

## Chapter 14

## Physical Development in Adolescence

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- ✓ What physical changes do adolescents experience?
- ✓ What are the consequences of early and late maturation?
- ✓ What are the nutritional needs and concerns of adolescents?
- ✓ What are the effects of stress, and what can be done about it?
- ✓ What are some threats to the well-being of adolescents?
- ✓ What dangers do adolescent sexual practices present, and how can these dangers be avoided?

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## Adolescence

The developmental stage between childhood and adulthood

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## Physical changes

- **Adolescent growth spurt** – a period of very rapid growth in height and weight during adolescence
- **Puberty** – the period of maturation during which the sexual organs mature. Girls start puberty around age 11 or 12, and boys begin around 13 or 14

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## Puberty in Girls

- **Menarche** – the onset of menstruation
- **Secular trend** – a statistical tendency observed over several generations
- **Primary sex characteristics** – characteristics that are associated with the development of the organs and structures of the body that directly relate to reproduction (vagina and uterus)
- **Secondary sex characteristics** – the visible signs of sexual maturity that do not involve the sex organs directly (breasts, underarm and pubic hair)

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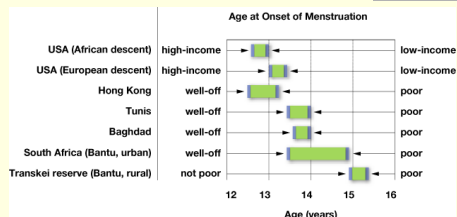
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## Onset of Menstruation




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## Puberty in Boys

- **Spermarche** –the first ejaculation, usually occurs around age 13yrs, more than a year after body has begun producing sperm
- **Primary sex characteristics** – characteristics that are associated with the development of the organs and structures of the body that directly relate to reproduction (penis and scrotum)
- **Secondary sex characteristics** – the visible signs of sexual maturity that do not involve the sex organs directly (underarm, pubic and facial hair, voice deepens)

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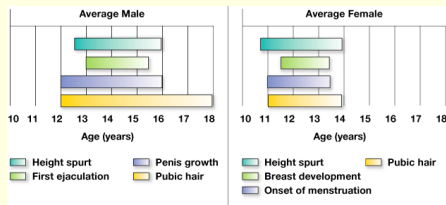
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## The Changes of Sexual Maturation During Adolescence




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## Body Image

- **Early maturation** – Boys who mature early tend to be more successful in athletics and have a more positive self-concept. Girls who mature early may endure ridicule, and the physical changes may lead to some psychological challenges, as suddenly they are faced with societal issues of female sexuality.
- **Late maturation** – Boys may be viewed as less attractive if they are smaller in stature and social life may suffer since they are expected to be bigger than the females they start dating. Girls who mature later may fare better because they fit societal ideal of slender, "leggy" body type versus early maturers, who tend to look heavier in comparison.

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## Nutrition and Food: Fueling the Growth of Adolescence

- **Obesity** is the most common nutritional concern during adolescence. About 20% of adolescents are overweight.
- **Anorexia nervosa** -severe eating disorder that may be life threatening - afflicts primarily white, intelligent, successful, attractive, affluent women between the ages of 12 and 40. However, anorexia is also becoming a problem for boys -about 10% are affected.
- **Bulimia** –eating disorder characterized by bingeing and purging.

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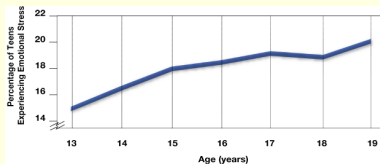
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## Stress and Coping

**Stress** is the physical and emotional response to events that threaten or challenge us. Adolescents experience a great deal of stress.




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## Stress may cause:

- **Psychosomatic disorders** – medical problems caused by the interaction of psychological, emotional, and physical difficulties
- **Life-threatening illnesses**
- **Coping** is defined as making efforts to control, reduce, or tolerate the threats and challenges that lead to stress:
  - ✓ Problem-focused coping involves attempt to change situation
  - ✓ Emotion-focused coping involves conscious regulation of emotion.
  - ✓ Social support involves the assistance and comfort supplied by others.
  - ✓ Defensive coping is the unconscious use of strategies that distort or deny the true nature of a situation.

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## Threats to Adolescent Well-Being

- ✓ Drugs
- ✓ Alcohol
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- ✓ Sexually transmitted diseases
- ✓ Societal pressures to be thin
- ✓ Peer pressure
- ✓ Poverty

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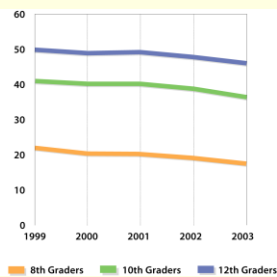
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**Addictive drugs** – drugs that produce a biological or psychological dependence in users, leading to increasingly powerful cravings for them

Percentage of Students Reporting Marijuana Use During the Previous 30 Days

According to a recent annual survey, marijuana use has decreased slightly over the past four years. These figures indicate the percentage of teenagers who have used marijuana in the previous 12 months. What do educators and health-care workers need to be aware of when dealing with adolescent drug use? (Source: L.D. Johnston, Bachman, & O'Malley, 2004)




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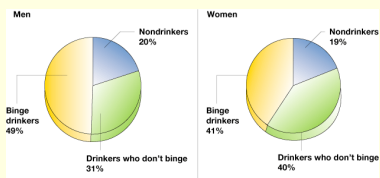
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## Binge drinking

- A particular problem on college campuses; defined for men as drinking 5 or more drinks in one sitting and for women as drinking 4 drinks in one sitting.




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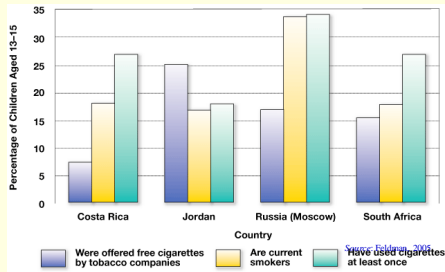
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## Tobacco and Smoking Around the World

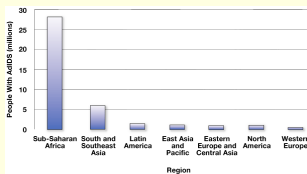


## Tobacco: The Dangers of Smoking

- Overall, a smaller proportion of teens smoke than in prior decades; numbers still substantial
- Smoking is on the rise among girls (In several countries including Austria, Norway and Sweden more girls smoke than boys)
- White children and children in lower SES households are more likely to experiment with smoking and start smoking earlier than African American children and children in higher SES households.

## Sexually Transmitted Diseases

- **AIDS** -acquired immunodeficiency syndrome – disease transmitted through the exchange of bodily fluids; one of the leading causes of death among young people



## Sexually Transmitted Diseases

3 million teenagers, about 1 person in 8 aged 13–19 and about 1 in 4 of those who have had sexual intercourse, acquire an STD every year. Among the most common are the following:

**Chlamydia:** Chlamydia is more common among teenagers than among older men and women; in some studies, 10 to 29 percent of sexually active adolescent girls and 10 percent of teenage boys have been found to be infected with chlamydia.

**Genital herpes:** A viral disease that is incurable, often indicated first by small blisters or sores around the genitals. It is periodically contagious.

**Trichomoniasis:** An infection of the vagina or penis, caused by a parasite.

**Gonorrhea:** Adolescents aged 15–19 have higher rates of gonorrhea than sexually active men and women in any 5-year age group between 20 and 44.

**Syphilis:** Infectious syphilis rates more than doubled between 1986 and 1990 among females aged 15–19.



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