

Occupational Health and Infectious Diseases: Preclinical Placement Requirements for Health Care Worker Students

This document outlines immunization and other occupational health requirements that health care students need before they begin any placement in a health facility through the course of their health profession program. In their guideline “Prevention and Control of Occupational Infections in Health Care”, Health Canada uses the term health care worker (HCW) to include any individual who has the potential to acquire or transmit infectious agents during their work in health care and includes students and researchers¹. **Students should verify required forms and deadlines with their clinical, fieldwork, or residency program contacts as they vary by program.**

The health literature is clear on the potential for to acquire infections, both in and outside the workplace, and for healthcare workers to transmit the infection to patients, co-workers, and family members^{2,3,4}. Infections may be spread through as airborne (e.g., tuberculosis, varicella, measles, COVID-19), droplets (e.g., respiratory syncytial virus, influenza, rubella, pertussis), through contact (e.g., hepatitis A, group A streptococcus), and mucosal or percutaneous exposure (e.g., hepatitis B and C, HIV)⁵. Several of these infections are vaccine preventable. Most of these vaccine-preventable infections may be transmitted from person-to-person. With that in mind, the Steering Committee on Infection Control Guidelines, Health Canada, and the National Advisory Committee on Immunization (NACI) have provided recommendations for health care worker immunization, including COVID-19^{6,7,8}.

The following form must be completed by a physician, nurse practitioner, registered nurse, or pharmacist prior to commencing clinical learning experiences at Dalhousie University. It is advised that all your immunizations be up to date before you begin your program as some immunization schedules take several months to complete. Please read the form carefully as there are different documentation requirements for some of the diseases. Please see Appendix A for a full explanation of the requirements for each disease. **You are required to comply with all requests for documentation.** Please present the completed forms to the university official responsible for your program by the deadline outlined by your specific school/college.

Students must provide proof of vaccinations and tests **outlined in Appendix A upon entry to each program**, or according to the deadline set by your program. Submit this form completed and signed by a Physician, Nurse Practitioner, Registered Nurse, or Pharmacist. Submit only when fully completed.

¹ Health Canada. Prevention and control of occupational infections in health care. CCDR 2002; 28S1.

² Sepkowitz K.A. Occupationally acquired infections in health care workers. Part 1. Ann Intern Med 1996; 125:826-34.

³ Sepkowitz K.A. Occupationally acquired infections in health care workers. Part II. Ann Intern Med 1996; 125:917-28.

⁴ Patterson W.B., Craven D.E., Schwartz D.A., Nardell E.A., Kasmer J., Noble J. Occupation hazards to hospital personnel. Ann Intern Med 1985; 102:658-80.

⁵ Health Canada. Routine practices and additional precautions for preventing the transmission of infection in health care. CCDR 1999; 25S4.

⁶ Health Canada. Canadian Immunization Guide <https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-3-vaccination-specific-populations/page-11-immunization-workers.html> accessed Nov 1, 2022

⁷ NACI- Varicella Proof of Immunity – 2015 Update <https://www.canada.ca/en/public-health/services/publications/healthy-living/varicella-proof-immunity-2015-update.html> accessed Nov, 1 2022.

⁸ Health Canada. COVID-19 vaccine: Canadian Immunization Guide. <https://www.canada.ca/en/public-health/services/publications/healthy-living/canadian-immunization-guide-part-4-active-vaccines/page-26-covid-19-vaccine.html#a5> accessed Nov 1, 2022.

Student Name: _____ **Date of Birth:** _____
Last Name First Name Middle initial (DD/MM/YYYY)

	Date Vaccine Given (DD/MM/YYYY)	Serology Date (DD/MM/YYYY)	Serology Result
Varicella – 2 doses (Serology not required if proof of 2 doses, serology for immunity to naturally acquired varicella acceptable)	1) 2)		
TdaP Tetanus/Diphtheria/Pertussis (Must have 1 TdaP booster documented in adulthood and be within 10 years)	1) (Please administer booster if needed)		**serology is not accepted
Td (Td – once every 10 years)	1)		**serology is not accepted
MMR – documented TWO doses OR serology proving immunity to EACH measles, mumps, and rubella.	1) 2)	Measles Date:	Measles results:
		Mumps Date:	Mumps results:
		Rubella Date:	Rubella results:
The Student / Learner has met all immunization requirements above: (Please place “X” in box)			YES:
			NO:

Hepatitis B (proof of immunization AND bloodwork required)	Date Vaccine Given (DD/MM/YYYY)			
Part A	Hepatitis B Primary Series	1)	2)	3)
AND				
	Hepatitis B serology (date): _____ (at least 4-8 weeks after immunization)	HBsAb (Anti-HBs): _____ (serology result)** (Please attach copy of serology results)		

****If titre (serology) results above show you are not immune to Hepatitis B, it is MANDATORY to complete Part B below****

Part B	Hepatitis B REPEAT Series	1)	2)	3)
	Hepatitis B serology (date): _____ (at least 4-8 weeks after repeat immunization) **Serology may be taken one month after first dose of repeat series to assess immunity if original series was completed more than 6 months prior to a negative/non-reactive HBsAB titre.	HBsAb (Anti-HBs): _____ (serology result)		

Polio – Mandatory if lived/visited a country in which there has been a recent polio outbreak
Documentation of Primary series:

Tuberculosis (TB skin test) – required proof of negative 2-step skin test, if more than 6 months ago an updated 1-step needed within 6 months of entry into the program, or per specific program’s deadline (see appendix for TB skin test algorithm)			
Date 1 st step given:	Date of read:	Result:	mm
Date 2 nd step given:	Date of read:	Result:	mm
UPDATED 1-step given: (Required if above 2-step is >6months at point of entry into the program)	Date of read:	Result:	mm
BCG Date (if applicable): <small>*No longer recommended in Canada*</small>	CXR Result (if applicable): <small>*Attach proof of negative CXR, if positive TB skin test*</small>		
The Student/Learner does not have tuberculosis as evidenced from a negative TST or chest X-ray: (Please place “X” in box)		YES:	NO:

The following vaccinations are **strongly recommended**:

- Influenza (seasonal)*
- COVID-19 (primary series plus applicable boosters)*

*Please note that placement sites may require one or both of these vaccinations.

Please Note: Additional immunization documentation may be required by the practicum/fieldwork site a student is assigned to for clinical coursework, particularly for out-of-province placements.

Please DO NOT sign this form until <u>ALL</u> requirements above have been met.	
Name of Health Care Provider:	Title:
Signature of Health Care Provider:	Date:
Office Address:	Phone:

Frequently Asked Questions**Where can I obtain a Mantoux Test/TB Test?**

Students are advised to contact their primary health care provider's office to determine where they can obtain a two-step Mantoux/TB test in their area of the Maritimes/Canada. **Students should note:** that a two-step Mantoux/TB test requires four separate visits to a health care provider trained to administer and read the test over a required period.

Various Mantoux (TB-Tuberculosis) Testing locations in Halifax are available. Please Note: you should call ahead to verify pricing and book an appointment.

Dalhousie University Health Services (Telephone: **902-494-2171**)

Website: https://www.dal.ca/campus_life/health-and-wellness.html

How can I find out if my vaccinations are up-to-date, or get a copy of my vaccination record in Prince Edward Island?

If you received your vaccinations in PEI and need to determine if your vaccinations are up-to-date, or need a copy of your vaccination record, call a Public Health Nursing Office in your area. It takes approximately **two weeks to process your request** for a copy of your record. Call: 902-368-4530 (Charlottetown).

<https://www.princeedwardisland.ca/en/information/health-pei/public-health-nursing>

Looking for your immunization records in New Brunswick?

To obtain an NB immunization record, you need to contact the immunization provider as below:

- If you received your immunizations from a doctor, contact them.
- If you received your immunizations at a Public Health clinic, contact your local clinic.

http://www2.gnb.ca/content/gnb/en/departments/ocmoh/healthy_people/content/public_health_clinics.html.

Where can I locate my immunization records in Nova Scotia?

In the NS Health Authority Central Zone most childhood and adult immunizations are given by your family doctor and school immunizations are given by Public Health Nurses, so your immunization records may be at both your doctor's office and at the Public Health Office.

If you lived in other areas of Nova Scotia, you could contact the Public Health Office in your area to request your immunization records. Please see the list of Public Health Offices in Nova Scotia: <http://www.nshealth.ca/public-health-offices>.

How can I access copies of my immunization records if I am from Newfoundland?

Individuals who wish to receive a certified copy of their Newfoundland Labrador Immunization Record should contact the Regional Health Authority of current residence. For a list of regional health authorities, and contacts, please see:

<https://www.gov.nl.ca/hcs/publichealth/cdc/immunizations/>

If you lived in another Canadian province, you should contact that province's Public Health Department for immunization records.

If you receive an immunization from a community pharmacist, please contact the community pharmacy location where you received the immunization for a copy of your record.

Please Note: Additional documentation may be required at the site you are assigned to for your clinical coursework, especially out-of-province placements.

APPENDIX A
Immunization and Infectious Disease Screening for Students

Requirements are to be met within 6 months of entry into the program, or as per each specific program's designated deadline, as a pre-requisite/condition. Students must have met the requirements prior to placements commencing, as per applicable Nova Scotia Health, IWK, and other Student and Learner Placement Affiliation Agreements, policy, and process.

2. Requirements:

i. The following vaccinations (or proof of immunity) are ***required for all*** Faculty of Health learning placements:

- Measles, Mumps, Rubella
- Tetanus, Diphtheria, Pertussis
- Varicella
- Hepatitis B
- Polio
- Tuberculosis

Due to the risk of false negative test results, live vaccines (MMR, Varicella etc.) as well as mRNA or viral vector COVID-19 vaccines should not be given within 28 days of TB skin tests

ii. The following vaccinations are recommended:

- Influenza (seasonal)
- COVID-19 (primary series plus applicable boosters)
- Please note that placement sites may require one or both of these vaccinations.

3. Description of immunizations and immunity status:

i. **Measles Mumps Rubella (MMR):**

Consider immune with **one** of the following, regardless of year of birth:

- Documentation of having received two doses of the following vaccines, on or after their first birthday
 - Measles-containing vaccine,
 - Mumps-containing vaccine
 - Rubella-containing vaccine
- Laboratory evidence of immunity
 - Proof of serology required for each Measles, Mumps, & Rubella
- Documentation of laboratory-confirmed
 - Measles
 - Mumps
 - Rubella

NOTE:

- If verification of two doses of MMR vaccine is received, then no further testing/verification is required.
- In the event that the individual who has had two documented doses of MMR vaccine is tested serologically, and is negative, an additional dose is not recommended; the student should be considered immune.

Tetanus, Diphtheria, Acellular Pertussis:

Consider immune with documentation of primary series (minimum 3 doses) and booster dose every 10 years.

ii. **Acellular Pertussis:**

Recommended once in adulthood (given in conjunction with Tetanus diphtheria (**Td**) vaccine.

Notes re Acellular Pertussis:

- All individuals, regardless of age, should receive a single dose of Tdap vaccine for pertussis protection if they have not been immunized previously with this vaccine in adulthood, even if they are not due for a tetanus and diphtheria booster.

iii. **Varicella**

Consider immune with **one** of the following, regardless of year of birth:

- Documentation of having received two doses of Varicella vaccine at least 6 weeks apart on or after their first birthday (serology not required if documented 2 doses)
- Laboratory evidence of immunity
- Documentation of laboratory-confirmed Varicella

NOTE:

- Individuals with a self-provided history of chickenpox or zoster should no longer be assumed to be immune.

Hepatitis B

Dalhousie Faculty of Health and our placing agencies (ie. NSH, IWK) requires that students complete a full series of Hepatitis B immunizations and achieve HBsAb immunity **prior** to any clinical placement.

Minimum Hepatitis B requirements for Dalhousie Faculty of Health learning placements: Prior to starting a learning placement, students are required to meet **one** of the two options below:

Option A: Show proof of completing a full series of Hepatitis B vaccinations, **AND** proof of HBsAb immunity (based on ranges provided by lab). If initial serology following primary Hepatitis B series, shows non-immunity, students are required to complete an additional repeat series. However, after the first dose of a repeat series students may test for immunity (serology) after 4 weeks. If immunity is shown at this time, the remainder of the repeat series can be arrested. If serology is non-immune, then the remaining 2 doses of the repeat series need to be completed. A final serology is required after all 3 repeat series doses, at least 4-8 weeks after the final dose.

OR

Option B: For those without a primary series completed, or no proof is available, students are required to provide proof of receiving at least one dose in a Hepatitis B vaccine series, provide a schedule for completion of the primary series, followed by acquiring proof of serology showing immunity, at least 4-8 weeks after last dose (must provide serology result upon completion); plus sign a Hepatitis B Immunity Waiver (see Appendix B).

NOTE: Expectation for Student/Learners who have not achieved Hepatitis B (HBsAB) immunity

- Students are expected to acquire Hepatitis B vaccinations and document results of immunity status during their academic study.
- If a student has not achieved Hepatitis B immunity prior to starting their learning placement, the student will be provided with the risks of non-immunity to Hepatitis B and the risks associated with working in a health care setting.
- If students are to sign the Hepatitis B Waiver – the student agrees to complete their Hepatitis B requirements in a timely manner.

Tuberculosis:

To confirm that the student does not have tuberculosis as evidenced from a negative TST or chest X-ray (in the event of a positive TST).

BCG vaccine is no longer recommended in Canada, including documentation in the form above is for informational purposes only.

Within 6 months of entry into the program, or as per the specific program’s designated deadline to be collected as a pre-requisite / condition of the learning program:

- If no history of a negative 2-step Tuberculin skin test (TST): a 2-step Tuberculin skin test must be completed and must be negative.
- If there is documentation of a prior negative 2-step TST, a 1-step TST test is completed, within 6 months of entry to the learning program.
- If there is a documented prior positive TST or any prior treatment for active or latent TB, or previous treatment for latent TB, a TST is not required; however, providing proof of treatment AND negative CXR (non-active TB) is required.
- Please refer to the following algorithm, on the next page.

NOTE: TB testing within 28 days of a COVID-19 mRNA vaccine

There is a theoretical risk that mRNA or viral vector COVID-19 vaccines may result in a false-negative TB skin test if given within 28 days of each other. Because of this theoretical possibility, we are asking students to plan ahead to ensure the timing of their COVID-19 vaccine and 2-step TB test are not within 28 days of each other.

Performing a 2-Step TST:

- A TST is applied and read within 48-72 hours of being administered.
- The measurement of induration (not erythema), in mm, must be recorded.
- If the first test is negative, a second test is applied 7-21 days later.
- If either the 1st or 2nd step TST is positive, the individual is considered positive.

