

Infancy, Childhood, and Adolescence

Learning Targets

- Identify major developmental milestones in infants and young children.
- Describe puberty, and list the secondary sex characteristics of males and females.
- Identify two cognitive changes that occur during adolescence.
- Describe two emotional changes and their impacts that occur during adolescence.



Terms to Learn



abstract thinking

adolescents

cognitive development

developmental milestones

growth spurts

impulse control

physical development

puberty

reasoning skills

secondary sex characteristics

socioemotional development

The Big Picture

What do you remember about yourself as a young child? Have you changed over the years? Infancy and childhood are periods of tremendous change as rapid development occurs physically, cognitively, and emotionally. Developing fully in each of these areas helps us achieve wellness at all stages of life.

Write About It

How have you changed since you were a young child, and how have you stayed the same?

Imagine a tiny seed planted in the ground. Given the right amount of care, sunlight, and water, the seed will sprout, grow taller, and eventually blossom into a beautiful flower. Infants and children are similar to little seeds as they embark on their amazing journey of development. They begin to grow physically, developing the strength to hold their heads up, crawl, and eventually walk, run, and jump. They are also developing socially and emotionally as they learn to recognize and respond to facial expressions. Infants and children begin to bond and build relationships with caregivers, eventually understanding their own emotions and feelings. Their brains are also like sponges, absorbing information from the world around them, including language and the ability to think for themselves. This developmental process is crucial for every person and shapes them into unique individuals with the potential to thrive and flourish.

The Lifespan

Infancy and childhood are the first two stages of a longer lifespan. The average adult lifespan in the United States is 80 years for females and 75 years for males. Over this lifespan, a person passes through six developmental phases (see figure 1). Each phase is marked by unique factors related to well-being. In infants, children, and adolescents, growth and developmental factors are most prominent as the body and brain reach maturity. During young adulthood and middle adulthood, factors related to maintaining emotional and physical health and managing stress become prominent. The older adult years are often marked by declining physical, emotional, and mental health; challenges to social well-being; and the stress associated with these changes.



Figure 1 General stages of the lifespan.

Infants and Children

The first two stages of the lifespan are infancy and childhood. Two of the most obvious markers of **physical development** in infants and children are weight and height. Parents and physicians track changes in weight and height to make sure that the child is properly nourished and healthy. Physical development also involves changes in motor skills (movement abilities) and sensory perceptions. These changes are particularly rapid during the first two years of life. For example, by six months most infants can roll from their stomach to their back, and by one year most can pull themselves to a stand, walk while holding onto furniture, and drink from a cup with a lid.

Cognitive development is the acquisition and development of skills such as language use, problem-solving, and reasoning. Emotional and social development involves expressing feelings about self, others, and things. It also involves relating well to others. Because emotional development and social development are closely related, they are often referred to as **socioemotional development**.

Early on, infants communicate mostly through crying, but as they grow, they learn to smile, laugh, and engage in back-and-forth interactions. By nine months, babies may exhibit stranger anxiety, a normal stage where they show a preference for familiar faces. As they approach toddlerhood and beyond, children become

Learning to crawl is just one of many developmental milestones expected in a typically developing infant.

increasingly aware of others' emotions, learning to show empathy and to comfort those who are upset. They begin engaging in pretend play, demonstrating their growing capacity for imagination and understanding of social roles. Markers of healthy socioemotional growth include developing self-esteem, empathy, and friendship.

Developmental milestones are the physical and behavioral signs one expects to see in a typically developing infant or child during a period or at a particular age. Table 1 presents some of the major physical, cognitive, and socioemotional milestones for infants and young children.

TABLE 1 Developmental Milestones for Infants and Young Children

| Age | Milestones |
|-------------|---|
| 0-6 months | Grows rapidly (doubles birth weight), follows objects with eyes, reaches with both hands, places objects in mouth, turns over unassisted, recognizes parents with smile at 2 to 3 months, responds to adult interaction by 6 months. |
| 7-12 months | Triples birth weight, doubles birth length, begins to grow teeth, stands up, crawls and begins to walk unassisted, begins to distinguish strangers, experiments with sounds, develops sense of self, distinguishes between good and bad, begins to attract attention with giggles and shouting, has sense of humor, demonstrates separation anxiety from parents. |
| 1-3 years | Continues to grow and gain weight (at a slower rate), has emerging teeth, runs, climbs, pushes and pulls, can learn taught skills, has fully developed range of emotions, moves from playing alone to having a set of friends, understands friendship, uses short sentences such as "me want cookie." |
| 4-6 years | Continues to grow 2 to 3 inches (5 to 7.5 cm) per year; legs lengthen; eats and drinks independently; hops, skips, and throws; has emerging molars and some permanent teeth; generally wants to please others; can follow rules and play in groups; selects own friends; uses a vocabulary of 2,100 words. |

Caring for Infants

If you're caring for an infant, talk with their parents or guardians for guidance. Make sure you know what to do and what not to do.

Be sure to know

- what to do when the baby cries,
- what to do if you suspect that the baby is sick,
- how to properly put on a diaper,
- how to bathe the baby safely,
- how to give the baby a bottle and burp the baby safely, and
- how to properly pick up and hold the baby.

Do not

- leave the baby alone,
- hit or shake the baby,
- yell or scream at the baby, or
- give the baby any toys or objects that could be swallowed.

Adolescence

The third stage of the lifespan is called adolescence. **Adolescents** are individuals between the ages of 10 and 19 who are experiencing changes that mark the transition from childhood to adulthood. The period of adolescence in which the body undergoes sexual development is known as **puberty**. Physical changes that occur during puberty include the development of **secondary sex characteristics** (see figure 2) and the start of ovulation in girls and sperm production in boys. At this time, the body can undergo rapid changes to height and weight known as **growth spurts**. During this time, bone length increases; this growth can cause aches and pains as well as muscle cramps. All of these physical changes during puberty can be a source of self-consciousness for adolescents who might compare themselves to their peers and feel anxious about their appearance.

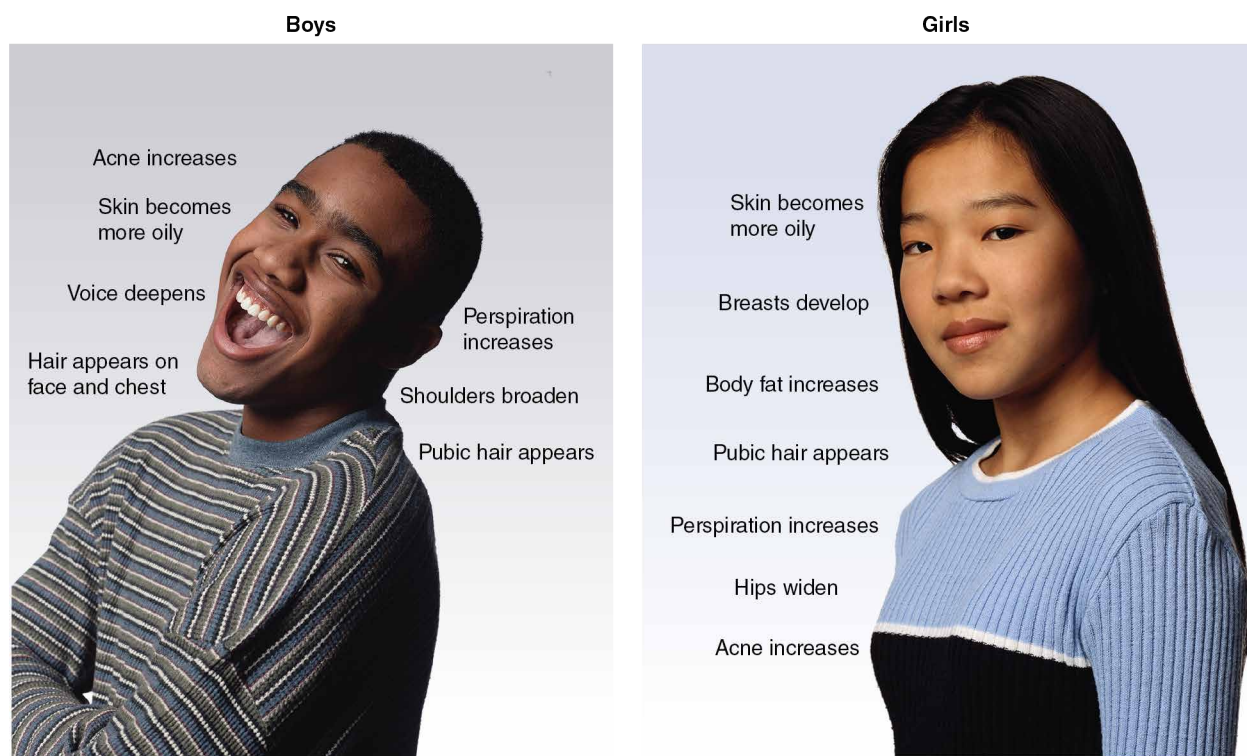


Figure 2 Secondary sex characteristics.

Adolescents and Healthy Behaviors

Physical changes can also alter how the body moves and reacts. As a result, it can sometimes feel awkward to do activities and sports that are normally easy or familiar. Both girls and boys may also feel self-conscious about their appearance during this time. Rest assured that it's normal for adolescents to feel self-conscious about changes in body size, shape, and appearance. The physical changes that accompany puberty are normal. Everyone will experience them, even though they can occur at different times and at different rates.

Girls are particularly at risk of dropping out of physical activity as they progress through adolescence. At this time they typically have an increase in overall body fat, develop breasts, start menstruating, and undergo changes in body shape that shift their center of gravity. These developments can cause self-consciousness and a perceived drop in skill or ability. While boys are more likely than girls to remain active during the teenage years, activity rates among boys also decline during adolescence. Continuing to be physically active throughout your teenage years helps you practice healthy habits in adulthood. Being physically active also helps prevent weight gain and can improve self-esteem. Be supportive of friends, and encourage each other to stay active.

Because growth takes a great deal of energy, both boys and girls experiencing puberty often notice an increase in appetite. Though it's normal to eat more during this time, you should select healthy and nutrient-dense foods that give your body the nourishment it needs.

Cognitive Development During Adolescence

Adolescence is a time of profound cognitive and emotional development. For one thing, you improve considerably at **abstract thinking**—the ability to consider things that are not visible, immediate, or concrete. You also improve your **reasoning skills**—your ability to solve problems and make decisions. Together, these changes allow you to think more critically and evaluate ideas more carefully. As your brain matures and develops, you may notice improvements in your ability to do math, solve scientific questions, and express complex ideas.

Adolescence and Emotional Well-Being

Adolescence can also bring uncertain and changing emotions. Many preteens and teenagers have emotions that at times seem uncontrollable. This emotional uncertainty results in part from an increase in hormones, such as estrogen and testosterone. As a result, despite adolescents' maturing cognitive abilities, they may also have challenges with **impulse control**—the ability to resist making rapid decisions without fully considering the consequences. It's important to think twice about any sudden or rash decisions you are tempted to make. You also need to consider the possible effects on your health and wellness. Examples include driving aggressively, drinking, using drugs, and being violent.

In addition, adolescence is a time of intense self-discovery and searching. This is a normal part of the adolescent experience. You may find yourself seeking meaning and purpose in your life. You may question your values and beliefs as you work to define what's important to you. You may also feel like experimenting with your physical appearance and personality. For example, you might try different clothing and hairstyle choices and other forms of expressing your identity and personality. All of this emotional change—along with the physical changes your body is going through—can make your teenage years a turbulent yet exciting time.

Skill-Building Challenge

Access Valid and Reliable Resources

Imagine you have been asked to take care of a younger sibling or to babysit a neighbor's child for the first time, and you want to make sure you are ready. Conduct some online research about how to successfully babysit a child who is between three and six years old. Compare information from at least three different valid and reliable sources, and use the information to make yourself a checklist. Your checklist should contain at least six items and should help you prepare to be successful as well as to handle a variety of situations that might arise.

Healthy Living Skills

This lesson focuses on the skill of accessing valid and reliable information. Here is another way you can develop healthy living skills related to this lesson.



INTERPERSONAL COMMUNICATION

You have noticed that your friend is having more mood swings than usual and that they are engaging in more risky behaviors. At first they were just doing things their parents told them not to do, like wearing an inappropriate shirt at school and buying energy drinks from the corner store. Lately, though, it seems they are becoming more impulsive and reckless. Yesterday they stole a bag of chips from the store, and this morning they skipped class to play video games instead. You are worried about your friend and this impulsive behavior. How might you share your concerns, and what communication strategy or strategies would you use in this situation? Write out a couple of things you might say to your friend.

LESSON SUMMARY

Developmental milestones in infants and young children are the physical and behavioral signs one expects to see as a person grows and develops. They encompass a range of things such as taking their first steps, smiling for the first time, and forming their first words and sentences. These milestones provide a general idea of the changes to expect as a child grows, with the understanding that children will develop at their own pace.

Puberty is a period of significant physical development marked by hormonal changes that lead to the body's transition from childhood to adulthood.

Adolescence is characterized by significant cognitive development, including the development of abstract thinking and improved reasoning skills. Abstract thinking enables adolescents to engage with concepts that are not concrete or readily visible, while enhanced reasoning abilities allow them to solve problems and make decisions.

The hormonal shifts during adolescence contribute to emotional volatility and challenges with impulse control. The intensity of emotions experienced during this time can make adolescents more susceptible to mood swings, while impulse control might lead to risk-taking behaviors.

REVIEWING CONCEPTS AND VOCABULARY

1. Changes in motor skills, perception, and hearing are a normal part of _____ development.
2. The acquisition and development of skills such as language, problem-solving, and reasoning are part of _____ development.
3. Periods of relatively rapid growth called _____ can cause aches and pains as well as muscle cramps.
4. Facial hair growth is an example of a _____ sex characteristic among males.
5. Lack of _____ control can lead to risk-taking behaviors in adolescence.

THINKING CRITICALLY

How might a person's lack of impulse control interact with peer pressure when it comes to making health decisions in adolescence? Give one positive and one negative example.

TAKE IT HOME

Talk to a parent or guardian about what you were like when you were an infant and young child. Did you develop more slowly or more quickly than expected? Did you do anything that was surprising or unexpected as you developed?

