Chapter 24 Sexually Transmitted Diseases and HIV/AIDS
Lesson 1 Sexually Transmitted Diseases

VIDEO SUMMARY

This video points out that many sexually transmitted diseases can be asymptomatic. One such STD is herpes, which can affect both women and men. Herpes gets into the body via a cut or the mucus membranes of the genitals. Inside a cell, herpes replicates, destroys the cell, and causes blistering, tingling, and pain. It travels to a nerve junction at the base of the spine, where it stays for life.

Click here to watch video; 00:01:22

Discussion Questions
Show the video for Lesson 1. Then guide students in discussing their responses to these questions.

1. What dangers can be associated with an STD that is asymptomatic?
   Someone who has an STD but does not show any symptoms may inadvertently spread the infection to a partner.

2. Think about what you have learned about antibiotics. Why are antibiotics ineffective against herpes?
   Herpes is a virus, and antibiotics are used to treat bacterial infections.

3. What can trigger a herpes outbreak?
   Herpes can be reactivated by stress or illness.

4. How can herpes affect an individual’s social and emotional health?
   An individual who contracts herpes may have difficulties in relationships because of the social stigma associated with STDs.

Role-Play
Refusal Skills This skill involves strategies to refuse behaviors that may put one’s health at risk.

Remind students that the only sure way to avoid contracting herpes and other STDs is to practice abstinence. Also remind students that pressure to have sex may come from dating partners, but it may also come from friends and classmates. Have students work with partners to role-play situations in which teens are pressured about sex. Ask students to demonstrate using refusal skills in this activity.

WEB LINKS AND ADDITIONAL GLENCOE RESOURCES

- Visit sadd.org for a list of the warning signs and symptoms of many common STDs.
- Visit the Florida Department of Health teen page for more information about common sexually transmitted diseases.

Go to Fitness Zone Online for additional fitness activities, videos, and podcasts.
Chapter 24 Sexually Transmitted Diseases and HIV/AIDS
Lesson 1 Sexually Transmitted Diseases

VIDEO SUMMARY

This video points out that many sexually transmitted diseases can be asymptomatic. One such STD is herpes, which can affect both women and men. Herpes gets into the body via a cut or the mucus membranes of the genitals. Inside a cell, herpes replicates, destroys the cell, and causes blistering, tingling, and pain. It travels to a nerve junction at the base of the spine, where it stays for life.

After you have watched the video, write your responses to these questions.

1. What dangers can be associated with an STD that is asymptomatic?

2. Think about what you have learned about antibiotics. Why are antibiotics ineffective against herpes?

3. What can trigger a herpes outbreak?

4. How can herpes affect an individual's social and emotional health?
Chapter 24 Sexually Transmitted Diseases and HIV/AIDS
Lesson 2 Preventing and Treating STDs

VIDEO SUMMARY

Researchers have developed a vaccine for HPV (human papillomavirus), the sexually transmitted disease that can cause cervical cancer. This vaccine protects females against both cervical cancer and genital warts. Many doctors recommend that the series of three injections be given to girls between the ages of 9 and 12, but some parents feel that their preteen daughters are too young for the HPV vaccine.

Click here to watch video; 00:02:29

Discussion Questions
Show the video for Lesson 2. Then guide students in discussing their responses to these questions.

1. According to the doctor in the video, what is the primary reason for giving girls the HPV vaccine?
   The vaccine helps to prevent the disease that causes cervical cancer, a type of cancer that kills 4,000 women in the U.S. each year.

2. According to one of the mothers in the video, why have some parents decided not to vaccinate their daughters against HPV?
   Some parents feel that their preteen daughters are too young to be at risk for a sexually transmitted disease.

3. Where can you go for reliable information on sexually transmitted diseases in your community?
   Answers will vary.

Debate

Communication  This skill is an interactive process between and among individuals to clarify ideas, thoughts, needs, and feelings.

Have students form small debate teams. Ask team members to work together to prepare to support or oppose this statement: Because the HPV vaccination offers such clear health benefits, parents should not be allowed to opt out of the vaccination for their daughters over the age of 10. Once students are prepared, have pairs of teams debate the issue briefly with the rest of the class as audience.

WEB LINKS AND ADDITIONAL GLENCOE RESOURCES

- The best protection against STDs is abstinence. This article at KidsHealth.org discusses the benefits of abstinence and explains how teens can practice it.
- Visit the National Cancer Institute Web page for more information about cervical cancer.

Go to Fitness Zone Online for additional fitness activities, videos, and podcasts.
Researchers have developed a vaccine for HPV (human papillomavirus), the sexually transmitted disease that can cause cervical cancer. This vaccine protects females against both cervical cancer and genital warts. Many doctors recommend that the series of three injections be given to girls between the ages of 9 and 12, but some parents feel that their preteen daughters are too young for the HPV vaccine.

After you have watched the video, write your responses to these questions.

1. According to the doctor in the video, what is the primary reason for giving girls the HPV vaccine?

2. According to one of the mothers in the video, why have some parents decided not to vaccinate their daughters against HPV?

3. Where can you go for reliable information on sexually transmitted diseases in your community?
Chapter 24  Sexually Transmitted Diseases and HIV/AIDS
Lesson 3  HIV/AIDS

VIDEO SUMMARY

HIV attacks the immune system, the body’s self-defense against diseases, and leaves the body vulnerable to a variety of infections. HIV is spread primarily through unprotected sex and intravenous drug use. A variety of medicines are used to control the spread of the virus and to combat bacterial, fungal, and viral infections that the body cannot otherwise fight off. The therapy is complicated, costly, and, at times, controversial.

Discussion Questions
Show the video for Lesson 3. Then guide students in discussing their responses to these questions.
1. What are some of the initial symptoms of the HIV infection?
   *The symptoms of HIV are similar to the symptoms of the common flu.*
2. According to the video, what is the only way to determine that a person has HIV?
   *A blood test is the only way to determine HIV infection.*
3. What concerns does the patient in the video express about taking drugs for HIV?
   *The patient expresses doubt that the drugs will work and frustration with the complicated nature of HIV drug therapy.*
4. In your opinion, what is the most important fact for teens to know about HIV?
   *Answers will vary.*

Access Technology

Accessing Information  This skill addresses the important steps to take to get valid health information and appropriate health services.

Help students recall that the drug therapy for HIV is usually very complicated, and patients must take the correct medicines on the correct schedule. Have students work with partners and use online sources to collect specific information about HIV therapy. Ask them to find out what medicines a patient might take and what schedule a patient would have to follow. Then have the partners write out (or chart) a daily schedule of medicines and note the online sources used. Provide time during which students can compare and discuss their finished schedules.

WEB LINKS AND ADDITIONAL GLENCOE RESOURCES

- Visit the Mayo Clinic Web site for more information about the symptoms, causes, and complications of the HIV virus.
- Go to hivsymptoms.org for a statistical breakdown of HIV infection rates worldwide.

Go to Fitness Zone Online for additional fitness activities, videos, and podcasts.
Chapter 24 Sexually Transmitted Diseases and HIV/AIDS
Lesson 3 HIV/AIDS

VIDEO SUMMARY

HIV attacks the immune system, the body’s self-defense against diseases, and leaves the body vulnerable to a variety of infections. HIV is spread primarily through unprotected sex and intravenous drug use. A variety of medicines are used to control the spread of the virus and to combat bacterial, fungal, and viral infections that the body cannot otherwise fight off. The therapy is complicated, costly, and, at times, controversial.

After you have watched the video, write your responses to these questions.

1. What are some of the initial symptoms of the HIV infection?

2. According to the video, what is the only way to determine that a person has HIV?

3. What concerns does the patient in the video express about taking drugs for HIV?

4. In your opinion, what is the most important fact for teens to know about HIV?
CHAPTER 24  SEXUALLY TRANSMITTED DISEASES AND HIV/AIDS

LESSON 4  PREVENTING AND TREATING HIV/AIDS

VIDEO SUMMARY

Though there is still no cure for HIV and AIDS, researchers have made great strides in understanding how the HIV virus affects the body. In most HIV patients, T-cells, the cells in your body that attack and destroy viruses, stop working. A new study shows that the T-cells of HIV patients are still functional, but the HIV virus disarms the cell by turning off a molecular switch in the cell. Laboratory experiments have succeeded in blocking that switch so that the T-cells function as they should, but more research is needed before scientists can turn T-cells back on in the human body.

Click here to watch video; 00:01:28

Discussion Questions

Show the video for Lesson 4. Then guide students in discussing their responses to these questions.

1. What is the significance of the findings of the new study?
   If scientists are able to reactivate T-cells in HIV patients, the patients’ bodies will fight off the HIV virus, cancer, or hepatitis C.

2. What other name for T-cells is given in the video? Why do you think T-cells have been given that name?
   T-cells are also known as “killer cells,” because they seek out and destroy viruses in the body.

3. Why is it important to proceed with caution in turning T-cells back on in the human body?
   Scientists fear that the human immune system may overreact, causing autoimmune diseases in which the immune system attacks healthy cells in the body.

Discuss

Communication  This skill is an interactive process between and among individuals to clarify ideas, thoughts, needs, and feelings.

Have students form small cooperative groups, and ask group members to review and discuss what they have learned about HIV/AIDS. Pose questions such as: What do you know about HIV/AIDS that you did not know before? Do you think other teens know everything they should know about HIV/AIDS? What can or should you do to be sure your friends, classmates, and family members are fully informed?

WEB LINKS AND ADDITIONAL GLENCOE RESOURCES

- Visit the National Institute on Drug Abuse for more information about the link between drug abuse and HIV infection.
- Learn more about HIV testing at thewellproject.org

Go to Fitness Zone Online for additional fitness activities, videos, and podcasts.
Chapter 24 Sexually Transmitted Diseases and HIV/AIDS
Lesson 4 Preventing and Treating HIV/AIDS

VIDEO SUMMARY

Though there is still no cure for HIV and AIDS, researchers have made great strides in understanding how the HIV virus affects the body. In most HIV patients, T-cells, the cells in your body that attack and destroy viruses, stop working. A new study shows that the T-cells of HIV patients are still functional, but the HIV virus disarms the cell by turning off a molecular switch in the cell. Laboratory experiments have succeeded in blocking that switch so that the T-cells function as they should, but more research is needed before scientists can turn T-cells back on in the human body.

After you have watched the video, write your responses to these questions.

1. What is the significance of the findings of the new study?

2. What other name for T-cells is given in the video? Why do you think T-cells have been given that name?

3. Why is it important to proceed with caution in turning T-cells back on in the human body?