

# Occupational Health and Safety Bulletin



## Immunizations for Worker Exposure

Workers in a variety of settings may be exposed to biohazardous substances that cause disease. In some instances, immunization may be recommended as one of the control measures used to prevent illness.

## Hazard Assessment and Control

There are requirements in both the *Occupational Health and Safety (OHS) Act* as well as the OHS Code to protect health and safety in any work setting, and to all workplace hazards. This includes biohazards. Requirements extend to both employers and workers.

For employers, the Alberta *OHS Act*, Section 2(1) states:

*“Every employer shall ensure, as far as it reasonably practicable for the employer to do so,*

- (a) *the health and safety of*
  - (i) *workers engaged in the work of that employer, and*
  - (ii) *those workers not engaged in the work of that employer but present at the work site at which that work is being carried out, and*
- (b) *that the workers engaged in the work of that employer are aware of their responsibilities and duties under this Act, the regulations and the adopted code.”*

The *OHS Act*, Section 2(2) applies to workers:

*“Every worker shall, while engaged in an occupation,*

- (a) *take reasonable care to protect the health and safety of the worker and of other workers present while the worker is working”*

- (b) *co-operate with the worker's employer for the purposes of protecting the health and safety of*
- (i) *the worker,*
  - (ii) *other workers engaged in the work of the employer, and*
  - (iii) *other workers not engaged in the work of that employer but present at the work site at which that work is being carried out.*

The OHS Code has a general requirement for employers and workers to assess and control hazards. It requires employers to assess hazards, involve workers in the assessment and inform workers about the hazards and methods of control. Section 7:

- (1) *"An employer must assess a worksite and identify existing and potential hazards before work begins at the work site or prior to the construction of a new work site.*
- (2) *An employer must prepare a report of the results of a hazard assessment and the methods used to control or eliminate the hazards identified."*

To ensure workers are informed about the hazards, the OHS Code, Section 8 states:

- (1) *An employer must involve affected workers in the hazard assessment and in the control or elimination of the hazards identified.*
- (2) *An employer must ensure that workers affected by the hazards identified in a hazard assessment report are informed of the hazards and of the methods used to control or eliminate the hazards.*

There are additional controls specified for biohazards, and these are found in Section 528(1),

*"An employer must establish policies and procedures dealing with storing, handling, using and disposing of biohazardous materials."*

Prior to implementing a workplace immunization program, it is important to complete a hazard assessment to determine workers risk of exposure. Where workers are required to handle, use or produce an infectious material or organism, or are likely to be exposed to an infectious material or organism at a place of employment, the employer must conduct a hazard assessment that identifies existing and potential exposure to infectious substances. This can include:

- reviewing job tasks performed;
- identifying all tasks and procedures, as well as job classifications

---

Prior to implementation of a workplace immunization program, it is important that a hazard assessment be completed to determine the level of the worker's risk of exposure.

---

where there is potential for occupational exposure to infectious substances; and

- identifying all workers who may be exposed to the infectious substance.

The hazard assessment must include control methods.

To implement hazard controls, the employer should develop a plan that includes all methods of control to eliminate or prevent exposure.

The hierarchy of controls include:

- eliminating the hazard
- engineering controls — such as ventilation and structural arrangement of the workplace;
- administrative controls — such as safe work practices or protocols, immunization, worker education and training.
- personal protective equipment — this includes the use of eye protection, gloves, gowns, respirators, etc. when working in areas where there is a risk of exposure. Personal protective equipment is a last resort and used when all other measures cannot ensure that exposure is prevented.

---

Immunization should be just one component of an overall program to protect the worker from potential occupational exposures.

---

## Immunization

Immunization is important and should be just one component of an overall program to protect the worker from potential occupational exposures.

*Diphtheria and Tetanus (Td)* — immunization is recommended for all adults in Canada. For optimal protection booster doses of Td should be given routinely every 10 years. One adult booster dose should include an acellular pertussis component (dTap) unless a dose of this vaccine was received at 12 years of age or older.

If the risk of work-related exposure is determined to be significant, other immunizations may be considered. :

*Cholera* — The vaccine should be considered for:

- work-related travel with considerably increased risk of exposure such as relief and aid workers or health care workers working in countries where cholera is prevalent.

*Hepatitis A* — Instances where workers may be at risk include:

- staff of institutions for the developmentally challenged where there is an ongoing problem with Hepatitis A virus (HAV) transmission;
- zoo-keepers, veterinarians and researchers who handle non-human primates;
- workers involved in research on Hepatitis A virus or production of HAV vaccine;
- work-related travel to areas or countries where there is a high rate of Hepatitis A infection, especially in rural areas or places with inadequate sanitation facilities.

*Hepatitis B* — Immunization should be offered to:

- health care workers (people employed by an employer to provide health services that carry with them the potential for exposure incidents) who are at risk of exposure to blood, blood products and body fluids that may contain the virus; or are at increased risk of sharps injury, bites or penetrating injuries and
- other individuals who, during the course of their work, are at risk of exposure to blood, blood products and body fluids that may contain the virus; or are at increased risk of sharps injury, bites or penetrating injuries.

*Influenza* — Although annual influenza immunization is recommended for all Albertans, it is particularly important for:

- all health care workers and other care providers in facilities and community settings, who through their activities, are potentially capable of transmitting influenza to those at high risk of influenza complications (e. g. staff who have contact with residents of continuing care facilities or residences, staff who provide home care for persons in high-risk groups);
- workers who provide essential community services (e.g. paramedics);
- workers in direct contact with avian influenza-infected poultry during culling (removing sick or weak animals from a flock) operations.

*Japanese Encephalitis* — The vaccine should be considered for :

- work-related travel to places where Japanese Encephalitis is common.

*Measles (Red Measles)* — Vaccine should be offered to susceptible workers. Assessment for measles immunization and the number of doses required is dependent upon the age and the occupation of the worker and may be recommended for workers such as:

- those born in 1970 or later who do not have evidence of immunity to measles or documented immunization;
- health care workers;
- students at post-secondary educational institutions;
- work-related travel to an area where measles is common;

*Meningococcal Vaccine* — The vaccine should be considered for workers at high risk of exposure such as:

- laboratory workers in clinical or research facilities who frequently handle cultures of *Neisseria meningitidis*. Technicians working in routine microbiology laboratories *do not* need to receive this vaccine;
- work-related travel to an area in which there is a high incidence of meningococcal disease;

*Mumps* — Vaccine should be offered to susceptible workers. Assessment for immunization is dependent upon the age and occupation of the worker.

*Pertussis* — All adults should receive one life-time dose unless they have received a dose at 12 years of age or older.

*Poliomyelitis* — Primary immunization is recommended for workers such as:

- laboratory workers handling specimens that may contain polioviruses,
- health care workers in close contact with individuals who may be excreting wild or vaccine strains of polioviruses;
- work-related travel to places where poliomyelitis is common.

*Rabies* — Pre-exposure vaccination should be offered to persons at potentially high risk of contact with rabies such as:

- workers caring for animals such as veterinarians, veterinarian health technicians, veterinarian assistants;
- animal control workers such as bylaw officers, dog pound workers, zoo workers;
- animal research workers including rabies laboratory workers;
- workers involved in work-related spelunking;
- wild life workers and foresters;
- work-related travel to places where there is rabies.

Note: does not include employees under federal jurisdiction

*Rubella (German Measles)* — In health care settings, health care workers of either sex not having evidence of immunity to rubella or documented immunization should be immunized. Staff working in daycare facilities not having evidence of immunity to rubella or documented immunization should be immunized.

*Tuberculosis* — Routine worker immunization (BCG) is not recommended. It may be offered to:

- health care workers intending to work for extended periods of time in areas of the world with high rates for TB. They should consult with Alberta TB Services as to the need to receive the BCG vaccine.

*Typhoid* — Immunization should be considered for workers at particularly high risk of exposure such as;

- laboratory workers in clinical or research facilities who frequently handle cultures of *Salmonella typhi*. Technicians working in routine microbiology laboratories *do not* need to receive this vaccine;
- work-related travel involving prolonged (> 4 weeks) exposure to potentially contaminated food and water; especially travel to or work in small cities, villages or rural areas in countries with a high incidence of disease. Immunization is not routinely recommended for business or short term (< 4 weeks) travel.

*Varicella (Chickenpox)* — Vaccine is recommended for susceptible workers.

## Payment for immunization

It is important to note that the cost of immunization specifically required for work-related (occupational) exposures may *not* be covered by Alberta Health.

Employers may have immunization programs delivered by their own internal Occupational Health Service, by contracted external Occupational Health Services, or in some instances, through special contract arrangements with the local public health clinic. Not all vaccines (particularly, those recommended for work-related travel) are offered through the publicly funded immunization program.

Employers and workers should check with their local public health clinics regarding the cost of vaccines and payment for administering vaccines if not covered by Alberta Health.

For more detailed information of specific immunizations, contact your local public health clinic.

## References

National Advisory Committee on Immunization. (2012). *Canadian Immunization Guide, Evergreen Edition*. Ottawa, ON: Public Health Agency of Canada <http://www.phac-aspc.gc.ca/publicat/cig-gci/>

Alberta Health. (2007-2014). *Alberta Immunization Policy*. Edmonton, AB: Government of Alberta

## Contact us:

---

### Province-Wide Contact Centre

 Edmonton & surrounding area: 780-415-8690

 Throughout Alberta: 1-866-415-8690

 Deaf or hearing impaired

- In Edmonton: **780-427-9999**

or

- **1-800-232-7215** throughout Alberta

### Web Site

 [www.work.alberta.ca](http://www.work.alberta.ca)

## Getting copies of OHS Act, Regulation & Code:

---

### Queen's Printer

 [www.qp.gov.ab.ca](http://www.qp.gov.ab.ca)

 Edmonton 780-427-4952

### Occupational Health and Safety

 <http://work.alberta.ca/occupational-health-safety/307.html>

Call any Government of Alberta office toll-free  
Dial 310-0000, then the area code and telephone number you want to reach

© 2014, Government of Alberta, Jobs, Skills, Training and Labour

This material may be used, reproduced, stored or transmitted for non-commercial purposes. The source of this material must be acknowledged when publishing or issuing it to others. This material is not to be used, reproduced, stored or transmitted for commercial purposes without written permission from the Government of Alberta, Jobs, Skills, Training and Labour. This material is to be used for information purposes only no warranty express or implied is given as to the accuracy or the timeliness of the material presented. In case of any inconsistency between this document and the Occupational Health and Safety Legislation, the legislation will always prevail.