Cornell
Health

Tuberculosis Testing at Cornell

Live Well to Learn Well

Web:
health.cornell.edu

Phone (24/7):
607-255-5155

Fax:
607-255-0269

Appointments:
Monday–Saturday

Check web for hours, services, providers, and appointment information

110 Ho Plaza,
Ithaca, NY
14853-3101

Facts

Many people think tuberculosis (TB) is a disease of the past, an illness that no longer threatens us today. However, with one third of the world's population estimated to be infected with the bacteria that causes TB, and more than 8 million TB disease cases every year, TB is very much with us today, endemic in 125 countries and affecting all others. The World Health Organization has declared TB a global health emergency.

Tuberculosis is an airborne infectious disease that is preventable and curable. It is spread from one person to another when someone with TB disease releases TB bacteria into the air (particularly by coughing). People nearby may breathe in these bacteria and develop TB infection. Generally, this takes prolonged exposure. The infectious particles can spread in close quarters and rooms with limited ventilation.

People who are exposed to someone with TB disease can become infected with TB bacteria, but in most cases their immune system prevents that infection from causing TB disease. This condition is called latent tuberculosis infection (LTBI). LTBI means the person has the TB bacteria in their body, but has yet to develop obvious symptoms (symptoms present only during TB disease). In order to spread TB bacteria, a person must have TB disease. Having LTBI is not enough to spread the germ. TB may last for a lifetime as an infection, never developing into disease.

In people with LTBI, the bacteria can become active and cause TB disease over time, sometimes even decades after initial infection. People with LTBI and a healthy immune system have a 10% chance of developing TB disease before the age of 65. Any condition that weakens the immune system will increase the chance of activating TB. Simply getting older is a major cause of TB activation, as are common cancers, low body weight, or HIV infection.

BCG vaccine

Many people had the "BCG vaccine" when they were young. Although BCG is 50 to 80 percent effective in preventing serious forms of TB in children, effectiveness in adolescents and adults is minimal. Therefore, it is not used in the U.S. BCG vaccination is a reasonable strategy for children in high-prevalence areas, but does not protect adults from getting infected or developing TB disease. BCG vaccine may affect results when skin testing methods are used for TB screening.

TB screening is recommended for all incoming students and required for many international students

Screening for TB

TB disease appears in the Cornell population on a regular basis. The Tompkins County Health Department assists Cornell Health with evaluating and treating TB infection and disease. One case of disease can infect dozens of people in this highly interactive and closely linked community. Both skin and blood testing are available for TB. You cannot get TB from the tests, and they are safe for those who are pregnant, breast-feeding, HIV-positive or undergoing chemotherapy.

Skin

TB skin testing is done over two visits using the Mantoux method in which a small amount of protein derived from TB bacillus is placed just under the skin surface. Two to three days later a trained person measures any resulting reaction.

Blood (e.g., Quantiferon-TB Gold; T-spot)

This form of Interferon-Gamma Release Assay (IGRA) is a whole-blood test that can aid in diagnosing TB infection, including both latent tuberculosis infection and tuberculosis disease. Although blood testing is higher in cost than skin testing and does require a needle stick, it:

- requires only one visit
- is more accurate than skin testing
- does not yield a false-positive result when there is a history of BCG vaccination

TB screening by a blood test is mandatory for many incoming international students. International students from countries with a high incidence of TB must be tested at Cornell Health within three weeks of arrival at Cornell.

TB screening is recommended for all incoming students; however, it is highly recommended for those who have ever lived or spent time in a country where TB is prevalent (see website for more information) or for those who have been identified as having some risk of exposure to a person with active TB.

Call 607-255-5155 to schedule an appointment for testing.

Those with a positive test result are required to get a chest x-ray to determine whether they have TB disease. Most health insurance plans, Cornell's student health plans (SHP and SHP+) included, will cover the cost of a chest x-ray after a positive test result. Information about cost is available on the Cornell Health website. If cost is a concern, please contact a Cornell Health billing representative to discuss a payment plan.

For more information

Call Cornell Health to speak with the TB nurse: 607-255-5155

Visit our website at *health.cornell.edu* [search "TB testing"] to:

- View information about Cornell's TB requirement for public health
- View the list of countries for which TB screening is required