UNIVERSITY OF MICHIGAN HEALTH
MICHIGAN MEDICINE

Infection Prevention and Mycobacterium Tuberculosis

What is TB?

Tuberculosis (TB) is caused by a bacterium called Mycobacterium tuberculosis. TB bacteria usually attack the lungs (pulmonary TB) but can attack any part of the body such as the kidney, spine, and brain. Not everyone infected with TB bacteria becomes sick. As a result, two TB-related conditions exist:

- Latent TB Infection (LTBI)
- TB Disease

If not treated properly, TB Disease can be fatal.

What is the difference between Latent TB Infection and TB Disease?

Many people who have latent TB infection may never develop TB disease. In these people, the TB bacteria may remain inactive for a lifetime without causing disease. But in other people, especially people who have a weak immune system, the bacteria become active, multiply, and cause TB disease.

People with latent TB infection:

- Have no symptoms
- Don't feel sick
- Cannot spread TB bacteria to others
- Usually have a positive TB skin test reaction or positive TB blood test
- May develop TB disease if they do not receive treatment for latent TB infection

TB Disease:

TB bacteria become active if the immune system can't stop them from growing. When TB bacteria are active (multiplying in your body), this is called **TB**

disease. People with TB disease are sick. They may also be able to spread the bacteria to people they spend time with every day.

Symptoms of TB disease may include:

- A bad cough that lasts 3 weeks or longer
- Pain in the chest
- Coughing up blood or sputum
- Weakness or fatigue
- Weight loss
- No appetite
- Chills
- Fever
- Sweating at night

How is TB spread?

TB bacteria are spread through the air from one person to another. The TB bacteria are put into the air when a person with pulmonary TB disease coughs, speaks, or sings. People nearby may breathe in these bacteria and become infected.

Why am I being placed into isolation as an inpatient?

You are placed into Airborne Precautions (also called respiratory isolation) while we are waiting on your test results to rule out a TB infection.

What are Airborne Precautions?

Airborne Precautions are a way to protect other patients, visitors, and staff from breathing in the air breathed out by people who have certain diseases. You are in isolation because you have a disease that is spread by respiratory droplets. To protect others, you will have a private hospital room. This room has a special air system that puts fresh air into the room but stops the air that

is in the room from going to the rest of the building. The door to your room must always be closed. There will be a sign on your door saying that it is an Airborne Precautions room.

Why are people wearing masks?

Most staff going into your room will wear a mask for their protection. Every visitor will also have to wear a mask. Staff will show them how to put it on.

Can I leave my room?

As long as your doctor says that you may have active disease, you need to stay in your room. If you must leave your room for some reason, ask your nurse first. If you leave, you will receive a mask to wear. If you cough or sneeze, please cover your mouth, even if you are wearing a mask.

When will Airborne Precautions end?

You will need to stay in Airborne Precautions until your doctor says:

- You do not have active disease

  or

- There is no longer a risk of you giving the disease to other people

What happens when I am discharged?

If you have been diagnosed with TB infection or are suspected of having TB infection, the health department will be notified that you have been discharged and they will follow up with you.

What should I do at home?

- Review the **"Home Isolation for TB" fact sheet** (MDHHS (Michigan Department of Health & Human Services): https://tinyurl.com/yckwfe8b

How do I contact the health department?

View this webpage to view the State of Michigan contact information sorted by county: https://tinyurl.com/yhsw725d

Where can I get more information about TB?

- View the **Tuberculosis Control webpage** from MDHHS (Michigan Department of Health & Human Services): https://tinyurl.com/2p8f323p
- View the **Tuberculosis TB webpage** from the CDC (Center for Disease Control and Prevention): https://tinyurl.com/mw4nrusu

Thank you for your help with infection prevention and control.

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