

# WASTE AND HYGIENE PLAN



A waste and hygiene plan is essential to maintain healthy living conditions during disasters. Studies show damage to sewer and wastewater infrastructure is likely to take much longer to recover than other types of infrastructure, such as drinking water supplies.

#### **QUICK-START STEPS**

- Personal Hygiene
- Dealing with Household and Pet Waste
- Dealing with Household Trash
- Laundry During a Disaster
- Privacy Considerations
- Septic System Considerations



## **PERSONAL HYGIENE**



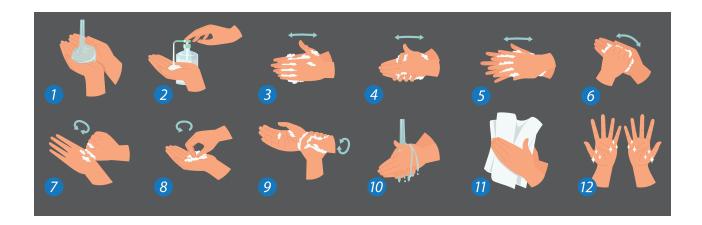
## **SAFETY CONSIDERATIONS**

- Don't bathe in water that may be contaminated with sewage or toxic chemicals, or in streams or lakes contaminated by flood water, human sewage or animal waste.
- Multiple people should not bathe using the same water.
- If you have a drinking water well, listen to local health authorities for advice on using well water for showering and bathing.
- If extensive flooding has occurred or you suspect the well may be contaminated, contact your local, state or tribal health department for specific advice on well testing and disinfection.
- Use only clean water to brush your teeth; tap water may be contaminated following a disaster.

During longer-term disasters when indoor plumbing may not be available, you need to keep your body clean to avoid infection and skin irritations. Here are some short-term options to help conserve water:

- Baby wipes or other personal hygiene wipes.
- Dry shampoo.
- Alcohol-based hand sanitizer.
- Bleach and water combination: Add 1/8 teaspoon of bleach per gallon of water, stir and let stand for 30 minutes.

#### Wash your hands regularly to prevent the spread of germs.



#### **DEALING WITH HOUSEHOLD AND PET WASTE**



## **SAFETY CONSIDERATIONS**

- Always wash your hands thoroughly after handling human and pet waste bags.
- Double-bag and store the waste separate from other garbage and away from food and water.
- Keep your yard clean of animal poo to limit infection and illness.
- Do not use pool noodles as a seat for your two-bucket system. They collect bacteria.
- Label each bucket so everyone in your household knows what waste goes in each bucket.

Despite how well you keep your space and body clean after a disaster, human waste can still make you and others sick. Methods for handling waste must be simple, cheap and able to protect public health by limiting exposure to waste. There are two methods for dealing with human waste: Pit toilets and the two-bucket system.



## 1. Pit Toilet \$ \$ 🕒 😅











Also known as a latrine, a pit toilet is simply a hole in the ground that collects human waste (both pee and poo) in an emergency. It's ideal for more rural areas with wide open spaces, but it can still be used in urban areas if location guidelines are followed. All you need is a shovel to dig the hole.











This method requires 5-gallon buckets and heavy-duty plastic bags. Plan for 5 gallons of waste from each person each week to help you know how many buckets you'll need. This method is ideal for dense urban areas with limited open space and located with a high-water table. Make sure to label one bucket for pee and one for poo. Separating pee lessens volume and odor, making contents safer and easier to store and dispose.

#### **HOW TO DISPOSE OF WASTE**

Make sure to store and dispose of waste properly to prevent the spread of illnesses, such as Hepatitis A, E. coli and C. diff.

## For pee:

- If possible, add water to the bucket to dilute the contents.
- Pour on the lawn, garden or ground.
- Place toilet paper in the poo bucket.

## For poo:

- Cover each use with bark chips, dirt, etc. to help dry the waste.
- Fill the bucket no more than half full of waste.
- Double-bag and store the waste separate from other garbage and away from food and water.
- Secure waste from pets, flies, rats, etc.

#### For menstrual product waste:

- Disposable tampons and sanitary pads should be placed in a separate garbage bag.
- If using a menstrual cup, the contents can be poured into a pit toilet or the poo bucket.

Visit www.rdpo.net/emergency-toilet for more information.

#### **DEALING WITH HOUSEHOLD TRASH**



## SAFETY CONSIDERATIONS

- Do not burn plastic, Styrofoam or other items that release toxins when burned.
- Be mindful of dry conditions and only burn trash in appropriate locations.
- When burying trash, dig a hole at least 4 feet deep and cover it with at least 18 inches of soil to prevent insect and animal infestation.

Work at reducing all household waste as an everyday practice. That way, it's not nearly as difficult when disaster strikes. Here are the best ways to dispose of household trash:

- Separate and compost food waste.
- Reduce bulk by smashing cans and boxes.
- Compact where possible.
- Separate and burn trash if you can.
- Bury paper and compostable trash in shallow pits if you can. Bury trash as far away from your home as possible and be mindful of high-water tables.
- Layer garbage with soil, ashes, lime or borax to help control odors.



#### LAUNDRY DURING A DISASTER

Disasters could cause you to be without electricity and the convenience of modern appliances, such as washing machines and dryers. While you can typically wear outer garments for several days before washing them, changing out or washing undergarments—especially underwear—helps limit infections and irritations. Here are four alternative ways of washing your clothes:

- 1. Washboard Method: This involves rubbing the fabric against itself with your hands or using an old-fashioned washboard. It's a time-consuming but reliable way of washing small batches of clothes. \$ ① ① ⑤ ⑥
- 2. Bucket and Plunger Method: Place dirty clothes, water and detergent in a bucket with a hole cut in the lid for a plunger. The plunger is used to agitate the clothes. You can buy a commercially designed model, but a quality sanitized plunger with a few holes drilled in the top of the rubber dome also works. \$ \$ \$ ©
- 3. Laundry Pod Method: A laundry pod is a non-electric, portable washing machine that resembles a salad spinner and washes small, light loads of clothing. One gallon of water will wash one load. The water is drained out the bottom and clean water is added through the top. \$ \$ ① ③ ⑤
- **4. Sailor's Method:** Sailors used to fill a heavy-duty black garbage bag with dirty clothes, water and soap. The black bag took advantage of the sun to heat the water, and the ship's movement agitated the wash. This method can be adapted by gently pressing on the bag to agitate the clothes. This is a practical method for washing large items, such as comforters, blankets or sleeping bags that don't fit in 5-gallon buckets. **\$** ① ① ⑤ ⑥







When finished, dump any leftover water on your lawn, garden or the ground.

#### PRIVACY CONSIDERATIONS

Creating private spaces is not always something we think about when it comes to planning for an emergency or disaster, but access to privacy can have a major impact on people's health and safety following a disaster. Privacy is an important consideration in instances such as bathing and using the bathroom, nursing, changing clothes and hanging clothing garments to dry when a dryer is not accessible.

- Include a screen or tarp in your preparations to create a layer of privacy where needed.
- Plan by including whatever nursing supplies you might require in your emergency kit.

#### **SEPTIC SYSTEM CONSIDERATIONS**

You should know where your septic system is and what it consists of before an emergency occurs. It's also a good idea to know this for maintenance purposes. Your county may have a record of where septic systems were installed.

Unless there's a pump, all tanks have an inlet and outlet pipe. The normal sewage level is at the outlet pipe level. Most of the time, you can see this pipe when you open the access to the tank. DO NOT go into the tank.

#### Signs your system is working:

- Your water supply is functioning.
- You have electricity (some systems require power for a pump).
- Toilets flush and sinks drain properly.

#### Signs your system is not working:

- The earth has moved around your septic system.
- There are abnormal wet or soft spots in your yard.
- You smell sewage odors.
- Water or sewage is backing up in the downstairs bathroom or floor drains.

If the level in your septic tank is high, sewage might not be leaving the tank. If the level is low, the tank itself may have been compromised, or the piping between the house and the tank may be damaged. You can usually examine the tank level when there's access to the ground-level inspection point.

#### If you have problems with your septic tank:

- Limit the use of water in your home and use the two-bucket system or pit toilet option until repairs are made.
- Keep people and pets away from your septic system until it's back in service.
- Only use a licensed professional to repair or replace your septic system.
- If sewage is staying below ground and not backing up, continued use should be okay. Avoid any scenario where exposure to or contact with waste could occur.

## **Waste and Hygiene Considerations:**

- Use non-latex gloves when disposing of waste.
- Find out from your homeowner association (HOA), property manager or multi-family dwelling if there are pre-identified locations for pit toilets.
- Learn where your underground utilities are located to avoid hitting a utility line that can harm your system or delay a return to service.

**ACTIVITIES:** Pages 75-78

