

COFM Immunization Policy - 2019

By: Council of Ontario Faculties of Medicine (COFM)

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This policy applies to all medical learners (undergraduate medical students and postgraduate residents and fellows) attending an Ontario medical school and performing clinical activities in Ontario. Undergraduate medical learners who do not comply with the immunization policy may be excluded from clinical activities. Residents who do not comply with the immunization policy may be delayed in starting or continuing training. Ontario medical learners doing international clinical placements will require an additional assessment. A travel medicine consultation should take place at least eight weeks before their placement. Additional immunizations may be necessary depending on the location of their placement.

This policy is an evidence-based consensus document developed by an expert working group on behalf of the six Ontario medical schools and faculties. The policy closely complies with the current Ontario Hospital Association immunization recommendations; however, immunization requirements of individual hospitals or clinical institutions may vary. The policy allows some flexibility to enable health care practitioners to select among certain options according to their professional judgment. All Ontario medical schools agree that regardless of option chosen in a particular clinical situation, learners of any Ontario medical school will have their immunization status accepted as long as this policy was followed.

The following investigations must be completed before entering a clinical placement. In the case of the hepatitis B immunizations, the series must be started before the learner enters a clinical placement and completed by the end of the first academic year. The medical learner may incur costs associated with some immunizations. For resident learners, the costs are subject to the terms of the PARO-CAHO Collective Agreement.

Tuberculosis¹:

- a) Medical learners whose tuberculin skin test (TST) status is unknown or undocumented, and those previously identified as tuberculin negative, require a baseline two-step TST with PPD/5TU, unless they have:
- documented results of a prior two-step test, or
 - documentation of a negative TST within the last 12 months, in which case a single-step test may be given.

¹ CDC Guidelines for Preventing the Transmission of Mycobacterium Tuberculosis in Health Care Settings (refer to most recent version). OHA/OMA Communicable Disease Surveillance Protocol – Tuberculosis (refer to most recent version)

If a learner has a previously documented positive tuberculin skin test, the learner should not receive another tuberculin skin test, see (d).

- b) Medical learners who have had previous Bacille Calmette-Guerin (BCG) vaccine are still at risk of infection with *M. tuberculosis* and should be assessed as in (a) above. A history of BCG vaccine is **not** a contraindication to tuberculin testing.

NOTE: Interferon Gamma Release Assays (IGRAs) are only recommended for learners unable to access a TST.

- c) Contraindications to tuberculin testing are:

- history of severe blistering reaction or anaphylaxis following the test in the past;
- documented active TB;
- clear history of treatment for TB infection or disease in the past;
- extensive burns or eczema over the testing site (use an alternate site);
- major viral infection (persons with a common cold may be tested; and/or
- live virus vaccine in the previous twenty-eight (28) days.

NOTE: Pregnancy is NOT a contraindication to a TST.

- d) For medical learners who are known to have a previously documented positive tuberculin skin test, for those who are found to be tuberculin skin test positive, or for whom tuberculin skin testing is contraindicated as in (c) above, further assessment should be done by Health Services under the direction of a physician, or by the learner's personal physician.

- e) Chest radiographs should be taken on medical learners who:

- i. have never been evaluated for a positive skin test;
- ii. had a previous diagnosis of tuberculosis but have never received adequate treatment for TB; and/or
- iii. have pulmonary symptoms that may be due to TB.

If the chest radiograph reveals features to indicate previous or active pulmonary TB, the medical learner should be further evaluated under the direction of a physician to rule out the possibility of active tuberculosis and, if active TB is not present, referred for consideration of a treatment plan (if any) for a latent TB infection (LTBI). Documentation of the results of this evaluation should be in place before s/he is cleared for clinical placement.

All TB skin test positive medical learners should be advised to report any symptoms of pulmonary TB as soon as possible to the Health Services, and should be managed using current guidelines.

Active cases of TB, those suspected of having active TB disease, tuberculin skin test converters and those with a positive TB skin test are reportable to the local Medical Officer of Health. Learners with active TB or suspected of having active TB should be reported as soon as possible to the Medical Officer of Health. Occupationally acquired active TB and LTBI are also reportable to Workplace Safety and Insurance Board (WSIB) and the Ontario Ministry of Labour.

Annual screening for TB may be necessary in health care settings with a high incidence of active TB disease. Health Services should consult the local Medical Officer of Health and local hospitals regarding the incidence of active TB disease in the region and the need for continuing TB surveillance of medical learners. A review of admissions through health records will determine if the setting is a high risk facility, as defined by Public Health Agency of Canada, i.e. ≥ 6 cases of active TB disease per year, requiring active surveillance.

Varicella/Zoster²:

Medical learners must demonstrate evidence of immunity. Medical learners can be considered immune to varicella/zoster if they have:

- laboratory evidence of immunity (positive IgG antibody) **OR**
- documentation of 2 doses of a VZV-containing vaccine (given on or after the first birthday with doses occurring at least 28 days apart. Refer to the [Canadian Immunization Guide](#) for further information on recommended intervals.) **OR**
- laboratory evidence of actual infection (polymerase chain reaction or direct immunofluorescence)

VZV vaccine is required for non-immune medical learners. If after vaccination a varicella-like rash localized to the injection site develops, the person may continue to work if the rash is covered. A small number (approximately 3%-5% after the first injection and 1% after the second injection) of vaccinated persons will develop a varicella-like rash not localized to the injection site; these persons should be excluded from work with high-risk patients (e.g., children, newborns, obstetrical patients, transplant patients, oncology patients) until lesions are dry and crusted, unless lesions can be covered. The effects of varicella vaccine on the fetus are unknown; therefore,

² National Advisory Committee on Immunization (NACI) **Canadian Immunization Guide**, Public Health Agency of Canada (refer to most recent version). OHA/OMA Communicable Disease Surveillance Protocols – Varicella/Zoster (Chickenpox/Shingles) (refer to most recent version)

pregnant women should not be vaccinated. Women should delay pregnancy for at least four (4) weeks following vaccination.

Serologic testing for immunity after immunization is not recommended. Currently available serologic tests, although useful to determine natural immunity, are not sensitive enough to determine post-vaccine immunity.

Measles³:

Medical learners must demonstrate evidence of immunity. Only the following will be accepted as proof of measles immunity:

- documentation of at least 2 doses of measles-containing vaccine on or after the first birthday, with doses given at least 28 days apart, **OR**
- laboratory evidence of immunity (positive IgG antibody)

If this evidence of immunity is not available, to meet the above requirements the medical learner must have (a) measles immunization(s), in the form of a trivalent measles-mumps-rubella (MMR) vaccine, unless the learner is pregnant. Pregnant women should not be vaccinated with live-virus vaccines, like MMR. Women should delay pregnancy for at least four (4) weeks following vaccination..

Mumps⁴:

Medical learners must demonstrate evidence of immunity. Only the following will be accepted as proof of mumps immunity:

- documentation of at least 2 doses of mumps-containing vaccine on or after the first birthday, with doses given at least 28 days apart, **OR**
- laboratory evidence of immunity (positive IgG antibody).

If this evidence of immunity is not available, the medical learner must have (a) mumps immunization(s) (if they had no previous doses of mumps-containing vaccine, they need two doses of MMR; If they had one previous dose of mumps-containing vaccine, they need one dose of MMR), in the form of a trivalent measles-mumps-rubella (MMR) vaccine, unless the learner is pregnant. Pregnant women should not be vaccinated with live-virus vaccines, like MMR. Women should delay pregnancy for at least four (4) weeks following vaccination..

³ National Advisory Committee on Immunization (NACI) **Canadian Immunization Guide**, Public Health Agency of Canada (refer to most recent version). OHA/OMA Communicable Disease Surveillance Protocols – Measles (refer to most recent version)

⁴ National Advisory Committee on Immunization (NACI) **Canadian Immunization Guide**, Public Health Agency of Canada (most recent version). OHA/OMA Communicable Diseases Surveillance Protocols – Mumps (refer to most recent version),

Rubella⁵:

Medical learners must demonstrate evidence of immunity. Only the following will be accepted as proof of rubella immunity:

- documentation of one dose of rubella-containing vaccine on or after their first birthday; **OR**
- laboratory evidence of immunity (positive IgG antibody).

If this evidence of immunity is not available, the medical learner must have one dose of a rubella-containing vaccine, in the form of a trivalent measles-mumps-rubella (MMR) vaccine, unless the learner is pregnant. Pregnant women should not be vaccinated with live-virus vaccines, like MMR. Women should delay pregnancy for at least four (4) weeks following vaccination..

Hepatitis B (HBV)⁶:

Documented evidence of a complete series of HBV immunizations, in addition to testing for antibodies to HBsAg (Anti-HBs) at least one month after the vaccine series is complete is required. Medical learners who have received a complete series of HBV vaccine and who have had an inadequate serological response should be tested for surface antigen (HBsAg) to determine if the reason for their non-response is because they are already a hepatitis B virus carrier. If the blood test identifying an inadequate serological response (anti-HBs <10 IU/L) was done one to six months after completing the vaccination series and the learner tests negative for HBsAg, the learner should receive an additional primary series. If the initial negative antibody result (anti HBs <10 IU/L) was done more than six months after completing the vaccination series, and the learner is negative for HBsAg, a test for serological response (anti HBs) could be done after the first booster in the second series. If the anti-HBs is \geq to 10 IU/L, no further doses are needed. If after the first dose an inadequate serological response is still found, continue with the remaining dose(s) and repeat the serology test (anti-HBs) one month after completing the second series. The sequence may be reversed, i.e., the “booster” test dose may be done before testing for HBsAg, if this is more appropriate considering the learner demographics.

If the anti-HBs titre is <10 IU/L one month after completing the second series, the person is considered a non-responder and must be counselled to be vigilant in preventing and following-up after needle stick injuries or any other potential exposure to HBV. Immediate medical management of the non-responder medical learner after a potential exposure to blood or body fluids is required as may need passive immunization with hepatitis B immune globulin.

⁵ OHA/OMA Communicable Diseases Surveillance Protocols – Rubella (refer to most recent version)

⁶ American Academy of Pediatrics **Red Book** (refer to most recent version)

Routine booster doses of vaccine are not currently recommended in persons with previously demonstrated antibody as immune memory persists even in the absence of detectable anti-HBs, however periodic testing should be conducted in hepatitis B responders who are immunosuppressed to ensure they are maintaining their anti-HBs titre.

Polio:

Documented history of a primary series is requested (oral included). In the absence of documentation of an original series, the learner should receive an adult primary series consisting of at least three doses of IPV.

Tetanus/Diphtheria:

Documented history of a primary series and dates of boosters are requested. In the absence of documentation of an original series, the learner should be offered immunization with a full primary series. If the most recent booster is not within the last 10 years, a booster must be given. If a Tdap (Adacel® Vaccine) has not been given as an adult (18+), this booster should be a Tdap.

Acellular Pertussis⁷:

A single dose of Acellular Pertussis in the form of a Tdap (Adacel® vaccine) is given if not previously received as an adult (18+). The adult dose is in addition to the routine adolescent booster dose. There is no contraindication in receiving Tdap in situations where the learner has had a recent Td immunization.

Influenza⁸:

Annual influenza vaccination is required for clinical placements occurring between November and June inclusive. Medical learners who choose not to have an annual influenza vaccination should be notified that hospital policies may preclude them from clinical placements or require antiviral prophylaxis and immunization in the event of an influenza outbreak. The National Advisory Committee on Immunization (NACI) NACI considers the provision of influenza vaccination to be an essential component of the standard of care for all health care workers (HCW) for the protection of their patients. This includes any person, paid or unpaid, who provides services, works, volunteers or trains in a health care setting.

Therefore, HCWs who have direct patient contact should consider it their responsibility to provide the highest standard of care, which includes annual influenza vaccination. In

⁷ OHA/OMA Communicable Diseases Surveillance Protocols – Pertussis (refer to most recent version)

⁸ OHA/OMA Communicable Diseases Surveillance Protocols – Influenza (refer to most recent version)

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the absence of contraindications, refusal of HCWs who have direct patient contact to be immunized against influenza implies failure in their duty of care to patients.

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