

# Alaska ID ECHO: HCV-HIV-PrEP-STIs



ALASKA NATIVE  
TRIBAL HEALTH  
CONSORTIUM



NPAIHB

*Indian Leadership for Indian Health*

TB in Alaska Update

May 9, 2023

*This program is supported by a grant from the Northwest Portland Area Indian Health Board and funding is provided from the HHS Secretary's Minority HIV/AIDS Fund.*

# Welcome to Alaska Infectious Disease ECHO: HCV, HIV, PrEP, STIs

## Approved Provider Statements:



In support of improving patient care, Alaska Native Medical Center (ANMC) is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

## Contact Hours:

ANMC designates this activity for a maximum of 12 contact hours, including 3 total pharmacotherapeutics contact hours, commensurate with participation.

## Financial Disclosures:

Youssef Barbour, MD & Lisa Townshend-Bulson, APRN / faculty for this educational event, are primary investigators in an ANTHC sponsored hepatitis C study funded in part by Gilead Sciences. All of the relevant financial relationships listed have been mitigated.

## Requirements for Successful Completion:

To receive CE credit please make sure you have actively engaged in the entire activity, your attendance is recorded by the facilitator, and complete the course evaluation form found here: <https://forms.gle/18t4EgvN2WdnM4P77>



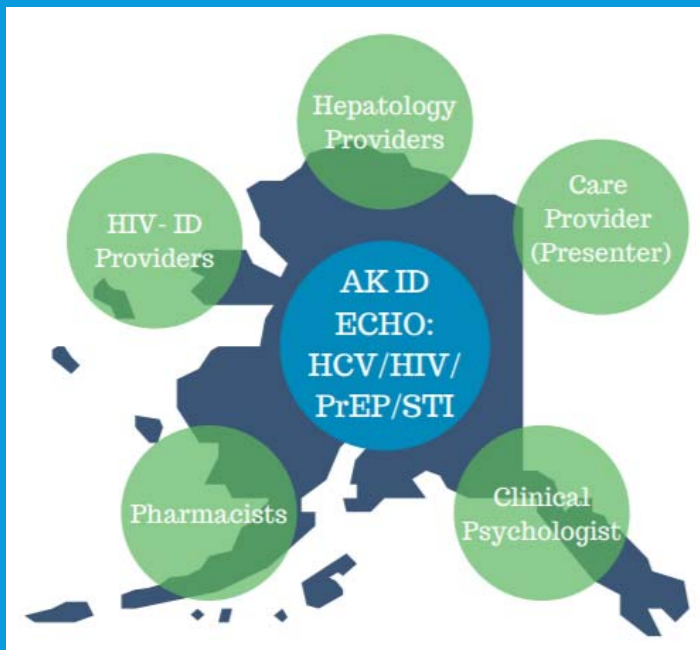
For more information contact  
[jfielder@anthc.org](mailto:jfielder@anthc.org) or (907) 229-1185



ALASKA NATIVE  
MEDICAL CENTER



# AK ID ECHO: CONSULTANT TEAM



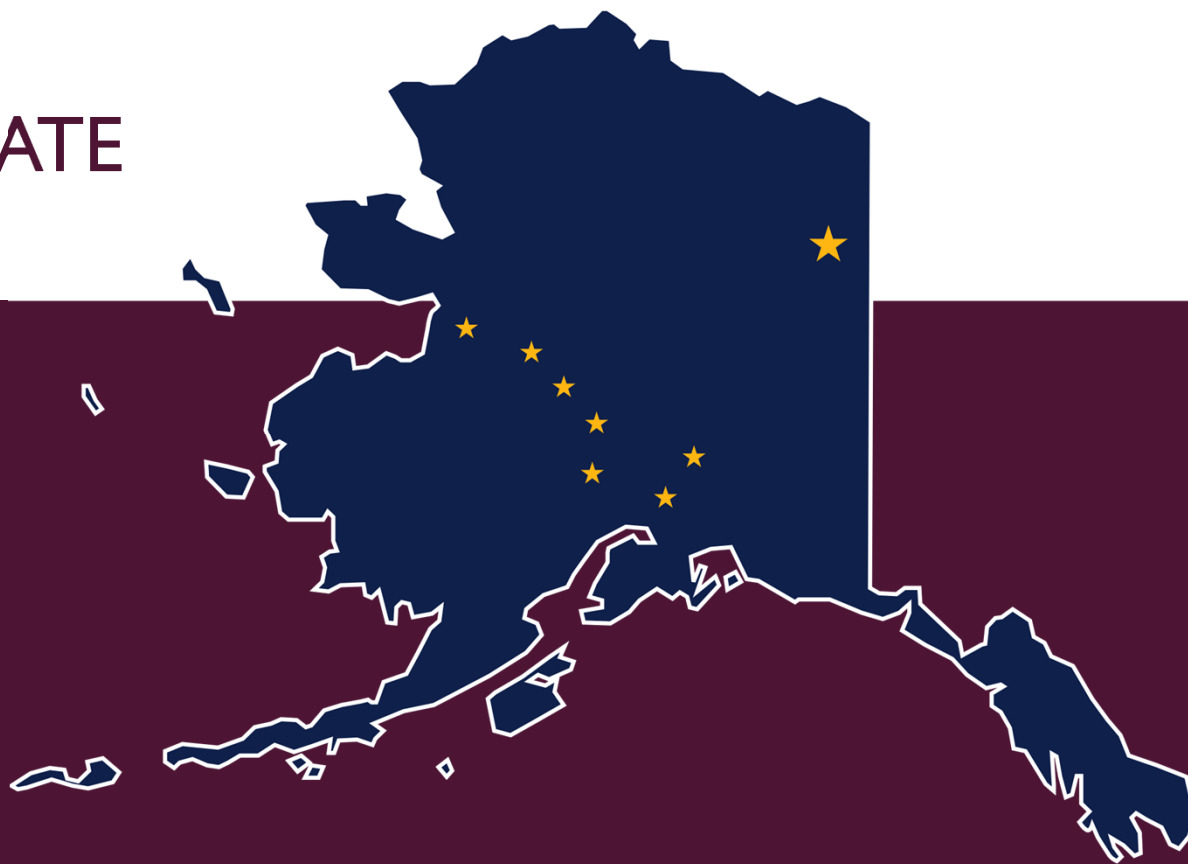
- Youssef Barbour, MD Hepatologist
- Leah Besh, PA-C HIV/Hepatology Provider
- Terri Bramel, PA-C HIV/STI Provider
- Rod Gordon, R.Ph. AAHIVP Pharmacist
- Jacob Gray, MD Infectious Disease Provider
- Annette Hewitt, ANP Hepatology Provider
- Brian McMahon, MD Hepatologist
- Lisa Rea, RN HIV/STI Case Manager
- Lisa Townshend, ANP Hepatology Provider

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# TB IN ALASKA UPDATE

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ALASKA DOH, TB PROGRAM



# Disclosures

- none



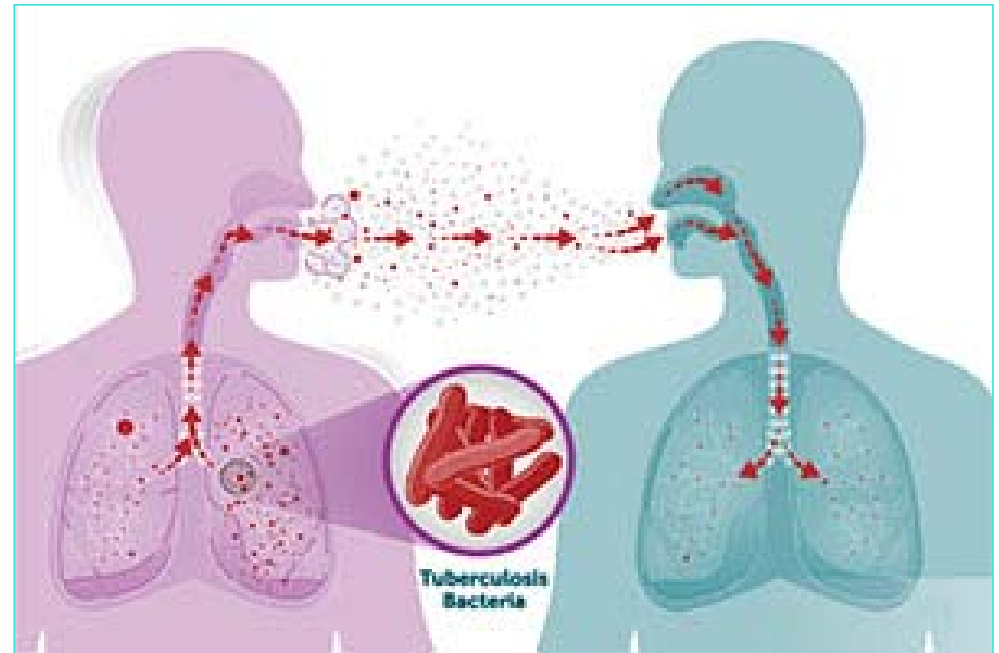
# Key Points

- TB basics
- Why it is important to think TB
- TB in AK
- TB Control in AK
- Future Directions



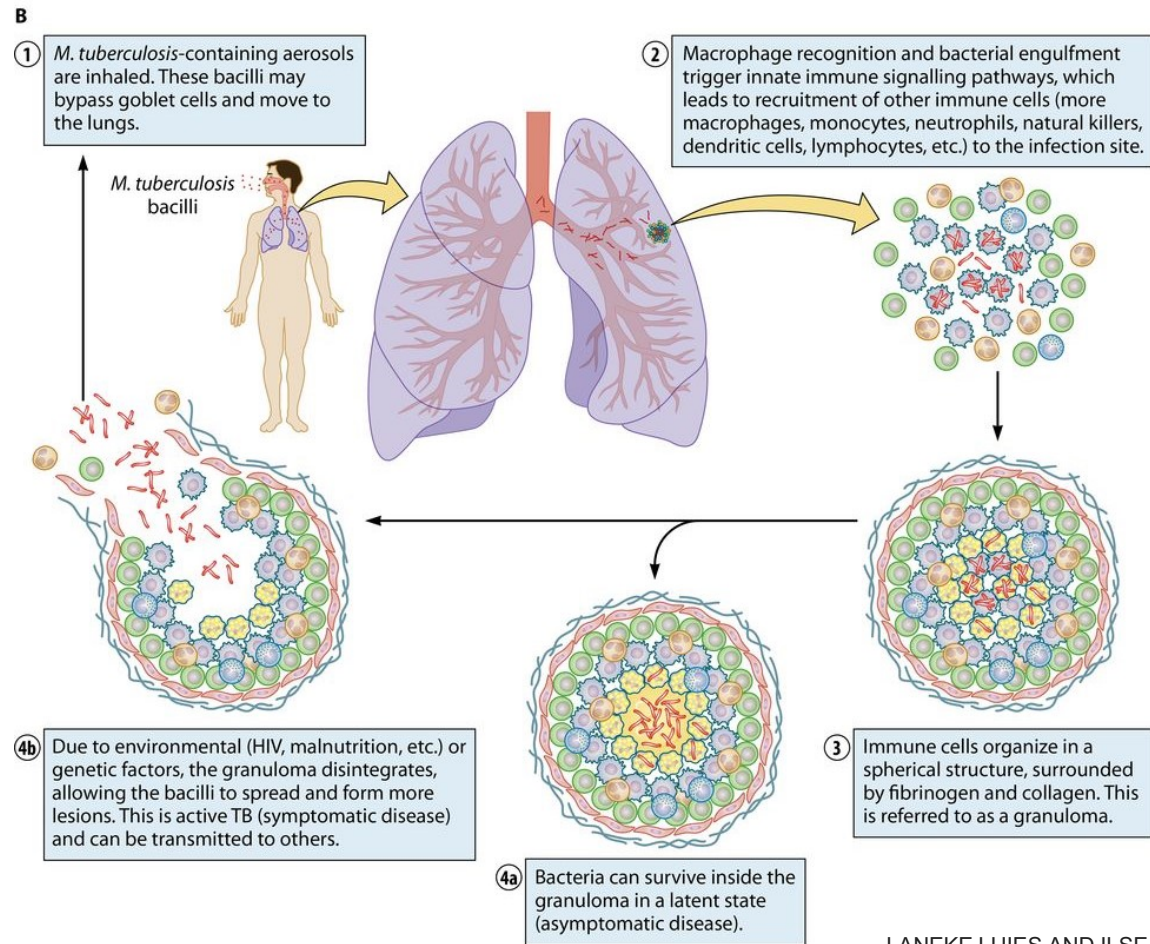
# Tuberculosis—What is TB?

- Infection caused by *Mycobacterium tuberculosis* bacteria
- Airborne transmission
- Most commonly attacks lungs, but can infect almost any part of the body



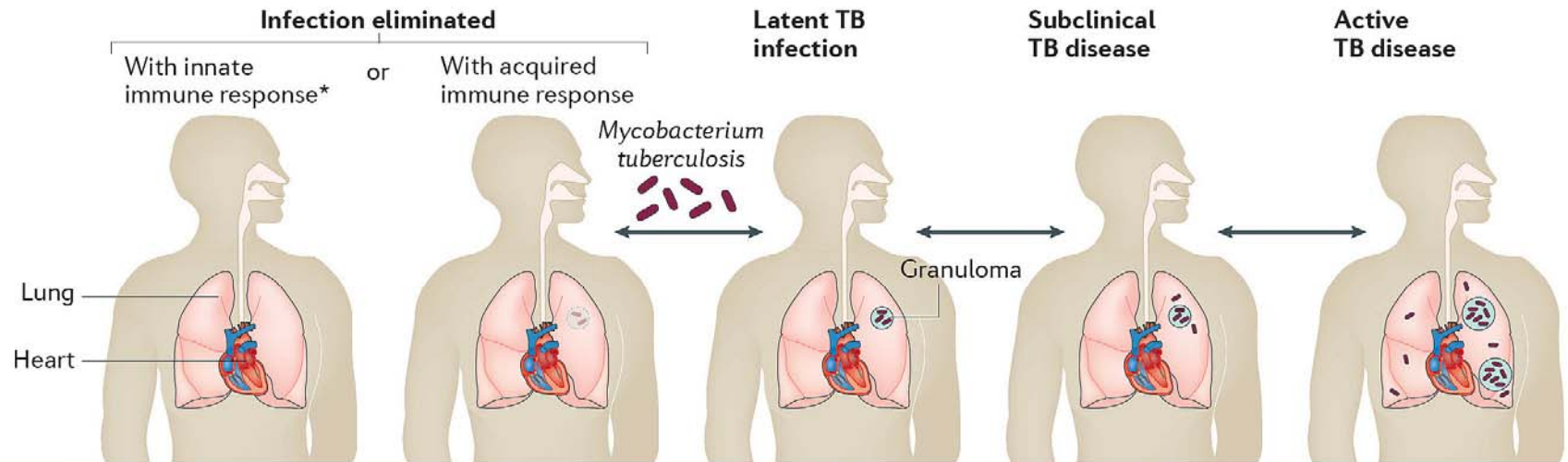


# Tb infection and disease: a continuum





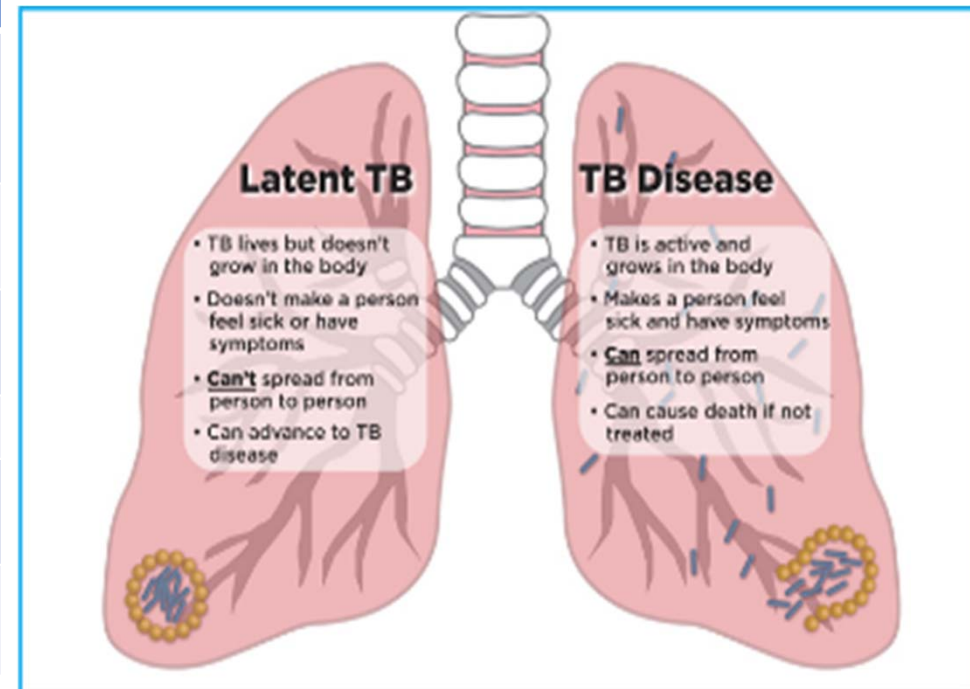
# Tb infection and disease: a continuum



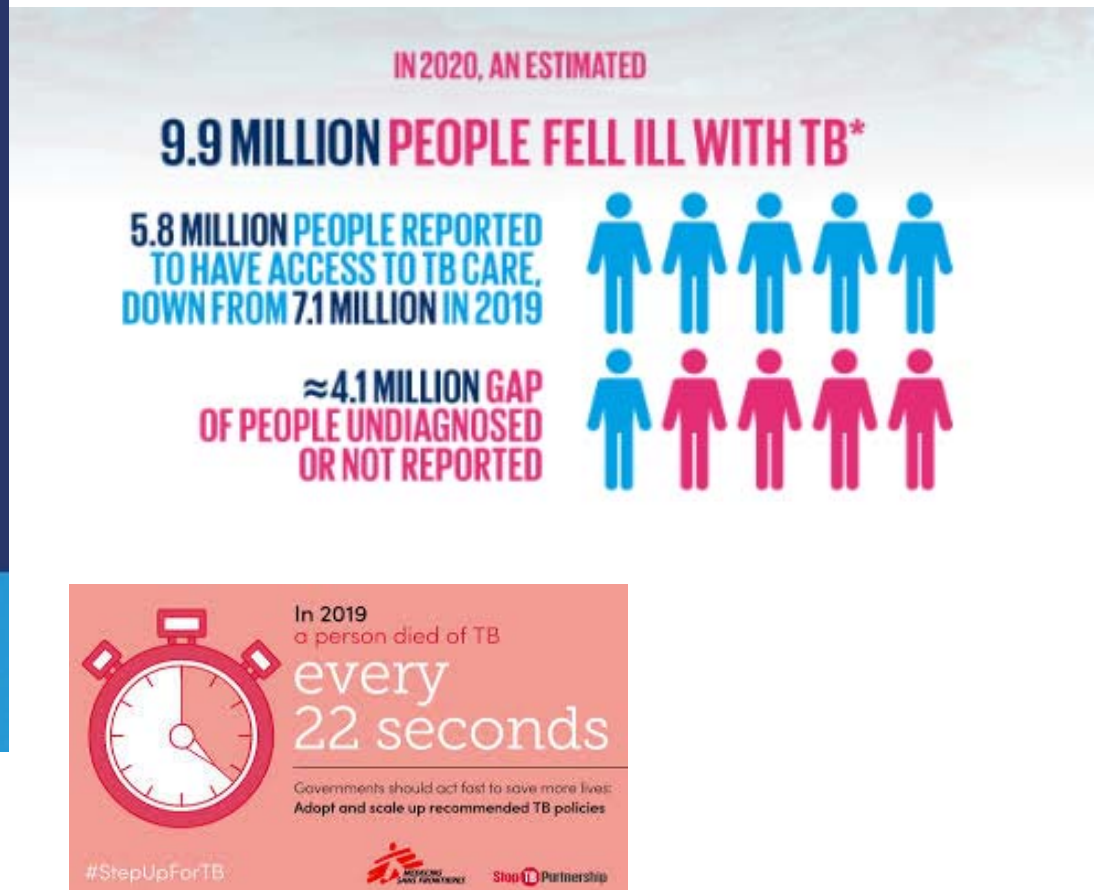
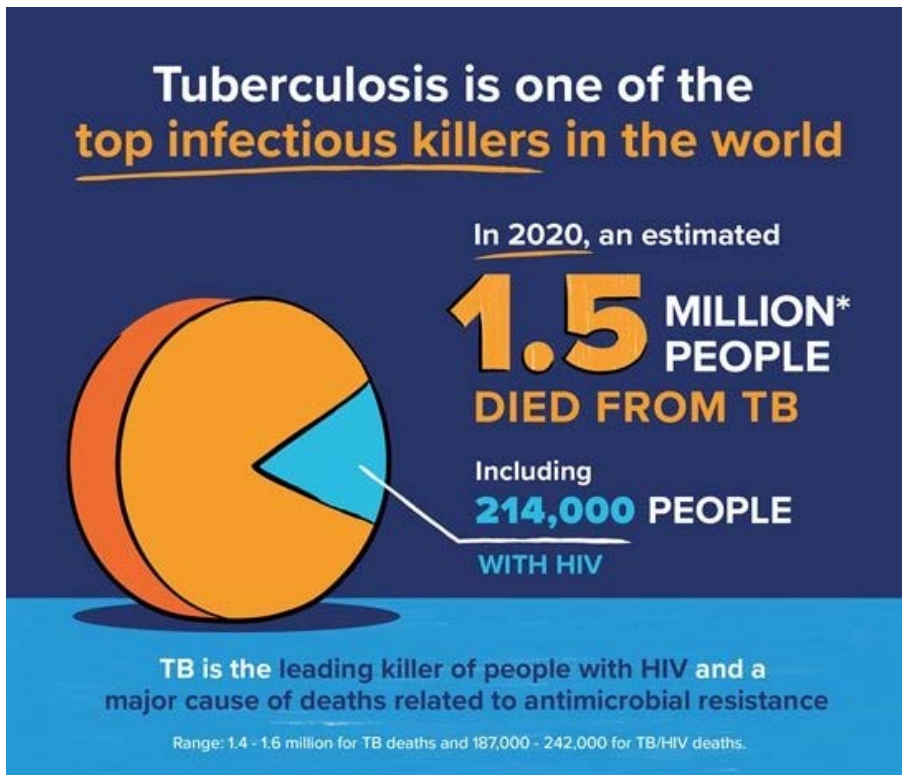
<b>TST</b>	Negative	Positive	Positive	Positive	Usually positive
<b>IGRA</b>	Negative	Positive	Positive	Positive	Usually positive
<b>Culture</b>	Negative	Negative	Negative	Intermittently positive	Positive
<b>Sputum smear</b>	Negative	Negative	Negative	Usually negative	Positive or negative
<b>Infectious</b>	No	No	No	Sporadically	Yes
<b>Symptoms</b>	None	None	None	Mild or none	Mild to severe
<b>Preferred treatment</b>	None	None	Preventive therapy	Multidrug therapy	Multidrug therapy

# Tuberculosis—Infection vs. Disease

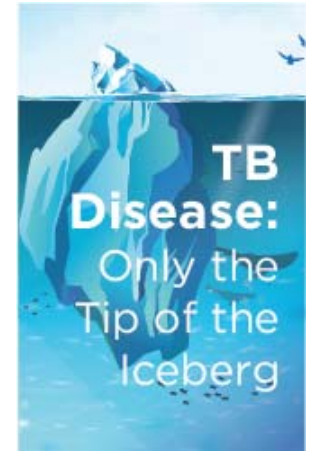
TB Infection (Latent)	TB Disease (Active)
No symptoms	Symptoms (cough, bloody sputum, sweats, weight loss)
Not contagious	Contagious
Positive TB test (TST or IGRA)	Positive TB test (TST or IGRA)
Normal chest X-ray	Abnormal chest X-ray
Negative sputum tests	Positive sputum tests
Treatment: 3-4 months with 1-2 drugs (~\$500)	Treatment: 4-9+ months with 4+ drugs (~\$20,000)



# Why is it important to think TB?



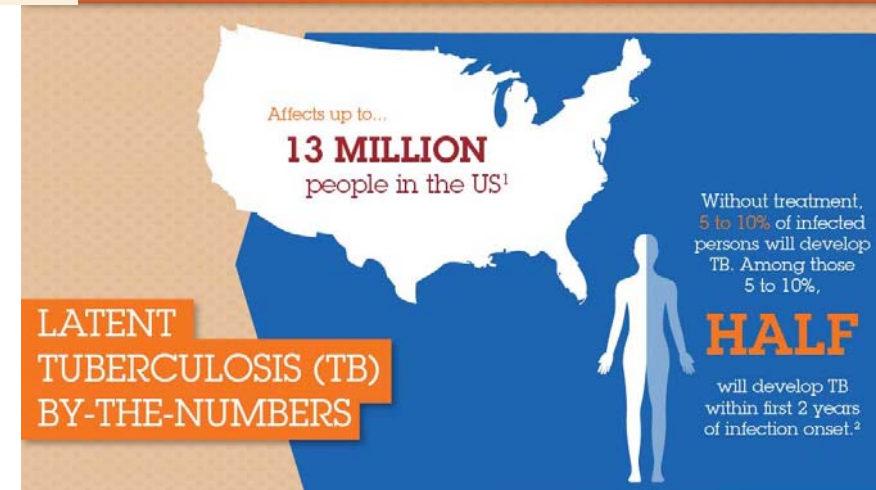
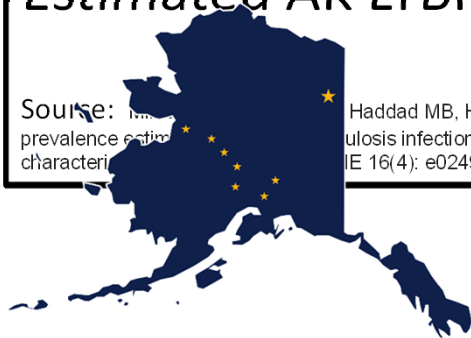
# Why is it important to think TB?



## Latent Tuberculosis Infection

Estimated AK LTBI prevalence: **32,601**

Source: Haddad MB, Hill AN, Marks SM, Readhead A, et al. (2021) State-level prevalence of tuberculosis infection in the United States by medical risk factors, demographic characteristics, and geographic location. *PLoS ONE* 16(4): e0249012. <https://doi.org/10.1371/journal.pone.0249012>





# The COVID-19 pandemic has reversed years of progress made in the fight to end TB



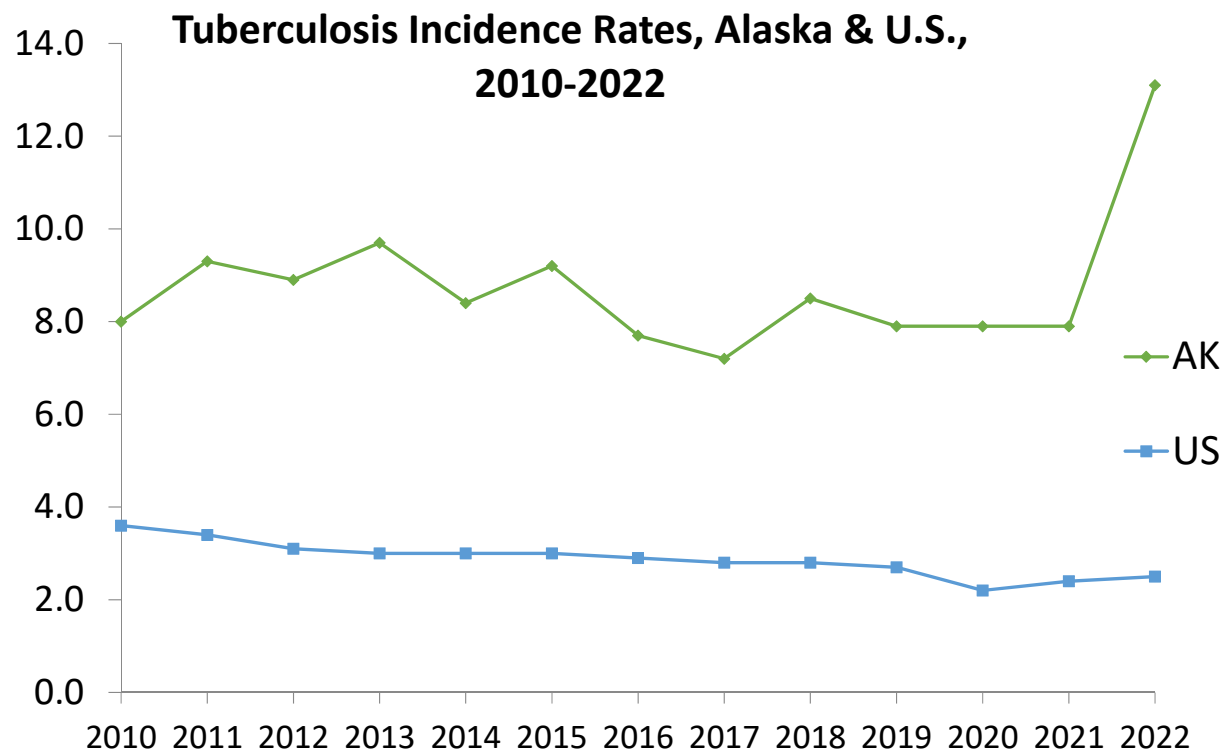
Actions to mitigate and reverse the impact of the COVID-19 pandemic on access to essential TB services are urgently needed

**INVEST**  
TO END TB  
**SAVE LIVES**



World Health  
Organization

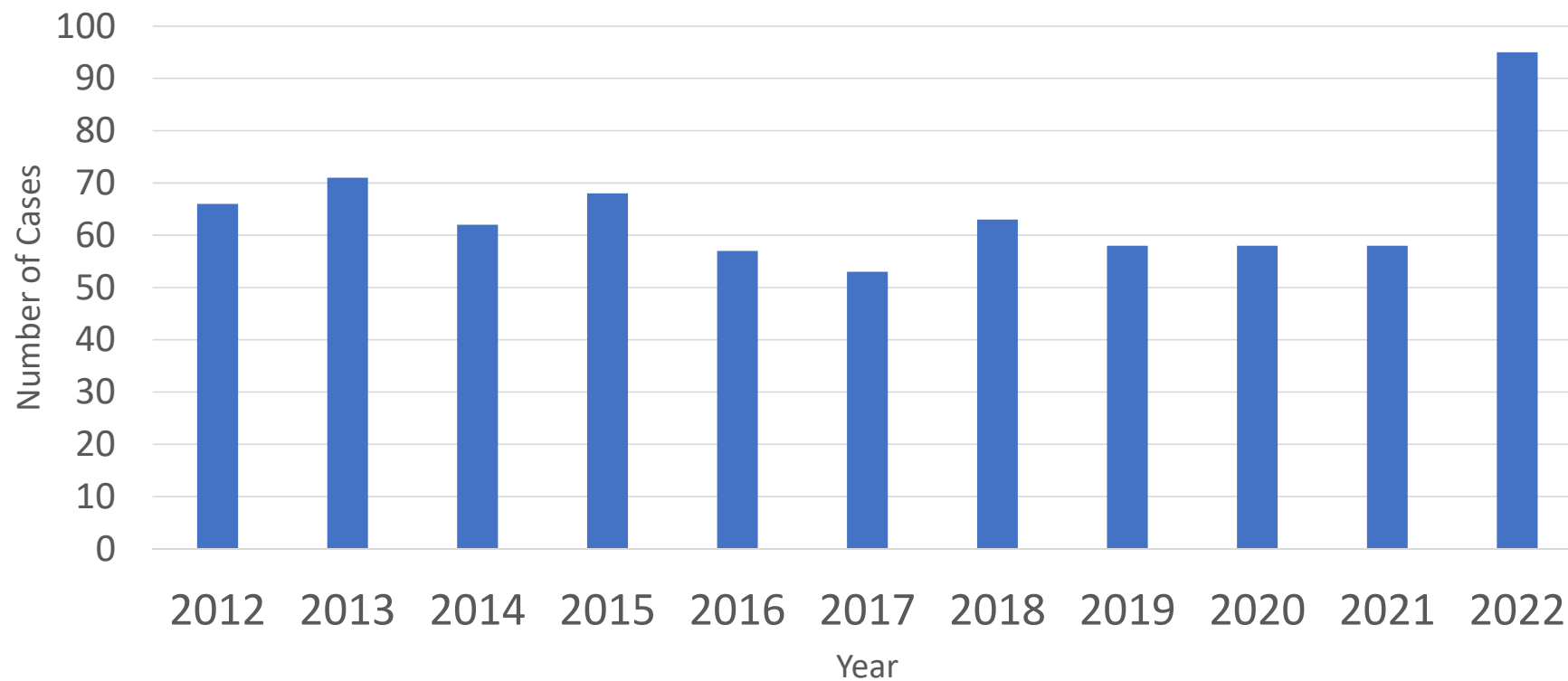
# Trends in TB—Alaska and U.S., 2010-2022



2022 AK rate: 13.1  
2022 US rate: 2.5



# Trends in TB Case Counts —Alaska 2012-2022







U.S. TB rate 2021: 2.5

71% foreign-born

AK TB rate 2021: 7.9

24% foreign-born

# Alaska TB Case Rates\* by Region, 2021

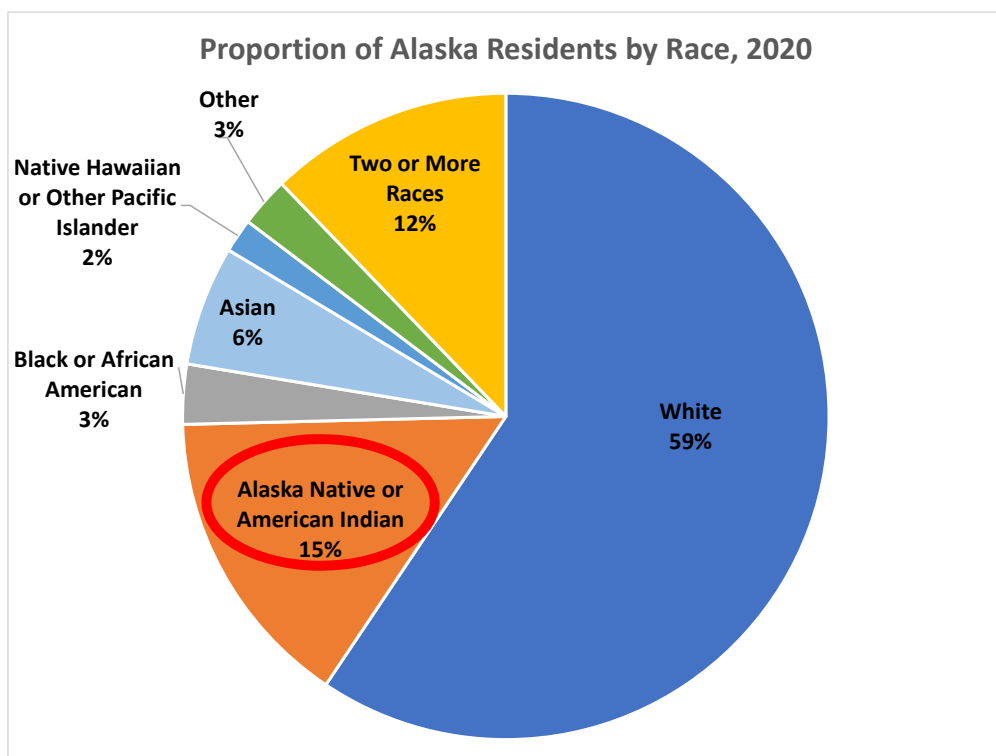
U.S.:	2.4	(2.5**)
Alaska:	7.9	(13.0**)
AK—N:	10.6	(64.8**)
AK—SW:	82.8	(135.9**)

\*Cases per 100,000

\*\*2022 provisional rates



# Distribution of Alaska TB Cases by Race



Race	Percent of 2021 TB Cases
Alaska Native/ American Indian	<b>71%</b> (85%)
Asian	<b>17%</b>
Black	<b>5%</b>
Pacific Islander	<b>3%</b>
White	<b>2%</b>








## Country of Origin for TB Cases\* in Alaska, 2017-2021

Country of Origin	# of Cases (% of all foreign-born cases)
<b>Philippines</b>	<b>50 (69.4%)</b>
<b>Mexico</b>	<b>3 (4.2%)</b>
<b>Dominican Rep.</b>	<b>2 (2.8%)</b>
<b>Indonesia</b>	<b>2 (2.8%)</b>
<b>Sierra Leone</b>	<b>2 (2.8%)</b>
<b>Thailand</b>	<b>2 (2.8%)</b>
<b>Vietnam</b>	<b>2 (2.8%)</b>



\*List only includes the nations (7/16) that had 2 or more cases.

# Who is at risk for TB in Alaska?

	<b>Alaska Native individuals from N or SW regions</b>
	<b>Birth, travel, or residence in a country with an elevated TB rate</b>
	<b>Immunocompromise</b>
	<b>Close contact to someone with infectious TB disease</b>
	<b>Reside or work in congregate setting</b>



## Percentage of TB cases by age group: Alaska vs. U.S.

	0-4	5-14	15-24	25-44	45-64	≥ 65
Alaska	12.1%	8.6%	3.4%	34.5%	27.6%	13.8%
U.S.	2.0%	2.0%	8.6%	28.7%	30.6%	28.1%

Source: Reported Tuberculosis in the U.S., 2021, CDC

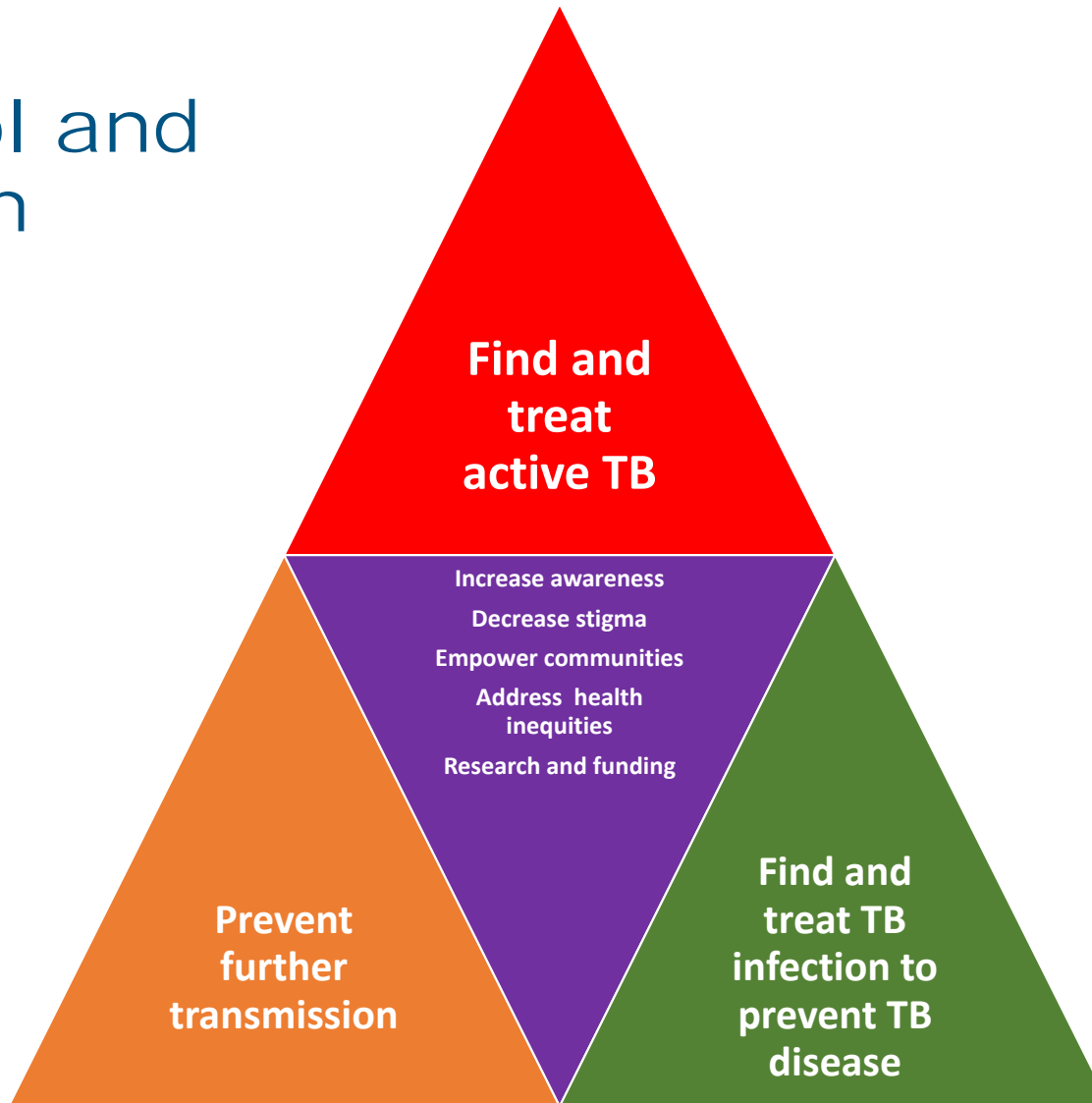
# TB Risk Factors—Alaska vs. U.S.

Demographic/Risk Factor	Alaska	U.S.
HIV	2.1%	4.2%
Diabetes Mellitus	8.6%	23.9%
Homelessness	13%	4.5%
Excess Alcohol Use	30.4%	8.2%
Non-Injection Drug Use	28.9%	7.0%
Contact to a Case	34.5%	6.0%
Cases Attributed to Recent Transmission	43.7%	12.3%

Source: Reported Tuberculosis in the U.S., 2021, CDC



# TB Control and Prevention



# TB Control Efforts in Alaska

## Active case finding and management

- Each case is followed by Public Health from beginning to end
- Collaboration with health care team to ensure appropriate evaluation/infection control/treatment
- Arrange and track directly-observed therapy (DOT); count every dose to ensure successful completion of treatment
- DOH provides active TB meds at no cost to patients
- Patient and family education and support/case management

## Contact Investigation

- Done by Public Health nurse for every active case
- Ensure that contacts get evaluated/tested/treated as needed

## Community Screening

- Public Health teams regularly visit communities with known or recent TB activity to do more widespread case-finding/screening

## Outreach/Consultation/Education



# Advances & Future Directions in TB

## Diagnosis

- POC molecular/resistance testing
- LF-LAM urinary antigen test for HIV+/TB in resource-limited settings
- Whole genome sequencing
- Computer-aided detection for chest radiographs
- Serum biomarkers

## Treatment

- New shorter-course regimens for LTBI, TB, and MDR-TB
  - 4-month RFP/MFX regimen for ATB
  - 6-month all-oral BPAL/M regimen for MDR-TB
- 30+ new drugs in trials

## Adherence

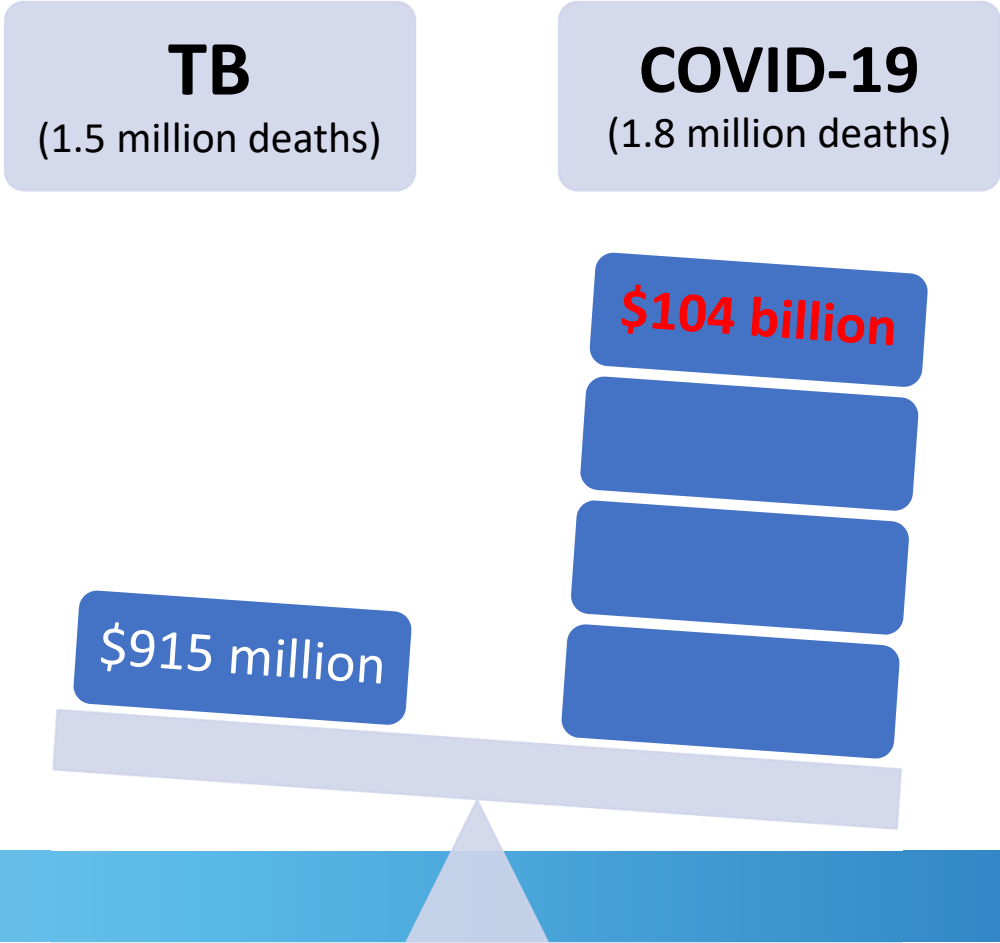
- vDOT

## Prevention

- Ways to determine which pts with LTBI are most likely to progress
- Vaccines
  - Pre-exposure (MTBVAC, VPM1002), post-exposure (M72/AS01E)



# 2020 Research and Development Funding



In 2020, the amount of funding for research and development for COVID-19 was 113 times higher than that for TB even though the number of deaths attributable to each was comparable  
TB: 1.5 million deaths  
COVID-19: 1.8 million deaths




# Resources: Alaska TB Program



- **907-269-8000**
- **<http://dhss.alaska.gov/dph/Epi/id/Pages/tb.aspx>**
  - Or google “Alaska TB Program”



# Resources: TB Warmline



**Tuberculosis Warmline**

The Tuberculosis Warmline is one of many services provided by the Curry International Tuberculosis Center (CITC).


The Center creates, enhances, and disseminates state-of-the-art resources and models of excellence and performs research to control and eliminate tuberculosis in the United States and internationally.

CITC is designated by the Centers for Disease Control and Prevention (CDC) as a Regional Tuberculosis Training and Medical Consultation Center (RTMCC). Our RTMCC serves the Western Region which consists of: Alaska, California (including San Francisco, San Diego, and Los Angeles), Colorado, Hawaii, Idaho, Nevada, Oregon, Utah, Washington, and the U.S. Pacific Island Territories.

The Warmline Service is provided free of charge. Funding is provided by a grant from the CDC – Division of Tuberculosis Elimination.

A Consultation Service for  
Medical Providers in the Western Region

For a medical consultation, please call or email us:  
**(877) 390-6682** or **(415) 502-4700**  
[currytbcenter@ucsf.edu](mailto:currytbcenter@ucsf.edu)



**Curry International Tuberculosis Center**  
300 Frank Ogawa Plaza, Suite 520  
Oakland, CA 94612-237  
Main Telephone: 510-238-5100

For additional information:  
<http://www.currytbcenter.ucsf.edu>  
e-mail: [currytbcenter@ucsf.edu](mailto:currytbcenter@ucsf.edu)

Hours of operation:  
9:00 AM to 3:00 PM Pacific time  
Monday through Friday

Voice mail is available to record incoming messages 24 hours a day, 7 days a week.

**1-877-390-6682**

**[currytbcenter@ucsf.edu](mailto:currytbcenter@ucsf.edu)**

# Resources: TB Project ECHO



**TB Project ECHO® (Extension for Community Healthcare Outcomes) is a collaborative model of medical education and care management that provides healthcare professionals with the knowledge and support they need to manage patients with TB infection through:**

- Consultations for clinicians working with patients who have TB infection or TB disease.
  - Participants receive case notes, prepared by the TB ECHO panel, following the session.
- Didactics on TB-related topics offered twice a month.
  - Continuing education credits available for didactics.
- Mentoring, from TB specialist, on best practice standards in TB care.
- Ability to participate remotely using free, easy-to-use videoconference technology.

<https://www.doh.wa.gov/YouandYourFamily/IllnessandDisease/Tuberculosis/TrainingandEducation/TBECHO>



# Resources: LTBI ASSIST

RUTGERS  
Global Tuberculosis  
Institute  
NEW JERSEY MEDICAL SCHOOL

**Latent TB Infection (LTBI) ASSIST**  
Interactive decision support for  
current CDC TB guidelines

**Get Started**

About LTBI-ASSIST

Latent Tuberculosis Infection (LTBI) Menu

Choose Your Question

- Who should be tested for latent TB infection?
- How to interpret results of tests for latent TB infection?  
How to evaluate patients with positive tests for latent TB infection?
- How is latent TB infection treated?
- How should treatment be monitored?  
How do I manage side effects or treatment interruptions?
- Note: symptomatic individuals should be evaluated for TB disease  
How to evaluate a person with signs or symptoms of TB disease?

Individuals with LTBI are typically asymptomatic. After initial infection, host immune control contains *M. tuberculosis* within granulomas. Chest imaging is typically normal or shows calcified granulomas.

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<https://globaltb.njms.rutgers.edu/educationalmaterials/LTBI-ASSIST%20-%20Storyline%20output/story.html>

Thank You!



# AK ID ECHO

## AK Infectious Disease ECHO

- Second Tuesday of every month from noon-1:00 PM
- To join, <https://echo.zoom.us/meeting/register/tZ0qc--qqj0qH9cw7gRs1d7K98I3AlvQJjHa>
- [www.anthc.org/ak-id-echo](http://www.anthc.org/ak-id-echo)
- Upcoming sessions
  - June 13: People Living with HIV and Breastfeeding
  - July 11: Overview of HIV Injectable Medications



# ADDITIONAL LEARNING OPPORTUNITIES

## Alaska Liver Disease ECHO

- Third Thursday of every month from noon-1:00 PM
  - <https://echo.zoom.us/meeting/register/tZUrcOqgqTwjHt2OI6vWpnJ9v1v3pG0BqjBc>
  - [www.anthc.org/ak-id-echo](http://www.anthc.org/ak-id-echo)
- 2023 theme ~ *Ways You Can Help Reduce Morbidity of Mortality From Liver Disease*
- May 18: Addressing Safe Medication Prescribing
- June 15: Effective Strategies for Alcohol Use Disorder Screening – When, Where, and How to Implement

## LiverConnect

- Second Tuesday of every month 8:00-9:00 AM
  - <https://echo.zoom.us/meeting/register/tJUvdeytqT4vGtzmN4TyvItMINRIZW7U38EU#/registration>
  - [www.anthc.org/hep/liverconnect](http://www.anthc.org/hep/liverconnect)
- June 13: Obesity Management
- July 11: When to Refer and Preparing a Patient for Liver Transplant



# ADDITIONAL LEARNING OPPORTUNITIES

## Addiction Medicine ECHO

- Second and fourth Thursday of each month from noon-1 p.m.
  - [https://zoom.us/meeting/register/tJlvf-itrTsqHdZDfE3IZ\\_KuUZeD3lOkQiSR](https://zoom.us/meeting/register/tJlvf-itrTsqHdZDfE3IZ_KuUZeD3lOkQiSR).
  - [www.anthc.org/project-echo/addiction-medicine-echo](http://www.anthc.org/project-echo/addiction-medicine-echo)
- May 25: Traditional Teaching: Two Eyed Seeing
- June 22: LGBTQIA+ and Substance Use
- Email: [behavioralhealth@anthc.org](mailto:behavioralhealth@anthc.org)



## Indian Country ECHO Programs

- Harm Reduction, Infectious Disease, and more!  
[www.indiancountryecho.org/teecho-programs](http://www.indiancountryecho.org/teecho-programs)





# Free prevention resources available at iknowmine.org/shop

The screenshot shows the iknowmine.org website interface. At the top, there is a search bar and navigation links for 'About Us', 'Get Care', 'For Caring Adults', and 'Shop'. A 'SIGN IN OR REGISTER' link is also present. The main header features the 'iknowmine.org' logo with the tagline 'Truthful, Accurate Information for You(th)'. Below this is a navigation menu with icons and labels for 'SEXUAL HEALTH', 'LGBTQ2S+', 'MY BODY', 'MY MIND', 'MY SPIRIT', 'MY RELATIONSHIPS', and 'ALCOHOL, TOBACCO & OTHER DRUGS'. A 'order resources & supplies' button and a 'get answers' button are also visible. The main content area features a large, colorful abstract background with the text 'Order Resources & Supplies' and a vertical red button labeled 'ASK NURSE LISA'.



HARM REDUCTION KIT



CONDOMS FOR ORGANIZATIONS



ALASKA NATIVE  
TRIBAL HEALTH  
CONSORTIUM



# AK ID ECHO Contacts

## ANTHC Staff

- Leah Besh PA-C, Program Director: [labesh@anthc.org](mailto:labesh@anthc.org)
- Lisa Rea RN, Case Manager: [ldrea@anthc.org](mailto:ldrea@anthc.org)
- Jennifer Williamson, Program Coordinator: [jjwilliamson@anthc.org](mailto:jjwilliamson@anthc.org)

ANTHC Liver Disease and Hepatitis Program: 907-729-1560

ANTHC Early Intervention Services/HIV Program: 907-729-2907

## Northwest Portland Area Indian Health Board

- David Stephens, Director Indian Country ECHO: [dstephens@npaihb.org](mailto:dstephens@npaihb.org)
- Jessica Leston, Clinical Programs Director: [jleston@npaihb.org](mailto:jleston@npaihb.org)





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*Thank you!*

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