Date: January 20, 2020

To: Physicians, Nurse Practitioners and Family Practice Nurses

From: Regional Medical Officers of Health

Re: Public Health Alert: Syphilis Outbreak

Dear Colleagues,

In 2019 there was an increase of total syphilis cases reported in Nova Scotia. The preliminary data shows 82 cases (compared to approximately 50 in 2018 and 38 in 2017), in males and females ages 20 to 65+, across the province. There is an increasing proportion of cases among females in 2019, 20% compared to approximately 10% in 2018 and 5% in 2017. This new trend suggests that more women of reproductive age could be exposed to and contracting syphilis and increases the possibility of congenital syphilis cases in Nova Scotia.

As a result, **The Office of the Chief Medical Officer of Health has declared a provincial syphilis outbreak.**

Across Canada syphilis outbreaks have been declared in eight provinces/territories. Cases of congenital syphilis in Canada have risen significantly with 17 cases of congenital syphilis diagnosed in 2018, the highest in 25 years. Congenital cases in 2019 are projected to be several fold higher. To date there have been no reported cases of congenital syphilis in Nova Scotia.

Men having sex with men continues to be the most common risk factor. Other risk factors include having unprotected sex with multiple partners (vaginal, anal or oral), or having sex with someone who is having unprotected sex with multiple partners.

Public Health recommends the following outbreak control measures to limit transmission, reduce morbidity and prevent congenital syphilis:

- Routinely assess risk factors and offer STI screening for all patients.
- Test all persons with symptoms suggestive of syphilis.
- Include syphilis serology for anyone requesting STI screening.
- Include syphilis serology for anyone with any other confirmed or suspected STI, such as gonorrhea or chlamydia.
- In all persons reporting unprotected sex with casual or anonymous partners consider testing regularly for all STIs every 3 to 6 months.

Syphilis & Pregnancy, Postpartum and Newborn Care:

As of January 20, 2020, Public Health and the Reproductive Care Program recommend:

- **Repeat syphilis serology in everyone at 24 -28 weeks gestation.**
    - For patients considered at high risk of syphilis, repeat syphilis serology at delivery.
- **For patients who deliver a stillbirth from 20 weeks gestation onward, screen for syphilis.**

- **If a patient has NOT had the recommended syphilis screening during pregnancy, syphilis serology should be completed prior to discharge after delivery.**
- **Infants presenting with symptoms or signs compatible with early congenital syphilis should be tested for syphilis even if the parent was seronegative at delivery, due to the possibility of a very recent parental infection.**

These recommendations will remain in place until further notice and are adapted from national guidelines.

Signs and symptoms and complete list of risk factors

Recommendations for consultation with specialists:

- For cases of syphilis in pregnancy always consult high risk obstetrics and pediatric and adult infectious disease specialists.
- Always consult an infectious disease specialist if neurosyphilis is suspected, if the patient is co-infected with HIV, or allergic to penicillin.
- Syphilis is a complex disease – unless you are experienced with clinical presentation, staging, repeat infections, and indeterminate serology, please consult with infectious disease specialists.
- This algorithm outlines the process.

Testing:

- Serology is the primary method for diagnosing syphilis. When you order a syphilis blood test a reverse algorithm (treponemal tests, followed by a non-treponemal test) is used (algorithm attached).
- NOTE: It can take up to a month for serology to become positive in early infection. In individuals assessed for suspect primary syphilis (i.e., ulcers) or in contacts of cases, they may need repeat testing in one month to ensure they are not within this period.
- Swabs of ulcers is not recommended at this point in time.

Treatment

Treatment depends on the stage of infection. **Contact Public Health to access Benzathine Pencillin G (Bicillin®) and to report infection. This preparation is different than the penicillin G used in IV formulations.**

Primary, Secondary, and Early Latent

- Benzathine penicillin G (Bicillin®) 2.4 million units IM in a single session (separated into 2 injections – 1.2 million units into each buttock. i.e., 2 injections).
- At-risk persons who present with symptoms of syphilis should be treated for infectious syphilis (without awaiting laboratory results). **Order serology and notify Public Health of the suspected cases.**

Late Latent

- Benzathine penicillin G (Bicillin) 2.4 million units IM weekly x 3 doses.

Treatment of Contacts:

- Sexual contacts of known syphilis cases should also be tested and treated immediately for syphilis (without awaiting testing results).

Sincerely,

Dr. Jennifer Cram
Medical Officer of Health (Western Zone)
MOH Health Protection Lead, NSHA Public Health

On behalf of:
Dr. Ryan Sommers – Northern Zone MOH
Dr. Daniela Kempkens – Eastern Zone MOH
Drs. Claudia Sarbu and Jessica Jackman – Central Zone MOHs

Cc: Dr. Robert Strang, Chief Medical Officer of Health, Nova Scotia
Dr. Gaynor Watson-Creed, Deputy Medical Officer of Health, Nova Scotia