Conducting a hazard assessment and developing an exposure control plan

An exposure control plan is required in workplaces when employees are required to handle, use, or produce an infectious material or organism or are likely to be exposed to certain infectious materials or organisms. (e.g., human immune deficiency virus [HIV], Hepatitis B virus [HBV], Hepatitis C virus [HCV], Hantavirus, Rabies virus, Campylobacter, Norovirus, Mycobacterium Tuberculosis, measles virus etc.).

Section 6-22(1) of *The Occupational Health and Safety Regulations, 2020* specifies the elements that must be included in your exposure control plan. These elements are outlined below.

The exposure control plan must be reviewed at least every two years and whenever necessary to reflect changes in infection control measures, including engineering controls. This must be done in consultation with the occupational health committee (OHC) or the occupational health and safety representative.

An employer shall make a copy of the exposure control plan and any amendments to the plan readily available to every worker.

It is also important to note that personal information must not be included in an exposure control plan. Personal information is any recorded information that uniquely identifies a person, such as a person's name, age, sex, race, religion, sexual orientation, disability, blood type, criminal or employment history, financial information, education or health information.

An exposure control plan must:
- Be in writing.
- Identify any workers who may be exposed.
- Identify categories of tasks and procedures that may put workers at risk of exposure.
- Describe the ways in which an infectious material or organism can enter the body and the risks associated with that entry.
- Describe the signs and symptoms of any disease that may arise for a worker exposed at a place of employment.
- Describe infection control measures to be used such as:
  - vaccination
  - engineering controls
  - personal protective equipment (PPE)
  - safe work practices and procedures
  - standard practices that incorporate universal precautions
- Identify limitations of the infection control measures (listed above).
- Set out procedures to be followed in each of the following circumstances:
  - if there has been a spill or a leak of an infectious material or organism
  - if a worker has been exposed
  - if a worker believes that he or she has been exposed

- Develop and implement methods of cleaning, disinfecting or disposing of clothing, PPE or other equipment contaminated with an infectious material or organism.
- Indicate who is responsible for carrying out these activities.
- Describe the training that will be provided to workers that may be exposed and the means by which this training will be provided.
- Require the investigation and documentation, in a manner that protects the confidentiality of the exposed worker, of any work related exposure incident, including the route of exposure and the circumstances in which the exposure occurred.
- Require the investigation of any occurrence of an occupationally transmitted infection or infectious disease to identify the route of exposure and implement measures to prevent further infection.

A workplace hazard assessment will help identify some of the information required for the exposure control plan. The hazard assessment must be completed by a competent person.

This planning tool will guide you through five steps in the process of conducting a hazard assessment. This tool is one resource to help develop your exposure control plan, and additional information may be required depending on the specific work environment at your place of employment.

Step one: Identify workplace hazards and assess risks

Identify areas where there may be potential risk of exposure to infectious materials or organisms.

When conducting a workplace hazard assessment, it is important to examine each work area and task performed so that you are able to accurately identify the hazards that exist.

Involve workers when assessing the workplace as they have a first-hand understanding of the tasks and some of the potential hazards that exist. Safety works best when everyone is involved in the process.

Checklist

☐ We have involved frontline workers, supervisors, managers and occupational health committee (OHC) members or occupational health and safety representatives.

☐ We have done a walkthrough of the workplace to identify categories of tasks and procedures that may put workers at risk for exposure.

☐ We have identified the level of risk to employees, considering the likelihood and severity of exposure.

□ We have identified the nature of the hazard (e.g., blood borne diseases, zoonotic diseases, contact transmission diseases, airborne diseases etc.) and the degree of risk associated with accidents, injuries, risky procedures and situations.

□ We have identified the route of exposure(s).

□ We have identified the signs and symptoms of the disease.

□ We have identified the tasks and procedures that may put workers at risk of exposure (e.g., use of sharp devices, exposure to blood and bodily fluids, conducting aerosol generating medical procedures (AGMP) etc.).

□ We have checked manufacturers' instructions or safety data sheets for all chemicals and equipment used.

□ We have considered physical, chemical, biological and psychological hazards when looking at tasks.

□ We have considered equipment, materials, environment and human resources used in the workplace.

Step two: Implement hazard control processes

Hazard controls are the measures that you will take to eliminate or reduce the risks of hazards in your workplace.

Implement protocols to minimize the risks of transmission. The following information may provide some guidance:

- Review the [Pathogen Safety Data Sheets (PSDS)](#) for the infectious material or organism.
- If guidelines specific to your sector or industry are available, implement these where they are applicable to the hazards at your workplace. You may also need to implement additional control measures to address the hazards to your workers.
- Follow the standards, guidelines, or protocols from your health and safety association or other professional industry associations.
- Limitations of the implemented infection control measures must be identified in the protocol.

Reduce the hazard of transmission by implementing controls

To reduce the risk of spreading of infectious material or organism, implement protocols to protect against identified hazards. Whenever possible, use the protocols that offer the highest level of protection. This may mean you need to incorporate controls from various levels of hierarchy of controls to address all of the hazards in your workplace.

First level of protection: Elimination and substitution

Eliminating the hazard is the best method of control and should always be the first consideration in your planning process. This step allows you to physically remove the hazard if possible.

Sometimes if you cannot remove the hazard you can make a substitution instead. For example, using a less toxic cleaning solution.

Elimination and substitution are the most effective means in the hierarchy of controls, but are not often feasible or possible to implement, particularly for infectious diseases.

Checklist

☐ We have evaluated if the infectious material or organism can be eliminated or substituted from the workplace.

☐ We have considered use of different cleaning and disinfectants chemicals.

☐ We have reviewed the Canadian Immunization Guide, published by The Public Health Agency of Canada (PHAC) and have recommended any available vaccines to the workers.

☐ We have considered the work set up or arrangements in this area.

Second level of protection: Engineering controls

Engineering controls can be effective in protecting workers from hazards in the workplace. It is sometimes possible to isolate workers from the infectious material or organism or reduce the hazard by mechanical means (e.g., install barriers, partitions, biosafety cabinets, ventilation, autoclave, sharps containers, safety engineered medical devices, etc.).

Checklist

☐ We have installed barriers or other appropriate equipment.

☐ We have included maintenance, cleaning and disinfection protocols for implemented engineering controls.

☐ We have a policy to ensure appropriate ventilation that is sufficient and suitable to protect workers.

☐ We have policies to ensure required inspections, maintenance and cleaning of ventilation systems are completed when required by a competent person.

☐ We have assessed engineering controls to ensure that they do not introduce other hazards to the workers in the workplace.

Third level of protection: Administrative controls

Establish rules, guidelines, policies and/or procedures to prevent exposure to infectious material or organisms.

Checklist

☐ We have identified rules and guidelines for how workers must conduct themselves.

☐ We have policies and procedures for preventing exposure to infectious material or organism. (e.g., handling and disposal of sharps, cleaning of spills, hand washing, redesign of work process etc.).

☐ We have reviewed the information and protocols for maintenance of engineering controls, cleaning and disinfection.

☐ We have sufficient cleaning and disinfection materials and staff have been trained to use them. The chemical product labels are visible on the cleaning solutions.

☐ We have clearly communicated the rules and guidelines to workers through a combination of training and signage.

Fourth level of protection: Personal protective equipment

If the first three levels of protection are not enough to control the hazard, consider the use of personal protective equipment (PPE). Ensure workers are selecting and using PPE appropriately.

Checklist

☐ We have reviewed information on how to use the PPE required and provided.

☐ We understand the limitations that PPE has in providing protection and how they need to be used in combination with other control measures.

☐ We have trained employees on how to use PPE.

Employers must conduct a hazard assessment with their OHC or occupational health and safety representative to ensure that any control measures implemented do not introduce new hazards for workers in a workplace setting.

Step three: Develop policies

Develop the necessary policies to manage your workplace, including how to address illness that arises at the workplace and how to keep the workers safe.

It is recommended to have a policy around what an investigation looks like when a worker tests positive for an infectious disease as a result of workplace transmission.

Checklist

☐ We have a workplace policy relating to infectious disease including how to address workplace illness and how to keep workers safe.

☐ Our policies prohibit anyone who is required to self-isolate from entering the workplace. Our policies address visitors coming to the workplace.

☐ First aid attendants, if applicable, have been provided with the appropriate protocols for infectious diseases.

☐ We have an investigation policy for work-related infectious disease exposure incidents that protects the confidentiality of the exposed worker.

☐ We have a working alone policy (if needed).

☐ We have procedures to be followed if there is a spill of infectious material or if a worker has or believes that they have been exposed.

☐ We have a working alone policy (if needed).

☐ We have strategies and training to address the risk of violence that may arise as individuals adapt to restrictions or modifications to the workplace.

☐ We have identified what cleaners and disinfectants will be used to clean any surfaces.

Step four: Develop communications plans and training

You must ensure that everyone entering the workplace, including workers from other employers, know how to keep themselves, and those around them, safe while at your workplace. This plan must be in writing and available to workers.

WorkSafe

S A S K A T C H E W A N

Work to live.

Checklist

☐ We have a training plan to ensure everyone is trained on our policies and procedures, including identifying limitations of infection control measures.

☐ All workers have received the policies related to workplace illness.

☐ Supervisors have been trained on monitoring workers and the workplace to ensure policies and procedures are being followed.

Step five: Monitor your workplace and update plans as necessary

As you continue to operate your business, things may change. You may identify new areas of concern or need to address a process that isn't working. Involve your employees and OHC or occupational health and safety representatives in reviewing and updating policies and processes.

Checklist

☐ We have a plan in place to monitor hazards.

☐ We make changes to policies and procedures as necessary.

☐ We review the adequacy of the policy, in consultation with the OHC, at least every two years.

☐ Workers know who to go to with health and safety concerns.

☐ When resolving safety issues, we involve employees and OHCs or occupational health and safety representatives.

☐ Our policies include escalations to address individuals who may not be following procedures.

Resources

- *The Occupational Health and Safety Regulations, 2020*
- Canadian Immunization Guide
- Pathogen Safety Data Sheets