

Tuberculosis in Whatcom

Amy Harley, MD, MPH and Ann Lund, RN

12/2/25

Joint Whatcom County BOH/PHAB meeting

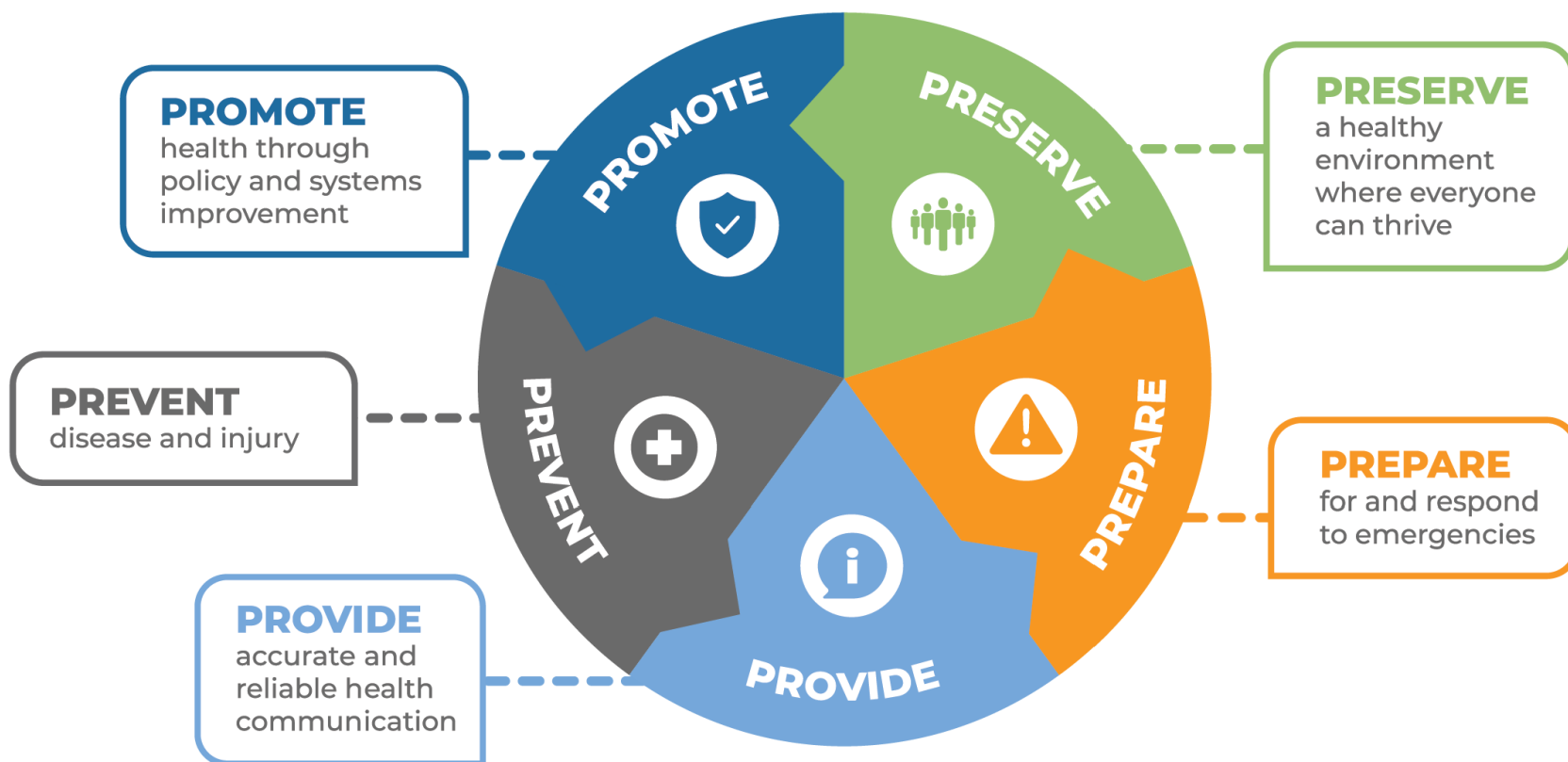


WHATCOM COUNTY
**HEALTH AND
COMMUNITY
SERVICES**



OUR PURPOSE:

We serve Whatcom County by
ADVANCING EQUITY & **PARTNERING WITH OUR COMMUNITY** to:



Ann Lund, RN and TB Warrior



“The true work of a TB nurse – to come alongside, to support and be present all along a journey”



Happy Retirement, Ann!
Thank you for your 18+ years of service!

Why Tuberculosis?



TB is a disease of public health importance

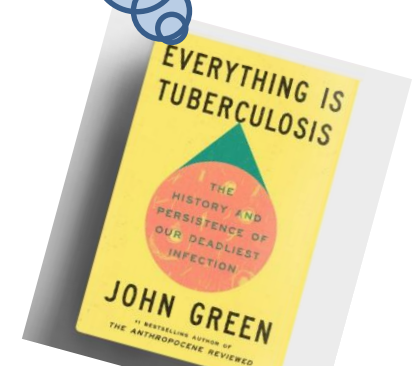
Remains one of the world's deadliest bacterial infections despite being preventable and curable since the 1950's

TB persists where systems leave people unsupported

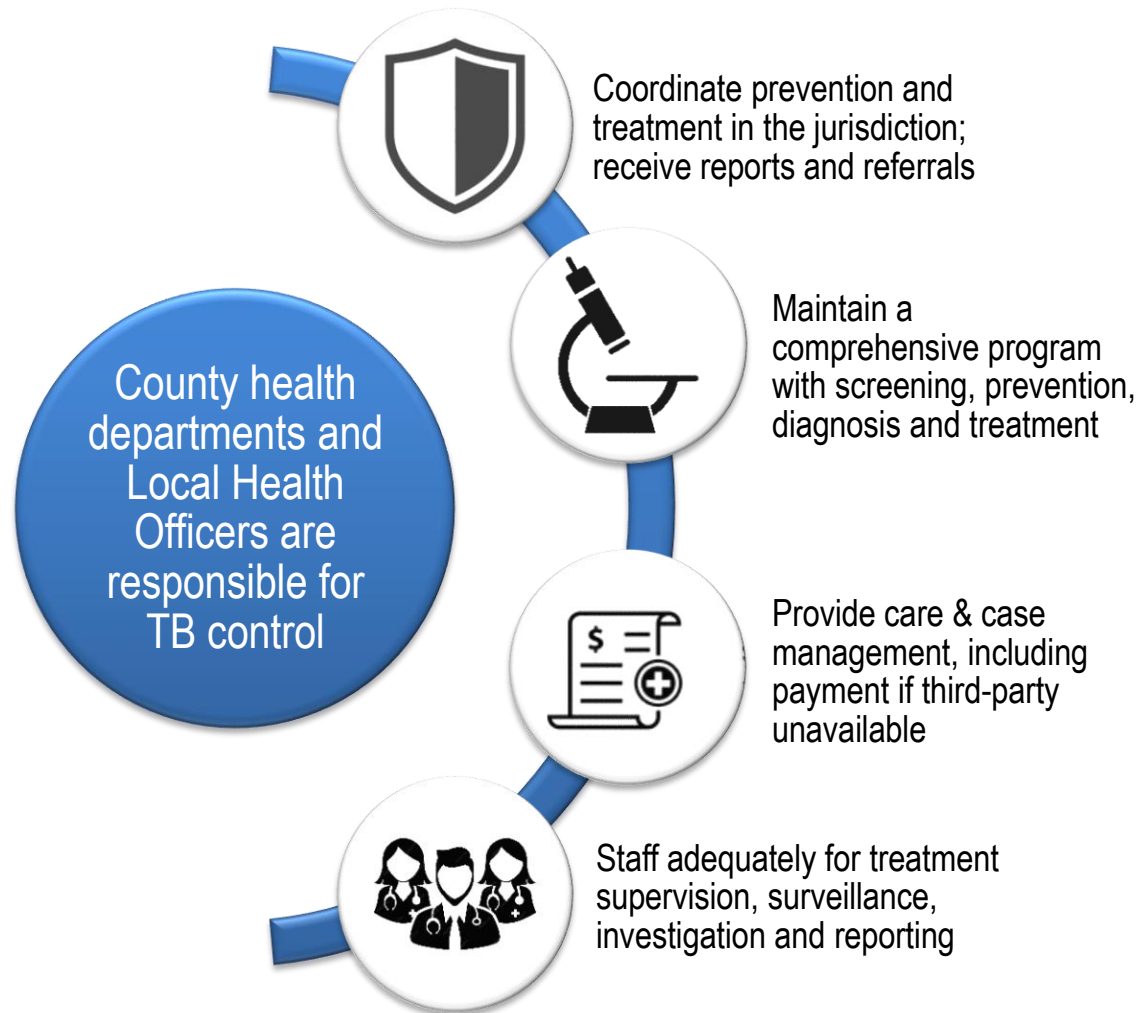
In WA, local health jurisdictions are responsible to manage TB under state standards. County legislators are *required* to budget for TB programs annually

"In a world where everyone can eat, and access healthcare, and be treated humanely, tuberculosis has no chance. Ultimately, we are the cause. We must also be the cure."

~John Green

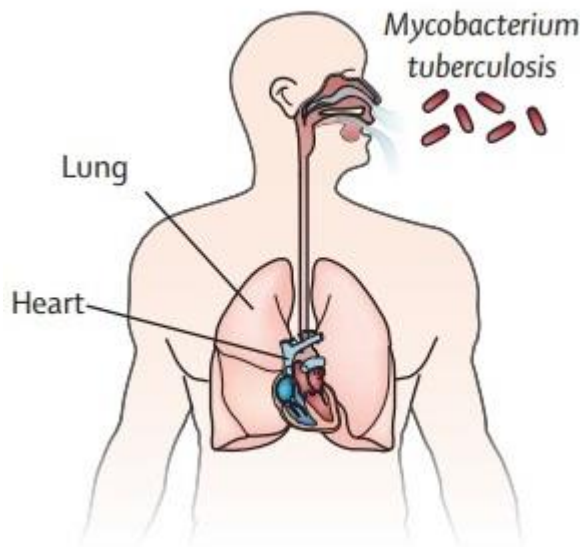


Legal requirements



Brief pathophysiology

TB bacteria spreads through the air



Anyone can get infected

- Higher exposures in crowded or high-incidence settings
- Generally requires hours of exposure in enclosed areas

After infection, TB may remain dormant for a while before causing illness

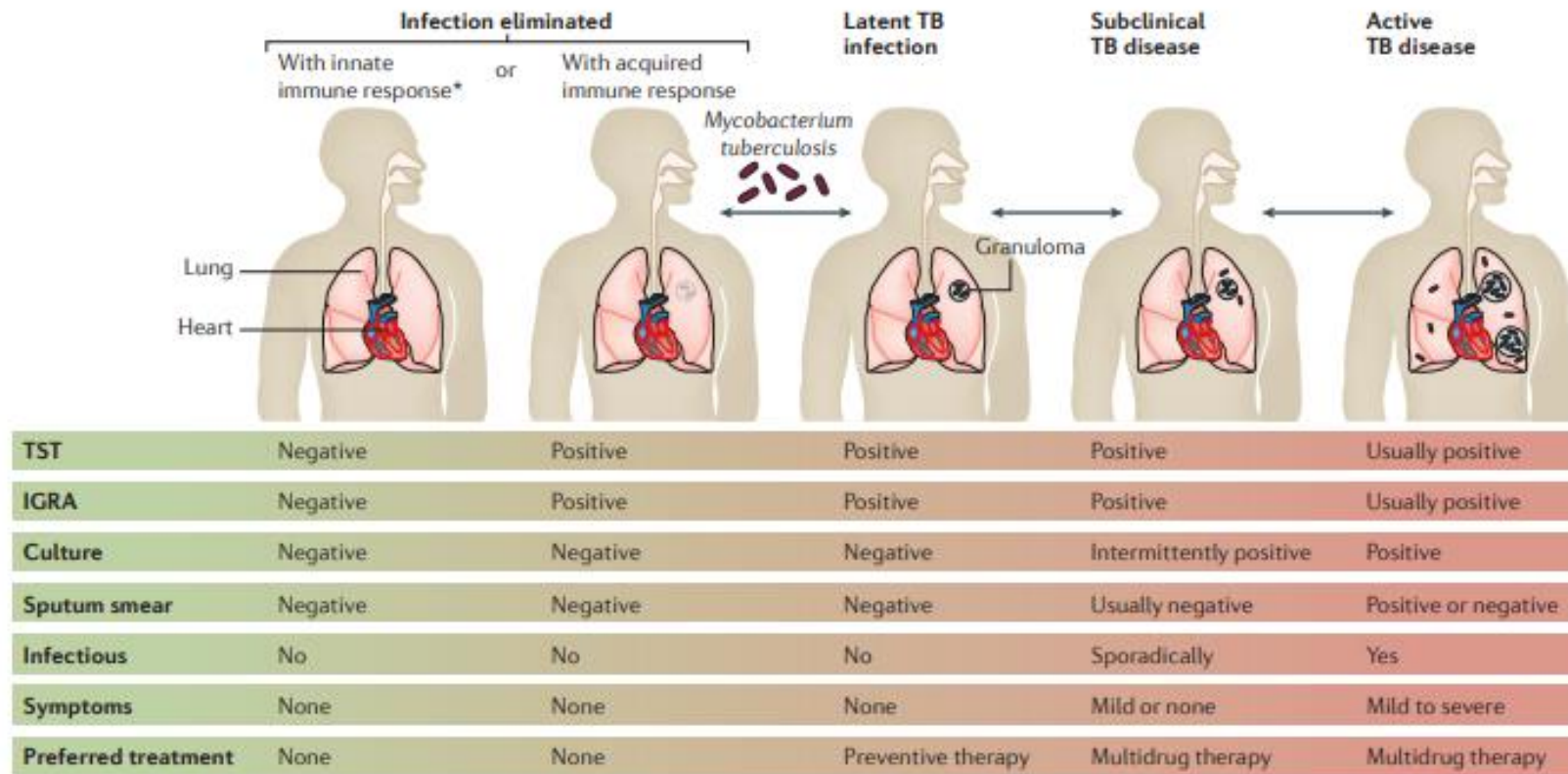
- Risk of becoming sick is highest in the first few years

Common symptoms of pulmonary TB include cough, fever, and weight loss – but not universal

- TB can infect any organ in the body

TB has a spectrum

From *Mycobacterium tuberculosis* infection to active disease



TB care is complex

Slow-growing bacteria with high risk of drug resistance

Requires multi-drug therapy and strict treatment completion with directly observed therapy

Long duration (6 month min, often 9-12 months)

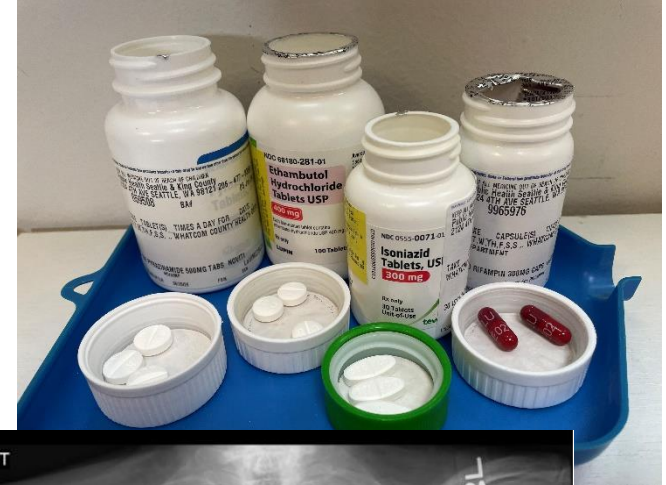
- Isolation at onset

Comorbidities, frailty and complications are common

- Must integrate with care for other conditions
- Can be disabling or deadly; fatality rate 12/100

Cultural, social and logistical needs need to be addressed

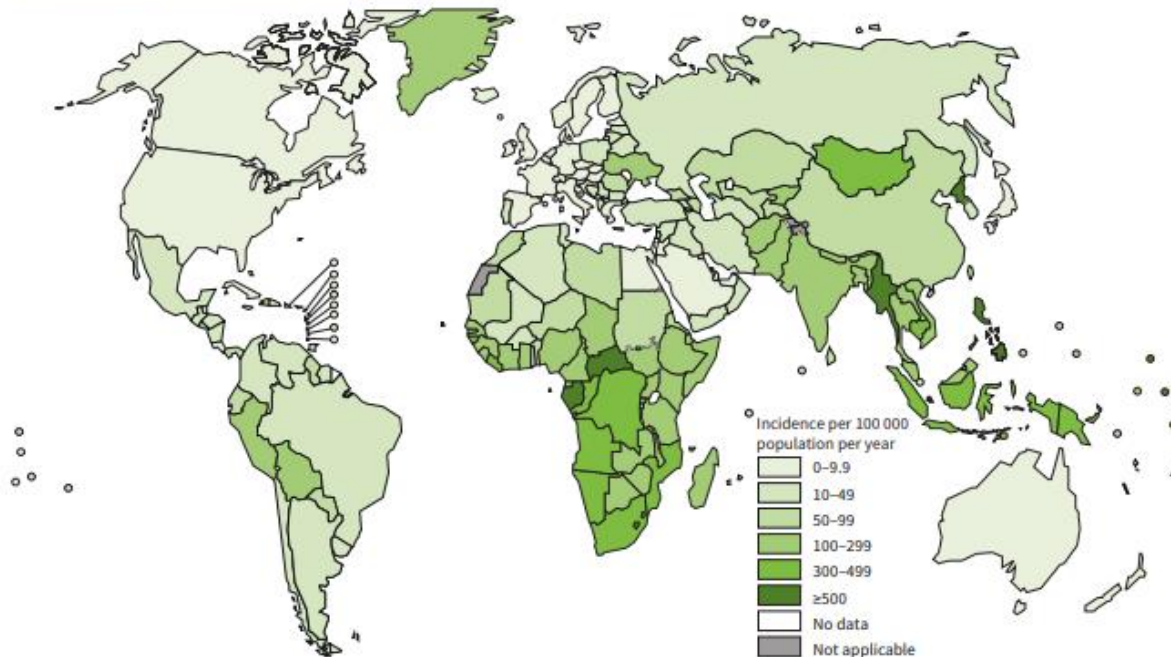
- Culturally appropriate, person-centered care
- Transportation, food, housing



Global TB rates

Rates vary widely, from
<10/100,000 to >500/100,000

Estimated TB incidence rates, 2023



TB is the world's top infectious killer and is present all over the world

Every year:
10 million people get TB
1.5 million die of TB

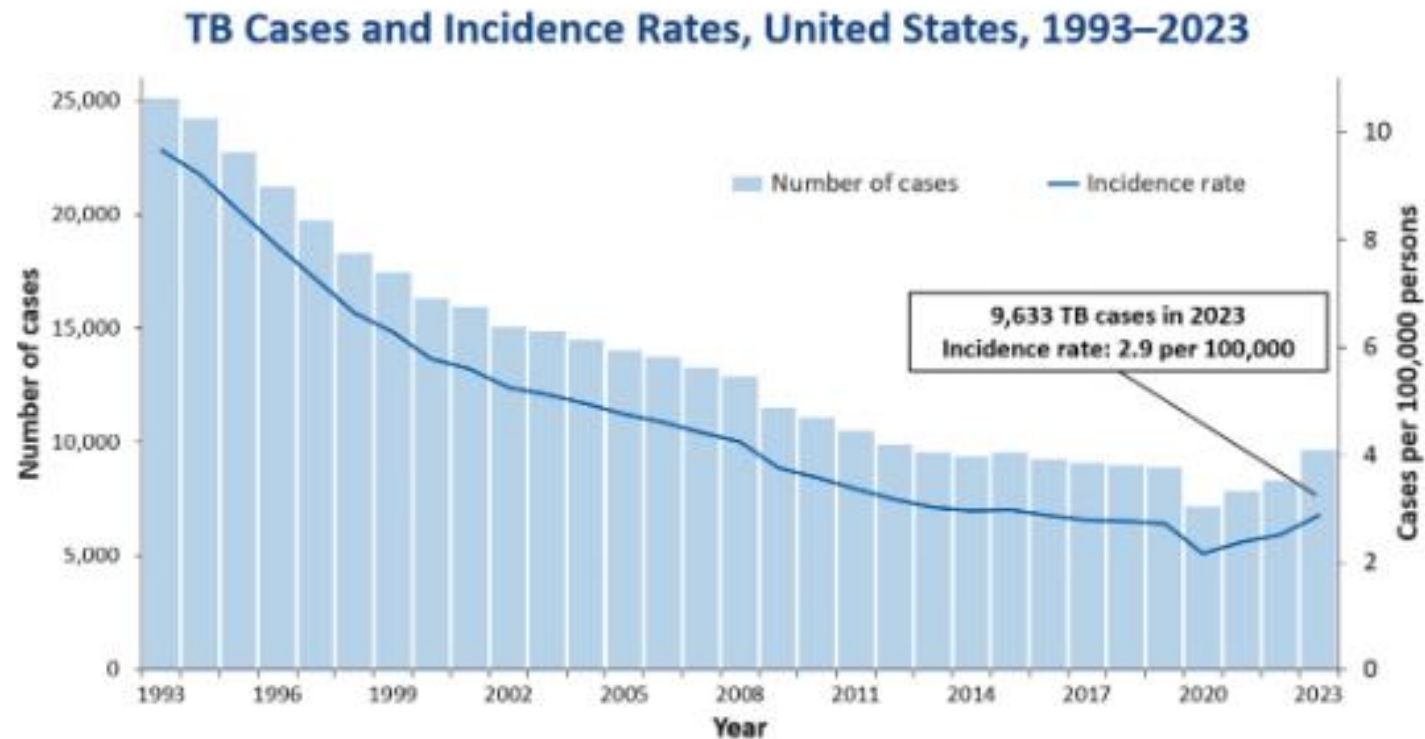
25% of the global population has TB infection =
2 billion people

National TB rates

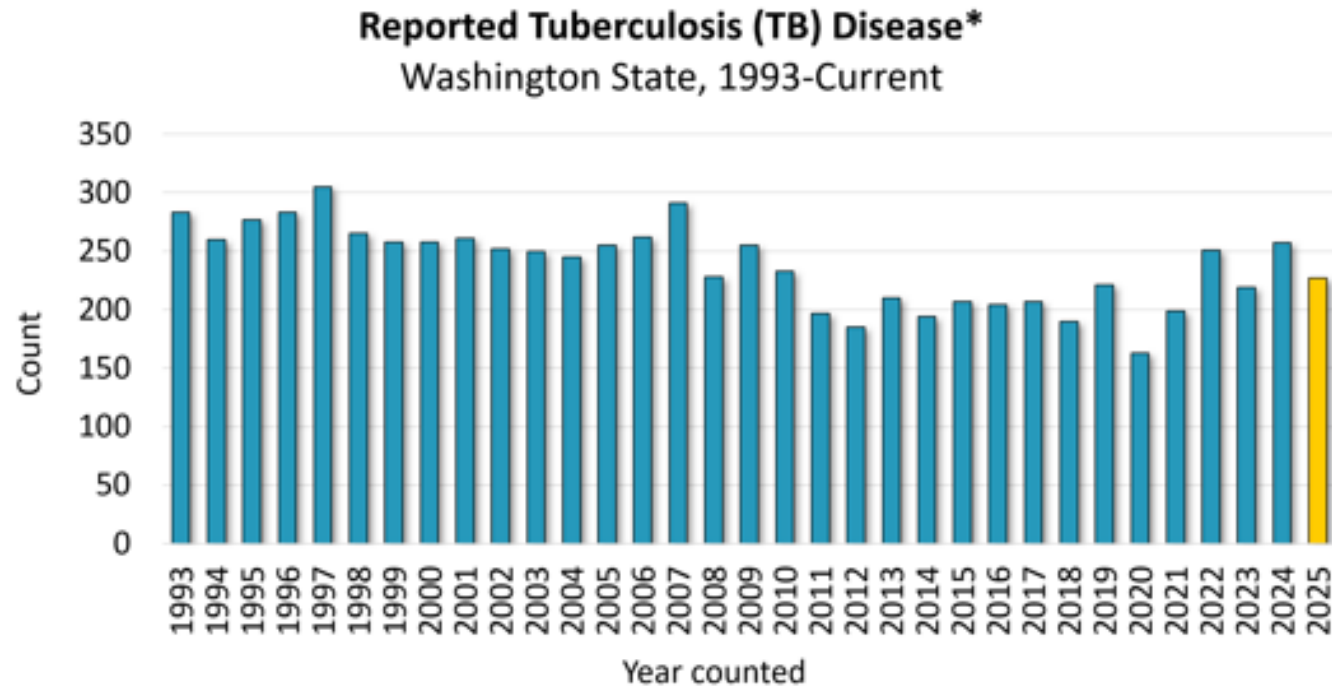


The U.S. has one of the lowest TB rates in the world

However, rates have *increased* 4 years in a row to above pre-pandemic levels



Washington state cases

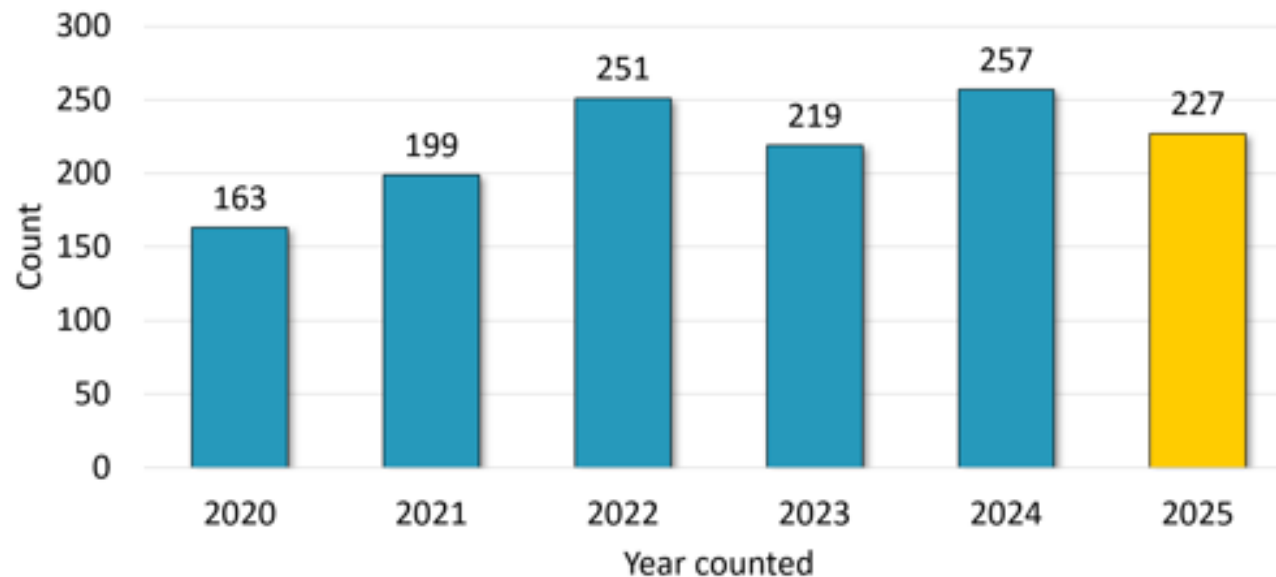


*By year counted

Washington State Department of Health

Washington state cases

Reported Tuberculosis (TB) Disease*
Washington State, 2020-Current



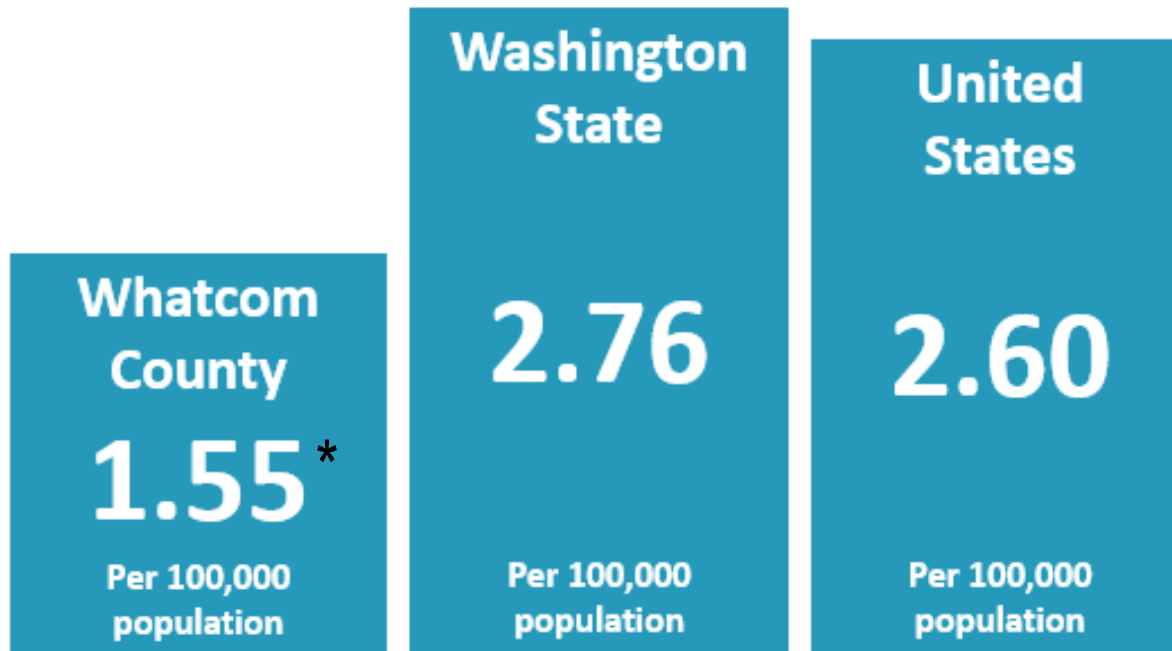
*By year counted

Washington State Department of Health

Comparative rates



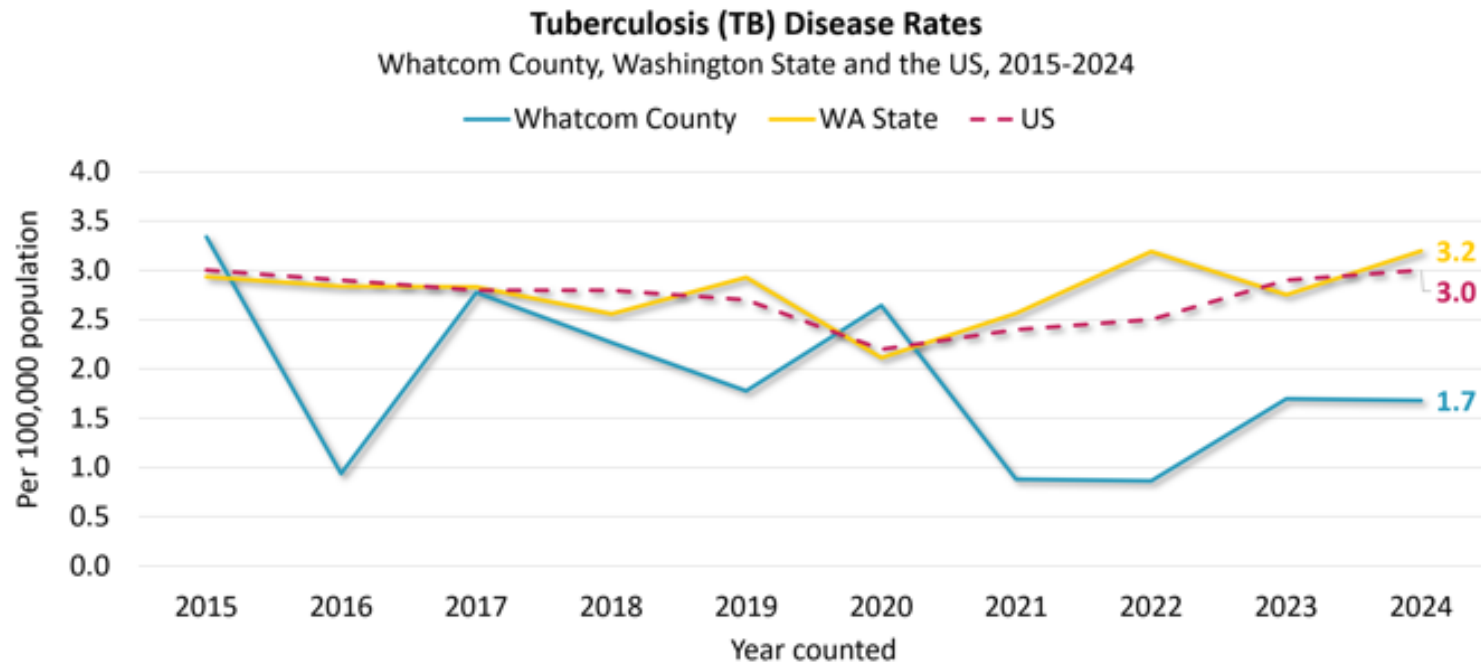
Average TB Disease Rates, 2020-2024 **(5-year)**



Washington State Department of Health

****Equivalent to a total count of 18 cases since 2020, (range 2-6 per year)***

Disease rates over time

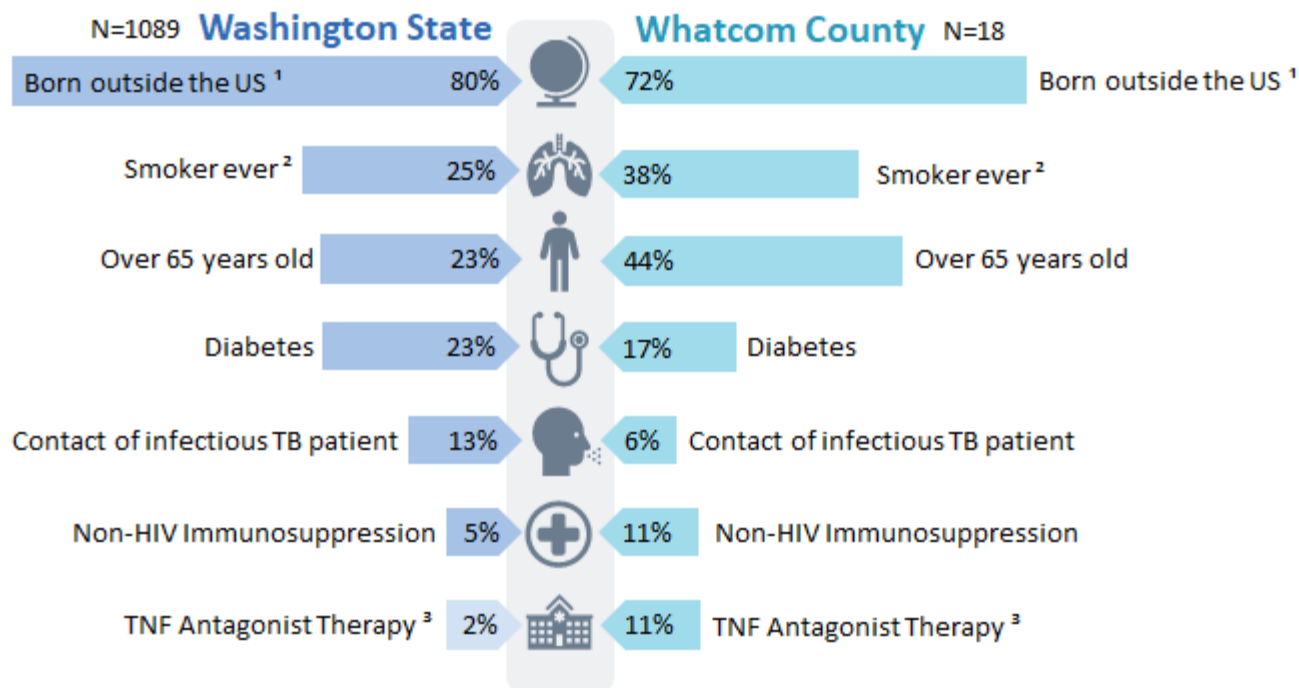


Washington State Department of Health

Risk factors for local TB cases



Top Risk Factors Among Persons with TB Disease, 2020-2024 (5-year)



Washington State Department of Health

TB program activities - 2025



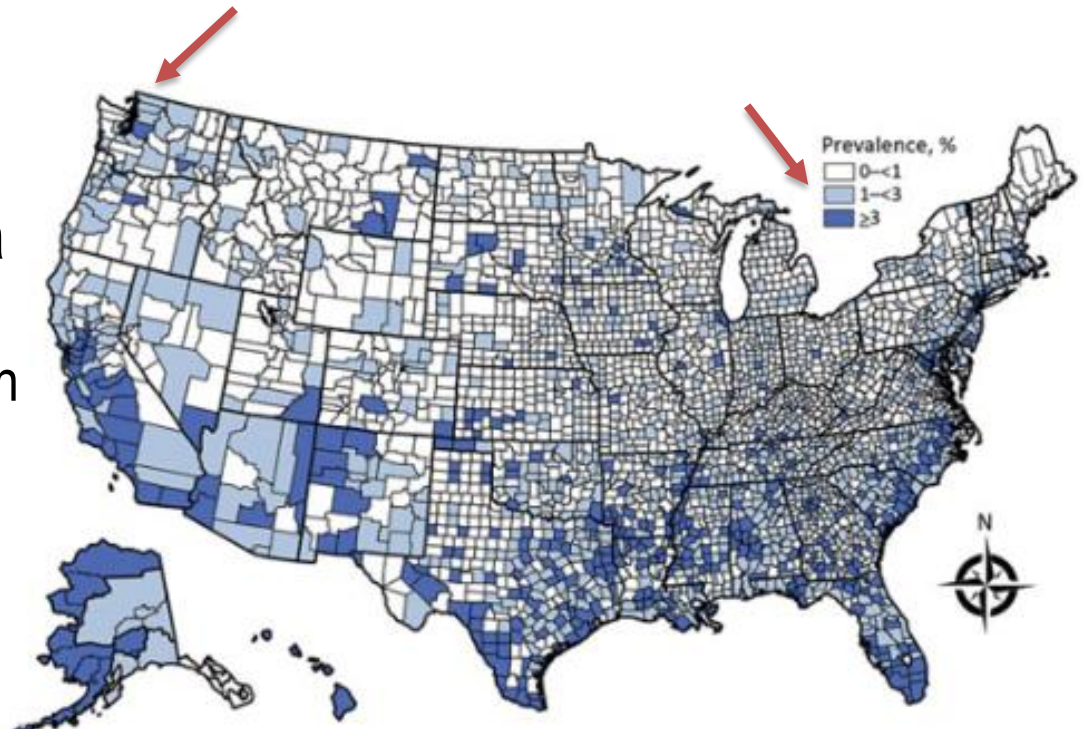
Type of activity	Number of cases	TB staff time investment
Active TB disease	<10	24 – 53 hr/wk x ~2 wks 12 – 26 hr/wk while on treatment
Contact investigation	21	10 hr/case
Rule out TB	10	8-12 hr/case
Consultations	134	1.5 – 4.5 hr/wk
Latent TB treatment	16	2.5 – 4 hr/case initially 1 – 2 hr/case while on treatment
Immigration evaluation follow-up	54	5 – 8 hr/case

TB infection is potential disease

Whatcom County TB infection prevalence 1-<3%

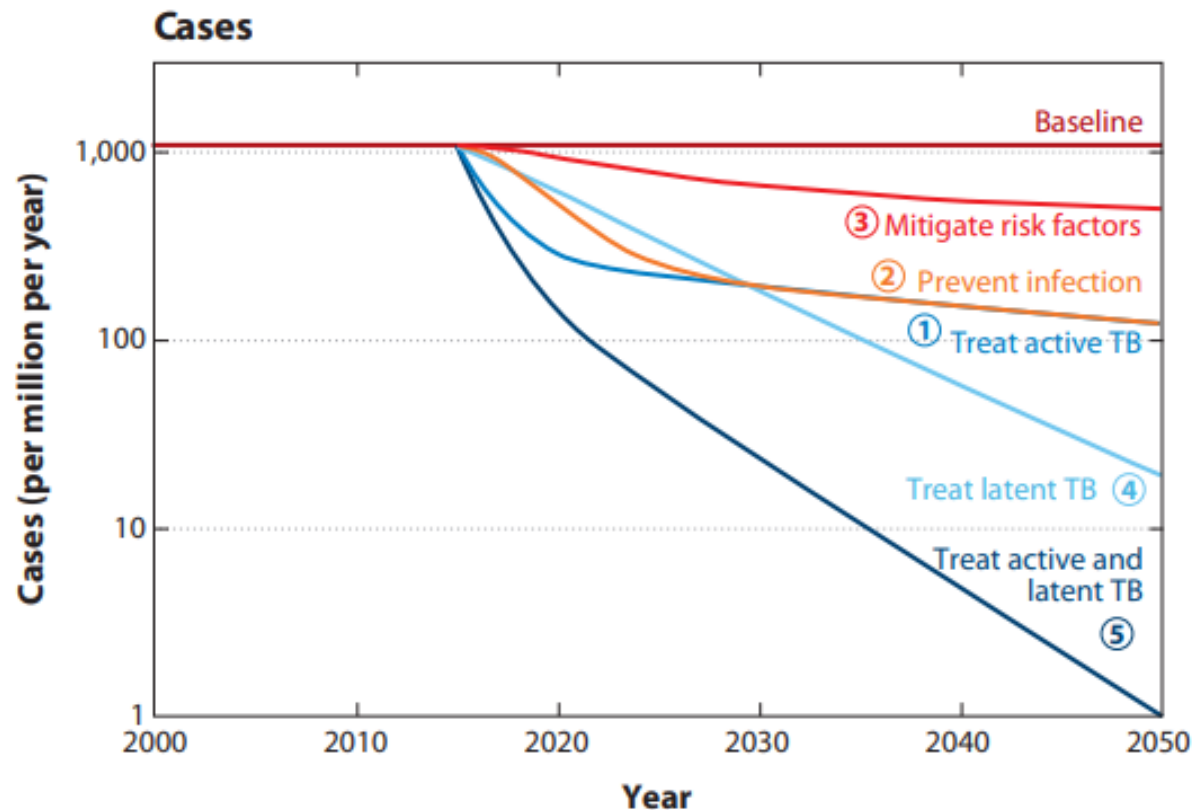
An estimated 2300-7000
Whatcom County residents
are infected with TB bacteria

- 5-10% of those infected will progress to active disease in their lifetime
- Risk varies substantially based on medical risk factors and age



How to eliminate TB?

Treating active disease is not sufficient



TB anywhere is TB everywhere



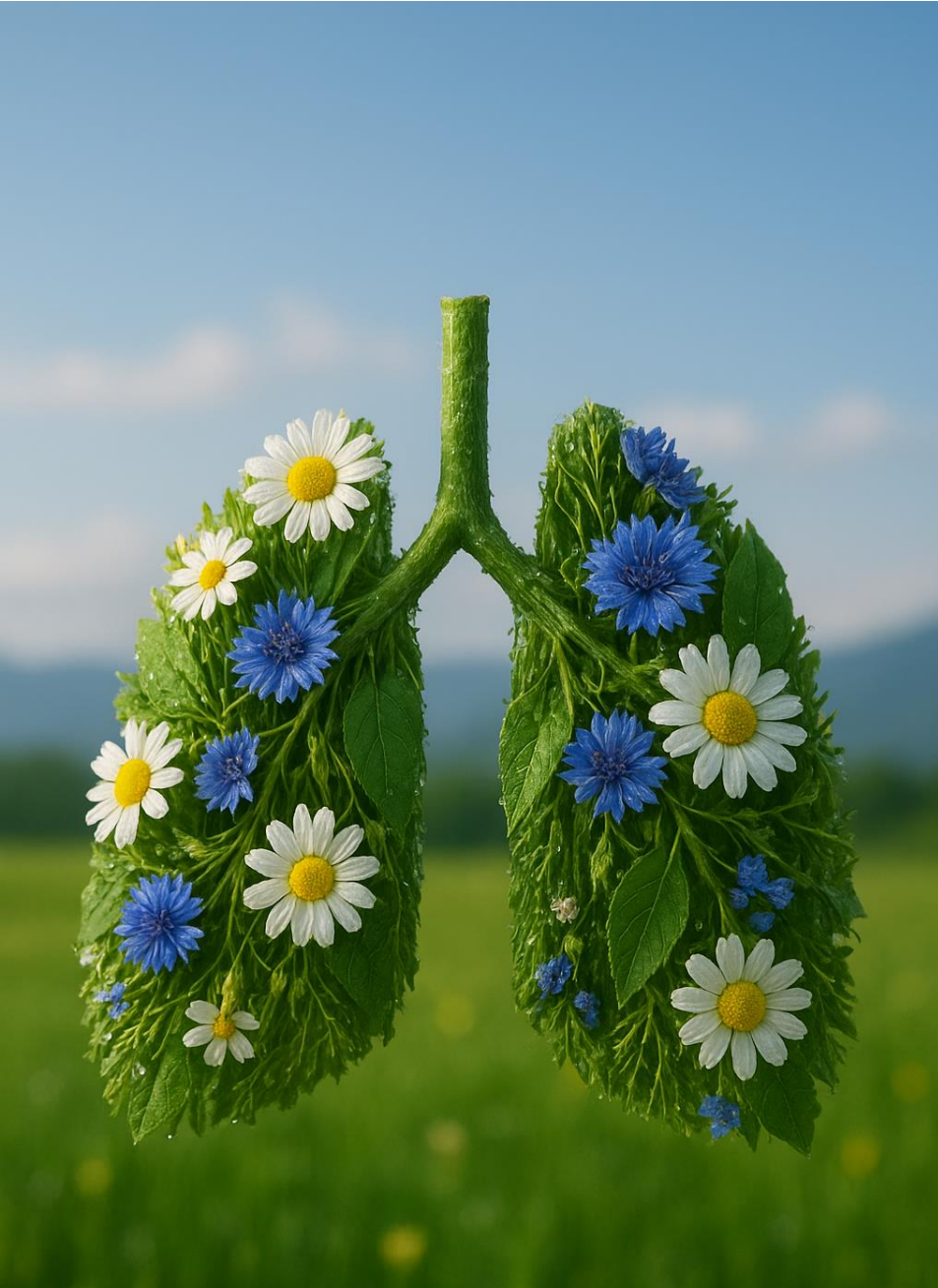
A generally healthy young professional with extensive international travel for work

An immigrant to the U.S. that was previously successfully treated for drug susceptible TB and years later developed recurrence with drug resistant TB

A older person with a severe rheumatologic condition that requires immunosuppressive therapy to control symptoms

A university student from a high TB incidence country, living in the U.S. for graduate school on a student visa

A medical provider who spends time annually volunteering in a clinic in a low-income country



We must imagine a world where people with TB receive humane and quality care wherever they are.”

Dr. Madhukar Pai



Thank you

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