Emergency Shelters in Disaster Response: Operational considerations for COVID-19 mitigation measures in low resource settings

Accessible version: https://www.cdc.gov/coronavirus/2019-ncov/hcp/non-us-settings/overview/emergency-shelters-low-resource-global.html

Document purpose:

Individuals housed in emergency shelters in response to disasters, such as shared living spaces and sanitary facilities, may be exposed to crowded conditions. Emergency managers, shelter coordinators and managers, and public health professionals should understand the risk of the introduction and spread of SARS-Cov-2, the virus that causes COVID-19, and other infectious diseases in these settings. This document provides suggestions to assist disaster response shelter management and staff in taking appropriate actions for reducing the possibility of COVID-19 virus spread among shelter staff, volunteers, residents, and visitors before, during, or after a disaster. For the purposes of this document, "emergency shelters" include small-, medium-, and large-scale, organized and temporary accommodations for persons displaced by disasters. Facilities may be residential (e.g., dormitories, hotels, etc.) or non-residential (e.g., sports stadiums, schools, churches, etc.), with varying degrees of sanitary infrastructure. The considerations are presented in table format and are organized by mitigation principle (physical distancing, hand hygiene, cleaning and disinfection, and respiratory hygiene).

Document audience: This document is intended for use by any person, institution, or organization preparing for or responding to disasters during the COVID-19 pandemic and for those assisting these entities (national and local governments, CDC country offices, and others) in low-resources settings.

What this document adds to existing guidance: This document provides suggestions that can be considered by emergency shelter staff in low-resource settings and can be adapted to follow national or local guidelines, and to account for local context. Local populations can be engaged in the planning and decision-making process by identifying trusted stakeholders and community leaders to provide feedback on proposed mitigation measures before their implementation.

Layered approach: Mitigation measures can be organized into three categories: personal controls, administrative controls, and engineering controls. These should be layered on top of each other to reduce overall risk of SARS-CoV-2 transmission for people temporarily housed in emergency shelters and shelter/ response staff. Engineering controls are potentially more effective and protective than administrative controls, which may be more effective and protective than personal controls.

Personal controls	Individual's behaviors to protect themselves and those around them.
Administrative controls	Processes and policies to minimize or prevent exposure to hazards.
Engineering controls	Controls designed to remove a hazard at its source, e.g., physical structures put in place to distance people from hazards.



cdc.gov/coronavirus

Note on implementation: Below we provide ideas on how to reduce SARS-CoV-2 transmission in emergency shelters. Planners, managers, staff and people temporarily housed in emergency shelters, and other members of the community must be engaged in the planning and implementation process for any mitigation measure to succeed. It is important to note that during disasters, resource availability may limit the ability to achieve maximal mitigation measures.

More information on how to effectively engage communities can be found <u>here</u>

PHYSICAL DISTANCING			
Personal controls: General recommendations for physical distancing in emergency shelters	Administrative and engineering controls:	Materials, activities, and personnel needed for implementation	Considerations and challenges for emergency shelters
Maintain 6 feet (2-meters) distance from others outside of the individual family units, when possible.	 Modify facility layouts ✓ When possible, place groups or families in individual rooms or in separate areas of the facility. ✓ Shelter facility should be large enough to provide space for distancing among residents. ✓ Provide a distance of at least 6 feet (2- meters) between cots of people from different households and have residents sleep head-to-toe. ✓ Provide physical cues, such as tape or chalk to guide spacing. Modify food distribution practices ✓ Serve pre-packaged meals or individual meals dispensed by food service workers, when possible. Food service workers should wear gloves and masks during meal preparation and service. ✓ Cafeteria-style service is preferred over selfservice, buffet, or family-style while maintaining a minimum of 6 feet (2 meters) spacing between individuals. 	 ✓ Communication (via radio, SMS/mobile messaging/WhatsApp, letters/announcements to caregivers) about new procedures to residents and staff. ✓ Signs posted throughout the shelter to inform residents/staff of new procedures and rationale. ✓ Tape, chalk, or paint to indicate desk/table/seating spacing, circulation routes, and physical distancing cues. ✓ Materials to be used for barriers between cots in separation area(s) (such as curtains or bed linens) ✓ Educate parents and caregivers about how to reduce the spread of illness. 	Additional shelters may be necessary ✓ Hotels/dormitories and small shelters (fewer than 50 residents) should be prioritized over larger shelters. Large congregate shelters should be a last resort. ✓ Officials should demobilize large congregate shelters as soon as possible after the emergency phase and relocate residents to hotels, dormitories or small shelters for better physical distancing. ✓ Officials should identify additional shelters while in the planning stages for the response. Identifying additional shelters may be difficult as many sites may be currently used as quarantine or isolation facilities.

- ✓ Maintain a minimum of 6 feet (2 meters) of distance between people of different households at mealtimes using increased table spacing and staggered mealtimes. Clean and disinfect the area between meal service times.
- Encourage staff and shelter residents to not share dishes, drinking glasses, cups, eating utensils, towels, or bedding with other people.
- ✓ Serve foods and drinks using disposable silverware, cups, and plates, if available. If these items are not disposable, the food contact surface should be protected from contamination and cleaned and disinfected after each use.
- ✓ Provide handwashing stations and soap with disposable towels or hand sanitizer (minimum 60% alcohol) for use prior to entering food lines.
- ✓ Residents should wear masks while in the food line.
- ✓ Position shelter staff at handwashing stations to promote proper handwashing and to monitor for signs of illness. Staff should wear masks.
- ✓ Implement illness screening, including fever monitoring, of residents entering the food distribution area.

Limit Crowding

✓ Establish one-way circulation in hallways, entrances/exits, and other facilities. Provide physical distancing guides, such as tape, paint, or chalk on floors or sidewalks and signs on walls, to ensure that staff and residents remain 6 feet (2 meters) apart when possible in lines, hallways, sanitation facilities (toilets/latrines), in common areas, and at other times.

Increased use of supplies

Plan for a significant increase in use of supplies, including:

- ✓ Masks, face shields, googles, gowns, and gloves.
- ✓ Water and other fluids for hydration.
- ✓ Disposable cups and other utensils.
- ✓ Facial tissues.
- √ Handwashing stations (soap and water).
- √ Hand sanitizers containing at least 60% alcohol.
- ✓ Paper towels.
- ✓ Disinfection and cleaning agents and supplies.
- ✓ Bed linens/blankets.
- ✓ Materials to be used for barriers between sleeping cots/mats in separation area(s) (such as curtains or bed linens).

- ✓ Modify schedules for food distribution, water collection, and other necessary tasks. Options may include:
 - ✓ Stagger start/end times for services offered by relief organizations.
 - ✓ Expand the timetable: schedule some individual family units to engage in relief services in the morning, others in the afternoon, and others in the evening as lighting and security permit.
 - Expand the days of the week that services are offered: schedule some individual family units to engage in relief services on certain days (e.g. Monday, Wednesday, Friday) and others to on remaining days (e.g. Tuesday, Thursday, Saturday).
- ✓ Educate and encourage residents and staff to not gather/socialize when coming to/leaving the shelter and during free time.
- ✓ Assign staff to monitor that physical distancing is observed among residents and other staff throughout the day and sheltering area.

Restrict mixing between groups

✓ Ensure the same groups (e.g., individual family units) stay together each day with the same staff, as much as possible. Limit interaction with other groups of residents and staff (e.g., stagger the scheduling of meals, food distributions, and water collection at different times).

✓ Avoid sharing meals and food serving utensils, water supplies (e.g. water bottles, containers, jugs), bedding, or other supplies. If sharing is necessary due to limited supply, disinfect between use by different individual family units. ✓ Restrict entry of non-essential visitors, and volunteers. ✓ Restrict mass gatherings, inter-group events, and meetings. ✓ If possible, consider designating outdoor spaces for religious services or communal meetings. Children ✓ Instruct parents/guardians to assist children to stay at least 6 feet (2 meters) apart from other residents. ✓ If possible, at nap time, ensure that children's naptime mats (or cribs) are spaced out, as much as possible, ideally 6 feet (2 meters) apart. Tape or paint may be used to mark spacing. Consider placing children head to toe in order to further

reduce the potential for disease spread.

✓ Assign the same mat/crib to one child or disinfect mat/crib between use by different children.

HAND HYGIENE			
Personal controls: General recommendations for hand hygiene in emergency shelters	Administrative and engineering controls:	Materials, activities, and personnel needed for implementation	Considerations and challenges for emergency shelters
Teach and reinforce frequent handwashing among residents and staff. Hand hygiene is one of the most effective ways to stop the spread of COVID-19. Shelter occupants and staff should clean hands upon entry and exit; after breaks; after blowing their nose, sneezing, or coughing; before and after eating; after going to the bathroom; and at other key times. Types of hand hygiene: Handwashing with soap and water. Soap and water are effective in protecting against COVID-19. The cleanest water available should be used for handwashing, and any types of soap (e.g., bar soap, liquid soap, and powder soap). Hands (front, back, between fingers, fingernails) should be scrubbed with soap and water for at least 20 seconds and dried using single-use hand drying materials (when available) or air dried.	 ✓ Require hand washing upon entry and exit of the shelter, as well as other shared areas. ✓ Create a schedule for frequent hand hygiene, especially for younger children. ✓ Post signs encouraging frequent hand hygiene and instructions for proper hand hygiene. ✓ Ensure widespread access to hand hygiene facilities by placing hand washing stations (handwashing stations or alcohol-based hand sanitizer dispensers) at entrances, exits, publicly used spaces, and within 16.5 feet (5 meters) of toilets. Low-cost visual cues can be used to direct or encourage shelter occupants/staff towards hand hygiene facilities throughout the shelter and to keep physical distancing in hand washing facilities. ✓ Handwashing stations should follow the hand hygiene behavior change principles. More information on different handwashing station designs is available at the Handwashing compendium here. Handwashing stations should: 1) Allow users to wet and rinse their hands under running water; 2) Secure provided soap (with a cage (liquid soap), rope (bar soap), or other device); 3) Have a place to catch used water; 4) Provide single-use hand drying materials, whenever possible; 5) Provide a waste bin to collect single-use hand drying materials (when applicable). 	 ✓ Handwashing stations or dispensers for alcohol-based hand sanitizer (containing at least 60% alcohol). ✓ Daily access to adequate supplies to support hand hygiene, including safe water and a consistent supply of soap, single use paper towels (if available), alcohol-based hand rub (containing at least 60% alcohol), or ingredients for making handwashing solution. ✓ Staff should enforce hand hygiene practices within the shelter, particularly when entering and existing the shelter. ✓ Staff should check hand hygiene stations regularly and refill supplies when necessary. ✓ Signs should be posted in shelter encouraging hand hygiene. Messaging should be appropriate for the culture, language, and literacy levels of shelter occupants and staff. Signs should include information about when and how to practice hand hygiene. 	 ✓ Continuous oversight will be required to ensure that hand hygiene stations are refilled regularly. Shelters should assign a point person responsible for oversight and maintaining hand hygiene stations. ✓ Plan and prepare for the costs associated with purchasing the handwashing stations or alcoholbased hand sanitizer dispensers, including cost for soap or hand sanitizers). In addition, plan for costs in developing and printing communications materials, along with expenses for paying staff to manage and refill hand hygiene stations upon entry and exit. ✓ Shelters may not have a water supply on site, which maybe challenging and costly to regularly refill hand hygiene stations. Shelter operators may consider temporary solutions for water provision, such as water trucking, where water may be scarce. Use of alcohol-based hand sanitizers as a safe alternative to handwashing stations that require water.

Soapy water (a mix of water and either powdered or liquid soap) can also be used. To prepare, mix soap and water to create a foam when rubbing hands together. When using soapy water, a separate handwashing station to rinse hands with will also be needed. Alternatively, soapy water can be placed in a bottle or other closed container next to a water handwashing station.

Cleaning with alcohol-based hand rub (for staff and children >5 years).

If hands are not visibly dirty, hand sanitizers with at least 60% alcohol content can be used as an alternative to washing hands with soap and water. Hand sanitizers should cover all surfaces of both hands. Rub hands together for approximately 20 seconds until they feel dry.

If soap and water and alcoholbased hand rub are unavailable or infeasible, handwashing with 0.05% chlorine solution can be considered as a temporary option. The solution should be refreshed daily. For more information, see make a handwashing solution instructions found here. Due to possibility of increased skin irritation, young children should not use chlorine solution for handwashing. Users should exercise caution to avoid getting the solution in their eyes or mouths.

- ✓ The installation, monitoring, and regular refilling of hand washing stations should be the responsibility of shelter staff.
- ✓ Staff mixing the 0.05% chlorine solution should be provided with personal protective equipment (thick gloves, thick aprons, and closed shoes).
- ✓ If water source is unavailable or water supply is limited, temporary measures such as water trucking may be introduced and utilized. For long-term needs, investments to improve water supplies should be prioritized to ensure adequate water for hand hygiene and cleaning.

- ✓ Paint, chalk, tape, or stickers to make visual cues/reminders to use handwashing facilities.
- ✓ When mixing 0.05% chlorine solution, staff should utilize personal protective equipment, rubber gloves, thick aprons, and wear closed shoes.
- Use a secure location for storing hand hygiene stations and/or alcohol-based hand sanitizer dispensers overnight.

- Alcohol-based hand sanitizers maybe challenging for young children and may require close supervision and monitoring.
- ✓ Supply constraints on soap and alcohol-based hand sanitizer due to COVID-19 may limit supplies.

 Single-use hand drying materials (such as paper towels) may also be limited and can be costly; air drying of hands is a safe alternative.
- ✓ Those mixing 0.05% chlorine solution should be adequately protected by wearing thick rubber gloves, thick aprons, and closed shoes to avoid potential skin and inhalation hazards. The solution should be mixed in a well-ventilated area. Staff should also be trained on how to mix chlorine solution using thick gloves. If not available, any kind of gloves can be used.
- ✓ Those mixing should remove gloves and wash hands immediately after mixing. If no aprons are available, they can wear protective clothing (such as long pants and long-sleeved shirts).
- √ Hand sanitizers should be kept out
 of reach of children.

CLEANING AND DISINFECTION			
Personal controls: General recommendations for hand hygiene in emergency shelters	Administrative and engineering controls:	Materials, activities, and personnel needed for implementation	Considerations and challenges for emergency shelters
Intensify cleaning and disinfection. Frequently touched surfaces should be cleaned and disinfected at least twice a day, and more frequently if soiled. Railings, desks, tables, doorknobs and window handles; restrooms, toilets and latrine surfaces; toys and nap mats; and materials used/shared by shelter occupants (e.g. pens, pencils, art supplies, books, electronics), are examples of frequently touched surfaces. Cleaning refers to the removal of germs, dirt, and impurities from surfaces. It does not kill germs, but by removing them, it lowers the risk of spreading infection. Cleaning is achieved with water, cleaning products (e.g., soap, detergent) and wiping or scrubbing soiled areas. Disinfecting refers to using chemicals, for example, diluted sodium hypochlorite (bleach), to kill germs on surfaces. This process does not necessarily clean dirty surfaces or remove germs, but by killing germs on a surface after cleaning, it can further lower the risk of spreading infection.	 ✓ Cleaning staff should clean and disinfect high-touch surfaces at least once a day, or more frequently, if possible. ✓ Shelter administrators and cleaning staff should walk through the shelter together and decide which surfaces are touched frequently by shelter occupants and staff and therefore should be the target of cleaning and disinfection efforts. ✓ Provide the cleaning staff with cleaning supplies (soap/detergent, bleach, buckets, etc.) and personal protective equipment (PPE) to wear when mixing, cleaning, and disinfecting (rubber gloves, thick aprons, and closed shoes). PPE should be used for COVID-19 related disinfection only (cleaners should not bring home PPE – it should be stored at the shelter in a secure, designated area). ✓ Provide cleaning staff with information (e.g. written or pictorial instructions) about when and how to clean with disinfectant and how to safely prepare disinfectant solutions, as described in the leftmost column. 	 ✓ Stocks of soap, bleach, buckets, and other cleaning supplies (e.g. mops, cloths, etc.). ✓ Designated cleaning personnel. ✓ Personal protective equipment should be used by designated cleaners (rubber gloves, thick aprons, and closed-toed shoes). ✓ Sufficient access to non-turbid water to meet all cleaning and disinfection needs. ✓ Adhere to instructions describing the cleaning and disinfection process, including proper mixing of solutions, for use by designated cleaners. ✓ Set-up schedule for increased routine cleaning and disinfection 	 ✓ Consider cost associated with purchasing the bleach, soap, cleaning supplies, and personal protective equipment. In addition, consider cost for printing instructional materials, and possibly having to pay additional staff to clean. ✓ If no rubber gloves are available for cleaners, any kind of gloves can be used. If no aprons are available, cleaners can wear protective clothing (such as long pants and long-sleeved shirts) and launder after use. ✓ There could be further supply chain constraints on soap, chlorine products, and PPE as demand increases as COVID-19 spreads. Calcium hypochlorite (HTH) powder or bleaching powder can also be used to mix disinfection solutions if available. ✓ If water supply is not available on site, it will be more challenging and costly to clean and disinfect daily. Water-scarce shelters may consider temporary solutions for water

provision, such as water trucking.

Use a **0.1% solution** made from bleach and water for disinfection. To mix, use the percentage found on the bleach bottle (for example, 5%) and follow these instructions: [% chlorine in liquid bleach/% chlorine desired] – 1 = Total parts of water for each part bleach

Example of making 0.1% solution with 5% liquid bleach:

[5% chlorine in liquid bleach / 0.1% chlorine solution desired] -1 = [5/0.1] - 1

= 49 parts of water for each part liquid bleach

If you are using a 20 L jerry can to mix, you will need 400 mL of bleach and should fill the rest of the jerry can with water.

20L / 50 parts = 0.4 L, or 400 ml

Instructions for making 0.1% solution from 0.5% disinfecting solution, 70% high-test hypochlorite (HTH), or 35% chlorine powder can be found here.

Increase ventilation and air flow

- Ensure ventilation systems are working properly, if available. Increase circulation of outdoor air within buildings by opening windows and doors and/or using fans.
- ✓ Shelters should be equipped with air exchange systems, when possible.
- ✓ Select upward airflow rotation if using ceiling fans.
- ✓ Throughly clean common areas, including play areas. Temporarily close areas frequently used by children and focus on cleaning items more likely to have frequent contact with the hands, mouths, or bodily fluids of children (e.g., toys)
- ✓ Clean and disinfect toys.
 - Toys that cannot be cleaned and disinfected should not be used.
 - Toys that children have placed in their mouths or that are otherwise contaminated by body secretions or excretions should be set aside until they are cleaned by hand using gloves. Clean with water and detergent, rinse, disinfect for example with a diluted sodium hypochlorite (bleach) solution, rinse again, and airdry. Be mindful of items more likely to be placed in a child's mouth, like play food, dishes, and utensils.

✓ There is potential for harm to users when making and using disinfection products, so it is important for cleaners to be adequately protected during the mixing and disinfection processes and for staff to be trained on how to mix and disinfect.

Cleaning and disinfection procedures:

- 1) Put on personal protective equipment (rubber gloves, thick aprons, and closed-toed shoes).
- 2) Mix 0.1% bleach solution using the procedures described above in well-ventilated area.
- 3) Clean with detergent or soap and water to remove organic matter.
- 4) Apply the 0.1% solution to the surface with a cloth and allow for a contact time (the amount of time that the disinfectant should remain wet and undisturbed on the surface) of at least 1 minute. Additional disinfectant may need to be applied to ensure it remains wet for 1 minute. After 1 minute has passed, rinse residue by wiping with clean water (this will also protect the surface or item from damage)
- 5) After cleaning and disinfection, carefully remove personal protective equipment (PPE) and wash hands immediately. Re-usable PPE (e.g. gowns) should be laundered immediately.

Cleaning and disinfecting procedures for various surfaces (hard surfaces, soft surfaces, electronics, and laundry) can be found here.

- Do not share toys with other groups of infants or toddlers, unless they are washed and disinfected before sharing.
- Set aside toys that need to be cleaned. Place in a dish pan with soapy water or put in a separate container marked for "soiled toys." Keep dish pans and water out of reach of children to prevent risk of drowning. Washing with soapy water is the ideal method for cleaning. Try to have enough toys on hand rotate when other toys are being cleaned.
- Children's books that are paperbased are not considered a high risk for transmission and do not need additional cleaning or disinfection procedures.

RESPIRATORY HYGIENE			
Personal controls: General recommendations for hand hygiene in emergency shelters	Administrative and engineering controls:	Materials, activities, and personnel needed for implementation	Considerations and challenges for emergency shelters
Wear a mask. Masks are particularly important when social distancing is not possible, and individuals are indoors with poor ventilation. Shelter occupants should be frequently reminded how to properly put on and take off masks without improperly touching. Cover coughs and sneezes using an elbow or a tissue. Dispose of the tissue and wash hands immediately.	✓ Shelter staff and occupants should wear masks at all times except when not practical, such as when eating or showering.	 ✓ Culturally appropriate signs on how to properly put on, wear, and remove masks in the language and literacy level of shelter occupants and staff ✓ Culturally appropriate signs depicting how to cover coughs and sneezes in the language and literacy level of residents and staff ✓ Informational materials for caregivers on how to properly make, wear, remove, and wash masks ✓ Informational materials for staff and volunteers reminding them to stay home if sick. 	✓ Masks should not be placed on babies or children younger than 2 years of age. Also, masks should not be used by anyone who has trouble breathing or is unconscious, incapacitated or otherwise unable to remove the covering without assistance.

SCREENING AND ISOLATION			
Personal controls	Administrative and engineering controls:	Materials, activities, and personnel needed for implementation	Considerations and challenges for emergency shelters
Screening and monitoring Shelters should monitor and record suspected COVID-19 cases to report to the local health department. Perform periodic assessments of all shelter policies and procedures related to reducing transmission of SARS-CoV-2 (e.g. isolation area, social distancing, meal service, cleaning, disinfection). Isolation Designated areas for isolation of people with suspected cases should be identified during the planning phase. The decision to discontinue isolation should be made in the context of local circumstances. Contact with local health officials The number of confirmed or suspected cases should be shared with local public health officials daily to alert them to increasing numbers.	 ✓ Screen all people entering the shelter (residents, staff, volunteers, and visitors) for signs of COVID-19. ✓ Staff who are checking client temperatures should use a system that creates a physical barrier between the client and the screener. ✓ Screeners should stand behind a physical barrier, such as a glass or plastic window or partition that can protect the staff member's face from respiratory droplets that may be produced if the individual sneezes, coughs, or talks. ✓ If physical distancing or barrier/partition controls cannot be put in place during screening, screeners should use PPE (i.e., medical mask, eye protection [goggles or disposable face shield that fully covers the front and sides of the face], a single pair of disposable gloves) when within 6 feet (2 meters) of a client. ✓ Given PPE shortages, and because PPE alone is less effective than a barrier, staff should try to use a barrier, whenever possible. 	 ✓ Consider sending a daily symptom screening text message/SMS/WhatsApp to staff to monitor COVID-19 symptoms. ✓ Consider sending a daily symptom screening text message/SMS/WhatsApp to shelter occupants to monitor COVID-19 symptoms, as feasible and appropriate. ✓ Informational materials for staff and volunteers, reminding them to stay home if sick. ✓ Post signage throughout the facility on: Common symptoms of COVID-19 Importance of wearing a mask The need to follow frequent handwashing and proper respiratory etiquette Reporting symptoms to shelter staff if the occupant feels ill Reminding staff to wash their hands with soap and water after touching someone who is sick or handling a sick person's personal effects, used tissues, or laundry Coping with stress 	 ✓ Provide additional personnel for medical screening to decrease intake time. ✓ Shelters will need to devise backup staffing plans in case staff remain home due to COVID-19 illness or to care for a family member. ✓ Staff may hide symptoms/signs of illness if they lose wages by staying home, risking the spread to others. Advocating for and instituting flexible sick leave policies to allow staff to stay home when sick or when caring for sick family members can help prevent this risk. ✓ Shelters should ensure there is a space to temporarily, safely, and confidentially isolate shelter occupants and/or staff, without stigma, who become ill/symptomatic with COVID-19 symptoms. ✓ Help parents understand that children may feel stress and become fearful while in the shelter. Information on coping with stress can help parents manage their own stress and that of their children.

- ✓ Staff and volunteers who screen positive for COVID-19 symptoms should be sent home immediately, and advised to follow public health guidance on quarantining or isolating to avoid the spread of COVID-19. If staff or volunteers are also residents of the shelter, they should be directed to an isolation area.
- ✓ Following medical screening, residents should be grouped as "not sick," "sick," and "requires immediate medical attention."

If a resident is classified as "sick" with possible COVID-19

- ✓ Provide a mask if available, and if the person can tolerate it.
- ✓ Advise the resident on cough etiquette and provide tissues if the individual cannot tolerate wearing a mask.
- ✓ Direct the resident to an isolation area in the shelter or at another location, according to a predesignated plan.

If a resident "requires immediate medical attention"

✓ Call emergency services for transport and, if applicable, tell the operator this person has a suspected case of COVID-19.

When a resident requires isolation

- ✓ When possible, place sick residents in individual rooms for isolation.
- ✓ If individual rooms are not possible, designate a separate isolation area for sick residents.

- ✓ Personnel, thermometer (preferably a no-contact thermometer), and screening tool to conduct symptom screening of residents, staff, and visitors upon entry.
- ✓ Personnel, mobile phone, and phone airtime to send symptom screening text messages to staff and monitor responses.
- ✓ Utilize trained medical, healthcare staff, or community health workers to conduct medical screening.
- ✓ Conduct thorough cleaning and disinfection of the area throughout the day.

- Encourage parents and caregivers to monitor their children for symptoms of illness and to report any suspected illness immediately to shelter staff.
- ✓ The symptoms of COVID-19 are similar in children and adults. However, children with confirmed COVID-19 have generally shown mild symptoms.
- Reported symptoms in children include cold-like symptoms, such as fever, runny nose, and cough.
 Vomiting and diarrhea have also been reported.

Let the resident know:

- ✓ They should notify shelter staff immediately if their symptoms worsen.
- ✓ They should not leave their room/isolation area except to use the restroom.
- ✓ They should keep a distance of at least 6 feet (2 meters) away from other residents in the isolation area.
- ✓ They must wear a mask covering at all times, except when eating or showering, unless they have trouble breathing.

Isolation areas or buildings should be separate from the rest of the shelter.

- ✓ Isolation areas should be well-ventilated.
- ✓ At least 6 feet (2 meters) of distance should be maintained between residents in isolation areas.
- ✓ Cots should be placed at least 6 feet (2 meters) apart with temporary barriers between them.
- ✓ Bathroom facilities should be near the isolation area and separate from bathrooms used by other shelter occupants.
- ✓ Shelter staff providing medical care to clients with suspected or confirmed COVID-19 where close contact (within 6 feet, 2 meters) cannot be avoided; should, at a minimum, wear eye protection (goggles or face shield), an N95 or higher-level respirator (or a mask if respirators are not available or staff are not fit tested), disposable gown, and disposable gloves. Masks are not PPE and should not be used when a respirator or mask is indicated.

- ✓ Shelter staff who enter the isolation area for reasons other than providing medical care (e.g. delivering meals or other items) should wear N95 respirators (or masks if respirators are not available or staff are not fit tested).
- ✓ Additional comfort items, like tissues and blankets, should be provided for sick shelter occupants.

Discontinuation of isolation

Options:

A symptom-based strategy (i.e., time since illness onset and time since recovery)

- ✓ At least 10 days have passed since symptom onset,
- ✓ At least 24 hours have passed since resolution of fever without the use of feverreducing medications, and
- ✓ Other symptoms have improved.

Test-based strategy

✓ RT-PCR testing for detection of SARS-CoV-2
RNA for discontinuing isolation could be
considered for persons who are severely
immunocompromised, in consultation with
infectious disease experts.