CDC Reports 2018 U.S. TB Case Data

On March 21, 2019, the Centers for Disease Control and Prevention (CDC) reported the provisional U.S. TB case data for 2018. Overall, the 2018 U.S. trends mirrored those seen in 2017 – small decreases in the number of TB cases and the TB case rate, but at a slower pace.

Specifically, the CDC indicated that 9,0291 new cases of TB were reported in the U.S. during 2018, a decrease of 0.7 percent compared to 2017. The 2018 TB rate of 2.8 cases per 100,000 population (or about 28 per million) was 1.3 percent lower than in 2017.

The 2018 TB case count and rate are the lowest on record since reporting began in 1953, but the rate of decline remains insufficient to achieve TB elimination in this century. As shown below, the average annual percentage change in the U.S. TB incidence rate between 2010 and 2014 was a decrease of 4.75 percent. During the five-year period between 2014 and 2018, the annual percentage change slowed to a decrease of 1.65 percent. For perspective, the 2018 U.S. TB case rate is 28 times the U.S. TB elimination threshold of 0.1 case per 100,000 persons.

Over the past four decades, and again in 2018, the number of TB cases reported in California, Florida, New York and Texas accounted for just about half the number of TB cases in the United States. Twenty-four states reported a decrease in the number of TB cases in 2018 and of those, New York had the largest drop with 50 fewer TB cases compared to 2017. Four states and the District of Columbia reported no change in the number of TB cases for 2018.

Twenty-two states, including Pennsylvania, experienced an increase in the number of TB cases in 2018. The largest increases were seen in Florida, with 42 more TB cases in 2018 than in 2017, followed by California (+32), Ohio (+29), Oklahoma (+20) and Pennsylvania (+20 - up from 192 cases in 2017 to 212 in 2018). There’s no one driving factor behind the increase, but possible factors include improved diagnostics and surveillance leading to earlier detection.
of TB disease, delayed detection of disease among undocumented patients who fear deportation if they seek medical attention, and low rates of treatment acceptance and completion for TB infection.

Disparities still exist between populations affected by TB. In 2018, the overall rate of TB among non-U.S. born individuals was 14 times that of U.S. born individuals. Among non-U.S. born individuals, Asians had the highest TB rate among all racial/ethnic groups, followed very closely by Native Hawaiians and Pacific Islanders. In the U.S. born population, the highest rates were reported in Native Hawaiians and Pacific Islanders, American Indians and Native Alaskans, non-Hispanic blacks, Asians, and Hispanics.

While the risk of progressing to TB disease is highest in the first two years after infection, it’s important to note that 46.3 percent of new TB cases among non-U.S. born individuals occurred in persons who have lived in the U.S. for 10 or more years, while 42.1 percent of cases occurred in persons who have lived in the U.S. for less than five years. Regardless of how long they have lived in the U.S., persons from countries where TB is common should be tested for TB.

Out of all 2018 U.S. TB cases, 4.1 percent occurred among the homeless and 3.3 percent occurred in individuals in correctional facilities. Persons co-infected with the human immunodeficiency virus, or HIV, accounted for 5.3 percent of all TB cases, but the proportion was much higher for those in the 25-44-year-old subgroup at 8.6 percent.
**CDC Recommendations**

To accelerate the decline in the number of U. S. TB cases, the CDC recommends:

- Continued strong infection control practices to quickly identify and fully treat cases of TB disease;
- Increased emphasis on testing high-risk populations for TB infection;
- Increased use of the interferon-gamma release assay (IGRA) blood test – especially when testing individuals previously vaccinated with the Bacille Calmette-Guerin (or BCG) vaccine; and
- Improved treatment acceptance and completion rates for TB infection via adoption of shorter, well tolerated treatment regimens such as 12 weekly doses of rifapentine + INH or four months of rifampin.

1 CDC Morbidity and Mortality Weekly Report, Vol.68, No.11, p. 257-262