

Environmental Health and Safety

Learning Goal:

- To determine ways to create shelter environments that are safe and healthy for residents and staff.

Shelters are often designed with one fundamental goal in mind: give people a safe place to be to prevent them from dying on the streets. As shelter stays have become longer, due to lack of affordable housing or the magnitude of natural disasters, it has become ever more critical that shelters minimize the risk of infection, provide safe and adequate food and water, and ensure basic health and hygiene.

In addition to these environmental health concerns, the possibility of violence is inevitably heightened as people are living in tight quarters under immense stress. Shelter providers must constantly be aware and work to prevent family violence, child abuse, rape, and the possibility of staff and volunteers being attacked. When violence does occur, staff should be equipped to deescalate violent situations and provide support for residents who have been victims of violence.

This segment of the guide will emphasize safe environmental health practices that will minimize the spread of disease. Additionally, we will take a broader look at steps shelters can take to prevent violence in congregate living settings.

The Tool Kits

At the beginning of each section of this Guide, readers will find lists that outline the contents of the Tool Kits that can be found in electronic form on the CD that accompanies this Guide. While some of the tools and handouts are found both in the Guide and in the Tool Kits, most of the items listed below are only found in the Tool Kits. They are to be used to supplement the material in the Guide and to provide shelter providers with day-to-day tools for use in the shelters.

Tool Kit C: Environmental Health and Safety

- C-1 Hand washing Flyer
- C-2 Food Prep brochure on food-borne bacteria
- C-3 Food Prep—Chill
- C-4 Food Prep—Clean
- C-5 Food Prep—Cook
- C-6 Food Prep—Separate
- C-7 “Healthy Shelter Living”
- C-8 Standard Precautions Policy
- C-9 Fluid Clean-up Policy
- C-10 Fluid Exposure Policy
- C-11 Laundry Hygiene Policy
- C-12 Wasatch HHC Program Safety Manual
- C-13 Seattle Guidelines
- C-14 “For the Women of Katrina: Protection from Violence Against Women and Children”
- C-15 “Violence and Disasters”
- C-16 “Preventing Violence After a Natural Disaster”
- C-17 Animals in Shelters

COMMUNICABLE DISEASE CONTROL HAND WASHING

General Information:

- Hand washing is the single most effective and least costly way to reduce the spread of infections, including the common cold, hepatitis A, food borne illnesses, and many other viral and bacterial diseases.
- Alcohol-based hand rub is also effective in limiting the spread of such diseases.
- Shelter and other environments should encourage and support good hand hygiene.

Facility Recommendations & Environmental Modifications:

Ensure that your shelter or facility has:

- Posters encouraging *frequent* hand washing posted in common areas.
- Posters showing proper hand washing *techniques* posted by all sinks.
- Sinks and hand washing facilities that are easily accessible to staff and clients.
- Sinks that are kept in good repair, drain properly, and have both hot and cold water.
- Soap dispensers that contain soap and are in good working order. Non-refillable soap dispensers are recommended.
- Disposable towels available.
- Facial tissues such as Kleenex available for staff and clients. Tissues help contain sneezes and coughs and provide a barrier for hands. Trash cans should be available for proper disposal of tissues.
- Alcohol-based hand rub dispensers installed at entry areas.

Staff Recommendations:

Staff should:

- Model and encourage good hand hygiene.
- Wash their hands immediately after using the toilet.
- Wash their hands before serving, preparing or eating food.
- Wash their hands before and after providing any “hands on” assistance to clients (such as assisting with mobility, balance, health or hygiene needs).
- Wash their hands after handling clients’ unwashed clothing or bedding.
- Wear aprons/coveralls and gloves when handling soiled laundry to reduce risk of infection.
- Wear gloves when handling client belongings to reduce risk of infection from bacteria, viruses, lice or mites, and to reduce risk of infection by needle stick.

Procedural Recommendations:

- Encourage staff and clients to wash or sanitize hands upon entering the shelter. This will effectively reduce the number of germs entering the shelter. Alcohol-based hand rub dispensers installed at entry areas encourage this practice.
- Do NOT use cloth towels or re-use paper towels.
- Instruct clients and volunteers who serve or prepare food to wash their hands ahead of time.
- Ensure that your shelter has a policy regarding blood borne pathogens control.

*Recommended Shelter Health and Safety Best Practice Guidelines – July 2005
Developed by Health Care for the Homeless, Public Health – Seattle & King County*

Guidelines for Environmental Safety in Shelter

Universal Precautions

- Communicable disease control measures in place.
- Information on universal precautions and proper hand washing procedures is posted.

Emergency Procedures

- Staff trained in CPR, first aid and emergency procedures.
- CPR and Heimlich maneuver procedures are posted.
- Staff trained in evacuation procedures for an emergency. Procedures are posted and reviewed with clients.
- Phone is available 24 hours a day for emergencies.
- List of emergency phone numbers is posted by phones.
- Emergency equipment kept in working condition and monitored regularly.

Facility Safety

- Regular walk through of building to identify hazards.
- Adequately marked exits that are open.
- Furniture and toys are cleanable, durable and safe.
- Safe and adequate heat with regular checks by the fuel company.
- Adequate ventilation and screens.
- Adequate waste disposal containers.
- Building is insect and rodent free.
- Plumbing is in working order (hot and cold water, toilets flush, sink drains).
- Facility is accessible to people with disabilities.
- No illegal drugs, alcohol or weapons allowed.

Fire Safety

- Fire drills conducted on a regular basis.
- Smoke detectors and fire extinguishers in place with regular servicing checks.
- Smoking is not permitted, or is limited to specific areas.

Homeless Health Care Los Angeles

Guidelines for the Control of Communicable Disease in Shelter

Health Care Prevention Measures

Do a health assessment on each client upon arrival at the shelter. Ask about communicable disease symptoms. Refer those who are sick to a doctor or clinic as soon as possible.

Avoid overcrowding. Provide good ventilation and circulation of air, especially in sleeping areas.

Isolate those who are sick, preferably in a private room if possible.

Educate staff on ways to prevent the spread of disease, especially hand washing. Always wash your hands:

- After using the bathroom
- After cleaning up blood, feces, urine or vomit
- Before preparing food
- After diapering a child

Make sure all children are up-to-date on immunizations. (*Do you know which ones are required and when?*)

Know your public health nurse and call her if you suspect contagious disease in your shelter.

Restrooms

Each restroom should have:

- liquid soap dispensers
- toilet paper (in all dispensers)
- paper towels
- lined trash can
- lined sanitary napkin/tampon disposal can in restrooms used by women
- self-closing door in each stall
- screened windows
- vents
- cleanable floors, walls and ceiling

Provide a separate diaper changing area:

- wipe off changing area each time with solution prepared fresh daily (1 tablespoon of bleach in 1 quart of water in a labeled spray bottle)
- insist on hand washing after diapering a child
- insist that dirty diapers be disposed of in specified places only – use a lined trash can with a tight-fitting lid and empty frequently

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Cleaning

Clean mattresses and pillows with an appropriate cleaning solution between clients.

Wash linens and towels in hot (140 degree) water.

Use separate cleaning items for the bathrooms and kitchen.

Store cleaning items in a cabinet or storeroom away from the kitchen.

Use disposable latex gloves (not rubber gloves) when cleaning, particularly when:

- cleaning up blood, feces, urine or vomit
- caring for any person who is bleeding, vomiting or cannot control their bowels or urine
- touching any clothes, towels or sheets that are bloody or have feces, urine or vomit on them

Follow these steps when cleaning up spills of blood, feces, urine or vomit:

1. put on latex gloves
2. clean up area with paper towels or newspapers
3. place paper towels or newspapers in trash can with plastic liner
4. spray area with bleach mix: 1 part household bleach to 10 parts water mixed fresh daily in labeled spray bottle
5. let bleach sit 10 minutes before wiping it up
6. wipe up bleach with paper towels
7. throw out towels in plastic lined trash can
8. remove gloves by the base of the glove
9. throw away gloves in plastic lined trash can
10. tie plastic liner and dispose in trash dump for pick up
11. wash your hands

Keep the area as clean as possible. Bathroom and shelter areas can be cleaned with regular soap and water and can be disinfected with bleach mix if needed. Sponges or rags used to clean the floor or any body fluid should not be used to wash dishes or clean food preparation areas.

Clients' Personal Items

Separate clients' personal items (clothing, pillows, sheets, towels).

Strongly discourage sharing of personal items (razors, toothbrush, hairbrush, comb, etc.)

Standard Precautions in Shelters: Cleaning Up Blood/Bodily Fluids

- 1) Put on **protective gear**. If it is possible that blood or bodily fluids may spray or splatter, wear **protective eye covering (plastic goggles)**. Put on **latex gloves**. If there is a possibility that your clothing may become soiled, put on a **protective gown** (as when handling laundry or soiled clothing). Keep the scene clear of people.
- 2) Get a **bucket or spray bottle, bleach, and paper towels or a mop** to clean the floor and other areas. If the area is large, put $\frac{1}{2}$ cup **bleach** in a gallon of **cool water** (hot water destroys the bleach). Spray the area with this solution. If the area to be cleaned is small, you can make a solution of bleach and cool water in a **quart spray bottle**. Use 1 teaspoon of bleach per quart. This bleach solution must be discarded after 24 hours. It is recommended that a fresh solution be mixed up every time it is needed.
- 3) Blot up as much of the spill and the bleach solution as possible with **paper towels**. If there is a large volume spills or vomit, use **kitty litter** to absorb. Dispose of these materials in a **plastic garbage bag**.
- 4) If you used a **mop**, rinse the mop in **bleach solution** and allow to dry. Dump the leftover solution down the drain or toilet. **DO NOT** use a sink that is normally used for food preparation.
- 5) Pick up any soiled debris (clothing, bedding, towels, or bandages) and place in a **garbage bag**. If you are finished cleaning, remove your protective gear and gloves and put them in the garbage bag. Tie off the garbage bag and place it in the regular trash. Only very large spills need to be placed in special biohazard bags and disposed of by an approved facility.
- 6) Wash your hands thoroughly. Re-stock the **clean-up kit**. If you have had significant exposure to bodily fluid (needle stick or contact with mucous membrane or non-intact skin) contact a supervisor **immediately**.

Developed by Health Care for the Homeless Network, Public Health – Seattle & King County, WA

Sample Shelter Policies

Shelters that have been in existence for many years have often developed sophisticated policies and procedures to address environmental health issues. New shelters, though, particularly those created quickly in response to a natural disaster, have not had the time to develop policies to address every eventuality. Here we offer a number of samples intended to guide shelters in developing their own environmental health policies.

These were developed by Health Care for the Homeless Network, Public Health – Seattle & King County, Washington. An entire set of recommended shelter guidelines can be found in the *General Information Tool Kit* on the CD that accompanies this Guide.

Sample Policy: Standard Precautions in the Shelter Setting

TITLE: Standard Precautions as it Relates to Infection Control

SCOPE: Homeless shelter staff and volunteers who may possibly face contact with bodily fluids or other potentially infectious materials as a result of performing their job duties

PURPOSE: To provide guidelines to agency management, staff, and volunteers regarding the use of Standard Precautions to minimize the risk of employees and volunteers coming in contact with bodily fluids which may contain blood-borne pathogens as well as other infectious agents

RESPONSIBILITIES

Agencies shall:

1. Provide opportunity for the staff to be trained in the control of infectious diseases (including blood borne pathogens) as it pertains to the shelter setting. Agencies may contact Health Care for the Homeless at (206) 296-5091 to arrange training free of charge.
2. Make every attempt to achieve levels of practice as outlined in the Basic Shelter Health and Safety Standards, Staff Health Policy, and other applicable Health and Safety Policies recommended by Public Health - Seattle & King County.
3. Provide all equipment needed to achieve appropriate hand washing (**hot and cold running water, soap, paper towels**). This equipment should be accessible to employees at all times.
4. Provide employees with reasonable access to **personal protective apparel** such as **latex gloves (nitrile gloves must be made available in all situations for employees with sensitivity to latex), goggles, protective gowns, and CPR shields**.
5. Have a plan in place for post-exposure to potentially infectious materials and employees will be trained in its use.
6. Outline basic procedures for all employee duties that may involve contact with bodily fluids or other potentially infectious materials. Such duties include but are not limited to: providing assistance with personal hygiene, handling soiled laundry, providing assistance to a sick client, providing first aid, providing CPR, and cleaning up after spillage of bodily fluids. In all such cases the agency will mandate a Standard Precautions approach, which is simply an infection control approach that treats all body fluids as potentially infectious. The agency may consult with a Health Care for the Homeless Public Health Nurse for assistance with outlining these duties (206) 296-5091.

Employees shall:

1. Agree to follow the procedures regarding duties which may involve contact with bodily fluids and other potentially infectious materials.
2. Immediately report any significant exposure incident to the supervisor. Contact of the employee's non-intact skin (chapped, cracked, scratched or otherwise open), eye, or mucous membrane with blood or other potentially infectious material is a significant exposure.

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DUTIES WHICH MAY EXPOSE EMPLOYEES IN THE SHELTER SETTING TO POTENTIALLY INFECTIOUS MATERIALS

First Aid and CPR:

Employees who are trained in First Aid and CPR may elect to assist clients needing these interventions. The agency should provide equipment to reduce the risk of infection while rendering such aid. Equipment that should be available and accessible to the employees includes:

- Latex gloves
- CPR masks
- disposable or cotton gowns that tie in the back
- safety goggles
- clean-up materials*

Assessment of wounds, skin conditions, scalp or hair problems:

Clients may ask staff to examine wounds, cuts, burns, injuries, skin conditions, or to check for the presence of lice or scabies. Staff should don latex gloves when asked to do any type of examination beyond visual. The agency should make latex gloves available for such occasions.

Assisting with personal hygiene or toileting:

Clients may request assistance by staff with hygiene (dental care, care of dentures or oral prostheses, assistance with bathing or cleaning up after a bowel movement or urination, changing diapers, cleaning up spill of menstrual fluid, assistance with removal of head lice or lice eggs, etc.) The agency should supply latex gloves for such purposes, and staff should be able to use gowns if they feel they need greater protection. Diaper changing areas should be equipped with a lined trash can, spray bottle of bleach solution, protective covering (such as old computer paper), paper towels, and gloves.

Assisting a sick client:

Clients who are vomiting, drooling, sweating profusely, or being incontinent of stool or urine may request assistance with cleaning up or changing clothes. The agency should provide latex gloves, reusable or disposable gowns and appropriate supplies for cleaning the environment as needed (mop, bleach, bucket, paper towels, etc.)

Assisting Clients Who Have Soiled Bedding or Laundry:

Refer to the sample policy on “Laundry” for details. As much as possible, have the client handle their own clothing and bedding. Wear gloves and a gown when handling soiled laundry. Encourage the client to discard any heavily soiled laundry. Heavily soiled linens should also be discarded or laundered separately and bleached.

* For information on supplies for cleaning the environment after contamination with bodily fluids (including vomit, excrement, urine, blood, saliva, mucous) please refer to the sample policy on “Blood/Bodily Fluids Clean-up Protocol”

Developed by Health Care for the Homeless Network, Public Health – Seattle & King County, WA

Sample Policy: Blood/Bodily Fluids Clean-Up in the Shelter Setting

When you provide First Aid or when you clean an area or handle any items soiled with blood or bodily fluids (urine, vomit, blood, feces, semen) please take precautions to protect yourself and others from infection. Always follow these simple steps when you clean up after blood/body fluids spills:

Equipment:

- Paper towels
- Plastic garbage bags
- Kitty litter (for big spills)
- Disinfectant (bleach 1:10 dilution)
- Mop & mop bucket
- Spray bottle

Protective apparel:

- Latex gloves
- Eye/face protection (plastic goggles)
- Protective gowns or aprons

Policy/Procedures:

Spill clean-up materials are located _____ along with a copy of this document.

- 1) Put on **protective gear**. If it is possible that blood or bodily fluids may spray or splatter, wear **protective eye covering (plastic goggles)**. Put on **latex gloves**. If there is a possibility that your clothing may become soiled, put on a **protective gown** (as when handling laundry or soiled clothing). Keep the scene clear of people.
- 2) Get a **bucket or spray bottle, bleach, and paper towels or a mop** to clean the floor and other areas. If the area is large, put cup **bleach** in a gallon of **cool water** (hot water destroys the bleach). Spray the area with this solution. If the area to be cleaned is small, you can make a solution of bleach and cool water in a **quart spray bottle**. Use 1 teaspoon of bleach per quart. This bleach solution must be discarded after 24 hours. It is recommended that a fresh solution be mixed up every time it is needed.
- 3) Blot up as much of the spill and the bleach solution as possible with **paper towels**. If there is a large volume spills or vomit, use **kitty litter** to absorb. Dispose of these materials in a **plastic garbage bag**.
- 4) If you used a **mop**, rinse the mop in **bleach solution** and allow to dry. Dump the leftover solution down the drain or toilet. **DO NOT** use a sink that is normally used for food preparation.
- 5) Pick up any soiled debris (clothing, bedding, towels, or bandages) and place in a **garbage bag**. If you are finished cleaning, remove your protective gear and gloves and put them in the garbage bag. Tie off the garbage bag and place it in the regular trash. Only very

large spills need to be placed in special biohazard bags and disposed of by an approved facility.

- 6) Wash your hands thoroughly. Re-stock the **clean-up kit**. If you have had significant exposure to bodily fluid (needle stick or contact with mucous membrane or non-intact skin) contact a supervisor **immediately** and follow the sample policy for “blood/bodily fluid exposure”.

Developed by Health Care for the Homeless Network, Public Health – Seattle & King County, WA

Sample Policy: Blood/Bodily Fluid Exposure

The following information should be provided to the employee's health care provider or the Emergency Room MD immediately after any incident of significant body fluid exposure by needle stick or contact with mucous membrane or non-intact skin.

Date and time of exposure:

What job duty was the employee performing at the time of exposure?

What sort of bodily fluid was the employee exposed to?

How much of the fluid did the employee come in contact with?

What part of the employee's body was exposed to the fluid?

How long did the employee remain in contact with the bodily fluid?

Did the employee have any breaks in the portion of their skin that contacted the bodily fluid?

In the case of a needle stick or other sharp object injury, how deeply did the needle or object penetrate, and was fluid injected into the employee?

Was the source material known to contain HIV or hepatitis B or C? (the source can be asked to voluntarily provide this information, and to volunteer to be tested for these conditions)

Developed by Health Care for the Homeless Network, Public Health – Seattle & King County, WA

Sample Policy: Laundry Hygiene in the Shelter Setting

TITLE: Laundry Procedures as it Relates to Infection Control

SCOPE: Shelter staff, volunteers, and clients

PURPOSE: To provide guidelines to staff, volunteers and residents who handle linens and laundry in a safe and effective manner to reduce the risk of spread of infectious diseases

BACKGROUND INFORMATION:

For the purpose of this policy, all linens and personal laundry of clients should be considered contaminated and should be treated carefully to avoid spread of infectious disease. Scabies, lice, and other bacterial pathogens (staphylococcal and streptococcal bacteria) are difficult or impossible to see. Laundry should be handled as little as possible. If possible, clients should handle their own laundry.

POLICY/PROCEDURE:

I. General Practices

- Staff should wear **gloves** when in contact with any used or worn laundry items, whether obvious contamination is visible or not.
- **Gowns or aprons** should be worn whenever it is likely that a staff person's clothing could come in contact with laundry.

II. Laundry Washed by Shelter Staff on Premises

- Use a hot wash cycle (at least 105-110 F for 10 minutes) followed by thorough drying in a hot dryer (160 F). This process is sufficient to decontaminate laundry. No other additives such as bleach are necessary to sanitize laundry, unless stain removal is desired.
- Any kitchen laundry or other items used by staff (towels, aprons, etc) should be washed and dried in the above manner.
- Staff/agency laundry should be washed in batches separate from client bedding and clothing.
- If linens are heavily soiled with feces, large amounts of solid material should be disposed of in a toilet. Handling of feces should be avoided whenever possible. If rinsing is required, staff should take care to minimize handling and avoid splashing.
- If possible clients should be asked to rinse their own linens when they are soiled.
- Wet linens should be stored in a **plastic bag** while awaiting final wash to avoid any leaking and reduce odor.
- Dispose of linens if soiling is severe.

III. Laundry Supplied by a Laundry Service

- Linen awaiting pick up by a laundry service should be stored in a contained bin or bag so that laundry cannot come in contact with clients, staff, the floor, or other clean items.
- Wet bedding should be placed in a plastic bag inside the bin so that leaking cannot occur.

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- Only large amounts of feces that can be easily removed should be disposed of in the toilet. No further rinsing or handling should be done by shelter staff.

IV. Bedding Stored for Returning Clients

- Used linen may not be transferred to a different client.
- Used bedding should be stored such that the bedding of different clients is not touching it. This will prevent cross contamination.

V. Supplies and Equipment

- Shelters should maintain washers and dryers in good working order or should contract with a Laundry Service for routine delivery and pick-up.
- If laundry is done on site, the water temperatures should be at least 105-110 F.
- Shelters should supply gloves, gowns or aprons, laundry detergent, plastic bags, and plastic laundry baskets or laundry bins.

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