



BCTS Exposure Control Plan Appendix 10-3

Purpose

The purpose of this *Exposure Control Plan* (ECP) is to eliminate or minimize the risks of occupational exposure to employees from communicable diseases or other hazardous substances. This ECP is intended to be used in conjunction with the Joint BCGEU/ BCPSA resource document entitled "*Guide to Prevention and Control of Infectious Diseases in the Workplace*" available at: <https://employee.gov.bc.ca/src/sections.cfm?sectionID=627>

Modes of disease transmissionⁱ

Bloodborne diseasesⁱⁱ

The three blood borne diseases that pose the greatest risk to workers are Human Immunodeficiency virus (HIV), Hepatitis B and Hepatitis C viruses. To cause infection, the blood or body fluids containing the virus must gain entry into the bloodstream of a susceptible person through sharps injuries (e.g. needle-stick injuries from contaminated needles), or splashes to a worker's mucous membranes (especially eyes and mouth). Splashes of blood on intact skin are considered extremely low risk for infection because intact skin is an effective barrier that prevents the virus gaining entry.

Contact diseases³

Contact diseases are infectious diseases transmitted through direct or indirect contact with bacteria or viruses. Contact diseases include bloodborne diseases.

Direct contact includes physical contact with an infected person, which usually occurs through direct contact with blood or body fluid.

Indirect contact involves touching something in the environment that has been contaminated by an infected person, usually an object or surface area (e.g. telephones, computers, doorknobs, elevator buttons, used tissues or contaminated equipment). The contaminated hands then deposit the bacteria or virus on the next object or person that they touch. Disease transmission through indirect contact includes transmission through contaminated food or water

Examples of contact diseases are Norwalk virus, MRSA (Methicillin-resistant *Staphylococcus aureus*) and *C.difficile* (*Clostridium difficile*). These diseases usually have temporary acute symptoms for workers but may have serious consequences for those who are frail or immunocompromised.

Airborne diseases³

Airborne diseases are infectious diseases that are spread through the air in:

- large-particle respiratory droplets
- aerosolized airborne droplet nuclei

Large-particle respiratory droplets generally travel only a short distance (less than 2 m) through the air and then settle out of the air quickly. For example, influenza travels in large-particle respiratory droplets.

Aerosolized airborne droplet nuclei are evaporated droplets that are extremely light and therefore can remain suspended in the air in tiny dust particles and travel considerable distances via air currents. Chicken pox and measles viruses travel this way.

Airborne (inhalable) particles, including both large-particle droplets and aerosolized droplet nuclei, are generated by coughing, sneezing and talking. A person becomes infected by breathing in air contaminated with the virus or bacteria. It is unlikely but not impossible to become infected from even a brief exposure to contaminated air. The chances of infection increase the longer one is near an infected person. Examples of disease that can spread through the air and present a risk to workers include tuberculosis, influenza and chicken pox.

Risk Identification and Assessment

A “risk” is the *chance* of injury or occupational disease occurring. “Risk identification” is the *condition* creating a chance of injury. A risk assessment takes into account the *chance* of the occupational disease occurring, who might be at risk of exposure and how serious the injury is.

Risk identification and assessment begins with an understanding of how diseases are transmitted as described above: bloodborne, contact or airborne. When identifying and assessing risks, some factors to consider:

- How is the disease transmitted?
- What work methods or procedures may result in exposure?
- What workers have a higher risk because of the clients they work with or the frequency that they engage in high risk job functions?
- Are safe work procedures in place?

BCTS risk assessment of exposure to hazardous substances is low relative to other safety and health considerations for all potential sources although of the common sources evident in BCTS activities the following are further controlled with minimal investment and reasonable standard procedures. Blood Borne Pathogens related to First Aid activities, exposure to Lyme disease and other infections via Ticks and field work activities and potential harmful exposure to pesticides.

(See Table one below for BCTS potential exposures all low risk)

Table 1 Job Risk Identification and Assessment

Job Classification	Tasks	Job Task Potential Hazards
Designated First Aid Attendant	Administering first aid	Blood and body fluids Airborne & droplet transmitted diseases
Office Activities	<ul style="list-style-type: none"> ▪ General Office Activities 	Exposure to communicable disease
Field Activities	<ul style="list-style-type: none"> ▪ General Field work 	Exposure to Ticks and potentially transmitted disease e.g. Lyme disease Exposure to Cryptosporidium, Giardia ,and other parasites, bacteria and viruses.
Pesticide Use	<ul style="list-style-type: none"> ▪ Handling or applying pesticides 	Exposure to unsafe dosage

Controls

Pesticides to be handled in accordance with Pest Management Plan and at direction of certified staff.

SWP#1 (Standard Precautions)

SWP#2 (Field Precautions)

For First Aid Attendants: Use Gloves and be aware of the hepatitis B vaccination program (Standard Precautions) safe procedures for First Aid as trained.

Standard Precautions

Standard precautions are the basic level of infection control that should be used to reduce or minimize the risk of disease transmission from both recognized and non-recognized sources of infection. They apply to blood, all body fluids, secretions and excretions (except sweat) whether or not they contain visible blood; non-intact skin; and mucous membranes.

“Standard precautions” assumes everyone could potentially have a communicable disease. The precautions can include hand hygiene, respiratory hygiene (cough etiquette), safe work procedures, and when appropriate, personal protective equipment e.g. gloves, masks, eye protection.

All employees shall receive adequate education and training which will include, at a minimum, the following:

- the contents of this exposure control plan

- an understanding of potential communicable diseases, including what it is, how it is spread and if appropriate, the purpose of testing

safe work procedures, including hand washing and cough/sneeze etiquette.

Hand hygiene

Hand hygiene is the most effective method to prevent the spread of infection. Reinforce hand hygiene with staff, clients, families and visitors. At the worksite, you would need access to:

- Sinks with warm water
- Self-contained pump soap dispenser (non-medicated and not anti-microbial soap)
- Disposable, one at a time paper towels
- Paper towel dispenser or Alcohol-based hand sanitizers.

For employee orientation, the location of hand washing facilities, including dispensing stations for alcohol-based hand rubs must be discussed.

Cough/sneeze etiquette

- Cough/sneeze etiquette is a combination of measures designed to minimize transmission. The components of cough/sneeze etiquette are:
- Encouraging clients to cover their mouth and nose with a sleeve or with a tissue during coughing and sneezing
- Encouraging the use of the available tissues to contain secretions with prompt disposal into the proper waste container
- Offering a surgical/comfort mask to persons who are coughing
- All employees are also expected to follow cough/sneeze etiquette.

Employees who are Ill

If an employee displays signs of illness prior to coming to the workplace they must directly call their supervisor/management at the start of the work schedule and discuss their suitability for work or review appropriate work options. If an employee develops signs of illness while at work, they must contact First Aid, and discuss with their supervisor/management their suitability for ongoing work or appropriate work options. The supervisor/management may consult with the BC Public Service Agency, and may require an STO2 to aid in this determination.

Monitoring of Employees

In the event of an outbreak, BCPSA Occupational Health Programs (OHP) can provide support in the following areas:

- Coordinating and monitoring any appropriate biological testing
- Coordinating and collaborating with external agencies including BCCDC and Public Health in responding to situations that may present a risk of exposure to employees

Responsibilities

As the **Employer**, BCTS is responsible for:

- Ensuring that a written exposure control plan, is available to employees, and addresses the occupational exposure risks to communicable diseases in the workplace, and that the ECP is reviewed in conjunction with the BCTS Safety Management Review.
- Ensuring that engineering controls and safe work procedures suitable to the identified exposure risks are established to minimize or eliminate an employee's potential for exposure to communicable diseases or hazardous substances.
- Ensuring that the materials and resources, required to implement and maintain this ECP, are provided where and when they are required.
- Ensuring supervisors and employees are provided with sufficient education to facilitate a good understanding of this ECP and how to eliminate or minimize the exposure risk to communicable diseases.
- Maintaining required records and documentation.

The **Supervisor** is responsible for:

- Ensuring that all employees under his/her direction who may have potential occupational exposure to communicable diseases are aware of the risks of exposure and how to eliminate or reduce those risks.
- Ensuring that employees are made aware of all work activities that could result in a potential occupational exposure to communicable diseases as determined by a risk assessment.
- Ensuring that employees receive specific education to recognize signs of potential communicable diseases that they may encounter in their worksite. Such education should be documented.
- Reviewing with Occupational Health Programs whether any biological testing is available and should be provided to employees (e.g. TB skin testing).
- Ensuring that suitable written procedures are established and conveyed to employees to eliminate or reduce the risk of exposure to individuals.
- Directing the work in a manner that ensures the risk to employees is minimized and adequately controlled.

The **Employee** is responsible for:

- Participating in any required risk assessment process to determine potential occupational exposure to individuals that may have communicable diseases.
- Familiarity with the contents of this ECP for following safe work procedures designed to eliminate or minimize the risk of exposure.
- Participating in any required education initiatives aimed at raising awareness for reducing the risk of occupational exposure.
- Learning about potential communicable diseases e.g. how they are transmitted, how to prevent transmission.

- Following established work procedures as directed by the employer or supervisor.
- Reporting any unsafe conditions or acts to the supervisor.
- Knowing how and when to report occupational exposure incidents.

The **Joint Occupational Health and Safety Committee** is responsible for:

Participating, reviewing and making recommendations to the employer on the prevention of transmission of communicable diseases.

Documentation and records

BCTS will keep records of employee educational sessions, potential exposures, incident reports and first aid records. Testing records are confidential and will be kept by Public Health and PSA Occupational Health Programs.

Review of ECP

This ECP will be reviewed in conjunction with BCTS safety management review.

ⁱ For more detailed communicable disease information, please go to BC Health Files
<http://www.healthlinkbc.ca/kbase/default.htm>

ⁱⁱ WorkSafeBC draft “*Controlling Exposure, Protecting Workers from Infectious Diseases*”