Tuberculosis Manual

Nunavut

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Foreword

The Nunavut Tuberculosis Manual serves as the primary reference guide to assist health care providers to consistently and effectively detect, treat and prevent tuberculosis (TB) in Nunavut.

The protocols, standards and recommendations described within are based on the Canadian Tuberculosis Standards 7th Edition (CTS) and other important guidance documents. As necessary, expert opinions were sought from local and national experts in TB diagnosis, treatment, and control to ensure recommendations from the CTS and other documents were appropriately interpreted for the Nunavut context. The content of this manual is endorsed by the Chief Medical Officer of Health (CMOH) in the Nunavut Department of Health.

Cooperation and communication among everyone involved in TB prevention, care and control in Nunavut is critical to the success of the territorial TB program and its efforts to eliminate TB as a public health problem in the Territory. To this end, it is expected that the protocols contained in this manual will be followed.

No set of guidelines or protocols will cover all individual situations that could arise, nor should protocols substitute for clinical judgment. It is strongly recommended that community and public health nurses, physicians, staff of Community Health Centres, and others who use this manual seek consultation with the office of the CMOH and the Territorial Communicable Disease Specialist, through their Regional Communicable Disease Coordinator (RCDC), for issues that are not covered here. In certain circumstances, it might be prudent to deviate from routine practices and protocols. **ANY deviation should be discussed in advance with the office of the CMOH and the Territorial Communicable Disease Specialist.**

A hardcopy of the Nunavut Tuberculosis Manual is available at every community health centre and public health centre in Nunavut as well as at the Qikiqtani General Hospital (QGH). The manual is also available online at the Nunavut Department of Health website: http://www.gov.nu.ca/health.

This manual will be updated as TB practices, policy and protocols evolve. Updated content will be uploaded onto the Nunavut Department of Health website and sent in hardcopy to community health centres, public health centres, and QGH in a timely manner. **Readers are encouraged to access the manual online to ensure they are using the most current information.**

How to Use this Manual

Organization

The Nunavut Tuberculosis Manual is divided into 16 sections and a glossary of terms.

- **Section 1 – Introduction:** information on the epidemiology of TB in Nunavut, the Nunavut TB program, and case reporting.

- **Section 2 – Understanding TB:** general information on TB and how TB is detected, treated, and prevented in Nunavut.

- **Section 3 – General TB Assessment:** information on how to do a general TB assessment. For information on how to do a TB assessment for a client who has been in contact with active TB (a 'TB contact'), see Section 9.

- **Section 4 – Tuberculin Skin Testing (TST):** information on how to give, read, measure, document, and follow-up TSTs and two-step TSTs.

- **Section 5 – Collection of Specimens for TB Testing:** information on how to collect sputum and other types of specimens for TB testing.

- **Section 6 – Care of Clients with TB Signs/Symptoms:** information on how to provide care to those with TB signs/symptoms.

- **Section 7 – Care of Clients with Latent TB Infection (LTBI):** information on how to provide care to those diagnosed with LTBI.

- **Section 8 – Care of Clients with Active TB:** information on how to provide care to those diagnosed with active TB.

- **Section 9 – Contact Investigation, Window Period Prophylaxis, and Source Case Investigation:** information on how to provide care to clients who have been in contact with active TB.

- **Section 10 – TB Surveillance:** information on how to provide care to clients who have been recommended for TB surveillance.

- **Section 11 – Citizenship and Immigration Canada (CIC) Medical Surveillance:** information on how to provide care to those recommended for TB surveillance by CIC.

- **Section 12 – Nunavut TB School Screening Program:** Information on the Program and how to implement it in targeted communities. Sample letters used for the Nunavut TB School Screening Program are provided in Section 12A.

- **Section 13 – Infection Prevention and Control:** information on infection prevention and control practices relevant to TB, including mask types, home isolation guidelines, and transportation and medevac of clients with suspected or confirmed active TB.

- **Section 14 – Additional Sources and Recommended Resources for Health Care Providers:** resources to support your practice.

- **Section 15 – TB Fact Sheets:** standardized information sheets to support client and community education on TB prevention, treatment, and control.

- **Section 16 – Directly Observed Therapy (DOT):** information on how to give and to document DOT.

NU TB Program Forms and Records

Images of the required NU TB Program forms and records are included within the sections they pertain to. Most forms and records are available in fillable pdf format. All can be accessed and printed from the GN Department of Health website.

Embedded Links

Underlined words (or groups of words) contain embedded links. Clicking on an embedded link with your computer mouse will redirect you to another place in the manual, or to a website or online resource if you are connected to the internet.

Key Messages

Highlighted frames like this one contain important information:

Always read through to the end of a block of content to be sure you have not missed any important information.

Highlighted frames like this one show you where to find additional information:

For information on the TST procedure, see:
TB Manual Section 4 – Tuberculin Skin Testing (TST)

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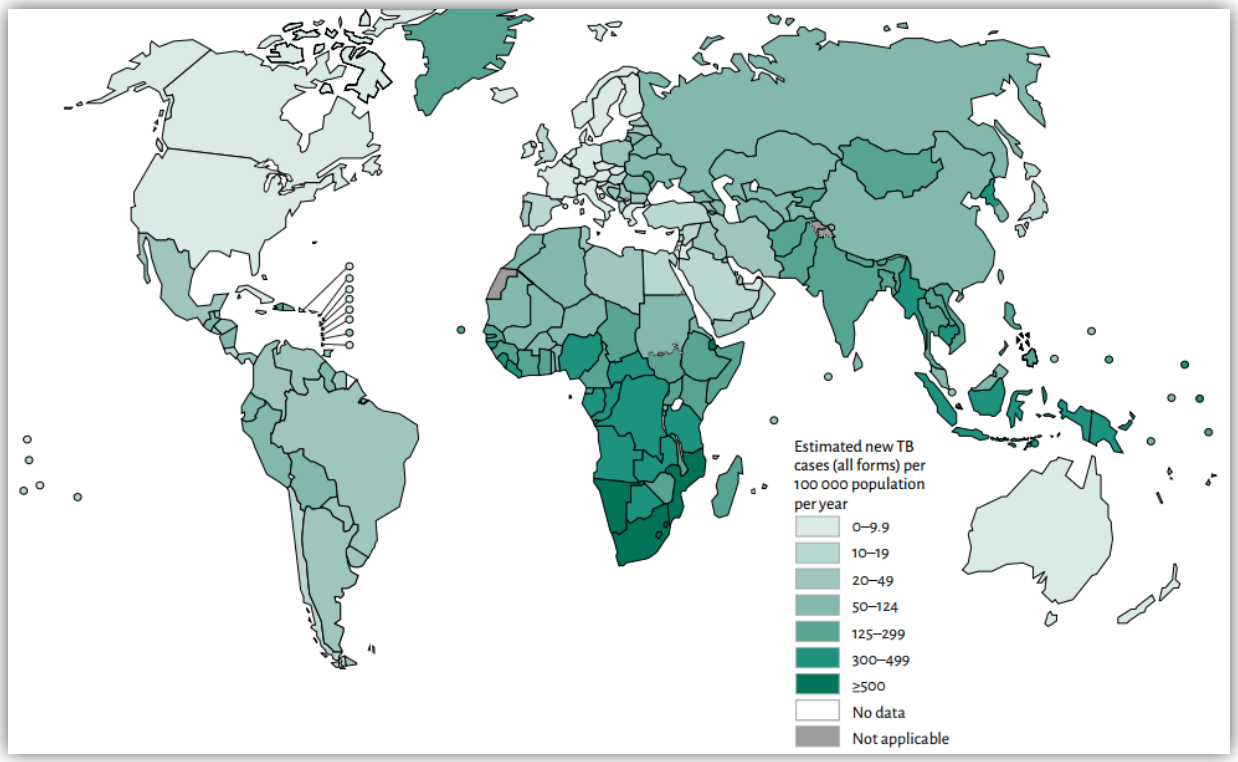
SECTION 1

Introduction

Tuberculosis (TB) in Nunavut

TB continues to be an important health issue globally, across Canada, and in Nunavut. According to the World Health Organization (WHO), more than one-quarter of the world's population is infected with TB bacteria. WHO data indicates there were 9.6 million people diagnosed with active TB and 1.5 million TB deaths in 2014.[1] WHO-estimated TB incidence rates for 2014 are shown in **Figure 1-1**.

Figure 1-1: Estimated TB incidence rates, 2014[2]



HIV infection is a major driver of TB and TB deaths globally, with one in three HIV deaths due to active TB. The increase in cases with drug-resistant TB is also a serious concern.

In Canada, there are about 1600 new cases of active TB diagnosed each year. Two population groups are disproportionately affected: the foreign-born and Canadian-born Aboriginals.[3] Annual reports on TB and TB drug resistance in Canada are available on the Public Agency of Canada (PHAC) website: *www.phac-aspc.gc.ca*.

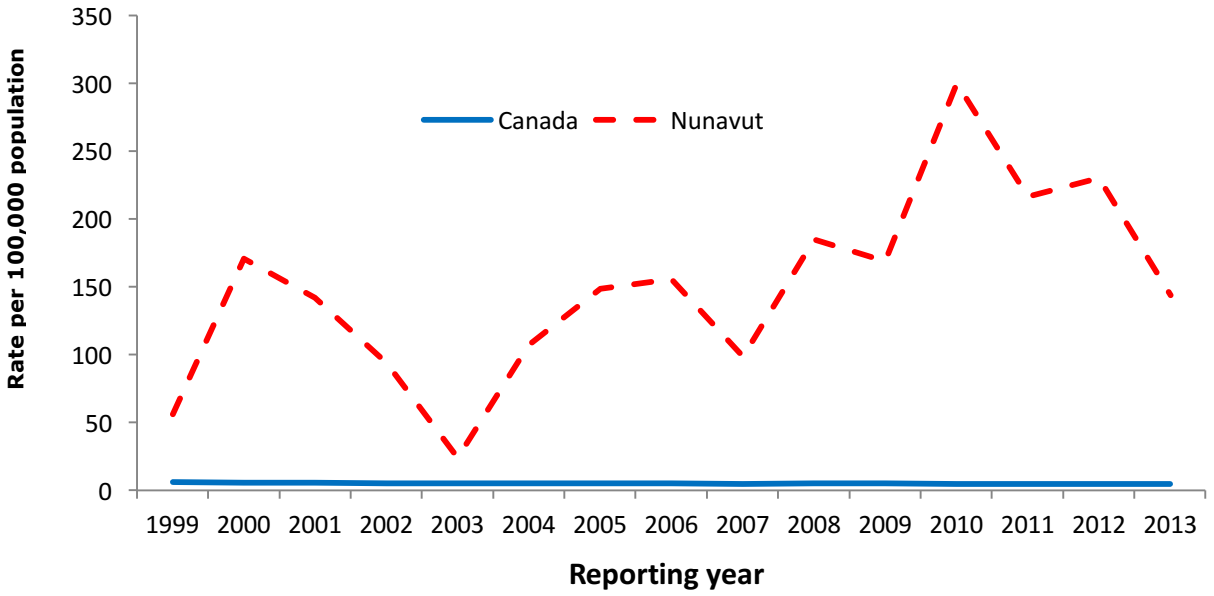
[1] World Health Organization. *http://www.who.int/mediacentre/factsheets/fs104/en/*
[2] World Health Organization. WHO Report 2015 – Global Tuberculosis Report 2015. Geneva: World Health Organization, 2015. WHO/HTM/TB/2015.22
[3] Menzies R, Wong T. *Canadian Tuberculosis Standards*. 7th ed. Canadian Thoracic Society and the Public Health Agency of Canada; 2013.

According to 2014 pre-release data from PHAC:[4]

- Canada's overall TB rate was 4.4 cases per 100,000 population;
- 69% of cases were foreign-born;
- 21% of cases occurred among Canadian-born Aboriginal people; and
- 37% of cases diagnosed among Canadian-born Aboriginal people were Inuit.

The TB incidence rate in Nunavut is consistently higher than the overall TB incidence rate for Canada (**Figure 1-2**). Reports on TB in Nunavut are available on the Government of Nunavut Department of Health website: *http://www.gov.nu.ca/health*.

Figure 1-2: TB incidence rate by reporting year: Nunavut and Canada, 1999 - 2013



Source: Public Health Agency of Canada

The TB incidence rate in Nunavut is believed to reflect the prevalence of latent TB infection (LTBI) in the Territory and impacts of local social determinants of health on the risk for exposure to and development of, TB disease.

The prevalence of LTBI in Nunavut is due in part to large TB outbreaks that occurred in the Eastern Arctic in the 1940s, prior to the discovery of effective TB drugs. At that time, people with active TB were evacuated south to recover in specialized hospitals called TB sanatoriums. Today, treatment for active TB and LTBI is available in every community in Nunavut, and there

[4] Public Health Agency of Canada. *Tuberculosis in Canada 2014 – Pre-release.* Ottawa (Canada): Minister of Public Works and Government Services Canada; 2016.

is a Bacille Calmette-Guérin (BCG) vaccination program in place to protect young children from developing active TB.

Social determinants of health known to influence TB rates include housing and nutrition. Residential crowding can increase the risk of TB transmission from infectious cases. Nutritional deficiencies can impair immunity and lead to development of active TB in those with LTBI.

The Government of Nunavut, through the participation of representatives of the Nunavut Tuberculosis Program, is collaborating with organizations such as Inuit Tapiriit Kanatami (ITK), Nunavut Tunngavik Inc. (NTI), PHAC, and researchers to reduce the TB incidence rate in Nunavut. Examples of such collaborations include the *Inuit-specific Tuberculosis (TB) Strategy (2013),* and TAIMA TB (*http://taimatb.tunngavik.com*).

TB Prevention, Care and Control in Nunavut

Legislative Authority

The Chief Medical Officer of Health (CMOH) has significant authority for communicable disease control, including TB prevention and control, under the Public Health Act for Nunavut. This authority extends to the management of infectious patients who do not voluntarily comply with isolation precautions or adhere to TB treatment.

For information on Orders under the Public Health Act, see:
'Treatment' in Section 2 – Understanding Tuberculosis (TB)

TB Reporting

Confirmed or Suspected Cases

Medical practitioners, nurses, laboratories and dentists are required by the Communicable Disease Regulations of the Public Health Act to report confirmed and suspected cases of active TB to the Office of the CMOH. For frontline practitioners, this is generally done by notifying the RCDC who in turn notifies the Office of the CMOH.

When you receive information that a client has or might have active TB (e.g. a chest x-ray finding or laboratory report consistent with active TB), report this to the RCDC by phone **within one business day**. Be prepared to provide all relevant demographic, clinical, personal and epidemiologic details.

New Residents on TB or LTBI Treatment

Report new residents who require continuation of treatment to the Office of the CMOH **within one business day**.

Deceased Patients

Report the death of any patient, who is receiving TB or LTBI treatment, to the Office of the CMOH **within one business day**.

Nunavut TB Program

The Nunavut TB Program (NU TB Program) facilitates TB prevention, care and control in the Territory. The NU TB Program operates in accordance with and under the authority of, the Public Health Act for Nunavut and the Communicable Disease Regulations, and its practices and protocols conform to the *Canadian Tuberculosis Standards*. The goal of the NU TB Program is to eliminate TB as a public health issue in Nunavut.

The NU TB Program is overseen by the Office of the CMOH, and supported by a Territorial Communicable Disease Specialist and a Territorial TB Clinical Consultant.

NU TB Program Objective, Guiding Principles and Components

The objective of the NU TB Program is to minimize active TB and TB transmission in Nunavut by:

- Promptly identifying cases and suspected cases of active TB, and ensuring timely and appropriate initiation of isolation precautions and treatment;
- Facilitating cure and preventing development of TB drug resistance with appropriate and adequate directly observed treatment (DOT);
- Identifying and assessing contacts to infectious TB, and when indicated, providing appropriate and adequate DOT for those with active TB or LTBI;
- Reducing the prevalence of untreated LTBI in Nunavut with testing programs, and appropriate and adequate DOT for those with LTBI;
- Facilitating surveillance for active TB in those with untreated LTBI and some people previously treated for active TB; and
- Protecting young children from developing active TB with the BCG vaccination program.

Guiding principles of the NU TB Program include:

- Appropriate and accountable programming, consistent with the *Canadian Tuberculosis Standards* and the *Guidance for Tuberculosis Prevention and Control Programs in Canada*;
- Culturally safe and appropriate care that reflects best and evolving practices;
- Timely access to screening and diagnostic tests, as close to home as possible; and
- Timely access to preventive and curative treatment, and appropriate monitoring, as close to home as possible.

Components of the NU TB Program include:

- Management of cases of active TB;

- Contact investigation and outbreak investigation;

- Screening for and treatment of, active TB and LTBI;
- Surveillance (data collection, analysis and dissemination) and data management;
- Laboratory diagnostic capacity;
- Resources and training on TB to support health care providers;
- Community-based education and awareness initiatives;
- Program monitoring and evaluation;
- Strategies to protect high-risk populations, such as targeted testing and BCG vaccination programs; and
- Strategies to address emerging issues such as co-infections and TB drug resistance.

Roles and Responsibilities

Table 1-1: Roles and responsibilities for TB prevention, care and control in Nunavut

Role	Responsibilities
Local Level	
Laboratory Services	• Report all positive TB results to Chief Medical Officer of Health (CMOH) or designate
TB Physician	• Consultant to Community Physicians, Regional Communicable Disease Coordinators (RCDCs), Community and Public Health Nurses (through the RCDCs),on diagnosis, assessment, treatment and clinical follow up issues relating to TB • Coordinate admissions to hospital • Write prescriptions for treatment of active TB and latent TB infection (LTBI) • Oversee management of patients admitted to hospital for TB in Nunavut • Monitor the ongoing CXRs, sputum reports and labs from patients on treatment • Consult with Territorial TB Clinical Consultant and/or Respirologist on complex cases • Attend case management meetings with Public Health and RCDC
Community Physicians	• Refer clients to CHNs or PHNs for screening when appropriate • Order diagnostic tests as appropriate • Consult with local TB Physician or Territorial TB Clinical Consultant regarding treatment for laboratory-confirmed, clinically confirmed or suspected cases of active TB as necessary • Report all laboratory-confirmed, clinically confirmed and suspected cases of active TB started on treatment to CMOH or designate • Order blood work panel for TB including HIV serology • Assist with client education as necessary
Community Health Nurses, Public Health Nurses, and/or TB Nurses (CHNS,PHNs, TBNs)	• Implement Nunavut TB Program at the local level: screening (e.g. school screening), testing; referral; treatment/monitoring; contact investigation; and prevention • Work through the RCDC to ensure all laboratory-confirmed, clinically confirmed and suspected cases started on treatment have been reported to the CMOH or designate • Provide education to clients and Directly Observed Therapy (DOT) Workers/TB Assistants as per the Nunavut Directly Observed Therapy Manual • Administer and document DOT in the community in accordance with the Nunavut guidelines and policies • Administer and document BCG vaccine in the community (if not administered in hospital) in accordance with the Nunavut guidelines and policies • Submit completed TB forms (e.g., DOT records, contact lists) to the RCDC in a timely fashion • Locate and screen/test contacts in accordance with Nunavut guidelines and policies • Support and supervise DOT Workers/TB Assistants • Work through the RCDC to ensure adherence to treatment and follow-up plan
Community Health Representatives (CHRs)	• Provide TB education in community with support from local and regional TB team (e.g., TBN, Supervisor Community Public Health Nurse [SCPHN], RCDC)
Directly Observed Therapy (DOT) Workers / TB Assistants	• Administer DOT in the community in accordance with the Nunavut Directly Observed Therapy Manual and Nunavut guidelines and policies • Work under the supervision of CHNs/PHNs/TBNs to monitor adherence to treatment and adverse reactions to treatment ***CONTINUED ON NEXT PAGE***

Role	Responsibilities
Local Level	
Health Care Workers (HCWs)	• Comply with TB screening policies established by the Nunavut TB Program • Maintain awareness of current TST status • Take appropriate precautions to prevent exposure to TB • Report TB exposures promptly to supervisor and occupational health practitioner (if available)
Occupational Health Practitioners or Supervisor of Community Health Programs (SCHP)	• Receive reports of HCW TB exposures • Investigate and manage HCW TB exposures from the time of incident until file is closed • Review HCW TB exposures from an occupational health viewpoint and act to prevent recurrence • Educate staff on airborne precautions and appropriate use of personal protective equipment • Assure availability of personal protective equipment (e.g., disposable N95 particulate respirators) • Assure staff have baseline, annual (if applicable) and post-exposure TB screening in accordance with Nunavut recommendations
Supervisor	• Ensure HCWs receive follow up for TB exposures in accordance with Nunavut guidelines and policies • Ensure appropriate incident reports are completed • Review HCW TB exposure incidents and act to prevent recurrence
Regional Level	
Regional Communicable Disease Coordinator (RCDC)	• Provide input into Nunavut TB standards, policies, procedures and guidelines • Operationalize Nunavut TB Program at the regional level • Provide support and direction to TB program health care practitioners within his/her respective region • Work with PHNs/CHNs/TBNs and physicians to ensure all laboratory-confirmed, clinically confirmed, and suspected cases are reported to the CMOH or designate • Assist with monitoring and reporting of contact investigation activities, and medication administration and adherence/compliance issues • Provide information and recommendations to support CHNs/PHNs/TBNs and physicians in the investigation and management of TB • Receive and review TB forms and contact lists from CHNs/PHNs/TBNs and forward on to the Territorial Communicable Disease Specialist • Coordinate consultation with Territorial TB Clinical Consultant • Coordinate prescriptions for active TB and LTBI as required • Meet weekly with TB physician for case management, prescriptions, adherence issues, adverse events and any other TB-related issues • Provide education, direction, and support to front-line TB program staff • Provide guidance to community programs in TB case and LTBI treatment management (e.g. client reviews as needed) • Provide guidance to community programs on contact investigations/source case investigations and screening programs • Receive and compile monthly reports and forward to the office of the CMOH • Maintain databases, regional files, and correspondence • Liaise with hospitals, Health Centres and regional referral centres • Coordinate DOT for patients who are traveling, within and outside of Nunavut, including ensuring that patients meet airline criteria for travel ***CONTINUED ON NEXT PAGE***

Role	Responsibilities
Territorial Level	
Chief or Deputy Chief Medical Officer of Health	• Set standards and policies for Nunavut TB Program • Provide support to territorial and regional level staff for Nunavut TB Program implementation • Review case reports of all laboratory-confirmed, clinically confirmed and suspected cases started on treatment • Advocate for the availability of adequate resources for the Nunavut TB Program • Conduct risk assessments and arrange for appropriate orders as per the Public Health Act if necessary • Act as a spokesperson for the Nunavut TB Program • Consult on TB-related issues • Review TB-related reports and makes program recommendations
Territorial Communicable Disease Specialist	• Provide support to the CMOH and RCDCs • Provide advice to health care providers on a territorial basis for the investigation and management of TB • Ensure TB reports are included in the communicable disease information system • Monitor TB prevention, treatment and control activities from a territorial perspective • Receive and review reports of all laboratory-confirmed, clinically confirmed and suspected cases started on treatment • Maintain Nunavut TB information system with all TB cases that have been committed to treatment • Report all cases annually to the Canadian TB Reporting System • Work with regional staff to ensure appropriate interventions with recalcitrant patients • Ensure coordination across regions during case and contact investigations • Liaise with and act as point of contact for Federal and Provincial/Territorial relations

Territorial TB Clinical Consultant	• Provide on-going expert clinical advice and support to the Department of Health pertinent to the management and control of TB, including:
	  ○ Expert advice as required, pertaining to TB diagnosis, treatment and follow-up
	  ○ Off-site duties as TB Clinical Consultant
	  ○ Available, within reason, for clinical consultation with physicians in Nunavut regarding TB diagnosis, treatment and monitoring
	  ○ Assist with the development of Nunavut clinical guidelines for TB diagnosis and treatment in keeping with the *Canadian Tuberculosis Standards*
	• Advise the Department of Health of any advances in TB diagnosis, treatment and patient monitoring

SECTION 2

Understanding TB

Etiology, Transmission and Pathogenesis

Etiology

TB disease is caused by mycobacteria, specifically, mycobacteria included in a grouping called the *Mycobacterium tuberculosis* complex (MTB complex). Of these, *Mycobacterium tuberculosis* is the most common cause of TB disease (active TB) in humans. Mycobacteria that cause TB disease are referred to as 'TB bacteria' throughout this manual.

Mycobacteria that **DO NOT** cause TB disease are known as 'nontuberculous mycobacteria' (NTM). In the past, NTM were called 'atypical mycobacteria' or 'mycobacteria other than tuberculosis' (MOTT). NTM are commonly found in soil and water, and do not usually cause disease in people with healthy immune systems. NTMs are not thought to spread from person-to-person, therefore information on diagnosis and management of NTM disease is not included in this manual. Refer to the *Canadian Tuberculosis Standards* for information on NTM.

Characteristics of TB Bacteria

TB bacteria are:

- Tiny (1 to 5 microns in size)
- Rod-shaped
- Slow-growing (divide once every 15 to 20 hours)

TB bacteria are identified in a clinical specimen with an acid-fast bacilli (AFB) smear and a mycobacterial culture. They cannot be identified with routine culture and sensitivity testing (i.e. 'routine C&S').

Figure 2-1: *Mycobacterium tuberculosis* (violet rods), Ziehl-Neelsen stain

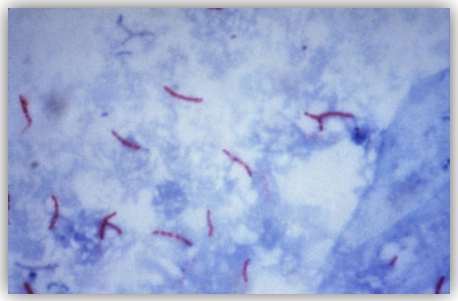


Image from: http://museumofhealthcare.ca/explore/exhibits/breath/diagnosis.html#hc5

Transmission

Transmission of TB bacteria is primarily person-to-person, through inhalation of airborne droplets (droplet nuclei) that contain TB bacteria.

Droplet nuclei are released by a person with infectious TB during forceful expirations such as coughing, sneezing, singing, and playing wind instruments. A person with TB disease affecting her/her larynx (laryngeal TB) can release droplet nuclei while talking.

Image adapted from: http://www.cdc.gov/tb/publications/posters/images/stoptblarge.pdf

Less commonly, TB bacteria are transmitted when droplet nuclei are aerosolized during:

- Pressurized irrigation or debridement of open TB wounds;
- Handling of specimens containing TB bacteria in the laboratory; and
- Autopsies of people with active TB.

TB bacteria (specifically *Mycobacterium bovis*) can also be transmitted in unpasteurized milk or other food products from animals with active TB.

Factors that influence the risk of transmission include:

- **Concentration of droplet nuclei in the shared airspace**, which is influenced by:
    - Degree of infectiousness of the person with TB (the case);
    - Degree of air circulation/ventilation;
    - Physical proximity to the case; and
    - Behavior of the case (e.g. covering his/her mouth when coughing or sneezing).
- **Whether the exposed person was previously infected with TB bacteria.**

Some studies suggest healthy people who were previously infected with TB bacteria might be protected against re-infection during subsequent exposures.

- **Duration and frequency of exposure(s).**

  In general, risk increases with longer and/or more frequent exposures.

- **Whether the person is/was adequately protected against inhaling TB bacteria during the exposure.**

  Wearing a properly sealed, disposable N95 particulate respirator (commonly referred to as an 'N95 mask') can protect a health care provider from inhaling TB bacteria while caring for an infectious case.

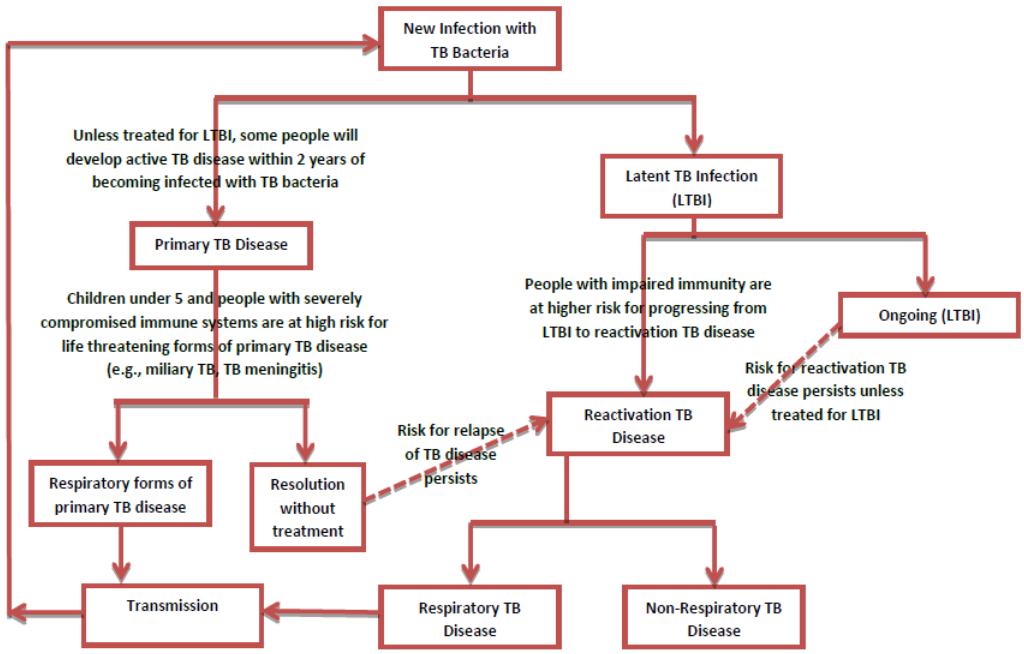
- **Age and immune status of the exposed person.**

  Very young contacts, elderly contacts and immunosuppressed contacts might be at higher risk for becoming infected with TB bacteria during exposures to infectious cases.

Some strains of TB bacteria might also be more easily transmitted than others.

Pathogenesis

Figure 2-2: TB pathogenesis[5]



[5] Adapted from Menzies R, Wong T. *Canadian Tuberculosis Standards*. 7th ed. Canadian Thoracic Society and the Public Health Agency of Canada; 2013.

Primary TB and Reactivation TB

Some people will develop active TB within the first 18 to 24 months after becoming infected with TB bacteria. This is known as **primary TB**. TB meningitis, miliary TB and pleural TB are often (but not always) presentations of primary TB.

Contacts under five years of age and those with severe immunosuppression are at high risk for developing primary TB after becoming infected with TB bacteria. Window period prophylaxis (WPP), also known as primary prophylaxis, is used in contact investigations to protect young and severely immunosuppressed contacts from developing primary TB (see **Contact Investigation and Source Case Investigation**).

Active TB that develops more than 18 to 24 months after infection with TB bacteria is known as **reactivation TB**.

Although it is not always possible to do so, making distinctions between cases with primary TB and those with reactivation TB can be important for public health management. For example, when a young child is diagnosed with active TB, it could mean there is someone with undiagnosed infectious TB among the people s/he spends time with. The RCDC may request that household members and others who spent time regularly with the child be assessed for TB. This practice is known as 'source case investigation' (see **Contact Investigation and Source Case Investigation**).

Latent TB Infection

Latent TB infection (LTBI) is the condition where a person is infected with TB bacteria but does not have active TB. **Table 2-1** outlines some similarities and differences and between LTBI and active TB. **Treating LTBI can prevent active TB from developing in future.**

Table 2-1: Latent TB infection (LTBI) compared with active TB

Latent TB Infection (LTBI)	Active TB
• TB bacteria in the body • TST and/or IGRA **USUALLY** positive • TB bacteria are **DORMANT (not multiplying)** • **NO** TB signs/symptoms • **NOT** infectious • At risk for development of active TB in future unless LTBI treatment is completed • **NOT a "TB case"**	• TB bacteria in the body • TST and/or IGRA **USUALLY** positive • TB bacteria are **ACTIVE (multiplying)** • **USUALLY** TB signs/symptoms • **POTENTIALLY** infectious (respiratory forms of active TB) • **A "TB case"**

It is not possible to know which people with LTBI will develop active TB. Impaired immunity, whether it exists at the time a person is infected with TB bacteria or develops later, can substantially increase the risk. **Table 2-2** provides estimates for some risk factors associated

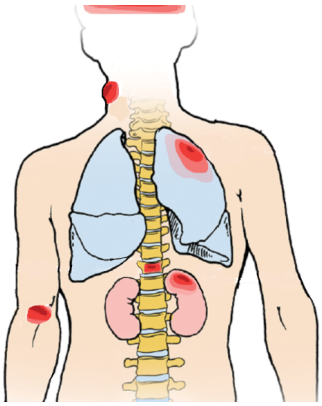
with progression from LTBI to active TB. In people with multiple risk factors, the risk for progression could be compounded.

Table 2-2: Risk factors and estimated risk for development of active TB among people with positive tuberculin skin tests[6]

Risk factor	Estimated risk for TB relative to people with no known risk factor
High risk	
Acquired immunodeficiency syndrome (AIDS)	110 - 170
HIV infection	50 - 100
Transplantation (related to immune-suppressant treatment)	20 - 74
Silicosis	30
Chronic renal failure requiring hemodialysis	10 - 25
Carcinoma of the head and neck	11.6
TB infection within the prior two years	15.0
Abnormal chest x-ray – fibronodular disease	6 - 19
Moderate risk	
Tumour necrosis factor alpha inhibitors	1.5 - 45.8
Diabetes mellitus (all types)	2 - 3.6
Treatment with glucocorticoids (≥ 15 mg/day of prednisone)	4.9 - 7.7
Young age when infected (zero to four years of age)	2 - 2.5
Slightly increased risk	
Alcohol consumption ≥ three drinks/day	3 - 4
Underweight (< 90% ideal body weight; for most people, this is a body mass index ≤ 20)	2 – 3
Cigarette smoker (one pack/day)	1.8 – 3.5
Abnormal chest x-ray – granuloma	2
Low risk	
Person with a positive TST, no known risk factor, and a normal chest x-ray	1
Very low risk	
Person with a positive two-step TST (booster), no other known risk factor, and a normal chest x-ray	0.5

[6] Ibid.

Presentation



Although active TB most often involves the lungs, TB disease can develop in almost any site in the body, including:

- Lymph nodes
- Genitourinary system
- Central nervous system
- Gastrointestinal system
- Bones and joints
- Eyes

Adapted from: http://www.cdc.gov/tb/publications/posters/images/stoptblarge.pdf

Presentations of active TB are divided into two main categories:

1. **Respiratory TB -** TB disease occurring **within** the respiratory system. In Canada, respiratory TB includes: primary TB, pulmonary TB, tuberculous pleurisy (non-primary) and TB of the intrathoracic lymph nodes, mediastinum, nasopharynx, nose (septum), and any nasal sinus.

2. **Non-respiratory TB -** TB disease occurring **outside of** the respiratory system. Some sites of non-respiratory TB include: peripheral lymph nodes (TB lymphadenitis), the central nervous system (e.g. TB meningitis), the genitourinary system, the abdominal cavity, and the bones and joints.

It is possible to have concurrent respiratory TB and non-respiratory TB. Thus, when a person is diagnosed with non-respiratory TB, chest x-rays are done and sputum specimens are tested for TB to determine whether s/he also has respiratory TB.

TB Signs and Symptoms

Signs and symptoms of active TB vary depending on:

- Which site(s) are involved;
- How advanced the disease is;
- How old the client is; and
- How well the client's immune system is working.

Common **systemic** TB symptoms include:

- Unexplained weight loss (or failure to gain weight in a growing child);
- Fever;
- Night sweats;
- Loss of appetite; and
- Fatigue.

In addition to systemic TB symptoms, people with **respiratory TB** might report:

- Cough (dry or productive) for at least two to three weeks;
- Bloody sputum (hemoptysis);
- Chest pain;
- Hoarse voice and/or sore throat (with laryngeal TB); or
- Wheezing (rare but potential symptom of respiratory TB in children).

In addition to systemic TB symptoms, people with **non-respiratory TB** might also report pain, swelling, or dysfunction of involved sites. Typical signs and symptoms of some of the more common non-respiratory presentations of active TB are shown in **Table 2-3**.

Table 2-3: Typical signs/symptoms of some presentations of non-respiratory TB[7]

Involved site	Typical signs/symptoms
Peripheral lymph nodes	• Isolated, unilateral, non-tender mass • Often involves anterior and posterior triangles of the neck, supraclavicular or axillary regions
TB meningitis ***treat as a medical emergency***	• Headache • Malaise • Personality changes, confusion • Irritation of the brain and spinal cord (meningismus) • Cranial nerve palsies • Seizures/coma
Miliary or disseminated TB	• Fever of unknown origin • Occurs most commonly in childhood (especially under one year of age) • 'Miliary' disease pattern might be present on chest x-ray • Chest x-ray results can be normal and tuberculin skin test can be negative
Abdominal TB **Gastrointestinal TB** **Peritoneal TB**	• Abdominal pain/swelling • Diarrhea, weight loss • Can mimic inflammatory bowel disease, Crohn's disease
Genitourinary TB	• Bloody urine • Sterile pus in urine • Frequent and/or painful urination
Bone TB	• Pain at involved site

[7] Ibid.

TB Assessment

A TB assessment is done to identify or rule out active TB or LTBI, or to document a client's TB status at a given point in time (e.g. pre-employment TB screening for health care providers).

In Nunavut, there are two flowcharts to guide how a TB assessment is done:

- ***General TB Testing Flowchart*** (see **Section 3 – General TB Assessment**)

- ***TB Contact Testing Flowchart*** (see **Section 9 – Contact Investigation, Window Period Prophylaxis and Source Case Investigation**)

Any or all of the following tests might be included in a TB assessment, depending on why the assessment is being done, and whether the client has TB signs/symptoms or is at increased risk for developing active TB (see **Table 2-2**). **Every TB assessment begins with an assessment for TB signs/symptoms and risk factors to ensure the appropriate tests are done.**

Tuberculin Skin Test (TST)

The tuberculin skin test (TST) is also known as a 'Mantoux test' or a 'TB skin test'. The TST is used to test for infection with TB bacteria. **TST is not used to diagnose active TB because people with LTBI can also have a positive TST result.**

During a TST, a small amount of purified protein derivative (PPD, also known as 'tuberculin') is injected intradermally on the client's inner forearm. If the client is infected with TB bacteria, s/he will develop a discrete area of swelling and firmness (induration) at the injection site within 48 to 72 hours.

The accuracy of TST results can be affected by a number of factors, including:

- Improper storage and handling of the testing solution;

- Errors in giving the test or measuring the results, which is why TSTs should only be given by health care providers with training in this skill;

- Limitations in the ability of the client's immune system to respond to the testing solution (e.g., infants, clients with immunosuppression);

- Recent infection with TB bacteria, as it can take up to eight weeks after infection with TB bacteria for the immune system to respond accurately to a TST; and

- Cross-reactivity to the testing solution due to infection with non-tuberculous mycobacteria (NTM) or prior Bacille Calmette-Guérin (BCG) vaccine.

Indications and Contraindications

A TST is included in a TB assessment **unless:**

- The client is under six months of age;
- TST is contraindicated; or
- There is a reason to defer the TST (see **Table 2-4**).

Table 2-4: TST contraindications and when to defer TST

Contraindications to TST	Situations When TST Should Generally be Deferred
• Allergy to any component of Tubersol® (Tuberculin Purified Protein Derivative [Mantoux]) or its container, or an anaphylactic or other allergic response to a previous TST • Previous active TB or LTBI • Documented prior positive TST or IGRA result • Prior blistered TST reaction	• Measles or other live virus immunization within past four weeks. **NOTES:** • **TST may be given before or on the same day as live virus vaccines but at a different site.** • **TST should be deferred until the client reaches six months of age**

Unless contraindicated or there is a reason to defer, TST **CAN** be given to a client:[8]

- With a history of BCG vaccination(s);
- With a common cold;
- Who is pregnant or breastfeeding;
- Who was immunized with any vaccine on the **same day**;
- Who was immunized within the previous four weeks with any **inactivated** vaccine(s); or
- Who gives a history of a prior positive TST reaction, but the result is not documented.

Follow-up of TST results is client-specific (see **Table 2-5**).

[8] Ibid.

Table 2-5: Situations in which various TST reaction sizes generally require follow-up[9]

TST reaction size	Situation in which a TST reaction size generally requires follow-up
0 – 4 mm induration	• Generally considered 'negative', and no treatment required unless client is an HIV+ contact. **NOTE:** Window period prophylaxis might be prescribed for contacts under five years of age and contacts with substantial immunosuppression (see **Contact Investigation and Source Case Investigation**).
≥ 5 mm induration	• HIV infection (without known recent contact). • Contact with infectious TB case within prior two years. • Presence of fibronodular disease on chest x-ray (healed TB, and not previously treated)'. • Organ transplantation (related to immune suppressant therapy). • TNF alpha inhibitors (e.g., infliximab, adalimumab and etanercept). • Other immunosuppressive drugs, e.g., corticosteroids (equivalent of ≥ 15 mg/day of prednisone for one month or more; risk of disease increases with higher dose and longer duration). • End-stage renal disease.
≥ 10 mm induration	• No known TB contact and no risk factors for active TB.

Bacille Calmette-Guérin (BCG) Vaccination and TST Results

BCG is a live, attenuated vaccine derived from *Mycobacterium bovis*. In Nunavut, BCG vaccination is offered up to 12 months of age to protect children from developing very serious forms of active TB.

Prior BCG vaccination **IS NOT** a contraindication to TST. However, it is important to note whether a client undergoing TST had BCG in the past because the vaccine can affect TST results (see **Bacille Calmette-Guérin [BCG] Vaccine**).

Two-Step TST

A two-step TST is done to establish an accurate baseline TST result for a person who will have tuberculin skin testing done at regular intervals (e.g. a health care provider). **Two-step TSTs are NOT DONE during TB contact investigations or source case investigations.**

During a two-step TST, two TSTs are done; an initial TST followed by a second TST one to four weeks later if the initial TST result is negative. The two-step TST procedure is described

[9] Ibid.

in **Section 4 - Tuberculin Skin Testing (TST)**. After a client has a negative two-step TST documented, future TSTs can be single-step (a single TST) regardless of how many years have passed since the two-step TST was done.

Chest X-Rays

Chest x-rays are used to detect abnormalities that **COULD BE** TB-related, including but not limited to:

- Infiltrates in the upper lobes or in the superior segments of lower lobes;
- Cavities, cavitary disease, granuloma;
- Hilar and/or mediastinal lymphadenopathies;
- Diffuse miliary nodules/patterns; and
- Pleuritis, pleurisy and pleural effusions.

Indications and Contraindications

Unless a client is or might be pregnant, posterior-anterior (PA) and lateral chest x-rays are included in TB assessments when:

- TST is contraindicated (see **Table 2-4**);
- There are TB signs/symptoms;
- TST result requires follow-up according to **Table 2-5** or the appropriate TB testing flowchart;
- An interferon gamma release assay (IGRA) result is positive;
- The client is at high risk for developing active TB (e.g., immunosuppressed contact, contact under five years of age); or
- The client was referred for Citizenship and Immigration Canada (CIC) medical surveillance.

A physician order is required prior to taking shielded chest x-rays of a client who is or might be, pregnant.

Examination of Clinical Specimens for TB Bacteria: Acid-Fast Bacilli (AFB) Smear and Mycobacterial Culture (TB Culture)

Almost any body fluid or tissue can be tested for TB bacteria. Respiratory TB is usually confirmed with sputum or specimens collected during bronchoscopy or gastric lavage. Non-respiratory TB is confirmed with specimens from the involved area such as pleural fluid, cerebrospinal fluid, urine, blood, or a tissue biopsy.

Initial examinations of specimens submitted for TB testing include acid-fast bacilli (AFB) smear and mycobacterial culture. Follow-up testing of culture-positive specimens typically includes drug susceptibility testing and TB genotyping. **Submission of multiple, good-quality specimens is important for ensuring accurate test results.**

Testing of clinical specimens is essential for guiding clinical and public health management of people infected with TB bacteria and those with TB signs/symptoms or other findings consistent with active TB. Results are used to:

- Confirm whether mycobacteria are present;
- Identify which mycobacteria are present, if any;
- Inform estimates on how infectious TB cases might be;
- Monitor response to treatment for active TB;
- Guide decisions on treatment for active TB (e.g. drug susceptibility testing);
- Monitor the occurrence and prevalence of strains of TB bacteria in Nunavut;
- Identify potential TB outbreaks; and
- Identify (or disprove) epidemiologic links and chains of transmission between or among TB cases.

Indications

Sputum specimens are included in TB assessments for clients with:

- Signs or symptoms consistent with **ANY** site of active TB;
- Chest x-ray abnormalities consistent with active or inactive (old, healed) TB (see Chest X-Rays*)*;

- Non-respiratory TB (to rule out concurrent respiratory TB);
- Immunosuppression;
- New positive TST or IGRA results; and/or
- Histories of active TB or LTBI, or prior positive TST or IGRA results.

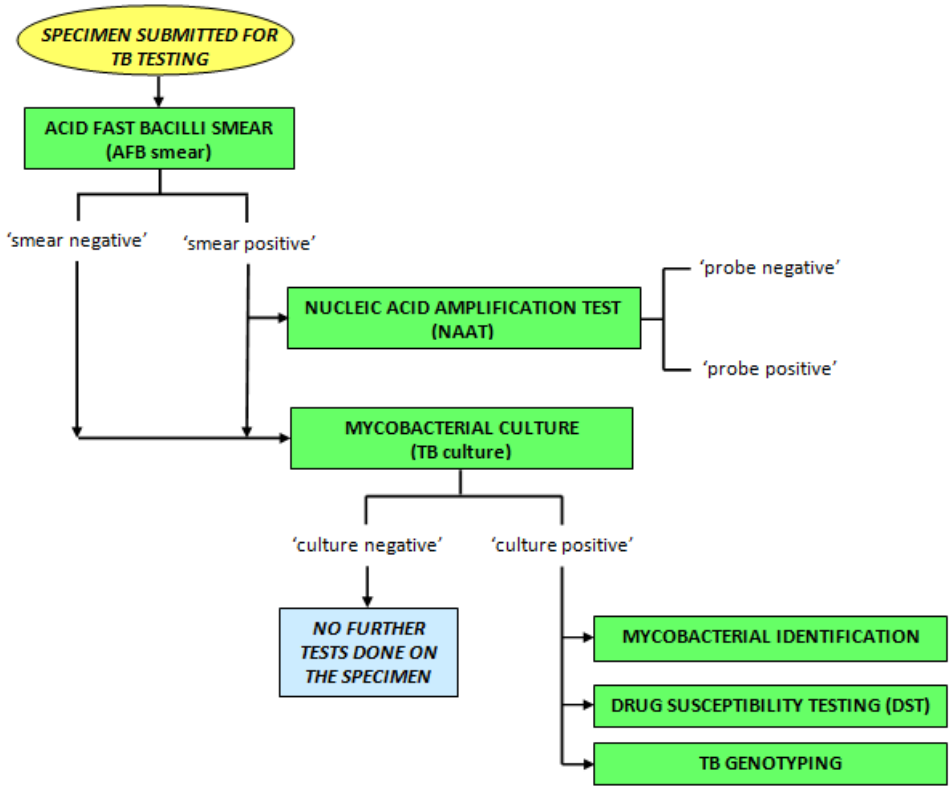
RCDCs may, after consultation with the TB physician, recommend testing of sputum specimens for TB **instead** of shielded chest x-rays for pregnant women in need of clinical investigations for active TB.

When a client is not able to provide sputum specimens spontaneously, other methods might be ordered to obtain material for testing (e.g., gastric aspiration, sputum induction, bronchoscopy).

For information on collecting specimens for TB testing, see:
Section 5 – Collection of Specimens for TB Testing

For client instructions on collecting sputum specimens, see:
Section 15 – TB Fact Sheets

Figure 2-3: Sputum specimen testing pathway



Acid-Fast Bacilli (AFB) Smear

AFB smear results are often available within 24 hours of when the specimen was received by the laboratory. Results are reported as "**no AFB seen**" (smear-negative), or "**AFB seen**" (smear-positive). **A positive AFB smear result indicates POSSIBLE active TB.**

Smear-positive reports also include a description of how many bacteria were seen in the specimen (quantification). In Nunavut, AFB smear quantification is reported as:

- 1+ (rare)
- 2+ (few)
- 3+ (moderate)
- 4+ (many)

A case with high numbers of AFB noted in his/her sputum specimen smears is considered potentially more infectious than a case with fewer AFB noted (see **Table 2-5**).

Mycobacterial Cultures (TB Cultures)

A mycobacterial culture that is positive for MTB complex is considered the "gold standard" for the definitive diagnosis of active TB. All specimens sent for TB testing undergo mycobacterial culturing (i.e. mycobacterial culture is done even when the AFB smear result is negative).

TB culture results are reported as "**positive**" or "**negative**". Results are typically reported two to eight weeks after the specimen is received at the laboratory.

A positive mycobacterial culture result indicates POSSIBLE active TB.

Culture results from specimens with high numbers of TB bacteria (e.g. smear-positive specimens) will usually be reported sooner than specimens with fewer TB bacteria. Thus, a case whose TB culture was reported positive early (e.g. after two weeks) is considered potentially more infectious than a case whose culture was reported positive later (e.g. after seven weeks). More information on relative levels of infectiousness is shown in **Table 2-5**.

Nucleic Acid Amplification Tests (NAAT)

NAATs can provide additional information on whether there are TB bacteria in specimens that are AFB smear-positive (smear-positive) or mycobacterial culture-positive (culture-positive).

When a smear-positive specimen has a 'positive' NAAT result ('probe-positive'), the client likely has active TB. However, a negative NAAT result does not rule out active TB.

NAATs (e.g. Gen-Probe™ Accuprobe) are used on positive TB cultures to help identify which mycobacteria are growing.

Drug Susceptibility Testing (DST)

DST is done to confirm which TB drugs should be used for cases and their contacts. DST can only be done when there is a positive mycobacterial culture to work from. **Thus, DST cannot be done for people with LTBI**.

DST can take one to three weeks to complete, so cases and contacts generally begin treatment before DST results are available. Treatment regimens are adjusted when DST results indicate the case's TB is resistant to one or more TB drugs (drug-resistant).

TB Genotyping

TB genotyping is a method for identifying which strain of TB bacteria a TB case is infected with. TB genotyping can only be done when there is a positive mycobacterial culture to work from. **Thus, TB genotyping cannot be done for people with LTBI**.

Table 2-5: Comparison of typical laboratory results, symptoms and level of infectiousness among presentations of active TB

	Respiratory TB				Non-respiratory TB	
	Test	**Result**	**Test**	**Result**	**Test**	**Result**
Laboratory Results for SPUTUM	**AFB smear**	**AFB seen (POSITIVE)**	**AFB smear**	**no AFB seen (NEGATIVE)**	**AFB smear**	**no AFB seen (NEGATIVE)**
	Culture	**growth of AFB (POSITIVE)**	**Culture**	**growth of AFB (POSITIVE)**	**Culture**	**no growth (NEGATIVE)**
Systemic TB Symptoms	Usually present along with respiratory symptoms (e.g. cough)		Usually present, might include respiratory symptoms (e.g. cough)		Usually present along with symptoms at site of disease involvement	
Level of Infectiousness	Highly infectious before treatment		Less infectious before treatment than cases whose AFB smears and cultures are both positive		Rarely infectious - transmission requires aerosolization of TB bacteria from the site of disease (e.g. during wound debridement)	

Other Tests - Interferon Gamma Release Assay (IGRA) and GeneXpert®

Interferon Gamma Release Assay (IGRA)

IGRA is a blood test to detect if a person is infected with TB bacteria. **IGRAs are not used to diagnose active TB because people with LTBI can also have a positive (reactive) IGRA result.**
IGRA results are not influenced by prior BCG vaccination or by exposure to most NTM. This means IGRA results can be more reliable than TST results in some circumstances. In Canada, IGRA is not considered a replacement for TST. Instead, IGRA results are used to supplement or compliment TST results. In Nunavut, IGRA is currently only available in Iqaluit, and must be ordered by a TB physician.

GeneXpert®

GeneXpert® is an automated, cartridge-based nucleic amplification assay test (NAAT). It can simultaneously detect TB bacteria in a clinical specimen and resistance to rifampin (an important 'first line' TB drug). GeneXpert® is performed directly from the testing material (versus requiring a positive mycobacterial culture).

GeneXpert® results can take as little as two hours once the testing process is underway. Results are reported as 'positive' or 'negative'. The test is used only during the initial clinical investigation of a potential new case. GeneXpert® is not repeated on confirmed cases to monitor the effectiveness of TB treatment.

GeneXpert® is currently only available in the Qikiqtaaluk region. AFB smear and mycobacterial culture will continue to be performed on all specimens received by Qikiqtani General Hospital (QGH) laboratory to ensure cases are not missed (e.g. as a result of falsely negative GeneXpert® results). Routine drug susceptibility testing for all first-line TB drugs will also continue to be done on all culture-positive specimens, regardless of whether or not GeneXpert® testing is done or identifies rifampin resistance.

For more information on GeneXpert® testing, refer to the Qikiqtani General Hospital (QGH) laboratory protocol.

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Treatment

Treatment of active TB and LTBI are essential components of TB care, prevention and control programming.

Treating active TB improves outcomes for those who are ill and stops transmission from infectious cases. Treating LTBI prevents progression to active TB in those infected with TB bacteria.

Drugs used to treat active TB and LTBI (TB drugs) are available in every community. In Nunavut, active TB and LTBI are treated with directly observed therapy (DOT).

When treatment for active TB or LTBI is provided at the school, the parent/guardian must sign a **Medication Administration Consent** form (see **Section 12A – Sample Letters for Nunavut TB School Screening Program**).

Image adapted from: *http://www.cdc.gov/tb/publications/posters/images/stoptblarge.pdf*

Treatment of Active TB

Active TB is almost always curable when appropriate treatment is prescribed and adhered to.

The objectives of active TB treatment are to:

- Rapidly reduce the number of TB bacteria, which will:
    - Provide relief from symptoms;
    - Lower the risk for TB-related death or disability;
    - Reduce the risk of transmission of TB bacteria from infectious cases; and
- Prevent the development or worsening of TB drug resistance; and
- Prevent relapse of active TB after completion of treatment.

Drug-resistant TB is rare in Nunavut therefore standardized treatment regimens are used initially, and adjusted when necessary once results from drug susceptibility testing become available (usually four to six weeks from date of initial positive TB culture).

The overall duration of active TB treatment is informed by:

- Which treatment regimen is used;
- How well the client responds to treatment; and
- How long it takes for the client to take all of the prescribed doses.

Treatment for active TB is divided into two phases: the initial phase (first two months) and the continuation phase (month three until treatment end). Treatment is typically given daily (Monday to Friday) during the initial phase, and three times a week (Mondays, Wednesdays, Fridays) during the continuation phase.

Initial Phase of TB Treatment

During the initial phase, at least three TB drugs are used, usually isoniazid (INH), rifampin and pyrazinamide (PZA). Ethambutol is included in the treatment regimen for most cases until results from drug susceptibility tests confirm there is no TB drug resistance. Results from drug susceptibility tests are usually available four to six weeks after the first positive TB culture. Supplemental pyridoxine (vitamin B6) is included in regimens with INH to prevent peripheral neuropathy (numbness/tingling in fingers and/or toes).

Treatment is taken daily; seven days per week when the client is hospitalized and at least five days per week when the client is in the community (Monday through Friday). **Adherence to treatment during the initial phase is extremely important.**

The full number of doses ordered by the treating physician must be observed before the client can advance to the next phase of treatment (the continuation phase). Therefore, missed doses can result in the initial phase of treatment taking longer than two calendar months to complete.

Continuation Phase of TB Treatment

The continuation phase begins once all doses prescribed for the initial phase have been observed and an updated prescription has been received.

Typically, two TB drugs are used (usually INH and rifampin), supplemented with vitamin B6. PZA and ethambutol are not usually used in the continuation phase unless the client has drug-resistant TB or is not taking **BOTH** INH and rifampin.

Treatment is generally given **AT LEAST** three times a week (Monday, Wednesday, Friday). Thrice-weekly dosing is recommended over twice-weekly dosing to ensure cases continue to receive adequate treatment and protection against developing TB drug resistance, should they miss a dose in a treatment week.[10]

The duration of the continuation phase for most cases with drug-susceptible TB is four calendar months during which **AT LEAST** 54, thrice-weekly doses are observed. An extended continuation phase is necessary for some cases, including those:

- With forms of active TB that require longer treatment (e.g., bone TB, TB meningitis);
- Whose initial treatment phase did not include PZA throughout;
- Whose treatment regimens did not include INH and rifampin (or rifabutin) throughout;
- With HIV infection who are not taking antiretroviral therapy;[11]
- With risk factors for relapse of TB disease, specifically:
    - Extensive disease and/or cavities on chest x-ray in the first two months of treatment;
    - Culture-positive sputum specimens after two months of treatment; and/or
    - Cavities on chest x-rays taken after six months of treatment.

Regular monitoring throughout TB treatment is required to identify and respond to adverse effects promptly. Monitoring during TB treatment also includes testing to confirm the effectiveness of the treatment, specifically chest x-rays and testing of sputum specimens for TB.

Follow-up requirements after completion of TB treatment are determined by the treating physician. In general, cases that complete treatment and whose clinical evaluations are satisfactory at the end of treatment do not require follow-up. Exceptions include:

- Pediatric cases (cases under 13 years of age);
- Cases treated with non-standard regimens; and

[10] Ibid.
[11] Ibid.

- Cases with:
    - Advanced disease (e.g. cavitary TB) and/or substantially abnormal end-of-treatment chest x-rays;
    - Inconsistent adherence;
    - Substantial immunosuppression (e.g. HIV infection);
    - Diabetes; and/or
    - Drug-resistant TB.

Cases that require follow-up after treatment are placed on TB surveillance (see **TB Surveillance**).

For information on TB treatment regimens, TB drug doses and monitoring requirements during treatment for active TB, see:

Section 8 – Care of Clients with Active TB

Treatment of Latent TB Infection (LTBI)

Once a person is infected with TB bacteria, s/he is at risk for developing active TB. The risk is greatest within the first two to three years after the infection occurs.

Treating LTBI can prevent development of active TB. LTBI treatment (also known as 'preventive treatment' or 'TB prophylaxis'), is prescribed for clients with positive tuberculin skin test (TST) results and/or positive interferon gamma release assays (IGRA), once active TB has been ruled out.

Treating LTBI is especially important for TB contacts and others at high risk for progression to active TB, such as infants and other children under five years of age, and people with immunosuppression (see **Table 2-2**). For some contacts, LTBI treatment might be started even before tuberculin skin testing (or IGRA testing) can reliably indicate whether they are infected with TB bacteria, once active TB has been ruled out. This practice is known as 'window period prophylaxis' (see Contact Investigation and Source Case Investigation).

LTBI treatment is not mandatory but is strongly recommended. Clients who decline treatment or who do not complete LTBI for other reasons are placed on TB surveillance for two years (see TB Surveillance).

The duration of LTBI treatment is determined by which treatment regimen is used and how long it takes for the client to take all of the prescribed doses. In Nunavut, LTBI is usually treated with a single TB drug: isoniazid (INH). INH is taken until 78, twice-a-week doses have been observed. Vitamin B6 is included in regimens with INH to prevent peripheral neuropathy (numbness/tingling in fingers and/or toes). Treatment is typically given twice a week, on Mondays and Thursdays. With regular adherence, it takes about nine months to complete treatment.

LTBI treatment with rifampin (instead of INH and vitamin B6) might be prescribed for some clients, such as contacts of cases with INH-resistant TB. The rifampin-based LTBI treatment regimen is 120 doses of rifampin taken five days a week (Monday to Friday). With regular adherence, it takes about six months to complete treatment.

Although INH and rifampin are well-tolerated by most clients, both are hepatotoxic drugs. Adverse effects can include liver failure (and potentially, death), particularly when treatment continues after signs or symptoms of hepatotoxicity become apparent. Regular monitoring throughout LTBI treatment is required to identify and respond to adverse effects promptly.

Follow-up is usually not needed once LTBI treatment has been completed. Exceptions include contacts of cases with drug-resistant TB and clients with:

- Abnormal chest x-rays at baseline or three-month follow-up;
- Intermittent adherence; or
- Substantial immune suppression.

For information on LTBI treatment regimens, TB drug doses and monitoring requirements during LTBI treatment see:

Section 7 – Care of Clients with Latent TB Infection (LTBI)

Special Considerations in the Treatment of Active TB and LTBI

Table 2-6: Conditions that require special consideration during treatment of active TB or LTBI

Condition	Considerations
Hepatic disease	Many TB drugs are hepatotoxic (e.g., INH, rifampin, PZA). Baseline liver function testing is required for all clients, along with regular clinical and laboratory monitoring throughout treatment to promptly identify adverse effects. More frequent monitoring may be ordered by the treating physician for clients with pre-existing liver disease.
Renal disease	Dosing of PZA and ethambutol may require adjustment for clients with renal disease (see **Section 6 - Care of Clients with Active TB**).
Pregnancy and breastfeeding - CONSULT RCDC FOR CLIENT-SPECIFIC RECOMMENDATIONS	INH, rifampin and ethambutol are considered safe in pregnancy, and PZA is likely safe as well.[12] Due to potential for increased risk of hepatotoxicity during pregnancy and the first three months postpartum, treatment of LTBI is usually delayed unless a woman is considered very high risk for progression to active TB. HIV-negative breastfeeding women with active TB who have been treated appropriately for at least two weeks and who are not considered infectious can breastfeed.[13] The concentration of TB drugs in breast milk is not sufficient to protect the child. Supplemental pyridoxine (vitamin B6) should be given to the nursing mother and to the breastfeeding child.[14]
HIV infection	Treatment of LTBI or active TB is done in consultation with a specialist.
TB drug resistance	LTBI treatment for contacts to drug-resistant TB cases and treatment of active cases with known or suspected TB drug resistance are done in consultation with a specialist.

[12] Ibid.
[13] Ibid.
[14] Ibid.

Supporting Adherence to TB and LTBI Treatment

Directly Observed Therapy (DOT)

In Nunavut, all treatment of active TB and LTBI is done with directly observed therapy (DOT). With DOT, each dose of treatment is observed by a trained health care provider (e.g., nurse, DOT worker). Using DOT helps clients to complete treatment safely and as quickly as possible.

For clients with active TB, supporting adherence to treatment with DOT is especially important to prevent:

- Treatment failure;
- Recurrence of active TB; and
- Development or worsening of TB drug resistance.

Image adapted from: *http://www.cdc.gov/tb/publications/posters/images/stoptblarge.pdf*

DOT visits also provide opportunities for:

- Clients to ask questions about their diagnosis and their care plan; and
- Health care providers to monitor how well clients are responding to treatment, and to promptly identify and respond to potential adverse effects.

Incentives and Enablers

Incentives are gifts given to a client to encourage or acknowledge adherence to treatment. Enablers are practical items given to a client to facilitate adherence to treatment, such as taxi vouchers. Incentives and enablers are available to support clients on DOT.

For more information on DOT and on the use of incentives and enablers, see:

Section16 - Directly Observed Therapy (DOT)

Treatment Refusal and Non-adherence

LTBI and WPP

Clients recommended for LTBI treatment or WPP (or their parents/guardians) may decline treatment or choose to discontinue treatment at any point after starting.

Every effort should be made to support adherence to LTBI treatment and WPP, and to encourage clients to complete LTBI treatment when it is recommended. Although non-adherence to LTBI or WPP treatment **DOES NOT** lead to development of TB drug resistance, it can lead to development of active TB.[15] TB drug resistance can develop when treatment for LTBI (or WPP) is given to someone with active TB.

Active TB

Although it is very rarely necessary to do so, clients with infectious TB can be compelled to adhere to treatment and to comply with isolation precautions.

Before assistance from the Office of the Chief Medical Officer of Health is sought, all efforts made to support adherence/compliance must be thoroughly and clearly documented and the principles of reasonableness and due process must be met. These principles include:

- Educating the client about TB and why isolation and treatment are necessary;
- Making multiple attempts to support the client to adhere/comply;
- Attempting to find out why the client is not adhering/complying;
- Attempting to overcome any issues that may be barriers to adherence/compliance, and negotiating with the client accordingly; and
- Using enablers and/or incentives when appropriate to support or encourage adherence/compliance.

[15] Ibid.

Contact Investigation and Source Case Investigation

A TB contact investigation is a systematic process for identifying, prioritizing and screening people who have been exposed to infectious TB disease.

A source case investigation (also called 'reverse contact investigation') is done to identify how a person became infected with TB bacteria (i.e. the 'source' of the TB bacteria the person is infected with).

Contact investigations and source case investigations are an important component of Nunavut TB Program because they can identify people with active TB or LTBI.

Image adapted from: *http://www.cdc.gov/tb/publications/posters/images/stoptblarge.pdf*

Contact Investigation

Contact investigations are planned on a case-by-case basis and informed by factors such as:

- Age of the case;
- How infectious the case is;
- Date of onset of TB signs/symptoms;
- Date of the first chest x-ray finding suggestive of active TB or first positive laboratory results (e.g. AFB smear or mycobacterial culture);
- Case's travel history since and immediately prior to the onset of TB signs/symptoms, abnormal chest x-ray, or positive laboratory results;
- Size and complexity of the case's social network (e.g., family, friends, work/school environments);
- Circumstances that might require enhanced/alternate approaches (e.g. under-housed or highly transient case and/or contacts); and
- Whether the case can/will provide details of his/her activities and identities of his/her contacts.

Generally:

- Only people exposed to the case during the infectious period are included in the investigation;
- Contact investigations for highly infectious cases (e.g. cases with AFB smear-positive, cavitary pulmonary TB or laryngeal TB) include a wider range of contacts than contact investigations for less infectious cases; and
- Contact investigations for cases with drug-resistant TB follow the same steps as those for cases with drug-susceptible TB.

Once an infectious period has been established for the case, people who were exposed to the case during that time are grouped into categories based on characteristics of their exposures to the case (contact categories). The following contact categories are based on those recommended in the *Canadian Tuberculosis Standards*, and adapted for the Nunavut context.

Contact Categories

Type 1 - Household: people who slept in the same household as the case, such as:

- Family;
- Room-mates and boarders;
- Overnight visitors; and
- "Couch surfers".

Type 2 - Close, Non-household: people who shared breathing space with the case daily, such as:

- Caregivers;
- Regular sexual partners;
- Close friends and extended family;
- Daycare or primary/secondary school classroom contacts; and
- Coworkers who work in close proximity, particularly in a small room.

Type 3 - Casual/community: people who spent time with the case less frequently than household or close non-household contacts, such as:

- High school classmates who share fewer courses with the case than Type 2 contacts;
- Classmates in college/university classes;
- Coworkers with less exposure than Type 2 contacts;
- Members of a club, team, weekly children's playgroup or other social/recreational/religious group;
- Extended family members who are seen occasionally; and
- Other students on a school bus.

Once categorized, contacts are then prioritized for screening and follow-up in consultation with the RCDC, based on risk for developing active TB if infected with TB bacteria. **High-priority contacts** generally include:[16]

- Type 1 contacts;
- Symptomatic contacts (e.g. **ANY** contact with: a cough for longer than three weeks, weight loss, fever/night sweats);
- Contacts under five years of age; and
- Immunosuppressed contacts, such as those with: HIV infection; end-stage renal disease; organ transplant (related to immune suppressive therapy); and/or treatment with TNA alpha inhibitors and/or other immune suppressive drugs/therapies, such as corticosteroids (equivalent of equal to or more than 15 mg/day of prednisone for one month or more) or chemotherapy.

[16] Ibid.

Contact Screening and Follow-up

The ***TB Contact Testing Flowchart*** describes how to test and follow-up contacts (see **Section 9 - Contact Investigation, Window Period Prophylaxis and Source Case Investigation**).

Most contact investigations involve two rounds of screening. The first round begins when the new case is identified. The second round is done once at least eight weeks have passed since the date of last contact with the case (when a TST or interferon gamma release assay [IGRA]) can reliably indicate whether the contact was infected with TB bacteria).

Some contacts **DO NOT** require a second round of screening **UNLESS** they present with TB signs/symptoms. These include contacts:

- With prior active TB or LTBI (treated or untreated);
- Diagnosed with active TB or LTBI during the first round of screening; and
- Whose first round of screening was done at least eight weeks after their last exposure to the case.

The time between exposure to a case and when a TST or IGRA result is considered reliable is referred to as the 'window period'. Treatment is given during the window period to contacts at very high risk for developing active TB, such as contacts under five years of age and contacts who are severely immunosuppressed. This practice is known as 'window period prophylaxis' (see **Section 9 - Contact Investigation, Window Period Prophylaxis and Source Case Investigation**).

Narrowing or Expanding the Scope of A Contact Investigation

The scope of a contact investigation can be narrowed or expanded in response to new information about the case or to findings from the initial groups of contacts tested. Decisions on when and how to expand a contact investigation are made by the RCDC, in consultation with the Territorial Communicable Disease Specialist and/or the CMOH/DCMOH.

A contact investigation is usually expanded if evidence of recent transmission is found. Evidence of transmission can include:

- A greater-than-expected number of contacts with LTBI;
- LTBI in contacts under five years of age;
- Positive TST results in contacts that had documented negative TST results within the prior two years (TST conversions); and
- Contacts with active TB.

A contact investigation might also be expanded if active TB is diagnosed in a contact from a category or group not initially included in the contact investigation. This could include contacts with very limited exposure to the case or contacts whose last exposures to the case were prior to the infectious period originally established for the contact investigation.

A contact investigation is usually closed once the majority of contacts have completed screening **unless** evidence of transmission is found. Decisions on when to close a contact investigation are made by the RCDC, in consultation with the Territorial Communicable Disease Specialist and/or the CMOH/DCMOH.

For the Contact Investigation Protocol, see:
Section 9 – Contact Investigation, Window Period Prophylaxis and Source Case Investigation

Source Case Investigation

A source case investigation might be recommended when a client is believed to have been recently infected with TB bacteria, without a known TB exposure. The purpose of the investigation is to look for an infectious TB case (a 'source case') among people the client spends time with.

Source case investigations are usually limited to household members and others who spend time with the client on a daily basis. A single round of screening is done. Emphasis is placed on identifying and testing people with TB signs/symptoms, and those with a history of LTBI or active TB.

For the Source Case Investigation Protocol, see:
Section 9 – Contact Investigation, Window Period Prophylaxis and Source Case Investigation

TB Surveillance

Nunavut TB Surveillance Program

The Nunavut TB Surveillance Program is a mechanism to monitor for active TB in clients with LTBI and clients at risk for relapse of active TB after treatment. TB surveillance is an important component of the Nunavut TB Program because early detection of active TB can improve outcomes for cases, and prevent or reduce TB transmission from cases with infectious TB.
TB surveillance is generally recommended for:

- Clients with untreated or incompletely treated LTBI at increased risk for development of active TB (e.g., children, contacts, recent TST converters, the immunosuppressed);

- Pediatric cases (cases under 13 years of age);

- Cases with:

    - Inconsistent adherence;
    - Substantial immunosuppression (e.g. HIV infection);
    - Diabetes;
    - Drug-resistant TB (any type);
    - Non-standard treatment regimens; and
    - Abnormal chest x-rays at the end of treatment.

Unless the RCDC or treating physician stipulates a different date be used, the surveillance period generally begins on:

- The date of the positive tuberculin skin test (TST) or interferon gamma release assay (IGRA) for a client with LTBI who did not start LTBI treatment;
- The last date of treatment for a client with LTBI who started LTBI treatment but did not complete it;
- The last date of treatment for a client treated for active TB.

For adolescents and adults, the surveillance period is generally two years with surveillance assessments carried out at **six-month** intervals.

For pediatric clients, the surveillance period is generally one year with surveillance assessments carried out at **three-month** intervals. The surveillance period might be extended to two years for pediatric clients with:

- Untreated or incompletely treated LTBI;
- Substantial immunosuppression (e.g. HIV infection);
- Disseminated TB **OR** drug-resistant TB; or
- Inconsistent adherence to treatment for active TB.

Assessments in the second year are done at six-month intervals unless otherwise stipulated by the RCDC or the treating physician.

For the TB Surveillance Protocol, see:
Section 10 – TB Surveillance

Citizenship and Immigration Medical Surveillance

Some newcomers are required by Citizenship and Immigration Canada (CIC) to complete an immigration medical examination (IME). Those with histories of active TB or abnormal IME chest x-rays must undergo periodic monitoring for active TB under the CIC medical surveillance program.

CIC medical surveillance is coordinated through the Nunavut Tuberculosis Program. Outcomes of medical surveillance assessments are reported to CIC by the Territorial Communicable Disease Specialist.

For the CIC Medical Surveillance Protocol, see:
Section 11 – Citizenship and Immigration Canada Medical Surveillance

Bacille Calmette-Guérin (BCG) Vaccine

Bacille Calmette-Guérin (BCG) is the only anti-TB vaccine currently available. It is a live attenuated vaccine derived from *Mycobacterium bovis*.

BCG does not protect against infection with TB bacteria, nor will administering BCG protect someone already infected with TB bacteria from developing TB disease. However, it is widely accepted that BCG reduces the risk of the most serious forms of TB in young children (e.g., TB meningitis, miliary TB).

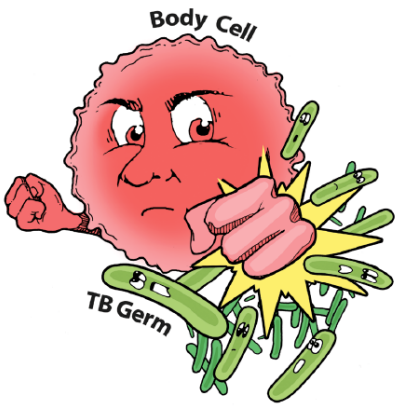


Image adapted from: *http://www.cdc.gov/tb/publications/posters/images/stoptblarge.pdf*

Eligibility

Infants up to 12 months of age living in Nunavut are eligible for BCG vaccine.

Refer to the ***Nunavut Immunization Manual*** and the product monograph for information on indications and contraindications **PRIOR TO ADMINISTERING BCG VACCINE**, and for information on management of infants with delayed BCG administration.

Identifying BCG Scars

BCG scars are typically raised, dimpled and shiny (see **Figure 2-4**). They are usually found on the upper left or right deltoid. If two scars are present, the BCG scar is usually the smaller, raised one. Look on the lower back for parallel scratch-like scars for BCG given in Quebec or Newfoundland ("back scratch scars").

Figure 2-4: Typical BCG vaccination scar

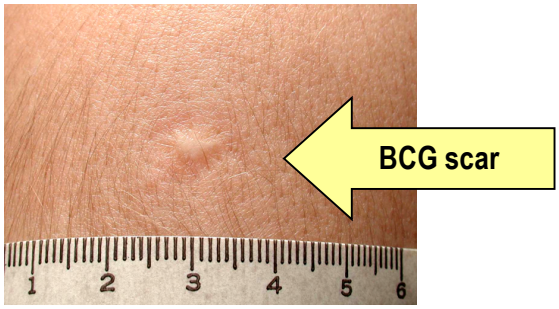


Image from: *http://www.phac-aspc.gc.ca/tbpc-latb/pdf/recognition-bcg-scars_e.ppt*

SECTION 3

General TB Assessment

General TB Assessment

A general TB assessment is done to identify or rule out active TB or LTBI, or to document a client's TB status at a given point in time (e.g. pre-employment TB screening for health care providers).

A systematic process is used to ensure all necessary information is collected and tests appropriate to the client's individual health history and TB risk factors are done (see the **General TB Testing Flowchart**). **To help identify active TB as quickly as possible, screen clients for TB signs/symptoms before doing any testing**.

Record the client's TB and health history, and TB risk factors on a **Tuberculosis Assessment Form** (**TBAF**), along with information on which tests were done.

When clinical investigations such as chest x-rays and sputum testing for TB are included in an assessment, also complete a **TB Prescription Request/Change Form** (**TBPRC**).

Steps in a General TB Assessment

Step One: Initiate a Tuberculosis Assessment Form (TBAF)

- Record demographic information in Part 1.
- Indicate why the TB assessment is being done in Part 2.

Step Two: Record TB and BCG Vaccination History

- Complete Part 3 as fully as possible. Refer to the client's medical chart (when available) if s/he is uncertain about any information requested for the **TBAF**.

Step Three: Do a Health and TB Signs/Symptoms Assessment

- Complete Part 4 as fully as possible.
- Review **ALL** TB signs/symptom questions with **EVERY** client. If TB signs/symptoms are present, follow the steps outlined in **Section 6 – Care of Clients with TB Signs/Symptoms**.
- If the client is immunosuppressed, record details of his/her condition(s) on the **TBAF**, and list the client's current medications and treatments on a **TBPRC**.

Step Four: Determine Whether Tuberculin Skin Testing (TST) is Appropriate

Include a TST in the TB assessment **unless:**

- The client is under six months of age;
- TST is contraindicated or it is necessary to defer the TST.

For information on TST contraindications and situations when TST should generally be deferred, see:
Table 2-4 in Section 2 – Understanding TB

Step Five: Give a TST and/or Initiate Clinical Investigations

- Record results of last prior TST in Part 5 of the **TBAF**.
- If a TST is given, record the administration date under '*Current TST*' and sign your name.
- **If it is not appropriate to give a TST and/or if the client is immunosuppressed**, complete a **TBPRC** and initiate clinical investigations. Indicate which tests were done in the *'Additional Tests'* section of Part 6 on the **TBAF**.

  NOTES:

  - **Within health centres, sputum specimens may only be collected where AIRBORNE PRECAUTIONS can be adhered to.** In health centres without negative pressure rooms, direct clients to produce sputum specimens **OUTDOORS**, in an area away from other people.
  - Chest x-rays taken within the prior month may be used in place of taking new x-rays provided the client is **asymptomatic** and the findings were reported as "**normal**".
  - **A physician order is required prior to taking shielded chest x-rays of a client who is or might be, pregnant.**

- If treatment for active TB or LTBI is anticipated, do baseline blood tests including:

  - AST/ALT and total bilirubin;
  - CBC;
  - Uric acid;
  - Creatinine;
  - Hepatitis B surface antigen (HbsAg), hepatitis C; and
  - HIV serology.

  NOTE: HbsAg, hepatitis C, and HIV testing is **NOT REQUIRED** for clients with pre-existing positive test results. Results from blood tests done within one month prior can be used as baseline measurements provided they are within normal limits for the client's age.

- For information on the TST procedure, see:
  Section 4 - Tuberculin Skin Testing (TST)

- For information on **airborne precautions**, refer to the *Nunavut Infection Prevention and Control Manual*, available online at:
  http://www.gov.nu.ca/health/information/infection-prevention-and-control

- For information on collecting specimens for TB testing, see:
  Section 5 - Collection of Specimens for TB Testing

- For client instructions on collecting sputum specimens, see:
  Section 15 – TB Fact Sheets

Step Six: Document and Follow-up on Test Results

- **If a TST was given**:

  - Inspect the test site for induration 48 to 72 hours later. Record the date under '*Date Read*' in Part 5 of the **TBAF** and sign your name.

  - Record the TST measurement in millimetres (mm). If there is no induration, record the TST result as '0 mm'.

- Follow-up the TST result per the **General TB Testing Flowchart**.

- Send the completed **TBAF** and **TBPRC** (if used) to the RCDC.

- Monitor for results of chest x-rays, sputum testing and blood tests. Consult the RCDC if chest x-ray findings are abnormal and/or if AFB smear or culture results are positive.

Step Seven: Complete Part 7 of the TBAF

- Sign and date Part 7 of the **TBAF** once all tests have been completed.

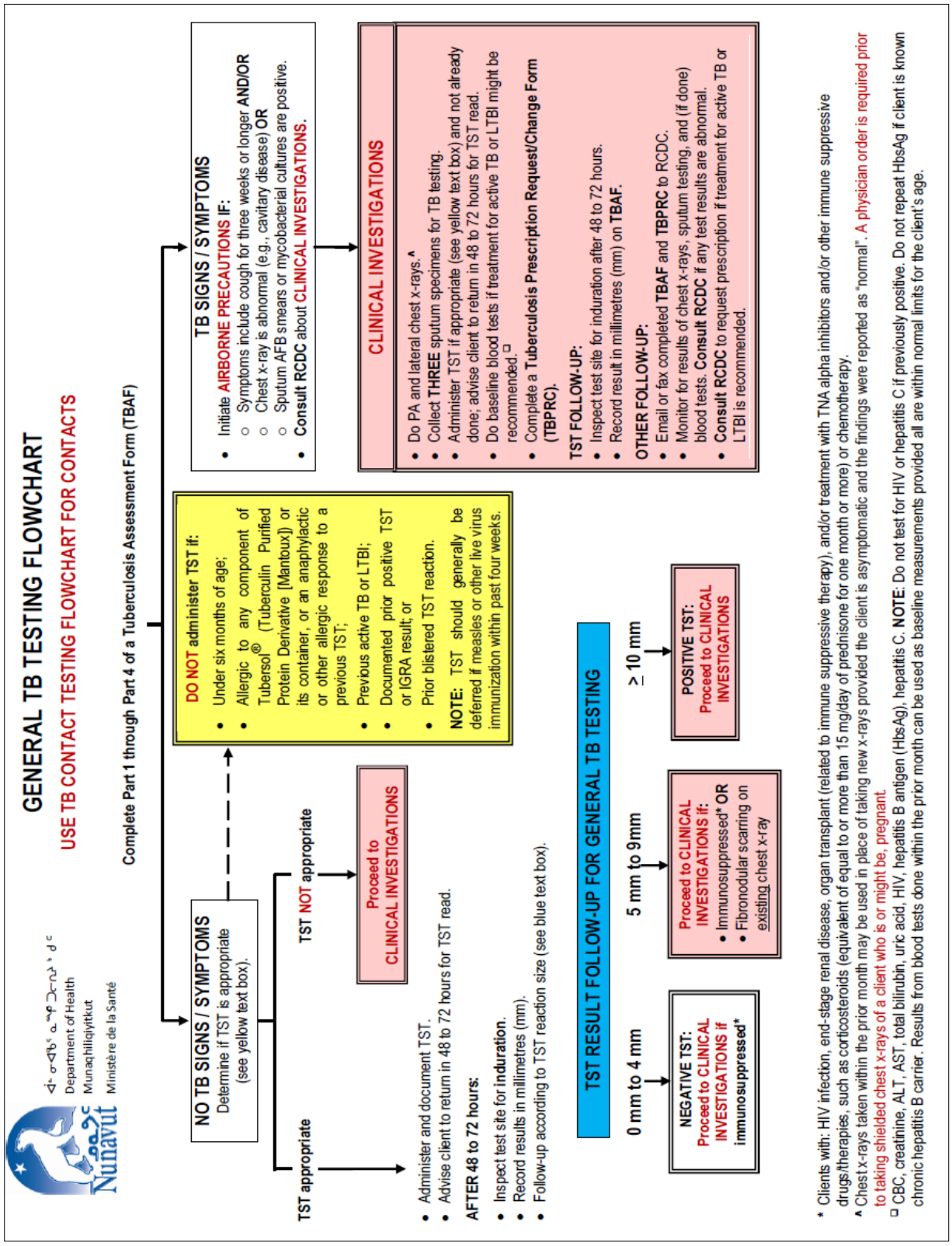
- File the **TBAF** and the **TBPRC** in the client's medical chart.

  NOTES:

  - If treatment for active TB or LTBI is recommended, consult the RCDC to obtain a prescription before filing the forms.

  - If TB surveillance is recommended, organize the first follow-up appointment before filing the forms.

General TB Testing Flowchart



Sample Tuberculosis Assessment Form (TBAF)

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Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Please fill in <u>OR</u> affix label:
Last Name: ______________________
First Name: ______________________
Sex: ☐ M ☐ F ☐ Other:__________
Date of Birth: ___ (DD) ___ (MM) ___ (YY)
Chart #: ______________________
HCP #: ______________________
Community of Residence: __________

TUBERCULOSIS ASSESSMENT FORM (TBAF)
DATE COMPLETED: ______________________

PART 1: CLIENT INFORMATION		
House/Building Number:	Mailing Address:	
Home Phone:	Cell Phone:	Other Phone:

PART 2: REASON FOR SCREENING – SELECT ONE ONLY		
☐ TB Signs/Symptoms	☐ TB School Screening (*specify school*):	
☐ Employment Screening (*specify*):	☐ Other (*specify*):	
☐ TB Contact	Date of last contact with TB case:	TB case initials/number:
☐ Baseline TB contact screening - DO NOT WAIT FOR TST RESULT TO CONSULT RCDC IF CLIENT IS UNDER FIVE YEARS OFAGE		☐ Follow-up TB contact screening - AT LEAST 8 WEEKS AFTER LAST CONTACT WITH TB CASE

PART 3: TB AND BCG VACCINATION HISTORY				
Prior active TB?	☐ NO ☐ YES - year:	Type of active TB:		
Prior latent TB infection (LTBI)?	☐ NO ☐ YES - year:	LTBI treatment taken?	☐ NO ☐ UNCERTAIN	☐ YES - year:
BCG vaccination?	☐ YES - year:	Prior TB contact?	☐ YES - year(s):	

PART 4: HEALTH AND TB SIGNS/SYMPTOMS ASSESSMENT – REVIEW EVERY SYMPTOM WITH EVERY CLIENT							
Cough	☐ YES x ___weeks	Chest pain	☐ YES x ___weeks	Weight loss	☐ YES _____ kg	Fever	☐ YES x___weeks
Fatigue	☐ YES x ___weeks	Night sweats	☐ YES x ___weeks	Bloody sputum	☐ YES x ___weeks	SOB	☐ YES x___weeks
☐ Denies all TB symptoms listed above			☐ Has TB signs/symptoms not listed (*describe*):				
Pregnant?	☐ YES - EDC:		IF YES, A PHYSICAN ORDER IS REQUIRED PRIOR TO DOING CHEST X-RAYS				
Immunosuppression or taking immune suppressant drugs?	☐ YES (*describe - include diagnosis and list medications*)					TST result is POSITIVE at 5 mm or more with: contact; immunosuppression; or fibronodular disease noted on an existing chest x-ray	
Fibronodular disease on existing chest x-ray?			☐ YES - date of x-ray:				

PART 5: TUBERCULIN SKIN TESTING					
Last TST	Date:	Result: mm	DO NOT ADMINISTER TST IF: UNDER SIX MONTHS OF AGE; PRIOR ACTIVE TB; PRIOR TREATMENT FOR LTBI; OR LAST TST RESULT WAS POSITIVE OR BLISTERED		
Current TST	Date:	Given By (Signature):	Date Read:	Read By (Signature):	Result: mm

PART 6: ADDITIONAL TESTS – DO IF: TB SIGNS/SYMPTOMS; NOT ELIGIBLE FOR TST; OR CURRENT TST RESULT IS POSITIVE	
☐ PA and lateral chest x-rays done	Date:
☐ THREE sputum specimens requested	☐ 'On the spot' sputum collected – date:
☐ Other tests (*describe*)	

PART 7: FOLLOW UP	
☐ No further follow-up required unless abnormal results	
☐ TB contact - repeat assessment required	RECALL DATE (at least 8 weeks after last contact with TB case):
FOLLOW-UP REQUIRED – SEND TBAF TO RCDC WITHIN ONE BUSINESS DAY (*check all that apply*) ☐ TB symptoms ☐ Positive TST ☐ Under five years of age ☐ Abnormal chest x-ray AND/OR positive sputum smear or culture result ☐ Other (*describe*):	
SEND THIS FORM AND TB PRESCRIPTION REQUEST/CHANGE FORM (TBPRC) TO RCDC IF TREATMENT ANTICIPATED	
Completed By (Name/Signature):	Date:

GN Dept. of Health Tuberculosis Assessment Form (TBAF) November 2016 **Page 1 of 1**

Sample Tuberculosis Prescription Request/Change Form (TBPRC)

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Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

TUBERCULOSIS PRESCRIPTION REQUEST / CHANGE FORM (TBPRC)
DATE COMPLETED: ______________________

Please fill in <u>OR</u> affix label:
Last Name: ______________________
First Name: ______________________
Sex: ☐ M ☐ F ☐ Other:____________
Date of Birth: ___ (DD) ___ (MM) ___ (YY)
Chart #: ______________________
HCP #: ______________________
Community of Residence: ______________

PART 1: PARENT/GUARDIAN NAME IF UNDER 13 YEARS OF AGE			
PART 2: WEIGHT MONITORING			
Last Weight on Record		Current Weight	
Date:	___________ kg	Date:	___________ kg
PART 3: MOST RECENT BLOOD TEST RESULTS			
Date:	☐ NORMAL	☐ ABNORMAL (*describe*):	
PART 4: KNOWN DRUG ALLERGIES			
PART 5: CURRENT MEDICATIONS AND DOSAGES			
PART 6: REQUESTS / COMMENTS (e.g., TRAVEL PLANS, WEIGHT/DOSE CHANGE, CHANGE FROM PILLS TO SUSPENSION)			
Completed By (Name/Signature):			Date:
SEND THIS FORM AND CURRENT DOT RECORD (IF ALREADY ON TREATMENT) TO RCDC			

GN Dept. of Health Tuberculosis Prescription Request / Change Form (TBPRC) November 2016 **Page 1 of 1**

SECTION 4

Tuberculosis Skin Testing

Steps in Tuberculin Skin Testing

Acute allergic reactions, including anaphylaxis, angioedema, urticaria and/or dyspnea, have been very rarely reported following skin testing with Tubersol®. Health care providers administering tuberculin skin tests (TSTs) should be familiar with the initial management of anaphylaxis in non-hospital settings (see the *Nunavut Immunization Manual*).

Recipients of TST should remain under supervision for at least 15 minutes after the injection; regardless of whether or not they have had the particular product previously. Epinephrine hydrochloride solution (1:1000) and other appropriate agents should be available for immediate use in case an anaphylactic or other acute hypersensitivity reaction occurs.

Step One: Prepare to Give the TST

- Ensure there are no contraindications to TST (see **Section 2 – Understanding TB**).
- Wash your hands.
- Tubersol® 5 tuberculin units (5-TU) of purified protein derivative – standard (PPD-S) is the recommended testing solution for TST in Canada. Refer to the product insert for information on handling of Tubersol®.
- Examine the vial of Tubersol®. The testing solution should be colourless and clear. Discard the solution if it is discoloured or contains any particulate matter.
- Check the expiry date and the date of first puncture on the vial of Tubersol® to ensure it has not expired and that it has been in use for **less than** 30 days. When opening a new vial of Tubersol®, label it with the date of first puncture.
- Prepare the Tubersol® for injection:
    - **DO NOT** preload syringes; draw up Tubersol® just before injecting it.
    - Clean the stopper of the vial with an alcohol swab. Allow to air dry.
    - **DO NOT** inject air into the vial.

- Remove the Tubersol® from the vial under aseptic conditions using a ¼ to ½ inch (0.6 to 1.3 cm) length, 26 or 27 gauge needle with a disposable plastic syringe.
- Withdraw a little more than **0.1 mL** of Tubersol® in to the syringe. Hold the syringe upright and lightly tap out the air, then expel one drop. Ensure that a full **0.1 mL** of Tubersol® remains in the syringe.

- Prepare the Client

  - **DO NOT** apply EMLA® cream (or similar local anesthetic cream) to the test site. Reactions to these products can make the test results difficult to measure.

  - Seat the client comfortably and explain the procedure.

  - Confirm the client is able to stay for 15 minutes after the injection and return to have the test site checked by a health care provider 48 to 72 hours later.

  - Choose a test site. **The preferred test site is the inner aspect of the forearm, about 10 cm below the elbow.** Avoid areas with abrasions, swelling, visible veins, scars, or lesions; these can make the test results difficult to measure. If neither forearm is suitable, use the outside of the forearm or the upper arm.

  - Clean the test site with an alcohol swab. Allow to air dry.

Step Two: Give the TST

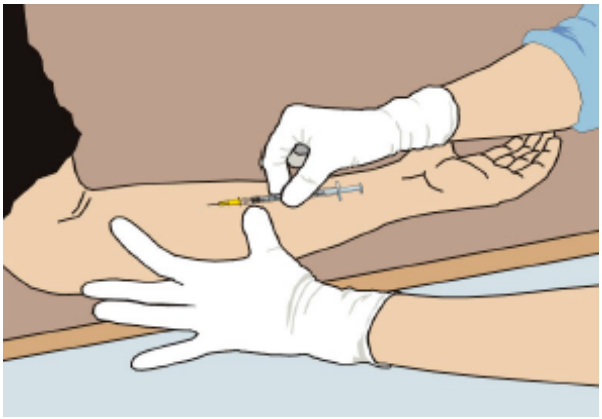
- Inject the Tubersol® **INTRADERMALLY**. To do this:

  - Use the fingers of your non-dominant hand to gently pull the skin near the test site taut (see **Figure 4-1**).

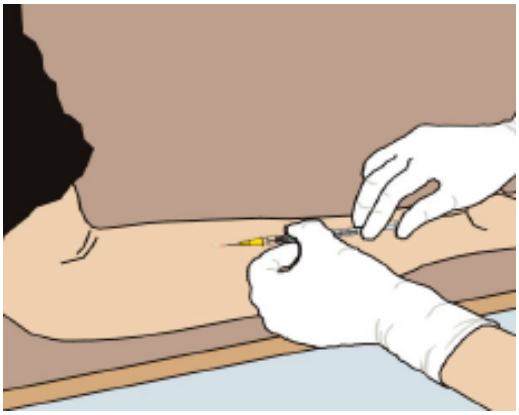
  - Position the opening of the needle (the bevel) so that it is facing upward.

  - Insert the needle at a 5° to 15° angle to the skin, just to the point where the entire **bevel** (not the entire needle) is underneath the skin (see **Figure 4-1**). Once the bevel is in place, allow the skin to loosen.

Figure 4-1: Correct method for intradermal injection on the forearm



Gently pull the skin near the test site taut.



Insert the needle at a 5° to 15° angle to the skin, just to the point where the entire **bevel** (not the entire needle) is underneath the skin.

Images adapted from: http://www.currytbcenter.ucsf.edu/abouttb/tb_control_faq.cfm

- **DO NOT ASPIRATE**. Slowly depress the plunger of the syringe. A pale bump (a wheal) should appear at the site of the injection while the Tubersol® is injected (see **Figure 4-2**). Withdraw the needle quickly once the full dose has been administered.

Figure 4-2: Tuberculin skin testing wheal

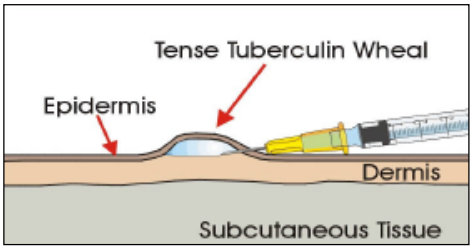


Image adapted from: http://www.currytbcenter.ucsf.edu/abouttb/tb_control_faq.cfm

- Sponge the test site lightly with dry gauze to remove any blood or leaked Tubersol®. **DO NOT** press on or massage the site. **DO NOT** cover the site with a bandage.

- Provide aftercare information (see Step Three). Remind the client (and/or the parent/guardian) to stay for 15 minutes after the injection, and to return 48 to 72 hours later to have the test site checked by a health care provider.

- Document on the immunization record and/or in Part 5 of the **Tuberculosis Assessment Form (TBAF)** that a TST was given.

NOTES:

- **Leakage:** Watch for Tubersol® leaking from the site during the injection, which can happen if the bevel is not inserted far enough under the skin. **If there is leakage**:
    - Stop pressing on the plunger.
    - Slide the bevel of the needle slightly further under the skin, and resume pressing on the plunger until the full dose has been administered.
    - Withdraw the needle quickly.
- **Wheal:** If no wheal appears, or if Tubersol® leaks from the site during the injection **AND** the wheal measures **LESS THAN 6 mm**, repeat the TST.[5] TSTs can be repeated immediately, at least 5 cm away from the site of the previous injection, or on the opposite forearm.

Step Three: Provide Aftercare Information

Aftercare information points to share with the client (and/or the parent/guardian):

- The wheal usually disappears within a few minutes after the TST is given.
- The test site **DOES NOT** have to be kept dry. Bathing, showering and swimming will not affect the test result.
- The test site should not be scratched. A cold compress (e.g. cold, wet washcloth) can be used to reduce discomfort. **DO NOT** apply topical anti-itch creams (e.g. Benadryl® or similar local anesthetic creams) to the test site. Reactions to these products can interfere with test results.
- Redness or rash might develop at the test site within the first few hours of having a TST. This is a minor allergic reaction, and does not indicate infection with TB bacteria.
- A blister might develop at the test site, although this is relatively rare.

[5]The New York City Department of Health and Mental Hygiene. *Mantoux Tuberculin Skin Test: A Guide for Providers*. Accessed Mar25.14 from: http://www.nyc.gov/html/doh/downloads/pdf/tb/tb-hcp-tst-guide.pdf

Step Four: Read the TST

- After 48 to 72 hours, inspect the test site for induration (read the test).
    - Examine the test site in good lighting.
    - If the test was done on the forearm, have the client place his/her forearm on a firm surface with the elbow slightly flexed.
    - Run your fingers lightly over the test site to feel for swelling or hardness (induration). **Ignore redness (also known as 'erythema') and bruising.**
- If there is no induration, record the TST result as '0 mm'.
- If you feel any induration:
    - Use a ballpoint pen held at a 45° angle to draw a line from the outer edge of the forearm inward toward the edge of the induration. Mark where the pen stops. This is the border of the induration.
    - Repeat the process on the other side of the indurated area (see **Figure 4-3**).

Figure 4-3: Ballpoint pen method for identifying and marking induration

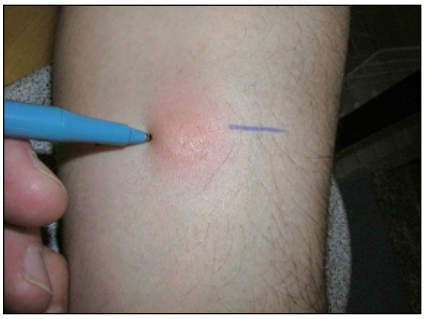


Image from: *http://www.respiratoryguidelines.ca/sites/all/files/CTB_Standards_EN_Chapter%204.pdf*

Step Five: Measure Induration

- Use a ruler with millimetre demarcations.
- Place the ruler across the **indurated** area (see **Figure 4-4**)
- Line up the '0' mark on the ruler with the pen mark on left-hand border of the indurated area.

- Measure the area between the two pen marks (the left-hand and right-hand borders of the indurated area). This is the transverse diameter. Measure only the transverse diameter. **DO NOT measure redness, bruising or blistering.**

- Once you have recorded the measurement, remove the pen marks by rubbing them lightly with an alcohol swab.

Figure 4-4: Correct and incorrect methods of measuring induration

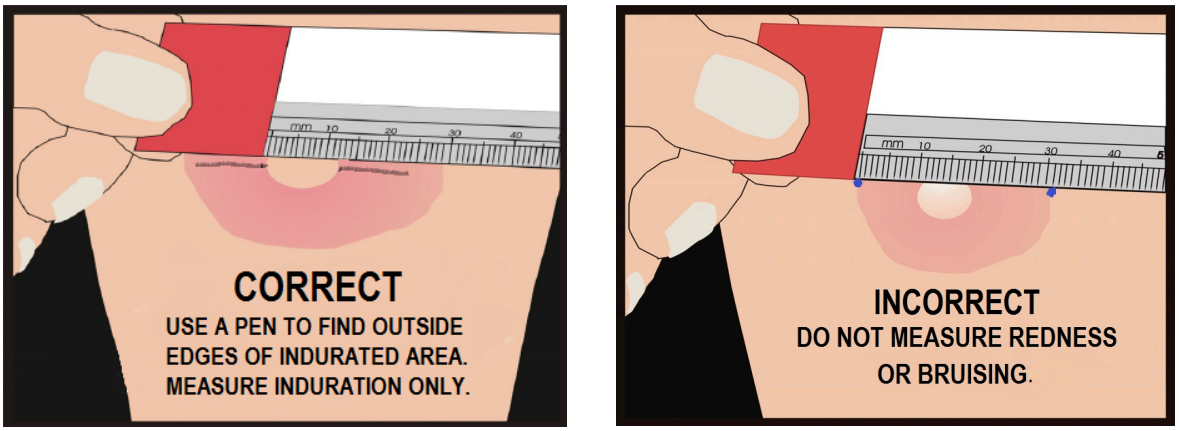


Image adapted from: http://www.currytbcenter.ucsf.edu/abouttb/tb_control_faq.cfm

Step Six: Document the TST Measurement

- Document the TST measurement **in millimetres (mm)** on the immunization record and/or in Part 5 of the **TBAF**.

    - Record **ONLY** the transverse diameter measurement. **DO NOT** record two measurements (e.g. 8 mm x 10 mm).

    - When the measurement falls between demarcations on the ruler, record the smaller of the two numbers. For example, if the measurement falls between 4 mm and 5 mm, record the TST result as 4 mm. **DO NOT** record measurements in centimetres or with decimal points.
    - Note blistering at the test site on the immunization record and/or in the page margin near Part 5 on the **TBAF**. **Blistering is a contraindication to future TSTs.**

    - When documenting a TST measurement on a **TBAF**, include the date the TST was read and your signature.

Step Seven: Follow-up the TST Result

- Follow-up clients tested as TB contacts per the **TB Contact Testing Flowchart** (see **Section 9 - Contact Investigation, Window Period Prophylaxis and Source Case Investigation**).
- Follow-up clients tested during a source case investigation per the **General TB Testing Flowchart** (see **Section 3 – General TB Assessment**).
- Follow-up all other clients per the **General TB Testing Flowchart**.

Two-Step Tuberculin Skin Testing

- **Do not use the two-step TST method for TB contacts.**
- Follow the testing and reading schedule described in **Table 4-1**.
- Use the same procedures as are used to do a routine (single-step) TST.

Table 4-1: Schedule for two-step tuberculin skin testing

Visit 1	• Administer first TST.
Visit 2 48 to 72 hours after TST	• Read, measure and document TST result. • **If there is less than 10 mm** of induration at test site, arrange for client to return in **7 to 28 days** for second TST. • **If there is 10 mm or more** of induration at test site, follow-up TST result as per **General TB Testing Flowchart** (see **Section 3 – General TB Assessment**). **DO NOT recall for second TST.**
Visit 3 7 to 28 days after first TST	If initial TST result was less than 10 mm induration: • Administer TST on arm that was **not used** for first TST. • Document which arm should be inspected when client returns to have TST read. **NOTE:** Live virus vaccines can be administered on the **SAME DAY** as the **SECOND** TST.
Visit 4 48 to 72 hours after second TST	• Read, measure and document result from second TST. • Follow-up TST result as per **General TB Testing Flowchart** (see **Section 3 – General TB Assessment**).

SECTION 5

Collection of Specimens for TB Testing

Specimen Requirements

- Attempt to collect **THREE** specimens whenever sputum testing for TB is indicated.
- Collect specimens in sterile, screw-cap, leak-proof containers.
- Ensure containers are tightly closed before shipping. **Leaking specimens cannot be processed.**
- Ensure each container is accompanied by a requisition that includes **TWO** patient identifiers (e.g., full name, date of birth) that are **IDENTICAL** to the identifiers on the specimen container. The requisition should be placed in the pocket on the **OUTSIDE** of the bag, **NOT** inside the bag with the specimen container.
- Indicate **'AFB smear and mycobacterial culture'** are required on requisitions accompanying specimens sent for TB testing. **TB bacteria are not identified by routine culture and sensitivity testing.**
- Collect at least one additional specimen for mycobacterial culture when specimens are collected for histopathology examination for TB. **Mycobacterial culturing cannot be done for specimens submitted in alcohol, formalin, or other preservatives.**
- Refrigerate sputum, lymph node, tissue, and urine specimens before, and during transport to the laboratory.
- Follow Nunavut laboratory protocols for shipping of specimens sent for TB testing.
- **Refer to the Qikiqtani General Hospital (QGH) laboratory protocol when GeneXpert® testing is done.**

Sputum Collection Schedules

Routine Collection Schedule (Three Days)

- Collect an 'on-the-spot' specimen;
- Give the client two pre-labeled specimen collection containers and biohazard bags, and ask the client to:
    - Collect a specimen upon waking for each of the next two mornings, prior to eating or drinking anything;

- Mark the dates and times the specimens were collected on the containers;
- Refrigerate the specimens, sealed in the biohazard bags provided, until they are returned to the health facility.

Two-Day Collection Schedule

- Collect an 'on-the-spot' specimen.
- Give the client two pre-labeled specimen collection containers and biohazard bags, and ask the client to:
  - Collect one specimen upon waking the next morning, and a second specimen (in a different container) at least one hour later. Ideally, the first specimen should be collected prior to eating or drinking anything;
  - Mark the dates and times the specimens were collected on the containers;
  - Refrigerate the specimens, sealed in the biohazard bags provided, until they are returned to the health facility.

Accelerated Collection Schedule (One Day) – USE IN SPECIAL CIRCUMSTANCES ONLY

When an accelerated collection schedule is needed (e.g. for client travel), all three samples may be collected on the same day.

- Give the client three pre-labeled specimen collection containers and biohazard bags, and ask the client to:
  - Collect one specimen upon waking the next morning, a second specimen (in the second container) at least one hour later and a third specimen (in the third container) at least one hour after the second specimen was collected. Ideally, the first specimen should be collected prior to eating or drinking anything.
  - Mark the dates and times the specimens were collected on the containers;
  - Refrigerate the specimens, sealed in the biohazard bags provided, until they are returned to the health facility.

NOTE: Document in the client's chart that the accelerated collection schedule was used and make sure the time each specimen was collected is recorded on the accompanying laboratory requisition.

On-The-Spot Sputum Collection

Within health centres, sputum specimens may only be collected where AIRBORNE PRECAUTIONS can be adhered to. In health centres without negative pressure rooms, direct clients to produce sputum specimens **OUTDOORS**, in an area away from other people.

- Give the client a specimen collection container that has been pre-labeled with his/her identifying information, and the date and time the sputum is being collected.

- Explain:
  - Why the specimen is needed;
  - How to cough up sputum; and
  - How to handle the container.

- Once the specimen has been collected, the client should tighten the lid on the container, place the container in a plastic biohazard bag, and return it to you.

- Check whether there is sufficient sputum in the container (see **Table 5-1**). If the amount is insufficient, ask the client to collect more. A good-quality sputum specimen is shown in **Figure 5-1**.

Table 5-1: Instructions and requirements for collecting sputum specimens for TB testing

Specimen Type	Requirements	Special Instructions	Unacceptable Specimens
putum	Collect specimen in a sterile plastic specimen container and submit in a sealed biohazard bag. The requisition should be placed in the pocket on the **OUTSIDE** of the bag, **NOT** inside the bag with the specimen container. **Volume:** 5 to 10 mL	Collect three separate specimens as per one of the following sputum specimen collection schedules: • **Routine Collection Schedule** • **Two-Day Collection Schedule** • **Accelerated Collection Schedule** (**use in special circumstances only**)* Keep specimens refrigerated until transported.	Saliva (instead of sputum). **NOTE:** A good-quality sputum specimen is shown in **Figure 5-1**. Specimens that have had alcohol, formalin, or other preservatives added.

* Indicate in the client's chart that an accelerated collection schedule was used, and ensure the time each specimen was collected is recorded on the accompanying laboratory requisition.

Figure 5-1: Example of a good quality sputum specimen

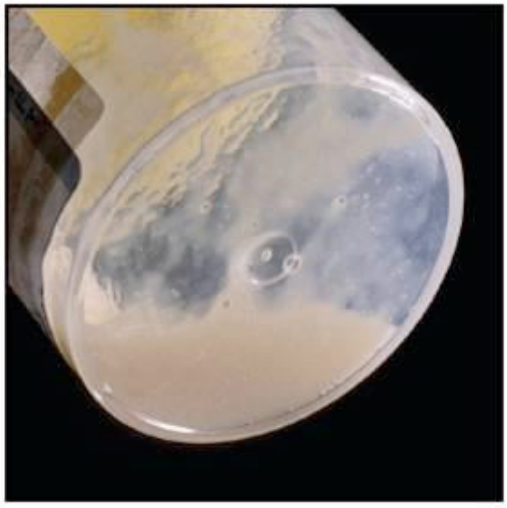
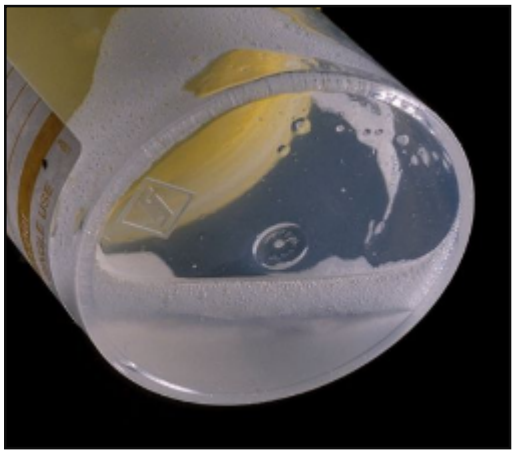


Figure 5-2: Example of a poor quality sputum specimen



Collection of Specimens Other than Sputum

Consult the RCDC or TB physician before collecting specimens other than sputum for TB testing.

Table 5-2: Instructions and requirements for collecting specimens other than sputum for TB testing

Specimen Type	Requirements	Special Instructions	Unacceptable Specimens
Lymph Node	Collect specimen in a sterile plastic specimen container and submit in a sealed biohazard bag. The requisition should be placed in the pocket on the **OUTSIDE** of the bag, **NOT** inside the bag with the specimen container. **Quantity:** As much as possible	Collect specimen aseptically. **Indicate site material was collected from on requisition.** Keep tissues moist by adding a few drops of sterile saline or sterile water. Do **not** add tissue fixatives or preservatives. Keep specimens refrigerated until transported.	Specimens that have had alcohol, formalin, or other preservatives added.
Tissue	Collect specimen in a sterile plastic specimen container and submit in a sealed biohazard bag. The requisition should be placed in the pocket on the **OUTSIDE** of the bag, **NOT** inside the bag with the specimen container. **Quantity:** As much as possible	Collect specimen aseptically. **Indicate site material was collected from on requisition.** Keep tissues moist by adding a few drops of sterile saline or sterile water. Do **not** add tissue fixatives or preservatives. Keep specimens refrigerated until transported.	Specimens that have had alcohol, formalin, or other preservatives added.
Urine	Collect specimen in a sterile plastic specimen container and submit in a sealed biohazard bag. Use only plastic specimen containers with caps that have a liner. The requisition should be placed in the pocket on the **OUTSIDE** of the bag, **NOT** inside the bag with the specimen container. **Volume:** ≥ 50 mL	Three **FIRST MORNING**, clean-catch, midstream specimens on consecutive days – **NOT 24-HOUR SPECIMENS.** Keep specimens refrigerated until transported.	24-hour urine. Urine from a catheter bag (no pooled urine). Specimens that are an insufficient volume.

SECTION 6

Care of Clients with TB Signs/Symptoms

Care of Clients with TB Signs/Symptoms

Steps in Caring for a Client with TB Signs/Symptoms

Step One: Determine if Airborne Precautions are needed

Initiating and maintaining appropriate infection prevention and control precautions is essential for protecting yourself and others who are sharing airspace with someone who has active TB.

- Initiate **AIRBORNE PRECAUTIONS** **immediately** when sharing airspace with a client who has:
    - Symptoms suggestive of active TB including cough for three weeks or longer **AND/OR**
    - Abnormal chest x-ray results (e.g. cavitary disease) **OR**
    - Positive sputum AFB smears or mycobacterial cultures

Once initiated, airborne precautions must continue until the client is no longer considered infectious **OR** until respiratory TB disease has either been ruled out or determined unlikely by a clinician with expertise in TB. This means:

- Until/unless hospitalized, the client must follow **home isolation guidelines** (see **Section 13 – Infection Prevention and Control**).
- You must advise receiving and transferring providers/programs that airborne precautions are necessary when sending the client to another facility or provider (e.g. for testing) or when arranging for his/her transport out of community.

- For information on **airborne precautions**, refer to the *Nunavut Infection Prevention and Control Manual*, available online at: *http://www.gov.nu.ca/health/information/infection-prevention-and-control*
- For information on mask types see: **Section 13 – Infection Prevention and Control**

Step Two: Testing

- Initiate a **TBAF** and complete a **TBPRC** (unless already done).
- Order PA and lateral chest x-rays.

  NOTES:

  - New PA and lateral chest x-rays are required when assessing a client with TB signs/symptoms (i.e. pre-existing x-rays may not be used).
  - **A physician order is required prior to taking shielded chest x-rays of a client who is or might be, pregnant.**

- Collect three sputum specimens for TB testing (see **Section 5 – Collection of Specimens for TB Testing**). Consult the RCDC if the client is not able to spontaneously produce a sputum specimen.

  NOTE: Within health centres, sputum specimens may only be collected where airborne precautions can be adhered to. In health centres without negative pressure rooms, direct clients to produce sputum specimens outdoors, in an area away from other people (see **Section 13 – Infection Prevention and Control**).

For client instructions on collecting sputum specimens, see:
Section 15 – TB Fact Sheets

- Give a tuberculin skin test (TST) unless contraindicated or already done.
- Do baseline blood tests, including:

  - AST/ALT and total bilirubin;
  - CBC;
  - Uric acid;
  - Creatinine;
  - Hepatitis B surface antigen (HbsAg), hepatitis C; and
  - HIV serology.

  NOTE: HbsAg, hepatitis C, and HIV testing is **NOT REQUIRED** for clients with pre-existing positive test results. Results from blood tests done within one month prior can be used as baseline measurements provided they are within normal limits for the client's age.

Step Three: TST Follow-up

- **If a TST was given**:
    - Inspect the test site for induration 48 to 72 hours later. Record the date under 'Date Read' in Part 5 of the **TBAF** and sign your name.
    - Record the TST measurement in millimetres (mm). If there is no induration, record the TST result as '0 mm'.

      NOTE: A TST result of less than 10 mm of induration **DOES NOT** rule out active TB in a symptomatic client.

Step Four: Other Follow-up

- Send the completed **TBAF** and **TBPRC** to the RCDC.
- Monitor for results of chest x-rays, sputum testing, and blood tests. Consult the RCDC if chest x-ray findings are abnormal and/or sputum specimen AFB smears or cultures results are positive.

Step Five: Complete Part 7 of the TBAF

- Sign and date Part 7 of the **TBAF** once all tests have been completed.
- File the **TBAF** and the **TBPRC** in the client's medical chart.

  NOTES:
    - If treatment for active TB or LTBI is recommended, consult the RCDC to obtain a prescription before filing the forms.
    - If TB surveillance is recommended, organize the first follow-up appointment before filing the forms.

SECTION 7

Care for Clients with Latent TB Infections (LTBI)

Care of Clients with Latent TB Infection (LTBI)

Treatment of LTBI can substantially reduce the risk for development of active TB. LTBI treatment (also known as 'preventive treatment' or 'TB prophylaxis'), is prescribed for clients with positive tuberculin skin test (TST) results and/or positive interferon gamma release assays (IGRA), once active TB has been ruled out.

In Nunavut, LTBI is treated with directly observed therapy (DOT).

Steps in Caring for a Client with LTBI

Step One: Discuss LTBI and LTBI Treatment with the Client

- Provide the TST (and/or IGRA) results, chest x-ray findings, and (if available) sputum test results.
- Review the following TB fact sheets with the client (and/or the parent/guardian):
  - **Latent TB Infection vs. Active TB Disease;**
  - **Latent TB Infection (LTBI) Treatment**;
  - **TB Drugs and Alcohol;**
  - **TB Drugs and Tylenol and Acetaminophen; and**
  - **TB Drugs and Your Liver.**
- Determine whether the client (and/or the parent/guardian) agrees to LTBI treatment. **If**

  LTBI treatment is accepted, proceed to Step Two.

  If LTBI treatment is declined:
  - Initiate TB surveillance (see **Section 10 - TB Surveillance**).
  - Document the date LTBI treatment was discussed and declined, and the due date for first surveillance assessment in the 'Progress Notes' and 'Problems List' in the client's medical chart.

Regardless of whether a client begins LTBI treatment, it is essential that s/he remain alert for TB signs/symptoms (see **Table 7-1**), and report to a health care provider quickly should any develop.

Table 7-1: TB signs/symptoms

Systemic TB signs/symptoms	Signs/symptoms of respiratory TB disease	Signs/symptoms of non-respiratory TB disease
• Fever* • Night sweats* • Weight loss or failure to gain weight (i.e. failure to thrive) • Fatigue • Loss of appetite	Systemic TB signs/symptoms **AND** • Cough > 3 weeks (dry or productive) • Chest pain • Shortness of breath • Bloody phlegm (hemoptysis)	Systemic TB signs/symptoms **AND** pain or dysfunction at the involved site, e.g.: • Swollen lymph nodes (TB lymphadenitis) • Headache, irritability, photophobia, stiff neck (TB meningitis)

*Can be absent in the very young and the elderly

Step Two: Prepare to Begin LTBI Treatment

- Ensure all baseline testing has been done, including:
  - PA and lateral chest x-rays;
  - Three sputum specimens sent for TB testing;
  - Blood tests: AST, ALT, total bilirubin, CBC, uric acid, creatinine, hepatitis B surface antigen (HbsAg), hepatitis C, and HIV serology.

  NOTE: HbsAg, hepatitis C, and HIV testing is **NOT REQUIRED** for clients with pre-existing positive test results. Results from blood tests done within one month prior can be used as baseline measurements provided they are within normal limits for the client's age.

- For clients two years of age and under, send the RCDC an updated growth chart.
- Consult the RCDC to obtain a prescription for LTBI treatment.
- Advise the client (or the parent/guardian) that LTBI treatment can begin once a prescription has been received.

- When LTBI treatment is to be provided at the school, ask the parent/guardian to sign a **Medication Administration Consent** form (see **Section 12A – Sample Letters for Nunavut TB School Screening Program**).

Step Three: Begin LTBI Treatment

Once a prescription has been received, initiate an LTBI DOT Record (**LTBI-1***).* To avoid delays in treatment starts, use stock medications rather than waiting for medications to arrive from the pharmacy.

Before administering the first dose of LTBI treatment:

- Ensure baseline blood test results are within normal limits for the client's age. Consult the RCDC about abnormal baseline results, including new positive HbsAg, hepatitis C, or HIV tests.

- Confirm the client's weight and document it on the **LTBI-1**. Compare the current weight against the prescription dosage to ensure the dosing is adequate (see LTBI Treatment Regimens and Recommended TB Drug Dosages). Consult the RCDC if dosage adjustments are required.

- Review information with the client (and/or the parent/guardian) on:

    - The treatment regimen;

    - Potential TB drug side effects/adverse responses to LTBI treatment (see Table 7-2), and how to contact the TB nurse or CHN should any occur;

    - The need to ensure the nurse and the pharmacy are aware of all medications the client is taking or starts taking during LTBI treatment, so that potential drug-drug interactions can be identified (see Table 7-3);

    - The importance of avoiding acetaminophen (Tylenol®) and/or alcohol during LTBI treatment; and

    - The importance of adherence to LTBI treatment.

DO NOT tell the client (or parent/guardian) that LTBI treatment will continue for a set period of time. A number of factors can influence the duration of treatment, including adherence, which cannot be known at treatment outset. Instead, explain that completing LTBI treatment requires a specific number of doses to be completed, and reinforce that the duration of treatment can be minimized with regular adherence.

After administering the first dose of LTBI treatment:

- Document the initial treatment dose on the **LTBI-1**; and
- Confirm a plan for the next DOT dose.

  NOTES:

  - **Preparation of doses of TB drugs is a nursing function.** DOT workers **ARE NOT** authorized to prepare TB drugs or dispense doses from stock medication supplies. For more information, see **Section 16 - Directly Observed Therapy**.
  - **There must be at least two calendar days between twice-a-week doses of INH**. For this reason, LTBI treatment with INH is usually given on Mondays and Thursdays. When a twice-weekly dose is not given on a Monday (for example, when a DOT dose is missed or a statutory holiday falls on a Monday), give treatment on Tuesday and Friday that week. When a twice-weekly dose is missed on a Thursday, it can be taken the next day (Friday). **Consult the RCDC if you are uncertain whether/when to give a next dose.**
  - **Daily LTBI treatment with rifampin is given five days a week (Monday to Friday)**. Missed doses of daily rifampin are made up by adding them to the end of the LTBI treatment term (i.e. treatment is complete when the prescribed number of doses have been taken).

For a client whose LTBI treatment began in hospital:

- Obtain the client's Medication Administration Record (MAR) from the hospital.
- Transcribe doses given in hospital onto the DOT record indicating the name of the facility (e.g. QGH) on the day the dose was given according to the MAR.

For information on DOT, the use of incentives and enablers, and helpful information on administering TB drugs, see:
Section 16 – Directly Observed Therapy (DOT)

Table 7-2: Common and/or important side effects/adverse responses associated with isoniazid and rifampin[5]

TB drug	Common side effects / adverse responses	Uncommon but important side effects / adverse responses
Isoniazid (INH)	• Rash • Hepatitis† • Neuropathy • Nausea/vomiting* Ψ • Fatigue Ψ • Drowsiness, headache • Mild hair loss	• Central nervous system toxicity** • Anemia
Rifampin	• Drug interactions • Rash • Saliva, urine, and tears can become orange/red in colour (harmless but could stain contact lenses)	• Hepatitis† • 'Flu-like' illness • Neutropenia • Thrombocytopenia

† Symptoms can include: loss of appetite; nausea and/or vomiting; abdominal discomfort; unexplained fatigue; dark-coloured urine; scleral icterus; jaundice

* Especially with intermittent regimens administered in combination with rifampin

Ψ Can also be a symptom of drug-induced hepatitis

** Symptoms can include: slurred speech; peripheral neuritis; dizziness; stupor; seizures; coma

[5] Adapted from: Menzies R, Wong T. *Canadian Tuberculosis Standards*. 7th ed. Canadian Thoracic Society and the Public Health Agency of Canada; 2013.

Table 7-3: Some common and/or important drug-drug interactions associated with isoniazid and rifampin[6,7,8]

NOTE: List does not include all possible interactions; consult a pharmacist for further information.

Isoniazid (INH)	Rifampin
• Acetaminophen • Antacids • Anticonvulsants (Carbamazepine, Phenytoin) • Antidepressants (Citalopram) • Beta-blockers (Metoprolol) • Clopidogrel • Diazepam • Doxorubicin • Haloperidol • Pimozide • Tamoxifen • Theophylline • Thioridazine	• Antiarrythmics (Diltiazem, Verapamil, Digoxin) • Anticoagulants (Warfarin, Apixaban, Dabigatran) • Anticonvulsants (Phenytoin, Valproic Acid) • Antifungals (Ketoconazole) • Antipsychotics (Aripiprazole, Clozapine, Quetiapine) • Barbituates • Beta-blockers • Calcium Channel Blockers (Amlodipine, Nifedipine) • Clarithromycin • Cyclosporine • Estrogens (**including hormonal contraceptives**)* • Glucocorticoids • Methadone • Protease Inhibitors • Sulfonylureas

* **Women using hormonal contraceptives should be advised to use alternate forms of birth control while taking rifampin.**

Step Four: Continue LTBI Treatment

Monitoring

Clients (and/or parents/guardians), DOT workers, and nurses managing the care of clients on LTBI treatment share responsibility for:

- Preventing and identifying TB drug side effects/adverse responses to treatment;
- Identifying signs/symptoms that could indicate development of active TB;
- Ensuring the nurse and/or the treating physician and/or the pharmacy are aware of all medications the client is taking (or starts taking) during LTBI treatment.
- Ensuring potential interruptions in or barriers to treatment adherence (e.g. travel) are identified and addressed (or minimized).

[6] Ibid.
[7] Rifampin and Isoniazid Product Monograph. E-Therapeutics. Canadian Pharmacists Association. Accessed November, 2014.
[8] Isoniazid and Rifampin. Lexicomp Online. Accessed November 2014.

Monitoring Requirements

- Monitor clients taking INH and B6 as per Table 7-4, or as directed by the RCDC and/or the treating physician. Monitoring requirements for clients taking rifampin are determined by the treating physician.

  NOTES:

  - Monitoring requirements are also determined by the treating physician for clients:
    - With abnormal baseline blood test results;
    - At increased risk for hepatotoxicity or other adverse effects; and
    - Who develop side effects/adverse responses during LTBI treatment.
  - Blood tests after baseline are **NOT** routinely required during LTBI treatment with INH and vitamin B6 for clients under 13 years of age.
  - In some situations, a clinical evaluation by a physician or nurse practitioner may be requested by the treating physician or the RCDC during the course of treatment; for example, pediatric clients or clients that are considered higher risk because they have underlying liver disease, are pregnant, or are experiencing treatment related issues.

- Document assessments on the **LTBI-1**. Consult the RCDC or the treating physician about abnormal results.

- Clinical monitoring of any client whose LTBI treatment is provided by a DOT worker must include a face-to-face assessment by a nurse, a nurse practitioner, or a physician **AT LEAST MONTHLY** (more frequently if there are any concerns).

Key Aspects of Monitoring during LTBI Treatment

- ### Hepatotoxicity

  Severe and potentially fatal hepatotoxicity can occur during LTBI treatment. Hepatotoxicity is defined as liver enzyme (AST/ALT) levels **FIVE** times the upper limit of normal *without symptoms* **OR THREE** times the upper limit of normal *with symptoms*. Clients at increased risk for hepatotoxicity during LTBI treatment include:[9]

[9] Menzies R, Wong T. *Canadian Tuberculosis Standards*. 7th ed. Canadian Thoracic Society and the Public Health Agency of Canada; 2013.

- Pregnant clients and clients who are up to three months postpartum;
- Those with a history of previous drug-induced hepatitis;
- Those with current cirrhosis or chronic active hepatitis of any cause;
- Those with hepatitis C;
- Those with hepatitis B and abnormal transaminases;
- Those who consume alcohol daily or who are undergoing concomitant treatment with other hepatotoxic drugs (e.g. methotrexate).

If signs/symptoms consistent with hepatotoxicity are present:

- **Hold treatment**;
- Draw AST, ALT, total bilirubin, and CBC **immediately**; and
- Consult the RCDC or the treating physician.

Signs/symptoms consistent with hepatotoxicity:

- Loss of appetite
- Nausea and/or vomiting
- Abdominal discomfort
- Unexplained fatigue
- Dark-coloured urine
- Scleral icterus or jaundice

- **Potential for Other Adverse Effects/Concerns**
  - Use clinical judgment to determine whether the RCDC should be consulted or the client referred for clinical assessment.
  - **Monitor clients taking anticonvulsants closely** as both INH and rifampin can affect the metabolism and serum levels of anticonvulsants.
- **TB Symptoms**
  - Consult the RCDC **immediately** if any TB signs/symptoms are noted.

- **Changes in Weight**

  - Document weight on the LTBI-1 monthly;

  - Maintain a growth chart for clients two years of age and under; and

  - Ensure adequate dosing is maintained by comparing the client's current weight against the last month's weight, and against the prescription dosage (see LTBI Treatment Regimens and Recommended TB Drug Dosages). Consult the RCDC when dosage adjustments are required.

  NOTE: Notify the RCDC immediately about weight loss in any client or failure to gain weight in a growing child as this could reflect an adverse response to treatment or development of active TB.

- **Adherence**

  - Consult the RCDC if three doses in a row are missed and/or if adherence falls below 80% in a calendar month.

    To calculate adherence as a percentage, divide the number of DOT doses taken by the number of DOT doses due. Multiply the result by 100. Example: seven DOT doses taken divided by nine doses due (i.e. two doses missed) = 78% adherence.

  NOTE: Ask about travel plans during each DOT visit. Consult the RCDC when arranging for continuation of LTBI treatment during travel (see Travel during LTBI Treatment).

- **Pregnancy**

  - If a client might be pregnant, do a pregnancy test (with client's consent). **Consult the RCDC or the treating physician for guidance on management of clients that become pregnant during LTBI treatment.**

Monitoring Milestones

- **At the end of each month**:

  - Send the **LTBI-1**, along with an updated growth chart for clients two years of age and under to the RCDC to review for adherence and treatment issues.

- **At the end of the third month:**

  - Do PA and lateral chest x-rays and (if possible) send three sputum specimens for TB testing.

    NOTE: A physician order is required prior to taking shielded chest x-rays of a client who is or might be, pregnant.

  - Update the **LTBI-1** with testing dates and results as they become available. Consult the RCDC about abnormal chest x-ray results and/or positive AFB smear or culture results.

- **Within one month of anticipated completion date**:

  - Confirm with the RCDC whether end of treatment chest x-rays and sputum specimen tests are required.

Table 7-4: Summary of routine monitoring during LTBI treatment with isoniazid and vitamin B6

NOTE: Clinical monitoring of clients whose LTBI treatment is provided by a DOT worker must include a face-to-face assessment by a nurse, a nurse practitioner, or a physician AT LEAST MONTHLY (more frequently if there are any concerns).

Monitoring	End of month 1	End of month 2	End of month 3	End of month 4	End of month 5	End of month 6	End of month 7	End of month 8	End of month 9
Weight (kg)	✓	✓	✓	✓	✓	✓	✓	✓	✓
Check dosing against current weight	✓	✓	✓	✓	✓	✓	✓	✓	✓
Assess for side effects / symptoms of hepatotoxicity	Ask about potential side effects/hepatotoxicity prior to each dose of medication. Signs / symptoms of hepatotoxicity include: loss of appetite; nausea and/or vomiting; abdominal discomfort; unexplained fatigue; dark-coloured urine; and scleral icterus or jaundice.								
Assess for TB signs / symptoms	✓	✓	✓	✓	✓	✓	✓	✓	✓
CBC Serum creatinine Uric acid	Repeat after baseline as requested by RCDC or ordering physician.								
AST ALT Bilirubin	13+ RF	35+ RF	13+ RF	35+ RF	35+ RF	35+ RF	35+ RF	35+ RF	35+ RF
Sputum for AFB smear and TB culture			x 3 (all clients)						^
PA and lateral chest x-rays			✓*						^
Pregnancy	Ask women of childbearing age about possibility of pregnancy monthly.								
Travel	Ask about travels plan during each DOT visit.								

✓ Required for all clients

13+ Required for clients 13 years of age and older

35+ Required for clients 35 years of age and older

RF Required for clients with **ANY** of the following risk factors for hepatotoxicity: pregnancy or first three months postpartum; history of previous drug-induced hepatitis; current cirrhosis or chronic active hepatitis of any cause; hepatitis C; hepatitis B with abnormal transaminases; daily alcohol consumption or concomitant treatment with other hepatotoxic drugs (e.g. methotrexate)

✓* **A physician order is required prior to taking shielded chest x-rays of a client who is or might be, pregnant**

^ Confirm with RCDC whether end of treatment sputum specimen testing and/or chest x-rays are required

Step Five: Document LTBI Treatment Outcome

Once discontinued, LTBI treatment is described as: 'complete', 'adequate', or 'incomplete'.

- **Complete**: 100% of prescribed doses were observed within the required timeframe.
    - **INH/Vitamin B6 regimen**: 78 twice-weekly doses observed within 12 months of the first dose.
    - **Rifampin regimen**: 120 daily (Monday to Friday) doses observed within six months of the first dose.
- **Adequate:** Treatment was discontinued before all prescribed doses were observed but at least 80% of the prescribed doses were observed within the required timeframe.
    - **INH/Vitamin B6 regimen**: at least 62 (80% of 78) twice-weekly doses were observed within 12 months of the first dose.
    - **Rifampin regimen**: at least 96 (80% of 120) daily (Monday to Friday) doses were observed within six months of the first dose.
- **Incomplete:** Less than 80% of the prescribed doses were observed, or the required number of doses was not observed, within the timeframes specified above for each regimen.

To document end of LTBI treatment and treatment outcome:

- Review TB signs/symptoms with the client (**Table 7-1**). Remind the client (and/or the parent/guardian) to remain alert for TB signs/symptoms, and to report to a health care provider quickly should any develop. **It is possible for people who have completed LTBI treatment to develop active TB.**
- Document whether LTBI treatment was 'complete', 'adequate', or 'incomplete' in the 'Progress Notes' and on the 'Problems List' of the client's medical chart. Also record:
    - Which TB drugs were taken;
    - Number of doses taken; and
    - Date of the last dose.

    If treatment was 'incomplete', record why treatment was stopped.

- Ensure the current **LTBI-1** is complete, including number of doses taken that month and number of doses taken to date. Send the **LTBI-1** to the RCDC, along with an updated growth chart for clients under two years of age. File the **LTBI-1** in the client's medical chart.

- **Within one week of when the last dose is taken**, complete Part 1 through Part 4 of an LTBI Treatment Outcome Form (**LTBI-2**) and send it to the RCDC. The RCDC will complete Part 5 (*Treatment Outcome and Surveillance Recommendation)*, and return the form to the health centre.

- Review the **LTBI-2** form for a TB surveillance recommendation when it is returned by the RCDC. TB surveillance is usually recommended for clients with incomplete LTBI treatment.

    - If TB surveillance **WAS NOT** recommended, file the **LTBI-2** in the client's chart and make a note under the 'Field Problem' section of the chart or the 'Past Problem' section of the electronic chart.

    - If TB surveillance **WAS** recommended, organize the first follow-up appointment before filing the **LTBI-2** in the client's chart.

NOTES:

- **Partial treatment of LTBI does not provide protection against development of active TB in future.** Encourage clients with incomplete LTBI treatment to consider completing treatment in future unless contraindicated (e.g. due to drug-induced liver toxicity or other adverse reactions to treatment). **DO NOT resume LTBI treatment without consulting the RCDC.**

- **A history of prior LTBI treatment does not provide protection against re-infection with TB bacteria.** Clients who are exposed to active TB after LTBI treatment should undergo routine contact follow-up assessments (see **Section 9 - Contact Investigation, Window Period Prophylaxis and Source Case Investigation**).

Treatment Regimens and Recommended TB Drug Dosages

Isoniazid (INH) with Pyridoxine (Vitamin B6)

In Nunavut, LTBI is usually treated with isoniazid (INH), taken twice-weekly, until a total of 78 doses have been observed. Supplemental pyridoxine (vitamin B6) is prescribed with INH to prevent peripheral neuropathy (numbness/tingling in fingers and/or toes).

Twice-weekly DOT is typically done on Mondays and Thursdays. In situations where daily DOT is prescribed, doses are observed five days a week (Monday through Friday). With regular adherence, it takes about nine months to complete treatment.

Table 7-5: Recommended drug doses for twice-weekly and daily LTBI treatment with isoniazid (INH) and pyridoxine (vitamin B6)[10,11,12]

NOTE: The treating physician will determine whether dosing is daily or intermittent.

TB Drug	Children Under 13 Years of Age	Adolescents and Adults
	Twice-Weekly Dose (Mondays and Thursdays)	
Isoniazid (INH)	20 to 30 mg/kg Maximum: 900 mg	15 mg/kg Maximum: 900 mg
Pyridoxine (vitamin B6)	As ordered, usually 12.5 to 25 mg	As ordered, usually 25 to 50 mg
	Daily Dose (5 days a week, Monday to Friday OR as ordered)	
Isoniazid (INH)	10 mg/kg (10 to 15 mg/kg) Maximum: 300 mg	5 mg/kg Maximum: 300 mg
Pyridoxine (vitamin B6)	As ordered, usually 12.5 mg	As ordered, usually 25 mg

Rifampin

Some clients, such as contacts of cases with INH-resistant TB, might be prescribed rifampin for LTBI treatment. When rifampin is used to treat LTBI, it is taken daily (Monday through Friday) until a total of 120 doses have been observed (see **Table 7-6**). With regular adherence, treatment takes about six months to complete.

[10] Long R. Ellis E. eds. *Canadian Tuberculosis Standards* (6th edition). Canada: Canadian Lung Association, 2007:182-201.

[11] Menzies R, Wong T. *Canadian Tuberculosis Standards*. 7th ed. Canadian Thoracic Society and the Public Health Agency of Canada; 2013.

[12] American Thoracic Society. Targeted tuberculin testing and treatment of latent tuberculosis infection. *Am J Respir Crit Care Med* 2000; 161:S221-S247.

Table 7-6: Recommended drug doses for daily LTBI treatment with rifampin[13]

TB Drug	Children Under 13 Years of Age	Adolescents and Adults
	Daily Dose (5 days a week, Monday to Friday OR as ordered)	
Rifampin	15 mg/kg (10 to 20 mg/kg) Maximum: 600 mg	10 mg/kg Maximum:600 mg

Travel during LTBI Treatment

Consult the RCDC as soon as a client indicates s/he plans to travel. Be prepared to discuss:

- Anticipated travel dates;
- Reason for travel;
- Arrangements for continuation of treatment (e.g., prescriptions, DOT provider, ongoing monitoring);
- Whether treatment should be held at any point during the anticipated travel period;
- Whether TB drugs should be sent with the client; and
- Whether to complete a TB Travel/Transfer Form (**TB Trans**).

When a **TB Trans** is required and travel is **within the same region** of Nunavut:

- Send the completed form and the client's current DOT record to the Supervisor of Community Health Programs (SCHP) of the destination community. Include a copy of the most recent blood test results if any were abnormal.

When a **TB Trans** is required and the **destination community is outside of the client's usual region**:

- Send the completed form and the client's current DOT record to the RCDC. Include a copy of the most recent blood test results if any were abnormal. The RCDC will forward the information to the destination community/jurisdiction. Some additional information is generally required for a client travelling outside of Nunavut.

[13] Menzies R, Wong T. *Canadian Tuberculosis Standards*. 7th ed. Canadian Thoracic Society and the Public Health Agency of Canada; 2013.

Sample Latent TB Infection (LTBI) DOT Record (LTBI-1) – Page 1 of 2

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Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Record of DOT Providers		
Initial	Name	Designation

Please fill in OR affix label:
Last Name: ______________________
First Name: ______________________
Sex: ☐ M ☐ F ☐ Other: ___________
Date of Birth: ___ (DD) ___ (MM) ___ (YY)
Chart #: ______________________
HCP #: ______________________
Community of Residence: ______________

LATENT TB INFECTION (LTBI) DOT RECORD

Treatment Start Date:	Weight at Treatment Start: ________ kg	TB Contact (circle): YES NO	Known Drug Allergies:

PART 1: PRESCRIPTION – DO NOT ADJUST TREATMENT WITHOUT CONSULTING THE RCDC

☐ INH and Vitamin B6 DOT two days per week x 78 doses ☐ Rifampin DOT five days per week x 120 doses ☐ Other (specify):

Drug	Dose (mg)	Date Started	Date Stopped	Drug	Dose (mg)	Date Started	Date Stopped

PART 2: DIRECTLY OBSERVED THERAPY (DOT) – ALL DOSES MUST BE DOT

Before every dose: do symptom inquiry* and ask about possibility of travel or pregnancy. **Consult RCDC BEFORE ADMINISTERING DOSE** if adverse effects, abnormal blood test results, or client becomes pregnant. **Consult RCDC** to arrange continuation of treatment during travel, or when three doses in a row are missed and/or if adherence falls below 80% in a calendar month.
At month end: calculate adherence**, complete required monitoring (see **Part 3**) and send the **LTBI-1** to RCDC, along with updated growth chart for clients under five years of age.

MONTH (specify)	DAY OF THE MONTH Mark dates of observed doses with your initials. Mark dates of missed doses with an "O".																														Adherence^			
																															This Month		To Date	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	DOT	DUE	DOT	DUE

* Ask about TB signs/symptoms, signs/symptoms of hepatotoxicity (extreme fatigue, stomach upset, nausea/vomiting, dark urine, yellow sclera, abdominal pain), and any other adverse effects.
**To calculate adherence as a percentage: # DOT doses divided by # doses DUE x 100. Example: seven doses observed divided by nine doses DUE (i.e. two doses missed) = 78% adherence.
^ DOT = # of doses that were observed, DUE = # of doses that should have been taken/observed according to the prescription.

GN Dept. of Health LTBI DOT Record (LTBI-1) – November 2016 **Page 1 of 2**

Sample Latent TB Infection (LTBI) DOT Record (LTBI-1) – Page 2 of 2

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Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Please fill in OR affix label:
Last Name: ______________________
First Name: ______________________
Sex: ☐ M ☐ F ☐ Other: __________
Date of Birth: ___ (DD) ___ (MM) ___ (YY)
Chart #: ______________________
HCP #: ______________________
Community of Residence: ______________

LATENT TB INFECTION (LTBI) DOT RECORD

PART 3: MONITORING - Clients whose TB treatment is provided by a DOT must have a face-to-face assessment by a nurse, a nurse practitioner, or a physician **AT LEAST MONTHLY**

Consult RCDC BEFORE ADMINISTERING DOSE if any adverse effects, abnormal blood test results, or the client becomes pregnant. Clients prescribed 78 twice-weekly doses of INH & Vitamin B6 must complete treatment within 12 months of start date. Clients prescribed120 daily doses of rifampin must complete treatment within six months of start date.

	Date	Weight* (kg)	S.I.^ Y/N	Specify Symptoms if Present	Blood Tests (date/list) *Refer to TB Manual for testing requirements*	Sputum Specimen(s) for TB Testing** *Indicate smear and culture results in spaces provided*				PA and Lateral Chest X-Rays (date/result)** Physician order required to x-ray a pregnant client	Pregnant Y/N or /N/A
End of Month 1						PRN					
End of Month 2						PRN					
End of Month 3						X3					
End of Month 4						PRN					
End of Month 5**						PRN					
End of Month 6						PRN					
End of Month 7						PRN					
End of Month 8**						PRN					
End of Month 9						PRN					
End of Month 10						PRN					
End of Month 11						PRN					
End of Month 12						PRN					

* Confirm dosing remains at a therapeutic level each month. **Notify the RCDC** about failure to gain weight in a growing child or weight loss in an adult or adolescent. **Consult the RCDC** when dosage adjustment is necessary.

^ TB signs/symptoms, symptoms of hepatotoxicity (extreme fatigue, stomach upset, nausea/vomiting, dark urine, yellow sclera, abdominal pain), and any other adverse effects.

**Within one month of anticipated completion date, confirm with the RCDC whether end of treatment chest x-rays and/or sputum tests are required (end of Month 5 for clients prescribed rifampin, end of Month 8 for clients prescribed INH and Vitamin B6)

PRN - Consult the RCDC and send three sputum specimens for TB testing if the client has a cough (dry or productive) for three weeks or longer.

GN Dept. of Health LTBI DOT Record (LTBI-1) – November 2016 **Page 2 of 2**

Sample Latent TB Infection (LTBI) Treatment Outcome Form (LTBI-2)

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Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Please fill in OR affix label:
Last Name: ____________________
First Name: ____________________
Sex: ☐ M ☐ F ☐ Other:__________
Date of Birth: ___ (DD) ___ (MM) ___ (YY)
Chart #: ____________________
HCP #: ____________________
Community of Residence: ____________________

LATENT TB INFECTION (LTBI) TREATMENT OUTCOME FORM

PART 1: PURPOSE OF TREATMENT – SELECT ONE CATEGORY ONLY

- ☐ TB Contact – Window period prophylaxis (WPP)
- ☐ TB Contact – TST or IGRA positive at initial screening
- ☐ TB Contact – TST or IGRA positive at follow-up screening (i.e. converter)
- ☐ TB Contact – TST or IGRA negative, high risk for development of active TB if infected (e.g. immunosuppressed)
- ☐ TST or IGRA positive – no known recent TB contact (e.g., work screening, TB school screening)

PART 2: TREATMENT SUMMARY

Medication	Start Date	End Date	Number of DOT Doses Taken	Number of DOT Doses Prescribed
Isoniazid (INH)	dd/mm/yy	dd/mm/yy		
Vitamin B6 (pyridoxine)	dd/mm/yy	dd/mm/yy		
Rifampin (RMP)	dd/mm/yy	dd/mm/yy		
Other (*specify*):	dd/mm/yy	dd/mm/yy		

PART 3: ADHERENCE SUMMARY - %COMPLETED IS # OF DOT DOSES TAKEN DIVIDED BY # OF DOT DOSES PRESCRIBED x 100

Percentage of Treatment Completed: ☐ 100% ☐ 80 - 99% ☐ 50 - 79% ☐ < 50% ☐ Unknown

PART 4: RESULTS FROM TB TESTING DONE AFTER THREE MONTHS OF LTBI TREATMENT

If test not done, specify reason: ____________________

PA and Lateral Chest X-Rays	
Date: dd/mm/yy	**Result:** ☐ Normal ☐ Abnormal (*specify*):

Sputum Specimens for TB Testing

Specimen #1 Collection Date	Result (circle) include count if AFB smear is positive (e.g. 2+ or few)			Specimen #2 Collection Date	Result (circle) include count if AFB smear is positive (e.g. 2+ or few)			Specimen #3 Collection Date	Result (circle) include count if AFB smear is positive (e.g. 2+ or few)		
dd/mm/yy	AFB Smear	NEG	POS ____	dd/mm/yy	AFB Smear	NEG	POS ____	dd/mm/yy	AFB Smear	NEG	POS ____
	Culture	NEG	POS ____		Culture	NEG	POS ____		Culture	NEG	POS ____

CHN/PHN/TB Nurse Name / Signature: ____________________ **Date**: ____dd/mm/yy____

PART 5: TREATMENT OUTCOME AND SURVEILLANCE RECOMMENDATION (TO BE COMPLETED BY RCDC)

- ☐ Window period prophylaxis - treatment discontinued after repeat screening completed and NEGATIVE
- ☐ Treatment completed ☐ Death before completion of treatment, *specify date of death*: __dd/mm/yy__
- ☐ Transferred to other territory/province/country – outcome of treatment unknown
  Specify date and new territory/province/country: ____________________
- ☐ Treatment discontinued due to adverse event (*specify*): ____________________
- ☐ Treatment discontinued at request of client/parent/guardian) (*specify reason*): ____________________
- ☐ Absconded (*lost to follow-up before completion of 80% of doses*)
- ☐ Other (*specify*): ____________________

SURVEILLANCE RECOMMENDATION: ☐ Not required ☐ Transferred to ***Surveillance Protocol***, first assessment due: ___dd/mm/yy___

RCDC Name / Signature: ____________________ **Date**: ____dd/mm/yy____

GN Dept. of Health LTBI Treatment Outcome Form (LTBI-2) – November 2016 **Page 1 of 1**

Sample Tuberculosis Travel/Transfer Form (TB Trans)

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Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Please fill in OR affix label:
Last Name: ______
First Name: ______
Sex: ☐ M ☐ F ☐ Other: ______
Date of Birth: ___ (DD) ___ (MM) ___ (YY)
Chart #: ______
HCP #: ______
Community of Residence: ______

TUBERCULOSIS TRAVEL / TRANSFER FORM

PART 1: TRAVEL DETAILS ADVISE CLIENT WHERE TO REPORT WITH HIS/HER MEDICATIONS FOR DIRECTLY OBSERVED THERAPY

Traveling to: ______
House #: ______
Boarding home: ______
Hotel/Other: ______
Contact Person: ______
Phone: ______

Departure date: ______ dd/mm/yy ______
Reason for travel (e.g., medical / pleasure / work): ______
Traveling companion(s): ______
Expected length of trip: ______
Expected date of return: ______ dd/mm/yy ______

PART 2: CLINICAL INFORMATION

Treatment for Active TB				
Active TB Disease *(specify type)* ______	Date of Diagnosis	Treatment Start	Current Sputum AFB Smear Status include count if AFB smear is positive (e.g. 2+ or few)	Current Sputum TB Culture Status (circle one)
TB Drug Resistance ☐ No ☐ Yes ☐ Unknown	dd/mm/yy	dd/mm/yy	Collection Date: dd/mm/yy Result (*circle*): Positive ______ Negative	Collection Date: dd/mm/yy Result (*circle*): Positive Negative Pending

Window Period Prophylaxis					
Window Period Prophylaxis	Treatment Start	Dates/Results of Initial Post-Exposure Tests			Date Repeat Tests Due
	dd/mm/yy	TST	dd/mm/yy	______ mm	dd/mm/yy
		Chest X-Ray	dd/mm/yy	result	dd/mm/yy

Treatment for Latent TB Infection			
Latent TB Infection	Treatment Start	Estimated Completion Date	Doses Left to Complete
	dd/mm/yy	dd/mm/yy	

PART 3: TREATMENT INFORMATION

Medications with client: ☐ No ☐ Yes If yes, number of doses provided: ______ Blister packed? ☐ No ☐ Yes
Last dose observed: ______ dd/mm/yy ______ Next observed dose due: ______ dd/mm/yy ______

PART 4: MONITORING INFORMATION

Date of most recent blood tests: ___ dd/mm/yy ___ Next blood tests due (*specify*): ______ Date due: ___ dd/mm/yy ___
Other monitoring due (*specify with dates due*): ______

PART 5: ATTACHED INFORMATION

☐ Copy of most recent sputum test results (for client with respiratory TB) ☐ Copy of most recent blood test results if abnormal
☐ DOT record ☐ Other (*specify*):

PART 6: COMMENTS

For travel within same region: send to SCHP of destination community. For travel outside of region/ territory: send to RCDC.

CHN/PHN/TB Nurse Name & Signature: ______ Date: ___ dd/mm/yy ___ Phone: ______

GN Dept. of Health TB Travel/Transfer Form (TB Trans) – November 2016 **Page 1 of 1**

SECTION 8

Care for Clients with Active TB

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Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Nunavut

Please fill in OR affix label:
Last Name: ______
First Name: ______
Sex: ☐ M ☐ F ☐ Other: ______
Date of Birth: ___ (DD) ___ (MM) ___ (YY)
Chart #: ______
HCP #: ______
Community of Residence: ______

TUBERCULOSIS TRAVEL / TRANSFER FORM

PART 1: TRAVEL DETAILS ADVISE CLIENT WHERE TO REPORT WITH HIS/HER MEDICATIONS FOR DIRECTLY OBSERVED THERAPY

Traveling to: ______	Departure date: ______ dd/mm/yy ______
House #: ______	Reason for travel (e.g., medical / pleasure / work): ______
Boarding home: ______	
Hotel/Other: ______	Traveling companion(s): ______
Contact Person: ______	Expected length of trip: ______
Phone: ______	Expected date of return: ______ dd/mm/yy ______

PART 2: CLINICAL INFORMATION

Treatment for Active TB

Active TB Disease *(specify type)* ______	Date of Diagnosis	Treatment Start	Current Sputum AFB Smear Status include count if AFB smear is positive (e.g. 2+ or few)	Current Sputum TB Culture Status (circle one)
TB Drug Resistance ☐ No ☐ Yes ☐ Unknown	dd/mm/yy	dd/mm/yy	Collection Date: dd/mm/yy Result (*circle*): Positive ______ Negative	Collection Date: dd/mm/yy Result (*circle*): Positive Negative Pending

Window Period Prophylaxis

Window Period Prophylaxis	Treatment Start	Dates/Results of Initial Post-Exposure Tests			Date Repeat Tests Due
	dd/mm/yy	TST	dd/mm/yy	______ mm	dd/mm/yy
		Chest X-Ray	dd/mm/yy	result	dd/mm/yy

Treatment for Latent TB Infection

Latent TB Infection	Treatment Start	Estimated Completion Date	Doses Left to Complete
	dd/mm/yy	dd/mm/yy	

PART 3: TREATMENT INFORMATION

Medications with client: ☐ No ☐ Yes If yes, number of doses provided: ______ Blister packed? ☐ No ☐ Yes
Last dose observed: ______ dd/mm/yy ______ Next observed dose due: ______ dd/mm/yy ______

PART 4: MONITORING INFORMATION

Date of most recent blood tests: ___ dd/mm/yy ___ Next blood tests due (*specify*): ______ Date due: ___ dd/mm/yy ___
Other monitoring due (*specify with dates due*): ______

PART 5: ATTACHED INFORMATION

☐ Copy of most recent sputum test results (for client with respiratory TB) ☐ Copy of most recent blood test results if abnormal
☐ DOT record ☐ Other (*specify*):

PART 6: COMMENTS

For travel within same region: send to SCHP of destination community. For travel outside of region/ territory: send to RCDC.

CHN/PHN/TB Nurse Name & Signature: ______ Date: ___ dd/mm/yy ___ Phone: ______

GN Dept. of Health TB Travel/Transfer Form (TB Trans) – November 2016 **Page 1 of 1**

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Care of Clients with Active TB

Early detection of active TB and prompt initiation of appropriate treatment and isolation (for infectious cases) improves outcomes for cases and stops transmission of TB bacteria.

Active TB is almost always curable when appropriate treatment is prescribed and adhered to. In Nunavut, all cases of active TB are treated with directly observed therapy (DOT). Although it is sometimes necessary for clients with active TB to begin TB treatment away from their home communities, most can return within two to three weeks.

There are two distinct phases in TB treatment: the initial phase (sometimes referred to as the 'intensive phase') and the continuation phase. There are important differences in monitoring requirements between two treatment phases.

Care of clients with active TB might also include interventions for protecting the health of others, such as airborne precautions, and contact investigations or source case investigations.

- For information on DOT, see:
  Section 16 - Directly Observed Therapy (DOT)
- For information on **airborne precautions**, refer to the *Nunavut Infection Prevention and Control Manual*, available online at:
  http://www.gov.nu.ca/health/information/infection-prevention-and-control
- For information on contact investigation and source case investigation, see:
  Section 9 – Contact Investigation, Window Period Prophylaxis and Source Case Investigation

Steps in Caring for a Client with Active TB

Step One: Prepare to Deliver TB Diagnosis

- Consult the RCDC to confirm isolation requirements and whether a contact investigation and/or a source case investigation is needed.

  Isolation Requirements

  Clients with **respiratory TB** (e.g., pulmonary TB, TB laryngitis) usually require isolation for **AT LEAST** two weeks from start of treatment.

Clients with **non-respiratory TB** might require isolation until concurrent respiratory TB has been ruled out with chest x-rays and sputum testing. In some situations, clients with suspected or confirmed active TB might be admitted to hospital for isolation until it is determined that airborne precautions are no longer necessary.

Isolation requirements for **a child with suspected or confirmed active TB** (any form) are determined on a case-by-case basis by the treating physician in consultation with public health.

NOTE: When medical evacuation is necessary, use the same processes used to arrange for other medical evacuations (see **Section 13 – Infection Prevention and Control**).

Contact Investigation and Source Case Investigation

Contact investigations are done for cases with infectious TB. Source case investigations (also called reverse contact investigations) are done to identify how a non-infectious case or TST converter became infected with TB bacteria (i.e. to identify a 'source case').

- Review the client's chart to familiarize yourself with the context in which the diagnosis was made, which can help you to anticipate questions the client might ask.
  Prepare yourself to provide the client (and/or his/her parents/guardians) with information about:
  - The diagnosis and the clinical picture (e.g., chest x-ray findings, sputum test results)
  - Isolation requirements (if any) and how to comply with airborne precautions/home isolation when these are indicated (see **Section 13 - Infection Prevention and Control**);
  - The follow-up plan (e.g., further evaluations, treatment [including DOT], potential adverse effects, monitoring); and
  - Limitations on travel during treatment.

Step Two: Deliver TB Diagnosis

While delivering the diagnosis to the client (and/or the parent/guardian) in person:

- Maintain airborne precautions when indicated (i.e. during in-person appointments with a client who has infectious or potentially infectious active TB).

- **During a home visit *(preferred)*: Don a disposable N95 PARTICULATE RESPIRATOR and fit-check it before entering the home. Wear the respirator throughout the interview.** Bring a supply of surgical masks to leave with the client for use when s/he leaves their home (e.g. to attend medical appointments).

- **During an appointment at a Public Health Unit, Health Centre, or other facility:**

  If feasible, arrange for the client to attend at the end of the day to minimize exposure to others. Alert reception staff about the appointment so they can **ensure the client dons a SURGICAL/PROCEDURE type mask** upon arrival and is immediately placed in an appropriate area for the interview (rather than sitting in the waiting room).

  If possible, perform the interview in a ventilated room away from other people and with the door closed. **Don a DISPOSABLE N95 PARTICULATE RESPIRATOR (commonly referred to as an N95 mask) and fit-check it before entering the interview room. Wear the respirator throughout the interview.**

For information on masks, see:
Section 13 – Infection Prevention and Control

- Review the following TB fact sheets with the client (and/or the parent/guardian):

  - **Tuberculosis**;

  - **Taking Medication for Active Tuberculosis**; and

  - **Keep Your Family and Friends Safe from TB**.

When **airborne precautions** are required, document the date the client (and/or the parent/guardian) was informed and what information was provided.

- Reinforce the following key messages:

  - Compliance with isolation recommendations (when indicated) will protect others from becoming infected with TB bacteria, and developing active TB.

- Active TB is almost always curable with adherence to appropriate TB treatment.
- Adherence to treatment will:
  - Quickly reduce the number of TB bacteria in the client's body, which will provide relief from symptoms and (for infectious cases) help to stop transmission, and
  - Prevent development (or worsening) of TB drug resistance.
- Treatment is available in the client's home community, and is supported with DOT. The use of DOT:
  - Supports adherence;
  - Ensures regular monitoring for medication side effects and other potential adverse reactions; and
  - Provides opportunities for the client to stay informed about his/her progress and treatment.

When the diagnosis is NOT delivered to the client in-person:

- Provide the key messages outlined above (e.g. over the phone); and
- Make arrangements with the client (and/or the parent/guardian) for a follow-up, in-person meeting to:
  - Review the TB fact sheets listed on the previous page;
  - Do any outstanding baseline assessments/tests; and
  - Begin treatment.

  NOTE: Follow the infection prevention and control measures described above during an in-person meeting with a client who has infectious or potentially infectious active TB.

Step Three: Prepare to Begin TB Treatment

- If a **TB Prescription Request/Change** form **(TBPRC**) was not completed during the client's initial assessment, complete one now and then send it to the RCDC. For clients five years of age and under, also send an updated growth chart.

- Ensure all baseline testing has been done, including:
    - PA and lateral chest x-rays;
    - Three sputum specimens sent for TB testing; and
    - Blood tests: AST, ALT, total bilirubin, CBC, uric acid, creatinine, hepatitis B surface antigen (HbsAg), hepatitis C, and HIV serology.

  NOTE: HbsAg, hepatitis C, and HIV testing is not required for clients with pre-existing positive test results. Results from blood tests done within one month prior can be used as baseline measurements provided they are within normal limits for the client's age.

- Consult the RCDC to obtain a prescription for TB treatment.

- When TB treatment is to be provided at the school, ask the parent/guardian to sign a **Medication Administration Consent** form (see **Section 12A – Sample Letters for Nunavut TB School Screening Program**).

Step Four: Begin TB Treatment

Once a prescription has been received, initiate an Active TB DOT Record (**ATB-1**). To avoid delays in treatment starts, use stock medications rather than waiting for medications to arrive from the pharmacy. **Unless otherwise ordered, the prescribed TB drugs should be taken together at the same time, NOT spread over the course of the day.**

Before administering the first dose of TB treatment:

- Ensure baseline blood test results are within normal limits for the client's age. Consult the RCDC about abnormal baseline results, including new positive HbsAg, hepatitis C, or HIV tests.

- Confirm the client's weight and document it on the **ATB-1**. Compare the current weight against the prescription dosage to ensure the dosing is adequate (see TB Treatment Regimens and Recommended TB Drug Dosages). Consult the RCDC if dosage adjustments are required.

- If ethambutol is included in the treatment regimen, document baseline vision test results on the **ATB-1**. See Visual Acuity and Red/Green Colour Vision Testing for information on vision testing.

- Review information with the client (and/or the parent/guardian) on:
    - The treatment regimen;
    - Potential TB drug side effects/adverse responses to TB treatment (see **Table 8-1**), and how to contact the TB nurse or CHN should any occur;
    - The need to ensure the nurse and the pharmacy are aware of all medications the client is taking or starts taking during TB treatment, so that potential drug-drug interactions can be identified (see **Table 8-2**);
    - The importance of avoiding acetaminophen (Tylenol®) and/or alcohol during TB treatment; and
    - The importance of adhering to TB treatment.

DO NOT tell the client (or parent/guardian) that TB treatment will continue for a set period of time. A number of factors can influence the duration of treatment, including adherence and response to treatment, which cannot be known at treatment outset. Instead, explain that completing treatment requires a specific number of doses to be completed, and reinforce that the duration of treatment can be minimized with regular adherence.

After administering the first dose of TB treatment:

- Document the initial treatment dose on the **ATB-1.**
- Confirm a plan for the next DOT dose.

  NOTE:

    - **Preparation of doses of TB drugs is a nursing function.** DOT workers **ARE NOT** authorized to prepare TB drugs or dispense doses from stock medication supplies. See **Section 16 - Directly Observed Therapy (DOT)** for more information.

For information on DOT, the use of incentives and enablers, and helpful information on administering TB drugs, see:

Section 16 – Directly Observed Therapy

For a client whose TB treatment began in hospital:

- Obtain the client's Medication Administration Record (MAR) from the hospital.

- Transcribe doses given in hospital onto the DOT record indicating the name of the facility (e.g. QGH) on the day the dose was given according to the MAR.

Table 8-1: Drugs included in the standard TB treatment regimen and associated side effects[5]

TB drug	Common side effects/adverse reactions	Uncommon but important side effects/adverse reactions
Isoniazid (INH)	• rash • drug-induced hepatitis† • neuropathy • nausea/vomiting* Ψ • fatigue, drowsiness Ψ • headache • mild hair loss • acne	• central nervous system toxicity** • anemia
Rifampin (RMP)	• drug interactions • rash • saliva, urine, tears can become orange/red in colour (harmless but could stain contact lenses)	• drug-induced hepatitis† • 'flu-like' illness • neutropenia • thrombocytopenia
Pyrazinamide (PZA)	• rash • nausea/vomiting Ψ • hepatitis† • arthralgia	• gout ↺ • photosensitivity
Ethambutol (EMB)	• visual toxicity (retrobulbar neuritis)^	• rash

† Symptoms can include: loss of appetite: nausea and/or vomiting; abdominal discomfort; unexplained fatigue; dark-coloured urine; scleral icterus or jaundice.

* Especially with intermittent regimens administered in combination with rifampin.

Ψ **Can also be a symptom of drug-induced hepatitis.**

↺ Although elevation in serum uric acid levels is common with pyrazinamide use acute gout is rarely seen except in those with pre-existing gout.

^ Manifested by decreases in visual acuity, visual fields, or colour vision. More common with higher doses (e.g. 25 mg/kg), older age, and renal impairment.

** Symptoms can include: slurred speech; peripheral neuritis; dizziness; stupor; seizures; coma.

[5] Adapted from: Menzies R, Wong T. *Canadian Tuberculosis Standards*. 7th ed. Canadian Thoracic Society and the Public Health Agency of Canada; 2013.

Table 8-2: Some common and/or important drug-drug interactions associated with isoniazid and rifampin[6,7,8]

NOTE: List does not include all possible interactions; consult a pharmacist for further information.

Isoniazid (INH)	Rifampin
• Acetaminophen • Antacids • Anticonvulsants (Carbamazepine, Phenytoin) • Antidepressants (Citalopram) • Beta-blockers (Metoprolol) • Clopidogrel • Diazepam • Doxorubicin • Haloperidol • Pimozide • Tamoxifen • Theophylline • Thioridazine	• Antiarrythmics (Diltiazem, Verapamil, Digoxin) • Anticoagulants (Warfarin, Apixaban, Dabigatran) • Anticonvulsants (Phenytoin, Valproic Acid) • Antifungals (Ketoconazole) • Antipsychotics (Aripiprazole, Clozapine, Quetiapine) • Barbituates • Beta-blockers • Calcium Channel Blockers (Amlodipine, Nifedipine) • Clarithromycin • Cyclosporine • Estrogens (**including hormonal contraceptives**)* • Glucocorticoids • Methadone • Protease Inhibitors • Sulfonylureas

* **Women using hormonal contraceptives should be advised to use alternate forms of birth control while taking rifampin.**

Step Five: Continue TB Treatment

Monitoring

Clients (and/or parents/guardians), DOT workers, and nurses managing the care of clients on TB treatment share responsibility for:

- Preventing and identifying TB drug side effects/adverse responses to treatment;
- Identifying worsening or recurrence of TB signs/symptoms, such as weight loss or fever, that could indicate suboptimal response to treatment;
- Ensuring the nurse and/or the treating physician and/or the pharmacy are aware of all medications the client is taking (or starts taking) during TB treatment.

[6]Menzies R, Wong T. *Canadian Tuberculosis Standards*. 7th ed. Canadian Thoracic Society and the Public Health Agency of Canada; 2013.
[7]Rifampin and Isoniazid Product Monograph. E-Therapeutics. Canadian Pharmacists Association. Accessed November, 2014.
[8]Isoniazid and Rifampin. Lexicomp Online. Accessed November 2014.

- Ensuring potential interruptions in or barriers to treatment adherence (e.g. travel) are identified and addressed (or minimized).

Monitoring Requirements

- Monitor clients taking standard TB treatment as per **Table 8-3**, or as directed by the RCDC and/or the treating physician. Monitor clients on extended standard treatment as per **Table 8-4**. Monitoring requirements for clients taking non-standard TB treatment (e.g. for drug-resistant TB) are determined by the treating physician.

  NOTES:

  - Monitoring requirements are also determined by the treating physician for clients:
    - With abnormal baseline blood test results;
    - At increased risk for hepatotoxicity or other adverse effects; and/or
    - Who develop side effects/adverse effects.
  - Blood tests after baseline are **NOT** routinely required during standard TB treatment for clients under 13 years of age.
  - In some situations, a clinical evaluation by a physician or nurse practitioner may be requested by the treating physician or the RCDC during the course of treatment; for example, pediatric clients or clients that are considered higher risk because they have underlying liver disease, are pregnant, or are experiencing treatment related issues.

- Document assessments on the DOT record **(ATB-1 or ATB-2**). Consult the RCDC or the treating physician about abnormal results.

- Clinical monitoring of any client whose TB treatment is provided by a DOT worker must include a face-to-face assessment by a nurse, a nurse practitioner, or a physician **AT LEAST MONTHLY** (more frequently if there are any concerns).

Key Aspects of Monitoring during Active TB Treatment

- **Hepatotoxicity**

  Severe and potentially fatal hepatotoxicity can occur during TB treatment. Hepatotoxicity is defined as liver enzyme (AST/ALT) levels **FIVE** times the upper limit of normal *without symptoms* **OR THREE** times the upper limit of normal *with symptoms*.

  Clients at increased risk for hepatotoxicity during TB treatment include:[9]

  - Pregnant clients and clients who are up to three months postpartum;
  - Those with a history of previous drug-induced hepatitis;
  - Those with current cirrhosis or chronic active hepatitis of any cause;
  - Those with hepatitis C;
  - Those with hepatitis B and abnormal transaminases;
  - Those who consume alcohol daily or who are undergoing concomitant treatment with other hepatotoxic drugs (e.g. methotrexate).

  If signs/symptoms consistent with hepatotoxicity are present:

  - **Hold treatment**;
  - Draw AST, ALT, total bilirubin, and CBC **immediately**; and
  - Consult the RCDC or the treating physician.

Signs/symptoms consistent with hepatotoxicity:

- Loss of appetite
- Nausea and/or vomiting
- Abdominal discomfort
- Unexplained fatigue
- Dark-coloured urine
- Scleral icterus or jaundice

- **Potential for Other Adverse Effects/Concerns**

  - Use clinical judgment to determine whether the RCDC should be consulted or the client referred for clinical assessment.

[9] Menzies R, Wong T. *Canadian Tuberculosis Standards*. 7th ed. Canadian Thoracic Society and the Public Health Agency of Canada; 2013.

- **Monitor clients taking anticonvulsants closely** as both INH and rifampin can affect the metabolism and serum levels of anticonvulsants.

- Complete vision tests monthly for clients taking ethambutol. Document results on the DOT record. Consult the RCDC or the treating physician should visual disturbances or changes be noted.

- **Worsening or Recurrence of TB Signs/Symptoms**

  - Consult the RCDC **immediately** if TB signs/symptoms worsen or recur as this could reflect suboptimal response to treatment.

  - Consult the RCDC if the client's AFB smear or TB culture results return to being reported as positive after a period of being reported as negative.

- **Changes in Weight**

  - Document weight monthly;

  - Maintain a growth chart for clients five years of age and under; and

  - Ensure adequate dosing is maintained by comparing the client's current weight against the last month's weight, and against the prescription dosage (see TB Treatment Regimens and Recommended TB Drug Dosages). Consult the RCDC when dosage adjustments are required.

  NOTE: Notify the RCDC immediately about weight loss in any client or failure to gain weight in a growing child as this could reflect an adverse or suboptimal response to treatment.

- **Adherence**

  Adherence to TB treatment is critical for relieving symptoms, stopping transmission from infectious cases, and preventing the development (or worsening) of TB drug resistance. Although it is rarely necessary to do so, clients with infectious TB can be compelled to adhere to treatment. Clearly document any/all efforts made to reinforce/support adherence to treatment (**see Section 2 - Understanding TB**). Consult the RCDC if three doses in a row are missed and/or if adherence falls below 80% in a calendar month.

To calculate adherence as a percentage, divide the number of DOT doses taken by the number of DOT doses due. Multiply the result by 100. Example: seven DOT doses taken divided by nine doses due (i.e. two doses missed) = 78% adherence.

NOTES:

- Ask about travel plans during each DOT visit. Consult the RCDC when arranging for continuation of TB treatment during travel (see Travel during Active TB Treatment).

- When a single three-times-weekly DOT dose is missed in a treatment week during the continuation phase, it is not necessary for the client to make-up the missed dose that week. The missed dose will be added to the end of treatment to ensure the client completes the full number of prescribed doses before treatment is discontinued.

- **Pregnancy**

  - If a client might be pregnant, do a pregnancy test (with client's consent). **Consult the RCDC or the treating physician for guidance on management of clients that become pregnant during TB treatment.**

Monitoring Milestones

- **After TWO WEEKS of treatment:**

  - Draw AST, ALT, and bilirubin for clients 13 years of age and older and/or at increased risk for hepatotoxicity.

  - Consult the RCDC for guidance on discontinuation of home isolation. **DO NOT advise the client to discontinue home isolation without prior approval from the RCDC and/or the treating physician.**

- **At the end of EACH MONTH**:

  - Send the DOT record (**ATB-1** or **ATB-2**), along with an updated growth chart for clients five years of age and under to the RCDC to review for adherence and treatment issues.

- **Once results from drug susceptibility testing are received (typically four to six weeks after treatment start)**

- Consult the RCDC and/or the treating physician to confirm whether adjustments to the prescription are needed. Ethambutol is usually discontinued once DST results confirm the isolate is sensitive to INH, rifampin, and PZA. **DO NOT adjust the treatment regimen without consulting the RCDC and/or the treating physician.**

- **At the end of the SECOND MONTH of treatment:**

  - For clients with respiratory TB:

    - Do PA and lateral chest x-rays. **A physician order is required prior to taking shielded chest x-rays of a client who is or might be, pregnant.**

    - Send three sputum specimens for TB testing. Consult the RCDC if the client is unable to produce a sputum specimen as these test results are needed to determine whether extended treatment is necessary.

  - Consult the RCDC to obtain a prescription for the continuation phase of treatment from the TB physician (Qikiqtaaluq Region) or community physician (where applicable). **DO NOT stop TB treatment while waiting for the updated prescription.**

  - Begin the continuation phase of treatment once all doses prescribed for the initial phase of treatment have been observed **AND** an updated prescription has been received. PZA is usually discontinued and most clients are changed to three-times-weekly DOT (Monday, Wednesday, Friday) for the continuation phase of treatment. **DO NOT adjust the treatment regimen without consulting the RCDC and/or the treating physician.** To avoid interrupting treatment, use stock medications rather than waiting for medications to arrive from the pharmacy.

  - Begin recording treatment and monitoring on page 2 (*Continuation Phase*) of an Active TB DOT Record (**ATB-1**).

- **At the end of the SIXTH MONTH of treatment:**

  - Ensure all other routine monitoring has been completed and recorded on the **ATB-1**.

  - Send the up-to-date **ATB-1** to the RCDC, along with the updated growth chart for clients five years of age and under.

  - Consult the RCDC to confirm the treatment plan.

  - Proceed to Step Six.

Table 8-3: Summary of routine monitoring during standard treatment for active TB

NOTE: Clinical monitoring of clients whose TB treatment is provided by a DOT worker must include a face-to-face assessment by a nurse, a nurse practitioner, or a physician AT LEAST MONTHLY (more frequently if there are any concerns).

Monitoring	End of Week 1	End of Week 2	End of Week 3	End of Week 4	End of Week 8	End of Month 3	End of Month 4	End of Month 5	End of Month 6
Weight (kg)				✓	✓	✓	✓	✓	✓
Check dosing against current weight				✓	✓	✓	✓	✓	✓
Assess for side effects / symptoms of hepatotoxicity	Ask about potential side effects/hepatotoxicity prior to each dose of medication. Signs / symptoms of hepatotoxicity include: loss of appetite; nausea and/or vomiting; abdominal discomfort; unexplained fatigue; dark-coloured urine; and scleral icterus or jaundice.								
Assess for TB signs/symptoms	Consult RCDC if there is worsening or recurrence of TB signs/symptoms.								
CBC AST & ALT Bilirubin		13+ RF		13+ RF	13+ RF	13+ RF	13+ RF	13+ RF	13+ RF
Serum creatinine Uric acid	Repeat after baseline as requested by RCDC or ordering physician.								
HgbA1C$^{\Omega}$		13+							
Sputum for AFB smear and TB culture	x1^	x1^	x1^	x1^	x3 (all clients)	Repeat three specimens each month until culture-negative^			x3 (all clients)
PA and lateral chest x-rays					✓^				✓^
Pregnancy	Ask women of childbearing age about possibility of pregnancy monthly.								
Snellen chart and Ishihara colour tests	Repeat monthly while ethambutol is being taken.								
Travel	Ask about travel plans during each DOT visit.								

✓ Required for all clients

13+ Required for clients 13 years of age and older

RF Required for clients with **ANY** of the following risk factors for hepatotoxicity: pregnancy or first three months postpartum; history of previous drug-induced hepatitis; current cirrhosis or chronic active hepatitis of any cause; hepatitis C; hepatitis B with abnormal transaminases; daily alcohol consumption or concomitant treatment with other hepatotoxic drugs (e.g. methotrexate)

Ω Not required for clients known to have diabetes

^ Required only for clients with respiratory TB

✓^ **A physician order is required prior to taking shielded chest x-rays of a client who is or might be, pregnant**

Step Six: Extend or Discontinue TB Treatment

Decisions on length of treatment are made by the treating physician, in consultation with the RCDC.

TB treatment is usually discontinued once:

- The prescribed number of doses have been taken; and
- The end-of-treatment examinations have been done (e.g., chest x-rays, sputum tests for TB); and
- The file (including DOT records) had been reviewed by the RCDC and/or the treating physician and s/he has confirmed that an adequate course of treatment has been completed.

If it is determined that TB treatment can be discontinued, proceed to Step Seven**.**

If treatment beyond six months (extended treatment) is required:

- Consult the RCDC to confirm:
    - Whether an updated prescription is needed (to maintain the client's TB drug supply);
    - Monitoring requirements. Routine monitoring for most cases on extended standard treatment is described in **Table 8-4**.

      NOTE: Monitoring requirements for clients whose treatment is extended beyond 12 months and/or who are receiving non-standard treatment (e.g. for drug resistant TB) are determined on a case-by-case basis by the treating physician.
- Record treatment and monitoring on an Active TB DOT Record – Extension of Treatment (**ATB-2**).

Table 8-4: Summary of routine monitoring during extended standard treatment for active TB

NOTE: Clinical monitoring of clients whose TB treatment is provided by a DOT worker must include a face-to-face assessment by a nurse, a nurse practitioner, or a physician AT LEAST MONTHLY (more frequently if there are any concerns).

Monitoring	End of Month 7	End of Month 8	End of Month 9	End of Month 10	End of Month 11	End of Month 12
Weight (kg)	✓	✓	✓	✓	✓	✓
Check dosing against current weight	✓	✓	✓	✓	✓	✓
Assess for side effects / symptoms of hepatotoxicity	Ask about potential side effects/hepatotoxicity prior to each dose of medication. Signs / symptoms of hepatotoxicity include: loss of appetite; nausea and/or vomiting; abdominal discomfort; unexplained fatigue; dark-coloured urine; and scleral icterus or jaundice.					
Assess for TB signs/symptoms	Consult RCDC if there is worsening or recurrence of TB signs/symptoms.					
CBC, AST & ALT Bilirubin	13+ RF	13+ RF	13+ RF	13+ RF	13+ RF	13+ RF
Serum creatinine Uric acid	Repeat as requested by RCDC or ordering physician.					
Sputum for AFB smear and TB culture	• Repeat three specimens each month until culture-negative.^ • Repeat at least one specimen each month thereafter.^		x3 (all clients)	x1^	x1^	x3 (all clients)
PA and lateral chest x-rays			✓^			✓^
Pregnancy	Ask women of childbearing age about possibility of pregnancy monthly.					
Snellen chart and Ishihara colour tests	Repeat monthly while ethambutol is being taken.					
Travel	Ask about travels plan during each DOT visit.					

✓ Required for all clients

13+ Required for clients 13 years of age and older

RF Required for clients with **ANY** of the following risk factors for hepatotoxicity: pregnancy or first three months postpartum; history of previous drug-induced hepatitis; current cirrhosis or chronic active hepatitis of any cause; hepatitis C; hepatitis B with abnormal transaminases; daily alcohol consumption or concomitant treatment with other hepatotoxic drugs (e.g. methotrexate)

^ Required only for clients with respiratory TB

✓^ **A physician order is required prior to taking shielded chest x-rays of a client who is or might be, pregnant**

Step Seven: Document TB Treatment Outcome

For a client with 'complete' TB treatment:

- Review TB signs/symptoms with the client (**Table 8-5**). Remind the client (and/or the parent/guardian) to remain alert for TB signs/symptoms, and to report to a health care provider quickly should any develop. **It is possible for people who have completed TB treatment to develop active TB again (relapse).**

Table 8-5: TB signs/symptoms

Systemic TB signs/symptoms	Signs/symptoms of respiratory TB disease	Signs/symptoms of non-respiratory TB disease
• Fever* • Night sweats* • Weight loss or failure to gain weight (i.e. failure to thrive) • Fatigue • Loss of appetite	Systemic TB signs/symptoms **AND** • Cough > 3 weeks (dry or productive) • Chest pain • Shortness of breath • Bloody phlegm (hemoptysis)	Systemic TB signs/symptoms **AND** pain or dysfunction at the involved site, e.g.: • Swollen lymph nodes (TB lymphadenitis) • Headache, irritability, photophobia, stiff neck (TB meningitis)

*Can be absent in the very young and the elderly

- Document completion of TB treatment in the 'Progress Notes' and on the 'Problems List' of the client's medical chart. Also record:
    - Which TB drugs were taken;
    - Number of doses taken; and
    - Date of last dose.

  If treatment was 'incomplete', record why treatment was stopped.

  NOTE: For a client who was lost to follow-up, consult the RCDC immediately when the client returns to the community or when his/her whereabouts becomes known. **DO NOT resume TB treatment without consulting the RCDC.**

- Ensure the current DOT record is complete, including number of doses taken that month and number of doses taken to date. Send the DOT record, along with an updated growth chart for clients under five years of age, to the RCDC. File the DOT record in the client's medical chart.

- **Within one week of the last dose**, complete Part 1 and Part 2 of an Active TB Treatment Outcome Form (**ATB-3**) and send it to the RCDC. The RCDC will complete Part 3

(*Treatment Outcome and Surveillance Recommendation*), and return the **ATB-3** to the health centre.

- Review the **ATB-3** for the surveillance recommendation when it is returned by the RCDC.
    - If surveillance **WAS NOT** recommended, file the **ATB-3** in the client's chart and make a note under the '*Field Problem*' section of the chart or the '*Past Problem*' section of the electronic chart.
    - If surveillance **WAS** recommended, organize the first follow-up appointment before filing the **ATB-3** in the client's chart.

Follow-up after TB Treatment

Follow-up after TB treatment is determined by the treating physician. In general, cases that complete treatment and whose end-of-treatment evaluations (e.g., sputum tests, chest x-rays) are satisfactory do not require follow-up unless they are under 13 years of age (see **'Treatment'** in **Section 2 – Understanding TB**).

NOTES:

- A client whose TB treatment was discontinued prior to completion is at **HIGH RISK** for relapse of active TB.
- A history of prior TB treatment does not provide protection against re-infection with TB bacteria. Clients who are exposed to active TB after TB treatment should undergo routine contact follow-up assessments (see **Section 9 - Contact Investigation, Window Period Prophylaxis and Source Case Investigation**).

For more information on TB treatment, refer to the *Canadian Tuberculosis Standards, 7th edition,* available online at:

http://www.respiratoryguidelines.ca/tb-standards-2013

TB Treatment Regimens and Recommended TB Drug Dosages

Table 8-6: Recommended treatment regimens for fully susceptible (or expected to be fully susceptible) active TB[10,11]

NOTES: See **Table 8-9** for clients with renal insufficiency. Some forms of active TB require an extended continuation phase (e.g., bone TB, TB meningitis). All doses must be taken as directly observed therapy (DOT). Use of pyrazinamide (PZA) in the intensive phase during pregnancy is individualized. When PZA is not included in the initial phase or when PZA is discontinued before the initial phase has been completed (e.g. due to drug intolerance), an extended continuation phase is required to reduce risk of relapse of active TB.

	Initial Phase	Continuation Phase
Regimen 1	**Standard Treatment Regimen Option 1 - PZA INCLUDED in Initial Phase**	
	INH, RMP, PZA, EMB*,** taken **daily** (or five days a week, Monday to Friday) for **two months – 56 daily doses (minimum 40 daily DOT doses)**	INH, RMP for **four months**, taken: **Daily** (or five days a week, Monday to Friday) **OR** **Three times a week – 54 doses** (Monday/Wednesday/Friday) †
Regimen 2	**Standard Treatment Regimen Option 2 - PZA NOT INCLUDED in Initial Phase^**	
	INH, RMP, EMB*, ** taken **daily** (or five days a week, Monday to Friday) for **two months (minimum 40 daily DOT doses)**	INH, RMP for **seven months**, taken: **Daily** (or five days a week, Monday to Friday) **OR** **Three times a week – 93 doses** (Monday/Wednesday/Friday) †

* Ethambutol is not necessary in children when the source case strain is fully susceptible. Refer to Canadian Tuberculosis Standards, Chapter 9 (2014) for detailed recommendations on TB treatment in children.

**Consult the RCDC and/or the treating physician re: discontinuing EMB as soon as drug susceptibility test results confirm there is no drug resistance.

^ Recommended for clients over 65 years and those with other risk factor(s) for hepatotoxicity. Risk of toxicity should be managed on a case-by-case basis in children as there is little supporting pediatric data.

† Three times weekly is preferred over twice weekly because if clients miss a single dose while receiving three times weekly therapy, they effectively receive twice weekly therapy, which is adequate. If clients miss a dose of twice weekly therapy, they effectively receive once weekly therapy, which is inadequate. In general, daily therapy is definitely preferred over intermittent regimens in children.

[10] Adapted from: Menzies R, Wong T. *Canadian Tuberculosis Standards*. 7th ed. Canadian Thoracic Society and the Public Health Agency of Canada; 2013.

[11] American Thoracic Society, Infectious Diseases Society of America, Centers for Disease Control. Treatment of tuberculosis. *Am J Respir Crit Care Med* 2003;167:603-62.

Table 8-7: Recommended drug doses for daily and intermittent therapy in children (12 years of age and under)[12]

NOTE: The treating physician will determine whether dosing is daily or intermittent. In general, DAILY DOT (or DOT five days a week, Monday to Friday) is prescribed during the INITIAL PHASE of treatment.

TB Drug	Daily Dose (range)		Three Times a Week Dose^ (range)	
	By Weight	Maximum	By Weight	Maximum
Isoniazid (INH)	10 mg/kg (10-15 mg/kg) ‡	300 mg	20-30 mg/kg	600-900 mg
Rifampin (RMP)	15 mg/kg (10-20 mg/kg)	600 mg	10-20 mg/kg	600 mg
Pyrazinamide (PZA)	35 mg/kg (30-40 mg/kg)	2000 mg	70 mg/kg (60-80 mg/kg)	*
Ethambutol (EMB)	20 mg/kg (15-25 mg/kg)	**	40 mg/kg (30-50 mg/kg)	***
Vitamin B6 (pyridoxine)	1 mg/kg	12.5 mg	1 mg/kg	12.5 mg

^ Intermittent doses should be prescribed only when directly observed therapy is available. In general, daily therapy is definitely preferred over intermittent regimens in children.

‡ Optimal dose range for children under 13 years of age that weigh less than 35 kg. For children 13 years of age and older that weigh between 35 and 60 kg, the optimal dosing of isoniazid is an area of uncertainty (refer to Canadian Tuberculosis Standards, Chapter 9 [2014]).

***** For pyrazinamide: maximum three times a week dose for children is 3000 mg according to the American Thoracic Society (ATS)[13] and 2000 mg according to the Red Book.[14]

****** For ethambutol: maximum daily dose for children is 1600 mg according to the ATS[6] and 2500 mg according to the Red Book.[7]

******* For ethambutol: maximum three times a week dose for children is 2400 mg according to the ATS[6], and 2500 mg according to the Red Book.[7]

[12] Adapted from: Menzies R, Wong T. *Canadian Tuberculosis Standards*. 7th ed. Canadian Thoracic Society and the Public Health Agency of Canada; 2013.

[13] Blumberg HM, Burman WJ, Chaisson RE, et al. American Thoracic Society/Centers for Disease Control and Prevention/Infectious Disease Societies of America. Treatment of tuberculosis. *Am J Respir Crit Care Med* 2003;167(4):603-62.

[14] American Academy of Pediatrics. *Tuberculosis*. *Red Book:2012 Report of the Committee on Infectious Diseases* (29th ed). Elk Grove Village, IL: American Academy of Pediatrics, 2012.

Table 8-8: Recommended drug doses for daily and intermittent therapy in adolescents and adults[15]

NOTE: The treating physician will determine whether dosing is daily or intermittent. In general, DAILY DOT (or DOT five days a week, Monday to Friday) is prescribed during the INITIAL PHASE of treatment.

TB Drug	Daily		Three Times a Week	
	By Weight	Maximum	By Weight	Maximum
Isoniazid (INH)	5 mg/kg	300 mg	10 mg/kg	600 mg
Rifampin (RMP)	10 mg/kg	600 mg	10 mg/kg	600 mg
Pyrazinamide (PZA)	20-25 mg/kg	2000 mg	30-40 mg/kg	4000 mg
Ethambutol (EMB)	15-20 mg/kg†	1600 mg	25-40 mg/kg	2400 mg

† Ethambutol dosing: optimal dosing is unclear. Eye toxicity is dose-dependent; risk is higher at 25 mg/kg than at 15 mg/kg.

Table 8-9: Recommended doses of TB drugs in renal failure[16]

TB Drug	Clearance by kidney	Normal dose	Creatinine clearance less than 30%* or hemodialysis†
Isoniazid (INH)	NO	5 mg/kg **daily**	No change
Rifampin (RMP)	NO	10 mg/kg **daily**	No change
Pyrazinamide (PZA)	Metabolites	20-25 mg/kg **daily**	25-35 mg/kg **three times per week**
Ethambutol (EMB)	YES	15-20 mg/kg **daily**	15-25 mg/kg **three times per week**

* Insufficient data if creatinine clearance >30% but <60%. Give standard doses, but monitor closely.

† No data on pharmacokinetics if patient is undergoing peritoneal dialysis. Give doses as for hemodialysis but monitor closely.

[15] American Academy of Pediatrics. *Tuberculosis*. *Red Book:2012 Report of the Committee on Infectious Diseases* (29th ed). Elk Grove Village, IL: American Academy of Pediatrics, 2012.

[16] Menzies R, Wong T. *Canadian Tuberculosis Standards*. 7th ed. Canadian Thoracic Society and the Public Health Agency of Canada; 2013.

Visual Acuity and Red/Green Colour Vision Testing

Clients taking ethambutol (EMB) are at risk for ocular toxicity. Failure to detect early signs of ocular toxicity and/or to discontinue EMB can result in permanent damage to the optic nerve and blindness.

- Document visual acuity and colour vision test results on the DOT record at baseline and monthly **THROUGHOUT** treatment with **EMB.**

- **Prior to each dose of EMB:**

    - Ask the client whether s/he has any of the symptoms listed below or has noticed any other changes in his/her vision. If there are any concerns, consult the RCDC and/or the treating physician **immediately.** Changes to the treatment might be necessary, for example, the EMB might need to be withheld until further vision testing can be done.

Symptoms associated with ocular toxicity can affect one or both eyes, and include:

- Sudden loss of vision (partial or complete);
- Blurred or foggy vision;
- Changes to colour vision and/or visual acuity;
- Pain with eye movement; and/or
- "Blind spots" in the field of vision (scotomata)

Visual Acuity Testing

Understanding Visual Acuity Test Results

Example: 20/40

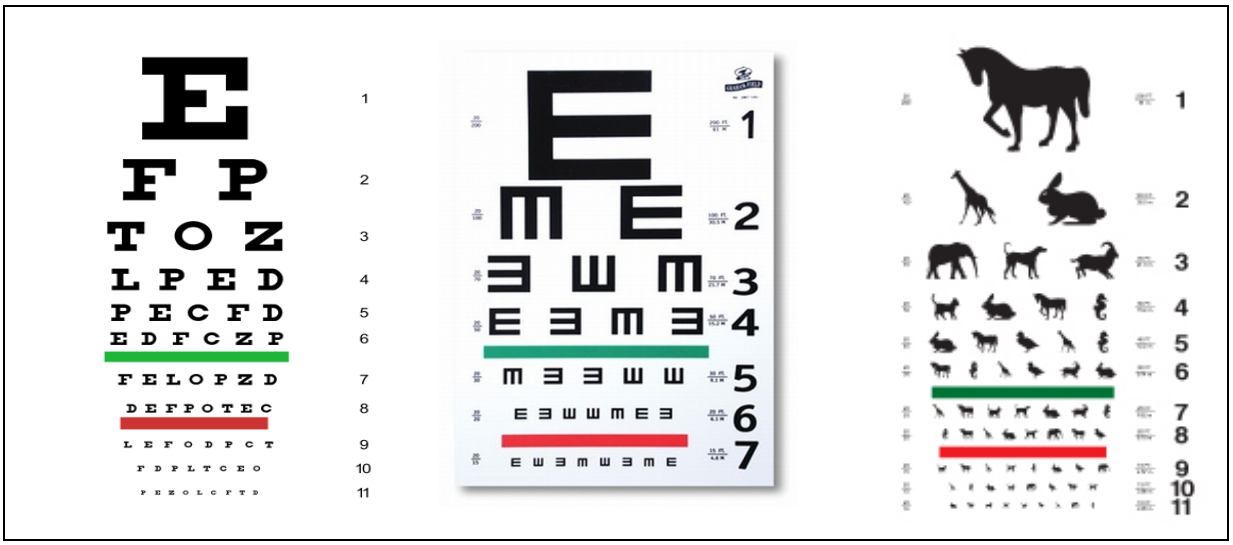
The top number (20) refers to the distance (in feet) the client was standing from the chart when the test was done. The bottom number refers to the distance (in feet) at which a person with normal eyesight could read the same line the client read correctly. Thus, a result of 20/40 means the line the client read from 20 feet away could be read by a person with normal vision from 40 feet away.

Testing Procedure

- Use a Snellen chart with numbers or pictures if a client cannot read letters (see **Figure 8-1**). When using a Snellen chart that features "E's", ask the client to use finger/hand gestures to identify the position of the characters.

Figure 8-1: Examples of types of Snellen eye charts for visual acuity testing

NOTE: DO NOT USE THESE IMAGES FOR TESTING



Adults and Children Over Five Years of Age

- If the client usually wears eye glasses or contact lenses, these should be worn during the test.
- Have the client sit or stand 6.1 metres (20 feet) from a Snellen eye chart.
- Test each eye individually. To do so, ask the client to keep both eyes open, and to cover one eye with the palm of his/her hand.
- Begin with the **TOP** line (largest). Ask the client to identify the characters on the first line, moving from left to right. Change lines downward, one at a time, until you reach the line on which the client can identify **LESS THAN** four of the six characters. Record the numbers adjacent to that line (e.g. 20/25) in the area provided at the bottom right-hand corner of the client's DOT record.
- Repeat the process for the other eye.

Children Three to Five Years of Age

- If the child usually wears glasses, these should be worn during the test.
- Have the child stand 3.1 meters (10 feet) away from a Snellen eye chart.
- Test each eye individually. To do so, ask the child to keep both eyes open, and have an adult cover one of the child's eyes.
- Begin with the **BOTTOM** line on the chart (smallest). If the child cannot identify **AT LEAST** four of the six characters correctly, move up the chart to the next larger line until you reach the line on which the child can identify **AT LEAST** four of the six characters. Record the numbers adjacent to that line (e.g. 20/25) in the area provided at the bottom right-hand corner of the child's DOT record.
- Repeat the process for the other eye.

Children under Three Years of Age

- Do the test when the child is alert.
- Evaluate the child's ability to fixate on an object, maintain fixation, and then follow the object in various gaze positions.
- Perform the test for each eye individually, and then repeat the evaluations with both of the child's eyes uncovered.
- Record findings in the area provided at the bottom right-hand corner of the child's DOT record.

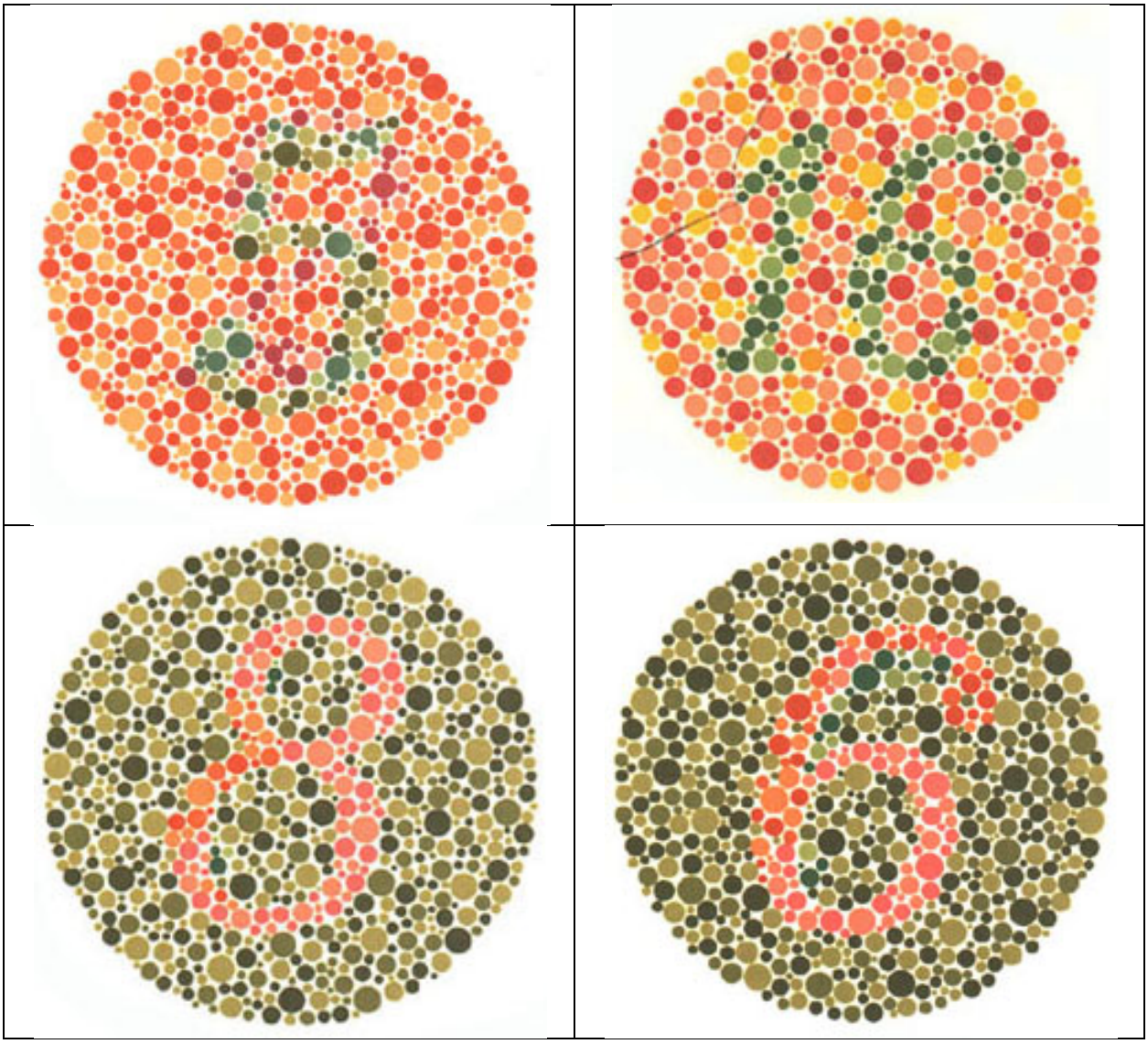
Red/Green Colour Discrimination Testing

Testing Procedure

- Use Ishihara plates (**Figure 8-2**) or the red/green lines on a Snellen eye chart (**Figure 8-1**).
- Ask the client to identify red and green within the images. If the client cannot name the numbers on the Ishihara plates, ask that s/he trace the outline of each number with his/her finger.
- Record results in the area provided at the bottom right-hand corner of the client's DOT record.

Figure 8-2: Ishihara plates for red/green colour discrimination testing

NOTE: WHEN PRINTED IN COLOUR, THESE IMAGES MAY BE USED FOR RED/GREEN COLOUR DISCRIMINATION TESTING.



Source:

American Academy of Ophthalmology Preferred Practice Committee
http://one.aao.org/CE/PracticeGuidelines/PPP_Content.aspx?cid=64e9df91-dd10-4317-8142-6a87eee7f517. Accessed March 20, 2014.

Travel during Active TB Treatment

Consult the RCDC as soon as a client indicates s/he plans to travel. Be prepared to discuss:

- Anticipated travel dates;
- Reason for travel;
- Arrangements for continuation of treatment (e.g., prescriptions, DOT provider, ongoing monitoring);
- Whether treatment should be held at any point during the anticipated travel period;
- Whether TB drugs should be sent with the client; and
- Whether to complete a TB Travel/Transfer Form (**TB Trans**).

When a **TB Trans** is required and travel is **within the same region** of Nunavut:

- Send the completed form and the client's current DOT record to the Supervisor of Community Health Programs (SCHP) of the destination community. Include a copy of the most recent blood test results if any were abnormal. For a client with respiratory TB, include a copy of the most recent sputum test results.

When a **TB Trans** is required and the **destination community is outside of the client's usual region**:

- Send the completed form and the client's current DOT record to the RCDC. Include a copy of the most recent blood test results if any were abnormal. For a client with respiratory TB, include a copy of the most recent sputum test results. The RCDC will forward the information to the destination community/jurisdiction. Some additional information is generally required for a client travelling outside of Nunavut.

Sample Active TB DOT Record (ATB-1) – Page 1 of 2

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Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Record of DOT Providers

Initials	Name	Designation

Please fill in OR affix label:
Last Name: ______
First Name: ______
Sex: ☐ M ☐ F ☐ Other: ______
Date of Birth: ___ (DD) ___ (MM) ___ (YY)
Chart #: ______
HCP #: ______
Community of Residence: ______

ACTIVE TB DOT RECORD – INITIAL PHASE OF TREATMENT

Diagnosis:	Date of Diagnosis:	Treatment Start Date:	Known Drug Allergies:

PART 1: PRESCRIPTION – DO NOT ADJUST TREATMENT WITHOUT CONSULTING THE RCDC

☐ DOT ______ days per week x ______ doses ☐ Other (specify):

Drug	Dose (mg)	Date Started	Date Stopped	Drug	Dose (mg)	Date Started	Date Stopped
Isoniazid (INH)				Ethambutol			
Vitamin B6 (pyridoxine)							
Rifampin							
Pyrazinamide (PZA)							

PART 2: DIRECTLY OBSERVED THERAPY (DOT) – ALL DOSES MUST BE DOT

Before every dose: do symptom inquiry* and ask about possibility of travel or pregnancy. **Consult the RCDC BEFORE ADMINISTERING DOSE** if any adverse effects, abnormal blood test results, or the client becomes pregnant. **Consult the RCDC** to facilitate continuation of treatment during travel or when three doses in a row are missed and/or if adherence falls below 80% in a calendar month. **At month end**: calculate adherence**, complete required monitoring (see **Part 3**) and send **ATB-1** to the RCDC, along with updated growth chart for clients under five years of age.

MONTH (specify)	DAY OF THE MONTH — Mark dates of observed doses with your initials. Mark dated of missed doses with an "O".																														Adherence^			
																															This Month		To Date	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	DOT	DUE	DOT	DUE

PART 3: MONITORING – Clients whose TB treatment is provided by a DOT must have a face-to-face assessment by a nurse, a nurse practitioner, or a physician AT LEAST MONTHLY

	Date	Weight^Ω (kg)	S.I.* (✓)	Blood Tests (date/list) *Refer to TB Manual for testing requirements*	Sputum Specimen(s) for TB Testing§ *Indicate smear / culture results*	PA and Lateral Chest X-Rays§ Physician order required to x-ray a pregnant client	Pregnant Y / N or N/A	Vision Testing (*when taking ethambutol*) Left Eye	Right Eye
Baseline					X3				
End of Week 1					X1				
End of Week 2					X1				
End of Week 3					X1				
End of Week 4					X1				
End of Week 8					X3				

*Ask about TB signs/symptoms, signs/symptoms of hepatotoxicity (extreme fatigue, stomach upset, nausea/vomiting, dark urine, yellow sclera, abdominal pain), and any other adverse effects.
**To calculate adherence as a percentage: # DOT doses divided by # doses DUE x 100. Example: seven doses observed divided by nine doses DUE (i.e. two doses missed) = 78% adherence.
^ DOT = # of doses that were observed, DUE = # of doses that should have been taken/observed according to the prescription.
Ω Confirm dosing remains at therapeutic level. Consult RCDC about failure to gain weight in a growing child or weight loss in an adult or adolescent case, and when dosage adjustment indicated.
§ **For AFB smear-positive respiratory cases:** test one specimen each week until AFB-smear negative and test one specimen each month until culture-negative. **Consult RCDC** about: culture-positive specimens; if AFB smears or cultures go from negative to positive; or if Week 8 sputum specimens are culture-positive.

GN Dept. of Health Active TB DOT Record (ATB-1) November 2016 **Page 1 of 2**

Sample Active TB DOT Record (ATB-1) – Page 2 of 2

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Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Record of DOT Providers		
Initials	Name	Designation

Please fill in OR affix label:
Last Name: ______________________
First Name: ______________________
Sex: ☐ M ☐ F ☐ Other: __________
Date of Birth: ___ (DD) ___ (MM) ___ (YY)
Chart #: ______________________
HCP #: ______________________
Community of Residence: ______________

ACTIVE TB DOT RECORD – CONTINUATION PHASE OF TREATMENT

PART 4: PRESCRIPTION – DO NOT ADJUST TREATMENT WITHOUT CONSULTING THE RCDC

☐ DOT 3 days per week (Mon/Wed/Fri) x 54 DOSES ☐ Other (specify):

Drug	Dose (mg)	Date Started	Date Stopped	Drug	Dose (mg)	Date Started	Date Stopped
Isoniazid (INH)							
Vitamin B6 (pyridoxine)							
Rifampin							

PART 5: DIRECTLY OBSERVED THERAPY (DOT) – ALL DOSES MUST BE DOT

Before every dose: do symptom inquiry* and ask about possibility of travel or pregnancy. **Consult RCDC BEFORE ADMINISTERING DOSE** if adverse effects, abnormal blood test results, or client becomes pregnant. **Consult RCDC:** if TB signs/symptoms worsen or recur; to arrange continuation of treatment during travel; or when three doses in a row are missed and/or if adherence falls below 80% in a calendar month. **At month end**: calculate adherence**; complete required monitoring (see **Part 6**); send **ATB-1** to RCDC with updated growth chart for clients under five years of age.

MONTH (specify)	DAY OF THE MONTH Mark dates of observed doses with your initials. Mark dates of missed doses with an "O".																														Adherence^			
																															This Month		To Date	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	DOT	DUE	DOT	DUE

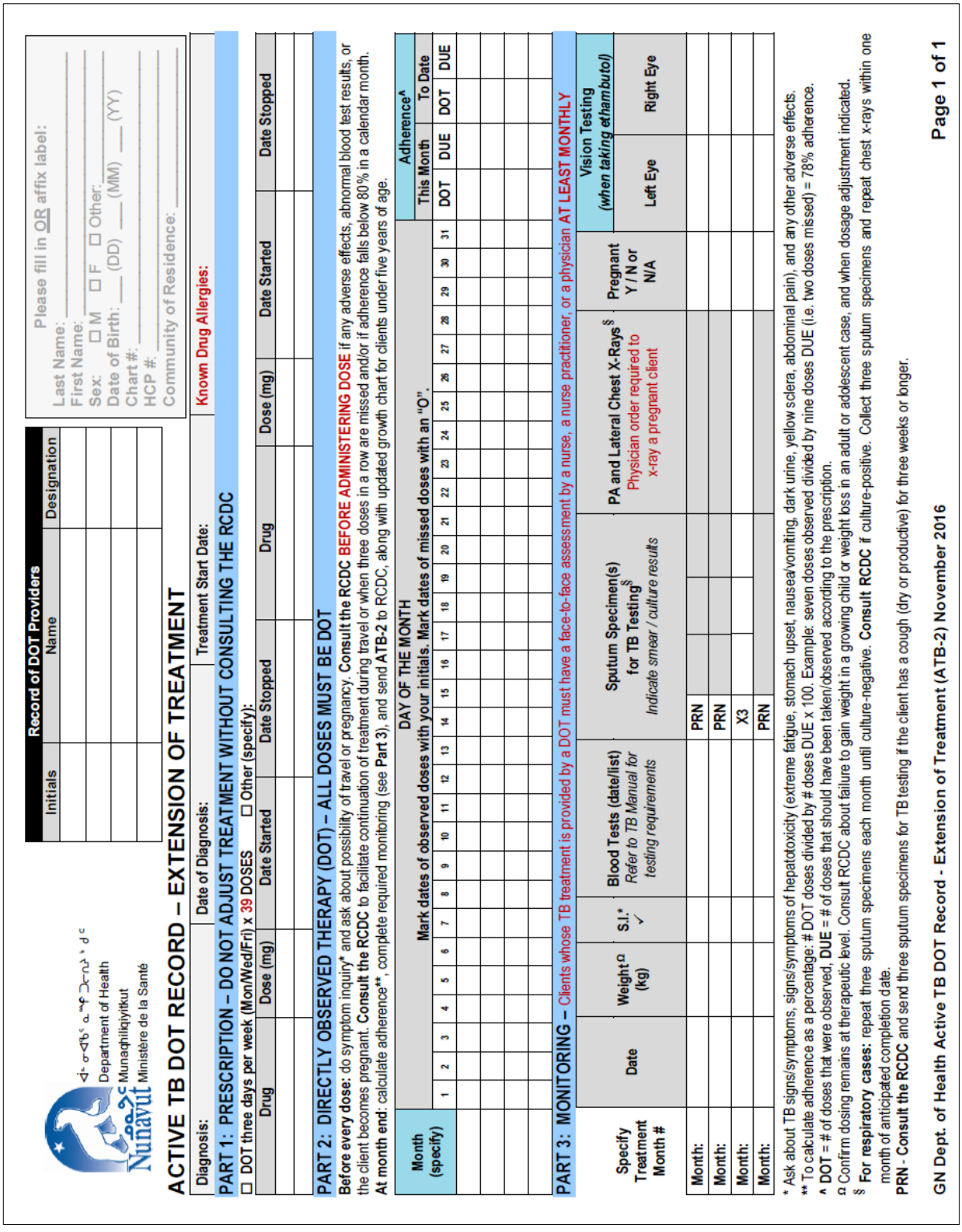
PART 6: MONITORING – Clients whose TB treatment is provided by a DOT must have a face-to-face assessment by a nurse, a nurse practitioner, or a physician AT LEAST MONTHLY

	Date	Weight** (kg)	S.I.* ✓	Blood Tests (date/list) *See Appendix D*	Sputum Specimen(s) for TB Testing§ *Indicate smear / culture results*				PA and Lateral Chest X-Rays§ Physician order required to x-ray a pregnant client	Pregnant Y / N / N/A	Vision Testing *(when taking ethambutol)*	
											Left Eye	Right Eye
Month 3					PRN							
Month 4					PRN							
Month 5					PRN							
Month 6					X3							
Month 7					PRN							

* TB signs/symptoms, symptoms of hepatotoxicity (extreme fatigue, stomach upset, nausea/vomiting, dark urine, yellow sclera, abdominal pain), and other adverse effects.
**Confirm dosing remains at a therapeutic level. Consult RCDC about failure to gain weight in a growing child or weight loss in an adult or adolescent case, and when dosage adjustment indicated.
§**For respiratory cases:** repeat three sputum specimens each month until culture-negative. **Consult RCDC** if culture-positive. Collect three sputum specimens and repeat chest x-rays within one month of anticipated completion date (usually Month 6).

GN Dept. of Health Active TB DOT Record (ATB-1) November 2016 **Page 2 of 2**

Sample Active TB DOT Record – Extended Treatment (ATB-2)



Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Record of DOT Providers

Initials	Name	Designation

Please fill in OR affix label:
Last Name: _____
First Name: _____
Sex: ☐ M ☐ F ☐ Other: _____
Date of Birth: ___ (DD) ___ (MM) ___ (YY)
Chart #: _____
HCP #: _____
Community of Residence: _____

ACTIVE TB DOT RECORD – EXTENSION OF TREATMENT

Diagnosis: | Date of Diagnosis: | Treatment Start Date: | **Known Drug Allergies:**

PART 1: PRESCRIPTION – DO NOT ADJUST TREATMENT WITHOUT CONSULTING THE RCDC

☐ DOT three days per week (Mon/Wed/Fri) x 39 DOSES ☐ Other (specify):

Drug	Dose (mg)	Date Started	Date Stopped	Drug	Dose (mg)	Date Started	Date Stopped

PART 2: DIRECTLY OBSERVED THERAPY (DOT) – ALL DOSES MUST BE DOT

Before every dose: do symptom inquiry* and ask about possibility of travel or pregnancy. **Consult the RCDC BEFORE ADMINISTERING DOSE** if any adverse effects, abnormal blood test results, or the client becomes pregnant. **Consult the RCDC** to facilitate continuation of treatment during travel or when three doses in a row are missed and/or if adherence falls below 80% in a calendar month. **At month end:** calculate adherence**, complete required monitoring (see **Part 3**), and send **ATB-2** to RCDC, along with updated growth chart for clients under five years of age.

Month (specify)	DAY OF THE MONTH – Mark dates of observed doses with your initials. Mark dates of missed doses with an "O". 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Adherence^ This Month DOT	DUE	To Date DOT	DUE

PART 3: MONITORING – Clients whose TB treatment is provided by a DOT must have a face-to-face assessment by a nurse, a nurse practitioner, or a physician **AT LEAST MONTHLY**

Specify Treatment Month #	Date	Weight^Ω (kg)	S.I.* ✓	Blood Tests (date/list) *Refer to TB Manual for testing requirements*	Sputum Specimen(s) for TB Testing§ *Indicate smear / culture results*	PA and Lateral Chest X-Rays§ Physician order required to x-ray a pregnant client	Pregnant Y / N or N/A	Vision Testing *(when taking ethambutol)* Left Eye	Right Eye
Month:				PRN					
Month:				PRN					
Month:				X3					
Month:				PRN					

* Ask about TB signs/symptoms, signs/symptoms of hepatotoxicity (extreme fatigue, stomach upset, nausea/vomiting, dark urine, yellow sclera, abdominal pain), and any other adverse effects.
** To calculate adherence as a percentage: # DOT doses divided by # doses DUE x 100. Example: seven doses observed divided by nine doses DUE (i.e. two doses missed) = 78% adherence.
^ **DOT** = # of doses that were observed, **DUE** = # of doses that should have been taken/observed according to the prescription.
Ω Confirm dosing remains at therapeutic level. Consult RCDC about failure to gain weight in a growing child or weight loss in an adult or adolescent case, and when dosage adjustment indicated.
§ **For respiratory cases:** repeat three sputum specimens each month until culture-negative. **Consult RCDC** if culture-positive. Collect three sputum specimens and repeat chest x-rays within one month of anticipated completion date.
PRN - Consult the RCDC and send three sputum specimens for TB testing if the client has a cough (dry or productive) for three weeks or longer.

GN Dept. of Health Active TB DOT Record - Extension of Treatment (ATB-2) November 2016 **Page 1 of 1**

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Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

ACTIVE TB TREATMENT OUTCOME FORM

Please fill in OR affix label:
Last Name: ______________________________
First Name: ______________________________
Sex: ☐ M ☐ F ☐ Other:__________
Date of Birth: ___ (DD) ___ (MM) ___ (YY)
Chart #: ______________________________
HCP #: ______________________________
Community of Residence: ______________

PART 1: TREATMENT AND ADHERENCE SUMMARY

Diagnosis: Date of Diagnosis: dd/mm/yy

BOX 1.1 – INITIAL PHASE Start Date: dd/mm/yy End Date: dd/mm/yy

Medication	Start Date	Frequency 7x/wk DOT or 5x/wk DOT	Number of DOT Doses Taken	Date Discontinued or Completed
	dd/mm/yy			dd/mm/yy
	dd/mm/yy			dd/mm/yy
	dd/mm/yy			dd/mm/yy
	dd/mm/yy			dd/mm/yy
	dd/mm/yy			dd/mm/yy

BOX 1.2 – CONTINUATION PHASE Start Date: dd/mm/yy End Date: dd/mm/yy

Medication	Number of Daily DOT Doses Taken	Number of 3x/wk DOT Doses Taken	Date Discontinued or Completed	Treatment completed? (circle)		Yes	No
			dd/mm/yy	Percentage of treatment completed (circle one)			
			dd/mm/yy				
			dd/mm/yy	> 80%	50-79%	< 50%	Not known
			dd/mm/yy				

Was treatment extended: ☐ No ☐ Yes If yes, why: ______________________________
Drug resistance at treatment start: ☐ No ☐ Yes ☐ Unknown
Drug resistance developed during the treatment ☐ No ☐ Yes (*specify*):______________________________
If drug resistance, check all drugs that apply: ☐ INH ☐ RMP ☐ PZA ☐ EMB ☐ Other (*specify*):______________________

PART 2: RESULT OF 8 WEEK SPUTUM CULTURE

Date of Specimen: dd/mm/yy Culture Result: ☐ Not done

PART 3: END OF TREATMENT EXAMINATIONS

PA and Lateral Chest X-Rays	
Date: dd/mm/yy	Result: ☐ Normal ☐ Abnormal (specify):

Sputum Specimen Testing

Specimen #1 Collection Date	Result (circle) include count if AFB smear is positive (e.g., 2+ or few)			Specimen #2 Collection Date	Result (circle) include count if AFB smear is positive (e.g. 2+ or few)			Specimen #3 Collection Date	Result (circle) include count if AFB smear is positive (e.g. 2+ or few)		
dd/mm/yy	AFB Smear	NEG	POS ____	dd/mm/yy	AFB Smear	NEG	POS ____	dd/mm/yy	AFB Smear	NEG	POS ____
	Culture	NEG	POS		Culture	NEG	POS		Culture	NEG	POS

CHN/PHN/TB Nurse Name / Signature: ______________________________ Date: ____ dd/mm/yy ______

PART 4: TREATMENT OUTCOME AND SURVEILLANCE RECOMMENDATION (TO BE COMPLETED BY RCDC)

☐ Cure – negative culture at completion of treatment (as defined by Public Health Agency of Canada)
☐ Treatment completed – without culture at the end of treatment
☐ Death before or during treatment, *specify date of death*: __dd/mm/yy__
  ☐ TB was the cause of death ☐ TB contributed to death but was not the underlying cause ☐ TB did not contribute to death
☐ Transferred to other territory/province/country – outcome of treatment unknown
  Specify date and new territory/province/country: ______________________________
☐ Failure – confirmed or recurrent positive cultures after 4 or more months of treatment
☐ Treatment discontinued due to adverse event (*specify*): ______________________________
☐ Treatment ongoing
☐ Absconded (*lost to follow-up before completion of 80% of doses*)
  ☐ Unknown ☐ Other (*specify*):______________________________

SURVEILLANCE RECOMMENDATION: ☐ Surveillance not required ☐ Transferred to ***Surveillance Protocol***, first assessment due: ____dd/mm/yy____

RCDC Name / Signature: ______________________________ Date: ______ dd/mm/yy ______

GN Dept. of Health Active TB Treatment Outcome Form (ATB-3) – November 2016 **Page 1 of 1**

Sample Tuberculosis Travel/Transfer Form (TB Trans)

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Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Please fill in OR affix label:
Last Name: ____________
First Name: ____________
Sex: ☐ M ☐ F ☐ Other: ____________
Date of Birth: ___ (DD) ___ (MM) ___ (YY)
Chart #: ____________
HCP #: ____________
Community of Residence: ____________

TUBERCULOSIS TRAVEL / TRANSFER FORM

PART 1: TRAVEL DETAILS ADVISE CLIENT WHERE TO REPORT WITH HIS/HER MEDICATIONS FOR DIRECTLY OBSERVED THERAPY

Traveling to: ____________
House #: ____________
Boarding home: ____________
Hotel/Other: ____________
Contact Person: ____________
Phone: ____________

Departure date: ______ dd/mm/yy ______
Reason for travel (e.g., medical / pleasure / work): ____________
Traveling companion(s): ____________
Expected length of trip: ____________
Expected date of return: ______ dd/mm/yy ______

PART 2: CLINICAL INFORMATION

Treatment for Active TB				
Active TB Disease *(specify type)* ________	Date of Diagnosis	Treatment Start	Current Sputum AFB Smear Status include count if AFB smear is positive (e.g. 2+ or few)	Current Sputum TB Culture Status (circle one)
TB Drug Resistance ☐ No ☐ Yes ☐ Unknown	dd/mm/yy	dd/mm/yy	Collection Date: dd/mm/yy Result (*circle*): Positive ______ Negative	Collection Date: dd/mm/yy Result (*circle*): Positive Negative Pending

Window Period Prophylaxis					
	Treatment Start	Dates/Results of Initial Post-Exposure Tests			Date Repeat Tests Due
Window Period Prophylaxis	dd/mm/yy	TST	dd/mm/yy	_____ mm	dd/mm/yy
		Chest X-Ray	dd/mm/yy	result	dd/mm/yy

Treatment for Latent TB Infection			
	Treatment Start	Estimated Completion Date	Doses Left to Complete
Latent TB Infection	dd/mm/yy	dd/mm/yy	

PART 3: TREATMENT INFORMATION

Medications with client: ☐ No ☐ Yes If yes, number of doses provided: ________ Blister packed? ☐ No ☐ Yes
Last dose observed: ______ dd/mm/yy ______ Next observed dose due: ______ dd/mm/yy ______

PART 4: MONITORING INFORMATION

Date of most recent blood tests: ___ dd/mm/yy ___ Next blood tests due (*specify*): ____________ Date due: ___ dd/mm/yy ___
Other monitoring due (*specify with dates due*): ____________

PART 5: ATTACHED INFORMATION

☐ Copy of most recent sputum test results (for client with respiratory TB) ☐ Copy of most recent blood test results if abnormal
☐ DOT record ☐ Other (*specify*):

PART 6: COMMENTS

For travel within same region: send to SCHP of destination community. For travel outside of region/ territory: send to RCDC.

CHN/PHN/TB Nurse Name & Signature: ____________ Date: ___ dd/mm/yy ___ Phone: ____________

GN Dept. of Health TB Travel/Transfer Form (TB Trans) – November 2016 **Page 1 of 1**

SECTION 9

Contact Investigation, Window Period Prophylaxis (WPP) and Source Case Investigation

Contact Investigation

A contact investigation is a systematic processes for identifying, prioritizing and screening people that have been exposed to someone with active TB.

DO NOT begin a contact investigation without consulting the RCDC.

Steps in TB Contact Investigation

Step One: Consult the RCDC

- Confirm the infectious period for the case and which contacts to test during the initial investigation.

Table 9-1: General guidelines for which contacts to include in the initial phase of a contact investigation, based on case characteristics[5]

Case Characteristics		Contacts to Test Initially
Laryngeal TB	• All cases	• Type 1, Type 2 and high priority contacts. • Consider including Type 3 contacts from the outset.
Respiratory TB	• **ANY** sputum AFB smear is positive **AND/OR** • Cavity on chest x-ray	• Type 1, Type 2 and high priority contacts.
Respiratory TB	• **ALL** sputum AFB smears are negative **AND** • **NO** cavity on chest x-ray	• Type 1 and high priority contacts.

For contact category definitions (types), see:
'Contact Investigation and Source Case Investigation' in Section 2 – Understanding TB

NOTE: Contact category definitions are also described on the **Tuberculosis Investigation Record (TB-IR)**.

[5]Adapted from Menzies R, Wong T. *Canadian Tuberculosis Standards*. 7th ed. Canadian Thoracic Society and the Public Health Agency of Canada; 2013.

Step Two: Identify High-Priority Contacts

- Interview the case **within 1 business day** to identify **high-priority contacts**. Review the **Keeping Your Family & Friends Safe from TB** fact sheet with the case during the interview.

  High-priority contacts generally include:

  - Type 1 contacts;
  - Symptomatic contacts (e.g. any category of contact with: a cough for longer than three weeks, weight loss, fever/night sweats);
  - Contacts under five years of age; and
  - Immunosuppressed contacts, such as those with: HIV infection; end-stage renal disease; organ transplant (related to immune suppressive therapy); and/or treatment with TNA alpha inhibitors and/or other immune suppressive drugs/therapies, such as corticosteroids (equivalent of equal to or more than 15 mg/day of prednisone for one month or more) or chemotherapy.

  Ask questions to help identify where the case has spent time, and who s/he has spent time with, such as:

  - Who else do you know that is also sick and/or coughing?
  - Where do you stay overnight?
  - Who else stays/lives/sleeps there? How often, and for how long?
  - Where do you spend time (e.g., store, drop-in centre, school, library, community centre, visitor's centre, airport, day care, restaurant, hotel)? How often do you go and how long do you stay?
  - Who do you spend time with? Visit with? Play cards with? Camp/travel with? Smoke with? Drink with? Toke with?
  - Who do you spend the most time with each day? Each week?
  - Where have you traveled to? Where did you stay? How long did you stay? Who else was there?
  - When people visited, who do they bring with them? Any children?

- Who are your parents, grandparents, aunties, uncles, cousins, other relatives? Where do they live? How often do you see them?

- Which family and community gatherings have you attended?

- Who in your family and friends has ever had TB? (Asking this question can be helpful for identifying whether this case could be linked to another case.)

- Record information about high-priority contacts and any other contacts identified by the case on a Tuberculosis Investigation Record (**TB-IR**). Ensure contacts in other jurisdictions are clearly identified on the record. **Send the TB-IR to the RCDC.**

- Consult with the RCDC to confirm high-priority contacts, and begin screening high-priority contacts **within 1 week** (see Step Three). See the end of this section for a sample contact notification letter.

- Continue gathering information about high-priority contacts each time you meet with the case (e.g. for DOT).

  - Remind the case (and/or the parent/guardian) that you want to make sure his/her family and friends are healthy.

  - Ask open-ended questions to prompt the case for additional information about his/her activities and contacts.

  - Test additional high-priority contacts as soon as possible.

  - Notify the RCDC when additional high-priority contacts are added to the **TB-IR.**

Step Three: Begin First Round of Contact Screening

- Document all attempts to reach/screen contacts.

- Initiate a **Tuberculosis Assessment Form** (**TBAF**) for each contact.

- Screen and follow-up contacts using the **TB Contact Testing Flowchart**.

  NOTES:

  - **A TST result of 5 MM OR MORE is considered "positive" for a contact.**

- Chest x-rays taken within the prior month may be used in place of taking new x-rays provided the contact is **asymptomatic** **AND** the findings were reported as "**normal**".

- **A physician order is required prior to taking shielded chest x-rays of a client who is or might be, pregnant.**

- Window period prophylaxis is generally recommended for contacts under five years of age, and may be recommended for immunocompromised contacts on a case-by-case basis (see Window Period Prophylaxis [WPP]).

- In situations where more than eight weeks have passed since a contact was last exposed to an infectious case, only one round of screening is needed, provided the contact is at least six months of age when the TST is done.

- Update the **TB-IR** with testing dates and results/findings as they become available.

- Send the **TB-IR** to the RCDC once the majority of contacts have completed screening.

- Consult the RCDC about:

  - Contacts with:

    - Symptoms;
    - New positive TST results;
    - Abnormal chest x-ray findings;
    - Positive AFB smears or mycobacterial cultures.

  - Contacts who:

    - Did not return for TST reads;
    - Refused screening;
    - Could not be found; and/or
    - Did not respond to attempts to provide screening.

Step Four: Review Findings from First Round of Screening with the RCDC

Decisions on when and how to expand a contact investigation are made by the RCDC, in consultation with the Territorial Communicable Disease Specialist, and/or the CMOH or Deputy CMOH. **DO NOT expand a contact investigation without consulting the RCDC.**

If the contact investigation is expanded:

- Re-interview the case to identify additional contacts;
- Update the **TB-IR** with information on additional contacts, and send it to the RCDC;

- Begin screening additional contacts as soon as possible as per Step Three.

Step Five: Complete Second Round of Contact Screening

NOTE: A second round of screening is **NOT REQUIRED** for contacts who meet the criteria listed below **UNLESS** they present with TB signs/symptoms:

- Contacts with prior active TB or LTBI (treated or untreated);

- Contacts diagnosed with active TB or LTBI during the first round of screening; and

- Contacts whose first round of screening was done at least eight weeks after their last exposure to the case.

For all other contacts:

- Document all attempts to reach/screen contacts.

- Re-screen those whose initial TST results were **less than 5 mm** of induration as described on the **TB Contact Testing Flowchart** once at least eight weeks have passed since last contact with the case **AND** the contact has reached at least six months of age.

  NOTES:

  - **A TST result of 5 MM OR MORE is considered "positive" for a contact.**

  - Chest x-rays taken within the prior month may be used in place of taking new x-rays provided the contact is **asymptomatic AND** the results were reported as "**normal**".

- Update the **TB-IR** with testing dates and results as they become available, and update the "current status" of each contact.

- Send the **TB-IR** to the RCDC once the majority of contacts have completed screening.

-

- Consult the RCDC about:

    - Contacts with:
        - Symptoms;
        - New positive TST results;
        - Abnormal chest x-ray findings;
        - Positive AFB smears or mycobacterial cultures.

    - Contacts who:
        - Did not return for TST reads;
        - Refused screening;
        - Could not be found; and/or
        - Did not respond to attempts to provide screening.

Step Six: Review Findings from Second Round of Screening with the RCDC

After reviewing findings from the second round of screening, the RCDC, in consultation with the Territorial Communicable Disease Specialist and/or the CMOH/DCMOH, will determine whether the contact investigation should be continued, expanded or closed. **DO NOT continue, expand, or close a contact investigation without consulting the RCDC.**

- If the RCDC recommends that the contact investigation be closed, proceed to Step Seven.

- If the RCDC recommends that the contact investigation be expanded:
    - Re-interview the case to identify additional contacts;
    - Update the **TB-IR** with information on additional contacts and send it to the RCDC;
    - Begin screening additional contacts as soon as possible;
    - Update the **TB-IR** with testing dates and results/findings as they become available.

Step Seven: Close the Contact Investigation

Once the RCDC recommends that the contact investigation be closed:

- Ensure the "current status" section of the **TB-IR** is completed for every contact. **DO NOT** designate contacts whose screening was not completed as "CLOSED".
- Send an updated copy of the **TB-IR**, marked "FINAL", to the RCDC and save a copy to the designated location on the health centre shared drive.
- File the original copy of the "FINAL" **TB-IR** in the client's medical chart.

TB Contact Testing Flowchart

TB CONTACT TESTING FLOWCHART

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Ministère de la Santé

USE GENERAL TB TESTING FLOWCHART FOR ALL OTHER CLIENTS

Complete Part 1 through Part 4 of a Tuberculosis Assessment Form (TBAF)

NO TB SIGNS / SYMPTOMS

Determine if TST is appropriate (see yellow text box).

DO NOT administer TST if:

- Under six months of age;
- Allergic to any component of Tubersol® (Tuberculin Purified Protein Derivative [Mantoux]) or its container, or an anaphylactic or other allergic response to a previous TST;
- Previous active TB or LTBI;
- Documented prior positive TST or IGRA result; or
- Prior blistered TST reaction.

NOTE: TST should generally be deferred if measles or other live virus immunization within past four weeks.

TST appropriate

- Administer and document TST.
- Advise client to **return in 48-72 hours** for TST read.
- If contact is under five years of age or immunosuppressed*, proceed to CLINICAL INVESTIGATIONS and consult RCDC**.

AFTER 48-72 hours:

- Inspect injection site for **induration**.
- Record results in millimetres (mm).
- Follow-up according to TST reaction size (see blue text box).

TST NOT appropriate

Proceed to CLINICAL INVESTIGATIONS

TST RESULT FOLLOW-UP FOR CONTACTS

0 mm to 4 mm → **NEGATIVE TST****

≥ 5 mm → **POSITIVE TST:** Proceed to CLINICAL INVESTIGATIONS

TB SIGNS / SYMPTOMS

- Initiate **AIRBORNE PRECAUTIONS IF:**
  - Symptoms include cough for three weeks or longer **AND/OR**
  - Chest x-ray is abnormal (e.g. cavitary disease) **OR**
  - Sputum AFB smears or mycobacterial cultures are positive.
- **Consult RCDC** about CLINICAL INVESTIGATIONS.

CLINICAL INVESTIGATIONS

- Do PA and lateral chest x-rays.^
- Collect **THREE** sputum specimens for TB testing.
- Administer TST if appropriate (see yellow text box) and not already done; advise client to return in 48 to 72 hours for TST read.
- Do baseline blood tests if window period prophylaxis (WPP)** or treatment for active TB or LTBI might be recommended.◘
- Complete a **TB Prescription Request/Change Form** (**TBPRC**).

TST FOLLOW-UP:

- Inspect injection site for **induration** after 48 to 72 hours.
- Record result in millimetres (mm) on **TBAF**.

OTHER FOLLOW-UP:

- Email or fax completed **TBAF** and **TBPRC** to RCDC.
- Monitor for results of chest x-rays, sputum testing, and (if done) blood tests. **Consult RCDC** if any test results are abnormal.
- **Consult RCDC** about prescription if WPP or treatment for active TB or LTBI is recommended.
- If initial TST result was less than 5 mm, repeat TST and assess for TB signs/symptoms once eight weeks have passed since last contact with the case <u>and</u> the contact has reached six months of age. Update care plan and **Tuberculosis Investigation Record** (**TB-IR**) based on findings. **DO NOT discontinue WPP prior to consulting RCDC**.

* Clients with: HIV infection, end-stage renal disease, organ transplant (related to immune suppressive therapy), and/or treatment with TNA alpha inhibitors and/or other immune suppressive drugs/therapies, such as corticosteroids (equivalent of equal to or more than 15 mg/day of prednisone for one month or more) or chemotherapy.

Window period prophylaxis (WPP) might be indicated for contacts under five years of age and contacts with substantial immunosuppression (see **Section 9 – Contact Investigation, Window Period Prophylaxis and Source Case Investigation).

^ Chest x-rays taken within the prior month may be used in place of taking new x-rays if the contact is asymptomatic **AND** the findings were reported as "normal". A physician order is required prior to taking shielded chest x-rays of a client who is or might be, pregnant.

◘ CBC, creatinine, ALT, AST, total bilirubin, uric acid, HIV, hepatitis B antigen (HbsAg), hepatitis C. **NOTE**: Do not test for HIV or hepatitis C if previously positive. Do not repeat HbsAg if client is known chronic hepatitis B carrier. Results from blood tests done within the prior month can be used as baseline measurements provided they are within normal limits for the client's age.

Sample Tuberculosis Investigation Record (TB-IR)

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Department of Health
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Ministère de la Santé

TUBERCULOSIS INVESTIGATION RECORD

UPDATED: ______ dd/mm/yy ______

☐ **TB Contact Investigation:** Use the **TB Contact Testing Flowchart.** Contacts with prior active TB or LTBI (treated or untreated), and contacts diagnosed with active TB or LTBI during the first round of testing do not require a second round of testing unless they present with TB signs/symptoms. A TST result of equal to or greater than 5 mm of induration is considered "positive".

☐ **Source Case Investigation:** Use the **General TB Testing Flowchart.** Do a single round of screening only.

Case Name (Last, First)			DOB (dd/mm/yy)		Community	Diagnosed (dd/mm/yy)				Type of TB		Status at Time of Diagnosis (✓ all that apply) ☐ AFB Smear-Negative ☐ AFB Smear-Positive: + _____ (include count if AFB smear is positive) ☐ Culture Pending ☐ Culture-Positive ☐ Culture-Negative ☐ Cavitary TB on Chest X-Ray						
#	Contact Name (Last, First)	DOB & Age	Date of Last Exposure & HCP #	Sex	Contact Type* & Relationship to Case	S/S**	Last Prior TST Date & Result (mm)	Post Exposure TSTs	Test Date	Result	Chest X-Ray Date & Result‡	Sputum Specimen Dates & Results◆						Current Status
		dd/mm/yy	dd/mm/yy				dd/mm/yy	TST 1	dd/mm/yy	mm	dd/mm/yy	dd/mm/yy		dd/mm/yy		dd/mm/yy		☐ ______ ☐ Closed ☐ Lost to Follow-up
							mm	TST 2	dd/mm/yy	mm		S	C	S	C	S	C	
		dd/mm/yy	dd/mm/yy				dd/mm/yy	TST 1	dd/mm/yy	mm	dd/mm/yy	dd/mm/yy		dd/mm/yy		dd/mm/yy		☐ ______ ☐ Closed ☐ Lost to Follow-up
							mm	TST 2	dd/mm/yy	mm		S	C	S	C	S	C	
		dd/mm/yy	dd/mm/yy				dd/mm/yy	TST 1	dd/mm/yy	mm	dd/mm/yy	dd/mm/yy		dd/mm/yy		dd/mm/yy		☐ ______ ☐ Closed ☐ Lost to Follow-up
							mm	TST 2	dd/mm/yy	mm		S	C	S	C	S	C	
		dd/mm/yy	dd/mm/yy				dd/mm/yy	TST 1	dd/mm/yy	mm	dd/mm/yy	dd/mm/yy		dd/mm/yy		dd/mm/yy		☐ ______ ☐ Closed ☐ Lost to Follow-up
							mm	TST 2	dd/mm/yy	mm		S	C	S	C	S	C	
		dd/mm/yy	dd/mm/yy				dd/mm/yy	TST 1	dd/mm/yy	mm	dd/mm/yy	dd/mm/yy		dd/mm/yy		dd/mm/yy		☐ ______ ☐ Closed ☐ Lost to Follow-up
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		dd/mm/yy	dd/mm/yy				dd/mm/yy	TST 1	dd/mm/yy	mm	dd/mm/yy	dd/mm/yy		dd/mm/yy		dd/mm/yy		☐ ______ ☐ Closed ☐ Lost to Follow-up
							mm	TST 2	dd/mm/yy	mm		S	C	S	C	S	C	
		dd/mm/yy	dd/mm/yy				dd/mm/yy	TST 1	dd/mm/yy	mm	dd/mm/yy	dd/mm/yy		dd/mm/yy		dd/mm/yy		☐ ______ ☐ Closed ☐ Lost to Follow-up
							mm	TST 2	dd/mm/yy	mm		S	C	S	C	S	C	
		dd/mm/yy	dd/mm/yy				dd/mm/yy	TST 1	dd/mm/yy	mm	dd/mm/yy	dd/mm/yy		dd/mm/yy		dd/mm/yy		☐ ______ ☐ Closed ☐ Lost to Follow-up
							mm	TST 2	dd/mm/yy	mm		S	C	S	C	S	C	

NOTE: Chest x-rays taken within the prior month may be used in place of taking new x-rays provided the contact is asymptomatic **AND** the results were reported as "normal". A physician order is required to x-ray a pregnant client.

***Type 1 - HOUSEHOLD:** Slept in the same household as the case, e.g.: family, room-mates, boarders, "couch surfers", overnight visitors. **Type 2 - CLOSE NON-HOUSEHOLD:** Shared breathing space with the case daily, e.g.: caregivers, regular sexual partners, close friends, extended family, daycare, primary/secondary school classroom contacts, coworkers who work in close proximity, particularly in small rooms. **Type 3 - CASUAL/COMMUNITY:** Spent time with the case less frequently than household or close non-household contacts, e.g.: high school classmates who share fewer courses with the case, classmates in college/university classes, less exposed colleagues at work, members of a club, team, weekly children's playgroup or other social/recreational/religious group, extended family members who are seen occasionally, other students on a school bus.

****Signs/Symptoms:** Cough = C, Fever = F, Night sweats = NS, Weight Loss = WL, Other = O ‡**Chest X-Ray Results:** Normal = N, Abnormal = ABN ◆**Sputum Results:** AFB Smear-Negative = S-, AFB Smear-Positive = S+, Culture-Negative = C-, Culture-Positive = C+

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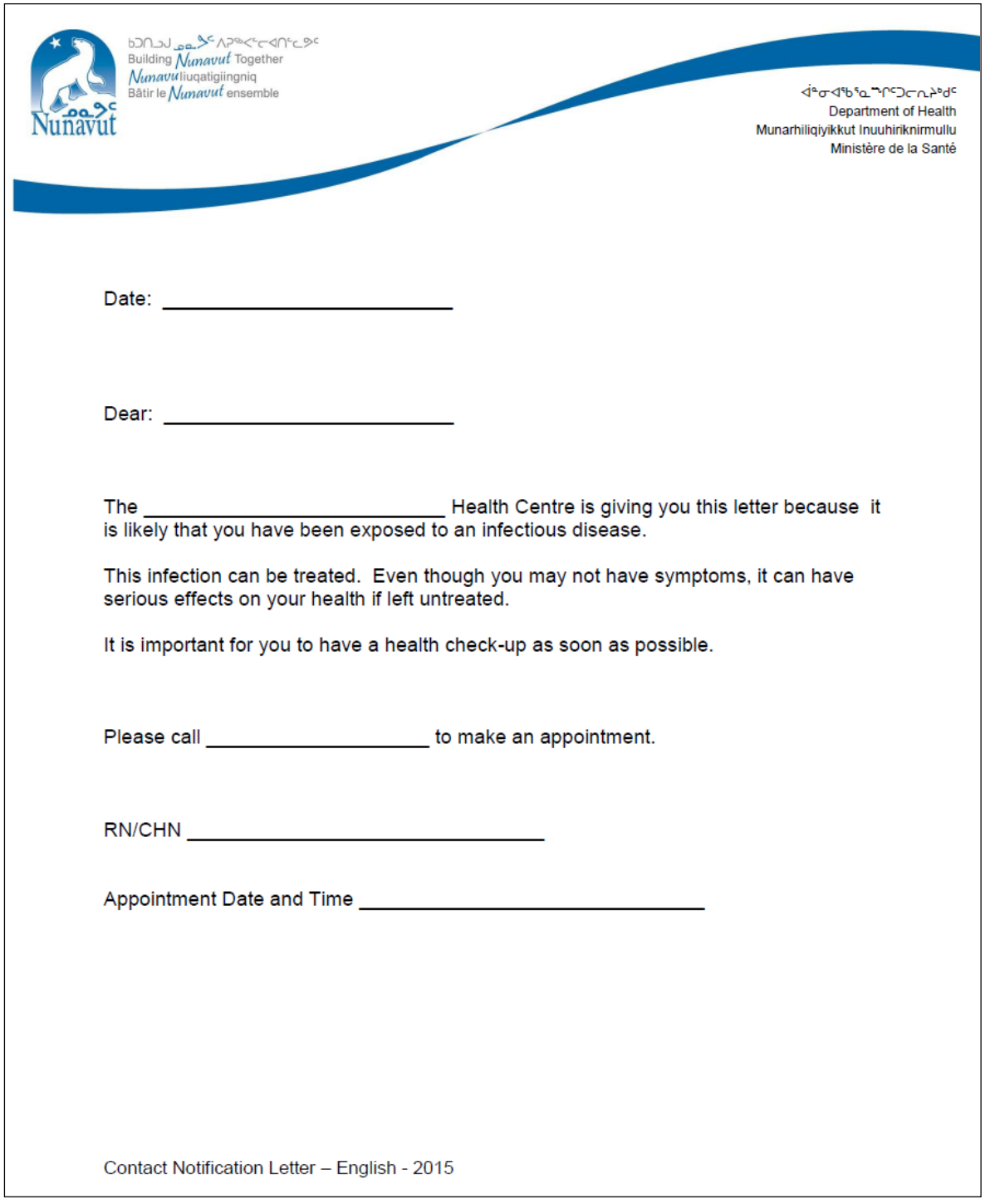
Sample Contact Notification Letter



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Building Nunavut Together
Nunavuliuqatigiingniq
Bâtir le Nunavut ensemble

Nunavut

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Department of Health
Munarhiliqiyikkut Inuuhiriknirmullu
Ministère de la Santé

Date: _____

Dear: _____

The _____ Health Centre is giving you this letter because it is likely that you have been exposed to an infectious disease.

This infection can be treated. Even though you may not have symptoms, it can have serious effects on your health if left untreated.

It is important for you to have a health check-up as soon as possible.

Please call _____ to make an appointment.

RN/CHN _____

Appointment Date and Time _____

Contact Notification Letter – English - 2015

Window Period Prophylaxis (WPP)

Window period prophylaxis (WPP) is also known as primary prophylaxis. WPP is used in contact investigations to protect children under five years of age from developing active TB during the 'window period' between when they were exposed to an infectious case and when their TST or IGRA results can be considered reliable. WPP may also be recommended for some immunocompromised contacts on a case-by-case basis by a Respirologist or Infectious Disease specialist.

The window period for most healthy people who are exposed to infectious TB is between two to eight weeks long. TST results can be unreliable in contacts under six months of age. Thus, the window period for an infant contact lasts until s/he reaches six months of age **AND** at least eight weeks have passed since the last exposure to the infectious case.

WPP is not mandatory but is strongly recommended for those at very high risk of developing severe forms of TB disease. In Nunavut, WPP is done with directly observed therapy (DOT).

WPP is **NOT APPROPRIATE** for:

- Symptomatic contacts (until active TB has been ruled out);
- Contacts with a history of active TB or LTBI (treated or untreated); or
- Contacts more than five years of age (unless they are substantially immunosuppressed).

Regardless of whether a contact begins WPP, it is essential that s/he (or the parent/guardian) remains alert for TB signs/symptoms and reports to a health care provider quickly should any develop.

Steps in Window Period Prophylaxis (WPP)

Step One: Discuss WPP with the Client (and/or the Parent/Guardian)

- Provide client (and/or the parent/guardian) with the TST results (if done) and chest x-ray findings.
- Review the following fact sheets with the client (and/or the parent/guardian):
  - **Window Period Prophylaxis (WPP);**
  - **TB Drugs and Tylenol and Acetaminophen; and**
  - **TB Drugs and Your Liver.**

- Determine whether the client (and/or the parent/guardian) agrees to WPP.
  If WPP is accepted, proceed to Step Two**.**

  If WPP is declined:

  - Emphasize the importance of:
    - Monitoring for TB signs/symptoms, and reporting to a health care provider quickly should any develop (see **Table 9-2**), and
    - Completing follow-up tests.
  - Advise the client (and/or the parent/guardian) that s/he will be notified when follow-up screening is due.
  - Document the date WPP was discussed and declined in the '*Progress Notes*' and '*Problems List*' in the client's medical chart.
  - Update the client's test results and status on the Tuberculosis Contact Investigation Form (**TB-IR**), and send it to the RCDC.
  - Proceed to Step Four.

Young children and people with immunosuppression can develop very dangerous forms of active TB (e.g. TB meningitis) within weeks of exposure to infectious TB. Careful and frequent monitoring for TB signs/symptoms is especially important when WPP is indicated but declined or is started and then discontinued prematurely.

Table 9-2: TB signs/symptoms

Systemic TB signs/symptoms	Signs/symptoms of respiratory TB disease	Signs/symptoms of non-respiratory TB disease
• Fever* • Night sweats* • Weight loss or failure to gain weight (i.e. failure to thrive) • Fatigue • Loss of appetite	Systemic TB signs/symptoms **AND** • Cough > 3 weeks (dry or productive) • Chest pain • Shortness of breath • Bloody phlegm (hemoptysis)	Systemic TB signs/symptoms **AND** pain or dysfunction at the involved site, e.g.: • Swollen lymph nodes (TB lymphadenitis) • Headache, irritability, photophobia, stiff neck (TB meningitis)

*Can be absent in the very young and the elderly

Step Two: Prepare to Begin WPP

- Ensure all baseline testing has been done, including:
  - PA and lateral chest x-rays;
  - Three sputum specimens for TB testing (if possible); and
  - Blood tests: AST, ALT, total bilirubin, CBC, uric acid, creatinine, hepatitis B surface antigen (HbsAg), hepatitis C, HIV serology.

    NOTE: HbsAg, hepatitis C, and HIV testing is **NOT REQUIRED** for clients with pre-existing positive test results. Results from blood tests done within one month prior can be used as baseline measurements provided they are within normal limits for the client's age.
- Consult the RCDC to obtain a prescription for WPP.
- Advise the client (and/or the parent/guardian) that WPP can begin once a prescription has been received.

Step Three: Begin WPP

Once a prescription has been received, initiate an **LTBI DOT Record** (**LTBI-1***).* To avoid delays in treatment starts, use stock medications rather than waiting for medications to arrive from the pharmacy.

Before administering the first dose of WPP:

- Ensure baseline blood test results are within normal limits for the client's age. Consult the RCDC about abnormal baseline results, including new positive HbsAg, hepatitis C or HIV tests.

- Confirm the client's weight and document it on the **LTBI-1**. Compare the current weight against the prescription dosage to ensure the dosing is adequate (see WPP Treatment Regimens and Recommended TB Drug Dosages). Consult the RCDC if dosage adjustments are required.

- Review information with the client (and/or the parent/guardian) on:

    - The treatment regimen;

    - Potential TB drug side effects/adverse responses to WPP (see **Table 9-3**), and how to contact the TB nurse or CHN should any occur;

    - The need to ensure the nurse and the pharmacy are aware of all medications the client is taking or starts taking during WPP, so that potential drug-drug interactions can be identified (see **Table 9-4**);

    - The importance of avoiding acetaminophen (Tylenol®) and/or alcohol during WPP; and

    - The importance of adherence to WPP.

After administering the first dose of WPP:

- Document the initial treatment dose on the **LTBI-1**; and

- Confirm a plan for the next DOT dose.

    NOTES:

    - **Preparation of doses of TB drugs is a nursing function.** DOT workers **ARE NOT** authorized to prepare TB drugs or dispense doses from stock medication supplies. For more information, see **Section 16 - Directly Observed Therapy (DOT)**.

    - **There must be at least two calendar days between twice-a-week doses of INH**. For this reason, WPP with INH is usually given on Mondays and Thursdays. When a twice-weekly dose is not given on a Monday (for example, when a DOT dose is missed or a statutory holiday falls on a Monday), give treatment on Tuesday and Friday that week. When a twice-weekly dose is missed on a Thursday, it can be

taken the next day (Friday). Consult the RCDC if you are uncertain whether/when to give a next dose.

- **Daily WPP with rifampin is given five days a week (Monday to Friday)**. When a dose of rifampin is missed on a weekday during WPP, it does not need to be taken (made up) on the weekend.

For information on DOT, the use of incentives and enablers, and helpful information on administering TB drugs, see:
Section 16 – Directly Observed Therapy (DOT)

Table 9-3: Common and/or important side effects/adverse responses associated with isoniazid and rifampin[6]

TB drug	Common side effects / adverse responses	Uncommon but important side effects / adverse responses
Isoniazid (INH)	• Rash • Hepatitis † • Neuropathy • Nausea/vomiting* Ψ • Fatigue Ψ • Drowsiness, headache • Mild hair loss	• Central nervous system toxicity** • Anemia
Rifampin	• Drug interactions • Rash • Saliva, urine, and tears can become orange/red in colour (harmless but could stain contact lenses)	• Hepatitis † • 'Flu-like' illness • Neutropenia • Thrombocytopenia

† Symptoms can include loss of appetite, nausea and/or vomiting, abdominal discomfort, unexplained fatigue, dark-coloured urine, scleral icterus or jaundice

* Especially with intermittent regimens administered in combination with rifampin

Ψ **Can also be a symptom of drug-induced hepatitis**

** Symptoms can include slurred speech, peripheral neuritis, dizziness, stupor, seizures, coma

[6]Adapted from: Menzies R, Wong T. *Canadian Tuberculosis Standards*. 7th ed. Canadian Thoracic Society and the Public Health Agency of Canada; 2013.

Table 9-4: Some common and/or important drug-drug interactions associated with isoniazid and rifampin[7,8,9]

NOTE: List does not include all possible interactions; consult a pharmacist for further information.

Isoniazid (INH)	Rifampin
• Acetaminophen • Antacids • Anticonvulsants (Carbamazepine, Phenytoin) • Antidepressants (Citalopram) • Beta-blockers (Metoprolol) • Clopidogrel • Diazepam • Doxorubicin • Haloperidol • Pimozide • Tamoxifen • Theophylline • Thioridazine	• Antiarrythmics (Diltiazem, Verapamil, Digoxin) • Anticoagulants (Warfarin, Apixaban, Dabigatran) • Anticonvulsants (Phenytoin, Valproic Acid) • Antifungals (Ketoconazole) • Antipsychotics (Aripiprazole, Clozapine, Quetiapine) • Barbituates • Beta-blockers • Calcium Channel Blockers (Amlodipine, Nifedipine) • Clarithromycin • Cyclosporine • Estrogens (**including hormonal contraceptives**)* • Glucocorticoids • Methadone • Protease Inhibitors • Sulfonylureas

* **Women using hormonal contraceptives should be advised to use alternate forms of birth control while taking rifampin.**

Step Four: Document and Monitor WPP

Document and monitor as described in **Section 7 – Care of Clients with Latent TB Infection (LTBI)**.

Step Five: Complete Follow-up Post Exposure Screening

- Complete screening as per the **TB Contact Testing Flowchart** once at least eight weeks have passed since the contact's last exposure to the infectious case **AND** the contact has reached six months of age.
- Update the **TB-IR** with testing dates and results/findings as they become available.
- Consult the RCDC about:
    - Contacts with:
        - Symptoms;
        - New positive TST results;

[7] Ibid.
[8] Rifampin and Isoniazid Product Monograph. E-Therapeutics. Canadian Pharmacists Association. Accessed November, 2014.
[9] Isoniazid and Rifampin. Lexicomp Online. Accessed November 2014.

- Abnormal chest x-ray findings;
- Positive AFB smears or mycobacterial cultures.

- Contacts who:

  - Did not return for TST reads;
  - Refused screening;
  - Could not be found; and/or
  - Did not respond to attempts to provide screening.

For contacts diagnosed with LTBI:

- Review the following TB fact sheets with the client (and/or the parent/guardian):

  - **Latent TB Infection vs. Active TB Disease** and

  - **Latent TB Infection (LTBI) Treatment**.

- Consult the RCDC to confirm:

  - Whether an updated prescription is needed (to maintain the client's TB drug supply);

  - Whether/when client should undergo the PA and lateral chest x-rays usually done once three months of LTBI treatment has been completed; and
  - The number of additional doses needed to complete LTBI treatment.

  NOTE: DOT doses taken during WPP are counted toward completion of LTBI treatment. The date WPP was started is considered the start date of LTBI treatment.

- Manage reminder of client's LTBI treatment (e.g. documentation and monitoring) as per **Section 7 – Care of Clients with Latent TB Infection (LTBI)**.

- Continue documenting treatment on the existing **LTBI-1** form.

For contacts diagnosed with active TB: manage as described in **Section 8 – Care of Clients with Active TB**.

For all other contacts: consult the RCDC to confirm whether/when WPP can be discontinued. **DO NOT discontinue WPP prior to consulting the RCDC or the treating physician.**

Step Six: Discontinue WPP

Once approval to discontinue WPP has been obtained:

- Review TB signs/symptoms with the client (and/or the parent/guardian, see **Table 9-2**). Remind the client (and/or the parent/guardian) to remain alert for TB signs/symptoms, and to report to a health care provider quickly should any develop. **It is possible for clients that have taken WPP to develop active TB.**

- Document discontinuation of WPP in the '*Progress Notes*' and on the '*Problems List*' of the client's medical chart. Clearly indicate that treatment was taken for WPP (not for LTBI). Also record:

    - Which TB drugs were taken;

    - Number of doses taken; and

    - Date of last dose.

- Ensure the current **LTBI-1** is complete, including number of doses taken that month and number of doses taken to date.

- Send the **LTBI-1** to the RCDC, along with an updated growth chart for contacts under two years of age.

- File the **LTBI-1** in the client's medical chart.
- **Within one week of the last dose**, complete Part 1 through Part 4 of a **Latent TB Infection (LTBI) Treatment Outcome Form** (**LTBI-2**) and send it to the RCDC. The RCDC will complete Part 5 (*Treatment Outcome and Surveillance Recommendation*) and return the form to the health centre.

- File the **LTBI-2** in the client's chart.

NOTE: A history of WPP does not provide protection against future infection with TB bacteria. Clients who are exposed to active TB after WPP should undergo routine contact follow-up assessments. WPP may be recommended again for contacts who still meet the criteria for WPP (see **TB Contact Testing Flowchart**).

Treatment Regimens and Recommended TB Drug Dosages

Isoniazid (INH) with Pyridoxine (Vitamin B6)

In Nunavut, the standard WPP treatment regimen includes a single TB drug: isoniazid (INH). Supplemental pyridoxine (vitamin B6) is prescribed with INH to prevent peripheral neuropathy (numbness/tingling in fingers and/or toes).

With the INH-based WPP regimen, DOT doses are usually given twice a week, on Mondays and Thursdays. The regimen may be changed to daily DOT (five days a week, Monday to Friday) **by the treating physician** when a contact cannot tolerate twice-weekly dosing.

Table 9-5: Recommended drug doses for twice-weekly and daily window period prophylaxis with isoniazid (INH) and pyridoxine (vitamin B6)[10,11,12]

TB Drug	Children Under 13 Years of Age	Adolescents and Adults
	Twice-Weekly Dose (Mondays and Thursdays)	
Isoniazid (INH)	20 to 30 mg/kg Maximum: 900 mg	15 mg/kg Maximum: 900 mg
Pyridoxine (vitamin B6)	As ordered, usually 12.5 to 25 mg	As ordered, usually 25 to 50 mg
	Daily Dose (5 days a week, Monday to Friday OR as ordered)	
Isoniazid (INH)	10 mg/kg (10 to 15 mg/kg) Maximum: 300 mg	5 mg/kg Maximum: 300 mg
Pyridoxine (vitamin B6)	As ordered, usually 12.5 mg	As ordered, usually 25 mg

Rifampin

WPP with rifampin may be prescribed for children that cannot tolerate the standard WPP regimen and for contacts of cases with INH-resistant TB.

WPP with rifampin is done as daily DOT (5 days a week, Monday to Friday).

[10] Long R. Ellis E. eds. *Canadian Tuberculosis Standards* (6th edition). Canada: Canadian Lung Association, 2007:182-201.

[11] Menzies R, Wong T. *Canadian Tuberculosis Standards*. 7th ed. Canadian Thoracic Society and the Public Health Agency of Canada; 2013.

[12] American Thoracic Society. Targeted tuberculin testing and treatment of latent tuberculosis infection. *Am J Respir Crit Care Med* 2000; 161:S221-S247.

Table 9-6: Recommended drug doses for daily window period prophylaxis with rifampin[13]

TB Drug	Children Under 13 Years of Age	Adolescents and Adults
	Daily Dose (5 days a week, Monday to Friday OR as ordered)	
Rifampin	15 mg/kg (10 to 20 mg/kg) Maximum: 600 mg	10 mg/kg Maximum:600 mg

Source Case Investigation

A source case investigation (also called 'reverse contact investigation') might be done to identify how a person became infected with TB bacteria. The purpose of the investigation is to look for an infectious TB case (a 'source case') among people the person regularly spends time with, such as household members, grandparents, regular caregivers (e.g., daycare providers, babysitters) and teachers.

DO NOT begin a source case investigation without consulting the RCDC.

Steps in Source Case Investigation

Step One: Consult the RCDC

- Confirm the period of time during which the person likely became infected with TB bacteria and which contacts to test. Source case investigations are usually limited to household members and others who spend time with the client on a daily basis.

Step Two: Identify High-priority Contacts

- Interview the client (and/or the parent/guardian) **within 1 business day** to identify his/her **high-priority contacts**.

[13] Menzies R, Wong T. *Canadian Tuberculosis Standards*. 7th ed. Canadian Thoracic Society and the Public Health Agency of Canada; 2013.

High-priority contacts include:

- Symptomatic contacts (e.g. any category of contact with: a cough for longer than three weeks; weight loss; and/or fever/night sweats);
- Household members (Type 1 contacts);
- Close, non-household contacts (Type 2 contacts) that spent time regularly with the client.

For contact category definitions (types), see:
'Contact Investigation and Source Case Investigation' in Section 2 – Understanding TB

NOTE: Contact category definitions are also described on the **Tuberculosis Investigation Record** (**TB-IR**).

- Ask questions to help identify where the client spent time, and who s/he spent time with such as:
  - Who else do you know that is also sick and/or coughing?
  - Where do you stay overnight?
  - Who else stays/lives/sleeps there? How often, and for how long?
  - Who do you spend the most time with each day? Each week?
  - Where do you spend time (e.g., store, drop-in centre, school, library, community centre, visitor's centre, airport, day care, restaurant, hotel)? How often do you go and how long do you stay?
  - Where have you traveled to? Where did you stay? How long did you stay? Who else was there? Was anyone there sick and/or coughing?
  - Who in your family and friends has ever had LTBI or active TB?
  - Who are your parents, grandparents, aunties, uncles, cousins, other relatives? Where do they live? How often do you see them?
  - When people visited, who do they bring with them?

- Record information about high-priority contacts on a Tuberculosis Contact Investigation Record (**TB-IR**). Ensure contacts in other jurisdictions are clearly identified on the record. Send the **TB-IR** to the RCDC.

- Consult with the RCDC to confirm high-priority contacts, and begin screening high-priority contacts **within 1 week** (see Step Three).

- Continue gathering information about high-priority contacts each time you meet with the client (e.g. for DOT).

    - Remind the client (and/or the parent/guardian) that you want to make sure his/her family and friends are healthy.

    - Ask open-ended questions to prompt the client for additional information about his/her activities and contacts.

    - Test additional high-priority contacts as soon as possible.

    - Notify the RCDC when additional high-priority contacts are added to the **TB-IR.**

Step Three: Screen High-priority Contacts

- Document all attempts to reach/screen contacts.

- Initiate a **Tuberculosis Assessment Form (TBAF)** for each contact. In Part 2, select 'Other' as the reason for screening, and specify 'source case investigation'.

- Test and follow-up contacts using the **General TB Testing Flowchart** (see **Section 3 – General TB Screening**)
  NOTES:

    - The **TB Contact Testing Flowchart** is **NOT USED** during a source case investigation because only a single round of screening is done.
    - Use **10 mm** as the cut-off point for a 'positive' TST result in a client tested during a source case investigation **UNLESS** the client is immunosuppressed or you are advised otherwise by the RCDC.
    - Chest x-rays taken within the prior month may be used in place of taking new x-rays provided the contact is **asymptomatic** **AND** the findings were reported as "**normal**".
    - **A physician order is required prior to taking shielded chest x-rays of a client who is or might be, pregnant.**

- Update the **TB-IR** with testing dates and results/findings as they become available.
- Send the **TB-IR** to the RCDC once the majority of contacts have completed screening.
- Consult the RCDC about:
    - Contacts with:
        - Symptoms;
        - New positive TST results;
        - Abnormal chest x-ray findings;
        - Positive AFB smears or mycobacterial cultures.
    - Contacts who:
        - Did not return for TST reads;
        - Refused screening;
        - Could not be found; and/or
        - Did not respond to attempts to provide screening.

Step Four: Review Findings with the RCDC

Source case investigations are not usually expanded unless a source case was not found **AND** TST converters or children with active TB are identified among those tested. Decisions on when and how to expand a source case investigation are made by the RCDC, in consultation with the Territorial Communicable Disease Specialist, and/or the CMOH/DCMOH.

DO NOT expand or close a source case investigation without consulting the RCDC.

If the RCDC recommends that the source case investigation be expanded:

- Re-interview the client (and/or the parent/guardian) if necessary to identify additional contacts;
- Update the **TB-IR** with information on additional contacts and send it to the RCDC;
- Begin screening additional contacts as soon as possible as per Step Three.
- Update the **TB-IR** with testing dates and results/findings as they become available.
-

Step Five: Close the Source Case Investigation

- Ensure the "current status" section of the **TB-IR** is completed for every contact.

  NOTE: DO NOT designate contacts whose screening was not completed as "CLOSED".

- Send an updated copy of the **TB-IR**, marked "FINAL", to the RCDC and save a copy to the designated location on the health centre shared drive.

- File the original copy of the "FINAL" **TB-IR** in the client's medical chart.

SECTION 10

TB Surveillance

TB Surveillance

TB surveillance is a mechanism to monitor for active TB in clients with untreated LTBI and clients at risk for relapse of active TB after treatment.

TB surveillance is an important component of the Nunavut TB Program because early detection of active TB can improve outcomes for cases and prevent or reduce TB transmission from cases with infectious TB.

Clients on TB surveillance are at increased risk for active TB disease. Manage symptomatic clients as described in: **Section 6 – Care of Clients with TB Signs/Symptoms**

Steps in TB Surveillance

Step One: Advise the Client that S/He is on TB Surveillance

- Review the **TB Surveillance** fact sheet with the client (and/or the parent/guardian).
- Emphasize the importance of:
  - Adhering to the surveillance assessment schedule;
  - Remaining alert for TB signs/symptoms and reporting to a health care provider quickly should any develop between his/her scheduled surveillance appointments (see **Table 10-1**); and
  - Advising his/her primary care physician and other health care providers about being placed on TB surveillance so those providers will know to follow-up TB signs/symptoms promptly.

Table 10-1: TB signs/symptoms

Systemic TB signs/symptoms	Signs/symptoms of respiratory TB disease	Signs/symptoms of non-respiratory TB disease
• Fever* • Night sweats* • Weight loss or failure to gain weight (i.e. failure to thrive) • Fatigue • Loss of appetite	Systemic TB signs/symptoms **AND** • Cough > 3 weeks (dry or productive) • Chest pain • Shortness of breath • Bloody phlegm (hemoptysis)	Systemic TB signs/symptoms **AND** pain or dysfunction at the involved site, e.g.: • Swollen lymph nodes (TB lymphadenitis) • Headache, irritability, photophobia, stiff neck (TB meningitis)

*Can be absent in the very young and the elderly

- Advise the client (and/or the parent/guardian) when the first surveillance assessment is due.

  For adolescents and adults, unless otherwise stipulated by the RCDC or the TB physician, the first TB surveillance assessment is due **six months** after:

  - The date of the positive tuberculin skin test (TST) or interferon gamma release assay (IGRA) for a client with untreated LTBI;
  - The last date of treatment for a client who began LTBI treatment (whether or not treatment was completed);
  - The last date of treatment for a client treated for active TB.

  For clients under 13 years of age (pediatric clients), unless otherwise stipulated by the RCDC or the TB physician, the first TB surveillance assessment is due **three months** after:

  - The date of the positive tuberculin skin test (TST) or interferon gamma release assay (IGRA) for a client with untreated LTBI;
  - The last date of treatment for a client who began LTBI treatment (whether or not treatment was completed);
  - The last date of treatment for a client treated for active TB.

- Initiate a **Tuberculosis Surveillance and Outcome Form (TB-Surv)**.

- Record the due date of the first surveillance assessment in the '*Progress Notes*' and '*Problems List*' in the client's medical chart.

Step Two: Complete the Initial Surveillance Assessment

- Document all attempts to reach/test the client.
- Complete the required assessments and tests.

For adolescents and adults:

- Screen for TB signs/symptoms;
- Document the client's weight (in kilograms) and compare it to the last weight on record;
- Take PA and lateral chest x-rays **unless the client is or might be, pregnant**; and
- Ask the client to submit three sputum specimens for TB testing.

NOTES:

- Chest x-rays taken within the prior month may be used in place of taking new x-rays provided the contact is **asymptomatic** AND the findings were reported as "**normal**".
- **A physician order is required prior to taking shielded chest x-rays of a client who is or might be, pregnant.**

- For information on sputum collection, see: **Section 5 – Collection of Specimens for TB Testing**
- For client instructions on collecting sputum specimens, see: **Section 15 – TB Fact Sheets**

For pediatric clients:[5]

- Screen for TB signs/symptoms;
- Arrange for the chid to have a physical assessment by a community health nurse (CHN), nurse practitioner, or a physician; and

[5] Dr. I. Kitai, personal communication, Jul. 22, 2014.

- Document the client's weight (in kilograms) and compare it to the last weight on record. **For clients under two years of age**, plot the current weight on the growth chart in his/her medical chart. If there are any concerns, send the growth chart along with the updated **TB-Surv** to the RCDC **immediately**.

  NOTES:

  - **DO NOT** include chest-rays and sputum specimen testing in pediatric surveillance assessments unless requested to do so by a physician or nurse practitioner **OR** signs/symptoms (**such as weight loss or failure to thrive**) are noted.

  - Repeat imaging (e.g., ultrasound, MRI) might be recommended for pediatric cases with non-respiratory TB.

- Advise the client (and/or the parent/guardian) of when the next surveillance assessment is due.

  For adolescents and adults:

  - Unless otherwise stipulated by the RCDC or the TB physician, the next assessment is due **six months** after the initial surveillance examination was done.

  For pediatric clients:

  - Unless otherwise stipulated by the RCDC or the TB physician, the next assessment is due **three months** after the initial surveillance examination was done.[6]

- Reinforce the need for the client (and/or the parent/guardian) to remain alert for TB signs/symptoms and to report to a health care provider quickly should any develop. It might be helpful to review the **TB Surveillance** fact sheet with the client at this time.

- Record the due date on the **TB-Surv** and in the '*Progress Notes*' and '*Problems List*' in the client's medical chart.

- Place the **TB-Surv** in the client's medical chart, and update it with test results as they are received.

[6] Ibid.

- Consult the RCDC **immediately** about:
    - Symptomatic clients;
    - Clients with abnormal chest x-ray findings or positive AFB smears or mycobacterial cultures;
    - Clients who have lost weight unexpectedly; and
    - Pediatric clients whose weight or other measures of growth are of concern, or whose physical assessment findings were abnormal.
- Notify the RCDC about:
    - Clients who did not adhere to the assessment schedule (e.g., clients who refused screening, clients that could not be found, clients who did not respond to attempts to provide screening); and
    - Clients who have moved out of territory or who have died (see Step Four).

Step Three: Repeat the Remaining Surveillance Assessments as Scheduled

For adolescents and adults:

- Unless otherwise stipulated by the RCDC or the TB physician, surveillance assessments are carried out at **six-month** intervals until the end of the surveillance period.

For pediatric clients:

- Unless otherwise stipulated by the RCDC or the TB physician, surveillance assessments are carried out at **three-month intervals** for **at least** one year.
- Maintain a growth chart for children who were under two years of age when TB surveillance began. If there are any concerns, send the growth chart along with the updated **TB-Surv** to the RCDC **immediately**.
- When the surveillance period is extended to two years, assessments in the second year are done at **six-month intervals** unless otherwise stipulated by the RCDC or the TB physician.[7]

[7] Ibid.

NOTE: When it becomes necessary to begin a new **TB-Surv** (i.e. to document a fifth TB surveillance assessment):

- Select "*Other*" in the '*Surveillance Outcome'* section at the bottom of the **TB-Surv.** Specify '**continued on second TB-Surv**'.
- Initiate a new **TB-Surv** form. Write "**continuation from original**" in the white space at the top. Note the date/time of the next TB surveillance appointment on the new form.
- File the completed **TB-Surv** in the client's medical chart.

- Document all attempts to reach/test the client.
- Consult the RCDC **immediately** about:
  - Symptomatic clients;
  - Clients with abnormal chest x-ray findings or positive AFB smears or mycobacterial cultures;
  - Clients who have lost weight unexpectedly; and
  - Pediatric clients whose weight or other measures of growth are of concern, or whose physical assessment findings were abnormal.
- Notify the RCDC about:
  - Clients who did not adhere to the assessment schedule (e.g., clients who refused screening, clients that could not be found, clients who did not respond to attempts to provide screening); and
  - Clients who have moved out of territory or who have died (see Step Four).

Step Four: Discontinue TB Surveillance

At the end of the surveillance period:

- Review TB signs/symptoms with the client (and/or the parent/guardian). Remind him/her (and/or the parent/guardian) to remain alert for TB signs/symptoms and to report to a health care provider quickly should any develop. Although the risk for active TB is typically much lower after two years, some risk remains.

- Update the **TB-Surv** with results as they are received.

Once all results have been received, or when a client has moved out of territory or died:

- Complete the *'Surveillance Outcome'* section at the bottom of the **TB-Surv**.

- Send the completed **TB-Surv**(s) to the RCDC, along with the growth chart for children who were under two years of age when TB surveillance began.

- Document completion of TB surveillance in the '*Progress Notes'* and on the '*Problems List*' of the client's medical chart.

- File the **TB-Surv**(s) in the client's medical chart.

Sample Tuberculosis Surveillance and Outcome Form (TB-Surv)

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Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

TUBERCULOSIS SURVEILLANCE AND OUTCOME FORM

REPORT ALL ABNORMAL RESULTS TO RCDC

Please fill in OR affix label:
Last Name: ______________________
First Name: ______________________
Sex: ☐ M ☐ F ☐ Other: __________
Date of Birth: ___ (DD) ___ (MM) ___ (YY)
Chart #: ______________________
HCP #: ______________________
Community of Residence: __________

Screening DUE dd/mm/yy	Cough ☐ No ☐ Yes x ___ weeks	Chest pain ☐ No ☐ Yes x ___ weeks	Fatigue ☐ No ☐ Yes x ___ weeks	
	Fever ☐ No ☐ Yes x ___ weeks	Night sweats ☐ No ☐ Yes x ___ weeks	Short of breath ☐ No ☐ Yes x ___ weeks	
	Sputum ☐ No ☐ Yes x ___ weeks	Blood in sputum ☐ No ☐ Yes x ___ weeks	Weight loss ☐ No ☐ Yes, _______kg	
Weight: ______ kg	Other (*specify*) :	x ___ weeks	since: ___(mm/yy)___	
	Chest X-Ray‡	Sputum #1*	Sputum #2*	Sputum #3*
	dd/mm/yy / result	dd/mm/yy / result	dd/mm/yy / result	dd/mm/yy / result
DONE dd/mm/yy	Comments:			
	CHN/PHN Name/Signature: ______________________		Date: ___dd/mm/yy___	
Screening DUE dd/mm/yy	Cough ☐ No ☐ Yes x ___ weeks	Chest pain ☐ No ☐ Yes x ___ weeks	Fatigue ☐ No ☐ Yes x ___ weeks	
	Fever ☐ No ☐ Yes x ___ weeks	Night sweats ☐ No ☐ Yes x ___ weeks	Short of breath ☐ No ☐ Yes x ___ weeks	
	Sputum ☐ No ☐ Yes x ___ weeks	Blood in sputum ☐ No ☐ Yes x ___ weeks	Weight loss ☐ No ☐ Yes, _______kg	
Weight: ______ kg	Other (*specify*) :	x ___ weeks	since: ___(mm/yy)___	
	Chest X-Ray‡	Sputum #1*	Sputum #2*	Sputum #3*
	dd/mm/yy / result	dd/mm/yy / result	dd/mm/yy / result	dd/mm/yy / result
DONE dd/mm/yy	Comments:			
	CHN/PHN Name/Signature: ______________________		Date: ___dd/mm/yy___	
Screening DUE dd/mm/yy	Cough ☐ No ☐ Yes x ___ weeks	Chest pain ☐ No ☐ Yes x ___ weeks	Fatigue ☐ No ☐ Yes x ___ weeks	
	Fever ☐ No ☐ Yes x ___ weeks	Night sweats ☐ No ☐ Yes x ___ weeks	Short of breath ☐ No ☐ Yes x ___ weeks	
	Sputum ☐ No ☐ Yes x ___ weeks	Blood in sputum ☐ No ☐ Yes x ___ weeks	Weight loss ☐ No ☐ Yes, _______kg	
Weight: _______kg	Other (*specify*) :	x ___ weeks	since: ___(mm/yy)___	
	Chest X-Ray‡	Sputum #1*	Sputum #2*	Sputum #3*
	dd/mm/yy / result	dd/mm/yy / result	dd/mm/yy / result	dd/mm/yy / result
DONE dd/mm/yy	Comments:			
	CHN/PHN Name/Signature: ______________________		Date: ___dd/mm/yy___	
Screening DUE dd/mm/yy	Cough ☐ No ☐ Yes x ___ weeks	Chest pain ☐ No ☐ Yes x ___ weeks	Fatigue ☐ No ☐ Yes x ___ weeks	
	Fever ☐ No ☐ Yes x ___ weeks	Night sweats ☐ No ☐ Yes x ___ weeks	Short of breath ☐ No ☐ Yes x ___ weeks	
	Sputum ☐ No ☐ Yes x ___ weeks	Blood in sputum ☐ No ☐ Yes x ___ weeks	Weight loss ☐ No ☐ Yes, _______kg	
Weight: ______ kg	Other (*specify*) :	x ___ weeks	since: ___(mm/yy)___	
	Chest X-Ray‡	Sputum #1*	Sputum #2*	Sputum #3*
	dd/mm/yy / result	dd/mm/yy / result	dd/mm/yy / result	dd/mm/yy / result
DONE dd/mm/yy	Comments:			
	CHN/PHN Name/Signature: ______________________		Date: ___dd/mm/yy___	

‡ Results: Normal = N, Abnormal = ABN   *Results: AFB Smear Neg = SM - AFB Smear Pos = SM + Culture Neg = C - Culture Pos = C+

SURVEILLANCE OUTCOME – complete at end of surveillance period and then send to RCDC		
☐ Discharged - surveillance completed	☐ Lost to follow-up	☐ Active TB - date of diagnosis: dd/mm/yy
☐ Transferred out of territory prior to end of surveillance period – outcome of surveillance unknown		Date of transfer: dd/mm/yy
Location where client transferred to:		
☐ Died prior to end of surveillance period (*specify date*): dd/mm/yy		Other (specify):
CHN/PHN/TB Nurse Signature:		Date: dd/mm/yy

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SECTION 11

Citizenship and Immigration Canada (GIC) Medical Surveillance

Citizenship and Immigration Canada (CIC) Medical Surveillance

Citizenship and Immigration (CIC) medical surveillance is coordinated through the Nunavut Tuberculosis Program. Outcomes of medical surveillance assessments are reported to CIC by the Territorial Communicable Disease Specialist.

When a client is referred for CIC medical surveillance:

- Initiate a **Tuberculosis Assessment Form (TBAF)** and a Tuberculosis Prescription Request/Change Form (**TBPRC**);
- Assess for TB signs/symptoms;

  NOTE: Routine TB assessment of clients referred for CIC medical surveillance **DOES NOT** include TST (or IGRA). However, TST or IGRA may be recommended based on findings from the initial examinations.
- Do a PA and lateral chest x-ray unless the client is or might be pregnant, and ask the client to submit three sputum specimens for TB testing.

  NOTE: A physician order is required prior to taking shielded chest x-rays of a client who is or might be, pregnant.
- Indicate which tests were done in the '*Additional Tests*' section of Part 6 on the **TBAF.** Sign/date the form in Part 7 (*Follow-Up*).
- Send the completed **TBAF** and **TBPRC** to the RCDC.
- Monitor for results of chest x-rays and sputum testing. Consult the RCDC if chest x-ray findings are abnormal and/or AFB smears or mycobacterial cultures results are positive.
- Once all tests have been completed file the **TBAF** and the **TBPRC** in the client's medical chart.

  NOTE: Organize any further follow-up or testing (e.g., TST, IGRA) recommended by the RCDC before filing the forms.

- For information on sputum collection, see:
  Section 5 – Collection of Specimens for TB Testing
- For client instructions on collecting sputum specimens, see:
  Section 15 – TB Fact Sheets

SECTION 12

Nunavut TB School Screening Program

Nunavut TB School Screening Program

The goals of the Nunavut Tuberculosis School Screening Program are to:

- Determine the rate of infection in the communities to help inform TB control program planning; and
- Identify and treat latent TB infection (LTBI) in children to prevent future cases of active TB.

The aim of the program is to perform tuberculin skin tests (TST) on students who were either not previously tested or who have been tested but had negative TST results.

Screening is generally limited to Kindergarten and Grade Six students. Screening in each region and specific grades is subject to change. Contact the RCDC for current recommendations for your community before initiating planning.

School Screening takes place in September, although TB screening for Kindergarten students can be done as part of preschool assessment clinics held in the spring and summer prior to school entry.

For consent forms for preschoolers and for information on informed consent, refer to Section 3.2 of the *Nunavut Immunization Manual*.

For detailed information on the TST procedure, see: **Section 4 - Tuberculin Skin Testing (TST)**

School Screening Procedure – Preschool Assessment Clinic

- Integrate information about the School Screening Program into the preschool assessment advertising in the community.
- Determine if the child is eligible for a TST (see '**Tuberculin Skin Test**' in **Section 2 – Understanding TB**).

  NOTE: Consult the RCDC about children known to have untreated or incompletely treated LTBI to determine if they should be assessed for LTBI treatment.

- Verify if the child is eligible for a TST:
    - Provide information on the School Screening Program and TST to the parent/guardian (see '**Tuberculin Skin Test**' in **Section 15 – TB Fact Sheets**);
    - Obtain a signed consent form from the parent/guardian;
    - Administer the TST;
    - Give the parent/guardian an appointment to return in 48 to 72 hours to have the child's TST read. **A phoned reminder to return for the read can be helpful to avoid having to re-do the TST if the appointment is missed**;
    - Record TST result on the child's immunization card.
    - If TST result is ≥ 10 mm induration, see Follow-up of TST Results > 10 mm of Induration.

NOTE: Refer children with TB signs/symptoms (e.g., cough for more than three weeks, night sweats, unexplained fevers, and/or weight loss or failure to thrive) to the Community Health Centre or to Public Health for a TB assessment, **regardless of TST results**.

School Screening Procedure – September

- Contact the school(s) in early September (see **Letter for School – TB School Screening** in **Section 12A – Sample Letters for Nunavut TB School Screening Program**).
- Obtain class lists and discuss appropriate times for screening with the Principal. Ask for the names of all students in the target grade(s) to be provided (e.g., delivered, faxed) to the nurse in charge of TB screening, by grade and by class (if more than one class).
- Begin notifying the community. Have the Community Health Representative (CHR) deliver promotional materials to be posted in the schools and throughout the community. Start radio/TV announcements in appropriate languages.
- Determine which students are eligible for TST (see **'Tuberculin Skin Test'** in **Section 2 – Understanding TB**).

  NOTE: Consult the RCDC about students known to have untreated or incompletely treated LTBI to determine if they should be assessed for LTBI treatment.
- Prepare a package of information about the School Screening Program for each eligible student. The packages should contain:

- English and translated versions of **School Screening TST Consent** (see **Section 12A – Sample Letters for Nunavut TB School Screening Program**); and

- A **Tuberculin Skin Test** fact sheet (see **Section 15 – TB Fact Sheets**).

NOTE: Address the packages to individual students to ensure packages are only given to those eligible for TST.

- Deliver the packages to the school for distribution to eligible students.

- Collect consent forms from the school(s). Determine which students have not returned a signed consent form. Have clerical staff phone the parents/guardians of those students to remind them that a signed consent is required before the TST can be done. **DO NOT give a TST to any student without first obtaining a consent signed by the student's parent or guardian.**

- Administer TSTs. Provide each student with a copy of the **School Screening - TST Given** letter (see **Section 12A – Sample Letters for Nunavut TB School Screening Program**).

- Read students' TST results 48 to 72 hours later. Record results on the students' immunization cards and on a **TB School Screening Form (SS-1)**.

  NOTE: Refer students with TB signs/symptoms (e.g., cough for more than three weeks, night sweats, unexplained fevers, and/or weight loss or failure to thrive) to the Community Health Centre or to Public Health for a TB assessment, **regardless of TST results**.

- Provide a copy of the **School Screening - TST Negative** letter to students with TST results < 10 mm of induration (see **Section 12A – Sample Letters for Nunavut TB School Screening Program**).

- If TST result is ≥ 10 mm induration, see Follow-up of TST Results > 10 mm of Induration.

Documentation

- Complete individual **SS-1** forms for each grade and each class of each school.

- Enter prior TST information for **ALL** students in the class. Include:

- Kindergarten students who completed TB screening prior to the start of the school year;
- Students who were **NOT** eligible for TST; and
- Eligible students who:
  - Did not attend the screening clinic;
  - Did not return a signed consent; or
  - Who were not screened for any other reason.

- Send the completed **SS-1** forms to the RCDC.
- Complete a **TB School Screening Summary (SS-2)** for each school and send it to the RCDC.

Follow-up of TST Results ≥ 10 mm of Induration

- Provide the student with a **School Screening - TST Positive** letter (see **Section 12A – Sample Letters for Nunavut TB School Screening Program**);
- Refer the student to the Community Health Centre or to Public Health for a TB assessment;
- Notify the RCDC.

NOTE: When treatment for active TB or LTBI is to be provided at the school, ask the parent/guardian to sign a **Medication Administration Consent** (see **Section 12A – Samples Letters for Nunavut TB School Screening Program**).

Contact Investigations and Source Case Investigations

When a student is diagnosed with **active TB** during school screening, a contact investigation and/or source case investigation might be recommended by Public Health (through the RCDC). **DO NOT** initiate a contact investigation or source case investigation prior to consulting the RCDC.

When a student is diagnosed **with LTBI** during school screening, consult the RCDC to confirm whether a source case investigation should be done. It is **strongly recommended** that, at a minimum, the parent/guardian be interviewed to determine if there is anyone with TB signs/symptoms:

- Living in the home, frequently visiting the home, staying overnight in the home; or
- Living outside of the home but having frequent contact with the child.

For information on contact investigation and source case investigation, see:
Section 9 – Contact Investigation, Window Period Prophylaxis (WPP), and Source Case Investigation

Sample TB School Screening Form (SS-1)

Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

TB SCHOOL SCREENING FORM

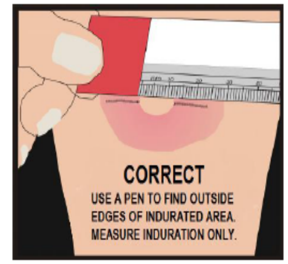
USE A SEPARATE SHEET FOR EACH GRADE AND CLASS

Community: ____________________

School Name: ____________________

Grade (circle): Kindergarten / Grade 6

Month/Year: ________ / ________



Name (Last, First) LIST NON-ELIGIBLE STUDENTS FIRST	DOB (DD/MM/YY)	HCP	Sex M F Other	Previous TST (MOST RECENT PAST TST) Date (DD/MM/YY)	Previous TST Result (mm)	Consent Form Received (Y or N) REQUIRED PRIOR TO TST	Current TST (TST RESULT NOW) Date (DD/MM/YY)	Current TST Result* (mm)	No Show	Comments or TB/LTBI History
1. Example: JOHNNIE DOE	21.07.2009	123456789	M	18.09.2013	12 mm	Not eligible	---	---		TB contact / LTBI treatment 2013
2. Example: JENNIE SMITH	15.05.2004	123456700	F	18.09.2009	0 mm	Y	Today's date			
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										
12.										
13.										
14.										
15.										
16.										
17.										
18.										
19.										
20.										

Enter information for ALL children in the class, even if: 1) not eligible for TST; 2) no-shows for tests or reads; or 3) not screened (e.g. no consent form).

*Measure and record **induration** (firm, raised area). **DO NOT** measure or record redness (erythema) or bruising.

Once completed, send to the RCDC

GN Dept. of Health TB School Screening Form (SS-1) October 2016 **Page ____ of _____**

Sample TB School Screening Summary (SS-2)

Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

TB SCHOOL SCREENING SUMMARY

Community: ______________________________

School Year: ___________/_______________
(e.g. 2015/2016)

Electronic completion preferred. When completing form electronically, DO NOT fill shaded areas - these will auto-calculate

Grade (Circle)	# students in class	# students with previous positive TST	#students eligible for TST	# of returned signed consents	# of students screened	# of new positive TSTs (i.e. ≥ 10 mm)	# of negative TSTs (i.e.< 10 mm)	# students not tested	TST positive rate = # positive TSTs / total # TSTs done	participation rate = # TSTs done / # students eligible
K or 6										
K or 6										
K or 6										
K or 6										
K or 6										
K or 6										
K or 6										
K or 6										
K or 6										
K or 6										
K or 6										

Once complete, send to the RCDC

GN Department of Health School Screening Summary Form (SS-2) October 2016

Page 1 of _____

SECTION 12A

Sample Letters for Nunavut TB School Screening Program

Sample Letters for Nunavut TB School Screening Program

Samples of the following letters for use with the TB School Screening Program are provided in English, French, Inuinnaqtun, and Inuktitut:

- **Letter for School – TB School Screening**
- **School Screening TST Consent**
- **School Screening – TST Given**
- **School Screening – TST Negative**
- **School Screening – TST Positive**
- **Medication Administration Consent**

DO NOT REMOVE SAMPLE LETTERS FROM THE TB MANUAL

Letter for School – TB School Screening (English)

Building Nunavut Together
Nunavuliuqatigiingniq
Bâtir le Nunavut ensemble

Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Date: _____

Dear: _____

The Department of Health will be doing the annual Tuberculosis (TB) screening in grade(s) _____ as part of our disease prevention programs.

We will be doing Tuberculin skin tests (TSTs) in your school during the month of _____.

We are asking your kind assistance with the following:

1. Provide us with the class lists for the above grade(s), separated by class if there is more than one.
2. Assist us to distribute the enclosed TST consent form and information packages for parents/guardians to the students, in the classes to be tested.
3. Assist us to collect the returned consent forms prior to screening.

Please call _____ at _____ for any additional information.

Thank you in advance for your assistance.

Sincerely,

RN/CHN_____

Letter for School: TB School Screening – English – 2015

Letter for School – TB School Screening (French)

Building Nunavut Together
Nunavuliuqatigiingniq
Bâtir le Nunavut ensemble

Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Date : _____

Cher/Chère : _____

Le ministère de la Santé procédera au dépistage annuel de la tuberculose dans les classes du ou des niveaux _____ de votre école dans le cadre de ses programmes de prévention des maladies.

Nous effectuerons des tests cutanés à la tuberculine (TCT) dans votre école au cours du mois de _____.

Nous sollicitons votre aimable collaboration pour les aspects suivants :

1. La fourniture des listes d'élèves du ou des niveaux mentionnés ci-dessus, répartis par classe lorsqu'il y a plus d'une classe.
2. De l'aide pour la distribution des trousses d'information et des formulaires de consentement pour les TCT ci-inclus destinés aux parents ou aux tuteurs des élèves qui fréquentent les classes où les tests seront effectués.
3. De l'aide pour recueillir les formulaires de consentement avant la tenue du test de dépistage.

Veuillez contacter _____ au _____ pour tout renseignement supplémentaire à ce sujet.

Je vous remercie à l'avance de votre collaboration

Je vous prie d'agréer mes salutations distinguées.

IA/ISC_____

Letter for School: TB School Screening – French – 2015

Letter for School – TB School Screening (Inuinnaqtun)

ᑲᑐᔾᔨᖅᑎᐊᖅᑕᐅᓂᖅ ᓄᓇᕗᒻᒥ / Building Nunavut Together / Nunavuliuqatigiingniq / Bâtir le Nunavut ensemble

ᐋᓐᓂᐊᖃᕐᓇᙱᓐᓂᓕᕆᔨᒃᑯᑦ
Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Ublua: ___________________________

Halu: ___________________________

Munaqhitkut ihivriukhiniaqtut aippagurangat tiibiikhimayakhainik (TiiBii) kapuunmik nutaqqavit iliharviani puqtunini ___________ qauyihaininganik aanniarutinik atuqtainik.

Havakhunguyugut Kapput TiiBiimik Aanniarunmik Uvinikkut Ihivriurut (TST) iliharvingni tatqiqhiutaani __________.

Apikhiyugut ikayuqtauyumapluta hapkuninga:

1. Titiqanik tuyuquyugut nutaqqaat ilihaqatigiktut atiinik puqtuniqaqtuni, ilihaqatigiktut atiinik amihukpata puqtunit ilihaqtunik.
2. Ikayuqlutallu tuniyangini agitiyakhanik TST-mik angayuqqat atiliuqtakhat makpiraat ukuallu tuhautikhat naunaiktakhanik angayuqat/munaqtitlu ilihaqtunut, ilihaqatigiktunut ihivriuqtauyukhanut.
3. Ikayuqlutallu katikhiyaptingni utqudjauyunik makpiraanik atiliuqtauyunik hivuani ihivriuqhinata.

Hivayaqlutit______________________uvani____________________ tuharumaguvit.

Quanaqutitn ikayuutingnik.

Pittianikkut,

RN/CHN______________________________

Letter for School: TB School Screening – Inuinnaqtun – 2015

Letter for School – TB School Screening (Inuktitut)

ᑲᑎᒪᔨ ᓄᓇᕗᑦ ᐱᖃᓐᓇᕐᓂᖅᑎᑦᓯᒪᔪᑦ
Building Nunavut Together
Nunavuliuqatigiingniq
Bâtir le Nunavut ensemble

Nunavut

ᐊᐅᓚᐱᖅᓯᒪᔪᓕᕐᓂᑐᑦ
Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

ᐅᑦᓗᓂ: _____

ᑐᖃᖅᑐᖅ: _____

ᐊᐅᓚᐱᖅᓯᒪᔪᓕᕐᓂᑐᑦ ᐱᓕᕆᓚᐱᕐᒪᑦ ᐊᓯᖏᑐᒥᒃᓱᐅᑎᓕᒃ ᐅᓪᓗᑕᖏᓚᐅᔪᑦ ᖃᐅᔨᓴᓂᖅᓯᓕᒃᑐᖅᑐᑦ
_____ ᐃᓕᑎᐅᔾᔨᖅᑕᐅᔾᑕᓂ ᐊᐅᓚᐱᖅᖢᓂᑎᑦᐃᓕᓕᒫᑦᔪᑦ ᐱᓕᕆᐊᖏᕐᓂᑦ.

ᐱᓕᕆᓚᐱᕐᓂᑦ ᐅᓪᓗᑕᖏᓚᐅᑎᑦ ᐅᐃᓂᒃᑯᑦ ᖃᐅᔨᓴᓂᖅᓯᓕᒃᑐᖅᑐᑦ ᐃᓕᓴᐅᓚᐱᖅᓯᓐᓂᐅᓂ ᑕᖅᑭᖏᓐᓂ _____.

ᐃᑲᔪᖅᑕᐅᔾᑎᐊᕈᒪᔪᑦ ᐃᑲᔪᖅᓱᐃᓕᓱ ᐅᑦᓗᓂ

1. ᑐᓴᓚᕆᐅᓕᑦ ᐃᓕᓴᐅᓚᖅᑎᑦ ᑎᑎᕋᓱᒪᓂᕆᓴᐅᓂᑦ ᖃᐅᓪᒪᔪᑦ ᖃᐅᔨᓴᓂᖅᓯᓂᑦ, ᐊᐃᒃᓱᒪᓕᕆᑦ ᐃᓕᓴᐅᓚᐱᖅᑎᑎᑦ ᐊᑕᐅᓱᐅᓂᖅᑐᑦᑕ.
2. ᐃᑲᔪᖏᓕᑎᒍᑦ ᑐᓂᓱᖃᓕᕆᓕ ᐃᓕᓚᐅᘏᑐᖅ ᐅᓪᓗᑕᖏᓚᐅᑎᑦ ᐅᐃᓂᒃᑯᑦ ᖃᐅᔨᓴᓂᖅᓯᓂᑦ ᐊᖏᕈᑎᑎ ᑎᑎᕋᖅᓯᐃᓐᓇᖅ ᐊᓯᒪᓕ ᓇᓕᓇᐃᖅᓱᓇᒪᔪᑦ ᐊᖏᓚᔪᖅᑲᒃᑯᓕᒃ/ᑲᒪᔨᐅᔪᓕᒃ ᐃᓕᓴᐅᓚᐱᖅᑎᓕᒃ, ᐃᓕᓴᐅᓚᐱᓇᖅᓯ ᖃᐅᔨᓴᖅᑕᐅᔾᔨᓚᐱᖅᑐᑦ.
3. ᐃᑲᔪᖏᓕᑦ ᐊᓯᖏᓐᓂᕐᒥᐅ ᐊᖏᕈᑎᑎᓂᑦ ᑎᑎᕋᓱᒪᓐᓂᑦ ᖃᐅᔨᓴᖅᑕᐅᔾᑕᒪᓕᐅᖏᑎᑦᓯᑎᑦ.

ᐅᖃᓕᓴᕐᓗᑎᑦ _____ ᐅᖏᖅᑐ _____ ᑐᑭᓯᒪᔪᖅᑲᓇᕐᓗᒍᑦ.

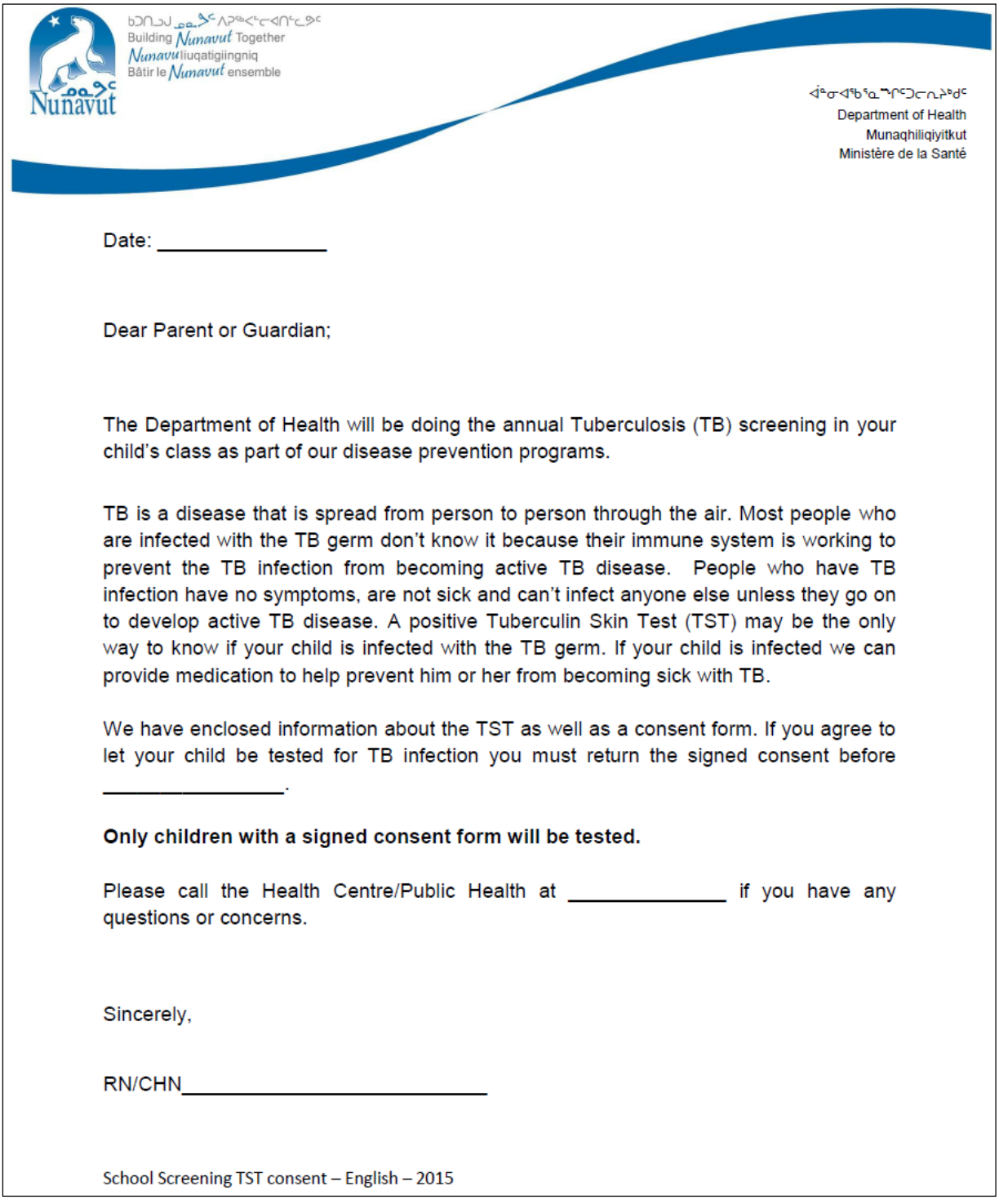
ᖃᐅᔨᓴᖅᓯᒪᓕᕐᓂᑦ ᐃᑲᔪᖅᓱᐃᓕᓱ.

ᐅᓂᒃᑳᖅᑐᖅ,

ᐃᓕᓴᐅᓚᐃᔨ/ᓄᓇᕗᒻᒥ ᐃᓕᓴᐅᓚᐃᔨ_____

Letter for School: TB School Screening – Inuktitut – 2015

School Screening TST Consent (English)



Building Nunavut Together
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Bâtir le Nunavut ensemble

Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Date: _____

Dear Parent or Guardian;

The Department of Health will be doing the annual Tuberculosis (TB) screening in your child's class as part of our disease prevention programs.

TB is a disease that is spread from person to person through the air. Most people who are infected with the TB germ don't know it because their immune system is working to prevent the TB infection from becoming active TB disease. People who have TB infection have no symptoms, are not sick and can't infect anyone else unless they go on to develop active TB disease. A positive Tuberculin Skin Test (TST) may be the only way to know if your child is infected with the TB germ. If your child is infected we can provide medication to help prevent him or her from becoming sick with TB.

We have enclosed information about the TST as well as a consent form. If you agree to let your child be tested for TB infection you must return the signed consent before _____.

Only children with a signed consent form will be tested.

Please call the Health Centre/Public Health at _____ if you have any questions or concerns.

Sincerely,

RN/CHN_____

School Screening TST consent – English – 2015

School Screening TST Consent (French)

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Building *Nunavut* Together
*Nunavu*liuqatigiingniq
Bâtir le *Nunavut* ensemble

ᐋᓐᓂᐊᖅᑲᖅᓇᙱᑦᑐᓕᕆᔨᒃᑯᑦ
Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Date : ________________

Cher parent ou tuteur,

Le ministère de la Santé procédera bientôt au dépistage annuel de la tuberculose dans la classe de votre enfant dans le cadre de ses programmes de prévention des maladies.

La tuberculose est une maladie causée par des bactéries qui se propagent dans l'air d'une personne à une autre. La plupart des personnes infectées ne le savent pas, car leur système immunitaire parvient à freiner l'infection qui ne se transforme pas en maladie active. Les personnes infectées par la bactérie de la tuberculose sont asymptomatiques, ne sont pas malades et ne peuvent infecter d'autres personnes à moins de développer une tuberculose active. Un résultat positif au test cutané à la tuberculine (TCT) est possiblement la seule façon de savoir si votre enfant est infecté par la bactérie de la tuberculose. Si votre enfant est infecté, nous pourrons lui fournir des médicaments afin d'éviter qu'il ne contracte la tuberculose.

Nous joignons à la présente de l'information au sujet du TCT, ainsi qu'un formulaire de consentement. Si vous acceptez que votre enfant passe le test afin de dépister une éventuelle infection tuberculeuse, vous devez retourner le formulaire dûment signé avant le _________________.

Seuls les enfants possédant un formulaire de consentement dûment signé passeront le test.

Veuillez contacter le centre de santé ou le Centre de santé publique au _______________ si vous avez des questions ou des préoccupations à ce sujet.

Je vous prie d'agréer mes salutations distinguées.

IA/ISC_____________________________

School Screening TST consent – French – 2015

School Screening TST Consent (Inuinnaqtun)

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Nunavut

ᐋᓐᓂᐊᖃᕐᓇᙱᑦᑐᓕᕆᔨᒃᑯᑦ
Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Ublua: ________________

Halu Angayuqqaq uvaluunniit Munaqti;

Munaqhitkut ihivriukhiniaqtut aippagurangat tiibiikhimayakhainik (TiiBii) kapuunmik nutaqqavit iliharviani qauyihaininganik aanniarutinik atuqtainik.

TiiBii aanniarut hiamitiqpaktuq inungmit inungmut aannikhaktaptingnit. Amihut inungnik TiiBiimik aanniarutinigiamingnik timimik hakugiktitivaktuq anniarutingnit ikayuutauvangmat aanniarutauyumut TiiBii-mut. Inuit TiiBii-mut aanniaruniktut mihingnaittumik, aanniangittut hiamitilimaittat inungnut kihimik Inuit TiiBii-mut aanniarutauyumut aanniarungnikumik. Aanniarunniktuq Kapput TiiBiimik Aanniarunmik Uvinikkut Ihivriurut (TST) naunairutauniaqtuq nutaqqat ilitturidjutauniaqtuq aanniarutiqalikluni takunnaittumut mihiknaittumut TiiBii-mut aanniarut. Nutaqqat aanniarunnikpat TiiBiimik havautituqtutlugu ikayuqtauniaqtuq aanniarnaittumik TiiBiimut.

Ilaliutiyaqqut makpiraanik naunaikhitikhanik TST angirutikhat titiraqmik atiliuqtakhangnik. Angiruvit nutaqqat ihivriuktauyangani TiiBiimut kapuutikhamik atiliuqlugu titiraq uttiqtitlavat tikitinnagu una________________.

Nutaqqat atiliurhimayumik titiqamik utqudjiyut ihivriuktauhunguyut.

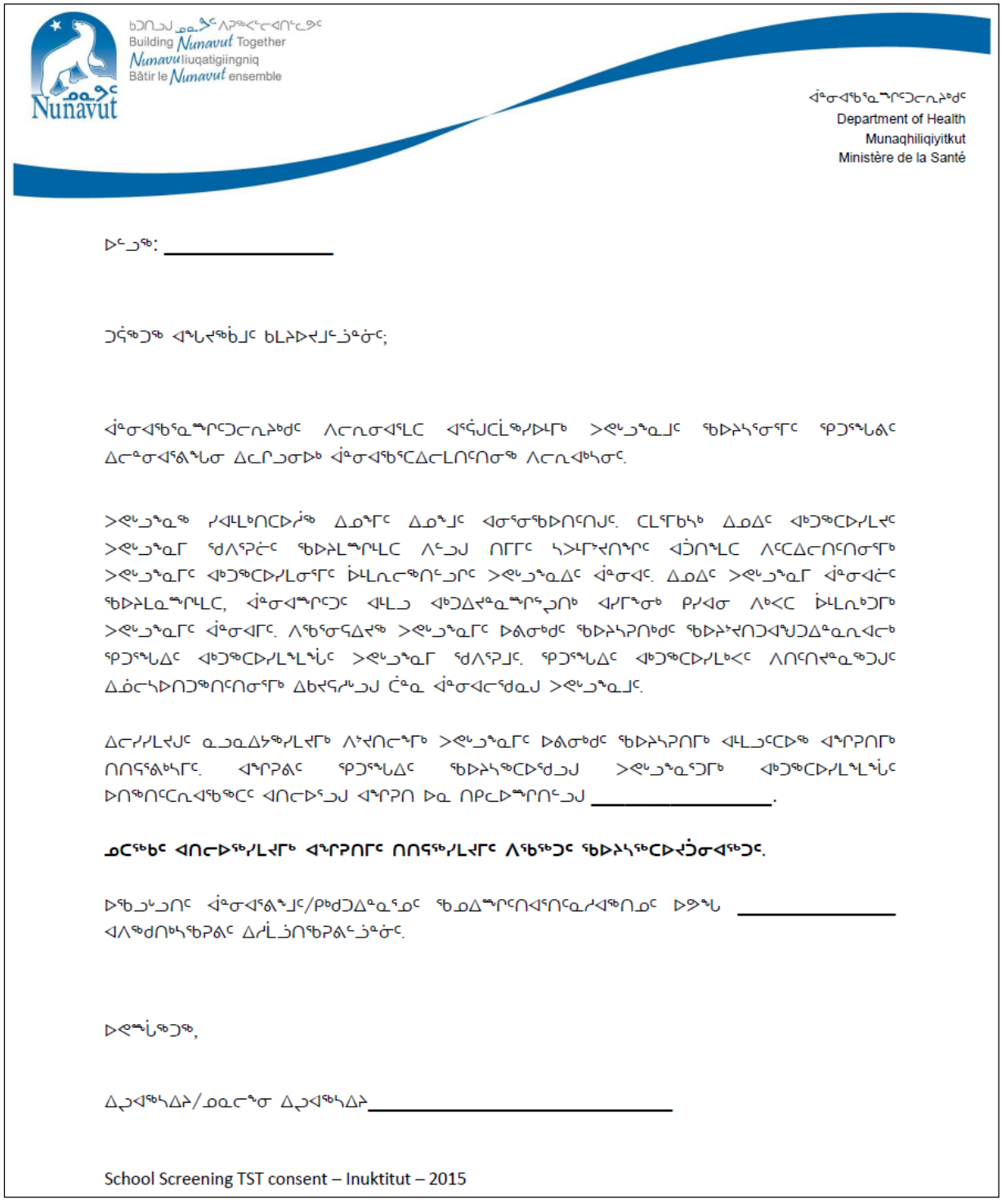
Hivayadjavutit munaqhiqarvingmut/Aanniarvingmutluunniit uvani______________ Apiqqutikhaqarupfi ihumalutiqarupfi hivayaqluhi.

Pittianikkut,

RN/CHN____________________________

School Screening TST consent – Inuinnaqtun – 2015

School Screening TST Consent (Inuktitut)



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ᐊᐅᓚᐊᖅᑳᖓᑕᑐᓕᕆᔨᒃᑯᑦ
Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

ᐅᑦᓗᖅ: _____

ᑐᖃᖅᑐᖅ ᐊᖏᓴᖅᑲᒪᒋᑦ ᑲᒪᔨᐅᔪᓐᓇᖅᑐᓂ;

ᐊᐅᓚᐊᖅᑳᖓᑕᑐᓕᕆᔨᒃᑯᑦ ᐱᓕᕆᓚᐊᖏᒪᓕᒡ ᐊᖏᖁᒋᒡᓗᖅᓯᐅᕐᒥᐅᖅ >ᓕᓴᐃᖓᓇᒧᑦ ᖃᐅᔨᓴᖏᓚᖅᑎᑦ ᕿᑐᕐᖁᓕᖅ ᐃᓕᓴᕐᔪᐊᖅᑐᓂ ᐊᐅᓚᐊᖅᑳᖓᑕᐃᓕᒪᑎᑕᐅᓂᖅᓯᖅ ᐱᓕᕆᓚᐊᖅᓴᖅᑐᓂ.

>ᓕᓴᐃᖓᓇᖅ ᓯᐊᓘᒃᑐᑕᐅᓯᖅ ᐃᓇᓕᑦ ᐃᓇᖅᒧᑦ ᐊᓚᖏᓂᖅᖃᐅᑎᑎᒋᑦ. ᑕᒪᖏᐅᓴᖅ ᐃᓇᐃᑦ ᐊᐅᑐᖅᑕᐅᓯᒪᔪᑦ >ᓕᓴᐃᖓᓇᒥ ᖃᐅᔨᒪᖅᑭᑦᑕ ᖃᐅᔨᓪᓚᕐᒪᒪᑕ ᐱᓕᓕᒪᖅ ᑎᑎᑦ ᓴᐃᒥᔪᐊᑎᖅᑭᑦ ᐊᑐᑎᖅᒪᑕ ᐱᓕᑕᐃᓕᑎᑎᓂᖏᓪᓕᖅᑐᖅ >ᓕᓴᐃᖓᓇᒥᑦ ᐊᐅᑐᖅᑕᐅᓯᒪᓂᖏᓪᓕᖅᑐᖅ ᐅᓪᓚᓐᓂᖅᑎᑦᑕ >ᓕᓴᐃᖓᓇᐃᓕ ᐊᐅᓚᐊᖅᑳᖓᑕᑐᓕᕆᓚᐊᖅᑕᐅᓂᖅ, ᐊᐅᓚᐊᖅᓯᕐᒥᑦᑐᑦ ᐊᖏᓚᓗ ᐊᐅᖅᑕᐃᔨᐊᓯᖅᓴᕐᕕᓂᖅᑐᖅ ᐊᓯᒥᖅᓂᖅ ᑭᓯᐊᓂ ᐱᐅᓪᓚᐅᖅᑕᐅᑎᑎᓂᖅ >ᓕᓴᐃᖓᓇᒥᑦ ᐊᐅᓚᐊᖅᑳᖓᑕᑐᓕᕆᓚᐊᖅᑕᐅᓂᖅᓯᖅ. ᐱᓕᕆᓚᐊᖅᑐᖅᑕᐅᓯᒪᓂᖏᓪᓕᖅᑐᖅ ᖃᐅᔨᒪᖅᑭᑦᑕ ᐊᐅᓚᐊᖅᑳᖓᑕᑐᓕᕆᓚᐊᖅᑕᐅᓂᖅᓯᖅ ᐊᐅᓚᐊᖅᑳᖓᑕᑐᓕᕆᔨᒪᓕᒡᓗᑎᑦ >ᓕᓴᐃᖓᓇᒥ ᖃᐅᔨᒪᖅᑭᑦᑕ. ᐱᖃᓐᓇᕐᓂᐊᕐᓇᖅ >ᓕᓴᐃᖓᓇᒥᑦ ᐅᐃᓂᖅᑭᑦ ᖃᐅᔨᓴᖏᓚᖅᑎᑦᑕ ᐅᐃᓴᕐᔪᐊᑎᑐᖅᑭᑦ ᖃᐅᔨᓴᖏᓚᖅᑎᑦᑕ ᐊᐅᓚᐊᖅᑳᖓᑕᑐᓕᕆᔨᒪᓕᒡᓗᑎᑦ >ᓕᓴᐃᖓᓇᒥ ᖃᐅᔨᒪᖅᑭᑦᑕ. ᐱᖃᓐᓇᕐᓂᐊᕐᓇᖅ ᖃᐅᔨᓴᖏᓚᖅᑎᑦᑕ ᐊᐅᓚᐊᖅᑳᖓᑕᑐᓕᕆᔨᒪᓕᒡᓗᑎᑦ >ᓕᓴᐃᖓᓇᒥᑦ ᐊᐅᓚᐊᖅᑳᖓᑕᑐᓕᕆᔨᒪᓕᒡᓗᑎ

School Screening – TST Given (English)

Building Nunavut Together
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Bâtir le Nunavut ensemble

Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Date: _____

Dear Parent or Guardian,

The Department of Health is doing annual Tuberculosis (TB) screening in your child's class this year and today your child was given a Tuberculin Skin Test (TST). The nurse will be returning to the school on _____ to check your child's arm and read the test, please make sure your child attends school on that day.

Until the nurse checks your child's arm remind your child not to scratch or rub the site. If it is itchy you can put an ice cube or cold cloth on it. Please don't put a bandage over it. Redness or bruising at the site is not unusual and does not mean the test will be positive. Reading the test requires skill and experience, it must be done by the nurse.

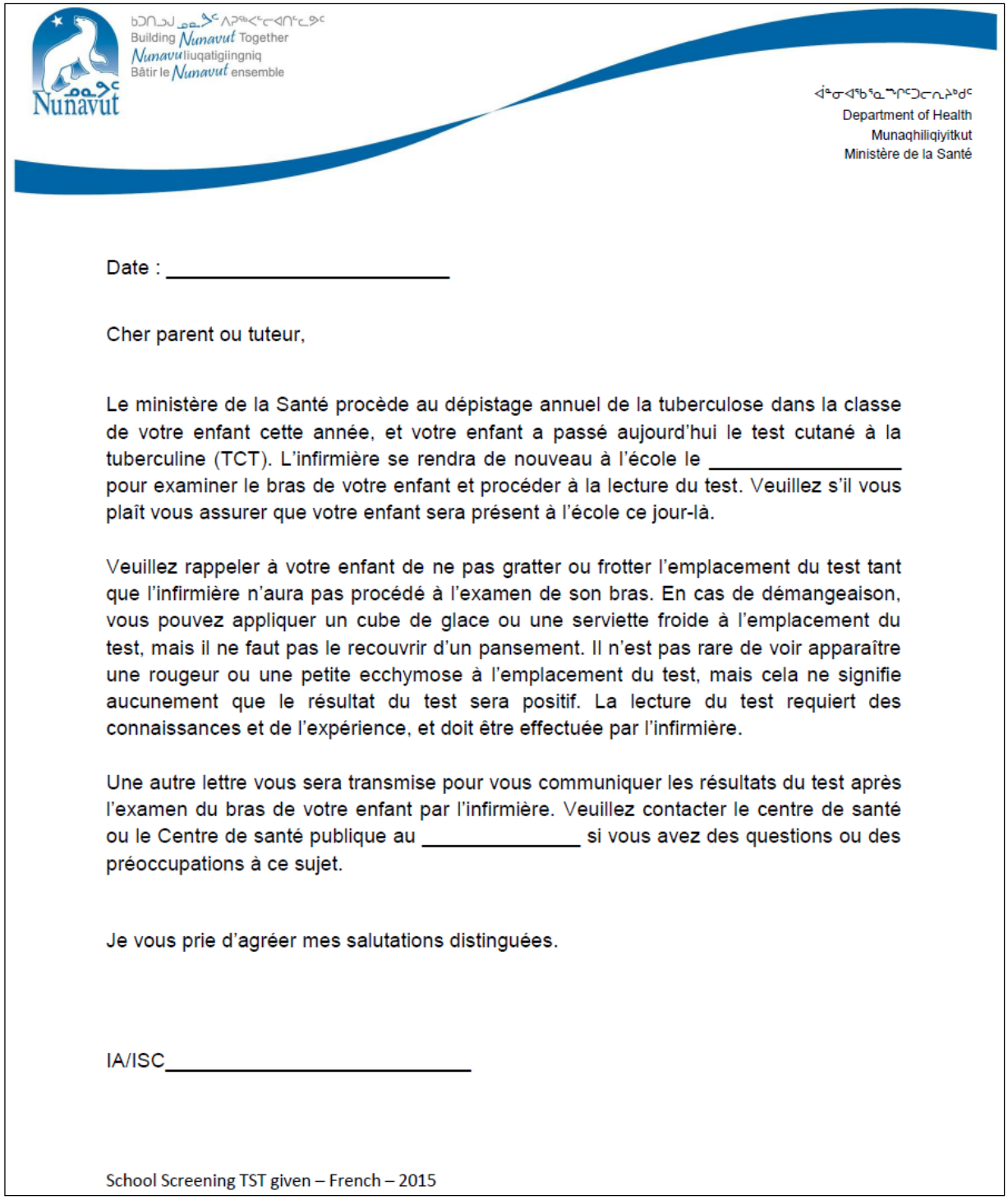
Another letter will be sent home to you informing you of the results of the test after the nurse has checked your child's arm. Please call the Health Centre/Public Health Office at _____ if you have any questions or concerns.

Sincerely,

RN/CHN_____

School Screening TST given – English – 2015

School Screening – TST Given (French)



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Bâtir le Nunavut ensemble

Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Date : _____

Cher parent ou tuteur,

Le ministère de la Santé procède au dépistage annuel de la tuberculose dans la classe de votre enfant cette année, et votre enfant a passé aujourd'hui le test cutané à la tuberculine (TCT). L'infirmière se rendra de nouveau à l'école le _____ pour examiner le bras de votre enfant et procéder à la lecture du test. Veuillez s'il vous plaît vous assurer que votre enfant sera présent à l'école ce jour-là.

Veuillez rappeler à votre enfant de ne pas gratter ou frotter l'emplacement du test tant que l'infirmière n'aura pas procédé à l'examen de son bras. En cas de démangeaison, vous pouvez appliquer un cube de glace ou une serviette froide à l'emplacement du test, mais il ne faut pas le recouvrir d'un pansement. Il n'est pas rare de voir apparaître une rougeur ou une petite ecchymose à l'emplacement du test, mais cela ne signifie aucunement que le résultat du test sera positif. La lecture du test requiert des connaissances et de l'expérience, et doit être effectuée par l'infirmière.

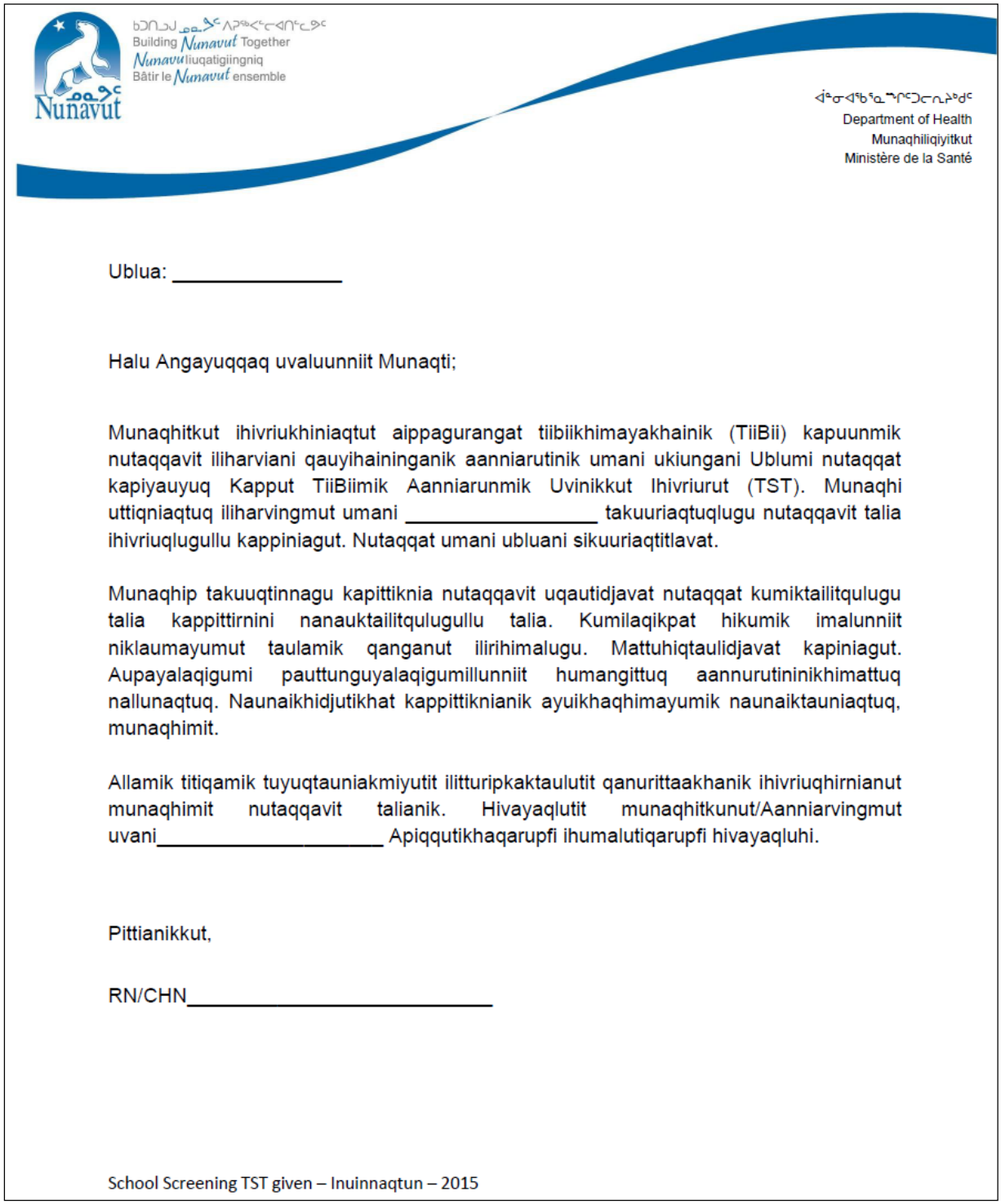
Une autre lettre vous sera transmise pour vous communiquer les résultats du test après l'examen du bras de votre enfant par l'infirmière. Veuillez contacter le centre de santé ou le Centre de santé publique au _____ si vous avez des questions ou des préoccupations à ce sujet.

Je vous prie d'agréer mes salutations distinguées.

IA/ISC_____

School Screening TST given – French – 2015

School Screening – TST Given (Inuinnaqtun)



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Bâtir le Nunavut ensemble

Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Ublua: _____

Halu Angayuqqaq uvaluunniit Munaqti;

Munaqhitkut ihivriukhiniaqtut aippagurangat tiibiikhimayakhainik (TiiBii) kapuunmik nutaqqavit iliharviani qauyihaininganik aanniarutinik umani ukiungani Ublumi nutaqqat kapiyauyuq Kapput TiiBiimik Aanniarunmik Uvinikkut Ihivriurut (TST). Munaqhi uttiqniaqtuq iliharvingmut umani _____ takuuriaqtuqlugu nutaqqavit talia ihivriuqlugullu kappiniagut. Nutaqqat umani ubluani sikuuriaqtitlavat.

Munaqhip takuuqtinnagu kapittiknia nutaqqavit uqautidjavat nutaqqat kumiktailitqulugu talia kappittirnini nanauktailitqulugullu talia. Kumilaqikpat hikumik imalunniit niklaumayumut taulamik qanganut ilirihimalugu. Mattuhiqtaulidjavat kapiniagut. Aupayalaqigumi pauttunguyalaqigumillunniit humangittuq aannurutininikhimattuq nallunaqtuq. Naunaikhidjutikhat kappittiknianik ayuikhaqhimayumik naunaiktauniaqtuq, munaqhimit.

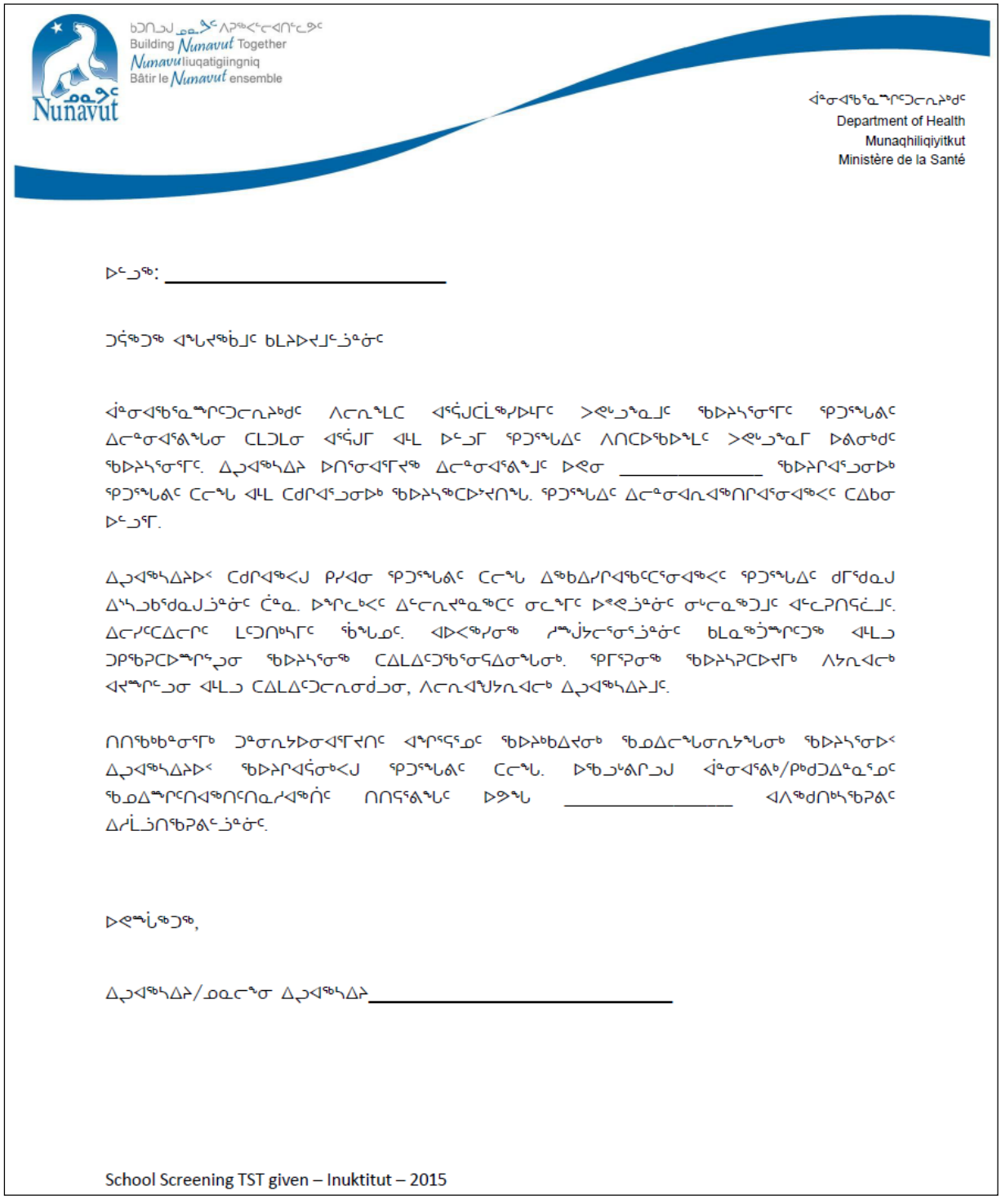
Allamik titiqamik tuyuqtauniakmiyutit ilitturipkaktaulutit qanurittaakhanik ihivriuqhirnianut munaqhimit nutaqqavit talianik. Hivayaqlutit munaqhitkunut/Aanniarvingmut uvani_____ Apiqqutikhaqarupfi ihumalutiqarupfi hivayaqluhi.

Pittianikkut,

RN/CHN_____

School Screening TST given – Inuinnaqtun – 2015

School Screening – TST Given (Inuktitut)



ᐅᑎᒍᑐ ᓄᓇᕗᑦ ᐱᖃᓐᓇᕐᓂᖅᓴᖅᑕᐅᓂᖅ
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ᐊᐅᓚᑲᖏᖅᓯᒪᔪᓕᕐᓂᑕᕐᓂᓕᕆᔨᒃᑯᑦ
Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

ᐅᓪᓗᓂ: _____

ᑐᖁᖅᑐᖅ ᐊᖏᓴᖅᑲᒪᔨᑦ ᑲᒪᓂᖅᓯᒪᓂᖅ

ᐊᐃᓐᓇᑲᖏᖅᓯᒪᔪᓕᕐᓂᑕᕐᓂᓕᕆᔨᒃᑯᑦ ᐱᓕᕆᖏᓂ ᐊᖏᖁᒋᓂᒪᖏᓕᕐᓂ ᐳᓚᓕᖏᓯᒪᓂ ᖃᐅᔨᓴᓂᖅᓂᑦ ᖃᑐᖅᖏᓚᐅᑦ ᐃᓕᓴᐃᓇᖅᓯᒪᓂ ᑕᒪᑐᒪᓂ ᐊᖏᖁᒋᒪᑦ ᐅᑎᖅ ᐅᓪᓗᓂ ᖃᑐᖅᖏᓚᐅᑦ ᐱᑎᑕᐅᑲᐅᐅᑦᓯᒪᓂ ᐳᓚᓕᖏᓯᒪᓂ ᐅᖃᓕᓂᒃᑯᑦ ᖃᐅᔨᓴᓂᖅᓂᑦ. ᐃᓕᓴᐃᓇᖅᓯᐅᑦ ᐅᑎᖅᓯᐅᖏᓐᓂᒃ ᐃᓕᓴᐃᓇᖅᓯᒪᓂᒃ _____ ᖃᐅᔨᓴᕐᓂᖏᓐᓂᒃ ᖃᑐᖅᖏᓚᐅᑦ ᑕᓕᖅᓂ ᐊᖏᖁᒋᓂᒪᖏᓕᕐᓂᐅᑎᓂᒃ ᖃᐅᔨᓴᖅᑕᐅᓴᐅᑎᓂᒃ. ᖃᑐᖅᖏᓚᐃᑦ ᐃᓕᓴᐃᓇᓕᖅᑎᑦᓯᐊᖅᑎᓂᓕᖅᑐᑦ ᑕᐃᒃᓯᓂ ᐅᖃᓕᓂᒃᑯᑦ ᐅᓪᓗᓂ.

ᐃᓚᐊᖅᓴᐃᓕᐅᑦ ᑕᐅᑎᐊᖅᑐᒍ ᑭᓯᐊᓂ ᖃᑐᖅᖏᓚᐅᑦ ᑕᓕᖅᑎ ᐃᖅᑲᐃᓯᑎᐊᖅᑕᑦᓂᓕᖅᑐᑦ ᖃᑐᖅᖏᓚᐃᑦ ᐅᒋᖁᓇᒍ ᐃᓴᓵᑲᖅᓯᓇᒍᔨᓪᓂᑦ ᑕᓐᓇᓂ. ᐅᖃᑎᒌᑦ ᐃᓕᓴᐃᓇᖅᓯᒪᓂ ᑕᓕᖅᑎᓂᒃ ᓂᓕᒍᔨᓪᓂᑦ ᑲᑎᒪᔨᓴᓂᖅᓂᑦ ᐊᒋᓕᖅᑎᓂᒃ ᐃᓕᓴᐃᓇᖅᓯᒪᓂ ᑕᓕᖅᑎᓂᒃ ᐅᒋᖁᓇᒍ ᑕᐃᒪᐃᓐᓇᖅᑐᖅ ᐃᓕᓴᐃᓇᖅᓯᒪᓂ ᑕᓕᖅᑎᓂᒃ ᐊᖏᖁᒋᓂᒪᖏᓕᕐᓂᐅᑎᓂᒃ ᖃᐅᔨᓴᖅᑕᐅᓴᐅᑎᓂᒃ ᐊᖏᖁᒋᓂᒪᖏᓕᕐᓂᐅᑎᓂᒃ ᐃᓕᓴᐃᓇᖅᓯᒪᓂ ᑕᓕᖅᑎᓂᒃ ᐃᓕᓴᐃᓇᖅᓯᒪᓂ ᑕᓕᖅᑎᓂᒃ ᐊᖏᖁᒋᓂᒪᖏᓕᕐᓂ

School Screening - TST Negative (English)

ᑲᑎᒪᔨ ᓄᓇᕗᑦ ᐱᖃᓐᓇᕐᓂᖅᓴᓂᖅ
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Nunavuliuqatigiingniq
Bâtir le Nunavut ensemble

ᐊᕐᓂᐊᖅᑐᖓᓯᒪᔪᖅᑐᑦ
Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Date: _____

Dear Parent or Guardian,

As you are aware, your child has recently been given a Tuberculin Skin Test (TST) in school. Today your child's TST was read by the nurse and was **negative**. This indicates that your child is **not** infected with tuberculosis and no further follow-up is required at this time.

Please call the Health Centre/Public Health at _____ if you have any questions or concerns.

Sincerely,

RN/CHN_____

School Screening TST negative – English – 2015

School Screening - TST Negative (French)

ᑲᑎᒪᔨᑦ ᓄᓇᕗᑦ ᐱᖃᓐᓇᕐᓂᖅᓴᖅ
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Bâtir le Nunavut ensemble

ᐊᐅᓚᑦᑐᖑᔪᓐᓇᖅᑐᑦ ᖃᓄᐃᓕᐅᕈᑎᒃ
Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Date : _____

Cher parent ou tuteur,

Comme vous le savez, votre enfant a récemment passé un test cutané à la tuberculine (TCT) à l'école. L'infirmière a procédé aujourd'hui à la lecture du TCT, et le résultat de ce test est **négatif.** Cela signifie que votre enfant n'est **pas** infecté par la bactérie de la tuberculose, et qu'aucun autre suivi n'est requis pour le moment.

Veuillez contacter le centre de santé ou le Centre de santé publique au _____ si vous avez des questions ou des préoccupations à ce sujet.

Je vous prie d'agréer mes salutations distinguées.

IA/ISC_____

School Screening TST negative – French – 2015

School Screening - TST Negative (Inuinnaqtun)

ᑲᑐᑎᓗᒍ ᓄᓇᕗᑦ ᐱᕈᖅᐸᓪᓕᐊᑎᓪᓚᕗᑦ
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Bâtir le Nunavut ensemble

ᐋᓐᓂᐊᖅᑲᖅᓇᙱᑦᑐᓕᕆᔨᒃᑯᑦ
Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Ublua: ________________

Halu Angayuqqaq uvaluunniit Munaqti;

Ilihimayutit, nutaqqat kapiyauhaqtuq Kapput TiiBiimik Aanniarunmik Uvinikkut Ihivriurut (TST) iliharvingmi. Ublumi nutaqqavit Kapput TiiBiimik Aanniarunmik Uvinikkut Ihivriurut (TST) takuktauyuq munaqhimit ihivriurutaa **aanniarutaittuq.**Naunaiktauyuq nutaqqat aanniarutaittuq tiibiikhimaittuq takuuktaupfagakhaittuqlu.

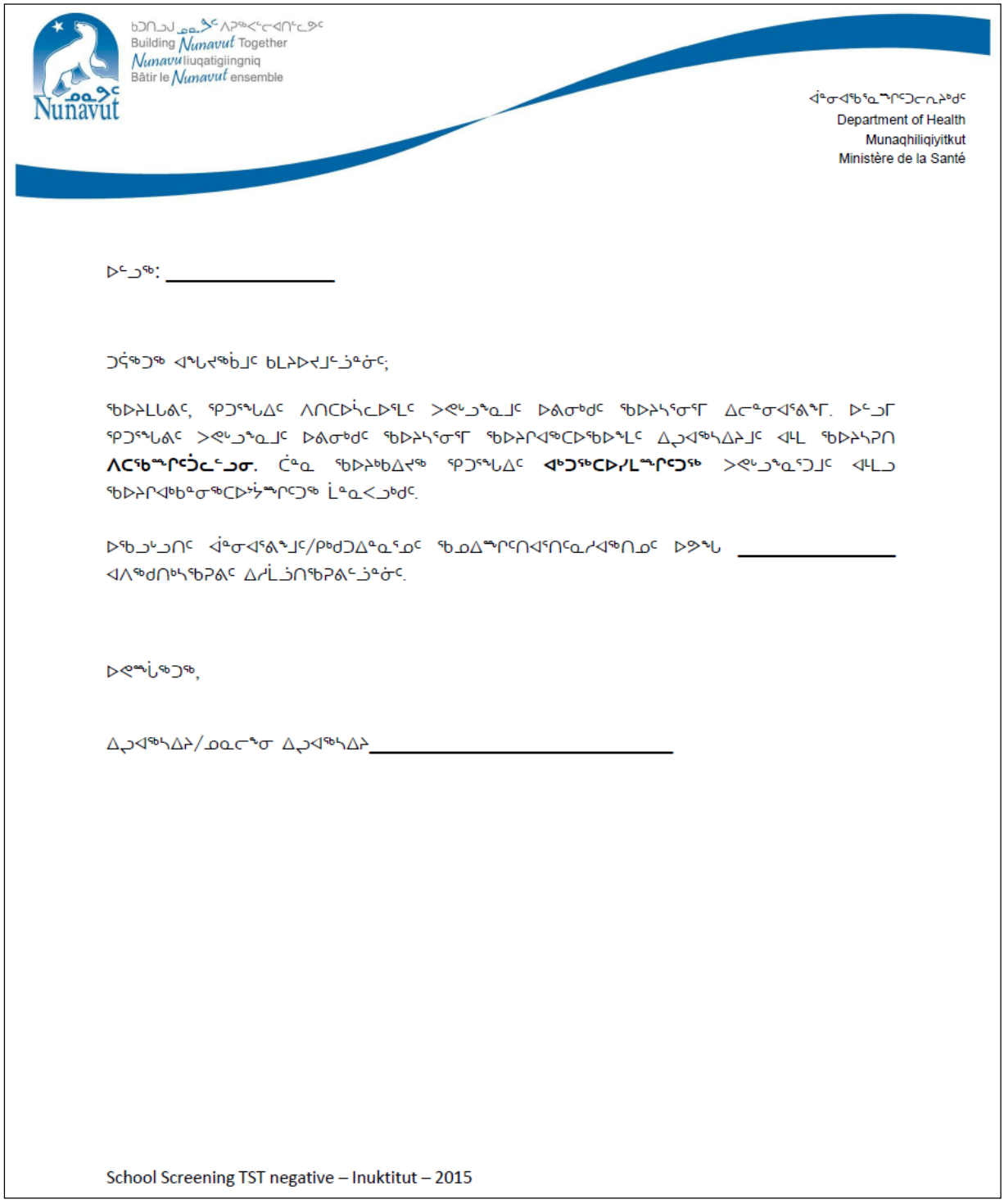
Hivayadjavutit munaqhiqarvingmut/Aanniarvingmutluunniit uvani_______________ Apiqqutikhaqarupfi ihumalutiqarupfi hivayaqluhi.

Pittianikkut,

RN/CHN_____________________________

School Screening TST negative – Inuinnaqtun – 2015

School Screening - TST Negative (Inuktitut)



ᑲᑎᒪᔨ ᓄᓇᕗᑦ ᐱᖃᓐᓇᐅᑉᐸᓂᖅ
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Bâtir le Nunavut ensemble

ᐊᐅᓚᐊᖅᓇᕐᓂᑐᓕᕆᔨᓂᖅ
Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

ᐅᑉᓗᖅ: _____

ᑐᖏᖅᑐᖅ ᐊᖏᓴᐸᒃᑰᒍᑦ ᑲᒪᔨᐅᔪᒍᑦᓱᓐᓂᖅ;

ᖃᐅᔨᓪᓚᕆᐊᓕᑦ, ᖃᑐᐃᖏᓪᓗᐃᑦ ᐱᑎᑕᐅᓴᒋᑉᓯᒪᑦ >ᕿᓐᓄᖏᓪᓗᒍᑦ ᐅᐃᓂᒃᑯᑦ ᖃᐅᔨᓴᖅᓂᖅᓯᒪ ᐃᑕᓐᓂᐊᖅᐃᖅᓱᒃᓭ. ᐅᑉᓗᒥ ᖃᑐᐃᖏᓪᓗᖏᓪᓗᒍᑦ >ᕿᓐᓄᖏᓪᓗᒍᑦ ᐅᐃᓂᒃᑯᑦ ᖃᐅᔨᓴᖅᓂᖅᓯᒪ ᖃᐅᔨᓴᐅᔪᖅᑕᐅᖃᐅᔨᓴᒃᑲᒪᑦ ᐃᓕᓴᐸᖅᐱᐃᓕᒍᑦ ᐊᒻᒪ ᖃᐅᔨᓴᐅᑎ **ᐱᑕᖃᓕᕐᓂᑦᓗᓂᓐᓂᒃᑯᑦ**. ᑕᐃᓐᓇ ᖃᐅᔨᓴᐅᑎᒃᑲᓂᖅ ᖃᑐᐃᖏᓪᓗᐃᑦ **ᐊᐅᑐᖅᑕᐅᓯᒪᓕᕐᓂᑐᓂᖅ** >ᕿᓐᓄᖏᓪᓗᕐᓂᑐᒍᑦ ᐊᒻᒪᓗ ᖃᐅᔨᓴᐸᑎᐅᓂᖅᑕᐅᔨᓴᕐᓂᑐᖅ ᒪᐃᓐᓇᐅᑉ.

ᐅᖃᓗᓕᑎᑦ ᐊᐃᓂᐊᖅᓱᒍᒪᔨᑦ/ᑭᐅᔭᑐᐃᓐᓇᖅᓯᓄᑦ ᖃᓄᐃᓕᕐᓂᑐᐊᖅᑎᓕᖅᓯᐊᖅᑎᓄᑦ ᐅᑦᓴᒃ _____ ᐊᐱᖅᔪᑎᐅᓴᖃᑦᓴᖅᑕᐅᓕᖅ ᐃᓱᒪᒋᔭᑎᖃᑦᓴᖅᑕᐅᓕᖅᓯᒪᓂᖅ.

ᐅᕿᓴᓱᖃᑦᑐᖅ,

ᐃᓕᓴᐸᒃᑲᐃᔨ/ᓄᓇᕗᒻᒥ ᐃᓕᓴᐸᒃᑲᐃᔨ_____

School Screening TST negative – Inuktitut – 2015

School Screening - TST Positive (English)

ᑲᑐᑎᓗᒍ ᓄᓇᕗᑦ ᐱᕈᖅᐸᓪᓚᐊᑎᓪᓚᕗᑦ
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Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Date: ___________________________

Dear: ___________________________

Your child ________________________ has recently had a Tuberculin Skin Test (TST) in school and the result of the test is **positive**. This indicates that your child may have been in contact with tuberculosis and infected with the TB germ. It is important for your child to have further testing to see if active Tuberculosis (TB) disease is present.

Most people who have a positive screen test have latent TB infection (LTBI), also known as sleeping TB, which is not making them sick but which can progress to become active disease and make them sick. Both LTBI and TB disease can be treated; LTBI can be treated with medication to prevent your child from becoming sick and TB disease can be treated and cured with medications.

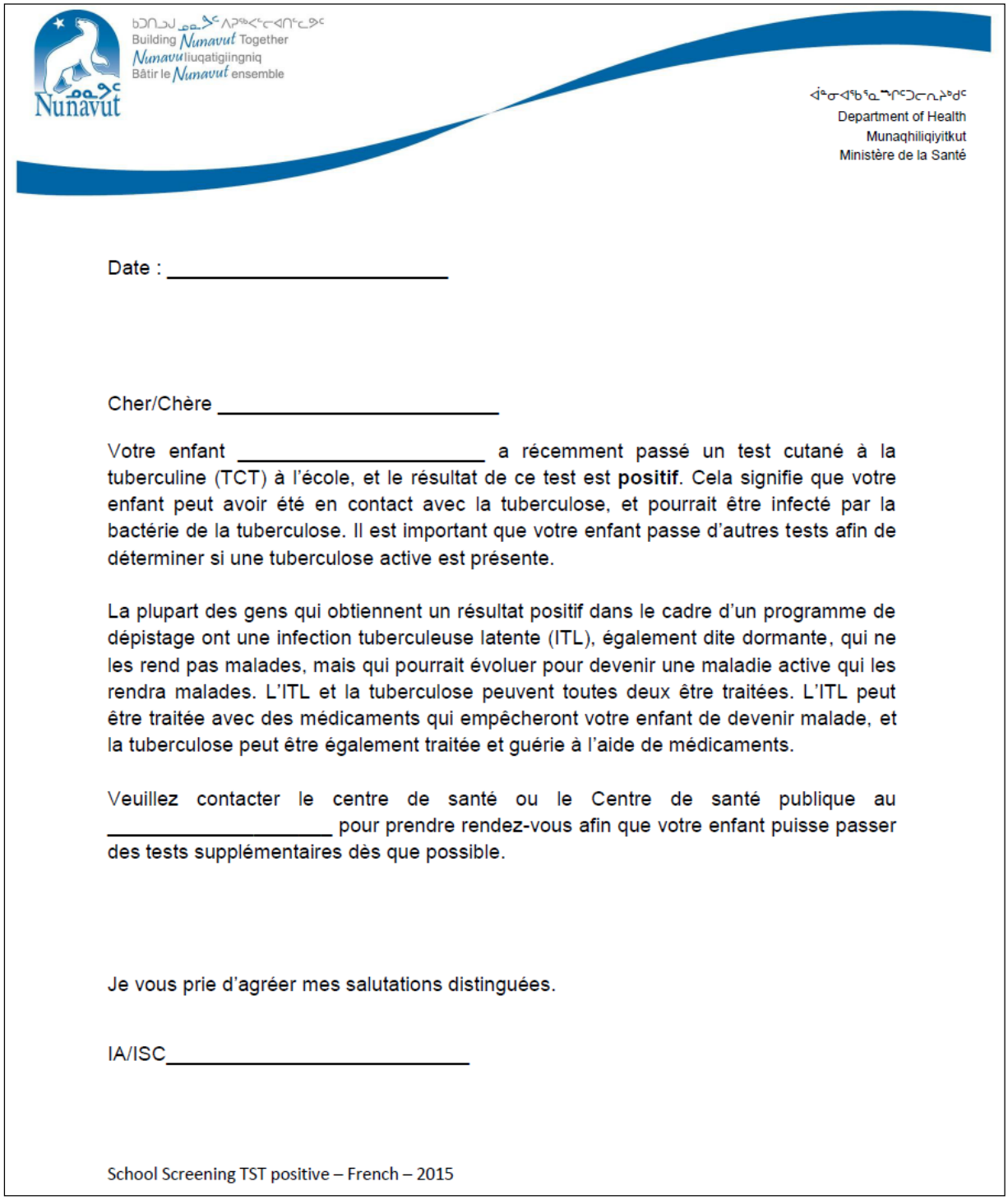
Please call the Health Centre/Public Health at ______________________ to make an appointment for your child to have further testing at your earliest convenience.

Sincerely,

RN/CHN_____________________________

School Screening TST positive – English – 2015

School Screening - TST Positive (French)



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Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Date : _____

Cher/Chère _____

Votre enfant _____ a récemment passé un test cutané à la tuberculine (TCT) à l'école, et le résultat de ce test est **positif**. Cela signifie que votre enfant peut avoir été en contact avec la tuberculose, et pourrait être infecté par la bactérie de la tuberculose. Il est important que votre enfant passe d'autres tests afin de déterminer si une tuberculose active est présente.

La plupart des gens qui obtiennent un résultat positif dans le cadre d'un programme de dépistage ont une infection tuberculeuse latente (ITL), également dite dormante, qui ne les rend pas malades, mais qui pourrait évoluer pour devenir une maladie active qui les rendra malades. L'ITL et la tuberculose peuvent toutes deux être traitées. L'ITL peut être traitée avec des médicaments qui empêcheront votre enfant de devenir malade, et la tuberculose peut être également traitée et guérie à l'aide de médicaments.

Veuillez contacter le centre de santé ou le Centre de santé publique au _____ pour prendre rendez-vous afin que votre enfant puisse passer des tests supplémentaires dès que possible.

Je vous prie d'agréer mes salutations distinguées.

IA/ISC_____

School Screening TST positive – French – 2015

School Screening - TST Positive (Inuinnaqtun)

ᑲᑐᑎᓗᒍ ᓄᓇᕗᑦ ᐱᕈᖅᐸᓪᓕᐊᑎᖦᓚᒍᑦ
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Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Ublua: ________________

Halu Angayuqqaq uvaluunniit Munaqti,

Nutaqqat________________________ kapiyauhaqtuq Kapput TiiBiimik Aanniarunmik Uvinikkut Ihivriurut (TST) iliharvingmi imatutlu ihivriuqtaudjutaa tikittuq **TB-mik puvaklungnilik**. Nutaqqat hanianiinami tiibiiqaqtumik aaniaqtumik. Nutaqqat ihivriuqtaupfariaqaqtuq tiibiiqariakhanik.

Amigaitut Inuit piqaqtut imaitumik ihivriuqhidjutaini naniyauyut piqaqtut imatut Tukihiyakkulli Takunaittumik Aanniarutilik Puvaglungnarmik (LTBI), takunnaittumut mihiknaittumut TiiBii-mut aanniarut, aanniangittugaluaqtuq kihimik aanniarutinguqtaaktuq. Tamangnik ukuak LTBI-lu TB-lu aanniarutik nakuuhittaaktuk. LTBI aanniarut nakuuhittaaktuq havautinut aanniarut hiamitinagu nutaqqat aannialiqtinagu TB aanniarut nakuuhittaaktuq aanniarutaiklunillu havautinut.

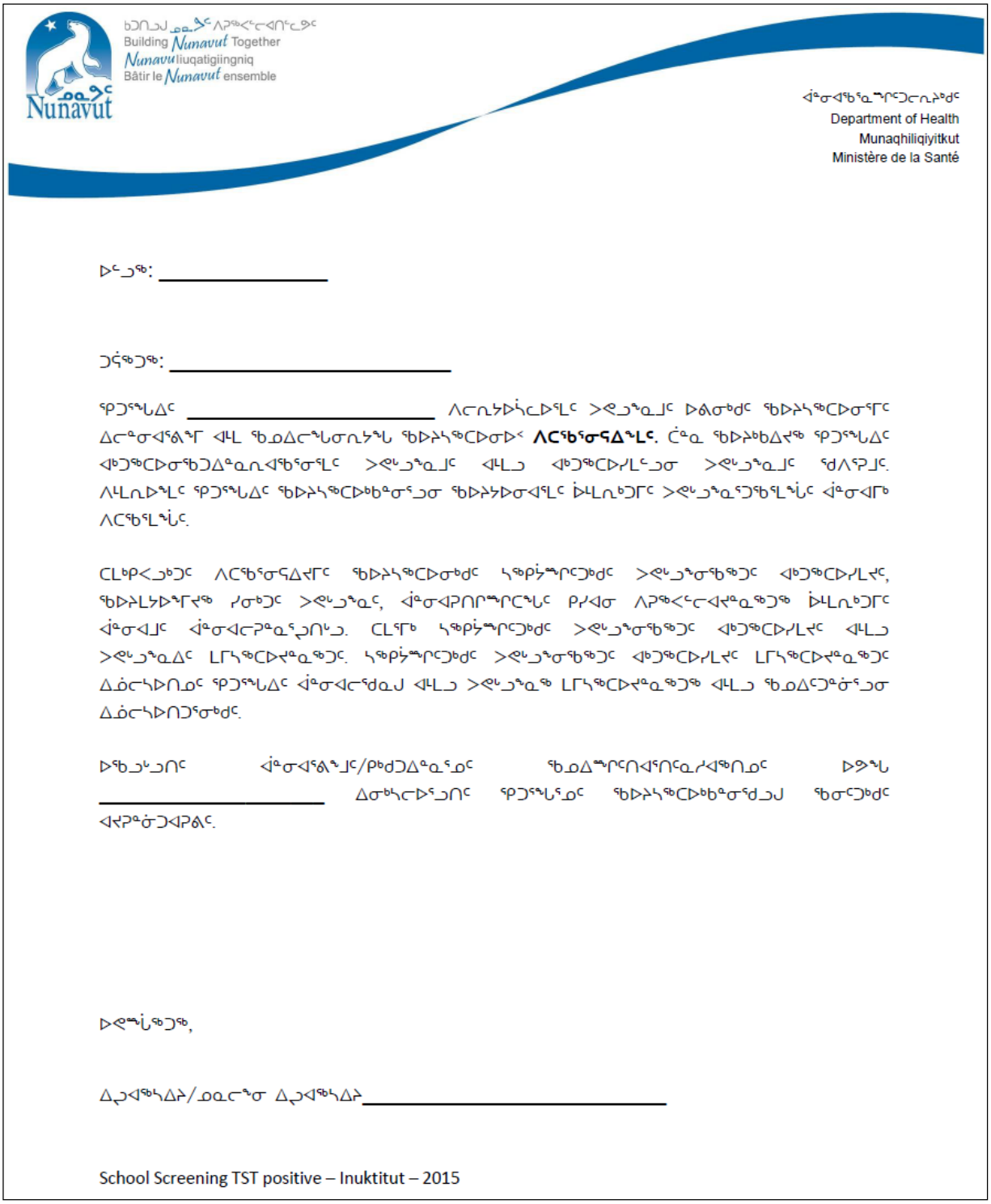
Hivayadjavutit munaqhiqarvingmut/Aanniarvingmutluunniit uvani ______________________ nutaqqat ihivriuqhiriangani qilamivyak.

Pittianikkut,

RN/CHN______________________________

School Screening TST positive – Inuinnaqtun – 2015

School Screening - TST Positive (Inuktitut)



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Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

ᐅᓪᓗᒥ: _____

ᑐᖃᖅᑐᖅ: _____

ᖃᑎᖅᑕᐃᑦ _____ ᐱᓕᕆᔨᒋᓕᕐᓂᑦ >ᓴᓗᖏᓪᓗᒍᑦ ᐅᐃᓂᒃᑯᑦ ᖃᐅᔨᓴᖅᑕᐅᓂᕐᕿᑦ ᐃᓕᓴᐅᓂᖏᓐᓂᒃ ᖃᐅᔨᓴᖅᑕᐅᓂᐅᑦ **ᐱᑕᖃᖅᓂᕋᐃᖏᓪᓕᑦ.** ᑕᐅᓪᓗ ᖃᐅᔨᓴᒃᐅᓕᕐᓂ ᖃᑎᖅᑕᐅᓂᖃᖅᑐᑦ ᐊᒃᑐᖅᑕᐅᓂᖃᖅᑐᑦ ᐃᓕᓴᐅᓂᖏᓐᓂᒃ ᐊᒃᑐᖅᑕᐅᓂᕐᓗᑎᑦᑐᓂ >ᓴᓗᖏᓪᓗᒍᑦ ᐊᓕᒪᔪ ᐊᒃᑐᖅᑕᐅᓂᕐᓗᑎᑦᑐᓂ >ᓴᓗᖏᓪᓗᒍᑦ ᖃᐅᕕᑭᑦ. ᐱᓕᕆᐅᖏᓐᓂᑦ ᖃᑎᖅᑕᐃᑦ ᖃᐅᔨᓴᖅᑕᐅᓂᖃᖅᖢᓂᓪᓚᓂ ᖃᐅᔨᓴᐅᓂᓪᓕᑦ ᐅᓪᓚᕆᐅᑎᑦ ᐊᓕᕆᔨᒋᓕᕐᓂᑦ ᖃᑎᖅᑕᐃᑦ ᖃᐅᔨᓴᖅᑕᐅᓂᖃᖅᑐᑦ ᐅᓪᓚᕆᐅᑎᑦ >ᓴᓗᖏᓪᓗᒋᑦᖢᓕᕐᓗᑎᑦ ᐊᓪᓚᑦᑎᕐᓂᑦ ᐱᑕᖃᖅᑐᑦ.

ᑕᒪᖀᓪᓚᑐᑦ ᐱᑕᖃᖅᓂᕋᐃᔪᒋᑦ ᖃᐅᔨᓴᖅᑕᐅᓂᖃᖅᑐᑦ ᓴᖅᑭᑲᒥᕐᑕᖃᖅᑐᑦ >ᓴᓗᖏᓪᓗᓂᖃᖅᑐᑦ ᐊᒃᑐᖅᑕᐅᓂᔪᒋᑦ, ᖃᐅᔨᓴᒪᐅᖓᔪᓂᖅ ᓯᓂᐅᑐᑦ >ᓴᓗᖏᓪᓗᓐᓂ, ᐊᑲᓂᐊᑭᑎᑎᓕᕐᓂᖅᓯᒪᓂ ᑭᓯᐊᓂ ᐱᑭᖅᑕᓪᓕᐊᔪᖅᓗᒃᑐᖅ ᐅᓴᓚᕆᐅᑐᑦ ᐊᑲᓂᐊᓕᒍᖅᓗᓐᓚᑐᓪᓚᑐᒃᓴ. ᑕᒪᖁᑎᒃ ᓴᖅᑭᑲᒥᕐᑕᖃᖅᑐᑦ >ᓴᓗᖏᓪᓗᓂᖃᖅᑐᑦ ᐊᒃᑐᖅᑕᐅᓂᔪᒋᑦ ᐊᓪᓚᑦᑎᕐᓂᑦ >ᓴᓗᖏᓪᓗᒋᑦᖢᓂᑦ ᒪᒥᓴᖅᑕᐅᓂᔪᓐᓇᖅᑐᒃᑐᖅᑐᑦ. ᓴᖅᑭᑲᒥᕐᑕᖃᖅᑐᑦ >ᓴᓗᖏᓪᓗᓂᖃᖅᑐᑦ ᐊᒃᑐᖅᑕᐅᓂᔪᒋᑦ ᒪᒥᓴᖅᑕᐅᓂᔪᓐᓇᖅᑐᒃᑐᖅᑐᑦ ᐃᓚᒋᑦᑕᓴᐃᓕᓐᓂᑦ ᖃᑎᖅᑕᐃᑦ ᐊᑲᓂᐊᑦᑯᓚᒍᒍᓗᒍ ᐊᓪᓚᑦᑎᕐᓂᑦ >ᓴᓗᖏᓪᓗᒍᖓ ᒪᒥᓴᖅᑕᐅᓂᔪᓐᓇᖅᑐᒃᑐᖅᖢᓂᑦ ᐊᓪᓚᑦᑎᕐᓂᑦ ᖃᐅᔨᓴᖅᑕᐅᓂᖃᖅᑐᑦᖢᓂᓪᓚᓂ ᐃᓚᒋᑦᑕᓴᐃᓕᓐᓂᖃᖅᑐᑦ.

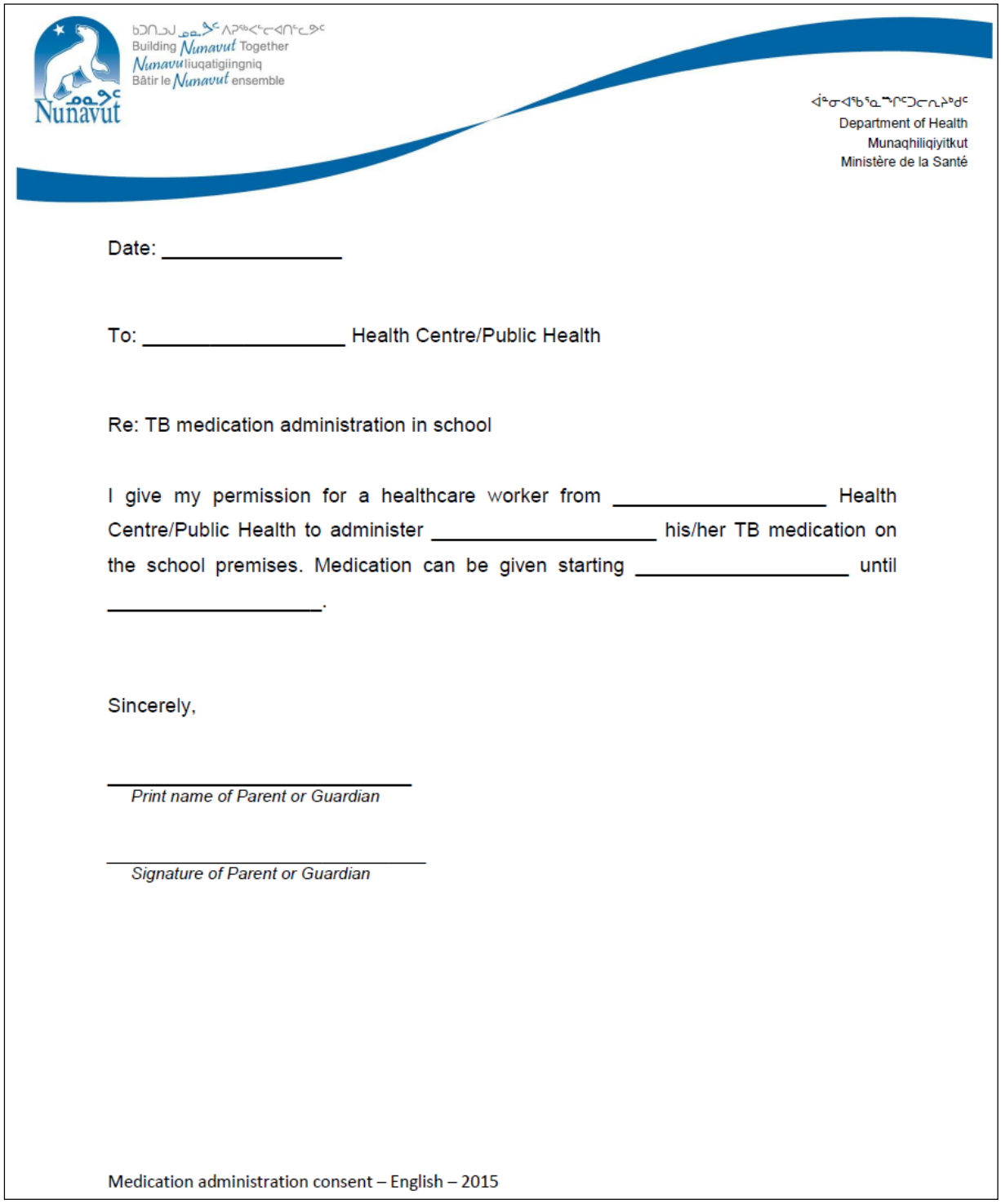
ᐅᖃᓗᓕᓂᑦ ᐊᓂᓕᕐᓂᖅᓯᒪᔪᑦ/ᑭᖅᑯᑐᐃᓐᓇᖅᓯᓂᑦ ᖃᓄᐃᓐᓇᕐᓂᖅᓯᒪᔪᑦ ᐅᑉᖏᓐᓄᑦ _____ ᐃᓅᖅᓴᓕᐅᔨᓕᓂᑦ ᖃᑎᖅᑕᐃᓕᓴᓄᑦ ᖃᐅᔨᓴᖅᑕᐅᓂᖃᖅᖢᓂᕐᕿᓕᓗᒍ ᖃᐅᓕᖅᑐᓂᑦ ᐊᔪᕈᓐᓃᑦᑐᖅᑕᐅᓗᒃᑐᑦ.

ᐅᓂᒃᑳᖅᑐᖅ,

ᐃᓕᓴᐅᓂᖅᓯᒪᔪᑦ/ᓄᓇᕗᓐᓂ ᐃᓕᓴᐅᓂᖅᓯᒪᔪᑦ_____

School Screening TST positive – Inuktitut – 2015

Medication Administration Consent (English)



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Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Date: _____

To: _____ Health Centre/Public Health

Re: TB medication administration in school

I give my permission for a healthcare worker from _____ Health Centre/Public Health to administer _____ his/her TB medication on the school premises. Medication can be given starting _____ until _____.

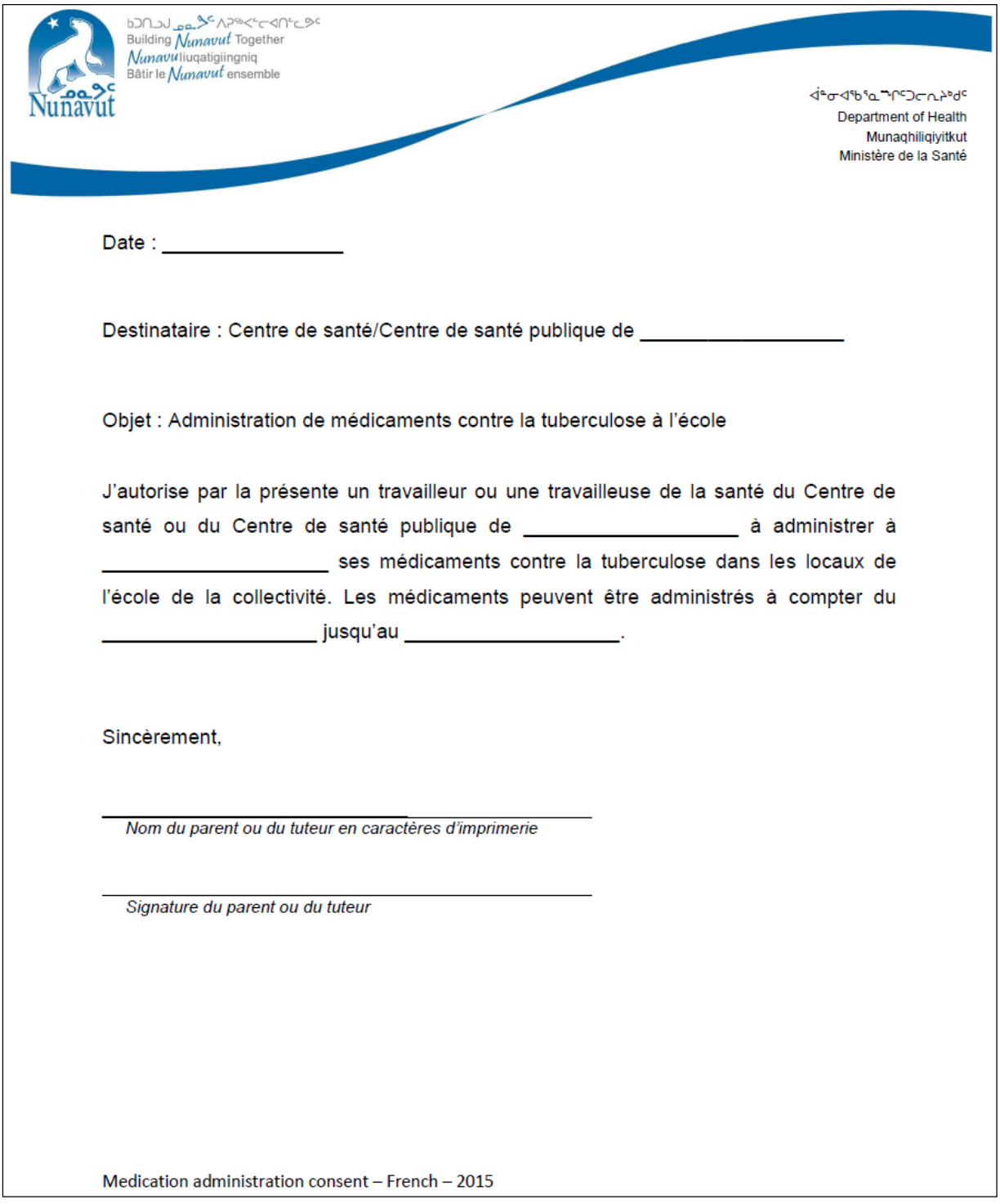
Sincerely,

_____
Print name of Parent or Guardian

_____
Signature of Parent or Guardian

Medication administration consent – English – 2015

Medication Administration Consent (French)



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Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Date : _____

Destinataire : Centre de santé/Centre de santé publique de _____

Objet : Administration de médicaments contre la tuberculose à l'école

J'autorise par la présente un travailleur ou une travailleuse de la santé du Centre de santé ou du Centre de santé publique de _____ à administrer à _____ ses médicaments contre la tuberculose dans les locaux de l'école de la collectivité. Les médicaments peuvent être administrés à compter du _____ jusqu'au _____.

Sincèrement,

_____
Nom du parent ou du tuteur en caractères d'imprimerie

_____
Signature du parent ou du tuteur

Medication administration consent – French – 2015

Medication Administration Consent (Inuinnaqtun)

ᑲᑎᒍᒧᑦ ᓄᓇᕗᑦ ᐱᕈᖅᐸᓪᓕᐊᑎᓪᓗᒍ
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ᐋᓐᓂᐊᖃᕐᓇᙱᑦᑐᓕᕆᔨᒃᑯᑦ
Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

Ublua: ________________

Uvunga: __________________ Munaqhiqarvik/Aanniarvik

Uvuuna: Tibiikhimayuq havautiktuqtitauyut iliharvingmi

Angiktunga munaqhiliqiyikkuni havaktiat uvani ___________________ Munaqhiqarvik/Aanniaqvik tunihiniaqtuq ____________________ nutarara tibiikhimayumut havautiktuqtitauyut iliharvingmi. Havautiktuqtitauliqniaqtuq ___________________ uvunga aklaat ___________________.

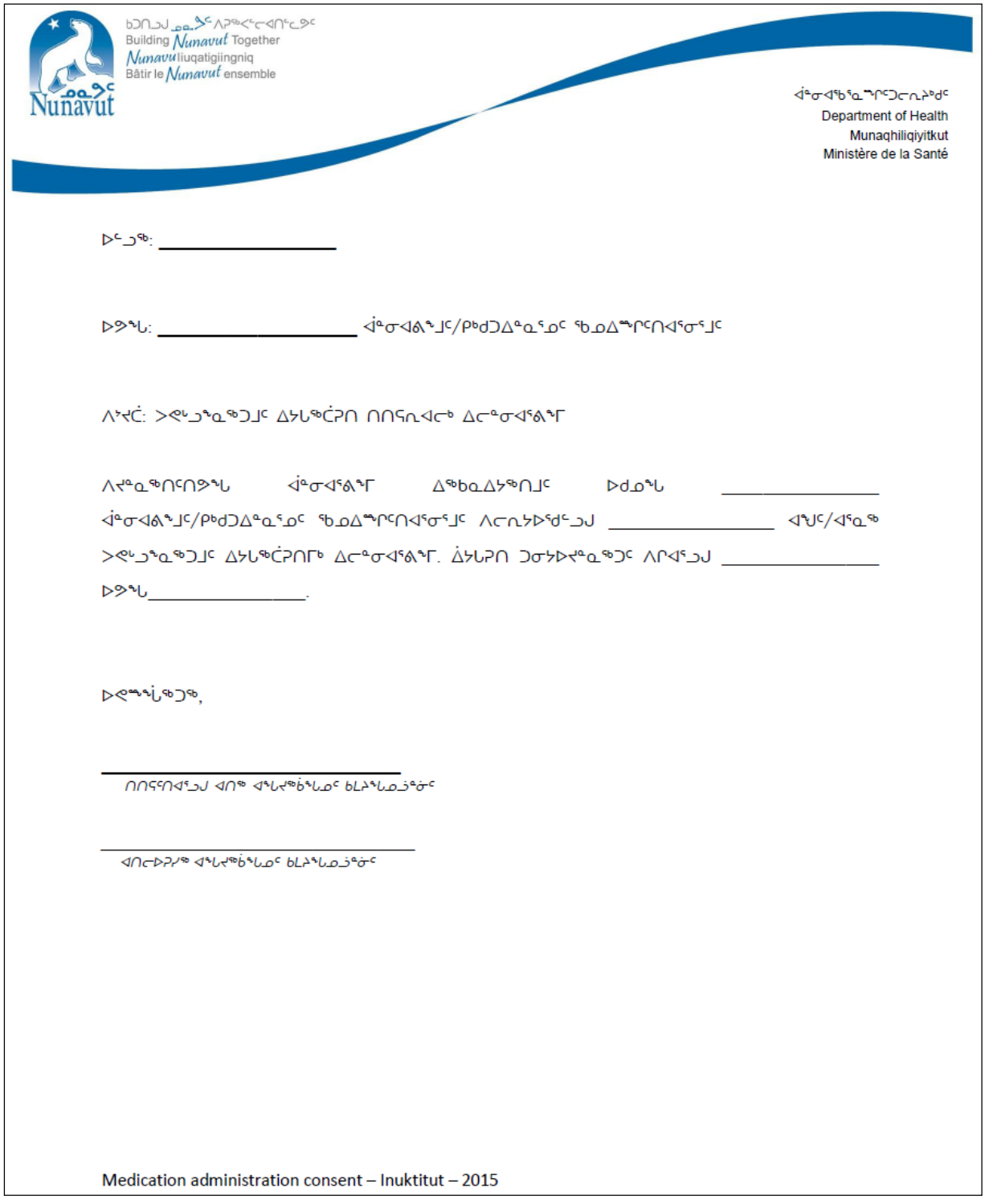
Pittianikkkut,

____
Titiraqlugu atia Angayuqqap uvaluunniit Munaqtip

____
Atiliurvia Angayuqqap uvaluunniit Munaqtip

Medication administration consent – Inuinnaqtun – 2015

Medication Administration Consent (Inuktitut)



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Department of Health
Munaqhiliqiyitkut
Ministère de la Santé

ᐅᑉᓗᖅ: _____

ᐅᖄᖅᑎ: _____ ᐊᓂᓕᕆᔨᖓᔪᓂ/ᑭᒃᑯᑐᐃᓐᓇᖅᓯᓂ ᖃᓄᐃᙱᑦᑐᕆᐊᖃᖅᖢᓂᔪᓂ

ᐱᒃᓴᑦ: ᐳᓴᒃᓇᖅᑐᑐᔪᓂ ᐃᓕᓴᖅᑕᕐᕈᑎ ᑎᑎᕋᕆᐊᒃᓴ ᐃᓕᓐᓂᕐᓂᐊᕐᓇᖅᖢᑎ

ᐱᓱᓇᖅᑎᑦᑎᐅᖅᓴᖅ ᐊᓂᓕᕆᖏᖢᑎ ᐃᖅᑲᓇᐃᓕᓴᖅᑎᔪᓂ ᐅᑯᓄᖅ _____
ᐊᓂᓕᕆᔨᖓᔪᓂ/ᑭᒃᑯᑐᐃᓐᓇᖅᓯᓂ ᖃᓄᐃᙱᑦᑐᕆᐊᖃᖅᖢᓂᔪᓂ ᐱᓕᕆᓚᐅᕐᓯᑯᓘᑐᔪ _____ ᐊᖏᓪᓕᐊᖏᖅ
ᐳᓴᒃᓇᖅᑐᑐᔪᓂ ᐃᓕᓴᖅᑕᕐᕈᑎᒥᒃ ᐃᓕᓐᓂᕐᓂᐊᕐᓇᖅᖢᑎ. ᐃᓕᓴᕈᑎ ᑐᓂᓴᐅᕐᓇᖅᓯᑐᓂ ᐱᑎᐊᖏᓪᓕᔪᐊ _____
ᐅᖄᖅᑎ_____.

ᐅᖄᓚᓱᒍᓐᓇᖅ,

_____
ᑎᑎᕋᕆᐊᖏᓪᓕᔪᐊ ᐊᑎᖅ ᐊᓱᒪᓚᒃᓴᒪᓂᓂ ᑲᒪᔨᓱᓂᓕᕆᔨᓂᓂ

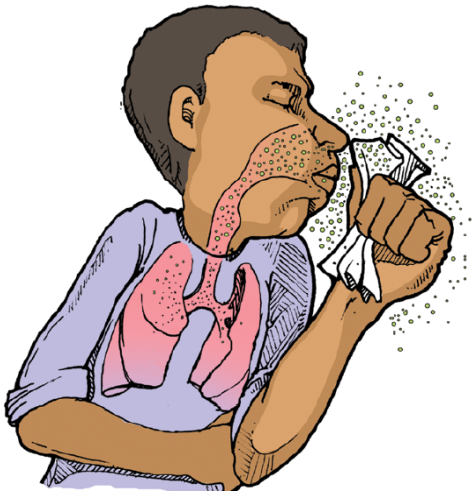
_____
ᐊᑎᓕᐅᕐᔪᓚᖅ ᐊᓱᒪᓚᒃᓴᒪᓂᓂ ᑲᒪᔨᓱᓂᓕᕆᔨᓂᓂ

Medication administration consent – Inuktitut – 2015

SECTION 13

Infection Prevention and Control

Infection Prevention and Control



Transmission of TB bacteria is primarily person-to-person, through inhalation of airborne droplets (droplet nuclei) released by an infectious case during forceful expirations, such as coughing.

Identifying, isolating, and treating infectious cases promptly is critical for stopping TB transmission.

Image adapted from: *http://www.cdc.gov/tb/publications/posters/images/stoptblarge.pdf*

Mask Types

Table 13-1: Images of example surgical/procedure type masks and disposable N95 particulate respirators

Surgical / procedure type mask	Disposable N95 particulate respirator
Capture droplet nuclei to reduce release into the surrounding airspace	**Filter** droplet nuclei to prevent inhalation
To be worn by clients with known or suspected infectious active TB	To be worn by health care providers and others during exposures to clients with known or suspected infectious active TB
	

Home Isolation Guidelines

During home isolation:

- The client must not travel outside of their home community without prior approval from the RCDC;
- The client must not go to work, school or any other public indoor places (e.g., churches, stores, restaurants, movie theatres);
- No visitors should be allowed in the client's home;
- The client should wear a surgical/procedure type mask (see **Table 13-1**) during health care provider visits to his/her home (e.g. for DOT);
- Health care providers must wear disposable N95 particulate respirators (see **Table 13-1**) while in the client's home; and
- The client should not use taxis or other forms of public transportation.

Unless contraindicated for other reasons, it is usually safe for clients on home isolation to spend time outside. Masking is not necessary while clients are outside, however they should cover their mouths when coughing and sneezing, and not spend time in close proximity to others.

- For information on **airborne precautions**, refer to the *Nunavut Infection Prevention and Control Manual*, available online at: *http://www.gov.nu.ca/health/information/infection-prevention-and-control*
- For information on collecting specimens for TB testing, see: **Section 5 – Collection of Specimens for TB Testing**
- For client instructions on collecting sputum specimens, see: **Section 15 – TB Fact Sheets**

Transportation and Medevac of Clients with Suspected or Confirmed Active TB

Clients with suspected or confirmed infectious active TB (e.g. pulmonary TB) should postpone all travel by commercial air transportation **OF ANY DURATION** until they are no longer considered infectious.

When circumstances require a client to leave his/her home community or to travel between communities (e.g. for further tests and/or treatment in hospital) while s/he is still considered infectious, medevac services must be used. **Medevac arrangements must be made in advance.**

Once a client with suspected or confirmed infectious active TB is on treatment **AND** clearance for air travel has been received from Public Health (through the RCDC), s/he can travel via scheduled flights for medical follow-up. No precautions (e.g. masking) are required and the airline does not need to be informed.

Non-respiratory TB

Clients with non-respiratory TB (e.g. TB lymphadenopathy) can travel for medical care or follow-up without any restriction or precautions **once concurrent infectious active TB has been ruled out.**

Children with Active TB

Restrictions or precautions for children with suspected or confirmed active TB (any form) traveling on scheduled flights are determined on a case-by-case basis by Public Health, through the RCDC. Considerations include: TB risk/exposure history; clinical assessment and chest x-ray findings (e.g., presence of cough, cavitary disease); and when available, results from testing of respiratory specimens (e.g., sputum, gastric aspirates).

For additional information on infection prevention and control for TB, refer to the *Nunavut Infection Prevention and Control Manual*, available online at:

http://www.gov.nu.ca/health/information/infection-prevention-and-control

SECTION 14

Additional Sources and Recommended Resources for Health Care Providers

Additional Sources and Recommended Resources for Health Care Providers

Guidelines in the *Nunavut Tuberculosis Manual* take precedence over those that might be found in other reference materials or from other sources.

Sources of Information on TB

Canadian Sources

- **Canadian Lung Association**
  http://www.lung.ca/diseases-maladies/tuberculosis-tuberculose_e.php

- **Health Canada – First Nations and Inuit Health Branch (tuberculosis)**
  http://www.health.gc.ca/tuberculosis

- **Public Health Agency of Canada TB Prevention and Control**
  http://www.phac-aspc.gc.ca/tbpc-latb/index-eng.php

American Sources

- **Centers for Disease Control and Prevention, Division of TB Elimination (CDC-DTBE)**
  http://www.cdc.gov/tb/

- **Regional Training and Medical Consultation Centers**
  http://www.cdc.gov/tb/education/rtmc/default.htm

International Sources

- **International Union against TB and Lung Disease (IUATLD)**
  http://www.theunion.org

- **Stop TB Partnership/World Health Organization**
  http://www.stoptb.org

- **World Health Organization (WHO)**
  http://www.who.int/tb/en/

Recommended Resources for Health Care Providers

- **BCG World Atlas:** An interactive website created by McGill University and the Research Institute of the McGill University Health Centre that provides a database of detailed information on current and past global BCG vaccination policies and practices for over 180 countries.
  http://www.bcgatlas.org/

- **Canadian Tuberculosis Standards, 7th Edition (2013):** Information and recommendations for TB prevention, care and control in Canada.
  http://www.respiratoryguidelines.ca/tb-standards-2013

- **findtbresources.org:** An online library of TB education and training resources and tools.
  http://www.findtbresources.org

- **International Tuberculosis Incidence Rates:** Information on incidence rates of TB disease published by the World Health Organization (WHO), helpful for identifying countries where TB is prevalent.
  http://www.publichealth.gc.ca/tuberculosis

- **Inuit Specific Tuberculosis Strategy (2013):** A document created by Inuit Tapiriit Kanatami (ITK) in collaboration with a subcommittee of the National Inuit Committee on Health (NICoH), the Inuit Public Health Task Group (IPHTG) to increase awareness of the need for more effective approaches to TB prevention, control, and care for Inuit, and to present a path forward for reducing the incidence of TB disease in Inuit Nunangat.
  https://www.itk.ca/wp-content/uploads/2016/07/20130503-EN-FINAL-Inuit-TB-Strategy.pdf

- **Recognition of BCG Scars:** A collection of photographs and text to help providers identify BCG vaccination scars.
  http://www.phac-aspc.gc.ca/tbpc-latb/pdf/recognition-bcg-scars_e.ppt

- **Self-Study Modules on Tuberculosis:** A series of nine educational modules on TB, provided in a self-study format. Modules 1 through 5 provide basic information on TB. Modules 6 through 9 provide more specific TB programmatic information.http://www.cdc.gov/tb/education/ssmodules/default.htm

- **Tuberculosis Education for Aboriginal and Non-Aboriginal Youth:** A guide developed to provide high school teachers across Canada, but in particular in the Prairie Provinces, with an abundance of information related to TB identification, the connection of TB to other diseases and behaviors, and TB history.
  http://www.tbper.ualberta.ca/en/publications/tb-education.aspx

- **Tuberculosis in Canada:** Current reports on the epidemiology of TB in Canada as reported to the Canadian Tuberculosis Reporting System (CTBRS).
  http://www.phac-aspc.gc.ca/tbpc-latb/index-eng.php

- **Tuberculosis: Drug Resistance in Canada:** Current reports on drug-resistant TB in Canada.
  http://www.phac-aspc.gc.ca/tbpc-latb/index-eng.php

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- **Tuberculosis Prevention and Control in Canada: A Federal Framework for Action (2014):** A document that describes the framework through which the federal government will focus its efforts to reduce TB in populations at risk in Canada.
  http://www.phac-aspc.gc.ca/tbpc-latb/pubs/tpc-pct/index-eng.php

SECTION 15

TB Factsheets

Tuberculosis (TB)

Fact Sheet

Tuberculosis (TB)

What is TB?

Tuberculosis (TB) is a disease caused by germs that are spread from person to person through the air. TB usually affects the lungs, but it can also affect other parts of the body, such as the brain, the kidneys, or the spine. TB can be treated and cured.

I was notified that I was in contact with someone who has TB, what should I do?

You should be tested to see if you have been infected. If you have been in contact with the TB germ, you may develop latent TB infection (sometimes called sleeping TB). You can be treated to prevent latent TB infection from becoming active TB disease.

What is the difference between latent TB infection and active TB disease?

If you have latent TB infection it means that the germ is not growing in your body, it is not making you sick and you cannot spread it to others.
If you have active TB disease, it means the germs are growing in your body. This will make you feel sick and you may be spreading it to others.

How is TB spread?

TB is spread when people spend time breathing the same air with someone who has active TB disease in their lungs. The TB germs must be breathed in from the air; you cannot get TB from touching things like doorknobs or sharing someone's drinking glass, or clothes. You cannot get TB by shaking hands with someone who has it. TB is most often spread to close friends and family members of people who have active TB disease and do not know they have it. You cannot get TB from someone who has latent TB infection.

What are the symptoms of TB?

The common symptoms of TB are:

- cough that lasts for more than 3 weeks
- night sweats
- fever
- weight loss
- coughing up blood
- feeling unusually tired

Remember – if you or someone you care about is having these symptoms, THINK TB and get tested! You can get tested for TB at your local health center.

How can you be tested for TB and what can the TB test tell me?

The TB skin test is a tiny needle in your forearm. Many people have had a TB skin test before. The skin test must be checked by a nurse 48-72 hours [2-3 days] after it is given, to find out the results. A positive TB skin test means you may have been in contact with someone who has active TB disease. It does NOT mean you can spread TB to others. You will need more tests such as a chest x-ray and spitting into a cup to make sure you do not have active TB disease.

Can TB be cured?

Yes. Active TB disease can be cured with medication. These medications can also prevent latent TB from turning into active disease. Each dose of medication is given by a healthcare worker in your home community.

Feuille de renseignements

Tuberculose

Qu'est-ce que la tuberculose?
La tuberculose est une maladie causée par des germes qui se transmettent dans l'air d'une personne à l'autre. La tuberculose affecte habituellement les poumons, mais elle peut aussi affecter d'autres parties de l'organisme, comme le cerveau, les reins ou la colonne vertébrale. La tuberculose se traite et se guérit.

J'ai reçu un avis disant que j'ai été en contact avec une personne qui a la tuberculose, que dois-je faire?
Vous devriez passer un test pour savoir si vous avez contracté l'infection. Si vous avez été en contact avec les germes de la tuberculose, il est possible que vous développiez une infection à tuberculose latente (parfois appelée tuberculose dormante). Vous pouvez vous faire traiter pour empêcher que l'infection à tuberculose latente devienne une tuberculose active.

Quelle est la différence entre une infection à tuberculose latente et une tuberculose active?
En cas d'infection à tuberculose latente, les germes ne se développent pas dans l'organisme. La personne n'est pas malade et ne peut pas transmettre l'infection à une autre personne.

En cas de tuberculose active, les germes se développent dans l'organisme. La personne est malade et peut transmettre l'infection à une autre personne.

Comment la tuberculose se transmet-elle?
La tuberculose se propage quand on respire le même air qu'une personne souffrant de tuberculose active au niveau des poumons. Les germes de la tuberculose se propagent quand une personne respire de l'air contaminé. La tuberculose ne se transmet pas en touchant des objets comme des poignées de porte ou en partageant les verres ou les vêtements. Vous ne pouvez pas attraper la tuberculose en serrant la main d'une personne infectée. La tuberculose se transmet souvent à des amis proches et des membres de la famille d'une personne qui a une tuberculose active et ne le sait pas. La tuberculose ne s'attrape pas d'une personne qui a une infection à tuberculose latente.

Quels sont les symptômes de la tuberculose?
Les symptômes courants de la tuberculose sont les suivants :

- toux persistante pendant plus de trois semaines
- sueurs nocturnes
- fièvre
- perte de poids
- crachats de sang
- sensation de fatigue inhabituelle

Rappel : Si vous ou une personne dont vous prenez soin présentez ces symptômes, PENSEZ TUBERCULOSE et passez un test! Vous pouvez passer un test au centre de santé de votre localité.

Comment se fait-on tester pour la tuberculose et qu'est-ce que le test révèle?
Le test de dépistage consiste à piquer une petite aiguille dans l'avant-bras. Plusieurs personnes ont déjà passé un test cutané de dépistage de la tuberculose. Une infirmière doit vérifier les résultats dans les 48 à 72 heures [de 2 à 3 jours] suivant le test. Un test positif signifie que la personne a été en contact avec une personne qui a une tuberculose active. Cela NE VEUT PAS dire que la personne peut transmettre la tuberculose à d'autres. D'autres tests, comme des radiographies ou l'analyse de crachats, sont requis pour vérifier s'il s'agit d'une tuberculose active.

Est-ce que la tuberculose se guérit?
Oui. La tuberculose active peut se guérir à l'aide de médicaments. Ces médicaments peuvent également empêcher que la tuberculose latente devienne une maladie active. Chaque dose de médicaments est administrée par un travailleur de la santé de votre collectivité.

Kangiqhidjutit

Tuberculosis (TB)

Huuna una TB?

Tuberculosis (TB) imalu aanikguutauyuq pidjutauvaktuk aaniakguutinit hiamitpaktunik tapfumuna inukmit alaamuttauk inukmit talvuna aanikhaakpaktaaptingnik. TB tuutkiikguutivaktuq puuvangnik, pidjutauvaktuk tuutkiikguutivaktuqlu alaanut timimi, qanuqtunmi qarritakmut, talvunalu taaktungni, nalliak quappigangni. TB qanuqmi havautikut aaniakguutaiktaktaan tamaktittautaktuq aaniakguut.

Uvanga tuhaktittauyunga uvanga ilauvaktungaguq aaniaktumik talvuna TB, qanuqgilliukniakinga huulilanga?

Ilvit ihivviuktauyukhautyuutit ilituqgiyangni aaniakguunnikgiakhangnik. Ilvit pikkattikpakhimaguvit aaniakguutillingmik TB aaniakguutinit ilvit naupkakhunguyatlunin taakkuunaitumik TB aaniakguut (ilani taiyauvaktuq hiniktuutut TB). Ilvit havauttituqtaaktauyuutit aaniakguutiningnaitumik taakkuunaitumik TB aaniakguut tapfumuna aaniakguutiningnaitumik aaniallakinaktuq TB aaniakguut.

Huuna alangayuq tapfumanga taakuunaitumik TB aaniakguutillakivaktuq unalu aaniallakinaktuq TB aaniakguut?

Ilvit piuttikaalikguvit taakkuunaitumik TB aaniakguutillakivaktuq naunaiguutivaktuq talvuna aaniakguut naunggituq ilvit timingni, aaniallakinggituutit imalu hiammitillimaitat alaanut.
Ilvit pikalikguuvit aaniakguutillakivaktuq TB aaniakguut, naunaiguutivaktuq aaniakguut naulliktuut timingni. Talvuna ilvit tuutkaingallikhunguyuutit ilvitlu qanuqtunmi hiammittiktaaktaatlu alaanut.

Qanuq TB hiammitpakpaa?

TB imalu hiammitikpaktuq katimaablutik attautimut aanikhaakhuutik attautimi ilaagiblugu tamna aaniaktguutillakivaktuq TB aaniakguut talvani puuvangni. Talvuna TB aaniakguutillakivaktuut aanikhaakganggamik talvanga aanikhaakattigiikangamik; ilvit pillimaituutit TB qaahaakguuvit huunavaluknik uuquap tigguqpiannit nalliak attuqqatiggungni niukkautimik, nalliak aanurangginik. Ilvit pillimaituutit TB haaluqguvit inukmik aaniakguutillingmik. TB imalu qanuqtunmi hiammitpaktuq talvuna kaanitunik ilaanaanit unalu ilaagiinit inungnik aaniakguutillakivaktuq TB aaniakguut ilihimanggitunik aaniakguutikaktunit. Ilvit pillimaituutit TB TB aaniakguut.

Huuna talvuna tuutkiingalikgangamik talvuna TB?

Talvuna tajjaguinak tuutkaingallikganggatta talvuna TB ima:

- qallaktuqhuni hivvituuniannik pinggaahunik havagniini
- uunuami aumaalaktuqhuni
- kijaaktikhuni
- qaapakpaalliabluni
- qaalaktuqhuni aukmik
- mihimallikhuni uunakguuhukhuni

Puiguuqtailuutit – ilvit nalliak pikpagiiyangnik pilikgumi uq'qungninga tuutkaingallikguumi, IHUUMALUUTIT TB imalu ihivviuktittiiyavuutit! Ilvit ihivviuktittaaktuutit talvuna TB talvani nunariyangni aaniakvianungaullutit.

Qanuqtun ihivviukhikniakgalluaqkin talvuna TB unalu qanuqtun naunnaikniakaa TB ihivviukhiktauguuma ilituuqginniakinga qanuqtun?

Tamna TB uuvinnikmi ihivviukhiktuukhamik mikkauyuq mitkuut talvuna ikuuhingniaguut. Ammigaituut inuit pivakhimayuut TB uuvinnikmi ihivviukhikpaktuut hivuagut. Tamna uuvvinik ihivviuktauyuukhak ihivviuktittillugit munakhimit 48-72 ikkangninnik [2-3 ubluunik] ahiagut tuuniyaukpat, naunnaigianggani qanuqgittaakhanik. A pilik TB uuvinnikmi ihivviukhikhimayuq qanuqtunmi illaukkatauyungnakhiyuutit inukmik aaniakguutillingmikTB aaniakguutauyuq. Tamna pidjutaituq PILIMAITUQ TB tapquunnunga alaanut. Ilvit ihivviukhikffaaktuukhauyuq imalu ihivviukguutimut imalu tuuvvuaqtuqluutitlu qalluunmut ilituqgittiakgianggini pidjutaittaakhangnik aaniallakinnaktunik ima TB aaniakguut.

Pitaaktuq TB aaniakguuttaiktaaktaat?

Hii. Aaniakguutillakivaktuq TB aaniakguut piiktittaaktaan haavauttituqtittaugumik. Hapquat haavauttikhauttit aaniallaakinnaitumik nuutkaaktitaaktuut taakuunnaitunik TB tapfumanga aaniakguutinguqhuni aaniakguut. Iikuut havauttikhat tuuniyauvaktuut tapfumanga munakhimit havaktimit talvani nunaariyangni.

ᓄᓕᐊᑦ ᑎᑎᕋᖅᓄᓪᓕᐊᑦ

ᐅᖅᑕᓂᐅᓂᖅ

ᐅᖅᑕᓂᐅᓂᖅ ᑭᓚᒪᒃ?

ᐅᖅᑕᓂᐅᖅᑕᖅᑐᑦ ᐊᐅᓂᐊᖓᔪᖅ ᖃᐅᔨᓴᕆᔨᐅᓂᖓᓚᓄᓪᓗᒍᑦᑕᓂᒃ ᓄᐊᓖᒪᑉᐸᑦᑕᓪᓕᐊᓄᓪᓚᖕᓂᒃ ᐃᓄᒪᑎᑦ ᐃᓄᒪᓚᑦ ᐊᓂᖅᑎᑲᓱᖅᓯᒪᒃ.
ᐅᖅᑕᓂᐅᖅᑕᖅᑐᑦ ᐊᑐᑐᖅᓯᒪᔪᓄᖅ ᐅᖅᑕᓂᐅᒃ, ᑭᓄᐊᓂ ᐊᑐᑐᖅᓯᒪᓂᐅᖏᓐᓄᑦ ᑎᒥᐅᑦ ᑭᓄᓇᓕᖅᑎᑦᓂᓂᒃᑯᓂ, ᓄᓇᓗ ᖃᖅᑎᖅᑎᑦᑕ, ᑕᖅᑐᖓᓂᒃ, ᖃᑎᖅᑎᓕᕆᓂᖅ. ᐅᖅᑕᓂᐅᓚᖅᑐᖅ ᒪᒥᖅᑕᖅᑕᐅᓚᖅᑐᖅ ᐱᔪᓐᓂᖅᑎᑕᐅᓂᓗ.

ᑐᖅᐅᒪᑎᑕᐅᓕᐅᖅᑐᖅᓱᖓ ᖃᓂᑭᖅᖃᓂᓂᕆᒪ ᐃᓄᒪᑦ ᐅᖅᑕᓂᑕᒥᑦ, ᖃᓄᐃᓕᓕᐅᕆᓚᐊᖃᖅᑯᓂᖓ?

ᖃᐅᔨᓴᖅᑕᐅᓕᐊᖃᖅᑐᖅᑎᑦ ᐊᐃᑕᑐᖅᑕᐅᓕᒪᓕᒪᓐᓇᖅᓯᒪᓂ. ᓴᖅᑭᖏᕐᕕᐅᓕᒪᓂᐅᕐᓇᓚᕐᓂ ᐅᖅᑕᓂᐅᕐᓂ ᐊᐃᑕᑐᖅᑕᐅᓕᐊᖃᖅᑎᑦᓂᓂᒃᑯᓂ (ᐃᓕᓴᐅᓂᑯᑦ ᑕᐃᔨᐅᓚᓱᓪᓚᒥᑦᑕ ᐅᖅᑕᓂᐅᖅᑕᖅᑐᑦ ᐅᖅᑕᓂᐅᕐᓂ). ᒪᒥᓴᖅᑕᐅᓕᐅᓄᖅᑕᖅᑐᑦ ᑕᓴᓇ ᐊᐃᑕᑐᖅᑕᐅᓕᐅᓄᖅᑕᖅᑐᑦ ᓴᓴᑎᑎᑕᐅᓂᖏᓐᓄᑦ ᐊᐃᑕᑐᖅᑕᐅᓚᐅᑦ ᐅᖅᑕᓂᐅᕐᓂ ᐊᓐᓂᖅᑐᑦ.

ᐊᔨᔪᒋᓐᓂᐅᓂᓂᒃ ᐅᓚᓱᒪᑕ ᐊᐃᑕᑐᖅᑕᐅᓕᐅᓄᖅᑕᖅᑐᑦ ᐅᖅᑕᓂᐅᓂᖅᑎᑦ ᐊᓖᒪ ᐊᐃᑕᑐᖅᑕᐅᓚᐅᑦ ᐅᖅᑕᓂᐅᕐᐳᑦ ᐃᓄᐃᓕᓕᐅᕆᓚᐊᖃᖅᑯᓂᖓ?

ᐊᐃᑕᑐᖅᑕᐅᓕᐊᖃᖅᑐᖅᑎᑦ ᐅᖅᑕᓂᓴᐅᓂᖅ ᑐᑭᖅᑐᖅᑐᖅ ᒡᓂᓇ ᖃᐅᔨᓴᕆᔨᐅᓂᖅ ᐃᖃᓗᓂ ᑎᑎᖅᑲᓂᑕᖅᑐᖅ ᐱᔪᖅᓯᒪᓂᖅᑐᖅ, ᐃᓕᓂᓂ ᖃᓄᐃᓕᓕᐅᕆᓚᐊᖃᖅᑎᑦᓂᓂᒃᑯᓂ ᐊᓖᒪ ᐊᓯᐅᓚᓂ ᐅᖅᑕᓂᐅᕐᓂ ᖃᓄᐃᓕᓕᐅᕆᓚᐊᖃᖅᑎᑦᓂᓂᒃᑯᓂ ᐊᐃᑕᑐᖅᑕᐅᓕᐊᖃᖅᑎᑦᓂᓂᒃᑯᓂ ᐊᓖᒪ ᐊᓯᐅᓚᓂ ᐊᐃᑕᑐᖅᑕᐅᓕᐅᓄᖅᑕᖅᑐᑦ ᐅᖅᑕᓂᐅᕐᓂ.

ᓇᓗᓇᐃᖅᑕᐅᓵᔨᓂᒃ ᐅᖅᑕᓂᐅᓚᓂ ᐅᖅᑕᓂᐅᕐᓂ ᐅᓚᓱᒪᑕ?

ᓇᓗᓇᐃᖅᑕᐅᓵᔨᑎᑎᑦᑕᓂᒃ ᐅᖅᑕᓂᐅᓂᖅᑎᑦ ᒪᓕᒐᓂᖅ:

- ᖃᐅᐃᖅᑲᓱᓂᓗ ᐱᓇᓱᐊᕐᓱᑦ ᐱᖓᓱᓄᑦ ᐅᖓᓪᒡᓗᓂᑦ
- ᐅᓐᓄᐋᑦᑯᑦ ᐊᐅᒪᓴᖏᓐᓄᖅ
- ᐅᑎᖏᓇᖓᓄᖅ
- ᓴᓗᑎᐊᓪᓚᕆᓂᖅ
- ᐊᐅᖏᖅᑐᑎᑦ ᖃᐅᐃᖅᑲᓱᓂᖅ
- ᐊᔨᔪᐅᖅᖁᓕᑎᑦ ᐅᐃᖏᖓᓄᖅ

ᐃᖅᑲᐅᒪᓕᑦ – ᑕᒪᑲᐅᓂᖓ ᓇᓗᓇᐃᖅᑕᐅᓵᔨᑎᖏᓐᓄᖅᑲᓕᐊᑦ ᑭᓇᐃᓐᓇᖏᓪᓗᓂᑦ ᑕᖅᑭᖏᖅᑕᖅᑕᖏᓂ ᑕᐃᒪᓕᐃᑕᐅᓂ ᓇᓗᓇᐃᖅᑕᐅᓵᔨᑎᖏᓐᓄᖅᑲᖅᑲᒃᑯᑦ, ᐅᖅᑕᓂᐅᓂᖅ ᐃᓱᒪᓕᓗᒍ ᖃᐅᔨᓴᕆᔨᐅᓂᖅᑎᑦ ᐅᖅᑕᓂᐅᕐᐳᑦ! ᐅᖅᑕᓂᐅᓂᖅᑎᑦ ᖃᐅᔨᓴᕆᔨᐅᓂᖅᑎᑦ ᐅᖅᑕᓂᐅᖅᑕᖅᑐᑦ ᐊᐅᓂᐊᕐᓇᖅᑐᓂ.

ᖃᐅᔨᓴᖅᑕᐅᓵᔨᑎᖏᓐᓄᖅᑕᖅᑐᑦ ᐅᖅᑕᓂᐅᓂᖅᑎᑦ ᐊᓖᒪ ᖃᐅᔨᓴᖅᑕᐅᓵᔨᑎᖏᓐᓄᖅᑕᖅᑐᑦ ᐅᖅᑕᓂᐅᓂᖅᑎᑦ ᐊᓖᒪ ᖃᐅᔨᓴᖅᑕᐅᓵᔨᑎᖏᓐᓄᖅᑕᖅᑐᑦ ᐅᖅᑕᓂᐅᕐᓂ?

ᐅᖅᑕᓂᐅᓚᖅᑐᖅᑎᑦ ᐅᖅᑕᓂᐅᓂᖅᑎᑦ ᐅᖅᑕᓂᐅᕐᓂ ᐅᖅᑕᓂᐅᓂᖅᑎᑦ ᐅᖅᑕᓂᐅᕐᓂ ᐊᓖᒪ ᐊᐃᑕᑐᖅᑕᐅᓕᐊᖃᖅᑎᑦᓂᓂᒃᑯᓂ ᐅᖅᑕᓂᐅᕐᓂ ᐊᓖᒪ ᐊᐃᑕᑐᖅᑕᐅᓕᐊᖃᖅᑎᑦᓂᓂᒃᑯᓂ ᐅᖅᑕᓂᐅᕐᓂ ᐊᓖᒪ ᐊᐃᑕᑐᖅᑕᐅᓕᐅᓄᖅᑕᖅᑐᑦ

Fact Sheet

Latent TB Infection vs. Active TB Disease

A person with LATENT TB infection:

- Has a positive Tuberculin Skin Test (TST) but their other tests (e.g. chest x-ray and sputum samples) show no evidence of Tuberculosis (TB).
- Has tuberculosis TB germ in their body, but the TB germs are sleeping or inactive.
- Does not feel sick.
- Can't infect anyone else.
- May become sick with active disease if the tuberculosis germ becomes active.
- Can be treated with medication in their home community to prevent the TB germs from becoming active and making them sick.
- Needs to take all their medications to prevent active TB disease, even though they feel well.

A person with ACTIVE TB disease:

- Usually, not always, has a positive TST. Has other findings and test results that indicate active disease.
- Has tuberculosis germs actively growing in their body.
- May feel sick and have symptoms such as coughing, fever, night sweats, fatigue (tiredness), poor appetite and weight loss.
- Is capable of spreading the disease to others if the germs are active in the lungs or throat.
- May become very sick or even die if not treated.
- Can be cured of TB disease with medication, often in their home community.
- Must take all their medications to prevent drug resistance, treatment failure or relapse; even when they are feeling better. Are legally obligated to take medications if they can infect others.

Feuille de renseignements

Infection tuberculeuse latente v. tuberculose active

Une personne ayant une infectio tuberculeuse latente :	Une personne atteinte de tuberculose active :
• Obtient un résultat positif au test cutané à la tuberculine (TCT), mais les autres tests (p.ex., radiographie pulmonaire et prélèvements d'expectorations) ne montrent aucun signe de tuberculose.	• Obtient habituellement, mais pas toujours, un résultat positif au TCT. D'autres éléments et résultats de tests confirment que la personne est atteinte d'une tuberculose active.
• A la bactérie de la tuberculose dans son corps, mais cette bactérie est dormante ou inactive.	• Est porteuse de bactéries tuberculeuses actives.
• Ne se sent pas malade.	• Peut se sentir malade et présenter des symptômes comme une toux, de la fièvre, des sueurs nocturnes, de la fatigue, un manque d'appétit et une perte de poids.
• Ne peut infecter d'autres personnes.	• Peut transmettre la maladie à d'autres personnes si la bactérie est active dans ses poumons ou sa gorge.
• Peut devenir malade si la bactérie de la tuberculose devient active.	• Peut devenir très malade, et même mourir, si elle n'est pas traitée.
• Peut être traitée avec des médicaments dans sa collectivité afin de prévenir l'activation de la bactérie de la tuberculose qui pourrait la rendre malade.	• Peut guérir en prenant des médicaments qui peuvent très souvent être administrés dans la collectivité.
• Doit prendre tous les médicaments prescrits afin de prévenir l'activation de la tuberculose, même si elle se sent bien.	• Doit prendre tous les médicaments prescrits afin de prévenir la résistance aux médicaments, l'échec du traitement ou la récidive, même lorsqu'elle se sent mieux. Il est obligatoire en vertu de la loi de prendre les médicaments prescrits s'il existe un risque d'infecter d'autres personnes.

Kangiqhidju

Pilarhuutingittumik TB-kut Aanniaruti unalu Pilaqutiqaqtuq TB-kut Aanniaruti

Inuk piqaqtuq PILARHUUTINGITTUMI TB-kut aanniarutimik:

- Piqaqtuq pihimanikkut TB-kkut Uvinimi Uuktuutimik (TST) kihimi aallat uuktuutit (imaakiaq qatigakkut iksuliit qalakkullu naunaiyarutainni) piqangittut naunaitkutinik TBmik.
- Piqaqtuq TB-kut qupilrunik timimingni, kihimi TB-kut qupilrut pilarhuutingittut.
- Aanniangittuq.
- Aannialaqipkalimaittuq aallanik.
- Aannialiqittaaqtuq pilaqutiqaqtumik aanniarutimik TB-kut qupilruit pilaqutiqaliqqata.
- Havautituqtittauttaaqtut nunallaamingni pingittaangata TB-kut qupilruit pilaqutiqalingittaangata aannialaqingittaanginnilu.
- Atuqtaghait tamaita havautit pingittaangata pilaqutiqaqtuqmik TB-kut aanniarutimik, aanniangitkaluaqhutik.

Inuk piqaqtuq PILAQUTIQAQTUMIK TB-KUT aanniarutimik:

- Tamainni, tamaitaungittunilu, piqayuktuq pilaqutiqaqtumik TB-kkut Uvinimi Uuktuutimik (TST). Aallanik tautukhimaliqtut uuktuutinilu naunaitkutiqaqtut pilaqutiqaqtumik aanniarutimik.
- Piqaqtuq TB-kut qupilrunik nauhimmaaliqtut timimingni.
- Aanniaqtuq naunaitkutiqaqtuqlu imaatut qalangniqmik, kitjaknirmik, hinikhuni mittuktiqtuq, unaguhungniq, niriumahuirniq qappangniqlu.
- Hiamitiqtaaqtaa aanniaruti aallanun qupilriut pilaqutiukpata puvangni iggiamiluunniit.
- Aannialiqiqpiaqtaaqtuq tukuluniluunniit havauhiqtaungitpat.
- Nakuuhittaaqtut TB-kut aanniarutimit havautikkut, nunallaamingni.
- Atuqtaghait tamaita havautitik havautit naapkilimaingittaangata qupilrunun, havauhirut huuhuingittaanga aannialiqiffaangittaanga; naammaghigaluaqtillugit. Maligakkut pitquyauhimayut havautituqlutik aannialaqipkaittaaqqata aallanik.

ᓯᓚᐃᓪ ᑎᑎᕐᖃᓯᒪᔪᓪ

ᓴᖅᑭᐱᖓᓕᒫᖅ ᐊᐅᓚᓂᖏᖅ ᐊᑦᔨᑭᖓᓕᕆᓂ

ᐅᓴᒪᓗᒃᑐᒥᒃ ᐊᐅᓚᓂᖅᓂᖅ

ᐃᓄᒃ ᓴᖅᑭᐱᖓᓕᒫᒥᒃ ᐊᐅᓚᑦᑐᒍᖅ:

- ᐱᖅᖃᓂᕆᐃᔪᒥᒃ ᐊᐅᓚᓗᒪᓱᑦ ᐅᐃᓂᒃᑯᑦ ᖃᐅᔨᓴᖅᑕᐅᔪᖅ ᑭᓯᐊᓂᖅᓂᒃ ᖃᐅᔨᓴᕐᑎᑕᓪᓕᒃ (ᓯᑦᓗ, ᓴᖃᐃᒃᑯᑦ ᐊᑦᔨᓪᓕᐅᖅᑕᐅᓂᖅ ᐊᒪᒪ ᓄᐊᖅᑕ ᖃᐅᔨᓴᖅᓂᓪᓕ) ᓴᖅᑭᑎᑎᓯᓯᒪᖏᓪᓕᒍᑦ ᐊᐅᓚᓗᒪᓱᑦ.

- ᐱᖅᖃᖅᑐᖅ ᐊᐅᓚᓗᖏᓪᓕ ᖃᐅᐱᕐᓴᓂᓂᒃ ᑎᑕᖅᓴᓂᕐᑐᒃ, ᑭᓯᐊᓂ ᖃᐅᐱᕐᕈᑦ ᓯᓂᑐᒍᑦ ᐅᓴᒪᖏᓪᓕᒍᑦᓴᓗᓂᑦ.

- ᐊᐅᓂᐊᖅᑯᓯᓪᖏᓪᓕᒍᖅ.

- ᐊᐅᓂᐊᕐᓂᖅᑎᑎᐊᓂᖏᓪᓕᒍᖅ ᐊᓯᕈᓂᒃ.

- ᐊᐅᓂᐊᕐᕕᖅᓴᖅᑐᒃ ᐅᓴᒪᓗᒃᑐᒥᒃ ᐊᐅᓂᐊᕈᑦ ᐊᐅᓚᓗᖏᓪᓕ ᖃᐅᐱᕐᓴᓂᕐᑐᒃ ᐅᓴᒪᓗᕐᖅᑦ.

- ᒪᒥᓴᖅᑕᐅᔨᓂᓪᓕᒍᖅ ᐃᓅᓕᔭᐅᑎᒍᑦ ᓄᓇᕐᓴᓂ ᐱᑎᑦᑕᐃᓕᒪᓂᑦ ᐅᐸᓚᓂᖏᓪᓕ ᐊᐅᓚᓗᖏᓪᓕᒍᑦ ᐅᓴᒪᓗᒃᑐᒥᒃ ᐊᐅᓂᐊᕈᑦᑕᑎᑎᓪᓕᒍᑦ ᐅᓴᒪᓗᓯᓂᔪᓐᓇᕐᓂᒃᑯᑦ.

- ᑕᒪᓐᓇᖅ ᐱᔭᕆᐊᖅᑐᕐᓂᖅ ᐃᓅᓕᔭᐅᑎᒍᑦ ᐱᖅᖃᓂᒃᑯᑦ ᐊᐅᓚᓗᖏᓪᓕᒍᑦ ᐊᐅᓂᐊᕈᑦᑕᑎᑎᓪᓕᒍᑦᓴᓗᓂᑦ.

ᐃᓄᒃ ᐅᓴᒪᓗᒃᑐᒥᒃ ᐊᐅᓚᓗᖓᓂᖅᑐᖅᓂᒃ:

- ᐃᓕᐃᑎᔭᒃᑐᖅ, ᑕᐃᓕᐃᖓᑦᓇᖓᓂᔪᓂᓪᓚᓂᓂᓪᓚᓂᓂᓪᓚᓂ

Tuberculin Skin Test (TST)

Fact Sheet

Tuberculin Skin Test (TST)

What is a Tuberculin Skin Test (TST)?

The TST is used to find out if someone has been exposed to the TB germ. The test involves putting a small needle just under the skin of the forearm and injecting a small amount of a special solution (tuberculin). After 48-72 hours the nurse must examine the test area and look for an 'induration' or hard bump in the area of the injection site. The TST is 'positive' if a bump of a certain size has developed where the needle was given.

What does it mean if my TST is positive??

A positive TST does not mean that you are sick with tuberculosis. In most cases it means that you may have been exposed to the TB germ at some time during your life but the TB germs in your body are inactive or sleeping; this is called Latent TB Infection (LTBI). However you will need to see a nurse or doctor to be certain.

You will need to be examined by a nurse or doctor and have further tests such as blood tests, chest x-ray and sputum samples to be sure you have LTBI and you are not sick with active tuberculosis. If you have LTBI you will usually be recommended to take medication to prevent the LTBI from becoming active TB and making you sick.

Who should not have a TB skin test?

- Anyone who has had a positive TST in the past.
- Anyone who has had active TB disease in the past or history of treatment for LTBI or active TB disease in the past.
- Anyone who is allergic to the tuberculin solution or allergic to any vaccine that contains the same ingredients as the tuberculin solution.
- Anyone with extensive burns, eczema or other skin conditions where the TB skin test is to be given.
- Anyone who has received a live virus vaccine (e.g. MMR, shingles, or chickenpox) in the 4 weeks before the TB skin test is given. A TB skin test can be done on the same day as live vaccines. If not given on the same day, the TB skin test must not be done until at least 4 weeks after the live vaccines. This is because the live vaccines can decrease the response to the TB skin test.
- Anyone with a major viral illness (e.g. mononucleosis, mumps, measles) in the past month. Anyone with a mild viral illness, such as the common cold, in the past month can receive their TB skin test.

Note: The following are **NOT** contraindications for TB skin testing: pregnancy, breastfeeding, past history of BCG vaccination, vaccination with a non-live vaccine in the past 4 weeks or treatment with low-dose steroids.

Feuille de renseignements

Test cutané à la tuberculine (TCT)

Qu'est-ce que le test cutané à la tuberculine (TCT)?

Le TCT est utilisé pour déterminer si une personne a déjà été exposée à la bactérie de la tuberculose. Ce test consiste à insérer une petite aiguille sous la peau de l'avant-bras pour injecter une faible quantité d'une solution spéciale (la tuberculine). Après une période de 48 à 72 heures, l'infirmière doit examiner l'emplacement du test afin de détecter la présence d'une « induration » ou bosse durcie à l'emplacement de l'injection. Le résultat du TCT est positif lorsqu'une bosse d'une certaine taille se développe à l'emplacement de l'injection.

Qu'est-ce que cela signifie si le résultat de mon TCT est positif?

Un résultat positif au TCT ne signifie pas que vous avez la tuberculose. Dans la plupart des cas, cela signifie que vous avez peut-être été exposé(e) à la bactérie de la tuberculose à un moment de votre vie, mais que les bactéries de la tuberculose dans votre corps sont inactives ou dormantes. C'est ce qu'on appelle une infection tuberculeuse latente (ITL). Vous devrez voir une infirmière ou un médecin pour confirmer le tout.

Vous devrez rencontrer une infirmière ou un médecin pour passer d'autres tests comme des tests sanguins, une radiographie pulmonaire ou la collecte d'échantillons d'expectorations pour confirmer que vous avez une ITL et non une tuberculose active. Si vous avez une ITL, on vous recommandera généralement de prendre des médicaments pour éviter que l'ITL ne se transforme en tuberculose active pouvant vous rendre malade.

Personnes devant s'abstenir de passer un TCT

- Toute personne ayant eu un résultat positif au TCT dans le passé;
- Toute personne ayant eu une tuberculose active dans le passé ou des traitements pour une ITL ou une tuberculose active dans le passé;
- Toute personne allergique à la solution de tuberculine ou allergique à tout vaccin contenant les mêmes ingrédients que la solution de tuberculine;
- Toute personne ayant d'importantes brûlures, de l'eczéma ou d'autres maladies de peau à l'emplacement où doit se faire le test à la tuberculine;
- Toute personne ayant reçu un vaccin à virus vivant (p.ex., ROR, zona ou varicelle) au cours des quatre semaines précédant le TCT. Un TCT peut être fait le même jour qu'un vaccin à virus vivant. Lorsque le TCT n'est pas effectué le même jour que les vaccins à virus vivant, il faut attendre au moins quatre semaines après l'administration d'un vaccin à virus vivant pour effectuer un TCT. Ce délai est requis, car le vaccin à virus vivant peut diminuer la réaction au TCT.
- Toute personne ayant eu une maladie virale importante (p.ex., mononucléose, oreillons, rougeole) au cours du mois précédent. Les personnes ayant eu une maladie virale bénigne, comme un rhume, au cours du mois précédent peuvent recevoir le TCT.

Note : Les situations suivantes ne sont **PAS** des contre-indications pour le TCT : grossesse, allaitement maternel, antécédent de vaccin BCG, immunisation à l'aide d'un vaccin ne contenant pas de virus vivant au cours des quatre semaines précédentes ou traitement contenant une faible dose de stéroïdes.

Kangiqhidjutit

Kapput TiiBiimik Aanniarunmik Uvinikkut Ihivriurut (TST)

Hunauva Kapput TiiBiimik Aanniarunmik Uvinikkut Ihivriurut (TST)?

Ihivriurut TST atuqtauyuq naunairutikhanik kinatkut hagyaikhimayut TB-qaqtumut qupilrunut. Ihivriurut TST kappittirniq mikarmut kappunmut atanut uviniup talikkut havaunmik (tuberculin-mik). Naatpata 48-72 ikangnit munaqhip ihivriuqniaqta qinikhiavaktut 'naptunirmik' kappittirnirmi. TST ihivriurutaa 'puvaglunngnilik' puvinnia angivyakpat kappitingniani.

Qanuq tukiqaqqa TST ihivriurutaa puvaglunngnilik??

TST ihivriurutaa puvaglunngnilik ukangittuq aanniangittutit TB-mik. Amihut Inuit puvihiqaqtut kappittirniit imatut ittuq inuuk aanniarutiqaqtumut qanniklihimayuq TB-qaqtumut inuuhimini kihimikTiiBii-mut aanniarutinut aanniarutiqaliklutit timingni taiyauyuq Tukihiyakkulli Takunaittumik Aanniarutilik Puvaglungnarmik (LTBI).Takukhiqlutit munaqhimit taaktimitlu naunaittiaqtukhaq.

Ihivriuqtaulutit munaqhimit taaktimitluunniit auktakhiqlutitlu, iksuliktaulutilu qallakhuqvikhangnik tivvuaqtuqtitaulutit LTBI-mut ihivriuqtauyangni tiibiikhimaittangnikluunniit. LTBI-qaruvit Havautituqtitauniaqtuttit hamna LTBI-mut hiamitiqnaitumik anniarutingnik TB-mut aannialirnaittumiklu.

Kitkut kappittuqtukhaungitpat TB-mut ihivriurunmik?

- Kinaliqaak TB-qaqhimayuq kinguagut.
- Kinaliqaak TB-qaqhimayuq kinguagut uvaluunniit havautituqtitauhimayuq LTBI-mut Tiibiikhimagumi kinguagut.
- Kinaliqaak uviniklulaqiyukkumi tuberculin-mit kappunmit uvaluunniit uviniklulaqiyukkumiadjikutainik tuberculin-mit kappunmit.
- Kinaliqaak uttirniqaqhimayunut, uvinikluktunut TB uvinikkut kappiyauhiamyuq.
- Kinaliqaak kappiyauhiamagumi havautilingmik (e.g. MMR, shingles, uvaluunniit uvinikkut imaktirnikkut) hitamani havainirni hivuani TB-mik ihivriuqtaunani kappiyautinani. TiiBii-mut uvinirmut naunaiyaitjutikhaq kapiyauttaaktut atauhirmi ublumi. Atauhirmi ubluani kappiyaungitkumi,TiiBii-mut uvinirmut naunaiyaidjutikhaq kapiyauyukhaungittut hitamat havainiq natinagu kappiyauhimanirminit. Kapuutit nakuhuirutauniarmata TiiBii-mut uvinikkut kappunmik.
- Kinaliqaak aanniaqpalaktuq (e.g. mononucleosis, mumps, measles) kingulirmi tatqiqhiunmi. Kinaliqaak aanniarumi, qallakumilu, kingulirmi tatqiqhiunmi TiiBii-mut kappunmik kapiyauttaaktuq.

Naunaiktakhat**:** Hapkuat pilluqutaungittut TiiBii-mut uvinikkut kappunmik ihivriuqtaulutik: hingaihimayuq, amamaktitiyuq, kinguagut BCG-mik kappiyauhimayuq, kappiyauhimayuq hitamani havainirni uvaluunniit havautituqtitaugumi hakuittunik steroids-mik.

ᓯᓚᕐᓂᑦ ᑎᑎᕋᖅᓯᒪᔪᓂᑦ

ᐊᓂᔮᖅᓱᓂᕐᒧᑦ ᐅᓪᓚᓂᒃᑯᓂ ᖃᐅᔨᓴᖅᑕᐅᓂᖅ (TST)

ᑭᓯᓂ ᐊᓂᔮᖅᓱᓂᕐᒧᑦ ᐅᓪᓚᓂᒃᑯᓂ ᖃᐅᔨᓴᖅᑕᐅᓂᖅ (TST)?

ᐊᔾᓚᖅᓱᓂᕐᒧᑦ ᐅᓪᓚᓂᒃᑯᓂ ᖃᐅᔨᓴᖅᑕᐅᓂᖅ ᐊᑐᖅᑕᐅᐊᓂᖅ ᖃᐅᔨᓴᕆᓪᓗᑎᒃ ᑭᓇᐅᔪᖅ ᐊᒃᑐᖅᑕᐅᓂᑯᓘᖏᓐᓄᑦ ᐊᓂᔮᖅᓱᓂᕐᒧᑦ ᖃᑯᐱᖅᑕᒧᑦ. ᖃᐅᔨᓴᖅᓂᖅ ᐃᓕᐅᑎᑎᕆᔭᖅ ᐃᓕᓴᓪᓚᑎᒃ ᒥᑭᑐᒥᒃ ᑲᐃᑎᒥᑦ ᐊᒋᓐᓂᑦ ᐅᓂᖅᓴᓂᖅ ᑕᓕᖏᓐᓄᑦ ᐊᓕᓚᐅ ᐃᓕᓴᓪᓚᑎᒃ ᑲᐃᑎᒥᑦ ᐊᖏᔪᖅᑐᑐᒥᒃ ᖃᐅᔨᓴᕐᐊᑭᑎᒥᑦ (tuberculin). ᐱᐊᓂᔪᑦ 48-72 ᐃᑲᖅᑦᑕ ᐃᓚᐊᖅᑲᐃᔨᓕ ᖃᐅᔨᓴᓗᐊᖅᑲᖅᑐᒃᑯᖅ ᐃᓂᖏᓂ ᐊᓕᓚᐅ ᑕᑐᓀᓴᓚᓂ “ᐊᐅᔪᖅᓴᔨᒥᑦ” ᐅᕐᓀᓵᓂᓂ ᖃᖅᑎᑲᓴᔨᒥᑦ ᑲᑎᒪᔨᖅᓯᒪᓂ. ᐅᔾᓚᖅᓱᓂᕐᒧᑦ ᐅᓪᓚᓂᒃᑯᓂ ‘ᐱᑕᖃᖅᓂᕆᐃᔪᔪᑦ’ ᖃᖅᑎᑲᑐᒍᓚᖅᑕᒥᖅᑦ ᖃᓄᑐᐃᓐᓇᖅ ᐊᔪᕐᑎᑎᓗ ᑲᑎᒪᔨᖅᓯᒪᓂ.

ᖃᓄᖅ ᑐᑭᖃᖅᑦ ᐅᓪᓚᓂᒃᑯᓗᒃ ᐅᓪᓚᓂᒃᑯᓂ ᖃᐅᔨᓴᖅᑕᐅᓂᖅ “ᐱᑕᖃᖅᑐᖅᑐ’-ᓪᓚᑦ??

ᐱᑕᖃᖅᓂᕆᐃᔪᖅ ᐅᓪᓚᓂᒃᑯᓗᒃ ᐅᓪᓚᓂᒃᑯᓂ ᖃᐅᔨᓴᖅᓂᕐᒥ ᑐᑭᖃᖏᓐᓂᑐᖅ ᐊᑲᓂᐊᕆᐃᑦ ᐅᓪᓚᓂᒃᑯᓗᒥᑦ. ᐃᓕᐃᑲᓚᐅᑐᖅ ᐊᒃᑐᖅᑕᐅᓂᒪᑐᐃᓐᓇᖅᑲᖅᖃᐃᑦ ᐅᓪᓚᓂᒃᑯᓗᒃ ᖃᐅᔨᓴᖅᑐᒥᒃ ᐅᓪᓚᓂᒃᑯᓗᒥᑦ ᖃᐅᔨᓴᖅᑐᒥᒃ ᐅᓪᓚᓂᒃᑯᓗᒥᑦ ᐃᓚᐅᑎᑦᑎᓂᖅ ᐅᓪᓚᓂᒃᑯᓗᒥᑦ ᑐᑭᖃᖏᓐᓂᑐᖅ; ᑭᓐᓇ ᑕᐃᔨᐅᓚᖅ ᑕᓂᖅᓴᐅᓚᖏᓐᓂᑐᒍᓂ ᐅᓪᓚᓂᒃᑯᓗᒥᑦ ᐊᒃᑐᖅᑕᐅᓂᒪᓚᖅ (LTBI). ᑕᓂᖅᓱᐊᖅᑲᖅᑐᑎᑦ ᐃᓚᐊᖅᑲᐃᔨᓕᑦ ᐅᕐᓀᓵᓂᓂ ᓄᒃᑕᒥᑦ ᖃᐅᔨᓴᖅᑎᑦᓂᐊᕆᐃᖅᑲᓕᑦ.

ᖃᐅᔨᓴᖅᑕᐅᓴᓱᖅᑎᕆᐊᖅᑐᑎᑦ ᐃᓚᐊᖅᑲᐃᔨᓕᑦ ᓄᒃᑕᒧᓕᓂᓂᓂᑦ ᐊᓕᓚᐅ ᖃᐅᔨᓴᖅᑕᐅᓂᒃᑯᓂᕆᔨᑦᑎᓂᑦ ᓱᓴᓗ ᐊᐅᓪᓚᓂ ᖃᐅᔨᓴᖅᑕᐅᓗᓂᓂ, ᐅᓂᒋᑦ ᐊᕐᓇᓪᓚᖅᑕᐅᓗᓂᑐᒃ ᐊᓕᓚᐅ ᓄᓪᓀᐃᑦ ᖃᐅᔨᓴᖅᑕᐅᓂᒃᑯᓂᕆᔨᑦᑎᓂᑦ ᐊᐅᓪᓚᓂᒃᑯᓗᒥᑦ ᐃᓕᓴᓪᓚᑎᒃ

Sputum Collection Instructions

Fact Sheet

Sputum collection instructions

1. Confirm the collection container is labeled correctly with:
- your (the patient) first and last name & healthcare number
- the date and time of collection,

Incorrectly or incompletely labeled specimens will not be tested.

2. Sputum samples are best if coughed up first thing in the morning, ***after*** you have been sleeping at night. However, sample may be collected at any time sputum is available to be produced. Sometimes it is easier to produce sputum in the morning after a steamy shower.

3. Gargle and rinse your mouth with water. **Do not** use mouthwash or brush teeth with toothpaste immediately before collection.

4. Take deep breaths through your mouth. Try and cough up mucous from deep in your chest. You may need to take several deep breaths and do lots of coughing.

5. Open the jar and hold it close to your mouth. Spit the sputum you coughed up from your chest into the jar. **The sample must come from your lungs, not your mouth.**

6. The sample you cough up should look thick and be yellow or green in color. A minimum of 15mL (1 tablespoon) of sample is required (it should at least fill the bottom surface of the container).

7. Close the container lid **tightly** and give sample to your caregiver right away.

8. If you are at home, seal the sample in the zip locked section of the bag and put the lab requisition in the pouch section of the bag.

9. Bring the container and lab requisition to the health centre or laboratory **as soon as possible**. If unable to return the sample right away the sample can be stored in the refrigerator until you have produced all the samples requested. Don't keep samples in the fridge longer than three days because **delays can affect the test results**.

Feuille de renseignements

Instructions pour la collecte des expectorations

1. Assurez-vous que le contenant à échantillon est bien étiqueté, et qu'il indique :
- le nom et le prénom du patient et son numéro de carte d'assurance-maladie;
- la date et l'heure de la collecte.

Les spécimens étiquetés de manière incorrecte ou incomplète ne seront pas analysés.

2. Il est préférable de recueillir les échantillons d'expectorations le matin, ***après*** une nuit de sommeil. Cependant, les échantillons peuvent être prélevés à tout moment où il est possible de produire des expectorations. Il est parfois plus facile de produire des expectorations le matin après une douche chaude.

3. Gargarisez-vous et rincez votre bouche avec de l'eau. **N'utilisez pas** de rince-bouche ou de dentifrice immédiatement avant la collecte de l'échantillon.

4. Prenez de grandes respirations par la bouche. Toussez fort et essayez de cracher du mucus venant du fond de la poitrine. Vous aurez possiblement besoin de plusieurs grandes respirations et de tousser à de nombreuses reprises.

5. Ouvrez le contenant à échantillon, et tenez-le près de votre bouche. Crachez les sécrétions provenant de votre poitrine dans le contenant. **L'échantillon doit provenir des poumons, et non de la bouche.**

6. L'échantillon craché devrait être assez épais et de couleur jaunâtre ou verdâtre. Une quantité d'au moins 15 ml (1 cuillère à soupe) d'échantillon est requise, ce qui devrait couvrir au moins toute la surface du fond du contenant.

7. Fermez bien **hermétiquement** le couvercle du contenant, et remettez-le immédiatement à votre fournisseur de soins de santé.

8. Si vous êtes à la maison, scellez l'échantillon dans la partie du sac se fermant à l'aide d'une fermeture à glissière (zip-lock), et placez la demande d'examen de laboratoire dans la partie pochette du sac.

9. Apportez le contenant et la demande d'examen de laboratoire au centre de santé ou au laboratoire **le plus rapidement possible.** S'il est impossible d'apporter immédiatement l'échantillon, il peut être conservé au réfrigérateur jusqu'à ce que vous ayez produit tous les échantillons requis. Ne conservez pas d'échantillons au réfrigérateur pendant plus de trois jours, car les **délais peuvent affecter les résultats des tests.**

Kangiqhidjutit

Nuvangmut tivvuaktuutainik katikhitinut ilihautikhanik

1. Naunaiklugu pukhaa tivvuaktuutainik Katikhitinut titiraqaqtuq nakuyumik:
   - inuup (aanniaqtup) hivilliq atia, kinguliq atia, aanniaqtalinikkut nappa.
   - ublua ubluqhiutanilu katikhiviata.

   Ihuinnaqhimayumik inikhimaittumik titiraqqaqhimayut katikhivit puqaqtut ihivriuqtaulimaittut.

2. Nuvangmut tivvuaktuutainik katikhitinik ihuatqiyauyuq ublaami qallakhuqtangnik, ***tupakkuvit*** hinniqaqlutit unnuami. Kihimik, tivvuaqtuutit katikhitaullayut kakuguluunniit qallakhuraiguvit. Ilani qallakhungnatqiyauyuq tivvuakturiami ublami uaktiqqaaklutit uunnaqtumi.

3. Imarmut qannit irruqtiqqaqlugu. **Attuqtailutit** qanirmut uaqtirunmik uvaluunniit kigutigikhaqtailutit kiguutigikhaunmut qalakhuktinnatit.

4. Akhuuklutit qannikkut annikhaaqtaklutit. Qakakhurnahuaqlutit qallak qatiklugu qatikkangnit. Akhuuklutit aannikhaqtaqlutit ahiit akhuuklutit qallakhuklutit.

5. Matuiklugu qallakvikhat tigummilugu qanikpit hanianut. Qallak qallakhuktat katikkangnit tivvuaktuqlugu qallakvikhangnut. **Qallak qallakhuktakhat puvvangnit, qaniringitangnit.**

6. Qallak qallakhuktat ninguyukhauyuq, quyiktauyuni hungayaqtulunilluuunniit. Qallakhuktat imatut aktigiyukhauyuq 15 ml (1 alluuiknuaq) qallakhuktat pitquyauyuq (kallakhukvikhat ataanut iniktukhauyuq).

7. Qallakhukviit matudjavat **akhuut** agitinariqlugu munaqhitkunut.

8. Aipqaguvit, pudjavat plastikmut ililugullu makpiraakha ihivriuqtauvikhanut titiqidjut puukhanut pukatap.

9. **Agitinaridjavat** munakhitkunut ihivriuqtauvikhanut. Aggitinalimaitkuni munakhitkunut niklaumavikmut tutqudjavat imiqqat aggitidjavat. Pihimahuiqlugit niklaumavingmut tutquumayut pingahuni ubluni **ihivriuqtautinatik nakungikhungungmata**.

ᓴᓪᓕᓐ ᑎᑎᕆᖅᓴᓪᓕᓐ

ᓄᓇᓕᒃ ᐊᖏᕆᔨᒧᑦ ᒪᓕᒪᐊᒋᓕ

1. ᖃᐅᔨᒪᐃᖅᑐᑦ ᐊᖏᕆᖃᐅᔨᓄᑦ ᐅᖃᐅᓂ ᑎᑎᕆᖅᓴᒪᕆᐊᖃᑦᑕᐊᖅᓯᒪᓂᖅ ᐅᑯᓂᖅ:
   - ᐃᓕᓐᓂ (ᑕᑯᐅᐅᓂᐊᖅᑐᖅ) ᓴᕐᓂᓕᖅ ᑭᖑᓪᓕᔭᑦ ᐊᑎᖅ, ᐊᒻᒪ ᐋᖅᓂᐊᓕᒫᑕᐋᖅᑭᐅᐅᓂ ᐅᓴᐅᑎᖅᑐᖅ.
   - ᐅᓪᓗᖅ ᐊᒻᒪ ᖃᐅᔨᓴᒪᐊᖅᑎᓪᓗᑐᑦ ᐊᖏᕆᖃᐅᔨᓄᑦᓯᒪᓂᖅ.

   ᑕᒪᓕᖅᓴᒪᓗᓂ ᐱᒃᓱᖅᓴᒪᖏᓪᓕᓗᓂᓪᓚᕐᓂᓪᓕ ᑎᑎᕆᖅᓴᒪᓂᖅᐳ ᖃᐅᔨᓴᖅᑕᐅᐅᓵᖏᓪᓕᕐᓂᑦ.

2. ᓄᖏᐃᑦ ᖃᐅᔨᓴᖅᑕᐅᓄᒃᓴᑦ ᐱᐅᓯᖓᔪᖅ ᖃᐊᐃᖅᓴᖅᑕᐅᐅᓪᓕᑕ ᓴᕐᓂᓕᖅᑎᑦ ᐅᓪᓚᒃᑯᑦ, ***ᑭᖓᓂᐊᒍᑦ*** ᓴᓂᓕᐅᖅᑎᓪᓗᑎᑦ ᐅᓐᓄᐊᒃᑯᑦ. ᑕᐃᒪᐃᐅᒃᑲᐊᖅᑎᓪᓗᐊᑐ, ᖃᐅᔨᓴᖅᑕᐅᐅᓄᒃᓴᑦ ᐊᖏᕆᖃᐅᔨᓄᖅᑭᐅᖅᑕᑦ ᖃᐅᖓᑕᐅᓄᖅᑕᑦ ᓄᓕᐅᑕᖃᓕᒫᖅᑕᑦ. ᐃᓕᓐᓂᓂᓕᒃ ᐊᖏᕆᔨᓄᑦᓴᓕᖅᓯᒪᓂᖅᑐᑦ ᓄᓕᐅᐃᐃᓚᐊᖅᓴᖅ ᐅᓪᓚᒃᑯᑦ ᑯᐃᐱᓂᓗᐊᖅ ᐅᐊᓴᓂᓴᓐᓂᑦ.

3. ᐃᓕᖅᑐᑦᓴᓗᐊ ᖃᐅᓂᑦ ᐃᒪᓴᒧᑦ. **ᐱᖓᓂᓗᓂᑦ** ᖃᐅᓂᓴᒧᑦ ᒪᒪᖅᓯᓂᕆᒥᑦ ᑭᒧᑎᓯᐅᕆᐊᓂᖓᓂᓗᓂᒃ ᑭᒧᑎᓯᐅᓂᕆᕐᓗᒃ ᐊᖏᕆᐅᐅᖓᓂᓐᓂᑦ.

4. ᓂᐅᓴᐊᔪᕐᓗᓂᑎᓂ ᐊᓂᖅᑲᓴᐊᔪᕐᓗᓂᑎᓂᓗ ᖃᐅᓂᖅᑎᑦ. ᐱᒋᐊᓴᓂᑎᓂ ᓴᑯᐃᖅᓯᓚᐊᓴᓂᑎᓂ ᓄᓕᖅᒥᓂ ᓴᓇᕐᓂᖅᓱᖅᑐᒥᓂ. ᐅᓄᖅᓯᑯᓴᓂᑎᓂ ᐊᓂᖅᑲᓇᐊᖃᑕᐃᓐᓇᓚᐊᖅᑲᖅᑐᑎᓂ ᓴᑯᐃᖅᓯᒃᑕᐃᓐᓇᓚᐊᓴᓂᑎᓂᓗ.

5. ᒪᑐᐃᓴᑦ ᐅᖃᐅᓂ ᑎᒍᒥᑐᒍ ᖃᐅᓂᓄᓂ ᖃᐅᓂᑐᓂ. ᑎᓕᖅᐊᓴᑦ ᓄᓕᖅ ᓴᑯᐃᖅᓯᖅᑕᑦ ᒪᓴᐃᓐᓂᓱᖅᑐᒥᑦ ᐃᓗᐊᓄᑦ. **ᖃᐅᔨᓴᖅᑕᐅᓂᐊᖅᑐᖅ ᐱᓴᒪᐊᖅᖃᒪᑦ ᐅᓕᓐᓂᓱᖅᓗᓂᓗ, ᖃᐅᓂᓂᐅᕐᓂᖅᑕᖅᑐᖅ.**

6. ᖃᐅᔨᓴᖅᑕᐅᓂᐊᖅᑐᖅ ᐅᓪᒪᐊᖅᑕᑦ ᑕᐅᑕᐃᓐ ᓯᓚᑐᖅ ᐊᒻᒪ ᖃᓄᖅᓯᖅᑐᖅ ᐅᓴᐅᓴᖃᓗᓐᓂᑦ ᑕᖅᓴᓐ. ᒥᑭᓐᓯᓗᓇ 15mL (ᐊᑕᐅᓯᖅ ᐊᓗᑎᑎᐊᓐᓴᖅ) ᖃᐅᔨᓴᖅᑕᐅᓂᐊᖅᑐᖅ ᐱᓴᒪᐊᓚᐅ (ᐃᓗᓕᖅᓇᓗ ᐊᑕᐅᓂᓐᓂᐅᓐ ᐊᖏᕆᐅᑎᖅᓴᑦ).

7. ᒪᑐᓗᐊ ᐅᖃᐅᓂ ᒪᑐᐃᓐ **ᓯᐅᓕᓗᐊ** ᑐᓂᓗᐊᓗ ᖃᐅᔨᓴᖅᑕᐅᓂᐊᖅᑐᖅ ᐅᒪᒃᓴᖅᓄᓂ ᑕᑯᐊᐅᓇᖅ.

8. ᐊᓂᕆᖅᓯᖅᓯᒪᔪᐃᓕᑦ, ᒪᑐᓂᑎᐊᖅᓗᐊᓗ ᖃᐅᔨᓴᖅᑕᐅᓂᐊᖅᑐᖅ ᑕᑯᓴᐅᓂᐊᖅᑐᖅᑐᒍ ᐅᖓᓪᓗᓂ ᐊᒻᒪ ᖃᐅᔨᓴᖅᑕᐅᓄᖅᓴᐅᑎᒍ ᑎᑎᖅᑲᖅ ᒥᑭᓂᓕᖅᓴᒪᓂᖅ ᑕᑯᓂᓕᑕᐅᓂᐊᖅᑐᖅ ᐅᖓᓪᓗᓂ ᐃᓕᑕᐅᓗᐊ.

9. ᐊᓴᖅᑐᐊ ᐅᖃᐅᓂ ᐊᒻᒪᓗ ᖃᐅᔨᓴᖅᑕᐅᓂᐊᖅᑐᖅ ᑎᑎᖅᑲᖅ ᐋᖅᓂᐊᓕᒫᖅᑐᒥ ᖃᐅᔨᓴᖅᓀᒪᓗᓕᑦᓯᓂᖅ **ᕿᓕᓪᒥᐅᓄᖅᓯᑦ ᐊᔪᖅᓱᖅᑕᕐᓂᑦ.** ᐅᑎᖅᑎᑲᐅᑎᑦᓄᖅᓱᖅᑕᕐᑯᓀᒪᓂᖅᑐᑦ ᐃᖅᑲᓇᖅ ᖃᐅᔨᓴᖅᑕᐅᓂᐊᖅᑐᖅ ᖃᐅᔨᓴᖅᑎᓀᒪᓗᐊᖅᑐᓄᖅᑕᑦ ᐃᓕᓴᕐᓂᖅᓯᐊᓂᖅᑐᓂᒃ ᖃᐅᔨᓴᖅᑕᐅᓂᐊᖅᑐᖅ ᐱᓴᐅᓴᖃᓗᓐᓂᑦ ᑭᓯᐊᓂᖅ. ᐱᓯᒪᐃᓄᖅᓱᖅᑕᕐᓂᓗ ᖃᐅᔨᓴᖅᑕᐅᓂᐊᖅᑐᖅ ᖃᐅᔨᓴᖅᑎᓀᒪᓗᐊᖅᑐᓄᖅᑕᑦ ᐃᓕᓴᕐᓂᖅᓯᐊᓂᖅᑐᓂᒃ ᐱᓴᐅᓴᖃᓗᓐᓂᑦ ᐅᓪᓚᒃᑯᑦ. ᐱᓯᒪᐃᓄᖅᓱᖅᑕᕐᓂᓗ ᖃᐅᔨᓴᖅᑕᐅᓂᐊᖅᑐᖅ ᖃᐅᔨᓴᖅᑎᓀᒪᓗᐊᖅᑐᓄᖅᑕᑦ ᐃᓕᓴᕐᓂᖅᓯᐊᓂᖅᑐᓂᒃ ᐱᓴᐅᓴᖃᓗᓐᓂᑦ ᐅᓪᓚᒃᑯᑦ. ᐱᓯᒪᐃᓄᖅᓱᖅᑕᕐᓂᓗ ᖃᐅᔨᓴᖅᑕᐅᓂᐊᖅᑐᖅ

Taking Medications for Active Tuberculosis

Fact Sheet

Taking medication for active Tuberculosis

You have been prescribed medicine to cure your active Tuberculosis (TB) disease.

Why do I have to take TB medication for so long?
Treatment of active TB disease usually takes from 6 months to a year to complete. The medication (antibiotics) used to treat TB can only kill the germs when they are growing and TB germs grow very slowly. As you get better the germs grow more slowly so it takes a long time to kill them all.

What if I don't finish all my TB medication?
You will probably start to feel better soon after starting your TB medication, however, it is important to keep taking your antibiotics because there are still TB germs alive in your body. If you stop taking your medication, or don't take it regularly, the TB germ can become resistant to the antibiotics. You will get sick again, but this time you will need to even take more medications and for a longer time to be cured. You may also spread drug resistant TB to your family, friends and coworkers.

Why does my healthcare provider watch me take my medication?

- Your health-care provider can also see if the drugs are working as they should, watch for side effects and answer questions you may have about TB.
- Your health-care provider will remind you to take all of your drugs to complete your treatment.
- Your healthcare provider will remind you when you need to have any tests such as blood tests, x-rays or sputum tests.
- When you complete your treatment, you will be cured of TB disease.

Is there anything else I should know?

- **AVOID** taking Tylenol during the months you are taking TB treatment as it increases the work your liver must do. Taking TB medication and Acetaminophen (Tylenol) at the same time increases the chance of liver damage. Use Ibuprofen (Advil or Motrin) instead
- **AVOID** drinking alcohol; using alcohol while taking INH can hurt your liver. If you do drink inform your nurse so that your liver function can be monitored closely.
- Tell your nurse or doctor about **all** other medicines you are taking, **even medicines that do not require a prescription**, such as acetaminophen (Tylenol).
- **Tell your nurse immediately (or go to the Health Centre / Emergency)** if you notice cola-colored (dark) urine, light stools, rashes, itching and/or yellowing skin or eyes.
- You will need to have blood tests during your treatment to make sure the medication is not hurting your liver.
- If you have TB in your lungs you will be asked to produce several sputum samples throughout your treatment; these help you and your health-care provider know that the medications are working.

Feuille de renseignements

Traitement d'une tuberculose active

Vous avez reçu une prescription visant à soigner votre tuberculose active.

Pourquoi dois-je prendre ces médicaments aussi longtemps ?

Le traitement d'une tuberculose active dure normalement de six mois à un an. Le médicament (antibiotique) utilisé pour traiter la maladie peut seulement tuer les bactéries lorsque celles-ci se développent et les bactéries de la tuberculose mettent beaucoup de temps à se développer. À mesure que votre santé s'améliore, les germes ralentissent leur croissance. Il est donc très long de les tuer tous.

Que se passe-t-il si je ne prends pas toute ma médication contre la tuberculose ?

Vous commencerez sans doute à vous sentir mieux très tôt après avoir commencé à prendre vos médicaments. Il est cependant important de continuer à prendre ces antibiotiques, car il existe encore des germes actifs de la tuberculose dans votre organisme. Si vous cessez de prendre vos médicaments ou si vous ne les prenez pas régulièrement, la bactérie de la tuberculose peut développer de la résistance aux antibiotiques. Vous serez donc malade à nouveau, mais cette fois vous devrez prendre encore plus de médicaments et pour une période encore plus longue. Vous pourriez également communiquer une tuberculose résistante aux antibiotiques à votre famille, vos amis et collègues de travail.

Pourquoi mon professionnel de la santé surveille-t-il ma prise de médicaments ?

- Votre professionnel de la santé peut également évaluer si le médicament donne les résultats visés, détecter la présence d'effets secondaires et répondre à vos questions au sujet de la tuberculose.
- Votre professionnel de la santé vous rappellera de prendre tous vos médicaments afin de compléter votre traitement.
- Votre professionnel de la santé vous informera des tests à réaliser comme les prises de sang, les radiographies et les analyses d'expectoration.
- Une fois votre traitement complété, vous serez guéri de la tuberculose.

Y a-t-il autre chose que je devrais savoir ?

- **ÉVITEZ de prendre du** Tylenol durant les mois où vous suivez le traitement contre la tuberculose, car cela accroit le travail du foie. La prise de l'INH et de l'acétaminophène (Tylenol) en même temps accroit les risques d'endommager le foie. Faites plutôt usage d'ibuprofène (Advil ou Motrin)
- **ÉVITEZ** de consommer de l'alcool; la consommation d'alcool avec l'INH peut endommager votre foie. Si vous buvez, avertissez l'infirmière afin que des tests sanguins mesurant le fonctionnement du foie puissent être faits plus souvent.
- Informez votre infirmière ou votre médecin de **tous** les autres médicaments que vous prenez, **même ceux qui ne demandent pas de prescription**, comme l'acétaminophène (Tylenol).
- **Avertissez l'infirmière immédiatement (ou rendez-vous à l'urgence ou au centre de santé)** si vous remarquez que votre urine est foncée (couleur cola), que vos selles sont claires, que vous avez des démangeaisons ou des éruptions cutanées ou que vos yeux ou votre peau jaunissent.
- Vous devrez vous soumettre à des prises de sang durant votre traitement pour afin de vous assurer que les médicaments n'affectent pas votre foie.
- Si vous souffrez d'une tuberculose pulmonaire, vous aurez à réaliser des tests de cytologie du crachat durant votre traitement. Ceux-ci vous aideront, vous et votre professionnel de la santé, à savoir si les médicaments font leur effet.

Kangiqhidjutit

Havautituqtukhaq aanniarutiqaqtut Tiibiiktut (tuberculosis)

Havautikhaqtitauyutit nakuuhidjutikhanik aanniarutingnut Tiibiimut (TB) aanniarut.

Huuq havautitukhaagyuaqtukhauvik Tiibiimut havautikhanik hivituryuaktumik?

Nakuuhidjutikhat Tiibiiktunut imatut 6-siksinit tatqiqhiutinit atauhirmut ukiumut havautituqtukhauyutit iniriangani. Havautit (antibiotics) atuqtauyut nakuuhitikhat Tiibiimut tuqutirivaktut aanniarutauyunik angiklivallialirangata Tiibiimut kayumitpiaktumik. Nakuuhivalliagangavit qupilrut angiklivalliavaktut kayuumitumik taimaitumik hivituyumik tuqutpalliavaktut tamaita.

Havautituqtakhatka nungungitkupkit Tiibiimut havautituqtatka qanurinniaqqa?

Nakuuhivallianiaqtutit havautituliruvit Tiibiimut havautikharnik, kihimik, anginiqaqtuq havautikhatit iiqqaqhimmaakpakupkit Tiibiimut qupilrut aullanginmata timingni. Havautikhatit taimmaarupkit, imatutluunniit iiqaqqataruirupkit, Tiibiimut qupilrut nakuuhilimaittut naapkitilimaikhunguyut havautimut. Aannialiffaakhunguyutit, amigaitqiyaniklu havautikhaqtitaulutit hivitutqiyamiklu havautituqtukhauliklutit. Hiamitipkainiaktutitlu Tiibiimik qupilrunik nakuuhitilimaitunik havautinut ilangnut, ilannarnut havaqatingnutlu.

Huuq munakhigiyarma qunngiakpakpanga havautituqtitlunga?

- Munakhigiyaqqit takuyumagamitit havautituqtatit nakuuhitiliriakhainik piyakhamiktut, qinikhimalutiklu haniagut nakungiutiqariakhainik havautit kiuyumaplugillu apiqqutikhaqaruvit Tiibiikkut.
- Munakhigiyaqqit uqautiniaktatit tamaita havautituqtakhatit iiqqaqtapaktakhatit nakuuhinnaktumik inirupkit havautituqtakhatit.
- Munakhigiyaqqit uqautiniaktatit ihivriukhiktukhauyutit auktakhiklutitlu, iksuliktaulutiklu, qallakhuktarnik tivvuaktuqvikharnik ihivriuktauyukhanik aullaktitauyukhaniklu.
- Nungupkupkit havautituqtakhatit, nakuuhihunguyutit Tiibiimut aanniarutingnit.

Ahiagutlu hunanik ilihimayukhauvik?

- **NAKUNGIRNAITTUMIK** niaquqhiutituqtaililutit Tylenol-mik tatqiqhiutini Tiibiimut havautituqtitlutit akhuuktitauvallangmat tingungnut. Tiibiimut havautituqtitlutit hapkuningallu atautkikkut niaquqhiutit (Tylenol-mik) nakungiutivallakhunguyut tingungnut hungiutilutiklu. Atuqluaqlutit Ibuprofen (Advil-mik uvaluunniit Motrin-mik)
- **NAKUNGIRNAITTUMIK** niuqaqtaililutit tanngarmik; niuqaqpakkuvit tanngarmik havautituqtitlutit INH tingungnut hungiutilutiklu. Imiruvit tanngarmik uqadjavutit munaqhingnut tingut qanurittaakhanik munariyauyangani.
- Uqadjavutit munaqhingnut taaktingnutlu **tamainik** allanik havautituqtarnik, **havautinik niuviktakhaniklu taaktimit makpiramik piyakhaitunik**, niaquqhiutinik (Tylenol).
- **Unniutilugu munaqhi qilamik (Munaqhiqarvingmut/ Aanniarvingmutluunniit)** Taakhiqpiaqqat quiyaragavit, aannaqtatitlu qakungaliqqata, amirliqhimayunik uviningnik, kumilaqiguvit unalu/uvaluunniit quryiktitpat uviinniit uvaluunniit iyikkit.
- Auktakhikpaktukhauyutit havautituqtitlutit naunairiangani havautituktatit tinguklirnaitumik.
- Tiibiiruvit puvvangni apiriyauhunguyutit tivvuaktuqvikhangnik amihuiktuqlutit havautituqttautitlutit; hamna ikayuutauniaqtuq ilingnut munaqhigiyarnutlu havautituqtatit ikayuutauyangita.

Fact Sheet

Latent TB Infection (LTBI) Treatment

You have been prescribed medicine to treat your latent TB infection (also known as sleeping TB) and prevent you from getting sick with active TB disease.

What is Isoniazid (INH)?

Isoniazid (INH) is an antibiotic that is used to kill the TB germ. INH is also used along with other TB drugs to cure active TB disease.

Why do I take vitamin B6 (Pyridoxine)?

Some people who take INH develop numbness or tingling in their fingers and toes. Vitamin B6 can help prevent this.

What is Directly Observed Therapy (DOT)?

DOT is when a nurse or other health care worker watches you take your medication. This is done to ensure you are not experiencing any side effects and to help you complete treatment as quickly as possible.

Are there any side effects I should know about?

Yes, INH can hurt your liver. Tell your nurse if you have:

- Less or no appetite for food
- An upset stomach or stomach cramps
- Nausea or vomiting

Tell your nurse immediately (or go to the Health Centre / Emergency) if you notice:

- Cola-colored (dark) urine or light stools
- Rashes or itching
- Yellowing skin or eyes

Is there anything else I should know?

- **AVOID** taking Tylenol during the months you are taking TB treatment as it increases the work you liver must do. Taking INH and Acetaminophen (Tylenol) at the same time increases the chance of liver damage. Use Ibuprofen (Advil or Motrin) instead
- **AVOID** drinking alcohol; using alcohol while taking INH can hurt your liver. If you do drink inform your nurse so that blood tests that check liver function can be checked more often.
- Tell your nurse or doctor about all other medicines you are taking, even medicines that do not require a prescription, such as acetaminophen (Tylenol).
- LTBI treatment will not work unless you take all of the required doses.
- You will need to have blood tests during your LTBI treatment to make sure the INH is not hurting your liver.
- Talk to your nurse if you have any concerns or questions.

Feuille de renseignements

Traitement d'une tuberculose latente (TBIL)

Vous avez obtenu une prescription visant à traiter votre tuberculose latente (aussi appelée tuberculose dormante) afin d'éviter qu'elle ne devienne une tuberculose active.

Qu'est-ce que l'isoniazide (INH) ?

L'isoniazide est un antibiotique utilisé pour tuer le germe de la tuberculose. L'INH est également utilisée avec d'autres médicaments pour traiter la tuberculose active.

Pourquoi dois-je prendre de la vitamine B6 (pyridoxine) ?

Certaines personnes qui prennent de l'INH ressentent des engourdissements ou des picotements dans les doigts et les orteils. La vitamine B6 peut aider à prévenir cet effet.

Qu'est-ce qu'un traitement sous contrôle direct ?

Un traitement sous contrôle direct est lorsqu'une infirmière ou un autre travailleur de la santé observe votre prise de médicament. Cette approche permet de s'assurer que vous ne développez pas d'effets secondaires et vous aide à compléter le traitement le plus tôt possible.

Existe-t-il des effets secondaires dont je devrais être averti ?

Oui, l'INH pourrait nuire à votre foie. Avertissez l'infirmière si vous :

- manquez d'appétit ou n'êtes plus intéressé par la nourriture
- avez des dérangements ou des crampes d'estomac
- ressentez de la nausée ou vomissez

Avertissez l'infirmière immédiatement (ou rendez-vous à l'urgence ou au centre de santé) si vous :

- remarquez que votre urine est foncée (couleur cola) ou que vos selles sont claires
- avez des démangeaisons ou des éruptions cutanées
- constatez que votre peau ou vos yeux jaunissent

Y a-t-il autre chose que je devrais savoir ?

- **ÉVITEZ** de prendre du Tylenol durant les mois où vous suivez le traitement contre la tuberculose, car cela accroit le travail du foie. La prise de l'INH et de l'acétaminophène (Tylenol) en même temps accroit les risques d'endommager le foie. Faites plutôt usage d'ibuprofène (Advil ou Motrin).
- **ÉVITEZ** de consommer de l'alcool; la consommation d'alcool avec l'INH peut endommager votre foie. Si vous buvez, avertissez l'infirmière afin que des tests sanguins mesurant le fonctionnement du foie puissent être faits plus souvent.
- Informez votre infirmière ou votre médecin de tous les autres médicaments que vous prenez, même ceux qui ne demandent pas de prescription, comme l'acétaminophène (Tylenol).
- Le traitement TBIL ne sera pas efficace si vous ne prenez pas toutes les doses prescrites.
- Vous aurez à subir des prises de sang durant votre traitement TBIL afin de vous assurer que l'INH n'affecte pas votre foie.
- Discutez avec votre infirmière si vous avez des questions ou des préoccupations.

Kangiqhidjutit

Latent Tiibiimik Aanniaqtuq (LTBI-mik) Havautituqtukhaq

Havautikhaqtitauyutit havautikhanik nakuhitikhanik latent Tiibiimut aanniarunmik (ilihimayauyuq mihingmatumik Tiibiikhimayuq) aanniaqtailiyatit Tiibiimut aanniarunmik.

Hunauva hamna Isoniazid (INH)?

Isoniazid (INH) havautit atuqtauvaktut tuqutirutikhanik Tiibiimik qupilrunut. INH havautit atuqtauvaktut allaniklu Tiibiimut havautinik nakuuhitikhanik aanniaqtunut Tiibiimik aanniarunmut.

Huuq havautituqtivauvik hapkuninga vitamin B6 (Pyridoxine)?

Ilangit inuit havautituqtitauyut imaitunik INH havautinik mihigingnaikpangmata uvaluunniit kakihilaivakhutik algaini innugait itigaitlu. Vitamin B6 havautit ikayuutauvaktut taimailinaittumik.

Hunava hamna Munaqhimit Qun'ngiaqtupluni Havautituqtitauyut (DOT)?

(DOT) Munaqhimit Qun'ngiaqtupluni Havautituqtitauyut. Taimailiuktitauvaktut ahiagut ayukhautiqarnaitumik ikayuutikhamiklu iniqtiriarni havautituqtakharnik qilamivyak.

Hunauvat ahiagut ayukhautaullayut ilihimayakhatka?

Hii, INH nakungiutillayuq tingungnut. Uqadjavutit munaqhingnut hapkuninga piguvit:

- Niriluarumayungnairutit niqinik ayurhaliruvitlu niriyakharnik
- Aqiruklikpaliruvit qiluhivalirutvitlu aqiarukkut
- Mirianguvaliruvit miriakpaliruvutluunniit

Unniutilugu munaqhi qilamik (Munaqhiqarvingmut/ Aanniarvingmutluunniit) takuguvit:

- Taakhiqpiaqqat quiyaragavit, aannaqtatitlu qakungaliqqata
- Amirliqhimayunik uviningnik, kumilaqiguvit
- Quryiktitpat uviinniit uvaluunniit iyikkit

Ahiagutlu hunanik ilihimayukhauvik?

- **NAKUNGIRNAITTUMIK** niaquqhiutituqtaililutit Tylenol-mik tatqiqhiutini Tiibiimut havautituqtitlutit akhuuktitauvallangmat tingungnut. Tiibiimut havautituqtitlutit hapkuningallu atautkikkut niaquqhiutit (Tylenol-mik) nakungiutivallakhunguyut tingungnut hungiutilutiklu. Atuqluaqlutit Ibuprofen (Advil-mik uvaluunniit Motrin-mik.
- **NAKUNGIRNAITTUMIK** niuqaqtaililutit tanngarmik; niuqaqpakkuvit tanngarmik havautituqtitlutit INH nakungiutillayuq tingungnut. Imiruvit tanngarmik uqadjavutit munaqhingnut tingut qanurittaakhanik munariyauyangani.
- Uqadjavutit munaqhingnut taaktingnutlu tamainik allanik havautituqtarnik, havautinik niuviktakhaniklu taaktimit makpiramik piyakhaitunik, niaquqhiutinik(Tylenol).
- LTBI havautituqtatit nakuuhitilimaittut kihimik tamaita iiqqaqtakhatit nunngutkupkit.
- Auktakhikpaktukhauyutit havautituqtitlutitLTBI havautinik naunairiangani havautituktatit INH tinguklirnaitumikt.
- Uqaqvigilugu munaqhigiyat ihumalutiqaruvit uvaluunniit apiqhuutikhaqaruvit.

ᓯᓚᖓᑦ ᑎᑎᕆᖅᓯᒪᔪᑦ

ᐊᐃᕐᑐᑕᐅᔨᓐᓇᖅᑎᑕᑐᒍᑦ >ᓀᑦᓗᓐᓇᓗᒍᑦ ᐱᔨᓐᓂᖅᑎᑎᑕᐅᓂᖅ

ᐃᓕᓴᕆᐊᕈᓯᒪᓕᕐᓗᑦ ᐊᐃᕐᑐᑕᐅᔨᓐᓇᖅᑎᑕᑐᒍᑦ >ᓀᑦᓗᓐᓂᕆᓗᑦ ᐱᔨᓐᓂᖅᑎᑎᑕᐅᓴᕆᔪᒍᑦ (ᖃᐅᔨᒪᓕᐅᓪᓚᕆᔨᓂᖅ ᓯᓂᑐᖅ >ᓀᑦᓗᓐᓇᖅᑐᒃ) ᐊᓐᓂᐊᓪᓂᐊᕐᓂᓇᕐᓗᑦ ᐊᐃᕐᑐᑕᐅᔨᓐᓇᖅᑐᒍᑦ >ᓀᑦᓗᓐᓇᐅᔪᑦ ᐊᓐᓂᐊᖏᓚᓐᓂᑦ.

>ᓀᑦᓗᑐᖅᓯᐅᑎᑦ ᐃᓕᓴᑦ (INH) ᑭᓯᒪᒪᑕ?

>ᓀᑦᓗᑐᖅᓯᐅᑎᑦ ᐃᓕᓴᑦ (INH) ᖃᐅᐱᑕᐊᔨᓂᑲᓂᒃ ᐃᓇᓕᓴᕆᐅᑎᐅᔨᖅ ᑐᓂᐅᓴᐃᓯᒧᑦᓗᓂᒃ >ᓀᑦᓗᓐᓇᐅᔪᑦ ᖃᐅᐱᑕᐊᔨᓂᖅᑎᑦ ᐊᓐᓂᐊᖏᓚᓐᓂᑦ. >ᓀᑦᓗᑐᖅᓯᐅᑎᑦ ᐃᓕᓴᑦ ᐊᑐᖅᑕᐅᖅᑐᖅᓯᐅᑎᓯᖅ ᐊᓯᖏᓐᓄᑦ >ᓀᑦᓗᑐᖅᓯᐅᑎᓂᑦ ᐃᓕᓴᕐᓂᒃ >ᓀᑦᓗᓐᓇᐅᔪᑦ ᐊᓐᓂᐊᖏᓚᓐᓂᑦ ᐱᔨᓐᓂᖅᑎᑎᑕᐅᓴᕆᔪᒍᑦ.

ᓯᓚᒡᑦ ᑎᒥᒍᑦ ᐃᑲᔪᑎᓂᒃ B6-ᓂᒃ ᐃᓯᕐᐊᖅᑲᖅᓱᖓ?

ᐃᓄᐃᑦ ᐃᓕᖏᑦ >ᓀᑦᓗᑐᖅᓯᐅᑎᓂᑦ ᐃᓕᓴᖅᑐᑦ (INH) ᐃᓄᓕᖓᐊᐊᖏᑦ >ᑐᐃᖏᑦᓗ ᐃᑦᐱᓇᓂᕐᐊᕐᑕᑎᐊᕈᓐᓇᓯᓂ ᑲᑭᓯᓂᓗᓐᓂᓐᓂᑦ. ᑎᒥᒍᑦ ᐃᑲᔪᑎᓂᒃ B6 ᑕᐃᒪᐃᑎᑦᓯᑕᐃᓕᓴᕈᓐᓇᖅᑐᑦᖅ.

ᖃᐅᔨᓴᖅᑕᐅᑦᓯᓕᒻᒥᓂᑦᓯᓂᒃᓄᓯᑦ ᐱᔨᓐᓂᖅᑎᑎᑕᐅᓂᖅ (DOT) ᑭᓯᒪᒪᓕ?

ᖃᐅᔨᓴᖅᑕᐅᑦᓯᓕᒻᒥᓂᑦᓯᓂᒃᓄᓯᑦ ᐱᔨᓐᓂᖅᑎᑎᑕᐅᓯᓕ ᐊᓯᐊᓂᔪᓂᑦ ᐊᓯᐊᓂᔪᑎᑦ ᐅᐊᑎᑎᕆᐅᑎᑦᓗᓂ ᐊᐅᓂᖅᑐᖅᑐᑦᓗᓂ ᐊᐅᓂᖅᑐᖅᑐᑦᓗᓂ ᐅᐊᑎᑎᕆᐅᑎᑦᓗᓂ ᐃᓕᓴᕐᓂᒃ. ᑕᐃᒪᐃᓴᖅᑕᖅᑐᑦ ᐊᐅᖅᖏᓐᓄᑕᐅᑕᑐᐃᓐᓇᐊᓕᓐᓂᓐᓂᒃ ᖃᐅᔨᓴᖅᑕᐅᓯᒪᓂᑦ ᐃᓕᓴᕐᓂᓐᓂᒃ ᐃᓕᖏᑦᓗ ᐃᐅᓴᓂᐊᕐᓂᖅᑐᖅᑐᑦᓗᓂ ᐃᓕᓴᕐᓂᓐᓂᒃ ᐃᓕᓴᕐᓂᓐᓂᒃ ᐃᓕᓴᕐᓂᓐᓂᒃ

Fact Sheet

Contact of Tuberculosis

Your healthcare provider has reason to believe that you have spent time with someone who has active TB disease and may have breathed TB germs into your body.

It is very important for you to be tested for TB.

- Your healthcare provider will arrange for you to have a Tuberculin skin test (TST) if you have never had a positive skin test in the past.
- If you have had a positive TST in the past it should not be repeated, instead you will be asked to provide samples of your sputum and to have a chest x-ray.
- If you have any symptoms of TB you will also be asked to provide samples of your sputum and have a chest x-ray. Symptoms of TB can include:
  - Cough for 3 or more weeks,
  - fever,
  - weight loss,
  - chest pain,
  - night sweats and/or
  - blood in your sputum.
- If your TST is “negative,” you probably don’t have TB germs in your body. However your body can take up to 8 weeks to recognize that you have been infected therefore the TST must be repeated several weeks later to be certain.
- If your TST is “positive,” you have TB germs in your body. You will need to provide samples of your sputum and have a chest x-ray to determine whether you have latent TB infection (LTBI) or active TB disease.
- If you have LTBI, you will be offered medicine to kill the TB germs unless there is a reason to believe you shouldn’t take the medication. Reasons can include such things as liver disease or allergy to the medication.
- If you have LTBI you are not infectious and you can’t spread TB to other people.
- Young children or people with HIV or certain health problems are more likely to develop active TB disease than other people. They may need to take medicine to prevent TB even if their TST is negative.
- If you have active TB disease you will need to take medication to cure the disease and prevent it from spreading to your family and friends.

Feuille de renseignements

Contact avec un cas de tuberculose

Votre professionnel de la santé a des raisons de croire que vous avez été en contact avec une personne souffrant de tuberculose active, et que vous avez inhalé des germes de la tuberculose.

Il est très important que vous passiez un test de dépistage de la tuberculose.

- Si vous n'avez jamais présenté de résultat positif d'un test de dépistage de la tuberculose dans le passé, votre professionnel de la santé prendra rendez-vous pour que vous passiez un test cutané à la tuberculine (TST).
- Si vous avez présenté un résultat positif d'un TST dans le passé, le test ne doit pas être répété, on vous demandera plutôt de fournir des échantillons d'expectoration et de passer une radiographie des poumons.
- Si vous présentez des symptômes de la tuberculose, on vous demandera de fournir des échantillons d'expectoration et de passer une radiographie des poumons. Voici certains symptômes de la tuberculose :
  - toux persistante (trois semaines ou plus);
  - fièvre;
  - perte de poids;
  - douleurs à la poitrine;
  - sueurs nocturnes;
  - crachats contenant du sang.
- Si le résultat de votre TST est « négatif », il n'y a probablement pas de germes de la tuberculose dans votre organisme. Toutefois, jusqu'à huit semaines peuvent s'écouler avant l'apparition de signes d'infection, par conséquent le TST doit être répété plusieurs semaines plus tard pour confirmer les résultats.
- Si le résultat de votre TST est « positif », des germes de la tuberculose sont présents dans votre organisme. Vous devrez fournir des échantillons d'expectoration et passer une radiographie des poumons pour déterminer si vous avez une infection tuberculeuse latente (ITL) ou la tuberculose active.
- Si vous avez une ITL, on vous offrira un médicament pour éliminer les germes de la tuberculose, sauf s'il y a une raison pour laquelle vous ne devriez pas prendre ce médicament. Si par exemple, vous avez une maladie du foie ou une allergie au médicament.
- Si vous avez une ITL, vous n'êtes pas contagieux et vous ne pouvez pas transmettre la tuberculose à d'autres personnes.
- Les jeunes enfants ou les personnes souffrant du VIH ou de certains autres problèmes de santé sont plus susceptibles de développer la tuberculose active. Si leur TST est négatif, ces personnes devront peut-être prendre des médicaments pour prévenir le développement de la tuberculose.
- Si vous souffrez de tuberculose active, vous devrez prendre des médicaments pour traiter la maladie et en prévenir la transmission à votre famille et à vos amis.

Kangiqhidjutit

Akuktauguvit TIIBIInin

Munahit nunalaani ihumagumi ilauqatigivaktakkit inuit tiibiiqaqtumik aanniarutimk aniqhaaqnagiyauguptigin aanniqniaqnun TIIBIIqaqtunik timingnun.

Akhuqnaqtuq ilingnun ihivriuqtauyukharnik TIIBII-min.

- Munarhitkut aulatitiniaqtun piutikharnik TIIBII-nik uviningni ihivriudjutikharnik taima ihuangitumik uvinikkut ihivriuqtangitkaluaguvit kingulirmi.
- Piyagiikhimaguvit TIIBII-nik Uviningni Ihivriudjutikharnik kinguliqmi atugiaqaffagiaqangitutin, kihimi tuniyukhauyutin naunairutikharnik qallangnik X-Raiqtauyukhauyutin Qatirangnik.
- Piqaguvit naunairutingnik aaniarutmikTIIBII-mik apigiyauniaqtutin tuniyukharnik qallangnik X-Raiqtauyukhauyutinlu. Naunairutiit TIIBII-qaguvit ilauyut ukuninga:
    - Qallaqtuinaliruvit pingahunik avatqukhugu havainiit,
    - kidjaumainaliguvit,
    - uqumaitilaanga ikikliyumiliqan,
    - Qaritaqliuliguvit,
    - Aumalaktuinaliguvit hiniktilutin imaa/imaaluuniit
    - Auqaligumi qallakhuktamingni.
- TIIBII-nik Uviningni Ihivriudjutikharnik piiqangitkuvin TIIBIIqangitutin timingni. Kihiani timit 8nik havainirnik ilitagiaqaqtuq aaniarutiqaligumi taima TIIBII-nik Uviningni Ihivriudjutikharnik uuktuqtaufaaqtukhat qaffinik havainirni naunaiyaiyaangat.
- TIIBII-nik Uviningni Ihivriudjutikharnik piiqaliruvit, TIIBIIqaliqtutin timingni. Tuniyukhauyutin naunairutikharnik qallangnik X-Raiqtauyukhauyutin Qatirangnik naunaiyaiyaangat piqaliguvit tutqukhimayumik TIIBIImik aaniarutmik aulahimaaqtumikluuniit TIIBIImik aaniarutmik.
- Piqaliguvit tutqukhimayumik TIIBIImik aaniarutmik tuniyauniaqtun havautikharnik TIIBIImik aaniarutiqaqnaitumik kihiani havautituqagiaqangitutin. Ihumaguvit tinguklukuvitluuniit ayungnautiqaguvitluuniit havautinik.
- Piqaliguvit tutqukhimayumik TIIBIImik aaniarutmik allanun inungnun hiamitilimaitutin.
- Nukakhiuyut nuttaqqa inuitluuniit HIVqaqtun aaniarutiqagumikluuniit allanik TIIBIIqtaaqtun. Havautitugiaqaqtukhat TIIBIIqaqnaitumik taima TIIBII-nik Uviningni Ihivriudjutikharnik piqangitkumi.
- Piqaguvit aulahimayumik TIIBIImik aaniarutmik havautituqtukhauyutin aaniarutiqaqnaitumik hiamitiqtitinaitumik ilatingnun ilannagiyangninlu.

ᓯᓚᕐᓂ ᑎᑎᕆᖃᕐᓯᒪᔪᓂ

ᖃᐅᓕᕆᖃᕆᓂᕆᕕᓂ ᐅᕙᓪᓕᑐᑎᑦ

ᐊᐪᓂᕈᕆᑐᓚᔨᕐᓴᐃᓂ ᐅᐸᐱᔨᓯᒪᓂ ᖃᐅᓕᕆᖃᕆᓂᕆᕕᓂ ᐃᓄᓕᒥᑦ ᐅᒪᓪᓕᑐᑎᑦᑐᒃ ᐅᙳᓪᓕᑐᑎᑦᑐᒃ ᐊᓂᖅᓴᕆᑐᑐᐃᓐᓇᕈᕈᕆᖃᕆᓂᕆᕕᓪᓗ ᐅᙳᓪᓕᐅᕐᓂᐊᕐᓂᖅᓂᒃ ᑎᑎᖅᓂᒃ.

ᐱᓕᕈᐊᓕᕐᖤᖅ ᖃᐅᔨᓴᖅᑕᐅᓪᓗᑎᑦ ᐅᙳᓪᓕᑐᑎᑦᑐᒃ.

- ᐊᐪᓂᕈᖅᑐᓚᔨᕐᓴᐃᓂ ᐊᖅᑭᑦᓯᐃᓂᕈᖅᑐᖅ ᐅᐃᓂᒃᑯᑦ ᖃᐅᔨᓴᖅᑕᐅᓂᕈᕆᓕᕆᓂ ᐅᐃᓂᒃᑯᑦ ᓇᓗᓇᐃᖅᑕᐅᓇᐅᖅᑕᐅᓯᒪᓕᕐᓂᖅᓯᒪᔪᓂ ᐅᙳᓪᓕᐅᕐᓂᖅᑕᐅᓇᖅᑐᓂ.
- ᐅᐃᓂᒃᑯᑦ ᖃᐅᔨᓴᖅᑕᐅᓇᐅᖅᓯᒪᓐᓂᕐᒥᓂ ᓇᓗᓇᐃᓚᓪᓗᒥ >ᐳᓪᓗᒥᓂᕆᖅᑕᐅᓪᓗᓂ ᐅᐃᓂᒃᑯᑦ ᖃᐅᔨᓴᖅᑕᐅᒃᑲᓂᕆᓚᐅᖅᑐᑎᒃ ᐅᓪᓚᕆᑯᐊᐅᓂᒃᓴᓕᖅᖃᖅᑐᑎᒃ, ᐅᓪᓚᕆᑯᐊᐅᓂᒃᓴᓕᖅᖃᖅᑐᑎᒃ ᓄᐳᒻᒥᑦ ᐊᒻᒪᓗ ᓴᖅᓄᓕᒃᑯᑦ ᑕᕐᕋᖅᑐᖅᑕᐅᓇᖅᑐᓂ.
- ᐊᐪᓂᕈᕆᓂᕆᔪᑦ ᓇᓗᓇᐃᖅᑕᐅᓇᐅᖅᑎᓂᕆᑲᓇᖅ >ᐳᓪᓗᓂᕆᓂᕆᔪᑦ ᓄᐳᒻᒥ ᐅᓪᓚᕆᑯᓯᒪᓕᖅᓂ ᑐᓂᓯᓂᕆᑯᕆᖃᕆᓂᖅᓴᖅᑐᑎᒃ ᓴᖅᓄᓕᒃᑯᑦ ᑕᕐᕋᖅᑐᖅᑕᐅᓇᖅᑐᓂ. ᐊᐪᓂᕈᕆᓂᕆᔪᑦ ᓇᓗᓇᐃᖅᑕᐅᓇᐅᖅᓴᕐᓂᑦ ᒪᑯᐊᖓᔪᓄᖅᓯᒪᓕᖅᑐᑦ:
  - ᐱᓇᓯᐊᕐᓯᓂᓄᑦ ᐱᖓᓱᓯᓂᓄᑦ ᐅᖓᑖᓇᑲᓐᓂᕐᒧᑦ ᖃᐅᐃᖅᓯᕆᑕᓪᓗᒥ,
  - ᐅᑎᓂᖅᑐᑦ,
  - ᓴᓪᓕᑎᓪᓚᕆᓚᐅᖅᑐᖅ,
  - ᓴᖅᓄᓕᒃᑯᑦ ᐊᐪᓂᕈᕆᓂᖅᑐᖅ,
  - ᐅᓪᓗᐊᖅᑯᑦ ᐊᐅᒪᔨᖅᑕᕆᓂᖅᑐᖅ ᐊᖏᓪᓗ/ᐅᖃᖅᑎᑲᓐᓂᕐᒧᑦ
  - ᐊᐅᓚᒥ ᐱᔭᐃᑲᑕᓯᓄᓕᖅ ᐃᖅᓄᖅ ᐅᓪᓚᕆᑯᑕᖅᓴᓂᒃ ᓄᐳᒻᒥᑦ.
- ᐅᓄᐃᓂᒃᑯᑦ ᖃᐅᔨᓴᖅᑕᐅᓇᐅᓂᒃ “ᐱᑕᖅᓯᕐᓄᓂᕆᓄᐊᖅᑉᓯᓪ,” >ᐳᓪᓗᓂᕆᓂᐅᓇᐅᓂᒃ ᖃᐅᐱᔨᓴᖅᑕᐅᓂᕈᕆᓕᕆᓂᕐᓯᒪᓕᕐᓂᖅᓯᒪᓂ ᐱᑕᖅᑕᑎᓴᕐᓯᒪᓂᑐᐃᓐ ᑎᑎᓂᒃ. ᑭᓱᐊᓂ ᑎᑎᑦ ᐃᓕᓴᖅᓱᓂᕐᓂᖅᓯᒪᓂᑐᐃᓐ ᐱᐊᓕᐊᕐᓱᓂ 8 ᐃᓱᒪᓕᓴᖅᑎᑦᓗᑦ ᑕᐃᒪᐃᓐᓂᖏᓄᑦ ᐅᓄᐃᓂᒃᑯᑦ ᖃᐅᔨᓴᖅᑕᐅᓇᐅᖅᑐᓚᔨᕐᓴᐃᓂ ᐱᐊᓕᐊᕐᓱᓂ ᖃᐅᔨᓂᖅᓴᓕᖅᖃᖅᑐᑎᒃ ᐱᐊᓕᐊᕐᓱᓂ ᖃᐅᔨᓂᖅᓴᓕᖅᖃᖅᑐᑎᒃ ᐱᐊᓕᓴᖅᑐᑦ >ᐳᓪᓗᓂᕆᑭᒃᑲᓇᕆᒪᔨᖅᑎᓪᓗᒥ.
- ᐅᓄᐃᓂᒃᑯᑦ ᖃᐅᔨᓴᖅᑕᐅᓂᒃ “ᐱᑕᖅᓯᕐᓄᓂᕆᓄᐊᖅᑉᓯᓪ,” >ᐳᓪᓗᓂᕆᓂᐅᓇᖅᑐᓂᒃ ᖃᐅᐱᔨᓴᖅᑕᐅᓂᕈᕆᓕᕆᓂᕐᓯᒪᓕᕐᓂᖅᓯᒪᓂ ᐅᓪᓚᕆᑯᓯᒪᓕᖅᓂ ᓄᐳᒻᒥᑦ ᑐᓂᓯᓂᕆᑯᕆᖃᕆᓂᖅᓴᖅᑐᑎᒃ ᖃᐅᔨᓴᖅᑕᐅᓂᕈᕆᓕᕆᓂ ᖃᐅᔨᓴᖅᑕᐅᓇᐅᖅᓯᒪᓐᓂᕐᒥᓂ ᐅᓪᓚᕆᑯᓯᒪᓕᖅᓂ ᓄᐳᒻᒥᑦ ᐅᓪᓚᕆᑯᐊᐅᓂᒃᓴᓕᖅᖃᖅᑐᑎᒃ ᖃᐅᔨᓴᖅᑕᐅᓇᖅᑐᓂ ᖃᐅᔨᓴᖅᑕᐅᓇᐅᖅᓯᒪᓐᓂᕐᒥᓂ ᐱᓕᕆᔨᒃᑯᑦ ᐅᓪᓚᕆᑯᐊᐅᓂᒃᓴᓕᖅᖃᖅᑐᑎᒃ

Window Period Prophylaxis (WPP)

Fact Sheet

Window Period Prophylaxis (WPP)

What is window period prophylaxis (WPP)?
Window period prophylaxis (WPP) is treatment given to prevent tuberculosis disease (TB) in an infant or young child who had repeated or lengthy contact with a person with contagious TB.

People become infected with TB by inhaling bacteria that are released into the air when a person with contagious TB disease sneezes, coughs, laughs, sings, or otherwise forcefully expels air from their lungs. Close contacts (e.g., people who live in the same residence) are most likely to become infected.

Who should have WPP?
WPP is usually recommended for infants and children less than 5 years of age who:

- Slept in the same home as a person with contagious TB.
- Were cared for by a person with contagious TB (e.g., grandparent, aunt/uncle, babysitter, daycare worker).
- Lived in or visited a place where a person with contagious TB was often present.

Why is WPP necessary?
WPP is necessary because young children can develop very serious forms of TB within a few weeks of inhaling TB bacteria including:

- TB meningitis (TB disease involving the lining of the brain).
- Disseminated TB (TB of many areas of the body at the same time).

Why are young children at higher risk?
Young children are at higher risk for TB because their immune systems are still developing and are not strong enough to protect them. Also, people like to hold, cuddle, kiss and sing to small children and babies, therefore if they have been in contact with a person with infectious TB that contact may have been very close.

What is the treatment?
Treatment is an antibiotic (isoniazid) and a vitamin supplement (vitamin B6). Doses are given by a health care worker 2 days a week, usually Mondays and Thursdays.

How long is WPP?
The length of treatment depends on the child's tuberculin skin test (TST) results and the age of the child. Usually 2 skin tests need to be done at least 8 weeks apart and if the second test is negative treatment can be stopped. However babies should be 6 month old before having a skin test, so very young babies are recommended to be treated until they are old enough to have a skin test which may be longer than 8 weeks.

What if the second skin test is positive?

If a child has a positive skin test he or she has been infected with the TB germ, if there are no signs or symptoms of active TB disease it is called Latent TB Infection (LTBI). Children who have LTBI are recommended to continue the medication for a total of 78 doses (usually 9 months).

Feuille de renseignements

Traitement préventif (prophylaxie)

Qu'est-ce que le traitement préventif de la tuberculose (prophylaxie de la tuberculose)?
La prophylaxie est le traitement donné pour prévenir la tuberculose chez les nourrissons et les jeunes enfants qui ont des contacts répétés ou de longue durée avec une personne souffrant de tuberculose contagieuse.

Une personne devient infectée en inhalant des bactéries propagées dans l'air lorsqu'une personne souffrant de tuberculose contagieuse éternue, tousse, rit, chante ou expulse autrement avec force de l'air de ses poumons. Les personnes qui ont des contacts étroits (p. ex., les gens vivant dans la même résidence) sont plus susceptibles de devenir infectées.

Qui devrait recevoir le traitement?
Le traitement est habituellement recommandé pour les nourrissons et les enfants de moins de cinq ans qui :

- dorment dans la même maison qu'une personne souffrant de tuberculose contagieuse;
- ont reçu les services ou les soins d'une personne souffrant de tuberculose contagieuse (p. ex., grands-parents, tante, oncle, gardienne, travailleur de garderie);
- ont vécu ou ont fait des visites dans un endroit où une personne souffrant de tuberculose contagieuse était souvent présente.

Pourquoi le traitement est-il nécessaire?
Le traitement est nécessaire parce que les jeunes enfants peuvent développer des formes graves de tuberculose dans les quelques semaines suivant l'inhalation de bactéries de la tuberculose, notamment les suivantes :

- méningite tuberculeuse (tuberculose qui attaque les membranes enveloppant le cerveau);
- tuberculose disséminée (tuberculose qui se propage dans plusieurs parties du corps en même temps).

Pourquoi les jeunes enfants sont-ils plus à risque?
Les jeunes enfants sont plus a risque de contracter la tuberculose parce que leur système immunitaire est en développement et qu'il n'est pas assez fort pour les protéger. De plus, comme les gens aiment tenir, cajoler et embrasser les petits enfants et les bébés et leur chanter des berceuses, ces derniers peuvent avoir été en étroit contact avec une personne contagieuse.

En quoi consiste le traitement?
Le traitement consiste à prendre des antibiotiques (isoniazide) et des suppléments vitaminiques (vitamine B6). Les doses sont administrées par un professionnel de la santé, deux fois par semaine, habituellement les lundis et les jeudis.

Combien de temps dure le traitement?
La durée du traitement dépend des résultats du test cutané à la tuberculine (TST) et de l'âge de l'enfant. Habituellement, il faut effectuer deux tests cutanés dans un intervalle de huit semaines. Si les résultats du deuxième test sont négatifs, on peut mettre fin au traitement. Toutefois, les bébés doivent avoir au moins six mois avant de subir un test cutané, il est donc recommandé de leur administrer un traitement jusqu'à ce qu'ils soient assez vieux pour passer un test cutané, ce qui peut prendre plus de huit semaines.

Qu'arrive-t-il si les résultats du deuxième test sont positifs?
Lorsque les résultats d'un test cutané sont positifs, cela signifie que l'enfant a été infecté par les germes de la tuberculose. S'il n'y a aucun signe ou symptôme de tuberculose active, il s'agit d'une infection tuberculeuse latente (ITL). On recommande que les enfants qui ont une ITL continuent de prendre des médicaments, jusqu'à un maximum de 78 doses (habituellement neuf mois).

Kangiqhidjutit

Window Period Prophylaxis-nik (WPP)

Hunauyuq window period prophylaxis-nguyut (WPP)?

Window period prophylaxis-nik (WPP) havautauyuq tiibiinaitumik aaniarutmik biipiinuanun nukakhitqianguyununlu nuttaqqanik taima ilauqatigihimaaqpaktaingit inungnik hiamitiqtaaqtunik allanun TiiBiimik.

Inuit ayungnautiqaqhimaliqtun TIIBIImik aniqhaaqnikkut aaniarungnik hiamitiqhimayut aningnikkut taima inuk aaniarutiqagumik hiamitiqtaaqtunik TIIBIImik aaniarutmik tagyugumik, qallakhugumik, iglagumik, atugumik, anirhaaqyumigumikluuniit puvangni. Qanitumiqatigungnilu (imaa itun, inuit igluqatigiigumik atauhirmi iglumi) taima aaniarutiqaqniaqtun.

Kina pigiaqaqtuq WPPnik?

WPPnik atuqtauyukhauyait biipiinuat nuttaqqatlu ukiuqangitunik 5nik taima kitut:

- Hiniqatigiyait iglumi inungnik hiamitiqtaaqtunik allanun TIIBIImik.
- Munagiyaunginaqtun inungnin hiamitiqtaaqtunik aaniarutmik TIIBIImik (imaa itun, ataattiangit, anaanattiangit, atangit/angangit, nuttaqqiyuq, nuttaqqanik munaqtiuyununlu havatit).
- Inuuhimaaqtun pulaaqtunikluuniit iglumun inungnun hiamitiqtaaqtunik TIIBIInik piqaqpan.

Huuq piyukhat WPP-mik?

WPP-mik pigiaqaqtukhat taima nukakhiuyut nuttaqqat ayungnautiqaqniaqtun TIIBIImik aaniarutnik qaffinuani havainirni anirhaarumitku TIIBIInik aaniarutingnik:

- TIIBIImik meningitis-mik (TIIBIImik aaniarut ilauhimangman iluvruani qaritam).
- Hiamitiqtaaqtunik TIIBIImik (TIIBIIniktun timimini tamaat atautikut).

Huuq nukakhiuyut nuttaqqat ayungnautiqaluaqniaqtun aaniarutmin?

Nukakhiuyut nuttaqqat ayungnautiqaluaqniaqtun TIIBIImik aaniarutmik inuuhiangit angikliyumiqhimaanginaligamik hakuklukamiklu aaniarutmin. Taimalu, inuit tigumayuinaqtun, iqitumayut, kuniktuimainaqtun atuqtuyaqatigiyainaqtait nukakhiuyut nuttaqat biipiinuangitlu, taimaitumik akuktauguvit inungnun aaniarutiqaqtun TIIBIImik haningniiqatigivaktaingit.

Hunauyut havautikhangit?

Havautikhautauyuq havautingnik ihuagutikhauyuq (isoniazid-mik) vitamikharniklu havautituqtakhangit (vitamin B6-mik). Havautikhangit tuniyauyukhat munarhitkunin malrungnik ubluanganik havainirmi tamaat, talvuuna Hivullirmi Hitamiutmilu.

Akunikhanga Havautituqtakhangit WPP-mik?

Akunikhanga havautituqvikhanga aulaniaqtun nuttaqqam aaniarutaangani naunaitkutitigun TIIBIInik uvingnirmi ihivriuqnikkut ukiungitlu nuttaram. Taima malrungnik uvinikkut ihivriudjutikhangit piqaqtukhat taima aitnik havainirnik ihivriuqtaufaaqtukhat kingulingalu ihivriudjutikhanga aulahimayukhaq taima kinguliuyuq ihivriudjutaa ihualigumi taima havautikhanga taimaaqtitigiaqaqtangit. Kihiani biipiinuat siksinik tatqikhiutiqaqtunik avatquhimayutluuniit pigiaqaqtun TIIBIImik uvinirmi ihivriudjutikharnik, taima nukakhitqianguyut biipiinuat havautituqhimaaqtukhat angikliyumiliqtinanik piqagiangat uvinirmi ihivriudjutikharnik taima hivunikhaqaqtuq taima aitnik havainirnik.

Taima kinguliuyuq uvinirmi ihivriudjutikhaq naunairutiqaqqan aaniarutiqaliqtuq?

Taima nuttaran aaniarutiqaligumi ihivriuyagiikhimaligumi uvinirmi ihviriudjutingni naunaiyagiikhimaliqan TIIBIImik aaniarutmik, naunairutiqangitkumi aulangitkumikluuniit aulayumik TIIBIImik aaniarutmik taivagiat Tutquhimayumik TIIBIImik Aaniarutiqaqtuq (LTBI). Nuttaqqat piqaliqtun LTBI-mik havautituqhimaaquyauyut taima katitiqhimayumik 78nik havautikharnik (taima 9nik tatqikhiutingnik).

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ᐊᓂᓪᓚᕐᒥᒃᓴᐃᓂᖅᓯᒪᓕᕆᓂᖅ ᖃᐅᔨᓴᖃᑕᐅᒃᑐᐃᓐᓇᕆᓂᖅ (WPP)

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Bacille Calmette-Guérin (BCG)

Fact Sheet
Bacille Calmette-Guerin (BCG)

What is Tuberculosis?
TB is an infection that can cause coughing, fever, and difficulty breathing.

It spreads through the air when a person coughs.

TB is most often an infection of the lungs, but it can also affect other parts of the body.

What are benefits of the BCG vaccine?
The BCG vaccine helps prevent infants and young children from getting very sick from TB.

It does not prevent all types of TB, but it helps prevent serious illness from TB (meningitis, miliary TB).

Is the vaccine safe?
Yes. A normal reaction to the BCG vaccine is a small raised bump that can swell and leak fluid 2 – 4 weeks after the vaccine. This usually heals within 2 – 5 months and may leave a small scar.

Rarely, a swollen lymph node (raised lump) in the armpit or above the collarbone may occur 2 – 4 months after the vaccine. This lymph node usually goes away on its own. Very rarely, this lymph node can get infected and will need to be treated medically. If you find a lump, talk to your health care provider.

The BCG vaccine may result in a future positive tuberculin skin test (TST).

There is a very rare chance of a severe allergic reaction called *anaphylaxis.* Anaphylaxis appears as hives, rash, swelling of the mouth, difficulty breathing. This type of reaction typically occurs within 15 minutes of receiving the test. **It is recommended you stay in the clinic for 15 minutes after getting the BCG vaccine.**. Anaphylaxis can be treated and your healthcare provider is trained to treat it.

The Japan BCG Laboratory vaccine is not licensed in Canada, but is approved for use in Canada under Health Canada's Special Access Programme and has been used in other parts of the world for 25 years

Who should talk with their healthcare provider before their baby receives the BCG?
Tell your health care provider if your baby/ward has any of the following:

- Immune system difficulties, such as:
  - Taking medications that affect the immune system
  - HIV positive
  - Born to HIV positive or unknown HIV status mother
  - Has a family member with Severe Combined Immunodeficiency Syndrome (SCIDS)
- Positive TST or Active TB disease
- Allergy to the vaccine or its components
- Burns or other serious skin problems.
- The birth mother was on immune suppressing medications during pregnancy or while breastfeeding.

What is the risk of not getting the BCG vaccine?
The BCG is recommended for infants in Nunavut because of their risk of becoming seriously ill with TB. The rates of TB infection are much higher in Nunavut then in other regions in Canada.

Bacille Calmette-Guerin (BCG) After Care

- Wash your baby's arm normally.
- Put a cool damp cloth over any swelling.
- If the sore is draining, cover it with gauze or a light cotton T-shirt.
- Do NOT:
  - massage the arm
  - put cream or ointment on it
  - put a band aid on the sore
  - pop or scratch the bump

If you are concerned about a reaction with the vaccine, talk with your health care provider.

Feuille de renseignements

Vaccin Bacille Calmette-Guérin

La tuberculose

La tuberculose est une infection qui peut causer la toux, la fièvre et des difficultés respiratoires.

Elle se propage dans l'air ambiant quand une personne tousse.

La tuberculose est le plus souvent une infection des poumons, mais elle peut aussi affecter d'autres parties du corps.

Avantages du vaccin BCG

Il aide à empêcher qu'un enfant soit très malade à cause de la tuberculose.

Il ne prévient pas tous les types de tuberculose, mais il aide à prévenir des types graves (méningites, tuberculose militaire)

Le vaccin est-il sécuritaire?

Oui. L'apparition d'une petite bosse pouvant enfler et laisser échapper du liquide de 2 à 4 semaines après le vaccin est une réaction normale. L'enflure disparaît habituellement dans un délai de 2 à 5 mois, et peut laisser une petite cicatrice.

Une inflammation du ganglion lymphatique dans l'aisselle ou au-dessus de la clavicule peut parfois apparaître dans un délai de 2 à 4 mois après la vaccination. Cette inflammation disparaît habituellement par elle-même. Il est très rare qu'elle s'infecte et nécessite un traitement médical. Si vous observez une enflure, parlez-en à votre fournisseur de soins de santé.

Le vaccin BCG peut entraîner un résultat positif lors de futurs tests cutanés à la tuberculine (TCT).

Il est très rare qu'une grave réaction allergique appelée *anaphylaxie* se produise. Voici les principaux symptômes d'anaphylaxie : urticaire, éruption cutanée, enflure de la bouche, difficultés respiratoires. Ce type de réactions se produit habituellement dans les 15 minutes suivant la vaccination. **Il est conseillé de rester à la clinique pendant 15 minutes après avoir reçu le vaccin Bacille de Calmette-Guérin (BCG).** L'anaphylaxie se traite et votre professionnel de la santé est formé pour la traiter.

Le vaccin du *Japan BCG Laboratory* n'est pas homologué au Canada, mais son utilisation au Canada a été approuvée en vertu du Programme d'accès spécial de Santé Canada, et il est utilisé dans d'autres parties du monde depuis 25 ans.

Que faut-il mentionner au fournisseur de soins de santé avant l'administration du vaccin BCG à un bébé?

Mentionnez au fournisseur de soins de santé si votre bébé ou pupille présente l'une des caractéristiques suivantes :

- Des problèmes liés au système immunitaire comme :
  - La prise de médicaments qui affectent le système immunitaire
  - Séropositif pour le VIH
  - La mère naturelle est séropositive ou son statut concernant le VIH est inconnu
  - Un membre de la famille est atteint d'un syndrome d'immunodéficience combinée grave (SCID)
- TCT positif ou tuberculose active
- Allergie au vaccin ou à ses composants
- Brûlures ou autres problèmes cutanés graves
- La mère naturelle a pris des médicaments immunosuppresseurs pendant sa grossesse ou lors de l'allaitement.

Quel est le risque de ne pas recevoir le vaccin BCG?

Il est recommandé que les nouveau-nés nunavois reçoivent le vaccin BCG en raison de leur risque d'être gravement malades s'ils attrapent la tuberculose. Le taux d'infection à la tuberculose est beaucoup plus élevé au Nunavut que dans le reste du Canada.

Soins après l'administration du vaccin Bacille Calmette-Guérin (BCG)

- Laver le bras du bébé normalement.
- Poser une compresse froide sur toute enflure.
- Si la plaie coule, il faut la couvrir avec de la gaze ou un coton léger.
- NE PAS :
  - masser le bras
  - appliquer de crème ou d'onguent
  - appliquer un pansement adhésif sur la plaie
  - crever ou gratter l'enflure.

Si une réaction au vaccin vous préoccupe, parlez-en à votre fournisseur de soins de santé.

Kangiqhitjutit

Bacille Calmette-Guerin-nik (BCG-nik)

Hunauyuq Puvaklungniq?

Puvaklungniq aannianiq taima qallakhuligaangamik kidjaumaniq, aningnililugaangamiklu.
Taima hiamitiqtuyukami anikhaarnikkut taima inuk qallakhugaangat.
Puvaklungniq taima aanniarutauyuq puvaklungnikkut, kihimi ayukhaqtitigiaqaqtun allanut timimun.

Hunauyut pitjutikhat BCG-nik kapukhirnikkut?

Tamna BCG-nik kapukhirniq ikayuutigivaktuq biipinuanut nuttaranuanutlu aanniaqnaitumik tapfuminga TB-mik.

Taima aanniaqnaitumik tamangnik TB-nin, taima ikayuutigivaktuq aanniaqnaitumik TB-nik(meningitis-min, military-minlu TB-nik).

Tamna kapuqhirniq qayangnaituq?

Hii. Kapukhigaangat tapfuminga BCG-mik mikiumik puvitpaktuq taima puviqyuattaaqtuq imarunmik 2nik – 4nik havainiqnik kapukhiqvianganin. Taima mamitpaktuq 2nik 5nikluuniit tatqikhiutingnik taima qilirunikpaktuq.
Taimailuayuituq, puvitiqtuqpaktun qallakhiit (puvingayut) talvani uniqmi qanganiluuniit qupturaqmi nuiniaqtun 2nik 4nikluuniit tatqikhiutingni kapukhirviani. Una puvingayuq inminik tamaqpaktuq. Taima una qallakhiit aanniarutiqayuitun taimalu havautituluayuitait. Taima nalvaaqhiguvit puvinganirmik, uqaqqatigilugit munarhitkut.
Tamna BCGnik kapukhirniq naunairutiqagiaqaqtuq hivunirmi tautuminaqtumik uvinirmi ihivriutjutikharnik Ayungnautiqaluangituq inuuhirmun taima taivagainik *anaphylaxis-mik.* Anaphylaxis-ngit tautungnaqhivaktun puvingninik, uvinirlungnikkut, puvitpakhunilu qaningit, ayukhautigivakhugitlu aningningit. Imaitun ayungnautigiyait aulavaktun taima 15 minutes-nik piagiikhimaliqan ihivriutjutikhaq.
Munarhiqarvikmiittughauyutit 15 minutes-ni kapukhiruvit uuminga BCG-mik kaupukhiutaanut.
Tamna Anaphylaxis-nik aanniarniq ihuaqhigiaqangman munarhitkuni munarhiqaqtuni.
Tamna Japan BCG-nik Ihivriuqviliqiviangit kapukhirnikkut laisiqangitun Kanatami, kihimi angirutigivaktun aturutikhanga talvani Kanatami ataani Aanniaqtailiqinikkut Kanatami Akhuqnaqtun Pitdjutikhangit Havaaqhangit atuqtauvaktunlu allani nunaqyuangani humiliqaak taima 25nik ukiunganik.

Kina uqagiaqaqtun munarhitkunun taima biipinuangit kapukhirtinani BCG-nik?

Uqaqatigilugu munarhi taima biipinuan/munariyatlu piqaqtuq ukuninga:

- Aanniaqtailinikkut ayungnautigivaktun imaitunin:
  - Havautitugumik ayungnautigivaktuq aanniaqtailinikkut inuuhirmini
  - HIV-qagumik
  - Inuuhimakpan HIV-qagumi nallunaqtumiklu HIV-qagumi Maamanga
  - Inuhiqaqqan ilamingni Inuuhiani ilaqaqqa Anginirmik Aanniarutingnik (SCIDS)
- Piqagumi TST-nik TB-qamilu aanniarutimik
- Ayungnautiqaqtun kapukhirnirmin havautiminlu
- Utiqhutik allaniklu uvinirlukhutik ayungnautigivaktaat
- Maamanga havautituqpakami ayungnautigilimaitunik hingaitiluni taimaluuniit maamaktitihimaaqtiluni.

Hunauyut ayungnautiginiaqtait kapukhingitkumik BCGnik kapuutinik?

BCG kapukhidjutigitquyait mirraanut Nunavunmi aanniarutinikkumik aanniaryuaqniaqmata tibiimit (TB). Amigaitilaangit tiibiimut (TB) aanniarutinikpaktut angitqiyauyut Nunavunmi aallanit aviktuqhiumayuni Kanatami.

Bacille Calmette-Guerin-nik (BCG-nik) Munagitjutikhangit

- Uattiaklugit biipinuat talnga ubluk tamaat.
- Kinipayumik allarutmik ililugu puvipkaknirmi.
- Tamna kilaq maqiligumi, matuhiqlugu kalikukmik iluvguaqmik.
- IMAILIUGUIQLUTIN:
  - Kahakataguiqlugu talin
  - Nanuttailugu urhuqtirutingnik
  - Matuhiqtailugu ullugianaqnirmi
  - Qagaqtitihuiqlugu kukkuktainahuaqlugu puvinnganinga

Ihumaalutiqaguvit ayungnautingnik kapukhingnikkut, uqaqqatigilugu munarhit nunalaani.

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>ᐊᓕᓴᐅᓯᖅ ᐃᑲᔪᑎᖃᓯᖅ ᐱᐊᖏᐃᑦ ᓯᕗᓯᓪᓗᓂ ᐊᐅᓂᖅᓴᖅᑐᓂᕐᒥᓂᓗ ᐱᓕᕆᔨᖅᑕᐅᓇᖅᑐᖅ >ᐊᓕᓴᐅᓂᖅᑎᑦ (ᖃᓚᐱᖅᓯᓪ/ᖃᐅᑎᖃᓯᓪ ᐃᓱᒪᓯᓯᒪᓂᖅ, >ᐊᓕᓴᐅᓂᖅ).

ᐊᓂᓂᐊᓕᓵᖅᓯᒪ ᐊᑦᑕᕐᓇᖓᓕᒫ?

ᐃ. ᓴᖅᑭᑲᓱᓯᖅ >ᐊᓕᓴᐅᓂᖅᓯᖅᑕᐅᓕᐅᖅᑐᖅᓂ ᖃᐅᑎᓂᐅᓕᓭᔪᓯᓱᓕᓴᓂ >ᑦᓕᓕᓯᔪᓱᓕᓴᓂ ᖃᐅᕈᓇᖅᑐᖅ ᒪᖃᕈᓕᓴᓂ ᐱᓇᓯᐊᕐᓯᑦ ᒪᖃᕐᑐᖅ ᐃᓂᓪᓕᖅ ᐊᓂᓂᐊᓕᓵᖅᓯᒪᓂᖅᓯᖅᑕᐅᓇᖅᑐᓂᖅᓴᖅᑐᓂ. ᒡᓘᓇ ᒪᒥᑐᓱᓯᖅ ᑕᖃᕐᑐᖅ ᐊᓂᓂᐊᓕᓵᖅᓯᒪᓂᖅᓯᖅᑕᐅᓇᖅᑐᓂᖅᓴᖅᑐᓂ. ᒡᓘᓇ ᖃᓕᓴᖅᓯᓇᖅᑐᖅ >ᑦᓕᓕᓯᔪᓱᓕᓴᓂ ᐃᓗᒥᓂ ᐊᓯᐅᓚᓱᓯᓱᓕᓴᓂ. ᑕᐱᒪᐃᓚᖅᑕᑎᒪᓂᐅᑦᓴᓂ, ᒡᓘᓇ ᖃᓕᓴᖅᓯᓇᖅᑐᖅ ᐊᓂᓂᐊᓕᓵᖅᓯᒪᓂᖅᓯᖅᑕᐅᓇᖅᑐᓂᖅᓴᖅᑐᓂ ᐊᐅᓂᖅᓴᖅᑐᓂᕐᒥᑦ ᐅᐃᓕᓴ

Tuberculosis (TB) and Smoking

Fact Sheet

Tuberculosis (TB) and Smoking

Is there a connection between TB and tobacco smoking?

- Yes! Smoking damages the lungs and can make smokers more susceptible to TB infection;
- Smoking harms the body's immune system, so smokers are less able to fight TB infection;
- Smoking decreases the effectiveness of TB treatment which can mean it is harder to kill the TB germs so longer treatment is needed and/or more severe forms of TB develop.

Does smoking increase the risk of becoming infected with the TB bacteria?

- Yes. If cigarette smokers breathe in TB bacteria, they may be up to three times more likely to develop latent TB infection than non-smokers.
- The risk of infection increases the more you smoke and the longer you have been smoking.

Does smoking increase the risk of developing active TB disease?

- A smoker who has latent TB infection (LTBI) is two to three times more likely to develop active TB disease than a non-smoker.
- Although it is not common in Canada, people can still die from TB. Smoking increases the risk of death among TB patients up to six times.
- Even if you have been cured of TB in the past, the risk of developing active TB disease again is three times higher in cigarette smokers compared to non-smokers.

What should I do if I have latent TB infection and I smoke?

- Quitting smoking is one of the best ways you can protect yourself from developing active TB disease.
- Quitting smoking will also help your treatment for latent TB infection be more effective.

What should I do if I have TB disease and I smoke?

- Smoking is associated with more severe disease and can cause more damage to your lungs, so quitting is a very good action you can take if you are diagnosed with TB.

What about second-hand smoke exposure?

- Exposure to second-hand smoke increases the risk of both latent TB infection and active TB disease among children and adults.
- The more second-hand smoke children and young adults are exposed to, the higher their risk of developing TB. Even when a person smokes outside, clothes keep some of the chemicals in them and babies and children breathe the chemicals in when they are close to the clothes.
- TB patients who smoke in the home are also placing their families at a greater risk for TB. It is very important to keep your home smoke-free.

Feuille de renseignements

Tuberculose et tabagisme

Existe-t-il un lien entre le tabagisme et la tuberculose ?

- Oui! Le tabagisme endommage les poumons et rend les fumeurs plus susceptibles d'être infectés par la tuberculose;
- Le tabagisme affaiblit le système immunitaire. Ainsi, les fumeurs sont moins en mesure de combattre la tuberculose;
- Le tabagisme réduit l'efficacité du traitement de la tuberculose ce qui signifie qu'il sera plus difficile de tuer les bactéries. Par conséquent, un traitement plus long sera nécessaire ou des formes plus graves de la maladie pourront se développer.

Le tabagisme augmente-t-il les risques de contracter la tuberculose ?

- Oui. Si les fumeurs aspirent la bactérie de la tuberculose, ils sont trois fois plus à risque d'être infectés par une tuberculose latente que les non-fumeurs.
- Plus vous fumez et plus longtemps vous fumez, plus les risques d'infection augmentent.

Le tabagisme augmente-t-il les risques de développer une tuberculose active ?

- Un fumeur porteur d'une tuberculose latente est de deux à trois fois plus susceptible de développer la forme active de la maladie qu'un non-fumeur.
- Bien que ce soit rarement le cas au Canada, on peut encore mourir de la tuberculose. L'usage du tabac multiplie par six les risques de décès dû à la tuberculose.
- Même si vous avez été guéri de la tuberculose dans le passé, les risques de développer à nouveau la maladie sont trois plus élevés chez les fumeurs que chez les non-fumeurs.

Que dois-je faire si je suis fumeur et que je suis porteur d'une tuberculose latente ?

- Arrêter de fumer, voilà la meilleure façon de prévenir l'apparition d'une tuberculose active.
- Le fait d'arrêter de fumer favorisera également un traitement plus efficace d'une tuberculose latente.

Que dois-je faire si je suis fumeur et que je souffre de la tuberculose ?

- Le tabagisme est associé à des cas plus graves de la maladie et peut endommager vos poumons. Ainsi, l'abandon du tabac est un geste responsable si vous avez été diagnostiqué comme étant porteur de la tuberculose.

Qu'en est-il de la fumée secondaire ?

- L'exposition à la fumée secondaire augmente les risques d'infection tant de la forme latente que de la forme active de la tuberculose chez les enfants et les adultes.
- Plus grande est l'exposition à la fumée secondaire chez les enfants et les adultes, plus grands sont les risques de développer la tuberculose. Même si la personne fume à l'extérieur de la maison, ses vêtements restent imprégnés d'une partie des produits chimiques provenant du tabac. Ainsi, les bébés et les enfants respirent ces produits lorsqu'ils sont en contact avec ces vêtements.
- Les patients atteints de la tuberculose qui fument dans la maison augmentent les risques, pour leur famille, de contracter la maladie. Il est très important d'avoir une maison sans fumée.

Kangiqhidjutit

Tiibiiktut (TB) Higaangniqlu

Atadjutiqaqqat Tiibiiktutlu (TB) tibaakumik higaangniqlu?

- Ihii! Higaangniq hunngiutauvaktuq puuvvangnut imatutlu higaayuktut aannialaqittaaktut Tiibiimik aanniarunmik;
- Higaarniq hakuiqtitpaktaa timiup hapummitdjutigivaktanginnik, taimaitumik higaayuktut hakuikpaktut Tiibiimut aanniarunmit;
- Higaarnik hakkuirutauvaktuq Tiibiimut havautinik taimatut ayurnatqiyauvaktuq tuqutiriangini Tiibiimik qupilrut taimatutlu hivitutqiyamik havautituqtukhauyut unalu/uvaluunniit angitqiyanik allanik Tiibiikhimavaktut hiamitpagunakhiyuqlu tiibiirniat.

Higaarnik angiklitivakpa qayangnaqtunik aanniaruniktukhanik Tiibiimik qupilrunik?

- Ihii. Tibaakkunik higaayuktut hilukhivaktut Tiibiinik qupilrunik, Taimatut itniarunakhiyut pingahuiktuqlutik angitqiyanik aanniarunniklutik Tiibiinik qupilrunik higaayuitunit.
- Qayangnaqtuq aanniarunmik angitqiyamik higaayukkuvit hivituyumiklu higaakpakhimaguvit.

Higaarnik angiklitivakpa qayangnaqtunik aanniaruniktukhanik Tiibiimik aanniarunmik?

- Higaayuktut aanniarutiqaqtuq Tiibiimik aanniarunmik (LTBI) imatut malruiktuqhimayumik pingahuiktuqhimayumikluunniit aanniarunnikhunguyuq Tiibiimik aanniarunmik higaayuitumit.
- Taimaiqattayuittugaluaqtut Kanatami, inuit tuquvaktut Tiibiikhimayut. Higaarnik angiklitiniaqtuq qayangnaqtumik tuquniarunakhiyut Tiibiikhimayunit aanniaqtut siksiiktukhimayumik.
- Annakhimagaluqtitlutit Tiibiimit kinguani, qayangnatqiyauyuq aanniarunmik Tiibiimik aanniarunniffaklutit pingahuiktuqhimayumik tibaakumik higaayuktut higaayuitunit.

Qanuriliurniaraluaqqik Tiibiikhimaguma Tiibiimik aaniarunmik higaayukhungallu?

- Higaaruiyaklutit atauhiq nakuunikhauyuq aanniaqtailiyarni Tiibiimik aaniarunmik.
- Higaaruiyaklutit ikayuutauniaqtuq havautauluni Tiibiimik aaniarunmit nakutqiyamik.

Qanuriliurniaraluaqqik Tiibiimik aaniarunmik aanniarutiqaruma higaayukhungallu?

- Higaarniq turrangayuq amihunut qayangnatqiyanut aanniarutinut akhutlu aannialaqinnaqpiaktuq puvvangnut, taimaitumik higaaruiyaruvit nakutqiyauniaktuq nalvaktauguvit Tiibiimik aanniaruniktutit.

Qanuritpattauq iglumi higaaktunit puyuit naimaplugit?

- Naimaplugit iglumi higaaktunit puyuit qayangnangniaqtuq tamagingnik latent Tiibiimik aanniarunmik imatutlu aanniarutit Tiibiimik aanniarunmik nutaqqanut inirnirnutlu.
- Hivituyumik naimaplugit iglumi higaaktunit puyuinik nutaqqat inulramiitlu inirnirit, qayangnatqiyauniaqtuq aannialiklutik Tiibiimik. Inuklu higaaraluaqluni hilami, aannuranginit naimannaktut nakungittut aullalimaittut nutarannuat nutaqqatlu aannikhakpaktait nakungittut qanikliyarangamik aannuranginut.
- Tiibiikhimayut higaayuktut iglumingni qayangnakhitivaktait ilatik Tiibiimik. Anginiqaqtuq iglut higaaktunit puyuitpakkungni.

ᓄᓕᐊᕐ ᑎᑎᕋᖅᓄᒪᓕᐊᕐ
ᐊᓂᔪᓂᖅ ᓄᓇᒥᔾᔪᑎᖅᑕᕐᓗᓂᓗ

ᐊᑲᐅᓇᕐᑕᐅᑎᓕᖅᓴᓐ ᐊᓂᔪᓂᖅᓗᒃ ᓄᓇᒥᔾᔪᑎᖅᑕᕐᓗᓂᓗ?

- Ài! ᓄᓇᒥᔾᔪᑎᖅᑕᕐᓂᖅ ᐱᐅᔨᓐᓂᖅᑎᑎᓄᑦᖅ ᐊᓂᔪᓂᖅᑐᑦ ᓄᓇᒥᔾᔪᑎᖅᑎᐅᔨᓪ ᐊᓂᒍᓇᖅᓴᕆᐊᓕᕐᓐᓇᖅᑐᑦ;
- ᓄᓇᒥᔾᔪᑎᖅᑐᓂᖅ ᑎᒥᐅᑦ ᐊᓐᓇᐅᒪᓕᒫᓐᓂᓐᓄᑦᖅ ᐱᐅᔨᓐᓂᖅᑎᑎᓄᑦᖅ, ᑕᐃᒪᓕᐃᓐᓂᖅᓴᓂ ᓄᓇᒥᔾᔪᑎᖅᑐᕕᖅᑐᑦ ᑎᒥᖓᓄ ᐊᓂᔪᓂᖅᑐᑦ ᐊᓐᓇᐅᒪᓕᒫᓐᓂᓐᓄᑦᖅ;
- ᓄᓇᒥᔾᔪᑎᖅᑐᓂᖅ ᐃᑲᔪᑎᖅᑲᓐᓂᐅᓂᓐᓄᑦᖅ ᐊᓂᔪᓂᖅᓇᒪᑦ ᐃᓇᓕᓴᕐᑕᐅᓂᕐᓂᒃ ᑕᐃᒪᓕᐃᓐᓂᖅᓴᓂ ᐊᐅᓚᐅᓐᓇᓂᕐᓂᖅᑐᑦ ᑐᓴᐃᔾᔨᓐᓂᐅᓂᕐᓂᒃ ᐊᐅᓂᐅᓂᖅᓴᖅ ᐱᐅᔨᓐᓂᖅᑎᑕᐅᓇᖅᑐᓂ ᐊᓕᒪᓗ/ᐅᓴᓇᓗᓂᓂ ᓴᖅᑭᓂᖅᓴᓗᓂᓂ ᐊᓂᔪᓂᖅᓇᒪᑦ ᓴᖅᐸᑕᐃᓚᐅᓇᖅᑐᓂᖅ.

ᐊᓂᔪᓂᖅᓇᐅᓴ ᖃᐅᔨᑦᔨᖓᓂᐅ ᐋᓐᓂᐊᖅᑕᐸᐅᓇᓂᕐᓂᒃ ᐅᓗᓚᐊᓇᖅᑐᒃᓇᐅᓂᖅᓴᕕᓴ ᓄᓇᒥᔾᔪᑎᖅᑐᑦᑕᕐᓗᓂᓗ?

- Ài. ᓄᓇᒥᔾᔪᑎᖅᑐᑎᑦ ᓂᐅᖅᓄᓂᖅᓴᑕ ᐊᓂᔪᓂᖅᓇᐅᓴ ᖃᐅᔨᑦᔨᖓᓂᖅᓂ, ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᓴᖓᑎᑎᕐᓴᑐ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᑕᐅᑐᓪᓗᑦ ᓄᓇᒥᔾᔪᑎᖅᑎᐅᔨᓕᕐᓂᒃ.
- ᐋᓐᓂᐊᖅᑕᐸᓇᓂᕐᓂᑦ ᐅᓗᓚᐊᓇᓂᖓᒃ ᓴᖓᑎᓂᖅᓴᕕᑕᐸᓇᓂᖅᑐᑦ ᓄᓇᒥᔾᔪᑎᖅᑐᓂᖅᓴᕕᖅᑕᕐᓇᓕᒃ ᖃᓄᐃᓕᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᓄᓇᒥᔾᔪᑎᖅᑎᐅᑕᕐᓂᒃᓱᒃ.

ᓄᓇᒥᔾᔪᑎᖅᑕᕐᓗᓂᓗ ᐅᓗᓚᐊᓇᖅᑐᒥᓂᖅᓴᕕᓇᖅᓴᐅᓇᖅᓴᓐ ᐊᐃᕐᑐᑕᐅᓄᑦᓴᐅ ᐊᓂᔪᓂᖅᓇᒪᑦ?

- ᓄᓇᒥᔾᔪᑎᖅᑎᑎᒃ ᐊᐃᕐᑐᑕᐅᓄᑦᓯᓇᖅᑕᕐᓂᒥᑦ ᐊᓂᔪᓂᖅᓇᒪᑦ ᒪᕐᕉᐃᐃᓐᓄᑦᖅᓴᓂᓗ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᓴᓂᓗᓂᓐᓂᓂ ᐊᐃᕐᑐᑕᐅᓄᑦᓴᐅ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᑕᐅᑐᓪᓗᑦ ᓄᓇᒥᔾᔪᑎᖅᑎᐅᔨᓕᕐᓂᒃ.
- ᑲᓇᑕᒥ ᑕᐃᒪᐃᒪᓕᓴᖅᑲᓇᖅᑐᒃ, ᑭᓄᓇᐃᓂ ᐃᓄᐃᑦ ᑐᓴᐅᓇᖅᑐᒃ ᐊᓂᔪᓂᖅᓇᒪᑦ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ.
- ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐃᓄᐃᑦ ᓄᓇᒥᔾᔪᑎᖅᑎᐅᔨᓕᕐᓂᒃ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ.

ᖃᓄᐃᓕᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐊᐃᕐᑐᑕᐅᓄᑦᓯᓇᖅᑕᕐᓂᒥᑦ ᐊᓂᔪᓂᖅᓇᒪᑦ ᐃᓄᐃᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ?

- ᓄᓇᒥᔾᔪᑎᖅᑎᑎᒃ ᐊᐃᕐᑐᑕᐅᓄᑦᓯᓇᖅᑕᕐᓂᒥᑦ ᐊᓂᔪᓂᖅᓇᒪᑦ ᐃᓄᐃᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ.

ᖃᓄᐃᓕᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐊᐃᕐᑐᑕᐅᓄᑦᓯᓇᖅᑕᕐᓂᒥᑦ ᐊᓂᔪᓂᖅᓇᒪᑦ ᐃᓄᐃᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ?

- ᓄᓇᒥᔾᔪᑎᖅᑎᑎᒃ ᐊᐃᕐᑐᑕᐅᓄᑦᓯᓇᖅᑕᕐᓂᒥᑦ ᐊᓂᔪᓂᖅᓇᒪᑦ ᐃᓄᐃᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ.

ᖃᓄᐃᓕᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐊᐃᕐᑐᑕᐅᓄᑦᓯᓇᖅᑕᕐᓂᒥᑦ ᐊᓂᔪᓂᖅᓇᒪᑦ ᐃᓄᐃᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ?

- ᓄᓇᒥᔾᔪᑎᖅᑎᑎᒃ ᐊᐃᕐᑐᑕᐅᓄᑦᓯᓇᖅᑕᕐᓂᒥᑦ ᐊᓂᔪᓂᖅᓇᒪᑦ ᐃᓄᐃᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ.

ᓄᓇᒥᔾᔪᑎᖅᑎᑎᒃ ᐊᐃᕐᑐᑕᐅᓄᑦᓯᓇᖅᑕᕐᓂᒥᑦ ᐊᓂᔪᓂᖅᓇᒪᑦ ᐃᓄᐃᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ?

- ᓄᓇᒥᔾᔪᑎᖅᑎᑎᒃ ᐊᐃᕐᑐᑕᐅᓄᑦᓯᓇᖅᑕᕐᓂᒥᑦ ᐊᓂᔪᓂᖅᓇᒪᑦ ᐃᓄᐃᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ.

ᓄᓇᒥᔾᔪᑎᖅᑎᑎᒃ ᐊᐃᕐᑐᑕᐅᓄᑦᓯᓇᖅᑕᕐᓂᒥᑦ ᐊᓂᔪᓂᖅᓇᒪᑦ ᐃᓄᐃᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ?

- ᓄᓇᒥᔾᔪᑎᖅᑎᑎᒃ ᐊᐃᕐᑐᑕᐅᓄᑦᓯᓇᖅᑕᕐᓂᒥᑦ ᐊᓂᔪᓂᖅᓇᒪᑦ ᐃᓄᐃᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ.

ᓄᓇᒥᔾᔪᑎᖅᑎᑎᒃ ᐊᐃᕐᑐᑕᐅᓄᑦᓯᓇᖅᑕᕐᓂᒥᑦ ᐊᓂᔪᓂᖅᓇᒪᑦ ᐃᓄᐃᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ?

- ᓄᓇᒥᔾᔪᑎᖅᑎᑎᒃ ᐊᐃᕐᑐᑕᐅᓄᑦᓯᓇᖅᑕᕐᓂᒥᑦ ᐊᓂᔪᓂᖅᓇᒪᑦ ᐃᓄᐃᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ.

ᓄᓇᒥᔾᔪᑎᖅᑎᑎᒃ ᐊᐃᕐᑐᑕᐅᓄᑦᓯᓇᖅᑕᕐᓂᒥᑦ ᐊᓂᔪᓂᖅᓇᒪᑦ ᐃᓄᐃᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ?

- ᓄᓇᒥᔾᔪᑎᖅᑎᑎᒃ ᐊᐃᕐᑐᑕᐅᓄᑦᓯᓇᖅᑕᕐᓂᒥᑦ ᐊᓂᔪᓂᖅᓇᒪᑦ ᐃᓄᐃᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ.

ᓄᓇᒥᔾᔪᑎᖅᑎᑎᒃ ᐊᐃᕐᑐᑕᐅᓄᑦᓯᓇᖅᑕᕐᓂᒥᑦ ᐊᓂᔪᓂᖅᓇᒪᑦ ᐃᓄᐃᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ.

ᓄᓇᒥᔾᔪᑎᖅᑎᑎᒃ ᐊᐃᕐᑐᑕᐅᓄᑦᓯᓇᖅᑕᕐᓂᒥᑦ ᐊᓂᔪᓂᖅᓇᒪᑦ ᐃᓄᐃᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ.

ᓄᓇᒥᔾᔪᑎᖅᑎᑎᒃ ᐊᐃᕐᑐᑕᐅᓄᑦᓯᓇᖅᑕᕐᓂᒥᑦ ᐊᓂᔪᓂᖅᓇᒪᑦ ᐃᓄᐃᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ ᐱᖓᓱᐃᓐᓂᖅᓴᕕᖅᑕᕐᓗᓂᓗ ᐱᖓᓱᐊᕆᖅᓄᑎᑦ ᐊᓂᔪᓂᖅᓇᒪᓂᕐᓂᒃ.

Fact Sheet

Tuberculosis (TB) Surveillance

You are at risk for Tuberculosis disease and you have been placed on TB surveillance.

What is TB surveillance?

TB surveillance is the practice of examining people for signs and symptoms of Tuberculosis disease at regular intervals for a set period of time.

What is the reason for TB surveillance?

TB surveillance is used to watch for active TB disease in people with untreated latent TB infection (also known as sleeping TB) and people who are at risk for relapse of active TB disease. Finding active TB disease early is important because it helps to prevent or interrupt the spread of TB, and people who are diagnosed earlier have better outcomes.

What is done during a TB surveillance examination?

During a TB surveillance examination you will:

- be asked about any TB symptoms you may have experienced since your last exam
- be asked to produce 3 sputum samples
- have a chest x-ray done

What are the symptoms of active TB disease?

Because you are at increased risk for developing active TB disease it is very important to for you to know the symptoms of TB, and you should see your healthcare provider promptly if any symptoms develop between your scheduled surveillance examinations. Common symptoms of TB are *any* of the following:

- A cough (wet or dry) that lasts 3 weeks or more
- Fever
- Weight loss
- Poor appetite
- Night sweats
- Tiredness
- Chest pain
- Coughing up blood

How long will I be on TB surveillance?

The highest risk for people who have untreated LTBI to develop active TB is during the 2 years after becoming infected with the TB germ.

The highest risk for people who have been treated for active Tuberculosis disease to relapse is in the 2 years following treatment.

How often will I be examined for Tuberculosis while I am on TB Surveillance?

Surveillance examinations are usually done every 6 months but occasionally people are recommended to be examined more frequently.

You are due for your next TB surveillance examination: _____

Feuille de renseignements

Surveillance de la tuberculose

Vous êtes une personne à risque d'être atteinte d'une infection tuberculeuse et vous avez été mis sous surveillance.

Qu'est-ce que la surveillance de la tuberculose?

La surveillance de la tuberculose consiste en une série d'examens effectués à intervalles réguliers, pour une période donnée, permettant de déceler les signes et les symptômes d'une infection tuberculeuse chez les personnes examinées.

Pour quelle raison y a-t-il surveillance de la tuberculose?

Le suivi de la tuberculose sert à surveiller l'apparition de la tuberculose active chez les personnes ayant une infection tuberculeuse latente et les personnes à risque d'avoir une rechute après une tuberculose active. Le diagnostic précoce de la tuberculose active est important parce qu'il permet de prévenir ou d'interrompre la propagation de la maladie et qu'il améliore l'efficacité des traitements.

Comment se déroule un examen de surveillance de la tuberculose?

Pendant un examen de surveillance de la tuberculose, on vous demande de :

- préciser tout symptôme de la tuberculose depuis votre dernier examen;
- fournir trois prélèvements d'expectoration;
- passer une radiographie des poumons.

Quels sont les symptômes de la tuberculose active?

Comme vous présentez un risque élevé de développer une tuberculose active, il est très important que vous en connaissiez les symptômes. Avisez dès que possible votre professionnel de la santé si vous éprouvez un ou des symptômes entre les rendez-vous de suivi prévus. Les symptômes courants de la tuberculose sont les suivants :

- Toux (grasse ou sèche) persistant depuis trois semaines ou plus
- Fièvre
- Perte de poids
- Perte d'appétit
- Sueurs nocturnes
- Fatigue
- Douleur à la poitrine
- Toux avec sang

Combien de temps dure la surveillance de la tuberculose?

Le risque de développer une tuberculose active est plus élevé dans les deux premières années suivant le début de l'infection tuberculeuse latente non traitée.

Le risque de rechute est plus élevé dans les deux premières années suivant le traitement de la tuberculose active.

À quelle fréquence se déroulent les examens de surveillance de la tuberculose?

Les examens de surveillance sont habituellement effectués tous les six mois, mais ils peuvent être recommandés plus souvent pour certaines personnes.

Date de votre prochain examen de surveillance de la tuberculose : _____

Kangiqhidjutit

Tuberculosis aanniarut (TB mik taivagaat) Ihivriungnia

Ilvit qayarnakhiutit Tuberculosis aanniarutaannik ihivriuqtauniaqtutinlu TB aanniarutaanik.

Hunauyuq TB ihivriungnia?
TB ihivriungnia havaaqaqtuq ihivriuqhugit inuit nalunaittutiqariakhaita Tuberculosis ngatnik pidjutihimmaakhutik pivaktut qanuktut hivituniatigun.

Hunayuq pidjutauvaktuq TB ihivriungniata?
TB ihivriungniata qun'ngiaqattakhutik pivaktut uumariakhaa TB aanniarutaa inungni havautituqtihimaittunut takunnaittuq TB aanniarutaa (ilihimayauyuq hiniqtutun TB) qayagiyauyutlu inuit TB qaqpaqtut. Nalvaakhigumik qilaminnuaq TB aanniarutaanik taimaa ikayuutauniangmat hiamalittaidjutauniangmat TB, inuitlu qilamik nalvaakhigumik qilaminnuaq nakuutqiavikhainik pidjutiliqpaqtut.

Qanuriliuqpaqtut TB ngatnik ihivriuliraangngamik?
TB mik ihivriuqtillutik imaatun apikhuqtauniaqtutin:

- Apikhuqtauniaqtutin TB ngatnik nalunaittutiqariakhaita ilvit atuqpagiakharnik talvanga kinggulliqmin takuyaugavit
- Apikhuqtauniaqtutin tunihilutik pinggahunik tivvuaqnik
- X suliiqtukhauyutin hatqaqkun

Hunauyut nalunaittutiqigiyauyut TB nga aanniarutaanik?
Ilvit qayarnakhigavit aanniarutimik TB mik ilvit ilitturiukhatin nalunaitkutainik TB ngatnik, takuyaqtuqtakhatitlu munakhitkut takunnakhiqpatta nalunaittutiqarianggitnik talvanga kingguliqmin takuvaktangnik ihivriuqtautillutin. Taapkuat nalunaittut nalunaitkutigiyauyut TB ngatnut hapkuangnguyut:

- Qalaqturniq (kinipayuq panikhimayuqluunniit) qalaqtuinnakhuni 3 weeks naatugit
- Qizzak
- Qapak
- Nirilluagungnaiqtuq
- Aumaalaqtuqtut unnuami
- Unaguhuinnaqtuq
- Uluriahuqtuq hatqaqmi
- Aukmik qalaqtuqpaktuq

Qanuqtun hivituyumik piniaqqa TB ihivriungninga?
Qayarnaqpiaqtut inuit havautituqtiyauhimaittut LTBI pivalliahungnguyut TB mik talvani malruungni uqiuni talvanga aanniarutiqarniagannit.

Qayarnaqtut inuit havautituqtiyauhimayut Tuberculosis aanniarutaanik tammaqtutun inniaqtuq talvanga malruungni uqiuni havautituqtiyauhimangganni.

Qaffiuktungniaqqik ihivriuqtaulunga Tuberculosis mik itillunga TB ihivriungniaganni?
Ihivriungnianggit pidjutiliqpagait 6 sini tatkiqhiutit naagaikpatta ilaani inuit ihivriuqattaqtitauniaqtut.

TB ihivriungniagatnik ilvit ihivriuqtauyukhauliqtutit: _____

ᓯᓚᕐᓂᖅ ᑎᑎᕋᖅᓯᒪᔪᓂ

ᐊᓂᓪᓚᖅᑐᑦ ᖃᐅᔨᓴᖅᑕᐅᖃᑦᑕᕐᓂᖅ

ᐊᓂᑦᓇᖅᑐᒃᖃᕐᓂ ᐊᓂᓪᓚᑐᐃᓇᐅᓚᐊᖅᓂᕐᓂ ᖃᐅᔨᓴᖅᑕᐅᖃᑦᑕᕐᓂᓕᐊᖅᑐᑎᓂ ᐊᓂᓪᓚᓕᕆᖃᒃᓚᐊᕐᓗᓴᖅᐱᑦ.

ᑭᓱᓗᒪ ᐊᓂᓪᓚᓂᕐᒪᑦ ᖃᐅᔨᓴᖅᑕᐅᓂᖅ?

ᐊᓂᓪᓚᓂᕐᒪᑦ ᖃᐅᔨᓴᖅᑕᐅᖃᑦᑕᕐᓂᖅ ᐊᑐᖅᑕᐅᓱᖅ ᐃᓄᐃᓂᑦ ᖃᐅᔨᓴᕆᓚᐊᕐᓂᕐᒪᑦ ᓇᓗᓇᐃᖅᑕᐅᓴᐊᑎᓂᑦ ᓴᖅᑭᕐᑐᖅᖢᓗᐊᕐᓗᓴᖅ ᐊᓂᓪᓚᓂᕐᒪᑦ ᖃᐅᔨᓴᖅᑕᐅᓗᔪᖃᖅᑕᖅᑐᑎ ᖃᓄᐃᑎᐅᓂᐊᕐᓗᓴᖅ ᐊᖏᖅᑭᑕᐅᓴᒪᓕᕐᒥᑦ.

ᑭᓱᑎᑦ ᐱᓵᐊᑎᖃᓕᒪ ᐊᓂᓪᓚᓂᕐᒪᑦ ᖃᐅᔨᓴᕐᓂᕐᑎᑦ?

ᐊᓂᓪᓚᓂᕐᒪᑦ ᖃᐅᔨᓴᖅᑕᕐᑐᑎ ᐊᐃᑎᖃᑕᐅᓱᑎᑦ ᐊᓂᓪᓚᑐᖅᖢᓗᐊᕐᓗᓴᖅᑎᓕᑦ ᑕᐃᒃᑯᐊ ᐊᐃᑎᖃᑕᐅᓵᖅᓯᒪᔪᑦ ᐊᓂᓪᓚᑕᓗᓄᑦ (ᖃᐅᔨᓴᓕᖅᐸᒥᓪᓚᕐᔪᖅ ᓱᓕᑎᖃᖅ ᐊᓂᓪᓚᑐᓂᕐᒥᐅᑦ) ᑭᒃᑯᑐᐃᓐᓇᐃᓕᑦᓗ ᐅᓗᓚᐊᓇᖅᑐᒥᑎᑎᖃᑦ ᐊᓂᓪᓚᓂᕐᒪᑦᖢᓗᐊᕐᓗᓴᖅᑎᓕᑦ ᐊᐃᑎᖃᑕᐅᓱᑎᑦ. ᖃᐅᔨᓴᓪᓚᓕᓗᓂ ᐊᐃᑎᖃᑕᐅᓱᑎᑦ ᐊᓂᓪᓚᓇᖅᑐᒥᑦ ᐱᓚᒪᐅᔪᖅ ᓱᐊᓚᒡᒡᓕᐊᓂᐊᖏᓚᒪᑦ, ᑕᐃᒃᑯᐊᓗ ᖃᐅᔨᓴᕐᔨᓪᓚᓕᔪᓂ ᐱᔪᓐᓀᖅᑎᑕᐅᑎᑐᓂᖅᓴᐅᓱᓪᓚᑕᑎᑐᓂ.

ᖃᓄᐃᓕᓕᐅᓱᖓᓚᒪᑦ ᐊᓂᓪᓚᓂᕐᒪᑦ ᖃᐅᔨᓴᖅᑎᓪᓚᑕᑦ?

ᐊᓂᓪᓚᓂᕐᒪᑦ ᖃᐅᔨᓴᖅᑕᐅᑎᓪᓚᑕ ᐃᒪᐃᓕᐅᕐᓴᖅᑐᑦ:

- ᐊᐱᖅᓱᖅᑕᐅᓚᑕ ᐊᓂᓪᓚᓇᖅᑐᒃᖃᕐᓂ ᓇᓗᓇᐃᖅᑕᐅᓴᐅᓱᖓᓚᒪᑦ ᑕᐃᒪᓐᓇᒥᓂ ᑭᖑᓪᓕᕐᓂᑦ ᑕᑯᓴᓕᓪᓚᑦ
- ᐱᓇᓱᓂᓂ ᐅᓪᓗᐊᖅᑕᕐᓂᓂ ᑐᓂᓱᑎᐊᖅᑐᕐᓴᖅᑐᑎᓂ
- ᓴᖅᑭᕐᑐᖅᖢᓗᐊᕐᓗᓴᖅᑐᑎᓂ

ᑭᓱᓪᓚᒪᑦ ᐋᖅᓂᐊᓂᕐᓂᓪᓚᑦ ᓇᓗᓇᐃᖅᑕᐅᓴᐅᓯᐅᓂᑦ ᐊᓂᓪᓚᓂᕐᒪᑦ?

ᐊᓂᑦᓇᖅᑐᒃᖃᕐᓂᖅᓴᐅᓱᖅᓯᒪᔪᑦ ᐊᐃᑎᖃᑕᐅᓵᖅᓯᒪᔪᑦ ᐊᓂᓪᓚᓂᕐᒪᑦ ᐱᓚᒪᐅᔪᓕᒫᖅ ᓇᓗᓇᐃᖅᑕᐅᓴᐅᓱᖓᓚᒪᑦ ᐊᐃᑎᖃᑕᐅᓵᖅᓯᒪᔪᑦ ᐊᓂᓪᓚᓂᕐᒪᑦᖢᓗᐊᕐᓗᓴᖅᑎᓕᑦ: ᐋᖅᓂᐊᓂᕐᓂᓪᓚᑦ, ᐋᖅᓂᐊᓂᕐᓂᑕᐅᓱᒍᓪᓚᑕ ᑕᑯᐅᑎᖃᓪᓚᑕᑎᑐᓂ ᓇᓗᓇᐃᖅᑕᐅᓴᐅᓱᖓᓚᒪᑦ ᓴᖅᑭᕐᑐᖅᖢᓗᐊᕐᓗᓴᖅᑐᑎᓂ ᐊᑯᓂᖅᑐᑦ ᐊᐃᑎᖃᑕᐅᓵᖅᓯᒪᔪᑦ ᐊᓂᓪᓚᓂᕐᒪᑦ:

- ᖃᐅᔨᓴᖅᓱᓂᖅ (ᓇᓕᖓᐅᔨᓴᓪᓚᑕ ᓇᓕᖓᐅᔨᓴᖅᑎᓂᕐᓚᑕᓂᓪᓚᑕᐅᓂᖅ) ᐱᓇᓱᐊᕐᓂᑦ ᐅᖃᓕᓇᓚᐅᖅᑐᓂ
- ᐅᑎᖃᓴᓪᓚᑕ
- ᓴᓪᓚᑎᓂᕐᓂᐊᓚᑕ
- ᓂᓗᐊᒪᓕᒃᑲᖅᓯᒪᔪᑦ

- ᐅᓐᓇᐊᖅᑐᑦ ᑭᐊᑎᓂᒪᓚᑕ
- ᑕᖃᓂᒪᓂᖅ
- ᓱᓕᐊᖅᑐᑦ ᐋᓐᓂᐊᖃᖅᑐᖅ
- ᐊᐅᓚᑦᖢ ᖃᐅᔨᓴᖅᓂᒃᑕᓪᓚᑕ

ᖃᓄᐃᑎᒥ ᖃᐅᔨᓴᖅᑕᐅᓴᖃᖅᓯᒪ ᐊᓂᓪᓚᓂᕐᒪᑦᖢᓗᐊᕐᓗᓴᖅᑎᓕᑦ?

ᐊᓂᑦᓇᖅᑐᒃᖃᕐᓂᖅᓴᐅᓱᖅᓯᒪᔪᑦ ᑕᐃᒪᐅᔪᑦ ᐊᐃᑎᖃᑕᐅᓵᖅᓯᒪᔪᑦ ᐊᓂᓪᓚᓂᕐᒪᑦ ᐱᓚᒪᐅᔪᑦ ᐊᐃᑎᖃᑕᐅᓵᖅᓯᒪᔪᑦ ᐊᓂᓪᓚᓂᕐᒪᑦᖢᓗᐊᕐᓗᓴᖅᑎᓕᑦ ᐋᖅᓂᐊᓂᕐᓂᓪᓚᑕᐅᓂᖅᓴᐅᓱᖅᓯᒪᔪᑦ ᐊᐃᑎᖃᑕᐅᓵᖅᓯᒪᔪᑦ ᐊᓂᓪᓚᓂᕐ

Fact Sheet

TB Drugs and Alcohol

Using alcohol when you are on treatment with TB drugs can hurt your liver and make you very sick.

How can I protect my liver while taking TB drugs?

- **Do not use alcohol.**
- If you do use alcohol, tell your TB care provider.
- Do monitoring blood tests on time to make sure your liver is staying healthy.

If you have any of these problems, stop taking your TB drugs!
Call or see your TB physician or nurse, or go to the Health Centre / Emergency Department to have your liver checked right away.

extreme tiredness	tummy pain	yellow eyes, skin or hands
nausea or throwing up	poor appetite	easy bruising or bleeding gums

Feuille de renseignements

Alcool et médicaments antituberculeux

Consommer de l'alcool pendant que vous prenez des médicaments antituberculeux risque d'affecter votre foie et de vous rendre très malade.

Comment protéger mon foie pendant que je prends des médicaments antituberculeux?

- **Ne consommez pas d'alcool.**
- Si vous le faites, dites-le à votre fournisseur de soins.
- Passez régulièrement des analyses sanguines pour vérifier que votre foie reste en bonne santé.

Si vous présentez l'un des symptômes ci-dessous, cessez de prendre vos médicaments contre la tuberculose!
Appelez ou visitez votre médecin ou votre infirmière ou infirmier, ou rendez-vous au centre de santé ou à l'urgence pour faire vérifier tout de suite l'état de votre foie.

Fatigue extrême	Maux de ventre	Jaunissement des yeux, de la peau ou des mains
Nausées ou vomissements	Manque d'appétit	Tendance aux ecchymoses (bleus) ou saignement des gencives

Kangiqhidju

TB Havautit Taanngallu

Taanngaqturniq havautituqtillutit TB-kkut Havautinik aannialaqhuut tingungmut aannialaqitjutigiqyuaqtaaqtatlu.

Qanuq naammaktinnahuarniaqqigu tinguga pitillunga TB Havautinik?

- **Taanngaqturuiqlutit.**
- Taanngaqturuvit, unniutilugu TB-kkut havakti.
- Ihivriuqtillugu auktaqnarhigaangat naunaiqhimayaangani tinguit naammagiakhaanik.

Hapkunuuna aannialaqiguvit, taimaaqlugit TB Havautit!
Hivayaqlugu TB-kkut havaktit munaqhiluunniit, Munarhiliaqlutit / Upin'ngarutinikkut Havakvingmut tinguit ihivriuqtihaklugu.

qitukpaallakniq	aqiaruqliurniq	quriiqtanguqtut iik, uvinik algalluunniit
mirian'nguhungniq miriaqtuqluunniit	niriumannaiqniq	pautunguyaaqtaalaqiniq qigutit mannguit aunaalaqiyaaliqniqlu

ᓄᓕᐊᑦ ᑎᑎᕆᖅᓯᒪᔪᑦ
ᐊᓂᓚᒃᑐᖅᓯᐅᑎᑦ ᐃᓅᓕᕆᐅᑦ ᐊᓱᒪ ᐃᒥᐊᓗᒃ

ᐃᒥᐊᓗᖅᑲᑦᑕᕐᓇᒃ
ᐊᓂᓚᒃᑐᖅᓯᐅᑎᒥᒃ
ᐃᓅᓕᕆᐅᑎᑐᖅᑎᓪᓗᑎᑦ ᑎᓴᖅᓂᓕ
ᖃᓄᓇᓕᖅᑎᑦᑎᔨᓇᖅᓴᖅ
ᖃᓄᓕᒪᓇᕆᐊᖃᓗᑎᓪᓗ.

ᖃᓄᓇᓕᐅᕈᓐᓇᖅᓴᖅ ᑎᓴᒪᓂ ᓴᓂᐅᓇᓕᓗᐃᑐ ᐊᓂᓚᒃᑐᖅᓯᐅᑎᑦ ᐃᓅᓕᕆᐅᑎᑐᖅᑎᓪᓗᖅᓱᒪ?

- ᐃᒥᐊᓗᖅᓯᑦ ᐊᑐᖅᑕᖅᑭᑦᓗᑎᑦ.
- ᐃᒥᐊᓗᖅᑲᑦᑕᕐᓇᒃ, ᐊᓂᓚᒃᑐᑕᓕᓴᑦ ᐅᖅᑲᐅᑎᓴᕆᐊᖃᖅᑲᖅᑕᐃᑦ.
- ᐊᐅᒃᑯᑦ ᖃᑲᐅᓴᖅᑲᑦᑕᖃᓪᓗᑎᑦ ᐱᓴᕆᐊᖃᖅᑕᑐᐊᖅᓱᖕᓂᑦ ᑎᓴᒪᐃᑦ ᖃᓄᐃᖅᑭᑎᑐᐊᖅᓯᒪᔭᖕᓂᑦ ᖃᑲᐅᓴᖅᖃᓪᓗᒍ.

ᐅᑯᓖᖕᓂᑦ ᓇᑕᐊᖏᑐᐃᓐᓇᖅ ᐊᑲᐅᖅᑭᑕᐅᕈᑎᖃᕐᓂᖅ, ᐊᓂᓚᒃᑐᖅᓯᐅᑎᑦ ᐃᓴᓴᖅᑲᑦᑕᖅᑕᑎᑦ ᓄᓐᖅᑲᐅᑎᓪᓗᖅᑭ!
ᐊᓂᓚᒃᑐᑕᓕᒧᑦ ᐃᓕᐊᖅᓴᐃᓕᒧᑦᓱᖏᓪᓂ ᐅᖅᑲᓪᓗᑎᑦ, ᐅᖏᓪᓗᓱᖏᓪᓂ ᐊᖏᓂᖅᓯᐊᕐᓇᑦᓗᑎᑦ/ᑐᐊᕕᖅᓴᖅᑐᑕᓕᓴᓄᑦ ᑎᓴᐃᑦ ᖃᐅᔨᓴᖅᑕᐅᕈᑎᖃᕐᓂᑦᓯᒪᔭᓗᒍ.

ᑕᖅᖏᓚᑐᐊᑲᑦᑯᕕᖕᓂᑦ	ᓇᑦᑯᑦ ᐊᖏᓂᐊᑕᕐᓂᖕᓂᑦ	ᐃᓱᒪᓕᒃ, ᐅᕕᓂᑦ ᐅᖏᓪᓗᓱᖏᓪᓂᑦ ᐊᓚᑦᑎᑦ ᖃᑯᓴᖅᓴᖅᑎᑦᓯᑕ
ᒥᓕᐊᖓᑲᑦᑯᕕᖕᓂᑦ ᒥᓕᐊᑲᑦᑯᕕᖕᓄᓪᓗᖏᓪᓂᑦ	ᓂᓕᔪᒪᑲᑦᑎᐊᖏᑦᑯᕕᖕᓂᑦ	ᔪᖏᓄᓪᓕᖅᑕᐃᓕᓂᕐᓂᖕᓂᑦ ᐅᖏᓪᓗᓱᖏᓪᓂᑦ ᐃᓄᒃᑯᑦ ᐊᐅᓪᓂᕐᓂᖕᓂᑦ

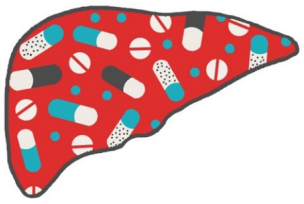
Fact Sheet

TB Drugs and Acetaminophen (Tylenol®)

Did you know?

Many medicines to relieve pain or help with symptoms of cold and flu contain a drug called 'acetaminophen'.

Taking acetaminophen (such as Tylenol®) when you are on treatment with TB drugs can hurt your liver and make you very sick.



How can I protect my liver while taking TB drugs?

- **Do not take products with acetaminophen (such as Tylenol®).**
- If you are uncertain whether a product has acetaminophen in it, check with your TB care provider or a pharmacist - **before you take it.**
- Tell your TB care provider about every medicine you are taking, including the ones you do not need a prescription to buy.
- Ask your TB care provider or a pharmacist which medicines you can take for pain or for cold or flu symptoms.
- Do monitoring blood tests on time to make sure your liver is staying healthy.

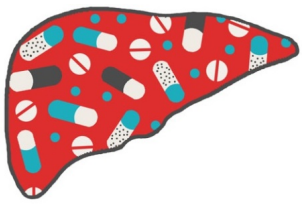
If you have any of these problems, stop taking your TB drugs!
Call or see your TB physician or nurse, or go to the Health Centre / Emergency Department to have your liver checked right away.

extreme tiredness	tummy pain	yellow eyes, skin or hands
nausea or throwing up	poor appetite	easy bruising or bleeding gums

Feuille de renseignements

Médicaments antituberculeux et acétaminophène (Tylenol[MD] par exemple)

Le saviez-vous?



De nombreux médicaments contre la douleur ou contre le rhume ou la grippe contiennent un médicament appelé « acétaminophène ».

Le fait de prendre de l'acétaminophène (Tylenol[MD], par exemple) pendant que vous suivez un traitement médicamenteux contre la tuberculose risque d'affecter votre foie et de vous rendre très malade.

Comment protéger mon foie pendant que je prends des médicaments antituberculeux?

- **Évitez les produits contenant de l'acétaminophène (Tylenol[MD], par exemple).**
- Si vous ne savez pas si un produit en contient, vérifiez auprès de votre fournisseur de soins ou d'une pharmacienne ou un pharmacien, et ce, **avant de le prendre.**
- Dites à votre fournisseur de soins tous les médicaments que vous prenez, y compris ceux que vous pouvez acheter sans ordonnance.
- Demandez à votre fournisseur de soins ou à une pharmacienne ou un pharmacien quels médicaments vous pouvez prendre contre la douleur ou les symptômes du rhume ou de la grippe.
- Passez régulièrement des analyses sanguines pour vérifier que votre foie reste en bonne santé.

Si vous présentez l'un des symptômes ci-dessous, cessez de prendre vos médicaments contre la tuberculose!
Appelez ou visitez votre médecin ou votre infirmière ou infirmier, ou rendez-vous au centre de santé ou à l'urgence pour faire vérifier tout de suite l'état de votre foie.

Fatigue extrême	Maux de ventre	Jaunissement des yeux, de la peau ou des mains
Nausées ou vomissements	Manque d'appétit	Tendance aux ecchymoses (bleus) ou saignement des gencives

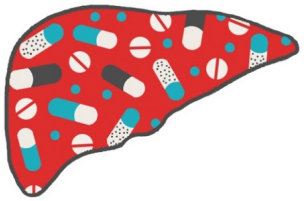
Kangiqhidju

TB Havautit Acetaminophen-lu (imaittumik Tylenol®)

Ilihimavit?

Amihut havautit ulurianaiyautit qalakhiutit fluumullu pilgit havaunmik taiyauyumik ‘acetaminophen’-mik.

Havautiturniq acetaminophen-mik (imaittumik Tylenol®) havautituqtillutit TB-kkut havautinik annialaqhuutiyaaqtuq tingungnut aannialaqutigiqpiaqlugulu.



Qanuq naammaktinnahuarniaqqigu tinguga havautitituqtillungaTB-kkut Havautinik?

- **Iihittailutit ulurianaiyautinik acetaminophen-mik (imaittunik Tylenol®).**
- Naluguvit hunaliqaak piqariakhaanik acetaminophen-mik, naunaiyaqlutit TB-kkut havaktimut havautitaqviliqiyitkunnilluunniit - **atuqtinnagu.**
- Unniutilugu TB-kkut havaktit tamainnik havautituqtarnik, taapkuninngalu niuviqvingnit pihimayunik.
- Apirilugu TB-kkut havakti havautitaqviliqiyitkulluunniit havautit atuqtaaqtatit uluriahungnirmut qalangmulluunniit fluu-qalluunniit.
- Ihivriuqtillugu auktaqnarhigaangat naunaiqhimayaangani tinguit naammagiakhaanik.

Hapkunuuna aannialaqiguvit, taimaaqlugit TB Havautit!
Hivayaqlugu TB-kkut havaktit munaqhiluunniit, Munarhiliaqlutit /
Upin’ngarutinikkut Havakvingmut tinguit ihivriuqtihaklugu.

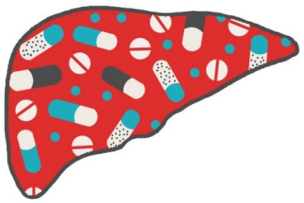
qitukpaallakniq	aqiaruqliurniq	quriiqtanguqtut iik, uvinik algalluunniit
mirian’nguhungniq miriaqtuqluunniit	niriumannaiqniq	pautunguyaaqtaalaqiniq kigutit mannguit aunaalaqiyaaliqniqlu

ᓱᓕᔪᓂ ᑎᑎᕆᖅᓱᒪᔪᓂ

ᐳᓂᓗᖏᓪᓗᒍ ᐃᓚᓕᑎᐅᑎᓂ ᐊᒻᒪᓗ

Acetaminophen (ᓱᐅᓗ Tylenol-ᒥᐢ)

ᖃᐅᔨᒪᓕᕆᔨᖅ?



ᐅᓄᖅᑐᐢ ᐃᓕᓴᖅᖃᐅᑎᐢ ᐊᓂᔪᓚᑐᐊᕈᓐᓇᖅᑐᐢ ᐅᕐᓂᒍᓐᓂᐢ ᐊᑲᐅᓱᓛᓕᕐᓂᑐᑎᓂᐢ ᓄᓂᖅᑐᒍᒧᐢ ᐅᑎᕆᓇᖅᑐᒍᒧᐢ ᐃᓚᓕᖃᐅᑎᕆᖃᒪᒡᒐ ᐃᒪᐢᓇ ᑕᐃᖅᐅᔪᒥᐢ ‘acetaminophen’.

Acetaminophen-ᑐᕆᖃᑕᕆᓗᓂ (ᓱᐅᓗ Tylenol-ᒥᐢ) ᐳᓂᓕᖅᑐᑕᓱᐅᑎᒥᖅ ᐃᓚᓕᖃᐅᑎᑐᕆᖅᓯᓕᑎᐢ ᑎᖏᕐᓂᐢ ᖃᓄᓚᓕᕆᑎᑎᕆᔪᓇᓇᕐᓇᖅᐳᖅ ᖃᓂᒪᓘᓴᔪᕆᓕᑎᓐᓕᐢ.

ᖃᓄᓚᓕᐅᕈᓇᖅᐳᖅᓱᒃ ᑎᖏᒃ ᓴᐳᑎᓇᓴᓕᐅ ᐳᓂᓗᖏᓪᓗᒍ ᐃᓚᓕᖃᐅᑎᑐᕆᖅᓯᓕᑎᐢ?

- Acetaminophen-ᖃᖅᖁᑐᓂᖅ ᐱᕐᑕᐃᓕᓕᑎᑎᐢ (ᓱᐅᓗ ᓂᐅᕆᔪᖅᓴᐅᕐᓂ Tylenol).
- ᓂᐊᕆᔪᖅᓴᐅᕐᓂ acetaminophen-ᖃᖅᓕᖏᓐᓂᐢ ᓇᓗᔪᒧᐢ, ᐳᓂᓗᖏᓪᓗᒍᓚᓗᒍᓪᓗᒋᐢ ᖃᐅᔨᓴᕐᓚᐊᕆᓗᑎᑎᐢ ᐅᕐᓂᒍᓐᓂᐢ ᐃᓴᓱᖅᑕᖅᑎᕐᑎᓗᒋᐢ – ᐃᓱᓪᓕᐅᖏᓐᓂᓂ.
- ᐳᓂᓗᖏᓪᓗᒍᓚᓗᒍᓪ ᑐᐱᖅᑎᓪᓗᒍ ᐃᓴᓱᖅᑕᕐᑕᓪᓕᒻᓂᖅᐹ, ᑕᐃᖅᑯᐊᓗ ᐃᓴᓱᖅᑕᕐᑕᐅᑎᖅᓚᐊᕆᖅᖏᓐᓂᑐᐢ ᐅᕐᖅᐅᓱᓚᕆᓕᑎᐢ.
- ᐳᓂᓗᖏᓪᓗᒍᓚᓗᒍᓪ ᐅᕐᓂᒍᓐᓂᐢ ᐃᓴᓱᖅᑕᕐᖅᑎᑎᓇᓪ ᐊᐱᓚᓗᒍᒧ ᓇᑕᐊᕐᓂᖅ ᐃᓚᓕᖃᐅᑎᑐᕐᐅᕆᓚᕐᓗᓱᖅᐱᐢ ᐊᓂᔪᓚᑐᐊᕈᓐᓇᖅᑐᒍᒧᐢ ᐅᑎᕆᓇᖅᑐᒍᒧᐢ-ᒍᓂᐢ.
- ᐊᐅᖅᑯᐢ ᖃᐅᔨᓴᖅᑕᕐᓂᑐᑎᓂᐢ ᐱᓴᓚᐊᕆᖅᑕᑐᐊᖏᓐᓂᐢ ᑎᖏᐃᑦ ᖃᓄᐃᓕᖅᑐᕐᓂᑎᕆᖏᓐᓂᐢ ᖃᐅᔨᓴᖅᓴᓗᒋᐢ.

ᐅᑯᓇᖓᓂᐢ ᓇᓕᐊᖓᓂᑐᐃᓇᖅ ᐊᐅᐅᖓᕐᓂᐅᕈᑎᖅᕈᕐᓇᐢ, ᐳᓂᓗᖏᓪᓗᒍᓯᐅᑎᐢ ᐃᓴᓱᖅᑕᕐᑕᕐᑕᑎᐢ ᓄᓂᖅᐅᑎᓗᒋᑦ!
ᐳᓂᓗᖏᓪᓗᒍᓚᓗᒍᓪ ᐃᓚᓕᖃᐅᑎᐃᓕᓚᓕᖏᓐᓂᐢ ᐅᖁᐅᓗᒍᓂᐢ, ᐅᖏᓇᖅᑐᐢ ᐊᐧᓂᓂᐊᕆᓕᐊᕆᓗᒍᓂᐢ/ᑐᐊᐃᕆᓇᖅᑐᒍᒧᐢᓇᓪᓗᐢ ᑎᖏᐃᑦ ᖃᐅᔨᓴᖅᑕᕐᐅᑎᑎᓂᕐᓂᓗᒋᐢ.

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ᒥᓚᐊᖏᓚᑲᑕᕐᑐᐃᓕᐢ ᒥᓚᐊᓚᑲᑕᕐᑐᐃᓕᐢ-ᒍᓂᐢ	ᓂᓚᔨᒪᑲᑕᖅᑎᐊᖓᑲᑕᕐᑐᐃᓕᐢ	ᓯᖓᔪᓕᖅᑕᖅᓴᕆᐃᓕᕈᕐᓕᐢ ᐅᕐᓂᒍᓐᓂᐢ ᐃᐳᕐᖅᑐᐢ ᐊᐅᓕᕈᕐᓕᐢ

SECTION 16

Directly Observed Therapy (DOT)

Directly Observed Therapy (DOT)

In Nunavut, all treatment of LTBI and active TB is done with directly observed therapy (DOT). When DOT is used for LTBI, it might also be referred to as 'directly observed preventive therapy', or 'DOPT'.

DOT helps clients to take treatment for LTBI or active TB safely, and to complete treatment as quickly as possible. With DOT, each dose of treatment is observed by a trained DOT provider, such as a nurse or a DOT worker. In some situations, a lay person with DOT training can be assigned by the Supervisor of Community Health Programs (SCHP) to give DOT. **It is not appropriate for close family members to give DOT.**

Ideally, the DOT provider and the client negotiate dates, places, and times for the DOT visits to minimize barriers for the client. Some locations commonly used for DOT include:

- A client's residence or work;
- The Health Centre;
- The client's school. For school-aged clients, parent/guardian must sign a **Medication Administration Consent** form (see **Section 12A – Sample Letters for Nunavut TB School Screening Program**).

Giving DOT is relatively simple most of the time, and includes:

- Delivering TB drugs to the client;
- Verifying the treatment **before** giving it to the client (i.e., correct client, correct TB drug, correct dose, correct route, correct time);
- Checking for adverse reactions to treatment **before** giving the next dose of TB drugs;
- Observing that the client has swallowed the full dose of treatment (for TB drugs given by mouth); and
- Documenting the DOT visit appropriately.

DOT providers also:

- Provide clients with information on TB and LTBI, and treatment care plans;

- Help clients keep appointments (e.g., for blood tests, with the physician or public health nurse);

- Offer/provide incentives/enablers to support clients to adhere to treatment;

- Connect clients to other services (e.g., smoking cessation, social services, transportation); and

- Draw on their familiarity with the client's home environment to help identify people who should be tested for TB (e.g., TB contacts, people with TB signs/symptoms).

This section of the TB Manual includes information on how to give and document DOT. Toward the end of the section you will find additional information on how to:

- Administer TB drugs;

- Build strong DOT relationships;

- Communicate effectively; and

- Share information on TB

Policies and Guidelines

Medication Dispensing and Administration

Policies and guidelines for administering medications in Nunavut are described in the ***Nunavut Community Health Nurse Standards, Policies and Guidelines (2011)***.

The following distinctions are especially important for TB drugs and DOT:

Dispensing is the selection, preparation, and transfer of one or more prescribed drug doses to a client or his/her representative for administration. In Nunavut, TB drugs can be ***dispensed*** by:

- Physicians;
- Nurse practitioners (NPs); or
- Registered nurses (RNs).

DOT workers/DOT assistants and lay persons assigned by the SCHP to give DOT are not permitted to dispense TB drugs.

Medication administration is the process of giving a medication to a client. In Nunavut, TB drugs can be ***administered*** (given) by:

- Physicians;
- NPs;
- RNs;
- DOT workers/DOT assistants; or
- Lay persons with DOT training who have be assigned by a SCHP to give DOT.

Communication among DOT Team Members

Regular and as-needed communication between DOT providers and the nurse supervising a client's treatment is critical for ensuring safe and appropriate care. To support this:

- The supervising nurse (or a designated alternate) must be available in person or by phone during DOT visits to provide support or direction to the DOT provider; and
- DOT providers and nurses supervising clients on treatment for active TB or LTBI meet **at least weekly** to review each client's progress and care plan.

Protecting Client Confidentiality

Protecting client confidentiality is a professional obligation and a legal requirement.

Confidentiality:

- Enables clients to seek care and share information with health care providers without fear that their personal information will be in appropriately shared or used;
- Preserves the client's right to self-determination; and
- Helps build a strong and cooperative provider-client relationship.

To protect client confidentiality:

- Confirm the client's identify the first time you meet (unless you are already familiar with them);
- **NEVER** discuss a client situation with **ANYONE** (including the client's family and friends) without the client's permission;
- **Before using an interpreter**, seek to client's permission to do so. Ensure the interpreter understands the importance of confidentiality. Avoid using the client's family members as interpreters if at all possible;
- Do not leave hard copies of forms or records where unauthorized people could access them; and
- Use only secure ways to send client information, and always mark sealed envelopes as "confidential". Consult your supervisor if you are uncertain about how to send client information securely.

When in an office, clinic or institution:

- Conduct client interviews or phone calls in private rooms or areas, with the door closed if possible.

- **NEVER** discuss clients or use client names in public areas;
- When a staff member or health care provider requests information about a client, establish his or her authority to do so before disclosing anything;
- Keep records that have client names and other identifying information in closed, locked files;
- Restrict access to electronic databases to designated staff;
- Carefully protect computer passwords or keys; **NEVER** give them to unauthorized people; and
- Carefully safeguard computer screens (e.g., minimize or close client records, turn the computer screen so it is not visible to others).

When in the community:

- Be discreet;
- Conduct client interviews and DOT visits in private – **NEVER** in public places;
- **DO NOT** leave sensitive or confidential information in messages for clients on doors;
- **DO NOT** leave messages with sensitive or confidential information on answering machines or phones that other people can access;
- **DO NOT** leave sensitive or confidential information with a client's neighbor or friend;
- **DO NOT** leave client information visible in the car; and
- **BE VERY CAREFUL** not to disclose the client's condition when gathering information on his or her whereabouts.

Consult your supervisor and/or the RCDC if you have any questions or concerns about maintaining client confidentiality.

Practicing Personal Safety

Protect your personal safety at all times while providing DOT.

- Choose safe DOT locations and following the Nunavut Home and Community Care Program Home & Community Care Safety Checklist (see Figure 16-1);

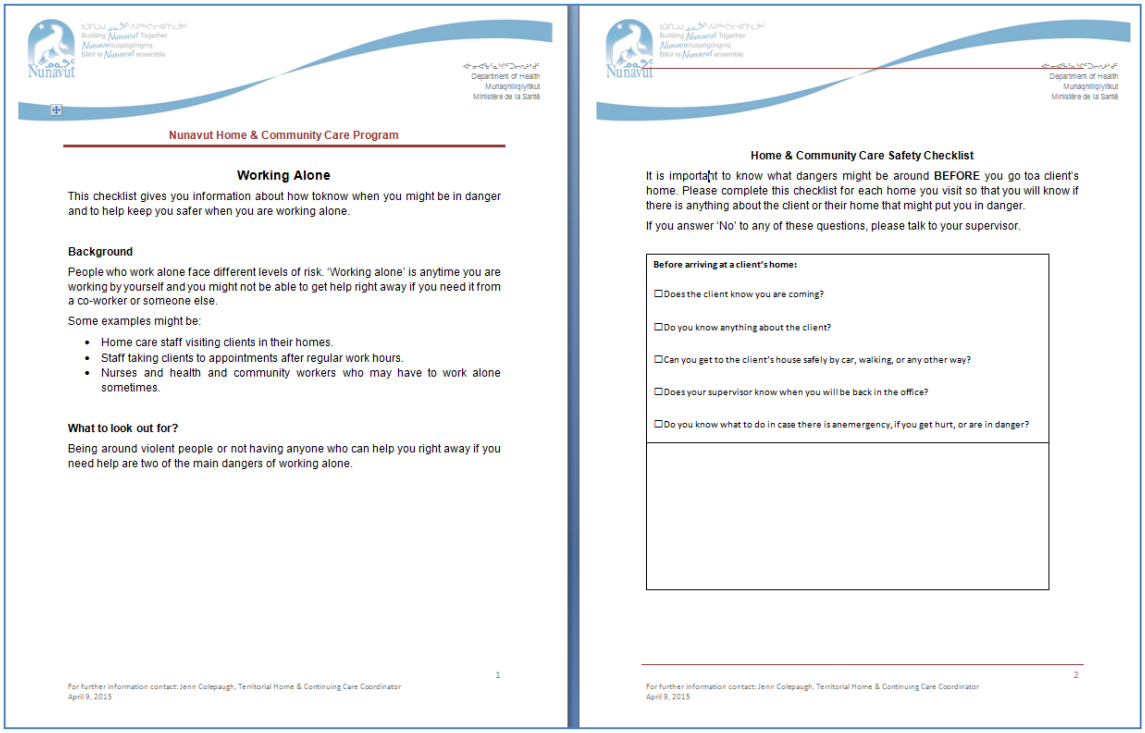
- Follow infection prevention and control policies, such as wearing a disposable N95 particulate respirator during DOT visits for clients with infectious TB (see **Section 13 – Infection Prevention and Control** for information on masking); and

- Consult with your supervisor to create a plan for visits with clients where safety issues could arise. For example, give DOT only at the health centre or do the visit with a colleague and administer DOT at the front entry, versus inside of the home.

Immediately withdraw from any situation where you have safety concerns. Document and report any safety concerns you have, including threatening behavior from a client or other person present at the location.

For more information on practicing personal safety, refer to **Tips for Practicing Personal Safety** near the end of this section of the TB Manual.

Figure 16-1: Nunavut Home and Community Care Program Home & Community Care Safety Checklist



Department of Health
Munaqhiliqiyiliqut
Ministère de la Santé

Nunavut Home & Community Care Program

Working Alone

This checklist gives you information about how toknow when you might be in danger and to help keep you safer when you are working alone.

Background

People who work alone face different levels of risk. 'Working alone' is anytime you are working by yourself and you might not be able to get help right away if you need it from a co-worker or someone else.

Some examples might be:

- Home care staff visiting clients in their homes.
- Staff taking clients to appointments after regular work hours.
- Nurses and health and community workers who may have to work alone sometimes.

What to look out for?

Being around violent people or not having anyone who can help you right away if you need help are two of the main dangers of working alone.

1

For further information contact: Jenn Colepaugh, Territorial Home & Continuing Care Coordinator
April 9, 2015

Department of Health
Munaqhiliqiyiliqut
Ministère de la Santé

Home & Community Care Safety Checklist

It is important to know what dangers might be around **BEFORE** you go toa client's home. Please complete this checklist for each home you visit so that you will know if there is anything about the client or their home that might put you in danger.

If you answer 'No' to any of these questions, please talk to your supervisor.

Before arriving at a client's home:

☐Does the client know you are coming?

☐Do you know anything about the client?

☐Can you get to the client's house safely by car, walking, or any other way?

☐Does your supervisor know when you will be back in the office?

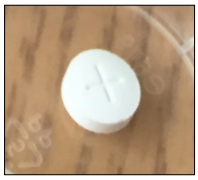
☐Do you know what to do in case there is anemergency, if you get hurt, or are in danger?

2

For further information contact: Jenn Colepaugh, Territorial Home & Continuing Care Coordinator
April 9, 2015

TB Drugs

Table 16-1: Drugs commonly used to treat active TB and latent TB infection (LTBI)

Drug	What it looks like	What it does	Other important information see Table 8-1 for more information on side effects / adverse reactions
Isoniazid (also called 'INH')	 300 mg tablet	• Kills TB bacteria	• Used with other TB drugs to treat active TB, or with vitamin B6 to treat latent TB infection (LTBI) • Can cause liver toxicity • Can react or interfere with many other medications (see Table 8-2) • Can cause numbness/tingling in fingers and toes • Also available in 100 mg tablets and as a liquid (syrup)
Vitamin B6 (pyridoxine)	 25 mg tablet	• Prevents numbness and tingling in fingers and toes caused by INH	• Does not affect TB bacteria • Usually used with INH
Rifampin	 300 mg capsule	• Kills TB bacteria	• Used with other TB drugs to treat active TB • Used to treat latent TB infection (LTBI) instead of isoniazid and vitamin B6 for some clients • Can cause liver toxicity • Can react or interfere with many other medications,including hormonal contraceptives (see Table 8-2) • Can turn body fluids (saliva, urine, tears) red-orange • Can stain fabric and skin • Also available in 150 mg capsules • Pharmacy can assist with compounding into liquid form
Pyrazinamide (also called 'PZA')	 500 mg tablet	• Kills TB bacteria	• Used with other TB drugs to treat active TB • Most effective during first two months of active TB treatment • Usually stopped once the initial phase of treatment has been completed • Can cause liver toxicity • Can cause joint pain (gout)
Ethambutol	 400 mg tablet	• Prevents development of TB drug resistance	• Used with other TB drugs to treat active TB • Usually stopped once test results confirm the client does not have drug-resistant TB • Can cause changes in vision and in colour perception (red and green) • Also available in 100 mg tablets

TB Drug Supplies

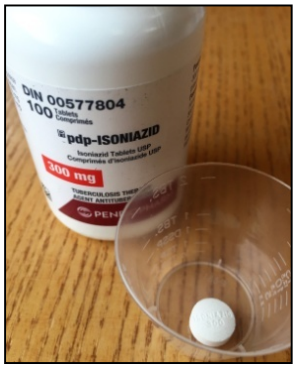
Once a TB prescription has been written by the treating physician, the client's TB drugs will be sent by the pharmacy to the health centre or public health unit in blister packs.

To avoid delays in treatment starts, use stock medications (see below) until the client's blister packs arrive from the pharmacy.

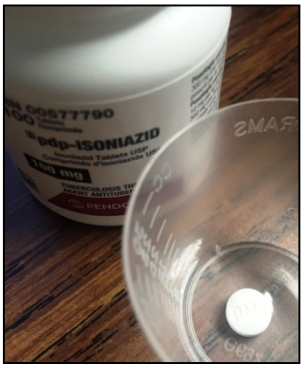
When a client's TB drugs are not blister-packed, the **CHN/PHN/TB Nurse** must dispense DOT doses into an appropriate and properly labeled container for the DOT provider.

Stock Medications

Figure 16-2: Stock medications – isoniazid (INH)

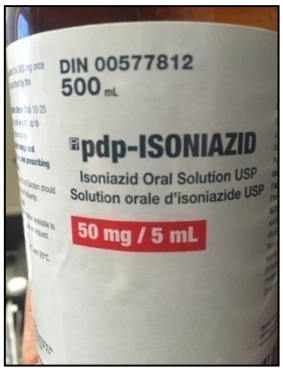


isoniazid (INH)
300 mg tablet



INH
100 mg tablet

size comparison:
INH 300 mg tablet (left)
INH 100 mg tablet (right)



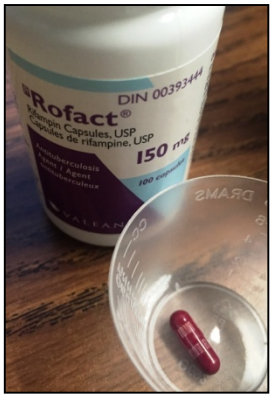
INH
50 mg / 5 mL
oral solution

Figure 16-3: Stock medications – vitamin B6 (pyridoxine)

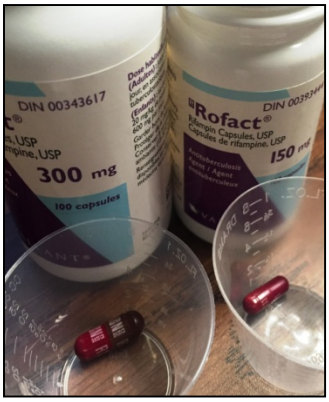
vitamin B6 25 mg tablet

Figure 16-4: Stock medications – rifampin

rifampin 300 mg capsule



rifampin 150 mg capsule



packaging comparison:
rifampin 300 mg capsules (left) and rifampin 150 mg capsules (right)

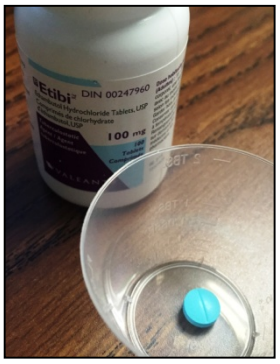
size comparison:
rifampin 300 mg capsule (left) and rifampin 150 mg capsule (right)

Figure 16-5: Stock medications – pyrazinamide (PZA)

pyrazinamide (PZA)
500 mg tablet

Figure 16-6: Stock medications – ethambutol

ethambutol
400 mg tablet



ethambutol
100 mg tablet

packaging comparison:
ethambutol 400 mg tablets (left) and ethambutol 100 mg tablets (right)

size comparison:
ethambutol 400 mg tablet (top) and ethambutol 100 mg tablet (bottom)

Blister Packs

EVERY BLISTER PACK MUST BE INSPECTED BY A NURSE BEFORE ANY DOSES ARE DISPENSED FROM IT. Inspected blister packs will be initialed and dated (see Figure 16-7).

To inspect a blister pack:

1. **Inspect the packaging** to make sure it is not damaged (e.g., crushed, water damage).

2. **Look at the inside LEFT cover of the package:**

   - There should be individual labels for **each drug** in the client's prescription.

   - Check **EACH LABEL** to make sure the information matches the client's prescription **EXACTLY** (drug name, dose, route, frequency).

3. **Check the inside RIGHT cover of the package (where the blisters are):**

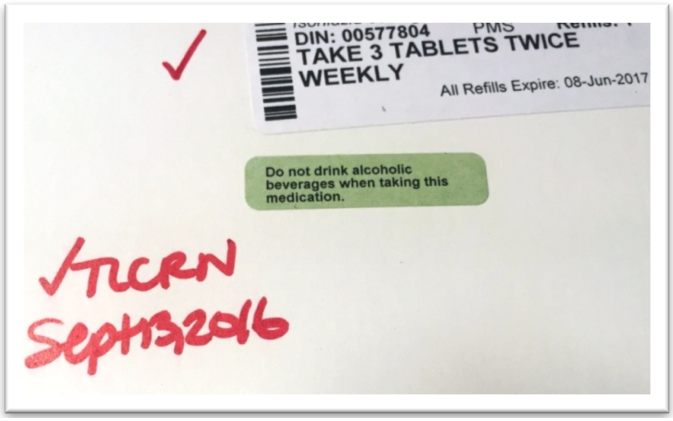
   - Press around the outside edges of the page to make sure all sides are firmly sealed.

   - Check **EACH BLISTER** to ensure the TB drugs in them match the labels on the LEFT SIDE of the package **EXACTLY.**

   NOTE: For clients in the initial phase of treatment for active TB, the pills for a single dose may be split between two bubbles (side-by-side).

4. **Initial and date each blister pack after you have inspected it.**

Figure 16-7, Example of how to initial and date a TB DOT blister pack after inspecting it



Minimum Time Required between DOT Doses

- **Administer DOT doses as prescribed; the treating physician determines** when a client may transition from daily doses to intermittent doses (e.g. twice-a-week DOT or three-times-a-week DOT).
- **All doses of TB drugs MUST BE OBSERVED** by the DOT provider. When a client is not able to take the dose during the DOT visit, reschedule the visit for another time/location within the time frame specified for that dose. If it is not possible to reschedule the visit, record the dose "missed" on the DOT record. **DO NOT leave the dose for the client to take at a later time.**
- **Consult the RCDC if you are uncertain whether/when to give a next dose.**

LTBI and WPP Treatment

- **There must be at least two calendar days between twice-a-week doses of isoniazid (INH)**. For this reason, LTBI treatment with INH is usually given on Mondays and Thursdays, i.e.:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
NO DOT	DOT given	NO DOT	NO DOT	DOT given	NO DOT	NO DOT

When a twice-weekly dose is **not given** on a Monday (for example, when a DOT dose is missed or a statutory holiday falls on a Monday), give treatment on Tuesday and Friday that week, i.e.:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
NO DOT	DOT appointment missed	DOT rescheduled and given	NO DOT	NO DOT	DOT given	NO DOT

When a twice-weekly dose is missed on a Thursday, it can be taken the next day (Friday), i.e.:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
NO DOT	DOT given	NO DOT	NO DOT	DOT appointment missed	DOT rescheduled and given	NO DOT

- **Daily LTBI treatment with rifampin is given <u>at least</u> five days a week (Monday to Friday), i.e.:**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
NO DOT	DOT given	DOT given	DOT given	DOT given	DOT given	NO DOT

Rifampin may also be ordered daily, seven days a week for LTBI treatment, i.e.:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
DOT given	DOT given	DOT given	DOT given	DOT given	DOT given	DOT given

Missed doses of daily rifampin are made up by adding them to the end of the LTBI treatment term (i.e. treatment is complete when the prescribed number of doses have been taken).

Active TB Treatment

- In the community, daily treatment for active TB is given **at least** five days a week (Monday to Friday), e.g.:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
NO DOT	DOT given	DOT given	DOT given	DOT given	DOT given	NO DOT

Daily treatment may also be ordered for seven days a week, e.g.:

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
DOT given	DOT given	DOT given	DOT given	DOT given	DOT given	DOT given

When a dose of daily treatment is missed in a treatment week during the initial phase of treatment, it is not necessary for the client to make-up the missed dose that week. The initial phase of treatment will simply continue until the full number of prescribed doses has been taken. The client will not begin the continuation phase of treatment until all of the doses prescribed for the initial phase of treatment have been taken.

- **Three-times-weekly DOT doses are given on Monday-Wednesday-Friday, e.g.:**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
NO DOT	DOT given	NO DOT	DOT given	NO DOT	DOT given	NO DOT

When a single three-times-weekly DOT dose is missed in a treatment week during the continuation phase, it is not necessary for the client to make-up the missed dose that week. The continuation phase of treatment will simply continue until the full number of prescribed doses has been taken. Treatment will not be discontinued until all of the doses prescribed for the continuation phase of treatment have been taken.

Vomiting

- **Client vomits more than 30 minutes after a dose of TB drugs:**
    - **DO NOT REPEAT THE DOSE**;
    - Note the event on the DOT record; and
    - Presume the dose has been absorbed (count the dose as 'taken').
- **Client vomits within 30 minutes after a dose of TB drugs:**
    - **DO NOT REPEAT THE DOSE;**
    - Note the event on the DOT record; and
    - Add an additional dose of TB drugs to the number of doses needed to complete treatment (as it would be if the dose were missed for any other reason).

NOTE: Vomiting can be a symptom of TB drug-related hepatotoxicity. Supervising nurses: if a client misses **two doses of TB drugs in a week due to vomiting** (e.g. he or she vomited within 30 minutes of ingestion of a dose of TB drugs twice in one week), **consult the RCDC** for guidance on how to proceed.

Taking TB Drugs during Other Illnesses

Treatment with TB drugs should continue even if the client has a minor illness such as a cold, ear, or throat infection. **Supervising nurses:** if the client has a moderate to severe gastrointestinal virus (e.g., nausea, vomiting, and/or diarrhea) consult the RCDC for guidance on how to proceed.

Monitoring Requirements

Severe and potentially fatal hepatotoxicity (liver toxicity) and other adverse effects can occur during treatment for active TBor LTBI. Thus, routine monitoring is required for all clients taking TB drugs. Detailed information on monitoring requirements during treatment with TB drugs is provided in **Section 7 – Care of Clients with Latent TB Infection (LTBI)** and **Section 8 – Care of Clients with Active TB**.

Key monitoring during treatment for LTBI or active TB is outlined in **Table 16-2**. TB signs/symptoms are shown in **Table 16-3**. Routine tests done during treatment with TB drugs are outlined in **Table 16-4**.

The **supervising nurse** is responsible for:

- Initiating monitoring tests, including monthly weight checks;
- Recording test results in ***PART 3: MONITORING*** of the client's DOT record;
- Ensuring prescribed doses remain appropriate for the client's weight; and
- Following up on abnormal test results and problems/concerns reported by the DOT provider.

DOT providers are responsible for:

- Asking clients about key monitoring issues **BEFORE** administering doses of TB drugs (see Table 16-2);
- Reporting problems/concerns to the supervising nurse;
- Reporting all missed doses to the supervising nurse;
- Recording DOT doses;
- Calculating DOT adherence each month; and
- Reminding clients when tests are due, and for helping clients to complete them.

Clinical monitoring of clients whose treatment is provided by a DOT worker must include a face-to-face assessment by a nurse, a nurse practitioner, or a physician **AT LEAST MONTHLY** (more frequently if there are any concerns).

Table 16-2: Key monitoring during treatment with TB drugs

Issue	Responsibility & Frequency	Actions
Possible drug reactions or other potential adverse effects	**DOT provider** **Before every DOT dose**	• Ask about extreme fatigue, stomach upset, nausea/vomiting, dark urine, yellow sclera, abdominal pain (signs/symptoms of hepatotoxicity), vision changes (if taking ethambutol), and any other problems. • **IF POSSIBLE DRUG REACTION OR OTHER POTENTIAL ADVERSE EFFECT: HOLD TREATMENT** and consult the supervising nurse / RCDC/ or prescribing physician **IMMEDIATELY**.
TB symptoms	**DOT provider** **Before every DOT dose**	• Ask about TB signs/symptoms (see **Table 16-3**) • **IF TB SIGNS/SYMPTOMS DEVELOP IN A CLIENT WITH LTBI OR WORSEN/RECUR IN A CLIENT WITH ACTIVE TB: HOLD TREATMENT and** consult the supervising nurse / RCDC/ or prescribing physician **IMMEDIATELY**.
Pregnancy	**DOT provider** **Before every DOT dose**	• Ask about possibility of pregnancy for clients of child-bearing age. • **IF CLIENT MIGHT BE PREGNANT: HOLD TREATMENT** and consult the supervising nurse / RCDC/ or prescribing physician **IMMEDIATELY**.
Travel plans	**DOT provider** **Before every DOT dose**	• Ask about possibility of travel. • Consult the supervising nurse / RCDC promptly to arrange continuation of treatment during travel.
New or changed other medications / treatments	**DOT provider** **Before every DOT dose**	• Report changes to the client's other medications or treatments, and any new medications the client begins during DOT to the supervising nurse.
Adherence	**DOT provider** **After every scheduled DOT dose**	• Record whether dose was observed. • **Report all missed doses to the supervising nurse.** • Consult the RCDC when three doses in a row are missed and/or if adherence falls below 80% in a calendar month.
Weight changes	**Supervising Nurse** **At least monthly**	• Check weight and document on DOT record and on growth chart (for clients two years of age and under). • **Confirm prescribed doses remain within therapeutic ranges.** • **Notify the RCDC IMMEDIATELY about weight loss in ANY client or failure to gain weight in a growing child.**

Table 16-3: TB signs/symptoms

Systemic TB signs/symptoms	Signs/symptoms of respiratory TB disease	Signs/symptoms of non-respiratory TB disease
• Fever* • Night sweats* • Weight loss or failure to gain weight (i.e. failure to thrive) • Fatigue • Loss of appetite	Systemic TB signs/symptoms **AND** • Cough > 3 weeks (dry or productive) • Chest pain • Shortness of breath • Bloody phlegm (hemoptysis)	Systemic TB signs/symptoms **AND** pain or dysfunction at the involved site, e.g.: • Swollen lymph nodes (TB lymphadenitis) • Headache, irritability, photophobia, stiff neck (TB meningitis)

*Can be absent in the very young and the elderly

Table 16-4: Routine tests done during treatment with TB drugs

Test	Reason	Frequency	Comments
Blood tests	To monitor for adverse effects from TB drugs and to test for diabetes in clients with active TB	**Clients with active TB, LTBI, or on WPP:** • If client has signs or symptoms of a drug reaction (e.g. hepatotoxicity) • Timing/frequency depends on age of the client, type of treatment, and risk factors drug reactions (e.g. hepatotoxicity)	• For timing and frequency of blood tests for clients with LTBI or on WPP, see **Table 7-4** and **Table 7-5** • For timing and frequency of blood tests for clients with active TB, see **Table 8-3** and **Table 8-4**
Chest x-rays	To monitor for: • Development of active TB in clients on DOT for WPP of LTBI • Response to treatment in clients with active TB	**Clients with active TB:** • If TB signs or symptoms develop during treatment (see **Table 16-3**) • After two months of treatment • Timing/frequency depends on how long the client has been on treatment and how well s/he has responded **Clients with LTBI:** • If TB signs or symptoms develop during treatment (see **Table 16-3**) • After three months of LTBI treatment • Near end of treatment if recommended by RCDC or treating physician **Clients on WPP:** • If TB signs or symptoms develop during treatment (see **Table 16-3**) • During follow-up post-exposure screening	
Sputum specimen testing • **AFB smear** • **TB culture**	To test for TB bacteria	**Clients with active TB:** • If TB signs or symptoms worsen or return during treatment (see **Table 16-3**) • Timing/frequency depends on how long the client has been on treatment and how well s/he has responded **Clients with LTBI:** • If TB signs or symptoms develop during treatment (see **Table 16-3**) • After three months of LTBI treatment • Near end of treatment if recommended by RCDC or treating physician	• Collection procedure described in **Section 5 - Collection of Specimens for TB Testing** • Positive AFB smear means the client might have active TB. More tests are done to confirm • Positive TB culture means the client has active TB
Vision testing	To monitor for adverse effect from ethambutol	• Monthly while taking ethambutol	• Testing procedure described in **Section 8 – Care of Clients with Active TB**

Supporting Adherence

One of the major benefits of DOT is that it supports adherence to and completion of, treatment. Adherence to treatment means following the recommended course of treatment by taking all the prescribed TB drugs for as long as necessary.

For clients with LTBI, adhering to treatment is important to prevent active TB. For clients with active TB, adhering to treatment is especially important to:

- Reduce the risk of dying or having disabilities from TB;
- Prevent development of TB drug resistance;
- Minimize duration of illness / length of treatment;
- Reduce the risk of transmitting TB germs to others; and
- Reduce the risk of developing TB again later (TB recurrence).

There is no way to reliably predict which clients will be adherent. Some factors associated with non-adherence include:

- Substance abuse or misuse
- Homelessness or housing issues
- Mental illness
- Whether the client believes DOT is necessary – which can be influenced by the client's understanding or attitudes about TB, TB treatment and DOT
- Frequent travel
- Language barriers
- Difficulty swallowing pills or concerns about potential adverse reactions
- Perceptions of the TB program,DOT, staff, or facilities
- Competing priorities, such as home, school, work or social commitments

To support adherence:

- Use a client-centered approach that puts the needs of the client first whenever possible. For example, implement a treatment/DOT plan that fits with the client's current lifestyle, schedule, or routines and use incentives and enablers when appropriate;

- Provide frequent, clear information on TB and treatment for active TB or LTBI;

- Support clients to identify and address behaviors that could negative impact their adherence, and provide positive feedback to reinforce positive behavior; and

- Be creative, flexible, and committed to working with clients to avoid or to resolve adherence issues.

Incentives and Enablers

There is no single solution for how to motivate or enable clients to adhere to treatment. Some clients find that good health is incentive enough. For others, using incentives and/or enablers can provide the sorts of encouragement and support they need to succeed. Incentives and enablers are most effective when they are combined with an attitude of caring and concern for the client and are tailored to a client's preferences and needs.

Incentives

Incentives are small rewards given to clients to encourage them to adhere to treatment, to keep their DOT appointments, or to get necessary testing done.The best time to begin using incentives is after a good relationship has been established with the client. Otherwise, the client might feel as if the DOT provider is trying to bribe them into accepting treatment.

Provide a variety of choices, and allow for change from time to time. Some examples are:

- Food, beverages
- Certificates or vouchers for local stores or services
- Books, magazines, hobby/craft items, or toys
- Household or personal care items
- Seasonal/holiday treats
- Movie passes or restaurant vouchers (once the client is no longer infectious)

Enablers

Enablers make it possible or easier for a client to adhere to treatment. Enablers can be helpful in getting the client started on treatment, and should be provided as soon as treatment starts. Some examples are:

- Taxi or gas vouchers
- Childcare
- Providing an appropriate snack for the client to have with DOT if the TB drugs upset his/her stomach
- Picking up specimens from the client instead of relying on the client to bring them to the health centre
- Helping the client to apply for other support services, such as food/housing assistance

Consult the Supervisor of Community Health Programs (SHCP) to confirm what resources are available to you **before** initiating incentives/enablers for a client.

Supporting DOT when Clients Travel

For clients on DOT for LTBI treatment, refer to **Section 7 – Care of Clients with Latent TB Infection (LTBI)**

For clients on DOT for active TB, refer to **Section 8 – Care of Clients with Active TB**

Calculating Adherence

To calculate adherence as a percentage:

- Divide the number of DOT doses taken by the number of DOT doses due as of that date, then
- Multiply the result by 100.

Example: seven DOT doses were taken of nine doses that were due (i.e. two doses missed)

- 7 divided by 9 = 0.78
- 0.78 X 100 = 78% adherence

Responding to Non-adherence

- **Report all missed doses to the supervising nurse.**
- **Supervising nurses: consult the RCDC if three doses in a row are missed and/or if adherence falls below 80% in a calendar month.**
- Work with the client to identify what might be interfering with his or her ability to stay on treatment.
- Take appropriate steps to address or minimize whatever barriers exist for that client, in consultation with your supervisor or the RCDC if necessary.
- **Clearly document any/all efforts made to reinforce/support adherence to treatment.**

Although it is rarely necessary to do so, clients with infectious TB can be compelled to adhere to treatment (**see Section 2 - Understanding TB**).

Documentation

Documentation is a responsibility shared between a client's DOT provider(s) and the nurse who is supervising the client's care.

Forms for documenting DOT include:

- Active TB DOT Record (**ATB-1**);
- Active TB DOT Record – Extension of Treatment (**ATB-2**);
  and
- Latent TB Infection (LTBI) DOT Record (**LTBI-1**)

DOT providers (e.g., nurses, DOT workers/DOT assistants) are responsible for:

- Providing their information in the ***RECORD OF DOT PROVIDERS*** section of the DOT form(s)
- Completing ***PART 2 - DIRECTLY OBSERVED THERAPY (DOT)*** on the DOT form(s), which reflects:
  - When doses were due;
  - Whether they were observed as taken; and
  - Calculating adherence (monthly and overall).

Nurses supervising treatment provided by DOT workers or DOT assistants are responsible for:

- Completing all other areas of the DOT records;
- Reviewing information recorded in ***PART 2*** of the DOT records by other DOT providers **at least monthly**. In some situations, the supervising nurse may prefer to complete the adherence section in ***PART 2***.

To see samples of the active TB DOT records, refer to **Section 8 – Care of Clients with Active TB and Section 7 – Care of Clients with Latent TB Infection (LTBI)**

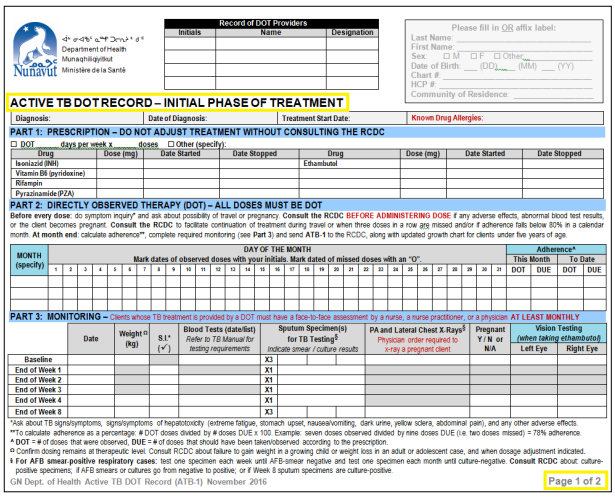
For a sample LTBI TB DOT record, refer to **Section 7 – Care of Clients with Latent TB Infection (LTBI)**

Steps for Documenting DOT for Active TB

Active TB DOT Record (ATB-1)

Use this record to document DOT during the initial and continuation phases of treatment for active TB.

Figure 16-10: Image of ATB-1, pages 1 and 2



ACTIVE TB DOT RECORD – INITIAL PHASE OF TREATMENT

Record of DOT Providers

Initials	Name	Designation

Please fill in OR affix label:

Last Name:
First Name:
Sex: ☐ M ☐ F ☐ Other
Date of Birth: ___ (DD) ___ (MM) ___ (YY)
Chart #:
HCP #:
Community of Residence:

Diagnosis: | Date of Diagnosis: | Treatment Start Date: | Known Drug Allergies:

PART 1: PRESCRIPTION – DO NOT ADJUST TREATMENT WITHOUT CONSULTING THE RCDC

☐ DOT ____ days per week x ____ doses ☐ Other (specify):

Drug	Dose (mg)	Date Started	Date Stopped	Drug	Dose (mg)	Date Started	Date Stopped
Isoniazid (INH)				Ethambutol			
Vitamin B6 (pyridoxine)							
Rifampin							
Pyrazinamide (PZA)							

PART 2: DIRECTLY OBSERVED THERAPY (DOT) – ALL DOSES MUST BE DOT

Before every dose: do symptom inquiry* and ask about possibility of travel or pregnancy. **Consult the RCDC BEFORE ADMINISTERING DOSE** if any adverse effects, abnormal blood test results, or the client becomes pregnant. **Consult the RCDC** to facilitate continuation of treatment during travel or when three doses in a row are missed and/or if adherence falls below 80% in a calendar month. **At month end**: calculate adherence**, complete required monitoring (see **Part 3**) and send **ATB-1** to the RCDC, along with updated growth chart for clients under five years of age.

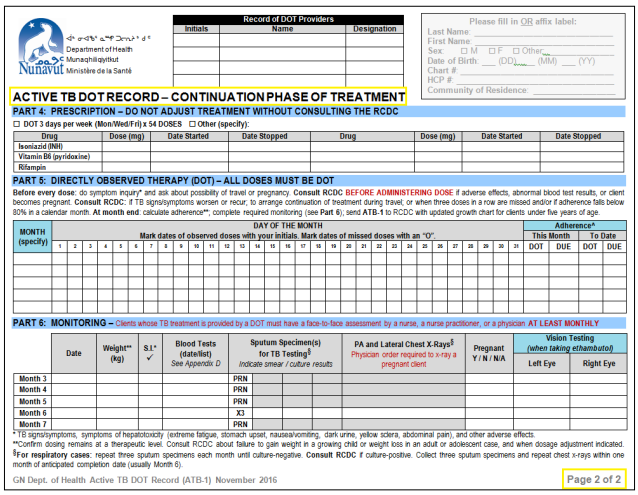
MONTH (specify)	DAY OF THE MONTH – Mark dates of observed doses with your initials. Mark dated of missed doses with an "O". (1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31)	Adherence* This Month DOT	This Month DUE	To Date DOT	To Date DUE

PART 3: MONITORING – Clients whose TB treatment is provided by a DOT must have a face-to-face assessment by a nurse, a nurse practitioner, or a physician AT LEAST MONTHLY

	Date	Weight ◻ (kg)	S.I.* (✓)	Blood Tests (date/list) Refer to TB Manual for testing requirements	Sputum Specimen(s) for TB Testing§ Indicate smear / culture results	PA and Lateral Chest X-Rays§ Physician order required to x-ray a pregnant client	Pregnant Y / N or N/A	Vision Testing (when taking ethambutol) Left Eye	Vision Testing (when taking ethambutol) Right Eye
Baseline					X3				
End of Week 1					X1				
End of Week 2					X1				
End of Week 3					X1				
End of Week 4					X1				
End of Week 8					X3				

*Ask about TB signs/symptoms, signs/symptoms of hepatotoxicity (extreme fatigue, stomach upset, nausea/vomiting, dark urine, yellow sclera, abdominal pain), and any other adverse effects.
**To calculate adherence as a percentage: # DOT doses divided by # doses DUE x 100. Example: seven doses observed divided by nine doses DUE (i.e. two doses missed) = 78% adherence.
^ DOT = # of doses that were observed, DUE = # of doses that should have been taken/observed according to the prescription.
◻ Confirm dosing remains at therapeutic level. Consult RCDC about failure to gain weight in a growing child or weight loss in an adult or adolescent case, and when dosage adjustment indicated.
§ For AFB smear-positive respiratory cases: test one specimen each week until AFB-smear negative and test one specimen each month until culture-negative. Consult RCDC about: culture-positive specimens; if AFB smears or cultures go from negative to positive; or if Week 8 sputum specimens are culture-positive.

GN Dept. of Health Active TB DOT Record (ATB-1) November 2016 Page 1 of 2



ACTIVE TB DOT RECORD – CONTINUATION PHASE OF TREATMENT

Record of DOT Providers

Initials	Name	Designation

Please fill in OR affix label:

Last Name:
First Name:
Sex: ☐ M ☐ F ☐ Other
Date of Birth: ___ (DD) ___ (MM) ___ (YY)
Chart #:
HCP #:
Community of Residence:

PART 4: PRESCRIPTION – DO NOT ADJUST TREATMENT WITHOUT CONSULTING THE RCDC

☐ DOT 3 days per week (Mon/Wed/Fri) x 54 DOSES ☐ Other (specify):

Drug	Dose (mg)	Date Started	Date Stopped	Drug	Dose (mg)	Date Started	Date Stopped
Isoniazid (INH)							
Vitamin B6 (pyridoxine)							
Rifampin							

PART 5: DIRECTLY OBSERVED THERAPY (DOT) – ALL DOSES MUST BE DOT

Before every dose: do symptom inquiry* and ask about possibility of travel or pregnancy. **Consult RCDC BEFORE ADMINISTERING DOSE** if adverse effects, abnormal blood test results, or client becomes pregnant. **Consult RCDC**: if TB signs/symptoms worsen or recur, to arrange continuation of treatment during travel, or when three doses in a row are missed and/or if adherence falls below 80% in a calendar month. **At month end**: calculate adherence**, complete required monitoring (see **Part 6**), send **ATB-1** to RCDC with updated growth chart for clients under five years of age.

MONTH (specify)	DAY OF THE MONTH – Mark dates of observed doses with your initials. Mark dates of missed doses with an "O". (1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31)	Adherence* This Month DOT	This Month DUE	To Date DOT	To Date DUE

PART 6: MONITORING – Clients whose TB treatment is provided by a DOT must have a face-to-face assessment by a nurse, a nurse practitioner, or a physician AT LEAST MONTHLY

	Date	Weight** (kg)	S.I.* ✓	Blood Tests (date/list) See Appendix D	Sputum Specimen(s) for TB Testing§ Indicate smear / culture results	PA and Lateral Chest X-Rays§ Physician order required to x-ray a pregnant client	Pregnant Y / N / N/A	Vision Testing (when taking ethambutol) Left Eye	Vision Testing (when taking ethambutol) Right Eye
Month 3					PRN				
Month 4					PRN				
Month 5					PRN				
Month 6					X3				
Month 7					PRN				

* TB signs/symptoms, symptoms of hepatotoxicity (extreme fatigue, stomach upset, nausea/vomiting, dark urine, yellow sclera, abdominal pain), and other adverse effects.
**Confirm dosing remains at a therapeutic level. Consult RCDC about failure to gain weight in a growing child or weight loss in an adult or adolescent case, and when dosage adjustment indicated.
§ For respiratory cases: repeat three sputum specimens each month until culture-negative. Consult RCDC if culture-positive. Collect three sputum specimens and repeat chest x-rays within one month of anticipated completion date (usually Month 8).

GN Dept. of Health Active TB DOT Record (ATB-1) November 2016 Page 2 of 2

Initial Phase of Treatment – Page 1

- **Nurses:**
  - Label page 1 with the client's information;
  - Records your information in ***Record of DOT Providers*** box (if you will be giving DOT);
  - Complete ***PART 1: PRESCRIPTION***;
  - Transcribe doses given prior to discharge from hospital (if any) from the client's Medication Administration Record into ***PART 2: DIRECTLY OBSERVED THERAPY (DOT)***; and
  - In ***PART 3: MONITORING***:
    - Record baseline results;
    - **Pencil-in** dates for upcoming monitoring tests; and
    - Add ongoing monitoring results as they become available.

At the end of each calendar month:

- Review page 1 for completeness;
- Ensure all routine monitoring has been done and adherence totals are recorded and correct; then
- Send the completed page 1 of the ATB-1 to the RCDC, along with an updated growth chart for clients two years of age and under.

Once the client has completed all of the observed doses prescribed for the initial phase of treatment:

- Review page 1 for completeness;
- Ensure all routine monitoring has been done and adherence totals are recorded and correct;
- Send page 1, along with an updated growth chart for clients two years of age and under, and a completed *Tuberculosis Prescription Request/Change Form* (**TBPRC**) to the RCDC (ensure the client's current weight is recorded on the **TBPRC** so the RCDC can confirm the continuation phase prescription is appropriate); then
- Consult with the RCDC to confirm the treatment plan (i.e., confirm whether client can begin continuation phase of treatment, medication doses).

ALWAYS consult with the RCDC or treating physician before changing the client to the continuation phase of treatment.

- **DOT provider(s):**
  - Record your information in ***Record of DOT Providers*** box;
  - Do required checks with the client **PRIOR TO ADMINISTERING EACH DOT DOSE** (see Table 16-2).
  - Check ***PART 3*** for dates of upcoming monitoring tests. Remind client when tests are due and provide any necessary supplies (e.g., sputum specimen collection bottles, requisitions completed by the supervising nurse for blood tests).
  - Record outcomes for DOT visits in ***PART 2.***

At the end of each calendar month:

- Ensure documentation is complete;
- Calculate the adherence totals for that month and to date, and records these in the ***Adherence*** section of the record; then
- Give the ATB-1 to the supervising nurse to review and forward to the RCDC.

Once the client has completed all of the observed doses prescribed for the initial phase of treatment:

- Ensure documentation is complete; then
- Give the ATB-1 to the supervising nurse to review and forward to the RCDC.

Continuation Phase of Treatment – Page 2

- **Nurses:**
  - Label page 2 with the client's information;
  - Record your information in ***Record of DOT Providers*** box (if you will be giving DOT);
  - Complete ***PART 1: PRESCRIPTION***
  - In ***PART 3: MONITORING***:
    - **Pencil-in** dates for upcoming monitoring tests;
    - Record ongoing monitoring results as they become available.

At the end of each calendar month:

- Review page 2 for completeness;
- Ensure all routine monitoring has been done and adherence totals are recorded and correct; then
- Send page 2 to the RCDC, along with an updated growth chart for clients two years of age and under.

Once all doses prescribed for the continuation phase have been taken:

- Review page 2 for completeness;
- Ensure all routine monitoring has been done and adherence totals are recorded and correct;
- Send page 2 to the RCDC, along with the updated growth chart for clients two years of age and under;
- Consult with the RCDC to confirm the treatment plan (i.e. discontinue treatment or extend treatment).

When treatment can be discontinued:

- Refer to ***Step Seven – Document TB Treatment Outcome*** **in Section 8 – Care of Clients with Active TB.**

ALWAYS consult with the RCDC or treating physician before discontinuing treatment.

- **DOT provider(s):**
  - Records your information in ***Record of DOT Providers*** box;
  - Do required checks with the client **PRIOR TO ADMINISTERING EACH DOT DOSE** (see Table 16-2);
  - Check ***PART 3*** for dates of upcoming monitoring tests. Remind client when tests are due and provide any necessary supplies (e.g., sputum specimen collection bottles, requisitions completed by the supervising nurse for blood tests); and
  - Record outcomes for DOT visits in ***PART 2.***

At the end of each calendar month AND once all doses prescribed for the continuation phase have been taken:

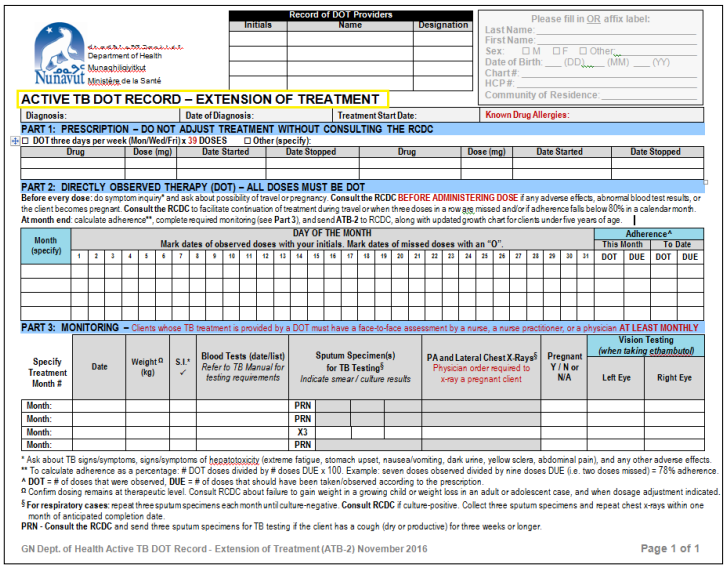
- Ensure documentation is complete;
- Calculate the adherence totals for that month and to date, and record these in the ***Adherence*** section of the record; then

- Give the ATB-1 to the supervising nurse to review and forward to the RCDC.

Active TB DOT Record – Extension of Treatment (ATB-2)

Use this record to document DOT when extended treatment for active TB is prescribed.

Figure 16-11: Image of ATB-2



Department of Health
Ministère de la Santé

Record of DOT Providers		
Initials	Name	Designation

Please fill in OR affix label:
Last Name:
First Name:
Sex: ☐ M ☐ F ☐ Other
Date of Birth: ___ (DD) ___ (MM) ___ (YY)
Chart #:
HCP #:
Community of Residence:

ACTIVE TB DOT RECORD – EXTENSION OF TREATMENT

Diagnosis:	Date of Diagnosis:	Treatment Start Date:	Known Drug Allergies:

PART 1: PRESCRIPTION – DO NOT ADJUST TREATMENT WITHOUT CONSULTING THE RCDC

☐ DOT three days per week (Mon/Wed/Fri) x 39 DOSES ☐ Other (specify):

Drug	Dose (mg)	Date Started	Date Stopped	Drug	Dose (mg)	Date Started	Date Stopped

PART 2: DIRECTLY OBSERVED THERAPY (DOT) – ALL DOSES MUST BE DOT

Before every dose: do symptom inquiry* and ask about possibility of travel or pregnancy. **Consult the RCDC BEFORE ADMINISTERING DOSE** if any adverse effects, abnormal blood test results, or the client becomes pregnant. **Consult the RCDC** to facilitate continuation of treatment during travel or when three doses in a row are missed and/or if adherence falls below 80% in a calendar month.
At month end: calculate adherence**, complete required monitoring (see **Part 3**), and send **ATB-2** to RCDC, along with updated growth chart for clients under five years of age.

Month (specify)	DAY OF THE MONTH Mark dates of observed doses with your initials. Mark dates of missed doses with an "O". 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	Adherence^ This Month DOT	This Month DUE	To Date DOT	To Date DUE

PART 3: MONITORING – Clients whose TB treatment is provided by a DOT must have a face-to-face assessment by a nurse, a nurse practitioner, or a physician **AT LEAST MONTHLY**

Specify Treatment Month #	Date	Weight¤ (kg)	S.I.* ✓	Blood Tests (date/list) *Refer to TB Manual for testing requirements*	Sputum Specimen(s) for TB Testing§ *Indicate smear / culture results*				PA and Lateral Chest X-Rays§ Physician order required to x-ray a pregnant client	Pregnant Y / N or N/A	Vision Testing *(when taking ethambutol)* Left Eye	Vision Testing *(when taking ethambutol)* Right Eye
Month:					PRN							
Month:					PRN							
Month:					X3							
Month:					PRN							

* Ask about TB signs/symptoms, signs/symptoms of hepatotoxicity (extreme fatigue, stomach upset, nausea/vomiting, dark urine, yellow sclera, abdominal pain), and any other adverse effects.
** To calculate adherence as a percentage: # DOT doses divided by # doses DUE x 100. Example: seven doses observed divided by nine doses DUE (i.e. two doses missed) = 78% adherence.
^ **DOT** = # of doses that were observed, **DUE** = # of doses that should have been taken/observed according to the prescription.
¤ Confirm dosing remains at therapeutic level. Consult RCDC about failure to gain weight in a growing child or weight loss in an adult or adolescent case, and when dosage adjustment indicated.
§ **For respiratory cases**: repeat three sputum specimens each month until culture-negative. **Consult RCDC** if culture-positive. Collect three sputum specimens and repeat chest x-rays within one month of anticipated completion date.
PRN - Consult the RCDC and send three sputum specimens for TB testing if the client has a cough (dry or productive) for three weeks or longer.

GN Dept. of Health Active TB DOT Record - Extension of Treatment (ATB-2) November 2016 Page 1 of 1

- **Nurses:**
  - Label the ATB-2 with the client's information;
  - Record your information in ***Record of DOT Providers*** box (if you will be giving DOT);
  - Complete ***PART 1: PRESCRIPTION***;
  - In ***PART 3: MONITORING***:
    - **Pencil-in** dates for upcoming monitoring tests;
    - Record ongoing monitoring results as they become available.

At the end of each calendar month:

- Review the ATB-2 for completeness;
- Ensure all routine monitoring has been done and adherence totals are recorded and correct; then

- Send the ATB-2 to the RCDC, along with an updated growth chart for clients two years of age and under.

Once the client has completed all of the observed doses prescribed for the continuation phase of treatment:

- Review the ATB-2 for completeness;
- Ensure all routine monitoring has been done and adherence totals are recorded and correct;
- Send the ATB-2 to the RCDC, along with an updated growth chart for clients two years of age and under; then
- Consult with the RCDC to confirm whether treatment can be discontinued.

ALWAYS consult with the RCDC or treating physician before discontinuing treatment.

- **DOT provider(s):**
  - Record your information in ***Record of DOT Providers*** box;
  - Do required checks with the client **PRIOR TO ADMINISTERING EACH DOT DOSE** (see Table 16-2);
  - Check ***PART 3*** for dates of upcoming monitoring tests. Remind client when tests are due and provide any necessary supplies (e.g., sputum specimen collection bottles, requisitions completed by the supervising nurse for blood tests);
  - Record outcomes for DOT visits in ***PART 2.***
  - **At the end of each calendar month:**
    - Ensure documentation is complete;
    - Calculate the adherence totals for that month and to date, and records these in the ***Adherence*** section of the record; then
    - Give the ATB-2 to the supervising nurse to review and forward to the RCDC.

- **Once the client has completed all of the observed doses prescribed for the continuation phase of treatment:**

  - Ensure documentation is complete;

  - Calculate the adherence totals for that month and to date, and records these in the ***Adherence*** section of the record; then

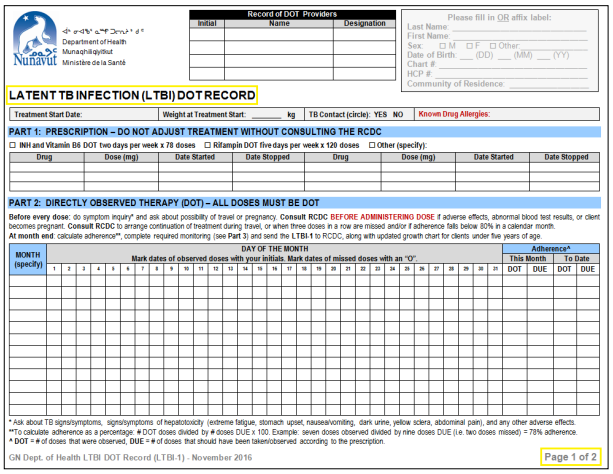
  - Give the ATB-2 to the supervising nurse to review and forward to the RCDC.

Steps for Documenting DOT for Latent TB Infection (LTBI) or for Window Period Prophylaxis (WPP)

Latent TB Infection (LTBI) DOT Record (LTBI-1)

Use this record to document treatment for LTBI or for WPP.

Figure 16-12: Image of LTBI-1, pages 1 and 2



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Record of DOT Providers

Initial	Name	Designation

Please fill in OR affix label:
Last Name:
First Name:
Sex: ☐ M ☐ F ☐ Other
Date of Birth: ___ (DD) ___ (MM) ___ (YY)
Chart #:
HCP #:
Community of Residence:

LATENT TB INFECTION (LTBI) DOT RECORD

Treatment Start Date: | Weight at Treatment Start: _____ kg | TB Contact (circle): YES NO | Known Drug Allergies:

PART 1: PRESCRIPTION – DO NOT ADJUST TREATMENT WITHOUT CONSULTING THE RCDC

☐ **INH and Vitamin B6 DOT two days per week x 78 doses** ☐ **Rifampin DOT five days per week x 120 doses** ☐ **Other (specify):**

Drug	Dose (mg)	Date Started	Date Stopped	Drug	Dose (mg)	Date Started	Date Stopped

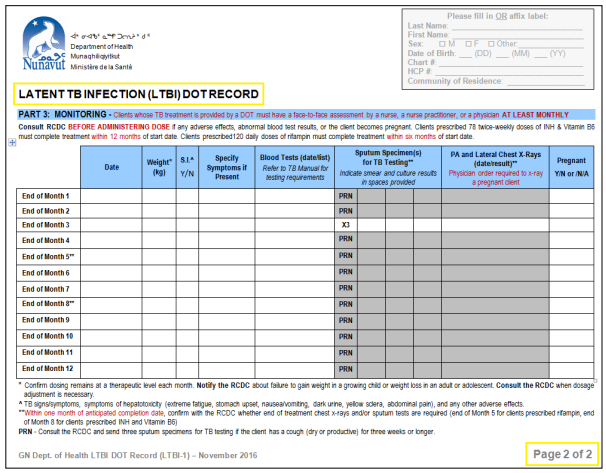
PART 2: DIRECTLY OBSERVED THERAPY (DOT) – ALL DOSES MUST BE DOT

Before every dose: do symptom inquiry* and ask about possibility of travel or pregnancy. **Consult RCDC BEFORE ADMINISTERING DOSE** if adverse effects, abnormal blood test results, or client becomes pregnant. **Consult RCDC** to arrange continuation of treatment during travel, or when three doses in a row are missed and/or if adherence falls below 80% in a calendar month.
At month end: calculate adherence**, complete required monitoring (see **Part 3**) and send the **LTBI-1** to RCDC, along with updated growth chart for clients under five years of age.

MONTH (specify)	DAY OF THE MONTH — Mark dates of observed doses with your initials. Mark dates of missed doses with an "O". 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	Adherence^ This Month DOT	This Month DUE	To Date DOT	To Date DUE

* Ask about TB signs/symptoms, signs/symptoms of hepatotoxicity (extreme fatigue, stomach upset, nausea/vomiting, dark urine, yellow sclera, abdominal pain), and any other adverse effects.
**To calculate adherence as a percentage: # DOT doses divided by # doses DUE x 100. Example: seven doses observed divided by nine doses DUE (i.e. two doses missed) = 78% adherence.
^ **DOT** = # of doses that were observed, **DUE** = # of doses that should have been taken/observed according to the prescription.

GN Dept. of Health LTBI DOT Record (LTBI-1) - November 2016 Page 1 of 2



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Please fill in OR affix label:
Last Name:
First Name:
Sex: ☐ M ☐ F ☐ Other
Date of Birth: ___ (DD) ___ (MM) ___ (YY)
Chart #:
HCP #:
Community of Residence:

LATENT TB INFECTION (LTBI) DOT RECORD

PART 3: MONITORING - Clients whose TB treatment is provided by a DOT must have a face-to-face assessment by a nurse, a nurse practitioner, or a physician **AT LEAST MONTHLY**

Consult RCDC BEFORE ADMINISTERING DOSE if any adverse effects, abnormal blood test results, or the client becomes pregnant. Clients prescribed 78 twice-weekly doses of INH & Vitamin B6 must complete treatment within 12 months of start date. Clients prescribed120 daily doses of rifampin must complete treatment within six months of start date.

	Date	Weight* (kg)	S.I.* Y/N	Specify Symptoms if Present	Blood Tests (date/list) *Refer to TB Manual for testing requirements*	Sputum Specimen(s) for TB Testing** *Indicate smear and culture results in spaces provided*			PA and Lateral Chest X-Rays (date/result)** *Physician order required to x-ray a pregnant client*	Pregnant Y/N or /N/A
End of Month 1						PRN				
End of Month 2						PRN				
End of Month 3						X3				
End of Month 4						PRN				
End of Month 5***						PRN				
End of Month 6						PRN				
End of Month 7						PRN				
End of Month 8***						PRN				
End of Month 9						PRN				
End of Month 10						PRN				
End of Month 11						PRN				
End of Month 12						PRN				

* Confirm dosing remains at a therapeutic level each month. **Notify the RCDC** about failure to gain weight in a growing child or weight loss in an adult or adolescent. **Consult the RCDC** when dosage adjustment is necessary.
^ TB signs/symptoms, symptoms of hepatotoxicity (extreme fatigue, stomach upset, nausea/vomiting, dark urine, yellow sclera, abdominal pain), and any other adverse effects.
**Within one month of anticipated completion date, confirm with the RCDC whether end of treatment chest x-rays and/or sputum tests are required (end of Month 5 for clients prescribed rifampin, end of Month 8 for clients prescribed INH and Vitamin B6)
PRN - Consult the RCDC and send three sputum specimens for TB testing if the client has a cough (dry or productive) for three weeks or longer.

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Clients on LTBI Treatment

- **Nurses:**
  - Label pages 1 and 2 with the client's information;
  - Record your information in ***Record of DOT Providers*** box (if you will be giving DOT);
  - Complete ***PART 1: PRESCRIPTION***;
  - Transcribe doses given prior to discharge from hospital (if any) from the client's Medication Administration Record into ***PART 2: DIRECTLY OBSERVED THERAPY (DOT)***;
  - In ***PART 3: MONITORING***:
    - Record baseline results;
    - **Pencil-in** dates for upcoming monitoring tests; and
    - Add ongoing monitoring results as they become available.

At the end of each calendar month:

- Review the LTBI-1 for completeness.
- Ensure all routine monitoring has been done and adherence totals are recorded and correct; then
- Send the LTBI-1 to the RCDC, along with an updated growth chart for clients two years of age and under.

Within one month of anticipated completion date:

- Confirm with the RCDC whether end of treatment chest x-rays and sputum specimen tests are required. Make necessary arrangements if they are.

Once the client has completed all of the observed doses prescribed:

- Review the LTBI-1 completeness;
- Ensure all routine monitoring and adherence totals have been done and recorded;
- Send the LTBI-1 to the RCDC, along with an updated growth chart for clients two years of age and under;
- Consult with the RCDC to confirm whether treatment can be discontinued; then
- Refer to ***Step Seven – Document TB Treatment Outcome*** **in Section 8 – Care of Clients with Active TB.**

ALWAYS consult with the RCDC or treating physician before discontinuing treatment.

- **DOT provider(s):**
  - Record your information in ***Record of DOT Providers*** box;
  - Do required checks with the client **PRIOR TO ADMINISTERING EACH DOT DOSE** (see Table 16-2);

- Check ***PART 3*** for dates of upcoming monitoring tests. Remind client when tests are due and provide any necessary supplies (e.g., sputum specimen collection bottles, requisitions completed by the supervising nurse for blood tests); and
- Record outcomes for DOT visits in ***PART 2.***

At the end of each calendar month:

- Ensure documentation is complete;
- Calculate the adherence totals for that month and to date, and records these in the ***Adherence*** section of the record; then
- Give the LTBI-1 to the supervising nurse to review and forward to the RCDC.

Once the client has completed all of the observed doses prescribed:

- Ensure documentation is complete;
- Calculate the adherence totals for that month and to date, and records these in the ***Adherence*** section of the record; then
- Give the LTBI-1 to the supervising nurse to review and forward to the RCDC.

Clients on Window Period Prophylaxis (WPP)

Nurses and DOT should follow the same processes as for clients on LTBI treatment until it is time to complete post-exposure screening (usually 8 weeks after last exposure to the infectious case).

Once follow-up post-exposure screening has been completed:

- **Nurses:**
  - Confirm with the RCDC or treating physician whether treatment can be discontinued **OR** a new prescription is required because test results show the client has LTBI or active TB.

When WPP can be discontinued:

- Review the LTBI-1 for completeness;
- Ensure all routine monitoring has been done and adherence totals have been recorded;

- Send the LTBI-1 to the RCDC, along with an updated growth chart for clients two years of age and under; then
- Refer to ***Step Five – Document LTBI Treatment Outcome*** **in Section 7 – Care of Clients with Latent TB Infection (LTBI).**

ALWAYS consult with the RCDC or treating physician before discontinuing treatment.

When a new prescription is required (for LTBI or active TB):

- Consult RCDC to confirm whether the current LTBI-1 can be updated with the new prescription or whether a new DOT record should be initiated.

Tips for Practicing Personal Safety

During community DOT visits:

- Dress appropriately in comfortable shoes and clothes;
- Do not wear expensive jewellery or watches, carry large sums of money, or leave valuables in your car;
- Work in pairs (whenever possible, but particularly with challenging clients);
- Where applicable, carry a cell phone and making sure it fully charged;
- Leave a list of field stops with your supervisor that includes an estimated time of return, and check-in with your clinic or office at regular intervals;
- Know where you are going in advance of the appointment;
- Drive carefully, with your car doors locked and your seatbelt on;
- Identify a safe public place (e.g. a store) that you can get to quickly if needed;
- Park your vehicle so it is easy for you to leave;
- Do a visual scan of the property. If there could be loose dogs in the area, honk the horn and wait briefly before you open the car door;
- If possible, keep your shoes on during the home visit. This will protect your feet from potential injuries and allow you to leave more quickly;
- Carry your car keys so they can be reached easily;
- Do a visual scan of the client's home, and note anything that could put your safety at risk (e.g. firearms or other weapons);
- Position yourself near an exit. If the closest exit becomes blocked, reposition yourself.

During community visits for a client with infectious TB:

- Don a disposable N95 particulate respirator before entering the home and continue to wear it until you leave the residence;

- Explain precautions to prevent TB transmission and ask the client to follow them;

- Provide tissues and ask the client to cover his or her nose and mouth when coughing or sneezing;

- Conduct the visit as efficiently as possible to reduce exposure time; and

- When appropriate, conduct the visit outdoors.

When transporting clients with infectious TB (e.g. to attend health centre appointments):

- Let the facility or department where you are going know in advance that the client is coming, and that **airborne precautions** are needed (**see Section 11 – Infection Prevention and Control**);

- Wear a **disposable N95 particulate respirator** during the entire journey;

- Provide and instruct the **client to wear a surgical mask** over his or her nose and mouth. Make sure you have enough masks on hand to provide a replacement should the mask become wet or torn;

- Avoid having other passengers or staff members in the vehicle with you to reduce the number of people that could be exposed and number of people required to wear **disposable N95 particulate respirators**;

- Set ventilation controls to the fresh air or vent setting – **NOT** to the recirculation setting;

- Set any fan(s) to the highest setting;

- Open as many windows as possible (weather permitting); and

- Leave the vehicle unoccupied with the windows open for at least an hour (weather permitting or inside a garage if one is available) after the end of the journey. Place a sign on the vehicle indicating when it can be used again.

When assisting clients to collect sputum specimens:

- Ask the client to collect the specimen outside or in a room away from you or other people; and

- Avoid being in the same room with the client while the specimen is being collected. If you must be present, put on a disposable N95 particulate respirator and continue to wear it until you leave the residence (or area when specimens are collected outside).

Collection of sputum specimens should only be done by nurses, physicians, and providers that have completed training in this skill.

- For information on collecting sputum specimens for TB testing, see:
  Section 5 - Collection of Specimens for TB Testing
- For client instructions on collecting sputum specimens, see:
  Section 15 – TB Fact Sheets

Tips for Administering TB Drugs

Taking TB drugs can be difficult, particularly for young children and others who find pills or capsules hard to swallow. Other factors, such as taste or smell, can also make taking TB drugs unpleasant. Over time, aversions can develop to some or all TB drugs, and to the liquids or foods they are taken with. This section provides general information on options for taking TB drugs, and some suggestions on how to avoid or manage common difficulties.

If you encounter difficulties administering TB drugs, consult the nurse responsible for the care of that client. Nurses should consult the RCDC as necessary.

Crushing, Fragmenting, or Dissolving Tablets, and Opening Capsules

- Isoniazid (INH), vitamin B6 (pyridoxine), ethambutol, and pyrazinamide (PZA) tablets can be crushed or broken into smaller pieces. When deciding whether to crush or break tablets, keep in mind that crushed pills have a stronger flavour than pills cut in half or pills taken as small pieces.

- Rifampin capsules can be pulled apart and emptied into small amounts of food or liquid.

- Crushed tablets or opened capsules administered with a small amount of food are preferable to using liquid forms of TB drugs, especially INH. The syrup form of INH is unlikely to be tolerated in amounts greater than 10 mL to 15 mL (i.e. doses in excess of 100 to 150 mg) because sorbitol used in its preparation can cause abdominal pain, cramping, and/or diarrhea.

- Crushed ethambutol tablets will dissolve in liquid, usually within 10 minutes.

- Crushed or opened TB drugs should be mixed with food or liquid **immediately** before administration. **If a dose is not administered within 30 minutes after mixing, it should be discarded and a new dose should be prepared.**

Some Food Options for Mixing with Crushed, Fragmented or Dissolved Tablets and Opened Capsules

- Non-fat and artificially sweetened puddings
- Non-fat and artificially sweetened yogurt (e.g. Source™ brand)
- Mashed bananas
- Unsweetened applesauce
- Unsweetened baby food

Figure 16-8: Tablet cutter

Figure 16-9: Tablet crusher

Isoniazid (INH) and vitamin B6 tablets before crushing

INH and vitamin B6 tablets after crushing

Once crushed, the INH and vitamin B6 can be mixed with a small amount of low-fat, sugar-free food or liquid

Taking TB Drugs with Food

Isoniazid (INH), vitamin B6, rifampin, pyrazinamide (PZA) and ethambutol can be given together, mixed in the same small amount of food provided this is acceptable to the client.

When mixing TB drugs with a food or liquid:

- Use the smallest quantity/volume possible (e.g. one or two teaspoons of liquid or food);
- Follow medicated food or liquid with food or liquid that does not have TB drugs mixed into it;

- Ensure the dose is consumed **within 30 minutes** of preparation. **If a dose is not administered within 30 minutes after mixing, it should be discarded and a new dose should be prepared.**

Special Considerations in Taking TB Drugs with Food

Isoniazid (INH)

- Should be taken on an empty stomach (i.e. one hour before meals or two hours after eating). If taking INH on an empty stomach causes stomach upset, it can be taken with small amount of **low-fat, sugar-free food**.

- **Avoid using foods or liquids that contain fats or sugars to give with INH or to give in the hour after INH is taken.** Fats slow the absorption of INH. Sugars inactivate INH.

- Some food options that can be offered to clients to take with **or within the hour after INH** include:

    - Non-fat and artificially sweetened puddings
    - Non-fat and artificially sweetened yogurt (e.g. Source™ brand)
    - Mashed bananas
    - Unsweetened applesauce or baby food
    - Sugar-free juice crystals (e.g. Crystal Light™) dissolved in water
    - One-quarter of an egg salad, chicken or tuna sandwich
    - **PLAIN** Cheerios™ (**NOT** Honey Nut or other flavoured kinds)
    - Low fat milk (1% M.F. or less)
    - Hard-boiled eggs (salt and pepper, spices allowed)

- Applesauce works well for administering rifampin that has been removed from its capsule.

Clients with Diabetes

- Schedule DOT visits for two to three hours after the client's last meal (breakfast, lunch); and

- Give DOT with snacks that provide some carbohydrate and some protein, such as:

    - One-half of a egg salad, chicken or tuna sandwich;

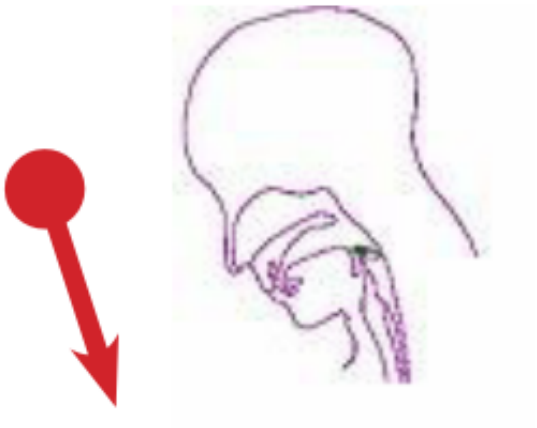
    - A serving of **PLAIN** Cheerios™ (**NOT** Honey Nut or other flavoured kinds) and milk; or

    - One or two small containers of non-fat and artificially sweetened yogurt; or 30 g of cheese (preferably low fat) and low fat crackers.

Clients with Difficulty Swallowing

- Tablets tend to sink; tilting the head up slightly can make them easier to swallow.

- Capsules (e.g. rifampin) tend to float; tilting the head down slightly can make them easier to swallow.



Infants

- If possible, schedule DOT for when the infant is hungry.
- Infants might tolerate the syrup form of INH better than older children.
- Liquid forms of TB drugs should be measured and given to an infant using a medicine dropper with a large tip, an oral medical syringe, or the nipple of a baby's bottle if appropriate. The hole might need to be enlarged if a pacifier or bottle nipple is used.

- TB drugs can be mixed with a small amount (less than 30 mL) of water or **sugar-free** juice/other liquid and administered in a baby's bottle. Ensure the contents of the bottle are consumed **within 30 minutes** of preparation. **If a dose is not administered within 30 minutes after mixing, it should be discarded and a new dose should be prepared.**

- Use a bib to prevent clothing stains from rifampin.

Children and Adolescents

- It can be better to hide bitter or unpleasant TB drugs in a food the child has never eaten before. If a familiar food is used, the child is more likely to notice something has been added to it, and might refuse it or spit it out.

- Use praise and incentives to encourage adherence.

- Younger children might respond well to a small incentive with each dose.

- Allow some negotiation around method for taking the medicine.

Sources:

Alberta Health and Wellness Tuberculosis Prevention and Control Guidelines (2010). Available at: www.health.alberta.ca/documents/TB-Prevention-Control.pdf

Directly Observed Therapy Manual for DOT Programs in British Columbia, June 2011. Available at: http://www.bccdc.ca/resource-gallery/Documents/Communicable-Disease-Manual/Chapter%204%20-%20TB/TB_DOTManual_June2011_Compressed.pdf

Tips for Building Strong DOT Relationships

Treatment for LTBI or active TB can take several months. When clients trust and feel comfortable with their DOT providers, they are more likely to:

- Actively participate in their care and follow treatment and monitoring recommendations;
- Feel more comfortable asking questions about their diagnosis and treatment, which can lead to experiencing less fear/anxiety and a better overall health care experience;
- Access other programs through their DOT providers that could further improve their health (e.g., vaccinations, smoking cessation resources); and
- Adhere to and complete treatment.

To help build strong relationships with DOT clients:

- Explain that you will do everything you can to **protect client confidentiality**;
- "Start where the client is." Being diagnosed with LTBI or active TB can be scary, and the idea of taking TB drugs for a long period of time can be daunting. Try to understand the client's knowledge, beliefs, and feelings about TB and taking treatment for LTBI or active TB;
- Respect the client's right to make decisions about his/her life and care;
- Communicate clearly, and provide complete and accurate information. Using TB Fact Sheets and other client education materials can help (see **Section 15 – TB Fact Sheets**). If you don't know the answer to a client's question, say so. Investigate the answer and provide it to the client as quickly as possible;
- Be on time for DOT appointments;
- Be consistent in what you do and say;
- Have a nonjudgmental attitude when the client makes lifestyle choices that you might not be comfortable with (e.g. drug or alcohol use); and
- Avoid criticizing the client's behaviour when adherence issues come up. Instead, try to engage the client in identifying what might be interfering with adherence. Suggest potential solutions respectfully.

Tips for Communicating Effectively

Try to:

- Assure the client of privacy and confidentiality;
- Listen attentively and respectfully;
- Use open, relaxed body language;
- Avoid being judgmental or accusatory, and never show frustration;
- Use the appropriate language level for the client and simple, non-medical terms whenever possible;
- Reinforce messaging by also providing information in writing and/or in pictures/diagrams;
- Avoid overwhelming the client by:
    - Limiting the amount of information given in any one visit;
    - Discussing the most important topics first and last;
    - Repeating important information.
- Use concrete examples; and
- Check for understanding with open-ended questions and/or by asking the client to share their understanding of what was discussed.

Open-ended Questions

Using open-ended questions can help you get a better understanding of a client's situation and his or her needs than questions that can be answered with "yes" or "no". Open-ended questions begin with words and phrases such as:

- Who
- What
- When
- Where
- Why
- How
- Tell me about
- Explain to me

Some examples of open-ended questions you might find useful are:

- Where would be a good place for us to meet for your DOT?
- What side effects are you experiencing from the TB drugs?
- What would make it easier for you to take your treatment?

Tips for Sharing Information on TB with Clients

Clients are more likely to adhere to and complete treatment when they understand enough about TB, their diagnosis, and the DOT program.

When sharing information on TB with clients, remember that readiness to learn can be affected by:

- Level of anxiety/worry
- Needs and priorities
- Educational background
- Level of maturity
- Past experiences
- Level of denial about the diagnosis

Some open-ended questions you could ask to get a sense of what your client understands about TB and DOT, and where additional information might be needed include:

- How did you find out you had TB (or LTBI)? How did that make you feel?
- What have you been told about TB (or LTBI)?
- What do you know about the DOT program? How did you get this information?
- What have you been told about your treatment?
- What were you told would happen if you missed some of your treatment?

Reinforce the client's understanding throughout treatment. He or she might not remember much of the information provided early on due to TB symptoms and/or anxiety about the TB/LTBI diagnosis or treatment plan. Some information should be reiterated often (e.g. the importance of adherence to treatment).

Use the Nunavut **TB Fact Sheets** to ensure clients receive accurate and consistent information on TB and TB treatment (see **Section 15 – TB Fact Sheets**).

Additional resources are available on the TAIMA TB website:

http://taimatb.tunngavik.com/

Glossary of Terms

Acid Fast Bacteria (AFB): Bacteria that retain specific stains even after being rinsed with an acid solution. The majority of AFB in clinical specimens are mycobacteria, including species other than *Mycobacterium tuberculosis*.

Active TB: Clinical disease caused by mycobacteria included in the *Mycobacterium tuberculosis* complex (MTBC), specifically: *M. tuberculosis* (including subspecies *M. canetti*), *M. bovis*, *M. africanum*, *M. caprae*, *M. microti*, and *M. pinnipedii*. Although *M. bovis BCG* is included in the MTBC, disease caused by *M. bovis BCG* is not included in the Canadian case definition of tuberculosis.

Acquired Drug Resistance: Drug resistance that develops when patients that initially have drug-susceptible TB bacteria become drug-resistant due to inadequate, inappropriate, or irregular treatment (i.e., irregular adherence, non-adherence).

Adherence: Often used interchangeably with 'compliance'. A patient's and health care provider's ability to follow disease management recommendations appropriately (e.g., ingestion of medications, maintaining airborne precautions).

Adverse Effect: An unexpected or dangerous reaction to a drug or an unwanted effect caused by the administration of a drug.

Aerosol: Small droplets that are exhaled or coughed up. In a person with respiratory TB, aerosols can contain TB bacteria (infectious aerosols). TB transmission is primarily due to inhalation of infectious aerosols. Generation of infectious aerosols is greatest with laryngeal TB and cavitary pulmonary TB.

Alanine Aminotransferase (ALT): Also called SGOT. An enzyme found in plasma (blood). ALT is used, often in combination with other blood tests (e.g., AST, bilirubin) as a biomarker for liver health. Elevations in ALT during treatment with TB drugs can be an indication of liver toxicity.

Anergy: A condition that impairs a person's ability to respond accurately to testing antigens (e.g. tuberculin). Anergy can be due to severe immunodeficiency, such as occurs with HIV infection.

Aspartate Aminotransferase (AST): An enzyme found in plasma (blood). AST is used, often in combination with other blood tests (e.g., ALT, bilirubin) as a biomarker for liver health. Elevations in AST during treatment with TB drugs can be an indication of liver toxicity.

Atypical Mycobacteria: See '*Nontuberculous Mycobacteria*'.

Bacillus Calmette-Guérin (BCG): A live attenuated vaccine derived from *Mycobacterium bovis*. BCG vaccine is primarily used to prevent severe forms of active TB in young children however it does not confer 100% protection.

Bactericidal: Capable of killing bacteria. Some TB drugs are bactericidal, while others are bacteriostatic.

Bacteriostatic: Capable of inhibiting the growth or reproduction of bacteria. Some TB drugs are bacteriostatic, while others are bactericidal.

Boosting (Booster Effect, Booster Phenomenon): An increase in tuberculin skin test response when the test is repeated one week to one year later, without known exposure to an infectious TB case. Boosting usually occurs in people that were infected with TB bacteria many years ago (e.g. the elderly). It can also occur in those vaccinated with BCG and people with sensitivity to nontuberculous mycobacterial antigens. The initial negative response is due to a failure of the immune system to recall the infection immunologically. Two-step tuberculin testing is recommended in situations where serial TSTs are anticipated (e.g. annual testing of health-care workers) to prevent mislabeling of new positive TST reactions as 'conversions'.

Break in Contact: When exposure to a person with infectious active TB ends. For example: when the case is placed in airborne infection isolation; when the case becomes non-infectious after a period of treatment; or the date on which a contact last shared airspace with a case while the case was still infectious.

Cavitary TB: Radiologic (e.g. chest x-ray) or pathologic evidence of lung destruction resulting in cavities or cystic areas that communicate with a bronchus. Cavities generally contain large numbers of bacteria. As a result, cases with cavitary pulmonary TB tend to be highly infectious.

Cell Mediated Immunity (CMI): An immune response that occurs in response to an antigen. CMI involves activation of phagocytes, natural killer cells, antigen-specific cytotoxic T-lymphocytes, and the release of various cytokines. Presentation of active TB is influenced by the capacity of the host's immune system to mount effective CMI responses.

Contact: A person exposed to an infectious TB case.

Contact Investigation: A systematic process for identifying people exposed to someone with infectious active TB, evaluating them for latent TB infection (LTBI) and active TB, and when appropriate, providing them treatment for LTBI or active TB.

Conversion: An increase in the size of a tuberculin skin test (TST) reaction on repeated testing that reflects new TB infection. Tuberculin conversion is defined as induration of 10 mm or greater when an earlier test resulted in a reaction of less than 5 mm. If the earlier result was between 5 mm and 9 mm, there are two criteria:

1. **An increase of 6 mm or more** – this is a more sensitive criterion, which is suggested for those who are immune compromised with increased risk of active TB or during an outbreak.

2. **An increase of 10 mm or more** – this is a less sensitive but more specific criterion. In general, the larger the increase, the more likely that it is a true conversion.

Converter: Might also be referred to as a "Mantoux converter". A person with a positive tuberculin skin test (TST) result who had a documented negative TST result in the previous two years.

Culture-Positive: When a clinical specimen (e.g., sputum, body secretion, tissue) exhibits growth of *M. tuberculosis* complex in a laboratory culture.

Delayed Type Hypersensitivity (DTH): A cell mediated immune response to an antigen. Induration at the site of a tuberculin skin test (TST) is an example of a DTH reaction.

Directly Observed Treatment (DOT): Also known as 'directly observed therapy'. The process whereby the ingestion each dose of TB drugs is observed by a health care provider or delegate.

Disseminated TB: Active TB occurring in three or more sites simultaneously or where there is evidence of hematogenous spread of TB bacteria (e.g. blood culture[s] that are positive for TB bacteria). See also '*Miliary TB*'.

Drug Resistance: Reduced effectiveness of a drug in curing a disease or condition, as determined by laboratory testing (see '*Drug Susceptibility Testing'*). Drug-resistant TB that occurs as a result of infection with drug-resistant TB bacteria (e.g. during exposure to a case with drug-resistant TB) is referred to as 'primary drug resistance'. Drug resistance that develops during TB treatment through inadequate, inappropriate, or irregular treatment is referred to as 'acquired drug resistance'.

Drug Susceptibility Testing (DST): Laboratory testing to gauge the effectiveness of individual drugs against the strain(s) of TB bacteria present in a clinical specimen (positive TB culture). Drugs included in the standard, initial DST are the four first-line TB drugs: isoniazid (INH); rifampin; pyrazinamide (PZA); and ethambutol. If resistance to any of the first-line drug is identified, additional DST might be done to identify other TB drugs (e.g. second-line TB drugs) that could be used to supplement the treatment regimen.

Enabler: A practical item given to a patient to facilitate adherence to TB treatment and/or monitoring (e.g. a taxi voucher).

Extensively Drug-Resistant TB (XDR-TB): TB disease caused by bacteria that are resistant to at least isoniazid (INH) and rifampin AND any fluoroquinolone AND at least one of three injectable second-line TB drugs (capreomycin, kanamycin and amikacin). Treatment of XDR-TB is more expensive, less effective, longer, and has more side effects than treatment of active TB caused by bacteria with lesser or no, TB drug resistance.

Extrapulmonary TB: Active TB that occurs outside of the lungs and respiratory tract. Includes: tuberculous pleurisy; TB of the intrathoracic lymph nodes, mediastinum, nasopharynx, nose (septum) or sinus (any nasal); and all non-respiratory sites. This term is often used interchangeably with non-respiratory TB, but the definitions are slightly different.

First-Line TB Drugs: Isoniazid (INH), rifampin, ethambutol, and pyrazinamide (PZA). **NOTE:** Streptomycin is no longer considered a first-line TB drug in Canada.

Granuloma: A collection of macrophages that forms when the immune system attempts to wall off substances such as TB bacteria, that it perceives as foreign, but is unable to eliminate. Over time, calcium can deposit on granulomas, resulting in 'calcified granulomas'.

Hepatotoxic: Capable of causing liver injury/damage. Many important TB drugs are hepatotoxic, including isoniazid (INH), rifampin and pyrazinamide (PZA).

High TB Incidence Countries/Territories: Countries/territories with TB incidence rates (all forms, 3-year average) estimated by the World Health Organization to be 30 cases per 100 000 or higher. To view current international TB incidence rates, refer to: http://www.publichealth.gc.ca/tuberculosis

Incentive: An item given to a patient to encourage or acknowledge adherence to treatment.

Index Case: The first TB case identified; the initial case from which a contact investigation begins.

Induration: Soft tissue swelling (**not** redness/erythema) that is measured when determining the tuberculin skin test response to purified protein derivative (PPD, also known as 'tuberculin').

Infectious TB: Forms of active TB that can allow TB bacteria to be transmitted through the production of infectious aerosols (e.g. by coughing). Cavitary pulmonary TB and laryngeal TB are considered the most infectious forms of active TB.

Interferon Gamma Release Assay (IGRA): A blood test to detect infection with TB bacteria. IGRA does not differentiate between latent TB infection (LTBI) and active TB. IGRA testing **can** differentiate between infection with TB bacteria and prior BCG vaccine. Some nontuberculous mycobacteria such as *M. kansasii*, *M. marinum*, *M. szulgai*, and *M. flavascens* can cause false-positive IGRA results.

Intermittent Treatment / Intermittent Therapy: TB treatment that is prescribed to be given less frequently than daily. Three-times-weekly treatment might be prescribed for people with active TB after a period of daily treatment. Twice-weekly intermittent therapy is commonly used throughout the treatment of latent TB infection (LTBI). Intermittent treatment, whether for active TB or LTBI, must always be administered as directly observed therapy (DOT).

Intradermal: The injection method used for tuberculin skin testing and for BCG vaccination.

Latent Tuberculosis Infection (LTBI): The presence of infection with TB bacteria, without evidence of clinically active TB. Clients with LTBI have no TB symptoms, no evidence of radiographic changes that suggest active TB, and negative microbiotic tests (e.g. negative TB smears and cultures). LTBI is not infectious. Treatment of LTBI can prevent development of active TB.

Mantoux Converter: See '*Converter*'.

Mantoux Test: See '*Tuberculin Skin Test*'.

Miliary TB: Active TB occurring in three or more sites simultaneously or where there is evidence of hematogenous spread of TB bacteria (e.g. blood culture[s] that are positive for TB bacteria). Chest x-ray findings can include diffuse micro-nodules. See also '*Disseminated TB Disease*'.

Multidrug Resistant TB (MDR-TB): Active TB caused by bacteria that are resistant to isoniazid (INH) and rifampin, with or without resistance to other first- or second-line TB drugs. Treatment of MDR-TB is more expensive, less effective, longer, and has more side effects than treatment of active TB caused by bacteria with lesser or no, TB drug resistance.

Mycobacteria Other Than TB (MOTT): See '*Nontuberculous Mycobacteria*'.

***Mycobacterium tuberculosis* Complex:** A group of mycobacteria that includes *Mycobacterium tuberculosis* (including subspecies *Mycobacterium canetti*), *M. bovis, M. bovis BCG, M. africanum, M. caprae, M. microti,* and *M. pinnipedii*. All of these species of mycobacterium expect *M. bovis* BCG are included in the Canadian case definition of tuberculosis.

Non-Pulmonary TB: See '*Non-Respiratory TB*'.

Non-Respiratory TB: Refers to all other sites of active TB not included in the definition of respiratory TB. Some sites of non-respiratory TB include: peripheral lymph nodes (TB lymphadenitis), the central nervous system (e.g. TB meningitis), the genitourinary system, the abdominal cavity, and the bones and joints.

Nontuberculous Mycobacteria (NTM): Mycobacteria that do not cause active TB or leprosy. See also '*Atypical Mycobacteria*' and '*Mycobacteria Other Than TB*' (MOTT). Common examples include: *M. avium* complex (MAC), *M. kansasii*, and *M. abscessus*.

Nucleic Acid Amplification Test (NAAT): A process whereby genetic material is amplified and then subsequently evaluated for the presence of DNA material; useful to identify specific mycobacterial species.

Outbreak: When there are more TB cases than expected within a geographic area or population during a particular time period, and there is evidence of recent transmission of TB bacteria among those cases.

Peripheral Neuropathy: A problem with the functioning of the nerves outside the spinal cord. Symptoms of peripheral neuropathy can include numbness, weakness, burning pain (especially at night), and loss of reflexes.

Polymerase Chain Reaction (PCR): A method of nucleic acid amplification; see '*Nucleic Acid Amplification Tests*'.

Preventive Therapy (Treatment of Latent TB Infection): Formerly called 'chemoprophylaxis' or 'TB prophylaxis'. Treatment to prevent active TB. Most frequently given to people with tuberculin skin test and/or interferon gamma release assay results that suggest latent TB infection (LTBI), and who have no signs or symptoms of active TB.

Primary Prophylaxis: See '*Window Period Prophylaxis*'.

Primary TB: Active TB that develops within two years of infection with TB bacteria.

Proxy Interview: An interview with a person that is familiar with a TB case's practices, habits and behaviours (e.g., parent, guardian, spouse).

Pulmonary TB: In Canada, pulmonary TB refers to active TB of the lungs and conducting airways, which includes tuberculous fibrosis of the lung, tuberculous bronchiectasis, tuberculous pneumonia, tuberculous pneumothorax, isolated tracheal or bronchial TB, and tuberculous laryngitis.

Purified Protein Derivative (PPD): A standardized preparation of purified protein from *M. tuberculosis*. PPD is the antigen used for tuberculin skin testing (TST).

Reactivation TB: Active TB that develops more than two years after infection with TB bacteria.

Recurrence: When a person who was treated for active TB in the past develops active TB again, and the second episode of active TB seems to have been caused by a different TB organism (e.g. TB genotypes from the two episodes do not match).

Relapse: When a person who was treated for active TB in the past develops active TB again, and the second episode seems to have been caused by the same TB organism (e.g. TB genotypes from the two episodes match).

Respiratory TB: In Canada, respiratory TB includes primary TB, pulmonary TB, tuberculous pleurisy (non-primary) and TB of the intrathoracic lymph nodes, mediastinum, nasopharynx; nose (septum) and sinus (any nasal).

Reverse Contact Investigation: See '*Source Case Investigation*'.

Secondary Case: An infected contact that develops active TB.

Second-Line TB Drug: TB drugs used as alternatives to treatment with first-line TB drugs (e.g., when the organism is resistant to first-line TB drugs, when the person is allergic to first-line TB drugs).

Smear: A laboratory technique for preparing specimens to be examined for bacteria under a microscope. During smear examinations for TB bacteria, a particular staining and rinsing technique is used (see '*Acid Fast Bacteria*'). Smears reported as being "positive for acid-fast bacteria" (AFB smear-positive) require further testing to determine whether the bacteria are TB bacteria, or another acid-fast bacteria.

Source Case: The person who is the source of infection with TB bacteria for secondary case(s) or contacts. A source case is not necessarily the index case. For example, when a young child is the first case identified in household (the index case), the origin of his/her infection with TB bacteria (the source case) was likely a parent, grandparent or older sibling.

Source Case Investigation: Also known as '*reverse contact investigation'*. A systematic process to find the source of transmission (source case) when infection with TB bacteria is thought to be recent (e.g. when a young child develops active TB).

TB Case: A person with active TB.

TB Genotyping: A laboratory-based method to determine the genetic pattern of the strain of TB bacteria that caused active TB in a person. Comparing TB genotypes between and among TB cases can be helpful to: identify transmission patterns; confirm/rule out transmission between/among cases; identify TB outbreaks; differentiate between relapse and re-infection in people diagnosed with active TB more than once; and identify or rule out instances of cross-contamination in laboratory specimens.

Treatment Failure: When a case has positive sputum cultures after four or more months of treatment or two positive sputum cultures in different months during the last three months of treatment, even if the final culture is negative and no further treatment is planned.

Tuberculin Skin Test (TST): Also known as a *'Mantoux tuberculin skin test'* or 'a TB skin test'. Used to determine whether a person has been infected with TB bacteria.

Tuberculin Skin Test (TST) Converter: See '*Converter*'.

Two-Step Tuberculin Skin Test (Two-Step TST): A testing protocol during which a second TST is performed one to four weeks after an initial "negative" TST reaction is documented. Two-step TSTs are done to establish accurate baseline TST results for people that will be having TSTs done at regular intervals (e.g. health care workers).

Window Period: The time between a contact's last exposure to an infectious case and when a tuberculin skin test or interferon gamma release assay can accurately detect whether s/he is infected with TB bacteria, generally up to eight weeks later.

Window Period Prophylaxis (WPP): Also known as '*primary prophylaxis*'. Treatment given to a high-risk contact (e.g. child under five years of age) to prevent development of active TB during the window period. WPP may also be recommended for immunocompromised contacts on a case-by-case basis by a respirologist or infectious disease specialist.

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