

## Health Advisory: Tuberculosis Outbreak Continues

Minnesota Department of Health Mon Jul 31 14:00 CDT 2017

### Action Steps:

**Local and tribal health departments:** Please forward to hospitals and clinics in **Ramsey, Dakota, Anoka, Washington, Scott, Wright, Carver, Stearns, and Olmsted** counties.

**Hospitals and clinics:** Please distribute to primary care providers, pediatricians, emergency room providers, urgent care providers, pulmonologists, infectious disease specialists, and infection preventionists in **Ramsey, Hennepin, Dakota, Anoka, Washington, Scott, Wright, Carver, Stearns, and Olmsted** counties.

### Health care providers:

- Have a high level of suspicion for multidrug resistant TB (MDR TB) in elderly Hmong patients with tuberculosis (TB) compatible symptoms
- Evaluate patients presenting with symptoms compatible with tuberculosis for active TB regardless of previous treatment for latent TB infection (LTBI) or active TB;
- Screen all persons at increased risk for LTBI at least once with an interferon-gamma release assay (IGRA) or tuberculin skin test (TST) per [USPTF \(https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/latent-tuberculosis-infection-screening\)](https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/latent-tuberculosis-infection-screening) and [CDC \(https://www.cdc.gov/tb/publications/ltni/pdf/targetedltbi.pdf\)](https://www.cdc.gov/tb/publications/ltni/pdf/targetedltbi.pdf) guidelines. Persons at increased risk of being infected include, but not limited to:
  - Persons born in or who have resided in countries with a high TB prevalence.
  - Persons who have worked in, live in, or have lived in, high-risk congregate settings like homeless shelters and correctional facilities.
  - Contacts of people with known or suspected infectious TB (these patients are identified through public health investigations)
- Ask patients about known exposure to individuals with MDR TB before starting treatment for LTBI.
- Report cases of probable or confirmed active TB within 24 hours to MDH at 651-201-5414 or 1-877-676-5414 and call MDH for questions about testing for TB or interpretation of TB test results

### Background

An outbreak of MDR TB among the elderly Hmong community in the Twin Cities Metropolitan area is ongoing. Since the initial health advisory related to this outbreak on March 6, 2017, five additional active MDR TB cases have been identified within this community, with two identified in July. Since January 2016, 15 active MDR TB cases have been reported to MDH; 12 (80 percent) patients were Hmong. Prior to 2016, MDH typically received zero to one case reports of MDR TB per year.

Some of the patients with MDR TB had sought care for symptoms compatible with active TB and had radiological findings compatible with TB for a considerable duration of time before specific evaluation for active TB infection was performed. It is important that providers have a high level of suspicion for TB when evaluating patients with well-established risk factors for TB exposure regardless of previous treatment for latent TB infection (LTBI) or active TB disease. In light of the current outbreak, providers should consider MDR TB in elderly Hmong patients with TB compatible symptoms.

## HEALTH ADVISORY: TUBERCULOSIS OUTBREAK CONTINUES

TB is a disease caused by the bacterium *Mycobacterium tuberculosis* (Mtb). Individuals infected with Mtb may have no clinical evidence of disease (LTBI) or may develop radiographic signs and/or symptoms of disease (active TB) or Active TB can affect any part of the body, but typically only TB of the lungs or larynx is infectious to others. Approximately 10 percent of individuals with LTBI will have reactivation of the infection with progression to active TB. The risk of reactivation of LTBI to active TB is higher in certain populations. These populations include persons recently exposed to Mtb, children less than five years of age, individuals with co-morbidities of HIV infection or other immunosuppressive disease, diabetes, chronic kidney disease, use of immunosuppressive therapy (e.g., tumor necrosis factor-alpha inhibitors, corticosteroids, chemotherapy, and anti-rejection medications post-transplant), and persons with a history of head or neck cancer, gastrectomy, jejunioileal bypass, silicosis, injection drug use, and tobacco use.

### **Evaluation for TB**

Screen individuals at increased risk of LTBI using an IGRA or TST. The use of IGRA is limited to individuals five years of age or older. If a patient has a positive screening test for TB, they will need additional evaluation including performing a symptom profile, medical history review, chest x-ray, and physical exam to determine if the individual has active TB or LTBI. A symptom profile focuses on common TB symptoms including fatigue or weakness, weight loss, fever, night sweats, coughing, chest pain, and hemoptysis.

Testing for active TB should be performed for any patient presenting with symptoms concerning for TB; active TB disease should remain on the differential diagnosis regardless of whether the patient was previously treated for LTBI. If a patient's symptom profile is suggestive of TB or they have chest x-ray abnormalities compatible with active TB, three induced sputum or other respiratory samples should be obtained for acid fast bacillus (AFB) smear and AFB culture, and, on two samples, Mtb nucleic acid amplification test (NAAT). Notify MDH (651-201-5414) whenever ordering sputum samples for TB testing.

### **Treatment considerations**

Treatment of patients with LTBI at high risk for reactivation to active TB is extremely important in TB control efforts. Management of patients diagnosed with LTBI who are contacts of a case patient in the current outbreak of MDR TB is different from typical LTBI treatment. Treatment decisions should be individualized for each patient in consultation with experts in the management of drug-resistant TB. Please call MDH at 651-201-5414 to discuss specific screening and management of patients connected to the current MDR outbreak investigation.

### **For more information**

Visit the MDH web page for more detailed treatment guidelines and to learn more about TB <http://www.health.state.mn.us/tb> . For questions, please call 651-201-5414.

A copy of this HAN is available at [www.health.state.mn.us/han/](http://www.health.state.mn.us/han/).

The content of this message is intended for public health and health care personnel and response partners who have a need to know the information to perform their duties.