### **Emergency Care**

#### THIRTEENTH EDITION



# CHAPTER 8

#### Life Span Development

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### Topics

- Infancy (Birth to 1 Year)
- Toddler Phase (12–36 Months)
- Preschool Age (3–5 Years)
- School Age (6–12 Years)
- Adolescence (13–18 Years)
- Early Adulthood (19–40 Years)
- Middle Adulthood (41–60 Years)
- Late Adulthood (61 Years and Older)

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#### A newborn infant.

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#### Physiological

- 3.0–3.5 kg (6.6–7.7 lbs) at birth
- Weight doubles by six months; triples by twelve months.
- Head 25 percent of total body weight
- Airway narrow; easily obstructed
- Nose and diaphragm used for breathing

- Physiological
  - Antibodies passed from mother to child in pregnancy
  - Antibodies also passed through breastfeeding

- Physiological
  - Moro reflex (startle)
    - Throws arms out, spreads fingers, grabs with fingers and arms
  - Palmar reflex
    - Grasps objects placed in palm
  - Rooting reflex (hunger)
    - Turns toward side of head touched

#### Moro Reflex



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#### Palmar Reflex



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#### Rooting Reflex



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- Physiological
  - Sucking reflex
    - Sucks when lips are stroked
  - Sleep patterns
    - Begin to regulate after two to four months
    - Then sleeps through night
  - Extremities grow from a combination of growth plates and epiphyseal plates.

- Physiological
  - Fontanelles not fused at birth
    - Posterior fontanelle closes in two or three months.
    - Anterior fontanelle closes between nine and eighteen months.

- Physiological
  - Sunken fontanelles indicate dehydration.
  - Bulging fontanelles indicate increased pressure inside skull.

- Psychosocial
  - Bonding
  - Trust versus mistrust
  - Scaffolding
  - Temperament

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#### A year-old infant.

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- Physiological
  - Pulmonary system
  - Nervous system
  - Musculoskeletal system
  - Immune system
  - Teeth

#### Psychosocial

- Begins to understand cause and effect
- Develops separation anxiety
- Begins to develop "magic thinking," imagination, and engages in play-acting



#### A toddler.

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#### Preschool Age (3–5 Years)

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### Preschool Age (3–5 Years)



A preschooler. © Daniel Limmer

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## Preschool Age (3–5 Years)

- Physiological
  - Body systems continue to develop.
- Psychosocial

Developing interactive and social skills

#### School Age (6–12 Years)

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### School Age (6–12 Years)



School-age children. © *Shutterstock.com* 

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# School Age (6–12 Years)

- Physiological
  - Loss of primary teeth
- Psychosocial
  - Less general supervision
  - Developing decision-making skills
  - More awareness of self-esteem
  - Values opinions of peers (positive or negative)

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#### An adolescent.

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- Physiological
  - Rapid two- to three-year growth spurt
  - Sexual maturity

#### Psychosocial

- Strives for independence
- Concern about body image and peer pressure
- May be prone to self-destructive behaviors
- Developing personal code of ethics

### Think About It

- Adolescents are often injured because of risk taking.
  - May be resistant to disclose what happened
  - Must be encouraged to explain circumstances surrounding an incident

#### Early Adulthood (19–40 Years)

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### Early Adulthood (19–40 Years)



A young adult. © *Shutterstock.com* 

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# Early Adulthood (19–40 Years)

- Physiological
  - Lifelong habits formed
  - Reaches peak physical condition
- Psychosocial
  - Job and family stress
  - Marriage, childbirth, and child rearing
  - Accidents leading cause of death

#### Middle Adulthood (41–60 Years)

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### Middle Adulthood (41–60 Years)



A middle-aged adult. © *Royalty Free/Masterfile* 

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## Middle Adulthood (41–60 Years)

- Physiological
  - May need vision correction
  - Cancer, heart disease often develop.
  - Weight control more difficult
- Psychosocial
  - Empty-nest syndrome
  - Caring for elderly parents

#### Late Adulthood (61 Years and Older)

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### Late Adulthood (61 Years and Older)



An older adult. © Shutterstock.com

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## Late Adulthood (61 Years and Older)

- Physiological
  - Body systems less efficient
- Psychosocial
  - Living environment
  - Self-worth
  - Financial burdens
  - Death and dying

#### **Chapter Review**

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 Understanding the basic physiological and psychosocial development for each age group will assist you in communicating with and assessing patients of various ages.

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#### **Chapter Review**

 Physiological differences between the ages will affect your care. Examples include differences in the respiratory systems of younger patients and the effect of preexisting medical conditions of older patients.



 Infants and young children have less developed and smaller respiratory structures, which can make respiratory conditions worse.

### **Chapter Review**

 Your ability to communicate with younger patients will depend on their stage of development. This can range from fear of strangers to separation anxiety from parents and embarrassment during adolescence. Older patients may have issues with denial or depression over medical conditions.

#### Remember

- Infants present massive bursts of anatomical and psychosocial development in the first year of life.
- Although preschoolers begin to develop independence and reason, in many ways they still resemble the psychosocial development of toddlers.

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#### Remember

- School-age children often are independent and logical, but that may crumble with illness or injury.
- Adolescents are reaching physiological maturity, but they often face difficult psychosocial challenges.

#### Remember

 Early, middle, and late adults vary greatly in terms of physiological development and conditioning; they also face psychosocial challenges unique to adulthood.

### **Questions to Consider**

- How do I approach a patient most effectively based on developmental characteristics?
- Does the age of my patient pose any assessment or care challenges based on physiologic development?

## **Critical Thinking**

 You are called for abdominal pain in a 16-year-old girl. She is with friends at the park. She seems hesitant to answer any of your questions. What characteristic of adolescent development is most likely the cause of this? How could you overcome it?