

Rural TB Support – Pathways to Diagnostics and Care

Presented by:

- Shawna Whitney, FNHA TB Services
- Dr. Victoria J Cook, Provincial TB Services, BCCDC

April 23, 2026, | 0800-0900



THE UNIVERSITY OF BRITISH COLUMBIA

Continuing Professional Development

Faculty of Medicine

Land Acknowledgement

We acknowledge that we work on the traditional, ancestral and unceded territory of the Skwxwú7mesh (Squamish), x^wməθkwəy'əm (Musqueam), and Səlílwətaʔ/Selilwitulh (Tsleil-Waututh) Nations.

I am calling into today from my ancestral, unceded territory of the Syilx/Okanagan people in the Interior. (Shawna)



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

PRESENTER DISCLOSURES

Shawna Whitney

- No relationships with commercial interests to disclose at this time.

Dr. Victoria J Cook

- No relationships with commercial interests
- No financial or in-kind commercial support
- Involved in clinical research supported by funds from CIHR, BC Lung Foundation and NIH



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

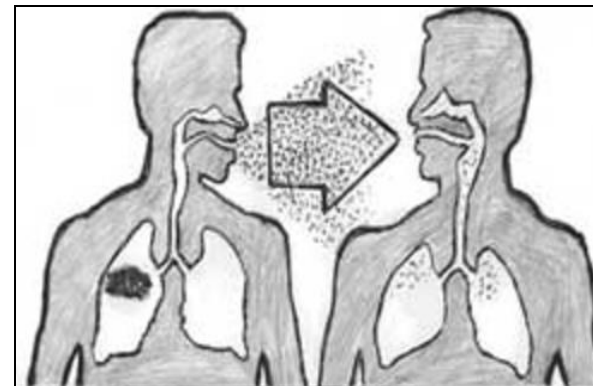
LEARNING OBJECTIVES

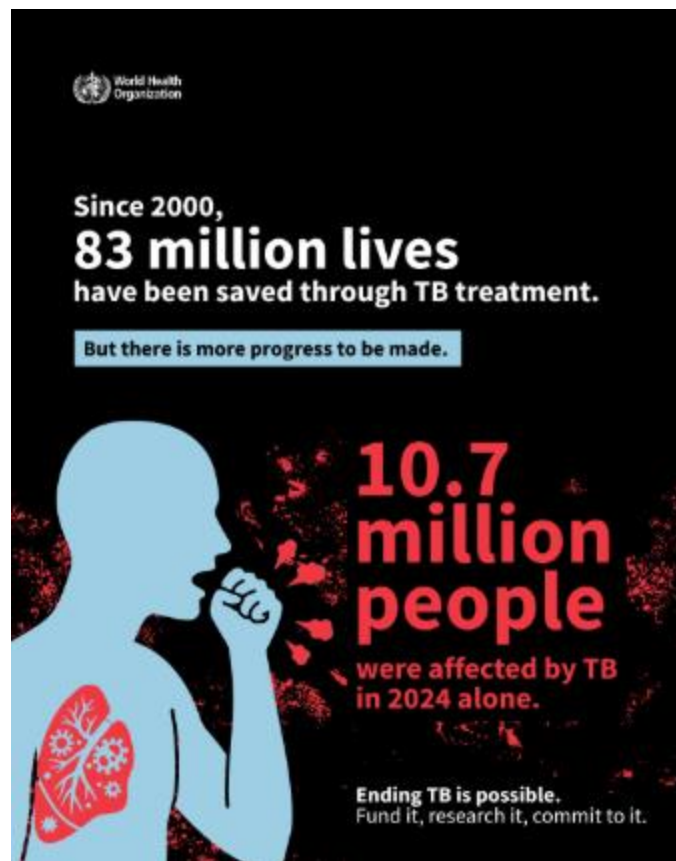
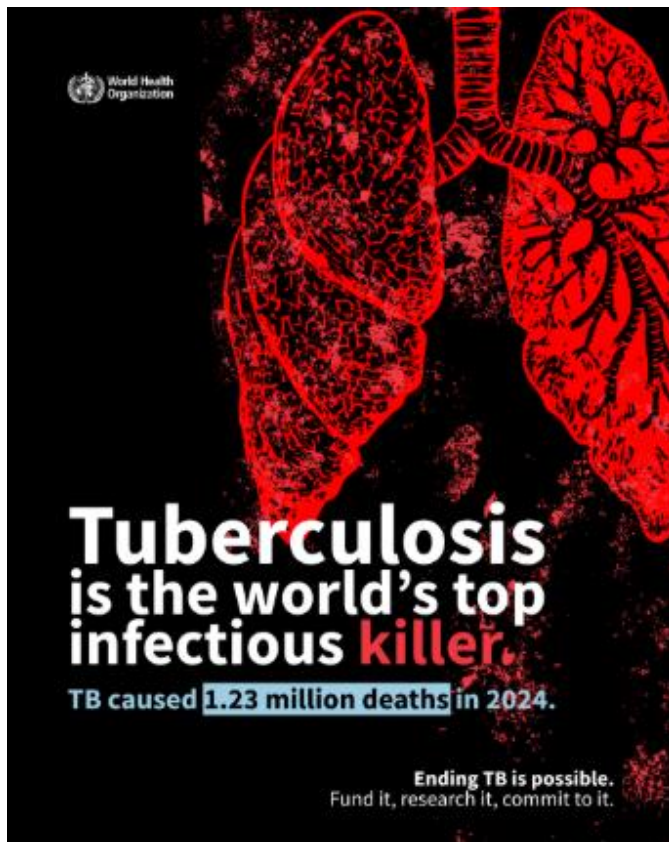
- Recognize TB as a priority health issue both globally and locally
- Review a TB workflow and pathways of screening process for rural First Nations communities
- Identify at-risk individuals for TB disease
- Assess the evolving clinical spectrum of tuberculosis, including the differences between TB infection and TB disease
- **Q & A > Please put any questions in the chat box**



What is Tuberculosis?

- reportable, infectious disease acquired (almost exclusively) through inhalation of airborne organisms
- caused by acid fast tubercle bacilli (AFB) of the *Mycobacterium tuberculosis* complex
- *M. tuberculosis* (MTB) causes majority of disease in humans and most often involves the lungs





TB in Canada

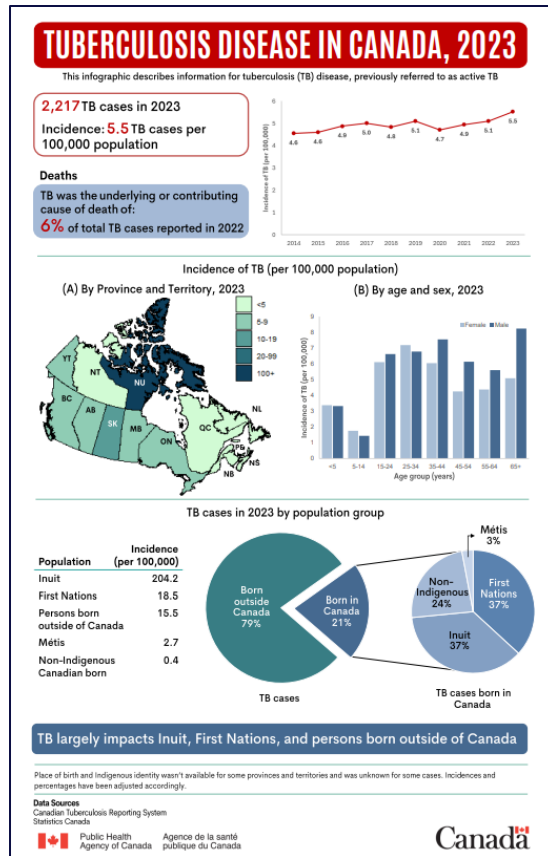
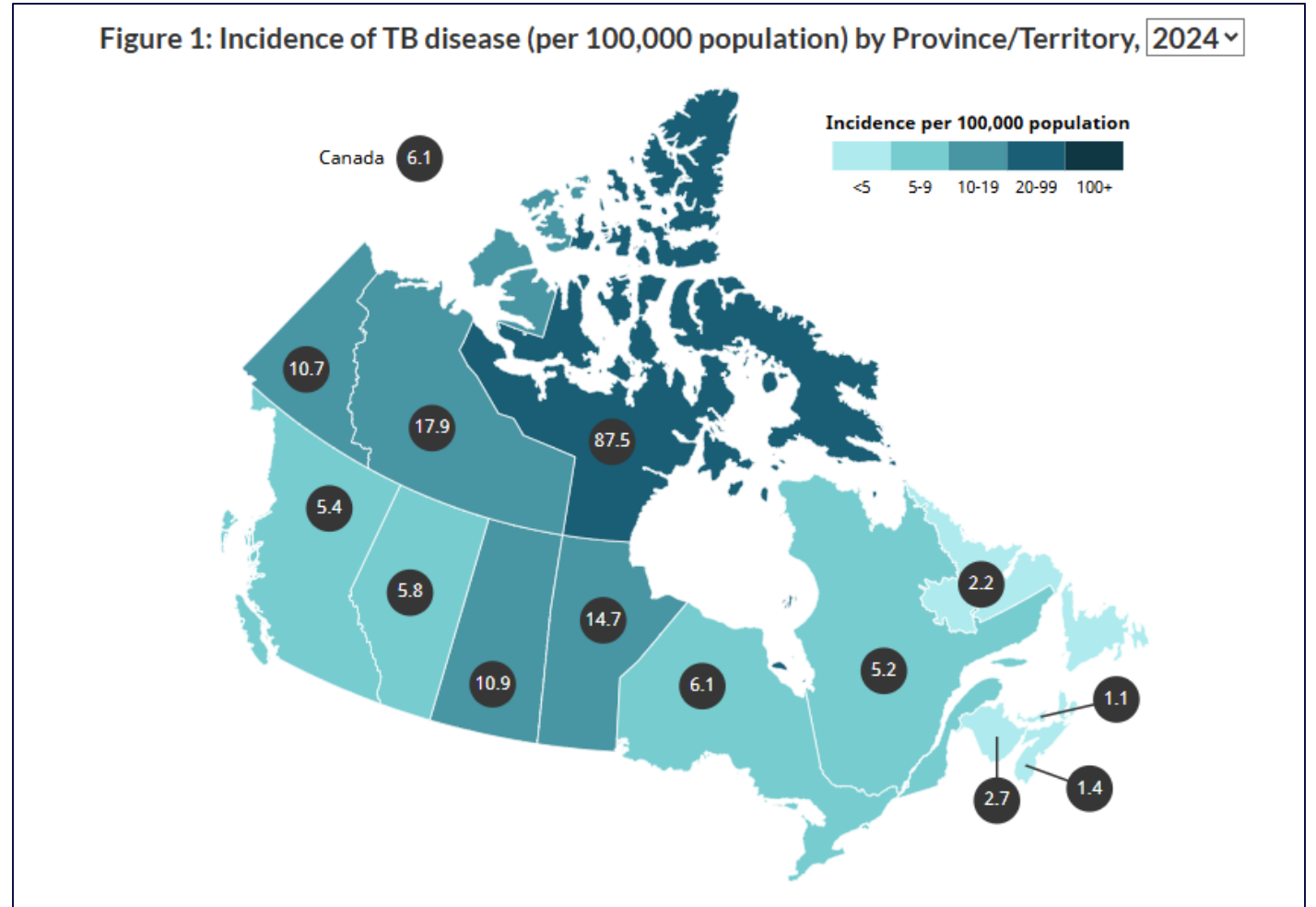


Figure 1: Incidence of TB disease (per 100,000 population) by Province/Territory, 2024



<https://health-infobase.canada.ca/tuberculosis/>

<https://www.canada.ca/en/public-health/services/publications/diseases-conditions/tuberculosis-disease-2023-infographic.html>

Figure 6: Proportion of TB disease cases by population group, 2024

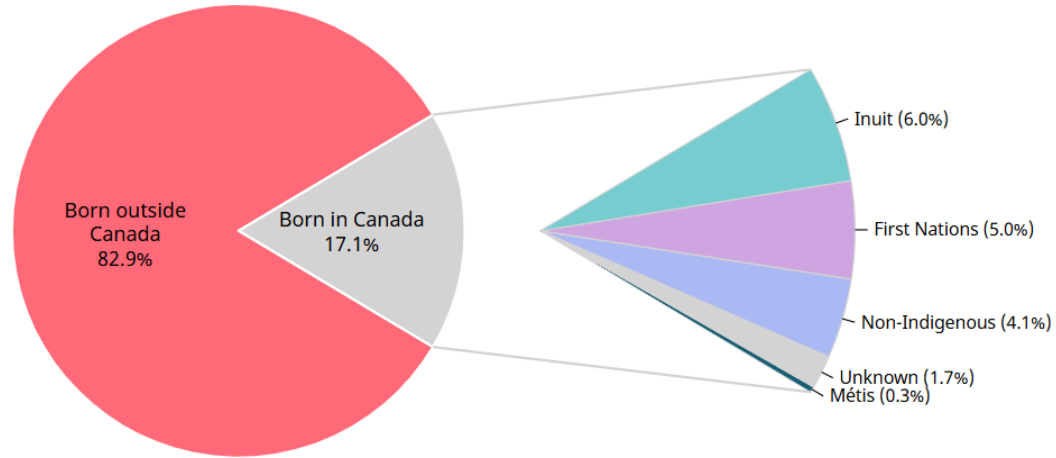


Figure 7: Proportion of TB cases born outside of Canada by WHO region of birth, 2024

👉 Hover over a bar to highlight the corresponding region on the map.

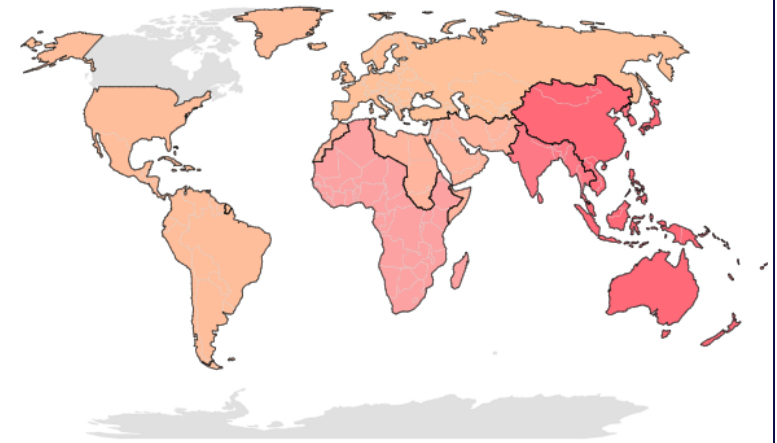
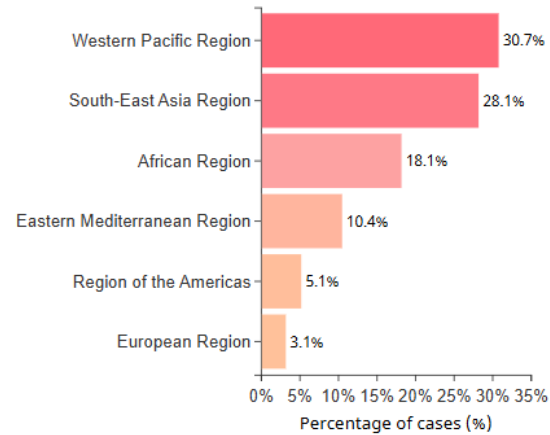
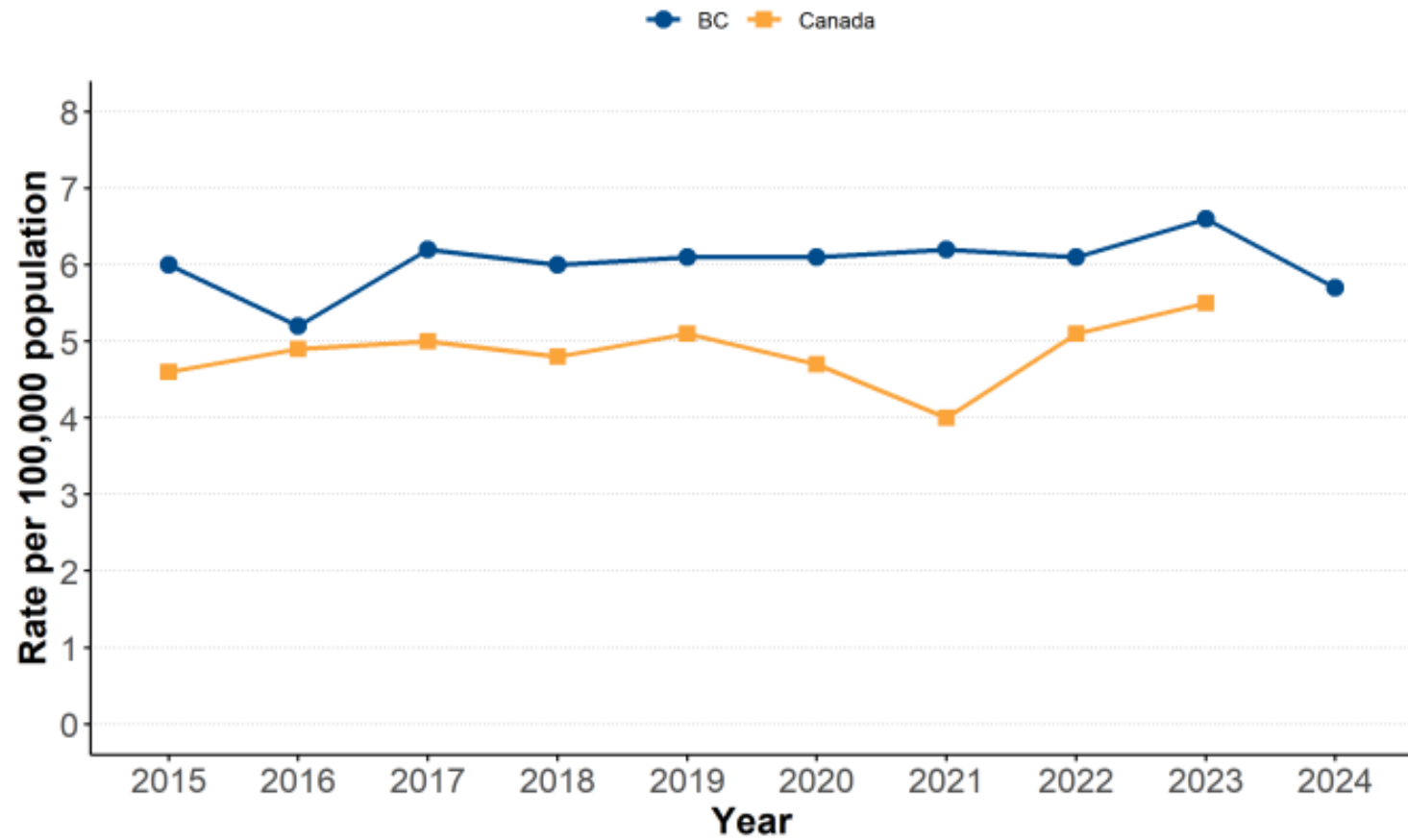
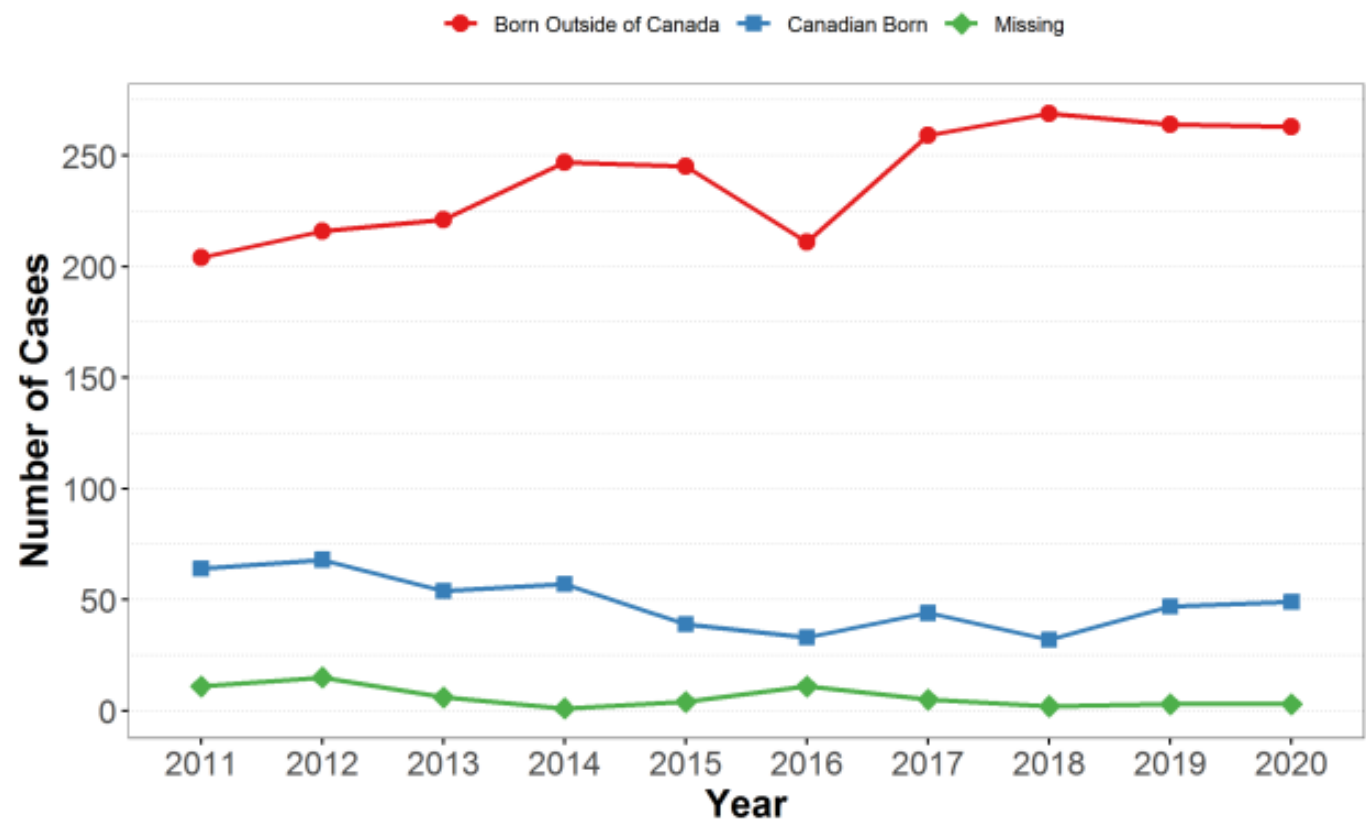


Figure 1. TB disease rates in BC and Canada*, 2015 to 2024



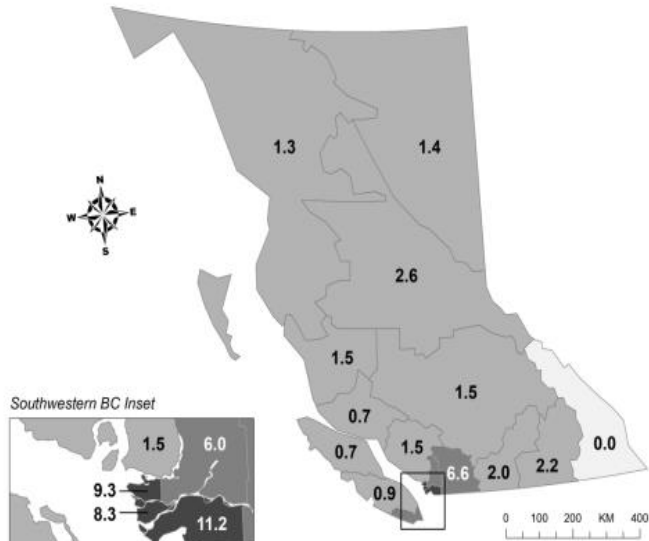
*Canadian rates from the Public Health Agency of Canada,^{9,10} data not yet publicly available for 2024

Figure 7. Active TB Cases by Country of Birth in BC, 2011 to 2020



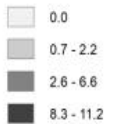
Over 80% of active cases of TB in BC are diagnosed in persons born or who lived in countries with higher incidence of TB disease

Figure 2. TB Disease Rates by Health Service Delivery Area*+ in BC, 2024



ID	Health Service Delivery Area	Cases	Rate
11	East Kootenay	0	0.0
12	Kootenay Boundary	2	2.2
13	Okanagan	9	2.0
14	Thompson Cariboo Shuswap	4	1.5
21	Fraser East	24	6.6
22	Fraser North	48	6.0
23	Fraser South	116	11.2
31	Richmond	20	8.3
32	Vancouver	72	9.3
33	North Shore/Coast Garibaldi	5	1.5
41	South Vancouver Island	19	4.1
42	Central Vancouver Island	3	0.9
43	North Vancouver Island	1	0.7
51	Northwest	1	1.3
52	Northern Interior	4	2.6
53	Northeast	1	1.4

Rate per 100,000 population by HSDA



*Health Service Delivery Area determined at time of case; cases with a client address outside of BC are excluded (n=1). *Population denominators from 2024 BC Statistics' Population Estimates.

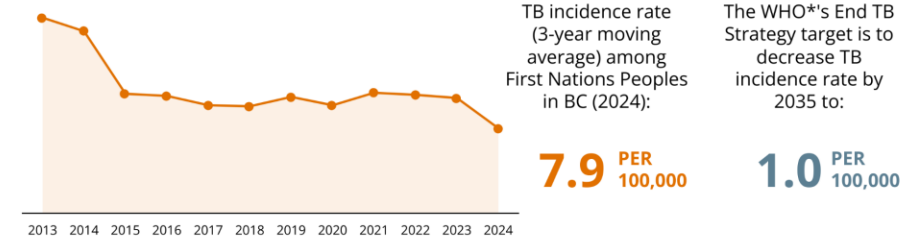
Knowledge Update on Tuberculosis in First Nations Peoples in BC - 2024



First Nations Peoples have rich histories of wellness. Colonialism has had damaging impacts on health, including harms caused by tuberculosis (TB). TB is a preventable and curable disease caused by a bacteria that usually affects the lungs. It spreads from person to person through the air.

This summary describes TB prevention and care among people who self-identified as First Nations in BC. *Data Source: Panorama (data up to Dec. 31, 2024)*

From 2013 to 2024, TB incidence rate (3-year moving average) has decreased by approximately 58%



Some people have higher risk of TB disease Between 2016 and 2023

People aged 60+ had **4.0x** higher TB disease rates than people <60 years age

Just over 1 in 5 people with TB disease had a chronic medical condition

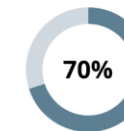
53.5% people with TB disease had history of substance use



Treating TB infection ("Sleeping TB") can prevent active TB disease



Each year, **43 people**, on average, started TB preventive treatment (2011-2023)



70% of people who started TB preventive treatment in 2022 and 2023 finished treatment within 12 months

*World Health Organization
<https://www.fnha.ca/what-we-do/communicable-disease-control/respiratory-infections-tuberculosis>
<http://www.bccdc.ca/health-info/diseases-conditions/tuberculosis>

Tuberculosis Elimination for Healthier First Nations Communities

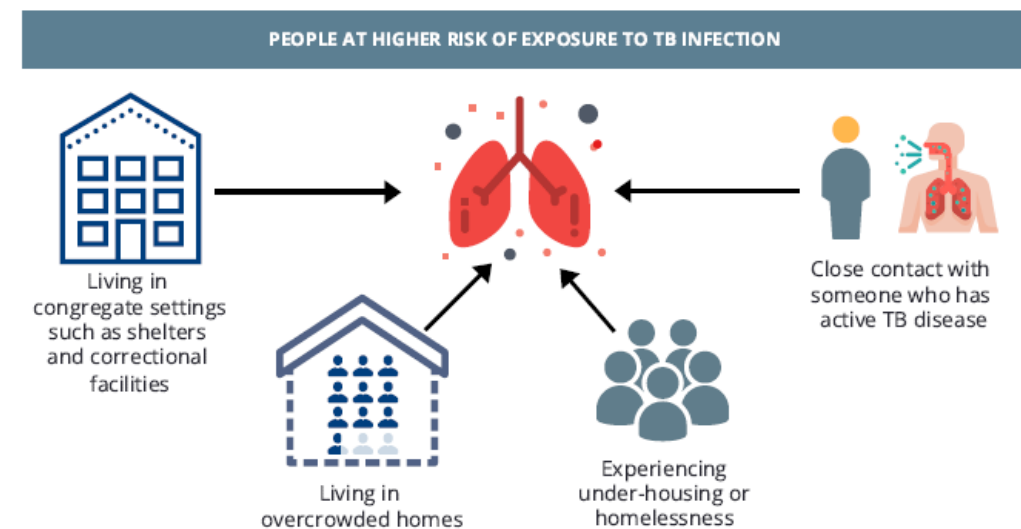


First Nations Health Authority
Health through wellness

Tuberculosis (TB) has two stages:

TB INFECTION	ACTIVE TB DISEASE
<p>A person with TB infection:</p> <ul style="list-style-type: none">• Has TB bacteria, but is not sick• Cannot spread TB• Should receive treatment to prevent development of active TB disease• If untreated, 10% of persons with TB infection will develop active TB disease at some time in their life	<p>A person with active TB disease:</p> <ul style="list-style-type: none">• Has TB bacteria and is sick• Can spread TB while coughing, sneezing, shouting, singing, etc.• Must receive treatment to prevent development of severe disease and to prevent spread• An untreated person can infect 5-15 people over a year through close contact

Anyone can get TB - but some people have a higher risk of acquiring TB infection



FNHA TB SERVICES & BCCDC PARTNERSHIP

Meet the FNHA TB Team



Shawna Whitney
CDC Nurse Specialist, TB



Sheila Hourigan
CDC Nurse Coordinator, TB



Diana Mounce
Clinical Nurse Advisor, TB



Ashley Yeamans
Casual Clinical Nurse
Advisor, TB



Kerrin Miller
Casual Clinical Nurse
Advisor, TB



Noor Gill
High Incidence Community
Clinical Nurse Advisor, TB



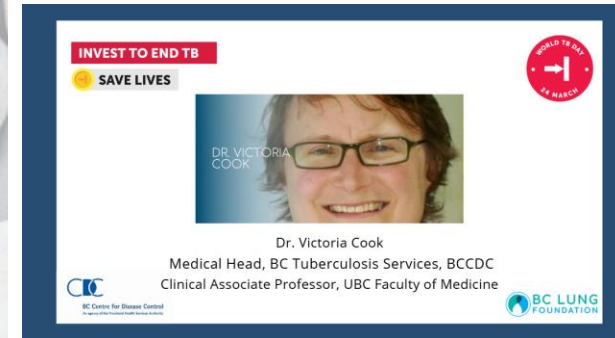
Tracey Olson
Data Entry Support, TB



Snehal Vaghela
Epidemiologist

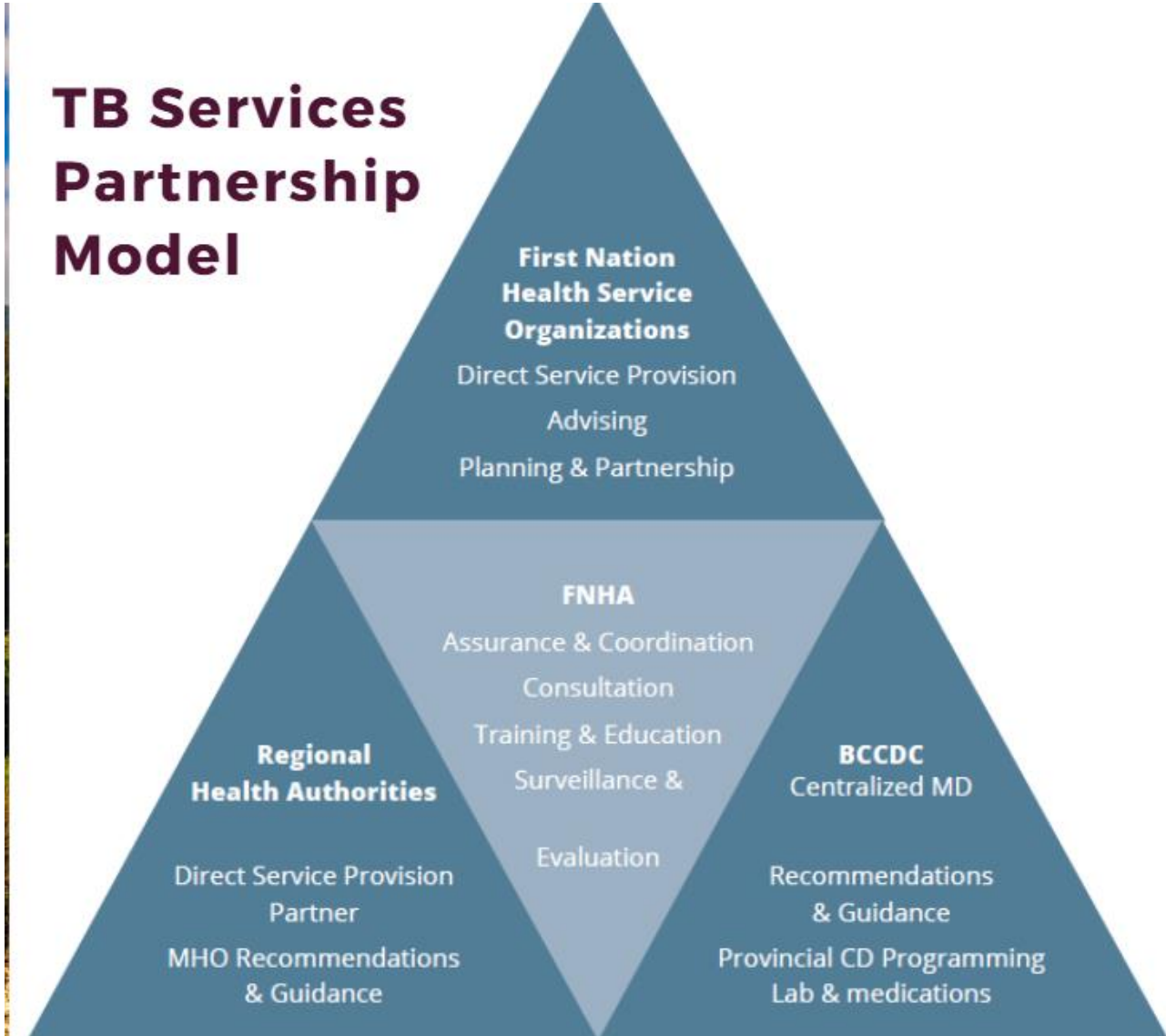


Liza Sam
TB Clinical Nurse Educator

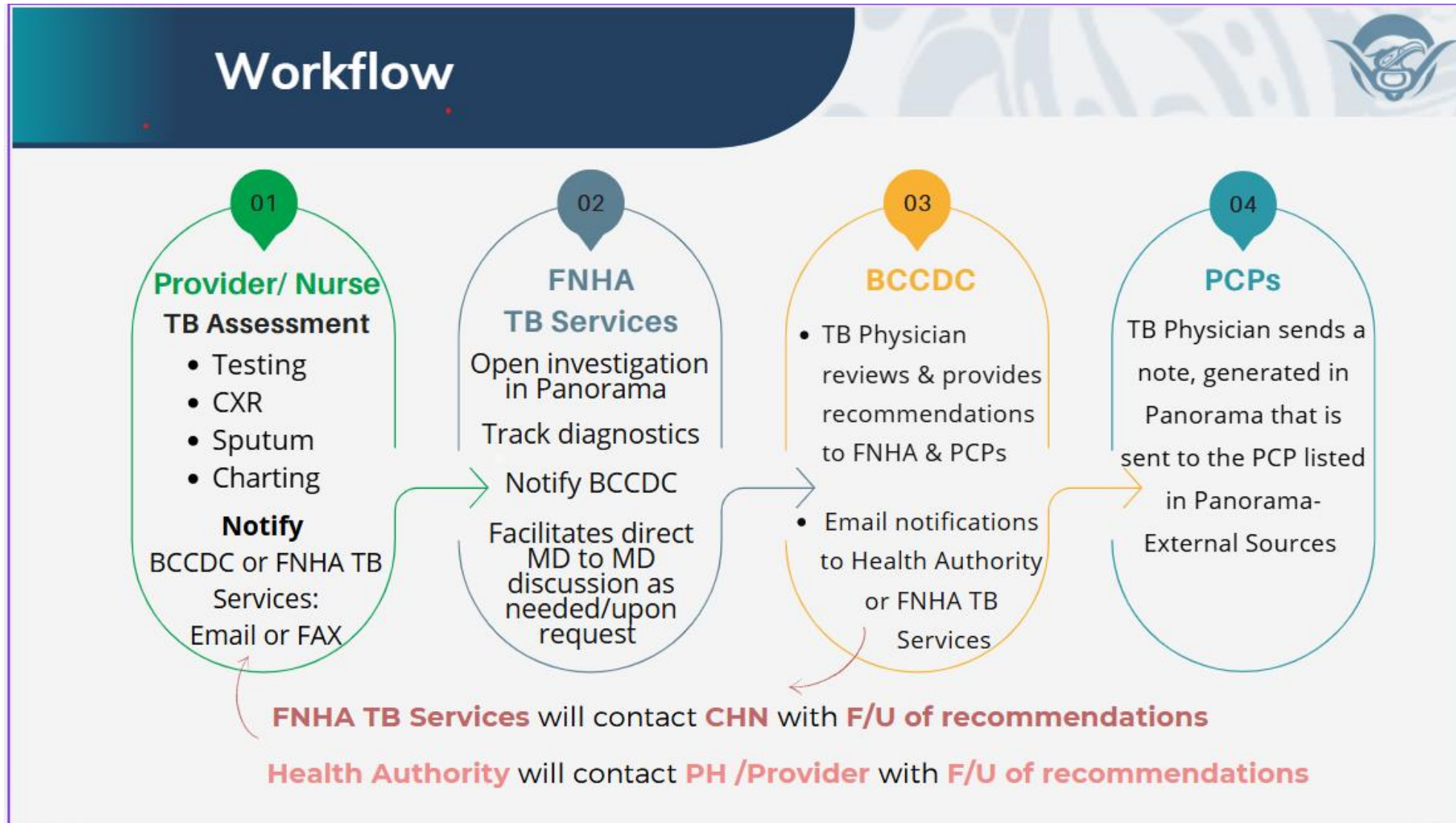


UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

TB SERVICES PARTNERSHIP MODEL



TB Screening Pathway within FNHA Community



Case # 1

89-year-old female

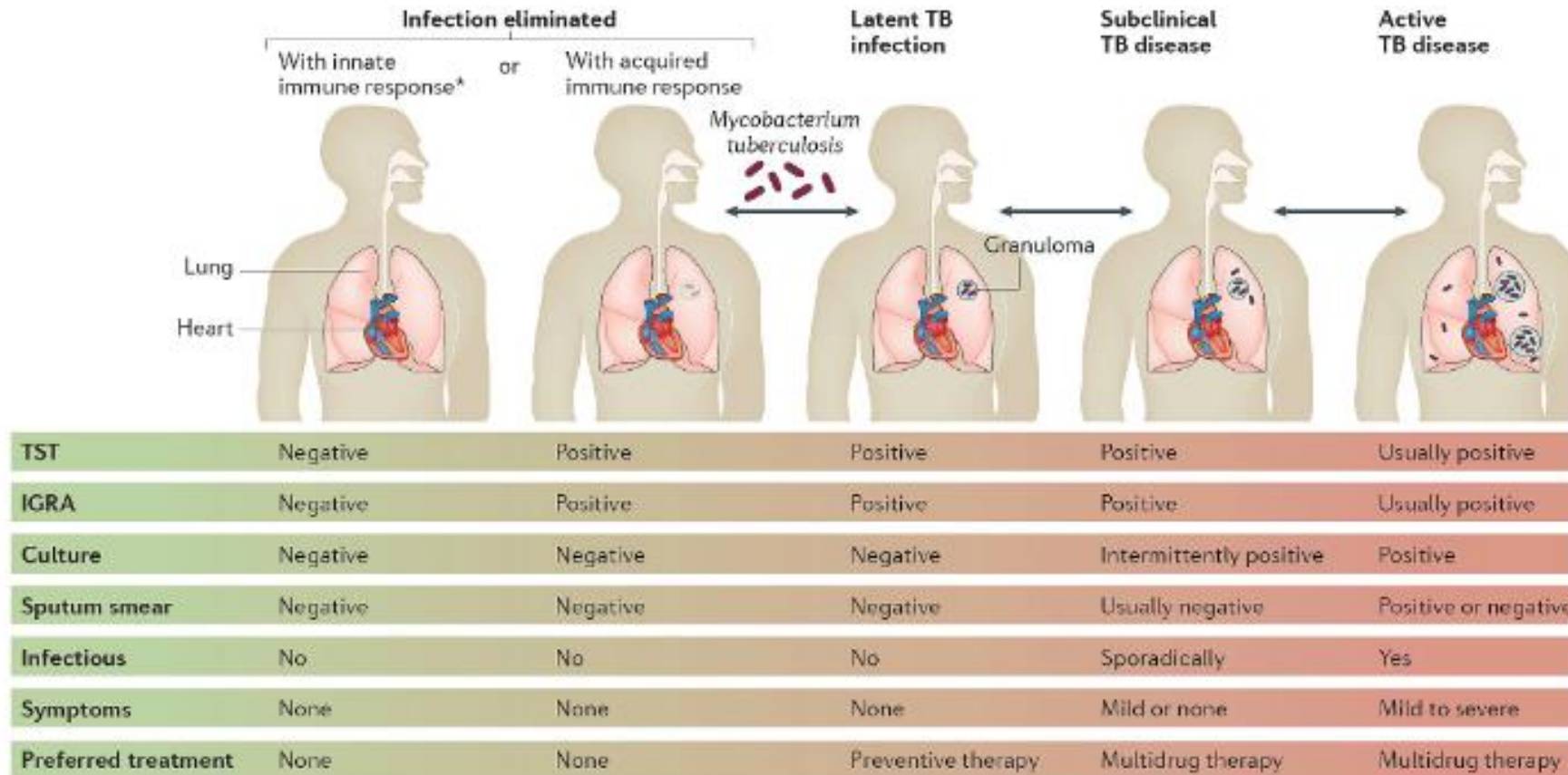
- Admitted to hospital Dec.12 with cough, SOB, fever, some weight loss.
- Sputum sample collected Dec.17th while in hospital. Smear negative, cultured positive Jan.21, 2026.
- CXR: right pleural effusion, adjacent atelectasis, nodular opacity at right upper lung. Abnormalities present since April 2025.
- TST: + Positive, previous Tx with INH as child (1961) in a TB sanatorium hospital. Spent 4 years there.



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT

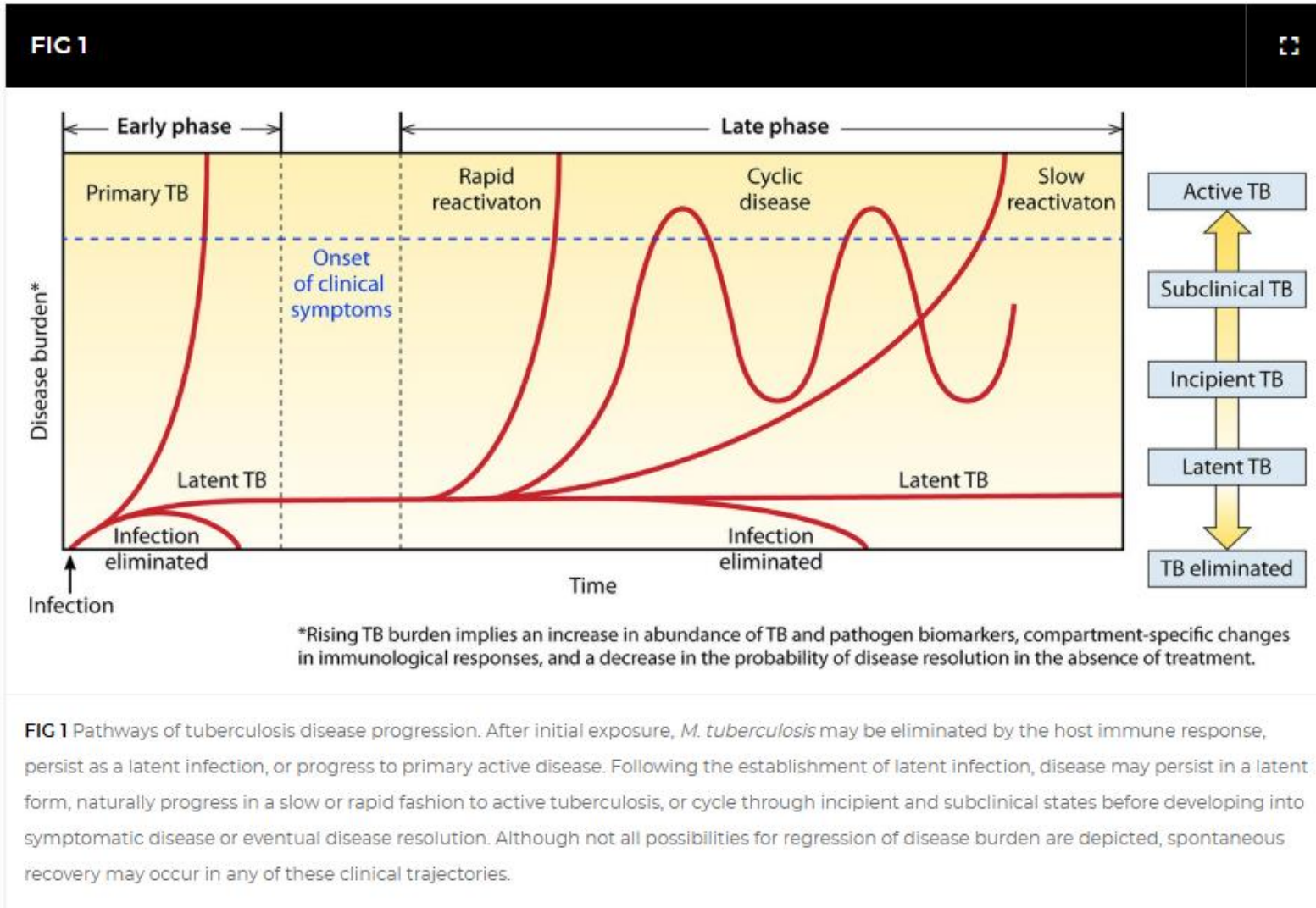
Spectrum of TB Infection

Incipient TB = pre-symptomatic, early stage of infection; "containment"

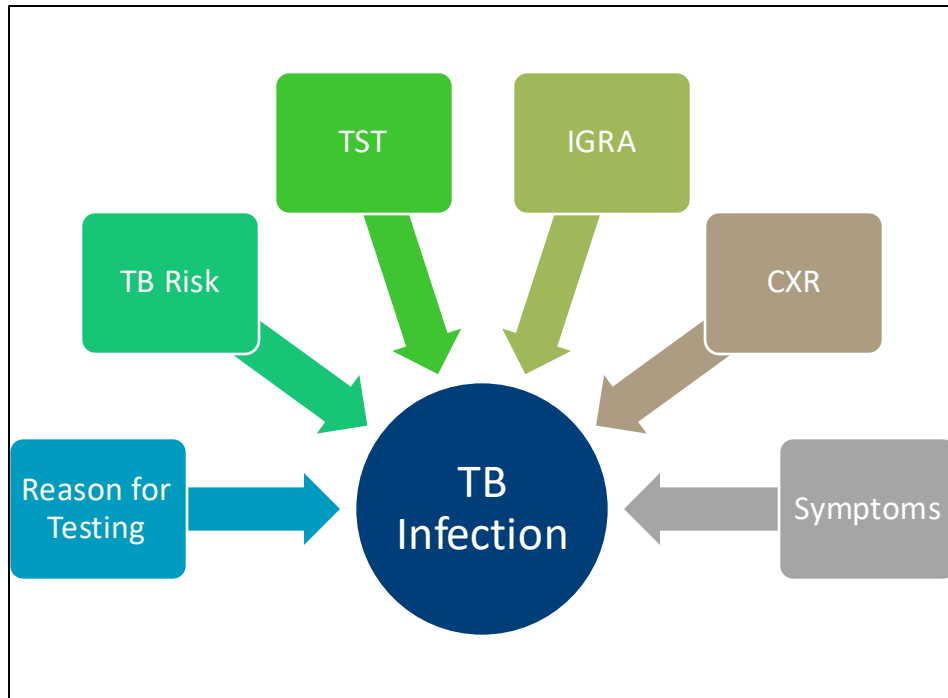


Bacterial Replication

Exposure



TB Infection – Options for Diagnosis and Treatment



- 90-95% effective
- Liver toxicity
- Cheapest but longer

- Better completion despite pill burden
- Effective as 9H
- More side effects (less liver but more “flu-like” and hypersensitivity)
- DDI
- “DOPT”; \$\$\$

- Better completion
- Effective as 9H
- Less severe liver AE
- DDI
- Cheaper

TB Disease – Diagnosis and Treatment

Preferred Drug Regimens:

Suspected Drug Sensitive =
2HRZE/4HRE

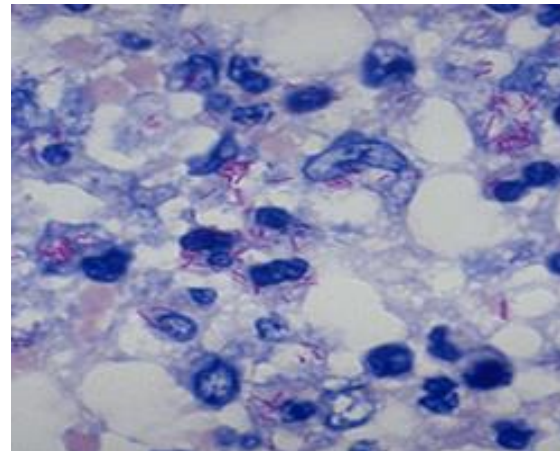
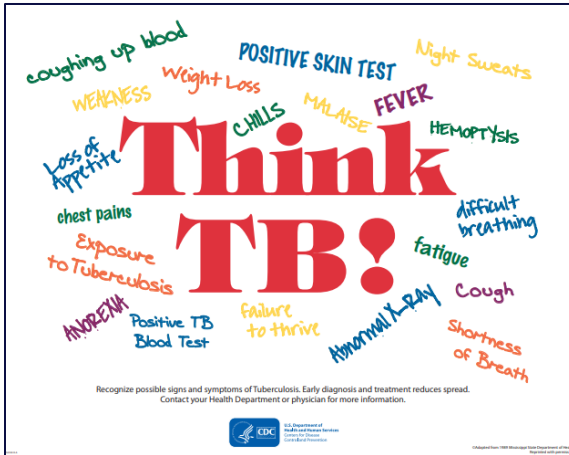
Drug Sensitive TB =
2HRZ/4HR

Drug Resistant TB =
INH_R→6RZEQ

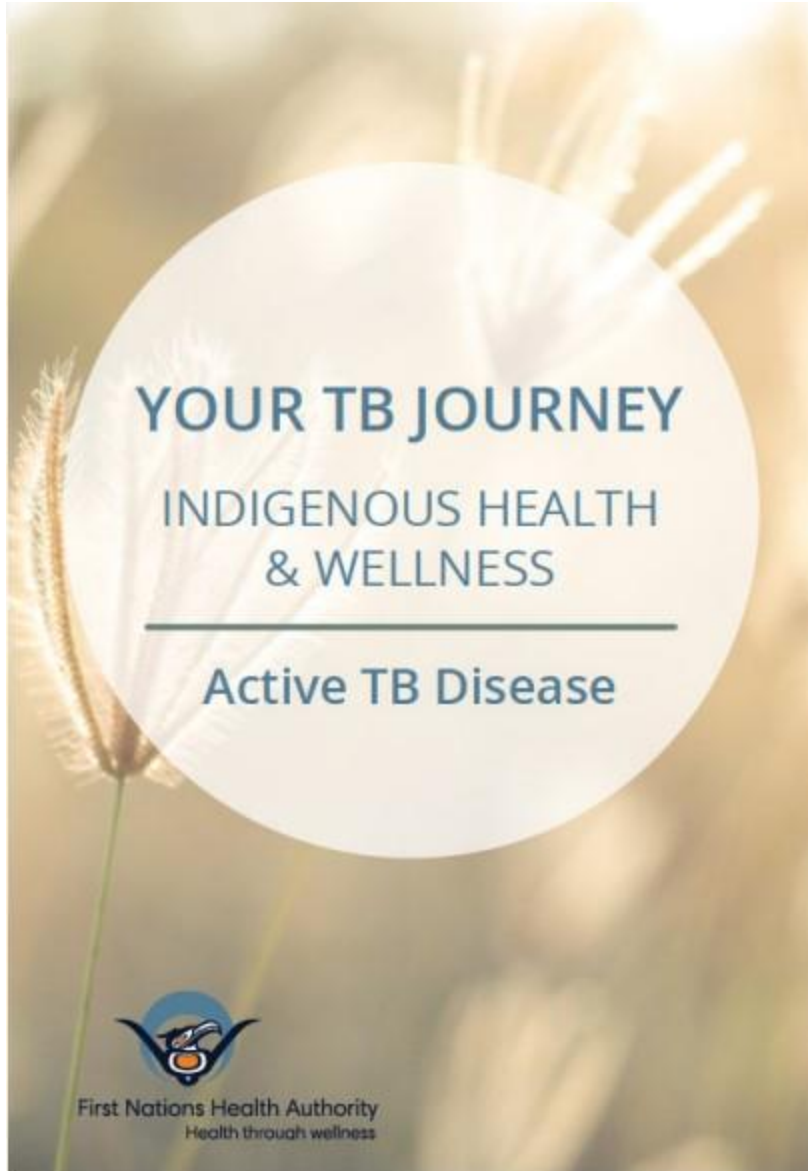
RR or MDR→BPaL(M)

**Supportive therapy can
include DOT or vDOT

H=Isoniazid
R=Rifampin
Z=Pyrazinamide
E=Ethambutol
Q=Quinolone



TREATMENT FOR TB DISEASE



It's not just about the medication....



Resources & References Mentioned

- RACE line for TB linked to VGH TB Ward

RACE RAPID ACCESS TO CONSULTATIVE EXPERTISE

Monday to Friday 0800-1700
Local Calls: 604-696-2131
Toll Free: 1-877-696-2131

"the app is awesome...CLICK, CLICK, CLICK - I got a call back within a couple of minutes!"

Download the RACEapp+ today

Family Physician Quick Links

List of Specialty Areas

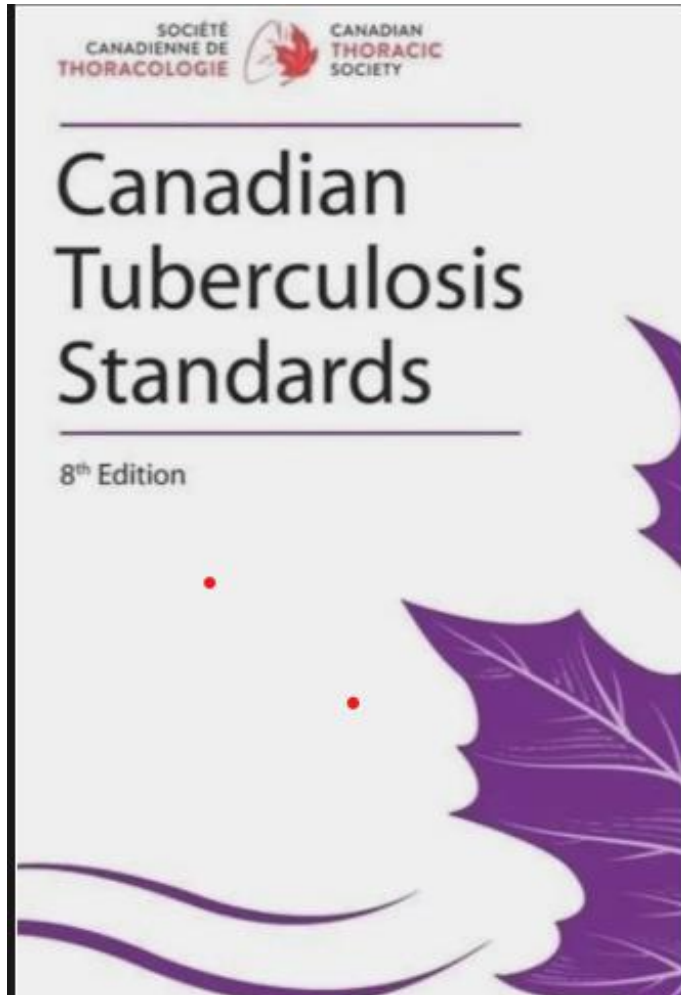
- Infectious Diseases
- Respirology
- Tuberculosis

List of Specialty Areas

Billing Information for a RACE call



TB RESOURCES



Communicable Disease Control Manual

The purpose of the guidelines in the Communicable Disease Control Manual is to assist public health practitioners with decision-making about specific situations and support consistency of provincial public health practice.

Communicable Disease Control Manual	
Admin Circulars	+
Communicable Disease Control	
Immunization Manual	+
Infection Control	
Tuberculosis Manual	
Sexually Transmitted Infections	
Surveillance of Reportable Conditions	

Source: BCCDC.ca

BC Centre for Disease Control

Tuberculosis Manual

Chapter contents

Sections 1 - 8

- Section 1 - Introduction
- Section 2 - Definitions
- Section 3 - Tuberculosis
- Section 4(a) - TB Screening Overview
- Section 4(b) - TB Screening DST
- Section 5 - Treatment of Active TB Disease
- Section 6 - TB Preventive Treatment
- Section 7 - Contact Investigation
- Section 8 - Assessment and Follow-up of TB Contacts

Appendices

- Appendix A - Tuberculin Skin Testing Procedures
- Appendix B - Infection Prevention and Control
- Appendix C - Collection of Specimens for TB Testing
- Appendix D - Sputum Induction
- Appendix E - Assessment of Visual Acuity and Colour Discrimination
- Appendix F - Contact Investigation Tool
- Appendix G - Resources for Health Care Providers

Related content

- TB Clinical Resources
- Translated Content (medication sheets)
- TB Online Courses
- TB Clinics
- Provincial TB Services
- TB Reports

<https://www.bccdc.ca/health-professionals/clinical-resources/communicable-disease-control-manual/tuberculosis>



First Nations Health Authority

TUBERCULOSIS SERVICES

fnhaTB@fnha.ca

<https://www.canada.ca/en/public-health/services/diseases/tuberculosis/health-professionals/canadian-tuberculosis-standards.html>

BC Provincial TB Services

- Clinical care
 - Clinics (direct)
 - Virtual care – (indirect)
- Public Health Laboratory
 - Mycobacteriology
- Provincial TB Pharmacy
 - Tuberculin, Medications
- Training/Education
 - UBC-CDC
- Research
 - Local, National and International collaborations
- Surveillance



Partnerships with FNHA, Regional HAs, YT, Ministry

Q&A

POST YOUR QUESTIONS IN THE CHAT BOX



UBC CPD
Medicine
CONTINUING
PROFESSIONAL
DEVELOPMENT





THE UNIVERSITY OF BRITISH COLUMBIA

Continuing Professional Development

Faculty of Medicine

THE UNIVERSITY OF BRITISH