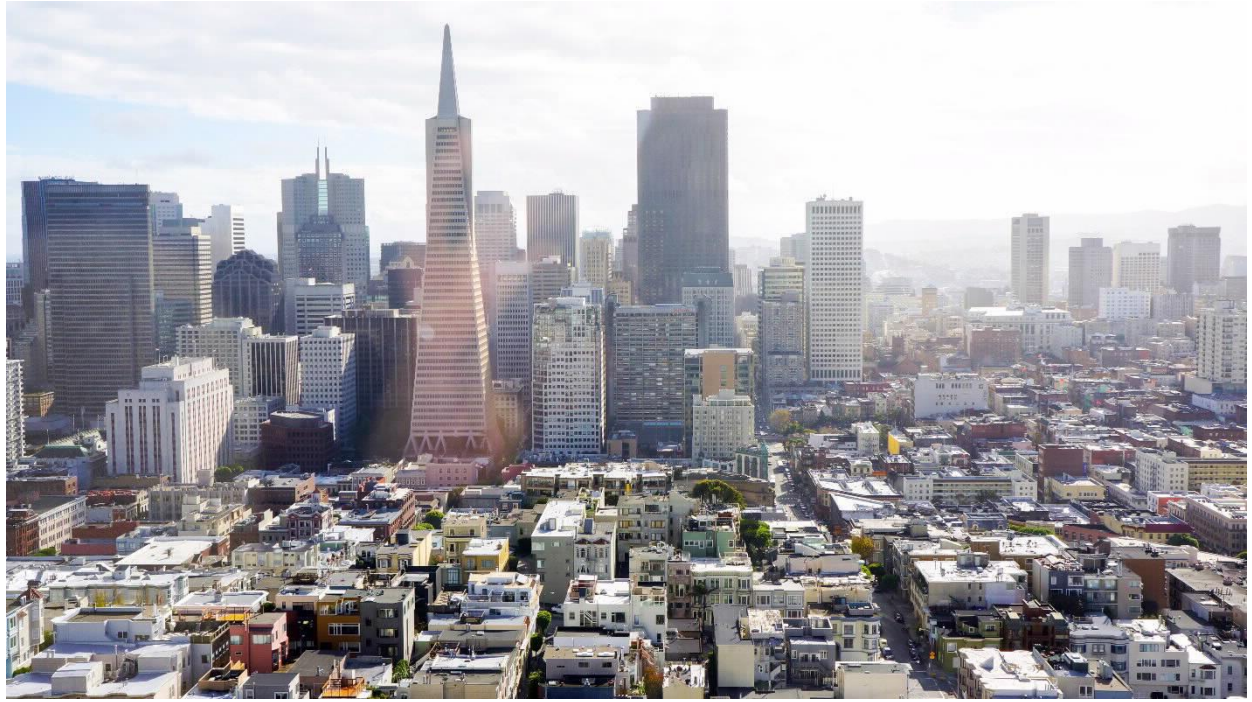

Tuberculosis Program Update

Prepared for San Francisco Health Commission

January 17, 2023

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San Francisco Department of Public Health

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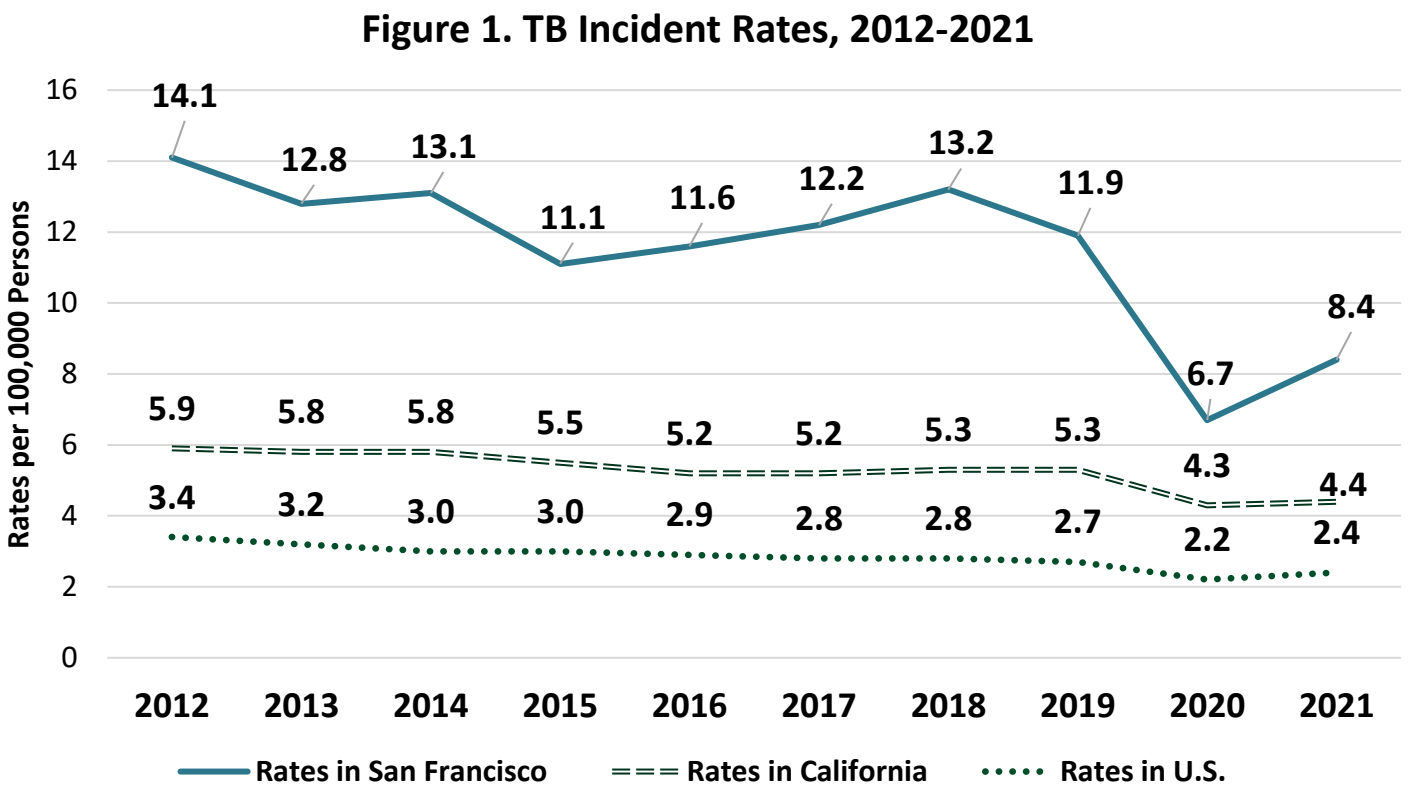
Active Tuberculosis cases, 2012 - 2021

- Over 100 cases in 8 of the past 10 years (2012 – 2021)
  - Smear positive resp (43.4%)
- 2022 YTD: 55 cases confirmed*
  - Smear positive resp (64.3%)
- Social distancing/masks?
- Decreased travel and immigration
- Under-diagnosis / delayed diagnosis



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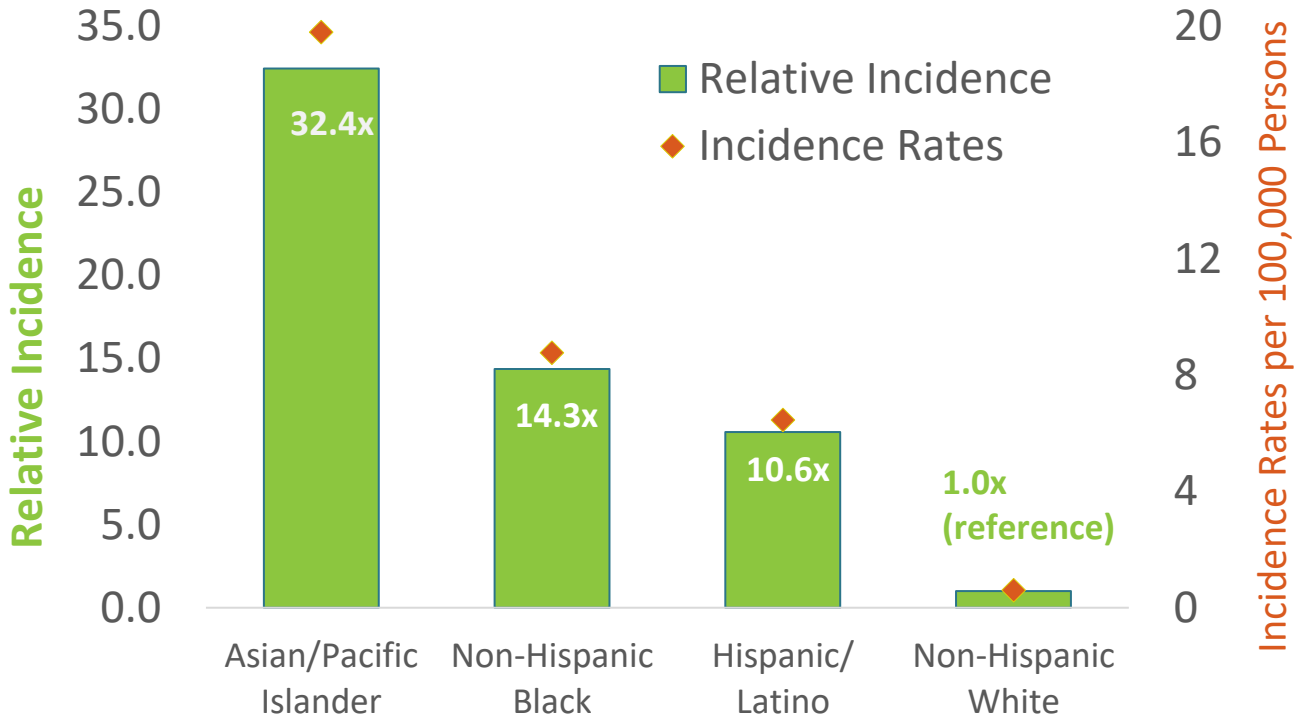
*It may take 2 or more months after diagnosis for a case to be confirmed

Racial/ethnic disparity in active TB Incidence

- TB disproportionately impact on non-white San Franciscans
- Asian / Pacific Islander residents of San Francisco have a TB incidence closer to Mexico's (24/100,000), than the US' (2.2/100,000)

Figure 2. TB Incidence by Race/Ethnicity, 2021



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Birth Country* of TB cases 2018 – 2022 YTD

Country	N (%)
China	153 (37.2%)
Philippines	53 (12.9%)
Vietnam	34 (8.3%)
India	12 (2.9%)
Burma	6 (1.5%)
Nepal	6 (1.5%)
Malaysia	5 (1.2%)

Country	N (%)
South Korea	4 (0.97%)
Mongolia	4 (0.97%)
Cambodia	3 (0.73%)
Japan	3 (0.73%)
Indonesia	2 (0.49%)
Taiwan	2 (0.49%)

Asia

Country	N (%)
Mexico	24 (5.8%)
El Salvador	8 (1.9%)
Guatemala	7 (1.7%)
Honduras	6 (1.5%)
Peru	5 (1.2)
Nicaragua	3 (0.73%)

Latin America

Country	N (%)
USA	51 (12.4%)
Ukraine	2 (0.49%)
Ethiopia	3 (0.73%)

Other

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*Countries-of-birth with fewer than 2 TB cases during 2018 - 2022 not shown

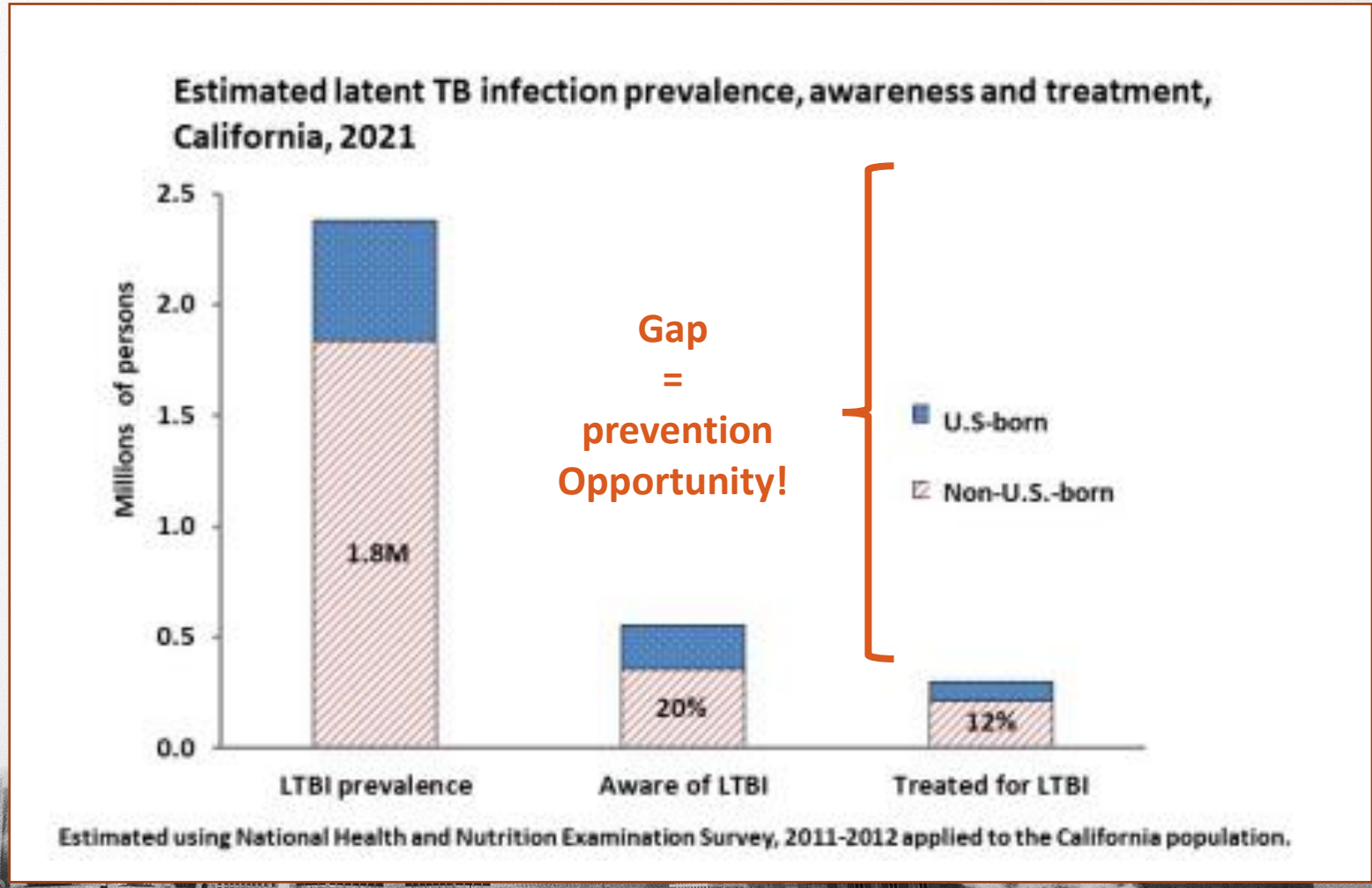
Race/Eth in US-born TB cases 2018 – 2022 YTD

Asian/Pacific Islander N=17 (34%)		Black/AA N=15 (30%)		Hispanic/Latino N=1 (2%)		Non-Hispanic White N=17 (34%)	
Chinese	n=12	Non-Hispanic Black	n=15	Mexican	n=1	European descendent	n=3
Vietnamese	n=1					Not specified	n=14
Asian Indian	n=1						
Middle Eastern	n=1						
Native Hawaiian	n=1						
Filipino	n=1						

Latent TB Infection: a prevention opportunity

- An estimated 13% of TB cases are due to recent transmission and a smaller number are among those with active TB disease already upon arrival in California.

- 87% cases of TB are due reactivation of latent infection which can live in your body for years – **this is preventable!**



Source: CDPH TB Control Branch TB Snapshot, 2021

Approach to TB prevention

Health Providers	• Develop expertise in diagnosing and treating TB/LTBI • Promote patient education about TB risk and prevention • Provide access and linkage to affordable TB testing and preventive treatment
Community Partners	• Increase awareness among people with TB exposure risk • Wellness education and linkage to care for prevention • Advocate for patient and community TB care needs
Congregate Care & Residential Settings	• Test for TB and educate about signs and symptoms of active TB • Promote preventive therapy whenever LTBI is diagnosed in staff or residents • Support ongoing linkage to care and facilitate LTBI treatment completion
Health Systems	• Develop quality measures around TB prevention care cascade • Optimize workflows for risk assessment, testing and treatment for TB/LTBI • Support rapid diagnosis and reporting of TB cases
TB Prevention and Control	• Rapidly diagnose and treat patients with active TB • Assure prompt evaluation and preventive therapy for those with LTBI • Support partners through education, referral, technical assistance among others

Health Providers

- Educational talks given to providers in the following health orgs:
  - SFHN clinics, BHS, UCSF, VA, Chinese Hospital, NEMS, SFCHC, HR360, One Medical
- Facilitate best practice sharing among community clinics (SFCCC Medical Directors)
- Publications and symposia regarding local clinical experience (supplemental materials)
- Clinical mentorship of Fellows, Residents, and Community Providers through clinical rotations and mini-fellowships (n=31 in 2022)
- Outreach/consultation to specific providers serving patients who would benefit most from prevention efforts based on referrals

Community Partners

- Newcomer's Health Program – Refugees, Ukrainian and Venezuelan arrivals (humanitarian parolees)

Educational materials, talks, outreach testing:

- Chinatown Community Development Center
- Mercy Housing
- Cannon Kip Senior Center

Congregate Care & Residential Sites

- Educational materials on website
  - Shelter Clients
- 166 TB screening referrals for shelter entrants and drug treatment programs in 2022
- SRO prevention outreach for education, testing, care linkage (8 buildings, over 500 rooms) in 2022

Health Systems

- 287 patients referred for consultation from multiple locations across San Francisco including UCSF, Kaiser, CPMC, Chinese Hospital, SF Health Network Hospitals and Clinics, SF Community Health Center, On Lok, MNHC, St. Anthony's, HealthRight 360 and more.
- Expanded access to interferon-gamma release assay (IGRA) testing for SF Health Network hospitals, primary care and specialty clinics
- Consultation regarding utilization of rapid diagnostics for MTB and support incorporation into order sets and workflows

TB Prevention and Control

- 470 TB cases from the 2017-2021 cohorts initiated on treatment for TB
- 327 Contacts to TB cases evaluated (2021 cohort)
- 170 people started on preventive treatment in 2021 for LTBI or high-risk contact to infectious TB cases
- 14 extended contact investigations at community sites including hospitals, SROs, schools, restaurants & grocery stores (2022 year-to-date)

TB Prevention and Control Section

Photo courtesy of Luc Marzano, CDC

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Thank you!

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