

Sexually Transmitted Diseases at a Glance

Minnesota Initial Refugee Health Assessment

Sexually Transmitted Infections: (check one for each of the following)

1. **Syphilis** Negative Positive; treated: ___yes___no Pending Not done; **Syphilis CONFIRM** Negative Positive

2. **Gonorrhea** Negative Positive; treated: ___yes___no Pending Not done

3. **Chlamydia** Negative Positive; treated: ___yes___no Pending Not done

4. **HIV** Negative Positive; referred? ___yes___no Pending Not done; **HIV CONFIRM** Negative Positive

5. **Other, specify:** _____ Negative Positive; treated? ___yes___no Pending

- Routine screening for HIV, ages 13 to 64 years, per CDC guidelines.
- Universal testing (all ages) of HIV and syphilis for arrivals from areas of the world with mid-high prevalence of HIV/AIDS.
- Screen other STDs if indicated by self-report or endemicity in homeland.
- Technology for urine screening for both *C. trachomatis* and *N. gonorrhoeae* is available and is considered equally, if not more, sensitive than traditional laboratory methods. This non-invasive testing is preferred for the refugee population, if systems allow.
- All patients who are diagnosed with syphilis should be tested for HIV infection.
- Patients infected with *N. gonorrhoeae* often are co-infected with *C. trachomatis*.
- According to the World Health Organization, in developing countries STDs and their complications rank in the top five disease categories for which adults seek health care.
- The most recent UNAIDS/WHO estimates show that, in 2011, 2.5 million people were newly infected with HIV. A reduction of 20 percent since 2001.



The rate of STDs among refugees arriving to Minnesota is unknown.

Key Resources

Sexually Transmitted Diseases Treatment Guidelines, Centers for Disease Control,
MMWR, 2010 / 59, (RR12)
MMWR, 2012 / 61, (31); 590-594
(See Updates, Errata, Etc. released August 2012 at this link)
www.cdc.gov/std/treatment/2010/default.htm

MDH STD and HIV Section

651-201-5414

www.health.state.mn.us/std

www.health.state.mn.us/hiv

Protocol Updates: *Implementing 2010 MDH HIV Screening Recommendations for Newly Arrived Refugees*

www.health.state.mn.us/refugee/hcp/index.html

World Health Organization

www.who.int/topics/en

World Health Organization, HIV/AIDS

www.unaids.org/en/

CDC

www.cdc.gov/std

www.cdc.gov/hiv/default.htm

CDC National STD/HIV Hotline

800-227-8922

Sexually Transmitted Diseases

Purpose

To ensure adequate diagnosis and treatment of sexually transmitted diseases in all refugees.

Background

The very high incidence of sexually transmitted diseases (STDs) worldwide is of serious public health concern. The increasing mobility of populations, urbanization, poverty, war, demographic changes (especially in developing countries), sexual exploitation of women, and changes in sexual behavior are some of the factors that have placed an ever increasing proportion of the population at risk for sexually transmitted diseases.

Sexually transmitted diseases affect people in both developing and industrialized countries. Those aged 15 to 24 are at highest risk of infection. STDs have important repercussions on reproductive health and have been shown to increase the risk for HIV infection. This is particularly serious because, in many cases, STDs are asymptomatic in both sexes, particularly in women.

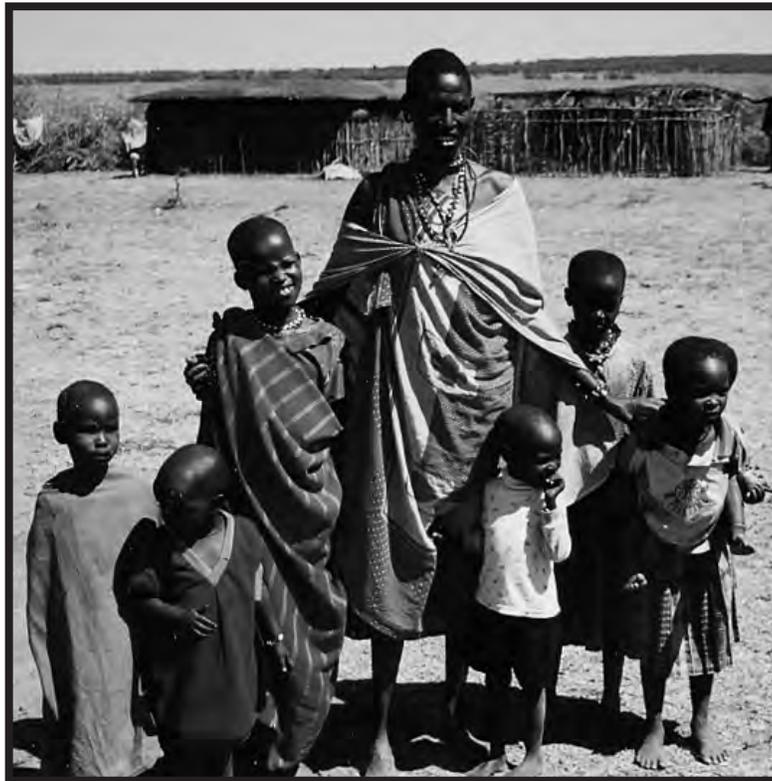


According to WHO (2011) the estimated annual incidence of curable STDs (not including AIDS and other viral STDs) is 448 million cases worldwide.

The estimated annual incidence of curable STDs (not including AIDS and other viral STDs) is 340 million cases worldwide. At present, the most common STDs which can be treated are included in the refugee screening process; however, HIV testing is no longer included in the overseas health exam and should be part of each domestic screening per age and prevalence-specific recommendations.

Information Summary

The following summary is designed to assist the provider in screening for STDs on the *Minnesota Initial Refugee Health Assessment* and in diagnosing and treating STDs, in the event that the screening test is positive.



Syphilis Screening

The differential diagnosis for a positive serology test to syphilis in a patient who is asymptomatic includes the following:

Latent syphilis transmitted through sexual contact

Standard treatment for latent syphilis of unknown duration in adults is benzathine penicillin, 7.2 million units total, administered as three doses of 2.4 million units IM each at one week intervals. If laboratory tests, clinical

exam, and history support early latent syphilis, (i.e., acquisition within one year), the standard treatment for adults includes benzathine penicillin G, 2.4 million units IM in a single dose. Patients can be considered to

have early latent syphilis on the basis of documented sero-conversions, a four-fold or greater increase in titer of a nontreponemal serologic test, history of symptoms of primary/secondary syphilis, or having had a sex partner with primary, secondary, or early latent syphilis in the past year. Children with latent syphilis should be treated with 50,000 units/kg of benzathine penicillin, up to the adult dose of 2.4 million units per dose, for a total of three doses.

All patients who have syphilis should be tested for HIV infection.

Syphilis transmitted through nonsexual modes

Nonsexual modes of transmission include direct or indirect contact with infectious early lesions of skin and mucous membranes. This condition, also known as “endemic syphilis,” occurs in localized areas where poor socioeconomic conditions and inadequate sanitation prevail. It is caused by *Treponema pallidum* ssp. *endemicum* and is not unusual among children. Standard treatment for endemic syphilis is a single injection of 1.2 to 2.4 million units of benzathine penicillin (with half doses for children under age 12).

Treponema pallidum pertenu

Infection with *Treponema pallidum* ssp. *pertenue* causes yaws. Yaws predominately consists of papular skin lesions that resolve spontaneously, but latent infection occurs. Persons with latent infection may subsequently develop destructive gummatous lesions that can be quite severe. Standard treatment for latent yaws is a single IM injection of 1.2 to 2.4 million units of benzathine penicillin (with half doses for children under age 12).

Prior adequately treated syphilis

Persons who have been adequately treated in the past for syphilis may remain seropositive by nontreponemal testing and will remain seropositive by treponemal testing. A thorough medical history is essential in distinguishing untreated disease and previously treated disease.

Gonorrhea Screening

Patients infected with *Neisseria gonorrhoeae* often are co-infected with *Chlamydia trachomatis*. This finding led to the recommendation that patients treated for gonococcal infection also be treated routinely with a regimen effective against uncomplicated genital *C. trachomatis* infection. Most infections among men produce symptoms that cause them to seek curative treatment. However, many infections among women do not produce recognizable symptoms until complications, e.g., pelvic inflammatory disease (PID), have occurred. Both symptomatic and asymptomatic cases of PID can result in tubal scarring that leads to infertility or ectopic pregnancy.

Recommended Regimens for Treatment of Gonorrhea*

Ceftriaxone 250 mg IM in a single dose
PLUS
Azithromycin 1 g orally in a single dose
or doxycycline 100 mg orally twice daily for 7 days*

Alternative regimens if ceftriaxone is not available:

Cefixime 400 mg orally in a single dose
PLUS
Azithromycin 1 g orally in a single dose
or doxycycline 100 mg orally twice daily for 7 days*
PLUS
Test-of-cure in 1 week

If the patient has severe cephalosporin allergy:

Azithromycin 2 g in a single oral dose
PLUS
Test-of-cure in 1 week

Uncomplicated gonococcal infections of the pharynx
recommended regimen:

Ceftriaxone 250 mg IM in a single dose
PLUS
Azithromycin 1 g orally in a single dose
or doxycycline 100 mg orally twice daily for 7 days*

TREATMENT FOR CHLAMYDIA IF CHLAMYDIAL INFECTION IS
NOT RULED OUT

* Because of the high prevalence of tetracycline resistance among Gonococcal Isolate Surveillance Project isolates, particularly those with elevated minimum inhibitory concentrations to cefixime, the use of azithromycin as the second antimicrobial is preferred. (released August 2012)

Cases of gonorrhea caused by *N. gonorrhoeae* resistant to fluoroquinolones have been reported sporadically from many parts of the world and are becoming widespread in parts of Asia. Because of the prevalence of quinolone-resistant *N. gonorrhoeae* (QRNG) in parts of Asia, treatment with a non-quinolone regimen is recommended. Culture and susceptibility testing should be performed on a patient who has apparent treatment failure after recommended therapy and should also be reported to the state health department.

Chlamydia Screening

Several important sequelae can result from *C. trachomatis* infection in women; the most serious of these include PID, ectopic pregnancy, and infertility. Some women who have apparently uncomplicated cervical infection already have sub-clinical upper reproductive tract infection.

Recommended Regimens for Treatment of Chlamydia

Azithromycin 1 g orally in a single dose

OR

Doxycycline 100 mg orally twice a day for 7 days

In populations with erratic health care-seeking behavior, poor compliance with treatment, or minimal follow-up, azithromycin may be more cost-effective because it provides single-dose, directly observed therapy.

Technology for urine screening for both ***Chlamydia trachomatis*** and ***Neisseria gonorrhoeae*** is available and is considered equally, if not more, sensitive than traditional cultures. This non-invasive testing is preferred for the refugee population, if systems allow.

HIV Screening

CDC recommends offering HIV as routine, opt-out screening which involves performing HIV screening after notifying the patient that the test will be performed unless the patient specifically declines. Offer routine screening examinations for persons ages 13-64 or anyone with a risk history not in this age group, including endemicity in country of origin. Consent

is inferred unless the patient declines. The basic concept is to make HIV testing a routine part of medical care on the same voluntary basis as other diagnostic and screening tests. A separate signed consent for HIV testing is not recommended. Information for patients should be culture and language appropriate.



How to Test

Screening should be done with a test that detects antibodies to both HIV-1 and HIV-2. An HIV-1/2/0/AG test is now available that screens for antibodies to HIV-1, HIV-2, other types, and p24 antigen. The p24 antigen detection allows earlier detection of persons infected with HIV but who have not begun antibody production. A Western blot or other type confirmatory test should be done on all positive screens. HIV-2 confirmatory testing should be done on persons with positive screens but negative or indeterminate HIV-1 Western blots who have lived in Western Africa or had sexual contact or shared needles for drugs with someone from there, or suspected to be HIV positive.

Also a Monospot test for HIV-1 and 2 differentiation is now available but HIV-2 confirmation still must be done by CDC or another laboratory.

Viral load testing for HIV-1 is available. Newer tests can quantify non-B subtypes but some subtypes or variants may not be quantified or may be underestimated. Since subtyping of viruses is available, if a non-B subtype is found, check with your laboratory to see how well the test they use quantifies that subtype.

Context of HIV Infection in Africa (WHO)

- Sub-Saharan Africa has only 12 percent of the world's population, while 68 percent of all people living with HIV globally live in this part of the world– an estimated 22.9 million people in 2010.
- Eighty-seven percent of the world's HIV orphans are from sub-Saharan Africa.
- The overall prevalence of HIV infection is 5 percent of the adult sub-Saharan African population, though this varies from country to country.

HIV-2 testing is indicated in persons with epidemiologic risk factors for HIV-2 infection, including:

- Sex and needle-sharing partners of West Africans
- Persons who have received blood transfusions in West Africa
- Children born to HIV-2-infected mothers
- Persons with conditions suggestive of HIV infection (such as an AIDS-associated opportunistic disease) for whom HIV-1 testing is not positive
- Persons whose blood specimens are reactive on HIV-1 EIA testing and exhibit certain unusual indeterminate patterns on HIV-1 Western Blot

Testing for HIV antibody is highly accurate. A repeatedly reactive screening test followed by a positive “confirmatory” test is necessary before a person is considered seropositive. Antibodies generally appear within three months after infection with HIV, but may take up to six months in some persons. Testing is recommended at three months and again at six months after exposure.

For in-depth information about HIV screening for refugees, see Protocol Updates: *Implementing 2010 MDH HIV Screening Recommendations for Newly Arrived Refugees* at www.health.state.mn.us/refugee/hcp/index.html.