Lifetime Physical Fitness & Wellness
A Personalized Program

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Preventing Sexually Transmitted Infections

“Anyone who has sexual contact can acquire a sexually transmitted infection. More than half of all Americans will be infected during their lifetime. Infections are most common among teens and young adults with about half of all infections occurring in people under 25.”

Objectives

▶ Name and describe the most common sexually transmitted infections.
▶ Outline the health consequences of sexually transmitted infections.
▶ Define the difference between HIV and AIDS.
▶ Explain the seriousness of the AIDS epidemic in the United States and worldwide.
▶ Describe ways to prevent acquiring sexually transmitted infections.

Evaluate your risk of HIV/AIDS.

Visit www.cengagebrain.com to access course materials and companion resources for this text including quiz questions designed to check your understanding of the chapter contents. See the preface on page xv for more information.
What is the difference between a sexually transmitted infection (STI) and a sexually transmitted disease (STD)?

Health experts are beginning to replace the term “STD” with “STI.” The concept of disease implies a clear medical condition that manifests itself through signs or symptoms that define a specific disease. In terms of STIs, once infected, a person may or may not develop signs or symptoms indicative of disease. The unfortunate reality is that in the early stages of infection, many individuals with STIs exhibit no signs or symptoms, or such that are so mild that they are often ignored.

What is “safe sex”? Safe sex means taking precautions during sexual intercourse or other form of sexual contact, designed to prevent the exchange of blood, semen, vaginal fluids, or breast milk that can keep you or your partner from getting a sexually transmitted infection (STI). These infections include chlamydia, gonorrhea, pelvic inflammatory disease, genital warts, genital herpes, syphilis, and HIV, among others. When unsure about your partner, use a lubricated latex condom from start to finish for each sexual act. If you think your partner should use a condom but refuses to do so, say no to sex with that person. While a condom definitely reduces the risk for infection, you need to realize that even with condom use you may acquire an STI. Condoms may not totally cover surrounding infected areas, and sometimes they rupture.

How does HIV damage the immune system? Upon HIV infection, the virus attacks and starts killing CD4 cells in the immune system. CD4 cells are a special type of white blood cell that fights off infections (viral, fungal, and parasitic). Initially, the body can make more CD4 cells to replace the cells damaged by HIV. Eventually, however, the body is unable to replace all damaged cells. As the number of CD4 cells decreases, the immune system weakens and the person is more susceptible to sickness, illness, and infections, including the development of AIDS.

Am I at risk for contracting HIV in a medical or dental office? HIV transmission in a health care setting is extremely rare. The implementation of strict infection control procedures protects both the patient and the health care provider. Only one such case, of a Florida dentist in 1990, has been reported by the CDC of patients having been infected. Data on more than 22,000 patients treated by 63 HIV-infected health care providers reveal no cases of transmission from provider to patient in a health care setting.

Real Life Story  Jasmine’s Experience

For some of my friends in college, it is not unusual to casually “hook up” or be “friends with benefits” without much thought of potential repercussions. It seems that some of the guys I dated were only interested in having sex. I didn’t share those same feelings. I didn’t want to have sex just for fun and pleasure. When I started dating Alex, it seemed different. He was kind and treated me well. After a few dates he told me that he loved me and wanted to sleep with me. I really liked him but I was not ready for sex and expressed my feelings openly to him. From that moment on, however, the topic of sex started to come up very regularly. He told me that if I really cared for him, I would sleep with him. He also told me to look at our friends—they were just fine with it. After repeated conversations about sex, we ended up sleeping together several times. It wasn’t long thereafter that I started to have discharge and painful urination. I went to see a gynecologist and I was diagnosed with a bacterial sexually transmitted infection. I was in complete shock. I told Alex about it and he didn’t seem too concerned. Only a few days later, he told me he did not want to date me anymore.

I was fortunate that it was a bacterial infection and not a viral infection. I was able to get the proper treatment and I am disease free. I am very lucky because it could have been different with life-long consequences. That experience led me to study and learn about sexually transmitted infections. I now realize the serious mistakes that I made: I accepted the fact that it was ok because my friends were doing it, I gave in to pressure to have sex when I really didn’t want to, I had unprotected sex, and I had no knowledge of Alex’s sexual history. Now that I understand the gravity of my actions, I will postpone sex until I am in a serious relationship with someone that I love and can fully trust, who loves and respects me in return, and who shares the same values that I have. As I have learned, “If someone does not respect my choice to wait, he does not deserve my friendship, or for that matter, anything else.”
Chapter 14 Preventing Sexually Transmitted Infections

Sexually Transmitted Infections (STIs) Survey

I. Are you aware that there are more than 25 STIs and some are incurable?
II. Do you understand that more than 50 percent of all Americans will acquire at least one STI in their lifetime and almost half of them are seen in people between the ages of 15 and 24?
III. Did you know that genital herpes is one of the most common STIs, it is caused by a virus, it is incurable, and that a “simple” cold sore (or fever blister) can lead to genital herpes?
IV. Can you explain the difference between HIV infection and AIDS?
V. Do you understand the concept of “safe sex” and guidelines to follow to prevent STIs?
VI. If you choose not to have sex, have you thought out an appropriate response in the event that you are asked or are pressured to have sex?

Based on estimates by the World Health Organization, 1 million people worldwide are infected daily with sexually transmitted infections, not including human immunodeficiency virus (HIV). STIs have also reached epidemic proportions in the United States. Of the more than 25 known STIs, some are still incurable. According to the American Social Health Association, more than half of all Americans will acquire at least one STI in their lifetime.

Each year, more than 19 million people in the United States are newly infected with STIs, almost half of which are seen in young people between the ages of 15 and 24. According to some estimates, one in three college students has had or has a STI. Currently, the United States has the highest rate of sexually transmitted diseases of any country in the industrialized world. Following are brief descriptions of the leading STIs, their symptoms, and their treatments (if any).

Chlamydia

Chlamydia is a bacterial infection that spreads during vaginal, anal, or oral sex, or from the vagina to a newborn baby during childbirth. Chlamydia can damage the reproductive system seriously. This infection is considered to be a major factor in male and female infertility. Because symptoms are usually mild or absent, 3 of 4 people with the infection don’t know they’re ill until the infection has become quite serious. Infertility often occurs “silently” because the individual is unaware of the infection until it is too late to prevent the irreversible damage.

Chlamydia is the most commonly reported STI. In any given year there may be as many as 2.8 million cases

More than 25 diseases are spread through sexual contact. About 1 in 4 adults in the United States has a sexually transmitted infection.

**Key Terms**

Sexually transmitted infections (STIs) Communicable diseases spread through sexual contact.

Chlamydia A sexually transmitted disease, caused by a bacterial infection, that can cause significant damage to the reproductive system.
of chlamydia in the United States. Almost 70 percent of these cases are reported in women between the ages of 15 and 24. Only about 1.2 million cases are reported each year because most people are not aware of their infection. Testing is also frequently skipped because patients are mistreated for symptoms that mimic other STIs. Women are frequently reinfected if their sex partners are not treated.

Symptoms of serious infection include abdominal pain, fever, nausea, vaginal bleeding, and arthritis. Although chlamydia can be treated successfully with oral antibiotics, its damage to the reproductive system is irreversible. Regular testing for chlamydia is recommended for all sexually active women under the age of 25, for older women with multiple sexual partners and/or previous STIs, and for those who do not regularly use condoms.

**Gonorrhea**

One of the oldest STIs, gonorrhea is caused by a bacterial infection. Gonorrhea is transmitted through contact with the vagina, penis, anus, or mouth of an infected person. According to the Centers for Disease Control and Prevention (CDC) approximately 700,000 individuals get new gonorrheal infections each year in the United States, but only about one-half of the cases are reported.3

Typical symptoms in men include a pus-like secretion from the penis and painful urination. Infected women may have discharge and painful urination as well. Up to 80 percent of infected women, however, don’t experience any symptoms until the infection has become fairly serious. At this stage, women develop fever, severe abdominal pain, and pelvic inflammatory disease (discussed next).

If untreated, gonorrhea can produce widespread bacterial infection, infertility, heart damage, and arthritis in men and women, and blindness in children born to infected women. Gonorrhea is treated successfully with penicillin and other antibiotics.

**Pelvic Inflammatory Disease**

Estimates indicate that each year in the United States more than 750,000 women experience an acute episode of a condition known by the umbrella term pelvic inflammatory disease (PID).4 PID is not truly an STI but, rather, refers to complications resulting from STIs, especially chlamydia and gonorrhea. PID often develops when the STI spreads to the fallopian tubes, uterus, and ovaries. Sexually active women, especially those under age 25, are at higher risk for developing PID. These women are at higher risk because the cervix is not yet fully matured, increasing the risk for STIs that lead to PID. The more sex partners a woman has, the greater the risk for PID.

Complications associated with PID typically include scarring and obstruction of the fallopian tubes (which may lead to infertility), ectopic pregnancies, and chronic pelvic pain. If a woman with PID becomes pregnant, she could have an ectopic (tubal) pregnancy, which destroys the embryo and can kill the woman. More than 100,000 women in the United States become infertile as a result of PID.

Typical symptoms of PID are fever, nausea, vomiting, chills, spotting between menstrual periods, heavy bleeding during periods, and pain in the lower abdomen during sexual intercourse, between menstrual periods, or during urination. Many times, however, women do not know they have PID because these symptoms are not always present.

PID is treated with antibiotics, bed rest, and sexual abstinence. Further, surgery may be required to remove infected or scarred tissue or to repair or remove the fallopian tubes or uterus.

**Human Papillomavirus and Genital Warts**

**Human papillomavirus (HPV)** is one of the most common causes of sexually transmitted infection. There are over 100 strains of HPV, and more than 40 are sexually transmitted. Most HPVs are harmless, infected people have no signs or symptoms, and the infection clears up without any form of treatment. Some strains of HPV infect the genital area, including the skin of the penis, the vulva, anus, lining of the vagina, cervix, and rectum, and can cause genital warts. Others are known as “high risk” types and in rare cases may lead to cancers of the cervix, vulva, vagina, anus, or penis.

Approximately 6 million new cases of HPV are reported each year, and at least 20 million Americans are infected.5 At least half of sexually active people acquire genital HPV infection during their lifetime. At least 80 percent of women will acquire genital HPV infection by age 50. Most women are diagnosed with HPV through an abnormal Pap test. Infection is spread through genital or oral contact, and from the vagina to a newborn baby. Because most people have no signs or symptoms, they...
are unaware of the infection and can transmit the virus to a sex partner.

Genital warts show up anywhere from 1 to 8 months after exposure. These warts may be flat or raised and usually are found on the penis or around the vulva and the vagina. They also can appear in the mouth, throat, rectum, on the cervix, or around the anus. Based on data from the CDC, as many as one million new cases of genital warts are diagnosed yearly in the United States. In some cities, nearly half of all sexually active teenagers have genital warts.

Health problems associated with genital warts include increased risk for cancers of the cervix, vulva, vagina, anus, penis, and enlargement and spread of the warts, leading to obstruction of the urethra, vagina, and anus. Because babies born to infected mothers commonly develop warts over their bodies, cesarean section is recommended for childbirth.

Treatment requires completely removing all warts. This can be done by freezing them with liquid nitrogen, dissolving them with chemicals, or removing them through electrosurgery or laser surgery. Infected patients may have to be treated more than once, because genital warts can recur.

Prevention of HPV infection is best accomplished through a mutually monogamous sexual relationship with an uninfected partner. It is difficult to know, however, if a person who has been sexually active in the past is currently infected.

The U.S. Food and Drug Administration (FDA) has approved the use of two HPV vaccines, Gardasil and Cervarix, developed to prevent cervical cancer and other diseases in women caused by HPV. Both vaccines protect against HPV types 16 and 18, which cause most cervical cancers. Additionally, Gardasil protects against HPV types 6 and 11 and most genital warts. The vaccine has been approved for use in girls and women between the ages of 9 and 26. Gardasil has also been approved for males in this age range to prevent genital warts. To get the full benefits of the vaccine, people should get vaccinated before they become sexually active. The vaccines are most effective in women who have not been infected with any of the HPV types covered. Few women, however, are infected with all HPV types, thus vaccination still offers protection against those viruses that have not been acquired. The vaccine has not been widely tested in people over 26. Licensing for this group may become available if the vaccine proves to be safe and effective for the older age group as well.

Genital Herpes

One of the most common STIs, genital herpes is caused by the herpes simplex virus (HSV). There are several types of HSV that produce different ailments, including genital herpes, oral herpes, shingles, and chicken pox.

The two most common forms of HSV are types 1 and 2. In type 1—the HSV most often known to cause oral herpes—cold sores or fever blisters appear on the lips and mouth. HSV-2 is better known as the virus that causes genital herpes.

Approximately 50 percent of Americans, or 135 million people over the age of 12, are infected with HSV-1. Most of these individuals acquired the virus as children. By age 50, more than 80 percent of the population has been exposed to HSV-1. One out of six people 14 to 49 years old are infected with the type 2 virus.6 One in four women, one in five men, and one in five adolescents are currently infected with genital herpes (HSV-2).

HSV is a highly contagious virus. Victims are most contagious during an outbreak, and HSV most often spreads by contact with an active lesion or sore. The infection also can be spread through virus-containing secretions from the vagina or penis. A few days following infection, a tingling sensation and lesions appear on the infected areas, most notably the mouth, genitals, and rectum, but can also surface on other parts of the body. Lesions can be somewhat painful.

Individuals infected with oral HSV-1 may shed the virus in saliva about 5 percent of the time, when they have no other symptoms of infection or visible lesions. In the first year of infection, genital HSV-2–infected individuals can shed the virus up to 10 days when they show no symptoms, but the frequency decreases over time.

In conjunction with the lesions, victims usually have mild fever, swollen glands, and headaches. The symptoms disappear within a few weeks, causing some people to believe they are cured. Presently, though, herpes is incurable and its victims remain infected.

The fundamental difference between the two main types of HSV lies in their preferred “site of residence.” The HSV-1 virus typically establishes latency in a collection of nerve cells near the ear known as trigeminal ganglion. HSV-2 usually establishes latency at the base of the spine in the sacral ganglion. The virus can remain dormant for a long time, but repeated outbreaks are common. The number of outbreaks tends to decrease over the years. Excessive fatigue, stress, cold, wind, wet-
ness, heat, sun, sweating, rubbing, chafing, and friction; as well as lack of sleep, illness, and restrictive clothing, and diet can precipitate new outbreaks. Diet also plays a role as some foods such as popcorn, coffee, peanuts, chocolate, and alcohol may trigger outbreaks.

Our society has typically labeled HSV-1 infection (cold sores) an “acceptable” viral infection, whereas infection with HSV-2 is viewed as a “bad” infection. The social stigma and emotional perspective of genital herpes make it difficult to objectively compare it with an oral infection, labeled as “just a cold sore” and acceptable to most people. HSV types 1 and 2, nonetheless, both cause oral and genital herpes. People who have an outbreak of oral herpes should not touch their own or someone else’s genitals after touching the oral cold sores. Doing so can lead to a herpes infection of the genitals (genital HSV-1 infection). Oral sex can also result in transmission of HSV from the lips to the genitals. Thirty percent of all new cases of genital herpes result from HSV-1 infection. The opposite is true as well: Oral sex with a genital HSV-2–infected person can cause oral HSV-2 infection (although there seems to be some degree of immunity against oral HSV-2 in people already infected with oral HSV-1). People with oral or genital sores should take care not to touch these sores. Following hand contact with cold or herpes sores, individuals should carefully wash themselves with soap. Avoid touching the eyes as such can cause vision damage as well.

During an outbreak, genital lesions may appear in areas that can be covered by a latex condom, but they can also appear in areas that cannot be covered. Use of a latex condom may protect against genital herpes only when the infected area is completely covered. Condoms, however, may not cover all infected areas. Thus genital herpes infections still occur. Individuals with HSV infection should abstain from sexual activity when lesions or other herpes symptoms are present. Sex partners of infected individuals should always be informed that they may become infected even if no lesions or symptoms are present. The best preventive approach is a mutually monogamous sexual relationship with an uninfected partner. Blood tests are available to determine HSV infection.

Syphilis

Another common type of STI, also caused by bacterial infection, is syphilis. It is referred to as “the great imitator” because signs and symptoms are often indistinguishable from other diseases. More than 36,000 new cases are reported each year.1 The incidence is highest in women between 20 and 24 years of age and men between 30 and 39.

Syphilis is transmitted through direct contact with a syphilis sore during vaginal, anal, or oral sex. In the primary stage, between 10 and 90 days following infection (average 21 days) a painless sore appears where the bacteria entered the body (sometimes multiple sores appear). A sore also can appear on the lips or in the mouth. This sore disappears on its own in 3 to 6 weeks. Untreated, the infection progresses to the secondary stage.

During the secondary stage, as the initial sore is healing, or several weeks thereafter, skin rashes and mucous membrane lesions appear. A rough/reddish-brown rash can be seen on the palms of the hand and the bottom of the feet, although different types of rashes can appear on other parts of the body. Additional sores may also appear within 6 months of the initial outbreak. Signs and symptoms of the secondary stage will disappear with or without treatment. Untreated, the infection will progress into the latent stage.

A latent stage, during which the victim is not contagious, may last up to 30 years, lulling victims into thinking they are healed. During the last stage of the infection, some people develop paralysis, crippling, gradual blindness, heart disease, brain and organ damage, or dementia, or die as a direct result of the infection.

Syphilis is diagnosed by microscopic examination of material from a sore or through a simple blood test. One of the oldest known STIs, syphilis once killed its victims, but now penicillin and other antibiotics are used to treat it. A single injection of penicillin will cure individuals who have been infected for less than a year. Additional treatments are necessary for people infected longer than a year. Antibiotics are also available for individuals allergic to penicillin. People infected with syphilis must abstain from sexual activity until all syphilis sores have completely disappeared. Sexual partners must also be informed of potential infection so that they can seek treatment if necessary.

Critical Thinking

Many individuals who have sexually transmitted infections withhold this information from potential sexual partners.

• Do you think it should be considered a criminal action if an individual knowingly transmits an STI to someone else?

HIV and AIDS

Of all sexually transmitted infections, HIV (human immunodeficiency virus) infection is the most frightening because in most cases it is fatal and it has no known cure. AIDS—which stands for acquired immunodeficiency syndrome—is the end stage of infection by HIV. In Activity 14.1 you will have the opportunity to evaluate your basic understanding of HIV and AIDS.

HIV is a chronic infectious disease that is passed from one person to another through blood-to-blood and sexual contact. The virus spreads most commonly among individuals who engage in risky behavior such as having unprotected sex or sharing hypodermic needles. When a person becomes infected with HIV, the virus multiplies and attacks and destroys white blood cells. These cells are part of the immune system, and
Drug and alcohol use can make people more willing to have unplanned and unprotected sex, thereby risking HIV infection.

...their function is to fight off infections and diseases in the body.

As the number of white blood cells that are killed increases, the body’s immune system gradually breaks down or may be destroyed completely. Without an immune system, a person becomes susceptible to various opportunistic infections and to cancers.

HIV is a progressive infection. At first, people who become infected with HIV might not know they are infected. An incubation period of weeks, months, or years may pass during which no symptoms appear. The virus may live in the body 10 years or longer before symptoms emerge. HIV infection can produce neurological abnormalities, leading to depression, memory loss, slower mental and physical response time, and sluggishness in limb movements that may progress to a severe disorder known as HIV dementia.

When the infection progresses to a point at which certain diseases develop, the person is said to have AIDS. HIV itself doesn’t kill. Nor do people die from AIDS. “AIDS” is the term designating the final stage of HIV infection, and death is the result of a weakened immune system that is unable to fight off these opportunistic infections.

Earliest symptoms of AIDS include unexplained weight loss, constant fatigue, mild fever, swollen lymph glands, diarrhea, and sore throat. Advanced symptoms include loss of appetite, skin diseases, night sweats, and deterioration of mucous membranes.

Most of the illnesses that AIDS patients develop are harmless and rare in the general population but are fatal to AIDS victims. The two most common fatal conditions in AIDS patients are Pneumocystis carinii pneumonia (a parasitic infection of the lungs) and Kaposi’s sarcoma (a type of skin cancer). The AIDS virus also may attack the nervous system, causing damage to the brain and spinal cord. An unsettling finding is that brain damage is seen even in patients who are on drug therapy. The brain appears to provide a haven for HIV where drugs cannot follow, leading to a selective destruction pattern of brain regions that control motor, language, and sensory functions. This finding may explain why individuals often display slower reflexes and disruption of balance and gait in the early stages of AIDS. Patients also frequently exhibit mild vocabulary loss, judgement problems, and difficulty planning.

The only means to determine whether someone has HIV is through an HIV antibody test. Being HIV-positive does not necessarily mean that the person has AIDS. Several years can go by before the person develops the diseases that fit the case definition of AIDS.

Upon becoming infected, the immune system forms antibodies that bind to the virus. According to the CDC, most infected individuals will show these antibodies within 3 months of infection, the average being 20 days. In rare cases, they are not detectable until after 6 months or longer.

If HIV infection is suspected, a person should wait at least 3 months to be tested. If the test is negative and the person still suspects infection, the test should be repeated 3 months later. During this time, and from then on, individuals should refrain from further endangering themselves and others through risky behaviors. Some people are tested to reassure themselves that their risky behaviors are acceptable. Even if the test turns up negative for HIV, this does not represent a “license” to continue risky behaviors.

No one has to become infected with HIV. At present, once infected, a person cannot become uninfected. There is no second chance. Everyone must protect themselves against this chronic infection. If people do not—and are so ignorant as to believe it cannot happen to them—they are putting themselves and their partners at risk.

New therapies are preventing AIDS from developing in a growing number of HIV-infected individuals. Professionals, however, disagree as to how many HIV carriers actually will develop AIDS. Even if individuals have not developed AIDS, they can pass on the virus to others, who then could easily develop AIDS.

Transmission of HIV

HIV is transmitted by the exchange of cellular body fluids including blood and other body fluids containing blood; semen; vaginal secretions; and maternal milk.

Key Terms

- **Syphilis**: A sexually transmitted disease caused by a bacterial infection.
- **HIV (Human immunodeficiency virus)**: Virus that leads to acquired immunodeficiency syndrome (AIDS).
- **AIDS (Acquired immunodeficiency syndrome)**: Any of a number of diseases that arise when the body’s immune system is compromised by HIV; the final stage of HIV infection.
- **Opportunistic infections**: Infections that arise in the absence of a healthy immune system, which would fight them off in healthy people.
Self-Quiz on HIV and AIDS

Indicate whether the following statements are true or false, then turn the page to see how well you understand HIV and AIDS.

<table>
<thead>
<tr>
<th></th>
<th>True</th>
<th>False</th>
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<tbody>
<tr>
<td>1</td>
<td>AIDS—acquired immunodeficiency syndrome—is the end stage of infection caused by the human immunodeficiency virus (HIV).</td>
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<tr>
<td>2</td>
<td>HIV is a chronic infectious disease that spreads among individuals who choose to engage in risky behavior such as unprotected sex or the sharing of hypodermic needles.</td>
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<td>3</td>
<td>AIDS is curable.</td>
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<td>4</td>
<td>Abstaining from sex is the only 100 percent sure way to protect yourself from HIV infection.</td>
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<td>5</td>
<td>A person infected with HIV can look and feel healthy.</td>
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<td>6</td>
<td>Condoms are 100 percent effective in protecting you against HIV infection.</td>
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<td>7</td>
<td>Using drugs and alcohol makes a person less likely to use a condom and use it correctly.</td>
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<td>8</td>
<td>If you’re sexually active, latex condoms provide the best protection against HIV infection.</td>
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<td>9</td>
<td>Using drugs and alcohol can make you more likely to have unplanned and unprotected sex.</td>
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<td>10</td>
<td>A pregnant woman who has HIV can transmit the virus to her baby during childbirth.</td>
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<td>11</td>
<td>You can become HIV-infected by donating blood.</td>
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<td>12</td>
<td>HIV can be transmitted by spending time with or through casual contact (shaking hands, hugging) with an infected person.</td>
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<td>13</td>
<td>The only means to determine whether someone has HIV is through an HIV antibody test.</td>
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<td>14</td>
<td>HIV can completely destroy the immune system.</td>
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<tr>
<td>15</td>
<td>The HIV virus may live in the body 10 years or longer before AIDS symptoms develop.</td>
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<td>16</td>
<td>People infected with HIV have AIDS.</td>
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<td>17</td>
<td>Once infected with HIV, a person never becomes uninfected.</td>
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<td>18</td>
<td>HIV infection is preventable.</td>
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<td>19</td>
<td>Drugs are now available that can lengthen the life of an HIV-infected person.</td>
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<tr>
<td>20</td>
<td>Early treatment can reduce the symptoms of HIV-infected people.</td>
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(continued)

Selected items on this questionnaire are adapted from Test Your Survival Smarts: Self-Quiz on Drugs and AIDS, National Institute on Drug Abuse, U. S. Department of Health & Human Services.
Self-Quiz on HIV and AIDS (continued)

Answers:

1. True. AIDS is the term used to define the manifestation of opportunistic diseases and cancers that occur as a result of HIV infection (also referred to as “HIV disease”).

2. True. People do not get HIV because of who they are, but because of what they do. Almost all of the people who get HIV do so because they choose to engage in risky behaviors.

3. False. There is no cure for AIDS, and none seems forthcoming.

4. True. Abstinence will protect you from HIV infection. But you may still get the disease by sharing hypodermic needles.

5. True. The symptoms of HIV are often not noticeable until several years after a person has been infected. That’s why—no matter who your partner is—it is important to always protect yourself against HIV and the risk of developing AIDS, either by abstaining from sex or by always practicing safe sex.

6. False. Only abstaining from sex gives you 100 percent protection, but condoms, if used correctly, are effective in protecting against HIV infection.

7. True. Teens who are drunk or high are less likely to use condoms because, under the influence, they forget or believe that nothing “bad” can happen.

8. True. Proper use, however, is necessary to minimize the risk of infection.

9. True. Otherwise-prudent people often act irrationally and engage in risky behaviors when they are under the influence of drugs and alcohol.

10. True. HIV transmission can occur between a pregnant woman and her baby during childbirth. A baby can also be infected through breast feeding, although this occurs less frequently.

11. False. A myth regarding HIV is that it can be transmitted by donating blood. People cannot get HIV from giving blood. A brand-new needle is used by health professionals every time they draw blood. These needles are used only once and are destroyed and thrown away immediately after each individual has donated blood.

12. False. HIV is transmitted by the exchange of cellular body fluids, including blood and other body fluids containing blood, semen, vaginal secretions, and maternal milk. These fluids are most often exchanged during sexual intercourse, by using hypodermic needles previously used by infected individuals, or by contact with open wounds, cuts, or sores.

13. True. Not you, not a nurse, not even a doctor, can tell without an HIV antibody test. Upon HIV infection, the immune system’s line of defense against the virus is the formation of antibodies that bind to the virus. On the average it takes 3 months for the body to manufacture enough antibodies to show positive in an HIV antibody test. Sometimes it takes 6 months or longer.

14. True. The virus multiplies, then attacks and destroys white blood cells. These cells are part of the immune system, and their function is to fight off infections and diseases in the body. As the number of white blood cells killed increases, the body’s immune system gradually breaks down or may be completely destroyed.

15. True. Ten years or longer may go by before the person develops AIDS.

16. False. Being HIV-positive does not necessarily mean that the person has AIDS. It may be 10 years or longer following infection before the individual develops the symptoms that fit the case definition of AIDS. From that point on, the person may live another 2 to 3 years. In essence, from the point of infection, the individual may endure a chronic disease for about 12 or more years.

17. True. There is no second chance. Everyone must protect himself or herself against HIV infection.

18. True. The best prevention technique is abstaining from sex until the time comes for a mutually monogamous sexual relationship (two people having a sexual relationship only with each other). That one behavior will almost completely remove you from any risk of HIV infection or developing any other sexually transmitted disease.

19. True. Available antiretroviral drugs can delay the progress of infection, allow HIV-infected individuals to live healthier and longer lives, and even keep some people from developing AIDS. However, these drugs do not cure HIV infection or AIDS.

20. True. The sooner treatment is initiated, the better the prognosis is for a longer life.
These fluids can be exchanged during sexual intercourse, by using hypodermic needles that infected individuals have used previously, between a pregnant woman and her developing fetus, by infection of a baby from the mother during childbirth, less frequently during breastfeeding, and, rarely, from a blood transfusion or organ transplant.

The most recent data available on HIV infection diagnoses among adults and adolescents in the United States by race/ethnicity are given in Figure 14.1. The percentage of adults and adolescents currently living with a diagnosis of HIV infection, by gender and transmission category, as of the end of 2008, are provided in Figure 14.2. Further, approximately 40,000 new infections are presently being reported each year. Of all new infections, about 55 percent are reported in men who have sex with men, 3 percent in male-to-male sexual contact and injection drug use, 9 percent in male-to-female sexual contact and injection drug use combined, and less than 1 percent in other unidentified categories.

The number of adults and adolescents living with an AIDS diagnosis, by gender, is given in Figure 14.3. Currently about 50 percent of the new infections occur in African Americans, followed by Caucasians (30 percent), and Hispanics (18 percent). Asians/Pacific Islanders and American Indians/Alaska Natives each account for 1 percent or less of diagnosis.

Today, the risk of being infected with HIV from a blood transfusion is slight. Prior to 1985, several cases of HIV infection came from blood transfusions because the blood had been donated by HIV-infected individuals. Now, all individuals who donate blood are first tested for HIV. To be absolutely safe, people who are planning to have surgery might consider storing their own blood in advance, so safe blood will be available if a transfusion becomes necessary.

A myth regarding HIV is that it can be transmitted by donating blood. People cannot get HIV from giving blood. Health professionals use a brand-new needle every time they withdraw blood from a person. They use these needles only once and destroy them immediately after each person has donated blood.

People do not get HIV because of who they are, but rather, because of what they do. HIV and AIDS can threaten anyone, anywhere: men, women, children, teenagers, young people, older adults, Caucasians, African Americans, Hispanic Americans, Asian Americans, Native Americans, Africans, Europeans, homosexuals, heterosexuals, bisexuals, drug users. Nobody is immune to HIV. HIV can be transmitted between males, between females, from male to female, or from female to male. Although
HIV and AIDS are preventable, nearly all of the people who get HIV do so because they engage in risky behaviors.

**Risky Behaviors**

You cannot tell if people are infected with HIV or have AIDS by simply looking at them or taking their word. Not you, not a nurse, not even a doctor can tell without an HIV antibody test. Therefore, every time you engage in risky behavior, you run the risk of contracting HIV. The two most basic risky behaviors are:

1. Having unprotected vaginal, anal, or oral sex with an HIV-infected person. Unprotected sex means having sex without using a condom properly. A person should select only latex (rubber or prophylactic) condoms that state “disease prevention” on the package. Although you might have unprotected sex with an infected person and not get the virus, you can get it by having unprotected sex only once with an infected individual.

   Rubbing during sexual intercourse often damages mucous membranes and causes unseen bleeding (even in the mouth). During vaginal, anal, or oral sexual contact, infected blood, semen, or vaginal fluids can penetrate the mucous membranes that line the vagina, the penis, the rectum, the mouth, or the throat. From the membrane, HIV then travels into the previously uninfected person’s blood.

   Health experts believe that unprotected anal sex is the riskiest type of sex. Even though bleeding is not visible in most cases, anal sex almost always causes tiny tears and bleeding in the rectum. This happens because the rectum does not stretch easily, the mucous membrane is quite thin, and small blood vessels lie directly beneath the membrane. Condoms also are more likely to break during anal intercourse because more friction is produced in a smaller cavity. All of these factors greatly enhance the risk of transmitting HIV.

   Although latex condoms, if used correctly, provide for “safer” sex, they are not 100 percent foolproof. Abstaining from sex is the only 100 percent sure way to protect yourself from HIV infection and other STIs.

2. Sharing hypodermic needles or other drug paraphernalia with someone who is infected. Following an injection, a small amount of blood remains in the needle, and sometimes in the syringe itself. If the person who used the syringe is infected with HIV and someone else uses that same syringe to shoot up, regardless of the drug used (legal or illegal), that small amount of blood is sufficient to spread the virus. All used syringes should be destroyed and disposed of immediately.

   In addition, a person must be cautious when getting acupuncture, getting a tattoo, or having the ears or other body parts pierced. If the needle had been used previously on an HIV-infected person and was not disinfected properly, the person risks getting HIV.

   Otherwise-prudent people often act irrationally and engage in risky behaviors when they are under the influence of drugs. Getting high can make you willing to have sex when you really didn’t plan to—thereby running the risk of contracting HIV.
Small concentrations of the virus have been found in saliva and tears. In principle, if both people have open cuts on the lips or in the mouth or gums, HIV could be transmitted through open-mouth kissing. Prolonged open-mouth kissing can damage the mouth or lips and allow HIV to be transmitted from an infected person to a partner through cuts or sores in the mouth. These cases, however, are rare.

**Myths about HIV Transmission**

The HIV virus cannot be transmitted through perspiration. Sporting activities with no physical contact pose no risk to uninfected individuals unless they both have open wounds through which blood from an infected person can come in direct contact with the open wound of the uninfected person. The skin is an excellent line of defense against HIV. Blood from an infected person cannot penetrate the skin except through an opening in the skin. As an extra precaution, a person should use vinyl or latex gloves when performing work that requires direct contact with someone else’s blood or open wound.

HIV is not transmitted through casual contact. HIV cannot be caught by spending time with, shaking hands with, or hugging an infected person; from a toilet seat, dishes, or silverware used by an HIV patient; or sharing a drink, food, a towel, or clothes with a person who has HIV.

Some people fear getting HIV from health care professionals. The chances of getting infected during physical or medical procedures are practically nil. Health care workers take extra care to protect themselves and their patients from HIV.

Another myth regarding HIV transmission is that you can get it from insects or animals. The H in HIV stands for “human.” You cannot catch HIV from insects or animals. Animals do not contract HIV.

**Wise Dating**

With the advent of the Internet, people now search for sex partners online. Use of the Internet to find sexual partners may further increase the risk of contracting an STI. A study reported in the *Journal of the American Medical Association* showed that those who seek sex partners over the Internet are at greater risk. These people also are more likely to have characteristics that increase their chances of transmitting STIs.

Dating and getting to know other people are normal aspects of life. Dating, however, does not mean the same thing as having sex. Sexual intercourse as a part of dating can be risky, and one of the risks is AIDS. You can’t tell if someone you are dating or would like to date has been exposed to HIV. The good news is that as long as you avoid sexual activity and don’t share drug needles, you are not at risk for contracting HIV.

**Figure 14.4** AIDS Diagnoses and Deaths of Adults and Adolescents with AIDS, 1985–2008—United States and Dependent Areas.

![Graph showing AIDS diagnoses and deaths over time](https://example.com/graph.png)

**Note:** All displayed data have been statistically adjusted to account for reporting delays, but not for incomplete reporting. Deaths of persons with an AIDS diagnosis may be due to any cause.


**Trends in HIV Infection and AIDS**

As of 2009, estimates by the World Health Organization indicate that about 33.3 million people worldwide are infected with HIV. More than 30 million have died from AIDS since the epidemic began in 1981. Close to 2.6 million new worldwide infections were reported in 2009. And women are becoming increasingly affected, with 15.9 million women now living with HIV.

About 1.2 million people in the United States are infected with HIV and approximately 25 percent of them are unaware of the infection. One in every 300 Americans is infected, and about 26 percent of the newly reported cases are women.

Through the end of 2008, more than one million AIDS cases had been diagnosed in the United States and dependent areas (see Figure 14.4), and an estimated 600,000 people have died from the diseases caused by HIV. About 80 percent of the people who died are in the 25- to 49-year-old age group.

Although initially more than half of all AIDS cases in the United States occurred in homosexual or bisexual men, HIV infection is now spreading at a faster rate in heterosexuals. Many heterosexuals practice unprotected sex because they don’t believe it can happen to their segment of the population. HIV is an epidemic that does not discriminate by sexual orientation.

As with any other serious illness, HIV-infected people and AIDS patients deserve respect, understanding, and support. Rejection and discrimination are traits of im-
mature, hateful, and ignorant people. Education, knowledge, and responsible behaviors are the best ways to minimize fear and discrimination.

**HIV Testing**

A person can be tested for HIV in several ways. You may look up your local Public Health Department or AIDS Information Service (or related names) in the phone book. Testing results are kept confidential.

Many states also conduct anonymous testing. Your name is never recorded. You can call several toll-free hotlines or access the CDC website (www.cdc.gov/hiv) for more information on anonymous testing, treatment programs, support services, and information about HIV, AIDS, and STIs in general. All information discussed during a phone call to these hotlines is kept strictly confidential. The numbers to call are:

- **National AIDS Hotline**: 1-800-CDC-INFO (1-800-232-4636) in English and Spanish
- **National AIDS Hotline for the hearing impaired (TTY)**: 1-888-232-6348
- **STI Hotline**: 1-800-227-8922
- **Information on local testing facilities is also available online at www.hivtest.org.**

The CDC recommends HIV testing for all patients ages 13 to 64 in health care settings, including pregnant women during the routine panel of prenatal screening tests. The recommendations further include annual screening for persons at high risk for infection. Consent for HIV testing is now included in the general consent form for medical care. Patients, however, can decline testing if they choose to do so.

**HIV Treatment**

Even though several drugs are being tested to treat and slow the infection process, AIDS has no known cure. At least 40 different approaches to an AIDS vaccine are being explored. The best advice at this point is to take a preventive approach.

Antiretroviral drugs are available that delay the progress of HIV infection and even keep some people from developing AIDS. Thanks to advances in the development of drugs, many HIV-infected people can now look forward to decades of life. More than two dozen drugs are now available that suppress HIV. These drugs are usually used in combinations, commonly referred to as **highly active antiretroviral therapy (HAART)** or “AIDS cocktails.” Because the virus mutates rapidly and because some individuals don’t tolerate some of the drugs, physicians often switch drug combinations to keep HIV under control.

A new study sponsored by the National Institutes of Health was terminated early in May of 2011 because of its significance in the prevention of HIV transmission. The study found that early treatment with antiretroviral drugs, right at the time of HIV diagnosis, greatly decreased the risk of transmitting the virus to an uninfected partner. The research was conducted on 1,763 couples in nine different countries throughout the world. Only one of the partners in the couple was infected with HIV. The results showed a 96 percent reduction in HIV infection risk only among patients that received the early drug treatment. All couples in the study were urged to use condoms as they are still critical for protection. Early treatment is thus critical to decrease transmission risk. HIV-infected individuals, nonetheless, cannot make the assumption that they will not pass on the virus simply because they are on antiretroviral medication.

At present, these drugs do not cure HIV infection or AIDS. They suppress the virus (decrease your viral load), even to undetectable levels, but they do not com-
pletely eliminate the virus. The sooner the treatment is initiated, the better is the prognosis for a longer life.

For HIV-infected individuals, viral load tests are available to detect the amount of virus present in the blood. These tests measure HIV RNA, the part of HIV that knows how to make more virus. Following drug therapy, undetectable viral load does not mean the person is cured. It means that the amount of HIV in the blood is so low that it cannot be detected. As there is no known cure, the person is still infected with HIV and can infect others. Although undetectable in the blood, the virus is still present in other body tissues and the lymph system.

Developing a vaccine to prevent HIV infection or AIDS seems highly unlikely in the near future. People should not expect a medical breakthrough. Treatment modalities, however, continue to improve and allow HIV-infected individuals and AIDS patients to live longer and more productive lives.

Several AIDS clinical trials are available in the United States. These projects are co-sponsored by the CDC, the Food and Drug Administration, the National Institute of Allergy and Infectious Diseases, the National Library of Medicine, and the National Institutes of Health. The purpose of AIDS clinical trials is to evaluate experimental drugs and various therapies for people at all stages of HIV infection. Interested individuals can call 1-800-TRIALS-A. As with all HIV testing, calls are completely confidential. Eligibility to participate in an AIDS clinical trial varies, and all applicants are evaluated individually. By calling the telephone number given, an interested person will receive information on the purpose and location of the trials (studies) that are open, eligibility requirements and exclusion criteria, and names and telephone numbers of persons to contact.

Guidelines for Preventing Sexually Transmitted Infections

The good news is that you can do things to prevent the spread of STIs and take precautions to keep yourself from becoming a victim. The facts are in: The best prevention technique is a mutually monogamous sexual relationship. This one behavior will remove you almost completely from any risk for developing an STI.

Unfortunately, in today’s society, trust is elusive. You may be led to believe you are in a safe, monogamous relationship when your partner actually (a) may cheat on you and get infected, (b) has a one-night stand with someone who is infected, (c) got the virus several years ago before the current relationship and still doesn’t know about the infection, (d) may choose not to tell you about the infection, or (e) shoots up drugs and becomes infected. In any of these cases, HIV can be passed on to you.

If someone does not respect your choice to wait, he or she certainly does not deserve your friendship or, for that matter, anything else.

Because your future and your life are at stake, and because you may never know if your partner is infected, you should give serious and careful consideration to postponing sex until you believe you have found an uninfected person with whom you can have a lifetime monogamous relationship. In doing so, you will not have to live with the fear of catching HIV or other STIs or deal with an unplanned pregnancy.

As strange as this may seem to some, many people postpone sexual activity until they are married. This is the best guarantee against HIV. Young people should understand that married life will provide plenty of time for fulfilling and rewarding sex.

If you choose to delay sex, don’t let peers pressure you into having sex. Some people would have you believe that you aren’t a “real” man or woman if you don’t have sex. Manhood and womanhood are not proven during sexual intercourse but, instead, through mature, responsible, and healthy choices.

Other people lead you to believe that love doesn’t exist without sex. Sex in the early stages of a relationship is not the product of love. It is simply the fulfillment of a physical, and often selfish, drive. A loving relationship develops over a long time with mutual respect for each other.

Then there are those who enjoy bragging about their sexual conquests and mock people who choose to wait. Many of these conquests are only fantasies expounded in an attempt to gain popularity with peers.

Teenagers are especially susceptible to peer pressure leading to premature sexual intercourse. The result? More than 750,000 teen pregnancies per year and a 31 percent pregnancy rate for all girls at least once as a teenager. Preventing these pregnancies is certainly does not deserve your friendship or, for that matter, anything else.

Because your future and your life are at stake, and because you may never know if your partner is infected, you should give serious and careful consideration to postponing sex until you believe you have found an uninfected person with whom you can have a lifetime monogamous relationship. In doing so, you will not have to live with the fear of catching HIV or other STIs or deal with an unplanned pregnancy.

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Teenagers are especially susceptible to peer pressure leading to premature sexual intercourse. The result? More than 750,000 teen pregnancies per year and a 31 percent pregnancy rate for all girls at least once as a teenager. Presently, the U.S. teen pregnancy rate is one of the highest of the industrialized nations. Too many young people wish they had postponed sex and silently admire those who do. Sex lasts only a few minutes. The consequences of irresponsible sex may last a lifetime. And in some cases, they are fatal!
Sexual promiscuity never leads to a trusting, loving, and lasting relationship. Mature people respect others’ choices. If someone doesn’t respect your choice to wait, he or she certainly doesn’t deserve your friendship or, for that matter, anything else.

There is no greater sex than that between two loving and responsible individuals who mutually trust, admire, and love each other. Contrary to many beliefs, these relationships are possible. They are built upon selfless attitudes and behaviors.

As you look around, you will find that many people hold these values. Seek them out and build your friendships and future around people who respect you for who you are and what you believe. You don’t have to compromise your choices or values. In the end, you will reap the greater rewards of a lasting relationship free of HIV and other STIs.

Also, be prepared so you will know your course of action before you get into an intimate situation. Look for common interests and work together toward them. Express your feelings openly: “I’m not ready for sex; I just want to have fun, and kissing is fine with me.” If your friend doesn’t accept your answer and isn’t willing to stop the advances, be prepared with a strong response. Statements like, “Please stop” or “Don’t!” are for the most part ineffective. Use a firm statement such as, “No, I’m not willing to have sex” or “I’ve already thought about this and I’m not going to have sex.” If this still doesn’t work, label the behavior as rape and say, “This is rape, and I’m going to call the police.”

Critical Thinking
Discuss how the information presented in this chapter has affected your feelings and perceptions about sex. * What impact will this information have on your wellness lifestyle?

Reducing the Risk for STIs and HIV Infection
Based upon recommendations from health experts, observing the following precautions can reduce your risk for STIs, including HIV infection and, subsequently, AIDS:

1. Postpone sex until you and your uninfected partner are prepared to enter into a lifetime monogamous relationship.
2. Unlike you are in a monogamous relationship and you know your partner isn’t infected (which you may never know for sure), practice safer sex every time you have sex and don’t have sexual contact with anyone who doesn’t practice safe sex. This means you should use a latex condom from start to finish for each sexual act. If your partner refuses to use a condom, say no to sex with that person.
3. Use “barrier” methods of contraception to help prevent the infection from spreading. Condoms, diaphragms, and spermicidal suppositories, foams, and jellies can all deter the spread of certain STIs.

Spermicidal agents may act as a disinfectant as well. Young people are especially susceptible. Traditionally, teenagers have not used birth-control methods at all and therefore remain at high risk for STIs and unwanted pregnancies. At this time, take a few minutes and list at least three ways you might bring up the subject of condoms with your partner. Also, think of ways you might convince a person to use a condom. If your partner refuses to use a condom, your answer should be quite simple: “No condom, no sex.”

4. Know your partner and limit your sexual relationships. The days are gone when safe sex resulted from anonymous encounters at a bathhouse or a singles bar. Having only one partner lowers your chances of becoming infected. Although you can still become infected by having unprotected sex with one person only, the more partners you have, the greater are your chances for infection.
5. Don’t have sex with prostitutes.
6. Determine the conditions under which you will allow sex. Ask yourself: “Am I willing to have sex with this person?” If you decide to have sex, practice safer sex. There is no reason to accept anything else. You will feel better about yourself.
7. Plan before you get into a sexual situation. Discuss STIs with the person you are contemplating having sex with before you do so. Even though talking about STIs might be awkward, the short-lived embarrassment of addressing intimate questions can keep you from contracting or spreading infection. If you don’t know the person well enough to address this issue or you are uncertain about the answers, don’t have sex with this individual.
8. Negotiate safer sex. Focus on the problem and not the person. Describe your feelings about the problem, using “I” instead of “you.” For example, you might say, “I’m feeling awkward and uncomfortable. The only way I can feel comfortable is by using a condom.” You also can offer options and provide alternative solutions. You might indicate to your partner, “We can work this out together. Let’s go for a drive and get a condom. We’ll feel better about what we’re doing.”
9. If you are sexually promiscuous, have periodic physical checkups. You can easily get exposed to an STI from a person who does not have any symptoms and who is unaware of the infection. Sexually promiscuous men and women between ages 15 and 35 are a particularly high-risk group for developing STIs.
10. Avoid sexual contact with anyone who has had sex with one or more individuals at risk for getting HIV, even if they are now practicing safer sex.

Key Terms

Monogamous Describes a sexual relationship in which two people have sexual relations only with each other.
11. If you do have sex with someone who might be infected with HIV or whose history is unknown to you, avoid exchanging body fluids.

12. Don’t share toothbrushes, razors, or other implements that could become contaminated with blood with anyone who is, or who might be, infected with HIV.

13. If you suspect that your partner is infected with an STI, ask. He or she may not even be aware of the infection, so look for signs, such as sores, redness, inflammation, a rash, growths, warts, or a discharge. If you are unsure, abstain.

14. If you know you have an infection, be responsible enough to abstain from sexual activity. Go to a physician or a clinic for treatment and ask your doctor when you can safely resume sexual activity. Abstain until it is safe. Just as you want to be protected in a sexual relationship, you should want to protect your partner as well. If you are diagnosed with an STI and you believe you know the person who gave it to you, think of ways you might bring up the subject of STIs with this person. You need to take responsibility and discuss this matter with your partner. As a result of your conversation, medical treatment can be initiated and other people can be protected from infection as well.

15. Wear loose-fitting clothes made from natural fibers. Tight-fitting clothing made from synthetic fibers (especially underwear and nylon pantyhose) can create conditions that encourage the growth of bacteria and can actually aggravate STIs.

16. Consider abstaining from sexual relations if you have any kind of an illness or disease, even a common cold. Any kind of illness makes you more susceptible to other illnesses, and lower immunity can make you more vulnerable to STIs. The same holds true for times when you are under extreme stress, when you are fatigued, and when you are overworked. Drugs and alcohol also can lower your resistance to infection.

17. Thoroughly wash immediately after sexual activity. Although washing with hot, soapy water will not guarantee safety against STIs, it can prevent you from spreading certain germs on your fingers and might wash away bacteria and viruses that have not entered the body yet.

18. Be cautious regarding procedures (such as acupuncture, tattooing, and ear piercing) in which needles or other nonsterile instruments may be used again and again to pierce the skin or mucous membranes. These procedures are safe if proper sterilization methods are followed or disposable needles are used. Before undergoing the procedure, ask what precautions are being taken.

19. If you are planning to undergo artificial insemination, insist that frozen sperm be obtained from a laboratory that tests all donors for infection with HIV. Donors should be tested twice before the lab accepts the sperm—once at the time of donation and again a few months later.

20. If you know you will be having surgery in the near future, and if you are able, consider donating blood for your own use. This will eliminate completely the already small risk of contracting HIV through a blood transfusion. It also will eliminate the more substantial risk for contracting other blood-borne diseases, such as hepatitis, from a transfusion.

Avoiding risky behaviors that destroy quality of life and life itself is crucial to a healthy lifestyle. Learning the facts and acting upon your personal values so you can make responsible choices can protect you and those around you from painful, embarrassing, startling, unexpected, or fatal conditions.

Assess Your Behavior

Log on to www.cengagebrain.com to access CengageNOW and the Behavior Change Planner where you can take the Wellness Profile assessment and gauge your level of risk in the area of sexual behavior.

1. Do you believe that a mutually monogamous sexual relationship is the best way to prevent STIs? If not, do you always take precautions to practice safer sex?

2. If you are not prepared to have a sexual relationship, are you prepared to say so? Have you prepared exactly what to say if you are asked to have sex?

3. Have you carefully considered the consequences of engaging in a sexual relationship, including the risk for STIs, HIV infection, your partner being untruthful about his/her sexual history and STIs, and the potential of an unplanned pregnancy?

4. Are you capable of discussing your and your partner’s sexual history prior to engaging in a sexual relationship that could bring about detrimental consequences for the rest of your life?

5. If you have an STI or a history of STIs, are you sufficiently responsible to have an open and honest discussion with a potential partner about the risk for infection and consequences thereof?
Evaluate how well you understand the concepts presented in this chapter using the chapter-specific quizzing available in the online materials at www.cengagebrain.com.

1. What percentage of Americans will develop at least one STI in their lifetime?
   a. 30 to 40 percent
   b. 20 to 30 percent
   c. More than 50 percent
   d. 15 to 20 percent
   e. 40 to 50 percent

2. Which of the following sexually transmitted infections is not caused by a bacterial infection?
   a. chlamydia
   b. genital warts
   c. syphilis
   d. gonorrhea
   e. All of the above are caused by bacterial infections.

3. Chlamydia
   a. can cause damage to the reproductive system that cannot be reversed by treatment, even if successful.
   b. can cause infertility.
   c. may occur without symptoms.
   d. may cause arthritis.
   e. All choices are correct.

4. Gonorrhea can cause
   a. widespread bacterial infection.
   b. infertility.
   c. heart damage.
   d. arthritis.
   e. all of the above.

5. Treatment of genital warts is done by
   a. dissolving the warts with chemicals.
   b. electrosurgery.
   c. freezing the warts with liquid nitrogen.
   d. All of the above choices apply.
   e. None of the above choices is correct.

6. Herpes
   a. is incurable.
   b. causes sores that are treated with electrosurgery.
   c. requires antibiotics for successful treatment and cure.
   d. is caused by a bacterial infection.
   e. is not a serious STI because the person becomes uninfected once the sores heal.

7. Cold sores or fever blisters
   a. can cause genital herpes.
   b. are not highly contagious.
   c. are treatable if caused by bacterial infection.
   d. All of the above choices are correct.
   e. None of the above choices is correct.

8. The only way to determine whether someone is infected with HIV is through
   a. an AIDS outbreak.
   b. a physical exam by a physician.
   c. a bacterial culture test.
   d. an HIV antibody test.
   e. All choices are correct.

9. HIV
   a. attacks and destroys white blood cells.
   b. readily multiplies in the human body.
   c. breaks down the immune system.
   d. increases the likelihood of developing opportunistic infections and cancers.
   e. All of the above are correct.

10. The best way to protect yourself against STIs is
    a. through the use of condoms for all sexual acts.
    b. by knowing about the people who have previously had sex with your partner.
    c. through a mutually monogamous sexual relationship.
    d. by having sex only with an individual who has no symptoms of STIs.
    e. All of the above choices provide equal protection against STIs.

Correct answers can be found at the back of the book.


**Suggested Readings**


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**Chapter 14:**

**Notes**


2. See note 1.

3. See note 1.

4. See note 1.

5. See note 1.


7. See note 1.
Answer Key

This page contains answers for this chapter only

Chapter 14

1. c  2. b  3. e  4. e  5. d  6. a  7. a  8. d  9. e  10. c
CHAPTER 14 CHECK YOURSELF
Protecting Yourself and Others from STI's

Are you sexually active? If you are not, read the following items to better educate yourself regarding intimacy. If you are sexually active, continue through all the questions below.

❑ Do you plan ahead before you get into a sexual situation?
❑ Do you know whether your partner now has or has ever had an STI? Are you comfortable asking your partner this question?
❑ Are you in a mutually monogamous sexual relationship and you know that your partner does not have an STI?
❑ Do you have multiple sexual partners? If so, do you always practice safe sex?
❑ Do you avoid alcohol and drugs in situations where you may end up having planned or unplanned sex?
❑ Do you abstain from sexual activity if you know or suspect that you have an STI? Do you seek medical care and advice as to when you can safely resume sexual activity?