

Health Care Workers

Recommended vaccines for health care workers ^A	
All routine vaccines	Immunize according to routine schedule.
Polio vaccine	Primary immunization is recommended for all health care workers (HCW). Administer a single booster dose 10 years after primary series for HCWs, including laboratory workers, who may be exposed to feces.
Hepatitis B vaccine	Recommended and provided free by employers for HCWs who may be exposed to blood or body fluids, or who may be at increased risk of sharps injury, bites, or penetrating injuries.
Influenza vaccine	Immunize yearly.

Health Care Workers (HCWs) include persons who provide health care to patients or work in institutions that provide patient care (e.g., physicians, nurses, emergency medical personnel, dental professionals, laboratory technicians; medical, dental, nursing and laboratory technician students; hospital volunteers; and administrative, housekeeping and other support staff in health care institutions).

HCWs are at risk of exposure to communicable diseases because of their contact with patients or material from patients with infections, both diagnosed and undiagnosed.

Maintenance of immunity against vaccine preventable diseases is an integral part of a health care facility's occupational health program. Optimal usage of immunizing agents in hospital staff will not only safeguard the health of staff members but may, in some instances, also protect patients from becoming infected by hospital employees.

The priority for all health care workers should be to ensure that all routine immunizations, including booster doses, are completed and booster doses are provided as needed on an ongoing basis.

Guidelines for Health Care Worker Immunization Programs

It is the responsibility of the employer to:

- Assess the immunization status of each worker at the time of initial employment.
- Obtain full vaccination history, including documentation of the doses received and dates of administration.
- Offer immunization at the earliest opportunity to persons who cannot provide acceptable information or evidence of adequate immunity.
- Maintain records of all immunizations and serologic tests. The employee should also keep these records.
- Institute an immunization recall system.

^A For specific vaccine schedule information, refer to [Part 4 - Biological Products](#).

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Hepatitis B Vaccine

Individuals are considered immune if they have completed a series of hepatitis B vaccine and one documented laboratory test that shows they have developed sufficient antibodies. For specific recommendations on post-vaccination serological testing, see [BC Communicable Disease Control Manual, Chapter 1, Hepatitis B](#), subsections 11.4 and 12.0.

Measles, Mumps, Rubella Vaccine

Although there is differing information available regarding the need for each of the antigens contained in MMR vaccine (based on birth year, previous illness and previous immunization), the only vaccine available and provided free in BC is the combination product, MMR. There are no data indicating an increase in adverse events related to additional doses of MMR vaccine.

Administer the appropriate number of doses (i.e., 1 or 2) of MMR vaccine to any individual requiring protection against any of the antigens.

Measles Protection:

Assess all new employees born on or after January 1, 1957 for proof of 2 live measles vaccinations, laboratory evidence of immunity, or a history of laboratory confirmed measles disease. Persons born before 1957 have probably been infected naturally and can be considered immune.

Mumps Protection:

Assess all individuals born on or after January 1, 1957 for proof of prior history of laboratory confirmed mumps disease, or 1 dose of live mumps-containing vaccine if they were born between 1957 and 1969 (inclusive), or 2 doses of live mumps-containing vaccine if they were born on or after January 1, 1970.^A Persons born before 1957 have probably been infected naturally and can be considered immune.

Rubella Protection:

Assess all employees for proof of 1 dose of rubella containing vaccine or laboratory evidence of immunity to rubella.

Influenza Vaccine

Influenza vaccination of HCWs has been shown to reduce the mortality and morbidity of patients under their care in long-term settings and to reduce worker illness during the influenza season.

Varicella Vaccine

Assess varicella susceptibility before immunization. A varicella susceptible person is one without a history of varicella or herpes zoster after 12 months of age and without a history of age appropriate varicella immunization. A self-reported history of varicella is adequate for those born before 2004; for those born in 2004 and later, a health care provider diagnosed history is required for reliability.

Those 13 years of age and older should have serological testing for immunity by varicella IgG before immunizing (use [Public Health Laboratory Serology Screening Requisition](#)) as most will be immune from prior subclinical infection. Serological testing is not routinely recommended post-vaccination.

^A Unlike for measles and rubella, there is no reliable serological correlate of protection for mumps IgG.

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Hepatitis A Vaccine

Hepatitis A vaccine is not routinely recommended for health care workers. Prevention of hepatitis A transmission within a health care facility should be based on the use of infection control practices, especially proper hand washing and management of potentially infected materials.

Polio Vaccine

HCWs who have not completed a primary series should have the series completed, regardless of the interval since the last dose. Administer a single booster dose 10 years after the primary series for HCWs, including laboratory workers, who may be exposed to feces.

BCG Vaccine

Comprehensive application of infection control practices remains the primary strategy to protect health care workers from infection with *M. tuberculosis*.

In Canada, BCG vaccination is not routinely administered to HCWs. Only in exceptional circumstances, such as an outbreak of multiple drug-resistant disease should BCG be considered for exposed health care workers.

Meningococcal Vaccines

Recommended, but not provided free to research, industrial, and clinical laboratory personnel who are routinely exposed to *N. meningitidis*.

2.4 Schedule D: Adults Age 18 and Older When Starting or Resuming Immunization

The following vaccines are routinely offered to eligible adults in BC; this schedule should be used in combination with the relevant Biological Product pages (see [Part 4 – Biological Products](#)). Additional vaccines may be recommended due to risk factors i.e., occupation, travel, lifestyle, health status. Refer to [Part 2 – Immunization of Special Populations](#).

Vaccine	Scheduling Guidelines and Routine Eligibility Criteria
HA	<ul style="list-style-type: none"> Aboriginal adults 18 years of age only: 2 doses given at 0 and 6 months.
HB	<ul style="list-style-type: none"> Individuals 18 and 19 years of age: 3 doses (0.5 mL each) given at 0, 1 and 6 months. Individuals 20 years of age and older born in 1980 or later: 3 doses (1.0 mL each) given at 0, 1, and 6 months
HPV9	<ul style="list-style-type: none"> Women born in 1994 or later and high risk males, up to 26 years of age (inclusive): 3 doses given at 0, 2, and 6 months. NOTE: Individuals who initiated the vaccine series prior to their 15th birthday should be immunized using a 2-dose series.
Men-C-C	<ul style="list-style-type: none"> Adults up to 24 years of age (inclusive): 1 dose.
MMR	<ul style="list-style-type: none"> Measles Protection: up to 2 doses of MMR are recommended for all individuals born on or after January 1, 1970 (1957 for health care workers) who do not have a history of lab confirmed measles infection, lab evidence of immunity, or documentation of 2 doses of a live measles-containing vaccine at 12 months of age or older and given at least 4 weeks apart. Mumps Protection: up to 2 doses of MMR are recommended for all individuals born on or after January 1, 1970 (1957 for health care workers) who do not have a history of lab confirmed mumps infection, or documentation of 2 doses of a live mumps-containing vaccine at 12 months of age and older and given at least 4 weeks apart. Rubella protection: 1 dose of MMR is recommended for all individuals born on or after January 1, 1957 who have not received 1 dose of a rubella-containing vaccine or who do not have serologic evidence of rubella immunity. If 2 doses of MMR vaccine are required, give at least 4 weeks apart.
IPV	<ul style="list-style-type: none"> Routine primary immunization against polio of adults living in Canada is not considered necessary. Primary immunization with polio vaccine is recommended only for unimmunized adults who are at higher risk of exposure to wild polioviruses: refer to Part 4 – Biological Products, Polio Vaccine. 3 doses given at 0 and 1 month, followed by a 3rd dose 6-12 months after the 2nd dose. If IPV is indicated, for those also requiring protection against tetanus, diphtheria or pertussis, combination products can be used (i.e., Tdap-IPV and Td/IPV).
Td/Tdap	<ul style="list-style-type: none"> Adults receiving a primary immunization series should receive 1 dose of Tdap (to provide protection against pertussis) followed by 2 doses of Td. This series should be given at 0 and 1 month, followed by a 3rd dose 6-12 months after the 2nd dose. For adults resuming an interrupted immunization series, provide additional doses of vaccine to ensure that the client has received at least 3 doses of a diphtheria and tetanus containing vaccine with at least one dose after the 4th birthday. Individuals born in 1989 or later who missed their adolescent Tdap booster are eligible for 1 dose of Tdap.
Var	<ul style="list-style-type: none"> Assess susceptibility. A varicella susceptible person is one without a history of varicella or herpes zoster after 12 months of age and without a history of age appropriate varicella immunization. A self-reported history of varicella is adequate for those born before 2004. For susceptible adults, do serological testing for immunity first. For information on serological testing refer to Part 4 – Biological Products, Varicella Vaccine. If susceptible, give 2 doses or varicella vaccine 6 weeks apart.