

New Sexually Transmitted Diseases Treatment Guidelines, 2006

On August 4, 2006, the Centers for Disease Control and Prevention (CDC) published the Sexually Transmitted Diseases (STD) Treatment Guidelines, 2006¹, available at: www.cdc.gov/std/treatment/2006/rr5511.pdf. These new guidelines were developed by the CDC along with STD experts, and update the 2002 STD Treatment Guidelines. Highlights of the 94-page 2006 STD Treatment Guidelines include the following updated evidence-based information:

- Expanded guidelines for the diagnostic evaluation of cervicitis and trichomoniasis.
- In addition to the existing metronidazole, a new antimicrobial treatment regimen, tinidazole, is now recommended for the treatment for trichomoniasis.
- Clinical studies have shown azithromycin is safe and effective in treating chlamydial infection in pregnant women. Consequently, azithromycin replaces the previously recommended erythromycin base as the recommended regimen during pregnancy. Erythromycin base is now recommended as an alternative regimen for pregnant women infected with chlamydia.
- The emergence of lymphogranuloma venereum proctocolitis among men who have sex with men (MSM) is highlighted.
- New evidence from several geographic areas indicates emergence of azithromycin-resistant *Treponema pallidum*.
- A continued increase of quinolone-resistant *Neisseria gonorrhoeae* (QRNG) amongst MSM. Fluoroquinolones are no longer recommended as the first line treatment for gonorrhea among MSM, for areas in the country with increased QRNG prevalence, and for infections acquired outside the United States.
- More studies report an association between sexual intercourse and the transmission of hepatitis C, but the overall contribution of this mode remains unclear.
- An expanded discussion of STD prevention approaches including client-initiated intervention methods, partner management, and accurate and timely reporting of STDs is presented.
- Screening sexually active young men should be considered in clinical settings with high prevalence of chlamydia (e.g., adolescent clinics, correctional facilities, and STD clinics).

Gonorrhea

- The U.S. Preventive Services Task Force recommends screening all sexually active women, including those who are pregnant, for gonorrhea infection if they are at increased risk.
- Women aged <25 years are at highest risk for gonorrhea infection. Other gonorrhea risk factors include a previous gonorrhea infection, other sexually transmitted infections, new or multiple sex partners, inconsistent condom use, commercial sex work, and drug use.

Men Who Have Sex With Men

The following tests should be performed at least annually for sexually active MSM, including men with or without established HIV infection:

- HIV serology, if HIV negative or not tested within the previous year;

STD Screening Guidelines

In addition to the updates listed above, the 2006 STD Treatment Guidelines include the following STD screening guidelines:

Chlamydia

- Annual screening is recommended for all sexually active women aged ≤25 years and for women 25 years or older with risk factors (e.g., those who have a new sex partner or multiple sex partners).

Inside:

Minnesota Influenza Vaccination Plan, 2006-2007.....	54
Extensively Drug-Resistant Tuberculosis (XDR-TB) Reported in Minnesota	55

- syphilis serology;
 - a test for urethral infection with *N. gonorrhoeae* and *C. trachomatis* in men who have had insertive intercourse* during the preceding year;
 - a test for rectal infection with *N. gonorrhoeae* and *C. trachomatis* in men who have had receptive anal intercourse* during the preceding year;
 - a test for pharyngeal infection with *N. gonorrhoeae* in men who have acknowledged participation in receptive oral intercourse* during the preceding year; testing for *C. trachomatis* pharyngeal infection is not recommended.
- * Regardless of history of condom use during exposure.
- The Minnesota Department of Health STD and HIV Section will collaborate with other state agencies, programs,

and clinics to revise and incorporate the current STD guidelines into the overall management of STDs in the state. In the meantime, all health care providers who treat patients with STDs are encouraged to review the new guidelines for effective prevention and control of STDs.

References:

1. Centers for Disease Control and Prevention. Sexually Transmitted Disease Guidelines, 2006. *MMWR* 2006;55 (No. RR-11).

Minnesota Influenza Vaccination Plan, 2006-2007

The Minnesota Department of Health (MDH) Influenza Vaccination Plan, 2006-2007, is an adaptation of the influenza vaccination recommendations of the Advisory Committee on Immunization Practices (ACIP). The Minnesota plan is endorsed by the Minnesota Coalition on Adult Immunization and the MDH Immunization Practices Advisory Committee. Highlights are presented below. For a complete copy of the recommendations, see the MDH immunization web site at: www.health.state.mn.us/immunize.

The 2006-2007 Trivalent Vaccine Virus Strains

- A/New Caledonia/20/1999(H1N1)-like antigen
- A/Wisconsin/67/2005 (H3N2)-like antigen
- B/Malaysia/2506/2004-like antigen

For the A/Wisconsin/67/2005 (H3N2)-like antigen, manufacturers may use antigenically equivalent A/Hiroshima/52/2005 virus, and for the B/Malaysia/2506/2004-like antigen, manufacturers may use the antigenically equivalent B/Ohio/1/2005 virus.

New Age Group Recommended for Vaccination

ACIP now recommends that healthy children aged 24-59 months and their household contacts and out-of-home caregivers be vaccinated against influenza. This change extends the recommendations for annual vaccination to all children aged 6-59 months.

Second Dose for Children 6 Months to <9 years Emphasized for Those Previously Unvaccinated

- ACIP emphasizes that all children aged 6 months to <9 years who have not been previously vaccinated at any time with either live, attenuated influenza vaccine (LAIV) or trivalent inactivated influenza vaccine (TIV) should receive 2 doses of vaccine.
- Children aged 6 months to <9 years who receive TIV should receive a booster dose of TIV ≥ 1 month after the initial dose, before the onset of influenza season if possible.
- Children aged 5 to <9 years who receive LAIV should have a second dose of LAIV 6-10 weeks after the initial dose, before the influenza season, if possible.
- If a child aged 6 months-<9 years received influenza vaccine for the first time during a previous season but did not receive a second dose of vaccine within the same season, only one dose of vaccine should be administered this season.

U.S. Healthcare Providers Should Plan to Use 100 million Doses of Vaccine

To ensure optimal use of all available doses of influenza vaccine, healthcare providers, those planning organized campaigns (e.g. health departments, occupational health clinics, and community vaccinators), and local public health agencies should: 1) develop plans for expanding outreach and infrastructure to vaccinate more persons than last year, and 2) develop

contingency plans for the timing and prioritization of administering influenza vaccine, if the supply of vaccine is delayed and/or reduced.

Vaccination Should be Offered Throughout the Influenza Season

ACIP emphasizes that influenza vaccine should be offered throughout the influenza season (December-April/May) even after influenza activity has been documented in a community. ACIP encourages all community vaccinators and public health agencies to help extend the routine vaccination season by scheduling at least one vaccination clinic in December.

Antiviral Recommendations

ACIP recommends that neither amantadine nor rimantadine be used for the treatment or chemoprophylaxis of influenza A in the United States because of recent data indicating widespread resistance of influenza virus to these medications. Until susceptibility to adamantanes has been re-established among circulating influenza A viruses, oseltamivir or zanamivir may be prescribed if antiviral treatment or chemoprophylaxis of influenza is indicated.

Vaccination of Healthcare Workers

ACIP recommends that all healthcare workers be vaccinated against influenza annually. Facilities that employ healthcare workers are strongly encouraged to provide vaccine to their workers by using approaches that maximize immunization rates (e.g., on-site vaccinations, access at shift change, etc).

Clarification of the Use of Live Attenuated Influenza Vaccine (LAIV)

- **Who can be vaccinated with LAIV?**

LAIV is an option for vaccination of healthy persons ages 5 through 49 years of age, including those wanting to avoid influenza and close contacts of persons at high risk for complications of influenza.

- **For whom is inactivated vaccine preferred?**

TIV is preferred over LAIV for household members, healthcare workers, and others who have close contact with severely immunosuppressed persons (e.g., persons with

stem cell transplants or severe combined immunodeficiency) during periods when such persons require care in a protected environment.

- **Should those who have close contact with any immunosuppressed persons be vaccinated with inactivated vaccine?**

It is not necessary; LAIV can be used for healthcare workers or other persons who have close contact with persons with “lesser degrees” of immunosuppression, e.g., persons with diabetes, persons with HIV, or those on corticosteroid therapy.

- **How long does a healthcare worker who received LAIV have to refrain from contact with severely immunosuppressed patients?**

If a healthcare worker receives LAIV, he or she should refrain from contact with severely immunosuppressed patients (e.g., persons with stem cell transplants or severe combined immunodeficiency) for 7 days after receiving vaccine.

- **Who can administer LAIV?**

Severely immunosuppressed persons should not administer LAIV. However, other persons at high risk for influenza complications (e.g., persons with asthma, heart disease, pregnancy, or diabetes) may administer LAIV.

Key Influenza Messages for Healthcare Workers

1. Influenza vaccination prevents death and serious illness.

Between 800 and 1,000 Minnesotans die every year as a result of influenza complications.

2. Unvaccinated healthcare workers spread influenza to persons who are the most vulnerable to serious complications and death from the illness.

Yet only 42% of healthcare workers get vaccinated against influenza every year.

3. People are infectious with the influenza virus before the onset of symptoms.

4. Vaccinate all your high-risk patients and their close contacts.

Be proactive:

- Don't miss the opportunity to vaccinate your patients who are in your clinic for other reasons.
- Send postcards reminding patients to come in for influenza vaccination.
- Hold special influenza vaccination clinics.
- Do whatever it takes to protect those at risk of serious complications and death from influenza.

5. Vaccinate until the end of the influenza season.

It is never too late to get vaccinated, even if influenza is already in the community! In Minnesota, the influenza season sometimes lasts until late April or early May.

6. You cannot get the flu from flu vaccine.

No excuses! Get vaccinated!

Extensively Drug-Resistant Tuberculosis (XDR-TB) Reported in Minnesota

The emergence of multidrug-resistant tuberculosis (MDR-TB) has been a serious public health concern in the United States and worldwide for several decades. The overlap of MDR-TB (defined as TB disease with resistance to isoniazid [INH] and rifampin [RIF]) and the HIV epidemic were major factors in the increase in the number of TB cases reported in the United States in the early 1990s.

Extensively drug-resistant tuberculosis (XDR-TB) is now emerging as a serious threat to global TB control efforts, raising concerns about the possibility of a future epidemic of virtually untreatable TB. XDR-TB is defined as tuberculosis (TB) disease with resistance to INH and RIF from among the first line TB drugs (i.e., “multidrug-resistant TB” or MDR-TB) in addition to resistance to at least three

of the six main classes of second-line TB drugs (i.e., aminoglycosides, polypeptides, fluoroquinolones, thioamides, cycloserine and para-aminosalicylic acid [PAS]).* The newly identified global emergence of XDR-TB first was described by the Centers for Disease Control and Prevention in the March 24, 2006, issue of *Morbidity and Mortality Weekly Reports*.¹ This phenomenon has been documented

worldwide, including within the United States, where 74 culture-confirmed cases of TB disease reported during 1993-2004 met the criteria for XDR-TB. Most recently, a cluster of XDR-TB cases was reported among primarily HIV-infected individuals in a South African hospital; 52 of 53 patients died within an average of 25 days after XDR-TB was first suspected. Because of the extent of drug resistance, treatment options for persons with XDR-TB are not likely to meet the World Health Organization (WHO)'s standard of treatment (i.e., treatment with at least four drugs to which the organism is known to be susceptible). Treatment outcomes for XDR-TB are worse than for MDR-TB; patients from the United States with XDR TB were reported as 64% more likely to die during treatment than patients with MDR-TB. The potential public health impact of XDR-TB is enormous, greatly surpassing that of MDR-TB.

A case of XDR-TB was reported to the Minnesota Department of Health (MDH) in the summer of 2006. The case-patient originally came from China on an employment visa and had lived in the Twin Cities area for several months before presenting to a clinic with TB-related symptoms and a non-cavitary chest radiograph consistent with active TB disease. The patient was referred to a public health TB specialty clinic for further diagnostic evaluation and treatment and began a standard course of four-drug TB therapy administered by directly observed therapy (DOT), consistent with national TB treatment guidelines. Public health measures were implemented to limit transmission and a contact investigation was coordinated by the local health department. When first-line drug susceptibility results were reported as resistant to all four first-line TB medications (i.e., INH, RIF, pyrazinamide, and ethambutol), second-line testing was ordered and the regimen was revised to include moxifloxacin, amikacin, cycloserine, ethionamide, and PAS. Second-line drug susceptibility testing revealed resistance to many additional TB medications (i.e., capreomycin, kanamycin, amikacin, PAS, and levofloxacin) and sensitivity to only ethionamide and cycloserine. The patient was hospitalized to address major adverse reactions to second-line medications and to again revise the treatment regimen. The patient showed some clinical and

radiographic improvement on therapy and was determined to no longer be infectious. After being discharged from the hospital, the patient returned to China to continue treatment.

Drug-resistant TB emerges primarily as the result of poorly managed TB care, including incorrect prescribing practices, inadequate duration of therapy, lack of access to high quality drugs, or failure to use DOT to ensure that the patient takes TB medications correctly and completely. The report of a case of XDR-TB in Minnesota highlights the importance of collaboration between clinicians, laboratories, and public health officials in detecting and treating persons with active TB disease to prevent the emergence of drug resistance and to promptly identify and appropriately treat drug-resistant TB. Health care providers should be familiar with medical conditions that are prevalent among populations within their practice settings and should maintain a high level of suspicion for TB among at-risk persons. Reasonably aggressive attempts should be made to obtain specimens for AFB smear, culture, and drug susceptibility testing if TB disease is suspected. Initial treatment regimens should include the four standard first-line drugs until drug susceptibility results are known. Research has shown that clinicians cannot accurately predict which of their patients will adhere to recommended treatment regimens. National TB treatment guidelines strongly recommend that the initial strategy for treating TB disease should include patient-centered case management with an adherence plan that emphasizes DOT.³

Suspected cases of TB disease should be reported to MDH within 1 working day of identification to ensure that appropriate public health measures can be implemented in a timely manner. MDH and local public health department staff will collaborate with treating physicians to ensure that free TB medications and DOT are provided, isolation and TB contact investigations are initiated for infectious patients, and that TB case management services are provided on an ongoing basis until patients complete therapy. In addition to these public health services available throughout Minnesota, local public health departments in Hennepin, Olmsted, and Ramsey counties operate TB clinics where expert TB

medical care is closely coordinated with DOT, interpreter and outreach worker services, contact investigations and other supportive services. MDH will continue surveillance for XDR-TB in Minnesota on an ongoing basis.

* A revised laboratory definition of XDR-TB is under consideration by the World Health Organization's newly formed Global Task Force on XDR-TB, which first met in Geneva in October 2006.⁴ The proposed definition includes TB disease that is resistant to at least RIF and INH from among the first line anti-TB drugs in addition to resistance to any fluoroquinolone, and to at least one of three injectable second-line anti-TB drugs used in TB treatment (capreomycin, kanamycin, and amikacin).

References:

- Centers for Disease Control and Prevention. Emergence of *Mycobacterium tuberculosis* with extensive resistance to second-line drugs – worldwide, 2000-2004. *MMWR* 2006; 55(No. RR-11): 301-05.
- World Health Organization. Emergence of XDR-TB www.who.int/mediacentre/news/notes/2006/np23/en/print.html.
- American Thoracic Society, Centers for Disease Control and Prevention, and Infectious Diseases Society of America. 2003. Treatment of Tuberculosis. *American Journal of Respiratory and Critical Care Medicine*. Vol 167: 603-662.
- World Health Organization. WHO Global Task Force outlines measures to combat XDR-TB worldwide. <http://www.who.int/mediacentre/news/notes/2006/np29/en/index.html>

Disease Control Newsletter

**Division of Infectious Disease
Epidemiology, Prevention and
Control**

**Dianne Mandernach, Commissioner
of Health**

**Richard N. Danila, Ph.D., M.P.H
Editor
Deputy State Epidemiologist**

**Valerie Solovjovs
Production Editor**