

Sexually Transmitted Diseases in Milwaukee County and Other High Risk Areas: Screening, Testing and Treatment Recommendations

MSMC COMMUNITY COLLABORATION ON HEALTHCARE QUALITY (CCHQ)
AND THE CITY OF MILWAUKEE HEALTH DEPARTMENT (MHD)

The Milwaukee metropolitan area has significantly elevated rates of certain sexually transmitted diseases. The US Preventive Services Task Force recommends increased STD screening in such high-prevalence areas. Milwaukee Health Department physicians developed the following screening and testing guidelines based on epidemiologic data and in cooperation with CCHQ; the treatment recommendations in this document are distilled from current CDC guidelines. There are other areas in Wisconsin with high STD rates in which these or similar screening and testing guidelines may be applicable; consult local health departments for recommendations.

I. Recommended Screening and Testing Schedule

A. Gonorrhea and chlamydia

1. Sexually active *women*: with every pelvic exam, up to annually, through age 29 (through 39 if more than one sex partner in preceding 12 months)
2. Sexually active *men*: consider annually through age 29 (recommend annually through 39 if more than one sex partner in preceding 12 months)
3. Anyone with any other STD, or with sexual contact to gonorrhea or chlamydia
4. *Women* with purulent cervical discharge, evidence of cervical inflammation, or cervical motion tenderness, or with sexual contact to a man with nonspecific urethritis
5. *Men* with urethral discharge

B. Syphilis

1. Anyone with any other STD, or newly diagnosed HIV
2. Anyone with a lesion or rash consistent with syphilis, known contact to a case of syphilis, or known contact to a person with any other STD
3. Pregnant women: three tests recommended (at initial prenatal visit, at the beginning of the third trimester / 28 weeks gestation, and when in labor)

C. HIV

1. Any person with any other STD, or known contact to another STD
2. Any person with syphilis (the workup and treatment for syphilis can vary depending on HIV status)
3. Any person with unusual infections or unexplained weight loss
4. Pregnant women (at initial visit; repeat later if any of the below apply)
5. Every 6-12 months for all sexually active persons aged 49 or less with any of the following in the preceding 6-12 months:
 - a. more than one sex partner
 - b. use of intravenous drugs
 - c. a sex partner who uses intravenous drugs, has one or more other sex partners, or is known to be positive for HIV

II. Recommended Screening Tests

A. Gonorrhea and Chlamydia

1. Amplified or non-amplified molecular testing (PCR, LCR, various others). Gonorrhea may also be tested for using Modified Thayer-Martin (MTM) culture. Note that amplified tests may remain positive for several weeks after adequate treatment.
2. The usual site of testing is the urethra for men and the cervix for women. Certain amplified tests are approved for urine as well.
3. If there is a history of rectal or pharyngeal exposure, gonorrhea culture and chlamydia testing should be done from those sites as well.

B. Syphilis

1. A non-treponemal test (RPR or VDRL) for screening
2. A treponemal test (FTA-abs, MHA-TP, or TPPA) for confirmation if non-treponemal test positive, as non-treponemal tests have frequent false positives
3. Diagnosis of syphilis can be very complex. Contact an infectious disease specialist or your local health department for support and advice. In Milwaukee, physicians and other health professionals are invited to call the Milwaukee Health Department Sexually Transmitted Disease program at 414-286-5526.

C. HIV

1. ELISA, with Western Blot (WB) if ELISA positive, or
2. OraSure or OraQuick, but must confirm with ELISA and WB if positive

D. **State law requires reporting known or suspected cases** of chlamydia, gonorrhea, and syphilis (among many other reportable diseases) to your local public health dept. within 72 hours. Demographic and treatment information is essential to facilitate appropriate public health follow-up and thereby impact overall disease rates. In southeastern Wisconsin report forms can be sent by US mail, or faxed to 414-286-8173 - - for assistance call 414-286-5526.

E. **HIV must be reported within 72 hours** to the state epidemiologist in Madison, per state law.

III. Treatment Recommendations

A. Gonorrhea

1. Any person with gonorrhea or with a history of sexual contact with a known case of gonorrhea should be treated with one of the following antigonorrheal antibiotics:
 - a. **Ceftriaxone** 125 mg IM in a single dose, or
 - b. Cefixime 400mg PO in a single dose, or
 - c. Cefpodoxime 400mg PO in a single dose, or
 - d. Cefuroxime axetil 1g PO in a single dose, or
 - e. Ceftizoxime 500mg IM in a single dose, or
 - f. Cefotaxime 500mg IM in a single dose, or
 - g. Spectinomycin 2g IM in a single dose (if allergic to cephalosporins)
2. For pharyngeal gonorrhea, only ceftriaxone is recommended.
3. **Do not use quinolones**, or azithromycin 2g, for gonococcal infections, per CDC's 2007 recommendations. Quinolone-resistant gonorrhea is rapidly increasing nationwide and in Milwaukee, and there is increasing risk for development of macrolide-resistant gonorrhea as well.
4. Cefixime, cefpodoxime, and spectinomycin may have limited availability. See <http://www.cdc.gov/std/gonorrhea/arg> for details.
5. Test of cure is generally not needed after completing one of the recommended regimens (even for pregnant women) unless symptoms present before treatment fail to resolve.
6. Concomitant treatment for chlamydia must be given as well, unless chlamydia has been ruled out by laboratory testing, because of high rates of co-infection.

B. Chlamydia

1. Any person with chlamydia or with a history of sexual contact to a known case of chlamydia should be treated with one of the following preferred antichlamydial antibiotics:
 - a. **Azithromycin** 1 g orally in a single dose, or
 - b. **Doxycycline** 100 mg orally twice a day for 7 days
2. If unable to use a preferred regimen, use:
 - a. Erythromycin base 500 mg orally four times a day for 7 days, or
 - b. Erythromycin ethylsuccinate 800 mg orally four times a day for 7 days, or
 - c. Ofloxacin 300 mg orally twice a day for 7 days, or
 - d. Levofloxacin 500 mg orally for 7 days
3. Azithromycin is pregnancy category B (no evidence of fetal harm in animal studies) thus acceptable for use to treat chlamydia in pregnant women.

4. Do not use quinolones for pregnant women. Due to a theoretical risk of adverse joint and tendon reactions in immature joints, CDC guidelines recommend against quinolone use in adolescents who weigh less than 45kg (100lbs); other clinicians prefer an age cutoff such as not less than 16 years old.
5. Do not use doxycycline for pregnant women or for adolescents under 8 years old.
6. Test of cure is generally not needed with non-erythromycin regimens (even for pregnant women) unless symptoms present before treatment fail to resolve. Erythromycin is less effective than other regimens, so patients treated with erythromycin should be tested for cure 3-4 weeks after treatment.
7. Concomitant treatment for gonorrhea should be very strongly considered, unless gonorrhea has been ruled out by laboratory testing, because of high rates of co-infection.

C. HIV

Treatment for HIV is beyond the scope of this document. Please consult with a physician experienced in HIV management.

D. Syphilis

1. Treatment of syphilis can be very complex. Contact an infectious disease specialist or your local health department for support and advice. In Milwaukee, physicians and other health professionals are invited to call the Milwaukee Health Department Sexually Transmitted Disease program at 414-286-5526.
2. If neurologic symptoms exist or neurosyphilis is suspected, CSF testing should be done prior to treatment. Neurosyphilis requires intensive, parenteral antibiotic treatment, often in an inpatient setting.
3. Uncomplicated syphilis *under 1 year duration*
 - a. Benzathine penicillin G (Bicillin LA) 2.4 million units IM in a single dose.
4. Uncomplicated syphilis of *unknown duration or of greater than 1 year duration*:
 - a. Benzathine penicillin G (Bicillin LA) 7.2 million units total, administered as three doses of 2.4 million units IM each at 1-week intervals.
 - b. No less than 5 days nor more than 10 days may elapse between the three doses. If so, the 3-shot series must be started from scratch.
5. **Never use Bicillin CR as a substitute for Bicillin LA.** Bicillin CR contains only half the dose of benzathine penicillin G recommended for syphilis.
6. Special Cases
 - a. Children. Dosing of penicillin for children is done by weight. Consult a pediatric infectious disease specialist or your local health department.
 - b. Penicillin-allergic patients. Although a doxycycline alternative exists, it is less effective, and the best approach is inpatient penicillin desensitization. Consult an infectious disease specialist or your local health department.
 - c. HIV positive patients should have CSF testing to rule out neurosyphilis. Some experts recommend three weeks of Bicillin regardless of duration of syphilis in HIV-positive patients. Close monitoring of frequent non-treponemal titers 3, 6, 9, 12, and 24 months after therapy is essential to assure that treatment was effective.
 - d. Pregnant women are treated with penicillin in the same dose as if they were not pregnant. However, their newborn(s) must be evaluated extensively at birth to rule out congenital syphilis. Consult with a neonatologist or your local health department.
7. Follow Up
 - a. HIV-positive (see above)
 - b. HIV-negative syphilis under 1 year duration: obtain VDRL or RPR test at 6 and 12 months after therapy. A four-fold drop in titer is required to assure that treatment was effective.
 - c. HIV-negative syphilis of unknown duration or over 1 year duration: obtain VDRL or RPR test at 6, 12, and 24 months after therapy. A four-fold drop in titer is required to assure that treatment was effective.

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