

Sexually Transmitted Diseases

Grades 7 and 8, Lesson #4

Time Needed

One to two class periods

Student Learning Objectives:

To be able to...

1. Name at least three STDs
2. List two of the four common, early symptoms of STDs and explain that STDs may be asymptomatic
3. List two of the three critical health behaviors that should follow a suspicion of infection
4. State that some STDs are life-threatening and others can have serious consequences
5. List at least two effective ways of reducing one's STD risk
6. Name the two STDs that can be prevented by getting vaccinated.

Agenda:

1. Explain the relevance of the lesson to the unit and to students' lives and your support for their abstaining.
2. Brainstorm and create a list of STDs.
3. Use a human graph activity to teach which STDs are the most serious, which aren't curable, which are often asymptomatic, and which ones condoms are less certain to prevent.
4. Complete the STD Reference Sheet aloud, as a large group activity.

Materials Needed:

Student Materials (for each student):

- *Sexually Transmitted Disease Reference Sheet*

Classroom set (single copy):

- Signs on pages 14 and 15 (laminated, if possible, for use multiple class periods, and cut into separate signs)
- Cards on page 16 (cut and taped onto separate index cards)

Activities

Background for teacher: The outdated term *venereal disease* (VD) should no longer be used. In some medical circles, the preferred term is now *sexually transmitted infection* (STI). Infection is used instead of disease because many infections don't cause disease; they are asymptomatic and don't always cause adverse reactions. But the term is less widely recognized by the public than STD. Some professionals now prefer the term *reproductive tract infection* (RTI), because not all the ailments in our genitals are transmitted sexually. But this leaves out oral and anal manifestations of diseases. This curriculum uses the term *sexually transmitted disease* (STD) to describe all the kinds of organisms that are frequently or exclusively communicated through oral, anal and/or vaginal sex.

Additional note: This lesson avoids scare-tactic videos or slide shows with advanced symptoms. These types of symptoms are rare and gory photos may encourage students to wait until their symptoms are just as advanced or to assume that, without such visible symptoms, a person must be uninfected. What's more, this type of education reinforces unhealthy body images, just as douche and penis enlarger advertising does. It makes more sense to promote the positive attitude that people's genitals are worth keeping healthy.

1. Explain the **relevance** of the lesson and how it relates to what you have studied so far: *Yesterday we talked about a few ways people get irritations and infections of the reproductive system. (Ask if the class can recall these "ways," as a review -- see Q&A #11-13 on the Sexual Health and Hygiene Reference Sheet in Lesson 3.) Today we will look at another way of getting infections. Many people catch infections of the reproductive system by having sex with someone else who has them.* Explain, too, your appreciation of their age and your support for **abstinence**: *I know many of you are not sexually active. For some, it may be several years... even ten or fifteen years. But you will want to know this information eventually, even if it's just to act as a health educator for friends and family.*
2. **Ask students to brainstorm all the STDs about which they have heard.** Write these on the board or on an overhead sheet. Fill in any they missed. The list should include:
 - Chlamydia
 - Gonorrhea
 - Syphilis
 - Pubic Lice
 - Scabies
 - Trichomoniasis
 - Hepatitis B and C aka HBV and HCV
 - Genital Herpes aka HSV 1 and 2
 - Human Papillomavirus (HPV) & Genital Warts
 - Cytomegalovirus aka CMV
 - Human Immunodeficiency Virus aka HIV Disease (last stage: AIDS)

→ The following are not specific germs; they are named for the location of the infection:

 - Pelvic Inflammatory Disease (PID)
 - Nongonoccal Urethritis (NGU) or Urinary Tract Infection (UTI)

→ It's OK, but not necessary, to include these rare STDs:

 - Molluscum contagiosum
 - Lymphogranuloma venereum
 - Chancroid

→ If someone brainstorms these, list them separately and explain that they *are not* usually sexually transmitted:

 - yeast infection
 - bacterial vaginosis (BV)
 - mononucleosis
 - Hepatitis A

3. Explain that you want you people to guess some things about STDs even if they don't know for sure.
- First, post the first three signs (from page 14), taped around the room with as much space between them as possible: "Life threatening", "Serious consequences", and "No serious consequences." Explain to class that "life threatening" means the disease could end in death, "serious consequences" means significant illness is possible, like cancer and increased susceptibility to HIV, or that the disease could do permanent damage to your body so you might not be able to have children or you might have pain for the rest of your life, and "no serious consequences" means that there might be unpleasant symptoms but the disease doesn't do permanent harm. Ask for volunteers to come to the front of the class. Give each student a card with the name of an STD on it (see page 16) and ask them to hold it so others can read it. Tell students with the cards to stand near the sign they think their disease goes with.

Life threatening ¹	Serious Consequences	No Serious Consequences
<ul style="list-style-type: none"> • HIV Disease* • Syphilis** • Hepatitis B, C*** • HPV **** <p>* End stage HIV Disease is what we call "AIDS."</p> <p>** Syphilis can kill a person eventually if untreated. Remember, though, it is curable and doesn't cause serious consequences, except in newborns, if treated early.</p> <p>*** Hep B & C can cause chronic pain, dementia, and even can be fatal, eventually, if they are chronic ... that is, if your body doesn't "clear the disease" on its own. We don't know why some people's bodies do & some don't. Remember, though, there is a vaccine to prevent Hep B.</p> <p>**** Most people clear HPV, but some HPV causes cervical cancer (which can be fatal). The HPV vaccine prevents most cases of genital warts and cervical cancer. The vaccine doesn't protect against all types of HPV.</p>	<ul style="list-style-type: none"> • Chlamydia^{*/**} • Gonorrhea^{*/**} • Pelvic Inflammatory Disease (PID) * • Genital Herpes** • Cytomegalovirus (CMV) ** <p>* Chlamydia & Gonorrhea, if untreated, can lead to PID in women. PID, if not treated early, can lead to infertility, ectopic pregnancy, or chronic pelvic pain. In men, Chlamydia & gonorrhea can lead to epididymitis and chronic scrotal pain as well as chronic pain with urination. Chlamydia & gonorrhea are curable, though.</p> <p>** Herpes and CMV (and gonorrhea & chlamydia except when they lead to PID) cause serious consequences not so much to teens & adults, but mainly if a baby gets infected during pregnancy or birth. Congenital CMV - meaning present at birth - is a very common cause of serious disability in newborns, including mental disability; lung, liver and spleen problems; hearing loss; bleeding problems; vision loss; and growth problems.</p>	<ul style="list-style-type: none"> • Pubic lice^{*/**} • Scabies^{*/**} • NGU / UTI* • Trichomoniasis* <p>* All four of these are curable.</p> <p>** We call pubic lice and scabies "STD's" because they are often spread sexually, but they can also be spread by sharing clothing or bedding ... even sleeping in a bed where someone spent the previous night who had lice, if the lice laid eggs on the bedding.</p>

Reinforce that some STDs are very serious.

- Second, take down the signs and replace with two signs: “curable” and “not curable.” Tape these at opposite ends of the room. Ask the same students to go to the sign they think their disease fits under.

Curable:	Not Curable:
<ul style="list-style-type: none"> • Chlamydia • Gonorrhea • Syphilis • Pubic lice • Scabies • Trichomoniasis • NGU / UTI • Pelvic Inflammatory Disease (except it may have already left scar tissue, before it is cured) 	<ul style="list-style-type: none"> • Genital Herpes (HSV) • Human Papillomavirus (HPV) & Genital Warts • HIV Disease • Hepatitis B, C (HBV, HCV) • Cytomegalovirus (CMV)

All those *not* caused by viruses – the majority -- *are* curable. **Reinforce, however, that the ones caused by viruses *aren't* curable.** They are treatable, and treatment may help with symptoms, slow down the progression of the disease, and even reduce risk of transmission. Mention, too, that there are now **vaccines** available to reduce the chances a person will become infected with **Hepatitis B and HPV.**

- Third, take down the old signs and replace with: “Always have symptoms” and “Often DON’T have symptoms.” Explain that symptoms are the visible signs that you have a disease. Sneezing may be a symptom of a cold. Say, “When a disease has no symptoms, it is called asymptomatic, and you can still spread it to others and get it from others. Sores, itching, and discharge may be symptoms of STDs.” Ask the same students to go to the sign they think their disease fits under.

Always have symptoms²	Often don't have symptoms
<ul style="list-style-type: none"> • Scabies • Pubic lice 	<ul style="list-style-type: none"> • Chlamydia • Gonorrhea • Human Papillomavirus & Genital Warts • Genital Herpes • Hepatitis B, C • Cytomegalovirus • HIV Disease • Syphilis • Pelvic Inflammatory Disease • NGU / UTI • Trichomoniasis

Reinforce that most STDs can be asymptomatic and this is when many are spread, because people do not realize they have an STD.³

- Fourth, take down the old signs and replace with two signs: “Condoms are very effective at preventing” and “Condoms might not cover the place on the body that was infected.” Tape these at opposite ends of the room. Explain that abstinence (from oral, anal and vaginal intercourse) protects from all diseases almost 100% of the time ... that is, assuming no needle sharing, and not counting things like public lice that can be passed on bedding. After, abstinence, the next best protection is condoms. Ask the same students to go to the sign they think their disease fits under.

Condoms are very effective at preventing⁴:	Condoms might not cover the place on the body that was infected:
<ul style="list-style-type: none"> • HIV Disease • Chlamydia • Gonorrhea • Hepatitis B, C • Cytomegalovirus • Trichomoniasis • NGU / UTI • Pelvic Inflammatory Disease 	<ul style="list-style-type: none"> • Genital Herpes • Genital Warts (caused by HPV) • Pubic lice • Scabies • Syphilis

Reinforce that condoms *do* protect *very well* against diseases that are spread through semen, vaginal fluids and blood (the ones in the left column). They are less effective for diseases that are spread skin-to-skin or, like lice, hair-to-hair. A herpes sore or a genital wart, for instance, might be on a person’s scrotum, labia or anus, where a condom just wouldn’t cover it. Or they could shed virus there, even when there was no sore or wart visible. However, it is important to close this section with the strong message that **NO DISEASES TRAVEL THROUGH LATEX OR POLYURETHANE.**

4. Hand out the STD Reference Sheet and fill it out together, as a large group, as you did with the Sexual Health and Hygiene Reference Sheet in Lesson 3. Write the correct answers on the whiteboard or an overhead sheet after students have a chance to guess. Alternatively, you can have them guess on paper at their seats, and then review as a whole class. (You will probably have time to complete more or less half the worksheet today. Save it to complete it tomorrow.)

Here are the correct answers and explanations:

1. There are more than **30** different STDs.⁵

Explanation/Note: We discover new ones all the time; eight have been discovered since 1980.⁶ Others have been around for thousands of years, like syphilis. Some only affect people with compromised immune systems, like persons with HIV or fetuses during birth. Some are very rare in the United States. Today we will focus on just 13 diseases.

2. Check 5 of the most common STDs.
- ◆ **Chlamydia**
 - ◆ **Trichomoniasis**
 - ◆ **Genital Herpes**
 - ◆ **HPV**
 - ◆ **CMV** is actually the most prevalent infection. However, many people have it, while very few get sick from it. It's primarily dangerous to babies and people with already-weakened immune systems, such as those with HIV.

3. We used to call STDs "**VD**".

Explanation/Note: The letters "VD" stand for venereal disease. "Venereal" comes from Venus, the goddess of love. We used to be cute, in other words, and call them "love diseases." Now we call them what they really are...sexually transmitted diseases ... or germs people can pass to one another if they have unprotected oral, vaginal, or anal intercourse.

4. What are some infections that seem like STDs but in fact are usually *not* spread by sex?
- ◆ **yeast infections**
 - ◆ **jock itch**
 - ◆ **bacterial vaginosis**
 - ◆ **mononucleosis**

Note: Yeast, jock itch and BV could theoretically be spread sexually, but that's not the primary way they are spread. Mononucleosis is a virus that is passed by saliva and has been called the "kissing disease" but it isn't considered an STD. It is also passed by sharing straws and eating utensils.

5. What 4 STDs can be life threatening?

- ◆ **Syphilis**
- ◆ **Hepatitis B & C**
- ◆ **HIV**
- ◆ **HPV**

Note: Pelvic Inflammatory Disease (PID) is commonly caused by chlamydia or gonorrhea. PID can leave scarring in the fallopian tubes, which can in turn lead to an ectopic pregnancy (also called tubal pregnancy). An ectopic pregnancy, if it were to rupture, could also be fatal. But that's a lot of "ifs."

6. What serious consequences can happen from some STDs? **All of These** (death, infertility [not being able to have a baby biologically or to get someone pregnant], cancer of the cervix, chronic pain [pain that doesn't go away], blindness, brain damage).

Note: Some of these consequences can be avoided completely or delayed significantly if identified and treated early.

7. What STDs have no cure?

- ◆ **Hepatitis B & C**
- ◆ **Genital Herpes**
- ◆ **HIV**
- ◆ **HPV**
- ◆ **CMV**

Explanation/Note: What these STDs have in common is that they are all viruses. Scientists are not sure how viruses work, so they are difficult to cure. All of these STDs can be treated with medication, but not cured.

(Although there's no medical cure for them, viruses such as Hepatitis B and HPV sometimes clear from the body naturally.⁷ This is similar to how your body eventually clears a cold virus.)

8. Who can get the HPV vaccine and what does it do?

- ◆ **Girls and women ages 9 to 26 years old**
- ◆ **Prevents most cases of genital warts and cervical cancer**

Explanation/Note: HPV vaccine is recommended for every 11 or 12 year old girl (it's not available yet for boys) and all teenage girls and young women should get it, if they haven't already. Ideally, the vaccine is administered before onset of sexual activity--before women are exposed to the viruses--but people who are already sexually active can still be vaccinated.

There is also a **vaccine for Hep B**, and it is recommended for all babies, children and teens 19 years of age or younger. Many people will have already received three doses of the Hepatitis B vaccine as part of childhood immunizations. If not, it is never too late to receive this vaccine. The vaccine helps to prevent people from getting the disease or having serious symptoms.

9. Which STDs can have no symptoms? ALL OF THEM except:

- ◆ **Scabies**
- ◆ **Pubic lice**

Explanation/Note: A person will definitely notice intense itching and bumps or a rash with scabies. With pubic lice, they'll notice intense itching and tiny white nits (eggs) on pubic hair. They may or may not see the actual lice; lice move fast.

With other STDs, symptoms may be obvious or they may be subtle and tough to identify. Some take years to show up. Sometimes symptoms never show up.

10. Can a person feel fine and look healthy and clean and still have an STD? **Yes, they can have no symptoms and they might still be contagious.**

Explanation/Note: In fact, that's often the reason they *are* spread. The person doesn't realize they have an infection. Even if a person *does* get symptoms, the symptoms may go away, although the person is still infected and can still pass on the germs. Genital warts and herpes sores both disappear, for instance, even though the disease is still in the person's body.

11. What are the most common, early symptoms of STDs ... if people DO have symptoms?

- ◆ **Sores**
- ◆ **Bumps**
- ◆ **Itching**
- ◆ **Unusual discharge**
- ◆ **Pain in your lower abdomen (belly)**
- ◆ **Burning (with urination)**

Explanation/Note: **Sores** can be a symptom, whether they hurt or not.

Discharge is a symptom only if it is unusual. In men, liquid other than urine or semen coming from the penis is abnormal. For men and women, any liquid besides feces [poop] coming out of the anus can be a symptom. For a woman, unhealthy discharge could be liquid coming from the vagina that is clearly not her normal, healthy wetness, like if it has a different odor than usual, if it's yellow or greenish instead of clear or white, if it is lumpy instead of smooth, or if there is blood when she is not menstruating.

12. The best (most certain) ways people can protect themselves and their partners from getting or giving an STD are:
- ◆ Not having oral, anal, or vaginal sex (This is called **abstinence** and it is safest.)
 - ◆ Only having sex with one other person, who only has sex with them, ever. (In a marriage or a long-term partner relationship where they have had years to build trust.)
 - ◆ Using a **condom** every time they have sex.

Explanation/Note: This is an appropriate point at which to discuss all the reasons people may choose to **abstain**. If you have not done lesson 12, share and take turns reading aloud the *Position Paper: Touch and Abstinence* from that lesson. This is also an appropriate point for discussing what it takes to develop **trust**, since some people will think they can trust someone they met yesterday on-line. Ask your class how long-term a relationship should be before people consider having sex, if they are trying to reduce their risk of STD's. Make sure they understand that the longer a person waits in each new relationship, the fewer partners they will have in their lives, and the less likely they'll be to ever catch an STD. Finally, this is an appropriate point to explain what it means to use a **condom** correctly. If you have not done Lesson 24, do that lesson's activity 4, now.

13. It also cuts down people's risk if they:
- ◆ Limit the number of people they have sex with in their lives.
 - ◆ Go to the doctor, regularly, if they are having sex, and ask for a thorough STD **check-up**.

Note: How regularly, depends upon how often they get into new relationships. Once a year is enough for someone who has had the same partner for all that time and whose partner hasn't been with anyone else since getting tested. Four times a year is recommended for some sexually active people. A person should talk with a health care provider about what to be tested for, depending upon their own sexual history. They should never *assume* that they've been screened for every STD. In other words, just because the doctor didn't say they had an STD, that doesn't necessarily mean they are in the clear; it might just mean they weren't tested for that particular disease.

- ◆ Do not **douche** (wash out the vagina) or use an **enema** (wash out the rectum) before or after having sex.

14. People **can't** get STDs by hugging, holding hands, cuddling with clothes on, dancing, playing football, brushing someone's hair, etc.
15. If a person thinks he or she might have an STD, he or she should:
- ◆ **Go to a doctor. Note:** Also acceptable answers: "go to a clinic," "get a check-up."
Important to add: People need to ask the doctor or other provider what infections she tested them for and the results for **each** STD that was tested. If the result of one STD test is negative, it doesn't mean that other results are negative as well or that the person was tested for every possible STD.
 - ◆ **Tell their partners. Note:** That means anyone with whom he or she has had sex ... and encourages them to get tested, too.
Important to add: If there is a power difference between the two people (like if the boyfriend or girlfriend is a lot older), or if the boyfriend or girlfriend has been violent in the past, or if it's just too scary to talk with them about the fact that they might have an infection, there are people at Public Health who can talk with a person's partner **for** them. And they don't say the name of the person who suggested they call.
 - ◆ **Stop having sex until a doctor says it's OK. Note:** Sometimes a person needs to be retested to make sure the medicine worked, even for those that are curable.
16. Hotlines to recommend for information about STDs, testing, and treatment:
- CDC National STD Hotline: **1-800-227-8922** (Free nationwide)
 Línea Nacional de las ETS de los CDC: **1-800-344-7432**
 CDC Nat'l STD Hotline TTY for the Deaf & Hard of Hearing: **1-800-243-7889**
 Public Health – Seattle & King County STD / HIV Hotline: **206-205-STDS** (7837)
 (Free in King County, WA)
 Your local county public health department: _____
 Herpes and HPV Hotline: **206-726-4478** (Free in King County, WA)
 AIDS Information Line: **1-800-342-AIDS** (Free nationwide)
 Teen AIDS Line: **1-800-234-TEEN** (M-F) or **1-800-440-TEEN** (weekends)
 (Free nationwide)

NOTE: Only give out numbers that are free for your students. Please provide local numbers for your students, if possible.

Websites to recommend for accurate, up-to-date STD information aimed at teens:

- Sex Etc. (the web site of Rutgers University's Network for Family Life Education): **www.sexetc.org**
- Teen Source by California Family Health Council: **www.teensource.org**
- Teen Wire by Planned Parenthood: **www.teenwire.com**
- Seattle King County Public Health – Sexually Transmitted Diseases Program: **www.metrokc.gov/health/apu/std/**
- Seattle King County Public Health – STDs among GLBT youth: **www.metrokc.gov/health/glbt/youthstd.htm**

Sexually Transmitted Disease (STD) Reference Sheet

Name _____ Date _____

A Sexually Transmitted Disease (STD) is ANY infection people commonly get by having sex with someone who has it.

1. There are more than ___ ___ different STDs.
2. Check five of the most common STDs:

<ul style="list-style-type: none"> <input type="checkbox"/> Chlamydia <input type="checkbox"/> Gonorrhea <input type="checkbox"/> Syphilis <input type="checkbox"/> Pubic Lice <input type="checkbox"/> Scabies <input type="checkbox"/> Trichomoniasis 	<ul style="list-style-type: none"> <input type="checkbox"/> Hepatitis B and C (also called HBV and HCV) <input type="checkbox"/> Genital Herpes (caused by Herpes Simplex Virus 1 or 2) <input type="checkbox"/> HPV (the virus that sometimes causes genital warts) <input type="checkbox"/> CMV (Cytomegalovirus) <input type="checkbox"/> HIV Disease (the last stage of which is AIDS)
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3. We used to call STDs “___ ___”.
4. What are some infections that seem like STDs but in fact are usually *not* spread by sex?
 - ◆ Y _____ I _____
 - ◆ J _____ I _____
 - ◆ B _____ V _____
 - ◆ M _____
5. What 4 STDs can be life threatening?

◆ _____	◆ _____
◆ _____ & _____	◆ _____
6. What serious consequences can happen from some STDs? (circle the best answer)

Death	Blindness
Infertility	Brain Damage
Cancer of the cervix	All of these
Pain	None of these

7. What STDs have no cure?

- ◆ _____ & _____
- ◆ _____
- ◆ _____

8. Who can get the HPV vaccine and what does it do?

- ◆ _____ and _____ ages _____ to _____ years old
- ◆ Prevents most cases of _____ & _____

9. Which STDs can have no symptoms? ALL OF THEM except:

- ◆ _____
- ◆ _____

10. Can a person feel fine and look healthy and clean and still have an STD?

- Yes, they can have no symptoms and they might still be contagious
- Yes, but they can't give it to anyone else unless they have symptoms
- No, they must have symptoms

11. What are the most common early symptoms of STDs ... if people DO have symptoms?

- ◆ _____
- ◆ _____
- ◆ _____ing
- ◆ _____ing
- ◆ unusual _____
- ◆ _____ in the abdomen (belly)

12. The best (most certain) ways people can protect themselves and their partners from getting or giving an STD are:

- ◆ Not having oral, anal, or vaginal sex (This is called _____ and it is safest.)
- ◆ Only having sex with _____ other person, who only has sex with them, ever. (In a marriage or a long-term partner relationship where they have had years to build trust.)
- ◆ Using a _____ every time they have sex.

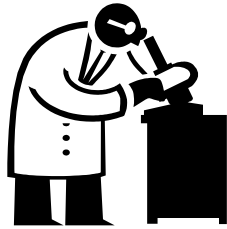
13. It also cuts down people's risk if they:

- ◆ Limit the _____ of people they have sex with in their lives.
- ◆ Go to the doctor, regularly, if they are having sex, and ask for a thorough STD _____.
- ◆ Do not _____ (wash out the vagina) or use an _____ (wash out the rectum) before or after having sex.

14. People _____ get STDs by hugging, holding hands, cuddling with clothes on, dancing, playing football, brushing someone's hair, etc.

15. If a person thinks he or she might have an STD, he or she should:

- ◆ _____
- ◆ _____
- ◆ _____

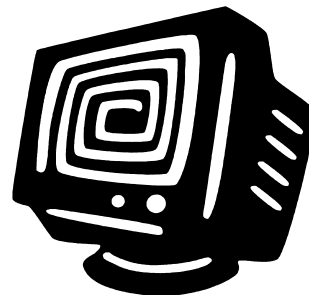


16. Scientists learn more about STDs all the time. It is hard to keep up with the changing information. When friends tell you things, they may be unclear or even wrong. Radio, TV, and newspaper reports may be incomplete or unclear, making things more confusing. So where can you go to find out the most up-to-date answers about STDs?

Trustworthy Telephone Hotlines include:

Trustworthy Websites include:

Don't blindly trust rumors. Check them out. Even teachers and doctors make mistakes!



SIGNS: Copy this page and the next onto bright-colored paper, laminate them if possible, and cut on the dotted lines to make wall signs for activity 3.

Life threatening

Serious

Consequences

No Serious

Consequences

Curable

Not Curable

Always have
symptoms

Often don't have
symptoms

Condoms are very
effective at
preventing

Condoms might not
cover the place on
the body that was
infected

CARDS: Copy this page, cut on the dotted lines, and tape the strips onto index cards to make cards for 13 students (at a time) to use in activity 3.

HIV Disease & AIDS

Syphilis

Hepatitis B and C

Human Papillomavirus (HPV) & Genital Warts

Chlamydia

Gonorrhea

Pelvic Inflammatory Disease (PID)

Genital Herpes

Cytomegalovirus (CMV)

Pubic lice

Scabies

NGU & UTI

Trichomoniasis

REFERENCES:

¹ CDC Website. Sexually Transmitted Diseases Fact sheets. Available at: http://www.cdc.gov/STD/HealthComm/fact_sheets.htm. Accessed May 2, 2006.

² See CDC Sexually Transmitted Diseases Fact sheets.

³ Ibid.

⁴ CDC Website. Sexually Transmitted Diseases Treatment Guidelines 2002. Available at: <http://www.cdc.gov/STD/treatment/1-2002TG.htm#PreventionMethods>. Accessed May 10, 2006.

⁵ Holmes KK. Sexually Transmitted Diseases, 3rd ed. New York: McGraw-Hill; 1999.

⁶ Ibid.

⁷ CDC Website. Human Papilloma Virus Fact sheet. Available at: <http://www.cdc.gov/std/HPV/STDFact-HPV.htm#cure>. Accessed: May 10, 2006.