



Guidelines for COVID-19 Outbreak Prevention, Control and Management in Congregate Living Sites

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Introduction

The purpose of this document is to provide current best-practice/evidence-based guidelines for COVID-19 outbreak control and management in Congregate Living sites. Please note that this is only a supplemental addition to existing guidelines; more detailed descriptions of general outbreak control strategies are available in the Alberta Health Services (AHS) Guidelines for Outbreak Prevention, Control and Management.

The notification of outbreaks and other infectious disease threats in Alberta is mandated under Section 26 of the provincial Public Health Act, and each Medical Officer of Health (MOH) is accountable for outbreak investigation and management (Section 29). AHS Zone Public Health contacts are listed in [Table 1](#).

In compliance with the Continuing Care Health Services Standards (Standard 1.7), AHS facilities and contracted service providers are responsible to develop and implement written procedures for identifying, reporting, investigating notifiable diseases and controlling any suspect outbreaks in facility living sites, including COVID-19. Early recognition and swift action is critical for effective management of COVID-19 outbreaks. **NOTE: a single case of COVID-19 in a resident/client or staff member constitutes an outbreak at this time.** Health care workers, Infection Control Professionals (ICP)/Infection Control Designate (ICD) in Congregate Living sites work collaboratively with Facility Administrators and health care workers to facilitate prompt response to help minimize the impact of the outbreak.

Note: This is not a comprehensive infection prevention and control (IPC) document. *Only the minimum updates necessary for managing outbreaks of COVID-19 respiratory illness are outlined here.* Please continue to use your AHS Guidelines for Outbreak Prevention, Control and Management for general information on outbreak management. For detailed information about IPC, please consult your ICP/ICD for your facility or Public Health.

Table 1: AHS Zone Public Health Contacts (Regular and After Hours)

AHS ZONE (Link to Zone MOH)	REGULAR HOURS Business hours may vary slightly from Zone to Zone, but are typically 8:30 am – 4:30 pm			AFTER HOURS
Zone 1 South	Communicable Disease Control	CDC Intake	587-220-5753	(403) 388-6111 Chinook Regional Hospital Switchboard
	Environmental Public Health	EPH CDC Lead	403-388-6689	1-844-388-6691
Zone 2 Calgary	Communicable Disease Control	CDC Intake	403-955-6750	(403) 264-5615 MOH On-Call
	Environmental Public Health	EPH Disease Control	403-943-2400	
Zone 3 Central	Communicable Disease Control	CDC Intake	403-356-6420	(403) 391-8027 CDC On-Call
	Environmental Public Health	24 Hour Intake	1-866-654-7890	1-866-654-7890
Zone 4 Edmonton	Communicable Disease Control	CDC Intake Pager	780-445-7226	(780) 433-3940 MOH On-Call
	Environmental Public Health	EPH		
Zone 5 North	Communicable Disease Control	CDC Intake	1-855-513-7530	1-800-732-8981 Public Health On-Call
	Environmental Public Health	EPH		

NOTE: Confirm outbreak reporting procedures and business hours in the Zone.

GENERAL GUIDELINES FOR COVID-19 OUTBREAK MANAGEMENT

1. Principles of Outbreak Management

1.1 Surveillance

Conduct ongoing monitoring and surveillance for symptoms of COVID-19 ([Table 2](#)) in residents and health care workers (HCW), and prompt identification of possible outbreaks. Surveillance takes place prior to, during and after outbreaks.

1.2 Assessment

Assess staff and residents for symptoms of COVID-19. Even if a single case of COVID-19 has already been identified, continue to collect and submit nasopharyngeal swabs for any newly symptomatic individuals until otherwise directed by Public Health.

(a) Symptomatic staff:

- whether related to workplace exposure or exposure in the community or home, any HCW or other staff of a congregate living facility that has symptoms of COVID-19 (see [Table 2](#)) must contact their manager/designate and WHS/OHS as per internal protocol promptly (or Public Health for sites that do not have WHS/OHS) and be excluded from work until safe to return.
- symptomatic staff are managed as per WHS/OHS/Public Health recommendations for self-isolation and daily active monitoring

(b) Symptomatic Residents:

- for residents that have symptoms of COVID-19 (see [Table 2](#)), arrange for nasopharyngeal specimen collection and testing as soon as possible.
- contact Zone Public Health prior to sending specimen for testing
- follow [IPC risk assessment algorithm](#) and *implement contact and droplet infection prevention and control precautions and other outbreak strategies immediately*, while waiting for test results.

1.3 Outbreak Identification

Initiate full outbreak management precautions as soon as one symptomatic staff/resident is identified.

One positive specimen result for COVID-19 is considered an outbreak.

Even when a COVID-19 case is identified and an outbreak is declared, all newly symptomatic staff and residents should be tested throughout the outbreak, until otherwise directed by Public Health.

1.4 Case and Outbreak Definitions

Early recognition of COVID-19 outbreaks is extremely important. Ongoing surveillance of residents and HCW or facility staff should be conducted using the following definitions for early detection of COVID-19 cases/outbreaks (see [Table 2](#)).

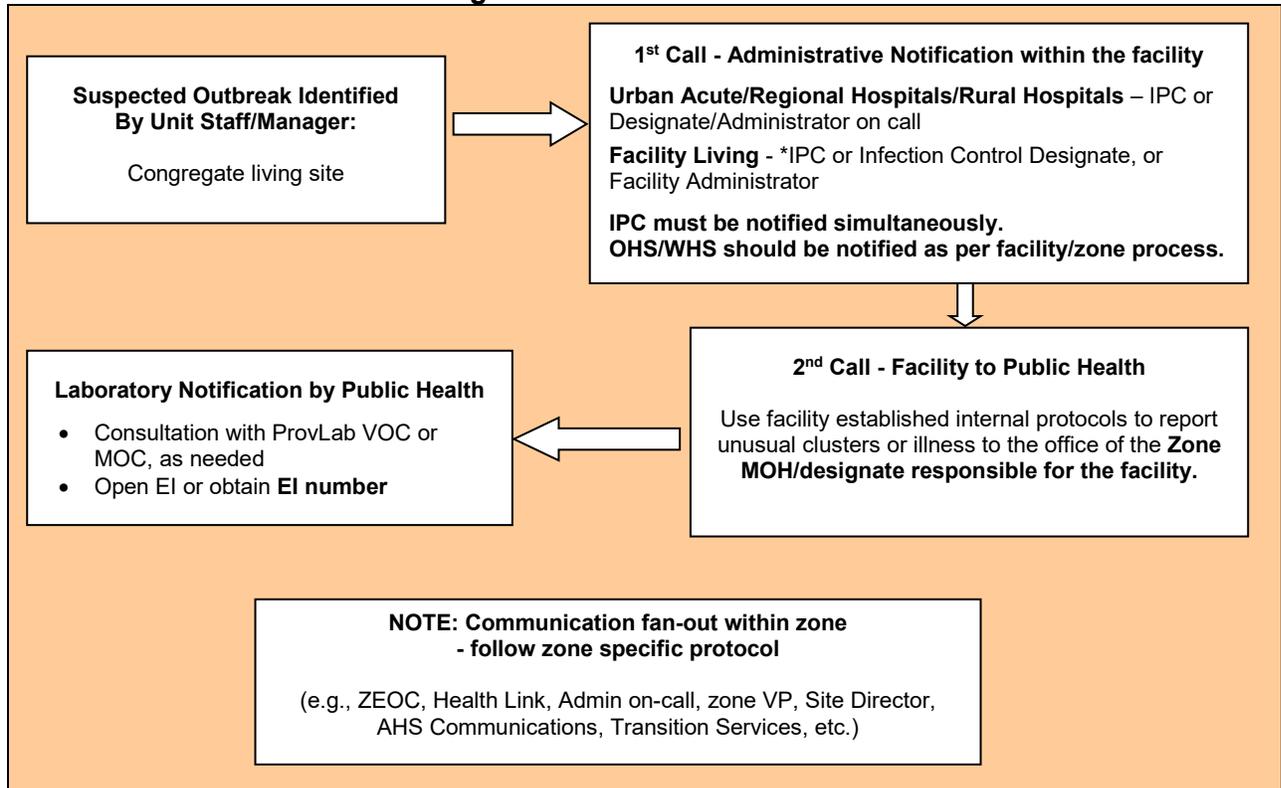
Table 2: COVID-19 Case and Outbreak Definitions

Case Definition	Outbreak Definition
Onset of new respiratory illness with cough OR fever (over 38°C) OR shortness of breath OR difficulty breathing OR sore throat OR runny nose OR nasal congestion.	ONE case of COVID-19 in staff or residents initiates the full outbreak investigation protocols. <u>Even if a case is identified, continue to collect and submit</u>

1.5 Notification

In order to initiate an outbreak investigation promptly, immediately report a single suspected case of COVID-19 (see [Table 3](#)) to your IPC/ICD and notify Zone Public Health (see [Table 1](#)) using established protocols to collect and report data. (see [Attachment 1](#)). For sites where there is no one assigned the role of infection prevention and control (IPC), contact Zone Public Health (see [Table 1](#)). Prompt reporting permits early identification and interventions to interrupt transmission of COVID-19 as soon as possible, reducing morbidity and mortality.

Table 3: Outbreak Notification Algorithm



1.6 Infection Prevention and Control Measures

While waiting for test results, implement full **contact and droplet precautions** in addition to routine IPC measures including hand hygiene, respiratory hygiene, appropriate personal protective equipment (PPE) and isolation of symptomatic staff or residents as possible. Additional precautions are necessary (see [Table 4](#)) if performing aerosol-generating medical procedures (AGMP). If staff/resident tests positive, maintain full IPC precautions until the outbreak is declared over.

- wear appropriate PPE as per [IPC risk assessment algorithm](#) for patients with symptoms of COVID-19.
- asymptomatic staff working in multiple facilities (e.g., acute care and continuing care facilities) must change clothes between shifts to prevent the spread of illness. Staff movement between facilities may be restricted at any time, especially if an outbreak is declared. Staff must consult their designated workplace health and safety/occupational health and safety/ICP or ICD contact, or Public Health, as appropriate.
- place signage inside the symptomatic resident’s room, near the door, alerting HCW/visitors that the resident is symptomatic and precautions are required.

- place symptomatic residents in single rooms if possible. If a single room is not available, residents with infection due to the same micro-organism may be cohorted following consultation with IPC. Maintain at least two (2) metres of physical separation between bed/stretcher spaces.
- place signage at the entrance of the facility/unit indicating the precautions required and screen visitors prior to entering the facility. Visitors are restricted. (see [Thinking of visiting a loved one in a Long-term Care or Continuing Care Facility?](#))
- **strict hand hygiene** is the most important measure in preventing spread of infections. Practice consistent hand hygiene and respiratory hygiene.
- as per Routine Practices, care equipment used with any resident should be cleaned before use in the care of another resident.
- HCW handling soiled laundry should wear gloves. Gowns should also be worn if there is a risk of contaminating clothing.

Note: Consult with IPC/ICD for assistance with IPC issues.

Sites/floors/wings experiencing a COVID-19 outbreak must implement additional IPC precautions to the extent that resources are available (e.g., private rooms with washroom facilities, physical layout of care units, housekeeping procedures and staffing patterns).

Table 4: COVID-19 - Infection Prevention and Control Practices and Additional Precautions

Follow [IPC risk assessment algorithm](#) for COVID-19. More detailed IPC recommendations are available on the [AHS website](#) (search: 'infection control') for the most current recommendation.

Implement Contact and Droplet Precautions in addition to Routine practices when caring for symptomatic residents to control the spread of respiratory viruses:

- Resident Placement and Signage
 - Single-room preferred
 - maintain a distance of two (2) metres between patients/residents sharing a room
- Mask
 - Wear procedure/surgical mask for any encounter, within two (2) metres, with a resident who has ILI, or has a suspected/confirmed case of COVID-19.
- N95 Respirator (fit-tested) - for aerosol generating medical procedures (AGMP)
- Resident undergoing an aerosol generating medical procedure (AGMP) –AGMPs are defined as any medical procedure that can induce the production of aerosols of various sizes, including droplet nuclei. See the Respiratory (ILI) Algorithm for a list of AGMP
- Eye Protection
 - When a mask or N95 respirator is worn, eye protection or face shields should also be worn for all resident care activities
 - Personal (prescription) eyewear does not provide adequate protection
- Gown
 - For direct contact of clothing or forearms with resident or resident's environment
- Gloves
 - Wear clean non-sterile gloves for direct contact with resident or resident's environment
- Hand Hygiene (4 moments from AHS Hand Hygiene Policy)
 - Before contact with a resident or resident's environment including but not limited to: putting on (donning) personal protective equipment; before entering a resident's room; and, before providing resident care.
 - Before a clean or aseptic procedure including but not limited to: wound care; handling intravenous devices; handling food; or, preparing medications.
 - After exposure (or risk of exposure) to blood and/or body fluids including but not limited to: when hands are visibly soiled; following removal of gloves.
 - After contact with a resident or resident's environment including but not limited to: removing (doffing) personal protective equipment; leaving a resident's environment and after handling resident care equipment.
- Resident Care Equipment
 - Dedicate to this resident or clean and disinfect after use
- Resident Transport
 - Transport for essential purposes only
 - Residents wear mask during transport
 - Notify receiving department

Refer to the AHS [Donning and Doffing PPE](#) posters for details on careful removal and disposal of PPE. Do not reuse or disinfect single-use PPE. Reusable PPE must be cleaned before reuse (launder gowns, disinfect eye protection).

1.7 Specimen Collection ([Attachment 2](#))

In consultation with Public Health, sites are responsible to make site-specific arrangements for specimen collection (nasopharyngeal swab) as soon as possible, and sites must arrange for specimen delivery to the laboratory.

1.8 Outbreak Control Strategies

Implement outbreak control strategies for contact and droplet precautions as soon as symptomatic staff/resident is identified:

- authorize and deploy additional resources to manage the outbreak as needed.
- restrict symptomatic staff from working in the facility, as well as any other work location.
- where possible, restrict symptomatic residents to their room (with dedicated bathroom if possible, with meal tray service in room, etc.); if not possible, restrict to own unit/wing.
 - for residents that require **urgent medical care**, ensure that appropriate IPC precautions are maintained during transit and at the receiving site AND ensure that the transport team and receiving site are advised of the possibility of COVID-19.
 - transfers/discharges between facilities are not recommended at this time during a COVID-19 outbreak investigation; consult Public Health if there are unique circumstances that require further assessment/discussion.
 - cancel all external day programs (e.g., CHOICE; day care) pending results from COVID-19 testing and maintain cancellation of day programs until advised by Public Health.
- apply site-level restrictions as recommended by Public Health (restrict admissions, cancel all group activities, cancel meetings scheduled to take place at the site, inform visitors, post outbreak signage, etc.).
 - If there are extenuating circumstances, *restrictions are ONLY modified or lifted by the MOH or MOH designate.*

1.9 Environmental Cleaning

The virus that causes COVID-19 has the potential to survive in the environment for up to several days. A person who has contact with an inanimate object such as contaminated surfaces and objects is at risk of infection. Cleaning, particularly of frequently touched surfaces, can kill the virus, making it no longer possible to infect people. AHS recommendations for cleaning can be found here [Environmental Cleaning in Public Facilities](#)

- enhance general environmental cleaning using a facility approved disinfectant. The thoroughness of cleaning is more important than the choice of disinfectant used.
 - the frequency of cleaning and disinfecting “high touch” surfaces (e.g., doorknobs, light switches, call bells, handrails) in resident rooms, care areas and common areas such as dining areas and lounges should be done three times daily. Recommendations for enhanced cleaning may be made by the Outbreak Management Team.
 - surfaces must first be cleaned prior to disinfection (2 step process). If the surface disinfectant product used has cleaning properties (detergent/disinfectant), it may be used for both steps. Follow manufacturer’s directions for use.
 - conduct a thorough, enhanced cleaning in all affected areas at the end of the outbreak as per facility protocols.
- equipment should be cleaned and disinfected only with a product listed in and following the procedures outlined in the manufacturer’s directions for that equipment.
- cleaning should be performed using the proper personal protective equipment (PPE). The correct donning and doffing of PPE should be followed. [Donning and Doffing PPE](#)
- upholstered furniture and rugs or carpets should be cleaned and disinfected when contaminated with emesis or stool, but may be difficult to clean and disinfect completely. Consult manufacturer’s recommendations for cleaning and disinfection of these surfaces. If appropriate manufacturer’s recommendations are not available, consult Public Health. Consider discarding items that cannot be appropriately cleaned/disinfected, when possible/appropriate.

1.10 Communication

Communicate promptly with staff and site administration regarding the COVID-19 outbreak investigation by Public Health, including other services (e.g., child care) that may be present at the site.

1.11 Impact On Residents

If considering implementation of outbreak control measures beyond those recommended in this document, it is important to consider the potential impact on the well-being of residents. More information about visitor restrictions is available here

[Thinking of visiting a loved one in a Long-term Care or Continuing Care Facility?](#)

1.12 Monitoring Outbreak Status

Communicate and track outbreak status by completing and submitting daily case listings to Public Health following usual Zone processes. Discuss weekend and holiday case listing reporting with Public Health.

1.13 Declaring Outbreak Over

Public Health will determine when to declare the COVID-19 outbreak over and lift any site restrictions. Following an outbreak, key program leads need to review and evaluate their role in the outbreak management and revise internal protocols for improvement where necessary. Any member of the Outbreak Management Team (OMT) can request a debrief session to address outbreak management issues.

Attachment 1: Data Collection for COVID-19 Outbreak Management

It is important for effective containment to track symptomatic residents, staff and HCW for surveillance, monitoring and reporting purposes. Accurately completed lists of cases should be reported to Public Health (by site Infection Control Professional/Designate OR as per Zone processes where variation in this responsibility exists) on a daily basis once an outbreak has been declared. Outbreak data elements that should be reported daily to Public Health include:

Outbreak Facility/Site (name, unit/floor, contact person, phone and fax)

Date of Report

Population affected at the time outbreak is declared (total resident and HCW population at risk on the outbreak unit/site, number of residents and HCW who meet the case definition)

Outbreak/EI number (as provided by Public Health)

Demographics of Cases

- Residents: name, personal health number, date of birth, gender, unit/room number
- HCW: name, gender, occupation, unit they work on

Signs and Symptoms

- Onset date
- Signs and symptoms meeting case definition
- Duration of illness

Lab tests/Results

- NP swab (date sent)
- Results

Hospitalization or Death of Cases

- Cases hospitalized (name, personal health number, date of admission, name of hospital)
- Cases who died (name, personal health number, date and cause of death)

Zones may already have established methods or tools for tracking illness during outbreaks compatible with current Information Technology (IT) systems. For Zones that do not currently have tools for collecting and reporting outbreak data or if they would like to see other tracking forms being used, they can contact Public Health offices in the other Zones.

Attachment 2: ProvLab Respiratory Specimen Collection Guidelines

Check ProvLab Bulletins for most current information on specimen collection, testing and interpretation of lab Results <http://provlab.ab.ca> or <http://www.albertahealthservices.ca/3290.asp>

ProvLab Bulletin (May 11, 2011) - New Laboratory Policy, Acceptance of Laboratory Samples and Test Requests.

ProvLab Bulletin (August 22, 2011) – Reminder Laboratory Policy, Acceptance of Laboratory Samples and Test Requests.

The Requisition must be completed to include:

- Resident's full name (first and last names)
- Resident Personal Health Number (PHN) or unique numerical assigned equivalent
- Resident demographics including: date of birth (DOB), gender, address, phone number
- Physician name (full name), address/location
- Test orders clearly indicated, including body site and sample type, date and time of collection
- Clinical history and other clinical information
- Facility name, and if applicable, unit
- EI# (assigned by the ProvLab and provided to Public Health Lead investigator)
- Fax number of outbreak facility/unit or ICP/ICD office
- Results will be faxed to the outbreak facility/unit or ICP/ICD **when it is noted on the requisition**, and reported to Zone Outbreak Response Lead

Note: EI# must be clearly recorded on the requisition.

Specimen Transport:

- Sites must collect specimens as directed by Public Health and arrange for delivery to the laboratory.
- Follow current Provincial Laboratory standards for transporting specimens at <http://www.provlab.ab.ca/guide-to-services.pdf>.

NASOPHARYNGEAL (NP) AND THROAT SWAB FOR DETECTION OF RESPIRATORY INFECTIONS

General Information:

- NP swabs are the preferred specimens for respiratory virus testing
- Use contact and droplet precautions to collect NP swabs as directed by Public Health
- Results for COVID-19 are usually available within 48-96 hrs. or sooner

If the specimens are for outbreak diagnosis, ensure specimen is transported to the lab ASAP. The EI# must be included on each requisition so that specimens receive appropriate testing. Rural facilities to transport lab specimens to ProvLab as directed by the Zone Outbreak Response Lead or by the fastest means possible.