



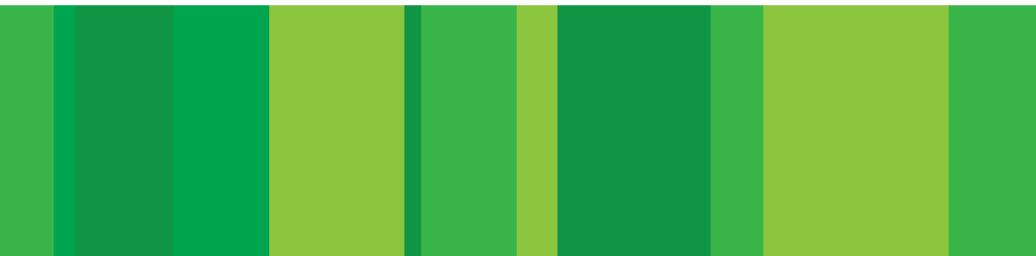
SYPHILIS

PHYSICIAN'S POCKET GUIDE



Stages
During Pregnancy
Diagnosis
Treatment
Reporting
Partner Services
Resources

Ohio Department of Health
STD and HIV Prevention Programs





Introduction



Syphilis rates in the United States have been rising since 2000.

This guide was created for physicians as a tool to accurately and effectively screen, diagnose, and treat patients who may have been exposed to syphilis. Included within this guide is the following:

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Syphilis 101



- Syphilis is a systemic sexually transmitted disease (STD) caused by the spirochete, ***Treponema pallidum***.
- Three means of syphilis transmission:
 - Person to person via vaginal, anal, or oral sex through direct contact with a syphilis chancre.
 - Person to person during foreplay, even when there is no penetrative sex (much less common).
 - Pregnant mother with syphilis to fetus.
- The highest risk groups include those between the ages of 15 and 34, African Americans, men who have sex with men (MSM), and HIV-infected individuals.
- It is very important for people who test positive for HIV and other STDs to get tested for syphilis, since transmission of HIV is enhanced by syphilis and other STDs.

Stages of Syphilis

Primary Stage

- One or more chancres (usually firm, round, small, and painless) appear at the site of infection (most often the genital area) 10 to 90 days after infection.
- The chancres heal on their own in 3-6 weeks.
- Patient is highly infectious in the primary stage.



Syphilis chancre - male genitals



Syphilis chancre - oral, lips



Syphilis chancre - female genitals

Secondary Stage

- Rashes occur as the chancre(s) fades or a few weeks after the chancre heals.
- Rashes typically appear on the palms of the hands, the soles of the feet, or on the face, but also may appear on other areas of the body.
- Sometimes wart-like "growths" may appear in the genital area.
- Rashes and syphilitic warts tends to clear up on their own within 2-6 weeks, but may take as long as 12 weeks.
- Patient is highly infectious in the secondary stage.



Rash on hands and or feet



Rash on body



Wart-like growths

■ **Early Latent Stage**

- Patient is seroreactive within one year of onset of infection, but has no symptoms.
- Patient is potentially infectious.

■ **Late Latent Stage**

- Patient is seroreactive more than 1 year after onset of infection, but has no symptoms.
- Patient is not infectious in late latent stage.

■ **Late (Tertiary)**

- Lesions in the skin and bones (gummas), internal organs, central nervous system, and cardiovascular system.
- Signs and symptoms of the late stage of syphilis include difficulty coordinating muscle movements, paralysis, numbness, gradual blindness, and dementia. This damage may be serious enough to cause death.
- Patient is not infectious in late stage.



Gumma on the shoulder



Oral effects of tertiary syphilis

■ Congenital Syphilis

- Severity ranges from asymptomatic to fatal.
- Common early manifestations are spontaneous abortion, stillbirth, encephalitis, generalized skin rash, rhinitis (“snuffles”), hepatic dysfunction, consumption coagulopathy, multiple organ failure.
- Late manifestations, usually not apparent at birth, include osteitis of long bones, maxillofacial and dental malformations, keratitis, neurosensory hearing loss, and chronic neuropsychological deficits.

The face of a newborn infant displaying pathologic morphology indicative of “Congenital Syphilis”.

A pregnant woman with syphilis can pass *T. pallidum* to her unborn child, who may be born with serious mental and physical problems as a result of this infection. When a newborn is affected it is known as “Congenital Syphilis”.



Syphilitic pemphigus



Syphilitic rhinitis

Syphilis during Pregnancy

Syphilis During Pregnancy

- A serologic test for syphilis should be performed on all pregnant women at the first prenatal visit.
- In populations in which the amount of prenatal care delivered is not optimal, screening (and treatment, if that test is reactive) should be performed at the time that a pregnancy is confirmed.
- Women who are at high risk for syphilis, live in areas of high syphilis morbidity, or are previously untested should be screened again early in the third trimester (at approximately 28 weeks' gestation) and at delivery.
- Any woman who delivers a stillborn infant after 20 weeks' gestation should be tested for syphilis. No infant should leave the hospital without the maternal serologic status having been determined at least once during pregnancy.
- Seropositive pregnant women should be considered infected unless an adequate treatment history is documented clearly in the medical records and sequential serologic antibody titers have declined.
- Serofast low antibody titers might not require treatment; however, persistent higher titer antibody tests might indicate reinfection, and treatment might be required.

Diagnosing Syphilis

■ Syphilis Diagnosis

- Dark-field examinations or direct fluorescent antibody tests of chancre tissue are the definitive methods for diagnosing primary and secondary syphilis.
- A presumptive diagnosis is possible with sequential serologic tests (e.g. VDRL, RPR), using the same testing method each time. A fourfold change in titer (e.g. from 1:8 to 1:32) is usually considered to be clinically significant. Confirmatory tests should be performed.
- Examine patient thoroughly and obtain sexual history, as many patients do not notice the signs and symptoms of syphilis because chancres can be hidden in the vagina, rectum, or mouth.



Syphilis Treatment

Syphilis Treatment

Primary, Secondary, or Early Latent <1 year

2.4 million units IM of Benzathine Penicillin G in a single dose

Latent >1 year or Latent of Unknown Duration

2.4 million units IM of Benzathine Penicillin G in 3 doses each at 1 week intervals (7.2 million units total)

Pregnancy

Treatment during pregnancy should be the penicillin regimen appropriate for the stage of syphilis
(see *CDC Treatment Guidelines*).

Neurosyphilis

3 to 4 million units IV of Aqueous Crystalline Penicillin G every 4 hours for 10-14 days (18-24 million units/day)

Congenital Syphilis

100,000-150,000 units/kg/day (50,000 units/kg/dose IV every 12 hours) of Aqueous Crystalline Penicillin G during the first 7 days of life and every 8 hours thereafter for a total of 10 days **OR**

50,000 units/kg/dose IM of Procaine Penicillin G in a single dose for 10 days

Children

Primary, Secondary, or Early Latent <1 year

50,000 units/kg IM of Benzathine Penicillin G in a single dose (maximum 2.4 million units)

Latent >1 year or Latent of Unknown Duration

50,000 units/kg IM of Benzathine Penicillin G for 3 doses at 1 week intervals (maximum total 7.2 million units)

Penicillin Allergies

CDC Treatment Guidelines: <http://www.cdc.gov/std/treatment/>

Reporting Syphilis

Reporting Syphilis Cases

According to Ohio Revised Code 3701 and Ohio Administrative Code 3701-3, health care providers and labs are required to report presumptive and confirmed cases of syphilis to the local health department within one working day of diagnosis.

• Include in the report:

- Name of the case or suspect case
- Date of birth
- Sex
- Address (including city, state, and zip)
- Phone number of the case or suspect case
- Laboratory test information
 - Specimen ID number
 - Collection date
 - Specimen type
 - Test name
 - Test result
- Organism and serotype as applicable
- Any treatment information.

When reporting syphilis cases include any signs or symptoms, VDRL or RPR and titers, and any confirmatory test results.

Reporting Forms

Ohio Department of Health



Confidential Case Reportable Disease form:

<http://www.odh.ohio.gov/pdf/IDCM/frm3334.pdf>



Positive Laboratory Findings for Reportable Disease form:

<http://www.odh.ohio.gov/pdf/IDCM/frm3333.pdf>

Partner Services and Prevention

Partner Services and Prevention

- The **Ohio Department of Health, STD and HIV Prevention Programs**, seeks to prevent and control the transmission of syphilis and HIV infection through the strategy of *Partner Services*.
- The purpose of *Partner Services* is to:
 - Assure rapid and appropriate medical evaluation and treatment of infected individuals.
 - Counsel infected individuals about how to prevent future infection and transmission of disease to others.
 - Identify, notify and rapidly refer for medical evaluation and treatment those persons who have been exposed to disease.
- *Partner Services* are carried out by Disease Intervention Specialists (DIS) employed at local health departments.
- Participation in the *STD/HIV Partner Service Program* is voluntary. Once patients or partners have been sufficiently informed about the nature of the program, the decision to participate rests solely with the individual.
- Strict confidentiality is a cornerstone of the *STD/HIV Partner Service Program*; information that may identify the source patient is never disclosed to partners or other third parties.

Resources

Resources



Ohio Department of Health:
Main web site
<http://www.odh.ohio.gov/>



Ohio Department of Health
Infectious Disease Control Manual
<http://www.odh.ohio.gov/healthResources/infectiousDiseaseManual.aspx>



Centers for Disease Control and Prevention
<http://www.cdc.gov/nchhstp/Partners/index.html>



CDC Treatment Guidelines
<http://www.cdc.gov/std/treatment/>



American Social Health Association
<http://www.ashastd.org/>



**CDC National Prevention
Information Network**
<http://www.cdcnpin.org/scripts/index.asp>

Notes



Local Health Department Information



Ohio Department of Health
STD and HIV Prevention Programs

www.odh.ohio.gov

