

Why ask the tough questions?

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A small brown and white dog, possibly a Jack Russell Terrier, is sitting on a green lawn. The dog is looking up towards the camera with large, expressive brown eyes. It has a white chest and paws, with brown patches on its face and ears. A black collar with a silver ring is visible around its neck.

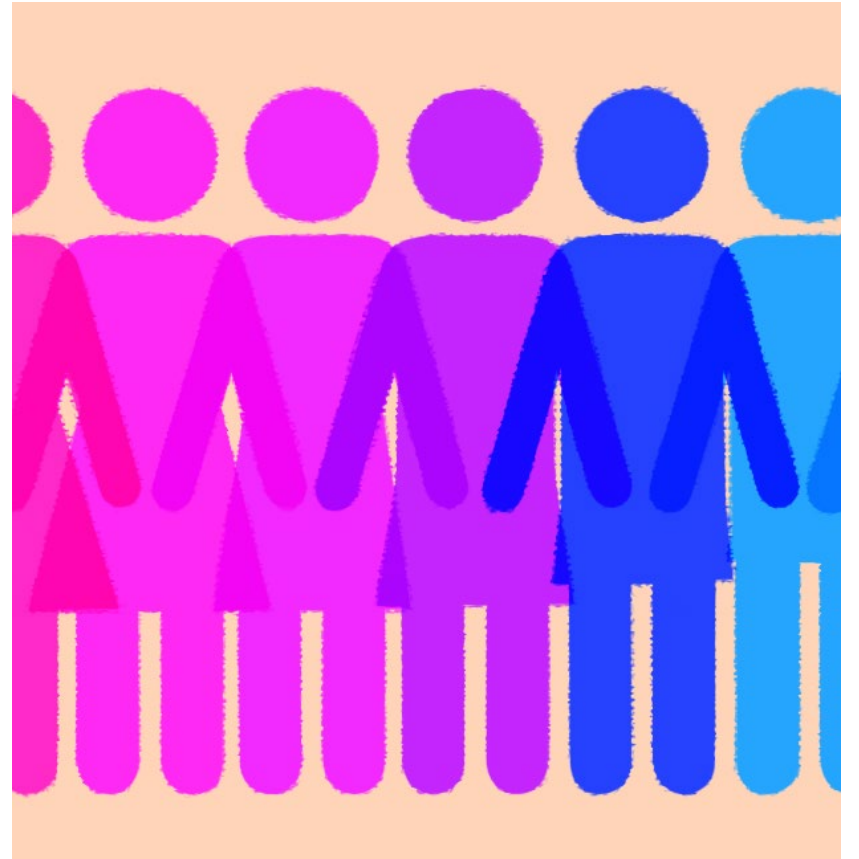
gettyimages
Credit: susaro

Individuals with risk factors may be more affected by TB, or have worse treatment outcomes, or may be more likely to die with TB

= health disparities that we,
as public health workers,
need to identify to address

We collect data on each individual with a reportable condition to improve public health

- Client interviews (local level)
- Report of Verified Case of Tuberculosis (RVCT) is completed at the local level and transmitted to the state which then transmits to CDC
- RVCT is part of the state and national TB surveillance system
- The TB surveillance system data are analyzed to:
 - Monitor disease trends
 - Identify areas for public health program improvement
 - Focus resources and efforts towards communities that experience TB disparities



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How are the data used to improve public health?

- To ensure adequate prevention and care, health departments focus efforts and resources on individuals with known TB risks
 - Born outside the U.S.
 - Experiencing homelessness or incarceration
 - Using substances
- To better prevent and improve care to individuals with TB, we analyze the data
 - Used for evidence-based guidance
 - National
 - State
 - Local

Let's first review known TB risks

Individuals born in most countries outside the U.S. were more likely to be exposed to TB in those countries than in the U.S.

Outbreaks of TB have occurred in shelters, among individuals living outside of a home, in single room occupancy hotels

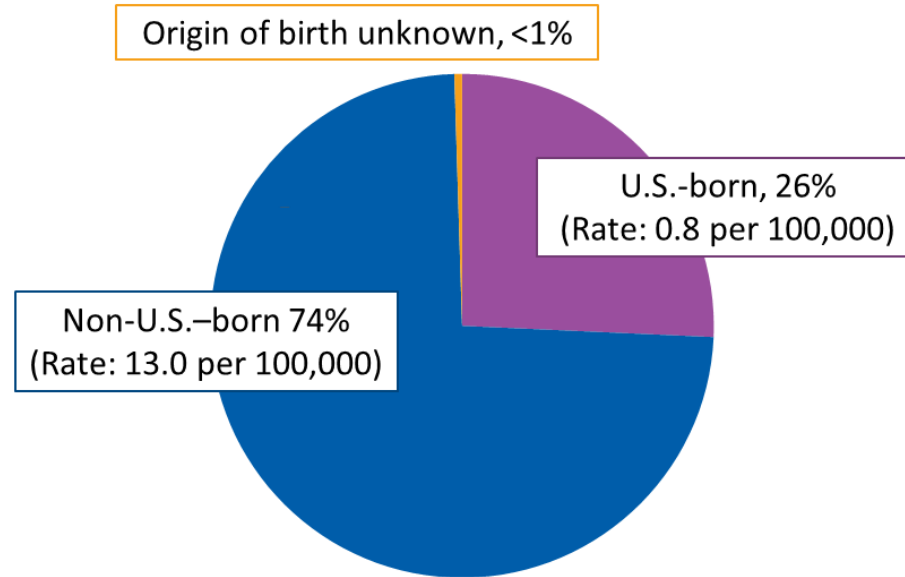
Individuals who are/have been incarcerated > risk of TB

Substance and excess alcohol use have been linked to TB outbreaks

Non-US-born TB rates compared to US-born TB rates=16 x higher



TB Incidence Rates and Percentages by Origin of Birth,*
United States, 2022 (N=8,331)



*Persons born in the United States, certain U.S. territories, or elsewhere to at least one U.S. citizen parent are categorized as U.S.-born. All other persons are categorized as non-U.S.-born.

Individuals
who are Non-
US-born are
at higher risk
than US-born

CA state guidelines
focus TB screening of
Non-US born
individuals





California Adult Tuberculosis Risk Assessment (>18 years old)



Despite being preventable, tuberculosis (TB) disease continues to cause significant suffering and death in the state of California. Even with modern treatments, more than [1 in 6 Californians with TB die](https://www.cdc.gov/tbca/data) ([bit.ly/cdc_tbca_data](https://www.cdc.gov/tbca/data)). TB is also a health disparity in California, with a disproportionate impact on people born outside the United States. **Identifying and treating persons with latent TB infection (LTBI) is the most promising tool to prevent TB disease.**

- Use this tool to identify asymptomatic adults for LTBI testing.
- Do not treat for LTBI until active TB disease has been excluded.
- A negative tuberculin skin test or interferon gamma release assay does not rule out active TB disease.

If a patient has symptoms of TB disease, including cough (for more than 2 weeks), fevers, night sweats, unexplained weight loss, or an abnormal chest x-ray consistent with TB disease, they should undergo further workup. **Contact your [local TB control program](https://www.ctca.org/locations.html) (<https://www.ctca.org/locations.html>) if there is suspicion for active TB disease.**

LTBI testing is recommended if any of the boxes below are checked.

Only repeat TB testing if there is a new risk factor since last screening

- ☐ **Birth, travel, or residence** for at least 1 month, or frequent border crossing in a country with an elevated TB rate¹

Interferon Gamma Release Assay (IGRA) is preferred over Tuberculin Skin Test (TST), especially for non-U.S.-born persons

- ☐ **Immunosuppression**, current or planned

HIV infection, organ transplant recipient, treated with biologic agents including TNF-alpha antagonist (e.g., infliximab, adalimumab, etanercept, others), steroids (equivalent of prednisone ≥ 15 mg/day for ≥ 1 month) or other immunosuppressive medication

- ☐ **Close contact** to someone with infectious TB disease during lifetime

- ☐ **Homelessness or incarceration**, current or past

Persons experiencing homelessness or residing in high-risk congregate settings including homeless shelter or correctional facility during lifetime

Treat for LTBI if LTBI test result is positive and active TB disease is excluded.

- ☐ **None**; no TB testing is indicated at this time.

Provider: _____

Assessment Date: _____

Patient Name: _____

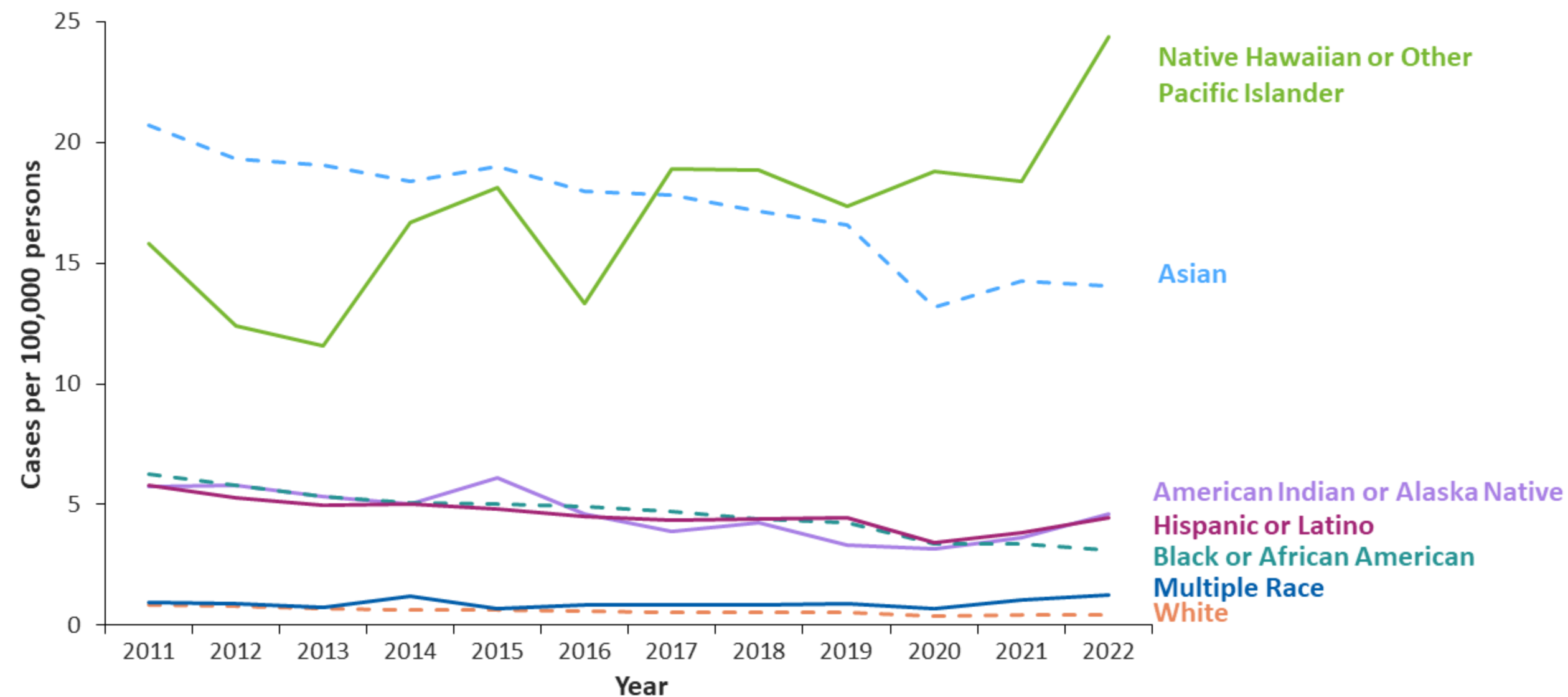
Date of Birth: _____

(Place sticker here if applicable)

TB rates and
outcomes in
the U.S. differ
for individuals
in different
racial and
ethnic groups

- US-born White people have lowest TB rates
 - Non-US-born Asian people have high TB rates
 - An analysis of national TB surveillance data 2003-2019 Compared to US-born White people
 - US-born Black, Hispanic, and Native American people with TB > risk of
 - Death
 - Treatment discontinuation
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TB Incidence Rates by Race/Ethnicity,* United States, 2011–2022



*Persons who identified as Hispanic or Latino were categorized as "Hispanic," regardless of self-reported race. Persons who did not identify as Hispanic or Latino were categorized by self-reported race; if more than one race was reported, the person was categorized as "Multiple race."

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 - Race and ethnicity is a social construct: differential distribution of TB risks

- Socioeconomic status (SES)
 - CA collects educational attainment for individuals with TB
- Factors that contribute to > risk of chronic conditions
 - Diabetes mellitus
 - Immune suppression
 - Kidney disease
- Access to care
- Other factors

Public health
interventions
in communities
with
individuals at
risk of TB

- Earlier TB diagnosis
 - Rapid evaluation of close contacts to individuals with TB
 - Build awareness of TB among individuals and providers
 - TB prevention activities
 - Risk assessment
 - Testing
 - Treatment
 - Cross program work
 - Address chronic health conditions together with TB
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CA regulatory codes support the collection, analysis and use of sexual orientation, gender identity, race/ethnicity data



- Understand the extent of health disparities experienced by
 - LGBTQ+ people
 - Individuals of racial/ethnic groups
- Improve government programs for people in need of care and assistance

SOGI=sexual orientation and gender identity
Assembly Bill 959, Senate Bill 957, AB1797

Gender Identity

- A greater percent of individuals with TB are men, compared to women
 - Men are at higher risk of TB than women
 - Sex assigned at birth is a risk for TB
 - Don't know if this is a disparity based on biology (e.g. hormonal influence) or behavior (e.g. men are more likely to smoke tobacco, which is a risk for TB), or a combination
- Knowing how someone identifies their gender is important to better understand a potential TB risk disparity
 - We currently don't collect these and that is the focus of our training



Sexual orientation

- Little data about the impact of sexual orientation on TB risk
- For some infectious diseases, e.g. HIV, syphilis, men who have sex with men (MSM) are at higher risk than those who identify with other sexual orientations
- Overlapping risks
 - The population of individuals who identify as MSM has a greater rate of HIV positivity and
 - HIV is a medical risk for TB
- Knowing how someone identifies their sexual orientation is important to better understand a potential TB risk disparity





Rationale for accurate data collection

- You are the face of public health for the client
- Some of the data you may collect are directly and urgently needed for appropriate TB care (e.g. medical questions)
- The data you will be collecting may ultimately improve the health of future clients- through better TB prevention, detection and treatment approaches