

Biological Hazards: Communicable Diseases

Exposure Control Plan

This document is intended to extract and consolidate various resources to address the occupational health and safety-specific components of an Exposure Control Plan as outlined in sections 5.54 and 6.34 of the WorkSafeBC Occupational Health and Safety Regulation as it relates to Communicable Diseases.

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1.0 Introduction

1.1 Purpose

The Biological Hazards: Communicable Diseases Exposure Control Program outlines the necessary responsibilities, procedures, and tools to reduce employees' risk of exposure to communicable diseases. The Program also addresses the requirements to ensure that the risk of exposure to communicable diseases, at all Provincial Health Services Authority (PHSA) owned and operated sites, is actively managed to reduce risk and ensure that PHSA meets the requirements of applicable standards and guidelines.

1.2 Scope

The Program defines the PHSA requirements for identifying, assessing, and controlling staff exposure to communicable diseases. PHSA's [Workplace Health and Safety Policy](#) governs this program and applies to all PHSA Workers and Worksites. This Program application scope is limited to communicable diseases transmitted person to person through the direct, indirect, contact, droplet, and airborne routes.¹

Department Managers ensure compliance with the program with assistance from the Workplace Health & Safety Department. Workplace Health & Safety assists in the development, maintenance and administration of the Program.

Some components contained within this Program are not unique to managing Communicable Diseases and are processes that occur on a regular basis within PHSA. As such, all related PHSA policies, programs, and guidelines remain in effect unless specifically noted in this Program. These policies and guidelines include:

- [PHSA Workplace Health and Safety Policy](#)
- [PHSA Baseline Immunity Assessment Policy](#)
- [PHSA Infection Prevention and Control Manuals](#)
- [PHSA Respiratory Protection Program](#)

1.3 Applicable Regulations and Standards

Regulation pertaining to communicable disease exposures are contained throughout the [WorkSafeBC Occupational Health and Safety Regulation \(OHSR\)](#), particularly section 5.54 and 6.34 related to the management of Communicable Diseases. As such, the information contained within this program is related specifically to the elements required to ensure the health and safety of workers while at work and should be considered within the context of supporting those specific elements as part of the larger PHSA Communicable Diseases plans and processes.

2.0 Program Administration

Workplace Health & Safety has the responsibility to develop and oversee administration of The Program. In addition to the responsibilities expressly identified in the [PHSA Baseline Immunity Assessment Policy](#), various departments and individuals have specific responsibilities to ensure its successful implementation and ongoing maintenance.

2.1 Executive Team and Directors

Senior Management is responsible for ensuring the health and safety of all PHSA employees. Senior Management will:

- Ensure that the PHSA Biological Hazards: Communicable Diseases ECP is developed and implemented including providing adequate financial resources
- Require management to be accountable for their responsibilities described in Section 2.2.

2.2 Managers and Supervisors

Management / Supervisors will:

- Understand and ensure compliance with the PHSA Biological Hazards: Communicable Diseases ECP.
- Identify employees who have the potential for occupational exposure to communicable diseases and notify Workplace Health.
- Implement the risk assessment process
- Develop control measures and implement corresponding work procedures to mitigate risk including auditing process for all levels of controls (e.g. environment, PPE).
- Provide adequate direction and instruction to employees in the safe performance of their duties.
- Ensure appropriate education/training is provided to staff so that work is performed in accordance with established standards and practices.
- Ensure employees comply with applicable elements of the Program.
- Provide assistance, upon request, to Workplace Health in determining and locating staff that may have experienced a communicable disease exposure.

2.3 Employees and Physicians

PHSA Staff and Physicians will:

- Take reasonable steps to be aware of their own communicable disease and vaccination status and to minimize the risk of transmitting infectious diseases to patients/residents/clients and co-workers.
- All new employees must report their vaccine and immunity status to the Provincial Workplace Health Contact Centre (PWHCC) online at <https://healthandsafety.healthcarebc.ca> within 2 weeks of hire.
- Employees must provide proof of full COVID-19 vaccination prior to start date.
- Participate in PHSA's [screening](#), education and vaccination protocols. Refer to [BCCDC self-check and safety checklist](#)

- Report any potential occupational exposures and/or occupational exposure related illnesses to their direct supervisor and the PWHCC Occupational Health Nursing Services (PWHCC OHN).
- Understand and comply with all health and safety requirements in The Program as directed.
- Follow work procedures outlined in The Program as directed.
- Use all safety equipment, devices and personal protective equipment outlined in The Program as directed.
- Report all unsafe acts and/or conditions following the site hazard reporting protocols.
- BC Emergency Health Services (BCEHS), Emergency Room (ER) triage nurse and physicians to conduct patient screening as per established screening methods, when applicable.
- Conduct point of care risk assessments (PCRA).
- [Notify IPAC](#) team immediately if an outbreak is suspected or confirmed

2.4 Volunteers

Volunteers will:

- Follow the direction of all policies and procedures outlined in this exposure control plan as directed.
- Report any potential exposures and/or illnesses that occur to their local Volunteer Services Manager. Please refer to section 2.2 for additional details on role of Managers and Supervisors.

2.5 Joint Occupational Health and Safety Committee (JOHSC)

Committee members will:

- Promote safe work practices and working conditions outlined in The Program
- Assist in creating a safe place of work by recommending corrective measures to management.
- Participate in the identification and control of hazards.
- Receive, consider and resolve matters respecting health and safety of workers.
- Recommend means of education and delivery of information related to the components outlined in The Program.
- Participate in the review of The Program.

2.6 Lower Mainland Consolidated Services (Other Health Authorities)

Health Authorities on PHSA sites providing clinical and clinical support services have primary responsibility to ensure that they work in a safe manner and in compliance with the WorkSafeBC Occupational Health and Safety Regulation and specific PHSA programs, policies and procedures as outlined in The Program. They are responsible for the conduct and work practices of their workers and any contractors they may bring on-site and to coordinate the work activities of workers and contractors.

2.7 Contractors/Consultants and Service Providers

- Contractors have primary responsibility to ensure that they work in a safe manner and in compliance with the WorkSafeBC Occupational Health and Safety Regulation. They are responsible for the conduct and work practices of their workers and any sub-contractors they may bring on-site and to coordinate the work activities of workers and contractors. Principle contractor or service provider will deal directly with issues of non-compliance.
- For the purposes of the Workers Compensation Act and Occupational Health and Safety Regulation, PHSA is regarded as both the owner and prime contractor at PHSA owned facilities with the exception of BC Cancer Centre at Abbotsford Regional Hospital and TECK Acute Care Center at BC Children's and Women's Hospital
- The Contract Manager must ensure that all work carried out in PHSA facilities is in compliance with the WorkSafeBC Occupational Health and Safety Regulation and PHSA requirements as outlined in the Program
- Contractors, consultants and services providers will comply with specific safety requirements and procedures based on information provided by PHSA of any known communicable diseases hazards

2.8 Infection Prevention and Control (IPAC)

IPAC will:

- Carry out case investigations for patient(s) in relation to communicable disease and healthcare associated infections.
- Liaises with Public Health, PWHCC, and operational leaders in situations of all outbreaks [reportable communicable diseases](#) case investigation.
- Identify potential communicable disease exposures in staff and patients and outbreaks.
- Declare the start and end of communicable disease outbreaks in hospitals, in conjunction with Public Health.
- Facilitate organization's response to the outbreak including determining steps to limit further spread of communicable disease, as an outbreak management team member.
- Ensure IPAC policies and procedures related to this Program are current and accessible to staff.
- Collaborate with operational leaders, staff, Public Health, Workplace Health, and the JOHSC/DOSH/POSH representatives and others to provide education and training on the following topics:
 - Signs and symptoms of Communicable Diseases.
 - Modes of transmission.
 - Written IPAC policies and procedures that direct the employee on how to eliminate or minimize exposure to themselves and to other staff, patients or visitors.
 - Proper use and selection of Personal Protective Equipment (PPE).

2.9 Public Health:

Public Health will:

- Liaise with IPAC and healthcare teams (e.g. charge nurse, patient care coordinator or Most Responsible Person) to determine if any inpatients or discharged patients require follow up.
- Liaise with PWHCC, IPAC, and operational leaders for comprehensive follow up of staff exposures to communicable diseases.
- Liaise with IPAC regarding communicable disease outbreak management.
- Advise PHSA staff including Health and Safety of new/emerging communicable diseases (e.g. via MHO letters).

2.10 Facilities Maintenance & Operation (FMO):

FMO will:

- Liaise with the PHSA Occupational Hygienist and PHSA Safety Consultant when local exhaust ventilation system specifications are being drafted.
- Oversee ongoing maintenance of isolation rooms and local exhaust ventilation systems such as biological safety cabinets (that individual departments have had annually certified from a qualified Biological Safety Cabinet Certifier).
- Ensure that if there is a potential for exposure to any communicable diseases in a construction project, any contractor hired is informed of the exposure risk and plan for controlling this exposure in their work plan following processes as established in the [Contractor Safety Program](#).
- Adhere to latest CSA 317.13 standards at all times: CAN/CSA-Z317.13-17: Infection control during construction, renovation and maintenance of health care facilities.

2.11 Workplace Health & Safety

Workplace Health & Safety will:

- Consult in communicable disease risk assessment and mitigation with regard to appropriate exposure control measures and best practices.
- Coordinate and facilitate Respirator Train the Fit-Tester sessions when necessary and advise on other personal protective equipment best practices.
- Provide access to vaccinations for specific communicable diseases as required by section 6.39 of the WSBC OHSR, where the BC Centre for Disease Control *Communicable Disease Control Immunization Program Manual* lists a vaccine that protects against infection by a biological agent. Vaccinations offered under Section 6.39 subsections (1) and (2) must be provided without cost to workers.
- For a biological agent that is designated as a hazardous substance in section 5.1.1, the employer must offer the vaccination, if/when a vaccine is available for adults, to all workers who are at risk of occupational exposure to that biological agent.
- Review and update the Biological Hazards: Communicable Diseases Exposure Control Program on an annual basis and, review content of online nursing practice databases (i.e. Clinical Skills by Elsevier) to ensure recommendations follow current nursing work practices and reflect PHSA specific policies and procedures.
 - More frequent revision to the Program may be required if/when work processes change, equipment changes, or new information becomes available (i.e. as guidelines are modified).

2.12 Provincial Workplace Health Contact Centre Occupational Health Nursing Services (PHWCC OHN)

PWHCC OHN will:

- Consult with Infection Prevention & Control and Public Health to confirm communicable disease incidents in the workplace and to determine/verify the exposure criteria and recommendations for follow-up for Health Authority employees.
- Identify employees who are in direct contact with the source of a communicable disease and who meet the exposure criteria.
- Provide post exposure follow up for employees including recommendations for work restrictions and/or further medical care as appropriate.

3.0 Anticipation and Identification of Communicable Disease Hazards

Human pathogens and toxins have been identified by the [Human Pathogens and Toxins Act & Regulation](#). Always follow local [IPAC guidance](#) to prevent occupational exposures to pathogens.

3.1 Staff at Risk

All staff that have direct patient care responsibilities are at risk for exposure to communicable diseases due to handling patient specimens and/or lab specimens. Examples of staff at risk for exposure include nurses, care aides, housekeepers, porters, phlebotomists, respiratory therapists, physicians and rehabilitation personnel. Following precautions as assigned by the care team in consultation with Infection Prevention and Control will minimize likelihood of transmission.

4.0 Hazard Control

The Occupational Health and Safety Regulation (OHSR) requires employers to have exposure prevention and infection control measures based on the following hierarchy:

1. Immunizations
2. Engineering
3. Administrative Controls
4. Personal Protective equipment (PPE)

Infection Prevention & Control develops various manuals, guidelines, and associated resources. These combine the exposure prevention methods listed above into sets of practices based on mode of disease transmission. These are designed to protect both the health care worker and the patients. Refer to the [Infection Control Manuals](#) on PHSA POD.

INFECTION CONTROL PRECAUTION TYPE & ASSOCIATED SIGNAGE

Routine Practices

No signage – Use Point of Care Risk Assessment

See also: [IPAC manual](#) and relevant clinical protocols on [SHOP](#) or [e-POPS](#)

IN ADDITION TO ROUTINE PRECAUTIONS, ADDITIONAL PRECAUTIONS MAY BE REQUIRED:

Airborne Precautions (e.g. TB, measles)



Contact Precautions (e.g. MRSA, AROs)



Contact Precautions Plus (e.g. C.Diff, GI, Noro)



Droplet and Contact Precautions (e.g. COVID-19)



Droplet Precautions (Respiratory e.g. pertussis; vomiting)



Droplet and Contact Precautions (e.g. Influenza, RSV)



Note: Modified infection control precautions may be required by Infection Control for emerging communicable diseases.

4.1 Immunizations

Immunizations will be provided by Health & Safety as recommended for healthcare workers in the following reference documents:

- [The Canadian Immunization Guide, Public Health Agency of Canada](#)
- [The BCCDC Communicable Disease Control, Immunization Manual](#)
- [The BCCDC Communicable Disease Control, Communicable Disease Guidelines](#)

Immunizations are offered to PHSA employees, free of charge, for the following communicable diseases:

- COVID-19
- Hepatitis B – if staff meets exposure criteria as per BC CDC guidelines
- Tetanus/diphtheria/pertussis (if there is an outbreak)
- Varicella

- Measles
- Mumps
- Rubella
- Annual Influenza
- TDPolio (if HCW is considered at risk for polio and has not had an adult dose of polio)

4.2 Engineering Controls

The following are engineering control examples that may be in place or implemented in healthcare facilities on an as needed basis, dependent on health status of patients.

4.2.1 *Personal Space/Barriers*

- Single Occupancy Rooms
- Anterooms

4.2.2 *Specialized Patient Care Equipment*

- Use of HEPA and ULPA
- Closed wound or other BBF/OPIM drainage systems e.g. hemovac

4.2.3 *HVAC and Local Exhaust Ventilation*

- Negative Pressure Rooms
- General & Specialized Room Ventilation
- Surgical Plume Evacuators
- Biological Safety Cabinets (BSCs)

4.3 Administrative Controls

4.3.1 *Hand Hygiene*

Hand hygiene locations are ubiquitous within PHSA facilities with locations selected as per [Infection and Control Guidelines](#)

4.3.2 *Respiratory Hygiene*

Respiratory hygiene is an established process in PHSA and is regularly communicated to and encouraged for staff, patients, visitors, etc. with a variety of [instructions and posters](#). Hand hygiene and masks are available at entrances and instructions for visitors on how to utilize is posted in multiple languages.

4.3.3 *Cohorting/Grouping of Infected Patients*

Grouping and cohorting patients according to their infection status has the potential to limit the number of care staff exposed and allow for specialized training and guidance for care staff to prevent transmission in select situations. Refer to your site specific IPAC manual for details

4.3.4 *Patient Transport and Transfer*

Established Infection Prevention and Control procedures for patient transport and transfer will be utilized. If transport is necessary within or between sites, the established patient care team and personnel in the receiving area must be advised of the required precautions for the patient being transported prior to transport and providing adequate time for them to

prepare an appropriate patient room prior to patient arrival. The patient portering services must also be informed of required precautions. Refer to your site specific IPAC manual for details.

4.3.5 *Waste*

All biomedical waste will be disposed of according to the [Lower Mainland Hazardous Waste Guidelines](#).

4.3.6 *Reprocessing Contaminated Equipment and Devices*

Where equipment is reprocessed established [procedures for reprocessing contaminated equipment and devices will be utilized](#).

4.3.7 *Aerosol Generating Procedures (AGPs)*

Established Infection Prevention and Control procedures for [Aerosol Generating Procedures](#) will be utilized.

4.4 Personal Protective Equipment (PPE)

Personal protective equipment (PPE) is designed and provided to prevent transmission of infectious agents from the patient to the health care worker. PPE is worn to shield employees from occupational exposure to Blood and Body Fluids and Other Potentially Infectious Materials. PPE creates barriers and filters between the worker and the infectious agents. For the most part PPE does not protect workers from needle sticks or other sharps injuries, unless a puncture resistant glove is being used and its effectiveness is limited based on the glove design. Appropriate use and removal of personal protective equipment is imperative to reduce the risk of cross contamination, e.g. contaminated gloves in contact with surfaces touched by others.

Personal Protective Equipment includes the following:

- Gloves
- Gown
- Masks
- Respirators
- [Eye Protection](#)

Information on appropriate use and choice of gloves based on the task or procedure being performed is provided in the [Lower Mainland Non-Sterile Exam Glove Selection Guide](#). Gloves are not a substitute for hand hygiene.

Site specific PHSA IPAC Policies and Standards provide information on PPE and the principles of donning and doffing personal protective equipment for routine practices and additional precautions.

Information on respiratory protection, including the N95 respirator and alternatives, is provided by Workplace Health & Safety on the [PHSA POD pages](#), the Respiratory Protection Program, or at a fit-testing session.

In addition, practices are to be in accordance with [Infection Prevention and Control Manuals](#).

Adherence to PPE requirements is the responsibility of health care workers. Training and local operational and educator teams conduct auditing for PPE.

5.0 Exposure Reporting

Communicable Disease hazard concerns should be reported to the department leader.

All inadvertent communicable disease exposures must be reported to the Provincial Workplace Health Contact Centre at 1-866-922-9464.

Required follow-up and corrective actions will occur as outlined in the documentation associated with these processes.

To report absence from work due to illness call the PHSA Employee Absence Reporting Line (PEARL) at 604-63-PEARL or 1-855-66-PEARL.

6.0 Health Protection (Post Exposure Management)

Occupational exposure to communicable diseases will be managed confidentially through the Provincial Workplace Health Contact Centre, *Occupational Health Nurse* (1.866.922.9464) in conjunction with Infection Prevention & Control and Public Health and according to the Workplace Health [Policy & Protocol for the Prevention and Management of Occupational Exposure to Communicable Diseases](#).

Further information regarding specific post exposure management of communicable diseases can be found on the [PHSA POD Exposure Prevention & Management](#) page.

7.0 Education and Training

PHSA will inform occupationally exposed employees about the contents of the Exposure Control Program including education and training.

Education and training will be provided prior to work assignment wherever possible when potential communicable disease exposure could occur. This education and training must also be provided to employees returning to a workplace where exposure hazard to infectious agents may have changed during the employee's absence. The training will be reviewed if any changes to the Exposure Control Program or work procedures that could affect exposure potential occur.

Departments will provide notification (during report) at the start of the work assignment detailing applicable infection control precautions in place.

8.0 Documentation and Record Keeping

8.1. Immunization Records

Workplace Health & Safety will maintain a confidential database of immunization status. A confidential Health History is obtained following hire at PHSA. Immunization status is reviewed and updated at that time.

Further information including immunization schedules can be found on the POD, under [Health & Wellness, Immunization](#).

8.2 Exposure Records

All known infectious agent exposures will be documented on the Occupational Health Employee File.

As part of the post-exposure follow-up, the Provincial Workplace Health Contact Centre Assistant or Occupational Health Nurse may collect and document specific information on the exposure. This

information will be documented in the confidential *Workplace Health Incident Tracking and Evaluation Database (WHITE)*.

8.3 Education/Training Records

A database and record for all employees trained in the elements of Communicable Disease exposure prevention is maintained for courses in the [PHSA Learning Hub](#).

8.4 Work Procedures

Written work procedures are to be maintained by the department manager/supervisors.

9.0 Program Evaluation

The Program will be evaluated on an ongoing basis to ensure compliance with applicable regulations and standards. Full review of the Program will occur on an annual basis.

DOCUMENT HISTORY

Version	Date	Summary of Key Changes
1.0	August 26, 2020	NEW
2.0	October 1, 2021	Incorporated IPAC edits.