

TB Cases in the United States

An estimated 30% to 60% of adults in developing countries have TB infection.

TB infection is one of the most common infections in the world. It is estimated that 30% to 60% of adults in developing countries have TB infection. Every year, about 8 million people develop TB disease and 3 million people die of the disease. In fact, among people older than 5 years of age, TB disease is the leading cause of death due to infectious disease around the world.

Physicians and other health care providers are required by law to report TB cases to their state or local health department.

In the United States, physicians and other health care providers are required by law to report TB cases to their state or local health department. Reporting is very important for TB control. When the health department learns about a new case of TB, it should take steps to ensure that the person receives appropriate treatment. The health department should also start a contact investigation. This means interviewing a person who has TB disease to determine who may have been exposed to TB. People who have been exposed to TB are screened for TB infection and disease.

State and some big city health departments report TB cases to the federal Centers for Disease Control and Prevention (CDC) based on certain criteria. These criteria are discussed in more detail in [Module 3, Diagnosis of Tuberculosis Infection and Disease](#). CDC reports the number of TB cases that occur each year in the United States.

In 1953, when nationwide TB reporting first began, there were more than 84,000 TB cases in the United States. From 1953 through 1984, the number of TB cases decreased by an average of 6% each year. In 1985, the number of new TB cases reached an all-time low of 22,201.

From 1985 through 1992, the number of new TB cases in the United States increased by 20%.

In 1986, however, there was an increase in TB cases, the first significant rise since 1953. Between 1985 and 1992 there was a resurgence of TB, with the number of new cases increasing from 22,201 in 1985 to 26,673 in 1992, an increase of 20% (Figure 2.1).

We can attribute the resurgence in TB cases between 1985 and 1992 to at least four factors:

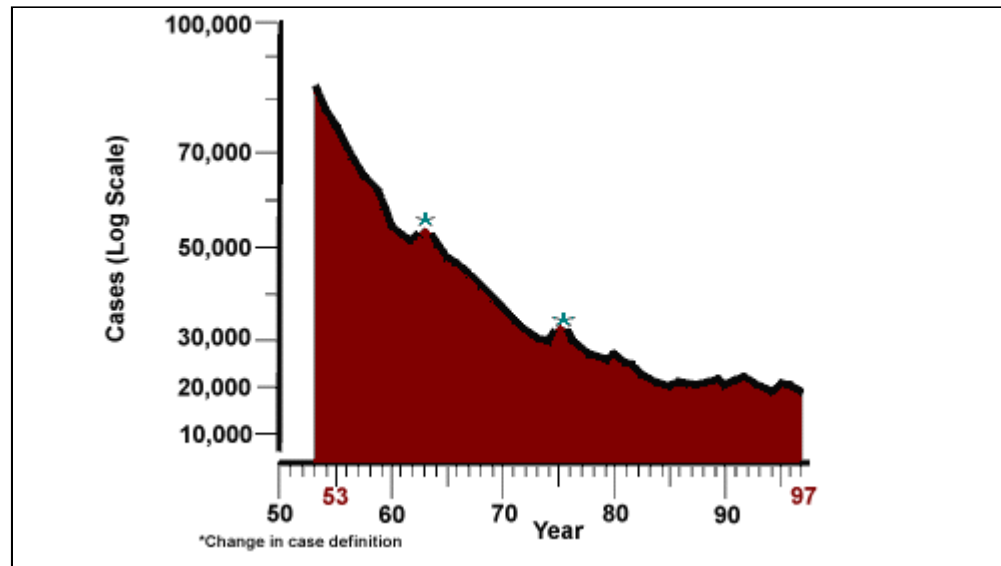
- The HIV epidemic
- Immigration from countries where TB is common
- The spread of TB in certain settings (for example, correctional facilities and homeless shelters)
- Inadequate funding for TB control and other public health efforts

From 1993 through 1997, there was a steady decline in the number of TB cases reported annually in the United States.

In 1993, the upward trend in new TB cases reversed. From 1993 through 1997, the number of TB cases reported annually in the United States steadily declined (Figure 2.1). In 1997, a total of 19,851 new cases of TB were reported, resulting in the lowest number of reported TB cases since

national reporting began in 1953.

Figure 2.1
Reported TB cases, United States, 1953-1997.



The continued decrease in the number of TB cases reported annually in the United States since 1993 may be attributed to at least three factors:

- Increased federal resources for TB control and other public health efforts
- Improvements in TB prevention and TB control programs in state and local health departments
- Increased attention to ensuring that patients complete drug therapy through directly observed therapy (DOT)

Despite trends reflecting a steady decline in TB cases in the U.S. between 1993 and 1997, there are still several areas of ongoing concern.

Despite national trends reflecting a steady decline in the number of TB cases reported annually in the United States between 1993 and 1997, there are still several areas of ongoing concern:

- While TB cases declined nationally, TB cases actually increased in some areas.
- TB patients who do not complete therapy can develop and spread strains of TB that are resistant to available drugs. For example, "Strain W," a deadly TB strain resistant to most of the best anti-TB drugs, has been found in several states.
- An increasing proportion of TB cases in the United States are among residents born outside of the United States (foreign-born).

In 1997 the TB case rate in the United States was 7.4 TB cases per 100,000 persons.

The number of TB cases at a certain place and time is often expressed as a **case rate**. A case rate is the number of cases that occur during a certain time period, divided by the size of the population during that time period. (The case rate is often expressed in terms of a population size of 100,000 persons.) For example, in the United States in 1997, there were 19,851 new TB cases in a population of approximately 267,284,000 people. In other words, the TB case rate was 7.4 TB cases per 100,000

persons. The TB case rates for each state, the District of Columbia, and Puerto Rico are shown in Figure 2.2.

In certain groups, the rates of TB are higher than in others.

Health departments, CDC, and others can compare the occurrence of TB cases in different places, time periods, and groups of people by using case rates. They have found that in certain groups, the rates of TB are higher than in others. These high-risk groups can be divided into two categories ([Table 2.1](#)):

- **People who are more likely to be exposed to or infected with *M. tuberculosis***
This category includes people who live or work in certain settings (see [Special Settings](#))
- **People who are more likely to develop TB disease once infected**

Figure 2.2
TB case rates by state, United States, 1997.

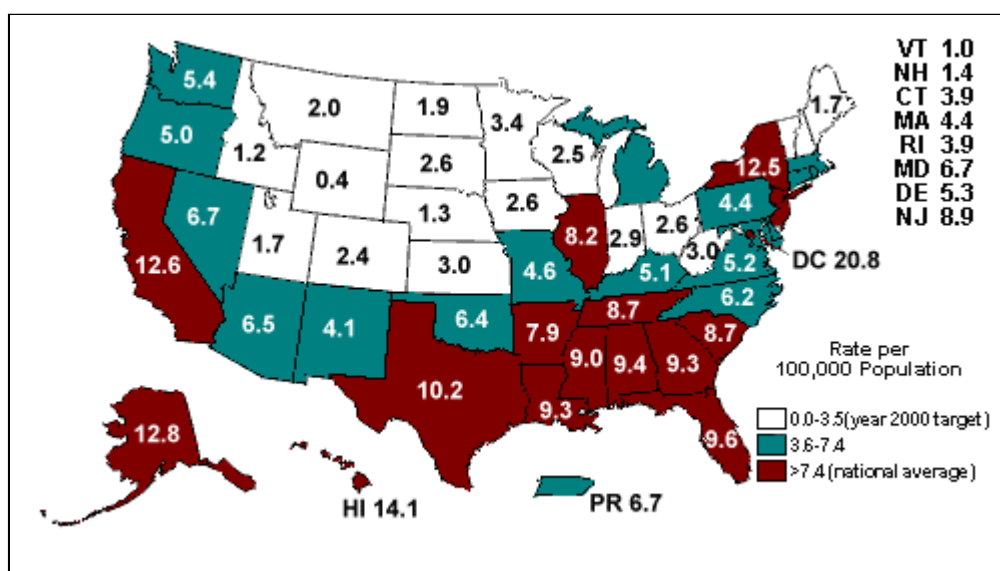


Table 2.1
Groups at High Risk for TB

People at Higher Risk for Exposure or Infection	People at Higher Risk for TB Disease
<ul style="list-style-type: none"> ■ Close contacts of people with infectious TB ■ People born in areas of the world where TB is common (for example, Asia, Africa, or Latin America) ■ Elderly people ■ Low-income groups with poor access to health care, including homeless people 	<ul style="list-style-type: none"> ■ People with HIV infection ■ People with other medical conditions that appear to increase the risk for TB (see Module 1, Transmission and Pathogenesis of Tuberculosis) ■ People recently infected with <i>M. tuberculosis</i> (within the past 2 years) ■ People with chest x-ray findings suggestive of previous TB disease

- People who inject illicit drugs
- People who live or work in residential facilities (for example, nursing homes or correctional facilities)
- Other people who may be exposed to TB on the job (for example, some health care workers)
- People in other groups as identified by local public health officials

- People who inject illicit drugs



Study Questions

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