

Tuberculosis (TB) Fact Sheet

for EMS, Public Safety, and First Responders

What is tuberculosis (TB)?

TB is a treatable infectious disease that usually affects the lungs and airway, but may also affect other parts of the body. People with TB disease in other parts of the body are not infectious to others.

What is the cause of TB?

A bacteria known as *Mycobacterium tuberculosis*.

How is TB spread?

TB can spread when someone with active tuberculosis disease of the lungs or airway coughs, sings, talks, or sneezes and sprays tiny droplets containing TB bacteria into the air (airborne spread). These tiny droplets can travel some distance on air currents and can infect people who inhale them.

Do all people who are infected with TB develop disease?

No, approximately 90% of people who are infected with TB will never develop disease. These people have a latent (inactive) infection (i.e., positive tuberculin skin test, but a normal chest x-ray and no TB symptoms) and are not infectious to others. However, in 10% of people the TB bacteria will grow and spread, causing tissue damage. People with TB disease of the lungs or airway may be infectious to others until they have received their initial phase of treatment with TB medications.

What are the symptoms of active TB disease?

The typical symptoms of TB disease are prolonged cough, weight loss, night sweats, fatigue, fever, and chest pain.

How can I protect myself from exposure?

When in contact with a patient known or suspected to have active TB disease, place a surgical mask on the patient, if possible, and wear an N95 respirator (or PAPR or SCBA), if one is available. If a respirator is not available, use a surgical mask for yourself.

Not all people with active TB disease are sick enough to spread the disease and not all people who are exposed to TB become infected. Your risk of becoming infected depends on the length and intensity of the exposure and how symptomatic the sick person is. Brief or distant exposure to TB, or exposure to someone without a cough, rarely leads to infection. It usually takes lengthy contact (i.e., sharing air space for several hours over a period of several days) with someone with active TB disease for a person to become infected. Therefore, keep the length of your exposure as brief as possible.

Adequate ventilation is also important. If you must transport a patient with known or suspected active TB disease, keep the windows of your vehicle open (if feasible) and set the heating and air-conditioning systems on a nonrecirculating cycle.

What if I have an exposure to a patient with active TB disease?

TB grows and develops very slowly, so there is no immediate risk to your health or to the health of people close to you. You **may** need to have a Mantoux TB skin test. If you have become infected, treatment with TB medication is recommended to prevent the latent infection from developing into active TB disease.

If I am exposed to a patient with active TB disease, can I bring TB home to my family?

No, you cannot infect others (family, friends, co-workers) by simply being exposed to someone with TB. TB does not spread by other means such as touching, sharing eating utensils, linens, etc.



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Is TB reportable to the Minnesota Department of Health (MDH)?

Yes, active TB disease is reportable. Latent TB is not reportable.

How many cases of TB are reported each year in Minnesota?

Approximately 200 cases are reported each year and the majority of cases are reported in Hennepin and Ramsey counties. Half of Minnesota counties outside the Twin Cities metropolitan area have had no reported cases of active TB disease in the last five years.

Who investigates cases and identifies people who may need TB skin testing?

Hospitals conduct a contact investigation when an unisolated patient with potentially infectious TB is identified. This investigation should include public safety personnel and first responders. A TB contact investigation uses a concentric circle approach and may take several months to complete. The investigation begins with identifying an "inner circle" of people who were most intensely exposed and administering tuberculin skin tests to them. If evidence is found that TB may have been transmitted within the inner circle, the investigation is expanded to the second concentric circle, i.e., contacts with less exposure. The investigation will continue in a step-wise fashion until there is no more evidence that TB has spread. Because TB develops very slowly, it is safe for most adults to wait for several weeks before being evaluated.

Who do I call if I think I may have been exposed to a patient with TB?

Data privacy restrictions require that TB contact investigations be conducted confidentially. If you suspect that you may have been exposed to TB on the job, but have not been notified, you may call the infection control department of the hospital that cared for the patient and ask to be placed on a list of possible contacts. Hospital infection control practitioners may not be able to discuss an individual's diagnosis with you, but can confidentially notify you if the need arises for you to be tested for TB.

Who do I call if I have other infectious disease questions?

Please call the Minnesota Department of Health at 651-201-5414 (or toll free at 1-877-676-5414).

Reference:

Centers for Disease Control and Prevention. Guidelines for preventing the transmission of *Mycobacterium tuberculosis* in health-care facilities, 1994. MMWR 1994;43(No. RR-13)