Syphilis Rates Still Rising on Vancouver Island

Syphilis cases continue to climb on Vancouver Island this year, with recent activity focused in the South and Central Island. 80 cases were reported in 2016 on Vancouver Island. We have already had 22 cases in the first 3 months of 2017.

Vancouver Island currently has the 2nd highest syphilis rate among BC health authorities (after Vancouver Coastal). Incidence was 10.2 cases per 100 000 population in 2016 and is projected to be higher in 2017.

The majority of infections are occurring in men who have sex with men, and less frequently in women with bisexual male partners.

A significant shift has occurred in HIV co-infection of new cases, as more cases are not HIV positive (about 60% of cases in 2017), and there are increasing cases in younger age groups (15-39 years). There have been some cases of neurosyphilis symptoms occurring in early stages of the disease; HIV co-infection is a risk factor for early neurosyphilis.

Clinical Presentation and Transmission

The classic presentation of syphilis is a painless ulcer (primary stage) or a 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). Neurosyphilis and ocular syphilis can occur in early and late stages of the disease. Meningitis, cranial neuropathies and visual acuity changes can be signs of neurological involvement.

Sexual transmission can occur via oral sex, vaginal and anal intercourse. Infection does not confer immunity. There have been cases of multiple re-infections after treatment in this outbreak.

Testing & Treatment

Syphilis testing is primarily done via serology using enzyme immunoassay as an initial screening test. For suspicious primary lesions, serology should be ordered at the time of presentation as well as 2 weeks later 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. The BCCDC Syphilis program will provide treatment recommendations for diagnosed cases. Serial serology (q3 months) is typically recommended after treatment to assess response.

**Contact Management**

**ALL contacts of early syphilis should be treated as soon as possible, not contingent on screening 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 Communicable Disease (CD) program is available to assist with contract tracing, patient education, advice on treatment and screening, and referrals to other sexual health services. For some cases and contacts, the BCCDC may directly contact patients and contacts, and provide treatment and contact recommendations. We would encourage you to contact your local CD hub with any inquires you may have.

**Prevention & Screening Recommendations**

Consistent condom use, reducing the number of sexual partners, and avoiding sexual activity under the influence of drugs can reduce the risk of syphilis transmission and other STIs. Encourage regular testing for STIs including syphilis and HIV for all sexually active people and anyone who requests testing.

While all sexually active individuals are at risk for syphilis, some populations are at increased risk for syphilis 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:** Routine STI screening including syphilis 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.