



## Alabama's Standards *for* Early Learning and Development

### APPENDIX FIVE

# PHYSICAL ACTIVITY: GOOD HEALTH THROUGH MOVEMENT



ALABAMA DEPARTMENT OF  
Early Childhood  
Education

In partnership with



*Publications or audiovisual media must include the following disclaimer: "The Alabama Standards for Early Learning and Development was made possible by grant number 90TP0065-01-00. Its contents are solely the responsibility of the authors and do not necessarily represent the official view of the United States Department of Health and Human Services, Administration for Children and Families." [HHS Grants Policy Statement, page II-31].*

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## Physical Activity: Good Health through Movement

### Introduction

Research shows that there is a relationship between cognitive (or learning) readiness and physical skill mastery. As children demonstrate balance, coordination, and strength, they are showing that they have the necessary skills to do things such as sit still and pay attention, balance in a chair, hold a pencil, track their eyes on a line – all necessary skills for learning. Children initially develop these skills through the typical sequence of skill mastery and then further develop them through play. The Center for Disease Control (CDC) tells us that “regular physical activity can help children and adolescents improve cardiorespiratory fitness, build strong bones and muscles, control weight, reduce symptoms of anxiety and depression, and reduce the risk of development health conditions such as heart disease.”

### How Much Physical Activity is Enough?

Shape America, or the Society of Health and Physical Education, has produced a set of guidelines for young children in its document *Active Start: A Statement of Physical Activity Guidelines for Children, Birth to Age 5*, 2<sup>nd</sup> edition. It specifies the amount and type of activity children should experience. Similar guidance is provided by Nemours Healthy Start, Standard 3.1.3 (Physical Activity and Screen Time) in *Caring for Our Children*, and the American Heart Association.



#### *Guidelines for Infants*

**Guideline 1** Infants should interact with caregivers in daily physical activities that are dedicated to exploring movement and the environment.

**Guideline 2** Caregivers should place infants in settings that encourage and stimulate movement experiences and active play for short periods of time several times a day.

**Guideline 3** Infants’ physical activity should promote skill development in movement.

**Guideline 4** Infants should be placed in an environment that meets or exceeds recommended safety standards for performing large-muscle activities.

**Guideline 5** Those in charge of infants’ well-being are responsible for understanding the importance of physical activity and should promote movement skills by providing opportunities for structured and unstructured physical activity.



### *Guidelines for Toddlers*

**Guideline 1** Toddlers should engage in a total of at least 30 minutes of structured physical activity each day.

**Guideline 2** Toddlers should engage in at least 60 minutes -- and up to several hours -- per day of unstructured physical activity and should not be sedentary for more than 60 minutes at a time, except when sleeping.

**Guideline 3** Toddlers should be given ample opportunities to develop movement skills that will serve as the building blocks for future motor skillfulness and physical activity.

**Guideline 4** Toddlers should have access to indoor and outdoor areas that meet or exceed recommended safety standards for performing large-muscle activities.

**Guideline 5** Those in charge of toddlers' well-being are responsible for understanding the importance of physical activity and promoting movement skills by providing opportunities for structured and unstructured physical activity and movement experiences.



### *Guidelines for Preschoolers*

**Guideline 1** Preschoolers should accumulate at least 60 minutes of structured physical activity each day.

**Guideline 2** Preschoolers should engage in at least 60 minutes -- and up to several hours -- of unstructured physical activity each day, and should not be sedentary for more than 60 minutes at a time, except when sleeping.

**Guideline 3** Preschoolers should be encouraged to develop competence in fundamental motor skills that will serve as the building blocks for future motor skillfulness and physical activity.

**Guideline 4** Preschoolers should have access to indoor and outdoor areas that meet or exceed recommended safety standards for performing large-muscle activities.

**Guideline 5** Caregivers and parents in charge of preschoolers' health and well-being are responsible for understanding the importance of physical activity and for promoting movement skills by providing opportunities for structured and unstructured physical activity.

## Daily Play Recommendations

	MINIMUM TIME FOR			Additional Recommendations
	Teacher-led Play	Unstructured Play	Outdoor Play	
<b>Infants</b>	Build up to 30 minutes		2-3 times	Limit time to be in pre-made equipment
<b>Toddlers</b>	30 minutes	60 minutes	60-90 minutes	Limit inactivity to no more than one hour at a time except when sleeping
<b>Preschoolers</b>	60 minutes	120 minutes	60-90 minutes	Include light, moderate, and vigorous play

## Physical Activity for Infants

It's never too early to encourage children's exercise for good health. Infants need opportunities for physical activity to develop their muscles, their bones and to practice their gross and fine motor skills. Babies' earliest movements and exploration help them make those brain connections that develop into healthy behaviors as they grow older, protect against obesity and support better sleep habits. Infants need opportunities to explore, move their bodies, and to experience the results of movement and action. Infants' physical activity begins with tummy time. When babies are laid on their tummies, they are acquiring the brain connections that link to motor development. They can use their limbs to reach, push, pull, kick, and twist. They strengthen their neck muscles and ready themselves for crawling and walking. Very young babies should be given 3-5 minutes of tummy time at a time, building up to about 30 minutes.

Infants' routines offer opportunities for physical activity. Professionals can move babies' legs and arms as they change diapers and get them dressed. They can wiggle fingers and toes as they sing movement songs like "This Little Piggy". Self-feeding, as well as toys that children can shake, bang, stack or grasp build eye-hand coordination.

Infants' movement must be supervised and should not be restricted. As babies begin to roll, sit, crawl, and walk, they need plenty of space and opportunities to safely practice those skills. Infant equipment such as swings, bouncy seats or molded seats should be limited and used for short periods.



## Physical Activity for Toddlers

Toddlers need opportunities to stay healthy and develop motor skills through physical activity. Just like infants, they are building those important brain connections that link physical activity with skills. Toddlers need experiences that help them associate the joy of physical activity and movement with good attitudes and habits. They need to learn the skills that later make exercise easier and enjoyable.

Active play materials and equipment should assist toddlers' use and practice of basic movements. For example, delays in climbing mastery may occur if children aren't given opportunities to climb steps or eye-hand coordination may lag if they don't have access to balls to roll, throw and catch.

Toddlers' vigorous play typically occurs in short spurts that last for about 5-10 minutes, and then are followed by quieter activities. Professionals should provide both structured and unstructured play experiences that consider toddlers' short attention spans. Examples of structured play include dancing to music or a parade. Unstructured play allows children to move about freely and can include climbing or riding toys, running or walking.

Toddlers enjoy walking, jumping, running, marching and moving to music. They like riding toys and using toys that move like cars or trucks. Provide obstacle courses or opportunities to climb over, crawl through or climb over build muscles; and encourage their fun with rolling or throwing balls.

## Physical Activity for Preschoolers

The U.S. Department for Health and Human Services recommends that pre-school children aged 3-5 should be physically active throughout the day with a minimum of three hours of a combination of light, moderate, and vigorous activity (2018). While the goal of three hours may seem daunting, physical activity can be integrated during the daily schedule and be used to support children's learning. Purposefully-designed physical activity can be used for transitions, and active play time like blocks or dress-up, and moving to music count toward the three hour goal.

Research also shows that when professionals design structured physical activities or games, children's physical activity levels are greater. Professionals should consider ways to design short, structured activities such as relay races or parachute play to promote physical activity.

The National Association for Sport and Physical Education describe three elements of exercise: endurance, strength, and flexibility. Aerobic activities such as running or hopping where children are active for periods of time, increase the heart rate, develop endurance. Climbing activities or exercise develop strength; and activities like stretching or bending that improve children's range of motion help to develop children's flexibility.

Preschoolers like to hop, skip and jump. They enjoy balancing, catching and kicking balls, and practicing gymnastic skills like tumbling. Preschoolers have fun with bike-riding, dancing or using playground equipment.

## **Integrate Physical Activity throughout the Day**

Early childhood professionals can incorporate physical activity experiences throughout the day. They can intentionally build motor skill development and movement as they teach math, literacy or social-emotional concepts or through the design of their environment.

Children can:

- Move and act out stories (language and literacy)
- Walk or move like animals (science)
- Exercise to music (creativity)
- Use rhythm sticks, scarves or clapping games (mathematics)
- Count while they hop or jump from one object to another (mathematics)
- Participate in obstacle courses where they are learning over, under, up, down, etc. (language and literacy and mathematics)
- Dance or move with others (social)
- Act out different feelings such as stomp when mad (emotional)
- Follow directions during movement games, like stop or go, fast and slow (approaches to learning and language and literacy)
- Make the shape of letters or numbers with their bodies or hands (mathematics and language and literacy)

Transitions may be more controlled when professionals build movement into them. Children can hop to the door, crawl to the table, or dance from one activity to another. As they walk outside, they can gently tap their heads or tummies, or walk on a tape line to balance. Prepare children for quiet or listening activities with a movement exercise. Do a series of exercises before story time; play Head Shoulders Knees and Toes before preparing for lunch.

## **Outdoor Play Leads to Good Health**

Outdoor play must be a vital part of children's daily experiences. They need to breathe the fresh air, release pent-up energy, and engage in the exploratory, active play that being outside promotes. The Harvard School of Medicine, in their Health Publishing Blog describes 6 Reasons Children Need to Play Outside and how they support children's good health. They tell us outside play provides: 1) sunshine; 2) exercise; 3) executive functioning (unstructured time to make up games and rules, to explore on their own and figure things out; 4) risk-taking; 5) socialization; and 6) appreciation of nature.

Head Start, in *Going Outside Improves Health*, lists numerous benefits from outdoor play.

Outdoor time:

- strengthens the heart and muscles
- strengthens children's immune systems
- reduces the number of viruses they may acquire and it provides access to vitamin D that improves bones and teeth.
- Positively impacts children's sleep patterns
- Reduces the likelihood of near-sightedness
- Produces milder symptoms of ADHD
- Helps develop a general sense of well-being
- Exposes children to a specific type of bacteria in dirt that may reduce anxiety and improve the ability to learn new tasks

### Infants and Outdoor Play

There are wonderful experiences for infants outside! Through their senses, they can explore nature, enjoying its smells, sights, and sounds. Babies can enjoy the touch of tree bark, the smell of flowers, or the sounds of birds as they tweet from trees. Infants can be laid on their bellies on a blanket or a safe area of grass to watch others' actions or to feel the grass through their fingers. They can also practice pushing-up, crawling, climbing or early toddling in the grass or on outside surfaces.

### Toddlers and Outdoor Play

Toddlers learn about their bodies when they play on outdoor equipment. As they climb up the ladder of a slide or crawl through a tunnel on a climbing structure, they are learning about taking risks, developing confidence and understanding about their body in space. Toddlers love to dig; sandboxes or dirt piles present exciting opportunities for learning.

### Preschoolers and Outdoor Play

Outdoor play for preschoolers offers children opportunities to master skills like running, hopping and jumping and skipping. They can practice climbing, learn how to pedal riding toys, and use soil, sand and water to learn concepts. Nature walks expose them to the environment, building stronger attitudes and behaviors about nature and its need for protection. Preschoolers continue to develop the confidence and information about their own bodies in space and relish experiences that encourage independent exploration as well as social play with others.

