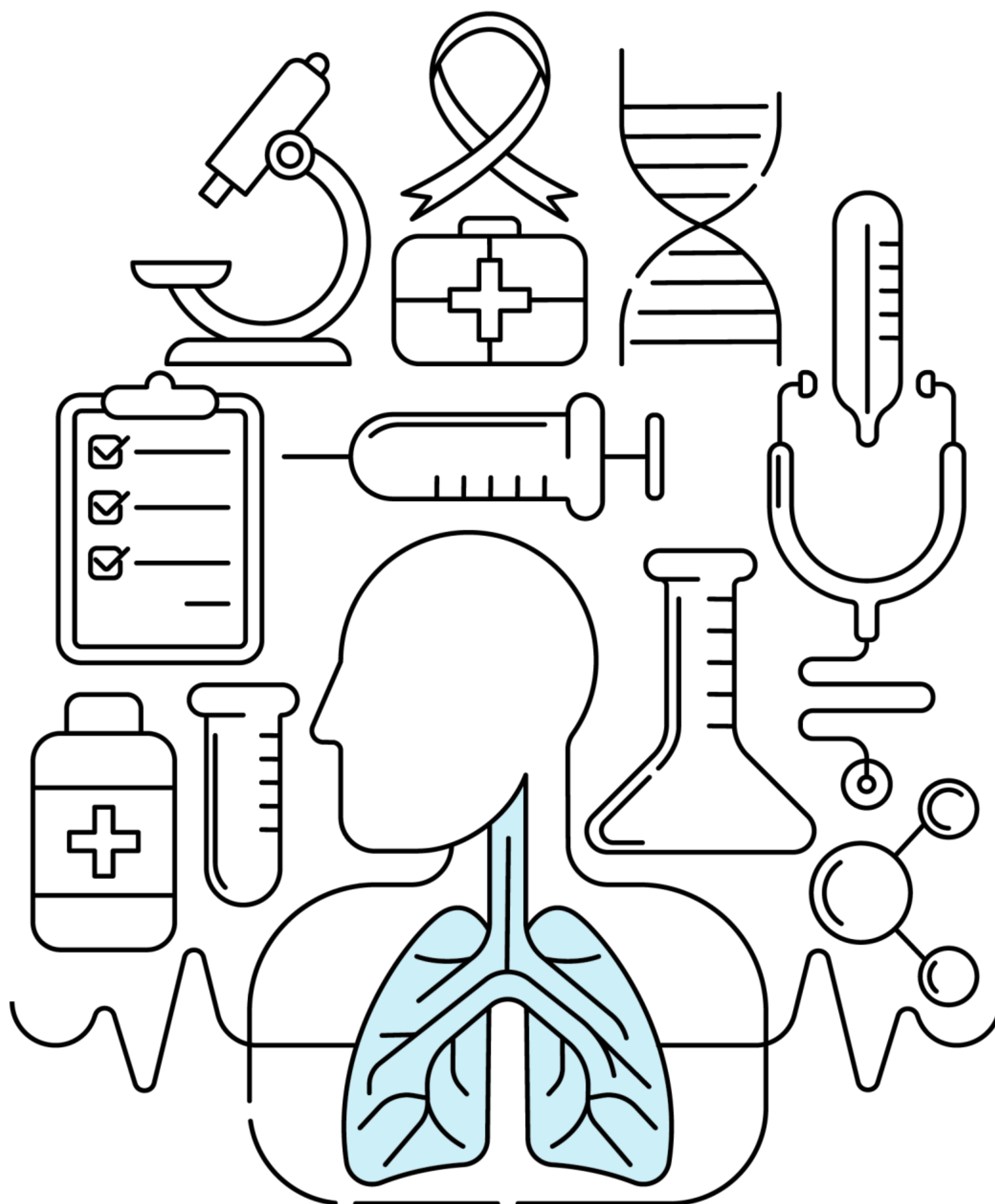
Alberta tuberculosis (TB) policy



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ISBN 978-1-4601-5350-5

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Health and Wellness Promotion Branch

Public Health and Compliance Division

Alberta Health

Alberta Tuberculosis (TB) Policy | Alberta Health, Government of Alberta

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Acknowledgements

Alberta Health would like to acknowledge those who have contributed their expertise and time to provide comments and suggestions in the drafting and revision of this policy document:

Alberta Health Services Tuberculosis Services

Alberta First Nations and Inuit Health Branch Tuberculosis Program, Indigenous Services Canada

Alberta Health Services, Alberta Precision Laboratories

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Introduction

The purpose of the Alberta Health Tuberculosis (TB) Policy is to outline roles and responsiblites for the prevention, treatment and control of TB in Alberta. The Canadian Tuberculosis Standards and recent scientific evidence should be referenced regarding clinical standards of TB prevention and treatment. The TB Policy supplements the *Alberta Public Health Disease Management Guideline for Tuberculosis* and the Tuberculin PPD Biological page, in addition to the internal *Alberta Health Services Tuberculosis Services (AHS TBS) Clinical Operations Manual*. Some situations or circumstances may arise in practice that are not covered in this policy, and therefore, it is imperative that clinical judgment always be exercised.

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Tuberculosis Control in Alberta

Tuberculosis (TB) control in Alberta aligns with the World Health Organization (WHO) Framework towards eliminating tuberculosis in low-incidence countries and national efforts to reduce the burden of tuberculosis in Canada, as outlined in the *Tuberculosis Prevention and Control in Canada: A Federal Framework for Action*.[1,2]

The WHO post-2015 Global TB Strategy includes targets of reducing the global incidence of TB by 90% and reducing tuberculosis deaths by 95% between 2015 and 2035. Further, the United Nations declared, and later reaffirmed, a commitment to end tuberculosis by 2030 through increased funding and treatment access.[3,4]

The overarching goal of TB control in Alberta is to contribute to the above targets through leadership and collaboration between partner agencies. Specific objectives for tuberculosis control in Alberta include:

- Reduction of incidence of active tuberculosis in Alberta to contribute to TB elimination goals
- Prevention of transmission of tuberculosis
- Prevention of the development of active tuberculosis in those with latent tuberculosis infection using safe and effective therapy
- Prompt identification of patients with active tuberculosis and ensure safe and effective treatment completion
- Ongoing epidemiological surveillance of tuberculosis

Legislative Authority

Under the Alberta *Public Health Act (PHA)*, the Chief Medical Officer of Health (CMOH) is responsible for monitoring the health of Albertans and making recommendations to the Minister of Health and for providing directions to AHS on measures to protect and promote the health of Albertans and to prevent disease and injury.[5] The legislation requires the CMOH to act as a liaison between the provincial government and AHS, Medical Officers of Health (MOH) and executive officers in the administration of the *PHA*.

Under the *PHA* and the *Communicable Diseases Regulation (CDR)*, TB is to be reported by physicians, health practitioners, laboratories and others to the local MOH or designate.[6] Operationally, notification also includes the TB MOH[A] in Alberta. Further, the TB MOH has a duty to notify the CMOH (or designate) of all TB cases, treatment outcomes and instances of outbreak.

The *PHA* and *CDR* also provide the MOH with the authority to initiate measures to control TB transmission through management of recalcitrant patients.

The provisions for the handling of the bodies of deceased persons with or suspected of TB disease are stipulated in the *Bodies of Deceased Persons Regulation*.

International Standards and Patients' Charter

The WHO and the International Union against Tuberculosis and Lung Disease (IUATLD) both endorse the *International Standards for Tuberculosis Care* (ISTC) and the companion document, *Patients' Charter for Tuberculosis Care* (the Charter).[7,8] The purpose of the ISTC is to describe a widely accepted level of care that all practitioners (public and private) should seek to achieve in managing people who have, or are presumed to have, TB.

As a companion to the ISTC, the Charter outlines the rights and responsibilities of government, health care workers and people living with TB. The Charter describes the ways in which patients, communities, health care providers, and governments can work as partners in a mutually beneficial, open relationship toward improving TB care and enhancing the effectiveness of

[A] The Provincial TB Medical Consultant is the designated Medical Officer of Health for TB.

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the health care process. It enables all parties to be held more accountable to each other, fosters mutual interaction and otherwise promotes positive partnerships between these stakeholders.

Practitioners are encouraged to familiarize themselves with the Charter, incorporate and promote its values and share it with their patients and others.

Roles and Responsibilities

TB control in Alberta is a shared responsibility between Alberta Health, Alberta Health Services (AHS), Alberta First Nations and Inuit Health Branch (FNIHB), governmental and non-governmental organizations, clinicians/practitioners and communities. All partners work together on surveillance, management, and necessary communications related to TB in Alberta.

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Roles and Responsibilities – TB Prevention and Control in Alberta

(See following pages for description of each organization/entity)

ROLES **✓ - Key/Lead Role** **∆ - Supportive Role**	**Alberta Health**	**AHS TBS**	**AHS Other**	**FNIHB TB Program**	**FN Community Health Staff**	**APL-Public Lab**	**Community Physicians**	**Other**
PROVINCIAL REPRESENTATION								
Liaise with FPT committees, working groups and parties; may request participation from provincial partners if required	✓	∆		∆		∆		
Respond to funding or programmatic planning requests	✓							
STANDARDS/POLICY								
Set provincial TB policy and standards according to accepted national and international guidelines	✓	∆		∆		∆		
Develop and update operational policy, clinical guidelines, standards and algorithm for TB patient care and program delivery		✓	∆	∆	∆	∆		
Establish criteria for publically funded tuberculin use (Biologics page)	✓	∆		∆				
Develop Provincial TB Public Health Disease Management Guideline	✓	∆		∆		∆		
Establish guidelines for IGRA use		✓				∆		
SURVEILLANCE, REPORTING								
Report all cases annually to PHAC (Canadian TB Reporting System)	✓	∆		∆				
Report all cases and/or treatment outcomes to AH at established instalments[B]		✓	∆	∆	∆	∆	∆	
Report outcomes of contact investigations annually to PHAC	✓	∆		∆				
Report outbreaks to CMOH using TB specific instructions		✓		∆		∆		
Maintain database of all TB cases and treatment outcomes	✓	✓		∆				
Maintain health record of all TB cases and treatment outcomes		✓	∆		∆		∆	
Collect, analyse, interpret and communicate TB related epidemiological data	✓	✓		∆		∆		
Receive, manage and respond to IRCC notifications for Medical Surveillance	∆Divested to TBS	✓	∆				∆	
PATIENT ASSESSMENT AND CARE								
		SCREENING AND DIAGNOSIS						
Establish and maintain TB assessment, screening and care management capacity and access to same for all Albertans, either through direct patient care or collaboration with partners in care		✓	∆		∆			Post Secondary, OHS, Corrections, LTC
Provide appropriate referral for TB assessment			✓	∆	✓		✓	Post Secondary, OHS, Corrections, LTC, Radiologists, Pathologists
Establish and maintain appropriate lab diagnostic services related to TB		∆	✓			✓		Private Lab and radiology

[B] AHS TBS shall report all new TB cases to AH weekly with quarterly updates.

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ROLES ✓ - Key/Lead Role Δ - Supportive Role	Alberta Health	AHS TBS	AHS Other	FNIHB TB Program	FN Community Health Staff	APL-Public Lab	Community Physicians	Other
TREATMENT AND FOLLOW UP								
Clinical management and care of all patients referred for TB care (active, screening, latent)		✓	Δ	Δ	Δ		Δ	AHS Public Health, Community pharmacies, Corrections
Ensure access, provision and availability of medications to treat TB only through the provincial supply (Drug Depot)	Δ	✓	Δ	Δ	Δ		Δ	
Facilitate access to medications under Special Access Program with Health Canada as needed	Δ	✓						
Facilitate access to medications for urgent public health need under federal Food and Drug Regulation (i.e., Rifapentine)	✓	Δ						
Establish and maintain Directly Observed Therapy for active TB treatment capacity and latent TB infection as indicated		✓	Δ	✓	Δ			Corrections
Utilize available strategies and mechanisms as necessary under the *Public Health Act* to ensure public safety in circumstances of recalcitrant patients		✓	Δ	Δ	Δ			
PUBLIC HEALTH PREVENTION AND CONTACT INVESTIGATION								
Establish and maintain contact investigation protocols		✓	Δ	Δ	Δ		Δ	OHS, IP&C Corrections, LTC
Develop operational and communication strategy for large public health impact events	✓	✓	✓	✓				
Outbreak support and management *See Alberta Outbreak Response Protocol for specific role clarification	✓	✓	Δ	Δ		Δ		
Communication with out of province/country agencies for purposes of clinical patient care follow up	Δ Divested to AHS TBS	✓						
Establish and maintain screening programs in accordance with Tuberculin Biologics Page, AHS TBS IGRA Guidelines and Clinical Operations Manual		✓	Δ	✓	Δ	Δ	Δ	
EDUCATION								
Provide guidance to other partners in care for program function at a local level regarding TB		✓		✓				
Provide TB related training/education as necessary to staff, partners in care and public as needed (with development of materials as appropriate)		✓	Δ	✓	Δ	✓	✓	
Maintain TB related training/education as necessary (identifying learning needs as needed)	✓	✓	✓	✓	✓	✓	✓	✓

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Provincial Organizations and Partnerships

Alberta Health

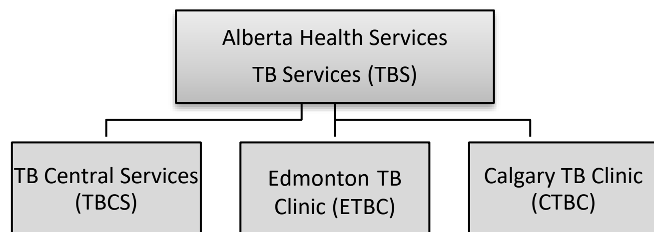
Alberta Health sets policy, legislation and standards for the health system in Alberta. The CMOH provides direction and guidance on public health policy to AHS, and gives information to the public about communicable diseases and public health programs. AHS appoints the Provincial Medical Consultant for AHS TB Services (AHS TBS). This position functions as a MOH, with associated powers and acts as a liaison between AHS and Alberta Health.

Alberta Health is responsible for surveillance of TB, sets policy direction for provincial TB management and funds AHS TBS to provide TB clinical services and public health management within Alberta. Alberta Health and AHS TBS are connected to federal governmental ministries and agencies involved in national TB prevention and management, including: the Public Health Agency of Canada (PHAC), Immigration, Refugees and Citizenship Canada (IRCC); and FNIHB. Alberta Health also works with federal partners to facilitate the fulfilment of Canadian obligations under International Health Regulations (IHR). In addition, Alberta Health works with other Alberta ministries/government agencies to address social determinants of health contributing to TB transmission.

AHS-TB Services

AHS TBS is a provincial program that aims to reduce the incidence, prevalence, morbidity and mortality associated with TB in Alberta by providing comprehensive and timely care to those with, or at risk of TB infection or disease. Further, AHS TBS is expected to maintain a consistent approach to TB care for all Albertans, regardless of geography.

AHS TBS is a centrally coordinated province-wide program that directly provides and/or supports clinical care for TB patients through three clinics. Two of these are dedicated public health TB clinics in Calgary (CTBC) and Edmonton (ETBC), and the third TB Central Services (TBCS) is a “virtual” TB clinic that coordinates care for AHS’ North, Central and South Zones and First Nations communities. All TB prevention and control activities in these zones is delivered through a public health nursing network, which takes direction from TBCS.



A TB Inpatient Unit (at the University of Alberta Hospital) and a TB Program Evaluation and Research Unit (University of Alberta) also support AHS TBS.

The centralized, comprehensive, multi-disciplinary approach to the management of TB in Alberta includes:

- diagnosis, treatment, and follow up of active TB disease and latent TB infection;
- contact tracing and outbreak prevention and management;
- screening of immigrants and high-risk groups;
- outreach and educational programs to improve the knowledge and awareness of TB in the community and health care settings;
- resource and multilingual education material development; and
- program evaluation and quality assurance research.

TB physicians investigate cases of suspected TB, make diagnoses of active or latent TB, create a management plan, authorize prescription of anti-TB medications, and direct public health nurses within TB services on clinical and public health management matters. TB clinicians (public health nurses, pharmacists, social workers, etc.) within AHS TBS carry out directives of the program and patient specific care plans.

Classification: Public

First Nations and Inuit Health Branch

The FNIHB plays a key role in TB surveillance for First Nations communities across the province. FNIHB works closely with TBCS and First Nations communities to develop TB programming and resources based on provincial TB guidance and Alberta First Nations TB epidemiology that is relevant for these communities.

FNIHB also works closely with both First Nations communities and TBCS to ensure clinical direction is operationalized. FNIHB supports front line staff to carry out activities related to screening, contact investigation, prevention, treatment and other patient care for persons living in First Nations communities.

The FNIHB Regional TB Program develops educational resources, provides training opportunities to front line staff, participates in awareness activities with communities and develops tools and processes for targeted TB screening. FNIHB supports community led initiatives to implement educational and awareness strategies.

AHS – Alberta Precision Laboratories (APL) – Public Health Laboratory

APL (which includes Public Health Laboratory) is a wholly-owned subsidiary of AHS. Public Health Laboratory delivers public health and specialized laboratory testing in Alberta, including diagnostic mycobacteriological testing and molecular typing to facilitate public health investigations of TB transmission. They play a key role in TB surveillance in partnership with Alberta Health and AHS TBS. They chair quarterly meetings with AHS TBS to discuss diagnostics and current issues related to TB.

Tuberculosis Control Committee of Alberta

This committee consists of representatives from Alberta Health, AHS TBS, Public Health Laboratory and FNIHB and meets semiannually to address TB practice and policy issues in the province. It functions as a venue for collaboration among its members. It serves an advisory function to Alberta Health and the Provincial Medical Consultant, AHS TBS.

National Organizations

Public Health Agency of Canada

At the national level, the Public Health Agency of Canada (PHAC) works collaboratively with the provinces and territories to promote and protect the health of Canadians, by decreasing the transmission of infectious diseases and by improving the health status of those affected. PHAC is responsible for the overall monitoring and evaluation of TB prevention and control in Canada. Provinces and territories submit case reports that meet case definition for national surveillance to the Canadian TB Reporting System (CTBRS). The CTBRS is managed by PHAC and maintains selected non-nominal information for all reported active TB cases and their treatment outcomes. This information is used to generate reports on TB incidence in Canada. For more information, refer to: www.canada.ca/en/public-health/services/diseases/tuberculosis-tb/surveillance-tuberculosis-tb.html.

Federal and Provincial/Territorial Collaboration

Representatives from PHAC and provincial governments participate in the work of the Communicable and Infectious Disease Steering Committee of the Pan-Canadian Public Health Network Council. The issues related to TB control relevant to federal and provincial governments are discussed at this forum.

Immigration, Refugees and Citizenship Canada

Immigration, Refugees and Citizenship Canada (IRCC) is responsible for assessing the health status of refugees and immigrants prior to their arrival in Canada. All immigration applicants, refugees or students who plan to remain in the country for more than six months, as well as certain visitors, are required to undergo an immigration medical examination at their point of application. Individuals who do not have active disease but have a history of TB infection in the past, as well as those who have evidence of past disease on their chest x-ray, are reported to AHS TBS for medical surveillance (see Immigration Medical Surveillance in Alberta).

Classification: Public

Indigenous Services Canada

Under Indigenous Services Canada, FNIHB works to improve health outcomes, provide access to quality health services and support greater autonomy in the health system for First Nation people and communities. They work with other federal departments, provincial and territorial partners and First Nations communities. These partnerships support Alberta's TB prevention and control mandate as well as Health Canada's *Monitoring and Performance Framework for Tuberculosis Programs for First Nations on-Reserve Framework*.[9]

National Microbiology Lab

The National Microbiology Laboratory (NML) is the national reference laboratory responsible for the identification, control and prevention of infectious diseases. As such, it houses the National Reference Centre for Mycobacteriology (NRCM), which provides diagnostic, reference and laboratory surveillance services for Mycobacterium TB. The NRCM operates a national proficiency program, which tests and ensures the quality of provincial laboratory technologies for mycobacterial disease, as well as maintains a national database of genotyping data (more information available on the NML website).

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Tuberculosis Reporting, Data Management and Surveillance

Detecting and reporting suspected cases of TB is the key step to reducing transmission of infectious TB, as it leads to prompt isolation and initiation of an effective multiple-drug regimen which reduces contagiousness.[10] All suspect and confirmed cases, per the Alberta Public Health Disease Management Guidelines, are to be reported to AHS TBS as outlined in the *CDR*. AHS TBS shall report case information to the CMOH as directed. Alberta Health conducts provincial surveillance of TB and participates in national surveillance programs. Case report information is collected by AHS TBS and entered into their electronic health record. AHS TBS provides case report information to Alberta Health on all active TB cases in Alberta on a quarterly, annual and ad hoc basis. This information is then collated, analyzed and reported to stakeholders and PHAC on an annual basis. Further, Alberta Health publishes the annual number of TB cases reported in the Alberta Notifiable disease summary with additional demographic information available on the Interactive Health Data Application (IHDA).

In the interest of facilitating clinical care and public health management of TB, any direct communications required for TB client care or follow-up extending beyond Alberta's borders may be undertaken by AHS. AHS will notify Alberta Health when active cases have transferred to an out of province jurisdiction.

Outbreak Reporting and Management

Where an epidemiological situation indicates that an outbreak of TB exists, it shall be reported to the CMOH by fastest means possible (FMP). If deemed appropriate, the CMOH may initiate an assessment call to determine next actions. If initiated, the role of the Outbreak Investigation Coordinating Committee (OICC) is outlined in the Alberta Outbreak Response Protocol (AORP). Reporting requirements and outbreak case definition are also available here.

Referral to Alberta Health Services TB Services

Types of Referrals

- Individuals suspected or confirmed to have active TB
- Contacts exposed to a suspect or confirmed case of TB
- Individuals diagnosed or suspected to have latent TB infection (LTBI)

Patient referrals are geographically determined in Alberta. Patients whose primary residence is in the Edmonton zone are referred to the Edmonton TB Clinic. Patients whose primary residence is in the Calgary zone are referred to the Calgary TB Clinic. Patients residing in the South, Central or North zone, including individuals living in a First Nations community in Alberta, are followed through TBCS.

Please refer to the internal AHS TBS Operations Manual for details regarding referral process.

Management of Tuberculosis Disease

Management of active TB disease involves a collaborative effort between the client, their family and attending physician, Public Health, and the AHS TBS clinicians and/or FNIHB and/or Corrections. It is essential for the management of this disease and prevention of transmission that each of the partners takes responsibility for their role in the partnership.

For more information on case and contact management and follow-up refer to Alberta Health's TB Public Health Notifiable Disease Management Guideline and the internal AHS TBS Operations Manual.

Classification: Public

Tuberculosis Medications

Anti-TB drugs for the treatment of active TB disease are available to patients at no cost through AHS TBS. These medications are only available through AHS TBS, when prescribed by AHS TBS physicians. AHS Pharmacy Services operates a specialized TB Depot that coordinates the purchase and distribution of TB medication.

Treatment decisions are made by TB physicians based on recommendations established by the Canadian TB Standards, WHO and recent research. Although new treatment regimens for TB are emerging, these may only be adopted after clinical review and agreement among TB Specialists in the province. Treatment for active TB disease in Alberta supports and adheres to the WHO standard of Directly Observed Therapy (DOT).[11]

Alternate medications that are not currently licensed in Canada can be accessed through the following processes.

Special Access Program (SAP)

- SAP requests should be made by the TB Physician in consultation with the Provincial Medical Consultant, AHS TBS. The appropriate form should be completed and sent to Health Canada. The AHS designated TB Depot is responsible for receiving and distributing the products to sites across Alberta.
- TB Physicians are required to complete the Patient Follow-up Form to report on the use of products accessed via the Special Access Program.

Access to Drugs in Exceptional Circumstances

These processes may be necessary in circumstances of drug resistance or for a unique population/patient.

- CMOH identifies the urgent public health need that requires immediate use of a foreign drug and notifies Health Canada.
- The Federal Minister of Health determines if the drug will be added to the List of Drugs for an Urgent Public Health Need.

Management of Recalcitrant Persons

Persons with infectious pulmonary TB, who do not adhere to their treatment for TB, pose a significant risk to public health. All efforts should be made to ensure that treatment adherence is supported until treatment is completed. Recalcitrant persons are defined as those patients who are unwilling or unable to take appropriate precautions to prevent transmission of the diseases listed in the*CDR*.[6] This includes those with a diagnosis of active TB disease.

Issuing orders under the *PHA* should be considered as a last resort and should be used only when all other less restrictive attempts to address recalcitrance have failed.[5] Decisions regarding detaining recalcitrant individuals for treatment of active TB disease should be determined by the Provincial TB Medical Consultant, AHS TBS (or designate) in consultation with the local MOH, on a case-by-case basis.

Management of Contacts

AHS TBS – in collaboration with staff from AHS Public Health, FNIHB, Corrections, AHS Workplace Health and Safety, AHS Infection and Prevention (where applicable) – is responsible for ensuring the completeness of contact investigations.

For contacts identified as residing outside of Alberta, AHS TBS will forward the relevant information to the appropriate geographical contact (e.g., Provincial Ministry, PHAC). Should investigations be anticipated to have large public impact, either by number of contacts or circumstances of exposure, AHS TBS will advise and involve Alberta Health in anticipatory preparation and/or mitigation of issues through contact with the Office of the CMOH and/or designate.

Classification: Public

Non-Tuberculosis Mycobacteria

Individuals diagnosed with non-tuberculosis mycobacteria (NTM) are considered neither infectious nor a public health concern. NTM is therefore not notifiable, and individuals with NTM are typically referred to other specialist physicians (often Pulmonology and/or Infectious Disease physicians) for clinical management and follow up, rather than to AHS TBS. Alberta Health does not provide funding for medications used to treat NTM.

Managing TB Disease in Patients Who Are Uninsured

Uninsured clients include the following.

- Visitors to Canada and immigrants who have arrived in Canada but are not yet eligible for Alberta provincially insured services.[(C)]
  - Immigrants are responsible for their own health care funding until eligible for Alberta Health Care Insurance. Temporary health care for refugees and refugee claimants may be covered by the Interim Federal Health Program.
- Individuals who do not have private insurance or have exhausted the limit of their private insurance.

Patients, who are uninsured and are under investigation for TB disease should still undergo TB diagnostic and treatment services to reduce public health risk. Should the health of the public be considered at risk, Alberta Health and AHS TBS will collaborate to determine if a mechanism for reimbursement to health care providers, laboratories, and radiology services is warranted or if these associated costs should remain the responsibility of the client. The primary public health goal is to reduce transmission and render the client non-infectious.

Immigration Medical Surveillance in Alberta

To minimize the potential for transmission of TB within Canada, extensive pre-landing screening for TB is undertaken by IRCC. All persons applying for immigration to Canada are screened for evidence of TB with an immigration medical exam prior to being granted permanent or temporary residency status. The objective of the exam is to detect active TB in immigrants prior to arrival in Canada to ensure that they are treated and are no longer infectious on arrival. Untreated active TB is the only condition where automatic exclusion from entry to Canada is regulated.

Applicants identified as having inactive pulmonary TB are permitted to enter Canada but are placed under medical surveillance, referred to AHS TBS, and are required to report to or be contacted by the closest TB Service Site within 90 days of arrival for post-landing surveillance. For complex inactive pulmonary TB cases, evaluation and follow-up should begin within seven days. Medical surveillance for this purpose includes a period of clinical observation and care recommendations to prevent TB reactivation.

Uninsured persons under medical surveillance are responsible for any costs associated with their assessment. This may include radiology and laboratory investigations. Services associated with AHS TBS personnel and medication are provided at no cost to the patient.

(C) Provincially insured services include diagnostic tests (radiology, lab services), hospitalization and physician fees. However, TB medication will be provided at no cost to any patient.

Classification: Public

Screening for Latent TB Infection

Tests Used

There are two tests used for identification of Latent TB Infection (LTBI) in Alberta:

- tuberculin skin test (TST), and
- Interferon Gamma Release Assay (IGRA) (example Quantiferon or QFT).

Eligibility for provincially funded TST is outlined in the Tuberculin Biologics page under the Alberta Immunization Policy. Regular review and revisions are undertaken to reflect the most current recommendations in line with Canadian TB standards and recent research. The use of IGRA testing is under the direction of AHS TBS, as well as other physicians if their clinical programs have received AHS TBS and Public Health Laboratory approval for access. Currently, IGRA is reserved for use in clinical situations where a TST is not considered feasible or where combined TST and IGRA testing is required for optimal patient assessment. The cost of QFT is eligible for coverage for those with Alberta Health Care Insurance.

Treatment of LTBI

Alberta Health provides funding for anti-TB medications for the treatment of LTBI. The objective of LTBI treatment is to prevent development of active TB disease.

For most patients in Alberta, LTBI treatment is self-administered. However, individual circumstances and scenarios may prompt direction for Directly Observed Prophylaxis Treatment (DOPT). In First Nations communities, DOPT for the treatment of LTBI is the standard of care.

Immunization

Bacille Calmette-Guerin (BCG) vaccine is not funded or offered in standard Public Health offices in Alberta.

Infection Prevention and Control

The AHS TBS determines the need for isolation and de-isolation of individuals suspected of having TB and those who are undergoing anti-TB treatment based on the Alberta Public Health Notifiable Disease Management Guideline, current recommendations by the Canadian TB Standards and research evidence.[10]

AHS is responsible for maintaining a province-wide infection prevention and control (IPC) program in compliance with provincial standards. With respect to TB, this includes maintaining appropriate negative pressure facilities or alternative infection control measures in those facilities not equipped with negative pressure rooms. Processes that address potential TB exposure and isolation of suspected or confirmed cases in their facilities must be implemented and regularly monitored.

Pre-employment screening for individuals at risk for infection (i.e., health care workers) is the responsibility of the employer, consistent with their Occupational Health and Safety guidelines. See the Tuberculin Biologics page under the Alberta Immunization Policy to determine who meets the requirements for provincially funded tuberculin skin test.

Research and Program Evaluation

AHS TBS should endeavor to conduct program evaluation and participate in collaborative research projects aimed at improving the quality of TB control in Alberta, discovering and testing new interventions or practices, contributing to the efforts aimed at TB elimination as well as inform TB program planning and decision making. AHS TBS may engage with the University of Alberta TB Program Evaluation and Research Unit and academic insitutions to conduct or participate in applied research.

Classification: Public

Appendix 1: Definitions

Active disease: This denotes the presence of current active TB, most often on the basis of positive bacteriology but in approximately 10–20% of cases on the basis of appropriate clinical and/or radiological and/or pathological presentation as well as treatment response.

Adherence: A term that is often used interchangeably with compliance and refers to the patient's and health care provider's ability to follow management guidelines appropriately. It most often refers to the strict adherence by the patient to the prescribed regimen of anti-TB drug treatment or preventive therapy.

Bacille Calmette-Guérin (BCG): A live attenuated vaccine derived from Mycobacterium bovis used to prevent or moderate TB disease in young children.

Contact: A person identified as having been exposed to someone with active TB disease. The degree of exposure is usually further defined, e.g., close contact (household or non-household), casual contact.

Directly Observed Therapy (DOT): The process whereby a health care worker or pill dispenser watches the client swallow each dose of anti-TB drugs, helping to ensure that higher treatment completion rates are achieved.

Directly Observed Preventive Therapy (DOPT): The process whereby a health care worker or pill dispenser watches the patient swallow each dose of medication for latent TB infection, to enhance treatment completion rates. DOPT is also known as directly observed prophylaxis (DOP).

Effective treatment: There is an observed clinical improvement and drug susceptibility testing has determined the client's isolate is being treated with an adequate regimen, or in the event that drug susceptibility tests are not yet available, the risk of drug resistance is considered to be very low; and there is evidence of adherence to the prescribed regimen (e.g., the delivery of DOT has been successful).

First-line anti-TB drugs: Isonaizid (INH), Rifampin (RMP), Pyrazidamide (PZA) and Ethambutol (EMB).

First Nations: Descendants of the original inhabitants of North America. In Canada, they are both "Status" and "non-Status". Status First Nations are registered with the federal government as Indians, according to the terms of the Indian Act.

Inactive Pulmonary TB: See Latent TB infection.

Infectious TB: Active TB disease of the respiratory tract, capable of producing infection or disease in others. Patients with evidence of cavitation on plain chest radiography are also more infectious than those without cavitation. In addition, transmission may be enhanced by crowding, low air exchange rates or longer duration of contact.

Interferon-gamma Release Assays (IGRAs): In-Vitro blood tests of cell mediated immune response; they measure T cell release of interferon gamma following stimulation by antigens specific to Mycobacterium TB.

Latent tuberculosis infection (LTBI): The presence of dormant (latent) infection with Mycobacterium TB with no evidence of clinically active disease.

Myocobacterium tuberculosis (MTB): Mycobacterium TB is a pathogenic bacterial species in the family Mycobacteriaceae and the causative agent of most cases of TB.

Non respiratory TB: The Canadian Tuberculosis Standards defines non-respiratory forms of TB disease to include the following sites of disease: bone and joints, bone marrow, peripheral lymph nodes, genitourinary and abdominal organs, pericardium and central nervous system (e.g., tuberculous meningitis, tuberculous myelitis, brain and/or meningeal tuberculoma).

TB clinicians: Public health/community nursing and medical staff who have expertise in the management of TB.

TB physicians: Designated physicians that work with the AHS TB Program.

Tuberculin skin test (TST): This is the standard method of determining whether a person is infected with Mycobacterium TB. The screening test is performed by injecting tuberculin purified protein derivative (PPD) into the inner surface of the forearm and reading the skin test reaction between 48 and 72 hours after administration.

Classification: Public

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