Adolescence is the period of development between childhood and adulthood. Most experts indicate that this period of development exists from about 12-18 years; some experts say that adolescence lasts from 11 years through 20-21 years.

Adolescence is specific to human development. No other animal, even the other primates, go through adolescence to the same extent as humans. This time period between puberty and the attainment of adult status is something that is uniquely human.

Adolescence lasts approximately 8 years, and is required for the development of the complex social skills needed by adults. It is a unique period of human development that is characterized by rapid physical, emotional, mental, and social growth and development.

Adolescence is further divided into:

- Early adolescence (11-13)
- Middle adolescence (13-16)
- Late adolescence (16-20)

Depending on the individual, the adolescent period can continue until approximately 21 years of age.
VITAL SIGNS

Temperature: 97.6°F - 98.6°F (oral/tympanic); 99.6°F (rectal)

Heart Rate: Average 75-85 (girls)
            Average 70-80 (boys)

Respirations: 15-20/minute

Blood Pressure: 115 ± 19 / 59 ± 10

Pulse rate and respiratory rates decrease during this stage of development. Blood pressure increases slightly to approximately 120/70 mmHg.

BP becomes slightly higher in males than females as they approach adulthood because more pressure is needed to circulate blood to the larger, more muscular male body.

HEIGHT & WEIGHT

Physiologic growth is rapid during this stage of development. Most girls are 1-2 inches taller than boys as they enter adolescence. Girls continue to grow until about 3 years after the first menstrual period (menarche), so a girl who starts menstruating at age 11 may stop growing by age 14.

During adolescence, boys generally grow 4-12 inches and gain 15-65 pounds. Girls usually grow 2-8 inches and gain approximately 15-55 pounds.

More children are obese than ever before. It is difficult for obese teenagers to smoothly transition through adolescence when their self-esteem is affected by their weight. Education is important to help these teens deal with weight issues. Referral to dieticians and adherence to diets of 1800 calories per day may be helpful.
HEAD-TO-TOE ASSESSMENT

Adolescents usually do not present to healthcare professionals for a physical exam unless they are ill, injured, or they are being examined for athletic clearance. It is important for adolescents to provide their health histories away from their parents, if possible. Adolescents are more apt to give an accurate history away from their parents. Parents may be hesitant to allow this procedure, but encourage the parent and the adolescent that it is part of promoting independence and self-care.

TEETH

Adolescents develop their second molars at around age 13 and their third molars (wisdom teeth) anywhere between 18 and 21 years. Some adolescents who develop their wisdom teeth before their jaws are fully grown, may need to have these teeth extracted to make room for their other teeth.

SKIN

Acne is a self-limiting inflammatory disease involving the sebaceous glands that empty into hair follicles. It can be devastating to the teenager who is struggling with self-identity, self-image, and self-worth.

An increase in androgen in both genders during puberty causes the sebaceous glands to become more active. As sebum is trapped in the narrow gland ducts, white heads begin to develop, followed by black heads, and finally inflamed papules. Treatments vary from topical to systemic, depending on the severity. Medical care should be obtained for the adolescent’s physical and emotional health and well-being.
CARDIOVASCULAR SYSTEM
Blood flow and oxygen supply are reduced somewhat during adolescence since the heart and lungs develop more slowly than the rest of the body. Insufficient energy and fatigue may occur when the adolescent engages in some activities. Fatigue may be normal in the adolescent, but it is always a good idea to suggest that the teen receive a medical exam if fatigue becomes problematic to rule out other causes.

SEXUAL DEVELOPMENT
Puberty is the period of adolescence during which the secondary sex characteristics develop fully. Body hair under the arms (axilla), around the pubic area, and the inner aspect of the thighs develops. The female pelvis increases in the transverse diameter, breasts develop, and menstruation begins. Males experience an increase in testosterone, with subsequent deepening of the voice, growth of facial hair, and enlargement of the external genitalia.

The adolescent may be self-conscious about being examined. When performing a physical exam, expose only the part of the body being examined. For young girls, place the stethoscope under the gown to listen for breath sounds and heart sounds. Exposure of the chest is usually not necessary unless a breast exam must be performed.

PAIN ASSESSMENT AND MANAGEMENT
The management of pain is essential in all age groups. Explain the 0-10 pain scale as you would for an adult. “0” means no pain and “10” means the worst pain one could ever have. Provide analgesics as ordered, and carefully monitor the adolescent’s pain relief and response to the medication.
In the initial assessment, document the level that the adolescent describes as a fraction. For example, if the post-op patient describes his or her incisional pain as a “7” on the 0-10 scale, document: “Post-op pain level = 7/10.” After the medication has been administered, reassess the patient’s vital signs (T,P,R, & BP) along with his or her pain level (the 5th vital sign). If the patient states the pain is now a “2” on the 0-10 scale, document: “Post-op pain level = 2/10.”

By using fractions to document pain level, other healthcare providers can easily interpret if the pain medication intervention was successful or not. Describing relief as “somewhat better” or “slightly improved” does not have the impact as stating that the pain dropped from a 7/10 to a 2/10 after medication.

Encourage participation so the adolescent has an increased sense of control and independence.

Pain impulses are perceived more quickly when compounded by anxiety. Teach the adolescent that pain can be controlled and that s/he should inform the nurse of pain before it becomes intolerable. In addition, pain management should not differ from one healthcare provider to the next. A pain management tool and interventional plan should be used so consistent pain management is achieved no matter who is providing care to the adolescent patient.

**COGNITIVE GROWTH & DEVELOPMENT**

- The adolescent begins the final stage of cognitive development around the age of 12.
- More abstract thinking is possible.
- Abstract and logical thinking allows for problem solving abilities.
• The adolescent is capable of creating “what if” scenarios in order to make choices.
• The adolescent begins to be successful in using the scientific method in order to solve problems. Math and scientific problems become less difficult to solve once the adolescent can think in the abstract.
• Adolescents are able to “think through” to the consequences of various actions. They may use “what if” scenarios to make choices about college, career, relationships, etc.
• During this stage of development, adolescents may question the existence of God and the value of religious beliefs, much to the dismay of parents who raised them in their faith. This rebellion is part of the adolescent’s need for independence and establishing his or her own value systems rather than just accepting those of his or her parents.
• It is important for parents and other adults to understand that peers often play more of an influential role for the adolescent than the family does. Strong, sincere moral values taught at an earlier stage of development can usually get the adolescent more easily through this period than parental mandates and ultimatums which can lead to rebellious behavior.

PSYCHOSOCIAL DEVELOPMENT
The 5th stage of development is referred to as ego identity (occupation, sex roles, politics, religion) vs. role confusion. When the psychosocial goals are met, the adolescent achieves fidelity and loyalty. When the goals are not met, fanaticism and repudiation (negativism) may occur.

Stage 5 important event is the development of peer relationships.
Significant relations in adolescence are:

- Peer groups
- Role models

**Positive Outcome (Fidelity; Loyalty)**
The adolescent strives to identify his or her place in society and the world.

**Negative Outcome (Fanaticism; Repudiation)**
Adolescents tend to see the world as black or white. Something is good or it is bad, and there is no “gray” in between.

**Fanaticism** occurs when a person is so involved in a particular society or subculture that there is no room for tolerance. Fanaticism is at the root of gangs. Peer pressure draws certain adolescents into the gang environment.

The adolescent can **repudiate** membership in the adult world, and fuse with groups such as gangs, religious cults, militaristic groups, hate groups (Neo-nazis, White Supremacists, etc.). As the adolescent struggles to find an identity and fails, being **bad** by using drugs, being in a gang, or getting into crime, are all better alternatives than not knowing who s/he is.

The adolescent needs to accomplish several psychosocial tasks in order to successfully move toward adulthood:

- Independence from the parents.
- Acceptance of body appearance.
- Relationships with the opposite sex
- Development of sexual identity.
- Development of own opinions about the world.
- Development of values, attitudes, and interests.
The adolescent strives to accomplish numerous psychosocial tasks during this period of development in order to successfully transition into adulthood. These tasks include:

- Separation from adults and other authority figures to achieve independence and make their own decisions.
- Acceptance of body appearance and flaws. This age group is very self-conscious about appearance and often perceives these flaws to be far worse than they are. Teenagers are often prone to eating disorders due to the distortion of body image.
- Establishing relationships with the opposite sex.
- Development of sexual identity and self-awareness.
- The formation of their own opinions as they begin to think more abstractly than during childhood.
- Development of values, attitudes, and interests.

Emotional crises abound during adolescence. What seems trivial to the adult who has forgotten adolescent growing pains can be devastating to the teenager. It is important to listen to the teenager’s concerns, disappointments, and feelings, and not try to trivialize them. Trivializing will only cause the teen to withhold information from the parents, teachers, or caregivers, and inhibit further communication.

**FEARS & STRESSORS OF THE ADOLESCENT**

**Major concerns:**

- Appearance (body image)
- School performance in preparation for college
- Loss of control
- Separation from peers
- Being different and unaccepted by peers

The adolescent may be hypersensitive to pain. The adolescent may not request adult support even when it is needed.
Therapeutic Interventions for the Adolescent

- Provide non-threatening opportunities for the adolescent to ventilate feelings, fears, and concerns.
- Encourage the adolescent to participate in his or her care.
- Allow the adolescent to make choices about care whenever possible.
- Encourage visits and social interactions with peers.
- Allow the adolescent to decide when parents should be present during teaching sessions.
- Respect the adolescent’s privacy by being sensitive during physical exams and by knocking on the door prior to entering the room.
- Be honest with the adolescent when discussing procedures.
- Encourage the parents to be involved in care and decision making when appropriate.
- During long hospitalizations, encourage contact with teachers and fellow students in order to prevent the adolescent from falling behind on school assignments.

SAFETY CONCERNS

SUICIDE

- Stressed adolescents sometimes use suicide attempts (gestures) to bring attention to their emotional pain.
- Actual suicide is the 3rd leading cause of death in this age group.

Angry teenagers can attempt suicide in an effort to influence their parents or significant others. Suicidal gestures are a way of getting back at or scaring someone, such as parents, boyfriends, or girlfriends. Teenage females statistically attempt suicide more frequently than males. Such situations are commonplace in most emergency departments.
TRAUMA

Teenagers generally feel invincible and often take risks that lead to injury or death.

The beginning of the 20th century found many young people dying from infectious diseases such as tuberculosis, influenza, and pneumonia. Over the past twenty years, however, deaths from motor vehicle accidents, suicides, and homicides have increased by 300-400%.

These statistics are disturbing because many of these deaths are preventable by stricter regulations for new young drivers, graphic educational programs that show teens the outcomes of driving while intoxicated, and through more progressive gun control or firearm education. Rather than telling the adolescent what to do and what not to do, educational programs allow teens to make more informed decisions on their own.

SUBSTANCE ABUSE

- Is the use of chemicals to improve mental state or produce euphoria.
- Has risen sharply during the 1990s.
- Use of drugs has been reported by nearly 50% of high school seniors.
- Can be emotionally charged to rebel against parental control.
- Can be induced by peer pressure.

Teen drug use is on the rise according to the National Institute on Drug Abuse. Studies shows that substance abuse by teens
has risen sharply during the 1990s, and use rates for many drugs are higher than anytime in the past 10 years.

Whether teens use alcohol or drugs is attributed to social factors and peer pressure; whether they develop substance dependency may involve biological and psychological factors. Several studies suggest a genetic link with alcoholism and addictive behaviors passed on from parents to their children.

**SIGNS & SYMPTOMS OF SUBSTANCE ABUSE**
Some signs and symptoms that may point to substance abuse in the adolescent include:

- Sudden failure to complete school assignments.
- Unexcused absences from school.
- Mood swings.
- Change in peer group.
- Change in physical appearance (less interest in cleanliness in an adolescent who is usually neat and clean, for example)

**SMOKING**
Despite public education regarding the dangers of cigarette smoking, approximately **20% of all adolescents smoke cigarettes**. Educational programs tend to focus on what will happen to adolescents in the *future* if they continue to smoke or engage in other unhealthy practices. These programs often have little impact on changing their behavior because adolescents are concerned with the *present*, not the future. Peer pressure and the adolescent’s need for acceptance are so powerful, that they often do not care about future consequences.

It is better for educational programs to focus on what is important to adolescents *now*:

- Wet cigarettes dangling from the mouth are *not* attractive.
• Cigarette smoking makes their breath and their hair smell terrible.
• Refraining from smoking is more mature than smoking just because friends are doing it.
• Smoking can cause impotence.
• Smoking may interfere with performance in sports.

Education must focus on what can happen to the adolescent right now (motor vehicle accidents, paralysis, death) than what can happen later in life (cirrhosis, liver transplant, etc.)

**ALCOHOL**
Alcohol use has been reported by approximately 90% of high school seniors.

Parents who also use alcohol sometimes accept alcohol use in their adolescents.

Parents are almost relieved that their teenager is using alcohol rather than illicit drugs.

**SAFE SEX**
More adolescents than ever are engaging in premarital sexual intercourse. As many as 50% of ninth grade boys and 30% of ninth grade girls are already sexually active (Alexander & Hickner, 1997).

Interviewing adolescents about sexual history should be done without the parents to better assure a truthful history. Obviously, the adolescent may deny sexual activity if his or her parents are in the room. Many adolescents want to discuss their sexuality with healthcare providers in a non-threatening environment because they are often concerned about pregnancy and sexually transmitted diseases.
Most adolescents who delay sexual activity do so because of fear of pregnancy, sexually transmitted diseases, and lack of opportunity. Morality is infrequently cited.

Those who engage in sexual activity early do so because of peer pressure and the need to feel mature.

Sex education should focus on providing teenagers with tools to thwart off peer pressure when they feel they are not ready to engage in sexual activity.

For those adolescents who confide that they are sexually active and plan to remain sexually active, the healthcare provider should provide counseling about sexual activity precautions to prevent pregnancy and sexually transmitted diseases (STDs).

One of the best measures to prevent STDs is the use of condoms. Higher on the list of preventions, of course, is abstinence, something that the adolescent may not wish to use.

If the adolescent indicates that he or she would prefer to abstain from sexual relations but fears rebuke by peers, the healthcare provider may be able to offer examples of reasons why they do not want to have sex. Sometimes, they just need to hear that it is okay to be firm and say “NO.”

PATIENT/FAMILY EDUCATION

- Give the adolescent some control of procedures and health decisions when possible.
- Ask the adolescent how s/he prefers to learn, i.e., live presentations, audiotapes, videotapes, interactive CD, etc.
- Allow the adolescent to learn with or without parents.
- Explain to parents that such behavior is normal in the adolescent.
- Be honest.
- Respect privacy.
• Allow the adolescent to make some decisions about his/her care.
• Avoid “preaching” to the adolescent.
• Avoid acting as a “parent” to the adolescent during the health encounter.

COMMUNICATING WITH ADOLESCENTS

When dealing with adolescents, avoid these *four cardinal sins* during communication:

**Spontaneous discussions about problems.** It is better to make an appointment or schedule a time with the teen for such discussions to give the teen more control.

**Nagging.** Nagging turns most people off, and teens react very negatively to nagging. Often, the teen will deliberately ignore nagging and shut off communication.

**Lectures.** Teens do not like lectures by adults on how to conduct their lives and how *their* life experiences can benefit the teen.

**Arguing.** Arguing with a teenager is a pointless endeavor and generally does not accomplish the intent of the argument. Often, the teen will do the opposite of what the parent or healthcare provider is asking just to maintain control. Such behavior only fosters resentment between adults and adolescents.

Understanding how to approach the adolescent often means the difference between successful and unsuccessful interventions. Physicians, nurses, and other healthcare professionals are most
often successful with teenagers when they are open, honest, and non-authoritarian in their approach.

Intimidation does not work well with the adolescent. In fact, adolescents may shut off communication with people they view as authoritarian and intimidating. This situation is due to the fact that the adolescent generally has a fragile sense of self-esteem that can be impaired by people they do not trust.

Physiologic appearance and chronological age may be misleading. Talking to a small-stature adolescent as a child or to a tall, well-developed adolescent as an adult may interfere with therapeutic communication and lead to mistrust and loss of confidence in the care provider.

Assessment of the adolescent’s developmental stage is very important to healthy and helpful interactions. Simple, open, and honest communication goes a long way toward creating a therapeutic relationship with the adolescent.

Care must also be taken not to transfer personal parental conflicts that the healthcare provider may currently be having at home or in the past with teenage children to the professional setting. When an adolescent acts out in the healthcare setting, it is all too easy for the authoritarian parent to emerge during the interaction. Such behavior will certainly impede healthy communication and trust.

Many hospitals admit their adolescent patients to the Pediatrics Department. Whenever possible, avoid placing adolescents in the same room with younger children. Communicate sensitivity to the adolescent’s age by placing him or her with another adolescent. The adolescents will have more in common and the communication between the two may help decrease the sense of separation from other peers.
Confidentiality is another essential component when dealing with adolescents. Very often, adolescents will not confide the truth about health or psychological problems to healthcare professionals for fear that the parents will be informed.

Some practitioners interview the adolescent and the parents separately in order to obtain the most correct history. It is sometimes uncomfortable for the adolescent to speak freely in front of the parents, especially if there have been parent-adolescent difficulties in the home.