# INFECTION PREVENTION AND CONTROL

# **PROVINCIAL GUIDELINES**

Provincial Infection Prevention and Control Guidance for Viral Respiratory Illness in Home and Community Health Care Settings in British Columbia

January 14, 2025



## **Table of Contents**

Table	of Cont	ents	2					
Guide	Guideline Review1							
Abbre	viations.		1					
Key Te	erms		1					
1 Int	I Introduction							
1.1	L.1 Purpose and Scope							
2 Vir	2 Viral Respiratory Illness Case Definitions							
2.1	Probable Case of Viral Respiratory Illness							
2.2	.2 Confirmed Case of Viral Respiratory Illness							
3 Im	3 Immunization for Health Care Workers, Clients, and Household Members6							
4 Inf	ection P	revention and Control Measures	6					
4.1	Rout	ne Practices	6					
	4.1.1	Point of Care Risk Assessment (PCRA)	6					
	4.1.2	Hand Hygiene	7					
	4.1.3	Respiratory Etiquette	7					
4.2	Adm	nistrative Measures						
	4.2.1	Passive and Active Screening for VRI Symptoms and Risk Factors						
	4.2.2	Specimen Collection and Testing for VRI						
	4.2.3	Guidance for Personal Protective Equipment (PPE)						
	4.2.4	Additional Precautions						
	4.2.5	Aerosol Generating Medical Procedures (AGMPs)						
	4.2.6	Health Care Worker Management and Safety						
	4.2.7	Education for Health Care Workers, Client and Household Members						
4.3	Envir	onmental Measures						
	4.3.1	Cleaning and Disinfection						
	Appendix A: Key Resources							
Appe	ndix B: P	rovincial Infection Prevention and Control (IPC) Prepardeness Checklist for Viral						
Respi	Respiratory Illness (VRI) in Home and Community Health Care Settings10							
Appe	Appendix C: Common Viral Respiratory Illness Pathogens							
Refer	References							

#### **Guideline Review**

This guidance replaces the COVID-19 Infection Prevention and Control Guidance for Home and Community Health Care (November 2023).

#### **Summary of Changes**

- The changes encompass all viral respiratory illness (VRI), including COVID-19, influenza, and Respiratory Syncytial Virus (RSV) and is no longer limited to COVID-19.
- Removed measures specific to COVID-19.
- Added definitions section.
- Added definitions for probable and confirmed VRI cases.
- Updated screening recommendations for home and community health care providers, health care workers (HCWs), clients, and household members.
- Updated links to current guidance documents, tools (e.g., signage and posters), and resources.

#### Acknowledgement

This document was developed by the BC Ministry of Health and Provincial Infection Control Network of BC (PICNet) in consultation with the Infection Prevention and Control (IPC)/Workplace Health and Safety (WHS) Provincial COVID-19 Working Group.

### **Abbreviations**

ABHR Alcohol-Based Hand Rub

AGMP Aerosol Generating Medical Procedure

COVID-19 Coronavirus disease, 2019

HCW Health Care Worker

IPC Infection Prevention and Control

IPCP Infection Prevention and Control Professional

MHO Medical Health Officer
PHO Provincial Health Officer

PICNet Provincial Infection Control Network of British Columbia

PPE Personal Protective Equipment
ORA Organizational risk assessment

SARS-CoV-2 Severe Acute Respiratory Syndrome – Coronavirus-2

VRI Viral Respiratory Illness

WHS Workplace Health and Safety/Occupational Health and Safety

## **Key Terms**

**Additional precautions:** Interventions implemented for certain pathogens or clinical presentations in addition to routine infection prevention and control practices, to reduce the risk of transmission of microorganisms from client to health care worker (HCW), and HCW to client.

**Aerosol generating medical procedure (AGMP):** Medical procedure(s) that can generate a large volume of very small droplets (aerosols) as a result of artificial manipulation of a person's airway.

**Alcohol-based hand rub (ABHR):** A liquid, gel, or foam formulation of alcohol (e.g., ethanol, isopropanol) which is used to reduce the number of microorganisms on hands in situations when the hands are not visibly soiled. Optimal strength of ABHRs used in health care settings should be 70% to 90% alcohol.

**Cleaning:** The physical removal of foreign material, e.g., dust, soil, organic material such as blood, secretions, excretions, or microorganisms, using mechanical and/or chemical means. Cleaning physically removes rather than kills microorganisms and is always done prior to disinfection.

Client (patient) care area: Any room or area within a home and community care setting, where clients or patients are actively receiving care. This includes client's home, and as applicable, waiting room and any location where emergency health services are being provided. It does not include locations such as administrative areas or private offices, which are not generally accessed by clients or patients or areas where care is not being provided, such as foyers, hallways, and cafeterias.

**Contact precautions:** Interventions to reduce the risk of transmission of microorganisms through direct or indirect contact. This intervention is one of a number of additional precautions.

**Community-associated infection:** An infection likely acquired before a health care encounter or accessing health care services, not a health care-associated infection.

**Drug Identification Number (DIN):** In Canada, disinfectants are regulated under the Food and Drugs Act and Regulations. Disinfectants must have a drug identification number (DIN) from Health Canada prior to marketing. This ensures that labeling and supportive data have been provided and that it has been established by the Therapeutic Products Directorate (TPD) that the product is effective and safe for its intended use.

**Disinfection:** The inactivation of disease-producing microorganisms and is always done following cleaning. Disinfection does not destroy bacterial spores. Disinfection usually involves chemicals, heat, or ultraviolet light.

**Droplet and contact precautions**: Interventions used, in addition to routine practices, to reduce the risk of transmission of microorganisms via respiratory droplets and through direct and indirect contact. Droplet and contact precautions include the use of personal protective equipment (PPE) such as a medical mask, eye protection, gown, and exam gloves whenever an individual is within two meters of the client. Signage to communicate droplet and contact precaution measures are also used. This set of interventions is one of a number of additional precautions.

**Hand hygiene:** A process for the removal of soil and transient microorganisms from the hands. Hand hygiene may be accomplished using soap and running water or the use of ABHRs. Hand washing with soap is required whenever hands are visibly soiled.

**Health care-associated infection:** An infection acquired during the delivery of health care that was not present or incubating at the time of admission. This includes infections in patients, residents, and clients, as well as health care workers. Also known as a nosocomial infection.

**Health care worker (HCW):** Individuals providing or supporting health care services. This includes, but is not limited to emergency service providers, physicians, dentists, chiropractors, nurses, podiatrists, respiratory therapists and other allied health professionals, students, support services (e.g., housekeeping, dietary, maintenance, hairdressers), and volunteers.

**Home and community care**: Includes formal medical or personal care delivered in the home for individuals who have acute, chronic, palliative or rehabilitative health-care needs. These services are delivered by a variety of HCWs.

**Hospital-grade disinfectant**: A disinfectant that has a drug identification number/natural product number (DIN/NPN) from Health Canada indicating its approval for use in Canadian hospitals.

**Infection prevention and control (IPC):** Measures practiced by health care workers and others in health care facilities to decrease transmission and acquisition of infectious agents (e.g., hand hygiene, use of personal protective equipment, and cleaning and disinfection). IPC measures include routine practices and contact, droplet, and airborne precautions.

**Infection prevention and control professional (IPCP):** Trained and knowledgeable individuals and teams who have the primary responsibility for development, implementation, evaluation, and education related to policies, procedures, and practices for the prevention and control of infections in health care settings.

**Isolation**: The physical separation of infected individuals from those uninfected for the period of communicability of a particular disease.

**Medical Health Officer (MHO):** A medical practitioner with training, knowledge, skills, and experience in public health and preventative medicine who is designated to this position, for a geographical area, by the Lieutenant Governor of BC under the Public Health Act. The MHO has responsibilities under the Public Health Act to monitor the health of the population, provide advice and direction on public health issues including health promotion and health protection, and their related practices, bylaws, and policies. The MHO also has responsibilities for directing the response to health hazards that threaten public health.

**Medical mask:** A medical grade face mask that meets ASTM International (or equivalent) performance requirements for bacterial filtration efficiency, particulate filtration efficiency, fluid resistance (synthetic blood), pressure differential, and flame spread. Respirators have differing characteristics from medical masks and are defined below. Medical masks include surgical and procedure masks.

**MHO official designate:** A person who has specific designated authority and duties of a Medical Health Officer. Designates can be public health professionals or are typically IPC physicians and IPC professionals in health authority operated sites. Official designates advise and direct outbreaks in jointly developed protocols with Public Health.

**Outbreak:** An increase is the occurrence of cases of infection or disease over what is expected in a defined setting or group in a specified time period; synonym of epidemic but used more often when limiting the geographic area.

**Organizational risk assessment (ORA):** An assessment done by organizations/institutions to identify and evaluate the risk of exposure to infectious agents in the health care environment and to implement appropriate control measures (e.g., communicable disease safety plan) according to the hierarchy of controls to minimize the risks.<sup>1</sup>

**Patient**: Any person receiving health care within a health care setting or service. The term is inclusive of patients, clients, and residents.

**Personal protective equipment (PPE):** Clothing or equipment worn by individuals for protection against hazards such as chemicals, blood, body fluids, and infectious secretions.

**Respirator:** PPE that provides respiratory protection for the wearer to reduce the risk of inhaling airborne particles, including infectious agents by forming a tight seal, protecting the mouth and nose, and filtering out air particles. The device is tested and certified in accordance to established standards by the Canadian Standards Association, Health Canada, National Institute for Occupational Health and Safety, or equivalent and approved for use by the health authority or organization. Examples include disposable filtering facepiece respirators such as N95 respirators, elastomeric respirators, and powered air-purifying respirators (PAPRs).

**Respiratory droplets**: Range of small (aerosols) and large fluid particles that are generated when a person coughs or sneezes or when an AGMP is done.

**Routine practices**: The practices recommended in Canada to be used with all clients to prevent and control transmission of infectious microorganisms in health care settings. These include point-of-care risk assessment (PCRA), hand hygiene, respiratory hygiene, use of PPE, aseptic technique, safe linen and waste handling practices, and equipment cleaning and disinfection.<sup>2</sup>

**Viral respiratory illness (VRI):** Any new-onset of acute infectious respiratory illness suspected or confirmed to be caused by a viral agent (e.g., SARS-CoV-2, influenza, RSV) with either upper- or lower-respiratory tract involvement, presenting with symptoms of a new or worsening cough and often fever. Refer to <u>Section 2</u> of this document for Probable VRI and Confirmed VRI case definitions.

**Workplace health and safety (WHS):** Trained individuals responsible for the anticipation, recognition, evaluation, and control of hazards arising in or from the workplace that could impair worker health and well-being. This includes prevention of communicable disease transmission to workers.

## 1 Introduction

Viral respiratory illness (VRI), including those caused by by influenza, coronavirus, respiratory syncytial virus (RSV), and 'common cold' viruses are widespread across the globe. VRIs are most often transmitted across a spectrum of small (aerosols) and large-sized respiratory droplets expelled when an infected person coughs or sneezes, and when aerosol generating medical procedures (AGMP) are done.<sup>3,4</sup> Multiple factors may influence transmission and infection with VRI (e.g., transmissibility of the virus, enclosed spaces, relative humidity, ventilation). Viruses in respiratory droplets can land on the recipient's eyes, nose, or mouth, or are inhaled when close to an infected person. Because microorganisms in droplets can often survive on surfaces and equipments, infections can also be spread indirectly when people touch contaminated hands, surfaces, and objects and then touch their mouth, nose, or eyes.<sup>5,6</sup>

Infections in healthy individuals are generally mild and self-limiting, but they can lead to severe illness and death, especially in people who are more clinically vulnerable. COVID-19 and influenza viruses continue to be an important cause of morbidity and mortality in patients, residents, and clients in health care facilities, including people who are immune compromised, frail, and elderly individuals. Preventing transmission of VRIs is essential to minimizing the risks for clients, health care workers (HCWs), household members, visitors and staff working in home and community health care settings. VRIs have similar routes of transmission, which means that infection prevention and control (IPC) measures to prevent and control transmission in these health care settings can be highly effective against all of them.

## 1.1 Purpose and Scope

This document provides infection prevention and control (IPC) guidance for health care providers and HCWs in home and community care settings to mitigate the impact of VRIs that spread primarily through close range respiratory droplets, such as SARS-CoV-2, influenza, and RSV. The guidance outlines the IPC measures intended for providing care safely in these settings, including interactions with clients.

This guidance is based on the current available best practices and scientific evidence and may change as new information becomes available. Due to the very broad range of services and settings in BC, this guideline may need adapting for the specific context.

Although not within the scope of these guidelines, it is important to note that some respiratory infections, such as Legionella, tuberculosis (TB) and emerging pathogens with unknown characteristics require special consideration and

additional control measures. For airborne-spread infections (e.g., measles, TB), or for emerging pathogens (e.g., avian influenza) with uncertain modes of transmission, organism-specific guidelines should be followed as laid out by regional health authorities, the BC Centre for Disease Control,<sup>5</sup> and the Public Health Agency of Canada.<sup>6</sup>

All health care providers and HCWs **must** follow current provincial and organizational policies, including orders from the Provincial Health Officer (PHO) and their local Medical Health Officer (MHO).

**Note:** There **may** be circumstances that exist where additional Ministry of Health policy directives will be in place in addition to or instead of these guidelines. Please follow the current and applicable provincial policy for IPC measures in health care settings, regulations, and Public Health Orders.

#### Further Information/Resources:

- Refer to <u>Appendix B: Provincial IPC Preparedness Checklist for VRI in Home and Community Health Care Settings</u> to assist with implementing this guidance.
- Refer to the poster: <u>For Clients Receiving Care and Household Members Help prevent the spread of viral</u> respiratory illnesses.
- Refer to the IPC Guidelines for Providing Health care to Clients Living in the Community for additional information.
- For viral respiratory pathogens of concern, refer to the <u>BC Centre for Disease Control's (BCCDC) Respiratory Diseases webpage</u> for more information.
- Where avian influenza is confirmed or suspected, refer to the <u>BC Centre for Disease Control's Communicable</u>
   <u>Disease Manual, PICNet's Pathogenic avian influenza interim infection prevention and control recommendations,</u>
   and the Public Health Agency of Canada's Avian influenza A (H5N1): for health professionals.

## 2 Viral Respiratory Illness Case Definitions

Early detection of VRI symptoms will facilitate the rapid implementation of effective control measures to limit the spread of VRIs.

## 2.1 Probable Case of Viral Respiratory Illness

A client is suspected to have a VRI when they have acute onset of signs and symptoms of a VRI based on clinical judgement\* **AND** testing has not occurred or results are pending.

VRI signs and symptoms include a new or worsening cough with fever\*\* and any one or more of the following (listed in no particular order of significance):

- Shortness of breath
- Runny or stuffy nose (i.e., congestion) or sneezing
- Sore throat or hoarseness or difficulty swallowing
- Other non-specific symptoms can include tiredness, malaise, muscle aches (i.e., myalgia), headache, and nausea, vomiting, or diarrhea (maybe present in some clients, particularly children).
- \* **Note**: Clinical judgement is required to assess probable VRI. Other etiology including non-infectious causes (e.g., side effect of medication or chronic health conditions) must be considered and ruled out.
- \*\* Fever may or may not be present, particularly in young children, elderly people, people who are immune compromised, or those taking medications such as steroids, such as Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) or Acetylsalicylic Acid (ASA). A temperature <35.6°C or > 37.4°C in the elderly may be an indication of infection.

## 2.2 Confirmed Case of Viral Respiratory Illness

A confirmed case of VRI is a client with:

- Signs and symptoms of acute respiratory infection (as listed above);
   AND
- Confirmation of infection with the pathogen causing VRI, (i.e., influenza, SARS-CoV-2, parainfluenza, RSV, adenovirus, rhinovirus, metapneumovirus)\* by validated laboratory testing.

\* Further Information/Resources: Refer to <u>Appendix C: Common VRI Pathogens</u> for organism-specific information, including incubation and communicability periods.

## 3 Immunization for Health Care Workers, Clients, and Household Members

- HCWs and staff providing care in all home and community care settings **must** meet immunization requirements in accordance with Ministry of Health and employer policies, and when directed by a medical health officer.
- Clients, household members, or visitors are **not required** to be vaccinated, nor do they need to provide proof of their vaccination.

## 4 Infection Prevention and Control Measures

Implementation of IPC measures help create a safe environment for health care providers, HCWs, clients, household members, and visitors in home and community health care settings.

• As declared by the Provincial Health Officer and for example, during VRI season, HCWs and non-clinical staff **must** follow provincial policy for IPC measures in health care settings, as applicable.

**Further Information/Resources**: Refer to the <u>Hierarchy of Controls for Infection Prevention and Exposure Measures</u> <u>for Communicable diseases</u> for information on IPC measures that can be implemented to reduce and eliminate the transmission of infectious diseases.

#### 4.1 Routine Practices

- Routine practices must be in place at all times in all home and community care settings. They are fundamental to preventing transmission of microorganisms among clients, HCWs, staff, and visitors in these settings.
- Routine practices and other risk reduction strategies include, but are not limited to, conducting a point-ofcare risk assessment (PCRA) before every client interaction, hand hygiene, respiratory hygiene, cleaning and disinfection, and appropriate use of PPE.

#### 4.1.1 Point of Care Risk Assessment (PCRA)

The PCRA helps HCWs select the appropriate actions and PPE required to minimize their risk of exposure to known and unknown health risks for a specific interaction, a specific task, with a specific client and in a specific environment. The PCRA is based on judgment about the clinical situation, as well as up-to-date information on how the specific health care facility or situation has designed and implemented appropriate physical (engineering) and administrative controls, and the use and availability of PPE. The PCRA can be adapted for specific-care settings, roles, and suspected or confirmed VRI infectious agent (e.g., influenza SAR-CoV-2, and RSV).

 Prior to every client interaction, all HCWs must complete a PCRA to assess any transmission and occupational health risks posed by a client, situation, or procedure to themselves, other HCWs, staff, other clients, and visitors.<sup>9</sup> • The <u>PCRA tool</u> **should** be used in assessing exposure risks and identifying appropriate measures to prevent and control exposure, such as use of PPE and hand hygiene.

## 4.1.2 Hand Hygiene

- All HCWs, staff, clients, household members, and visitors **must** correctly perform hand hygiene with alcohol-based hand-rub (ABHR) or plain soap with warm water.
- In home and community health settings, provide HCWs with personal size containers of ABHR with at least 70% alcohol and provision be made for soap if the household does not have it.
- Best practices are as follows:
  - Clean hands using at least 70% ABHR or use plain soap and water for at least 15 seconds.
  - Antibacterial soap is NOT necessary for prevention of VRIs.
  - Hand washing with soap and water is recommended when hands are visibly soiled/dirty.
- All HCWs and staff **must** perform hand hygiene:
  - On entry to and exit from the client's home and in between clients;
  - Before putting on PPE and between each step during removal of PPE;
  - Before putting on and after removing gloves;
  - Before and after contact with the client or their environment (e.g., medical equipment, bed, table);
  - o Before preparing or administering all medications or food;
  - Before performing a clean or sterile procedures or tasks;
  - When transitioning between care activities (e.g. performing peri-care and then providing tube/line/drain care);
  - After handling laundry and waste;
  - o After all personal hygiene practices (e.g., blowing nose, using washroom); and
  - At any time hands are visibly soiled or potentially contaminated (e.g., after handling blood, body fluids, bedpans, urinals, wound dressings).
- Clients and household members should perform, or be encouraged and supported to perform, hand hygiene:
  - Before leaving the house and upon returning;
  - Prior to eating, oral care, or handling of medications;
  - Before and after caring for a sick person;
  - After all personal hygiene practices (e.g., blowing nose, using washroom); and
  - At any time hands are visibly soiled or potentially contaminated (e.g., after handling blood, body fluids, bedpans, urinals, wound dressings).

#### Further Information/Resources: Please refer to the following IPC posters on the PICNet website:

- How to Clean your Hands poster
- Hand hygiene videos
- BC Guidelines and Resources
- <u>BC Ministry of Health Best Practices for Hand Hygiene</u>

#### 4.1.3 Respiratory Etiquette

- Encourage all clients, HCWs, staff, household members, and visitors to practice diligent respiratory etiquette. This includes:
  - Using tissues to contain coughs and sneezes; or coughing or sneezing into one's upper sleeve or elbow if tissues are not available;
  - Disposing of used tissues in a proper waste bin and performing hand hygiene immediately after; and
  - o Refraining from touching their eyes, nose, or mouth with unclean hands.

#### 4.2 Administrative Measures

#### 4.2.1 Passive and Active Screening for VRI Symptoms and Risk Factors

• Follow the current and applicable Ministry of Health policy directives, regulations, and Public Health Orders.

#### Passive Screening

Passive screening means that all HCWs, staff, clients, and household members will self-screen and monitor for VRI symptoms and risk factors before the HCW/staff enters a home and community care setting.

#### Further Information/Resources: Please refer to the following IPC posters on the PICNet website:

- <u>VRI Transmission</u> poster.
- How to Clean your Hands poster.
- Respect Personal Space poster.
- How to Wear a Medical Mask poster.
- <u>Staff and Visitors Screening poster</u> for VRI and other communicable diseases (outside VRI season).
- All Patients Screening poster for VRI and other communicable diseases (outside VRI season).

#### Active Screening

Active screening means screening of individuals to determine their risk of having VRI and guide measures to prevent exposure of VRI to others in the home and community care setting.

- Active screening may be in place when indicated by provincial or organizational direction (e.g., during VRI season, emergency department screening). This may include:
  - Active screening of individuals for VRI symptoms before providing services (e.g., telephone screening or when first arriving at the client's residence);
  - o Directing all HCWs and staff to perform hand hygiene before entering client's residence and upon leaving; and
  - Requiring all HCWs and staff to wear medical masks.
- As part of a PCRA and a clinical assessment, HCWs should screen clients and household members for VRI symptoms and take appropriate measures to prevent and minimize the risk of exposures.

Further Information/Resources: During the VRI season, please refer to following IPC posters for additional guidance:

- VRI Entrance Screening Tool for Health Care Facilities poster.
- Medical Mask is Required poster.

#### Screening of HCWs and Staff

- Before each shift, all HCWs, including volunteers must follow:
  - All applicable employer communicable disease polices, including self-screening for symptoms, practicing hand hygiene and respiratory etiquette, and staying home if they are ill; and
  - o Measures outlined in the VRI health care worker self-check and safety checklist.

#### 4.2.2 Specimen Collection and Testing for VRI

- Review the latest viral testing guidelines prior to any testing.
- All HCWs must follow institutional process and procedures for specimen collection, transport, and testing.
- Follow droplet and contact precautions during specimen collection. These precautions include wearing a gown, gloves, medical mask, and eye protection (e.g., face shield/goggles).

#### **Further Information/Resources:**

• Refer to the Laboratory Services webpages.

- Refer to the Guidance for PPE use outlined below in this document.
- Refer to the video for instructions on how to perform a nasopharyngeal swab.

## 4.2.3 Guidance for Personal Protective Equipment (PPE)

#### For Home and Community Health Care Workers

- HCWs must follow provincial policy for IPC measures in health care settings, as applicable, for example, during VRI season.
- Additionally, HCWs **must** follow their health authority/organizational guidelines for PPE and use PPE that is approved by their organization.
- HCWs must perform a PCRA to determine if additional PPE or IPC measures are required.
- Access to additional PPE, such as respirators **must** be provided by the facility/agency in circumstances where a HCW determines there is an elevated risk of transmission through client interactions based on a PCRA.
- When in contact with clients deemed at risk for having a VRI, implement droplet and contact precautions, which includes wearing a medical mask, eye protection, gloves, and gown.
- When using PPE, HCWs **must** always:
  - Perform hand hygiene using ABHR with a minimum of 70% alcohol content or using plain soap and water when hands are visibly soiled.
  - o Practice hand hygiene after removing each individual piece of PPE and before putting on new PPE.
- A medical mask must be worn based on a PCRA and when within two metres of a client who is on droplet and contact precautions.
  - Avoid touching your mask. If you do touch or adjust your mask, perform hand hygiene immediately before and after adjusting.
  - Medical masks must be removed, ensuring two metres of distance from the client, disposed of, and hand hygiene performed:
    - If the mask becomes soiled, wet, or damaged during use;
    - When leaving the client care area; and
    - After exiting the area of a client on additional precautions.
- Gloves must be worn based on a PCRA or for contact with clients on droplet and contact precautions.
  - Gloves should not be re-used between clients.
  - o Gloves **must** be removed, disposed of, and a new pair worn following hand hygiene as they are single use.
- Gowns must be worn based on a PCRA or for contact with clients on droplet and contact precautions.
  - o Gowns should not be re-used between clients.
  - o Gowns **should** be discarded in a waste bin when leaving the client's home or when soiled or damaged and hand hygiene **should** be performed.
  - Reusable gowns should be placed in a dedicated plastic bag for laundering. Follow health authority/employer guidance where applicable.
- HCWs **must** don and doff PPE safely after each client interaction.
  - Follow instructions on how to put on (don) and take off (doff) PPE.
  - o Hand hygiene **must** be performed before donning and after doffing PPE.
  - o HCW should bring adequate PPE with them to each visit. **Do not** store PPE in the client's home.
  - Put on PPE just before entering the client's home and remove it upon exiting the client care area, ensuring that the client and other household members are at least two metres away.
  - Ensure a plastic-lined waste bin is placed near the exit door for disposing PPE. Discard disposable or single-use
     PPE in the waste bin prior to exiting.

#### For Clients Receiving Care and Household Members

- During the home health visit, a household member who is involved in client care **may choose** to wear a mask when they are near the client or the HCW.
- Unless directed otherwise, household members and support persons involved in client care with symptoms or a diagnosis of a VRI **should** wear a medical mask.
  - o If assisting with client care or based on a PCRA by the HCW, they **must** follow droplet and contact precautions (wear gown, gloves, eye protection, and medical mask).
- Clients are **not** required to wear masks in their own homes while receiving home health care services, with exceptions based on a HCW's PCRA.

#### **Further Information/Resources:**

- Refer to BCCDC's personal protective equipment webpage and PICNet website for PPE donning and doffing videos.
- Refer to Appendix A: Key Resources for additional information on PPE use.

#### 4.2.4 Additional Precautions

Additional precautions are used in addition to routine practices when an infection with a specific mode of transmission is suspected or confirmed. These are specific and extra measures required in conjunction with routine practices to prevent transmission. The need for additional precautions should not prevent or delay the provision of medical services.

- Follow routine practices. In addition, droplet and contact precautions **should** be implemented for management of clients with suspected or confirmed VRI.
- HCWs should follow organizational policy and procedures for droplet and contact precautions. Can use precaution signs from your organization or precaution signs available on the PICNet website, as needed.
- Duration of additional precautions can vary depending on the communicable period of the suspected or confirmed VRI infectious agent. Follow organizational guidance, based on duration of symptoms and local epidemiology or refer to <u>Appendix C: Common VRI Pathogens</u>.

#### Management of Individual(s) with Suspected or Confirmed VRI

- HCWs and staff should advise symptomatic individual(s) in the household to:
  - Whenever possible, limit their activities to a dedicated, well-ventilated single room or area in the home (e.g., open windows, keep door closed) until their symptoms improve or they are able to perform daily activities.
  - O Whenever possible, use a dedicated bathroom.
  - Perform hand hygiene when leaving their room.
  - Refrain from sharing personal items (e.g., toothbrush, towel, bedding, clothing, used cups and utensils).
  - Respect personal space as much as possible.
  - o Follow BCCDC's guidance on how to self-isolate.
- If a dedicated room/bathroom is not possible:
  - Open windows of shared spaces for ventilation (e.g., bathrooms, kitchen).
  - Sleep in a separate bed, if possible.
  - Clean and disinfect high touch surfaces in the bathroom/kitchen/other shared spaces after they have been used by individuals with VRI symptoms.
- HCWs **should** engage and communicate with clients, household members, and care providers to help them understand the nature of the infection, the precautions being used, as well as measures to prevent transmission of infection to others.

#### 4.2.5 Aerosol Generating Medical Procedures (AGMPs)

An aerosol generating medical procedure (AGMP) is a medical or surgical procedure that involves manipulation of a clients's airway in a manner that may stimulate coughing and/or promote the generation of aerosols.

- AGMPs on clients with suspected or confirmed VRI should only be performed if:
  - The AGMP is medically necessary while the client is symptomatic and there is no medically-viable alternative (consult their primary care provider).
  - The AGMP is carried out by HCWs trained to conduct AGMPs.
- AGMP precautions **should** be implemented for clients with suspected or confirmed VRI that can be spread by aerosolization (e.g., COVID-19).
- When performing or assisting with a planned or urgent AGMP on a client with confirmed or suspected VRI on AGMP precautions, implement the following:
  - o Only those HCWs essential to safely perform the procedure **should** be present in the room.
  - o HCWs **must** wear gown, gloves, and eye protection.
  - Additionally, properly fit-tested and seal checked respirators (e.g., N95 respirator or equivalent) must be worn.
  - The door of the room is closed. If possible, open windows in the room for ventilation.
  - In addition, adhere to routine institutional IPC and workplace safety guidelines and practices.
- Additional considerations:
  - Timely interventions for commencing emergent lifesaving procedures (e.g., CPR) **should not** be delayed to facilitate switching from a medical mask to respirator.
  - Ensure HCWs have training (e.g., donning/doffing procedures and performing seal checks) and fit testing for respirators (e.g., N95 respirators). Refer to <u>Respirator donning and doffing instructions</u> on the PICNet website.
- For AGMPs on clients without suspected or confirmed VRI, use the <u>PCRA tool</u> and any health authority or employer AGMP guidelines to determine additional measures required.

**Further Information/Resources:** For up-to-date information and examples of AGMPs and/or local health authority guidance, refer to the <u>AGMP guidance on the PICNet website</u>.

## 4.2.6 Health Care Worker Management and Safety

- Ensure that all HCWs have sound knowledge of IPC practices required in the workplace and with clients.
- Ensure there is a process for reporting health and safety concerns.
- All HCWs and staff **must** meet immunization requirements in accordance with current <u>Public Health Orders</u>, regulations under the Public Health Act, and employer policies to protect themselves, clients, and others.

#### Health Care Worker Illness

- HCWs with suspected or confirmed VRI must stay home when sick.
- Develop a contingency plan for staff illnesses and shortages, with consideration given to staff scheduling:
  - Consider adjusting hours to accommodate client and staffing needs, while supporting IPC measures.
  - Assess employee availability when greater staffing needs and employee absences for family or self-care are expected.

#### **Further Information/Resources:**

- For up-to-date information on what to do if a staff member becomes ill, how long to stay away from work, and
  criteria for return to work for those with symptoms, refer to the <u>Provincial Guidance on Return to Work and</u>
  Exposure Management for HCWs with VRI.
- Please see the VRI HCW Self-Check and Safety Checklist for more information.

#### 4.2.7 Education for Health Care Workers, Clients, and Household Members

All HCWs and volunteers require IPC education on health authority or organizational policies which includes information regarding the principles of IPC such as routine practices and additional precautions. Yearly review of all infection control principles enhances and reinforces good practices.<sup>1</sup>

- Provide appropriate education and training, monitor for compliance, and take immediate corrective action when needed, on the following topics:
  - o Hand hygiene.
  - o Environmental cleaning and disinfection.
  - o How to conduct a PCRA prior to each client interaction.
  - Appropriate handling of HCW work clothing/uniforms (e.g. work clothes must be laundered after each shift/workday).
  - o Respiratory protection, proper selection and use of PPE, and donning and doffing of PPE.
- Additionally, HCWs are also responsible for:
  - Educating clients about hand and respiratory hygiene. If the client has an infection, provide education on practices necessary to reduce the risk of spread.
  - Educating household members, and visitors on respiratory and hand hygiene and any other situationally appropriate practices (e.g., how to use PPE).
  - Providing a demonstration or illustrated visuals to clients and household members especially where language or other barriers exist.

#### 4.3 Environmental Measures

### 4.3.1 Cleaning and Disinfection

Regular cleaning and disinfection are essential for preventing the transmission of pathogens from contaminated objects and surfaces. Cleaning is necessary to remove dirt, organic material and debris, and prepare equipment and surfaces for disinfection to be effective in killing microorganisms. Consistent, regular cleaning and disinfection assists in reducing the potential for environmental transmission of microorganisms and processes **must** be in place to ensure regular effective cleaning.<sup>11-15</sup>

- HCWs should follow routine practices as directed by the health authority or employer.
- Client care area/environment must be cleaned and disinfected according to established institutional procedures.
- Ensure cleaning and disinfectant supplies are readily available close to the point-of-use.
- Use a disinfectant (e.g., disinfectant wipes) with a Drug Information Number (DIN) assigned by Health Canada, according to health authority/employer guidance and the product label/manufacturer's instructions.
- Follow manufacturer's instructions regarding dilution and contact time of the disinfectant to ensure pathogens have been killed.
- When organic matter is present (e.g., blood, sputum, vomitus), it **must** be removed, and surfaces **must** be cleaned with a detergent or cleaning agent prior to disinfection.
- Change cleaning cloths frequently to prevent spreading microorganisms from surface to surface. **Do not** re-dip soiled/used cloths into disinfectant solution.
- HCWs may advise client or household members as follows:
  - Regularly clean and disinfect surfaces in the home, particularly client care area and bathroom.
  - Highly touched surfaces (e.g., toilets, sink taps, counters, door handles, light switches, phones) **should** be cleaned and disinfected daily.
  - Any surface that is visibly dirty or contaminated with body fluids should be cleaned and disinfected immediately.
  - Use common, store-bought cleaning and disinfection products.

#### Client Care and Medical Equipment

- HCWs **should** only bring essential equipment into the home.
- Avoid placing equipment directly onto potentially contaminated surfaces.
- Minimize contact of equipment brought into the home by:
  - Placing a plastic bag or paper under the equipment;
  - Cleaning and disinfecting the surface; or
  - Keeping equipment in a plastic bag that is hung from a hook while not in use.
- Clean and disinfect reusable, non-critical equipment (e.g., blood pressure monitor, stethoscope, thermometers) after each use, when visibly soiled, and after being stored in a client's home for a period of time.
- Store cleaned and disinfected equipment in a clean, dedicated area or in a clean bag/container with a lid in the client's home.
- Reusable items that cannot be cleaned and disinfected in the home should be placed in a clean bag or container
  for transport and cleaned and disinfected as per the health authority or employer guidelines where applicable.

#### **Further Information/Resources:**

- Refer to <u>British Columbia Best Practices for Environmental Cleaning for Prevention and Control of Infection in All Healthcare Settings and Programs.</u>
- For client-directed instructions, please refer to the <u>Cleaning and Disinfecting of Household</u> information on BCCDC website.

#### Laundry

- Wash soiled or used linens using regular laundry detergent and hot water (60-90 degrees celsius) and dried completely.
- Wash items in accordance with the manufacturer's instructions.
- Avoid coming into direct contact with contaminated items:
  - Always wear gloves when handling soiled linen. If the client is suspected of VRI, wear all appropriate PPE including gloves, medical mask, eye protection, fluid resistant gown, or apron.
  - Do not shake soiled linen, towels, and clothing.
  - Do not carry soiled linen against the body. Place soiled linen in a leak-proof container for transport (e.g., bag, bucket). Consider placing a bag liner in the container that is either disposable or can be washed.
  - Perform hand hygiene after handling soiled linen.
- Store clean laundry in designated areas.
- Regularly clean and disinfect laundry container. Clean and disinfect immediately if visibly soiled.

#### Sharps

- Used sharps **must** be disposed immediately in a designated, puncture-resistant container that is readily available at the client care area.
- Needles **must not** be recapped, bent or manipulated by hand.

#### Waste Management

- HCWs may advise client or household members as follows:
  - Non-biomedical waste (e.g., used PPE, non-sharp medical equipment) requires no special handling other than containment during disposal and removal.
  - All bags should be securely closed for disposal. Do not compress bags or try to remove excess air.
  - Biomedical waste (e.g., liquid blood or body fluid drainage), sharps, and medication should be disposed of as per usual practice, following local or municipal regulations and/or as directed by the health authority or employer.
  - Perform hand hygiene after handling waste.

#### Provincial guidance and information specific to VRIs can be found at:

- BCCDC Respiratory Diseases
- Office of the Provincial Health Officer Orders, Notices and Guidance
- Government of British Columbia COVID-19 Provincial Support and Information
- BCCDC getting a vaccine
- HealthLink BC and 8-1-1 for health advice on VRIs, including COVID-19 (translation services are available)
- Health care Worker Exposure and Illness Resources
  - o Provincial Guidance on Return to Work and Exposure Management for HCWs with VRI
  - VRI HCW Self-Check and Safety Checklist

#### Facility/Unit Entrance VRI posters:

- <u>Staff and Visitors Screening</u> (outside VRI season)
- All Patients/Residents Screening poster (outside VRI season)
- VRI Entrance Screening Tool for Health Care Facilities (during VRI season)
- Medical Mask is Required (during VRI season)
- How to Wear a Medical Mask
- Respect Personal Space

#### Hand Hygiene resources:

- How to Clean your Hands poster
- Hand hygiene videos
- BC Guidelines and Resources
- BC Ministry of Health Best Practices for Hand Hygiene

#### Point-of-Care Risk Assessment Tool (PCRA)

#### Personal Protective Equipment (PPE) Use resources:

- PPE Audit Tool
- PPE Donning and Doffing posters
- PPE Donning and Doffing videos
- Appropriate Use of PPE in Health Care Settings
- Cleaning and Disinfection Instructions for Reusable Eye and Facial Protection
- Eve and Facial Protection Selection Fit Tool
- Prescription Eye Protection Selection Requirements
- Skin Protection for PPE Use for Health Care Workers
- Position Statement to Address Double Masking and Mask Modifications for Medical Masks in Health Care Settings
- Respirator donning and doffing instructions
- Donning instructions for elastomeric half facepiece respirator (EHFR) without an exhalation valve filter

#### **VRI Transmission and Chain of Infection posters:**

- VRI Transmission
- VRI chain of infection

#### **Environmental Cleaning and Disinfection resources:**

- Quick Reference Guide on Environmental Cleaning and Disinfection in Clinic settings
- PICNet's <u>British Columbia Best Practices for Environmental Cleaning for Prevention and Control of</u> Infections in All Healthcare Settings and Programs

#### **Ventilation resources:**

- Indoor Ventilation resources
- Provincial IPC Guidance on Portable Fans in Health Care Settings in BC

#### Other IPC Resources:

- IPC Guidelines for Providing Health care to Clients Living in the Community on PICNet website
- Public Health Agency of Canada's <u>Routine practices and additional precautions for preventing the</u> transmission of infection in healthcare settings
- Hierarchy of Controls for Infection Prevention and Exposure Measures for Communicable diseases
- For up-to-date IPC resources, please refer to the <u>PICNet website</u>.

## Appendix B: Provincial Infection Prevention and Control (IPC) Prepardeness Checklist for Viral Respiratory Illness (VRI) in Home and Community Health Care Settings

Provincial IPC Prepardeness Checklist for VRI in Home and Community Health Care Settings in BC **General IPC Measures** Home health agencies and health authorities are responsible to: ☐ Follow current provincial policy directives and PHO orders. ☐ Implement the required IPC measures for the safe delivery of home health services. ☐ Ensure immunizations are up-to-date and adhere to applicable public health orders and organizational immunization policies. ☐ Develop a contingency plan for HCW illness and shortages. ☐ Provide HCW IPC education (e.g., hand hygiene, PCRA, Personal Protective Equipment (PPE) donning and doffing). ☐ Educate all HCWs about self-screening, identifying VRI signs and symptoms, and staying away from work when sick. ☐ Ensure there are processes and protocols for when staff report sick or report an unprotected ☐ Have processes in place to monitor clients for VRI signs and symptoms and place on additional precautions as needed. ☐ Consider if a virtual client visit is appropriate while there is VRI risk in the client's home. ☐ Ensure HCWs and staff are equipped with sufficient PPE, hand hygiene, and cleaning and disinfection supplies. ☐ Provide guidance for environmental cleaning and disinfection as needed. ☐ Ensure PPE donning and doffing instructions are readily available for HCWs. ☐ Where respirators (e.g., N95 respirator or equivalent) are worn or anticipated to be required based on a point-of-care risk assessment (PCRA), provide fit-testing to ensure appropriate size and style of a respirator is selected and worn. ☐ Conduct regular assessments to determine stock of necessary PPE and other supplies. ☐ Establish processes for procurement and distribution of supplies for HCWs and staff in a timely manner. ☐ Assess HCW hand hygiene and PPE compliance (e.g., PPE Audit Tool). ☐ Ensure there is a process for reporting health and safety concerns. **Symptom Screening** For Health Care Workers: ☐ Before each shift, all HCWs and staff **must** follow all applicable employer communicable disease polices, including self-screening for symptoms, practicing hand hygiene and respiratory etiquette, and staying home if they are ill; and measures outlined in the VRI health care worker self-check and safety checklist. ☐ Staff with confirmed VRI, with unprotected exposures, or those otherwise required to self-isolate according to public health directives, should follow the Provincial Guidance on Return to Work and Exposure Management for HCWs with VRI, and any additional workplace health and safety guidance. Continued......

<ul> <li>□ When indicated by provincial or organizational direction (e.g., during respiratory season), as part of PCRA, HCW (or appropriate staff as designated by the health authority or employer) <b>should</b> assess and monitor client and household members for VRI symptoms and take appropriate measures to prevent and minimize the risk of exposures.</li> <li>□ <b>Contact</b> the household by phone or stand at the entrance of the home, away from clients and household members.</li> </ul>						
☐ Ask the screening questions in the <u>Viral Respiratory Illness Entrance Screening Tool for Health-Care Facilities</u> including whether any clients or household members have symptoms of VRI or are required to self-isolate.  For Clients and Household Members:						
☐ Before each visit, all clients and household members <b>must</b> self-screen for symptoms and risk factors associated with VRIs, practice rigorous hand hygiene and respiratory etiquette, and inform HCW (or appropriate staff as designated by the home health agencies) if they are ill.						
Health Care Worker Measures						
Prior to every home visit, HCWs (or appropriate staff member) should:  □ Follow institutional IPC policies and procedures including conducting a PCRA prior to any						
<ul><li>interaction with a client.</li><li>□ Self-screen to identify VRI signs and symptoms before each shift and staying away from work when sick.</li></ul>						
<ul> <li>Carry sufficient supplies to take into the home (e.g., PPE, medical equipment, alcohol-based hand rub).</li> </ul>						
☐ Inform all clients and household members on recommended VRI safety measures. For Clients  Receiving Care and Household Members – Help prevent the spread of viral respiratory illnesses						
During home visits:						
☐ For all clients and home visits, adhere to <u>routine practices</u> , including:						
<ul> <li>Conduct a <u>PCRA</u> prior to any interaction with a client or household member.</li> <li>Practice diligent <u>hand hygiene</u>. Perform hand hygiene before and after each client contact.</li> </ul>						
<ul><li>Cover your cough with a tissue or your elbow, followed by hand hygiene.</li><li>Use PPE appropriately.</li></ul>						
<ul> <li>HCW must be trained on how to properly don and doff PPE to avoid self-contamination.</li> <li>Properly doff PPE just prior to leaving the home while keeping a safe distance from others or when PPE is visibly soiled or damaged.</li> </ul>						
<ul> <li>Ensure proper storage and disposal of PPE (e.g., bring adequate PPE with them to each visit, PPE should not be stored in a client's home, and a plastic-lined waste receptacle</li> </ul>						
<ul> <li>should be placed at the door exiting the home for disposal).</li> <li>Safely handle client care and medical equipment. Minimize equipment taken into the home and clean and disinfect reusable equipment after each use.</li> </ul>						
☐ Safely handle soiled linen, waste, and sharps. Follow routine procedures.						
☐ Inform supervisor when exposure incidents have occurred (e.g., PPE breaches).						
If screening indicates VRI risk in a home (client or household with suspected or confirmed VRI or required to self-isolate):						
☐ Consider if a virtual client visit is appropriate while there is VRI risk in the client's home.  Continued						

If entry into the home is required, implement droplet and contact, in addition to routine practices
and wear a medical mask, eye protection, gown, and gloves.
Inform household members of the above measures and advise to limit activities of any
symptomatic individual(s) to one dedicated room or area in the home and to use a separate
bathroom if possible.
Avoid non-essential services and visitors in the home while the person is symptomatic.
If client may require VRI testing, advise them to contact their primary care provider.
Direct the client to follow the BCCDC information on how to self-isolate.
Avoid non-essential aerosol generating medical procedures (AGMPs) while the client is
symptomatic. When performing a necessary AGMP on a client with suspected or confirmed VRI,
wear a fit-tested N95 respirator, in addition to eye protection, gown, and gloves.

Note: This checklist is adapted from Daly, P. (2007). Pandemic influenza and physician offices [Electronic Version]

## Appendix C: Common Viral Respiratory Illness Pathogens

Viral Organism	Epidemiology	Incubatio	Symptoms and symptom duration	Period of communicability*
	<u></u>	n period		
Adenovirus <sup>1</sup>	Usually fall and winter Causes infection in all ages	Range 1- 10 days	Conjunctivitis, sore throat, croup, fever, and other respiratory symptoms	Shortly before symptom onset and until symptoms cease.  Symptoms may be prolonged in immune-compromised people
COVID-19 <sup>25-27</sup>	Epidemiology is evolving at the time of writing.	2-14 days	Cough and fever, loss of smell or taste, sore throat, fatigue, headache	Generally 48hrs before symptom onset to 10 days after (for acute care settings). Communicable period may be longer than 10 days in immune compromised patients or patients with severe/critical COVID-19 illness.
Influenza A <sup>19,28–30</sup>	Typically November to April Causes mild to severe symptoms Causes infection in all age groups with highest incidence in children; highest mortality in elderly and those with comorbidity Can infect animals and humans	1-4 days	Fever*, cough (often severe and may last longer than other symptoms), headache, muscle/joint pain, sore throat, prostration and exhaustion.  Gastro-intestinal symptoms may occur in children  Duration: 2-7 days	1 day <b>before</b> symptoms onset and up to 5-7 days <b>after</b> clinical onset in adults; Young children and people with immune-compromise may be >7days  People with asymptomatic infections may also be infectious
Influenza B <sup>19</sup>	Historically November-April Causes milder infection Mostly affects children	1-4 days	Cough, fatigue, fever—though everyone does not have a fever—or chills, gastrointestinal symptoms like vomiting and diarrhea—which are more common in children, headaches, muscle or body aches, runny nose, sore throat. Duration: 3-7 days, although cough and malaise can persist > 2 weeks.	1 day <b>before</b> symptoms onset and up to 5-7 days <b>after</b> clinical onset in adults; People with asymptomatic infections may also be contagious
Parainfluenza virus <sup>31</sup>	Entire year (little seasonal pattern) Predominantly causes infection & outbreaks in young children and the elderly	2-6 days	Fever, cough, bronchiolitis, bronchitis, pneumonia Croup, 1-3 weeks	duration of active symptoms
Respiratory Syncytial virus (RSV) <sup>1</sup>	Usually seasonal: winter and early spring Predominantly causes infection & outbreaks in young children and the elderly	2-8 days	Fever, cough, wheezing Bronchiolitis in children Pneumonia in adults	Shortly before clinical onset and duration of active disease.  Viral shedding may persist for several weeks or longer after symptoms have subsided, especially in children
Common respiratory viruses:¹ -Rhinovirus -Coronavirus -Metapneumo- virus -Echovirus -Coxsackie-virus -other entero- viruses.	Throughout the year with peaks in the spring and fall	Usually 2-3 days, but may be longer	'Common cold' type illness: Sneezing, runny nose, cough, sore throat, sinus congestion malaise, headache, myalgia and/or low grade fever	Viral shedding usually most abundant during the first 2-3 days of clinical illness. Shedding usually ceases by 7-10 days, but may continue for up to 3 weeks in young children

<sup>\*</sup> In general, communicability is greatest in pre-symptomatic and early symptomatic stage of illness.

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