SYPHILIS

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ABOUT THIS FACTSHEET

This fact sheet is for front-line, outreach staff, public health staff, others providing sexual health care and the communities of gay, bisexual, queer, and other men who have sex with men (gbMSM). In Canada, gbMSM are disproportionately impacted by sexually-transmitted infections (STIs).¹

WHAT IS SYPHILIS?

Syphilis is a bacterial STI caused by Treponema pallidum subspecies pallidum (T. pallidum). In Canada, syphilis rates have been rising steeply since 2014, particularly in gbMSM communities.^{1,2,4} The highest risk of transmission is when in direct contact with the lesion, but the lesions are not often visible and can be internal.¹⁹

Syphilis can also increase HIV transmission.³ With the use of pre-exposure prophylaxis (PrEP) to prevent HIV, we have observed an increase in condomless (aka 'bareback') sex amongst gbMSM, which facilitates transmission of STIs such as syphilis, gonorrhea, and chlamydia.^{5,6,8} In a 5-year study of 366 participants, there was a particular increase of STI incidence in PrEP users who were vounger, used substances before or during sex (known as Party and **Play** or Chemsex),⁹ and reported condomless anal sex.^{6,8,20}

SYMPTOMS OF SYPHILIS

Syphilis has four stages: primary, secondary, latent (asymptomatic), and tertiary. If untreated, syphilis infection can lead to severe complications.²

In the primary stage, after an incubation period typically around 14 to 21 days, syphilis presents as one or more small, painless open sores (often called a chancre). The chancre is firm and painless, can be on the genitals, mouth, skin. or rectum, and will heal in 3 to 6 weeks if untreated. Sexually active gbMSM should be encouraged to check their bodies including their genitals, buttocks, in and around the anus, and the perineum (space between anus and scrotum) for any usual sores, rash, or bumps. If untreated, the infection typically progresses to an asymptomatic stage ("early latent" syphilis) followed by secondary syphilis.¹¹

The secondary stage of syphilis can include a rash or sores affecting any areas of the body.¹¹ Often, the rash is on the palms and/or soles, which can help distinguish it from many other causes of rash. The rash is often red or reddish-brown. It usually does not cause itch. Other symptoms can include swollen lymph nodes, fever, and fatigue.

The latent stage of syphilis is when there are no symptoms or visible signs of the infection, and it may last for years.

Without treatment, syphilis may or may not progress to the tertiary stage. In tertiary syphilis, syphilis can affect many internal systems and organs, such as the brain, eyes (ocular syphilis), ears (otosyphilis), heart or blood vessels (cardiovascular syphilis), and the central nervous system (neurosyphilis).¹¹

Ocular syphilis can cause visual disturbances or blindness.¹⁵ Otosyphilis can cause dizziness, ringing/buzzing (tinnitus), and hearing loss. Neurosyphilis can cause severe headaches, muscle weakness and/or trouble with muscle movements, and changes to one's mental state, including challenges with focusing, memory, decisionmaking, and personality change.^{11,12} With regards to neurosyphilis, an infection of the central nervous system can actually occur at any time after infection,¹² and it requires intravenous antibiotics for cure.² For people living with HIV (PLHIV), neurosyphilis is more common,¹⁹ particularly in untreated HIV infection, with low CD4+ counts, or detectable HIV viral loads.¹²

With timely access to diagnosis and treatment of syphilis, neurosyphilis and its complications are uncommon. However, particularly when treatment is delayed, the damage done to the neurological system cannot always be fully reversed by antibiotic treatment.

It is recommended persons diagnosed with tertiary syphilis should undergo cerebral spinal fluid (CSF) analysis before treatment. A CSF analysis is done from a sample collected during a lumbar puncture or spinal tap. More info here on CSF procedure and risk.¹⁴

TESTING FOR SYPHILIS

Routine screening for syphilis is recommended for all sexually active gbMSM who have new sexual partners and/or whose sexual partners have had new partners since previous testing, whether or not suggestive symptoms are present.² If a patient or their partner detects something unusual on their body, such as anogenital ulcers or a widespread rash, they should visit their physician for assessment and testing and treatment as indicated. For some tips on how to discuss your sexual health with your healthcare provider, please refer to Finding and **Building a Therapeutic Relationship** with your Healthcare Provider. ²²

The standard test for syphilis requires a blood draw at the clinic or laboratory. In Canada, there is a rapid test kit, INSTI®Multiplex HIV-1/2 Syphilis Antibody Test, that tests for both syphilis and HIV and is approved for clinical use.²⁴ The test kit can analyze the sample in a few minutes, which can result in much faster treatment as compared to the standard waiting time for results that are drawn and sent to the laboratory.^{16,17,24} Test kits can also help patients to feel more comfortable by reducing the need for disclosure of sexual orientation and activities to potentiallystigmatizing healthcare providers.

Having had syphilis does not confer immunity to future syphilis infections, and routine testing is recommended.

TREATMENT AND HARM REDUCTION

Most cases of syphilis are treated with penicillin (or doxycycline for those with an allergy to penicillin), although the doses and route of penicillin differs depending on the stage of infection. More information for syphilis treatment is available at the **Syphilis guide: Key information and resources**.² Recommended follow-up after syphilis infection includes serial syphilis serology tests, which helps to ensure that syphilis has been adequately treated.²¹

To prevent syphilis infection, consistent and correct condom use is recommended during sex, including oral sex. However, many individuals may choose not to use condoms. Newer studies have demonstrated efficacy of doxycycline, an antibiotic, in preventing syphilis infection when taken soon after (ideally within 24 hours of) condomless sex, a practice known as doxy post-exposure prophylaxis (doxy-PEP).^{10,18,25} However, concerns exist regarding consequences of long-term antibiotic use, including the risk of antimicrobial resistance to syphilis and adverse effects from the medication. Speak to your healthcare to help determine if doxycycline is right for you. For more information on doxy-PEP, refer to the fact sheet Doxycycline PEP for Prevention of STIs.¹⁸

SEX, SYPHILIS, AND STIGMA

When possible, it helps to speak with sexual partner(s)-online or inperson-about previous testing dates and test results. However, barriers to this discussion exist: there can be a considerable stigma around STIs,¹⁰ and conversations about STI testing or STI status may be more difficult in certain settings, such as the backroom/darkroom of a venue. during group sex. and/or in situations when recreational substances have been taken to enhance one's sexual intimacy and experiences. You can choose when, where, and how to have this conversation about STIs in order to facilitate the most comfortable conversation possible.

Your sexual partners' regularity with testing, their sexual encounters, and other factors may be helpful in making an informed decision about the type of sex you want to have with them, and/ or may lead you to decide to get tested sooner than your typical screening schedule. There is no "right" or "wrong" decision. With an open conversation and informed decision-making, the sex itself can be more pleasurable. Taking care of your sexual health and wellbeing is crucial for satisfying sexual experiences and supporting your emotional, mental, and physical health.

SEX POSITIVE CARE

Sex-positive messaging validates and affirms gbMSM's experiences and encourages them to effectively care for the sexual health of themselves and their partners. Additionally, sexpositive messaging can instill selfworth and self-confidence. Sexual health campaigns must emphasize sexual pleasure and diverse sexual practices to be effective. Too often, gbMSM's sexual practices are framed as dangerous or shameful, and overemphasis is placed on their risk for STIs without attention being given to the positive aspects of their sex lives. An example of sex-positive messaging can be found in the GMSH campaign The Sex You Want.23

Take-home messaging for gbMSM is that you can enjoy the types of sexual experiences you want while also remaining active in sexual health services. Great sex makes one feel good and improves happiness and intimacy.⁷ Rather than vilifying it, we should celebrate the diverse range of sexual experiences in which one may choose to engage.

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