Basic STD Facts

Several sexually transmitted diseases (STDs) can cause serious complications if left untreated. Genital herpes, chlamydia, gonorrhea, trichomoniasis and syphilis increase the chance of HIV transmission/infection by two to six times. Although there are more than 20 diseases that can be transmitted sexually, based on estimated numbers of people currently infected and the significance of potential adverse outcomes, eight of these, including HIV, are considered “major” STDs.

**STD vs. STI**

Over the past two decades, the term STDs (sexually transmitted diseases) has been the most accepted and widely used term in the literature and popular press. In recent years, however, the term STIs (sexually transmitted infections) has been increasing in popularity and use in the literature on sexually transmitted diseases. For a brief discussion of the use of STD vs. STI see http://tinyurl.com/2otn79. The policy review materials use the more familiar term STDs, whereas the published study uses the technically more precise term STIs.

**Genital Herpes (Herpes simplex virus)**

Genital herpes is caused by herpes simplex virus type 2 (HSV-2) and, less commonly, herpes simplex virus type 1 (HSV-1). Although genital herpes is treatable, there is no cure for it, and herpes is a lifelong infection. Herpes is highly transmissible through oral, anal and vaginal sex. Genital herpes is not a reportable disease in California.

**Human Papillomaviruses (HPV)**

There are approximately 40 types of sexually transmitted human papillomaviruses (HPV). Most HPV transmission occurs asymptptomatically, and more than 90 percent of HPV infections are thought to be invisible to the naked eye. Research suggests that most people’s immune system will eliminate HPV infection within a year or two; however, about 10 percent of people remain infected for much longer, possibly for life.

Some HPV types are highly linked to the development of cervical and anal cancer, whereas others cause visible genital warts. Pap smears can detect cervical abnormalities and cancer. A vaccine that protects against four HPV types, which cause about 70 percent of cervical cancer and 90 percent of genital warts, is now approved for females aged 11-26. HPV is not reportable in California.

**Trichomoniasis (Trichomonas vaginalis)**

Trichomoniasis is highly infectious through vaginal sex. Women frequently experience uncomfortable vaginal irritation and itching, vaginal discharge and burning during urination. Men usually experience few symptoms. Trichomoniasis is curable, but re-infection can occur. Trichomoniasis is not reportable in California.
The hidden STD epidemic among California youth

**Chlamydia (Chlamydia trachomatis)**

Chlamydia is highly infectious through vaginal and anal sex. Oral sex transmission is possible, though not common. Many cases go undetected because chlamydia frequently causes no signs or symptoms. Untreated chlamydia can cause serious problems in women, including pelvic inflammatory disease (PID), potentially fatal tubal (ectopic) pregnancies and infertility. A pregnant woman can pass chlamydia to her fetus, resulting in eye infections or pneumonia. Untreated chlamydia can result in epididymitis in men. Although several oral antibiotics can cure chlamydia, a person can get re-infected again and again. Chlamydia is reportable in California.

**Gonorrhea (Neisseria gonorrhoeae)**

Gonorrhea is easily passed through vaginal, anal and oral sex. Both men and women may experience discharge or burning during urination, however, many infections do not cause symptoms. Untreated gonorrhea can result in PID in women and epididymitis in men. Gonorrhea is curable with certain antibiotics, but re-infection can occur and drug resistance is a growing problem. Gonorrhea is reportable in California.

**Hepatitis B Virus (HBV)**

Approximately 50 percent of Hepatitis B cases are sexually transmitted. About five to 10 percent of the infections become chronic, lifelong infections. The hepatitis B virus (HBV) is relatively easy to transmit through vaginal and anal sex. HBV infections are usually asymptomatic, but acute infection can be debilitating and sometimes cause fatal liver disease. Newer medications are now available for treatment of HBV, and there is an effective HBV vaccine. Hepatitis B is reportable in California.

**Syphilis (Treponema pallidum)**

Many of the syphilis cases are among men who have sex with men, about half of whom are co-infected with HIV. Syphilis is highly infectious in its primary stage through oral, vaginal and anal sex. It can also be passed from a pregnant woman to her fetus, sometimes causing stillbirth or lifelong birth defects. Syphilis is usually easily cured with specific antibiotics, but re-infection can occur. Syphilis is reportable in California.

**Human Immunodeficiency Virus (HIV)**

The majority of new human immunodeficiency virus (HIV) diagnoses occur among men who have sex with men; however, heterosexual contact has now surpassed injection drug use as the second most common mode of transmission for HIV. HIV can be transmitted through blood, sexual fluids (semen and vaginal secretions) and breast milk. Although advances in treatment have yielded significant decreases in deaths among persons with AIDS, there is no cure, and AIDS remains a highly fatal sexually transmitted disease. HIV and AIDS are reportable in California.