How do physical development and health goals relate to school readiness? The first three years of life involve rapid growth and intense learning and work in the area of physical development. Newborns depend on adults to meet all of their nutritional and physical needs. They are not yet able to walk, point, reach, or even hold their own heads up! Feeling good—that is, good physical health—gives them the energy and strength to do the hard work ahead. Think of how hard a mobile infant works at pulling up to stand, day after day, practicing and gaining strength. Usually, with the support of a loving adult, the hard work pays off and the baby finally stands easily—and then moves on to the next task. By the age of three, most children can walk, run, climb, scribble, paint, do puzzles, and more.

“The physical development that occurs in the first three years of life is astounding.”

In This News You Can Use, we explore some vignettes about physical development and health as they relate to school readiness goals. (See School Readiness Goals for Infants and Toddlers in Head Start and Early Head Start Programs.)

The physical development that occurs in the first three years of life is astounding. Keep in mind a few things as you watch children learn and grow in this area:

- Most children develop in a predictable order (rolling over before sitting, sitting before crawling), but the ages at which they attain these milestones vary widely and depend on many factors.
- Although we often look for big milestones such as eating solid foods or walking, each of these requires smaller milestones that involve skills that can also be observed.
- Family priorities can affect when children reach different milestones. Family values determine the amount of practice and attention children get for different skills.
Healthy and Safe Habits
(Example for Goal 3, for older infants)

Seventeen-month-old Josanna walks up to her teacher, Carly, and says, “Shu-shu.” Carly replies, “You want a tissue? Here, let me help you wipe your nose.” After they wipe her nose, Carly says, “Come on and let’s wash our hands now.” Josanna and Carly walk over to the sink and wash hands while singing (to the tune of “Row, Row, Row Your Boat”), “Wash, wash, wash our hands every single day. When we wash them really well we wash the germs away.” After singing the song two times, they wipe their hands with paper towels, throw the towels away, and go back to play.

Washing hands is one of the most effective ways to prevent spreading germs that can cause illness. Although very young children will begin to participate in the routines that support healthy development, they will need the adults in their lives to support and reinforce these routines for many more years.

What could washing hands have to do with school readiness? In fact, such everyday routines set the foundation for a life of healthy habits. Children who are healthy, both mentally and physically, are able to fully participate in learning. Programs can play a crucial role in helping families stay healthy. Here are just a few ways:

- Practice healthy habits in group care, during socializations, and during home visits. Know when to wear gloves, wash hands, and take other health precautions.
- Know what resources are available in your community for families such as free outlet covers, free or low-cost clinics that offer health care and immunizations, and other useful supports.
- Be respectful of family beliefs and values around these healthy habits.

Large Muscle Control
(Example for Goal 1, for young infants)

Eight-week-old Jonas is being held by his mother, Angelica, during a home visit from Yvonne. As the adults talk, Jonas holds up his head and looks from one adult to another. Yvonne notices his strong head control and asks Angelica if they are doing any “tummy time.” Angelica says they are and puts Jonas down on a blanket on the floor on his stomach. Jonas immediately pushes himself up with his arms, lifts his head for a moment, and then lays down. He does two more “baby push-ups” then begins to cry, signaling he is done.

It may seem that Jonas’s small head movements and push-ups don’t amount to much. In fact, they are very important foundations for later milestones such as sitting and crawling. When you consider that the baby’s head is the heaviest part of his body, just imagine what it takes to hold it up while turning toward the source of adult’s conversation! The ability to balance and keep his head upright will help Jonas in a few months when he is trying to sit up.
The “baby push-ups” Jonas shows off for his mother and home visitor are the very beginning movements that will give him the strength to become mobile. Yvonne is impressed with how strong Jonas is, as well as with his willingness to be on his tummy for a few minutes at a time. She explains to Angelica how these movements will later become purposeful and lead to further gross motor milestones such as rolling over, sitting, and crawling. She also notes how Jonas is able to focus and shift his attention from one adult to the other as though he were following the conversation, which demonstrates the emerging ability to regulate himself. (To learn more about self-regulation and attention, check out the News You Can Use “Foundations of School Readiness: Approaches Toward Learning” series).

Tummy time can be very unpopular with some young infants, who may prefer to be held or to be on their backs. It can help to keep these sessions very short or until the baby shows signs of distress. But for children who spend a lot of time sleeping on their backs, tummy time is important for physical development. It is a great way for babies to gain neck strength as well as upper-body and arm strength. Some families may be uncomfortable with allowing their baby to be on the floor for cultural or for health and safety reasons. Offer families ideas such as using a blanket, a crib mattress, or a parent’s lap or chest. Remind families that tummy time should always be supervised.

**Small Motor Control**
(Example for Goal 2, for toddlers)

*Thirty-two-month-old Alexei sits on the floor with Justine, his family child care provider. Alexei is taking small cars and lining them up. He picks up a car from the basket and carefully places it just next to the last one before reaching for another car. When he has lined up all of the cars, he reaches for a basket of small, plastic dogs and begins to line them up as well, side by side. As Justine watches him, she thinks of all the skills he has mastered to be able to do this seemingly simple task.*

Small or fine motor (muscle) control generally develops after larger motor movements are mastered. For example, a baby can bang with her whole hand before she can pick up items with a pincer grasp. Alexei may have built with large wooden blocks, pushed big trucks around, and painted in large strokes before he had the finer control required to line up cars and small animal figures. As Alexei grows, he will need to refine these small motor skills even further in order to hold a pencil and write in school. Here are some ways that adults can help children develop small motor strength and skills:
• Provide play dough and clay for children to build their hand strength.
• Allow children to color and paint on large pieces of paper so they can use broad strokes. As they gain control over their whole arm, they will build their ability to make smaller marks on smaller paper.
• Sing songs with hand movements such as “The Itsy Bitsy Spider” and “Twinkle, Twinkle, Little Star.”
• Play the “thank you game”: The child hands you an object, you take it and say thank you, and then you hand it back to the child. This grab-and-release activity not only supports fine muscle development, but also helps reinforce the pleasure of taking turns.

Conclusion

We hope for good health for all the children we serve, and ever-developing motor skills. Remember that families are essential partners in this care and learning. Talk with families about the many ways that they practice important health routines with their children. Talk with them about all the ways you keep their children safe and healthy so that when children get sick—and they will—families will feel confident that you are doing your best to keep their children healthy.

Infants and toddlers are continuously reaching motor milestones, and when they do, adults often celebrate. Because of the excitement and pride many families feel about their child’s motor development, it can be a wonderful avenue for building relationships with families as you share in their joy and celebrations. You can also help families see all the important “mini-milestones” that may be leading up to bigger ones.


SUMMARY:
This News You Can Use (NYCU) discusses physical development and health for infants and toddlers. Readers can explore what physical development and health look like for infants and toddlers and how adults can support them using the sample goals from School Readiness Goals for Infants and Toddlers in Head Start and Early Head Start Programs.

Key Messages:
- Early health habits support lifelong health and wellness. Adults need to keep young children healthy and safe while modeling positive healthy habits.
- Physical development generally happens in a predictable order, although the timelines can be different for individual children.
- Supporting infants’ and toddlers’ physical development involves recognizing all of the smaller steps that lead up to the major milestones.

Think:
- How do the ideas in this NYCU support the work you do with infants, toddlers, and their families?
- What ideas do you already use in your practice? What might you change or add based on what you read?

Reflect:
- How might your own beliefs about health and health practices affect how you respond to families’ beliefs or practices?
- Think about how you share milestones with parents. Some parents might feel guilty or upset if they find out their child took his first steps and they missed it. Has there been a time when you shared a milestone with a parent and that sharing brought about an unexpected reaction? How might you have done it differently?
- How do you decide what milestones to share with parents?

Discuss:
- Look at the Physical Development and Health Goals in the School Readiness Goals for Infants and Toddlers in Head Start and Early Head Start Programs resource. What are some other examples for how you support both physical development and wellness with the infants, toddlers, and families in your program?
- What stories can you share from your own work with young children and their families that show how you have physical development and health?

Next Steps:
- Learn more about how physical development and health relates to school readiness by reading the National Center on Health’s fact sheet “Healthy Children Are Ready to Learn.”