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 (HCWs).
	Administer a single booster dose 10 years after primary series for HCWs, including laboratory workers, who may be exposed to feces.

Priority Pathogens: Protection against the following is particularly recommended to support Infection Prevention and Control:

- Measles
- Mumps
- Rubella
- Varicella
- Hepatitis B
- Pertussis
- SARS-CoV-2 (COVID-19)
- Influenza

Health Care Workers (HCWs) in BC 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. HCWs also care for individuals who may be at risk of severe outcomes due to infection with a communicable disease.

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 can help safeguard the health of staff members and protect patients from certain infectious diseases.

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

Routine serologic testing of healthcare workers without written documentation of immunization to determine immunity is not practical and serological correlates of protection and commercially available tests are not available for many vaccine preventable diseases. However, for some diseases, lab evidence of natural infection, lab evidence of immunity, and/or year of birth can be considered as proof of immunity. See <u>Vaccine Specific Considerations for Health Care Workers</u> and <u>Part 4 – Biological Products</u> for more information.

^A For specific vaccine schedule information, refer to Part 4 – Biological Products.

Communicable Disease Control Manual

July 2024

Health Care Workers

Guidelines for Health Care Worker Immunization Programs

It is the responsibility of the employer to:

- Assess the immune status of each health care worker for vaccine preventable diseases 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 for immunity. The employee should also keep these records.
- Institute an immunization reminder/recall system.

Vaccine Specific Considerations for Health Care Workers

Measles, Mumps, Rubella (MMR) 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.

Varicella Vaccine

Assess varicella susceptibility before immunization. As of June 2018, a varicella susceptible person is one without a history of lab confirmed varicella or herpes zoster after 12 months of age and without a history of age-appropriate varicella immunization. Individuals with a documented exemption in the immunization registry prior to this date due to previous disease will be considered immune. A self-reported history of varicella or physician diagnosed varicella is adequate only if disease occurred before 2004.

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

Health Care Workers

Hepatitis B Vaccine

Hepatitis B vaccination is 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. 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. Laboratory testing for anti-HBs in the absence of a documented complete vaccine series is not acceptable proof of immunity. For more information regarding adequate proof of vaccination history, see Part 1 - Immunization Schedules, Consideration of Immunization History. For specific recommendations on post-vaccination serological testing, see BC Communicable Disease Control Manual, Chapter 1, Hepatitis B.

Pertussis Vaccine

The National Advisory Committee on Immunization recommends all adults receive a single dose of pertussis vaccine if not previously received in adulthood. This dose is not currently publicly funded in BC, however some employers may provide it for free. The pertussis vaccine is available in the combination product with tetanus and diphtheria (i.e., Tdap).

COVID-19 Vaccine

COVID-19 vaccination is recommended for HCWs to reduce worker illness during periods of high SARS-CoV-2 circulation in the community and to reduce transmission of SARS-CoV-2 to vulnerable individuals receiving health care, personal care or home support in hospital or community settings. Dose recommendations may vary based on age and product formulation.

Influenza Vaccine

Annual 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.

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.

Hepatitis A Vaccine

Hepatitis A vaccine is not routinely recommended for HCWs. 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.

Meningococcal Vaccines

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

Bacillus Calmette-Guérin (BCG) Vaccine

Comprehensive application of infection control practices remains the primary strategy to protect HCWs 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 HCWs.