INFECTION PREVENTION AND CONTROL

PROVINCIAL GUIDELINES

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

April 13, 2026

BRITISH COLUMBIA | Ministry of Health

PICNet
PROVINCIAL INFECTION CONTROL NETWORK OF BRITISH COLUMBIA
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Guideline Update Overview

Summary of Changes

Version	Summary of Major Updates
April 13, 2026	Replaces: • This guidance replaces the Provincial Infection Prevention and Control Guidance for Viral Respiratory Illness in Acute Care and Ambulatory Health Care Settings in British Columbia (January 14, 2024). Updates: • Updated for alignment with BC Ministry of Health Policy Communiqué: Infection Prevention and Control Measures for Preventing Viral Respiratory Illness (November 27, 2025). • Removed reference to facility entrance screening tool and mask required poster. • Updated links to current guidance documents, tools (e.g., signage and posters), and resources.
January 14, 2025	Replaces: • COVID-19 Infection Prevention and Control Guidance for Acute Health Care Settings (August 2021). • Interim Guidance: Discontinuing Additional Precautions Related to COVID-19 for Admitted Patients in Acute Care and in Associated High-Risk Outpatient Areas (September 2022). Changes include: • Expanded scope to encompass best practices to address all viral respiratory illnesses (VRIs), including COVID-19, influenza, and Respiratory Syncytial Virus (RSV). • Expanded scope to include health-authority operated ambulatory settings. • Addition of definitions section. • Addition of definitions for probable and confirmed VRI cases. • Updated screening recommendations for health care workers (HCWs), patients, and visitors. • Updated links to current guidance documents, tools (e.g., signage and posters), and resources.

Acknowledgement

This document was developed by the 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/team
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

Acute care facility: A hospital and an inpatient setting providing necessary treatment for a disease or episode of illness for a short period of time (e.g., where length of stay averages < 30 days). These can include settings with surgical, medical, intensive care, and/or rehabilitation units.

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 patient to patient, patient to health care worker (HCW), and HCW to patient.

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.

Airborne precautions: Interventions to reduce the risk of transmission of microorganisms through airborne droplet nuclei (small particle residue of evaporated droplets containing microorganisms that remain suspended in the air for long periods of time) or dust particles containing the infectious agent. This intervention is one of a number of additional precautions.

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.

Case: An epidemiological term for a person in the population or study group identified as having a particular disease, health disorder, or condition under investigation. The epidemiologic definition of a case is not necessarily the same as the ordinary clinical definition.

Case definition: A set of diagnostic criteria that must be fulfilled to identify a person as a case for a particular disease. Case definition can be based on clinical and/or laboratory criteria.

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.

Cohort: Two or more patients colonized or infected with or exposed to the same organism that are separated physically, in a room or unit, away from other patients. For example, patients with a suspected or confirmed diagnosis, and patients without symptoms suggestive of viral respiratory illness (VRI), can each be a respective patient cohort.

Cohorting HCWs: The practice of assigning specified personnel to only care for patients known to be colonized/infected with or exposed to the same organism. Such individuals would not participate in the care of other patients.

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. 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 metres of the patient. 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 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.

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 has 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.[1]

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

Patient care area: Any room or area within a health care setting (including a contracted facility), where patients are actively receiving care. This includes waiting rooms 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 patients or areas where care is not being provided, such as foyers, hallways, cafeterias, chapels and family rooms.

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 patients to prevent and control transmission of infectious microorganisms in health care settings. These include point-of-care risk assessment (PCRA), hand hygiene, respiratory hygiene, patient placement and accommodation, use of PPE, aseptic technique, safe linen and waste handling practices, and equipment cleaning and disinfection.[2]

Test-based strategy: The decision to discontinue additional precautions based on having negative test results.

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 Section 2 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) such as that caused 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.[3,4] 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, infections can also be spread indirectly when people touch contaminated hands, surfaces, and objects and then touch their mouth, nose, or eyes.

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, clients, and residents 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 patients, health care workers (HCWs), visitors, and staff working in these 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 professionals working in acute care and health authority owned, operated or funded ambulatory care settings, as well as inpatient and outpatient services provided within acute care hospitals and outpatient clinics in the community (e.g., urgent care centres, dialysis, oncology, and other clinics), 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 patients.

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 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,[5] and the Public Health Agency of Canada.[6]

All HCWs must follow current provincial and organizational policies, including current 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:

- For VRI outbreak guidance, refer to the Provincial Outbreak Guidance for Viral Respiratory Illness in Acute Care Settings in British Columbia.
- Refer to Appendix B: Provincial IPC Preparedness Checklist for VRI in Acute Care and Ambulatory Health Care settings to assist with implementing this guidance.
- For viral respiratory pathogens of concern, refer to the BC Centre for Disease Control's (BCCDC) Respiratory Virus Data for more information.
- Where avian influenza is confirmed or suspected, refer to the BC Centre for Disease Control's Communicable Disease Manual, PICNet's Highly Pathogenic Avian Influenza – interim infection prevention and control recommendations for health care settings, 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 patient is suspected to have a VRI when they have acute onset of signs and symptoms of a VRI based on clinical judgement* AND test results maybe pending.

VRI signs and symptoms include a new or worsening cough with fever** and any one or more of the following (not listed in any 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 patients, particularly children).

*Note: Clinical judgement is required to assess probable VRI. Other etiologies including non-infectious causes must be considered and ruled out (e.g., side effects of medication or chronic health conditions).

** Fever may or may not be present, particularly in young children, the elderly, the immuno-compromised, or those taking medications such as steroids, Non-Steroidal Anti-Inflammatory Drugs (NSAIDs), or Acetylsalicylic Acid (ASA). A temperature <35.6ºC or > 37.4ºC in the elderly may be an indication of infection.

2.2. Confirmed Case of Viral Respiratory Illness

A confirmed case of VRI is a patient 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.

Note: Once initial testing has identified the causative agent within a select group of symptomatic patients, further testing of symptomatic patients may be suspended at the discretion of the Medical Health officer MHO/official designate.

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

3. Immunization for Health Care Workers, Staff, Patients, and Visitors

- HCWs and staff in an acute care facility and health authority owned, operated and funded ambulatory care settings, as well as inpatient and outpatient care units must meet immunization requirements in accordance with Ministry of Health and employer policies, and when directed by a medical health officer.
- Patients and visitors are not required to be vaccinated, nor do they need to provide proof of their vaccination.
- Regardless of their immunization status, people (e.g., visitors, support persons) are not to visit a health care facility if they are sick and/or have symptoms of an infectious disease (e.g., active respiratory or gastrointestinal symptoms).

4. Infection Prevention and Control Measures

Implementation of IPC measures help create a safe environment for HCWs, staff, patients, and visitors in acute care and ambulatory health care settings.

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

4.1. Routine Practices

- Routine practices should be in place at all times in all acute care and ambulatory health care settings. They are fundamental to preventing transmission of microorganisms among HCWs, staff, patients, and visitors in these settings.
- Routine practices and other risk reduction strategies include conducting a point-of-care risk assessment (PCRA) before every patient interaction, hand hygiene, respiratory hygiene, cleaning and disinfection, and appropriate use of PPE.

4.1.1. Point-of-Care Risk Assessment (PCRA)

- Prior to any patient interaction, all HCWs and staff must conduct a PCRA to assess any infectious risks that a patient, situation, or procedure might pose to themselves, other HCWs, patients, and visitors.[9]
- To conduct a PCRA, evaluate the likelihood of exposure to an infectious disease, including VRI, during the following:
  - A specific interaction (e.g., direct patient care versus performing or assisting with AGMPs versus non-clinical interactions);
  - With a specific patient (e.g., infants or young children) whether the patient has symptoms consistent with an infectious illness, whether all secretions/excretions are contained (e.g., compliance with respiratory hygiene), whether the patient is able to follow instructions (e.g., cognitive abilities, mental health condition);
  - In a specific environment or setting in which the interaction will take place (e.g., the patient is in an open area or multi-bed room, versus a private examination room).
- The PCRA tool should be used in assessing exposure risks and identifying appropriate measures to prevent and control exposure, such as use of PPE. The questions and actions can be adapted for specific-care settings, roles, and suspected or confirmed VRI infectious agent (e.g., influenza, SARS-CoV-2, and RSV).

4.1.2. Hand Hygiene

- All HCWs, staff, patients, and visitors must rigorously practice hand hygiene with plain soap and warm water or at least 70% ABHR as this is the most effective way to reduce the spread of illness.
- Strategies to support and promote diligent hand hygiene:
  - Ensure dedicated hand hygiene stations are set up at the facility, unit, clinic, and room entrances, so everyone can perform hand hygiene when they enter.
  - Ensure hand hygiene sinks, plain soap dispensers, singly dispensed paper towel holders, ABHR dispensers, and related supplies, are readily available throughout the facility.
  - Provide HCWs with personal size containers of ABHR with at least 70% alcohol, where ABHR dispensers cannot be mounted or easily accessible due to patient safety concerns.
  - Ensure other supplies, including disinfecting wipes, tissues, and non-touch waste bins are available as required at point-of-use.
  - Post signage to promote and reinforce the importance of diligent hand hygiene and proper hand hygiene technique with HCWs, staff, patients, and visitors on an ongoing basis.
  - Encourage all patients to perform hand hygiene where physically and cognitively feasible. Assist patients with performing hand hygiene if they are unable to do so by themselves.
- Instruct HCWs, staff, patients, and visitors on diligent hand hygiene which must be performed:
  - On entering the clinic or unit;
  - On entering the examination or patient room;
  - On leaving the examination or patient room;
  - Before and after contact with patient or the patient care environment;
  - After risk of body fluid exposure;
  - Before putting on/donning PPE;
  - In between each step when taking off/doffing PPE;
  - Before meals;
  - After using the washroom;
  - After using a tissue for their face; and
  - After coughing or sneezing.
- Where applicable, instruct HCWs and staff that hand hygiene must also be performed:
  - At the beginning of the workday;
  - Before and after breaks;
  - After removing each individual piece of PPE, and before putting on new PPE;
  - Before and after contact with a patient or their environment, even while wearing gloves;
  - Before performing a clean or sterile procedure;
  - Before assisting patients with feeding or medications; and
  - After contact with body fluids.

4.1.3. Respiratory Etiquette

- Post signs at the facility, unit, clinic, and room entrances to encourage and guide patients, HCWs, staff, and visitors to follow proper respiratory etiquette.
- Ensure an adequate supply of tissues and waste baskets are available for use by patients, HCWs, staff, and visitors.
- Reinforce the importance of diligent respiratory etiquette with patients, HCWs, staff, and visitors on an ongoing basis, including:
  - Covering the nose and mouth when sneezing and coughing with a disposable tissue, bent elbow, or upper sleeve (even when this is due to allergies or chronic illness);
  - Using disposable, single use tissues for wiping noses;
  - Immediately disposing of used tissue into a waste bin;
  - Performing hand hygiene after coughing, sneezing, or using tissues;
  - Refraining from touching their eyes, nose, or mouth with unclean hands;
  - Wearing a medical mask when experiencing VRI symptoms; and
  - Refraining from sharing food, drinks, unwashed utensils, cigarettes, or vaping devices.

4.2. Administrative Measures

4.2.1. 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, patients, and visitors/support persons will self-screen and monitor for respiratory symptoms before and when entering the health care setting. Passive screening includes following actions by facilities:

- Post signage at appropriate locations around the facility (e.g., facility and unit entrances) with foundational IPC controls, including self-screening for symptoms by reviewing the signage, hand hygiene, respiratory hygiene, respecting personal space, and staying home when sick. Additionally, ensure the availability of alcohol-based hand rubs (ABHR) and medical masks for those who wish or/need to use them.
- Post signs in multiple languages at all entry point(s) reminding people not to enter if they are sick or if they are required to self-isolate in accordance with public health directives.

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

- VRI Transmission poster.
- How to Clean your Hands poster.
- Respect Personal Space poster.
- How to Wear a Medical Mask poster.
- Staff and Visitors Entrance poster for VRI and other communicable diseases*).*
- All Patients Entrance poster for VRI and other communicable diseases*).*

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 facility, unit, or clinic.

- Active screening may be in place when indicated by provincial or organizational direction (e.g., emergency department screening). This may include:
  - Active screening of visitors for VRI symptoms upon entry;
  - Directing all individuals to perform hand hygiene upon entry; and
  - Providing medical masks.
- As part of a PCRA and a clinical assessment, HCWs should assess and monitor patients for VRI symptoms and take appropriate measures to prevent and minimize the risk of exposures.

Screening of Health Care Workers and Staff

- Before each shift, all HCWs including volunteers, contractors, and students must follow:
  - All applicable employer communicable disease polices, including self-screening for symptoms, practicing hand hygiene and respiratory hygiene, and staying home if they are ill; and
  - 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 processes 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 BCCDC's Viral Testing, Laboratory Services and Laboratory memos & Communications 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)

- HCWs and non-clinical staff must follow provincial policy for IPC measures in health care settings, as applicable.
- Additionally, HCWs and staff 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.

- When in contact with patients deemed at risk for having a VRI, implement droplet and contact precautions, which includes wearing a medical mask, eye protection, gloves, and gown.
- Access to additional PPE, such as respirators must be provided by the facility in circumstances where a HCW or organization determines there is an elevated risk of transmission through patient interactions based on a PCRA or an organizational risk assessment.
- Unless directed otherwise, visitors and support persons accompanying patients with symptoms or a diagnosis of a VRI should wear a medical mask.
    - Visitors and support persons assisting with patient care or based on a PCRA by the HCW, they must follow droplet and contact precautions (wear gown, gloves, eye protection, and medical mask).
- When using PPE, HCWs must always:
    - Combine frequent hand washing using plain soap and water or ABHR with a minimum of 70% alcohol content.
    - Change gloves between patients, accompanied by hand hygiene between each glove change.
    - Change medical mask if the mask becomes wet, damaged, or soiled or when leaving the facility.
    - Practice hand hygiene after removing each individual piece of PPE and before putting on new PPE.
- Extended use of PPE considerations:
    - HCWs must follow provincial policies, and health-authority or organizational guidance for extended use of PPE.
    - Gloves and gown use should not be extended unless recommended by provincial or organization direction during pandemics and/or PPE supply shortages.
    - A medical mask can have extended use in general patient care areas when required or recommended as part of provincial policy), or when recommended by MHO during VRI outbreaks. In this context, medical masks must be removed, and hand hygiene must be performed:
        - If the mask becomes soiled, wet, or damaged;
        - When leaving the patient care area; and
        - After exiting the room or bed space of a patient on additional precautions.
    - Medical mask or respirator and eye protection can have extended use when worn by HCWs inside a room/area within a cohort of patients with the same VRI and when no other infectious pathogen is present (e.g., MRSA, CPO).
    - Medical mask and eye protection should be removed, and hand hygiene must be performed at least two metres away or outside the room of patients on droplet and contact precautions.
    - Respirators must be removed outside the patient room and hand hygiene must be performed.
    - Medical mask, eye protection, and respirators must be removed and replaced if they become soiled, wet, or damaged during use

    - Change PPE if moving from patients with the same confirmed VRI to patients without confirmed VRI or different VRI pathogen.
    - Change PPE if moving between patients on additional precautions for non-VRI reasons (e.g., airborne, droplet or contact precautions).
    - Properly doff and dispose/clean and disinfect PPE when leaving a patient care area (e.g., at end of shift, during breaks or mealtimes).
- Don and doff PPE safely.
    - Hand hygiene must be performed before donning and after doffing PPE.
    - Ensure PPE instructions on how to put on (don) and take off (doff) PPE are readily available for HCWs.
- Signage to guide PPE use:
    - Post signage for droplet and contact precautions outside the room/space of patients who are suspected of having or have been diagnosed with a VRI.
    - Post signs for appropriate use of PPE in health care settings.
    - Post signs at appropriate locations with instructions on how to put on (don) and how to take off (doff) PPE.
    - Post signs at appropriate locations on how to wear a medical mask.
    - Post instructions at appropriate locations on how to clean and disinfect eye and facial protection.
    - Post signage to inform HCWs about skin protection from PPE use.

Further Information/Resources: For up-to-date information on PPE, please refer to PICNet's website for PPE posters and donning and doffing videos.

Medical Mask Use for HCWs (clinical and non-clinical staff), Visitors, and Patients

Medical masks provide protection from respiratory droplets and other blood and body fluids by covering the mouth and nose and include the following:

- HCWs and non-clinical staff must follow provincial policy for IPC measures in health care settings, as applicable.
- Visitors and support persons must wear a medical mask or other PPE when directed by a health care worker.
- Patients must wear a medical mask or other PPE when directed by a health care worker during direct patient care, if tolerated.
    - Patients who are coughing and/or on droplet and contact precautions should wear a medical mask (if tolerated) for source control when leaving their room (e.g., during transport) or when in common areas of the facility.
- Unless directed otherwise, HCWs and non-clinical staff, patients, and visitors may choose to wear a medical mask based on personal choice.
- Ensure masks are available at all entry points to those who wish or need to use them.
- Avoid touching the medical mask during wear. If touched or adjusted, hand hygiene must be performed immediately before and after.

- Where possible, physically minimize exposure to respiratory droplets (e.g., where clinically appropriate, HCW can minimize exposure by positioning themselves to the side of a coughing patient, instead of directly in front of them when providing care).
- Medical masks should be changed if the mask becomes wet, damaged, or visibly soiled.

Further Information/Resources: For signage, please refer to How to Wear a Medical Mask poster on PICNet website.

Eye protection

Eye protection (e.g., goggles, face shield) cover the eyes and provide protection from respiratory droplets and other blood and body fluid droplets and include the following:

- HCWs must wear eye protection based on a PCRA or when within two metres of a patient who is on droplet and contact precautions.
- Eye protection must be worn in addition to prescription glasses (if worn).
- Avoid touching eye protection when worn. If touched or adjusted, hand hygiene must be done immediately before and after.
- Eye protection must be removed and discarded after leaving a patient's room or at least two metres away from a patient on droplet and contact precautions.
- Reusable eye protection must be cleaned and disinfected after each use.

Further Information/Resources:

- Refer to Eye and Facial Protection Selection Fit Tool.
- Refer to Prescription Eye Protection Selection Requirements.
- Refer to Cleaning and Disinfection Instructions for Reusable Eye and Facial Protection.

Gloves

Gloves prevent hand contamination from respiratory droplets and other blood and body fluids and include the following:

- HCWs must wear clean exam gloves based on a PCRA or for contact with patients on droplet and contact precautions and their bed space/environment.
- Gloves are task specific and are not a substitute for hand hygiene.
- Gloves should not be re-used between patients.
- Gloves must be discarded, and hand hygiene must be performed, after contact with a patient on droplet and contact precautions and/or if gloves become soiled, torn, or punctured and a new pair of gloves donned.

Gowns

Gowns cover the wearer's arms and clothing and prevent their contamination from respiratory droplets and other blood and body fluids. Considerations for gowns include the following:

- HCW must wear protective gowns based on PCRA or for contact with patients on droplet and contact precautions and their bed space/environment.
- Gowns should not be re-used between patients.

- Gowns should be removed, and hand hygiene should be performed after contact with a patient on droplet and contact precautions and/or their bed space/environment.

Further Information/Resources: Refer to the Provincial Support for Using Reusable Gowns for Infection Prevention and Control (IPAC) purposes.

Respirators

Respirators (e.g., N95 or equivalent) protect the wearer from inhaling airborne particles or aerosolized droplets and include the following:

- HCWs must wear respirators based on PCRA and during aerosol generating medical procedures (AGMP) on patients suspected or confirmed to have infections that can potentially spread through aerosolization (e.g., COVID-19, circulating novel respiratory viruses); and
- HCWs must wear the style and size of respirator they have a valid fit-test for and perform a seal check each time a respirator is worn.

Further Information/Resources:

- Refer to donning and doffing instructions for respirators on PICNet website.
- Refer to Donning Instructions: Elastomeric half facepiece respirator (EHFR) that does not have an exhalation valve filter

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.[1] These are extra and specific 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. Generally, most common VRIs require droplet and contact precautions.

- Droplet and contact precautions must be implemented for management of patients with suspected, probable, or confirmed VRI.
- HCWs must follow organizational policy and procedures for droplet and contact precautions.
- Use additional precaution signs from your organization or available on the PICNet website.

Patient Management with Suspected or Confirmed VRI

Patient management involves planning for patient scheduling and patient flow including triage, placement/accommodation, testing, and transfers.

- Follow routine practices. In addition, droplet and contact precautions must be implemented for patients suspected or confirmed to have a VRI.
- HCWs should engage and communicate with patients, families, and care providers to help them understand the nature of the infection, the precautions being used, as well as prevention of transmission of infection to others during their stay in the facility, and upon their return to the community.

Triage for Patients with Signs and Symptoms of VRI

- Where possible, have a dedicated area or mechanisms to physically or spatially separate infectious patients from other patients (e.g., privacy curtains/screens are drawn between patients); and/or
- Where possible, schedule appointments for these patients during times of low traffic (e.g., first or last appointment of the day, depending on clinical need) and at different times from patients who are high risk (e.g., elderly, those with chronic illnesses, or who are immune compromised); and
- Support patients to perform hand hygiene and to wear a medical mask, if tolerated, to reduce the likelihood of transmission of the infection to others.

Placement and Accommodation for Patients with Suspected or Confirmed VRI

The following practices are recommended to minimize the risk for VRI transmission and to support IPC practices:

- Place patient in a single occupancy exam room, treatment room, or patient room with an ensuite washroom. Use a dedicated commode if a private washroom is not available.
- HCWs should follow their institutional processes for prioritizing patient placement into single occupancy rooms.
- Patient cohorting may be an option when the demand for single occupancy rooms is exceeded or unavailable. This refers to grouping of patients who have VRIs caused by the same infectious agent (e.g., SARS-CoV-2) or cohorted as per institutional protocol in consultation with an IPCP and the patient care team.
- If feasible, assign a designated team of direct care staff to the cohort of patients. Consult with an IPCP when considering cohorting options.
- If a patient has to share a room with others, consider the following:
  - Have mechanisms to physically or spatially separate infectious patients from other patients (e.g., privacy curtains/screens are drawn between patients);
  - Ensure a dedicated washroom or a commode;
  - Ensure roommate(s) are not at high risk of serious illness if VRI transmission occurs, and that they are able to comply with IPC measures; and
  - Consult with IPCP as needed.
- Post additional precaution signs outside entrance of the patient's room and at the bedside in multi-bed rooms.
- Set up a PPE station outside the patient's room.
- If patients must remain in common areas (e.g., waiting room or treatment areas), have mechanisms to physically or spatially separate infectious patients from other patients. Consult with IPC. These patients should also be supported to wear a medical mask (if tolerated).
- Have hand hygiene supplies and cleaning and disinfectant wipes readily available.

Contact Management

- Patients deemed to be close contacts of a confirmed case should be monitored for symptom development and may be placed on droplet and contact precautions if advised by an IPCP.
- Consult with an IPCP for determining who the close contacts are and the duration of additional precautions, based on the infectious agent.

Further Information/Resources: For further information on management of patient close contacts, refer to the Provincial Outbreak Guidance for Viral Respiratory Illness in Acute Care Settings in British Columbia.

Transport to Other Facility or Department

Where transfers are medically necessary, ensure the following:

- Notify the receiving facility, unit, diagnostic service, or transport personal if the patient is on any additional precautions;
- Provide patient with clean clothing or a clean hospital gown;
- Have the patient clean their hands, put on a medical mask (if tolerated), and encourage them to practice respiratory hygiene. Assist the patient as needed;
- Transfer the patient to a clean stretcher or wheelchair, when possible.
- If this is not possible, clean and disinfect any mobility aids, such as wheelchairs, canes, and walkers before exiting the room;
- Transporting personal and other staff should maintain routine practices and apply additional precautions during the transport and/or transfer of the patient; and
- While transporting the patient, minimize time spent in common areas (e.g., waiting rooms), and use the most direct route possible while avoiding high traffic areas.

Discontinuation of Additional Precautions

Duration of additional precautions can vary depending on the communicable period of the suspected or confirmed VRI infectious agent.

- Consult with health authority IPC guidance and IPCP as needed.
- Additional precautions should only be discontinued when there are no other remaining infectious diseases or pathogens requiring additional precautions (e.g., a patient with an antibiotic-resistant infection should be placed on contact precautions).
- Prior to discontinuing additional precautions, environmental services/housekeeping should be notified to do an additional precautions discharge/terminal cleaning and disinfection of the patient room or bed space before removing the additional precaution sign.

Further Information/Resources:

- Refer to Appendix D: for Duration of Additional Precautions in Patients with COVID-19 Illness.
- Refer to additional precaution signs from your organization or available on the PICNet website.

4.2.5. Aerosol Generating Medical Procedures

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

- Refer to and follow local health authority internal policies for respiratory protection requirements for AGMPs.
- AGMP precautions should be implemented on patients suspected or confirmed to have a VRI that can be spread by aerosolization (e.g., COVID-19) or based on local health authority guidance.
- When performing or assisting with a planned or urgent AGMP on a patient with confirmed or suspected VRI on AGMP precautions, implement the following:
  - Place AGMP sign outside the patient room.
  - Only those HCWs essential to performing the procedure should be in the room.
  - HCWs should wear eye-protection, gown, and gloves for droplet and contact precautions. Additionally, properly fit-tested and seal checked respirators (e.g., N95 respirator or equivalent) should be worn.
  - Perform AGMPs in an airborne infection isolation room (AIIR/negative pressure room), whenever possible.
  - If an AIIR is not available, the patient should be placed in a single occupancy room with the door closed or follow organizational guidelines regarding appropriate accommodation.
  - Transfer of patients during AGMPs should be avoided, unless deemed medical necessary.
  - For transport of patients requiring continuous positive airway pressure (CPAP) or bilateral positive airway pressure (BiPAP) where the CPAP or BiPAP cannot be safely switched off for the duration of the transfer, HCWs who are in contact with the patient or stretcher must wear an N95 respirator or equivalent. Refer to section on Transport to Other Facility/Department in this document.
  - Follow health authority specific IPC and workplace health and safety guidelines for AGMPs.
- Additional considerations:
  - Timely intervention for commencing emergent lifesaving procedures (e.g., CPR) should not be delayed in order to facilitate switching from a medical mask to respirator.[10]
  - A fit-tested and seal-checked respirator with eye protection should also be worn while performing an AGMP if a novel/emerging pathogen or one that is transmitted by the airborne route (e.g. pulmonary TB) is suspected .[1,6,19,20–24]
  - Ensure HCWs have the training (e.g., donning/doffing procedures and performing seal checks) and fit testing for respirators (e.g., N95 respirators). Refer to donning/doffing instructions for respirators on the PICNet website.

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

4.2.6. Outbreak Management

- An outbreak may be declared at the direction of the MHO or their official designate.
- Considerations for declaring an outbreak can be found in the BC Communicable Disease Control Manual COVID-19 Interim Guidelines and the Provincial Outbreak Guidance for Viral Respiratory Illness in Acute care Settings in British Columbia.
- There may be circumstances where the cases of VRI at an acute care setting do not meet the threshold for an outbreak but enhanced monitoring/surveillance and implementation of additional measures to prevent transmission are deemed appropriate by the MHO/official designate (e.g., severity of illness amongst vaccinated patients suggests circulation of a variant that causes more severe illness or a facility with low vaccination coverage amongst patients).
- If an outbreak has been declared at an acute care setting, operators must implement the Provincial Outbreak guidance for Viral Respiratory Illness in Acute Care settings immediately.

Further Information/Resources: Refer to the Outbreak poster available on the PICNet website.

4.2.7. Health Care Worker Management and Safety

- Ensure that all HCWs have sound knowledge of IPC practices required in the workplace and with patients.
- Ensure there is a process for reporting health and safety concerns.
- HCWs are encouraged to keep all recommended immunizations up-to-date to protect themselves, patients, and others.
- Provide appropriate education and training, monitor for compliance, and take immediate corrective action when needed, on the following topics:
  - Hand hygiene
  - Environmental cleaning and disinfection
  - How to conduct a PCRA prior to each patient interaction.
  - Appropriate handling of HCW work clothing/uniforms (e.g. work clothes should be laundered after each shift/workday).
  - Respiratory protection, proper selection, and use of PPE, and putting on (donning) and removing (doffing) PPE.

Health Care Worker Illness

- Develop a contingency plan for staff illnesses and shortages, with consideration given to staff scheduling:
  - Consider adjusting clinic hours to accommodate patient and staffing needs, while supporting IPCmeasures.
  - Assess employee availability when greater staffing needs and employee absences for family orself-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 Provincial Guidance on Return to Work and Exposure Management for HCWs with VRI.
- Please see the VRI HCW Self Check and Safety Checklist for more information.

4.2.8. Education for Health Care Workers, Patients, and Visitors

- All HCWs and volunteers require IPC education on health authority or organizational policies, which includes information regarding IPC principles, such as routine practices and additional precautions. Yearly review of all infection control principles enhances and reinforces good practices.[1]
- Additionally, HCWs are responsible for:
  - Educating patients about hand hygiene and respiratory etiquette. If the patient has an infection, provide education on practices necessary to reduce the risk of spread.
  - Educating visitors about respiratory etiquette, hand hygiene and any other situationally appropriate practices (e.g., how to use PPE).
  - Providing a demonstration or illustrated visuals to patients and visitors especially where language barriers exist.

4.3. Environmental Measures

4.3.1. Cleaning and Disinfection

Regular cleaning and disinfection are essential for preventing the transmission of VRIs 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 should be in place to ensure regular effective cleaning.[11-15]

- Use firm contact and friction cleaning methods to reduce the number of microorganisms.
- Cleaning cloths should be changed frequently to prevent spreading microorganisms from surface to surface.
- Do not re-dip soiled or used cloths into cleaning and/or disinfectant solutions.
- Disinfectant wipes labeled as cleaner and disinfectants with cleaning capability can be used.[15]
- Hospital-grade low-level disinfectants with a Health Canada issued Drug Information Number (DIN) assigned by Health Canada must be used and have demonstrated effectiveness against common bacterial and viral agents.
- Follow the manufacturer's instructions regarding dilution and contact time required to be effective (i.e., 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.

Patient Care Areas

- Patient care areas should be cleaned and disinfected according to established institutional procedures.
- Establish clear roles and responsibilities for those responsible for cleaning and disinfecting each piece of medical or non-medical equipment, and environmental surfaces.
- Limit items that are not easily cleaned (e.g., fabric or soft items).
- Furnishings in health care environments should be washable, intact, smooth, and tolerant of hospital-grade disinfection, where possible.
- PPE, including disposable gloves must be worn, based on institutional procedural requirements, a PCRA, and disinfectant Safety Data Sheets.
- Perform hand hygiene before wearing and after removing PPE, including gloves.
- Clean and disinfect environmental surfaces when visibly soiled, at least daily and more frequently as directed during outbreaks, clusters, organizational, or provincial direction.
    - This includes exam rooms, patient rooms, bed rails, over-bed table, nursing station, keyboards,mice, communal toys, and all hard surfaces in bathrooms (e.g., sinks, faucets, handles).
- Follow routine procedures for waste disposal and laundry management.
- Empty garbage containers daily or more frequently as needed.

Patient Care Equipment

- Ensure cleaning and disinfectant supplies are readily available close to the point-of-use.
- Minimize equipment brought into the patient or exam room of a patient suspected or confirmed to have VRI.
- Clean and disinfect shared reusable equipment between each patient and use. [11,13-16] This includes stethoscopes, blood pressure cuffs, otoscopes, baby scales, thermometers, tables, and examination beds, chairs, and/or tables.
- Store clean equipment and supplies in a clean room, drawer, cupboard and away from used or dirty equipment to protect from moisture, contamination, and damage.

Further Information/Resources:

- Refer to British Columbia Best Practices for Environmental Cleaning for Prevention and Control of Infection in All Health care Settings and Programs.[17]
- Please see the Environmental Cleaning and Disinfection in Clinic Settings Quick Reference Guide available on the PICNet website.

4.3.2. Food Handling, Delivery and Pick Up

Food Service Providers

- All food service providers, and delivery staff must follow food safety requirements, including practicing diligent hand hygiene.
- Use regular, reusable food trays, dishes, and utensils for all patients. Disposable dishes are not required.

- All food service providers, delivery and staff must clean their hands prior to delivering meal trays and after leaving patient areas, units/floors when delivering and picking up trays.
- Gloves are not required when delivering to or picking up meal trays from units. However, if gloves are worn, staff must remove gloves prior to leaving units and perform hand hygiene.
- Any HCW delivering meal trays to patients on droplet and contact precautions must wear appropriate PPE as indicated by additional precaution signs.
- Food service providers and delivery staff should not enter patient rooms in VRI cohort or outbreak units. Staff should leave meal trays outside VRI cohort or outbreak units and notify the patient care team.
- Food service providers and delivery staff should leave meal trays outside rooms with patients on droplet and contact precautions and notify patient care team.

Food Carts

- Regularly clean and disinfect carts used for transporting food between meal services, after picking up used dishes, and when visibly soiled.
- Clean and disinfect cart handles before entering and after leaving each patient care area, unit, or floor.
- Do not bring food carts into patient rooms.
- Do not transport food on carts that also have used dishes on them (i.e., carts used to deliver meals cannot be used to pick up used dishes at the same time).

Health Care Workers

- Remind patients to clean their hands or assist them with hand hygiene as needed before eating.
- HCWs should follow organizational workplace health and safety policies or guidance for food consumption in clinical and patient care areas.
- Open or shared food items (e.g., candy, cookies, chocolate, nuts, and fruits) should not be kept in patient care areas or staff workspaces, including the care team area and the nursing station.
- HCWs and staff are discouraged from taking part in any food sharing on units/facilities under enhanced monitoring and outbreaks.

Visitors

- Provide visitors with appropriate information on safe food practices, such as protecting foods from contamination, minimizing direct handling of food, preventing cross-contamination of foods, and discarding food that may have been contaminated with coughs or sneezes.
- Visitors may bring in food for patients.
    - These food items should be individually packaged for consumption by the patient.
    - Visitors should consult with the care team staff regarding any dietary considerations before bringing in food for the patient (e.g., allergies, diabetes, choking hazard, or swallowing difficulties).
- Remind visitors and patients to perform hand hygiene before and after handling or eating food.

Further Information/Resources: Refer to the BCCDC's Food Safety page for information related to food safety.

4.3.3. Indoor Ventilation

- Heating, ventilation, and air conditioning (HVAC) systems should be properly installed, regularly inspected, and maintained according to HVAC standards and other building code requirements.
- Where feasible, optimize HVAC systems in patient care areas and rooms, especially where patients presenting with communicable respiratory illnesses are cared for.
- Consult with HVAC specialists/professionals prior to making adjustments to ensure appropriate procedures are undertaken and intended parameters are met.

Further Information/Resources: Refer to resources for optimizing indoor ventilation on the PICNet website.

4.3.4. Considerations for Ambulatory Clinics

- Facilities may not be able to adopt all of the following measures; however, consideration should be given to incorporating as many measures as possible.
- Where possible, schedule patients with symptoms associated with VRI during designated time slots (e.g., end of day).
- In consultation with IPC, have mechanisms to physically or spatially separate infectious patients from other patients in waiting or treatment areas.
- Maintain existing physical barrier(s) where initial screening or triaging for infectious diseases occurs (e.g., at triage/reception stations). Consult with IPC.
- Provide alcohol-based hand rubs (ABHR) with a minimum of 70% alcohol at the reception counter and near exam room doors, for use by patients, visitors, HCWs and staff.[18]
- Post signage (e.g., entrance posters, hand hygiene, respect personal space) at appropriate locations and common areas (e.g., entrance, waiting area, exam room, and sinks).
- For the management of patients presenting with suspected or confirmed VRIs, considerations are:
    - Having a process and designated space for triage in waiting areas, and examination rooms.
    - For clinics seeing patients on a walk-in basis, consider setting up VRI screening station(s) for all individuals entering the facility at each designated entry point.
    - Provide medical masks to patients presenting with VRI symptoms.
    - Where feasible, the exam room(s) closest to the entrance should be designated for patients with VRI symptoms to facilitate separation from others, pending formal assessment.
    - Exam rooms should have minimal equipment (e.g., exam table, chair, blood pressure cuff, lights).

- Minimize sterile and clean supplies located in exam rooms.
- Keep supplies in closed cabinets or containers to minimize the risk of contamination.
- Set up a PPE station outside of exam rooms.

- Heating, ventilation, and air conditioning (HVAC) systems should be properly installed, regularly inspected, and maintained according to HVAC standards and other building code requirements.
  - Where feasible, optimize HVAC systems in patient care areas and rooms, especially where patients presenting with communicable respiratory illnesses are cared for.
  - Consult with HVAC specialists or professionals prior to making adjustments to ensure appropriate procedures are undertaken and intended parameters are met.
- If privacy curtains are used in the clinic or facility, remove and launder them when visibly soiled, when a patient on additional precautions leaves, and at least quarterly.[19]

Further Information/Resources:
- Refer to resources for optimizing indoor ventilation on the PICNet website.
- For information about laundry management, refer to the PICNet website for Environmental Cleaning and Disinfection in Clinic Settings Quick Reference Guide .

5. Facility Response Planning and Organization

- Develop or update a facility preparedness plan and response strategy to ensure readiness for managing surges in VRIs and to help prevent future pandemics.
- Conduct an organizational risk assessment (ORA) to identify the effectiveness of the present IPC measures in the facility and the breadth of the hierarchy of controls to prevent transmission of VRIs.
- Considerations for an ORA include:
  - Identifying where patients are likely to present for care.
  - Identifying how multiple patients will be handled at once for screening or treatment.
  - Reviewing and maintaining ventilation systems. Measures to improve indoor air quality and ventilation are important to decrease risk of aerosol transmission. See indoor IPC ventilation resources for more information.
- Establish clearly defined roles and responsibilities for all staff, balanced by cross training of staff and planning for backfilling positions if staff are unable to work.
- Establish clear communication channels.
- Ensure that information and decision-making pathways are identified.
- Designate a qualified staff member(s) as the lead(s) for coordinating surge/pandemic response at the residence, including staff responsibilities and information gathering and dissemination.
- Consider developing a standard operating procedure that outlines setting-specific processes and established roles and responsibilities.

Further Information/Resources: Please see Appendix B: Provincial IPC Preparedness Checklist for VRI in Acute Care and Ambulatory Health care settings of this document to aid in planning.

Appendix A: Additional Tools and Resources

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

- Provincial Outbreak Guidance for Viral Respiratory Illness in Acute Care Settings in British Columbia
- Provincial Outbreak Guidance for Viral Respiratory Illness in Long-Term Care Settings in British Columbia
- Provincial Infection Prevention and Control Guidance for Viral Respiratory Illness in Long-Term Care and Seniors' Assisted Living Settings in British Columbia
- BCCDC Respiratory Virus Data
- Office of the Provincial Health Officer – Orders, Notices and Guidance
- BCCDC Respiratory Illness: Getting vaccinated
- Health care Worker Exposure and Illness Resources
  - 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:

- Staff and Visitors Entrance Poster
- All Patients/Residents Entrance Poster
- 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
- Eye and Facial Protection Selection Fit Tool
- Prescription Eye Protection Selection Requirements
- Skin Protection for PPE Use for Health Care Workers
- Respirator donning and doffing instructions.
- Donning instructions for elastomeric half facepiece respirator (EHFR) without an exhalation valve filter
- Position Statement to Address Double Masking and Mask Modifications for Medical Masks in Health Care Settings

VRI Transmission and Chain of Infection posters:

- VRI Transmission
- VRI chain of infection

Environmental Cleaning and Disinfection resources:

- Environmental Cleaning and Disinfection in Clinic Settings Quick Reference Guide
- PICNet's British Columbia Best Practices for Environmental Cleaning for Prevention and Control of Infections in All Health care Settings and Programs

Ventilation resources:

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

Other IPC Resources:

- Public Health Agency of Canada's Routine practices and additional precautions for preventing the transmission of infection in health care settings
- Hierarchy for Infection Prevention and Exposure Control Measures for Communicable Diseases
- For up-to-date IPC resources, please refer to the PICNet website.

Appendix B: Provincial Infection Prevention and Control (IPC) Preparedness Checklist for Viral Respiratory Illness (VRI) in Acute Care and Ambulatory Health Care Settings

Note: The checklist below includes some strategies for the prevention of VRI transmission in health care facilities. Not all strategies are applicable to all types of facilities or settings.

Provincial IPC Preparedness Checklist for VRI in Acute Care and Ambulatory Care
General IPC Measures
☐ Follow current provincial policy directives and PHO orders. ☐ Educate all staff about VRIs. ☐ Develop a contingency plan for staff illness and shortages. ☐ Assign a staff member(s) to coordinate VRI planning and monitor public health advisories. ☐ Place posters and signage (e.g., hand hygiene, respiratory etiquette) at all entrances and common areas. ☐ Ensure ABHR with at least 70% alcohol, medical masks, tissues, no-touch waste receptacles and disinfectant wipes are available at multiple locations (e.g. entrances, reception counter, common areas, and exits). ☐ Where ABHR cannot be mounted or easily accessible due to patient safety concerns, provide HCW with personal size containers of ABHR with at least 70% alcohol. ☐ Provide disposable tissues and no-touch waste bins to facilitate respiratory hygiene in appropriate areas. ☐ Provide plain soap and paper towels in washrooms and at staff sinks. ☐ In consultation with IPC, have mechanisms to physically or spatially separate infectious patients from other patients in waiting or treatment areas. ☐ In consultation with IPC and WHS, maintain existing physical barrier(s) where initial screening or triaging for infectious diseases occurs (e.g., at triage/reception stations).
Symptom Screening
☐ Encourage HCWs, staff, contractors, visitors, and others to self-screen for VRI symptoms and not come to work or visit if experiencing acute respiratory or gastrointestinal symptoms. ☐ Have processes in place to monitor patients for VRI signs and symptoms and place them on additional precautions as needed. ☐ Post signage at building entry points and common areas to support self-screening process.

Continued...

Health Care Worker Measures

Institutions and organizations are responsible to:

- ☐ Develop a contingency plan for HCW illness and shortages.
- ☐ Educate all HCW about self-screening and monitoring and identifying VRI signs and symptoms and staying away from work when sick.
- ☐ Provide HCW IPC education (e.g., hand hygiene, PCRA, PPE donning and doffing).
- ☐ Ensure PPE, hand hygiene, and cleaning and disinfection supplies are readily available for HCWs.
- ☐ 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.
- ☐ Assess HCW hand hygiene and PPE compliance (e.g., PPE Audit Tool).

Health care workers are responsible to:

- ☐ Follow institutional IPC policies and procedures including conducting a PCRA prior to any interaction with a patient or visitor.
- ☐ Ensure immunizations are up-to-date; and adhere to the current applicable Public Health Orders, regulations and institutional policies.
- ☐ Self-screen and monitor for signs and symptoms of illness.
- ☐ If clinical illness and symptoms develop, stay home from work; and inform their supervisor.
- ☐ Inform their supervisor when exposure incidents have occurred (e.g., PPE breach). Health authority employees should report exposure incidents to Provincial Workplace Health Contact Centre if applicable.

Environmental Measures

- ☐ Have cleaning and hospital-grade disinfectant supplies (e.g., disinfectant wipes) readily available in appropriate locations to facilitate environmental and equipment cleaning and disinfection.
- ☐ Ensure there is assigned responsibility and availability of procedures for cleaning and disinfection.
- ☐ Provide guidance for environmental cleaning and disinfection as needed.
- ☐ Cleaning cloths should be changed frequently. Do not re-dip soiled or used cloths into cleaning and/or disinfectant solutions.
- ☐ Ensure there are processes and procedures for separating used or dirty equipment from clean equipment.
- ☐ Dedicate reusable equipment to patients on additional precautions as much as possible.
- ☐ If reusable non-critical equipment is shared, it must be cleaned and disinfected with a hospital-grade disinfectant after each patient use.
- ☐ Store clean equipment and supplies in a clean room/drawer/cupboard and physically separated from used or dirty equipment to protect from moisture, contamination, and damage.
- ☐ Replace fabric-covered furnishings with ones that are washable, intact smooth, and tolerant of hospital-grade disinfection, where possible.
- ☐ If privacy curtains are used in the clinic or facility, remove, and launder them when visibly soiled, when a patient on additional precautions leaves, and at least quarterly.
- ☐ Where permitted by fire regulations, keep frequently used interior doors open to avoid recurrent door handle contamination.
- ☐ Heating, ventilation, and air conditioning (HVAC) systems should be properly installed, regularly inspected, and maintained according to HVAC standards and other building code requirements. Refer to the indoor ventilation resources.

Appendix C: Common Viral Respiratory Illness Pathogens

Viral Organism	Epidemiology	Incubation period	Symptoms and symptom duration	Period of communicability*
Adenovirus[1]	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[25-27]	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. Refer to Appendix D: Duration of Additional Precautions in Patients with COVID-19 Illness.
Influenza A[20,28-30]	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 before symptoms onset and up to 5-7 days after clinical onset in adults; Young children and people with immune-compromise may be >7days People with asymptomatic infections may also be infectious
Influenza B[20]	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 > 2weeks.	1 day before symptoms onset and up to 5-7 days after clinical onset in adults; People with asymptomatic infections may also be contagious
Parainfluenza virus[31]	Entire year (little seasonal pattern) Predominantly causes infection & outbreaks in young children and the elderly	2-6 days	Fever, cough, bronchiolitis, bronchitis, pneumonia Croup. Duration 1-3 weeks.	The exact period of communicability is not known; however, viral shedding can happen for about 3-10 days during initial infection.
Respiratory Syncytial virus (RSV)[1]	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 such as:[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

** In general, communicability is greatest in pre-symptomatic and early symptomatic stage of illness.*

Appendix D: Duration of Additional Precautions for Patients with COVID-19

A conservative approach to discontinuing additional precautions in acute care and high-risk outpatient areas associated with acute care facilities is necessary to protect vulnerable patients from the risk of acquiring SARS-CoV-2 from patients who are still potentially infectious. As such, the recommended duration of additional precautions for these patients might differ from public health's guidance for the public and community settings. The duration of COVID-19 related additional precautions is based on several factors including:

- The incubation and communicable periods. Refer to Appendix C: Common VRI Pathogens.
- Potentially longer duration of infectious viral shedding in individuals who are immunocompromised and those who have increased severity of COVID-19 illness.[25,32] The period of communicability may extend up to 20 days or longer after symptom onset in some of these individuals.[25,32–34]
- Clinical judgement, including an evaluation of patients' symptoms, severity of illness, the level of immune compromise and ability to transmit the virus to another person.
- Local health authority guidance.

Definition of Key Concepts

COVID-19 Illness Severity

COVID-19 infection can range in illness presentation. Replication-competent virus has been recovered between 10 and 20 days after symptom onset in some patients with severe or critical COVID-19 illness.[32–34] Please note, patients who have COVID-19 can be hospitalized for reasons other than the severity of their COVID-19 illness (e.g., surgical procedure, another medical condition). The following definitions are intended to assist in determining the duration of addition precautions for pediatric and adult patients:

- Asymptomatic infection: A patient who had a laboratory-confirmed positive COVID-19 test and who had no symptoms during the complete course of infection.[32,35] If they developed compatible symptoms, the patient should be reclassified in one of the appropriate categories based on the severity of their COVID-19 illness.[32]
- Mild to moderate COVID-19 illness: A patient who has COVID-19 symptoms[25] and does not require supplemental oxygen support (i.e. have oxygen saturations of ≥ 94% on room air) for COVID-19 illness.[25,32,36] Additionally, the patient did not reach the threshold for severe to critical illness. If a patient is admitted to the hospital for reasons unrelated to their COVID-19 illness, they should not automatically be considered as having severe or critical COVID-19 illness.
- Severe to critical COVID-19 illness: A patient for whom COVID-19 causes any one of the following based on clinical judgement and as determined by MRP:[25,32,36]
  - Experienced oxygen saturation below 94% on room air;
  - Hypoxemic respiratory failure;
  - Multi-organ dysfunction, septic shock; or
  - Hospitalized because of the severity of their COVID-19 illness.

Refer to the British Columbia COVID-19 Therapeutics Committee[36] guidance for information on the classification of severe and critical COVID-19 illness on the BCCDC website.

Level of Immune Compromise

The level of immune compromise is a consideration in determining discontinuation of droplet and contact precautions in moderately or severely immune compromised patients as SARS-CoV-2 replication-

competent virus or sub-genomic RNA has been reported after 10 days and in some cases beyond 20 days.[32,33] A patient's most responsible physician/practitioner (MRP) is the best person to determine how immune compromised a patient is and which category from the list provided below (i.e., mildly, moderately, or severely immune compromised) a patient belongs in. This decision-making is done in consultation with the IPC team as needed.

The following information provide examples and considerations to guide decision-making:

- Mildly immune compromised: Patients with mild immune compromising conditions and/or factors such as advanced age, diabetes mellitus or end-stage renal disease.[25,32] *For the purpose of discontinuing additional precautions, these patients are treated in the same manner as those without immune compromising conditions and/or factors.*
- Moderately immune compromised: Patients with one or more of the following:[32,37]
  - Persons on systemic chemotherapy for solid organ cancer;
  - Solid organ transplant who are greater than one year out of transplant, stable on their immunosuppression and overall very stable as determined by the MRP on a case-by-case basis;
  - Human immunodeficiency virus (HIV) with a CD4 count of 50 - 200 cells/mm^3 (inclusive);
  - Any person taking a biologic/immunomodulatory therapy, prednisone of >20 mg/day (or equivalent dose) for ≥14 days, tacrolimus, sirolimus, mycophenolate, methotrexate or azathioprine.

  Based on their clinical judgement, MRPs may determine that there are other diagnoses and/or medications not listed above that support considering patients as moderately immune compromised. Consult an infectious disease specialist as needed.
- Severely immune compromised: Based on their clinical judgement, MRPs may determine that there are diagnoses or a combination of diagnoses and/or medications that support considering a patient as severely immune compromised. Current evidence may not have demonstrated prolonged live viral shedding with such diagnoses and/or medications to date. Thus, clinical judgement remains important to determine if these patients should be considered as severely immune compromised for the purpose of determining their communicability period. Examples may include, but are not limited to, conditions or combinations of the following as determined by the MRP, based upon their assessment of the patient:[25,32,37–41]
  - Bone marrow transplant
  - Solid organ transplant (less than one year from transplant)
  - Chronic lymphocytic leukemia
  - Lymphoma
  - Hypogammaglobulinemia
  - HIV with a CD4 count of <50 cells/mm^3 or AIDS
  - Chimeric antigen receptor T-cell therapy
  - Use of rituximab
  - Primary immunodeficiencies
  - Familial hemophagocytic lymphohistiocytosis
  - Type 1 interferon defects (primary immunodeficiency and acquired autoantibodies to type 1 interferons).
  - Agammaglobulinemia
  - Combined variable immunodeficiency (CVID)
  - Combinations of diagnoses
  - Medications that would confer severe immune compromise

Decision-making about discontinuing additional precautions for patients who are considered severely immune compromised requires consultation with MRPs, and IPCP. Consult an infectious disease specialist as needed. A test-based strategy should be considered to discontinue additional precautions for these patients. Table 1 provides general guidance for when to discontinue COVID-19 related additional precautions (i.e., droplet and contact precautions) in patients confirmed to have COVID-19 infection. The duration of additional precautions is dependent on the severity of COVID-19 illness and degree of any immune compromising conditions or medications (see definitions of key concepts). Additionally, health authority specific guidelines and processes for discontinuation of additional precautions should be followed.

Table 1: Duration of Droplet and Contact Precautions for Patients Confirmed to have COVID-19
Important – modifications to the duration of additional precautions can be made at the health authority level or on a case-by-case basis in consultation with MRP and/IPCP team.

COVID-19 Illness Severity	Level of Immune Compromise	When Droplet and Contact Precautions Can be Discontinued*
Asymptomatic Infection	None / Mildly	• Ten days have passed since onset of symptoms AND at least 24 hours have passed since last fever without the use of fever-reducing medication AND symptoms (respiratory, gastrointestinal and systemic) have improved; or • Follow local health authority guidance, and/or MRP and IPCP consultation, based on duration of symptoms and local epidemiology.
	Moderately	• *Twenty days* have passed since date of the first positive COVID-19 test AND symptoms did not develop after the first positive test.
	Severely	• *Twenty days* have passed since the date of the first positive COVID-19 test (consider longer period based on consultation with MRP) AND symptoms did not develop after the first positive test. • Consultation with MRP and IPCP/infectious disease specialist is recommended. • After the above conditions have been met, a test-based strategy should be considered with re-testing until there are two negative tests collected at least 24 hours apart or according to local IPC recommendations. Refer to the notes section.
Mild to Moderate Illness	None / Mildly	• *Ten days* have passed since onset of symptoms AND at least 24 hours have passed since last fever without the use of fever-reducing medication AND symptoms (respiratory, gastrointestinal and systemic) have improved.
	Moderately	• *Twenty days* have passed since onset of symptoms AND at least 24 hours have passed since last fever without the use of fever-reducing medication AND symptoms (respiratory, gastrointestinal and systemic) have improved.

COVID-19 Illness Severity	Level of Immune Compromise	When Droplet and Contact Precautions Can be Discontinued*
	Severely	• *Twenty days* have passed since onset of symptoms AND at least 24 hours have passed since last fever without the use of fever-reducing medication AND symptoms (respiratory, gastrointestinal and systemic) have improved. • Consultation with MRP and IPCP/infectious diseases specialist is recommended. • After the above conditions have been met, a test-based strategy should be considered with re-testing until there are two negative tests collected at least 24 hours apart or according to local IPC recommendations. Refer to the notes section.
Severe to Critical Illness	None / Mildly	• *Twenty days* have passed since onset of symptoms AND at least 24 hours have passed since last fever without the use of fever-reducing medication AND symptoms (respiratory, gastrointestinal and systemic) have improved.
	Moderately	
	Severely	• *Twenty days* have passed since onset of symptoms AND at least 24 hours have passed since last fever without the use of fever-reducing medication AND symptoms (respiratory, gastrointestinal and systemic) have improved. • Consultation with MRP and IPCP/infectious diseases specialist is recommended. • After the above conditions have been met, a test-based strategy should be considered with re-testing until there are two negative tests collected at least 24 hours apart or according to local IPC recommendations. Refer to the notes section.

**Notes:*

- In general, it is not recommended to test patients who are asymptomatic.[42] However, health authorities may test these patients as part of an outbreak or cluster investigation, or for other reasons, as directed by IPCP or public health/medical health officer.
- If unable to determine the date of symptom onset, use the collection date of initial positive laboratory result as the date of symptom onset.
- Symptom improvement does not necessarily apply to pre-existing or chronic respiratory symptoms caused by another health condition. Additionally, coughing from COVID-19 illness may persist for several weeks and does not mean the patient is infectious and must remain on additional precautions, providing that the patient is afebrile and other symptoms have improved.[25]
- The 20-day period for patients who are moderately or severely immune compromised may be modified by IPC or the medical health officer, in consultation with the patient's care team and MRP.
- A test-based strategy may be considered in specific circumstances and should be done in consultation with MRP and IPCP/infectious diseases specialist. Circumstances may include the following:
    - For discontinuing additional precautions earlier than the recommended duration[32] outlined in Table 1.

    - If there are concerns that a patient who has severe or critical illness and/or is moderately immune compromised is infectious for more than 20 days.[32]
    - For patients who are not severely immune compromised and whose symptoms are not improving after 20 days and where the symptoms may be due to an alternative diagnosis.
- Consult IPCP when:
    - A patient refuses repeat testing, or if a specimen cannot be collected.
    - The repeat test result is positive to get guidance on when to re-test again. The patient should remain on additional precautions for COVID-19 in the interim.
- In patients with persistently positive COVID-19 test results (e.g., patients whose symptoms have resolved, but polymerase chain reaction testing, or rapid antigen test still indicates the presence for virus RNA or antigen, respectively), consult the IPC team/infectious diseases specialist. Based on their organizational risk assessment, health authorities may choose to identify a specific time period for when additional precautions can be discontinued for patients who persistently test positive.
- In consultation with a medical microbiologist, cycle threshold (Ct) values of laboratory specimens may also be considered to determine when repeat testing should be done.

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