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IMPORTANT INFORMATION
This BC Renal guideline/resource was developed to support equitable, best practice care for patients with chronic kidney disease living in BC. The guideline/resource promotes standardized practices and is intended to assist renal programs in providing care that is reflected in quality patient outcome measurements. Based on the best information available at the time of publication, this guideline/resource relies on evidence and avoids opinion-based statements where possible; refer to www.bcrenalagency.ca for the most recent version.

1.0 Scope of Guideline

This guideline provides tuberculosis (TB) screening and follow-up recommendations and procedures for incident (new to dialysis) adult peritoneal dialysis patients.

The guideline is applicable to all new Peritoneal Dialysis (PD) patients attending training at the regional PD outpatient units in British Columbia.

2.0 Summary of the Literature & Internet

Tuberculosis (TB) is a disease caused by the bacteria *Mycobacterium tuberculosis* that is spread from person to person through droplets in the air. TB usually affects the lungs, but it can also affect other parts of the body, such as lymph nodes, the brain, kidneys or the spine.

M. tuberculosis can exist in an active or latent state in the human body:

1. **Active TB**, also called TB disease, is usually symptomatic and often transmissible. With active TB, tests for TB bacteria are usually positive and radiologic tests may be abnormal.

2. **Latent TB infection (LTBI)**, also called TB infection, is the presence of latent or dormant TB bacteria in the body but no evidence of active TB. This means that the person does not have TB symptoms, there is no evidence of radiographic changes consistent with active TB and microbiologic tests are negative. LTBI is not infectious; however, if left untreated, healthy persons diagnosed with LTBI have a 5-10% lifetime risk of progressing to active TB. This percentage increases significantly when additional risk factors exist, such as end-stage kidney disease, with cited relative risks ranging from 7 - 50 times the background incidence (Canadian TB Standards, 7th Edition, 2014).

This guideline provides recommendations aimed at reducing the incidence of active TB in the chronic kidney disease (CKD) population in BC through incident screening and identification and treatment of dialysis patients with LTBI. Treatment of patients with LTBI will reduce the number of active TB cases in the dialysis population, avoiding time and labour intensive contact follow-up. Fewer active cases will, in turn, reduce transmission of TB within the larger CKD population.

The TB screening program recommended for dialysis patients in this guideline includes 3 components:

1. **TB screening questionnaire**
2. **Chest radiography (x-ray)**
3. **Interferon Gamma Release Assays (IGRA)**

   - IGRAs are immunological tests that are (1) not influenced by prior BCG vaccine or exposure to most nontuberculous mycobacteria; and (2) are more robust that Tuberculin skin Test (TST) in their performance in immunocompromised patients (including those on dialysis) (BCCDC, 2019).

   - The traditional Tuberculin Skin Test (TST) has a high false negative rate (because of a high prevalence of anergy in dialysis patients). The IGRA is reported to be a more sensitive test than the TST in the dialysis population, while offering a comparable level of specificity (Ferguson, 2014). Further, compared to the TST, the IGRA was associated more strongly with risk factors for LTBI in end-stage kidney disease (Rogerson, 2013).

   - The sensitivity and specificity of testing varies depending upon the population being tested (BCCDC, 2019).
There are two types of IGRA tests available in BC: (1) QuantiFERON®-Gold Plus (QFT® - Plus) (Enzyme-linked Immunosorbent Assay (ELISA) on whole blood); and (2) T-SPOT® (Enzyme-linked Immunospot Assay on peripheral blood mononuclear cells). These tests appear to have similar sensitivity and specificity, however, QFT®-Plus is easier to use and less expensive. As a result, QFT®-Plus is used more often in TB screening of dialysis patients in BC.

3.0 Recommendations

Recommendation #1: Screen all incident (new) peritoneal dialysis patients for TB during the initial week of training. The only exceptions are patients who previously had:

- A previous reactive IGRA test with documented LTBI treatment; or
- Documented previous active TB disease or LTBI which has been treated; or
- TB screening when they started hemodialysis (HD) following the same protocol as recommended in this guideline.

In general, repeat or serial IGRA testing is not recommended. However, in certain circumstances, it may be appropriate, most commonly with TB exposure as a part of contact investigation or with high-risk travel. Consultation with TB Services on a case-by-case basis is recommended.

Please ensure that CORR data elements are up to date in PROMIS (within the last 30 days).

Recommendation #2: Utilize a three-component protocol to screen for TB:

1. TB screening questionnaire
2. IGRA blood test (QFT-GIT)
3. Chest x-ray within the past 3 months

See Appendix 1 for an overview of the TB screening workflow.

TB screening questionnaire (see Appendix 2 for an example of screening questionnaire and Appendix 3 for samples of PROMIS screenshots)

This questionnaire is available as a fillable form in PROMIS. Print the questionnaire from PROMIS (demographics will auto populate), discuss the questions with the patient and enter the responses into PROMIS. BC Centre for Disease Control (BCCDC) will have access to the completed questionnaire, along with the results of the IGRA test and chest x-ray, in PROMIS for analysis.

IGRA testing (see Appendix 4 for example of IGRA lab requisition)

The IGRA lab requisition is available in PROMIS (demographics will auto populate). Print the requisition from PROMIS and place with the blood sample prior to sending to the laboratory. BE SURE TO USE THE IGRA LAB REQUISITION IN PROMIS and not the standard lab requisition. Please refer to “Section 4.0 Procedures” for details.

IGRA blood samples may be drawn in any hospital with an in-centre PD unit that has been designated (trained and set up) as an IGRA collection site by the BCCDC Provincial Health Laboratory.¹

¹ All hospitals with PD units are IGRA collection sites.
Please note that IGRA blood samples may be drawn on certain days of the week in your hospital lab. Samples are processed in any hospital that has been designated (trained and set up) as an IGRA processing site. Accurate results rely on specific collection methods and care of samples after the blood draw.

- If the receiving laboratory is a designated IGRA processing site:
  - Samples are incubated for 16-24 hours.
  - Samples are centrifuged and the plasma portion pipetted off into new vials.
  - Plasma samples are transported to the BCCDC Public Health Laboratory for analysis.

- If the receiving laboratory is NOT a designated IGRA processing site:
  - The receiving laboratory packages the samples (insulated so that the samples are maintained at room temperature).
  - The receiving laboratory transports the samples to a designated IGRA processing site within the HA for processing (Note: samples must be incubated with 16 hours of collection at the designated IGRA processing site).

BCCDC will have access to the results of the IGRA test, along with the completed questionnaire and chest x-ray report, in PROMIS for analysis. The results of the IGRA tests are usually available within 1 week of the sample being drawn.

Chest x-ray (see Appendix 5 for example of chest x-ray requisition)

The chest x-ray requisition is available in PROMIS (demographics will auto populate). Print the requisition and give to the patient. BE SURE TO USE THE CHEST X-RAY REQUISITION IN PROMIS and not the standard radiology requisition. Refer to “Section 4.0 Procedures” for details.

The patient may have his/her chest x-ray at any hospital medical imaging department. Once the report is available, a copy will be sent by the medical imaging department to the PD unit and to the BCCDC (copy to the BCCDC is noted on the PROMIS requisition). BCCDC will manually upload the report into PROMIS.

If the patient has had a chest x-ray within the past 3 months, a repeat chest-ray is not required. Enter the date and location the x-ray was completed into PROMIS. BCCDC will manually upload the x-ray report into PROMIS. Refer to “Section 4.0 Procedures” for details. If this report/image is inconclusive, BCCDC will advise the PD unit to provide the patient with a chest x-ray requisition specific for ruling out TB.

BCCDC will have access in PROMIS to all 3 components of TB screening for analysis - the completed TB screening questionnaire, IGRA test results and the chest x-ray report.

Recommendation #3: The renal unit staff advises BCCDC by clicking on the “Alert BCCDC” button in PROMIS when the following 3 screening activities have been completed for a new PD patient:

1. Responses to the TB screening questionnaire have been entered into PROMIS.
2. IGRA lab requisition has been given to the PD patient to complete at the hospital lab.
3. Chest x-ray requisition has been given to the patient or the date and location of a chest x-ray completed within the past 3 months has been entered into PROMIS. Refer to “Section 4.0 Procedures” for details.

Once BCCDC receives the “ALERT” from the PD unit, they will check PROMIS for the completed TB screening questionnaire, the IGRA blood test result and the
chest x-ray report. If any of these components are missing two weeks after the “ALERT” was sent, BCCDC will notify the patient’s PD unit. The PD unit will be responsible for following-up with the patient.

Recommendation #4: After analysis of the results, BCCDC TB Services will issue a specific report/letter outlining recommendations.

BCCDC TB Services will manually upload the report/letter including all recommendations, into PROMIS.

*For Island Health: BCCDC will fax copies of the TB screening questionnaire, IGRA blood test results and the chest x-ray report to the Island Health TB program (BCCDC will also upload a copy of the chest x-ray report into PROMIS). The Island Health TB program will analyze the results and issue a report, including recommendations and will fax copies as above. In addition, they will fax a copy to BCCDC TB services. BCCDC TB Services will upload the report in PROMIS. The Island Health TB Clinic will follow up on the results with the patient/appropriate care providers.

Distribution of the report and follow up of results will depend upon the outcome of testing. See Appendix 6 for an overview of report/letter distribution and follow-up for each type of result. See Appendix 7 for sample copies of each result type report/letters.

Recommendation #5: Implement appropriate TB precautions within the PD unit as per follow-up protocols.

LBTI is not infectious, therefore, there are no specific infection control procedures required for patients diagnosed with LTBI. If active TB is identified, local facility infection control procedures should be implemented and reported to BCCDC.

4.0 Procedure

PD unit responsibilities:

1. Designate a person(s) responsible for maintaining TB screening processes and to ensure the process is completed for every new PD patient (e.g., PD nurse, Patient Care Coordinator, unit clerk).

2. Establish method to track new PD patients and status of TB screening components (e.g., excel worksheet which indicates PD training start date, completion of TB questionnaire, confirmation that PROMIS lab and x-ray requisitions were given to the patient and confirmation the BCCDC was alerted via PROMIS). In the long term, this tracking will be supported by a report developed and available in PROMIS.

3. On admission ensure the following orders are included for new PD patients:
   a) Complete TB screening questionnaire
   b) IGRA blood test (QFT®-Plus)  
      *VGH: IGRA blood test (T-SPOT)
   c) Chest x-ray (within past 3 months)
   d) chest x-ray (within past 3 months)
4. Once patient is registered in PROMIS, print the following documents from PROMIS and add to chart:
   • Auto-populated TB screening questionnaire
   • Auto-populated laboratory requisition for IGRA (QFT®-Plus) blood test
   • Auto-populated chest x-ray requisition (unless a chest x-ray was completed within the previous 3 months)

*It is important to use the forms in PROMIS that are auto-populated. DO NOT USE STANDARD LAB REQUISITIONS/CHEST X-RAY FORMS.
<table>
<thead>
<tr>
<th>PROCEDURES</th>
<th>ACTION</th>
<th>RESPONSIBILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Preparation</td>
<td>• Enter name of patient on TB tracking spreadsheet.</td>
<td>RN/Unit Clerk</td>
</tr>
<tr>
<td></td>
<td>• Ensure PROMIS CORR data elements are up-to-date (within the past 30 days).</td>
<td></td>
</tr>
<tr>
<td>2. TB screening questionnaire</td>
<td>• After patient is registered in PROMIS, print questionnaire from PROMIS. Refer to Appendix 2 and Appendix 3 for further reference.</td>
<td>Unit Clerk</td>
</tr>
<tr>
<td></td>
<td>• Search for the patient.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Under the Assessment menu, select TB Services.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Under the TB Assessment tab, select Add:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Enter assessment date.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Check off the Population at Risk checkbox.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Select “Renal TB Screening” as the Reason for Screening.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Under the Risk Factors section, check off the “Chronic Renal Disease/Dialysis” checkbox.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Select “Save.”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Select the Reports menu (next to Renal).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Select the arrow next to TB Screening to view a list of reports.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Select TB Screening Questionnaire.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Select the Assessment Date entered above (in the TB Assessment form).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Select “Run Report.”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Print out the TB Screening Questionnaire and place form in the patient’s chart.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fill out Questionnaire with patient.</td>
<td>RN</td>
</tr>
<tr>
<td></td>
<td>Enter completed Questionnaire in PROMIS.</td>
<td>Unit Clerk</td>
</tr>
<tr>
<td></td>
<td>• Search for the patient.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Under the Assessment menu, select TB Services.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Under the TB Assessment tab, select the record with the corresponding Assessment Date.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Select the pencil icon next to Nurse Completes to edit the record (see Appendix 3, Form B).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Enter information (from Questionnaire).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Select “Save”.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discard the hard copy of the Questionnaire once it has been entered into PROMIS.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Note that TB screening questionnaire has been entered into PROMIS on TB tracking spreadsheet.</td>
<td>Unit Clerk</td>
</tr>
</tbody>
</table>
3. **IGRA (QFT®-Plus) blood test**

- Print lab requisition from PROMIS (auto-populates with demographics & name of test - see Appendix 4 for an example).
- Search for the patient.
- Select the Reports menu (next to Renal).
- Select the arrow next to TB Screening to view a list of reports.
- Select IGRA-QFT Requisition.
- Under Ordering Physician, select Dr. Victoria Cook (BCCDC TB physician).
  *Island Health: select Dr. Alasdair Polson (Island Health TB Clinic Physician).
- Select Management Centre.
- Under Units, select Peritoneal Dialysis Unit.
- Select “Run Report”.
  *Vancouver General Hospital: Cross out “QFT Gold in Tube” on the pre-populated requisition. Check off “T-Spot.”
- Print out requisition and provide it to RN.

<table>
<thead>
<tr>
<th>Unit Clerk</th>
</tr>
</thead>
</table>

- Send patient to lab with requisition or request lab staff to come to PD unit to draw blood.
- If lab staff coming to PD unit, call to inform them of IGRA test needed. Special blood collection and handling techniques are required.

Note that blood sample and requisition were sent to the local laboratory on TB tracking spreadsheet.

<table>
<thead>
<tr>
<th>Unit Clerk</th>
</tr>
</thead>
</table>

- Note that blood sample was collected on TB tracking spreadsheet.
- In PROMIS, select TB Services under the Assessment menu.
- Under the TB Assessment tab, select the record with the corresponding Assessment Date.
- Select the pencil icon next to Nurse Completes to edit the record (see Appendix 3, Form B).
- Under the Radiology and IGRA Test section in the TB Questionnaire in PROMIS, check off the IGRA Test QFT checkbox and enter the IGRA Order Date (see Appendix 3, Form C).
  *Vancouver General Hospital: Enter T-Spot (not QFT).

4. **Chest x-ray**

If no chest x-ray performed in the past 3 months, print chest x-ray requisition from PROMIS (see Appendix 5 for example) & give to patient

<table>
<thead>
<tr>
<th>Unit Clerk</th>
</tr>
</thead>
</table>

- Search for the patient.
- Select the Reports menu (next to Renal).
- Select the arrow next to TB Screening to view a list of reports.
- Select Chest X-Ray Requisition.
- Under Ordering Physician, select Dr. Victoria Cook (BCCDC TB physician).
  *Island Health: select Dr. Alasdair Polson (Island Health TB Clinic Physician).
- Select Management Centre.
- Under Units, select Peritoneal Dialysis Unit.
- Select “Run Report”.
- Print out chest x-ray requisition & give to patient.
- Instruct patient to have chest x-ray done at hospital medical imaging department during the PD training week.

If chest x-ray done in past 3 months, do not repeat:
- Search for the patient.
- Under the Assessment menu, select TB Services.
- Under the TB Assessment tab, select the record with the corresponding Assessment Date.
- Select the pencil icon next to Nurse Completes to edit the record (see Appendix 3, Form B).
- Under the Radiology and IGRA Test section, enter the Chest X-Ray Order Date (see Appendix 3, Form C).
- Under Comments, enter the location of the CXR.
- Select “Save”.

BCCDC will review results.

**Documentation**

- Note that chest x-ray requisition was given to patient or chest x-ray report completed in the past 3 months on TB tracking spreadsheet.
- If no chest x-ray done in the past 3 months, enter Chest X-ray ordered and the date on the “Nurse Completes” section of the assessment in PROMIS.
- If chest x-ray done in the past 3 months, document in PROMIS as per the previous section.

5. **Alert BCCDC that all 3 activities have been completed**

Once all 3 activities have been completed:
- Search for the patient.
- Under the Assessment menu, select TB Services.
- Under the TB Assessment tab, select the record with the corresponding Assessment Date.
- Select “Alert to BCCDC” at the bottom left of the screen (see Appendix 3, Form B).

Note: Both the Chest X-Ray Order Date and the IGRA Order Date must be entered to enable the alert button.

6. **Close out**

Note that BCCDC has been “alerted” that all activities have been completed on TB tracking spreadsheet.

**BCCDC contact for questions:** TB Nurse Consultant, 604-707-5678 or tbnurseconsultants@bccdc.ca
5.0 References


6.0 Sponsors

This BC Renal guideline/resource was developed to support equitable, best practice care for patients with chronic kidney disease living in BC. The guideline/resource promotes standardized practices and is intended to assist renal programs in providing care that is reflected in quality patient outcome measurements. Based on the best information available at the time of publication, this guideline/resource relies on evidence and avoids opinion-based statements where possible; refer to bcrenalagency.ca for the most recent version.

Original version (2015) developed by:
• A working group of representative groups of renal clinicians and directors/managers, BC laboratories, BCCDC TB Services, Island TB Clinic and BC Renal

Original version (2015) approved by:
• BC Renal Peritoneal Dialysis Committee
• BC Renal Medical Advisory Committee
• Provincial Committee for Implementation of TB Screening for Dialysis Patients (BCR/BCCDC, BC Public Health Microbiology and Reference Lab)

Updates reviewed by:
• Representatives from Zoonotic Diseases & Emerging Pathogens Laboratory, BCCDC Public Health Laboratory (Team Lead & Technical Coordinator)

For information about the use and referencing of BC Renal provincial guidelines/resources, refer to the table of contents.
7.0 Appendices

Appendix 1: TB Screening & Follow-Up Workflow for Incident Hemodialysis and Peritoneal Dialysis Patients

Appendix 2: Example of TB Screening Questionnaire

Appendix 3: Example of TB Questionnaire in PROMIS

Appendix 4: Example of IGRA Lab Requisition

Appendix 5: Example of Chest x-ray Requisition

Appendix 6: Distribution of Reports/Letters & Follow up of Results

Appendix 7: Samples of Follow-up Reports/Letters for Different Results:
- 7a: Non-reactive IGRA: Letter 1
- 7b: Reactive IGRA (Latent TB infection): Letters 2a, 2b, 3, 4, 5, and 6
- 7c: Inconclusive IGRA: Letter 7
Appendix 1: TB Screening & Follow-Up Workflow for Incident Hemodialysis and Peritoneal Dialysis Patients

BC Provincial TB Screening Workflow for Chronic Kidney Disease (CKD) Patients Initiated on Dialysis

- Health Authority Renal Program
  - CKD patient to be initiated on dialysis
  - Nephrologist
  - Nurse
  - IGRA Test ordered
  - TB Chest Radiography ordered
  - TB Screening Questionnaire conducted (entered into PROMIS)

- Medical Imaging
  - TB Chest Radiography Conducted (PA only)
  - Radiology Report uploaded into PROMIS (by MI or Renal Program)
  - Radiology Report

- Lab
  - BCMPHRL (RSCS)
    - Patient attends RSCS & IGRA
    - Blood sample pre-processed at RSCS
    - Blood sample transported to BCMPHRL central lab
    - Sample tested (SQC/CA) at BCMPHRL central lab
    - Test Results reported in LUS (SQ) and Medical Consultation auto-uploaded to PROMIS

- BCCDC TB Sentinel Island TB Program
  - Target – 60 days from ordering of screening tests to receipt of TB Program recommendations
  - Patient’s Primary Care Provider
    - Letter reporting negative result
    - TB Services Nurse reviews results
    - TB Services Physician reviews results
    - Patient sent to VHA, FHA or VHA
    - Results sent to HA Public Health Program
    - LTBI results & treatment discussed with patient
    - Prescription generated & meds dispensed by BCCDC pharmacy
    - Medication shipped to nearest PH office
    - PH dispenses meds monthly, D&O assessment, med reviewers

Note: Unreactive IGRA & normal chest x-ray results are reviewed by the RN. Physicians review all other results.

Updated March 28, 2015
Appendix 2: Example of TB Screening Questionnaire

1. Please complete all sections highlighted in **yellow** (unless pre-populated with correct information).

   (Search for patient) > Reports > TB Screening Questionnaire
Appendix 3: Example of TB Screening Questionnaire in PROMIS

Form A: TB Screening Questionnaire
Form B: TB Questionnaire - “Nurse Complete” Section

TB Screening Questionnaire Details

- Nurse Completes
  - Assessment Date: 25-Oct-2019
  - Reason for Exam
    - Population at Risk: No
    - Reason for Screening
    - Contact Information
    - Current TB Exposure
    - Name of TB or TUB
    - Last Date of Contact
  - Historic Exposure
    - List Details (Name, Date)
- Risk Factor
- Assesments
- Symptoms
  - Spiculum Collected
- Hepatitis History
  - Previous BCG
  - Date
  - BCG Scar

Alert sent to BCCDC on [Alert to BCCDC]
Form C: TB Questionnaire – Radiology and IGRA Test

Edit TB Screening Questionnaire

Preventive Treatment

Radiology and IGRA Test

- Chest X-Ray Ordered
- IGRA Test

Initial TST Test

Given By

Date Given

Date Read

Size of Reaction (mm)

Read By

Recommendations

No Further Testing

Repeat as Required

Repeat TST Test

Given By

Date Given

Date Read

Size of Reaction (mm)

Reason for not having Chest X-Ray

Pregnant

Refused
Appendix 4: Example of IGRA Lab Requisition

Nov 1, 2019: The requisition below is the one currently loaded into PROMIS. BCCDC is working on an update. It will be loaded into PROMIS (and updated in this guideline) once available. Until then, please use the one below.

![IGRA Lab Requisition Form](image)
Appendix 5: Example of Chest X-Ray Requisition

Requisition For Chest X-Ray

Name: ADEMO00001, JANE   DOB: 31-JUL-1946   PHN:
Address: 123 MAIN, VANCOUVER, BC, V6Z1Y6
Phone: CELL:
HOME/RESIDENTIAL:
Ordering Physician: COOK, VICTORIA J
Ordering Physician's MSP #: 27172
Exam Requested: CHEST PA and LATERAL
Exam Reason: Rule Out TB - Renal TB Screening

Requisition For Chest X-Ray

Hospital of Radiology Service performing x-ray:

X-ray Date: ___________________________  X-ray Number: ___________________________

X-ray instructions: Please return x-ray (unread) with this requisition to the office serving your Health Authority

Copy to Ordering Physician: COOK, VICTORIA J
Location: Hemodialysis Unit
Clinic: Abbotsford Rgnl. Hosp. & C.C.
Address: 32900 Marshall Road, Abbotsford, V2S 0C2
Fax: 

Billing instructions: Please send packing slip to

BCCDC TB SERVICES
655 WEST 12TH AVE
VANCOUVER BC
V5Z 4R4

BCCDC TUBERCULOSIS SERVICES
655 WEST 12TH AVE
VANCOUVER BC
V5Z 4R4
Appendix 6: Distribution of Reports/Letters & Follow-Up of Results

Report Distribution & Follow-Up for Each Result Type

Non-Reactive IGRA

- BCCDC mails letter to nephrologist, renal unit, GP, and uploads report into PROMIS
- LETTER 1
- No further follow-up required

Reactive IGRA (Latent TB infection)

- BCCDC mails follow-up recommendations report to GP/PHN
- LETTER 2a
- LIA Patient: BCCDC TB Services contacts patient directly with appointment and follows appointment information to dialysis unit
- LETTER 3b
- Island Health Patient: Contacts patient directly with appointment and follows appointment information to dialysis unit
- LETTER 3
- RHA/HHA Patient: GP/PHN contacts patient for follow-up
- LETTER 2b
- Treatment commenced to client
- Client refuses treatment
- Neophlogist, GP, PHN, renal unit informed of rejection. Documentation uploaded into PROMIS
- LETTER 4
- Neophlogist, GP, PHN, renal unit informed of rejection. Documentation uploaded into PROMIS
- LETTER 5
- No further follow-up required

Inconclusive GIRA

- BCCDC/Island Health mails letter and regulation to patient, and uploads into PROMIS
- LETTER 7
- If patient does not complete within 1 month, BCCDC documents in BCCDC chart
- BCCDC/Island Health notifies nephrologist & renal unit & uploads documentation into PROMIS
- Renal unit, nephrologist will follow-up with patient

Active TB

- BCCDC/Island Health will manage clinical care of severe case
- PHN in collaboration with TB Services, will lead contact investigation
- Active TB Patient
- Neophlogist, GP, PHN, renal unit notified of end of treatment (completed or not) and documentation uploaded into PROMIS
- TREATMENT INITIATION
- No further follow-up required
- Non-reactive IGRA pathway
- Reactive IGRA pathway
- Inconclusive IGRA pathway

Incidental Findings

A copy of the chest x-ray report will be forwarded to the nephrologist with note for him/her to follow up based on clinical context
Appendix 7: Samples of Follow-Up Reports/Letters for Different Results

7a: Letter Associated with Non-Reactive IGRA Results

LETTER 1

August 30, 2016

Dr.

Re: Patient Name DOB:

The Provincial Tuberculosis (TB) Services has received a TB screening form regarding the above dialysis patient. There is no evidence of TB infection or disease. This patient is cleared for TB screening purposes. Further testing is not recommended at this time.

Follow up is recommended in accordance with disease specific protocols. Contact TB Services if symptoms develop or at the discretion of a physician.

If you have any further questions, please contact a TB Services Nurse Consultant at 604-707-5670.

Sincerely,

TB Services

Provincial TB Services, Clinical Prevention Services
BC Centre for Disease Control
**Letter 2a**

August 30, 2016

Dr.

**Re:** Patient Name. IGRA Result: DOB:

**Reason screened:**

Provincial Tuberculosis (TB) Services has received a TB screening form for this dialysis patient and there is evidence for latent TB infection (LTBI). Patients on dialysis are at a higher risk for developing active TB compared to the general population, so treatment is indicated barring significant contraindications. First line treatment of LTBI consists of isoniazid 300mg and vitamin B6 25mg daily for a period of 9 months. The diagnosis, treatment, side effects of the medication (including hepatitis, rash and GI upset) and need for clinical follow-up/blood work should be discussed with the patient prior to starting LTBI treatment. Alcohol and/or pregnancy should be avoided while on treatment. An exit chest film is not required at the completion of therapy if the baseline film was normal. TB medication can be obtained free of charge from the local public health office.

An appointment has been made for this patient on ______ at the __________.

located at: __________

If the patient is unable to make this appointment, please contact us at 604-707-2692 to discuss other appointment times.

Sincerely,

TB Services

Provincial TB Services, Clinical Prevention Services
BC Centre for Disease Control

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November 2019
7b: Letters Associated with Reactive IGRA (Latent TB) Results

Letter 2b

August 30, 2016

Dr.

Re: Patient Name, IGRA Result: DOB:

Reason screened:

Provincial Tuberculosis (TB) Services has received a TB screening form for this dialysis patient and there is evidence for latent TB infection (LTBI). Patients on dialysis are at a higher risk for developing active TB compared to the general population, so treatment is indicated barring significant contraindications. First line treatment of LTBI consists of isoniazid 300mg and vitamin B6 25mg daily for a period of 9 months. The diagnosis, treatment, side effects of the medication (including hepatitis, rash and GI upset) and need for clinical follow-up/blood work should be discussed with the patient prior to starting LTBI treatment. Alcohol and/or pregnancy should be avoided while on treatment. An exit chest film is not required at the completion of therapy if the baseline film was normal. TB medication can be obtained free of charge from the local public health office.

We encourage you to review with the patient, the LTBI brochure at www.bccdc.ca/LTBIfacts and the 4.5-minute video explaining LTBI in a number of languages at www.bccdc.ca/TBVideos.

If the decision is to start LTBI treatment, please arrange an appointment with public health.

If you require further information, please contact a TB Services Nurse Consultant at (604) 707-5678.

Sincerely,

TB Services

Provincial TB Services, Clinical Prevention Services
BC Centre for Disease Control

Provincial Health Services Authority
Letter 3

August 30, 2016

Dr.

Re: Patient Name  DOB:

Reason screened:

TB Services has received TB screening results for the above dialysis patient and there is evidence for latent TB infection (LTBI). Treatment for LTBI is recommended.

We have notified this patient’s General Pracitioner and their local Public Health Office to review LTBI treatment options with the patient. We will inform you of the patient’s decision regarding treatment.

If you require further information, please contact a TB Services Nurse Consultant at (604) 707-5678.

Sincerely,

TB Services

Provincial TB Services, Clinical Prevention Services
BC Centre for Disease Control
7b: Letters Associated with Reactive IGRA (Latent TB) Results

Letter 4

August 30, 2016

To: Patient Name

DOB:

This patient has initiated treatment for latent TB infection. The patient has been prescribed:

Choose an item.

Your office will be notified when treatment ends. TB Services would be happy to provide additional advice upon request. If you require further information, please contact TB Services at the number above.

Sincerely,

TB Services

Provincial TB Services, Clinical Prevention Services
BC Centre for Disease Control
7b: Letters Associated with Reactive IGRA (Latent TB) Results

Letter 5

August 30, 2016

To: Patient Name

DOB:

This patient has refused treatment for latent TB infection.

If this patient develops symptoms suggestive of active TB such as cough lasting longer than three weeks’ duration, haemoptysis or unexplained weight loss or fever, please send the patient for a chest x-ray, collect 3 sputum samples for AFB smear and culture, and contact TB Services.

If you require further information, please contact TB Services at the number above.

Sincerely,

TB Services

Provincial TB Services, Clinical Prevention Services
BC Centre for Disease Control
7b: Letters Associated with Reactive IGRA (Latent TB) Results

Letter 6

August 30, 2016

To: Patient Name DOB:

This patient has completed treatment for latent TB infection. No further follow up is necessary.

If this patient develops symptoms suggestive of active TB such as cough lasting longer than three weeks' duration, haemoptysis or unexplained weight loss or fever, please send the patient for a chest x-ray, collect 3 sputum samples for AFB smear and culture, and contact TB Services.

If you require further information, please contact TB Services at the number above.

Sincerely,
TB Services

Provincial TB Services, Clinical Prevention Services
BC Centre for Disease Control
Letter 7

August 30, 2016

To: Patient Name
    DOB:

You recently had a blood test for Tuberculosis (TB) at your dialysis unit, which needs to be repeated.

This blood test will show if you have “sleeping” TB infection. Treatment for “sleeping” TB is available and can prevent active TB in the future.

The TB blood test can be drawn at various locations. This information has been included with this letter along with another blood test requisition.

Please contact us if you have any questions or concerns at the number above.

Sincerely,

TB Services

Provincial TB Services, Clinical Prevention Services
BC Centre for Disease Control