



EMPLOYEE HEALTH INITIATIVE: WORLD TUBERCULOSIS DAY - MARCH 24, 2011

TB Elimination: Together We Can!

World TB Day is March 24. This annual event commemorates the date in 1882 when Dr. Robert Koch announced his discovery of *Mycobacterium tuberculosis*, the bacteria that cause tuberculosis (TB).

World TB Day provides an opportunity to communicate TB-related problems and solutions and to support worldwide TB-control efforts. The Center for Disease Control (CDC) and its partners are committed to eliminating TB in the United States. In the United States, the theme for World TB Day is "TB elimination: Together We Can!"

CDC and its domestic and international partners, including the [National TB Controllers Association](#), [Stop TB USA](#), and the global [Stop TB Partnership](#), are taking many steps to prevent further spread of TB and to reduce the overall burden of the disease. Efforts range from developing new treatment regimens and increasing the capacity of health professionals to provide adequate treatment, to issuing new recommendations for improved testing and treatment for U.S. immigrants.



TUBERCULOSIS: WHAT IS IT? WHAT ARE THE SYMPTOMS

What is TB?

Tuberculosis (TB) is a disease caused by germs that are spread from person to person through the air. TB usually affects the lungs, but it can also affect other parts of the body, such as the brain, the kidneys, or the spine. A person with TB can die if they do not get treatment.

What Are the Symptoms of TB Infection and TB Disease?

A Person with Latent TB Infection	A Person with TB Disease
• Has no symptoms	• Has symptoms that 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
• Does not feel sick	• Usually feels sick
• Cannot spread TB bacteria to others	• May spread TB bacteria to others
• Skin test or blood test result indicating TB infection	• Skin test or blood test result indicating TB infection
• Has a normal chest x-ray and a negative sputum smear	• May have abnormal chest x-ray, or positive sputum smear or culture
• Needs treatment for latent TB infection to prevent active TB disease	• Needs treatment to treat active TB disease

HIGH RISK GROUPS

People who are more likely to get sick from **TB disease** include:

- people with HIV infection (the virus that causes AIDS);
- people who have been recently infected with TB (in the last two years)
- people who inject illegal drugs;
- babies and young children;
- elderly people;
- people who were not treated correctly for **TB** in the past; and
- people with certain medical conditions such as diabetes, certain types of cancer, and being underweight.

These things make your body weaker. When your body is weaker, it is difficult to fight TB germs.



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HOW IS IT SPREAD?

How is TB Spread?

TB germs are put into the air when a person with TB disease of the lungs or throat coughs, sneezes, speaks, or sings. These germs can stay in the air for several hours, depending on the environment. Persons who breathe in the air containing these TB germs can become infected; this is called latent TB infection.

What is the Difference Between Latent TB Infection and TB Disease?

People with **latent TB infection** have TB germs in their bodies, but they are not sick because the germs are not active. These people do not have symptoms of TB disease, and they cannot spread the germs to others. However, they may develop TB disease in the future. They are often prescribed treatment to prevent them from developing TB disease.

People with **TB disease** are sick from TB germs that are active, meaning that they are multiplying and destroying tissue in their body. They usually have symptoms of TB disease. People with TB disease of the lungs or throat are capable of spreading germs to others. They are prescribed drugs that can treat TB disease.

WHAT SHOULD I DO IF I HAVE BEEN EXPOSED?

What Should I Do If I Have Spent Time with Someone with Latent TB Infection?

A person with latent TB infection cannot spread germs to other people. You do not need to be tested if you have spent time with someone with latent TB infection. However, if you have spent time with someone with TB disease or someone with symptoms of TB, you should be tested.

What Should I Do if I Have Been Exposed to Someone with TB Disease?

People with TB disease are most likely to spread the germs to people they spend time with every day, such as family members or coworkers. **If you have been around someone who has TB disease, you should go to your doctor or your local health department for tests.**

HOW DO YOU GET TESTED?

How Do You Get Tested for TB?

There are two tests that can be used to help detect TB infection: a skin test or a special TB blood test. The Mantoux tuberculin skin test is performed by injecting a small amount of fluid (called tuberculin) into the skin in the lower part of the arm. A person given the tuberculin skin test must return within 48 to 72 hours to have a trained health care worker look for a reaction on the arm. The special TB blood test measures how the patient's immune system reacts to the germs that cause TB.

What Does a Positive Test for TB Infection Mean?

A positive test for TB infection only tells that a person has been infected with TB germs. It does not tell whether or not the person has progressed to TB disease. Other tests, such as a chest x-ray and a sample of sputum, are needed to see whether the person has TB disease.

For more information click on this link: [Testing & Diagnosis](#) Tuberculin skin testing, Blood Tests for TB Infection (IGRAs), Diagnosis of TB.

TREATMENT FOR TB INFECTION AND TB DISEASE

Why is Latent TB Infection Treated?

If you have latent TB infection but not TB disease, your doctor may want you to take a drug to kill the TB germs and prevent you from developing TB disease. The decision about taking treatment for latent infection will be based on your chances of developing TB disease. Some people are more likely than others to develop TB disease once they have TB infection. This includes people with HIV infection, people who were recently exposed to someone with TB disease, and people with certain medical conditions.

How is TB Disease Treated?

TB disease can be treated by taking several drugs for 6 to 12 months. It is very important that people who have TB disease finish the medicine, and take the drugs exactly as prescribed. If they stop taking the drugs too soon, they can become sick again; if they do not take the drugs correctly, the germs that are still alive may become resistant to those drugs. TB that is resistant to drugs is harder and more expensive to treat. In some situations, staff of the local health department meet regularly with patients who have TB to watch them take their medications. This is called directly observed therapy (DOT). DOT helps the patient complete treatment in the least amount of time.



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DATA & STATISTICS

Tuberculosis (TB) is one of the world’s deadliest diseases:

- One third of the world’s populations are infected with TB.
- Each year, nearly 9 million people around the world become sick with TB.
- Each year, there are almost 2 million TB-related deaths worldwide.
- TB is the leading killer of people who are HIV infected

How many cases of tuberculosis (TB) were reported in the United States in 2009?

A total of 11, 545 TB cases (a rate of 3.8 cases per 100,000 persons) were reported in the United States in 2009. Both the number of TB cases reported and the case rate decreased; this represents a 10.5% and 11.3% decline, respectively, compared to 2008. The TB rate in 2009 was the lowest recorded rate since national reporting began in 1953.

Is the rate of TB declining in the United States?

Yes. Since 1993, the TB case rate in the US has declined annually. Case count and case rate declines in 2009 were considerably steeper than in recent years. During 2000-2008, the TB rate decreased an average of 3.8% annually, compared to a decrease of 11.3% in 2009. Although 2009 TB case reports and annual TB rate reached all time lows in the United States, disproportionately high rates of TB persist among foreign-born persons and racial/ethnic minorities, particularly among U.S.-born blacks.

How many people died from TB in the United States?

There were 544 deaths from TB in 2007, the most recent year for which these data are available. Compared to 2006 data, when 644 deaths from TB occurred, this represents a 14% decrease in TB deaths.

What are the rates of TB for different racial and ethnic populations†?

- American Indians or Alaska Natives: 4.3 cases per 100,000 persons
- Asians: 23.3 cases per 100,000 persons
- Blacks: 7.6 cases per 100,000 persons
- Native Hawaiians and other Pacific Islanders: 16.7 cases per 100,000 persons
- Hispanics or Latinos: 7.0 cases per 100,000 persons
- Whites: 0.9 cases per 100,000 persons

† For this report, persons identified as white, black, Asian, American Indian/Alaska Native, native Hawaiian or other Pacific Islander, or of multiple races are all non-Hispanic. Persons identified as Hispanic may be of any race.

TB IN SPECIFIC POPULATIONS

[TB in Specific Populations](#)

TB & HIV, Pregnancy, International travelers

BCG VACCINE & IMMUNIZATION

BCG, or bacille Calmette-Guerin, is a vaccine for tuberculosis (TB) disease. Many foreign-born persons have been BCG-vaccinated. BCG is used in many countries with a high prevalence of TB to prevent childhood tuberculous meningitis and miliary disease. However, BCG is not generally recommended for use in the United States because of the low risk of infection with *Mycobacterium tuberculosis*, the variable effectiveness of the vaccine against adult pulmonary TB, and the vaccine’s potential interference with tuberculin skin test reactivity. The BCG vaccine should be considered only for very select persons who meet specific criteria and in consultation with a TB expert. [World Health Organization. Issues Relating to the Use of BCG in Immunization Programmes- A Discussion Document](#)

SOURCES FOR THIS ARTICLE, ADDITIONAL INFORMATION AND RELATED LINKS:

Sources for this Article, Additional Information and Related Links:

- ❖ [CDC. Development of new vaccines for tuberculosis: recommendations of the Advisory Council for the Elimination of Tuberculosis \(ACET\). MMWR 1998; 47 \(No. RR-13\).](#)
- ❖ [CDC. The role of BCG vaccine in the prevention and control of tuberculosis in the United States: a joint statement by ACET and the Advisory Committee on Immunization Practices. MMWR 1996; 45 \(No. RR-4\).](#)
- ❖ [State TB Control Offices; World Health Organization](#); [Stop TB Partnership](#); [Stop TB USA](#)
- ❖ [National TB Controllers Association](#),
- ❖ [Respiratory Protection in Health-Care Settings](#)
- ❖ [Infection Control in Health-Care Settings](#)
- ❖ [BCG Vaccine](#)
- ❖ [Tuberculosis Information for International Travelers](#)

