MEDICAL ADVISORY
Significant Rise in Syphilis Rates

TO: Family Physicians
    Emergency Departments
    Infectious Disease Physicians
    Infection Control Professionals

FOR YOUR INFORMATION:
    Central West Medical Officers of Health
    Academy of Medicine
    Dr. Michael Stacey, VP Medical, Hamilton Health Sciences
    Mr. Bruce Squires, President, McMaster Children’s Hospital
    Dr. David Russell, Chief of Staff, St. Joseph’s Healthcare
    LHIN, Dr. Jennifer Everson, Primary Care Lead and Dr. Bill Krizmanich, Emergency Department Lead.

FROM: Dr. Bart Harvey, Associate Medical Officer of Health

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Background

Hamilton Public Health Services (PHS) is notifying health care providers of a sharp rise in infectious syphilis cases in Hamilton. Syphilis is a sexually transmitted infection caused by Treponema pallidum. Primary, secondary and early latent syphilis are considered infectious, and if left untreated or improperly treated may affect the brain and nervous system.¹

In 2021, 163 infectious syphilis cases were confirmed in Hamilton. This represents a rate increase of 2.8 times since 2019. Rates of infectious syphilis have increased in both males and females and is highest among individuals aged 30 to 39 years old. Males, including gay, bisexual and men who have sex with men (MSM), continue to be disproportionately affected.

Additionally, four early congenital syphilis cases were confirmed in Hamilton during 2021. Two cases were reported in 2020, one case was reported in 2018 and one in 2017. No cases were reported from 2012 to 2016.

Symptomatology, Transmission and Screening

Syphilis is mainly transmitted via unprotected vaginal, anal or oral sex, however can spread from an infected mother to infant during pregnancy or childbirth. Clinical manifestations of syphilis vary by stage. Early symptoms of infectious syphilis may include one or more

painless ulcerations or chancres, macular, maculopapular or papular lesions or rash, fever, headache and malaise. Screening is strongly recommended for symptomatic clients and for those with the following risk factors:

- sex trade work
- substance use
- multiple and/or anonymous sex partners
- pregnancy

A complete screen for other sexually transmitted infections including chlamydia, gonorrhea and HIV, should be considered for all at risk individuals. To order syphilis testing, write ‘syphilis screen’ in section 3 of the PHO general test requisition. Further testing information can be found by visiting: www.publichealthontario.ca.

**Diagnoses**

Prompt diagnosis, staging and treatment of all positive cases can reduce the incidence of syphilis in our community. For further guidance consult The Canadian Guidelines on Sexually Transmitted Infections by visiting: www.canada.ca/en/public-health/services/infectious-diseases/sexual-health-sexually-transmitted-infections.

If you require additional guidance or are unfamiliar with syphilis staging and treatment, please consult with an Infectious Disease Specialist.

**Treatment Recommendations**

Benzathine Penicillin G L-A (Bicillin® L-A) is the first-line treatment for infectious and non-infectious syphilis. The number of doses required is guided by stage of the infection. **Short-acting penicillin (such as Crystapen) is ineffective** and should not be used to treat infectious syphilis.

Alternatives for penicillin allergic patients include Doxycycline and Ceftriaxone. There is no satisfactory alternative to Bicillin® L-A for treatment of syphilis in pregnancy. Advise treated individuals to always use a condom for any sexual contact until treatment has been completed, ideally for seven days.

Medications to treat syphilis are publicly funded and can be ordered by visiting: www.hamilton.ca/STImedorders

**Reporting Requirements:**
Infectious syphilis is reportable to the Medical Officer of Health under the Health Protection and Promotion Act, R.S.O. 1990, c. H.7.

To report confirmed cases of sexually transmitted infections, please fax Hamilton Public Health – Reportable Infectious Disease Line at 905-546-4078.

If you wish to speak to a Public Health Nurse about sexually transmitted infections, please call the Sexual Health information line at 905-528-5894. Hours of operation are Monday to Friday from 0830 to 1630.