



**Office of the  
Chief Medical  
Health Officer**

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**Syphilis is on the rise in BC**

Like many jurisdictions, BC has observed an increase in infectious syphilis rates since 2010, with a significant jump in 2015. The rate of infectious syphilis in BC has increased from 11.9 per 100,000 in 2014, to 16.2 per 100,000 in 2015.

- In 2015, there were 761 infectious syphilis cases – nearly 40% higher than 2014
- 80% of infectious syphilis cases were among gay, bisexual, and other men who have sex with men (MSM). Rate of increase has been greatest among young men (i.e. 20-29 years).
- About half of infectious syphilis cases among MSM were in HIV-positive individuals
- While there is a concern that this increase may lead to cases of congenital syphilis, only one congenital syphilis has been reported since 2010.

In Island Health, increases in syphilis since 2010 have mirrored provincial trends, with similar case demographics. We had 31 reported cases in 2014 and 59 in 2015.

**Clinical presentation and transmission**

The classic presentation of syphilis is a painless ulcer (primary stage) or generalized maculopapular rash and lymphadenopathy (secondary stage). Left untreated, it may also progress to tertiary syphilis, where involvement of the major organs may occur (e.g. heart, aorta, bones, joints, brain). Syphilis – even in its early stages – can also manifest in more complicated and serious ways, such as neurosyphilis or ocular syphilis. These more serious sequelae are more commonly seen in those who are HIV-positive. Syphilis is transmitted sexually via oral sex, as well as vaginal and anal intercourse. Infection does not confer immunity and there have been cases with multiple re-infections following treatment in this outbreak.

**Testing, treatment and contact management**

Syphilis testing is primarily done via serology. Enzyme Immunoassay (EIA) is now used in BC as the initial screening test, and confirmatory testing will be done automatically by the provincial lab.

If a lesion is present, it is possible to sample lesions directly and prepare a syphilis slide (available from PHSA Laboratories) for darkfield microscopy. Serology should also be ordered simultaneously if a lesion is present. For suspicious lesions, repeat serology in 2 weeks as serology may be negative in early infection.

Syphilis is curable with benzathine penicillin G (Bicillin) given intramuscularly. The dosing regimen is dependent on the stage of infection and may require multiple doses. Serial serology (q3 months) is typically recommended after treatment to assess response.

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ALL contacts of *early syphilis* cases should be treated as soon as possible, and not contingent on laboratory test results. The screening test may not be positive in early infection or incubation. Contacts of late syphilis cases should be tested, and treated based on BCCDC clinician recommendations. Testing for HIV and other STIs is also recommended for all contacts.

The Island Health CD program is available to assist with contact tracing, patient education, advice on treatment, referrals and public information. For some cases and contacts, BCCDC may directly contact clients or contacts and provide advice and recommendations. We would encourage you to contact the local CD hub with any inquiries that you may have.

### **Provincial Screening Recommendations**

While all sexually active individuals are at risk for syphilis, some populations are at increased risk for syphilis infection and re-infection and/or increased risk of morbidity due to syphilis. These are:

- **Gay, bisexual, and other men who have sex with men (MSM):** *Recommend STI screening every 3 months*
- **People living with HIV:** *Recommend STI screening every 3 months*
- **People with multiple sex partners:** *Recommend STI screening every 3 months*
- **Prenatal patients:** For prenatal patients, routine screening in the first trimester is recommended. If there is *ongoing risk during pregnancy, repeat testing may be warranted* (i.e. third trimester screening and at delivery). All women should have at least one syphilis test documented during the course of pregnancy or immediately post-partum.

### **Zika Virus Update**

The BC Guidelines on Zika virus have been recently updated to reflect emerging information about the biology and epidemiology of Zika virus. Substantive changes different from previous updates we have sent out earlier this year include the following:

- Males who have returned from an area where Zika virus is circulating (asymptomatic and symptomatic) are now recommended to abstain or use condoms for sexual activity with pregnant partners for the ***duration of pregnancy***, delay conception and use condoms with female partners of childbearing age for ***six months*** after returning from a risk area.
- Women, especially pregnant women, who have had unprotected sex with male partners that may have had Zika virus infection, are eligible for testing.
- Male-to-female and male-to-male sexual transmission has been documented. Returning travellers can use condoms to prevent transmission in these instances.

Please consult with an Island Health medical microbiologist if considering Zika virus testing for your patient, and the local medical health officer for other Zika-related inquiries. Further information and updates on the BC guidelines can be found here: <http://www.bccdc.ca/health-info/diseases-conditions/zika-virus/information-for-health-professionals>.

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