

# Alberta Treatment Guidelines for Sexually Transmitted Infections (STI) in Adolescents and Adults 2012

## General Considerations for STI

NOTIFIABLE

- Given the current rates of STI in Alberta, it is appropriate to assess for risk of and screen for STI at routine medical appointments. This is particularly important in individuals at higher risk for STI\* or in individuals where the risk of consequences of STI are high (e.g., adolescents, pregnant women).
- All insertive and receptive sexual practices (oral, vaginal and anal) put individuals at risk for STI. In addition, intimate skin to skin contact may result in transmission of some STI, including herpes simplex virus and human papillomavirus infections.
- Treatment of curable STI is necessary to mitigate sequelae of infection and to prevent further transmission.
- Drugs for the treatment of notifiable STI are provided free of charge and are replaced following submission of a STI Notification Form.
- Some STI are **NOTIFIABLE** under the Alberta *Public Health Act* (for copies of Notification of Sexually Transmitted Infections forms, see STI Resources on back page).
- Partner notification is a critical component of STI control and important in preventing further spread and re-infection. Assistance with partner notification is available from public health staff (see section on Partner Notification on back page).
- Counselling about safer sex practices is important and effective in inducing behaviour change in individuals with or at risk for STI. This can in turn prevent re-infection and acquisition of new infections. Safer sex options include use of barrier contraceptives, reducing numbers of sexual partners, delaying onset of sexual debut and abstinence.
- Patients and contacts should abstain from unprotected sexual intercourse until treatment in both is completed or for 7 days after single dose therapy.
- Hepatitis B immunization should be offered to all individuals with STI who have not already been immunized. In some situations, hepatitis A immunization may be recommended.
- Having one sexually transmitted infection puts one at risk for other STI. Therefore, all individuals with one sexually transmitted infection should be screened for syphilis, HIV, gonorrhoea and chlamydia.

*\*Individuals at higher risk for STI include but are not limited to those having sexual contact with person(s) with known STI, sexually active under 25 years of age, a new sexual partner or > 2 sexual partners in the past year, use of non-barrier contraception, injection drug or other substance use, sex workers and their clients, street-involved/homeless, Aboriginal ethnicity, anonymous sexual partnering, previous STI, victims of sexual assault/abuse, men who have sex with men (MSM).*

The *Alberta Treatment Guidelines for Sexually Transmitted Infections (STI) in Adolescents and Adults 2012* has been adapted from the *Canadian Guidelines on Sexually Transmitted Infections* for provincial use with permission from the Public Health Agency of Canada. The Canadian Guidelines are available on line at: [www.phac-aspc.gc.ca/std-mts/sti-its/guide-lignesdir-eng.php](http://www.phac-aspc.gc.ca/std-mts/sti-its/guide-lignesdir-eng.php).

Recommendations regarding treatment of pediatric infection are excluded from these guidelines. In general, children diagnosed with STI should be managed in conjunction with a specialist at a referral centre and be reported to Alberta Child and Family Services Division or appropriate law enforcement agency for investigation of possible sexual abuse (see section on back page on Considerations in Persons Under 18 Years of Age).

This guideline includes the level of recommendation and quality of evidence indicators for the treatment recommendations. The indicators reflect a combination of the methodologies from the U.S. Preventive Services Task Force and the Canadian Task Force on Preventive Health Care and have been modified and simplified for use as outlined below (re-printed with permission from the *Canadian Guidelines on Sexually Transmitted Infections*).

## LEVELS OF RECOMMENDATION

- A Strongly recommends** that clinicians routinely provide the treatment to eligible patients. **Good evidence** that the treatment improves important health outcomes and concludes that benefits substantially outweigh harms.
- B** Recommends that clinicians routinely provide the treatment to eligible patients. At least **fair evidence** that the treatment improves important health outcomes and concludes that benefits outweigh harms.
- C** No recommendation for or against routine provision of the treatment. At least **fair evidence** that the treatment can improve

- health outcomes but concludes that the balance of the benefits and harms is **too close to justify a general recommendation**.
- D** Recommends against routinely providing the treatment to asymptomatic patients. At least fair evidence that the treatment is **ineffective** or that harms outweigh benefits.
- I Evidence is insufficient** to recommend for or against routinely providing the treatment. Evidence that the treatment is effective is **lacking, of poor quality or conflicting**, and the balance of benefits and harms cannot be determined.

## QUALITY OF EVIDENCE

- I** Evidence from at least one properly randomized, controlled trial.
- II** Evidence from at least one well-designed clinical trial without randomization, from cohort or case-control analytic studies (preferably from more than one centre), from multiple time-series studies or from dramatic results in uncontrolled experiments.
- III** Evidence from opinions of respected authorities based on clinical experience, descriptive studies or reports of expert committees.

# CHLAMYDIA

## Urethral, Cervical, Rectal, Pharyngeal Infection

### Non-Pregnant/ Non-Lactating Adults

#### Preferred

azithromycin 1 g po as a single dose (A-I)

#### Alternate

doxycycline 100 mg po BID for 7 days (A-I)

### Pregnant/Lactating Women

#### Preferred

azithromycin\* 1 g po as a single dose (B-I)  
or

amoxicillin 500 mg po TID for 7 days (A-I)

\*Available data suggests that azithromycin is safe and effective in pregnant and lactating women.

### Considerations (urethral, cervical, rectal, pharyngeal infections)

- ◆ Co-treatment for gonorrhoea (see relevant section) should be provided if there is a positive test for gonorrhoea or if treatment is being provided before test results are available.

NOTIFIABLE

- ◆ If vomiting occurs > 1 hour post administration of azithromycin, a repeat dose is not required.
- ◆ Doxycycline is contraindicated in pregnant women.

## Eye Infection

### Adult and Children ≥9 years

#### Preferred

doxycycline 100 mg po BID for 14 days

#### Alternate

azithromycin 1 g po as a single dose

### Considerations (eye infections)

- ◆ Children < 9 years of age - consult pediatric Infectious Disease physician.
- ◆ All patients should also have genitourinary specimens submitted for *C. trachomatis*.

### Contacts (all chlamydia cases)

All contacts in the last 60 days, 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.

### Follow-Up (all chlamydia cases)

- ◆ Test of Cure (TOC) is not routinely indicated if recommended treatment is administered, symptoms and signs disappear and there is no re-exposure to an untreated partner unless:
  - compliance is sub-optimal or uncertain
  - patient is prepubertal
  - patient is pregnant
  - non-genital site involved (e.g., eye, pharynx, rectum) or
  - the treatment agent used is not listed as the preferred or alternate treatment in this guideline.
- ◆ TOC, using a nucleic acid amplification test (NAAT), if needed, should be performed 3-4 weeks after the completion of effective treatment to avoid false-positive results due to the presence of non-viable organisms.
- ◆ Re-screening of all individuals diagnosed with chlamydia is recommended after 6 months.
- ◆ Neonates born to women with untreated chlamydia need to be closely monitored for signs of chlamydial infection (e.g., conjunctivitis, pneumonitis). Prophylaxis is not recommended unless follow-up cannot be guaranteed.

# SYPHILIS

NOTIFIABLE

**Treatment and follow-up testing of all suspected or confirmed cases of syphilis should be done in consultation with STI Services.**

## Non-HIV Infected/ Non-Pregnant Adults

### Primary, Secondary, Early Latent

#### Preferred

**Long acting benzathine penicillin G 2.4 mu IM** as a single dose (A-II)

**Alternate (only for penicillin allergic patients)**

**doxycycline 100 mg po BID** for 14 days (B-II)

### Late Latent

#### Preferred

**Long acting benzathine penicillin G 2.4 mu IM** weekly for 3 consecutive weeks (A-II)

**Alternate (only for penicillin allergic patients)**

**doxycycline 100 mg po BID** for 28 days (B-II)

## Non-HIV Infected/ Pregnant Adults

### Primary, Secondary, Early Latent

#### Preferred

**Long acting benzathine penicillin G 2.4 mu IM** weekly for 2 doses (C-III)

### Late Latent

#### Preferred

**Long acting benzathine penicillin G 2.4 mu IM** weekly for 3 consecutive weeks (A-II)

#### Considerations

- ◆ All pregnant women should be screened for syphilis during pregnancy. Screening should be performed in the first trimester and again at the time of delivery. In women at high risk of acquisition or re-infection with syphilis in their current pregnancy, more frequent screening is recommended.

- ◆ For pregnant women with reactive serology, consultation with STI services is recommended. Consultation will identify if the woman is a known case, and has a history of prior treatment or stable serology.
- ◆ All pregnant women with infectious syphilis should be managed in conjunction with a STI specialist. If the mother is >20 weeks gestation, a detailed fetal ultrasound should be performed and she should be managed together with a materno-fetal specialist.
- ◆ Treatment of infectious syphilis in pregnancy may precipitate a Jarisch-Herxheimer reaction which may cause fetal distress or premature labour; therefore all patients > 20 weeks gestation should undergo fetal monitoring for 12-24 hours after administration of benzathine penicillin.
- ◆ Doxycycline is not recommended during pregnancy. Therefore, there is no satisfactory alternative to penicillin in pregnancy. Penicillin allergic pregnant women should be considered for desensitization followed by treatment with benzathine penicillin.

## All Adults Neurosyphilis

#### Preferred

**crystalline penicillin G 4 mu IV q4h** for 10-14 days (A-II)

#### Alternate

In cases of severe penicillin allergy – consult a STI specialist

#### Considerations (all neurosyphilis)

- ◆ CSF examination for cell count and differential, protein, glucose and VDRL is recommended to establish a diagnosis of neurosyphilis and is indicated in all patients with neurologic, auditory or ophthalmic symptoms or signs, and patients meeting other criteria (refer to syphilis chapter in *Canadian Guidelines on Sexually Transmitted Infections*).

#### Considerations (HIV co-infection)

- ◆ Patients with HIV co-infection should be managed with a STI/HIV specialist. It is generally recommended that all HIV infected patients without evidence of neurological involvement receive 3 weekly doses of **long acting benzathine penicillin 2.4 mu IM**.
- ◆ Some co-infected patients may require a longer course of treatment, as well as closer and longer follow-up.

#### Considerations (all syphilis cases)

- ◆ Even after adequate treatment, syphilis treponemal tests (TT) usually remain positive for life. Therefore, not everyone with positive serology will require treatment. Past history of treatment for syphilis may be available from STI Services and may help to guide current management.

#### Contacts (all syphilis cases)

- ◆ All sexual contacts of infectious syphilis (primary, secondary and early latent) must be located, tested and treated. Minimum trace back periods are as follows: primary syphilis: 3 months, secondary syphilis: 6 months, early latent: 1 year. Trace back periods may be extended if no partners identified or if partners test negative.
- ◆ 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 a STI expert.
- ◆ Regarding late latent syphilis: children of female cases and regular partners of all cases should be tested and treated if found to be infected.

#### Follow-Up (all syphilis cases)

- ◆ Follow-up with serial RPR is recommended at 1, 3, 6, 12 months after treatment in infectious (primary, secondary and early latent) cases. For late latent syphilis, serology should be repeated at 12 and at 24 months post therapy unless RPR non-reactive. Follow-up is extended to 24 months for those who are HIV co-infected, regardless of RPR result.
- ◆ HIV testing should be done at baseline and at 1 and 3 months after diagnosis in patients with infectious syphilis.

# GONORRHEA

NOTIFIABLE

## Heterosexual/Pregnant Women

### Preferred

**cefixime 800 mg** po as a single dose [B-III]  
PLUS **azithromycin 1 g** po as a single dose

### Alternate

**spectinomycin 2 g** IM as a single dose [A-I]  
PLUS **azithromycin 1 g** po as a single dose

or

**azithromycin 2 g\*** po as a single dose [A-I]

## MSM (Men who have Sex with Men) and Pharyngeal Infections

### Preferred

**ceftriaxone 250 mg** IM as a single dose [A-I]  
PLUS **azithromycin 1 g** po as a single dose

### Alternate

**cefixime 800mg** po as a single dose [B-III]  
PLUS **azithromycin 1 g** po as a single dose

or

**azithromycin 2 g\*** po as a single dose [A-I]

\* Since azithromycin resistance has been reported, this agent should only be used as monotherapy if there is a strong contraindication to the use of cephalosporins (e.g. history of anaphylactic reaction to penicillin or allergy to cephalosporin).

## Considerations

- ◆ All patients treated for gonorrhoea should also be treated with azithromycin 1 g unless treatment for gonorrhoea was with azithromycin. This co-treatment also provides additional coverage for gonorrhoea.
- ◆ Disseminated infections and infections involving the eye require expert consultation.
- ◆ Available data suggests that azithromycin is safe and effective in pregnant and lactating women.
- ◆ Due to higher sensitivity of NAAT over culture for *N. gonorrhoeae*, NAAT should be used for screening in most instances. Depending on the clinical situation, both culture and NAAT may be appropriate. Antimicrobial susceptibility testing can only be conducted on culture specimens. Culture is recommended in all cases with sexual contact outside of Canada, presumed treatment failure, sexual assault/abuse cases and symptomatic MSM.

## Contacts

- ◆ All contacts in the last 60 days, 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.

## Follow-Up

- ◆ Test of Cure (**TOC**) is recommended in the following instances:
  - the treatment agent used is not listed as the preferred or alternate treatment in this guideline

- patient is prepubertal
- patient is pregnant
- antimicrobial resistance is documented
- case who is linked to a drug resistant/treatment failure case and was treated with that same antibiotic
- compliance is sub-optimal or uncertain
- non-genital site involved (e.g., eye, rectum, pharynx)
- pelvic inflammatory disease (PID) or disseminated gonococcal infection
- persistent symptoms or signs post-treatment
- treatment failure for gonorrhoea has occurred previously in the patient or
- there is re-exposure to an untreated partner.
- ◆ **TOC** using NAAT, if needed, should be performed 3-4 weeks after the completion of effective treatment to avoid false-positive results due to the presence of non-viable organisms. **TOC** using culture may be performed 3-7 days after treatment.
- ◆ Re-screening of all individuals diagnosed with gonorrhoea is recommended after 6 months.
- ◆ Neonates born to women with untreated gonorrhoea should be given a single dose of **ceftriaxone 25-50 mg/kg** IM **not to exceed 125 mg** IM in a single dose [A-III]; consultation with a pediatric specialist is recommended. Prophylactic co-treatment for chlamydial infection is not recommended unless follow-up cannot be guaranteed (see chlamydia).

# GENITAL HERPES SIMPLEX

## First Episode\*

**acyclovir 400 mg** po TID for 7-10 days (A-III) or

**famciclovir 250 mg** po TID for 5 days (A-I) or  
**valacyclovir 1 g** po BID for 10 days (A-I)

\*Note that duration of therapy depends on severity of outbreak

## Recurrent Lesions

### Episodic Therapy

**valacyclovir 500 mg** po BID for 3 days (B-I) or

**valacyclovir 1 g** po QD for 3 days (B-I) or

**famciclovir 125 mg** po BID for 5 days (B-I) or

**acyclovir 800 mg** po TID x 2 days

### Suppressive Therapy Non-Pregnant

**acyclovir 400 mg** po BID (A-I) or

**famciclovir 250 mg** po BID (A-I) or

**valacyclovir 500 mg** po QD (A-I) [for patients with  $\leq 9$  recurrences per year] or

**valacyclovir 500 mg** po BID or **1 g** po QD (A-I) [for patients with  $> 9$  recurrences per year]

### Suppressive Therapy Pregnant

Suppressive therapy in late pregnancy is the "standard of care" and is highly recommended to reduce possible transmission to neonate.

**acyclovir 400 mg** po TID initiated at 36 weeks until parturition (A-I) or

**valacyclovir 500 mg** po BID initiated at 36 weeks until parturition (B-I)

\* Antiviral therapy may be initiated earlier in pregnancy in patients experiencing symptomatic outbreaks.

## Considerations

- ◆ Topical acyclovir does not alleviate symptoms or signs and should not be used.
- ◆ Counselling is an essential part of management.

- ◆ Management options are three fold: No treatment, episodic therapy or suppressive therapy.
- **No Treatment:** Antiviral therapy is not necessary in all cases, particularly when recurrences are both mild and infrequent and in cases where sexual transmission is not a concern.
- **Episodic therapy** may be an option for patients with infrequent ( $\leq 9$  outbreaks per year) but significant symptomatic outbreaks. For episodic therapy, treatment should be started as soon as possible, preferably during the prodromal symptoms or within hours of the development of a lesion.
- **Suppressive therapy** may be an option for patients with  $> 9$  symptomatic outbreaks a year or in those who are concerned with disease transmission. Suppressive therapy reduces recurrence rates, as well as asymptomatic shedding and sexual transmission.

# NON-GONOCOCCAL URETHRITIS (NGU) NOTIFIABLE

## Case Definition:

- Inflammation of the urethra with or without a mucoid, muco-purulent or purulent urethral discharge
- **and/or**  $\geq 5$  polymorphonuclear leukocytes per oil immersion field ( $\times 1000$ ) in  $\geq 5$  non-adjacent, randomly selected fields in a smear of urethral secretions (if available)
- **and** absent gram-negative intracellular diplococci on gram stain of urethral secretions (if available)
- **and** negative tests or no tests performed for gonorrhea and chlamydia.

## Empiric treatment for NGU (no tests done or specimens collected but test results not available)

### Heterosexual

#### Preferred

**cefixime 800 mg** po as a single dose [B-III] PLUS  
**azithromycin 1 g** po as a single dose

#### Alternate

**spectinomycin 2 g** IM as a single dose [A-I] PLUS  
**azithromycin 1 g** po as a single dose **or**  
**azithromycin 2 g\*** po as a single dose [A-I]

## MSM

### (Men who have Sex with Men)

#### Preferred

**ceftriaxone 250 mg** IM as a single dose [A-I] PLUS  
**azithromycin 1 g** po as a single dose

#### Alternate

**cefixime 800 mg** po as a single dose [B-III] PLUS  
**azithromycin 1 g** po as a single dose **or**  
**azithromycin 2 g\*** po as a single dose [A-I]

\* Since azithromycin resistance has been reported, this agent should only be used as monotherapy if there is a strong contra-indication to the use of cephalosporins (e.g. history of anaphylactic reaction to penicillin or allergy to cephalosporin).

## Empiric treatment for NGU

### (negative tests for gonorrhea and chlamydia)

#### Preferred

**azithromycin 1 g** po as a single dose

#### Alternate

**doxycycline 100 mg** po BID for 7 days

## Considerations

- ◆ All patients should be tested for gonorrhea and chlamydia.
- ◆ If urethritis is diagnosed clinically, immediate treatment is recommended. Treat presumptively for gonorrhea and chlamydia pending laboratory results.
- ◆ Patients who remain persistently symptomatic 3-4 weeks after treatment for gonorrhea and chlamydia and in whom a diagnosis of NGU has been made **and** persistent or repeat infection with gonorrhea has been ruled out should be treated with **doxycycline 100 mg** po BID x 7 days.

## Contacts

All contacts in the last 60 days, 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.

## Follow-Up

If symptoms persist or recur, patients should return for re-evaluation with a STI expert.

# MUCO-PURULENT CERVICITIS (MPC) NOTIFIABLE

## Case Definition:

- Inflammation of the cervix with a muco-purulent or purulent cervical discharge or cervical bleeding on insertion of a swab
- **and** negative tests from genitourinary specimens for chlamydia and gonorrhea.

## Empiric treatment for MPC (no tests done or specimens collected but test results not available)

### Preferred

**cefixime 800 mg** po as a single dose [B-III] PLUS  
**azithromycin 1 g** po as a single dose

### Alternate

**spectinomycin 2 g** IM as a single dose [A-I] PLUS  
**azithromycin 1 g** po as a single dose **or**  
**azithromycin 2 g\*** po as a single dose [A-I]

\* Since azithromycin resistance has been reported, this agent should only be used as monotherapy if there is a

strong contra-indication to the use of cephalosporins (e.g. history of anaphylactic reaction to penicillin or allergy to cephalosporin).

## Empiric treatment for MPC

### (negative tests for gonorrhea and chlamydia)

#### Preferred

**azithromycin 1 g** po as a single dose

#### Alternate

**doxycycline 100 mg** po BID for 7 days

## Considerations

- ◆ **Diagnosis of MPC should not be made in pregnancy** due to poor positive predictive value of any criteria for defining MPC in pregnant women.
- ◆ Speculum examination is required to make this diagnosis.
- ◆ All patients should be tested for gonorrhea and chlamydia.

- ◆ If cervicitis is diagnosed clinically, immediate treatment is recommended. Treat presumptively for gonorrhea and chlamydia pending laboratory results.
- ◆ Patients who remain persistently symptomatic 3-4 weeks after treatment for gonorrhea and chlamydia and in whom a diagnosis of MPC has been made and persistent or repeat infection with gonorrhea has been ruled out should be treated with **doxycycline 100 mg** po BID x 7 days.

## Contacts

All contacts in the last 60 days, 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.

## Follow-Up

If symptoms persist or recur, patients should return for re-evaluation with a STI expert.

# EPIDIDYMO-ORCHITIS

### Preferred

**ceftriaxone 250 mg** IM in a single dose PLUS  
**doxycycline 100 mg** po BID for 14 days

### Alternate

**ofloxacin 300 mg** po BID for 14 days (A-I)

## Considerations

- ◆ Ofloxacin may be used if negative for gonorrhea or positive with quinolone susceptible gonorrhea. If positive for gonorrhea and antimicrobial resistance testing is not available, a **TOC** must be obtained.

- ◆ Bed rest, scrotal elevation and support and analgesics are also recommended.

## Contacts

- ◆ When treatment is indicated for the index case, and they are presumed to have sexually acquired epididymitis, all sexual partners from 60 days prior to symptom onset or the date of dx (if asymptomatic) should be located, clinically evaluated and treated with an appropriate regimen regardless of clinical findings and without waiting for test results.

## Follow-Up (all epididymo-orchitis)

- ◆ Follow-up should be arranged to evaluate the response to treatment. If a recommended regimen has been given and correctly taken and the:
  - patient has failed to improve after 48-72 hours, they should be assessed for an alternate diagnosis.
  - patient's symptoms and signs have disappeared and there is no re-exposure to an untreated sexual partner, then repeat diagnostic testing for *N. gonorrhoeae* and *C. trachomatis* is not routinely recommended.

# PELVIC INFLAMMATORY DISEASE (PID)

## Outpatients

### Non-Pregnant/ Non-Lactating Adults

#### Preferred

**ceftriaxone 250 mg** IM as a single dose  
PLUS **doxycycline 100 mg** po BID for 14  
days (A-II)

WITH or WITHOUT **metronidazole\* 500 mg**  
po BID for 14 days (B-III)

#### Alternate

**ofloxacin\*\* 400 mg** po BID for 14 days

WITH or WITHOUT **metronidazole 500 mg**  
po BID for 14 days (A-I)

#### Considerations

- ◆ \*Addition of metronidazole is recommended when concurrent anaerobic infection is a concern (e.g., bacterial vaginosis, presence of tubo-ovarian abscess and/or HIV co-infection).

- ◆ Patients on metronidazole should be advised not to consume alcohol for the duration of treatment and for 24 hours after because of possible disulfiram-like (Antabuse) reaction.
- ◆ \*\*Ofloxacin may be used if negative for gonorrhea or positive with quinolone susceptible gonorrhea. If positive for gonorrhea and antimicrobial resistance testing is not available, a test of cure must be obtained.
- ◆ Removal of an IUD in a case with PID is controversial and should be discussed with the practitioner who inserted the device and/or a STI expert.

#### Contacts

- ◆ All contacts in the last 60 days, 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.

#### Follow-Up

- ◆ Individuals treated as outpatients need careful follow-up and should be re-evaluated 2-3 days after treatment is initiated.
  - ◆ Refer to a specialist for consideration of hospitalization if the individual:
    - is pregnant
    - does not respond clinically to oral antimicrobial therapy
    - is unable to follow or tolerate an outpatient oral regimen
    - has severe illness, nausea and vomiting, or high fever
    - has a tubo-ovarian abscess
    - is immunocompromised, such as with HIV infection
    - is a youth/adolescent (particularly if compliance is an issue)
- And/or
- surgical emergencies such as appendicitis cannot be excluded.

## HIV/AIDS NOTIFIABLE

(Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome)

All individuals having unprotected sexual intercourse (oral, vaginal or anal), injecting drugs, sharing needles and other injection drug use equipment, and/or infected with other STI are at risk of HIV infection. The presence of STI increases the risk of acquisition and transmission of HIV.

### Testing and Results

HIV testing should be offered to all individuals, with emphasis on high-risk patients, including those diagnosed with another STI. Testing should occur after a discussion of the implications and limitations of testing, ensuring informed consent. It is strongly recommended that test results are given in person if possible, to facilitate post-test counselling and referral(s) to appropriate resource(s).

### HIV Testing In Pregnancy

HIV testing in pregnancy is part of routine prenatal care.

### Reporting

- ◆ All confirmed and probable cases of HIV should be reported to the Zone Medical Officer of Health and Alberta Health using the HIV/AIDS Case Report Form. For copies of this form, call Alberta Health at **780-969-0888**.
- ◆ All HIV positive persons who have previously donated or received blood, sperm, organs or tissue should be reported the Zone Medical Officer of Health.

### Referral

- ◆ Newly diagnosed HIV positive individuals should be referred to appropriate support agencies including local HIV/AIDS support groups (see STI Resources on back page) and to a HIV specialist.

### Contacts

- ◆ Partner notification must be undertaken in all cases of AIDS and HIV infection.
- ◆ Identification and contact tracing of all known sexual and needle-sharing partners of HIV infected patients must be undertaken. It may be necessary to go back several years. Knowledge of a previous negative test can assist in determining the time frame for contact identification.
- ◆ A partner notification nurse (PNN) will assist with the partner tracing and notification process.

# VAGINITIS

## Bacterial Vaginosis

### Non-Pregnant/ Lactating

#### Preferred

**metronidazole\* 500 mg** po BID for 7 days (A-I) *or*

**metronidazole gel (Nidagel®)\*\* 0.75%, one applicator (5 g)** intravaginally QD for 5 days (A-I) *or*

**clindamycin cream 2%, one applicator (5 g)** intravaginally QD for 7 days (A-I)

#### Alternate

**clindamycin 300 mg** po BID for 7 days (A-I) *or*

**metronidazole\* 2 g** po in a single dose (A-1)

\* The effect of oral metronidazole on the nursing infant is unknown but no adverse effects have been reported in numerous studies; infant should be observed for diarrhea.

### Pregnant

#### Preferred

**metronidazole 500 mg** po BID for 7 days (A-I)

#### Alternate

**clindamycin 300 mg** po BID for 7 days

### Treatment for Recurrent BV

### Pregnant and Non-Pregnant

#### Preferred

**metronidazole 500 mg** po BID for 10-14 days (B-III) *or*

**metronidazole gel (Nidagel®)\*\* 0.75%, one applicator (5 g)** intravaginally QD for 10 days (B-III), followed by suppressive therapy of **metronidazole gel twice a week** for 4-6 months (B-III).

#### Considerations

- ◆ For therapy with metronidazole, a 7 day oral course and a 5 day course of gel are equally efficacious (cure rate 75–85%). A single oral dose also has a cure rate of 85% but a higher relapse rate at 1 month (35–50% vs. 20–33%) [A-I].
- ◆ Patients on metronidazole should be advised not to consume alcohol for the duration of treatment and for 24 hours after because of possible disulfiram-like (Antabuse) reaction.
- ◆ **\*\*Nidagel® NOT Metrogel® or Flagystatin®**
- ◆ Clindamycin cream is oil-based and may cause latex condoms or diaphragms to fail.

- ◆ Treatment of male sexual partners is not indicated and does not prevent recurrence.
- ◆ **Asymptomatic:** Treatment is unnecessary except in cases of:
  - pregnant women with history of high-risk pregnancy (previous preterm delivery),
  - prior to IUD insertion,
  - prior to gynecologic surgery or upper genitourinary tract instrumentation or
  - prior to therapeutic abortion.
- ◆ **Pregnant Women:**
  - Low risk, asymptomatic pregnant women do not need to be screened and/or treated for BV.
  - Treatment with an oral agent in asymptomatic pregnant women with a history of pre-term delivery may reduce the risk of preterm rupture of membranes and stillbirth.
  - Intravaginal agents are not recommended in pregnancy as they have not been shown to decrease the risk of adverse pregnancy outcomes.
  - Based on multiple studies, data supports the safety and lack of teratogenicity of systemic metronidazole in pregnancy. Metronidazole is not contraindicated during pregnancy.

## Vulvovaginal Candidiasis

### Non-Pregnant/ Non-Lactating

#### Preferred

#### Topical Agents

Intravaginal, over-the-counter azole ovules and creams (e.g., clotrimazole, miconazole) (A-I) *or*

#### Oral Agents

**fluconazole 150 mg** po as a single dose (B-III)

### Pregnant/Lactating

#### Preferred

**Topical azole** for 7 days (A-1)

#### Considerations

- ◆ Treatment is unnecessary for asymptomatic infection.
- ◆ Many topical/intravaginal agents are oil based and might weaken latex condoms and diaphragms.

- ◆ Treatment of sexual partners is not routinely recommended unless male partner has candida balanitis. In males, use a topical azole cream BID for 7 days.
- ◆ Some effective topical azole agents are: butoconazole, clotrimazole, miconazole and terconazole.
- ◆ Fluconazole is contraindicated in pregnancy but considered an option in lactating women, if benefits outweigh risks.

## Trichomoniasis

### Non-Pregnant/ Non-Lactating

#### Preferred

**metronidazole 2 g** po as a single dose (A-I)

#### Alternate

**metronidazole 500 mg** po BID for 7 days (A-I)

### Pregnant/Lactating

#### Preferred

**metronidazole\* 2 g** po as a single dose (A-I)

\* The effect of oral metronidazole on the nursing infant is unknown but no adverse effects have been reported in numerous studies; infant should be observed for diarrhea.

#### Considerations

- ◆ **Pregnant Women:** Treatment is recommended only if symptomatic.

- ◆ Based on multiple studies, data supports the safety and lack of teratogenicity of systemic metronidazole use in pregnancy.
- ◆ Intravaginal metronidazole gel is not effective.
- ◆ Patients on metronidazole should be advised not to consume alcohol for the duration of treatment and for 24 hours after because of possible disulfiram-like (Antabuse) reaction.
- ◆ Sexual partners should be treated simultaneously.

## Partner Notification for STI

- ◆ Partner notification will identify those at risk, reduce disease transmission/re-infection and ultimately prevent disease sequelae.
- ◆ **It is mandated under the *Public Health Act* that every attempt is made to identify, locate, examine and treat partners/contacts of all cases.**
- ◆ Physician/case manager are required to provide partner names and locating information on the Notification of Sexually Transmitted Infections form and forward to STI Services.
- ◆ If testing and/or treatment of partners is not confirmed on the STI Notification Form, STI Services will initiate follow-up by a Partner Notification Nurse (PNN).
  - PNNs are specially trained to conduct notification of partners and contacts in a confidential manner that protects the identity of the index case.
  - The phone number for your designated PNN is available by calling STI Services at **780-735-1466** or toll-free **1-888-535-1466**.
- ◆ STI Services initiates follow-up on all out of province/country referrals of cases and partner(s).

## STI Resources

- ◆ Medical and case consultation for STI/HIV is available through STI Services by calling **780-735-1466** or toll-free **1-888-535-1466** or through a STI Clinic or PNN.
- ◆ To obtain copies of the Notification of Sexually Transmitted Infections form contact STI Services by calling as above or faxing: **780-735-1195**.
- ◆ STI/HIV toll-free, province-wide, 24-hour information line for general public: **1-800-772-2437**.
- ◆ The Alberta STI Treatment Guidelines for STI in Adolescents and Adults, may also be reviewed on the Alberta Health website at [www.health.alberta.ca/documents/STI-Treatment-Guidelines-2012.pdf](http://www.health.alberta.ca/documents/STI-Treatment-Guidelines-2012.pdf).
- ◆ Canadian Guidelines on Sexually Transmitted Infections, Public Health Agency of Canada, are available at [www.phac-aspc.gc.ca/std-mts/sti-its/guide-lignesdir-eng.php](http://www.phac-aspc.gc.ca/std-mts/sti-its/guide-lignesdir-eng.php).

## Considerations in Persons Under 18 Years of Age

In all cases, where a person under 18 is suspected or confirmed to have an STI, an assessment should be carried out by the clinician to determine if additional reporting is required.

- ◆ **To Alberta Child and Family Services Division**
  - The clinician should determine whether there are reasonable and probable grounds to believe that they are in contact with “*a child in need of intervention*” [as per Section 1(2) of the Child, Youth and Family Enhancement Act (2)] and shall report to a director pursuant to Section 4 of the CYFEA (2).
  - Reporting is done by contacting the local Child and Family Services office or calling the **CHILD ABUSE HOTLINE: 1-800-387-5437 (KIDS)**. For local office contact information see [www.humanservices.alberta.ca/services.html](http://www.humanservices.alberta.ca/services.html)
- ◆ **To Law Enforcement Agency**
  - Consent is a key factor in determining whether any form of sexual activity is a criminal offence. Children under age 12 years do not have the legal capacity to consent to any form of sexual activity. The law recognizes that the age of consent for sexual activity is 16. However, the law identifies the exception for minors between 12 and 16 years as having the ability to consent, in “close in age” or “peer group” situations.
  - Reporting is done by contacting your local City Police Detachment or RCMP Detachment at [www.rcmp-grc.gc.ca/ab/det-eng.htm](http://www.rcmp-grc.gc.ca/ab/det-eng.htm).

For additional information see: Frequently Asked Questions:

- Age of Consent to Sexual Activity at [www.justice.gc.ca/eng/dept-min/clp/faq.html](http://www.justice.gc.ca/eng/dept-min/clp/faq.html)
- The Canadian Criminal Code at [www.laws.justice.gc.ca/en/C-46/40863.html](http://www.laws.justice.gc.ca/en/C-46/40863.html)

It is recommended that **all** children under 14 years of age (except for congenitally acquired infections) be managed in consultation with a referral centre in either:

### Edmonton:

Child and Adolescent Protection Centre  
Stollery Children’s Hospital, 1C4.24  
Mackenzie Health Sciences Centre  
8440 - 112 Street, Edmonton, AB T6G 2B7  
Tel: **780-407-1240**

### Calgary:

Child Abuse Service  
Child Development Centre  
Suite 200, 3820 - 24 Avenue NW  
Calgary, AB T2N 1N4  
Tel: **403-955-5959**

## STI Services

### Alberta Health Services

2nd Floor, South Tower, 10030 107 Street  
Edmonton, Alberta T5J 3E4  
**Tel: 780-735-1466**  
**Toll-free: 1-888-535-1466**  
Fax: 780-735-1195

## STI Clinics

### Calgary STI Clinic

5th Floor, Sheldon M. Chumir Health Centre  
1213 4th Street SW, Calgary, AB T2R 0X7  
**Tel: 403-955-6700**  
Fax: 403-955-6722

### Edmonton STI Clinic

Edmonton General Hospital Site  
11111 Jasper Avenue, Room 3B20  
Edmonton, Alberta T5K 0L4  
**Tel: 780-342-2300**  
Fax: 780-425-2194

### Fort McMurray STI Clinic

113 Thickwood Blvd  
Fort McMurray, Alberta T9H 5E5  
**Tel: 780-791-6263**  
Fax: 780-791-6282

## Free Replacement Drugs

The following drugs are supplied and replaced following submission of a STI Notification Form:

**amoxicillin 500 mg** po TID for 7 days

**azithromycin 1 g and 2 g** po as a single dose

**\*Long acting benzathine penicillin 2.4 mu** injection

**cefexime 800 mg** po as a single dose

**ceftriaxone 250 mg** injection

**doxycycline 100 mg** po BID for 7, 14 or 28 days

**metronidazole 500 mg** po BID for 14 days (for treatment of PID only)

**ofloxacin 300 mg and 400 mg** po BID for 14 days

**\*spectinomycin 2 g** injection

\*These drugs are available by special request through STI Services for treatment of STI as per these guidelines. STI Services, STI Clinics and PNNs can provide assistance in acquiring these medications.