

Infectious Syphilis on the Rise in Toronto

Infectious syphilis is on the rise in Toronto. There were almost 10 times as many cases of syphilis in 2004 in Toronto than was reported in 2001 (2001=30 cases; 2004=300 cases). The majority of these cases are in men who have sex with men (MSM) including contact in bathhouses, with the rest being related to immigration from or travel to an endemic area. This increase is similar to trends being seen in other parts of Canada, the United States and Europe.

What is Syphilis?

Syphilis is a complex sexually transmitted disease caused by the bacteria *Treponema pallidum*. The primary stage of syphilis is usually marked by the appearance of a painless genital ulcer or chancre, on average 21 days after infection. This chancre lasts 3-6 weeks and usually resolves on its own. Secondary syphilis is characterized by a diffuse rash appearing 4-10 weeks after the chancre. These symptoms will also resolve on their own. Late or tertiary syphilis appears 10 to 20 years later and is characterized by serious heart, brain and bone disease. A person with untreated syphilis is most infectious in the first year. HIV infected persons who have early syphilis may be at increased risk for neurologic complications.

How is Syphilis diagnosed?

Darkfield examinations and direct fluorescent antibody tests of lesion exudate or tissue are the definitive methods for diagnosing early syphilis. A presumptive diagnosis is possible with the use of two types of serologic tests: a) nontreponemal tests – VDRL or RPR, and b) treponemal tests – FTA-ABS and MHA-TP. The non-treponemal tests are used to screen individuals at risk but must be followed by treponemal tests for confirmation of diagnosis because false-positive nontreponemal results may occur.

It is recommended that individuals at increased risk due to multiple or high risk sexual contacts (including men who have sex with men, commercial sex work and street involvement) be screened every three to six months with VDRL or RPR. In persons with symptoms suggestive of primary or secondary syphilis, both nontreponemal and treponemal tests should be ordered for diagnostic purposes.

Interpretation of syphilis serology is often difficult, advice should be sought from the STD Program at Toronto Public Health or a colleague experienced in this area.

How is Syphilis Treated?

Primary, secondary and early latent syphilis is treated with Benzathine penicillin G, 2.4 million units IM in a single dose. Doxycycline, 100 mg. BID for 14 days can be used to treat patients with penicillin allergy, however, these patients should be closely followed as data to support alternate therapy is limited. Late latent syphilis should be treated with Benzathine penicillin G, 2.4 million units IM, 3 doses at weekly intervals. Most experts recommend treating HIV-positive patients with primary, secondary and early latent syphilis with additional treatments (eg. Benzathine penicillin G administered at one week intervals for 3 weeks as for late latent disease). HIV-positive patients with late latent syphilis or syphilis of unknown duration should have a CSF examination prior to treatment.

Management of Sexual Partners

All sexual partners of infected persons should be identified and tested within the following time periods:

Primary Syphilis:	3 months before onset of symptoms
Secondary Syphilis:	6 months before onset of symptoms
Early Latent:	1 year before diagnosis
Late Latent:	Assess long term sexual partners and children if appropriate

Contacts who have been exposed to early syphilis within the past 90 days should be treated presumptively regardless of their test results. Blood tests should still be done on these clients prior to administering treatment.

For more information, please call the Sexually Transmitted Disease Program at 416-338-2373.

References:

Health Canada, Canadian STD Guidelines, 1998 Edition www.hc-sc.gc.ca/hpb/lcdc/bah

Centers for Disease Control, STD Treatment Guidelines, 2002 <http://www.cdc.gov/mmwr/PDF/RR/RR5106.pdf>

February, 2005.

