# STI Treatment Guidelines

In-service Training
Webex / Teleconference

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***Our Mission***

The NITHA Partnership, a First Nations-driven organization, is a source of collective expertise in culturally based, cutting edge professional practices for northern health services in our Partner Organizations.

***Our Vision***

Partner Communities will achieve improved quality health and well-being, with community members empowered to be responsible for their health.

# Sexually Transmitted Infections

Outline

- Objective
- Case definition
- Epidemiology & Occurrence
- Background Information
- Public Health Investigation / Interventions
- Treatment

# Sexually Transmitted Infections

## Objectives

- To reduce morbidity /and mortality of STI through contact tracing;
- To prevent congenital syphilis;
- To track epidemiology trends of STI, including risk factors and distribution;
- To monitor the incidence of AMR, in order to inform treatment guidelines;
- To identify risk populations for prevention and control;
- To monitor effectiveness of prevention and control measures;
- To inform the public and the medical community about STI;
- To identify outbreaks in order to ramp up control activities.

# Sexually Transmitted Infections

Case Definition

Confirmed case - detection by culture, nucleic acid, FAT, dark-field microscopy, serology

- Genital infections – genitourinary specimens
- Extra-genital infections – rectum, conjunctiva, pharynx, blood and other extra-genital sites

# Sexually Transmitted Infections

## Epidemiology & Occurrence

- Worldwide
- Chlamydia - 1.5X of the national average; gonorrhea rates are over double
- Chlamydia is common in females, 15 – 29 yrs old, in males, 20-39 yrs old;
- Gonorrhea is common in males 20-24 yrs old, females – 15-19 yrs old
- High in Northern SK – probably due to barriers in accessing health care and lack of anonymity in small communities
- Common risk factors: unprotected sex, new/multiple partners in last 3 months, ETOH use, having sex with a known case

# Sexually Transmitted Infections

## Epidemiology & Occurrence

- PHAC reports under-screening of high risk males / females
- Persists for months without treatment
- Chlamydia often, is the co-infection of  gonorrhea.

# Sexually Transmitted Infections

## Background Information

- Asymptomatic
- Urethritis (urethral discharge, dysuria)
- Pain (abdominal, deep pelvic pain – dyspareunia)
- Vaginal / cervical discharge, cervicitis/ strawberry / friable cervix)
- Epididymitis (for GC infection)
- Bleeding
- Chancre (painless sores), rashes

# Sexually Transmitted Infections

## Public Health Investigation

1. Case

- Confidential Notification form – guide in interview/investigation
- History - sexual history is confidential, onset of illness, risk factors
- Treatment

# Sexually Transmitted Infections

## Public Health Investigation

Special considerations (chlamydia)

- Additional testing including HIV should be recommended based on risk assessment and testing history;
- Test of cure is *not routinely* indicated when recommended treatment is taken, SSx disappear, & no re-exposure to untreated partner;
- Test of cure should be *performed 4 weeks* following completion of treatment in the following circumstances:
- With recommended treatment taken, signs and symptoms persist

# Sexually Transmitted Infections

## Public Health Investigation

Special considerations (chlamydia)

- In all pregnant women
- If alternative treatment had been used
- In all pre-pubertal children.

# Sexually Transmitted Infections

## Public Health Investigation

Special considerations (gonorrhoea)

- Cultures obtained less than 24 hrs may be negative;
- Culture is especially important in:
  - sexual abuse of children (rectal, pharyngeal, vaginal);
  - Sexual assault;
  - Treatment failure;
  - Evaluation of PID;
  - Infection acquired overseas / or areas with recognized AMR.
- NAAT *should not be used* for test of cure for GC.

# Sexually Transmitted Infections

## Public Health Interventions

- Confidential Notification form – guide in interview/investigation
- Assessment – contacts
- Communication – various methods to contact individuals
- Education – prevention and control, safer sex / behavioural practices
- Immunization –recommend immunizations they are eligible for;
- Referral – harm reduction / other supportive services
- Testing – if NAAT, only test available, perform at least 4 weeks after TX;
- Positive results within 30 days should be considered a duplicate case unless re-infection is likely to have occurred.

# Sexually Transmitted Infections

## Public Health Investigation

ll. Contact/s

- Chlamydia / gonorrhoea:
- All individuals who had sexual contact with index within 60 days prior to onset of symptoms or date of diagnosis
- The last sexual partner
- Neonates born to infected mother
- Mothers of infected neonates
- Sexual partners of mother with infected neonates

# Sexually Transmitted Infections

## Public Health Interventions

ll. Contact/s

Chlamydia / gonorrhoea

- Must be notified of their exposure within 72 hrs / to intercept transmission of STIs.
- Assess for symptoms.
- Offer supportive non-judgmental and assistance.
- Provide disease information – safer sex / behavioural practices
- Provide education on treatment – abstain from unprotected sex for 7 days after completion of treatment.

# Sexually Transmitted Infections

## Public Health Interventions

ll. Contact/s

Chlamydia / gonorrhoea

- Recommend testing for other STIs including HIV
- Recommend immunization as per Sk Immunization Manual; sexual risk factors may render individual eligible for Hepatitis A and B vaccines.
- Provide treatment at the same time of testing – do not await for test results.

# Sexually Transmitted Infections

## Public Health Investigation

ll. Contact/s

- Syphilis (partner notification)

| Stage of syphilis (index) | Time Period |
|---|---|
| Primary syphilis | 3 mos. prior to onset of SSx |
| Secondary syphilis | 6 mos. Prior to onset of SSx |
| Early latent | 1 yr prior to diagnosis |
| Late latent | Assess partners/children |
| Congenital | Assess mother & sexual partner |
| Stage undetermined | Assess/consult with expert |

# Sexually Transmitted Infections

## Public Health Interventions

ll. Contact/s

Syphilis

- All contacts should be tested for syphilis.
- Offer single dose of bicillin (2.4 mu) at initial visit.
- BW for baseline serology.
- Encourage to abstain for a full 2 weeks following treatment.
- If client has any lesions, the 2-week period should be extended until all lesions have healed.
- Condoms should be advised and encouraged in all sexual encounters.

# Sexually Transmitted Infections

## Public Health Interventions

ll. Contact/s

Syphilis

- Follow-up serology 4-6 weeks after treatment.
- Newly diagnosed pregnant women should receive treatment appropriate to their stage of disease.
- All babies born to mothers with syphilis should be assessed by a paediatrician / empirical treatment may be given.
- Infected infants are frequently asymptomatic at birth and may be seronegative if maternal infection occurred late in gestation.

# Sexually Transmitted Infections

## Public Health Interventions

### ll. Contact/s

### Syphilis

Monitoring of Serologic Tests and Other Follow Up

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

# Sexually Transmitted Infections

## Public Health Interventions

ll. Contact/s

Syphilis

- Post-treatment reaction is possible – *Jarisch-Herxheimer reaction*
- *Acute febrile illness with headache, myalgia, chills, rigours generally occurs within 8-12 hrs & resolves within 24 hrs.*
- Not clinically significant unless pregnant or with neurologic or ophthalmic involvement.
- Not a drug allergy; can be treated with antipyretics.
- Can be treated with steroids in severe reactions but used in consultation with experienced colleague.

# Sexually Transmitted Infections

## Public Health Interventions

ll. Contact/s

Special Considerations in Pregnant Women and Newborn Infants

- Universal screening of all pregnant women continues to be important and remains the standard of care in most jurisdictions.
- Screening ideally performed in the 1st trimester, then repeated at 28 – 32 weeks and at delivery for high risk women or in areas experiencing heterosexual outbreaks.
- Any woman delivering a stillborn infant at ≥ 20 weeks gestation should be screened for syphilis.

# Sexually Transmitted Infections

## Public Health Interventions

ll. Contact/s

<u>Special Considerations in Pregnant Women and Newborn Infants</u>

- No NB should be discharged from hospital prior to confirmation that either the mother or NB has had syphilis serology undertaken during pregnancy or at the time of labour or delivery.
- Infants presenting with signs / symptoms compatible with early congenital syphilis should be tested for syphilis.

# Sexually Transmitted Infections

*Table 1. Chlamydia. Adults (non-pregnant and non-lactating): Urethral, endocervical, rectal, conjunctival infection*

| Preferred | Alternative |
|---|---|
| • **Azithromycin** 1 g PO in a single dose if poor compliance is expected*<br>**OR**<br>• **Doxycyline** 100 mg PO bid for 7 days | • **Ofloxcin** 300 mg PO bid for 7 days<br>**OR**<br>• **Erythromycin** 2 g/day PO in divided doses for 7 days†<br>**OR**<br>• **Erythromycin** 1 g/day PO in divided doses for 14 days† |

Source: Canadian Guidelines on Sexually Transmitted Infections 2017.

# Sexually Transmitted Infections

*Table 3. Chlamydia. Pregnant women and nursing mothers: Urethral, endocervical, rectal infection*

- **Amoxicillin** 500 mg PO tid for 7 days*

  **OR**
- **Erythromycin** 2 g/day PO in divided doses for 7 days*†

  **OR**
- **Erythromycin** 1 g/day PO in divided doses for 14 days*†

  **OR**
- **Azithromycin** 1 g PO in a single dose, if poor compliance is expected‡

Source: Canadian Guidelines on Sexually Transmitted Infections 2017.

# Sexually Transmitted Infections

*Table 1. Gonorrhea. Recommended treatment of uncomplicated anogenital and pharyngeal infection in adults and youth 9 years of age and older (for MSM, see Table 2)*

| ***Urethral, endocervical, vaginal, rectal*** | |
|---|---|
| **Preferred** | **Alternatives** |
| • Ceftriaxone 250 mg IM in a single dose[*†]<br>**PLUS**<br>• Azithromycin 1 g PO in a single dose[‡]<br><br>**OR**<br>• Cefixime 800 mg PO in a single dose[*§]<br>**PLUS**<br>• Azithromycin 1 g PO in a single dose[‡] | • Gentamicin 240 mg IM in 2 separate 3 mL injections of 40 mg/mL solution<br>**PLUS**<br>• Azithromycin 2 g PO in a single dose[‡] |

# Sexually Transmitted Infections

*Table 1. Syphilis. Treatment: Non-pregnant adults*

| Stage | Preferred treatment[Ψ] | Alternative treatment for penicillin-allergic patients |
|---|---|---|
| All **non-pregnant adults who are not co-infected with HIV**<br>• **Primary**<br>• **Secondary**<br>• **Early latent** (<1year duration) | Benzathine penicillin G 2.4 million units IM as a single dose[*] | • Doxycycline 100mg PO bid for 14 days<br>**Alternative agents (only to be used in exceptional circumstances and should be discussed with the MHO)[†]**<br>• Ceftriaxone 1 g IV or IM daily for 10 days |
| **All non-pregnant adults**<br>• **Late latent** syphilis<br>• **Latent** syphilis of unknown duration<br>• **Cardiovascular syphilis** and other **tertiary syphilis** not involving the central nervous system | Benzathine penicillin G 2.4 million units IM weekly for 3 doses | • Consider penicillin desensitization<br>• Doxycycline 100mg PO bid for 28 days<br>**Alternative agents (only to be used in exceptional circumstances and should be discussed with the MHO)[†]**<br>• Ceftriaxone 1 g IV or IM daily for 10 days |

# Sexually Transmitted Infections

| | | |
|---|---|---|
| **All adults**<br>• **Neurosyphilis** | Penicillin G 3-4 million units IV q4 h (16-24 million units/day) for 10-14 days | • Strongly consider penicillin desensitization followed by treatment with penicillin<br>• Ceftriaxone 2 g IV/IM qd x 10-14 days |

| Stage | Preferred treatment[Ψ] | Alternative treatment for penicillin-allergic patients |
|---|---|---|
| Epidemiological 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. | See comment on Azithromycin[ǂ] |

Source: Adapted from Canadian Guidelines on Sexually Transmitted Infections 2018.

# Sexually Transmitted Infections

*Table 2. Syphilis. Treatment: Pregnant women*

| Stage | Preferred treatment[Ψ] | Alternative treatment for penicillin-allergic patients |
|---|---|---|
| **Pregnant women**<br>• **Primary**<br>• **Secondary**<br>• **Early latent** (<1year 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; insufficient data exist to recommend ceftriaxone in pregnancy.<br>• Strongly consider penicillin desensitization followed by treatment with penicillin |
| **Pregnant women**<br>• **Late latent** syphilis<br>• **Latent** syphilis of unknown duration<br>• **Cardiovascular syphilis** and other **tertiary syphilis** not involving the central nervous system | Benzathine penicillin G 2.4 million units IM weekly for 3 doses | |

Source: Adapted from Canadian Guidelines on Sexually Transmitted Infections 2018.

# Thank you!