



Eliminating Tuberculosis in Asian-American Communities

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Hep B United Summit

July 25, 2019

Overview

- **Brief Overview of TB**
- **CDC's TB Elimination Strategy**
- **Current Communication and Education Activities and Resources**
- **Upcoming Latent TB Infection Campaign and Community Engagement Network**



Background

What is the #1 Infectious Disease Killer in the World?

- A. HIV
- B. Hep B
- C. TB
- D. Ebola

What is the #1 Infectious Disease Killer in the World?

A. HIV

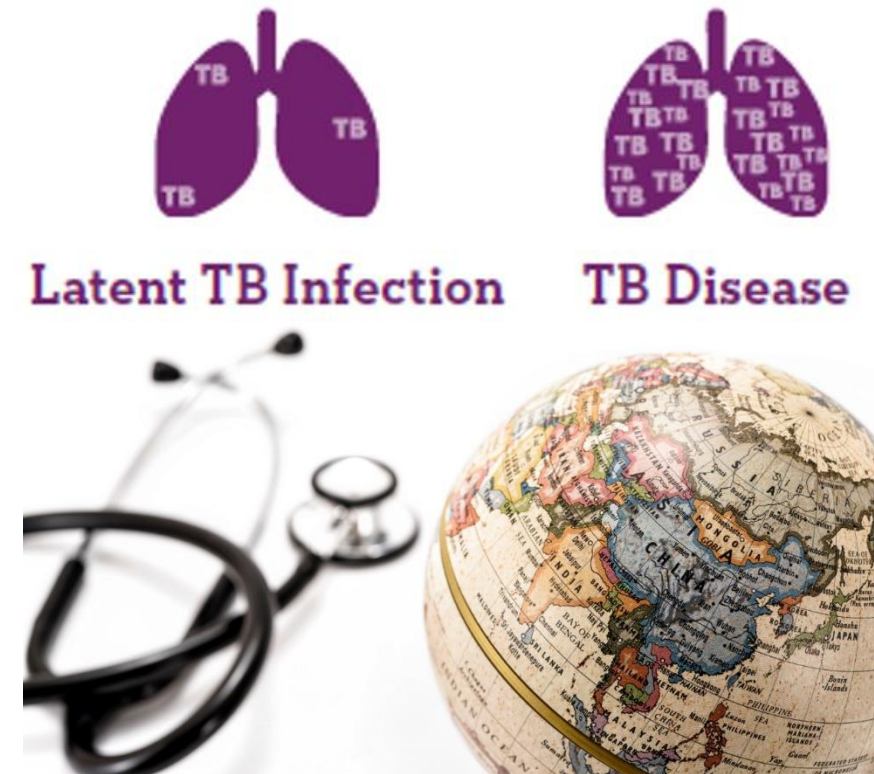
B. Hep B

C. TB

D. Ebola

TB: The world's deadliest infectious disease

- 1/4 of the world's population is infected with TB.
- In 2017, 10.0 million people around the world became sick with TB disease. There were 1.3 million TB-related deaths worldwide.
- Up to 2/3 of people with TB disease will die without treatment.
- Even after treatment, there can be long-term health consequences.
- People with untreated TB disease can infect 4 or more other people through close contact.



Are TB cases in the U.S increasing or decreasing?

A. Increasing

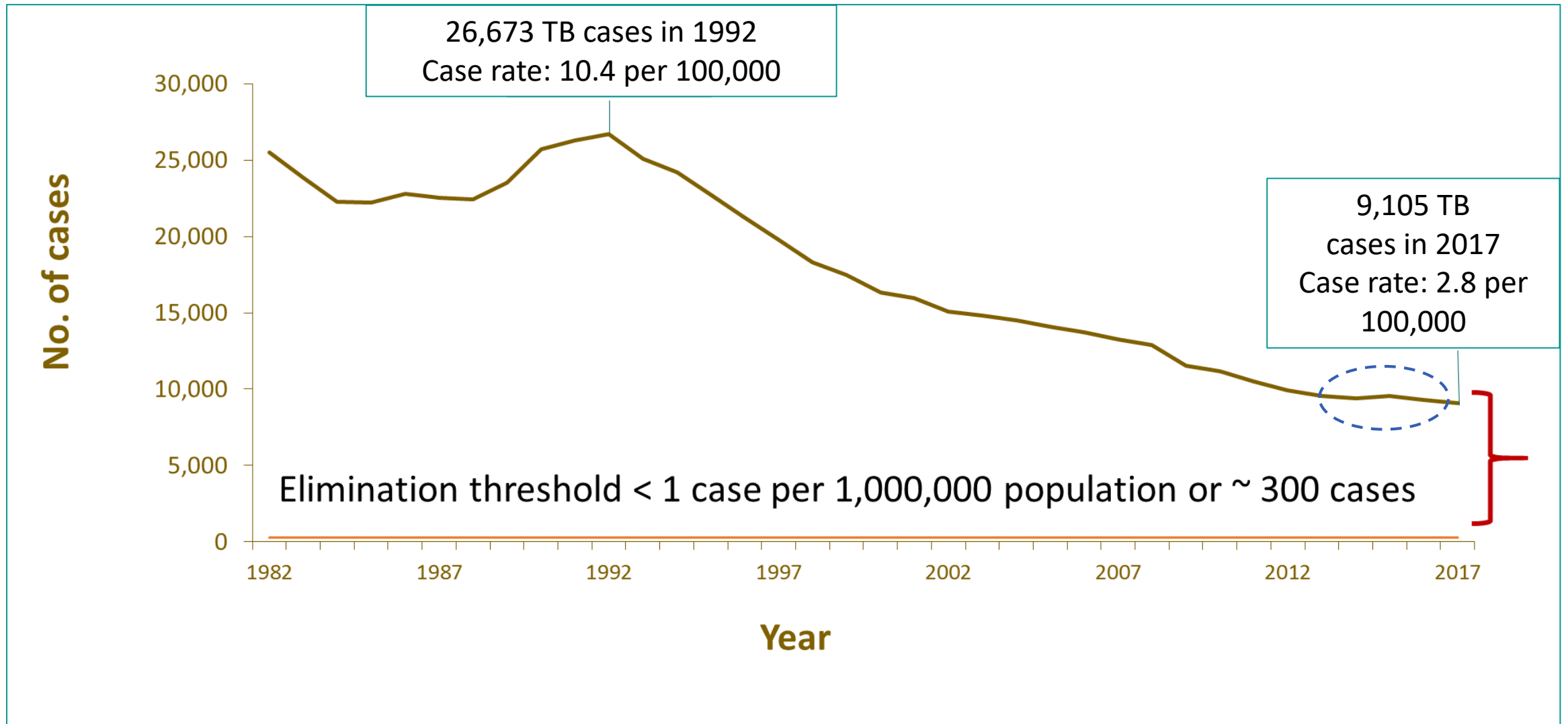
B. Decreasing

Are TB cases in the U.S increasing or decreasing?

A. Increasing

B. Decreasing

Highly successful public health efforts have led to the reduction of U.S. TB cases over the past two decades



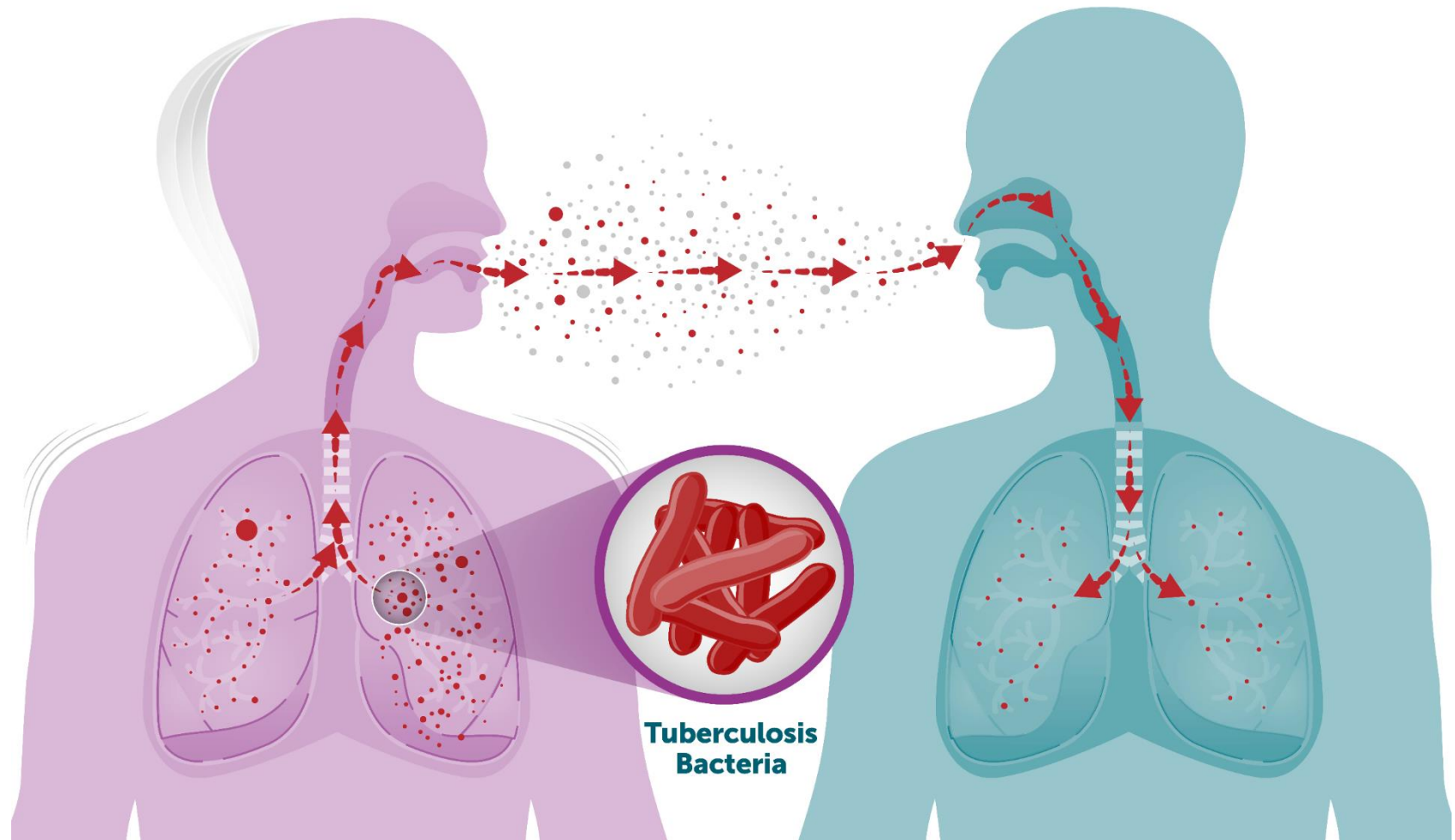
Tuberculosis

- Tuberculosis (TB) is caused by a bacterium called *Mycobacterium tuberculosis*.



TB Transmission

- TB is spread through the air from one person to another when a person with TB disease coughs, speaks, or sings.
- People nearby may breathe in these bacteria and become infected.



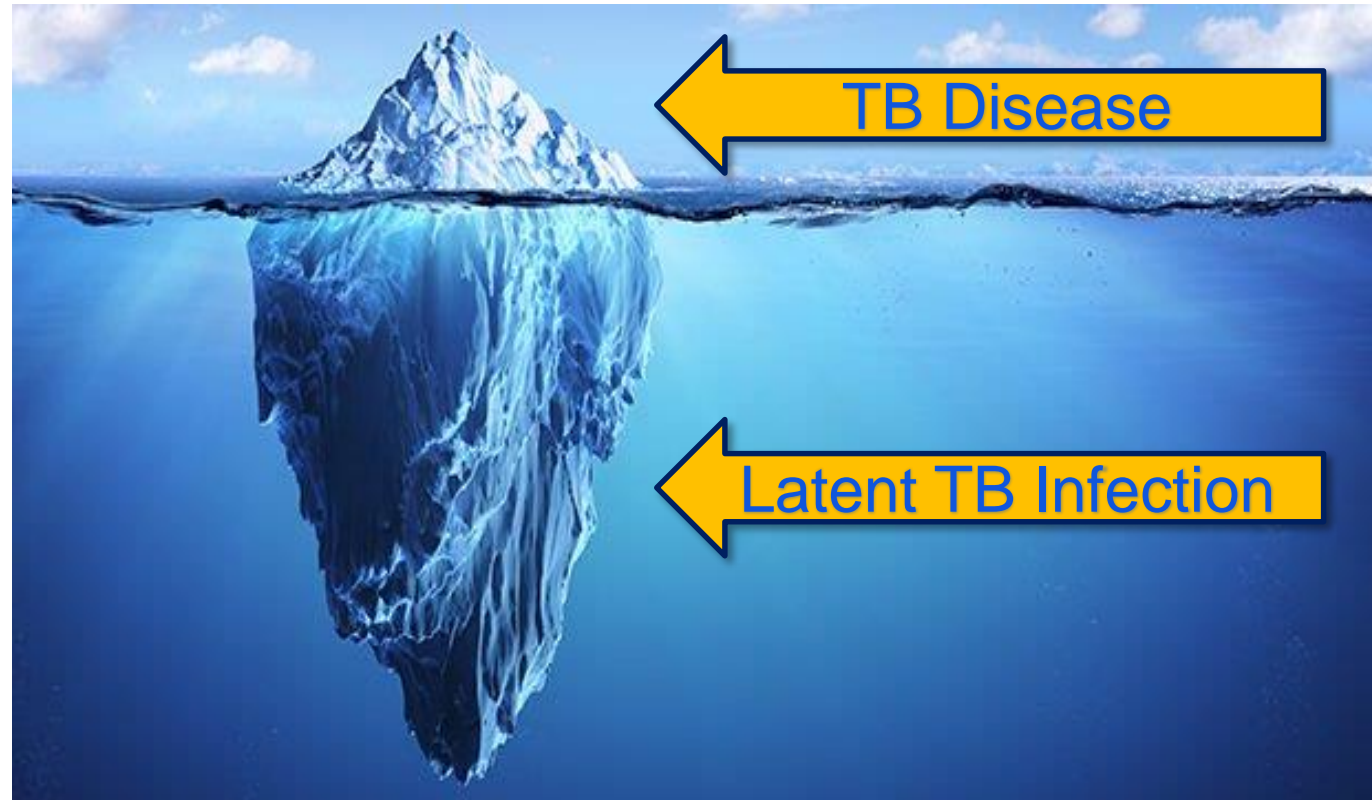
Latent TB Infection and TB Disease

Not everyone infected with TB bacteria becomes sick. As a result, two TB-related conditions exist: latent TB infection (LTBI) and TB disease.

A Person with Latent TB Infection:	A Person with TB Disease:
Has no symptoms	Has symptoms (may include cough, fatigue, weight loss, or night sweats)
Does not feel sick	Usually feels sick
Cannot spread TB bacteria to others	Can spread TB bacteria to others
Has a positive TB skin test or blood test	Has a positive TB skin test or blood test
Needs treatment for latent TB infection to prevent TB disease	Needs treatment for TB disease

Latent TB Infection (LTBI)

- >80% of active TB Disease cases in the US are reactivation TB from long-standing LTBI
- In the US, up to 13 million persons have LTBI
- LTBI treatment is 90% effective in preventing TB disease



Why offer targeted testing and treatment for LTBI?

Treating latent TB infection prevents TB disease.

\$400-\$600

To treat latent TB infection



\$18,000

To treat TB disease

Treating latent TB infection is less costly than treating TB disease.

LTBI treatment is 90% effective in preventing TB disease

Eliminating TB in the United States is possible

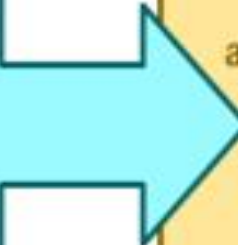


Dual Approach

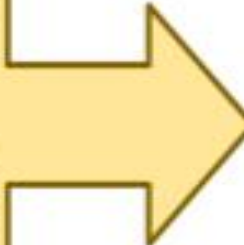
CDC Strategy for Addressing Latent TB Infection

**Accelerate
screening and
treatment for
latent TB
infection**

Expand targeted
LTBI testing and
treatment
TB Blood Tests
(IGRAs)
Shorter treatments



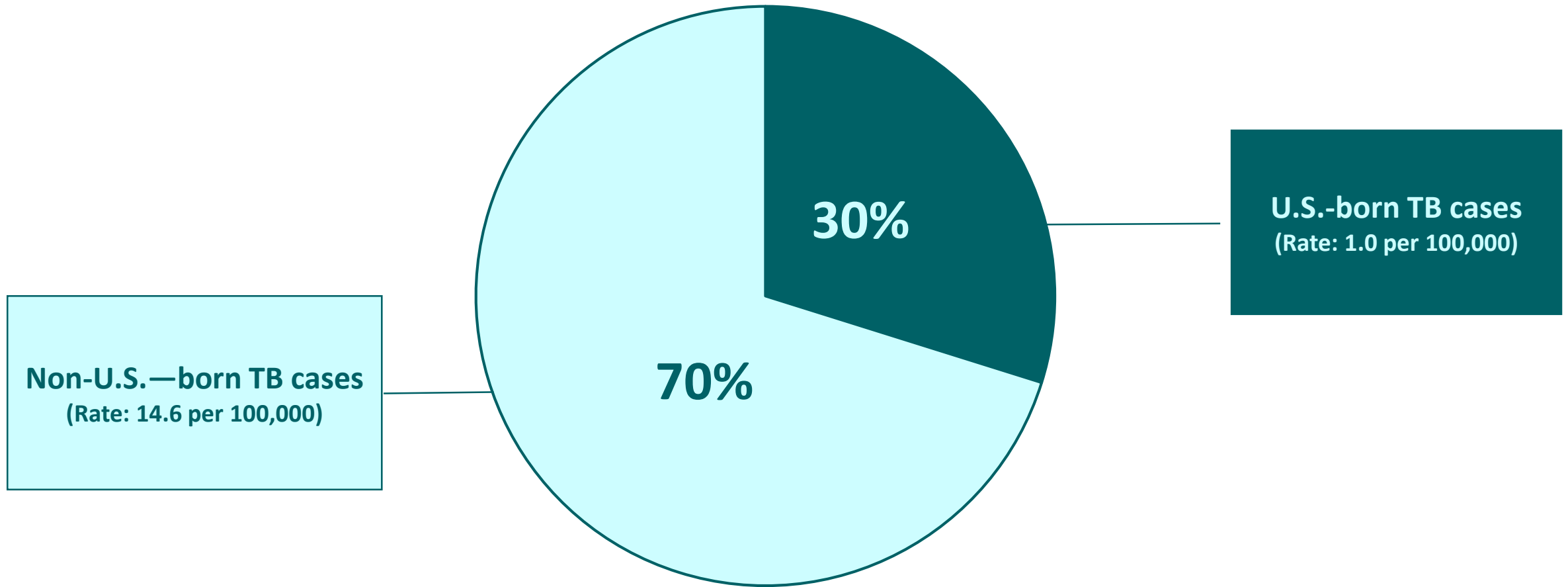
Outreach to &
engagement with
affected communities.
Partner with primary
care providers who
serve affected
communities.



Target
resources to four
highest
burden
states

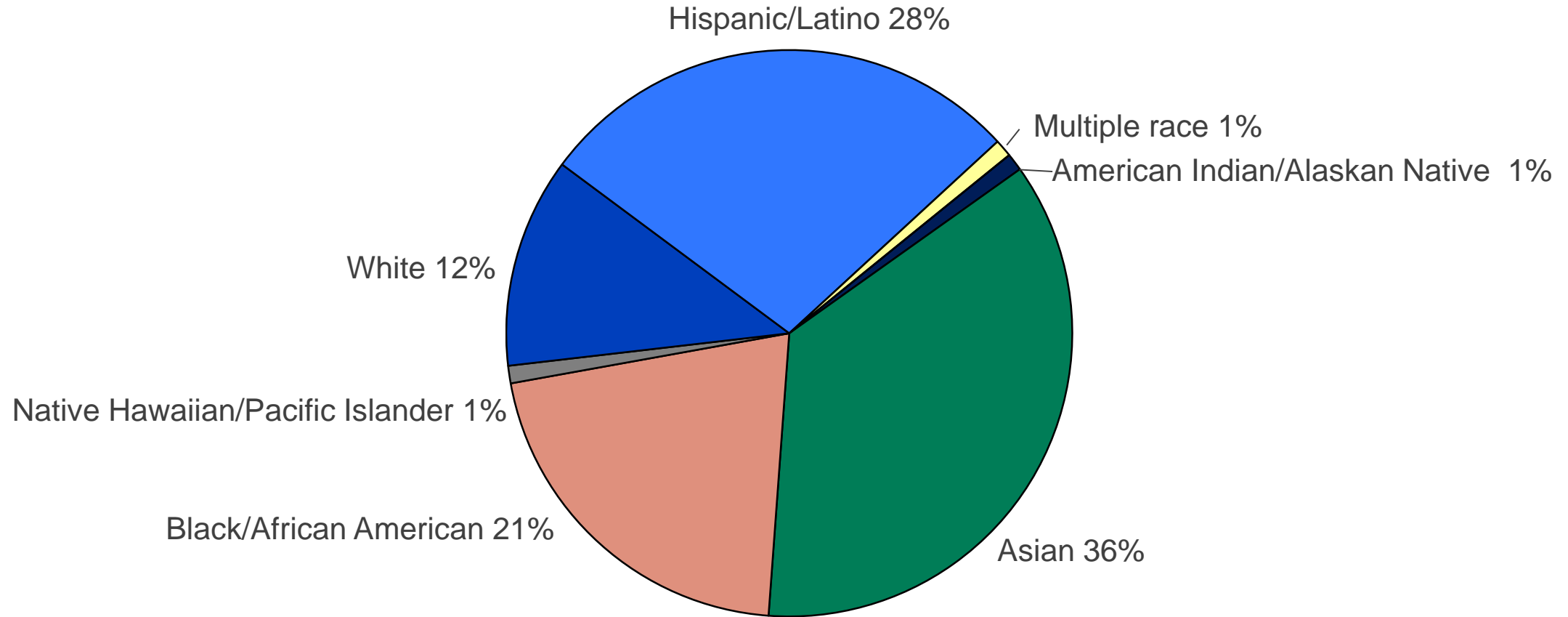


The majority of TB cases occur in persons born outside of the United States*



*Provisional data, as of February 12, 2018.

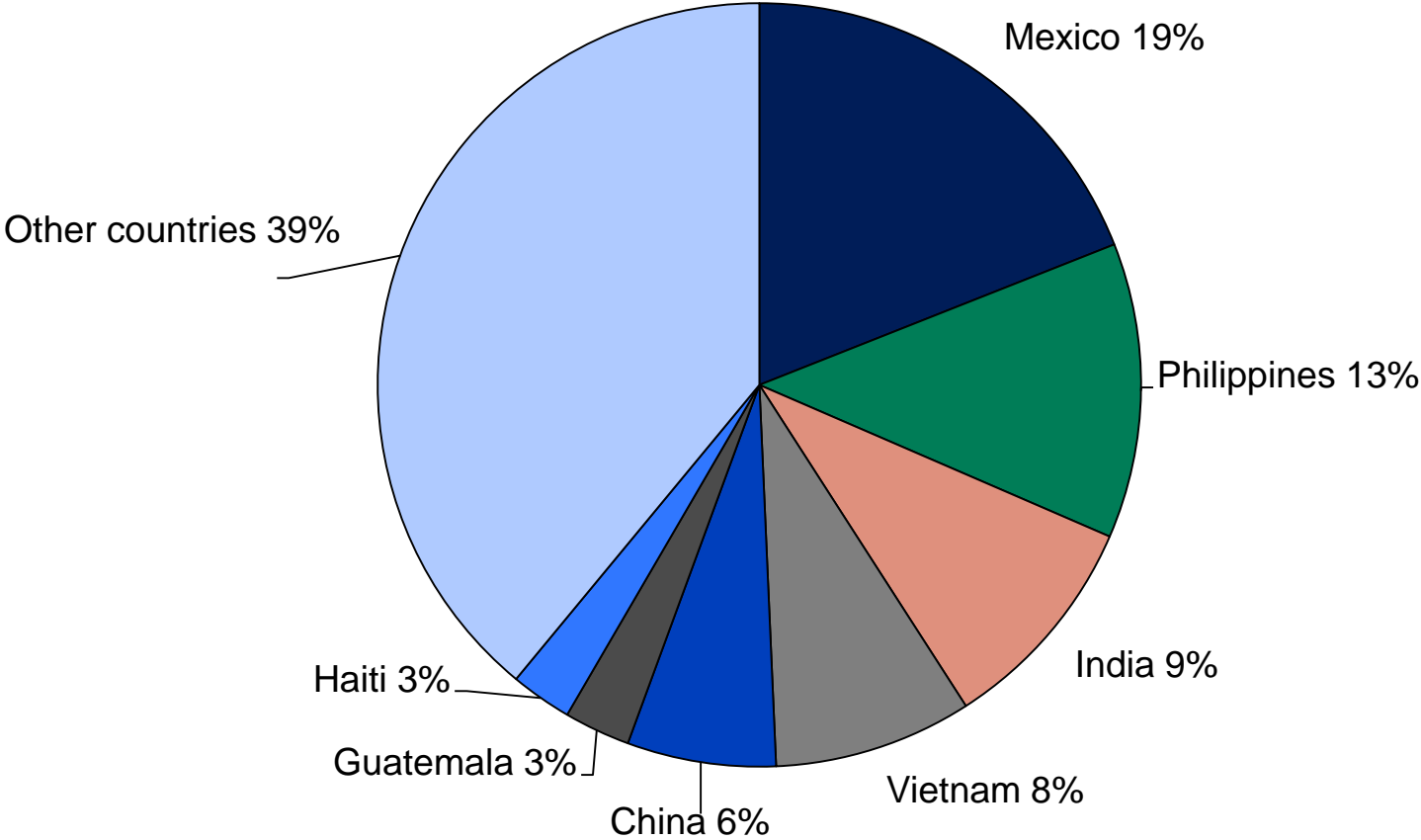
Reported TB Cases by Race/Ethnicity,* United States, 2017†



* All races are non-Hispanic; multiple race indicates two or more races reported for a person, but does not include persons of Hispanic/Latino origin.

† Percentages are rounded.

Countries of Birth Among Non-U.S.–Born Persons Reported with TB, United States, 2017

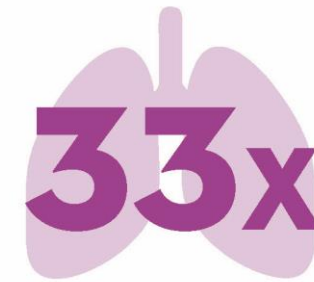


*Percentages are rounded.

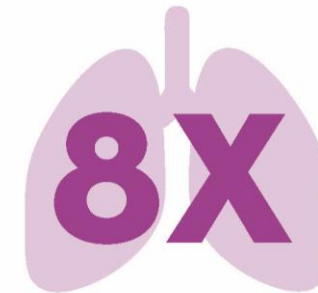
Key Audiences for Latent TB Infection Communication and Education

- In 2017, TB disease was reported in 3,254 Asians in the United States, accounting for nearly 36% of all people reported with TB nationally
 - Filipino
 - Indians
 - Vietnamese
 - Chinese
- **Hispanics/Latinos**
- **Healthcare providers who serve at-risk populations**

TB case rates are:



Higher for **Asians** than whites.



Higher for **Hispanics/Latinos** than whites.

U.S. Preventive Services Task Force Recommendation

- As of September 6, 2016, the U.S. Preventive Services Task Force recommended testing for TB as a part of standard preventive care for certain at-risk groups.
- The recommendation applies to asymptomatic adults ≥18 years of age who are at increased risk for TB:
 - Born in, or former residents of, countries with increased TB prevalence (e.g., Mexico, Philippines, Vietnam, India, China, Haiti, Guatemala); or
 - Currently live in, or have lived in, high-risk congregate settings (e.g., homeless shelters, long-term care facilities, correctional facilities).

Latent Tuberculosis Infection: Screening		
Release Date: September 2016		
Recommendation Summary		
Population	Recommendation	Grade (What's This?)
Asymptomatic adults at increased risk for infection	The USPSTF recommends screening for latent tuberculosis infection (LTBI) in populations at increased risk.	B

US Preventive Services Task Force | Recommendation Statement FREE

September 6, 2016

Screening for Latent Tuberculosis Infection in Adults

US Preventive Services Task Force
Recommendation Statement

US Preventive Services Task Force

[» Author Affiliations](#) | [Article Information](#)

JAMA. 2016;316(9):962-969. doi:10.1001/jama.2016.11046

Testing and Treatment of LTBI – Milestones

- In June 2018, CDC updated its 2011 recommendation for a 12-dose LTBI treatment regimen to include an option to self-administer medication
- Shorter regimens of 12 doses (3 months) of isoniazid (INH) plus rifapentine (RPT) is an option equal to the standard 9-month INH regimen.

The 12-Dose Regimen for Latent TB Infection:



- ✓ Prevents TB disease
- ✓ Saves money
- ✓ Results in higher treatment completion
- ✓ Is convenient for patients

www.cdc.gov/tb

UN General Assembly High Level Meeting on TB

- Held September 26, 2018
- The meeting was only the fifth time the United Nations (UN) has called for a high-level meeting devoted to a health issue
- Served as an opportunity to showcase the U.S. commitments and achievements to domestic and global TB
- CDC's domestic focus: Latent TB Infection



Expanding testing and treatment for latent TB infection: the final frontier of TB elimination in the United States

The U.S. has one of the lowest TB disease case rates in the world, thanks to investments in domestic TB programs.

But too many people in the U.S. still suffer from TB disease.

We must continue to find and treat cases of TB disease AND test and treat persons with latent TB infection to prevent future cases of TB disease.




Over the past 20 years, public health efforts have prevented up to **319,000 cases of TB** and averted up to **\$14.5 billion dollars in costs**.

However, progress towards ending TB in the U.S. has slowed to **approximately 9,000 TB cases/year**.

To reach elimination in the U.S., we must address **up to 13 million people with latent TB infection**.

More than 80% of U.S. TB disease cases result from longstanding, untreated latent TB infection.

CDC is expanding testing in at-risk populations by:

 Encouraging use of TB blood tests, which are more accurate than skin tests, and require a single patient visit to conduct the test.

 Engaging healthcare providers to reach at-risk communities.

CDC is at the forefront of researching new treatments for latent TB infection.

 **1 dose**
1 time per week
12 weeks

CDC research identified a shorter more convenient treatment regimen for latent TB infection. Previous regimens lasted 9 months.

 **\$400-\$600**
To treat latent TB infection

\$19,000
To treat TB disease

Treatment for latent TB infection is less costly than treatment for TB disease.



The time is now for global commitment to address leading infectious disease killer – tuberculosis

BY REBECCA MARTIN, OPINION CONTRIBUTOR — 09/25/18 03:25 PM EDT

THE VIEWS EXPRESSED BY CONTRIBUTORS ARE THEIR OWN AND NOT THE VIEW OF THE HILL.

12 COMMENTS

72 SHARES



SHARE



TWEET



PLUS ONE



© Getty Images

On Sept. 26, 2018, the United Nations General Assembly will hold the first-

Activities and Resources

Connect with CDC TB!

- On the web: www.cdc.gov/tb
- On social media:
 - Twitter: [@CDC_TB](https://twitter.com/CDC_TB)
 - Facebook: [@CDCTB](https://www.facebook.com/CDCTB)
- In your inbox:
 - TB Notes newsletter:
<https://www.cdc.gov/tb/publications/newsletters/default.htm>



LTBI Resources Online Hub

- One-stop shop for resources, materials, and links to latent TB infection and USPSTF materials
- Since 2016:
 - Over 35,000 views
 - Over 22,000 unique visitors
 - Over 8,000 downloads

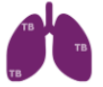
The screenshot displays the CDC Tuberculosis (TB) website. At the top, the CDC logo and tagline "Centers for Disease Control and Prevention" are visible, along with a search bar and a "CDC A-Z INDEX" dropdown. The main heading is "Tuberculosis (TB)". A left sidebar lists various topics with expandable icons: Tuberculosis, Basic TB Facts, Personal Stories, Testing & Diagnosis, Treatment, Drug-Resistant TB, Research, Infection Control, TB in Specific Populations, Laboratory Information, Data & Statistics, Professional Resources & Tools, Publications & Products, Events, World TB Day, Links, and About Us. The main content area features a "Latent Tuberculosis Infection Resources" section with social media icons (Facebook, Twitter, and a plus sign). Below this is a large banner image with the text "LATENT TB INFECTION" overlaid on a photo of a doctor and a patient. Further down, there are two columns of resources: "Targeted Testing Recommendations" and "CDC Resources for USPSTF Recommendations". The "Targeted Testing Recommendations" section includes "CDC Guidance" with links to "Targeted Tuberculin Testing and Treatment of Latent Tuberculosis Infection", "Latent Tuberculosis Infection: A Guide for Primary Health Care Providers", "LTBI: Guide for Diagnosis and Treatment Mobile Application for Health Care Providers", and "Targeted Tuberculosis (TB) Testing and Treatment of Latent TB Infection (slide set)". The "CDC Resources for USPSTF Recommendations" section lists "CDC Messages and Resources", "USPSTF LTBI Recommendation: Statement from Dr. Phillip LoBue, Director, CDC's Division of Tuberculosis Elimination", "Matte Articles" (including "Health Care Providers Critical in Expanded Effort to End TB in the U.S. (Health Care Providers)" and "Ending Tuberculosis Requires Focus on Prevention (General Public)"), and "USPSTF Recommendation Statement: Screening for Latent Tuberculosis Infection (LTBI) in Adults (slide set)".

<https://www.cdc.gov/tb/publications/ltbi/ltbiresources.htm>

Latent TB Infection Infographics, Graphics & Web Buttons

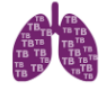
TAKE ON Up to 13 million people in the U.S. have latent tuberculosis (TB) infection.

LATENT TB INFECTION




Latent TB Infection
Latent TB infection means TB germs are in the body, but not enough to cause sickness or spread germs to others.

TB Disease




TB Disease
If TB germs become active & multiply, latent TB infection can turn into TB disease.

1 in 10




Without treatment, 1 in 10 people with latent TB infection will develop TB disease.


PEOPLE WHO SHOULD BE TESTED FOR TB INFECTION INCLUDE:




Contacts of people with TB disease.



People from countries where TB disease is common.




People with health problems that make it hard to fight TB disease.



HOSPITALS
CORRECTIONAL FACILITIES
SHELTERS


People who spend time in places where TB is more common.

TREATING LATENT TB INFECTION PREVENTS TB DISEASE.



TB SKIN TEST


A skin test or blood test can find TB infection.



TB BLOOD TEST

1 dose
1 time per week
12 weeks

Shorter regimens help patients finish treatment.




\$19,000 TO TREAT TB DISEASE


\$600 TO TREAT LATENT TB INFECTION

Treating latent TB infection is less costly than treating disease.


ELIMINATING TB REQUIRES EXPANDING TESTING & TREATMENT OF LATENT TB INFECTION. CDC WORKS TO:



Engage Affected Communities & Medical Providers.




Promote Effective Testing & Treatment Options.



Develop New Guidance & Tools.

To learn more about latent TB infection: www.cdc.gov/tb
September 2018



Centers for Disease Control and Prevention
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention

Tuberculosis (TB) Disease: Only the Tip of the Iceberg

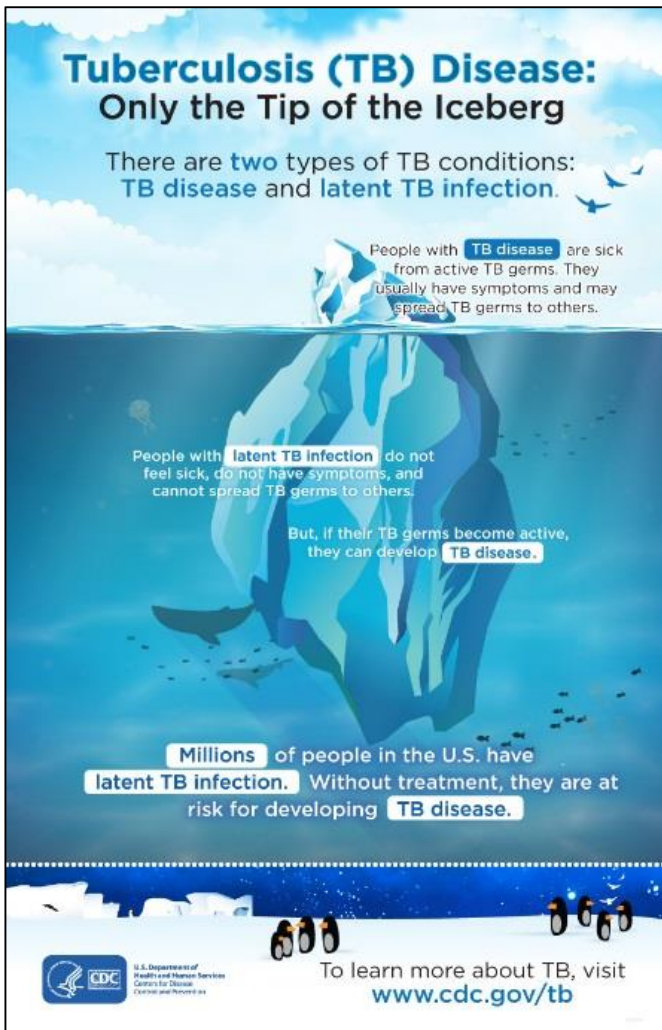

There are two types of TB conditions: TB disease and latent TB infection.

People with **TB disease** are sick from active TB germs. They usually have symptoms and may spread TB germs to others.

People with **latent TB infection** do not feel sick, do not have symptoms, and cannot spread TB germs to others.

But, if their TB germs become active, they can develop **TB disease**.

Millions of people in the U.S. have **latent TB infection**. Without treatment, they are at risk for developing **TB disease**.

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

To learn more about TB, visit www.cdc.gov/tb

LATENT
TB
INFECTION

LEARN MORE



LATENT
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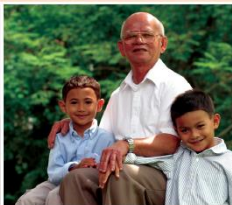
Culturally Appropriate Patient Education Materials

Available in English, Spanish,
Tagalog, and Vietnamese

TB What You Need To Know
About Tuberculosis Infection



TB Protect Your Family and
Friends from Tuberculosis
The TB Contact Investigation



TB Take Steps to Control
Tuberculosis Disease
When You Have HIV



TB Staying on Track with
Tuberculosis Medicine



TB Get the Facts About
Tuberculosis Disease

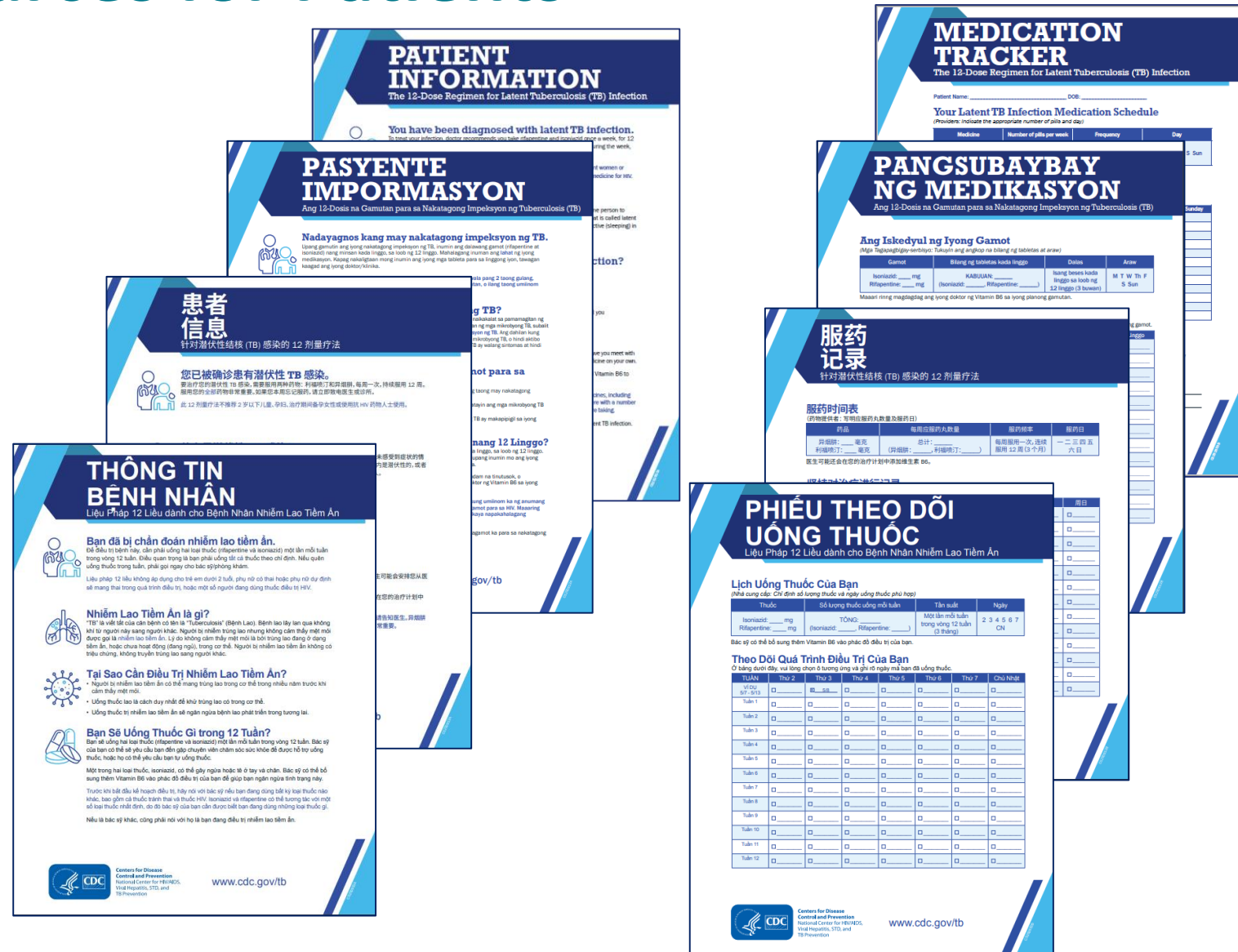
TB What You Need to Know About
the Tuberculosis Skin Test



LTBI Treatment Resources for Patients

■ Patient Education Materials

- Patient Information Brochure
- Medication Tracker and Symptom Checklist
- Materials are available in Spanish, Tagalog, Vietnamese, and Mandarin



TB in the Asian Community Webpage

Tuberculosis (TB)

CDC > Tuberculosis > TB in Specific Populations

Facebook Twitter Email RSS

- Tuberculosis
 - Basic TB Facts +
 - Personal Stories +
 - Testing & Diagnosis +
 - Treatment +
 - Drug-Resistant TB
 - Research +
 - Health Care Settings +
 - TB in Specific Populations -**
 - African-American Community +
 - Asian Community**
 - Children
 - Correctional Facilities
 - Homelessness

Asian Community

In 2017, a total of 9,105 TB cases were reported in the United States; however, Asians continue to be impacted by TB at a greater rate compared to other racial and ethnic groups.

Several important factors contribute to the higher rates of TB among racial/ethnic groups, including Asians. These factors include being born in a country with a high rate of TB or travel to a country with a high rate of TB.

TB case rates are:

33x Higher for Asians than whites.

The Numbers

- In 2017, TB disease was reported in 3,254 Asians in the United States, accounting for nearly 36% of all people reported with TB nationally.
- The rate of TB disease is 33 times higher for Asians than non-Hispanic whites.
- Read more of the 2017 surveillance data in [Reported Tuberculosis in the United States, 2017](#).

Countries with highest TB burden among non-U.S.-born Asians, 2017

1. Philippines
2. India
3. Vietnam
4. China
5. Myanmar

Reported TB Cases by Origin and Race/Ethnicity*, United States, 2017[†]

Origin/Race/Ethnicity	U.S.-born persons (%)	Non-U.S.-born persons (%)
Hispanic/Latino	22%	31%
White	30%	4%
Black/African American	37%	14%
Asian	3%	49%
Native Hawaiian/Pacific Islander	2%	1%
Multiple race	-	1%
American Indian/Alaska Native	3%	-

* are non-Hispanic; multiple race indicates two or more races reported for a person, but does not include persons of Hispanic/Latino origin; ages are rounded; as of June 1, 2018.
[†] an Indian/Alaska Native accounted for <1% of cases among non-U.S.-born persons and are not shown.

<https://www.cdc.gov/tb/topic/populations/tbinasians/default.htm>

Find TB Resources Website

- Searchable database of national and international TB education & training resources
- Monthly Newsletter
 - Highlight of the Month
 - Additional Resources in the database

The image displays two overlapping screenshots. The background is a screenshot of the 'Find TB Resources' website, and the foreground is a screenshot of the 'Find TB Resources Newsletter' for May 2019.

Find TB Resources Website:

- Header:** FIND TB RESOURCES
- Navigation:** Home, Search Materials, Submit Materials, Adapting Materials, Research Tools, Additional Resources, Contact Us
- Search Bar:** Find TB Resources connects you to a worldwide library of online resources, training, and educational materials. Includes 'Search Materials' and 'Advanced Search' buttons.
- Highlight of the Month:** Features 'Latent TB Videos for Healthcare Providers: Online Video Series'. Topics include: Why Should I Get Testing for Latent TB?, Why Do I Need Treatment for Latent TB?, and I Received the BCG Vaccine: Do I Still Need Latent TB Testing and Treatment? Includes links for 'View the May 2019 E-Newsletter', 'View Archived Newsletter', and 'Sign up for the Monthly E-Newsletter'.
- Footer:** The Find TB Resources Website is a service of the Centers for Disease Control and Prevention (CDC), Division of Tuberculosis Elimination (DTBE). Includes CDC logo, Twitter handle @CDC_TB, and navigation links.

Find TB Resources Newsletter (May 2019):

- Header:** Find TB Resources Newsletter | May 2019
- Greetings!** Welcome to the newsletter for the Find TB Resources Website.
- Highlight of the Month:** This month's highlight features Latent TB Videos for Healthcare Providers: Online Video Series, from the Curry International TB Center and TB Free California. This video series aims to help providers latent TB prevent. The
- Additional Resources:** Includes '12-Dose Regimen for Latent TB Infection - Patient Education Materials (Chinese)', from the Centers for Disease Control and Prevention (CDC).
- Footer:** Follow @CDC_TB on Twitter

<https://findtbresources.cdc.gov>

TB Personal Stories

- Personal Stories project launched in 2014
- Focuses on different aspects of TB experience
- Target audiences
 - Current patients and families
 - TB survivors
 - Health care providers
 - Policy makers



Message Testing

- CDC conducted focus groups on latent TB infection with non-U.S. born populations (including people born in Mexico, the Philippines, India, Vietnam, and China)
- Concepts include:
 - Terminology
 - Risk Factors
 - Treatment
 - BCG vaccine
 - Trusted sources of health information
- Findings will help inform future communication and education projects



So... What are we hearing... (Very preliminary)

- Little to no knowledge of TB vs. LTBI—
 - Little familiarity with the term “latent”
 - Explored alternatives: dormant, sleeping, inactive, delayed
- Confusion between BCG and TST
 - Some reference to both as the “TB Shot”
- No knowledge of TB blood test
- Targeted communication efforts needed
- Different perceptions of TB as an issue in country of birth
- Link to diabetes resonates



Coming Soon!

**Latent TB Infection Communications Campaign
and Community Engagement Network**

Expanding LTBI testing and treatment: the final frontier of TB elimination in the U.S.

- Eliminating TB requires expanding testing and treatment of latent TB infection (LTBI).
- CDC and USPSTF recommend testing populations at increased risk for LTBI, including people born in or who frequently travel to countries where TB disease is common.
- By developing targeted campaign(s) for LTBI and working with community partners, we can increase awareness of LTBI and encourage testing and treatment among at-risk populations.



Goals

1. Develop a targeted communications campaign to encourage testing and treatment among at-risk populations.
2. Develop a partner network to engage at-risk communities to assist with outreach and other activities to encourage testing and treatment for latent TB infection.



Methods

- DTBE will develop the campaign and the community engagement network in parallel.
- Campaign messages will be influenced by upcoming message testing project in addition to extensive formative research.
- Campaign materials will be culturally and linguistically appropriate (developed in-language).
- Use existing initiatives, such as CDC's Know Hep B Campaign as a model.



Know Hepatitis B Campaign

- **Multilingual campaign developed by CDC & Hep B United**
 - Launched in 2013
 - Phase each ~ year
- **Goal: Increase testing for chronic Hepatitis B**
- **Audience: Asian Americans**
- **Languages: Chinese, Korean, Vietnamese**



TB Campaign Objectives

- Raise awareness about LTBI, risk, and link between infection and disease
 - Address misperceptions
 - Decrease stigma
 - Encourage testing and treatment
- Increase awareness of treatment for LTBI (especially shorter regimens)
- Encourage providers to test and treat LTBI among at-risk populations



TB Community Engagement Network Strategies and Activities

■ Networking

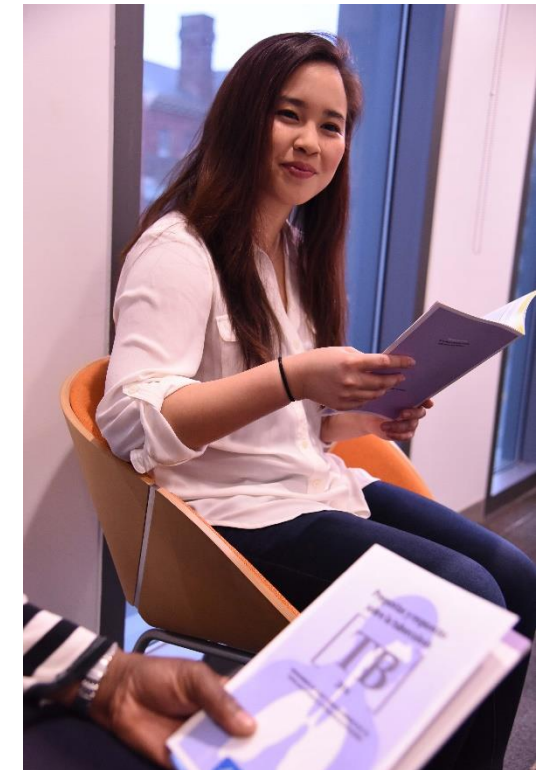
- Community-based organizations, health centers, professional associations, and others
- Members should actively serve target populations

■ Capacity Building

- Educational outreach to target populations
- Technical assistance on LTBI testing and treatment

■ Campaign Implementation

- Provide feedback on campaign materials and strategies
- Assist with dissemination of campaign materials



TB Campaign Evaluation

- Work with CDC's TB Epidemiologic Studies Consortium sites and Oregon Community Health Information Network (OCHIN) for select outcome evaluation in 1-2 sites
- Possible models include:
 - Pre/Post evaluation of testing and/or treatment rates in select markets
 - Evaluation of awareness of latent TB infection and exposure to the campaign
 - Knowledge assessments among target audiences



In Summary...

- Expanding testing and treatment for latent TB infection is essential to achieve the goal of TB elimination in the United States.
- Efforts to address latent TB infection must include at-risk communities, public health systems, and private healthcare providers.
- CDC is working on communication and education tools and resources to increase awareness of latent TB infection.

Acknowledgments

- Dr. Phil Lobue
- Leeanna Allen
- Dr. Tracy Ayers
- Dr. Tom Navin
- Allison Maiuri
- Dr. John Parmer
- Ann Cronin
- Dr. Sapna Bamrah Morris
- Dr. Carla Winston
- Dr. Cynthia Jorgensen
- We Are TB
- National TB Controllers Association

Questions?

www.cdc.gov/tb



@CDCTB



@CDC_TB

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

