Bloodborne Pathogens Exposure Control & Compliance Game Plan

Many workers handle or work near “sharps,” that is, needles, syringes, scalpels, lancets, and other tools and equipment with sharp points or edges posing 2 kinds of hazards:

- Cuts, lacerations, and punctures to skin, muscles, nerves, bones, and internal organs; and
- Infectious illness if the sharp is contaminated with Hepatitis, HIV, and other viruses, bacteria, and biohazardous materials contained in the blood and other bodily fluids that can cause life-changing and even life-threatening damage when they enter the body.

Although the hazard is most common in healthcare, so-called “bloodborne pathogens” (BBPs) are also a hazard for workers in scientific research and educational facilities, cleaning services, law enforcement offices, and other settings involving the handling of BBP-contaminated sharps or materials. BBP exposure is also a potential hazard at any kind of site in which first aid services are provided. The federal *Human Pathogens and Toxins Act* and provincial OHS laws require employers to take special measures to manage these hazards.

Defining Our Terms

While OHS laws also require employers to limit workers' exposure to hazardous biological and chemical agents contained in the air, including via respiratory protection, this Game Plan focuses on BBPs contained in blood and other potentially infectious body fluids and tissues rather than on airborne contamination. Use the OHS Insider Respiratory Protection Compliance Game Plan for help in controlling airborne biohazards.

Step 1: Perform BBPs Hazard Assessment

The first step in the compliance process is to have one or more competent person perform a thorough assessment of the BBP hazards at your facility. Risk factors to be on the lookout for include:

- The presence or potential presence of blood, saliva, and other potentially infectious fluid or tissue;
- The presence of needles or other sharps that can provide a path of entry for BBPs, such as through the skin (aka, percutaneous), mucous membranes, or nonintact skin exposure;
- Activities with BBPs exposure risks, e.g., direct patient care, first aid, lab procedures, and/or handling contaminated waste or laundry;
- Current measures in place to control identified BBPs hazards.

Once you gather the data, identify the job positions and tasks that involve BBPs exposure hazards at your site.

Step 2: Consider Substitution to Eliminate BBPs Hazards

Canadian OHS laws follow the so-called hierarchy of controls approach to managing hazards, at the top of which is total hazard elimination. The starting point: Ask if it would be reasonably practicable to carry out the operation without the elements that make up the BBPs hazard, such as by substituting a less infectious material.

Step 3: Use Engineering Controls to Manage BBPs Hazards

When elimination isn't reasonably practicable, seek solutions that engineer away the hazard. For BBPs caused by contaminated sharps, the primary form of engineering control is to replace conventional hollow bore needles with safety-engineered needles that have been approved by Health Canada as a medical device for performing tasks involving potential contact with blood and other potentially infectious material, such as collecting or withdrawing bodily fluids. Such needles come in different varieties, such as self-sheathing needles or needleless systems.

Safety-engineered needles are expressly required in 8 provinces and territories—AB, BC, MB, NS, NT, NU, ON, and SK—unless the employer can show that they'd create additional risks to workers, aren't medically appropriate for the particular procedure, or are not commercially available. Use of hollow bore needles without engineered safety devices is also allowed during public health emergencies where care delivery is urgent and safety devices may be in short supply. In Ontario, workers are also allowed to use a hollow-bore needle that's not safety-engineered if they have "reasonable grounds" to believe that using the safety-engineered needle in the particular circumstances would pose a greater risk of harm

to themselves or another person.

Best Practice: You should, in consultation with your workplace JHSC or safety rep, consider the use of safety-engineered needles even if your jurisdiction doesn't specifically require it. Keep records documenting each safety needle you considered and your reasons for deciding to adopt or not adopt it.

Step 4: Provide & Ensure Use of Appropriate PPE for Work Involving BBPs Hazards

It's essential to ensure that workers performing tasks involving BBPs exposure risks have and properly use the required hand protection and other PPE. Specifically, workers must wear disposable gloves when touching blood or other body fluids, mucus membranes, or non-intact skin, or when handling items or surfaces soiled with blood or other body fluids. Such gloves must be disposed of after each use or immediately if they get torn, punctured, or contaminated. Workers must also wear eye and face protection, including goggles or face shields where droplets of blood or any body fluids may come in contact with the mucus membranes of the eyes, nose, or mouth. Other necessary PPE may include surgical gowns and lab coats. Employers should furnish all required PPE at no cost to the worker.

Step 5: Implement Safe Work Procedures for Tasks Involving BBPs Exposure

As with any other hazard, employers should develop, implement, and train workers on safe work procedures for carrying out operations involving potential exposure to BBPs hazards. Depending on your operation, such tasks may include:

- Delivering direct patient care or first aid;
- Drawing blood or other specimens;
- Cleaning up spills;
- Handling specimens; and
- Disposing of biological waste.

Step 6: Ensure Safe Disposal of Medical Waste & Contaminated Sharps

BBPs exposure incidents commonly occur during the disposal of needles, knives, scissors, scalpels, broken glass, and other sharp objects that may puncture the skin. Accordingly, many jurisdictions require employers to ensure that sharps and waste materials that may be contaminated with blood or other potentially infectious material (OPIM) be placed in special sharps containers that are:

- Leakproof;
- Puncture-resistant;
- WHMIS labeled or colour-coded as a biohazard;
- Easily accessible to personnel;
- Located as close as feasible to the immediate area where contaminated sharps are used or may be present;
- Maintained in the upright position; and
- Emptied as often as necessary to prevent overfilling.

You also need safety procedures to ensure disposal is carried out safely, such as a ban on bending, recapping, removing, shearing, or purposely breaking contaminated needles and requiring the use of tongs, brushes, dustpans, or other mechanical means of picking up potentially contaminated sharps without direct contact with the hands.

Step 7: Implement Effective BBPs

Housekeeping & Sanitation Protocols

Keeping work areas in a clean and sanitary condition is essential to preventing harmful BBP exposure. So, require workers to use a solution consisting of 1 part bleach to 10 parts water and/or an expressly approved disinfectant to clean and disinfect surfaces and equipment immediately after completing procedures involving risks of contamination with blood or OPIM. In addition, require workers to use soap and water and alcohol sanitizers to clean their hands immediately after handling blood and OPIM, even if they were wearing gloves while doing so. Other housekeeping and sanitation protocols to adopt:

- Regular inspection and decontamination of bins, pails, cans, and similar receptacles containing blood and OPIM;
- A ban on eating, drinking, applying cosmetics or lip balm, smoking, or handling contact lenses in work areas where there’s a reasonable likelihood of exposure to blood or OPIM; and
- Precautions for the safe handling of potentially contaminated laundry.

Step 8: Implement Protocols for Cleaning Spills Involving BBPs Hazards

Require workers to use PPE and implement the following protocols when cleaning spills of blood and OPIM:

- Immediately secure the spill area and notify the supervisor or other person with authority to initiate response measures;
- Contain the spill with inert absorbing material such as kitty litter or absorbent pads;
- Remove the absorbed material with a scraper and pan or

other mechanical method not involving direct hand contact and place it in a biohazard bag;
- Clean the spill with an approved disinfectant;
- Disinfect the hands with an alcohol sanitizer or other approved disinfectant;
- Discard contaminated gloves and PPE in a biohazard bag or other appropriate receptacle as soon as possible after completing the cleanup.

Step 9: Use WHMIS Labels to Communicate BBPs Hazards to Workers

Under WHMIS rules, employers must provide proper communication to ensure workers have the information they need to understand the biohazards to which they're exposed on the job. For BBPs, the key to compliance is ensuring that the following items have warning labels bearing the WHMIS biohazard infectious materials symbol:

- Containers of biological waste;
- Contaminated equipment;
- Refrigerators and freezers containing blood or OPIM;
- Other containers used to store, transport or ship blood or OPIM;
- Sharps disposal containers; and
- Bags and containers that contain or were in contact with blood or OPIM;

Exceptions: It's not necessary to individually label each container of blood or OPIM that's placed in a labeled container for storage, transport, shipment, or disposal. Nor are WHMIS labels required for biological waste that's been decontaminated.

Step 10: Provide Proper BBPs Safety Training to Exposed Workers

You must ensure that workers who are exposed to BBPs receive training from a competent person who’s knowledgeable of the subject about the hazards they face and put measures in place to control them. Such training must occur before initial assignment to tasks involving occupational exposure and cover, at a minimum:

- BBPs hazards and symptoms;
- Pathways of entry;
- Potential infection sources found at the workplace, such as needles or syringes;
- Job tasks that may involve exposure to BBPs;
- An explanation of the engineering controls, work practices, and other measures you use to protect workers from BBPs exposure risks;
- A description of the required PPE, how it works, and how to use and dispose of it;
- An explanation of biohazard signs, WHMIS labels, and colour-coding systems;
- What to do and whom to contact in an emergency involving blood or OPIM;
- The procedures to follow if an exposure incident occurs, including the method or reporting and medical follow-up; and
- Information on the evaluation and follow-up required after an exposure incident.

In BC, training of workers exposed to the risk of contracting the hepatitis B virus (HBV) must include information about the HBV vaccination, including with regard to its efficacy, safety, method of administration, benefits, and that you will offer it to workers free of charge. In all jurisdictions, BBPs safety training should be refreshed, repeated, and reinforced as necessary and no less often than once a year.

Step 11: Implement Protocols for Reporting & Documenting BBPs Exposure Incidents

While prevention is the first line of defense, you also need to be prepared in case BBPs injuries and incidents do occur. Require workers who suffer or are involved in such incidents to notify their supervisor or another company official immediately. Several jurisdictions, including BC, NWT, NU, and SK, require employers to maintain an injury log for all BBPs exposure incidents that lists:

- The date and time of the exposure incident;
- The department or work area in which the exposure incident occurred;
- The type and brand of the device involved in the exposure incident; and
- An explanation of how the exposure incident occurred.

In addition, you might have to report BBPs incidents involving injuries to your province's workers' comp board or OHS agency, depending on the incident reporting rules of your jurisdiction.

Step 12: Keep BBP Injury Logs Confidential

Be mindful that BBP injury logs and incident reports are subject to medical privacy laws to the extent they contain the names and other identifying information about the workers involved. **Translation:** You must keep the protected health information listed in these log forms and reports confidential and not disclose it to third parties except as permitted or required by law.

Step 13: Provide for Medical Examination of Workers Injured in Exposure Incidents

Under the OHS laws of most jurisdictions, OHS officials may, with the worker’s consent, require employers to provide and pay for a medical consultation to determine whether a worker involved in an exposure incident or otherwise exposed to BBPs has suffered an occupational illness as a result. If reasonably practicable, such exams should take place during the worker’s normal work hours and the employer must treat the time in taking and getting to and from the exam as work time without making any deductions to salary or wages.

Step 14: If Necessary, Offer Free Vaccinations to Workers Exposed to BBPs Hazards

In BC, employers must offer workers exposed to the risk of HBV free vaccination against the virus. That requirement may also be expanded to vaccinations against other pathogens named in the OHS regulations. In Alberta, employers must provide workers who are involved in actual BBP exposure incidents information about how they can get vaccinated as part of a broader confidential post-incident exposure valuation. You should keep written records documenting the worker’s consent to or decline of the offer to be vaccinated.