

***How do people get an illness from flood water or sewage?***

Diseases are spread in two ways:

1. Direct contact with flood water, sewage or a sick person.
2. Indirect contact with flood water and sewage by using objects like toys and furniture or eating food that has touched flood water or sewage.

If you have symptoms such as fever, vomiting, diarrhea, headache, nausea, or cramps, call your doctor. If a child under one year of age gets these symptoms, call your doctor right away.

***What can be done to prevent problems?***

Prevention is the key. Follow these steps to reduce your risk:

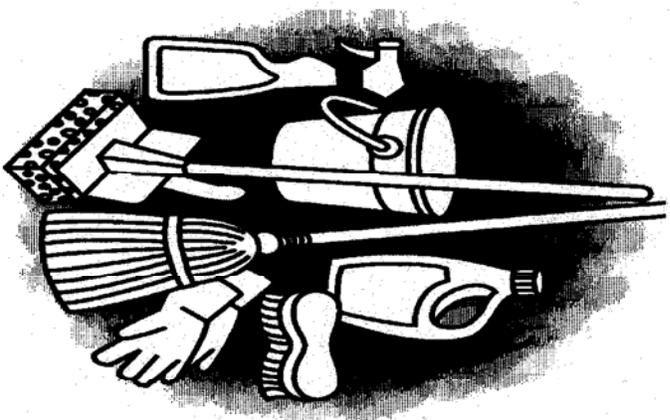
1. Wash your hands after every contact with the flooded area, after using the toilet, and before eating. Wash your hands under warm running water, use liquid soap, lather hands for at least 20 seconds, dry hands with a paper towel.
2. Follow appropriate sanitizing procedures.
  - Put 8 tablespoons of laundry bleach in each gallon of water used to sanitize contaminated areas and objects.
  - Discard cloth items that cannot be laundered, like stuffed animal toys or pillows.
  - Open windows and use fans to ventilate the contaminated area.
  - Keep pets out of the flooded area to prevent them from tracking sewage to other areas.

Dispose of trash, including objects like toys and clothing, in leakproof bags and label as "contaminated with sewage".

Large items that cannot be bagged, such as furniture or carpet, should also be labeled as "contaminated with sewage". Warning labels, attached to trash that is placed at the curb for pickup, will help prevent other people from salvaging these items.



*Note: This information was compiled from various health agencies. If you have questions, you should contact the St. Clair County Health Department at (810) 987-5300 and the City of Port Huron's Department of Public Works at (810) 984-9770.*



# CLEANING UP THE MESS

*... After the Flood or Sewage Back-up*

If flood waters or sewage fill your basement, you *must* take steps to prevent you and your family from becoming sick or injured. **Do not bring children into the flooded area during clean-up!**

### Cleaning and Sanitizing

1. Drain all flood waters and/or sewage by natural draining or pumping.
2. Remove dirt, soil and debris from surfaces that came in contact with flood waters.
3. Wash down all walls, floors and surfaces that the flood water or sewage touched with clean, warm or hot water and a low suds detergent.
4. Rinse again with warm or hot water.
5. Sanitize by rinsing walls, floors and surfaces using one of the following mixtures:
  - 2½ tablespoons of Lysol/Pine-Sol per gallon of water used, or
  - 8 tablespoons of laundry bleach (i.e., Clorox, Roman Cleanser) in each gallon of water used.
6. Air the area by opening windows or using fans.
7. Prevent tracking flood debris and sewage into clean areas.

### Utilities

The greatest danger is not the risk of disease, but the risk of electrocution or explosion. The following guidelines should be followed when entering a flooded area with gas and/or electricity present:

1. Have the utility companies shut off the gas and electricity.
2. Do not touch the fuse box or any plugged-in cords or appliances until the electricity is shut off. Touching these could result in electrocution.
3. If an electrical appliance motor or its controls are submerged under water, do not start it until consulting with the dealer or service company.

4. Do not re-light appliances until checked by the gas company. Make sure all pilot lights are on before re-lighting burners.
5. Do not light matches until the gas is turned off. If there is a gas leak, it could cause an explosion.

### Foods

Foods that are contaminated can make you and your family sick. They should be dealt with in the following manner:

1. Destroy and discard all contaminated bottled and boxed foods.
2. Canned goods (including home canned jars) may be kept if cleaned thoroughly. To clean containers:
  - Scrub with soap and water. (Use a brush around the rim of home canned jars.)
  - Submerge in chlorinated water for 15 minutes, using one ounce of bleach per gallon of water.
3. Food stored in a freezer will keep for two days after losing power if the freezer is full (one day for a half-full freezer) and not opened.
  - Air dry to prevent rusting.
4. If your freezer cannot be started in a day or two, store food in someone else's freezer.
5. Meat that has ice crystals may safely be re-frozen. If it is only "cool-feeling" it is best to cook it, and then re-freeze it.
6. Food stored in a refrigerator will keep for 4-6 hours after losing power, depending on how warm it is in the kitchen. Do not open the refrigerator unless absolutely necessary. You may add ice to the refrigerator if you know it will be turned on soon.
7. Throw out anything with an unusual color, odor, or if a perishable food is above 45°F internally.
8. Place discarded food in a tightly closed container until pick-up or disposal.

### Clothing and Bedding

Clothing, carpets, furniture, toys and bedding should be discarded unless they are cleaned and disinfected. Movable objects could be put outdoors to be cleaned and dried in the sunlight. Discarded clothing should be placed in a tightly closed container until pick-up or disposal.

After clean up, make sure that all clothing and parts of the body that came in contact with the flood waters and sewage are thoroughly washed. Be sure to wash hands immediately afterwards.

Persons engaged in cleaning operations should be particularly mindful of their personal hygiene. Contaminated fingers should be kept away from eyes, nose, and mouth. Persons are advised against smoking because soiled fingers carry disease germs to the cigarette and then to the mouth. After clean-up, hands should be thoroughly cleaned using a nail brush and a lot of soap.

### Disease Prevention

If you are faced with cleaning up an area that has been flooded or contaminated with sewage, you may be concerned about the health risks associated with this activity. There are disease-causing organisms that can be transmitted by contact with flood water or sewage.

Even though there is some risk of disease transmission during contact with flood water and sewage, that risk is relatively small. There have been many studies of individuals who work in sewage treatment plants. In the studies, it was found that these individuals do not have any greater incidence of infection from organisms than the general adult population. It was also found that the standard immunization requirements which apply to the general population would apply to those exposed to sewage. Therefore, no additional immunizations are needed after a flood or sewage back-up.