

## Tuberculosis and HIV in California, 2013-2022

Tuberculosis (TB) is an illness caused by the bacteria *Mycobacterium tuberculosis*. TB spreads through the air when a person sick with TB coughs. TB is curable, and even preventable through testing and treatment for latent TB infection (LTBI). HIV infection is a common risk factor for TB, and those with TB and HIV coinfection can have worse illness and higher chance of death than those with TB alone.

### California has the highest burden of TB in the U.S.

- California reports the most cases of any state in U.S. and has the 3rd highest incidence rate.<sup>1</sup>
- There were 1843 people reported with active TB in California in 2022, 83% of whom were born outside the U.S.; 23% were born in Mexico.

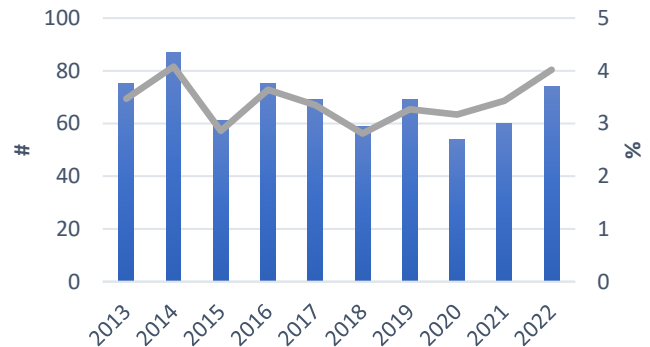
Two-thirds of people in California with both TB and HIV live in 5 counties:

- Los Angeles (29%)
- San Diego (22%)
- San Francisco (7%)
- Orange (5%)
- Alameda (5%)

### 4% of TB occurred in people living with HIV.

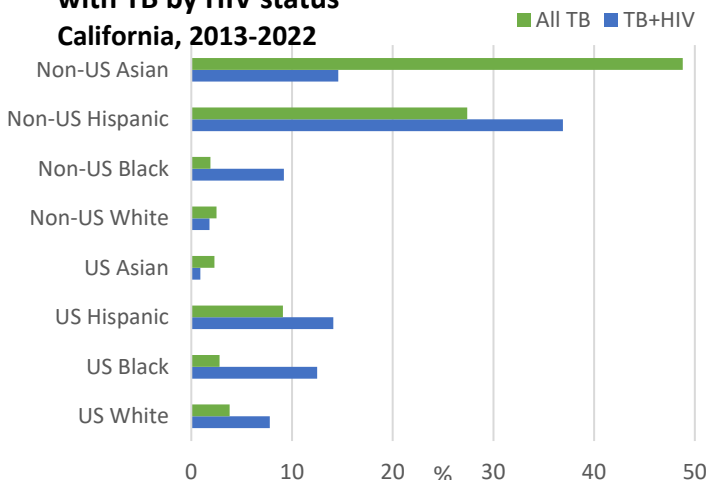
- A total of 683 people with TB had HIV during 2013-2022.
- 4% (n=74) of TB disease in 2022 occurred in people living with HIV.
- This proportion has been stable over the last 10 years but might be on the rise.

**HIV coinfection among people with TB California 2013-2022** # with HIV % with HIV



### Race, ethnicity, and nativity in people with TB by HIV status

#### California, 2013-2022



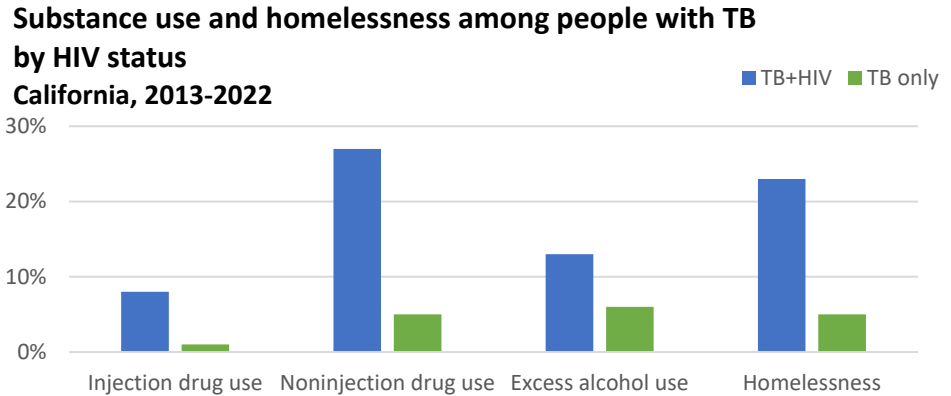
### Most people with TB and HIV were born outside the U.S.

- Almost two-thirds of people with TB and HIV were born outside the U.S. (429 or 63%), a lower percentage than among all people with TB in California.
- More than a third of people with TB and HIV were Hispanic people born outside the U.S. (252 or 37%), a higher percentage than among all people with TB in California.

- The most frequent countries of birth for people with TB and HIV were: United States (36%), Mexico (29%), Philippines (6%), Vietnam (3%), Guatemala (3%).

### Homelessness and substance use common among people with HIV and TB

- Among people with HIV and TB, substance use and homelessness was much more common than among people with TB alone.

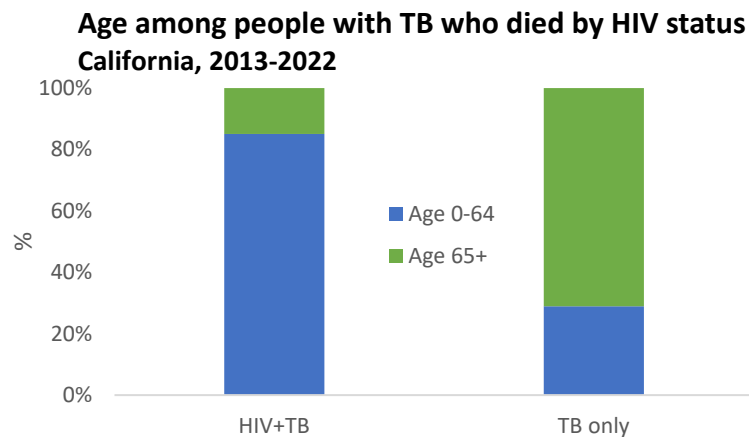


### HIV is poorly controlled in those with TB

- Collection of CD4 count in TB reports started in 2022.
- In 2022, among 74 people with TB and HIV, 42 (57%) had a CD4 count reported. Of those, 36 (86%) had CD4 <200 cells/mm<sup>3</sup>.

### 10% of people with TB and HIV died; 85% were less than 65 years old

- Among people with HIV and TB, 67 (10%) died, a proportion similar to people with TB only.
- Of people with HIV and TB who died, 85% were younger than 65 years.
- In comparison, 71% (n=1412) of deaths in people with TB only occurred in those 65 years or older.



### TB among people with HIV is preventable through LTBI testing and treatment

- LTBI testing with IGRA and treatment for those with a positive result is effective at preventing TB among people with HIV. TB risk is further lowered by effective HIV treatment.

- Among the 74 people with HIV and TB in 2022, 20% had not had an IGRA done, 50% had a positive IGRA, and 30% had a negative or indeterminate IGRA indicating likely severe immunosuppression or overwhelming TB disease.. Most people with a positive result had IGRA testing near the time of active TB diagnosis, too late to prevent TB.

Reference: 1) Schildknecht KR, Pratt RH, Feng PI, Price SF, Self JL. Tuberculosis — United States, 2022. *MMWR Morb Mortal Wkly Rep* 2023;72:297–303