

8. Healthy Health Care Workers

Adherence of health care workers to recommended infection prevention and control practices will decrease the transmission of infectious agents in health care settings. This will protect the health care provider, co-workers in the health care setting, patients, and visitors.

An occupational health program in a health care setting should include:

- Reinforcement of hand hygiene practices
- Pre-employment assessment for vaccination and immune history
- Ensuring immunity to standard vaccine preventable infectious diseases and tracking of these vaccinations/immunities
- Tuberculosis screening (pre-placement and routine screening)
- Annual influenza immunization
- Management of health care providers with infections
- Management of latex and other possible sensitivities
- Prevention of exposure to blood and body fluid exposure including a sharps safety guideline
- A post exposure follow-up process
- A respiratory protection program
- Training on selection and use of personal protective equipment and Additional Precautions
- Training and awareness of WHMIS
- Cleaning and disinfecting of medical equipment and healthy care facility.



All health care workers have a responsibility:

- to know their relevant immunization status (see below)
- to adhere to Routine Practices and Additional Precautions including appropriate and correct use of PPE and hand hygiene
- to use safe handling of sharps and
- to report exposures and symptoms that put themselves at risk for transmission of infections.

Staff who consume food or beverages in care areas (e.g. patient environment, nursing station, charting areas) are at increased risk for acquiring serious foodborne gastrointestinal infections. Outbreaks in institutions involving staff have been reported, particularly with hepatitis A, cryptosporidiosis and norovirus.

It is good practice to wash your hands before eating and drinking in the workplace to reduce the risk of infectious or other substance exposure.

Hierarchy of Controls:

The most effective forms of prevention are in this order where possible.

1. At the source: elimination of exposure: for example, keep contagious persons away from shared clinical areas
2. Along the path: interruption of transmission: for example, putting a procedure mask on a coughing/sneezing person
3. At the exposed: individual interruption of exposure: for example, N95 respirator for the caregiver of a patient with TB

Hazards from infectious waste and sharps

Infectious waste may contain microorganisms which may enter the body by various routes:

- Through a break in the skin (puncture, abrasion or cut)
- Through mucous membranes
- By inhalation
- By ingestion from contaminated hands

Personal protective equipment should be selected and worn depending on the route of transmission of the infectious organism.

Immunity and exposure history:

Recommended immunization for health care workers includes the following:

- Hepatitis B (for those at risk of exposure to blood or body fluids)
- Influenza (annually)
- Measles, mumps and rubella (MMR)
- Tetanus, diphtheria and polio and pertussis (Tdap)
- Varicella.



Health care worker immune status: The immune status should be considered when assigning a health care provider to a particular patient (e.g. rubella, mumps, varicella, and hepatitis B immunity.)

Hepatitis A: The National Advisory Committee on Immunization (NACI) does not recommend routine immunization of HCWs.

Hepatitis B: Recommended for all susceptible HCWs who may be exposed to blood or body fluids, or who may be at increased risk of sharps injuries or bites. The schedule is 3 doses of hepatitis B vaccine given at 0, 1 and 6 months intervals.

Post immunization serologic testing for anti-HBs should be conducted 1-6 months after the third dose to determine immunity. If the HCW has completed HB immunization more than 6 months ago, testing for anti-HBs should still be done.

If anti-HBs is >10 mIU/mL and documented at any time, repeat serology or re-immunization is not required.

If anti-HBs is <10 mIU/mL, administration of additional doses with testing for response after each dose should be undertaken.

Those who fail to respond to three additional doses of vaccine are not likely to benefit from further immunization.

Influenza: Annual vaccination for influenza is essential for all as the circulating virus changes each year.

Measles: Documentation of 2 doses of live measles virus vaccine on or after the 1st birthday or laboratory evidence of immunity to measles.

Note: The previously accepted assumption of immunity in HCWs born before 1970 is no longer valid, due to recent cases of measles in Ontario in persons born before 1970. While this is an acceptable assumption for the general public, it is not sufficient for HCWs.

Meningococcal disease: Meningococcal vaccine is not routinely recommended for most health care workers. It is recommended that laboratory personnel who are routinely exposed to preparations or cultures of *Neisseria*

