5.8 SYPHILIS REPORTABLE

ETIOLOGY

Syphilis is caused by the infectious agent *Treponema pallidum,* a gram-negative Spirochete.

CASE DEFINITIONS

Confirmed Case - Primary Syphilis

Laboratory confirmation of infection:

- Identification of *T. pallidum* from a chancre or a regional lymph node.
  OR
- Presence of one or more typical lesions (chancres), and reactive treponemal serology, regardless of non-treponemal test reactivity, in individuals with no previous history of syphilis.
  OR
- Presence of one or more typical lesions (chancres) and at least a 4-fold (e.g. 1:8 to1:32) increase in the titre over the last known non-treponemal test in individuals with a past history of syphilis treatment.

Confirmed Case - Secondary Syphilis

Laboratory evidence of infection:

- Identification of *T. pallidum* from a mucocutaneous lesions, condylomata lata and reactive serology (nontreponemal and treponemal).
  OR
- Presence of typical mucocutaneous lesions, alopecia, loss of eyelashes and lateral third of eyebrows, iritis, generalized lymphadenopathy, fever, malaise or splenomegaly AND
  - either a reactive serology (non-treponemal and treponemal)
    OR
  - at least a 4-fold (e.g.1:8 to 1:32) increase in titre over the last known non-treponemal test.

Confirmed Case - Early Latent Syphilis

Laboratory confirmation of infection:

- An asymptomatic patient with reactive serology (non-treponemal and treponemal) who, within the past 12 months, had one of the following:
  - Non-reactive serology
    OR
  - Symptoms suggestive of primary or secondary syphilis
    OR
  - Exposure to a sexual partner with primary, secondary or early latent syphilis.

Confirmed Case – Late Latent Syphilis

- > 1 year after infection or of unknown duration
  Laboratory confirmation of infection:
- An asymptomatic patient with persistently reactive treponemal serology (regardless of non-treponemal serology reactivity) who does not meet the criteria for early latent disease and who has not been previously treated for syphilis

Confirmed Case –Neurosyphilis

Laboratory confirmation of infection:

- reactive treponemal serology (regardless of non-treponemal serology reactivity) AND **one** of the following:
  - reactive CSF-VDRL (Venereal Disease Research Laboratory) in non-bloody cerebrospinal fluid (CSF);
  - clinical evidence of neurosyphilis AND either
    - elevated CSF leukocytes
      OR
    - elevated CSF protein in the absence of other known causes.

Confirmed Case –Tertiary Syphilis other than Neurosyphilis

Laboratory confirmation of infection:

- reactive treponemal serology (regardless of non-treponemal test reactivity)
  AND
- characteristic abnormalities of the cardiovascular system, bone, skin or other structures, in the absence of other known causes of these abnormalities)
  AND
- no clinical or laboratory evidence of neurosyphilis

Confirmed Case-Early Congenital Syphilis (within 2 years of birth)

Laboratory confirmation of infection:

- identification of *T. pallidum* from nasal discharges, skin lesions, placenta, umbilical cord or autopsy material of a neonate (up to 4 weeks of age)
  OR
- reactive serology (non-treponemal and treponemal) from venous blood (not cord blood) in an infant/child with clinical, laboratory or radiographic evidence of congenital syphilis, whose mother is without documented evidence of adequate treatment
  OR
- detection of *T. pallidum* DNA in an appropriate clinical specimen

CLINICAL FEATURES

After initial invasion, *T. pallidum* multiplies rapidly and disseminates widely through the lymphatic and systemic circulation before the clinical development of the primary lesion, called a chancre. The chancre persists through the primary and secondary stages. If untreated it is a lifelong infection.

There are three possible clinical stages of disease and latency periods can vary:

- **Primary** syphilis
- **Secondary** syphilis
- Early latent (asymptomatic) syphilis
- Late latent syphilis
- **Tertiary** syphilis
- Neurosyphilis
- Congenital syphilis

Primary Syphilis

- Primary syphilis classically presents as a single, indurated painless ulcer known as a chancre 3 weeks after exposure to an infectious lesion.
- The chancre marks the point of entry of *T. pallidum* and exudes a clear fluid containing numerous spirochetes.
- Primary syphilis may also be co-infected with herpes simplex virus.
- Painless regional lymphadenopathy is frequently present.
- Up to 30% of primary infections are asymptomatic.
- Without treatment, symptoms resolve in about in 4 – 6 weeks.
- Concurrent HIV infection may alter the appearance of lesions.

Secondary Syphilis

- There may be no clear demarcation between primary and secondary syphilis.
- A chancre is still present in as many as 1/3 patients with secondary syphilis.
- Clinical signs of secondary syphilis appear on average between 2 – 12 weeks and up to 6 months after an untreated primary stage.
- Clinical signs of secondary syphilis resolve without treatment between 2 weeks and 12 months.
- This is considered the most bacteremic stage of infection**.**
- Presentation may include a skin rash, low-grade fever, malaise, pharyngitis, alopecia, weight loss, arthralgia and painless lymphadenopathy. Enlargement of the epitrochlear lymph nodes is a unique finding in secondary syphilis.
- The rash is a symmetric maculopapular eruption present on the trunk, palms and soles but may be so faint as to go unnoticed. The rash will disappear with or without treatment.
- Mucous patches (glistening white to red patches) are seen in the mouth and other mucous membranes.
- Condyloma lata are smooth white papules or papules found on the genitals.

- All untreated cases will progress to latent syphilis.
- About 1/3 of untreated cases will progress to tertiary syphilis.
- Concurrent HIV infection may alter the appearance of lesions.

Early Latent Syphilis

- Early latent syphilis is disease that has been acquired **within the preceding year.**
- There are no signs or symptoms but without treatment the person remains infectious due to a 25% chance of relapse to the secondary stage in untreated cases in the first year after infection.
- Central nervous system (CNS) disease is most often asymptomatic but syphilitic meningitis with cranial nerve palsies and deafness may occur.

Late Latent Syphilis

- Late latent syphilis is syphilis acquired more than 1 year ago.
- Cases are asymptomatic but will have reactive treponemal serology.
- Relapse to the secondary stage is very unlikely.
- Most untreated patients remain in the latent stage for life and do not progress to tertiary syphilis.

Tertiary Syphilis other than Neurosyphilis

- Occurs 5-25 years after infection in some untreated patients
- Characterized by
    - Gummas of the skin, viscera, or musculoskeletal system
    - Cardiovascular complications

Neurosyphilis

- Occurs when there is evidence of central nervous system infection.
- Can occur at any stage of infection.
- CSF abnormalities must be present.

Congenital Syphilis

- The risk of congenital syphilis is 50% for babies born to mothers with untreated primary, secondary or early latent syphilis.
- There may be no symptoms in 2/3 of these cases.
- Some of the manifestations: that may occur are low birth weight babies, rhinitis, hepatosplenomegaly, rash, anemia, metaphyseal dystrophy, and stillbirth.
- The symptoms of early syphilis may present in the first 2 years of life.
- Initial screening should ideally be performed in the first trimester. The screening test should be repeated at 28-32 weeks and again at delivery in women at high risk of acquiring syphilis.

Table 1: Stages and clinical features of syphilis

Stage	Clinical Features	Incubation Period
Primary	Chancre, lymphadenopathy	3 weeks (3-90 days)
Secondary	Rash, fever, malaise, lymphadenopathy, mucus lesions, condyloma lata, patchy or diffuse alopecia, meningitis, headaches, uveitis, retinitis	2-12 weeks (2 weeks-6 months)
Latent	Asymptomatic	Early: <1 year Late: ≥1 year
Tertiary		
Cardiovascular	Aortic aneurysm, aortic regurgitation, coronary artery ostial stenosis	10-30 years
Neurosyphilis	Ranges from asymptomatic to symptomatic with headaches, vertigo, personality changes, dementia, ataxia, presence of Argyll Robertson pupil	< 2 years-20 years
Gumma	Tissue destruction of any organ; manifestations depend on site involved	1-46 years (most cases 15 years)
Congenital		
Early	2/3 may be asymptomatic Fulminant disseminated infection, mucocutaneous lesions, osteochondritis, anemia, neurosyphilis, hepatosplenomegaly	Onset <2 years
Late	Interstitial keratitis, lymphadenopathy, hepatosplenomegaly, bone involvement, anemia, Hutchinson's teeth, neurosyphilis	Persistence >2 years after birth

Source: Canadian Guidelines on Sexually Transmitted Infections, 2013

DIAGNOSIS

- A diagnosis is made by identifying the spirochete from fluid taken from ulcers in primary and secondary syphilis and/or by serologic testing.
- For confirmation on laboratory specimens go to the public health laboratory website www.publichealthlab.ca or call (709)-777-6583.
- The interpretation of syphilis serology should be made in conjunction with a colleague experienced in this area.
- Every attempt should be made to obtain and document prior history of treatment for syphilis and prior serologic results in order to avoid unnecessary re-treatment.

Laboratory Tests

A detailed explanation of the laboratory tests for the screening and diagnosis of previous or current infection with *T. pallidum* can found on the NL Public Health website:

http://publichealthlab.ca/service/syphilis-serology/

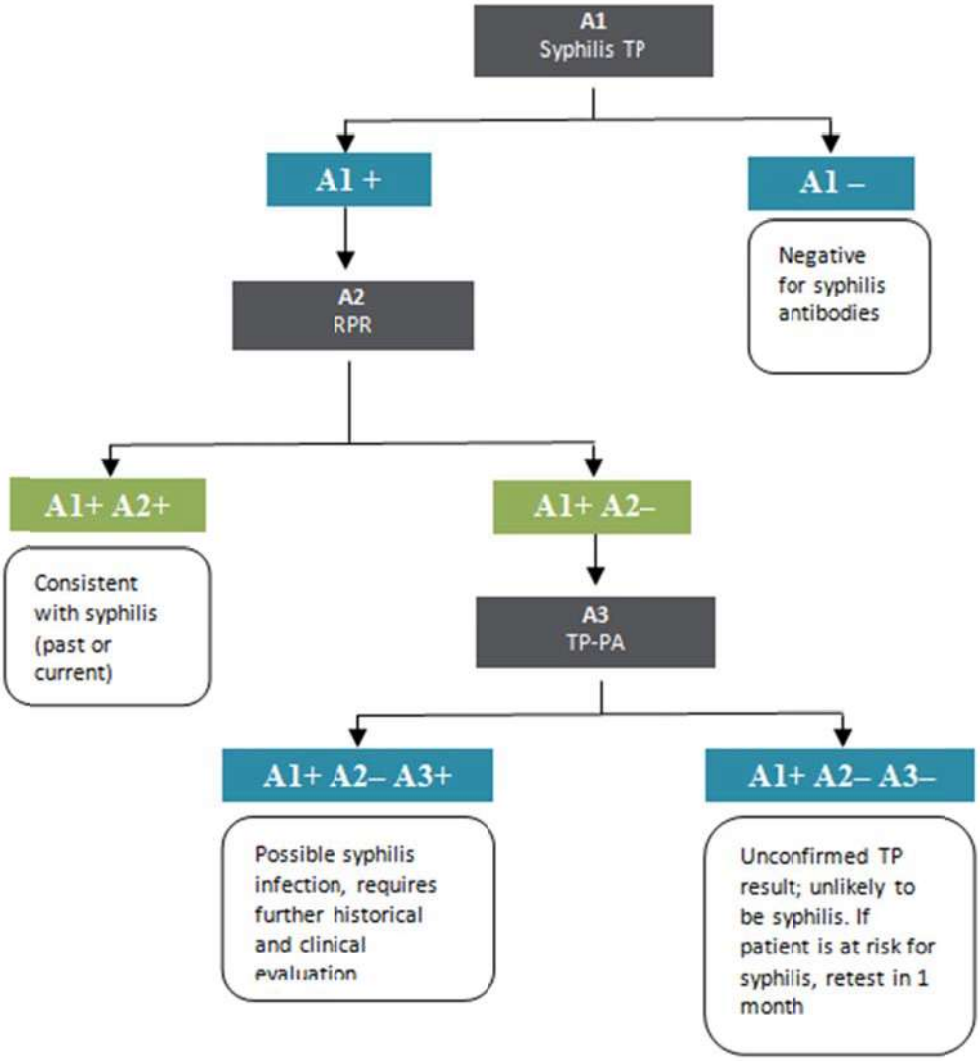
A recommended approach for the laboratory diagnosis of congenital syphilis can be found on the NL Public Health website:

http://publichealthlab.ca/wp-content/uploads/2012/10/Congenital-Syphilis-July-2012.pdf

Table 2: Serological diagnosis of syphilis

Test Type	Name	Indications	Measures
Treponemal	**Syphilis TP**: *T. pallidum*-specific antibodies	Initial screening test	• *T. pallidum*-specific antibodies • Often persist lifelong despite effective treatment
	TP-PA:*Treponema pallidum* particle agglutination	Confirmatory test	
Non-Treponemal	**RPR**: Rapid plasma reagin	Determining the stage of infection and to monitor treatment success	• Detect reagin-based antibodies produced in response to treponemal infection • Can measure titres
	VDRL: Venereal disease research laboratory		

Figure 1: Syphilis screening algorithm (source: NL Public Health Lab)



Specimen Collection

- Serology
  - Suitable specimens are individual human serum samples obtained by standard laboratory techniques.
- Blood
  - Container/Tube: Serum separator (SST)
  - Specimen Volume: 5 mL of whole blood
  - Separate serum within 6 hours and store at 2-8°C and transport on ice packs within 7 days.
  - Specimen Minimum Volume= 0.3 mL

Table 3: Transport Temperature

Specimen	Room temperature	Refrigerated	Frozen
Serum	NO	YES. The samples should be stored for not more than 7 days at 2-8°C.	YES. For longer delay, freeze at -70°C or below and transport on dry ice.

Source: NL Public Health Laboratory

Interpretation of Results

Table 4: Interpretation of results

Syphilis TP	RPR	TP-PA	Interpretation
NONREACTIVE	NP	NP	**NEGATIVE**. No syphilis or incubating syphilis.
REACTIVE	REACTIVE (any titre)	NP	Confirmed **POSITIVE**. Syphilis, yaws, or pinta, OR Lyme disease.
REACTIVE	NONREACTIVE	REACTIVE	Confirmed **POSITIVE**. Primary or latent syphilis; previously treated or untreated syphilis; yaws or pinta, or Lyme disease
REACTIVE	NONREACTIVE	NONREACTIVE	**NEGATIVE**. Biological false+ve TP result, or Lyme disease.

			Serology typically repeated 2-4 weeks after initial test.

Source: NL Public Health Laboratory

EPIDEMIOLOGY

Occurrence

- This disease is found worldwide. Co-infection with other STI, including HIV is common.
- Infectious syphilis (primary, secondary and early latent stages) is the least common of the nationally reportable bacterial STIs.
- Syphilis was rare in the nineties but started to increase in the early 2000's. Since that time there have been outbreaks across Canada, mainly affecting the men who have sex with men (MSM) population.
- Eastern Health declared a syphilis outbreak in October 2014.
- From January 2014 to December 31, 2015, there were 56 infectious syphilis cases (including 5 neurosyphilis cases) and 7 non-infectious cases.
- 91% of infectious cases are men who have sex with men.

Reservoir

- Humans

Incubation

- 10 days to 3 months in primary syphilis, but usually 3 weeks.

Transmission

- Approximately 90% of all syphilis is sexually transmitted. Exposure mainly occurs during oral, anal, or vaginal intercourse.
- Transmission of syphilis occurs by direct contact with infectious exudates from moist lesions of the skin and/or mucous membranes of those who are infected.
- Transmission may also occur from the following routes:
    - Trans-placental infection of the fetus during pregnancy
    - Blood transfusions if the donor is in the early stages of disease
    - Through lesions on the hands of health care workers
    - Touching children with early congenital disease
- Previous infection with syphilis does not induce long–term immunity; reinfection is possible.

Communicability

- The period of communicability for syphilis is variable and can depend on the stage of the infection.
- Syphilis is infectious while the moist lesions of primary and secondary disease are present. It is also infectious during the early latent stage, and also in muco-cutaneous recurrences.
- Congenital transmission is most likely during primary and secondary maternal syphilis.

CONTROL MEASURES

Management of Cases

Investigations

- The diagnosis of syphilis depends on a combination of epidemiologic history, signs and symptoms and past history of syphilis and/or treatment for syphilis.
- The interpretation of serology should be made in conjunction with the MOH and or a specialist experienced in this field.
- All case files should be reviewed to ensure accurate staging and treatment
    - Testing for syphilis should not occur in isolation, offer other STI screening (chlamydia, gonorrhea, HIV, hepatitis).
    - Cooperation of the index case is essential to successful contact tracing; enhance cooperation of the index case by obtaining trust and providing an explanation of the reasons for contact tracing.
    - Counsel and identify partners, obtain contact information.

Treatment

- Treatment is dependent on the stage of the disease and if person is HIV positive.
- Persons known to be infected with syphilis (especially infectious cases) should receive appropriate treatment as quickly as possible.
- Antibiotic treatment is recommended according to the physician/MOH. See Table 5 below.
- Cases and their sexual partners should be counseled in the importance of abstaining from sex while clinical disease is present and until adequate treatment has been administered.
- Repeat testing: see **Follow-up Testing** below.

Treatment of Special Populations

HIV Co-Infection

- Due to the complexity of treatment, patients with HIV co-infection should be co-managed with an ID specialist.

Pediatric Cases

- Neonates should be co-managed with an ID specialist
- Neonates born to untreated, infected mothers must be tested and treated.
- If the case is an infant, the mother and her sexual partner(s) should be located, examined and tested.
- Congenital syphilis can result in significant health problems for the infant.
- If case is < 14 years of age sexual abuse must be considered and reported to Child Youth and Family Services as per the Children and Youth Care and Protection Act.

Pregnant Women

- All pregnant patients with infectious syphilis should be managed in conjunction with an ID specialist.
- For pregnant women with reactive syphilis serology and infants born to mothers with reactive serology, follow up will depend on maternal and neonatal history; advice should be sought from ID specialist.
- With documentation of adequate treatment in the past, patients need not be retreated, unless there is clinical or serological evidence of re-infection or treatment failure.
- Previously treated cases should be retested in pregnancy to rule out relapse or treatment failure.
- If the mother is > 20 weeks gestation, a detailed fetal ultrasound should be performed and she should be managed together with a maternal-fetal medicine specialist.
- Antibiotic treatment is recommended according to ID specialist recommendations.
- Treatment of infectious syphilis in pregnancy may precipitate a Jarisch Herxheimer reaction which may cause fetal distress or premature labour; all patients > 20 weeks gestation should undergo fetal monitoring for 12 – 24 hours after administration of benzathine penicillin.

Table 5: Treatment of syphilis in adults

Stage	Preferred Treatment	Alternative Treatment
All **non-pregnant** adults • Primary • Secondary • Early latent	**Benzathine penicillin G** 2.4 million units IM as a single dose*	**Doxycycline** 100 mg PO bid for 14 days
All **non-pregnant** adults • Late latent syphilis • Latent syphilis of unknown duration • Tertiary syphilis not involving the central nervous system	**Benzathine penicillin G** 2.4 million units IM weekly for 3 doses	Consider penicillin desensitization **Doxycycline** 100 mg PO bid for 28 days
All adults Neurosyphilis	**Penicillin G** 3-4 million units IV q 4 h (16-24 million units/day) for 10 -14 days	Strongly consider penicillin desensitization followed by penicillin treatment **Ceftriaxone** 2 g IV/IM daily x 10-14 days
Treatment of sexual contacts in the preceding 90 days to primary, secondary and early latent syphilis	**Benzathine penicillin G** 2.4 million units IM as a single dose	N/A
Pregnant women • Primary • Secondary • Early latent (< 1 year duration)	**Benzathine penicillin G** 2.4 million units IM weekly for 1-2 doses	There is no satisfactory alternative to penicillin for the treatment of syphilis in pregnancy Strongly consider penicillin desensitization followed by penicillin treatment
Pregnant women • Late latent syphilis • Latent syphilis of unknown duration • Cardiovascular syphilis and other tertiary syphilis not involving the central	**Benzathine penicillin G** 2.4 million units IM weekly for 3 doses	There is no satisfactory alternative to penicillin for the treatment of syphilis in pregnancy Strongly consider penicillin desensitization followed by treatment with penicillin

nervous system		

* Some experts recommend 3 weekly doses (total of 7.2 million units) of benzathine penicillin G in HIV-infected individuals.

Source: Canadian Guidelines on Sexually Transmitted Infections, 2013

Follow-up Testing

Table 6: Follow-up testing for non-pregnant adult syphilis cases

Primary, secondary, early latent	1, 3, 6, 12 months after treatment
Late latent, tertiary (EXCEPT NEUROSYPHILIS)	12 and 24 months after treatment
Neurosyphilis	6, 12 and 24 months after treatment. Patients with CSF abnormalities require follow up CSF at 6 monthly intervals until normalization of CSF parameters. Other clinical follow up may be indicated on a case by case basis.
HIV-infected (any stage)	1, 3, 6, 12 and 24 months after treatment and yearly thereafter

Source: Canadian Guidelines on Sexually Transmitted Infections, 2013

Follow-up testing

- For infectious syphilis (primary, secondary and early latent), repeat syphilis serology (RPR) should be obtained at 1, 3, 6, and 12 months following treatment.
- For HIV co-infection, syphilis serology should be repeated at 1, 3, 6, 12, and 24 months post-treatment.
- For late latent syphilis, syphilis serology (RPR) need not be repeated until 12 months post therapy.

- Repeat testing is not required if the baseline or follow-up NTT (RPR) is non-reactive or becomes non-reactive during follow up, but may be considered in HIV-infected individuals or in recent exposures to syphilis (e.g., early primary syphilis).
- Repeat HIV testing should be done in all primary syphilis cases since syphilis increases the risk of acquisition of HIV. HIV testing should be done at 1 and 3 months.

Management of Contacts

Definition of contact

- A person who has had sex, or has had some relevant exposure to the case.

Notification

- Partner notification will identify those at risk, reduce disease transmission/re-infection and ultimately prevent disease sequelae.
- Notification of partners and contacts is done in a confidential manner that protects the identity of the index case. Is done in collaboration with the case, may be done by the index case or by the attending HCP.
- All contacts should be screened for HIV and other STI.
- All contacts should be instructed about infection transmission.
- All contacts should be provided with individualized STI prevention education to develop knowledge, skills, attitudes and behaviors to reduce the risk and prevent recurrences of STI.
- Follow-up on all out of province/country referrals of cases and partner done in collaboration with provincial office.

Primary Syphilis

- All contacts in the last three months, regardless of symptoms or signs, must be located, examined, tested and treated. It may be necessary to extend this time period until a sexual contact is identified.
- Named contacts should be treated prophylactically.
- If the contact refuses treatment, repeat serology monthly until three months has elapsed since last sexual contact with infected individual.
- Sexual partners must be treated at the same time to prevent re-infection.

Secondary and Early Latent Syphilis

- All contacts of secondary syphilis in the last six months and early latent syphilis in the last 12 months regardless of symptoms or signs, must be located, examined, tested and treated if applicable.
- It may be necessary to extend the traceback period until a sexual contact is identified.
- All individuals with contact within the preceding three months should be treated prophylactically.
- If the contact refuses treatment repeat serology monthly until three months has elapsed since last sexual contact with infected individual.

Late Latent Syphilis

- When appropriate, a serologic test for syphilis should be performed on long-term sexual partners.
- Children born to females with late latent syphilis should be tested, regardless

of current age of child, based in estimated duration of infection in mother.

Presumptive

- Persons who are treated as contacts to confirmed infectious syphilis should not be interviewed for contacts until it has been confirmed that they also have infectious syphilis.

Management of Outbreaks

An outbreak management team should be established to address infection prevention and control measures.

PREVENTION

Screening

In the following circumstances, consider testing the following individuals with risk factors for syphilis:

- Sexual contact with syphilis infected person(s)
- MSM
- New sexual partner or more than 2 sexual partners in preceding year
- Previous STI
- Vulnerable populations (e.g., IDU, incarcerated individuals, sex workers, street involved youth).
- All sexually active persons under 25 years of age.
- All pregnant women (at first prenatal visit; re-screen all who are positive at first screen and those at high risk in third trimester).
- Any women delivering a stillborn infant at ≥ 20 weeks gestation should be screened for syphilis.
- No newborn should be discharged from hospital prior to confirmation that either the mother or newborn has had syphilis serology undertaken during pregnancy or at the time of labor or delivery.
- Infants presenting with signs or symptoms compatible with early congenital syphilis should be tested for syphilis.
- Survivors of sexual assault.

Education

- Ensure appropriate treatment of syphilis for cases.
- Interview case, identify and ensure appropriate treatment of syphilis for sexual partner(s).
- Include information about risk for STI during pre-travel health counseling.
- Educate the case, sexual partners and the public about symptoms, transmission and prevention of infection including:

- Personal protective measures, in particular the correct and consistent use of condoms,
- delaying onset of sexual activity,
- developing mutually monogamous relationships,
- reducing the numbers of sexual partners,
- minimize anonymous or casual sexual activity,
- sound decision making,
- provide STI services that are culturally appropriate, accessible and acceptable,
- provide information about risk of STIs when traveling.

REPORTING

Reporting Requirements and Procedures

- The laboratory (hospital or public health laboratories) report case/s to the attending physician, the Chief Medical Officer of Health and the Medical Officers of Health(MOH).
- MOH office will notify, as required, local physicians, nurse practitioners, environmental health officers, community health nurses, Communicable Disease Control Nurses (CDCNs) and Infection Control Practitioners (ICPs), in the particular region as required for follow-up and case investigation.
- CDCN in collaboration with the ICP (if necessary) will collect case details.
- CDCN enters the case details into the electronic reporting system and uses the CNPHI tool, if indicated, for alerts or outbreak summaries.

Provincial Disease Control

- Reports the aggregate case data to Public Health Agency of Canada.
- Provides an analysis of the case(s) with reports in the Quarterly Communicable Disease Report (CDR).
- Coordinates the response, if an outbreak occurs across RHAs.

DOCUMENTS

1. Checklist for syphilis case management by CDCN
2. Checklist for management of syphilis contact by CDCN
3. STI treatment/contact tracing form
4. Syphilis case report form
5. Algorithm for laboratory diagnosis of congenital syphilis. http://publichealthlab.ca/wp-content/uploads/2012/10/Congenital-Syphilis-July-2012.pdf
6. NL Public Health Laboratory requisition for STI testing

Reference:

Canadian Guidelines on Sexually Transmitted Infections. Section 5 - Management and Treatment of Specific Infections: Syphilis. http://www.phac-aspc.gc.ca/std-mts/sti-its/cgsti-ldcits/section-5-10-eng.php#table-2

Checklist for Management of New Syphilis Cases by CDCN

1. Scan and email a copy of laboratory report to the CDCN responsible for syphilis to initiate follow-up.
2. Confirm contact information for the case.
3. Enter the case in to the CDC system or update the CDC system.
4. Contact the MOH to discuss treatment requirements.
5. Contact the ordering physician to discuss the following:
    a. If there was a prior diagnosis of syphilis.
    b. The date and province where a prior diagnosis was made.
    c. The specific medications that were prescribed in the past.
    d. Treatment can be arranged through CDC free of charge.
    e. A signed Medical Order for Treatment must be faxed to the CDCN.
    f. Once the physician has contacted the patient, notify the CDCN.
    g. That the physician will receive a letter indicating when treatment was completed and when repeat serology is recommended.
6. The CDCN will contact the client to discuss:
    a. An appointment time for treatment
    b. The contact tracing interview will be conducted at the same appointment.
7. At the clinic visit:
    a. Use the syphilis case report form to obtain information on the case and contacts
    b. Offer testing for other STBBIs
        i. Chlamydia/gonorrhea
        ii. HIV
        iii. Hepatitis B
        iv. Hepatitis C
    c. Offer hepatitis A/B vaccination as appropriate (outlined in NL Immunization manual).
    d. Discuss treatment for syphilis
        i. Specific medication (s)
        ii. Side effects
    e. Discuss follow up appointments for:
        i. Repeat serology at 1, 3, 6, 12 months post treatment
        ii. Plus an additional visit at 24 months if HIV +

    f. Interview case about contacts
        i. Consult with MOH regarding how far back in time to trace
8. Referral to ID (in consultation with MOH)
9. For any identified contacts residing out of province, provide the name and information to the DHCS CDC Nurse Specialist for follow up.

Checklist for management of syphilis contact by CDCN

1. Once the contact list is generated, review each contact to determine if prior testing or treatment for syphilis was undertaken.
2. Arrange testing of contacts via family doctor, community NP or sexual health clinic.
3. At the clinic visit:
    a. Use the Syphilis Case Report form.
    b. Screen for syphilis
    c. Rebook the client for one week to review results.
4. Discuss with MOH regarding need for empiric treatment.
5. At the one week follow up visit, discuss results and need for retesting in 3 months if initial result negative.
6. If unable to connect with contact after three phone attempts, send a registered letter if street address is known. If still unable to connect, close the case as “lost to follow up.”
7. Once all contacts have been followed up, close the file by changing status in CDC case log from “in progress” to “completed” or “completed-treated.” File hard copy information.