Child & Toddler Physical Activity and Active Environments

Summary

The Washington State Department of Health (DOH) conducted the second **Washington State Survey of Nutrition and Physical Activity in Early Learning** in 2018. The first survey, conducted in 2013, provided valuable information to improve programs and served as a baseline for many of the questions in the second survey. For 2018, DOH reached out to all licensed early learning programs in Washington state; 671 early learning providers responded (297 **early learning centers** and 374 **family home programs**).

Best Practices in Early Learning

Throughout this document, the findings highlight early learning best practices. Most of the standards addressed in the survey were selected from *Caring for Our Children: National Health and Safety Performance Standards, Fourth Edition (CFOC4)*, the most highly-regarded resource for early care and education standards.[1]

Results

Responses provided information about how much physical activity was scheduled in early learning settings, and the quality of active environments. The results show that while programs excel in some physical activity best practices, there is still room for improvement.

- While almost all programs (88-89%) reported having access to indoor and outdoor environments that support active play, between 42-58% did not meet the best practice for scheduling time outside.
- Despite what is known about the importance of role modeling, between 62-87% of programs did not meet the best practice for scheduling adult-led activities, and only 53% met the best practice for having staff engage during children's active play time.
- Although over 90% of respondents felt early learning professionals should be a resource for families on physical activity and active play, less than 66% reported sharing information about active play with families.

Recommendations

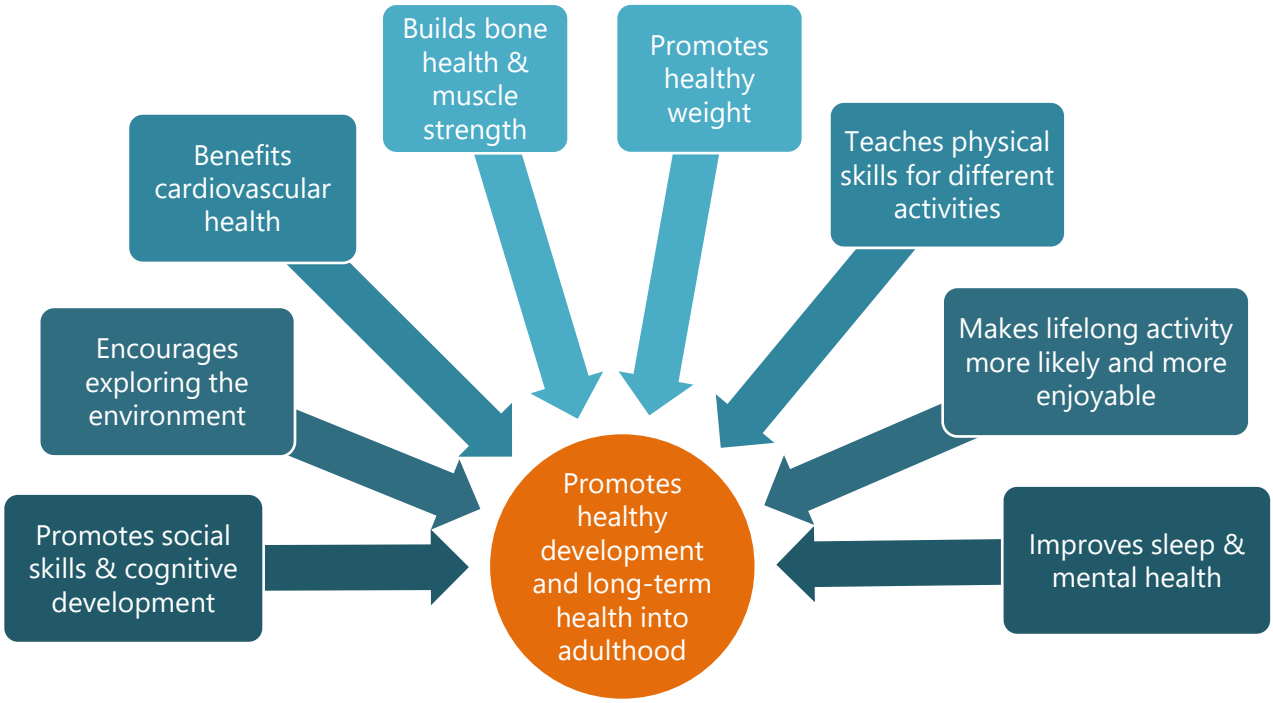
- Strengthen associations between physical activity best practices and Early Achievers (Washington's Quality Rating and Improvement System (QRIS)) criteria.
- Provide support to early learning programs to enhance indoor and outdoor play environments.
- Increase availability and accessibility of training and education for early learning programs and professionals on active play, especially around developing and enacting policies that support best practices.

Play and Much More: The Importance of Physical Activity in Early Learning

There is a reason kids call it "playing," and not "exercising;" movement for children goes beyond having fun. Physical activity engages children to explore their environment, use their imagination, and interact with their peers.[2] Just as it does in adults, physical activity also promotes overall health in young children.[3] Environments and practices in early learning settings that encourage children to be active are vital, especially considering that 24% of low-income 2-to-4 year-olds in Washington state are overweight or obese. Also, weight-related illnesses disparately affect children of color and children of low socioeconomic status.[4–7] The good news is that early learning providers have an opportunity to be strong supporters of physical activity in children.

Physical activity during the early years helps children learn different motor skills like jumping or throwing. Scientists call this "motor competence," and the better a child's motor competence early on, the more likely he or she is to be physically active as an adult.[8] Encouraging physical activity in young children not only promotes health at a young age, but it also sets the stage for a lifetime of health-promoting activity. Figure 1 summarizes some of the short and long-term benefits of physical activity in chlidren.

Figure 1: Benefits of physical activity in young children [1,8–10]



What is Active Play? Physical Activity for Toddlers and Children

Although the term "physical activity" can apply to anyone, "active play" is often used to describe developmentally appropriate kinds of physical activity for toddlers and children. CFOC4 includes recommendations for *how long* children should be active in early learning programs, and about the *kinds* of activity with which children and toddlers should be engaged. Different types of activities can help develop unique skills. Figure 2 describes the different types of active play asked about in the survey, the skills they promote, and why each is key to a child's health and development. Although some of these elements may overlap, they are presented here individually to highlight the role of each.

Figure 2: Types of active play for toddlers & children and their role in development [1,2,10,11]

Scheduled Time for Activity in Early Learning Programs

In CFOC4, best practices for active play are based on the age of the child and length of program. For this reason, we divided questions on time scheduled for active play by both age (toddlers vs. children) and length of program (full-time vs. part-time).

- **Full-time programs** are programs that last 8 hours or more per day. Best practices for full-time programs are different for **toddlers** (12-29 months) and **young children** (30 months and older), and include time spent outside, adult-led activity, and any type of active play (see figures 3 and 4).
- **Part-time programs** are programs that last for less than 8 hours. Best practices for part-time programs depend on whether the program is **less than 4 hours**, or **4 hours to less**

than 8 hours. In part-time programs, best practices are the same for toddlers and children, so questions were not divided by age group. These best practices only address time scheduled for active play (see figures 5 and 6).

*Figure 3: How much time do **full-time** early learning programs schedule for daily physical acitivty for toddlers **12-29 months old?***

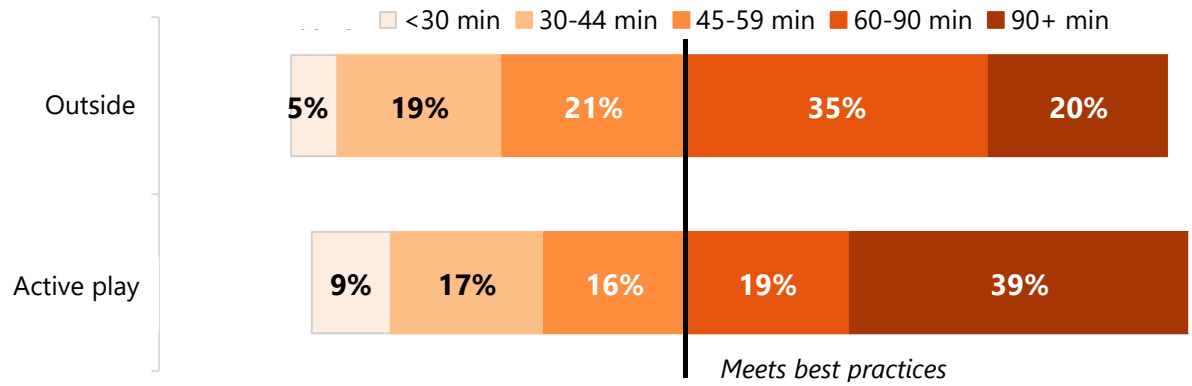


*Figure 4: How much time do **full-time** early learning programs schedule for daily physical activity for children **30 months and older**?*

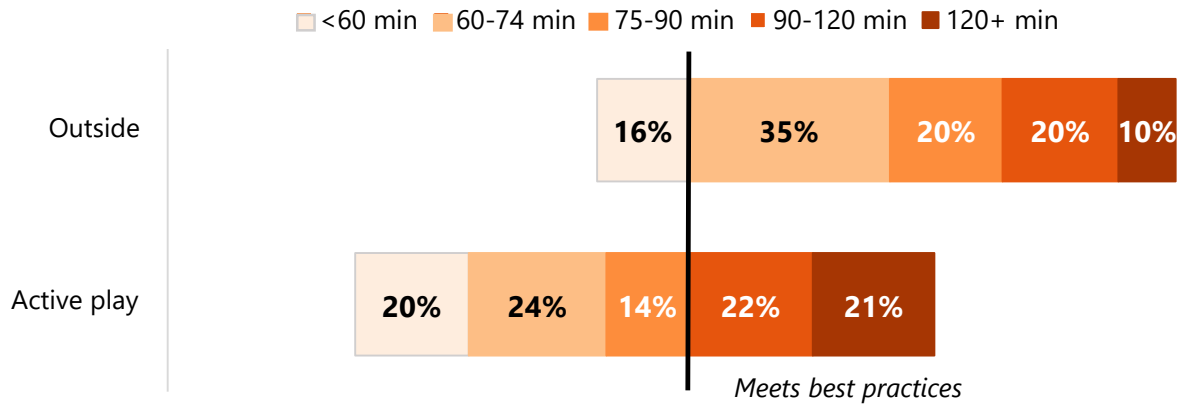


*Figure 5: How much time do **part-time (less than 4 hours)** early learning programs schedule for any active play?*

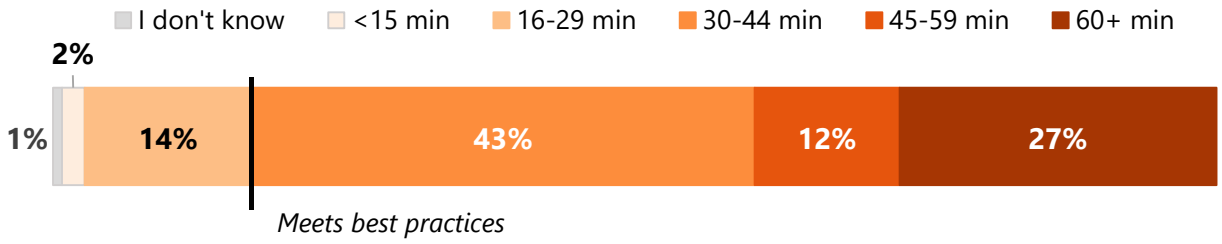
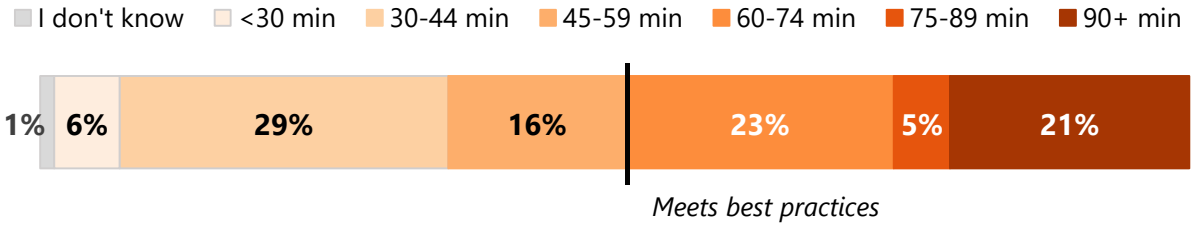


*Figure 6: How much time do **part-time (4 hours to less than 8 hours)** early learning programs schedule for any active play?*



These graphs show clear differences in the types and amount of physical activity scheduled for toddlers and children. Although the majority of full-time programs met best practices for providing active play opportunities to children 30 months and older, less than half of programs provided enough time for playing outside or adult-led activities for this age group. For toddlers, the percentage of programs meeting best practices for playing outside and active play was about half, and only 13% of programs met best practices for adult-led play.

Physical Activity Opportunities during Lessons and Routines

CFOC4 recommends all children should be provided *continuous* opportunities to develop and practice age-appropriate gross motor and movement skills.[1] Building motor skills (both gross motor and fundamental movement skills) is particularly important. Not only do these skills increase strength and fitness, but they also make activity more enjoyable, increasing the odds that children will remain active as adults. Figures 7 and 8 describe how programs responded to questions about creating opportunities to support this best practice by incorporating movement in lesson plans, classroom routines and transitions.

Figure 7: How often are lessons focused on building gross motor and fundamental movement skills scheduled for children ages 30 months to pre-k?

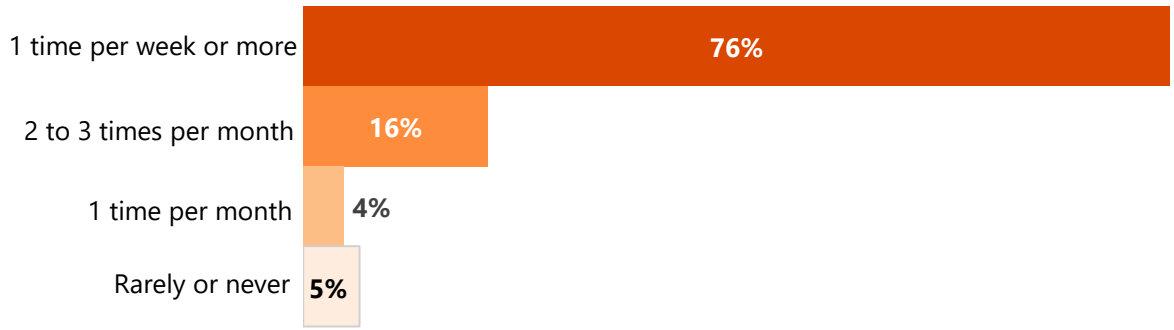
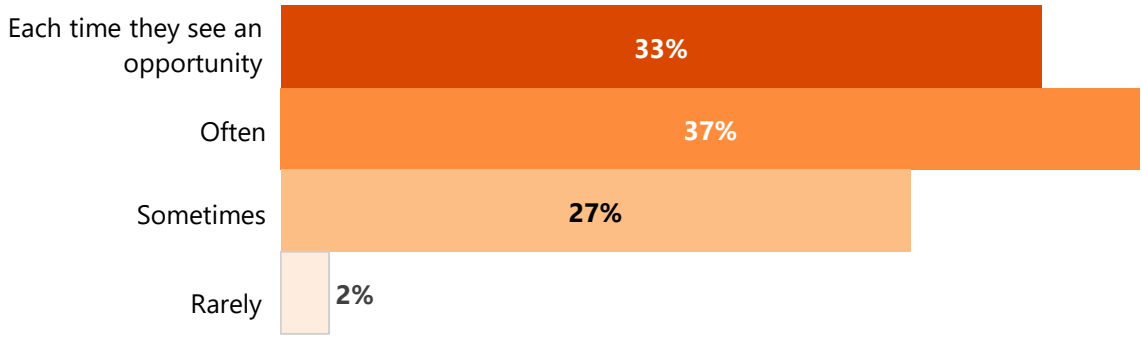
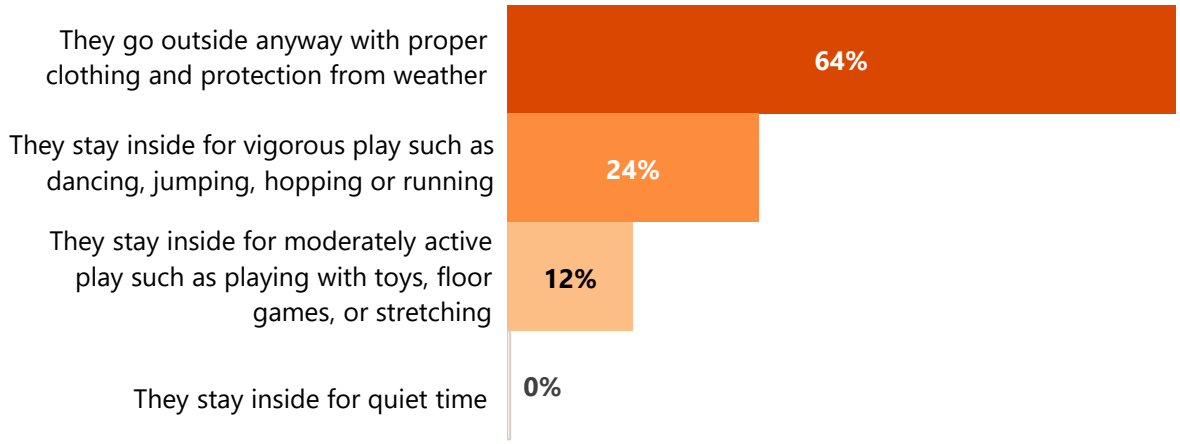


Figure 8: How often do early learning program staff incorporate physical activity into classroom routines and transitions?



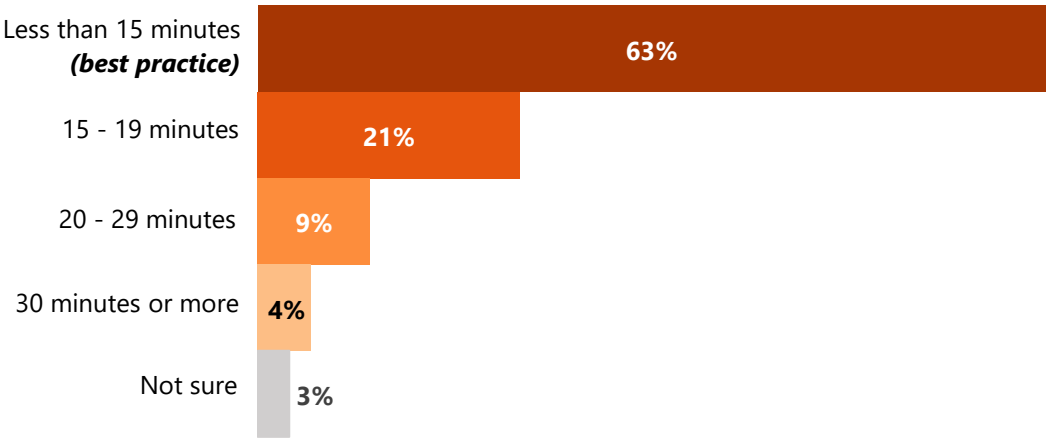
According to CFOC4, children should only be kept from going outdoors if the weather poses a significant health risk, such as frostbite or heat-related illness. If children must remain inside, the total amount of physical activity they have should remain the same.[1] Figure 9 shows how early learning programs responded when asked what they do with children during different types of weather.

Figure 9: What do early learning providers do with children over 12 months when the weather is cold, rainy, snowy or hot?



Children have a natural inclination to move and touch in order to explore their environment. It is important to allow children to move around as needed throughout the day. Confining children to seats for lengthy periods of time can reduce the amount of active play they experience. Figure 10 shows how long children over 2 remained seated in programs that responded to the survey.

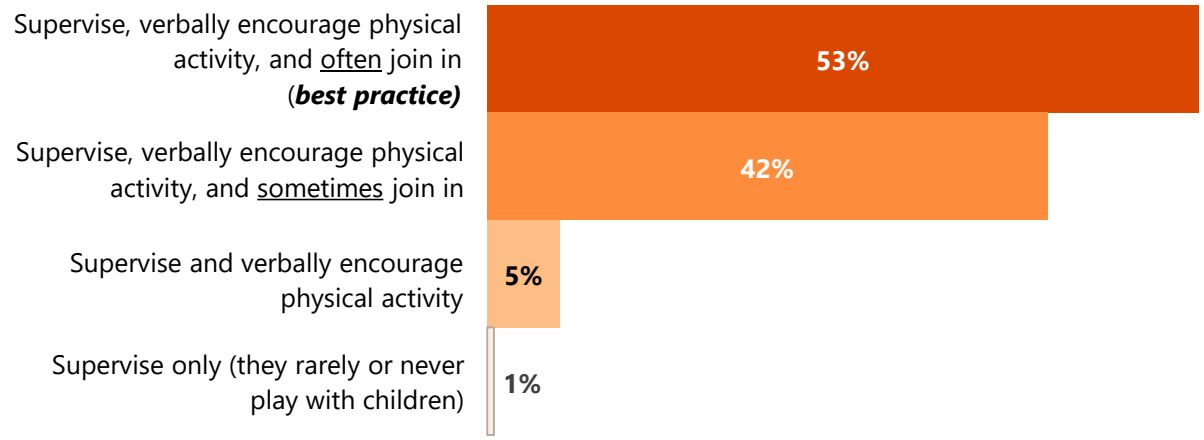
Figure 10: Outside of meal and nap times, what is the longest that children over age two remain seated at any one time?



The Importance of Role Modeling

Children learn healthy and safe behaviors from adult role models, and physical activity is no exception. A recent review on what facilitates active play in children showed that both parents and early learning providers can help children be more active simply by playing along with them.[13] Encouragement is also key as a form of positive reinforcement during active play.[1]

Figure 11: What do early learning program staff do during toddlers' and children's active play time?



Recommendations:

Strengthen associations between physical activity best practices and Early Achievers (Washington's Quality Rating and Improvement System (QRIS)) criteria.

- Suggested Strategies:
  - **Local health departments or child care resource and referral offices** can offer trainings, share resources, and lesson plans with Early Achievers coaches and providers on alignment between physical activity best practices and Early Achievers criteria (materials available at *www.doh.wa.gov/HEAL/earlylearning*).
  - **Washington's Early Achievers program** can expand assessments to include outdoor activities, using outdoor preschool programs as a model.

Activity-Friendly Environments

Similar to how some governments intentionally design neighborhoods and cities to be health-promoting environments, early learning sites can create environments that encourage children to move around. In 2018, almost all survey participants said that their program had enough indoor space to accommodate active play for children. Along the same lines, 89% of programs said that the outdoor areas used for active play were big enough to accommodate all types of activities, including running and playing with wheeled toys. Figures 12 through 14 describe both indoor and outdoor environments for programs that responded to the survey.

Figure 12: Do early learning programs have adequate indoor space to accommodate active play?

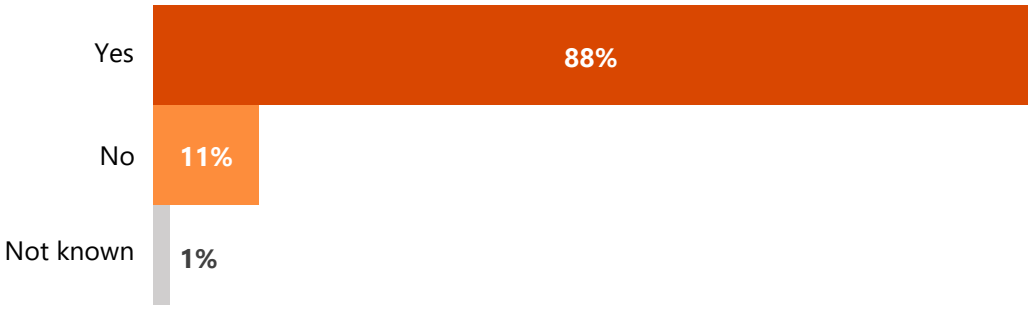


Figure 13: What best describes the outdoor play areas (including nearby parks that are frequently used) used by children in early learning programs?

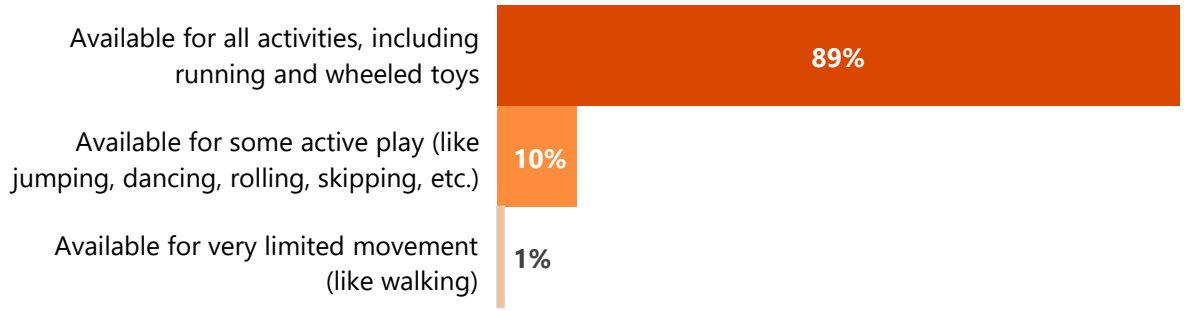
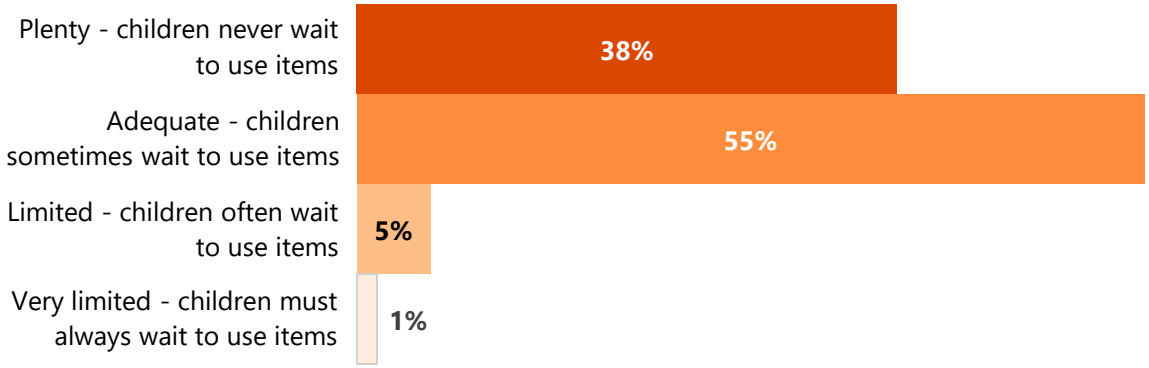
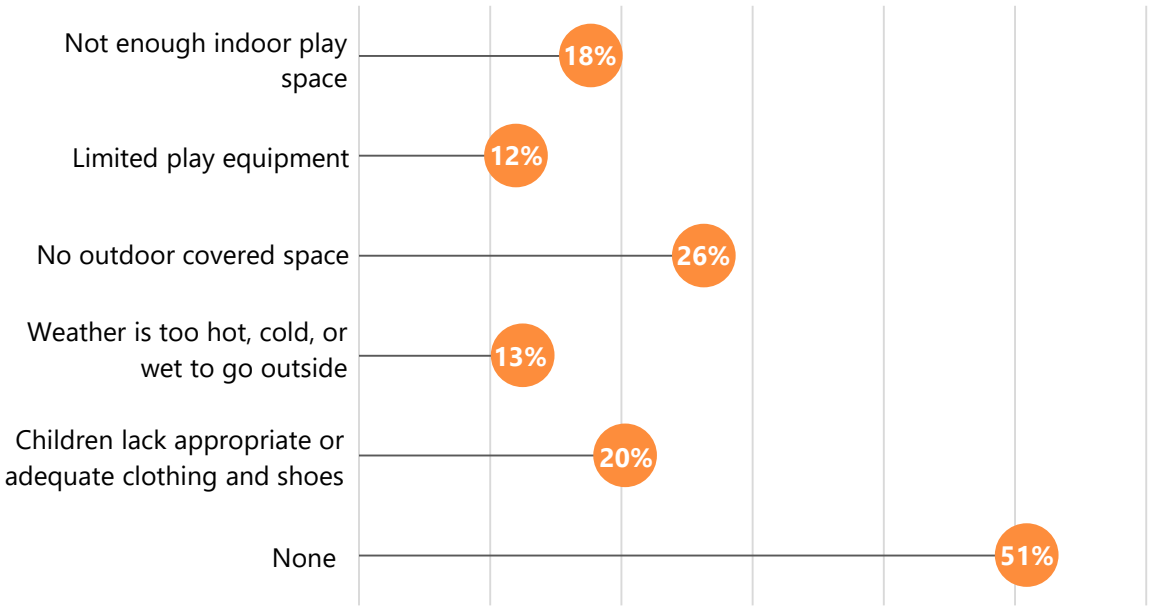


Figure 14: What best describes the amount of portable play equipment that children can use both indoors and outdoors while at care?



Whenever best practices are not being met, it's important to remember how challenging it can be to make changes to early learning programs. Figure 15 illustrates barriers respondents identified to promoting physical activity in their programs.

Figure 15: Challenges early learning programs report in providing more physical activity to children



Recommendations:

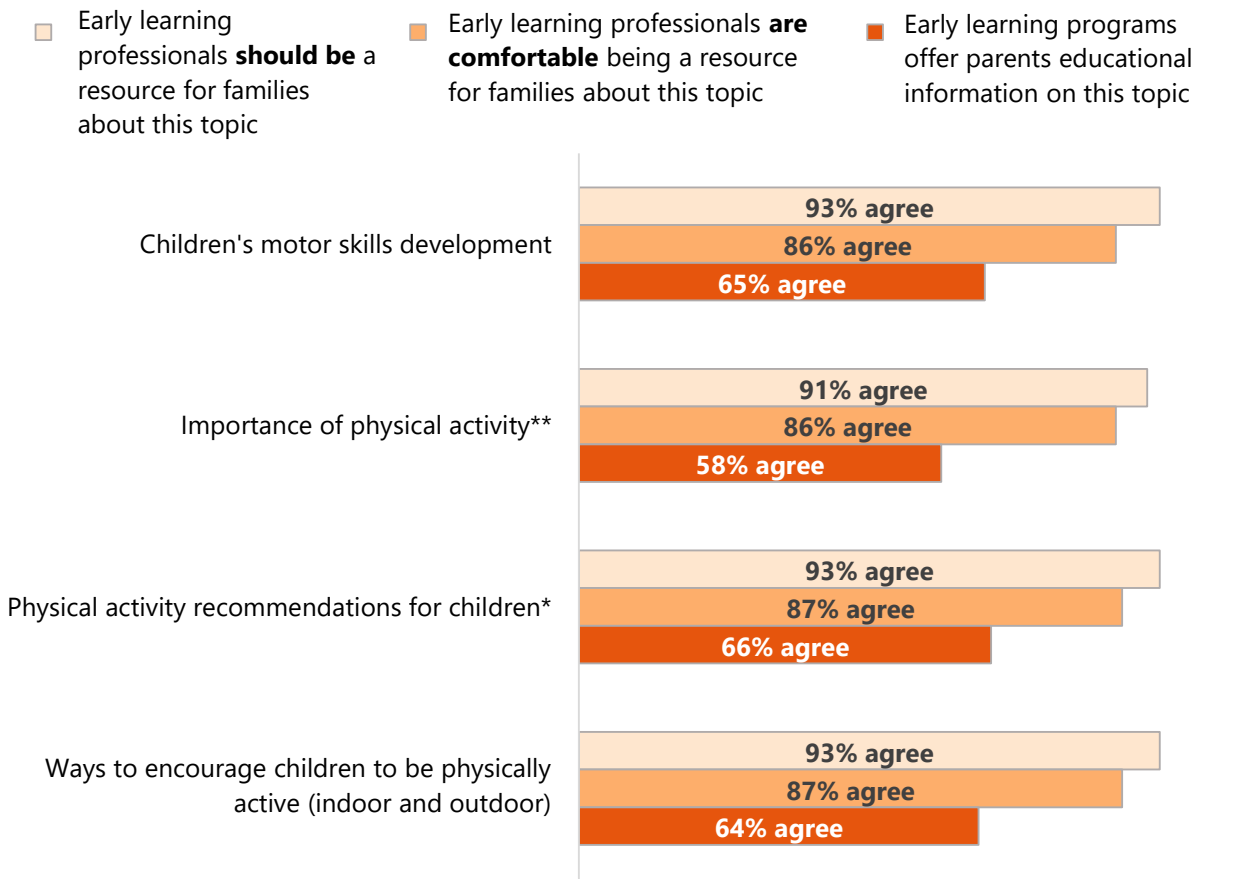
Provide support to early learning programs to enhance indoor and outdoor play environments.

- Suggested strategies:
  - Continue to support the **Department of Commerce's Community Capital Facilities – Early Learning Program**, which provides grants to Early Childhood Education Assistance Program (ECEAP) contractors to expand, remodel, purchase or construct early learning facilities and classrooms to support early learning opportunities, including indoor and outdoor play areas.
  - Expand eligibility for the **Community Capital Facilities** grant to all licensed programs, not just ECEAP programs or those intending to participate in ECEAP, and increase funding to meet demand.

Providers' Roles & Practices

As trusted caregivers, early learning professionals can be reliable community resources for child health information. Figure 16 shows that while most respondents agree that this is an important role, not all were comfortable being a resource for families on active play for toddlers and children. Even fewer programs reported offering information about physical activity and active play to parents.

Figure 16: Early learning professionals' opinions and practices on being a resource for families on physical activity for children and toddlers



***Family home programs only*
**Early learning centers only*

Staff training can help providers feel more comfortable sharing information and resources with families. Evidence suggests that early learning providers whose practices meet physical activity recommendations are also more likely to feel confident in their ability to support physical activity in children.[14] This supports encouraging continuing education on physical activity best practices. Figures 17 and 18 describe completed, required and interest in training experiences for physical activity in both **family home programs** and **early learning centers**. Questions on trainings were asked differently for each type of program to accommodate differences in the way programs are staffed and managed.

*Figure 17: In the last three years, have **family home programs** completed trainings on the following topics?*

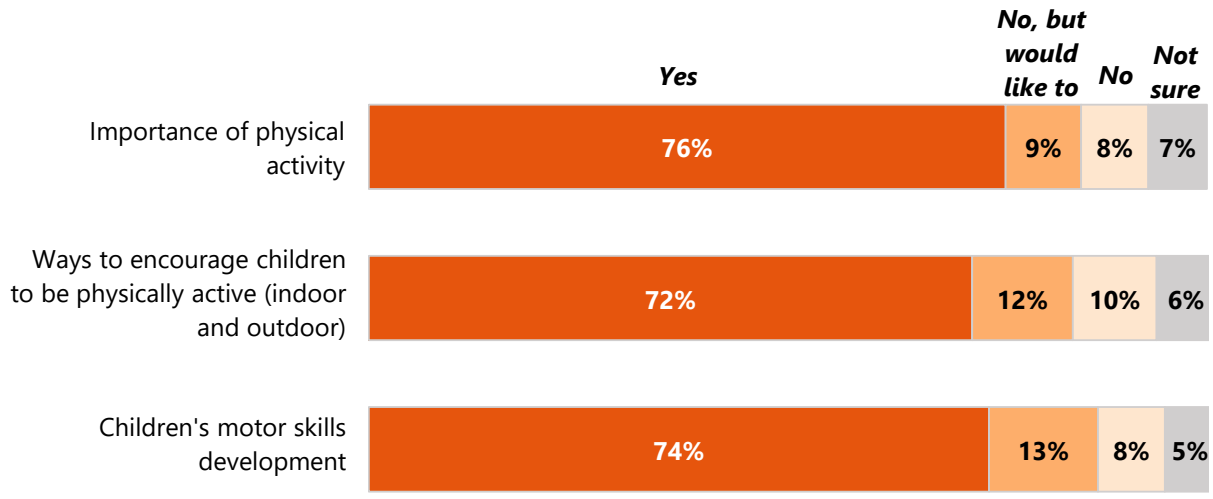
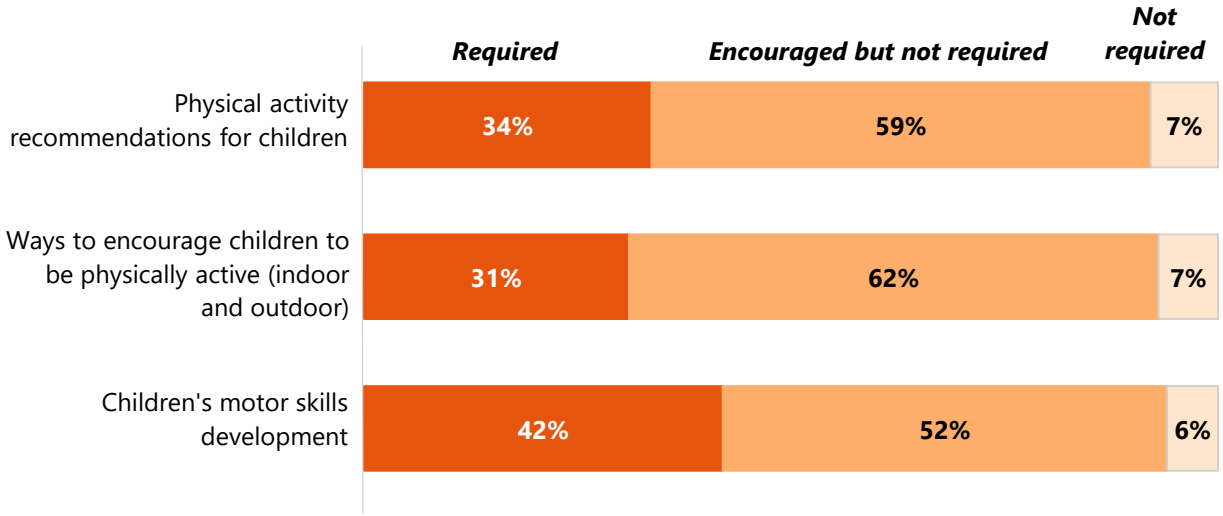


*Figure 18: What are **early learning centers'** training requirements for program staff?*

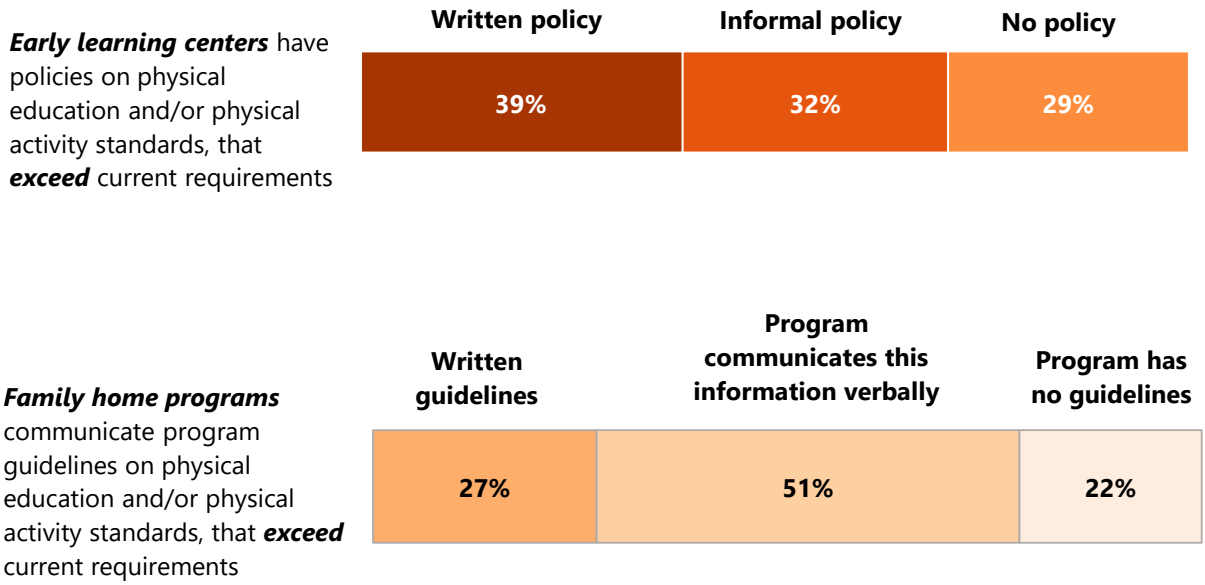


Early learning centers were asked to indicate whether staff desired more training opportunities from a list of topics. 47% expressed interest in more training opportunities on children's motor skills development, 51% on ways to encourage children to be physically active both indoors and outdoors, and 50% on physical activity recommendations for children.

Policies & Guidelines

Policies or written guidelines are recommended because they help make sure programs set and meet standards, assist with new staff orientation, and facilitate communication with families.[1] For example, clearly communicating clothing standards for parents would ensure children are dressed appropriately for outdoor play. CFOC4 recommends that written policies be updated yearly and include concrete steps to achieve desired results. Similar to training experiences, questions about policies and guidelines were asked differently for early learning centers and family home programs based on language commonly used by each type of program. The figure below describes the existence of policies or guidelines in Washington **early learning centers** and **family home programs**.

*Figure 19: Do early learning programs have a policy or guidelines on physical education and/or physical activity standards that **exceed*** current requirements*?



*At the time the survey was administered, licensing requirements fell short of best practices in many cases. Therefore, this survey asked whether programs had policies in place that exceeded current requirements.

Recommendations:

Increase availability and accessibility of training and education for early learning programs and professionals on active play, especially around developing and enacting policies that support best practices.

- Suggested strategies:
  - **State agencies and organizations** can offer culturally relevant trainings in multiple languages on physical activity and active play policies in early learning programs, targeting program administrators and offered for continuing education credits.
  - **States and local counties** can develop and implement a state or county recognition program on active play in early learning.
  - **State and local agencies, as well as resource and referral offices**, can consolidate resources and trainings on physical activity in early learning and provide links or distribute materials widely to early learning program staff.

Examples of websites with physical activity resources for professionals and families:

- "Best Practices in Physical Activity" by Nemours (https://d3knp61p33sjvn.cloudfront.net/media-resources/ECELC/C2P2/LS3/ECE_Program_Participants/English_PhysicalActivityGuide_FINAL.pdf)
- Physical Activity Tips & Resources for Educators (Nemours) (https://www.nemours.org/services/health/growuphealthy/activity/educators.html)
- Nutrition & Physical Activity Resources (Washington State Department of Children, Youth and Families) (https://www.dcyf.wa.gov/services/early-learning-providers/hng/resources)
- Healthy Kids, Healthy Future Resources for Physical Activity (https://healthykidshealthyfuture.org/5-healthy-goals/get-kids-moving/resources/)

To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email civil.rights@doh.wa.gov. Questions about this survey? Email the Washington State Department of Health at nourishedandactive@doh.wa.gov, or visit the "Nourished and Active in Early Learning" website at http://www.doh.wa.gov/HEAL/earlylearning.

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References

1. American Academy of Pediatrics, American Public Health Association, NRC 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. fourth. Itasca, IL; 2019. http://nrckids.org. Accessed February 27, 2019.

2. Nemours Health & Prevention Services. Best Practices for Physical Activity, volume 3. Newark. Delaware; 2013. https://d3knp61p33sjvn.cloudfront.net/media-resources/ECELC/C2P2/LS3/ECE_Program_Participants/English_PhysicalActivityGuide_FINAL.pdf. Accessed March 10, 2019.

3. Benjamin Neelon SE, Briley ME. Position of the American Dietetic Association: Benchmarks for Nutrition in Child Care. J Am Diet Assoc. 2011;111(4):607-615. doi:10.1016/J.JADA.2011.02.016

4. Robert Wood Johnson Foundation. Washington State Obesity Data, Rates and Trends – The State of Obesity. The State of Obesity. https://stateofobesity.org/states/wa/. Published 2018. Accessed February 25, 2019.

5. Williams AS, Ge B, Petroski G, Kruse RL, McElroy JA, Koopman RJ. Socioeconomic Status and Other Factors Associated with Childhood Obesity. J Am Board Fam Med. 2018;31(4):514-521. doi:10.3122/jabfm.2018.04.170261

6. Centers for Disease Control & Prevention. Childhood Obesity Facts | Overweight & Obesity | CDC. https://www.cdc.gov/obesity/data/childhood.html#obesity-among-preschoolers. Published 2018. Accessed February 27, 2019.

7. Thorn B, Tadler C, Huret N, et al. WIC Participant and Program Characteristics Final Report WIC Participant and Program Characteristics 2014 Final Report.; 2015. http://www.fns.usda.gov/wic-participant-and-program-. Accessed March 14, 2019.

8. Utesch T, Bardid F, Büsch D, Strauss B. The Relationship Between Motor Competence and Physical Fitness from Early Childhood to Early Adulthood: A Meta-Analysis. Sport Med. February 2019:1-11. doi:10.1007/s40279-019-01068-y

9. Janssen I, Leblanc AG. Systematic review of the health benefits of physical activity and fitness in school-aged children and youth. Int J Behav Nutr Phys Act. 2010;7:40. doi:10.1186/1479-5868-7-40

10. Bento G, Dias G. The importance of outdoor play for young children's healthy development. Porto Biomed J. 2017;2(5):157-160. doi:10.1016/J.PBJ.2017.03.003

11. Cohen KE, Morgan PJ, Plotnikoff RC, Callister R, Lubans DR. Fundamental movement skills and physical activity among children living in low-income communities: a cross-sectional study. Int J Behav Nutr Phys Act. 2014;11(1):49. doi:10.1186/1479-5868-11-49

12. Action for Healthy Kids. Alternatives to Withholding Physical Activity for Punishment. www.ActionforHealthyKids.org. Accessed March 11, 2019.

13. Hesketh KR, Lakshman R, van Sluijs EMF. Barriers and facilitators to young children's physical activity and sedentary behaviour: a systematic review and synthesis of qualitative literature. Obes Rev. 2017;18(9):987-1017. doi:10.1111/obr.12562

14. Bruijns BA, Adamo KB, Burke SM, et al. Exploring the physical activity and screen-viewing-related knowledge, training, and self-efficacy of early childhood education candidates. BMC Pediatr. 2019;19(1):5. doi:10.1186/s12887-018-1358-6