

Sexually Transmitted Diseases Treatment Guidelines

COMMUNICABLE DISEASE CONTROL

Summary of Management Recommendations

A. Symptoms Present

1. Urethritis (males) and Cervicitis (females)

- See Manitoba Health Protocols (Urethritis, Cervicitis, Gonorrhea, *Chlamydia trachomatis* infection)
- Common presentations in men: urethral discharge, dysuria, frequency, itching
- Common presentations in females: cervical/vaginal discharge, dysuria, frequency, dyspareunia, cervical motion tenderness, lower abdominal pain or tenderness, abnormal bleeding between periods, spotting or bleeding after intercourse
- Take urethral or cervical swabs for gonorrhea and chlamydia
- Treat for both gonorrhea and chlamydia
- If swabs are positive, test and treat contacts as per Manitoba Health Protocols

2. Pelvic inflammatory disease

- See Manitoba Health Protocols (Gonorrhea and *Chlamydia trachomatis* infection)
- Common presentations: lower abdominal pain and/or tenderness, adnexal tenderness, adnexal mass, fever, chills; may also have cervicitis symptoms
- Take cervical swab for gonorrhea and chlamydia
- Recommended treatment regimen for outpatients: ceftriaxone 250 mg IM single dose; and doxycycline 100 mg po BID for 14 days; and metronidazole 500 mg TID for 14 days (all three drugs required)
- If swabs are positive, test and treat contacts as per Manitoba Health Protocols

3. Epididymitis

- See Manitoba Health Protocols (Gonorrhea and *Chlamydia trachomatis* infection)
- Common presentations: scrotal pain and swelling; may also have urethritis symptoms
- Take urethral swab for gonorrhea and chlamydia
- Treat for gonorrhea and chlamydia
- If swabs are positive, test and treat contacts as per Manitoba Health Protocols

4. Proctitis

- See Manitoba Health Protocols (Gonorrhea and *Chlamydia trachomatis* infection)
- Common presentations: rectal discharge, rectal pain, rectal swelling
- Take rectal swab for gonorrhea, chlamydia and herpes (see below)
- Treat for gonorrhea and chlamydia
- If swabs are positive, test and treat contacts as per Manitoba Health Protocols
- If diarrhea or abdominal cramping present, request GI consultation

5. Vaginal discharge

- Common presentations: vaginal discharge (possibly foul-smelling), vaginal redness, itch or swelling, dyspareunia
- Collect vaginal specimens (smears and swabs) for candida, trichomonas and bacterial vaginosis. Testing includes a pH test, an amine odour (whiff) test, a wet mount and a gram stain. A cervical swab

for gonorrhea and chlamydia may also be taken. See *Canadian STD Guidelines* (1998) for more details.

- Treat on the basis of careful history, physical examination and results of specimen testing. Avoid over-treatment on the basis of culture results alone, e.g., a positive culture for yeast by itself does not mean that a woman has candidiasis. A smear showing hyphae and inflammation is more specific.
- If vaginitis is caused by *Trichomonas vaginalis*, treat the case and partners, regardless of symptoms, with metronidazole, 2 g orally in a single dose.
- If recurrent or all testing is negative, refer to an infectious disease specialist or gynecologist.

6. Genital ulcer

- See Manitoba Health Protocols (Syphilis, Chancroid and Genital Herpes)
- Take serum for syphilis serology. For herpes culture, a swab from either a vesicle or fresh ulcer should be submitted in virus transport medium to the Cadham Provincial Laboratory (CPL). The laboratory requisition should specifically request herpes testing. Serum may also be collected for herpes serology. For syphilis testing by darkfield microscopy, a slide with ulcer fluid should be submitted. For chancroid culture, a special medium is required. Please contact the CPL in advance regarding details on the latter two specimens. These specimens are generally referred out by CPL.
- Treat case and contacts as per results of testing.

7. Papular genital lesions

- See Manitoba Health Protocols (Genital Herpes, Genital Warts, *Molluscum Contagiosum*)
- Take swab for herpes culture if suspicious
- Take Pap smear
- See Manitoba Health Protocols for treatment of genital warts
- If in doubt, refer to an infectious disease specialist or gynecologist

B. Symptoms not Present, but Client at Risk

1. Known contact to a confirmed case of gonorrhea, chlamydia, trichomonas, infectious syphilis or chancroid

- Treat as per the case, after taking specimens for testing (as per the case).

2. Client is at risk for STD

- All sexually active men and women under the age of 25 should be screened for chlamydia on an annual basis, during presentations to a health provider.
- Individuals of any age should be screened for gonorrhea and chlamydia in the following circumstances:
 - prenatal women
 - women prior to insertion of an intrauterine device
 - women prior to therapeutic abortion or D&C
 - persons with more than one sex partner in the past year
 - persons with a new sex partner in the past year
 - persons whose partner has other sex partners
 - street-involved persons (living on the street, gang activity, etc.)
 - substance misuse (e.g., injection drug use, sniff use)
 - history of an STD in the past year
 - unprotected sex with high-risk persons
 - sexual assault

3. Hepatitis B Immunization

- See Manitoba Health Protocol (Hepatitis B)
- Hepatitis B immunization should be offered to all individuals in the following circumstances (and is paid for by Manitoba Health):
 - grade 4 students (program has been administered by public health jurisdictions in Manitoba schools since 1998)
 - infants born to infected or suspected infected mothers

- sexual, household, needle-sharing or razor-sharing contacts of acute and chronic hepatitis B cases
- persons with multiple sex partners (including sex trade workers)
- persons with a recent STD history (previous year)
- street-involved persons
- men who have sex with men
- injection drug users
- individuals with hepatitis C infection or chronic liver disease (should also be immunized against hepatitis A if susceptible)
- dialysis patients
- persons who frequently receive blood products
- persons who have sustained significant exposures to blood or blood products, as per the Manitoba Health Post-Exposure Protocol
- inmates in correctional facilities

4. Urine-based Screening for Gonorrhea and Chlamydia

- The Cadham Provincial Laboratory (CPL) offers urine-based screening for gonorrhea and chlamydia on selected high-risk populations, using nucleic acid amplification techniques (PCR). Consult with the CPL or your local regional health authority for information on eligibility.

C. All Clients

1. All clients with confirmed or suspected STDs should be counselled appropriately regarding condom use and safer sex practices. Sexual contacts should be identified, traced and treated (see relevant Manitoba Health Protocols).
2. Clients treated for gonorrhea should also be treated for chlamydia.
3. All clients who are treated for STDs should be advised to refrain from sex for at least seven days after treatment, and after their sex partners have completed treatment. If this is not possible, condom use in all sexual contacts should be strongly counselled.

4. All clients with a confirmed or suspected STD should be evaluated for other STDs. In particular, they should, after appropriate counselling, be offered serological testing for syphilis and HIV infection, as well as hepatitis B immunization.
5. Test of cure is generally not recommended if a recommended treatment is given, symptoms and signs disappear, and there is no re-exposure to an untreated partner. Repeat testing is advisable if any of the following exist:
 - treatment failure has previously occurred
 - antimicrobial resistance to therapy is documented or an alternative treatment regimen has been used
 - compliance is an issue
 - there is concern that the drug has not been absorbed due to emesis or diarrhea
 - pharyngeal or rectal gonorrhea is diagnosed
 - there is re-exposure to an untreated partner
 - infection occurs during pregnancy
 - PID or disseminated gonococcal infection is diagnosed
 - the patient is a child

If done, repeat testing for gonorrhea should be by culture and should be performed four to five days after completion of therapy. Repeat testing for chlamydia should be performed three to four weeks after completion of treatment. For repeat testing for syphilis, see the Manitoba Health Protocol.

6. Children with a confirmed or suspected STD should be appropriately investigated and referred, as sexual abuse is an important consideration. See Manitoba Health Protocol "Children with Sexually Transmitted Diseases."
7. Newborns born to mothers who are positive for gonorrhea or chlamydia at the time of delivery (or treated less than seven days prior to delivery) should be treated, regardless of test results.
8. For women, the occasion of presentation for an STD may be a good opportunity for taking a Pap smear.
9. For women, where indicated, pregnancy testing may be offered prior to treatment.

Specific Treatment Guidelines

Drug	Dosages	Indications	Precautions
GONORRHEA			
Cefixime	400 mg po single dose	First line treatment for uncomplicated urethral, endocervical, pharyngeal and rectal gonorrhea. May be used in pregnancy and lactation.	Contraindicated in patients with known cephalosporin allergy and history of immediate and/or anaphylactic reaction to penicillins. (Effective against penicillin-resistant forms of gonorrhea).
Ciprofloxacin	500 mg po single dose	Uncomplicated urethral, endocervical, pharyngeal and rectal gonorrhea in patients allergic to cephalosporins and/or penicillins.	Not to be used in pregnancy or lactation. Should not be used if there is a possibility that the infection was acquired in southeast Asia or other areas where significant resistance has been reported. If Ciprofloxacin is used in such a case, a test of cure is recommended.
Ceftriaxone	250 mg IM in single dose	Non-hospitalized patients with pelvic inflammatory disease.	
	2.0 GM per day IM	Gonococcal <i>ophthalmia</i> , disseminated infection (arthritis, meningitis) in adults and adolescents.	As for Cefixime. Consultation with an Infectious Disease Specialist is recommended.
	50-100 mg/kg/day IM or IV	Gonococcal <i>ophthalmia</i> , disseminated infection (arthritis, meningitis) in children <9 years.	As for Cefixime. Consultation with an Infectious Disease Specialist is recommended, including regarding duration of therapy.
	25-50 mg/kg/day IV or IM in a single daily dose for 7 days	<i>Ophthalmia neonatorum</i> .	As for Cefixime. Consultation with an Infectious Disease Specialist is recommended, including regarding duration of therapy.
CHLAMYDIA			
Azithromycin (Zithromax)	1.0 gm po in a single dose (four-250 mg capsules)	Uncomplicated urethral, endocervical and rectal infection in adolescents >9 years and adults. See Precautions regarding use of azithromycin in pregnancy.	Although there are limited data on the safety of azithromycin during pregnancy, significant adverse effects have not been observed. The theoretical risk of adverse effects during pregnancy (particularly during the first trimester) should therefore be weighed against the risk of non-compliance with the recommended alternative, a seven-day course of erythromycin (see below).
	12-15 mg/kg (maximum 1 gram) orally in a single dose	Children between 1 month and 9 years of age.	
Erythromycin	500 mg po QID for 7 days	Pregnant women with urethral, endocervical or rectal infection.	See note above for azithromycin.
	40 mg/kg/day orally in 4 divided doses for 14 days	<i>Ophthalmia neonatorum</i> and uncomplicated urethral, endocervical and rectal infection in children aged 1 week to 1 month.	For children under 1 week of age, consult a pediatrician.
Amoxicillin	500 mg po TID for 7 days	Pregnant and lactating women with uncomplicated urethral, endocervical or rectal infection, who are allergic to or cannot tolerate erythromycin or azithromycin.	Limited data exist concerning the efficacy of this treatment, thus a test of cure is recommended. Consultation with an infectious disease specialist may be indicated.
Doxycycline	100 mg po BID for 14 days	Non-hospitalized patients with pelvic inflammatory disease.	Contraindicated in pregnancy and lactation.

Drug	Dosages	Indications	Precautions
SYPHILIS			
Benzathine Penicillin G	2.4 MU IM in a single session, in divided doses	Infections in adults and adolescents staged as primary, secondary or latent of <1 year duration. May be used in pregnancy and lactation.	Consultation with an Infectious Diseases specialist is recommended. Contraindicated in clients with penicillin allergy. The supply of benzathine penicillin G (as well as procaine penicillin G) may become problematic in future as it is no longer available through Canadian distributors. Manitoba Health will try to ensure the continued availability of benzathine penicillin, but if unavailable, doxycycline (see below) or erythromycin, 500 mg tid for 14 days, should be substituted.
	2.4 MU IM once a week for 3 consecutive weeks, for a total of 7.2 MU.	Latent infections >1 year's duration in adults and adolescents.	CSF examination is recommended to exclude neurosyphilis. Consultation with an Infectious Diseases specialist is recommended.
Crystalline Penicillin G	3-4 MU q4h IV for 10-14 days	Neurosyphilis	Consultation with an Infectious Diseases specialist is strongly recommended.
Doxycycline	100 mg BID for 14 days	Infections in adults or adolescents staged as primary, secondary or latent <1 year duration who have a penicillin allergy.	Contraindicated in pregnancy and lactation and in children under 9 years of age. Consultation with an Infectious Diseases specialist is recommended.
	100 mg BID for 28 days	Latent infections greater than 1 year's duration in adults or adolescents who have a penicillin allergy.	
Erythromycin	40 mg/kg/day orally in 4 divided doses (maximum 500 mg per dose) for 14 days	Children under 9 years of age with infection staged as primary, secondary, or latent <1 year duration who have penicillin allergy.	Consultation with an Infectious Diseases specialist is recommended.
CHANCROID			
Ceftriaxone	250 mg IM single dose	First line treatment for adults and adolescents.	Should be considered in the differential diagnosis of any client with a genital ulcer.
Erythromycin	500 mg po QID for 7 days	Alternate treatment for clients with known cephalosporin allergy and history of immediate and/or anaphylactic reaction to penicillins.	Should be considered in the differential diagnosis of any client with a genital ulcer.

Contact tracing (partner notification) remains one of the most important management tools for the control of STDs. Interviewing clients who are diagnosed as having disease allows for the identification of persons who are at greatest risk of infection. With large numbers of asymptomatic infections, it is important to advise sexual partners of the need for testing and epidemiologic treatment. Public health nurses can assist physicians in interviewing/contact tracing. A list of regional public health offices is provided below for your convenience:

Winnipeg: Communicable Disease Control (204) 788-6736 STD Unit, 705 Broadway (204) 940-2200	Central: Portage la Prairie (204) 239-3076
Interlake: Stonewall (204) 467-4401 Selkirk (204) 785-7702	Norman: The Pas (204) 627-8324 Flin Flon (204) 687-1700
N. Eastman: Beausejour (204) 268-7465	S. Eastman: Steinbach (204) 346-6145
Parkland: Dauphin (204) 638-2108	Burntwood: Thompson (204) 677-5371
Churchill: Churchill (204) 675-8327	Marquette/ S. Westman: Brandon (204) 571-8376