

Health Advisory: University Tuberculosis Outbreak

Minnesota Department of Health Tue Jan 22 13:00 CDT 2019

Action Steps

Local and tribal health departments: Please forward to hospitals, emergency departments, urgent care centers, clinics, and convenience clinics in your jurisdictions.

Hospitals and clinics: Please distribute to primary care providers, emergency room providers, urgent care providers, pulmonologists, infectious disease specialists, and infection preventionists in your facilities.

Health care providers:

- Have a high level of suspicion for active tuberculosis (TB) in college-aged patients who are current attendees, recent graduates, or individuals that associate with students of Minnesota State University, Mankato (MSU) who exhibit TB compatible symptoms (cough > 3 weeks, chest pain, hemoptysis, unintentional weight loss, loss of appetite, fatigue, or persistent fevers, chills, night sweats).
- Evaluate symptomatic current or recent MSU students or those with whom they associate for active TB even if MSU attendance is the only identified risk factor for TB.
- 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

The Minnesota Department of Health is assisting Blue Earth County Public Health in investigating an outbreak of tuberculosis (TB) associated with individuals who have spent time on the MSU campus from August 2016 to present. To date, eight (8) individuals have been diagnosed with active TB linked to this outbreak; two of those individuals were never enrolled as MSU students. Two of these cases were found through contact investigation efforts, but six of these cases presented on their own. Due to the fact that some potentially exposed individuals no longer attend or are socially connected to MSU, and have relocated outside of Blue Earth County, we are asking health care providers to keep TB in the diagnostic differential when providing care to patients who attend or have attended MSU, or who associated with MSU attendees any time since August 2016.

TB is a disease caused by the bacterium *Mycobacterium tuberculosis* (Mtb). Individuals infected with Mtb may have no clinical evidence of disease (latent TB infection or LTBI). However, about 10% may develop radiographic signs and/or symptoms of active TB disease. Active TB can affect any part of the body.

Evaluation for Active TB

Testing for active TB should be performed for all patients presenting with symptoms concerning for TB who attended MSU or who associated with MSU attendees anytime since August 2016. Active TB should remain on the differential diagnosis regardless of whether the patient was previously treated for LTBI or active TB or has a negative TB test result (TST or IGRA). If a patient's symptom profile is suggestive of TB or they have chest x-ray or CT 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 whenever ordering sputum samples for TB testing. Additional testing is necessary for any patients with signs or symptoms of extra-pulmonary TB. Negative test results do not necessarily rule out active TB if suspicion for TB remains; in these situations consultation with an infectious disease or pulmonary specialist is recommended. When suspicion remains high, specialists may decide to classify patients as having culture-negative active TB.

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The highest risk period for developing active TB is two years post exposure, however the potential of latent infection reactivating to active TB is lifelong. TB should remain on physicians' differential in patients associated with MSU.

Treatment considerations

Guidance on treating active TB (both confirmed and culture-negative) is available at <https://www.cdc.gov/tb/topic/treatment/guidelinehighlights.htm>. All cases diagnosed or being treated for active TB should be reported to MDH.

If active TB is ruled out, completing treatment of LTBI among patients with positive TST or IGRA testing is extremely important in TB control efforts. The Minnesota Department of Health highly recommends utilizing the shorter treatment regimens for LTBI: <https://www.cdc.gov/tb/topic/treatment/ltbi.htm>. Rifampin and rifapentine decrease the efficacy of hormonal contraceptives. Discuss barrier birth control options with female patients.

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 or 1-877-676-5414.

A copy of this HAN is available at 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.