SYPHILIS

Indiana State Department of Health

What is Syphilis?

Syphilis is a sexually transmitted disease (STD) caused by the bacterium *Treponema pallidum*. Syphilis can be transmitted through vaginal, oral, or anal sex when there is direct skin-to-skin contact with a syphilis sore.[1] Sores (chancres) can be found on the penis, vagina, anus, in the rectum, on the lips, or in the mouth.[1] Time from exposure to the beginning of symptoms is typically 21 days, but can range from 10 to 90 days.[1] Syphilis can also be spread from an infected mother to her unborn baby.

People at Increased Risk for Syphilis:

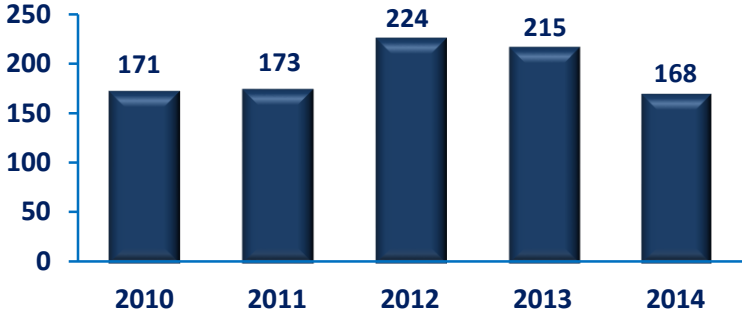
- Those who are sexually active and live in areas where syphilis is prevalent.[1]
- Men who have sex with men (MSM). In 2014, MSM made up 83% of reported cases in the US.[1]
- Those whose partners have syphilis.[1]
- Those infected with HIV or other STDs.[1]
- Those with limited access to quality health care and screening due to socioeconomic factors.[2]
- Those involved with substance abuse or exchanging sex for money, housing, or other resources.[1]
- Untreated pregnant females can transmit syphilis to their unborn babies.[2]

Remember: a person may still be infected even if they do not have any symptoms.

Indiana and Syphilis

Reported cases of syphilis have been elevated in recent years [Figure 1]. Every sexually active Hoosier is at risk for syphilis. You should be aware of signs and symptoms and how to be tested and treated quickly before syphilis causes permanent damage.

Figure 1. Reported primary and secondary syphilis cases 2010-2014, Indiana[3]



Stages of Syphilis:

Syphilis is known as 'the great imitator' since symptoms can be mistaken for other illnesses such as the flu and can go away without treatment. Primary, secondary, and early latent syphilis are considered **early** syphilis (less than a year in duration).

Primary *(most infectious stage)*:

- Chancre (firm, round, painless sore) at site of infection; many go unnoticed.[1]

Secondary *(infectious stage)*:

- Skin rash- rough red or brown spots on palms of hands and bottoms of feet (may occur elsewhere)[4]
- Mucous membrane lesions (sores in mouth, vagina, anus)[1]
- Fever[1]
- Sore throat[1]
- Patchy hair loss[1]
- Headaches[1]
- Weight loss[1]
- Fatigue[1]

Note: Primary and Secondary stages may run concurrently.

Early Latent *(less infectious stage)*:

- When symptoms disappear (up to one year after infection)[1]
- Can still be spread from mother to her unborn child[4]

***Late Latent*:**

- Damage may occur in the internal organs including the brain, heart, liver, bones, joints, nerves, blood vessels, and eyes.[1]
- Damage may be severe enough to cause death.[1,4]

***Neurosyphilis*:**

- Can happen at the early or latent stages and is when the infection invades the nervous system.[1]
- Neurosyphilis is a problem because infections of the brain or spinal cord can cause changes as mild as abnormal walk, up to incontinence, dementia, blindness, seizures, stroke, and death.[5]

For additional information on syphilis in Indiana, please visit: www.in.gov/isdh/17440.htm

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Testing for Syphilis

Syphilis testing utilizes a blood specimen to look for specific antibodies. Most people who have been diagnosed with syphilis will continue to have positive results even after receiving adequate treatment for the infection. It is important to talk with your doctor if you have had syphilis, or think that you may be at risk.

Because interpreting syphilis test results can be complicated, Indiana Disease Intervention Specialists (DIS) are trained to work with providers and patients to diagnose, treat, and follow up patients with syphilis.

Treating Syphilis

Preferred treatment depends on the stage of infection.

Early Syphilis Treatment (*less than one year's duration*)
2.4 mu Benzathine penicillin G IM in a single dose

OR

Latent Syphilis Treatment (unknown duration)
2.4 mu Benzathine penicillin G IM once a week for 3 weeks (7.2 million units total)

It is important to complete the treatment and return to your physician in 3 to 6 months for follow-up testing.[6]

As sex with an untreated partner can cause re-infection, it is that important all contacts to confirmed cases receive **both** preventative treatment and testing for syphilis. Disease Intervention Specialists are trained to confidentially notify and provide services for any contacts to syphilis patients.

Indiana Syphilis Increase 2015

Preliminary data for 2015 indicates that syphilis cases in Indiana will be remarkably higher than 2014. The increase in cases has occurred mostly in MSM, but heterosexual cases are also being identified. Congenital syphilis cases have also increased. For information on how to seek testing for syphilis, please call 317-233-1325 and ask for the STD Division.

Syphilis and HIV

Syphilis and other STDs cause sores and breaks in the skin that allow HIV easier entry into the body.[1] Conversely, syphilis sores bleed easily so that someone co-infected with syphilis and HIV can transmit HIV to another person more effectively.[1] Together, HIV and syphilis can do more damage than they can separately; this relationship of co-infection makes HIV and syphilis a destructive pair.

CDC reports that syphilis and HIV co-infection among MSM is a problem. As many as half of MSM who are infected with the early stages of syphilis are co-infected with HIV.[1] This holds true in the state of Indiana; in 2013, **49%** of MSM with primary or secondary syphilis were also co-infected with HIV. All male clients who report having sex with other men should be tested for syphilis and HIV annually. Access to health care by MSM is often accompanied with stigma, so it is important for MSM to be able to communicate effectively about their sexual activities with their physician to receive proper screening for syphilis, HIV, and other STDs.

When being treated for syphilis, it is important to abstain from sex until treatment is completed for all partners. Infected persons should notify all partners of their infection status and urge them to seek testing and treatment. Patients should **wait** 7 days until they and all partners have been treated before having sex again

Remember: Condoms Still Work; they can effectively protect against STDs when used correctly.[7]

Fast Facts

- Syphilis is **treatable and preventable**.
- All **pregnant** women should be tested for syphilis in their first trimester.
- Once syphilis has caused **neurological** damage, it cannot be reversed even if the syphilis is effectively treated.
- People infected with syphilis have a **2-5 times greater risk** of acquiring HIV because genital sores make it easier for HIV to enter the body.[1]

References

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2. De Santis, M., De Luca, C., Mappa, I., Spagnuolo, T., Licameli, A., Straface, G., & Scambia, G.(2012). Syphilis infection during pregnancy: Fetal risks and clinical management. *Infectious Diseases in Obstetrics and Gynecology, 2012.*
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6. Centers for Disease Control and Prevention. http://www.cdc.gov/std/tg2015/.
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