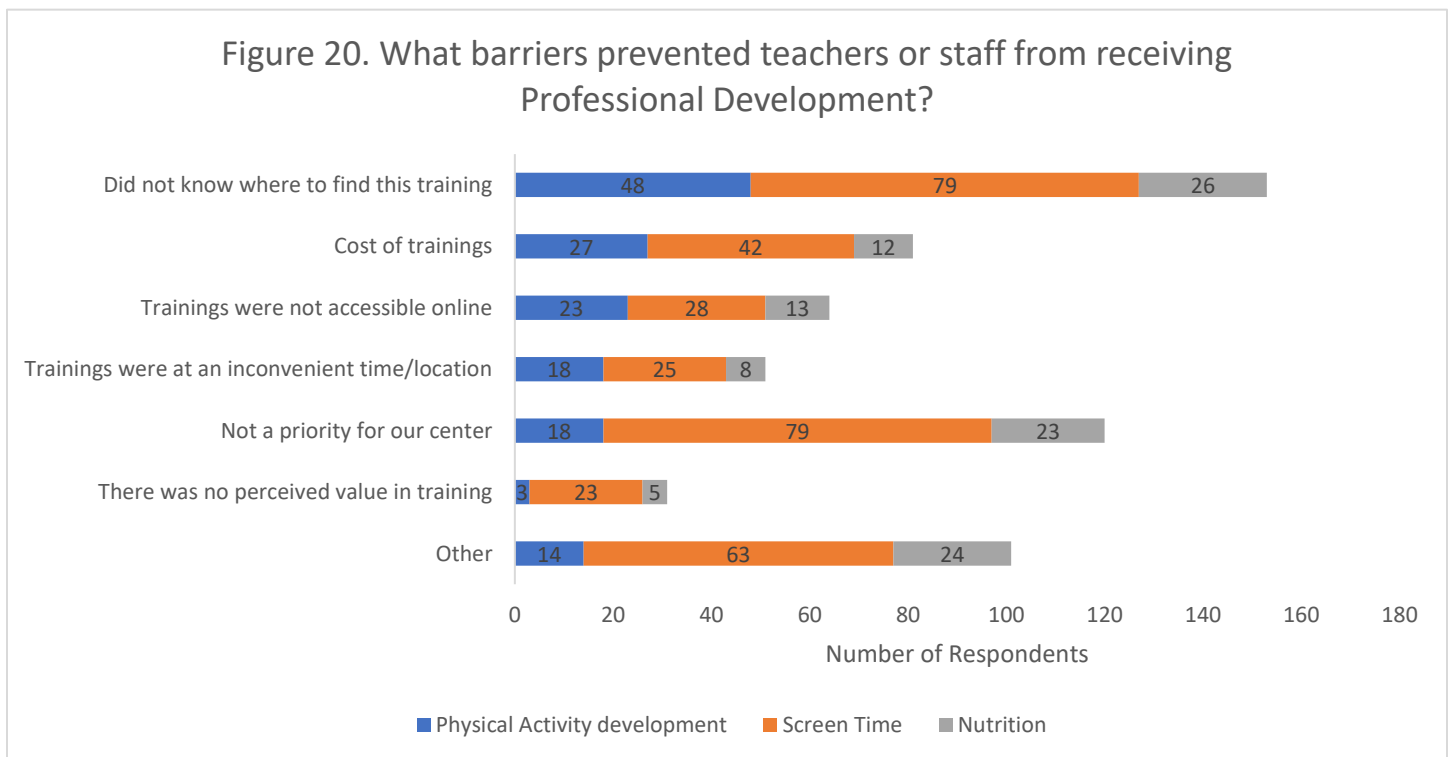
nutrition, and screen time in the past year. As shown in Figure 19, 45.9 percent (n=411) and 42.1 percent (n=377) of respondents indicated professional development was provided “1 time” in nutrition and screen time. Alternatively, 44.8 percent of respondents indicated that staff had “2 or more” opportunities for physical activity professional development. Screen time had the highest number (n=272) of respondent stating there were “0” opportunities provided for professional development.

Respondents that selected “0 times” for the previous professional development question (n=466) were asked a follow-up question about barriers. Figure 20 displays the barriers that prevented teachers or staff from receiving professional development on nutrition, screen time, and physical activity. Respondents could select as many responses as applied.

Of 82 respondents who provided a response for nutrition, the most common responses were they “Did not know where to find the training” (n=26), “Not a priority for our center” (n=23), and “Trainings were not accessible online” (n=13). The least common response was that “There was no perceived value in training” (n=5). Of those that selected “Other” (n=24), fourteen respondents stated meals were not provided.

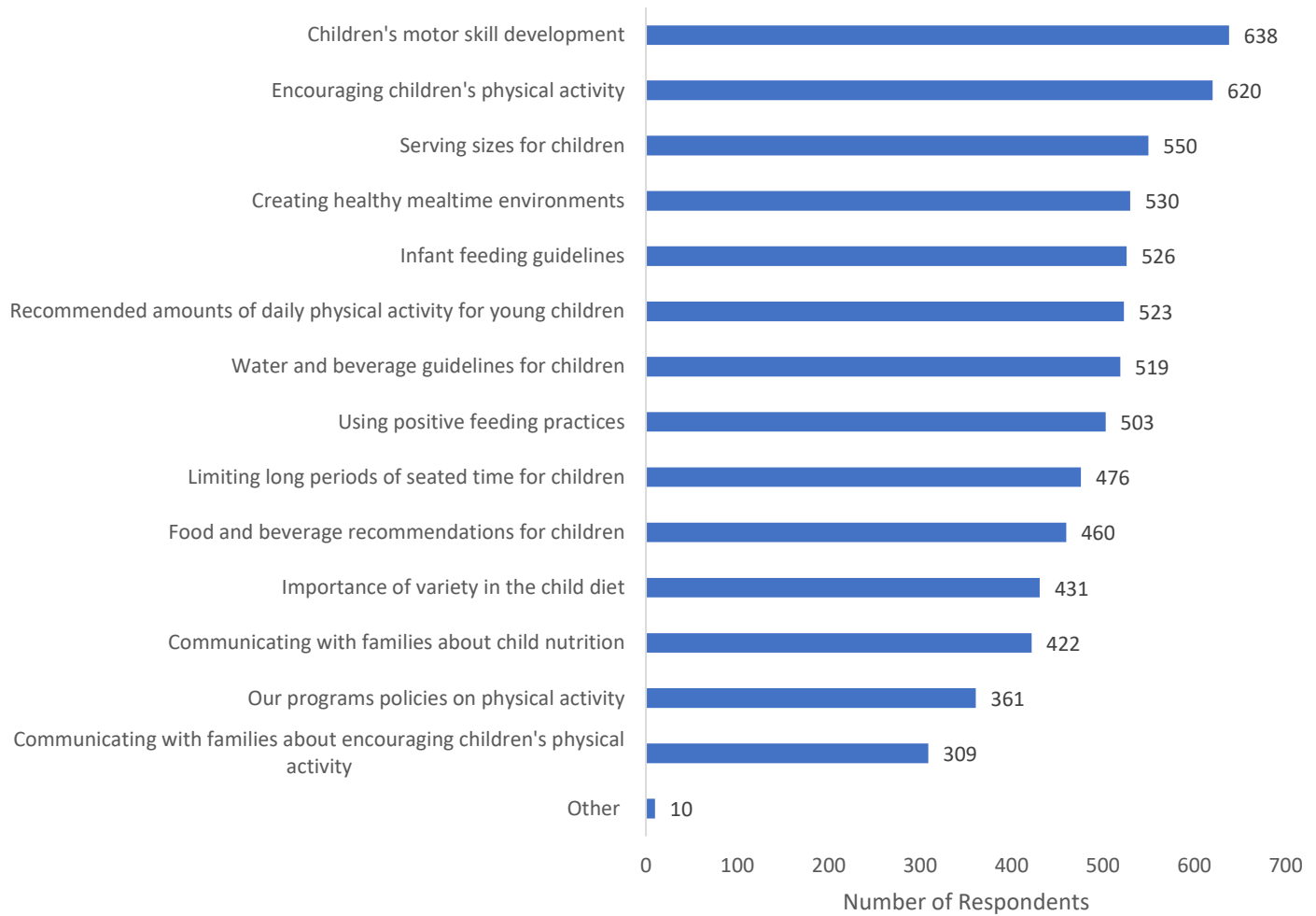
Of 252 respondents who provided a response for screen time, the most common responses included: “Not a priority for our center” (n=79), “Did not know where to find the training” (n=79), and “Cost of trainings” (n=42). The least common response was that “There was no perceived value in training” (n=23). Of those that selected “Other” (n=63), 48 respondents stated screen time was not used in their facility. Three respondents indicated they “Did not have the time” or were “Short staffed”.

Of 103 respondents who provided a response for physical activity professional development barriers, the most common responses were they “Did not know where to find the training” (n=48), “Cost of trainings” (n=27), and “Trainings were not accessible online” (n=23). The least common response was that “There was no perceived value in training” (n=3). Of those that selected “Other” (n=14), three stated it was not offered or was “Not thought of at the moment and will now be incorporated.”



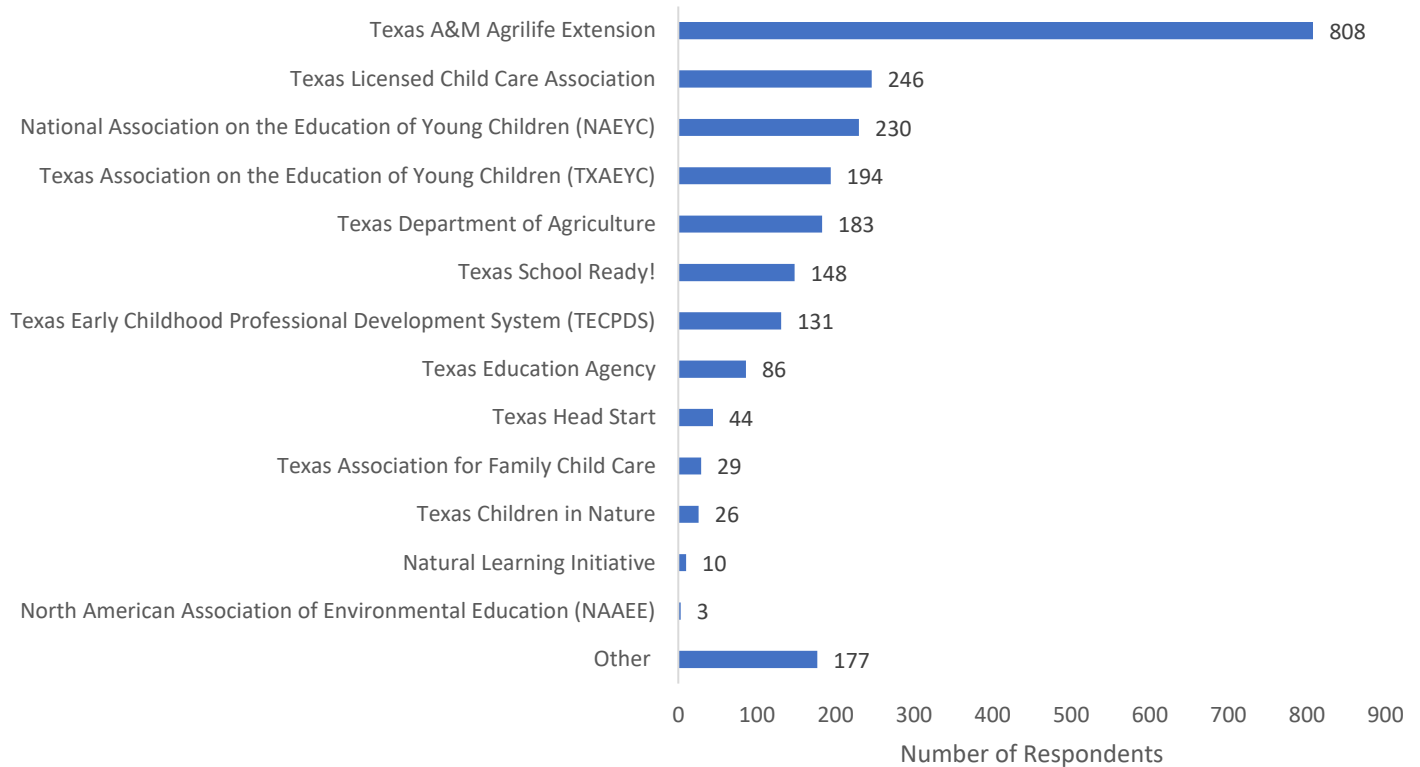
As shown in Figure 21, respondents stated the topics that had been included in professional development for their current staff. Of 851 respondents, the most common topics included: “Children's motor skill development” (n=638), “Encouraging children's physical activity” (n=620), and “Serving sizes for children” (n=550). The least common responses were “our programs policies on physical activity” (n=361) and “Communicating with families about encouraging children's physical activity” (n=309). Of those that selected “Other” (n=10), three provided topics such as, “Lunch time procedures” and “More info on allergies.”

Figure 21. Which of the following topics on children's physical activity and nutrition has been included in professional development for your current staff? n= 851



On the last question of the survey, respondents specified the resources they used to find professional development opportunities. Respondents could select as many responses as applied. Of 858 respondents represented in Figure 22, 94.2 percent indicated they find their professional development through Texas A&M Agrilife Extension. The other top resources included: “Texas Licensed Child Care Association” (n=246), “National Association on the Education of Young Children (NAEYC)” (n=230), and “Texas Association on the Education of Young Children (TXAEYC)” (n=194). Of those that selected “Other” (n=177), 32 indicated “Childcare Education Institute” as a resource to find professional development. Other programs cited included: “Tym the Trainer” (n=18), in-house training (n=11), and “Texas Rising Star” (n=9).

Figure 22. What resources are used to find the professional development opportunities for your staff? n= 858



## Conclusion

The Texas Department of State Health Services (DSHS) Obesity Prevention Program (OPP) and the Chronic Disease Epidemiology Branch (CDE) distributed the *2020 Early Childhood Nutrition and Physical Activity Survey* to licensed childcare facilities throughout Texas in October 2020. The CDE evaluator analyzed 1,061 complete or partially complete responses and the survey had a 16.5 percent response rate from licensed childcare facilities.

Based on the responses from the survey, center directors and owners were the primary groups completing the survey. Respondents' facilities mostly served preschool aged children 2-5 years old and primarily considered themselves a privately owned, faith based, or non-profit facility. The responses showed less than half of respondents' facilities participated in at least one physical activity program.

Many respondents indicated that their facility made physical activity accessible through their outdoor space, including: open grassy areas, shade structures, trees, and portable play equipment. However, 13 facilities did not have any of the structures listed. When respondents were asked about outdoor play, a majority of respondents shared that staff sometimes linked outdoor play with indoor lessons and allowed outside active play two or more times per day.

Many respondents provided ample time for structured and unstructured play for the various age groups, like physical activity, respondents reported screen time limits that were within the recommended time frame, less

than 1-hour per day for preschool aged children and zero screen time for infants and toddlers. However, for both physical activity and screen time, there were some respondents that did not meet the recommended standards.

A majority of respondents stated they had a physical activity and screen time policy. Policies covered various topics: the type of shoes that should be worn; limiting time seated; not using screen time as an award; and, education on screen time for staff, children and parents. Insufficient funds were the most common barrier to promoting physical activity.

Many respondents indicated their facility provided nutrient-dense meals and snacks for their children for a least one meal or snack a day. Many used best practice guidelines when preparing these meals. A few respondents have no guidelines.

Most respondents had attended some professional development on either physical activity, nutrition, or screen time. However, some respondents had not attended professional development on any of these topics. One of the most common barriers to attending these trainings was not knowing where to find them.



# Appendix 1: 2020 Early Childhood Nutrition and Physical Activity Survey

## Introduction

The Texas Department of State Health Services (DSHS) is conducting an assessment of childcare facilities. We need your help to gather information about your efforts related to improving nutrition, physical activity, and outdoor learning environment. The following survey should take about 15 minutes to complete and will inform the DSHS Obesity Prevention Program.

Please answer these questions based on your facility **PRIOR to March 10, 2020 (COVID-19 pandemic)**. Thank you for your commitment to children in Texas and for responding to this survey!

The survey should be completed by a person responsible for overseeing the physical activity (indoor and outdoor play) and nutrition (feeding schedule/food purchase) of the children in care (e.g., day care home provider, center teacher, center director, or administrator). If you have any questions, please reach out to [firstname.lastname@dshs.texas.gov](mailto:firstname.lastname@dshs.texas.gov).

For this survey, use the age groups below when answering questions:

- Infants (0 – 12 months)
- Toddlers (13 – 23 months)
- Preschool (age 2 – 5 years)
- All Children (Toddlers and Preschool)

1. Which age groups does your facility serve? Select all that apply.

- a. Infants (0 – 12 months)
- b. Toddlers (13 – 23 months)
- c. Preschool (2 – 5 years)

*(skip logic for ages the ECE serves)*

## About you/ your facility

2. What is your current position? Select all that apply.

- a. Principal
- b. Center director
- c. Center teacher
- d. Child care home provider
- e. Owner
- f. Other (please specify): \_\_\_\_\_

3. Which of the following best describes your facility? Select all that apply.

- a. Child care center - Part of a franchise or chain
- b. Child care center - Privately owned
- c. Child care home
- d. Early Head Start
- e. Head Start

- f. State-funded Pre-K program
- g. Military child care center
- h. Non-profit
- i. Faith-based
- j. Other (please specify): \_\_\_\_\_

4. What is the availability of care? Select all that apply.

- a. Full Day (8 hours or more)
- b. Half Day (4 hours)

5. Which, if any, physical activity programs does your facility participate in? Select all that apply.

- a. Texas Rising Star Program
- b. National Association for the Education of the Young Child (NAEYC)
- c. National Early Childhood Program Accreditation (NECPA)
- d. National Accreditation Commission (NAC) for Early Care and Education Programs
- e. National Association of Family Child Care (NAFCC)
- f. Let's Move Child Care
- g. I Am Moving, I Am Learning
- h. Coordinated Approach to Child Health (CATCH)
- i. Other (please specify): \_\_\_\_\_
- j. None of the above (*Answer is exclusive*)

## Outdoor Space

6. Which of the following features does your outdoor learning environment include? Select all that apply.

- a. There are at least 10 outdoor play and learning settings for different activities.
- b. There are looping, curvy pathways provided for circulation and available for children to use with wheeled toys.
- c. There is an open, grassy area for games and events for children.
- d. There are (man-made) shade structures, in addition to trees, to provide children with protection from the sunlight.
- e. There are different types of natural, loose materials (such as leaves, sticks, gravel, seeds) present and children are allowed to play freely with them.
- f. There are different types of wheeled toys, portable play equipment (such as balls, blocks, jump rope), and play materials (such as dress-up clothes) available to stimulate creative play and children are allowed to play freely with them.
- g. There are types of physical activities, including gross motor activities supported by the outdoor learning environment (such as running, jumping on/off, crawling through, rolling, swinging, throwing, balancing, climbing).
- h. There are trees providing cover for about 1/3rd of the outdoor area.
- i. At least ¼ of trees are edible fruit or nut species.
- j. There are sufficient shrubs (about 3 for every 100 sq. ft.), including at least ¼ fruiting shrubs and vines.

- k. There is a designated vegetable garden with sufficient produce for repeated opportunities for snacking and/or meals during growing seasons.
- l. There is an outdoor classroom/ program base/storage available for tools, equipment and materials for outdoor learning.
- m. None of the above (Answer is exclusive)

## Outdoor Play

7. How often do teachers or caregivers join children during unstructured physical activity playtime?

Definition: Unstructured physical activity is the active free play that children do when they are free to play on their own. Free play can include swinging, sliding, climbing pushing, pulling, riding, or playing chase. In free play, the adult watches and encourages active play but does not lead the children's play.

- a. Never join children in active play (mostly sit or stand)
  - b. Rarely join children in active play
  - c. Sometimes join children in active play
  - d. Always joins children in active play
8. How often do all children have outdoor active play?
- a. 1 time per week or less
  - b. 2 - 4 times per week
  - c. 1 time per day
  - d. 2 or more times per day
9. How often are the outdoor learning environment and activities linked to reinforce indoor learning?
- a. Never
  - b. Rarely
  - c. Sometimes
  - d. Always

## Physical Activity

*Only shown to respondents who select Q1 "infants" Infant:0-12 months*

10. How often is "tummy time" facilitated for non-crawling infants (age 0-12 months)?

Definition: Tummy time is supervised time when an infant is awake and alert, lying on her/his belly. Opportunities for tummy time should last as long as possible to help infants learn to enjoy it and build their strength. For infants who are not used to it or do not enjoy it, each period of tummy time can start at 1 – 2 minutes, and build up to 5-10 minutes over time.

- a. 1 time per day or less (Half-day: 1 time every other day)
- b. 2 times per day (Half-day: 1 time per day)
- c. 3 times per day (Half-day: 2 times per day)
- d. 4 times per day or more (Half-day: more than 2 times per day)

11. How often do teachers offer developmentally-appropriate, portable play equipment to infants (age 0-12 months) during tummy time and other indoor activities?

Definition: Portable play equipment for infants includes balls, soft blocks, mirrors to view self, and rattles.

- a. Never
- b. Rarely
- c. Sometimes
- d. Always
- e. N/A: Equipment not available

12. Outside of nap and meal times, how many minutes do infants (age 0-12 months) spend in seats, swings, or ExcerSaucers at any one time?

- a. 30 minutes or more
- b. 15-29 minutes
- c. 1-14 minutes
- d. Infants are never placed in seats, swings, or ExcerSaucers

Questions only shows to respondents who select Q1 "Toddler:13-23 months"

13. How much time is provided to toddlers (age 13-23 months) for indoor and outdoor physical activity each day? Please count time for both structured and unstructured play.

Definition: **Physical activity** is any movement of the body that increases heart rate and breathing above what it would be if a child was sitting or resting. Examples include: walking, running, crawling, climbing, jumping and dancing.

Definition: **Structured play** are adult-led activities and lessons that can be led by teachers or outside presenters. Examples include dancing, music and movement, motor development lessons, physically active games, and tumbling. The total amount of adult-led activity time may include multiple short activities added up over the course of the day.

Definition: **Unstructured play** allows for children to do whatever interests them, without as many directions or guides. Examples include playing on the jungle gym, playing dress up, and exploring the outdoors

- a. Less than 60 minutes (Half-day: less than 15 minutes)
- b. 60 – 74 minutes (Half-day: 15 – 29 minutes)
- c. 75 – 89 minutes (Half-day: 30 –44 minutes)
- d. 90 minutes or more (Half-day: 45 minutes or more)

14. Outside of nap and meal times, what is the longest that toddlers (age 13 to 23 months) are expected to remain seated at any one time?

- a. 30 minutes or more
- b. 20-29 minutes
- c. 15-19 minutes

- d. Less than 15 minutes

Questions only shows to respondents who select Q1 “Preschool: 2-5 years”

15. How much time is provided to preschool children (age 2 – 5 years) for indoor and outdoor physical activity each day? Please count time for unstructured play only.

Definition: **Physical activity** is any movement of the body that increases heart rate and breathing above what it would be if a child was sitting or resting. Examples include: walking, running, crawling, climbing, jumping and dancing.

Definition: **Unstructured** play allows for children to do whatever interests them, without as many directions or guides. Examples include playing on the jungle gym, playing dress up, and exploring the outdoors

- a. Less than 60 minutes (Half-day: less than 30 minutes)
- b. 60 – 89 minutes (Half-day: 30 – 44 minutes)
- c. 90 – 119 minutes (Half-day: 45 – 59 minutes)
- d. 120 minutes or more (Half-day: 60 minutes or more)

16. How much time of adult-led (structured) physical activity is provided to preschool children (age 2 – 5 years) each day?

Definition: **Structured play** are adult-led activities and lessons that can be led by teachers or outside presenters. Examples include dancing, music and movement, motor development lessons, physically active games, and tumbling. The total amount of adult-led activity time may include multiple short activities added up over the course of the day.

- a. Less than 30 minutes (Half-day: less than 10 minutes)
- b. 30-44 minutes (Half-day: 10 – 19 minutes)
- c. 45 – 59 minutes (Half-day: 20 – 29 minutes)
- d. 60 minutes or more (Half-day: 30 minutes or more)

17. Outside of nap and meal times, what is the longest that preschool children (age 2 – 5 years) are expected to remain seated at any one time?

- a. 30 minutes or more
- b. 20-29 minutes
- c. 15-19 minutes
- d. Less than 15 minutes

## Screen Time

The following series of questions are about screen time.

For this survey, screen time includes any time spent watching shows or playing games (including active video games) on a screen. Screens can include televisions; desktop, laptop, or tablet computers; or smart phones.

18. (Only show if selected Q1 “infant”) For infants (0-12months), the amount of screen time allowed in our program each week is:

	Minutes Per Week
Educational screen time	
Recreational screen time	

19. (Only show if selected Q1 “toddler”) For toddlers (13-23 months), the amount of screen time allowed in our program each week is:

	Minutes Per Week
Educational screen time	
Recreational screen time	

20. (Only show if selected Q1 “preschool children”) How much screen time is allowed for preschool children (2- 5 years) each week?

	Minutes Per Week
Educational screen time	
Recreational screen time	

## Physical Activity Policy and Curriculum

21. How often is physical activity education for children (motor-skill development) provided through a standardized curriculum?

Definition: Standardized curriculum is the academic content of a child's day. Curriculum is an imperative, complex concept that includes a host of activities and learning experiences, that include daily activities -- circle time, song time, active play time, story time, craft time, etc. Standardized curricula include but are not limited to: Bank Street, Reggio Emilia, and High/Scope.

- a. Never
- b. 1 time per month
- c. 2-3 times per month
- d. 4 or more times per month

22. Does your facility have a written policy on physical activity and/or screen time? Select all that apply.

Definition: A written policy can include any written guidelines about your program’s operations or expectations for teachers, staff, children, and families. Policies can be included in parent handbooks, staff manuals and other documents.

- a. Yes, we have a written policy on physical activity
- b. Yes, we have a written policy on screen time
- c. No, we do not have a written policy on either physical activity or screen time

23. Only display if “yes, policy for physical activity” selected for Q22: Which of the following topics are addressed by your written policy on physical activity? Select all that apply.

- a. Structured (adult-led) physical active play
- b. Unstructured (free) physical active play
- c. Amount of time provided each day for indoor and outdoor physical activity
- d. Limiting long periods of seated time for children
- e. Not withholding physical activity as punishment
- f. Shoes and clothes that allow children and teachers/caregivers to actively participate in physical activity
- g. Education for teachers/caregivers on children’s physical activity
- h. Education for children on physical activity
- i. Education for families on children’s physical activity
- j. Visible display of educational posters or signage in classrooms and/or common areas about physical activity
- k. Other (please specify): \_\_\_\_\_

24. Only display is “yes, policy on screen time” selected for Q22. Which of the following topics are addressed by your written policy on screen time? Select all that apply.

- a. Amount of screen time allowed
- b. Types of programming allowed
- c. Appropriate supervision and use of screen time in classrooms
- d. Not using screen time as a reward
- e. Not using screen time to manage challenging behaviors
- f. Professional development on screen time
- g. Education for families on screen time
- h. Other (please specify): \_\_\_\_\_

25. Which of the following prevent you from promoting physical activity in your facility? Select all that apply.

- a. Lack of support from administration
- b. Lack of support from teachers
- c. Lack of support from parents/families
- d. Lack of staff training and education on physical activity
- e. Lack of space or equipment
- f. Lack of established policies on physical activity (e.g. curriculum, materials)
- g. Insufficient funds
- h. Lack of physical education curriculum
- i. Other (please specify): \_\_\_\_\_

26. In what ways has COVID-19 impacted physical activity in your facility?  
(Open text box)

## Nutrition

27. What meals or snacks does your facility prepare for children each day? Select all that apply.

- a. Breakfast
- b. Morning snack
- c. Lunch
- d. Afternoon Snack
- e. Dinner
- f. None

28. What percentage of children bring their own meals and/or snacks every day?

- a. None
- b. 25% or less
- c. 26-50%
- d. 51-75%
- e. 76% or more

*(After Q28, if Q27 "none" was selected, skip to Q36)*

29. When preparing meals, does the prepared meal follow any nutrition guidelines? Select all that apply

- a. MyPlate / USDA
- b. CACFP Standards
- c. Other (please specify):

30. How often does your facility offer vegetables? For this assessment, vegetables do not include french fries, tater tots, hash browns, or dried beans

- a. 2 times per week or less (Half-day: 1 time per week or less)
- b. 3–4 times per week (Half-day: 2–3 times per week)
- c. 1 time per day (Half-day: 4 times per week)
- d. 2 times per day or more (Half-day: 1 time per day or more)

31. How often does your facility offer fruit? For this assessment, fruit does not include servings of fruit juice

- a. 3 times per week or less (Half-day: 2 times per week or less)
- b. 4 times per week (Half-day: 3 times per week)
- c. 1 time per day (Half-day: 4 times per week)
- d. 2 times per day or more (Half-day: 1 time per day or more)

32. How often does your facility offer meats or meat alternatives that are lean or low fat? Lean or low-fat meats include skinless, baked or broiled chicken; baked or broiled fish; and ground beef or turkey that is at least 93% lean and cooked in a low-fat way. Low-fat meat alternatives include low-fat dairy foods; baked, poached, or boiled eggs; and dried beans

- a. 3 times per month or less
- b. 1–2 times per week
- c. 3–4 times per week
- d. Every time meats or meat alternatives are served



33. How often does your facility offer high-fiber, whole grain foods? High-fiber, whole grain foods include whole wheat bread, whole wheat crackers, oatmeal, brown rice, Cheerios, and whole grain.
- 1 time per week or less (Half-day: 3 times per month or less)
  - 2–4 times per week (Half-day: 1 time per week)
  - 1 time per day (Half-day: 2–4 times per week)
  - 2 times per day or more (Half-day: 1 time per day or more)
34. How often does your facility offer high-salt, high-fat snacks? High-salt, high fat snacks include chips, frozen/canned pastas or burritos, and nuts.
- 1 time per day or more
  - 3–4 times per week
  - 1–2 times per week
  - Never
35. For infants (0-12 months), do parents have a designated breast milk-only refrigerator in the facility?
- Yes
  - No
36. In what ways has COVID-19 impacted the nutrition and meal times in your facility?  
(Open text box)

### Professional Development

37. In the past year, how many times did teachers and staff receive professional development on children’s physical activity and nutrition?

Definition: For this assessment, professional development on children’s physical activity does not include training on playground safety. Professional development can include taking in-person or online training for contact hours or continuing education credits. It can also include information presented at staff meetings.

	2 or more times	1 time	0 times
Physical activity			
Screen time			
Nutrition			

*Skip Logic: if “0 times” is selected display question 38*

38. What barriers prevented teacher or staff from receiving Professional Development on (pipe in “Physical Activity/ Screen Time/ nutrition)? Select all that apply.
- Did not know where to find this training
  - Not a priority for our center
  - Cost of trainings
  - Trainings were not accessible online
  - Trainings were at an inconvenient time/location
  - There was no perceived value in training
  - Other (please specify): \_\_\_\_\_

39. Which of the following topics on children’s physical activity and nutrition has been included in professional development for your current staff? Select all that apply.

- a. Food and beverage recommendations for children
- b. Serving sizes for children
- c. Importance of variety in the child diet
- d. Creating healthy mealtime environments
- e. Using positive feeding practices
- f. Communicating with families about child nutrition
- g. Infant feeding guidelines
- h. Water and beverage guidelines for children
- i. Recommended amounts of daily physical activity for young children
- j. Encouraging children’s physical activity
- k. Limiting long periods of seated time for children
- l. Children’s motor skill development
- m. Communicating with families about encouraging children’s physical activity
- n. Our program’s policies on physical activity
- o. Other (please specify): \_\_\_\_\_

40. What resources are used to find the professional development opportunities for your staff? Select all that apply.

- a. Texas A&M Agrilife Extension
- b. Texas Association on the Education of Young Children (TXAEYC)
- c. National Association on the Education of Young Children (NAEYC)
- d. Texas School Ready!
- e. Texas Licensed Child Care Association
- f. Texas Head Start
- g. Texas Association for Family Child Care
- h. Texas Children in Nature
- i. Texas Education Agency
- j. Texas Department of Agriculture
- k. North American Association of Environmental Education (NAAEE)
- l. Natural Learning Initiative
- m. Texas Early Childhood Professional Development System (TECPDS)
- n. Other (please specify): \_\_\_\_\_

## Appendix 2: Tables

Table 2. In what ways has COVID-19 impacted physical activity in your facility? (n=632)		
Theme	Occurrence	Selected Quote
Social Distancing and Touch	230	“The 6 feet distance is hard for Early Childhood children. They love to be next to and play with their friends at this age”
No Change	141	“Covid-19 hasn't changed how frequently and how we conduct physical activity at our school.”
Limited Use of Resources	96	“We are not allowed to use our gym. We can't share spaces. We can't co-exist on the playground (one classroom at a time) which limits their daily outdoor time”
Loss of Staff, Enrollment, and Money	89	“reduced activity as groups are smaller and teaching staff has been reduced.” “low staffing, low enrollment, cannot afford equipment due to low staffing and enrollment.”
Extra Cleaning/Stress	60	“We have to keep children distanced as much as possible and re cannot use resources the way we used to. Everything has to constantly be disinfected after a child touches it and it's just gotten too complicated. We focus more on playground outside time than our physical education room.”
Increase Outdoor Play	59	“We have increased outside play due to Covid. We finally built an outdoor classroom.”
Loss of Physical Activity	45	“We have had to reduce outdoor time/recess since we can no longer have more than one classroom in the playground area at one time.”

Table 3. In what ways has COVID-19 impacted nutrition and meal times in your facility? (n=449)		
Theme	Occurrence	Selected Quote
No Change	190	“COVID did not impact our nutrition and meal times.”
Budget and Availability of Food	117	“Difficulty purchasing milk [and] foods due to availability and cash flow”
Meal Practices	93	“now children cannot serve family style. Staff must serve all components”
Meals No Longer Provided / Home Packed lunch	55	“Parents now provide ALL snacks and meals in all age classrooms. Additionally, students eat in their classrooms (not in a family-style dining hall as before). Parents do not always send healthy snacks and meals (may be a financial hardship?) and the restriction on mixing classes during the day does not allow for mixed-age mentoring and family-style eating models (multiple adults and multi-aged children at a table).
Extra Sanitizing	4	“Must sanitize more efficiently.”

# General Informational Page

## Author Information

Prepared by Elena Martinez, MS, CHES  
Program Evaluator  
Chronic Disease Epidemiology  
Health Promotion and Chronic Disease Prevention Section

Reviewed by Maria Cooper, PhD  
Manager  
Chronic Disease Epidemiology  
Health Promotion and Chronic Disease Prevention Section

## Suggested Citation

*2020 Early Childhood Nutrition Survey and Physical Activity Statewide Survey Report*. Prepared by Chronic Disease Epidemiology, Health Promotion and Chronic Disease Prevention Section, Texas Department of State Health Services.

## Contact Information

**Obesity Prevention Program**  
Texas Department of State Health Services  
1100 West 49<sup>th</sup> Street  
Austin, Texas 78756

Phone: (512) 776-7111

Fax: (512) 458-7618

BringingHealthyBack@dshs.texas.gov

***dshs.texas.gov/obesity***



**TEXAS**  
Health and Human Services

**Texas Department of State  
Health Services**

