Operational Directives	WRHA Infection Prevention & Control Program	
	Tuberculosis in the Maternal and Newborn Population	Page 1 of 4
	Approval Signature: Original signed by: Dr. Nancy Dixon	**Supersedes:** New
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1.0 PURPOSE:

1.1 To provide direction and standardize the process of assessing and managing Tuberculosis Infection (TBI) and active Tuberculosis (TB) in the maternal and newborn population throughout the Winnipeg Regional Health Authority (WRHA).

1.2 To prevent transmission of TB in maternal and newborn settings in the Winnipeg Health Region.

2.0 PREAMBLE:

2.1 The presence of active and or respiratory TB in maternal patients risks TB exposure to the newborn as well as to others within the facility. More rarely, active TB in maternal patients risks vertical TB transmission to the fetus.

2.2 Implementation of appropriate measures will minimize exposure of the newborn, health care facility staff, and other patients in the health care facility.

3.0 OPERATIONAL DIRECTIVES:

3.1 Consult the Reproductive Infectious Diseases Specialist by telephone at 204-787-1961 and through fax at 204-787-2314 once aware of any patient with a diagnosis of TBI, or with suspicion of, or confirmed active TB during pregnancy. [4.3]

3.2 Do not separate non-infectious mother and newborn.

3.3 Contact the IP&C/designate if unsure of mother's infectious status.

3.4 For a **mother with TBI or a low index of suspicion for active TB disease AND no abnormality on chest x-ray**:[4.1]

- No additional precautions for mother
- No special investigation or therapy for newborn
- Do not separate mother and newborn
- The Reproductive Infectious Diseases Specialist or Adult Infectious Diseases (ID) Specialist may offer mother TBI treatment during the antenatal period if indicated on a case by case basis (e.g., recently infected; HIV co-infected).

3.5 **Antenatal Period**:

3.5.1 Consult the Reproductive Infectious Diseases Specialist once aware of a pregnant woman with active TB and LTBI. [4.3]

- The Reproductive ID Specialist coordinates care for patients diagnosed with TBI or active TB during pregnancy; arranging all necessary consultations and developing a plan of care for the labour and delivery with input from other involved programs. [4.3]
- The Reproductive ID Specialist communicates by faxing a patient-specific care plan and instructions to the WRHA TB Infection Control Professional (ICP) at 204-940-2182 and the various hospital programs at both acute tertiary care facilities, as appropriate. This may include, but not limited to communication from the Reproductive ID Specialist considering treatment of active TB in collaboration with Adult Respirology/Chest Medicine. [4.3]

3.5.2 **Mother with abnormal chest x-ray consistent with active TB disease, with or without other evidence of active TB disease:**

- Rule out active infectious TB disease prior to delivery, if possible: [4.1]
  - Obtain three sputum specimens for Acid Fast Bacilli (AFB) smear and culture.
  - Consult Respirologist or Infectious Diseases specialist with expertise in Tuberculosis.
  - Consult Pediatric Infectious Diseases through Health Sciences Center paging at 204-787-2071 prior to delivery for newborn management planning.
  - Consider mother infectious for antepartum, intrapartum and postpartum care, until active TB is ruled out.
  - Obtain serology for HIV if not done within the past 3 months.
- If active infectious TB disease is ruled out, antepartum and intrapartum care can occur as per routine; follow-up of the newborn is not required. [4.2]

3.5.3 **Mother with Confirmed or Suspected Active Infectious TB Disease at or close to the time of delivery:** [4.1]

- Provide mother with a surgical/procedure mask if confirmed or suspected active TB.
- Place mother on Airborne Precautions until deemed non-infectious.
- When able initiate maternal active TB investigation on mother follow 3.5.2

3.6 **Intrapartum Period:**

3.6.1 **Care for Mother**: [4.1]

- Place mother on Airborne Precautions:
  - If mother has suspected or confirmed active TB disease (infectious or non-infectious) at the time of delivery.
- Mother wears a procedure or surgical mask.
- Separate mother and infant only if the mother is sick enough to require hospitalization for respiratory symptoms.
- Place mother in case room to deliver to allow for additional staff and equipment required.
- Keep case room door closed.
- Maintain Airborne Precautions for 1 hour post patient discharge from airborne infection isolation room, for adequate air exchange.
- Staff wear N95 mask if entering the room.

3.6.2 **Care of the newborn**: [4.1]

- Notify Pediatric Infectious Diseases of impending delivery through Health Sciences Center paging at 204-787-2071.
- Notify Neonatology of impending delivery through Health Sciences Center paging at 204-787-2071.
- Send the placenta for physical examination to Pathology Services Laboratory Requisition.
- Send placental tissue for AFB to the Clinical Microbiology Laboratory
- Send amniotic fluid for AFB (if available) to the Clinical Microbiology Laboratory.
- Maintain Airborne Precautions until congenital TB is ruled out.

3.7 **Postpartum Period**:

3.7.1 **Care of the mother**: [4.1]

- Maintain Airborne Precautions for duration of hospitalization or until determined to be no longer infectious
- Collect sputum specimen if not already done.

3.7.2 **Care of the newborn**: [4.1] [4.2]

- Maintain Airborne Precautions - until newborn deemed non-infectious
- Evaluate for congenital TB by:
  - Obtaining a chest radiograph (PA/LAT)
  - Collect blood specimens [CBC, Sed rate (ESR)]
  - Collect urine and stool for AFB
  - Consider a lumbar puncture
  - Consider an abdominal ultrasound if advised by Pediatric Infectious Diseases.
- Discontinue Airborne Precautions if negative for congenital TB or as indicated by Pediatric Infectious Diseases.
- Newborn may go to nursery. Newborn may room with mother, who must wear a procedure or surgical mask if infectious.

4.0 REFERENCES:

4.1 Canadian Journal of Respiratory, Critical Care, and Sleep Medicine: Vol 6, No sup1 (tandfonline.com). Canadian Tuberculosis Standards 8th Edition. Tuberculosis Prevention and Control. Public Health Agency of Canada, The Canadian Lung Association. Accessed April 19, 2023.

4.2 Rachel Dwilow. Tuberculosis in the Maternal and Newborn Population. (Email communication, May 7, 2019). Expert opinion.

4.3 Vanessa Poliquin. Tuberculosis in the Maternal and Newborn Population. (Email communication, April 16, 2019). Expert opinion.

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