



Infection Prevention & Control Outbreak Management of Coronavirus Disease (COVID-19) – All Phases

Original: July 2, 2020
Revised: March 31, 2022
Revised: September 14, 2022
Revised: November 2, 2022
Revised: March 6, 2023

Infection Prevention & Control

Outbreak Management of Coronavirus Disease (COVID-19) – All Phases

Purpose Statement

The purpose of this document is to provide best practice guidance for the management of COVID-19 outbreaks.

Declaring an Outbreak

IPC and EHS, in consultation with the Infectious Diseases/Medical Microbiologist, review the data to confirm patients/HCWs meet the COVID-19 case definition before declaring an outbreak.

1. Outbreak Definitions

COVID-19 Confirmed

A person with laboratory confirmation of infection with the virus that causes COVID-19 performed at a community hospital or reference laboratory (NML or a provincial public health laboratory) running a validated assay.

Healthcare-associated (HCA) acquired in your acute care facility (Nosocomial)

- Symptom onset ≥ 7 calendar days after admission and using best clinical judgement (e.g., symptom onset < 7 days but known epi link to a positive case). **OR**
- If patient is readmitted with a positive test < 7 days after discharge from hospital and using best clinical judgement.

HCA in another healthcare facility

- Any patient who is identified with COVID-19 not acquired at your facility, which is thought to be associated with another healthcare facility (e.g., another acute-care facility, long-term care or rehabilitation facility etc.). Retirement homes are not considered another healthcare facility.

Community-associated

- No exposure to healthcare that would have resulted in this infection (using best clinical judgement) and does not meet the criteria for a healthcare-associated infection.

COVID-19 Outbreak Involving Staff and Inpatients

Two or more laboratory-confirmed COVID-19 cases (patients and/or staff) working in the same department (unit/floor/service) within a facility within a 7-day period and it is determined that the acquisition of the infection occurred within the hospital setting and is not associated with travel or community this is considered a confirmed outbreak.

Duration of Isolation Precautions

Patients will be isolated as per [IPC Guidance - Strategy for Discontinuing IPC Precautions \(All Phases\)](#).

2. Outbreak Management Team Members and Responsibilities

- Executive Director/Facility Manager or designate collaborates with IPC to establish a facility [Outbreak Management Team \(OMT\)](#).
- Executive Director/Facility Manager/designate or IPC schedule meetings as required.
- Implements and organizes a response to the outbreak and ensures that communication is provided to the Executive Leadership Team, HCWs, volunteers, students, patients, families and the public. These measures will be documented in an Outbreak Management Meeting Record.
- Executive Director/Facility Manager or designate collaborates with IPC to plan and implement a response to the outbreak.

- Local Area IPC Manager acts as conduit to ID/IPC COVID-19 Committee.
- Executive Director/Facility Manager or designate act as conduit to the Horizon Executive Leadership Team.
- Ensures all outbreak activities and measures are documented in the [Outbreak Management Meeting Record](#).
- Works with IPC and ServiceNB to ensure adequate availability of all supplies (i.e., hand hygiene products, Personal Protective Equipment (PPE), linen, laboratory testing supplies, etc.) through notification of appropriate departments.
- Collaborates with IPC and EHS regarding:
 - Cohorting HCWs assignments.
 - Cohorting HCWs to affected areas if practical or assigning HCWs to care for asymptomatic patients before symptomatic patients and batching patient care.
 - Minimizing/restricting movement of HCWs students or volunteers (when feasible), between floors/areas, especially if some areas are not affected.
- Ensures restrictions regarding patient admissions/re-admissions/transfers and activities are modified or lifted following consultation with IP&C. When restriction of admissions/transfers is unduly impacting the availability of acute care beds for patients requiring urgent care, IP&C and OMT assess the circumstances surrounding the restriction.
- Collaborates with Communications to ensure outbreak restrictions i.e., room/unit closures, admissions and transfer restrictions, are communicated to local Area stakeholders:
 - staff in the affected area.
 - staff and volunteers across the organization.
 - patient and families.
 - the broader public (e.g., on the hospitals website).
 - the media.
- Ensures social visitation restrictions remain in place.
- Ensures Designated Support Persons (DSPs) are permitted to visit as per [DSP Visitation Table](#).

3. Contact Tracing

IPC will manage inpatient contact tracing (which includes a 3-day upstream patient review).

Definition of Exposed Patient

All inpatients who had prolonged close contact (within 6 feet for a cumulative total of 15 minutes or more over a 24-hour period) with the infected HCW/Patient (two days before a positive health care worker/patient's symptom onset date or specimen collection date) are considered exposed.

- All exposed inpatients are placed on [Droplet/Contact Precautions](#) and monitored twice daily for signs and symptoms of COVID-19 until 7 days after their last exposure.
- IPC identifies exposed inpatients who have recently been transferred off the unit (where the exposure occurred) to other wards or facilities; notifies other wards or facilities of the suspected exposure and ensures all transferred patients meeting the definition of an exposed patient are placed on [Droplet/Contact Precautions](#) and monitored twice daily while awake for signs and symptoms of COVID-19 until 7 days after their last exposure.
- Exposed inpatients who require an urgent transfer to another unit for medical reasons are transferred on [Droplet/Contact Precautions](#) and remain on precautions for 7 days after their last exposure.
- Non-exposed patients on an outbreak unit do not require isolation.
- Exposed inpatients who are within 90 days of onset of prior COVID-19 infection do not require isolation if they remain asymptomatic.
- EHS manage HCW/Volunteer and Physician contact tracing.

4. COVID-19 Testing

COVID-19 testing will be performed on symptomatic patients, HCWs and DSPs. If an exposed inpatient develops signs and symptoms following a COVID-19 exposure, a GeneXpert rapid test is completed as per the [COVID-19 Testing Directive](#). If an inpatient meets the definition of an exposed patient and requires surgery they are tested as per the [COVID-19 Testing Algorithm \(All Phases\)](#).

5. Administrative Measures & Notifications

Responsible Person(s)	Required Actions and/or Notifications
Infection Prevention and Control	<ul style="list-style-type: none">• notifies appropriate HCWs/departments within the facility as indicated by local Area practices (i.e., Administration, EHS and Environmental Services (EVS) and ServiceNB). Outbreak Notification Memo (Appendix B).• posts outbreak signage at the entrance to the unit and/or facility advising HCWs and DSPs of the necessary precautions and informing the public that social visitors are not permitted.• maintains a presence on the outbreak unit to provide education on COVID-19 symptom surveillance and reporting, the key elements in an outbreak response and PPE donning and doffing ensuring the "Buddy" system has been implemented.• initiates inpatient contact tracing• notifies the Regional Medical Officer of Health of outbreak as per) Public Health New Brunswick Notifiable Diseases and Events Notification Form.• advises EVS regarding need for enhanced environmental cleaning.• audits hand hygiene compliance, PPE accessibility and compliance.• maintains surveillance to identify and report new cases.• maintains and updates a Daily Line List - COVID-19 Respiratory Outbreaks in an Acute Care Facility
Nurse Manager/ Charge Nurse	<ul style="list-style-type: none">• reviews inpatient census to determine if there are patients who require aerosol generating medical procedures (AGMPs) such as CPAP, BiPAP or Cough Assist machine. If patients require AGMP, consults attending Physician to determine if AGMP is essential or nonessential. If it is determined that the therapy is essential, consult IPC regarding patient placement.• in consultation with EHS reviews HCW vaccination rates and promotes HCW vaccination.• monitors HCW absences in association with the outbreak.• advises HCWs to test as per COVID-19 and Influenza HCW Guidelines• ensures attending physician is contacted in a timely fashion to strongly consider using the Horizon COVID-19 Clinical Order Set, supported by treatment guidance through the First Line app.• ensures proper collection of appropriate specimens.• ensures work areas, i.e., nursing station, medication carts/room and patient care environment are accessible and free of clutter for EVS to clean and disinfect all surfaces• cancels or postpones previously booked non-patient events (i.e., meetings, HCWs in-service) on an outbreak unit/facility

Responsible Person(s)	Required Actions and/or Notifications
	<ul style="list-style-type: none"> ensures HCWs do not eat or drink at the Nurses station or charting areas as per Infection Prevention and Control Routine Practices (HHN-IC-015). HCWs may eat and drink in designated staff lounges.
Attending Physician or designate	<ul style="list-style-type: none"> notifies inpatients/substitute decision maker of the outbreak situation and isolation requirements. The disclosure process is completed in accordance with the Patient Safety Incident Management: Harmful Incidents, No Harm Incidents, Near Misses and Multi-Patient Events (HHN-SA-002) policy. reviews inpatient vaccination status. Works with Nursing and Pharmacy to have COVID-19 vaccination offered to those inpatients who are unvaccinated or partially vaccinated as per vaccine schedule. manages COVID-19 patients using the Horizon COVID-19 Clinical Order Set, supported by treatment guidance through the First Line app. Members of the COVID-19 treatment team will be available where possible for informal/formal guidance.
EHS	<ul style="list-style-type: none"> ensures Nurse Manager/Charge Nurse can access the COVID-19 and Influenza HCW Guidelines for guidance and recommendation for HCWs on an outbreak unit. provides updates on HCW exclusions to the Nurse Manager/Charge Nurse and IPC. ensures that HCWs are advised of recommendations and work restrictions. directs HCWs and Physicians working on Outbreak Units to be tested as per the Health Care Worker (HCW) Scenario Guidelines
Responsible Managers	<ul style="list-style-type: none"> advise symptomatic HCWs to isolate immediately and contact EHS for assessment and decision regarding work exclusion. follows up with EHS to review HCW vaccination rates and promotes HCW vaccination. monitor HCW absences in association with the outbreak.

6. Enhanced Environmental Cleaning Measures

Responsible Person(s)	Required Actions and/or Notifications
EVS	<ul style="list-style-type: none"> implements enhanced environmental cleaning cleans and disinfects patient rooms ensuring frequently touch surfaces such as bed rails, call bell cords, bathroom surfaces (taps, toilet handles), doorknobs, light switches are cleaned twice per day. use fresh mop head, cloths, cleaning supplies and cleaning solutions to clean affected rooms and provides a dedicated toilet brush for each toilet/commode cleans and disinfects, nurses' station, common areas and frequently touch surfaces such as computer carts, medication carts, computer screens, telephones, touch screens etc. twice a day and when soiled, or as recommended by IPC. cleans staff lounge/lunchroom after breaks and mealtimes. terminally cleans the patient's room/bedspace when the patient is taken off isolation.

Responsible Person(s)	Required Actions and/or Notifications
	<ul style="list-style-type: none"> consults with Nursing to identify items that cannot be cleaned/disinfected and ensures they are properly discarded. cleans the following common areas, i.e., nutrition centre, staff lounge and family rooms, on the affected unit when the outbreak is declared over.
Nursing	<ul style="list-style-type: none"> initiates Droplet/Contact Precautions for all symptomatic and exposed patients ('exposed' defined in 3 above), and posts Droplet Contact Precautions Sign at the entrance of patient's room or bed space. provides the patient with information on Additional Isolation Precautions (HHN-0605). ensures that reusable non-critical equipment is dedicated to the use of one patient. If equipment cannot be dedicated it is cleaned and disinfected with an approved hospital grade cleaner/disinfectant. Refer to Cleaning/Disinfection of Non-Critical Patient Care Equipment and Electronic Devices (HHN- IC-006). ensures that patients personal care items (e.g., tissues, lotions, soaps, razors) and disposable equipment, such as containers used for blood collection or tourniquets left in the room following transfer/discharge are discarded. ensures work areas, i.e., nursing station, medication carts/room and patient care environment are accessible and free of clutter for EVS to clean and disinfect all surfaces advises DSPs to practice good hand hygiene and wear the appropriate PPE (i.e., gloves, gown, procedure/surgical mask, eye protection). Demonstrates for DSPs how to perform hand hygiene and don and doff PPE. advises DSPs to only visit one patient and exit the facility immediately after the visit provides patient with discharge instructions as outlined in Patient Discharges.
EVS & Nursing	<ul style="list-style-type: none"> discard items that cannot be appropriately cleaned and disinfected upon patient discharge or transfer

7. COVID-19 Outbreak Strategies

Category	Outbreak Strategies
Patient Transfers & Cohorting	<ul style="list-style-type: none"> Infected patients may be transferred to the facility COVID -19 Unit if available and if it is determined patient requires admission to the unit. For infected patients identified in a semi-private/ward setting, all attempts are made to transfer the patient to a private room. The exposed patients remain cohorted and isolated separately on Droplet/Contact Precautions for 7 days from the last date of exposure. patients will wear a medical grade face mask during transfer (if tolerated). If no COVID-19 Unit or no transfer required, COVID-19 patients will be managed in place on the outbreak unit. The outbreak unit will be divided into an outbreak area (COVID-19 positive patients and patients potentially exposed to COVID-19) and a

Category	Outbreak Strategies
	<p>non-outbreak area (newly admitted patients and patients transferred from non-outbreak unit).</p> <ul style="list-style-type: none"> • Transfer symptomatic patients to a single room. If a single room is not available, patients with infection due to the same micro-organism may be cohorted following consultation with IP&C as per IPC Guidance - Cohorting Patients with Respiratory Viral Infections. • Isolation precautions on recovered patients are discontinued as per IPC Guidance - Symptom-Based Strategy for Discontinuing IPC Precautions (All Phases). Recovered patients can be used as a buffer to divide the outbreak area from new admissions who have not been exposed. • Unit reconfiguration: When multiple units have COVID-19 nosocomial outbreaks, multiple exposed patients from different units may be combined in one unit so that a non- outbreak unit is made available for patient care. • When the outbreak strategies outlined above have been implemented and operational capacities remain challenged due to patient flow issues, the IPC Guidance: Cohorting Strategies to Facilitate Patient Flow During COVID-19 Pandemic - All Phases (Appendix A) will be followed to provide additional approaches for cohorting COVID -19 suspect, positive, or recently recovered patients. • If a positive patient is transferred, they remain isolated as per IPC Guidance - Symptom-Based Strategy for Discontinuing IPC Precautions (All Phases). • If an exposed patient is transferred from an outbreak unit to another unit/facility, the patient will be managed on Droplet/Contact Precautions for 7 days after their last exposure. • The outbreak facility notifies the transporting HCWs and the receiving facility that the exposed patient is being transferred from a unit experiencing an outbreak. If tolerated, symptomatic patients should wear a medical grade face mask during transfer.
Patient Admissions	<ul style="list-style-type: none"> • Newly diagnosed COVID-19 patients being admitted to hospital can be managed with the COVID-19 patient cohort. • Recently recovered COVID-19 patients (Patients who are within 90 days of onset of prior COVID-19 infection) can be admitted to outbreak units. • Newly admitted patients admitted to the non-outbreak section will not require Droplet/Contact Isolation • Patients will be managed as per IPC Guidelines: Managing COVID-19 Patients Outside of COVID-19 Designated Units - All Phases
Patient Discharges	<ul style="list-style-type: none"> • If an admission/ transfer to another facility occurs during a confirmed COVID-19 outbreak, Nursing collaborates with the receiving facility prior to patient discharge. The patient is not transferred until the receiving facility is aware of: <ul style="list-style-type: none"> ○ the outbreak ○ IPC precautions required • Patient transfers from an outbreak unit to long term care or an adult residential facility, will be made on a case-by-case basis involving the home, the primary care provider, in consultation with the Regional

Category	Outbreak Strategies
	<p>Medical Officer of Health and Social Development prior to discharge. The hospital physician works with the receiving physician (if different) and the home to arrange the appropriate transfer.</p> <ul style="list-style-type: none"> • If Patient is discharged home, a risk assessment is completed to determine if they are a high or low risk contact <ul style="list-style-type: none"> ○ High Risk Patients Discharged from an Outbreak Unit <ul style="list-style-type: none"> ▪ Patient is COVID-19 positive OR ▪ Patient shared a room with a COVID-19 positive patient OR ▪ Patient had direct contact with a COVID-19 positive HCW ○ Discharge instructions for High-Risk patients will include: <ul style="list-style-type: none"> ▪ COVID-19 positive patients will be advised to follow Provincial Public Health Guidelines GNB: What To Do If You Have COVID-19 ▪ Patients who have had close contact with a COVID- 19 positive patient or HCW are advised that they must monitor for symptoms and arrange for COVID- 19 testing as per GNB COVID-19 Testing Guidelines
Patient Activities	<ul style="list-style-type: none"> • Nursing consults with IPC for assistance with adapting patient activities. • Nursing cancels all group activities for the duration of the outbreak: <ul style="list-style-type: none"> ○ Food sharing activities (BBQs, communal cooking, potluck parties, bake sales, etc.) ○ Group activities where there is hand contact (dancing, playing cards, puzzles, etc.) • Nursing ensures that medically necessary activities and appointments are kept and notifies the receiving facility/department so that appropriate precautions can be taken for the patient. • treatments such as physiotherapy or occupational therapy are restricted, when possible, to the symptomatic patient's room. Otherwise, if this therapy needs to be provided outside the patient's room, it will be provided while patient wears a mask, follows appropriate hand hygiene as well as 2 metre physical distancing. • Nursing consults with IPC for assistance with adapting patient activities. • patients requesting a leave of absence from a facility/unit that is under restrictions due to a COVID-19 outbreak may do so if the patient is asymptomatic. Nursing advises patients that if they become symptomatic while away from their facility, they should contact the Nursing Unit for instructions.
Infection Control Precautions	<ul style="list-style-type: none"> • Nursing monitors the index case and all other exposed inpatients for vital signs and symptoms of COVID -19 twice per day while awake to assess for a change in health status. • Nursing will ensure close contacts of the COVID-19 positive patient are managed on Droplet/Contact Precautions. • Patients who are within 90 days of onset of prior COVID-19 infection do not require isolation or testing if they remain asymptomatic. • Nursing ensures all patients wear a medical grade face mask when out of their room for essential medical procedures.

Category	Outbreak Strategies
	<ul style="list-style-type: none"> While awake and where tolerated, patients will wear a medical grade face mask when they are within 2 meters of other individuals (e.g., when staff enter their single-bed room and when in a multi-bedroom). Masks will not be used for patients who have difficulty breathing who are unable to remove the mask on their own (e.g., due to decreased level of consciousness, young age, mental illness, cognitive impairment or physical ability). Patients who are on Droplet/Contact Precautions should remain in their rooms and not encouraged to leave their room. IPC and Nursing ensure symptomatic patients are restricted to their room on Droplet/Contact Precautions with meals delivered to them. IPC and Nursing restrict asymptomatic positive patients to the outbreak section of the unit, unless a transfer is clinically indicated. If transfer is clinically indicated, the receiving unit/facility is notified that the patient should be placed on droplet/contact precautions. Isolation precautions are discontinued as per IPC Guidance - Symptom-Based Strategy for Discontinuing IPC Precautions (All Phases). Exposed inpatients who require an urgent transfer to another unit for medical reasons are transferred on Droplet/Contact Precautions and remain on precautions for 7 days after their last exposure. Isolation precautions on recovered patients are discontinued. Recovered patients can be used as a buffer to divide active outbreak units and new admissions who have not been exposed.
Staff	<ul style="list-style-type: none"> Staff cancel or postpone previously booked non-patient events (i.e., meetings, HCWs in- service) on an outbreak unit/facility. Cohorting of staff dedicated to each section will be applied when possible. HCWs who must enter the Outbreak Unit to deliver supplies, meal trays and/or pharmaceuticals are required to wear a medical grade face mask, they are not required to wear eye protection or don a gown and gloves.

8. Additional Restrictions & Strategies

Activity or Individual(s)	Restrictions
Healthcare Worker Restrictions	<ul style="list-style-type: none"> Refer to COVID-19 and Influenza HCW Guidelines. The number of HCWs caring for COVID-19 patients should be minimized whenever possible. HCWs should be cohorted to work only with COVID-19 patients whenever possible. HCWs working on an outbreak unit (or a facility with an outbreak) who work at other facilities must notify EHS at those facilities about their exposure to the outbreak unit.
Visitor Restrictions	<ul style="list-style-type: none"> All Social Visitors are restricted. DSPs are permitted Communications advise the Public through various methods such as social media, PSA, and signage, regarding visitor restrictions.
Volunteer Restrictions	<ul style="list-style-type: none"> Volunteers are not permitted to work during an outbreak.

Activity or Individual(s)	Restrictions
Meals/Nourishment Areas & Sharing Food	<ul style="list-style-type: none"> • IPC ensures that the dining room (if applicable) on the affected Nursing unit is closed, and patients dine in their room. • All communal activities are postponed until outbreak has been declared over. • IPC and Nursing restrict access to kitchen/nourishment areas and there is no communal sharing of food in outbreak areas. • Nursing ensures shared food containers are removed and medication water pitchers are sent daily to Nutrition and Food Service for cleaning. <p>NOTE: Use of disposable plates and cutlery by symptomatic patients is not required</p>
Pets	<ul style="list-style-type: none"> • Pets will not visit on affected units.
Recreational Reading Material and Games	<ul style="list-style-type: none"> • Alcohol based hand rub is available in waiting rooms and patient lounges for the patient/public to clean their hands after handling shared magazines, books and puzzles. • Nursing provides children or adults on Droplet/Contact Precautions with dedicated toys, books, magazines, and puzzles, which are discarded, and personal items taken home on discharge. <p>IMPORTANT: Volunteer carts that take books and magazines to patients are not taken into patient bed spaces or rooms where Droplet/Contact Precautions are in place, or onto units with outbreaks.</p>

9. Declaring the Outbreak Over and Surveillance Post-Outbreak

An outbreak may be declared over when two viral cycles (14 days) have passed from the last date that others were potentially exposed to a case during the communicable phase of illness. (The case may be a healthcare worker (HCW), a patient, or a DSP who was present in the care setting during the communicable phase of illness, and recommended personal protective equipment was not used by others thus resulting in a potential exposure).

However, in the following situations an outbreak may be declared over after one viral cycle (7 days) from the last date that others were potentially exposed to a case during the communicable phase of illness:

When the trigger to declare the outbreak was 2 cases of hospital-acquired infection (nosocomial) or all acquired cases involving roommates in one room, where the case investigation has identified the most likely source and contact tracing has been completed for the patients and HCWs, and no additional cases were identified.

- Once the outbreak is declared over:
 - Notify all key stakeholders of the end of the outbreak.
 - Remove signage related specifically to the outbreak.
 - Perform a terminal clean of the unit.
 - Restore patient/resident flow patterns for discharge and transfer.
 - Debrief with unit/facility leadership and staff to evaluate the management of the outbreak and implement all corrective actions, as required.
- IPC surveillance is maintained after the outbreak has been declared over and after restrictions have been lifted.

- IPC in consultation with Infectious Diseases/Medical Microbiologist assess to determine if restrictions should be implemented if new cases of HCA (nosocomial) COVID-19 are identified following the outbreak.
- IPC and Nurse Manager/Charge Nurse facilitate a debrief session when the outbreak is declared over.

DEFINITIONS

Frequently Touch Surfaces: Include but are not limited to: bed rails, call bell cords, bathroom surfaces (taps, toilet handles), door knobs, light switches, elevator buttons, tables, counter tops, nourishment areas (fridges, ice machines, cupboard handles).

RELATED DOCUMENTS

[Additional Isolation Precautions \(HHN-0605\)](#)

[COVID-19 Testing Directive](#)

[COVID-19 Testing Algorithm \(All Phases\)](#)

[COVID-19 Clinical Order Set](#)

[COVID-19 and Influenza HCW Guidelines](#)

[COVID-19 - Line List - Respiratory Outbreaks in an Acute Care Facility](#)

[Cleaning/Disinfection of Non-Critical Patient Care Equipment and Electronic Devices \(HHN-IC-006\)](#)

[Droplet Contact Precautions Sign \(HHN-0378\)](#)

[Health Care Worker \(HCW\) Scenario Guidelines](#)

[Horizon Designated Support Person \(DSP\) Visitation Table](#)

[Horizon Designated Support Person \(DSP\) Operational Plan](#)

[IPC Guidance: Cohorting Patients with Respiratory Viral Infections](#)

[IPC Guidance: Management of Suspect/Confirmed COVID-19 Patients \(currently being revised\)](#)

[IPC Guidance: Managing COVID-19 Patient Outside of COVID-19 Designated Units - All Phases](#)

[IPC Guidance: Strategy for Discontinuing IPC Precautions \(All Phases\)](#)

[Infection Prevention and Control Routine Practices \(HHN-IC-015\)](#)

[Notifiable Diseases and Events Notification Form](#)

[Outbreak Management Team Membership](#)

[Outbreak Management Structure Meeting Record of Actions](#)

[Patient Safety Incident Management: Harmful Incidents, No Harm Incidents, Near Misses and Multi-Patient Events \(HHN-SA-002\)](#)

REFERENCES

Alberta Health Services: Guidelines for Outbreak Prevention, Control and Management in Acute Care and Facility Living Sites: Includes Influenza and Gastrointestinal Illness. August 2016

Provincial Infection Control Network of British Columbia. Respiratory Infection Outbreak Guidelines for Healthcare Facilities Reference Document for use by Health Care Organizations for Internal Policy/Protocol Development. February 2011

Centers for Disease Control and Prevention - Interim Infection Prevention and Control Recommendations for Patients with Confirmed 2019 Novel Coronavirus (COVID-19) or Patients Under Investigation for COVID-19 in Healthcare Settings – Updated April 7, 2020
<https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control.html>

Public Health Agency of Canada - Infection prevention and control for coronavirus disease (COVID-19): Interim guidance for acute healthcare settings – Modified June 16, 2021 <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/infection-prevention-control-covid-19-second-interim-guidance.html>

The Public Health Agency of Canada: Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings November 2016 <https://www.canada.ca/en/public-health/services/publications/diseases-conditions/routine-practices-precautions-healthcare-associated-infections.html>

Government of Canada - Interim national case definition: Coronavirus Disease (COVID-19) – Modified April 2, 2020
<https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/national-case-definition.html>

Public Health Ontario - Technical Brief Updated IPAC Recommendations for Use of Personal Protective Equipment for Care of Individuals with Suspect or Confirmed COVID-19 - Modified April 6, 2020
<https://www.publichealthontario.ca/-/media/documents/ncov/updated-ipac-measures-covid-19.pdf?la=en>

University Health Network - COVID-19 Outbreak Information at UHN
https://www.uhn.ca/Covid19/Pages/Outbreak_Information.aspx

Yu Wu ; Liangyu Kang ; Zirui Guo ; et al (2022). Incubation Period of COVID-19 Caused by Unique SARS- CoV-2 Strains: A Systematic Review and Meta-analysis. JAMA Network Open 2022;5(8): e2228008.
<https://pubmed.ncbi.nlm.nih.gov/35994285/>

**Infection Prevention and Control Guidance:
Cohorting Strategies to Facilitate Patient Flow During COVID-19 Pandemic - All Phases**

In the event of an outbreak, the strategies outlined in the [Infection Prevention & Control Outbreak Management of Coronavirus Disease \(COVID-19\) - All Phases](#) document take precedent and the following guideline will be used as a complimentary tool to provide different approaches for cohorting COVID -19 suspect, positive, or recently recovered patients. These strategies will support Horizon facilities to maintain their operational capacities by facilitating patient flow.

Cohorting is the practice of grouping together patients who are colonized or infected with the same organism to confine their care to one area and prevent contact with other patients. Cohorts are created based on clinical diagnosis, microbiologic confirmation when available, epidemiology, and mode of transmission of the infectious agent.

Cohorting is often used to confine and contain the transmission of a virus but may but may also be used to provide staffing efficiencies and optimize capacity.

Decisions around cohorting should take into consideration the period of infectivity and reinfection risk by variant status and rates of community transmission. The cohorting of patients is performed in consultation with Infection Prevention and Control.

Infection Prevention and Control recommends the following for suspect/confirmed COVID-19 patients:

- Patients with mild-moderate symptoms and no risk for an aerosol generating medical procedure (AGMP) are placed on Droplet/Contact Precautions in a private room with a dedicated bathroom whenever possible.
- Patients with severe/critical illness, at risk for an AGMP are placed on Full Precautions in an airborne infection isolation room (AIIR) or private room with the door closed.

However, in response to the increasing number of COVID-19 admissions to our acute care facilities and concern regarding the high number of admitted patients remaining in emergency departments the following IPC cohorting strategies may be implemented.

Strategies for Patient Cohorting			
Patient	Preferred	Alternative	Accommodation
*Patients with PCR confirmed COVID-19 or positive POCT with compatible COVID-19 symptom history.	Cohort with patients with confirmed COVID-19.	Cohort with: **recently recovered patients.	May cohort in multi-bed rooms. Maintain separation of 2 metres between each patient's bed space and ensure privacy curtains are closed.
Suspect COVID-19: Symptomatic patients.	Do not cohort.	Do not cohort.	Private room or bedspace isolation with privacy curtains closed
Suspect COVID-19: Asymptomatic patients	Cohort with other ***suspect COVID- 19 asymptomatic patients.	Cohort with ***other asymptomatic patients (non-suspect COVID-19)	May cohort in multi-bed rooms. Maintain separation of 2 metres between each patient's bed space and ensure privacy curtains are closed.
**Recently recovered patients	Cohort with other asymptomatic patients (non-suspect COVID-19).	Cohort with: *Patients who are suspect or confirmed COVID- 19. **Recently recovered patients.	May cohort in multi-bed rooms. Maintain separation of 2 metres between each patient's bed space and ensure privacy curtains are closed

* Patients with confirmed COVID-19 can be cohorted regardless of Variant of Concern (VOC) status. Transmission of a different VOC to an individual that already has active COVID-19 infection has not been described. However, with 100% Omicron in circulation, cohorting of active COVID-19 cases with unknown VOC status would not confer a significant risk to the patients.

** Recently recovered patients are those who have been taken off Additional Precautions AND are within 90 days of their infection AND were diagnosed with COVID-19 on or after January 1, 2022 (when the Omicron variant was identified as the predominant strain of COVID-19 in NB).

*** Avoid placing suspect patients in the same room with patients who, if they were to become infected, would be at high risk for complications or who may facilitate transmission (e.g., elderly, patients with cardiopulmonary disease, immunocompromised, unvaccinated).

Additional IPC Considerations for Patient Cohorting

- Patient cohorting should only be considered when appropriate facilities and staffing resources are available.
- Geographical cohorting refers to restricting patients who are infected or colonized with the same microorganism to several rooms along a corridor or an entire clinical unit. Use of this practice can limit transmission by separating those who are infected or colonized to a specified area away from those who are not.
- Multiple bed moves to accommodate cohorting can be associated with unintended consequences including increased potential risk of transmission, increased strain on staffing, and adverse effects on patient care and safety such as increase in patient falls and risk of patient disorientation.
- When considering cohorting, other factors that impact both cohorting and bed flow should be evaluated:
 - Turnaround times of relevant diagnostic test results
 - Environmental and portering service resources
 - Need to accommodate a caregiver/DSP/aide
 - Medical and safety needs of the patient
 - Skill set of clinical staff
- Cohorting should never compromise infection control practices, Additional Precautions must be maintained, and patients must be isolated separately in their bedspace.
- Patients and their Designated Support Persons are made aware of the precautions to be followed and are willing and able to comply with these precautions.
- PPE donning and doffing posters are visible and accessible to guide HCWs in the appropriate use of PPE between cohorts.
- Patient care equipment must be dedicated to each patient or cleaned and disinfected between patients.
- Patients should not be cohorted if there is a risk of transmission of other infections, e.g., *Clostridium difficile* infection.
- Prioritize AIIRs for patients with suspect/confirmed COVID-19 who require an AGMP.
- Prioritize private rooms for:
 - Patients with suspect (symptomatic) or confirmed COVID-19
 - Patients with confirmed COVID-19 and history of international travel in the last 10 days.
- Prioritize multi-bed rooms for cohorting:
 - Patients with confirmed COVID-19
 - Patients recently recovered from COVID-19
 - Asymptomatic suspect patients
- Cohorting of suspect/confirmed COVID-19 patients in unconventional spaces (hallways, open bays, repurposed non-clinical rooms) is not supported.
- Spaces used for cohorting should:
 - Accommodate spatial separation required between patients within a cohort (ideally > 2m between bedspaces) including a commode at bedside if feasible.
 - Accommodate any safety or medical needs of patients

References:

Public Health Ontario Technical Brief Cohorting Strategies to Facilitate Bed Flow in Acute Care Settings: January 21, 2022. https://www.publichealthontario.ca/-/media/Documents/nCoV/ipac/2022/01/cohorting-strategies-facilitate-bed-flow-acute-care.pdf?sc_lang=en

Alberta Health Services Memorandum: Update - Patient Cohorting for COVID-19 (Including Variant Strains): February 22, 2022. <https://www.albertahealthservices.ca/assets/healthinfo/ipc/hi-ipc-memo-pt-cohort-covid-19-variant.pdf>

Centers for Disease Control and Prevention: Fundamental Elements Needed to Prevent Transmission of Infectious Agents in Healthcare Settings. <https://www.cdc.gov/infectioncontrol/guidelines/isolation/prevention.html>



Memo

To: Horizon Emergency Departments

From: _____, Infection Prevention and Control
Lisa Hebert, Regional Clinical Lead Employee Health

cc: Merita MacMillan, Regional Lead Infection Prevention and Control
employeehealth@horizonnb.ca

Date:

Re: COVID-19 Outbreak

On dd/mm/yyyy, Infection Prevention and Control (IPC) declared a COVID-19 Outbreak on nursing unit. The following IPC precautions have been implemented to ensure the safety of Patients and Health Care Workers (HCWs):

- All identified exposed patients have been placed on Isolation Precautions.
- Patients are being monitored for signs and symptoms of COVID-19.
- Enhanced cleaning measures have been implemented
- Designated Support Persons will be permitted on a COVID-19 outbreak unit by exception as outlined in the [Horizon Designated Support Person Operational Plan](#).
- HCWs will wear facial protection (N95 respirator/well fitted medical grade facemask and eye protection (goggles/face shield) when providing direct and indirect patient care while in patient room/bedspace (such as meal delivery and environmental services).

Employee Health Recommendations for Testing

- HCWs who have worked greater than 15minutes (cumulative time) on the outbreak unit, five days prior to the declaration of the outbreak are encouraged to book a PCR test. Please refer to the [HCW Scenario Guidelines COVID-19, Scenario #7](#) for additional information.
- Asymptomatic HCWs can present to on site Employee Health Testing Center where available or through [GNB.ca](#) for testing.
- HCWs with a prior positive POCT or PCR test in the last 90 days do not require any testing unless greater than 30 days and develop new symptoms. These HCWs should refer to the scenario guideline at [HCW Scenario Guidelines](#) and notify Employee Health.