

Tuberculosis (TB) is a contagious infectious disease caused by the bacteria *Mycobacterium Tuberculosis*, a slow-growing bacteria that grows best in areas of the body that have an abundance of blood and oxygen. For that reason, it is most often found in the lungs. TB can damage a person's lungs or other parts of the body and cause serious illness. TB is spread through the air when a person with TB disease coughs, sneezes or speaks, sending germs into the air.

In British Columbia, there are approximately 300 new cases of active TB disease per year. Maintaining appropriate awareness of TB among health care professionals is critical to reducing transmission and initiating early prevention and treatment. Screening refers to a process that attempts to discover conditions suitable for early preventative or curative measures. The goal is to prevent transmission of TB to staff and persons in care. The Tuberculosis Manual can be found on the Ministry of Health/British Columbia Center for Disease Control website:

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

#### **Licensed Child Care Facilities:**

Routine tuberculosis screening is generally not recommended for employees of child care facilities or those parents ordinarily present at licensed child care facilities, except those working in facilities located in indigenous communities.

A review of provincial TB cases shows that no child had been infected as a result of exposure to a child care worker in non-indigenous communities in BC within the last ten years. Screening child care employees is logistically difficult and can be costly due to the large turnover of employees. Historically, high rates of latent TB infection and active TB disease in indigenous communities have created an environment at increased risk for the development and transmission of TB. The incidence of TB disease in some indigenous communities is greater than that of Canadian-born/non-indigenous persons. These recommendations may be changed at the discretion of the local Medical Health Officer depending on local context and in consultation with indigenous partners, including the First Nations Health Authority.

#### **Licensed Residential Care Facilities:**

Routine tuberculosis screening is required for all health care workers present in a licensed care facility.

Persons being admitted to a licensed community care facility should be assessed for their risk of tuberculosis by a health care professional, and that health care professional must document the screening process. Persons who are admitted into community living facilities, hospices or child/youth facilities are in low risk settings for tuberculosis. Given person in care population characteristics, they are not required to have a TB test completed.

Person in care screening for all other licensed care facilities should be completed using the TB Symptom and Risk Factor Screening Tool [sample provided below], as well as tuberculin skin test (TST) or chest x-ray (CXR) if indicated on the chart below. The Medical Health Officer (MHO) may make alternative policy decisions based on local disease incidence and prevalence.

Screening is done to minimize the risk of spreading active TB disease as persons in care in community living facilities tend to remain for long periods of time in an environment, which would pose a risk to both the staff and the other persons in care. Preventing a case of TB from spreading within a facility reduces the need for extensive contact tracing and keeps others healthy. Routine screening also identifies persons in care with latent TB infection who may be eligible for preventative treatment.

<b>Timeframe for Initiating TB Screening</b>	<b>TB Symptom &amp; Risk Factor Screening Tool</b>	<b>Tuberculin Skin Test (TST)</b>	<b>Chest X-Ray (CXR) &amp; Referral to TB Services</b>
<b>Persons in care &lt;60 years of age:</b> Complete prior to admission (May be done within one month prior to admission if not symptomatic) *See exclusions below [Appendix A Sample Screening Tool Below]	Yes.	Yes.	Yes. If symptomatic, or TST contraindicated, or TST result >10 mm, or immune compromised.
<b>Persons in care &gt; 60 years of age:</b> Complete prior to admission (May be done within one month prior to admission if not symptomatic) *See exclusions below [Appendix A Sample Screening Tool Below]	Yes.	No.	Yes. Only if symptomatic OR screening indicated by TB Symptom & Risk Factor Screening Tool.
<b>Employees:</b> Upon starting employment or at the discretion of the employer/institution (Applies to all employees of Adult Care Facilities including Detox Centres & Person in care Drug & Alcohol Treatment Programs)	No.	Yes. At time of hire OR documentation of negative TST screening at the time of first hire in BC AND no subsequent TB exposures/risk factors since that screening.	Yes. If symptomatic, or TST contraindicated, or TST result >10 mm, or immune compromised.
<b>Volunteers:</b> [Appendix B Sample Screening Tool Below]	Yes. Upon hire, facilities should develop a TB screening tool and must retain a record of the screening.	Optional. But is recommended for all healthcare volunteers wishing to have baseline screening.	Yes. Only if symptomatic.

## Exceptions in Licensed Adult Person in Care Facilities\*:

### 1. Exclusions:

#### Specified Service Types:

- Community Living, Hospice and Child/Youth Service Types:
  - Routine screening is NOT required. (For the purposes of this InfoSheet, “licensed group home” is defined as the person in care service types of Community Living, Hospice and Child and Youth Care as set out in the Care Regulation (RCR).
  - Licensed group home screening should be based on contact tracing of active TB cases.
- Mental Health, Acquired Brain Injury and Substance Abuse Service Types:
  - Persons in care of these types of service types fall under the same screening requirements as licensed adult person in care facilities and are NOT excluded from screening. Adults under 60 years of age should be screened with TST (or CXR if TST contraindicated) prior to or shortly after admission.
  - Adults over 60 years of age should be screened with the TB Symptom & Risk Factor Screening tool and CXR if indicated after completion of the screening tool.

#### Exclusions for Employees:

- TST is the preferred screening test for employees.
- Documentation of previous TB screening (TST or CXR) done for another BC employer is an acceptable alternative if there were NO subsequent TB exposures (including travel to endemic regions) or new risk factors since the time of the previous screening.
- TST screening is safe in pregnancy. Pregnant employees should have CXR screening following delivery. Contact TB Control if symptomatic.

#### Exclusion for Tuberculin Skin Test (TST) (Employees and Persons in Care):

- Previous treated TB disease.
- History of anaphylaxis or severe reaction to TST.
- Documented previous positive TST—should proceed to CXR.

### 2. Employees Rejoining a Facility, Coming From Another Facility or Without Documentation:

The following employees of licensed adult person in care facilities should be screened for tuberculosis as follows:

- All current employees who have no documentation of a TST test or other tuberculosis specific screening (i.e., CXR).
- Employees rejoining the facility after an absence with complete documentation of previous TB screening in BC do not need to have this screening repeated unless there has been known contact with active tuberculosis OR other new TB risk factor since the time of previous screening.

**3. Retesting:**

- No routine TB screening of a person in care is required unless specifically recommended by Island Health TB Program or Infection Control (Island Health operated facilities).
- On occasion, routine screening of employees by a facility may be done for an exceptional reason, in consultation with the Island Health TB Program or Island Health Occupational Health (for Island Health operated facilities).

**4. Respite:**

- Persons being admitted into Respite care should be considered as if they are being received into full-time care at the first admission i.e., a TB Symptom & Risk Factor Screening Tool or TST (depending on persons in care's age) should be administered for the first admission. Results should stay with the chart/persons in care's admission record for future admissions, but screening does not need to be repeated for subsequent readmissions.

**5. Transfers From Other Facilities:**

- If a person in care is transferring between facilities and has continuously been in care, whether in a licensed or unlicensed facility, and documented screening was completed prior to that person's admission to the transferring facility, repeat screening (including a chest x-ray) is not required prior to admission to the next facility. Screening results should stay with the chart/persons in care's admission record to the facility receiving the transfer.

**6. Detox Services:**

- For detox services, the goal is to identify and treat individuals with active TB disease and prevent transmission to a vulnerable population in group settings. Detox facilities are often short stay settings. Thus, TB Control does not recommend TB skin testing as it requires a reading 48 to 72 hours after initial planting and only indicates infection as opposed to active disease. Chest X-rays (CXR) and symptom assessment, using the TB Symptom & Risk Factor Screening Tool are more valuable tools in ruling out active disease, which is the goal in screening for admission to detox and treatment centers. Sputum collection may be required if the person in care is symptomatic or has an abnormal CXR.
- Admission to detox and person in care treatment should not be delayed or denied because of barriers to accessing TB screening. TB screening may occur after admission to a facility and screening should occur as soon as possible after admission, ideally less than one week after admission.

**7. Substance Use Treatment Centres:**

- For person in care in substance use treatment centres, the goal is to identify and treat individuals with active TB disease and prevent transmission to a vulnerable population in group settings. Depending on the length of stay/treatment, it may be appropriate to screen a person in care using the TB Symptom & Risk Factor Screening Tool, CXR (recommended for shorter stays) or with TST (recommended if person in care likely to return for TST read). Symptom assessment is also necessary. Sputum collection may be required if the person in care is symptomatic or has an abnormal CXR.

- Admission to detox and person in care treatment should not be delayed or denied because of barriers to accessing TB screening. TB screening may occur after admission to a facility and screening should occur as soon as possible after admission, ideally less than one week after admission.

<b>Persons in care and Timeframe for Initiating TB Screening</b>	<b>TB Symptom &amp; Risk Factor Screening Tool</b>	<b>Tuberculin Skin Test (TST)</b>	<b>Chest X-Ray (CXR) and Referral to TB Services</b>
Entering Detox and/or Person in Care Drug & Alcohol Treatment Programs:  Complete prior to or following entry to facility if not symptomatic.	Yes.	Yes. If persons in care likely to return for TST read in 2 days.	Yes. If persons in care is unlikely to return for TST read, or symptomatic, or TST is contraindicated, or TST result >10 mm, or immune compromised.

**8. Recordkeeping:**

- All records and chest x-ray reports should be kept for as long as the person is in care of the facility or if the individual is an employee of the facility. Screening results for all persons in care and all employees should be available to be reviewed by Licensing staff.

**9. Missing Records for Person in Care:**

- It may be that person in care were screened and/or tested at one time, but that the records no longer exist at some facilities. If the records are “missing or lost”, the facility should discuss with the health professional most responsible for the person in care to obtain screening records or have affected person in care screened for TB using the TB Symptom & Risk Factor Screening Tool. If a facility has no record of either TB screening or testing for a person in care, they are in non-compliance with the RCR.

Note: Records may be available through the physician/health unit/TB clinic depending on how long ago the screening occurred, but it is possible that to be in compliance with the legislation, the facility might have to arrange for screening for a person in care. Please consult with your Licensing Officer.

Appendix A  
SAMPLE

**TUBERCULOSIS SYMPTOM & RISK FACTOR SCREENING TOOL**

**\*Symptoms of active TB may include:**  
Cough (esp. productive), Hemoptysis, Night Sweats, Fever,  
Recent Weight Loss, Chest Pain and Lymphadenopathy.

**HEALTH PROFESSIONAL MUST COMPLETE AND SIGN PART A OR PART B**

**PLEASE ONLY MARK THE APPROPRIATE BOXES**

<p><b>1. Unless contraindicated, a TUBERCULIN SKINTEST (TST) within the past six months is REQUIRED</b> <i>(Please check all appropriate boxes on the right)</i></p>	<p><input type="checkbox"/> TST Contraindicated <b><i>(proceed to Section 2 below)</i></b></p> <p><input type="checkbox"/> TST Completed RESULT:</p> <p style="padding-left: 20px;"><input type="checkbox"/> Negative. If <b>NEGATIVE</b>, no further testing is required. <b>unless</b> patient is symptomatic (see Section 2).</p> <p style="padding-left: 20px;"><input type="checkbox"/> Positive. If <b>POSITIVE</b>, a CHEST X-RAY is <b>REQUIRED</b>.</p> <p><input type="checkbox"/> Chest X-Ray Completed RESULT:</p> <p style="padding-left: 20px;"><input type="checkbox"/> Negative. If <b>NEGATIVE</b>, no further testing is required.</p> <p style="padding-left: 20px;"><input type="checkbox"/> Positive. If <b>POSITIVE</b>, referral to TB Services is required.</p> <p><input type="checkbox"/> Referral to TB Services completed. <b><i>(completion of Section 2 is not required)</i></b></p>
<p><b>2. IF TST is contraindicated OR IF the patient is symptomatic* a CHEST X-RAY is REQUIRED</b></p> <p style="padding-left: 20px;"><input type="checkbox"/> TST Contraindicated.</p> <p style="padding-left: 20px;"><input type="checkbox"/> Patient is symptomatic. <i>(Please check all appropriate)</i></p>	<p><input type="checkbox"/> Chest X-Ray Completed RESULT:</p> <p style="padding-left: 20px;"><input type="checkbox"/> Negative. If <b>NEGATIVE</b>, no further testing is required.</p> <p style="padding-left: 20px;"><input type="checkbox"/> Positive. If <b>POSITIVE</b>, referral to TB Services is required.</p> <p><input type="checkbox"/> Referral to TB Services completed.</p>

I have checked the appropriate boxes above AND have attached the results of the TST and/or CXR as indicated.

**SIGNED:**

Date: <u>YYYY/MM/DD</u>	Name: PRINTED	Designation:	Telephone:
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**\*Symptoms of active TB may include:**  
Cough (esp. productive), Hemoptysis, Night Sweats, Fever,  
Recent Weight Loss, Chest Pain and Lymphadenopathy.

**HEALTH PROFESSIONAL MUST COMPLETE AND SIGN PART A OR PART B**

**PLEASE ONLY MARK THE APPROPRIATE BOXES**

<b>PART B</b> <b>For patients who are 60 years of age or older</b>	
<b>1.</b> Is this patient symptomatic?* <input type="checkbox"/> Yes. <b>(CHEST X-RAY is required; please indicate results in the column to the right)</b> <input type="checkbox"/> No. <b>(proceed to 2 below)</b>	<input type="checkbox"/> Chest X-Ray Completed <b>RESULT:</b> <input type="checkbox"/> Negative. <b>If <u>NEGATIVE</u>, no further testing is required.</b> <input type="checkbox"/> Positive. <input type="checkbox"/> If <b><u>POSITIVE</u></b> , referral to TB Services isrequired. <input type="checkbox"/> Referral to TB Services completed. <b>(completion of Section 2 is not required)</b>
<b>2.</b> Does the patient have any of the following riskfactors (mark all that apply): <input type="checkbox"/> HIV/AIDS <input type="checkbox"/> Organ Transplant <input type="checkbox"/> Substance use <input type="checkbox"/> Is an immigrant from a High PrevalenceCountry** <input type="checkbox"/> Recent travel to a High Prevalence Country** <input type="checkbox"/> Homeless or under-housed <input type="checkbox"/> Immune suppressing medication <input type="checkbox"/> History of hepatitis <input type="checkbox"/> History of tuberculosis <b>(now complete the right hand column)</b>	<input type="checkbox"/> None of these risk factors are present and therefore a <b><i>CHEST XRAY IS NOT REQUIRED.</i></b> <input type="checkbox"/> One (or more) risk factors apply as indicated onthe left and therefore a <b><i>CHEST XRAY is REQUIRED.</i></b> <input type="checkbox"/> Chest X-Ray Completed <b>RESULT:</b> <input type="checkbox"/> Negative. <b>If <u>NEGATIVE</u>, no further testing is required.</b> <input type="checkbox"/> Positive. <b>If <u>POSITIVE</u>, referral to TB Services isrequired.</b> <input type="checkbox"/> Referral to TB Services completed.

I have checked the appropriate boxes above AND have attached the results of the TST and/or CXR as indicated.

**SIGNED:**

<b>Date:</b> <u>YYYY/MM/DD</u>	<b>Name:</b> PRINTED	<b>Designation:</b>	<b>Telephone:</b>
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**\*\*High Prevalence Countries:** Brazil, Russian Federation, *AFRICA* (including Angola, Central African Republic, Congo, Democratic Republic of Congo, Ethiopia, Kenya, Lesotho, Liberia, Mozambique, Namibia, Nigeria, Sierra Leone, South Africa, Tanzania, Zambia, Zimbabwe); *SOUTH ASIA* (including Bangladesh, India, Pakistan); *SOUTH EAST ASIA* (including Cambodia, China, Indonesia, Myanmar, North Korea, Papua New Guinea, Philippines, Thailand, Vietnam).

***If unsure of the TB incidence in a country not listed above, please consult with the Island TB program.***

**SAMPLE**

**TUBERCULOSIS SYMPTOM & RISK FACTOR SCREENING TOOL FOR VOLUNTEERS**

Please complete the following questions:

1. Have you ever had active Tuberculosis? YES / NO
  
2. Have you been experiencing any of the following symptoms for longer than one month?
  - Persistent cough: YES / NO
  - Excessive fatigue: YES / NO
  - Unexplained weight loss: YES / NO
  - Coughing up blood: YES / NO
  - Excessive night sweats: YES / NO
  - Persistent fever: YES / NO

**IF YOU HAVE ANSWERED YES TO ANY OF THE ABOVE:**

- You will need to make an appointment with your family physician/health professional to rule out a communicable condition (such as active tuberculosis). If a TB scratch/skin test is required, you will need to go to the Island Health TB Clinic (Victoria) or the nearest Public Health Unit. Inform the clinic/unit that you are planning to volunteer at a licensed facility.
- The results of your TB screening will need to be documented below and returned to your Manager/Coordinator of Volunteer Resources before you may begin volunteering.

Please note: It is recommended by Health Canada that people who travel to areas of high TB prevalence (e.g., China, India, Pakistan, Bangladesh, Philippines, some countries in South East Asia and Africa) have TB testing before and upon their return through a travel clinic.