



## General Shelter Safety and Sanitation

Crowded conditions in emergency shelters can make it difficult to keep residents free from injury and disease. Shelter residents are more likely to become ill from factors such as increased mental and physical stress, lack of prescription medication, and contact with contaminated water. The constant use of the facility requires a thorough safety and sanitation plan to keep shelter residents safe and well.

### HEALTH AND SAFETY

- Schedule staff to dispense hand sanitizing gel (at least 60% alcohol) at the beginning of food service lines and immediately outside restrooms.
- Post signs regarding proper handwashing procedures, reporting signs of illness, toy sanitation, decontamination guidelines for bodily fluid spills, prohibition of food in certain areas, proper laundry procedures, and pet care, as applicable. ([CDC Printable Educational Materials](#))
- Confirm that emergency exits are marked and free of obstruction.
- Post an emergency evacuation plan and an identified meeting place.
- Install a public address system or alarm for notification of an emergency evacuation.
- Document all safety and security incidents that may require follow up action – injuries, damage to the facility, acts or threats of violence, etc.

### AIR VENTILATION AND FILTRATION

***Good ventilation is critical in helping to control the spread of COVID-19, especially in crowded spaces and small, enclosed rooms with low ceilings. ([CDC COVID-19 Guidelines for General Population Disaster Shelters](#))***

- Work with the building's maintenance staff to:
  - Modify the ventilation system to increase ventilation rates or to increase the percentage of outdoor air that circulates into the system
  - Ensure "clean to dirty" directional airflows
  - Ensure upward directional airflow if using ceiling fans
  - Install the highest efficiency air filters compatible with the shelter's existing HVAC system
  - Open doors and windows, if feasible

### EQUIPMENT AND FACILITY MAINTENANCE

- Lock/secure cleaning supply storage areas.
- Inspect and eliminate potential entrances or harborage for pests (insects, rodents) such as torn screens, outside doors propped open, standing water, etc.
- Provide first aid kits and an Automated External Defibrillator (AED) and resupply contents as needed.
- Ensure the following equipment is in working order: CO<sub>2</sub> detector, smoke alarm, fire extinguisher, fire alarm.

- Monitor the facility for the following hazards: carbon monoxide, trip hazards in outdoor and indoor walkways, exposed or frayed wire, hazardous materials, and unsecured equipment.
- Locate all propane tanks and generators outside.
- Plan for the repair of sinks, toilets, and other facilities that will receive continual use.

## ROUTINE CLEANING

### Personnel/Training

- Assign and train staff/volunteers to:
  - Follow an established cleaning and trash removal schedule for each designated area in the shelter
  - Properly wear Personal Protective Equipment (PPE) (When and What Personal Protective Equipment (PPE) to Wear) for the following tasks:
    - Cleaning and disinfecting commonly touched surfaces and handling trash – face mask, disposable gown, and gloves
    - Cleaning and disinfecting showers and restrooms, decontaminating after vomit/diarrhea/bodily fluid spills, and mixing disinfectant solutions - surgical mask, eye protection/face shield, gloves, apron/disposable gown, shoe covers
  - Know what cleaning/disinfecting chemicals they are using, how to properly use them, and what the hazards are. (Refer to the Safety Data Sheet for each product.)
  - Think “C” (clean) comes before “D” (disinfect) in the two-step cleaning process:
    - Clean to remove dirt, grease, and other material where germs can hide from the disinfectant
    - Disinfect to kill germs

***Cleaning up bodily fluid spills is not part of routine cleaning. Refer to Decontamination Procedures for Vomit, Diarrhea, and Other Bodily Fluids for proper decontamination procedures.***

### Cleaning Supplies

- Obtain additional supplies of cleaning products normally used for the facility.
- During the COVID-19 pandemic obtain:
  - One of the [EPA-Registered Disinfectants for COVID-19](#)
  - Alcohol-based wipes or sprays containing at least 70% alcohol for cleaning electronic equipment such as touch screens, keyboards, etc.
- Label all cleaning products and solutions that are not in the original manufacturer’s container with the name of the product and the amount of product to use.
- Maintain a file of the Safety Data Sheets (SDS) for each chemical/cleaning product used.
- Stock PPE –surgical masks, N95 masks or higher level respirators, eye protection/face, shields, gloves, gowns/aprons, and shoe covers.

### Procedure for Routine Cleaning and Disinfection

***The following disinfection procedures do not apply to food preparation equipment, counters, or tableware.***

- Clean surfaces with detergent or general cleaner to remove any visible dirt.

- Rinse the surface with water and dry with paper towels.
- Disinfect with a disinfectant that is effective against Norovirus ([EPA-Registered Disinfectants for Norovirus](#)).
- During the COVID-19 pandemic, use a disinfectant following manufacturer’s directions that is an EPA-approved disinfectant for both Norovirus and COVID-19 ([EPA-Registered Disinfectants for COVID-19](#)). (Ex. - bleach or quaternary amonium compounds).
  - Use the higher of the two concentrations of the disinfectant for the two viruses
  - Use the PPE recommended by the manufacturer or Safety Data Sheet
- Contact times on the manufacturer's label must be followed for disinfection to be effective.

**The following table and directions are an example of the routine disinfection procedure for nonfood-contact surfaces using regular strength (5-6%) chlorine bleach. The chlorine concentration indicated below is effective for both Norovirus and COVID-19.**

Purpose	PPM	Dilution	Contact Time	Final Step
Disinfection	3500	1 cup bleach/1 gallon water	5 minutes	Rinse
Food-contact surface disinfection	3500	1 cup bleach/1 gallon water	5 minutes	Rinse thoroughly, sanitize after disinfection
Food-contact surface sanitization	100	1 tbsp bleach/1 gallon water	10 seconds	Air Dry

- Surfaces must be washed with hot soapy water and rinsed before being disinfected.
- For concentrated (8.25%) chlorine bleach, use 1/2 cup bleach/1 gallon water for disinfection and 2 tsp bleach/1 gallon water for sanitization.
- Use only regular chlorine bleach products containing sodium hypochlorite. Do not use scented or splashless bleach as they are not EPA-approved disinfectants and do not use past the expiration date.
- Use chlorine bleach in a well-ventilated area and wear Personal Protective Equipment (PPE) such as goggles, surgical face masks, gloves, and a covering for all exposed skin. Do not mix chlorine bleach with ammonia.
- Use a chlorine bleach solution within 24 hours after preparation and store away from sunlight in a closed, labeled opaque container to avoid decomposition.
- Use a new unopened bottle of bleach every 30 days for preparing disinfectant solutions.
- Consider steam cleaning surfaces that may be permanently stained by chlorine bleach (158°F for 5 minutes or 212°F for 1 minute).

## **Carpets, Upholstered Furniture, and Other Cloth Items**

***Norovirus and other viruses can become airborne.***

- Vacuum carpets, upholstered furniture, and other cloth items using a HEPA (high efficiency particulate air)

filter, if possible.

- o Do not vacuum a room or space if there are people in it.
- o Turn off room fans and the central HVAC system, if possible, so that particles that escape from vacuuming will not circulate throughout the facility.
- o Disinfection of the vacuum cleaner is not needed when a HEPA filter is properly installed and remains intact during use.

## CLEANING SCHEDULES

- Divide the shelter into areas such as the kitchen, dining room, restrooms, living areas, etc. and develop a list of cleaning activities for each area.
- Disinfect high-touch surfaces (door handles, light switches, tables, chairs, shared items, etc.) with bleach or other EPA-approved disinfectant every 1-2 hours.
- Clean and disinfect electronics such as cell phones, tablets, touch screens, remote controls, and keyboard following manufacturer's instructions as needed according to amount of use. Procedure for Routine Cleaning and Disinfection.
- Clean and disinfect bed frames between occupants.
- Ensure daily garbage removal from all areas of the shelter and more frequently as needed even if normal collections are temporarily disrupted.
  - o Line trash cans with garbage bags.
  - o Clean inside of trash cans regularly.
- Ensure staff wears face masks and disposable gowns and gloves when handling garbage.
- Develop a plan for the immediate cleanup of vomit, diarrhea, and other bodily fluid spills following [Decontamination Procedures for Vomit, Diarrhea, and Other Bodily Fluids](#).
- Determine cleaning frequency and times based on size of shelter population and traffic flows in various areas of the shelter.

## Restrooms

***Because the ratio of residents to toilets may be high, restrooms need constant supervised cleaning and maintenance.***

- Staff each restroom to:
  - o Control the number of individuals using the facility at one time
  - o Clean and disinfect toilets, door and faucet handles, diaper changing stations, and toilet room stalls and walls as frequently as every 1-2 hours based on use and observations by the housekeeping staff
  - o Maintain basic supplies such as hand soap, paper towels, and toilet paper

## Showers

- Clean and disinfect showers including the shower curtain twice a day or, if used continuously, every 2 hours.

## Sleeping Areas

***Traffic flow patterns and use will determine the frequency these areas should be cleaned (floors, furniture, etc.).***

- Clean and disinfect cot/bed frames between occupants.
- Clean and follow decontamination procedures for cots without a barrier (waterproof mat/sheet, absorbent pad, blue pad, plastic, etc) when they become contaminated with vomit or feces. Decontamination procedures will depend upon the cot/mattress material.
- Discard grossly contaminated cots/mattresses or if they become and remain wet or stained.
- Clean and disinfect moisture-resistant mattresses covers with an [EPA-Registered Disinfectant for Norovirus](#) compatible with the cover materials to avoid tears, cracks, or holes.
- During the COVID-19 pandemic, use a disinfectant following manufacturer's directions that is an EPA-approved disinfectant for both Norovirus and Covid-19 ([EPA-Registered Disinfectants for COVID-19](#)). (Ex. - bleach or quaternary ammonium compounds).
  - o Use the higher of the two concentrations of the disinfectant for the two viruses
  - o Use the PPE recommended by the manufacturer or Safety Data Sheet
- Launder bedding, including mattress and pillow covers if made of fabric, between occupants at normal temperature settings.
- Dispose of bedding/clothing exposed to lice or scabies or heavily soiled with feces or vomit.

## Healthcare/Isolation Areas

***The frequency and level of cleaning and disinfection should be determined by the type of healthcare services being provided.***

- Clean and disinfect medical/first aid or triage areas every 4 hours depending upon the number of patients.
- Cover cots/beds with a barrier (waterproof mat/sheet, absorbent pad, blue pad, plastic, etc).
- Follow the procedures in Sleeping Areas for cleaning and disinfecting cots/beds and laundering bedding.

## All Other Common Areas

- Clean living areas frequently based on occupancy level and as needed.
- Clean and disinfect tables, door handles, railings, waste receptacle handles and lids, and other commonly touched surfaces that pose the most risk to disease contamination several times a day or 1-2 hours in highly populated shelters.

## Food Preparation Areas

- Clean and sanitize food preparation areas after each meal and as needed between food preparation tasks. ([Food Service Information for Shelter Operators](#)) including cleaning information during the COVID-19 pandemic.
- Clean and disinfect dining and serving areas after each meal service/shift.

***Ensure that cleaning and disinfecting product residues are not left on table surfaces as residues could be ingested or cause allergic reactions.***

## Cleaning Tools

- Replace and clean mops, rags, and towels several time a day or every 1-2 hours in highly populated

shelters.

## DECONTAMINATION

***Cleanup of vomit and feces is critical to preventing a Norovirus outbreak. Cleanup of vomit and diarrhea as well as other bodily fluids involves a more stringent cleaning process than a routine cleaning procedure.***

- Treat any vomit or diarrhea as if it contains Norovirus.
- Use only designated staff/volunteers trained in decontamination procedures to clean up vomit, feces, and other bodily fluids.
- Keep decontamination supplies together in “kits” for ready availability.
- Refer to Decontamination Procedures for Vomit, Diarrhea, and Other Bodily Fluids\_for specific guidelines

5/3/2021



**HOUSTON HEALTH DEPARTMENT**  
8000 North Stadium Drive, Houston TX 77054  
832-393-5100  
CHS@houstontx.gov  
**HOUSTONCONSUMER.ORG**

