

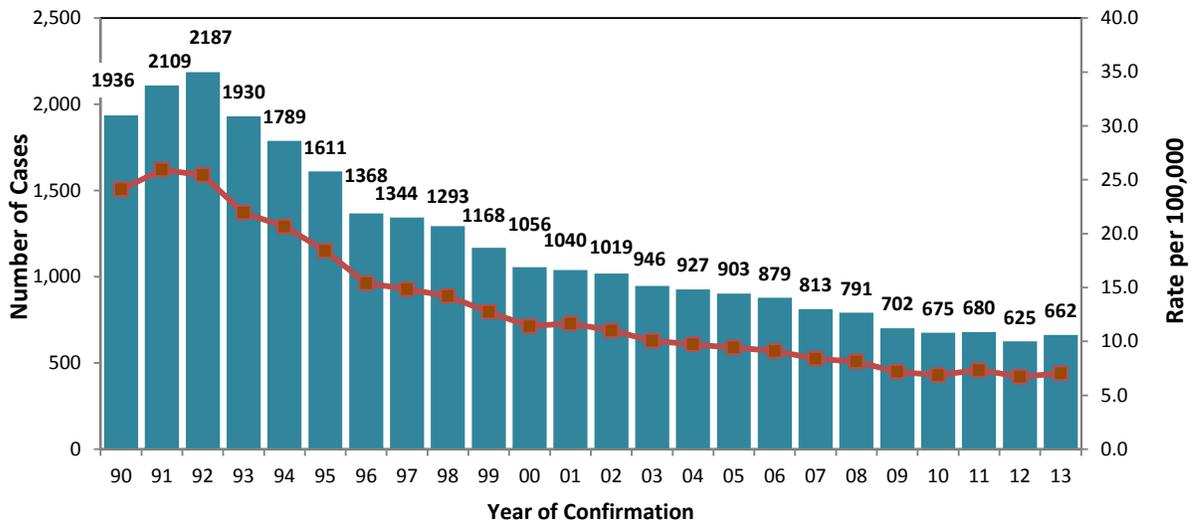


## Tuberculosis in Los Angeles County: A Snapshot

### Los Angeles County Overview

- The latest state surveillance data show that tuberculosis disease (TB) continues to decline in California.<sup>1</sup> However, in 2013, Los Angeles County (LAC) reported a total of 662 cases, a 6% increase from 625 cases in 2012.
- In 2013, the incidence rate of TB in LAC was 7.0 per 100,000, which is the 7<sup>th</sup> highest rate among California jurisdictions, higher than the overall state incidence rate (5.7/100,000),<sup>1</sup> and more than twice the national incidence rate (3.0/100,000).<sup>2</sup>

**Figure 1. TB Cases and Incidence Rates: Los Angeles County, 1990-2013**



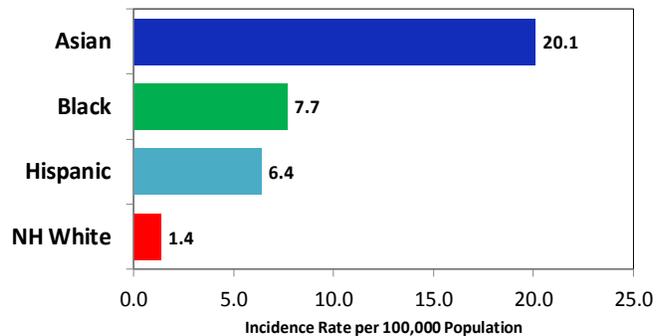
LA County TB Cases. Data exclude Pasadena and Long Beach TB cases. Data are provisional and subject to change. Population estimates source: LA County Department of Public Health, ACDC.

### Most Affected Populations

#### Racial/Ethnic Groups

- The TB incidence rate was highest among Asians (20.1/100,000), followed by Blacks (7.7/100,000), Hispanics (6.4/100,000) and non-Hispanic Whites (1.4/100,000).
- TB incidence rates among Asians, Blacks and Hispanics were 14.4, 5.5, and 4.6 times higher than among non-Hispanic Whites, respectively.
- More TB cases were reported among Hispanics (n=292 cases) in 2013, resulting in a 2% increase from 2012 (n=286 cases).

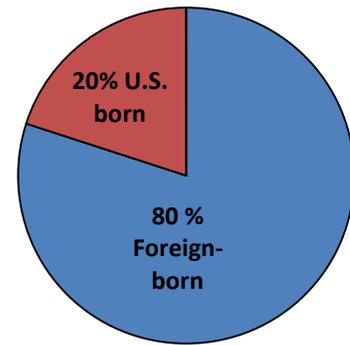
**Figure 2. TB Incidence Rate by Racial/Ethnic Group, 2013**



Data exclude Pasadena and Long Beach TB cases. Race/ethnicity excludes 1 case with unknown racial/ethnic group. Data are provisional and subject to change. Population estimates source: LA County Department of Public Health, ACDC.

## Foreign-Born Individuals

- TB cases among foreign-born individuals (n=558) were 4 times higher than among U.S.-born individuals (n=133).
- Among foreign-born TB patients with a known place of birth, 50% were Asian, 44% were Hispanic, 3% were Black, and 3% were non-Hispanic White.
- About two-thirds (62%) of foreign-born TB patients originated from 6 countries (Mexico, Philippines, China, Vietnam, Guatemala, and El Salvador).



**Figure 3. Proportion of TB Cases by National Origin, 2013**

## Medical Comorbidities

- In 2013, 44% of TB cases had one or more medical comorbidities, including diabetes mellitus, end stage renal disease, HIV, or another immunosuppressive condition. These comorbidities increase a person's risk of progression from TB infection without symptoms to active TB disease.<sup>1</sup> The most common comorbidity was diabetes mellitus (28% of TB cases).

## Individuals Living with HIV

- Among individuals with TB and known HIV status, 3.9% were co-infected with HIV. People living with HIV are at high risk for rapid progression to TB disease and are more likely to die during treatment.<sup>3</sup>

## Children and Older Adults

- There were 18 cases of TB among children ages 0 to 4 years, representing 2.7% of all cases reported in 2013. This represents an increase from the previous year (n=9 cases in 2012). Although the percent of cases in this age group is similar to the average from 2009 to 2012 (approximately 2.5%), the incidence rate was higher in 2013 (3.0/100,000) compared to the combined 2009-2012 rate (2.3/100,000).
- Persons 65 years of age and older represented 31% (n=208) of TB cases in 2013. In 2012, there were 196 cases (31%) in this age group.

## Homelessness

- Persons experiencing homelessness are particularly vulnerable to TB. Factors such as crowded living situations can increase the risk of transmission in this population. In 2013, there were 66 (10%) TB cases reported in LAC as having been homeless within the past year.

## Multidrug-Resistant (MDR) and Extensively Drug-Resistant (XDR) TB

- In 2013, there were 5 MDR cases and 1 XDR case in LAC. This was the only XDR case reported in LAC since 2007.
- Despite the significant growth of MDR TB cases in some global regions<sup>3</sup>, in LAC, MDR TB has remained a small proportion of TB cases, averaging between 1% and 2% of TB cases during 2000-2013.
- Treatment for TB patients with MDR or XDR TB is often more complex, and requires lengthy (1 ½ to 2 years) and costly treatment regimens.<sup>3,4</sup>

## Deaths Among Persons with TB

- Among TB cases confirmed in 2009-2011, there were 236 deaths, including deaths due to TB and deaths unrelated to TB disease. Of these, 76% died while receiving treatment.

## References

<sup>1</sup> Tuberculosis Control Branch, Report on Tuberculosis in California, 2013. California Department of Public Health, Richmond, CA. July 2014.

<sup>2</sup> TB Incidence in the United States, 1953-2013. Centers for Disease Control and Prevention, Division of Tuberculosis Elimination. Atlanta, GA. Available at: <http://www.cdc.gov/tb/statistics/tbcases.htm>. Published 2014.

<sup>3</sup> WHO. Global Tuberculosis Report 2014. Available at: [http://www.who.int/tb/publication/global\\_report/en/index.html](http://www.who.int/tb/publication/global_report/en/index.html). Published 2014.

<sup>4</sup> Marks, S. Flood, J., Seaworth, B. et al. Treatment Practices, Outcomes, and Costs of Multidrug Resistant and Extensively Drug Resistant Tuberculosis in the United States, 2005-2007. *Emerging Infectious Disease* 2014; 20(5): 812-821.