



Blood Test, Chest X-Ray and Tuberculin Skin Test – Medical Directive

Medical Advisory Committee Approved: 27JUNE2023

Harmonized

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Authorizing Prescriber(s)

Occupational Health Department Physicians of Lakeridge Health (LH).

Authorized to Whom

Registered Nurses (RN) and Registered Practical Nurses (RPN), working in Occupational Health with the corresponding knowledge, skill and judgment for each order and/or procedure below. Implementers from herein will be referred to as Nurse.

Co-implementers: Medical Radiation Technologists employed at LH.

Patient Description/Population

This Medical Directive applies to individuals who are:

- Employees of LH,
- Privileged staff (physicians, dentists, midwives) of LH,
- Employee candidates who have accepted a formal offer of employment and are completing new hire requirements.
- LH volunteers for Tb testing only.

This population is referred to as Lakeridge Health Colleagues (LHC)

Order and/or Procedure

For orders see [Order Table](#). Procedures stated below.

Blood tests:

1. Prior to completing blood tests to determine immune status, the Nurse must:
 - Explain the purpose for ordering the blood tests
 - Explain the process of results notification and follow-up
2. Prior to completing blood tests post - blood borne diseases exposure, the Nurse must:
 - Explain the purpose of ordering the blood tests
 - Provide the LHC with information and counseling regarding Hepatitis B, Hepatitis C and HIV (transmission, implications of testing positive, mandatory reporting to public health)

etc.)

- Provide the frequency of follow up blood tests
- Explain the process of results notification and follow up

Chest X-Ray:

1. Prior to completing a Chest X-Ray requisition, the Nurse must:
 - Have knowledge of the Tuberculosis Surveillance Policy
 - Explain the purpose of the chest x-ray
 - Explain the risk of radiation exposure
 - Explain the process of results notification and follow up
 - Ask the LHC if they are pregnant (if appropriate)

Tuberculin Skin Test (TST):

1. Prior to conducting the TST the Nurse must:
 - Have knowledge of the Tuberculosis Surveillance Policy
 - Review documentation of previous TST (if available)
 - Explain the purpose of and process for the TST including risks, side effects and precautions
 - Explain the process of reading results and follow-up
 - Ensure there are no contraindications to administration of TST
 - Obtain informed, signed consent
 - Advise the LHC to remain in the vicinity for a minimum of 15 minutes
 - Advise the LHC to notify the Nurse of significant side effects/adverse reaction

Indications to the Implementation of the Directive

The LHC meets any of the indications on the [Order Table](#). The Nurse must obtain consent from the LHC for any of the indicated procedures.

Contraindications to the Implementation of the Directive

This medical directive must not be implemented if the LHC does not consent to any of the procedures being enacted. The LHC meets any of the criteria under contraindications on the [Orders Table](#).

Consent

The Nurse implementing this medical directive must obtain informed consent prior to implementation as indicated in the order/procedure section.



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Documentation Requirements

In addition to standard documentation practices the Nurse implementing this medical directive must document the implementation of this Medical Directive in the OH medical record. Documentation must include:

- The procedure performed
- The date and time it was performed
- The name of the medical directive
- the name and signature of the implementer including credentials.

Example:

Measles – Serology as per Blood Test, Chest X-ray and Tuberculin Skin Test –
Medical directive April 11, 2023 at 1300h, J Smith RN

Review/Evaluation Process

This medical directive will be reviewed every 2 years by the Occupational Health Department.

References

Canadian immunization guide. Government of Canada . (2023). Immunization of workers: Canadian Immunization Guide – Recommended immunization, health care workers. .Retrieved from: <https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-3-vaccination-specific-populations/page-11-immunization-workers.html#p3c10t1>

Ontario Hospital Association - Communicable Diseases Surveillance Protocols. (2019, May 1). Retrieved from: <https://www.oha.com/labour-relations-and-human-resources/health-and-safety/communicable-diseases-surveillance-protocols>

Product Monograph - Tubersol . Toronto . Ontario Canada . (2012, June 1)

Routine Practices and Additional Precautions. Public Health Ontario . (2020). Retrieved April 24, 2023, from <https://www.publichealthontario.ca/en/Health-Topics/Infection-Prevention-Control/Routine-Practices-Additional-Precautions>

This table must **not** be used independently apart from the Medical Directive

Order Table

Order	Indication	Contraindication	Notes (Optional)
Serology, Measles	Immune status for Measles is unknown	Documentation of previous positive immunity status or documentation of receipt of two doses of measles containing vaccine on or after the first birthday, with doses given at least four weeks apart. Consent is not obtained	
Serology, Mumps	Immune status for Mumps is unknown	Documentation of previous positive immunity status or documentation of receipt of two doses of mumps containing vaccine given at least four weeks apart on or after the first birthday Consent is not obtained	
Serology, Rubella	Immune status for Rubella is unknown	Documentation of previous positive immunity status or documentation of receipt of one doses of rubella containing vaccine) on or after first birthday	



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Order	Indication	Contraindication	Notes (Optional)
		Consent is not obtained	
Serology, Varicella	Immune status for Varicella is unknown	Documentation of previous positive immunity status or documentation of receipt of two doses of varicella containing vaccine Consent is not obtained .	
Hep B Surface antibody	Immune status for Hepatitis B is unknown	Consent is not obtained or previously documented immunity	In persons with previously demonstrated antibody to HBsAb immune memory persists even in the absence of detectable antibody.
1. Hepatitis B Core antibody 2. Hep B Surface antibody and antigen 3. Hepatitis C (PHL) 4. Serology HIV 5. Alanine Aminotransferase (ALT)	Screening post blood borne diseases exposure	Consent is not obtained 2. For Hep B- previous documented immunity	
X-ray PA and Lat	previous diagnosis of TB but has never received adequate treatment for TB A new, positive TST	The LHC is pregnant or may be pregnant Consent is not obtained	For LHCs who have previously been assessed for a positive TST and have a documented chest x-ray on file, there is no need to repeat the chest x-ray unless clinically indicated.



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Order	Indication	Contraindication	Notes (Optional)
	previously known to be TST positive but has not had a CXR within the last 5 years.		
TST – One-step Administer 0.1 mL Tubersol intradermally on the inner aspect of the forearm. Read TST in 48-72 hours.	<p>Post occupational exposure to active TB (consult OHA/OMA TB Surveillance protocol).</p> <p>Annual surveillance for LHC who perform high risk occupational activities including: cough-inducing procedures such as sputum induction, bronchoscopy, administration of aerosolized therapies, respiratory therapy, chest physiotherapy, autopsy, morbid anatomy and pathology examinations, bronchoscopy and designated mycobacterium laboratory procedures (manipulation of M. tuberculosis cultures.)To determine baseline TB status.</p> <p>At the time of hire/appointment,</p>	<p>History of severe blistering reaction or anaphylaxis following the test in the past</p> <p>Documented active TB</p> <p>Clear history of treatment for LTBI or active TB in the past</p> <p>Extensive burns or eczema over the testing site (use an alternate site)</p> <p>Major viral infection (note that a LHC with a common cold may be tested)</p> <p>Live virus vaccine in the previous 4 weeks</p> <p>Consent is not obtained</p>	<p>A history of Bacille-Calmette-Guerin (BCG) vaccine is not a contraindication to a TST.</p> <p>LHCs who have had BCG vaccine may still be at risk of infection.</p> <p>Note: BCG vaccination is an unlikely explanation of a positive TST if BCG was given in infancy.</p> <p>Pregnancy is NOT a contraindication to a TST.</p>

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Order	Indication	Contraindication	Notes (Optional)
	<p>A single step TB skin test should be done in the following situations:</p> <ul style="list-style-type: none"> • Documentation of a previous negative 2 step TST completed more than 4 weeks prior to start date. <p>OR</p> <ul style="list-style-type: none"> • Documentation of a negative single step TST within the last 12 months has been provided 		
<p>TST – two-step 1. Administer 0.1 ml of Tubersol intradermally on the inner aspect of the forearm. Read TST in 48-72 hours. If this result is 0-9 mm of induration, perform a second test.</p>	<p>TST status is unknown</p> <p>Previously identified as a TST negative, with no documentation of a 2 step TST in OH medical record.</p>	<p>Documentation of a previous 2 step TST or documentation of a previous one step TST, completed within the past 12 months; in these cases, only a single step is required.</p> <p>History of severe blistering reaction or anaphylaxis following the test in the past</p>	<p>If the first step is positive in the TST do not proceed with the second step</p>



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Order	Indication	Contraindication	Notes (Optional)
2. In one to four weeks from #1, administer 0.1 ml of Tubersol intradermally on the inner aspect of the opposite forearm. Read TST in 48-72 hours.		Documented active TB Clear history of treatment for LTBI or active TB in the past Extensive burns or eczema over the testing site (use an alternate site) Major viral infection (note that a LHC with a common cold may be tested) Live virus vaccine in the previous 4 weeks Consent is not obtained	