Tuberculosis Facts from the Montgomery County Health Department
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Norristown, PA (March 11, 2015) – According to the Centers for Disease Control and Prevention (CDC), tuberculosis (TB) is caused by a bacterium called *Mycobacterium tuberculosis*. The bacteria usually attack the lungs, but TB bacteria can attack any part of the body such as the kidney, spine, and brain. If not treated properly, TB disease can be fatal.

The disease is spread through the air from one person to another. The bacteria that cause TB get into the air when a person with TB disease of the lungs or throat coughs, sneezes, or speaks. People nearby may breathe in these bacteria and become infected. It should be noted that not everyone infected with TB bacteria becomes sick. There are two TB-related conditions:

- **Latent TB infection**
- **TB disease**

In latent TB infection the TB bacteria can live in the body without making a person sick. In most people who breathe in TB bacteria and become infected, the body is able to fight the bacteria to stop them from growing. People with latent TB infection do not feel sick and do not have any symptoms. People with latent TB infection are not infectious and cannot spread TB bacteria to others. However, if TB bacteria become active in the body and multiply, the person will go from having latent TB infection to being sick with TB disease.

With TB disease, the TB bacteria become active because the immune system can’t stop them from growing. The TB bacteria are active (multiplying in the body. People with TB disease are sick and may also be able to spread the bacteria to other people.
Many people who have latent TB infection never develop TB disease. Some people develop TB disease soon after becoming infected (within weeks) before their immune system can fight the TB bacteria. Other people may get sick years later when their immune system becomes weak for another reason. According to the CDC, “about 5 to 10% of infected persons who do not receive treatment for latent TB infection will develop TB disease at some time in their lives. For persons whose immune systems are weak, especially those with HIV infection, the risk of developing TB disease is much higher than for persons with normal immune systems.

**TB Symptoms:**
Signs and symptoms of active TB include: a bad cough that lasts three weeks or longer, pain in the chest, coughing up blood or sputum, weakness or fatigue, weight loss, no appetite, chills, fever, and sweating at night.

**Generally, persons at high risk for developing TB disease fall into two categories:**

*Persons who have been recently infected with TB bacteria, including:*
- Close contacts of a person with infectious TB disease
- Persons who have immigrated from areas of the world with high rates of TB
- Children less than five years of age who have a positive TB test
- Groups with high rates of TB transmission, such as homeless persons, injection drug users, and persons with HIV infection
- Persons who work or reside with people who are at high risk for TB in facilities or institutions such as hospitals, homeless shelters, correctional facilities, nursing homes, and residential homes for those with HIV

*Persons with medical conditions that weaken the immune system:*
- Babies and young children often have weak immune systems
- HIV infection (the virus that causes AIDS), substance abuse, diabetes mellitus, severe kidney disease, low body weight, organ transplants, head and neck cancer, and certain specialized treatments for rheumatoid arthritis or Crohn’s disease can also weaken a person’s immune system

**Certain people should be tested for TB bacteria because they are more likely to get TB disease, including:**
- People who have spent time with someone who has TB disease
- People with HIV infection or another medical problem that weakens the immune system
- People who have symptoms of TB disease (fever, night sweats, cough, and weight loss)
- People from a country where TB disease is common (most countries in Latin America, the Caribbean, Africa, Asia, Eastern Europe, and Russia)
- People who live or work somewhere in the United States where TB disease is more common (homeless shelters, prisons or jails, or some nursing homes)
- People who use illegal drugs

**When to see a doctor:**
See a doctor if presenting with a fever, unexplained weight loss, drenching night sweats, or a persistent cough. These are often signs of TB, but they can also result from other medical problems. A doctor can perform tests to help determine the cause. The Centers for Disease Control and Prevention recommends that people who have an increased risk of tuberculosis be screened for latent TB infection. This recommendation includes: people with HIV/AIDS, IV drug users, those in contact with infected individuals, and health care workers who treat people with a high risk of TB.

**Treatment for Latent TB and TB Disease Infection:**
For individuals who have latent TB infection, but not TB disease, a health care provider may suggest treatment to prevent TB disease. Treatment of latent tuberculosis infection (TLTBI) is essential to eliminating and controlling TB disease in the United States. The TLTBI regimen is typically one drug taken daily for four to nine months. The Montgomery County Health Department (MCHD) provides this treatment in one of their three clinic sites: [http://www.montcopa.org/index.aspx?NID=1048](http://www.montcopa.org/index.aspx?NID=1048).

TB disease can be treated by taking several drugs, usually for six months. It is very important to finish the medicine and take the drugs exactly as prescribed. It is the responsibility of the MCHD to ensure that all persons who are suspected of having tuberculosis are identified and evaluated promptly and that an appropriate course of treatment is prescribed and completed successfully. To ensure treatment completion for all active tuberculosis cases, patient medication is monitored by MCHD staff via directly observed therapy (DOT). Montgomery County residents being treated for active TB or latent TB infection are seen monthly in MCHD clinics for medical monitoring.