

## Fast Facts

- People with latent TB infection are at much higher risk for progressing to active TB disease if they also have HIV.
- All people with newly diagnosed HIV should be tested for TB infection.
- Among people with TB who had an HIV test, the percentage who were HIV-positive dropped from 48% in 1993 to 6% in 2015.

Tuberculosis, or TB, is caused by the bacterium *Mycobacterium tuberculosis*, which can be present as either latent TB infection or TB disease. Latent TB infection means that TB bacteria are living in the body but not causing any symptoms. People with latent TB infection are not sick, do not have symptoms, and cannot spread TB bacteria.

TB disease means the bacteria are multiplying and destroying body tissues; if not diagnosed and treated properly, it can be fatal. People with TB disease are sick, have symptoms, and can spread the bacteria to others. Persons with TB disease of the lungs or airways can spread TB bacteria from person to person through the air when a person with TB disease coughs, sneezes, speaks, or sings.

**All people with newly diagnosed HIV should be tested for TB infection as soon as possible. People living with HIV and at ongoing risk for TB exposure should be tested annually.** The risk for exposure to TB is the same for everyone: being in close contact with someone with infectious TB disease. This risk increases for people who are homeless or injection drug users, or those living or working in settings such as jails, health care facilities, drug-treatment units, or homeless shelters.

People with HIV and latent TB infection need treatment for HIV and for latent TB infection as soon as possible to prevent them from developing TB disease. People with latent TB infection who have HIV are much more likely to progress to TB disease than people without HIV. TB outbreaks can rapidly expand in patient groups infected with HIV. Several recommended treatment regimens are available for latent TB infection, including a relatively new combination regimen of isoniazid and rifapentine taken weekly for 12 weeks as directly observed therapy (DOT). In DOT, health care workers meet with TB patients individually to watch them take each dose of TB medicine. People with HIV and TB disease must take several drugs for at least 6 to 9 months to treat their TB.

Unfortunately, some people with HIV do not know they are infected with TB. Similarly, some people with TB disease are unaware of their HIV status, although HIV status reporting for people with TB is improving. CDC recommends that anyone who has TB disease, is suspected of having TB disease, or is a contact of a TB patient be tested for HIV.

## The Numbers

- At the end of 2013, an estimated 1,242,000 people in the United States were living with HIV, 13% of whom did not know they were infected.
- A total of 9,557 TB cases (a rate of 3.0 cases per 100,000 persons) were reported in the United States in 2015.
- In 2015, 90% of patients with TB disease knew their HIV status.
- Among 8,366 persons with TB disease who had a documented HIV test result in 2015, 6% were coinfecting with HIV.
- From 1993 to 2015, the estimated percentage of HIV coinfection in persons with TB who reported HIV testing decreased from 63% to 8% among persons aged 25 to 44 years.

## Prevention Challenges

- **Possible drug interactions** can interfere with treatment. Treatment with the right drugs is important for HIV patients. Recommendations for treating TB in adults with HIV are, with a few exceptions, the same as those for adult TB patients who are not HIV infected. However, managing HIV-related TB is complex, and people with HIV and TB should seek care from health care providers with expertise in the management of both diseases.
- **Multidrug-resistant TB (MDR TB)** is resistant to at least two of the best anti-TB drugs—isoniazid and rifampin. MDR TB is hard to treat and can be fatal. The percentage of primary MDR TB (defined as MDR TB in a patient with no previous history of TB disease) cases in the United States has remained relatively steady at approximately 1% in recent years. Extensively drug-resistant TB is a rare type of MDR TB that is resistant not only to isoniazid and rifampin, but also any fluoroquinolone and at least one of three injectable second-line drugs. It is extremely hard to treat, and the remaining treatment options are less effective. To prevent the continued

emergence of drug-resistant strains, treatment for TB must be improved, not only in the United States but worldwide. Although a person with drug-resistant TB can transmit the resistant bacteria directly to others, resistance primarily develops when a TB patient is not treated with the right drugs or does not take the drugs properly. The most effective way to ensure that patients finish their treatment is DOT, and its use must be expanded.

- **Lack of awareness of TB or HIV status** can prevent adequate treatment. Anyone who is newly diagnosed with HIV or TB should be tested for coinfection. Without treatment, each disease increases the severity of the other. TB disease is an AIDS-defining condition. Worldwide, TB is a leading cause of death among people living with HIV.

## What CDC Is Doing

CDC and its domestic and international partners are taking many steps to prevent the further spread of TB and to reduce the overall burden of the disease. Efforts include:

- Assessing new TB diagnostic techniques;
- Developing new treatment regimens;
- Increasing the capacity of health professionals to provide adequate patient care by offering training and promoting evidence-based guidelines; and
- Continuing to address and support global TB control because foreign-born people account for more than half of TB cases in the United States.

The goal of controlling and eventually eliminating TB requires a focused, continual effort to meet the prevention and treatment needs of people most at risk, including those who have HIV. The strategy of preventing and treating TB in people with HIV is therefore essential to achieving the goal of TB elimination in the United States.

### Additional Resources

**CDC-INFO**  
1-800-CDC-INFO (232-4636)  
[www.cdc.gov/info](http://www.cdc.gov/info)

**CDC HIV Website**  
[www.cdc.gov/hiv](http://www.cdc.gov/hiv)

**CDC Act Against AIDS Campaign**  
[www.cdc.gov/actagainstaids](http://www.cdc.gov/actagainstaids)

**CDC TB Website**  
<http://www.cdc.gov/tb>