Oregon Health Authority

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HIV, STD, TB, VIRAL HEPATITIS PROGRAM, OREGON HEALTH AUTHORITY

Minding the Gap

Sexually Transmitted Infections

Persons incarcerated within jail or prison experience higher burden of sexually transmitted infections than the general population. STIs can increase susceptibility to HIV infection, and are indicators of high-risk sexual practices, such as inconsistent condom use.

While the high turnover rate in jails make health screening and care challenging, jail medical staff can positively affect community public health through the provision of STI screening, treatment and referral of inmate or detainee patients in local jail facilities.

SYPHILIS

Cause: bacterium *Treponema pallidum*

Transmission: Syphilis is transmitted during vaginal, anal, or oral sexual contact. Syphilis is transmitted from person to person by direct contact with syphilis sores. Pregnant women infected with syphilis can pass it to their unborn children. Men with HIV appear to be more likely to transmit syphilis infection , and men who have HIV appear to be more susceptible to syphilis infections.

Symptoms: Syphilis is a systemic disease divided into stages that can be separated by extended periods without symptoms.

Primary syphilis usually consists of a single sore that lasts one to five weeks. The average time between infection with syphilis and the primary stage sore is 21 days, but it can range from 10 to 90 days. Syphilis is most infectious during this period. The primary stage sore will resolve with or without treatment, but if not treated the infection remains.

Secondary syphilis symptoms include skin rashes and/or sores in the mouth, vagina, or anus. Rashes can appear from the time when the primary sore is healing to several weeks after it has healed. The rash usually does not cause itching and may appear as rough, red, or reddish brown spots both on the palms of the hands and/or the bottoms of the feet. However, the rash may look different on other parts of the body and can look like rashes caused by other diseases. Large, raised, gray or white lesions may develop in warm, moist areas such as the mouth, underarm or groin region. The symptoms of secondary syphilis will go away with or without treatment. People with secondary syphilis are infectious. Without appropriate treatment, the infection will progress to the latent and possibly late stages of disease.

Latent syphilis begins when primary and secondary symptoms disappear. Without treatment, the infected person can continue to have syphilis in their body even though there are no signs or symptoms. Latent syphilis can last for years. Latent infection can be detected by blood testing. A latent infection is called "early latent syphilis" if the infection was acquired within the last year.

Late syphilis develops in about 15% of people who were not treated for syphilis. It can appear 10–30 years after the initial infection. Symptoms of the late stage of syphilis include difficulty coordinating muscle movements, paralysis, numbness, gradual blindness, and dementia. In the late stages of syphilis, there may be damage to the internal organs, including the brain, nerves, eyes, heart, blood ves-

STD Resource Links

The below links have more detailed information about STDs, and address:

CDC "Sexually Transmitted Diseases Treatment Guidelines, 2010";

2012 CDC treatment guidelines for gonorrhea;

The Oregon Disease Reporting Guidelines for healthcare providers; and

Oregon-specific STI Facts Sheets, including the Intersection Between HIV and STD's in Oregon.

sels, liver, bones, and joints. This damage can result in death.

Diagnosis: Blood tests for syphilis antibodies. The blood tests for syphilis are often not positive until three weeks or more after the exposure.
Estimated cost of screening test: $5-10
Treatment: Antibiotics
Estimated cost of treatment: Early treatment cost estimate $5-10 through public health to $100 in private sector. Latent syphilis treatment cost estimates fall between $30 and 300. Neurosyphilis treatment may require hospitalization making it difficult to estimate costs.
Untreated: Syphilis infection may result in death.
Cost-effective threshold: If syphilis infection rates are ≥1%, it is cost effective to screen.
Syphilis in Oregon: In Oregon, early syphilis (including primary, secondary, and early latent syphilis) cases increased substantially during the past four years from a low of 26 cases (0.7 per 100,000) during 2007 to 167 (4.3 cases per 100,000 population) during 2011. During 2011, elevated rates of early syphilis were observed in men aged 25 to 44 years with the highest rate reported among men aged 40–44 years (22.3 cases per 100,000 population). In addition, during 2011, at least 129 of the 166 men with reported cases of syphilis reported having had sex with other men, 46 percent (48/104) of syphilis cases occurred in men with HIV, and there was one female case of syphilis.

CHLAMYDIA

Cause: bacterium *Chlamydia trachomatis*.
Transmission: Chlamydia is transmitted from person to person during vaginal, anal, or oral sex. Chlamydia can be found in the vagina, penis, rectum, or throat. Pregnant women with Chlamydia can pass it from an infected mother to her baby during vaginal childbirth.
Symptoms: An estimated 50 % of men and 70% of women have no symptoms. In men, Chlamydia may produce symptoms similar to gonorrhea. If symptoms do occur, they typically appear between 1 and 3 weeks after infection and can include painful sexual intercourse, burning sensation during urination and discharge from the penis, vagina, or rectum. Women may also have lower back pain, nausea, fever, or bleeding between menstrual periods.
Diagnosis: Urine or swab of fluid collected from penis or cervix
Estimated cost of testing: $20
Treatment: Antibiotics
Estimated cost of treatment: $10-40

Untreated: In women, untreated Chlamydia infection can spread to the uterus or fallopian tubes and cause pelvic inflammatory disease (PID) and permanent damage to the fallopian tubes. The damage can lead to chronic pelvic pain, infertility and tubal pregnancy. Untreated Chlamydia infection can increase a person's risk of acquiring HIV.
Cost-effective threshold: If Chlamydia rates are ≥ 3% for women or 8% for men it is cost effective to screen.
Chlamydia in Oregon: During 2011, 13,691 cases of Chlamydia were reported in Oregon residents living in every county (approximately 375 cases per 100,000 residents). Reported rates of Chlamydia are twice as high in women compared to men, probably a result of current guidelines that recommend asymptomatic screening in women, but not in men. By age, the highest rates in both women and men are among 15 to 24-year-olds. In addition, Chlamydia rates are higher in blacks and African Americans (834/100,000 population) and Hispanics (391) than whites (226).

GONORRHEA

Cause: bacterium *Neisseria gonorrhea*
Transmission: Gonorrhea is transmitted from person to person through vaginal, anal and oral sex. Gonorrhea can be found in the vagina, cervix, uterus, fallopian tubes, urethra, mouth, throat, eyes and anus. Pregnant women with gonorrhea can also pass it to her baby during vaginal childbirth.
Symptoms: Men and women have different experiences with gonorrhea infections. Most men infected men with gonorrhea are symptomatic. Symptoms in men can include painful urination, and white, yellow or greenish discharge from the penis. Most women infected with gonorrhea have no symptoms. If a woman experiences symptoms, these may include painful urination, pelvic pain, increased vaginal discharge or vaginal bleeding between periods. Symptoms of rectal gonorrhea infection may include discharge, anal itching, soreness, bleeding or painful bowel movements. A gonorrhea infection in the throat may cause a sore throat, but usually there are no symptoms. If a woman transmits gonorrhea to her child during birth, the child may develop eye infections and blood infections that can result in widespread, disseminated gonorrhea infection (DGI).
Diagnosis: Urine or swab of fluid collected from the urethra (for men), the cervix or vagina (for women), throat or rectum.

Estimated cost of testing: $20
Treatment: Injectable antibiotic combined with one or two oral antibiotics. The CDC recently updated its gonorrhea treatment guidelines. Gonorrhea has become resistant to several antibiotics that have historically been used to treat the infection, so it is important to follow current treatment recommendations.

Estimated cost of treatment: $10-20
Untreated: In women, untreated gonorrhea can spread into the uterus or fallopian tubes and cause pelvic inflammatory disease (PID) and may lead to permanent damage to the fallopian tubes. The damage can lead to chronic pelvic pain, infertility and ectopic pregnancy. In men, gonorrhea may be complicated by epididymitis (inflammation of the tube that connects the testicles with the vas deferens). In rare cases, this may lead to infertility. Disseminated gonococcal infection (DGI) can present as joint pain, skin lesions, or infection of the heart, bones or meninges (lining that cover the brain) and can be fatal. Untreated gonorrhea can increase a person's risk of acquiring or transmitting HIV, the virus that causes AIDS.

Cost-effective threshold: If gonorrhea rates are ≥ 3% for women or 8% for men it is cost effective to screen.
Gonorrhea in Oregon: During 2011, 1,490 cases of gonorrhea were reported in Oregon residents (28 cases per 100,000 residents). Gonorrhea cases were reported in 26 of 36 Oregon counties. Rates of gonorrhea have fluctuated between 25 and 45 cases per 100,000 residents since 2002 and rates in Oregon remain well below the U.S. (101 cases per 100,000 residents during 2010). With the exception of those 10–19 years of age, reported rates of gonorrhea in men exceed rates among women. The highest rates of gonorrhea occur among men and women aged 20–24 years. Among men, rates rise again among those aged 40–44 years. During 2011, at least 35 percent of gonorrhea cases occurred among men who reported sex with other men. By race and ethnicity, African Americans experienced higher case rates of gonorrhea (391 cases per 100,000 residents) than whites or Hispanics, or people of other races (<35 cases per 100,000 residents). A disproportionate number of gonorrhea cases occur in men who are also infected with HIV. During 2006–2011, the annual rates of gonorrhea among men living with HIV have been ≥30 times higher than the rate among the general population. Approximately 70 cases of gonorrhea occur in men who have HIV each year.

Training Opportunities

October 25-26, 2012 STD Update by the Seattle STD/HIV Prevention Training Center with Optional Clinical Practicum. 8:30-5 pm in Portland, OR. Phone: 206-685-9850 or email **seaptc@uw.edu** for more information.

April 22-23, 2013 Adolescent Sexuality Conference Youth Sexual Health & Social Justice: *Room for everyone.* Seaside, Oregon. Contact Lila Duncan, STD Project Coordinator, HIV/STD/TB Program, Oregon Public Health P: 971-673-0163
CDC STD Webinars. The CDC offers free STD webinars geared for public health practitioners, clinicians, physicians, program staff and more. CME units are available for some courses.

Professional Associations

The American Correctional Health Services Association (ACHSA) is a national professional organization whose members provide medical, mental health and dental health care for incarcerated individuals in our nation's jails, detention facilities, and prisons and within our communities. The mission of the ACHSA is to serve as an effective forum for current issues and needs confronting correctional health care.

The **American Jail Association** is the only national, nonprofit association dedicated exclusively to supporting those who work in and operate jail facilities by offering high quality training, education, and networking. Members come from every facet of the correctional field, including security, health care, education, and food services.

National Commission on Correctional Health Care (NCCHC) works to improve the quality of health care in jails, prisons and juvenile confinement facilities. With support from the major national organizations representing the fields of health, law and corrections, NCCHC's leadership in setting standards for health services is widely recognized.

Questions? Contact us!

HIV Prevention: *Larry Hill P: 971-673-0162 or Cessa Karson P: 971-673-0153* **HIV Care:** *Christy Hudson P:* 971-673-0159
TB: *Heidi Behm P: 971-673-0169* **Viral Hepatitis:** *Jude Leahy P: 971-673-1130*