



Process for Ordering Sputum for AFB by the WRHA PPH TB Services for Adults in the Winnipeg Health Region		<i>Supersedes:</i> Process for Sputum Acid Fast Bacilli Collection by the WRHA Population and Public Health Tuberculosis Team for Adult Clients in the Winnipeg Health Region: CPG	
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1.0 PURPOSE:

- 1.1 Provide clinical practice and operational guidance to Public Health Nurses (PHN) in Population and Public Health (PPH), tuberculosis (TB) Services, to ensure consistency in the ordering of sputum for acid fast bacilli (AFB) for the diagnosis and/or management of active TB disease.

2.0 SCOPE and GOAL:

- 2.1 This practice guideline is applicable for the care of adults in the community with active TB disease and/or who are contacts to cases of infectious TB disease.
- 2.2 This practice guideline describes the process by which a PHN facilitates sputum for AFB orders under the designated TB Clinician.

3.0 DEFINITIONS

- 3.1 **Active TB disease:** active disease due to *Mycobacterium tuberculosis* (MTb) that is usually symptomatic and for which microbiologic tests are usually positive and radiologic tests usually abnormal. A diagnosis of **Clinical TB disease** may be made when there clinical symptoms or radiology suggestive of TB that has not been confirmed with microbiological tests, and the TB Clinician has initiated treatment.
- 3.2 **Contact:** a person identified as having been exposed by sharing space with an infectious case of TB.
- 3.3 **Infectious TB:** the condition whereby the patient can transmit TB infection to others by virtue of the production of aerosols containing TB bacteria. Patients with smear-positive, cavitory and laryngeal TB disease are usually the most infectious.
- 3.4 **Sputum for AFB:** procedure whereby client coughs up lung secretions (sputum) for laboratory evaluation by smear (to visualize acid fast bacilli [AFB] microscopically) and culture (to grow the mycobacteria to confirm TB and to determine antimicrobial susceptibilities), and PCR (polymerase chain reaction) if the smear is found positive.



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4.0 BACKGROUND

- 4.1 In the assessment of TB contacts, sputum for AFB may be done early in the clinical assessment to rule out active disease.
- 4.2 Sputum samples are monitored periodically during TB treatment, which can be facilitated in the community by PHNs.
- 4.3 TB clinicians and PHNs work in collaboration to provide care to people infected with TB and their contacts. According to the *Regulated Health Professions Act* of Manitoba, facilitating the collection of sputum and ordering AFB testing lies within the scope of both disciplines. However, in order to facilitate care for the client and communication between providers involved in care, ordering the sputum AFB test under the name of the TB clinician best suits these goals and is most consistent with the roles of the providers. Thus this procedure is considered a shared competency between providers.

5.0 PROCEDURE (Cases of Active TB Disease), see [Algorithm](#)

- 5.1 The PHN may collect sputum for AFB for clients with confirmed active TB disease in the community at the following times:
 - **Initial Assessment:** three diagnostic sputum samples each spaced at least one hour apart.
 - For clinical cases (excluding initial assessment), no additional sputum will be routinely collected unless otherwise requested by the TB Clinician.
 - **Home Isolation:** To determine when home isolation can be discontinued (See Home Isolation Guideline located at [PPH TB Services Homepage](#))
 - **Monitoring Response to Treatment:** At or approaching two months of therapy and monthly thereafter until culture negative (three samples), or if treatment adherence has been inconsistent.
 - **End of Treatment:** Within the last four weeks of therapy (three samples)



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- **Multi-Drug Resistance:** Collect weekly until *culture* negative x3 and as requested by the TB Clinician.

5.2 If a client can't spontaneously produce sputum at the 2 month mark and/ or end of treatment, inform TB clinician via [TB Treatment Related Communication Form](#)

6.0 PROCEDURE (Contacts to Cases of Infectious TB Disease)

6.1 **Sputum for adult contacts (17 years of age or older):** sputum samples for AFB and TB culture are obtained on contacts for the following reasons:

- Symptoms of active TB disease (cough lasting 2 weeks or more fever, night sweats, hemoptysis, and/or unexplained weight loss, chest pain)
- Abnormalities on CXR, TB suspected

6.1.1 For contacts in the Winnipeg Health Region who require sputum for AFB testing, the Head of HSC Respiriology will be the ordering clinician on the requisition with copy of the report to WRHA PPH TB Services CD coordinator.

6.1.2 When a sputum sample is positive (AFB smear positive, culture positive for TB), a referral for a contact turned case will be faxed by the CD Coordinator to Respiriology Outpatient Department (HSC) clinic.

6.1.2.1 If a sputum sample is positive for a non-tuberculosis mycobacteria strain, follow up will be facilitated on a case by case basis by WRHA PPH TB Services. Consult with MOH for TB Services as required.



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7.0 Collection of Sputum Sample:

Instructions for the collection of sputum AFB sample are provided by Shared Health Diagnostics Services.

English: <https://sharedhealthmb.ca/download/112/patient-information-brochures/740/pb120-10-05e.pdf>

French: <https://sharedhealthmb.ca/download/112/patient-information-brochures/739/pb120-10-05e-fr.pdf>

8.0 Completing the Requisition: Shared Health Diagnostics Service, Microbiology Lab Requisition

8.1 The sputum requisition will bear the name, address and fax number of the TB clinician as the clinician of record, and will include the name, address and fax number of the TB Communicable Disease (CD) Coordinator for the WRHA in the “Copy to” section.

8.2 **Unique Identifiers:** Shared Health Diagnostic Services Manitoba requires 3 unique identifiers documented on the lab requisition form in order to ensure they have the right test for the right client. Generally, the client’s full name, Date of Birth and PHIN are documented on the lab requisition and on the client label on sputum container. In certain circumstances, a client may not have a PHIN (e.g., uninsured client) and therefore, Shared Health requires another type of unique identifier.

8.2.1 **If a client has no PHIN, but has an institution specific Medical Record Number (e.g. HSC MRN):** The PHN will document the client’s full name, DOB, and MRN on the lab requisition and sputum container label.

8.2.2 **If a client does not have a PHIN or MRN (e.g., client has not had a hospital visit):** Lab has approved the use of the client’s Passport number or Manitoba Driver’s License number as alternative unique identifiers.

The PHN can document the client’s Passport Number or Manitoba Driver’s License number on the lab requisition and



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sputum container label. The PHN should also document on the lab req/container what the unique identifier is.

- 8.2.3 **If a client does not have a PHIN, MRN, Passport number, or Manitoba Driver’s License number:** Lab has approved the use of the [DSM Client Identification Waiver](#). The intent of this waiver is for the client and PHN to accept responsibility for the client’s identification in lieu of formal identification. The form must be signed by the client (and or caregiver e.g., parent) and the PHN. The form must be attached to each sputum requisition.

9.0 REFERENCES

Public Health Agency of Canada (2014) *Canadian Tuberculosis Standards 7th ed.* <https://www.canada.ca/en/public-health/services/infectious-diseases/canadian-tuberculosis-standards-7th-edition.html>

Manitoba Health, Tuberculosis (TB) Protocol, December 2014. <https://www.gov.mb.ca/health/publichealth/cdc/protocol/tb.pdf>