Guide for Outbreak Prevention & Control in Shelter Sites

Includes viral respiratory, gastrointestinal, rash & other illnesses

Alberta Health Services

If you have feedback about this guide email: CDCResourceFeedback@primarycarealberta.ca.

If you have questions about a specific outbreak, or site-specific processes, always direct your questions to your designated site lead or the AHS Public Health Outbreak team.

Navigating this resource

- The most up-to-date version of the guide is the electronic version on the website. Printed copies of the guide should be considered current only on the date printed.
- Bolded terms are defined in the glossary.

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Land acknowledgement

Our work takes place on historical and contemporary Indigenous lands, including the territories of Treaty 6, Treaty 7 & Treaty 8 and the homeland of the Métis Nation within Alberta and 8 Metis Settlements. We also acknowledge the many Indigenous communities that have been forged in urban centres across Alberta.

Introduction

Shelter operators are responsible to protect the health of **clients** and **staff** in their sites. Shelters are required to report outbreaks[1] and communicable diseases[2] under Section 26 of the Alberta Public Health Act. The **Alberta Health Services (AHS) Public Health Outbreak team**, including zone Medical Officers of Health, Communicable Disease Control (CDC) and Safe Healthy Environments (SHE), collaborate with shelters to manage outbreaks of viral respiratory, gastrointestinal (GI) and rash illnesses.

This guide provides best practice recommendations for outbreak prevention and control to reduce the risk of spreading illness[3]. It was developed by AHS Communicable Disease Control and Safe Healthy Environments. This guide is for shelters that provide temporary overnight or longer residence/place of stay (excluding drop-in day programs) which seeks to protect vulnerable populations. This includes emergency shelters such as homeless shelters, men's or women's shelters, youth emergency centres, and family violence emergency shelters.

The AHS Public Health Outbreak team will provide advice and support to shelters that experience challenges implementing the recommendations in this guide. These challenges may include limited staffing and supplies, physical layout, shared accommodation and communal areas.

Shelter outbreak checklist

Shelters may want to print the Shelter Outbreak Checklist. This resource summarizes the key outbreak prevention and control actions in a checklist format.

[1] An outbreak occurs when there are more cases of a communicable disease than are normally expected in a specific time and place.

[2] A communicable disease is an illness caused by an organism or micro-organism or its toxic products that is transmitted directly or indirectly from a person with infection, an animal or the environment.

[3] Illness refers to symptoms of viral respiratory, gastrointestinal or rash illness.

Always use outbreak prevention practices

Germs can spread from person to person or via contaminated surfaces. Use the following outbreak prevention practices every day to stop the spread of illness. Shelter operators are encouraged to develop their own site-specific plans to meet these recommendations.

Perform frequent hand hygiene

- Hand hygiene (washing or sanitizing your hands) is the most effective way to prevent the spread of illness.
- Review and post Washing hands with soap and Using alcohol-based hand rub.

Provide easy access to alcohol-based hand rub and hand washing stations

- Ensure sufficient hand hygiene stations and supplies are available, not expired and accessible to staff and clients such as at entrances.
- Provide soap and disposable towels at handwashing stations.
- Assist clients who are unable to perform hand hygiene independently.
- Use alcohol-based hand rub (minimum 70% alcohol) when performing hand hygiene except when soap and water is needed to clean hands thoroughly, according to shelter protocol

When to use soap and water instead of alcohol-based hand rub

- When hands are visibly soiled with food, dirt, or blood and body fluids
- Before, during, and after handling food
- Immediately after using the washroom
- Following glove removal after contact with a client with vomiting and/or diarrhea.

Perform respiratory etiquette

- Review and post (Cover Your Cough).
- Cover coughs and sneezes with a sleeve or tissue.
- Perform hand hygiene after coughing, sneezing or nose blowing.
- Dispose used tissues in the garbage.
- Support those who choose to wear a mask.

Provide a healthy, clean environment

- Ensure frequent **cleaning** and **disinfection** of high touch surfaces.
- Follow the Public Health Recommendations for Environmental Cleaning and Disinfection of Public Facilities.
- Follow Key Points for Ready to Use Disinfectant Wipes.

Assess and improve ventilation

Assess current ventilation

- Evaluate existing HVAC systems (maintenance status and filer type), airflow patterns, and opportunities for natural ventilation.

Maximize outdoor air

- Increase the intake of outdoor air through HVAC systems.
- Open windows and doors when weather and safety conditions permit, especially in common areas and sleeping quarters.
    - Use fans carefully to increase air exchange with open windows (avoiding blowing air directly from one person to another).

Improve air filtration

- Ensure HVAC filters are properly installed and changed regularly according to manufacturer instructions. Use the highest efficiency filters that the system can accommodate.
- Consider portable HEPA filters
    - Use portable High-Efficiency Particulate Air (HEPA) filtration units in poorly ventilated areas, sleeping rooms, isolation areas, and common spaces to supplement general ventilation.

Clean linen and laundry thoroughly

- Follow linen and laundry directions in the Linen in Community-based Services resource.
- Perform hand hygiene before and after handling linen or laundry.
- Handle dirty linen and laundry as little as possible and wear a gown and gloves to prevent contamination of clothing. Minimize agitation and shaking of laundry.
- Check linen and laundry for sharps or needles prior to handling.

Follow safe food handling practices

- Refer to information from Environmental Public Health for Food Facilities at Information for Your Business.
- Provide access to hand sanitizer and hand washing stations at the cafeteria.
- Encourage clients to perform hand hygiene prior to eating.

Handle food with care

- Food handlers are required to wash hands with soap and water before food preparation.
- Minimize client handling of shared food and serving utensils.
- Provide clients with individual plates, cups and utensils and discourage sharing of items.

Keep kitchen and dining areas clean

- Clean and disinfect all surfaces of tables and chairs, including the underneath edge of the chair seat and table after each meal.
- Assign staff to cleaning duties or food preparation and food service. If this is not possible, have staff prepare food before cleaning and perform hand hygiene before and after each activity.

Promote immunization to prevent serious illness

- Encourage clients and staff to get recommended vaccines, including COVID-19, influenza, and measles containing vaccine.

Keep the shelter illness free

Stay home when ill

- Remind staff not to work when ill.
- Send staff home as soon as possible if they develop symptoms at work.

Monitor for illness

- Request **visitors** with symptoms or who feel unwell not to enter the shelter.
- Follow the site illness plan if clients with symptoms are identified.
- Refer to Appendix B: Supporting symptomatic clients.

Assist clients with viral respiratory illness

- Wear a mask and eye protection.
- Ask client to cover cough and sneezes with a sleeve or tissue.
- Provide a mask to client and encourage use if tolerated.

- Maintain a physical distance of two metres if possible.
- Refer to Appendix A: Personal protective equipment (PPE)

Assist clients with GI illness

- Clean hands well and often.
- Wear gloves and gown / protective clothing.
  - Wash hands before and after wearing gloves.
  - Consider using a mask and face shield to protect from splashes, such as when caring for clients with vomiting and diarrhea.
- Promptly and thoroughly clean and disinfect areas soiled by vomit or feces.
- Refer to Appendix A: Personal protective equipment (PPE)

Plan a safe return to work for staff after illness

Viral respiratory illness	Stay home until: • All symptoms have improved **and** • Feeling well enough to resume normal activities **and** • Fever-free for 24 hours without using fever-reducing medications. Consider wearing a mask for five days when indoors with others once feeling well enough to resume normal activities. Refer to Respiratory illness and COVID-19 Information for Albertans.
GI illness	Stay home until 48 hours after the last episode of vomiting and/or diarrhea.
Rash / other illnesses	Stay home for the length of time recommended by a physician, nurse practitioner or the AHS Public Health Outbreak team.

Watch for and report symptoms

Report illness to the AHS Provincial Public Health Support team (PPHST) at **1-844-343-0971**. PPHST is a provincial outbreak reporting and response team. They provide initial support and direction to shelter sites reporting outbreaks.

Illness type	Symptoms to watch for	When to report
Viral respiratory illness 	**List A**: Cough, shortness of breath, sore throat, loss or altered sense of taste/smell, runny nose / nasal congestion **List B:** Fever, fatigue (significant and unusual), muscle ache / joint pain, headache, nausea, diarrhea	**Within a seven-day period:** Report if there are an unusual number of clients with new onset of two or more symptoms[4] (at least one symptom must be from List A).

Illness type	When to report
GI illness 	**Within a 48-hour period:** Report if there are an unusual number of clients with NEW onset of diarrhea or vomiting[4] or laboratory confirmation of a pathogen known to cause GI illness. **Staff:** Report if there is an unusual increase in GI illness (above the baseline) or laboratory confirmation of a pathogen known to cause GI illness. Report even if staff were not present at work with symptoms.
Rash illness 	**Within a 10-day period**: Report if there are an unusual number of clients with similar rash illness.
Other illness 	Some illnesses may benefit from further advice and/or investigation. • Report other illnesses of concern such as group A streptococcal infections, measles, mumps, pertussis (whooping cough), meningitis, monkeypox, hepatitis and scabies. • Refer to Appendix C for additional information about preparing for and managing airborne diseases.

[4] Symptoms may have a variety of causes, both infectious and non-infectious. If new symptoms without an alternative cause are observed in individuals, especially when they have been in contact with each other, report for further investigation.

After the shelter has reported to PPHST

PPHST will notify the AHS Public Health Outbreak team

- After the report is made, PPHST will:
  - Send a summary of the information reported to the AHS Public Health Outbreak team.
  - Advise the shelter when to expect a response from the AHS Public Health Outbreak team.

Communication from the AHS Public Health Outbreak team to the shelter

If an outbreak is declared, the AHS Public Health Outbreak team will:

- Advise staff to continue with routine outbreak prevention practices and to start implementing outbreak control measures as outlined below.
- Send an email to the shelter site with contact information and instructions for reporting additional clients and staff who develop symptoms.

More than one type of outbreak may occur at the same time. If this happens, the AHS Public Health Outbreak teams from CDC and SHE will work with the shelter to control both outbreaks.

Control measures to use for every outbreak

Communicate about the outbreak

- Inform clients, staff, service providers and administration about the outbreak.
- Encourage frequent hand washing and use of alcohol-based hand rub and respiratory etiquette.
- Request clients and staff report symptoms to the shelter operator.
- Request support from community support services, municipalities and other partners if needed.

Enhance cleaning and disinfection to prevent the spread of illness

- Follow directions for cleaning and disinfection during an outbreak. Refer to the Public Health Recommendations for Environmental Cleaning of Public Facilities.
- Increase frequency of cleaning and disinfection of common areas and high touch surfaces such as doorknobs, light switches, tabletops and washrooms.
- Ensure there are adequate supplies of cleaning and disinfection products.

- Clean and disinfect sleeping mats after every use and store them in a way that prevents contamination such as in a separate space not accessed by clients.

Prevent the spread of illness

- Refer to Appendix B: Supporting symptomatic clients for information on supporting clients with symptoms to stay away from others.
- Discourage sharing of personal items such as drinking cups, cigarettes / vaping equipment and towels.

Handle food safely

- Ensure staff and clients who volunteer to support meals are feeling well.
- Encourage clients to perform hand hygiene prior to eating.
- Food handlers are required to wash hands with soap and water before food preparation.

Use food services modification

- Discontinue buffet and family-style meal service.
- Limit client handling of shared food, dishes and utensils.
- Provide clients with individual cutlery sets.
- Hand out snacks directly to clients.
- Remove shared food containers such as water pitchers and salt and pepper shakers.

Handle linen and laundry soiled with vomit or stool safely

- Wear a gown and gloves when handling soiled linens and laundry. Refer to Appendix A: Personal protective equipment (PPE).
- Discard heavily soiled items.
    - If items need to be kept, wear PPE including gown and gloves to remove stool or vomit and dispose into toilet or leak-proof garbage bag prior to washing.
- Place soiled laundry in a sealed or tied leak-proof bag. Do not use a fabric bag.
    - Remove gown and gloves and wash hands once soiled laundry has been placed in the laundry bag.
    - If using a plastic laundry basket to transport the bag, clean and disinfect basket after use.
- Dedicate one laundry room or one washing machine for soiled laundry from clients with symptoms.
- Wash laundry in a standard washing machine with hot water (70 °C).
- Run a bleach cycle (without a load of laundry) before washing other laundry.

- Dry laundry completely in a dryer.
- Clean and disinfect washer and dryer surfaces and buttons/knobs between uses.

Manage shared transportation

- Provide a mask for clients with viral respiratory symptoms if tolerated.
- Wear a mask and eye protection when transporting a client with viral respiratory symptoms.
- Stock protective clothing such as gowns and gloves, cleaning and disinfection products and garbage bags to clean and contain vomit or diarrhea. Refer to Appendix A: Personal protective equipment.
- Increase frequency of cleaning and disinfection of the shared transport vehicle, including high-touch surfaces such as door handles, rails and the steering wheel.

Specimen collection

- Typically, outbreaks are managed without specimen collection. The AHS Public Health Outbreak team will provide direction about specimen collection if requested.

Control measures that may be introduced for complex outbreaks

The AHS Public Health Outbreak team assesses and monitors the outbreak in collaboration with the shelter operator. If necessary for outbreak control, other outbreak measures may be recommended.

For staff

- Assign dedicated staff to work only in the affected outbreak area. This can help stop the spread of illness to other areas.
- Cancel or postpone non-essential group activities.

For clients

- Limit the movement of clients, including transfers between shelters.
- Encourage clients to access an assigned shelter.
- Provide incentives to reduce client movement in and out of the shelter site. For example, offer three meals at one site instead of one meal at three different sites.
- Limit the number of clients or visitors at drop-ins or other day programs.
- Implement additional screening measures.
- Encourage physical distancing during meals and activities.

For visitors

- Request visitors wear a mask.

Ending an outbreak

The AHS Public Health Outbreak team determines when an outbreak is over and will advise the shelter when the outbreak control measures may be stopped. Resume routine outbreak prevention practices when the outbreak is over.

If additional clients or staff develop symptoms within seven days of the outbreak ending, watch for and report symptoms. If reporting criteria are met, call PPHST and tell them that an outbreak recently ended at the site.

Glossary

AHS Public Health Outbreak team: Coordinates and leads the outbreak response. This team includes Medical Officers of Health (MOHs), and outbreak teams from Communicable Disease Control (CDC) Nurses and Safe Healthy Environments Public (SHE) Health Inspectors.

Cleaning: Refers to using soap or detergent to remove visible dirt, grime, and impurities. Cleaning does not kill germs but helps remove them from the surface.

Clients: Individuals who access shelters/shelter services. For ease, they will be referred to as 'clients' throughout this guide.

Disinfection: Refers to using chemicals to kill germs on surfaces.

Personal protective equipment (PPE): Refers to protective clothing or equipment used by staff and visitors who work directly in areas with clients. PPE such as mask, eye protection, gown and gloves protects from exposure to infectious agents.

Shelter operator: The charge person or the most accountable staff member at a shelter. Some roles of a shelter operator may be designated to other staff.

Staff: Individuals who provide support or services within the shelter, including volunteers, and students. For ease these individuals will be referred to as 'staff' throughout this guide.

Visitor: Anybody entering the site who is not a staff member or a client.

Appendix A: Personal Protective Equipment (PPE)

Personal protective equipment (PPE)

PPE adds a layer of protection when interacting with clients with symptoms or when interacting with their personal items or space.

- This includes during cleaning of contaminated areas. Contamination happens when germs are left behind, even after a client with symptoms leaves the area.
- For sites with access to PPE, follow these recommendations for use.

Always use hand hygiene before putting on PPE and after removing it

How to put on and take off PPE:

- Putting on (Donning) Personal Protective Equipment (PPE)
- Taking off (Doffing) Personal Protective Equipment (PPE)

Wear a mask and eye protection when in contact with clients with viral respiratory illness

How to use a mask

- Perform hand hygiene before putting on and taking off a mask.
- Replace the mask if it becomes wet, damaged or soiled.
- Do not reuse a disposable mask.
- Dispose of used masks in a lined garbage.

Use eye protection to keep sprays of body fluids out of the eyes

- Use eye protection such as goggles or a face shield if there is any risk of sprays of body fluids. This includes when caring for clients who are actively vomiting or coughing.
    - Prescription eyeglasses are not considered eye protection.
- Refer to manufacturer instructions regarding whether eye protection is single use or if it can be cleaned and disinfected and then reused.

Use a clean gown and new gloves to protect clothing from contamination

- Perform hand hygiene before putting on and after removing a gown and gloves.
- Remove gown and gloves after use and place in a lined garbage that is located immediately outside of the room/area. This prevents staff from walking through the shelter with a contaminated gown or gloves.
- If using a non-disposable gown, follow shelter process for laundry.

Appendix B: Supporting clients with symptoms

Keep clients with symptoms away from others to stop the spread of illness

- Develop site-specific policies. Consider the physical layout of the shelter, the number of clients, staff availability and the types of services offered.
- Ensure clients with symptoms continue to have access to food, drinks and their medications.

General strategies

- Designate areas where supervision can occur. Follow site processes if medical attention is needed.
- Use modified policies related to smoking, drugs or alcohol use during an outbreak.
- Discourage clients from sharing towels, bedding or clothing with others.

Strategies to prevent the spread of viral respiratory illness

- Keep clients away from others until:
  - All symptoms have improved[5] **and**
  - Feeling well enough to resume normal activities **and**
  - Fever-free for 24 hours without using fever-reducing medications.
- For five days after the client is well enough to resume normal activities:
  - Encourage client to wear a mask when indoors with others.
  - Also encourage client to clean hands well and often and keep distance from others.
- Refer to Respiratory illness and COVID-19 Information for Albertans

Use a separate washroom

- Dedicated washroom is available: Dedicate a washroom for use by the symptomatic clients. Clean and disinfect the washroom more frequently.
- Only a shared washroom is available: Increase frequency of cleaning to between every use or hourly if that is not possible.

Provide a private space based on shelter capacity

- Private room is available: Use a private room with meal service.
- Separate dorm/wing/floor is available: When it is not possible to keep symptomatic clients in private rooms, consider isolating clients with viral respiratory symptoms

[5] Each client can best decide if their symptoms are improving. Improving means they feel better than on the previous days.

together in a separate dorm/wing/floor.

- No separate space is available: When it is not possible to keep clients with symptoms in private rooms or a separate dorm, wing or floor place them in a separate area of the room with beds/mats at least two metres apart. Alternate beds/mats head-to-toe.
    - In larger rooms, use temporary physical barriers between beds/mats such as sheets or curtains. Clean the temporary physical barriers when visibly dirty and when the client is no longer using the space.
    - Consult with the AHS Public Health Outbreak team about alternative sleeping arrangements.

Strategies to prevent the spread of gastrointestinal illness

Keep clients away from others

- Keep clients with GI illness symptoms away from others until they have been symptom-free for 48 hours.

Use a separate washroom

- Dedicated washroom is available: Dedicate a washroom for use by clients with symptoms. Clean and disinfect the washroom more frequently.
- Only a shared washroom is available: Increase frequency of cleaning to between every use or hourly if that is not possible.

Provide a private space based on shelter capacity

- Private room is available: Use a private room with meal service until the client has not had vomiting and/or diarrhea for 48 hours.
- Separate dorm/wing/floor is available: When it is not possible to keep clients with symptoms in private rooms, consider isolating clients with GI symptoms together in a separate dorm, wing or floor.
- No separate space available: If it is not possible to keep clients with symptoms in a private room or a separate dorm, wing or floor, place them in a separate area of the room with beds/mats at least one metre apart. Alternate beds/mats head-to-toe.
    - In larger rooms, use temporary physical barriers between beds/mats such as sheets or curtains. Clean the temporary physical barrier when visibly dirty and when the client is no longer using the space.
    - Consult with the AHS Public Health Outbreak team about alternative sleeping arrangements.

Strategies to prevent the spread of rash and other illnesses

Keep clients away from others

- How long to keep clients away from others depends on the type of illness.
- The AHS Public Health Outbreak team will advise if clients with other illnesses need to stay away from others and for how long.

For rash illnesses also advise clients to:

- Have the rash assessed by a medical professional such as a physician or nurse practitioner.
- Keep the rash covered by clothing.
- Avoid sharing of towels, bedding or clothing with others.

Use a separate washroom

- The AHS Public Health Outbreak team will advise if a separate washroom is needed.

Provide a private space based on shelter capacity

- The AHS Public Health Outbreak team will advise if a private space is needed.

Appendix C: Preventing and managing airborne disease

Beyond the viral respiratory illnesses already outlined in this guide, there are airborne diseases of concern that may impact shelters. These diseases are caused by viruses or bacteria that spread through small respiratory droplets.

Measles is a highly contagious airborne disease caused by a virus. Prompt action is required if a client reports that they are a contact of someone with measles, or that they themselves may have measles. For more information on measles disease refer to Measles 101.

Tuberculosis (TB) is a contagious airborne disease caused by bacteria that can spread easily to others if someone has an active lung infection. For further information on TB refer to MyHealth.Alberta.ca.

If a shelter is concerned about an airborne disease (such as measles) notify PPHST at 1-844-343-0971. The AHS Public Health Outbreak team will provide support.

Prevent airborne disease

Many of the prevention practices previously outlined also apply to airborne diseases. These include:

- Immunization
- Ventilation
- Hand hygiene
- Respiratory etiquette
- Environmental cleaning
- Use of appropriate PPE

Prepare for airborne disease

Develop a plan in the event of an airborne disease. The plan should include:

- Notification to PPHST
- Establishing a dedicated isolation space
- Stocking adequate PPE supplies and educating staff on proper use
  - Annual staff fit testing for N95 respirator
- Ensuring shelter staff understand infection control practices.

Manage airborne disease

Implement the site illness plan.

- Immediately notify PPHST.
- Use airborne precautions when managing the client.
  - If an N95 respirator is not available, use a procedure mask.
- Immediately isolate the client.

    - The dedicated isolation space should at minimum have four walls and a door.
        - The door should always remain closed.
        - The isolation space should include a dedicated washroom.
- If the client requires transfer for medical treatment, notify EMS and the receiving facility of the airborne disease of concern.
    - Provide client with PPE for the transfer.