Immunization for Health Care Workers in B.C.

Why is immunization important for health care workers?

Health care workers are at risk of exposure to infectious diseases while at work.

Many diseases can be prevented with immunization. Getting immunized protects your health and prevents the spread of disease between you and your patients, and between you and your family and friends.

What routine immunizations are recommended in B.C.?

The vaccines recommended for health care workers are diphtheria and tetanus, polio, hepatitis B, measles, mumps and rubella (MMR), varicella and influenza. All are provided free to health care workers in B.C.

Immunization of employees is the responsibility of the Occupational Health department or assigned staff in the workplace. The employer and employee should keep records of all immunizations and laboratory test results.

Diphtheria, Tetanus, and Polio

Polio: Primary immunization with polio vaccine is recommended for all health care workers. Most adults will have completed a primary series of polio vaccine as children. If you think that you have not received the vaccine, then a primary series of polio vaccine is recommended. Health care workers should have a booster dose of the vaccine 10 years after completion of the primary series.

Due to immunization, polio has been eliminated in most parts of the world. In 1994, Canada was certified as a "polio free" country. Individuals at risk of getting polio in Canada are those who come in contact with people from countries where polio still exists. Individuals travelling to these countries may be exposed to polio and should be immunized. While most polio infections may not result in symptoms, others can result in paralysis and even death.

Diphtheria and Tetanus: Immunization against diphtheria and tetanus is recommended for all adults in Canada. A booster dose of the tetanus and diphtheria vaccine is recommended every 10 years. The booster may be given sooner if you get a dirty or major wound, including a bite.

Diphtheria is a serious communicable disease, causing death in 5 to 10 per cent of cases, with the highest rates among the very young and the elderly.

Tetanus is an acute and often fatal disease, but is rare in Canada. Cases are associated with dirty wounds, animal bites and contaminated drug injection equipment.

Measles, Mumps and Rubella

Measles: Protection against measles requires proof of receiving 2 doses of a measles vaccine or proof that you have had laboratory-confirmed measles in the past. Those born before 1957 have probably had measles and are considered immune.

Measles is a highly contagious disease that can be more severe in infants, children and adults who have weakened immune systems. Complications from measles include pneumonia, which is an infection of the lungs, and encephalitis, which is an inflammation of the brain. Encephalitis can lead to seizures, deafness or brain damage.

Mumps: Protection against mumps requires proof of having had laboratory-confirmed mumps in the past, or proof of having received the recommended number of doses of mumps vaccine for your age. People born between 1957 and 1969 need 1 dose of mumps vaccine while those born after 1969 need 2 doses. Individuals born before 1957 have probably had mumps and are considered immune.

Mumps is generally a mild disease. However, complications, including encephalitis, are more common in adults.

Rubella: Health care workers are considered protected against rubella infection if they have proof of having received 1 dose of rubella vaccine, regardless of their year of birth, or proof they have had laboratory-confirmed rubella disease.

Rubella infection in adults may cause swelling and pain in the joints. Infections in the first 3 months of

pregnancy can cause severe harm to a developing baby; about 9 out of 10 babies will have a birth defect. Babies may be born with damage to their sight, hearing, heart and brain. Rubella outbreaks in health care facilities are of concern due to the potential spread to pregnant health care workers and patients.

Hepatitis B

Hepatitis B vaccine is recommended for health care workers who may be exposed to blood or body fluids. Individuals are considered to be immune if they have completed the hepatitis B vaccine series and have a lab result indicating immunity. Those who do not develop immunity (non-responders) to an initial vaccine series should be offered a second series of vaccine. To check for immunity, hepatitis B antibody levels should be tested 1to 6 months after completion of the vaccine series.

Hepatitis B is a virus that attacks the liver. It can cause serious disease, including permanent liver damage (cirrhosis). Hepatitis B is also the main cause of liver cancer, which can be fatal.

Varicella

Varicella vaccine is recommended for health care workers who do not have proof of immunity against chickenpox. Proof of immunity consists of a self-reported history of chickenpox or shingles after 12 months of age, lab results indicating immunity, or documentation of completion of an age-appropriate series of varicella vaccine.

Individuals whose disease history is uncertain should be tested to determine if they are susceptible to varicella. Those who are susceptible should receive 2 doses of the vaccine, given at least 6 weeks apart.

Chickenpox is an infection caused by the varicella-zoster virus. Infection in teenagers, adults and those with weakened immune systems is more severe. Complications from chickenpox include pneumonia, encephalitis, and bacterial infections of the skin. About 1 in 3,000 adults will die from the infection.

Influenza

Annual influenza vaccine is recommended for health care workers. All health care workers are at risk of getting and spreading the influenza virus to their patients, families and friends. It is important to prevent spreading the virus to people at high risk of complications from influenza, such as the elderly or those with heart or lung disorders, weakened immune systems or other chronic medical conditions.

Influenza immunization of health care workers has been shown to reduce illness and complications among patients in long-term care settings. It also helps reduce illness among employees during the influenza season.

Influenza is an infection of the upper airway caused by the influenza virus. A person with influenza is at risk of other infections, including viral or bacterial pneumonia.

Pertussis

The National Advisory Committee on Immunization recommends a booster dose of pertussis vaccine for all adults who were immunized in childhood. In B.C., the booster dose is not routinely provided for free to adults. However, a booster dose of pertussis may be provided at no cost to health care workers by their Occupational Health department. The booster dose of pertussis vaccine is given in combination with diphtheria and tetanus vaccines.

Pertussis, also known as whooping cough, is a serious infection of the airways caused by pertussis bacteria. Pertussis can cause severe coughing that can last several months. Complications from pertussis include pneumonia, convulsions, brain damage or death. These complications are seen most often in infants. About 1 in 170 infants who get pertussis may die.

For More Information

For more information on the recommended routine immunizations, see the HealthLinkBC Files listed below:

- #12d Influenza (Flu) Vaccine
- #13 Polio Vaccine (IPV)
- #14a Measles, Mumps, Rubella (MMR) Vaccine
- #18a Tetanus and Diphtheria (Td) Vaccine
- #18b Tetanus, Diphtheria and Polio (Td-IPV) Vaccine
- #18c Tetanus, Diphtheria, Pertussis Vaccine
- #25a Hepatitis B Vaccine
- #44b Chickenpox (Varicella) Vaccine

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