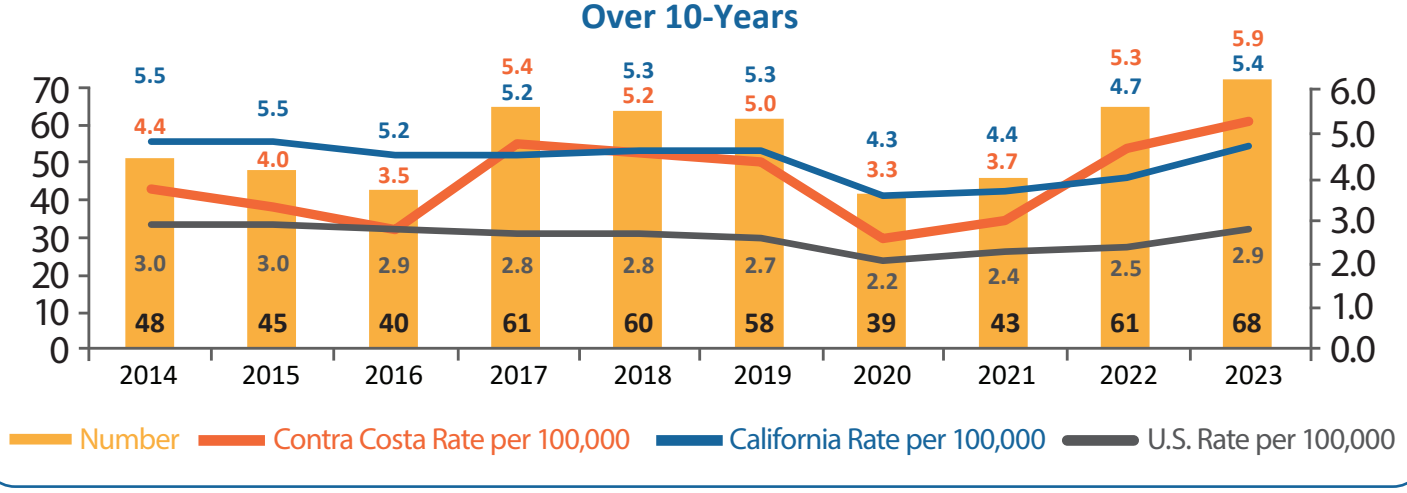
# TUBERCULOSIS *in* Contra Costa County 2023

## Contra Costa County Tuberculosis Cases and Case Rates Over 10-Years




Contra Costa County saw an 11.5% increase in persons diagnosed with active Tuberculosis (TB ) in 2023 compared to 2022. Similar trends were seen at the State and Federal levels. Although there were decreases during the COVID-19 pandemic, likely due to restricted immigration and disruption of healthcare systems, rates and case numbers are now approaching year 2008 levels. Consequently, we are falling far short of TB elimination goals.

Our county continues to have moderate to high rates of TB as we have more than double the national average and rank 9th in the state for TB case counts. It reflects the international composition of Contra Costa County as rates continue to be higher among individuals born in countries with a moderate to high burden of TB disease (all countries, excluding the United States, Canada, Western/ Northern Europe, Australia, and New Zealand).

TB in Contra Costa County continues to be an indicator of health and economic disparities and disproportionately impacts our elderly, Asian, Black and Hispanic communities. Additionally, based on the Healthy Places Index*, high-risk communities with demonstrated disparities in healthcare access continue to bear a significant burden of TB disease. Over two-thirds of TB cases come from the two lowest HPI communities.

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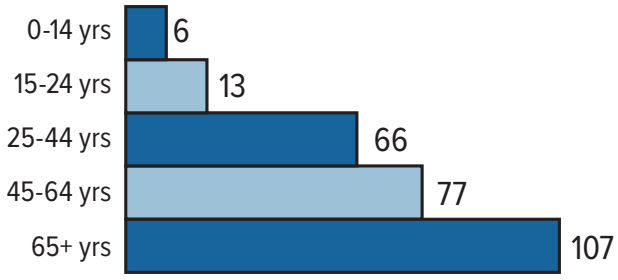
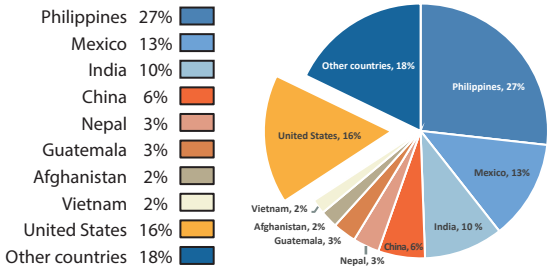
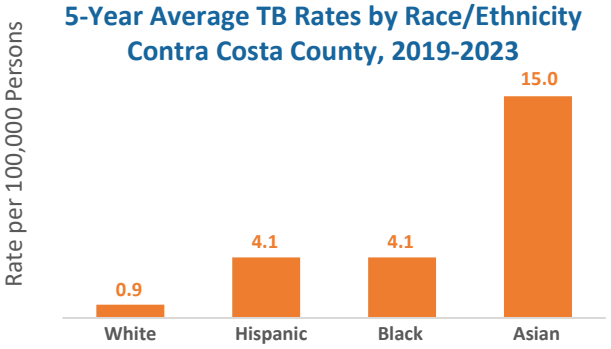
### Age Distribution of Persons with TB Disease 2019-2023




### Country of Birth for Persons with TB Disease Contra Costa County, 2019-2023

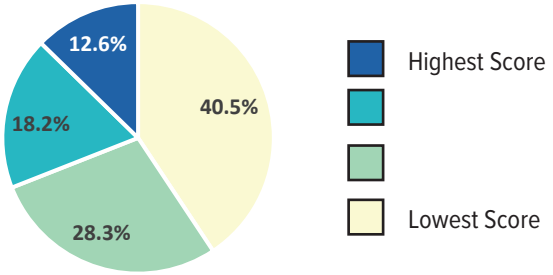


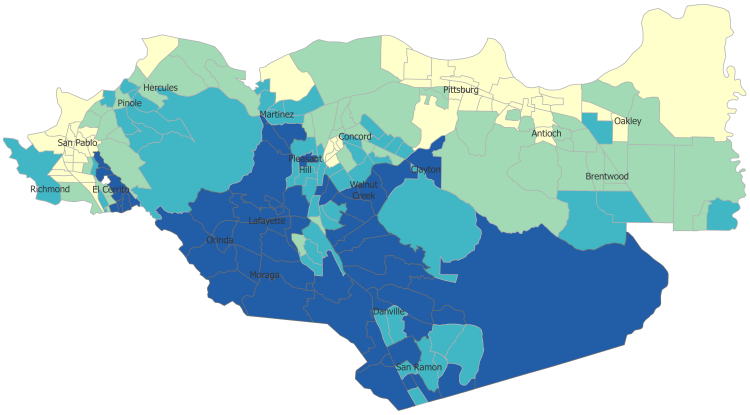

### 5-Year Average TB Rates by Race/Ethnicity Contra Costa County, 2019-2023



# Healthy Places Index for Contra Costa County

**Percent of Persons with TB Living in Each Area, 2019-2023**




**The Healthy Places Index combines 25 community characteristics, like access to healthcare, housing, education, and more, into a single indexed HPI score. The healthier a community, the higher the HPI score. In Contra Costa County, over the five-year period 2019 to 2023, four in 10 persons with TB disease lived in areas with the least healthy community conditions.*

# What Can Contra Costa Providers do to Control TB disease?

In April, 2023, in response to the rise in TB disease, the United States Preventive Services Task Force updated their recommendations to screen for TB infection in all asymptomatic adults 18 years or older at risk of exposure. Although not a novel or new recommendation, it illustrates that key to TB prevention, is finding and treating Latent TB Infection (LTBI). Contra Costa providers play an immensely important role in TB prevention and must continue to THINK TB if we want to make progress towards TB elimination.

We have more options to treat LTBI with the 4-month daily Rifampin and 12 -week weekly high-dose Isoniazid/Rifapentine regimens (when drug supply allows). If you have a patient, regardless of age, who has risk factors for exposure, make sure to evaluate them for LTBI. If diagnosed with LTBI, offer treatment.

TB Client Services is here to help so reach out if you need assistance.

| Regimen | Duration | Dose and age group | Frequency | Total doses |
|---|---|---|---|---|
| **Isoniazid* and rifapentine† (3HP)** | 3 mos | **Adults and children aged ≥12 years**<br>Isoniazid:15 mg/kg rounded up to the nearest 50 or 100mg; 900 mg maximum<br>Rifapentine:<br>10-14.0 kg: 300mg<br>14.1-25.0 kg: 450mg<br>25.1-32.0 kg: 600mg<br>32.1-49.9 kg: 750mg<br>≥50 kg: 900 mg maximum<br>**Children aged 2-11 years**<br>Isoniazid*: 25mg/kg; 900 mg maximum<br>Rifapentine†: see above | Once Weekly | 12 |
| **Rifampin¶ ** (4R)** | 4 mos | **Adults:** 10 mg/kg | Daily | 120 |
| | | **Children aged >2 years:** Daily: 15-20 mg/kg | | |
| | | **Infants and children aged ≤ 2 years:** Daily 20-30 mg/kg | | |
| | | **Maximum dose:** 600 mg | | |

*Adapted from the Testing and Treatment of Latent Tuberculosis Infection in the United States, NSTC/NTCA Clinical Recommendations February 2021, Pg 14*

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USPSTF Clinician Summary of USPSTF Recommendation

# Screening for Latent Tuberculosis Infection in Adults

April 2023

## What does the USPSTF recommend?

B Grade

**For asymptomatic adults at increased risk of latent tuberculosis infection (LTBI):**
Screen for LTBI in populations at increased risk.
See "How to implement this recommendation" for additional information on adults at increased risk.

## To whom does this recommendation apply?

This recommendation applies to asymptomatic adults 18 years or older at increased risk for tuberculosis (TB). It does not apply to adults with symptoms of TB or to children and adolescents.

## What's new?

- This recommendation replaces and is consistent with the 2016 USPSTF recommendation on LTBI screening.
- In 2016, the USPSTF recommended screening for LTBI in populations at increased risk (B recommendation).

## How to implement this recommendation?

- **Populations at increased risk for LTBI,** based on increased prevalence of active disease and increased risk of exposure, include persons who were born in, or are former residents of, countries with high TB prevalence and persons who live in, or have lived in, high-risk congregate settings (eg, homeless shelters or correctional facilities).
- Clinicians can consult their local or state health departments for more information about populations at increased risk in their community, since local demographic patterns may vary across the US.
- Two types of screening tests for LTBI are currently available in the US: the tuberculin skin test (TST) and the interferon-gamma release assay (IGRA).
  - The TST requires trained personnel to administer intradermal purified protein derivative and interpret the response 48 to 72 hours later.
  - The IGRA requires a single venous blood sample that measures the CD4 T-cell response to specific Mycobacterium tuberculosis antigens and laboratory processing within 8 to 30 hours after collection.
  - Testing with IGRA may have advantages over TST for persons who have received a BCG vaccination, as IGRA does not cross-react with the vaccine, and for persons who may be unlikely to return for TST interpretation.
- The USPSTF found no evidence on the optimal frequency of screening for LTBI.
- In the absence of evidence, a reasonable approach is to repeat screening based on specific risk factors; screening frequency could range from 1-time only screening among persons at low risk for future TB exposure to annual screening among those who are at continued risk of exposure.
- Additional examinations, diagnostics, and tests (ie, medical history, physical examination, chest radiograph, and other laboratory tests) are essential to completing a diagnosis of LTBI.
- Current recommendations for the treatment of LTBI are available from the Centers for Disease Control and Prevention (CDC).

**Adapted from the U.S. Preventive Services Task Force (USPSTF) Recommendation Screening for Latent Tuberculosis Infection in Adults**



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