



FLOOD EMERGENCY INFORMATION

KEEP YOURSELF HEALTHY!

Consider all floodwaters contaminated!

We want you to keep yourself and your family healthy while you are recovering from the floods and getting your house back in order. Exposure to contaminated water, food, air, and garbage can cause illness. The following information will help protect you. Also check the Skagit County website at www.skagitcounty.net or call us at 360-336-9380.

Hand washing and Personal Hygiene

When you start clean up after flooding, you need to take precautions. Remember that you are working in a highly contaminated environment; you will need to increase personal hygiene to keep from becoming ill or risking a serious infection.

- Make sure you wash your hands often even if you are wearing gloves while working.
- When the only water for hand washing is contaminated you need to wash and then use an antibacterial hand sanitizer
- Always work in protective clothing (boots, gloves, and coveralls)
- Treat cuts and abrasions immediately by cleaning them with pure water and using an antibacterial product to protect them. Do your best to protect them from flood water and mud.
- Is your tetanus vaccination up-to-date? A booster is necessary every 10 years. Contact your health care professional or come to the Skagit County Public Health Department on Monday, Wednesday, or Friday from 8:00-4:00 for a tetanus booster shot. There is a charge for this service.

The most important message we at your Health Department can send is **WASH YOUR HANDS OFTEN!**

Drinking Water

A minimum of one gallon of water per person per day is needed for drinking, cooking and washing. Have several days' worth of water for each person in your household in advance.

Emergency sources of water inside the home include:

- Melted ice cubes
- Use water from the toilet tank (not the bowl) and water pipes

- Hot water tank. Turn off the power that heats it, and let the tank cool. Then place a container underneath and open the drain valve at the bottom of the tank. Don't turn the tank on again until water services are restored
- Any vegetables, fruit, pop or juice contain water. Your body doesn't care where the liquid comes from
- Swimming pool water may be used for bathing and flushing toilets
- Water Beds: Avoid water from water beds as a source for drinking water. Pesticides are in the plastic casing of the bed and chemicals have probably been added to the water to prevent the growth of algae, fungi, and bacteria. The water is safe only for hand-washing and laundering.

Emergency sources of water outside the home include:

- Rain water
- Spring water
- Water from streams, river, lakes, and coiled garden hoses can be used after it is purified.

IMPORTANT! - Water that is clear and pure in appearance can be highly contaminated with organisms that can make you sick. Follow these steps to purify water:

1. **First, strain water** containing sediment or floating material through a cloth or paper filter before beginning the purification process.
2. **Second, either heat sterilize** (boil the water) **or chemically sterilize (using chlorine/bleach or iodine tablets):**
 - Heat sterilization: The preferred method of purification because disease-causing- microorganisms cannot survive the intense heat. Bring water to a rolling boil for 1 minute. Pour the water back and forth from one clean container to another to improve the taste. Adding a pinch of salt could also help
 - Chemical sterilization (when boiling is not an option): New/fresh plain household chlorine bleach (5.25% chlorine) may be used. Be sure the label states that hypochlorite is the only active ingredient. Bleach containing soap or fragrances is not acceptable. With an eye dropper, add 16 drops of bleach per gallon of water, stir, and let stand. After 30 minutes the water should taste and smell slightly of chlorine. At this time it can be used. If the taste and smell (and appearance in the case of cloudy water) has not changed, add another dose of 16 drops of bleach and let stand. If after 30 minutes, the water does not have a chlorine smell, do not use it. Iodine tablets may be purchased in advance from a sporting goods store (e.g. Joe's on College Way in Mount Vernon).

Store water in glass or plastic containers that are clean and sanitary. Plastic containers are good because they are lightweight and unbreakable. Metal containers (except stainless steel containers specifically for the purpose of storing drinking water) should be considered as a last resort because they may corrode and give water an unpleasant taste.

Emergency Drinking Water and Well Disinfection during Flood Events

Wells that have been flooded may be contaminated with pathogenic organisms that can cause disease (bacteria, viruses). Do not drink the water until it has been

sanitized. A worksheet for disinfection can be found at : <http://www.skagitcounty.net/HealthEnvironmental/Documents/Individual%20Well%20Disfection%20Instructions.pdf> After you have disinfected the well, we recommend that you have it tested for bacteria. Contact the Health Department (336-9380) or www.skagitcounty.net/drinkingwater for more information. Samples may also be taken locally to Edge Analytical in Burlington (757- 1400).

Food Safety

If your power goes out, use food that spoils rapidly first. Most foodborne diseases are caused by bacteria in raw or undercooked foods of animal origin such as meat, milk, eggs, fish or shellfish. Proper storage and cooking of these foods can help prevent illness. Keep refrigerator and freezer doors closed to conserve cold air or keep cold food cold with ice, dry ice or snow. It is most important to keep meat, seafood and dairy products cold. If food is cold to touch, it is probably safe to keep, use or refreeze. Discard food you would normally refrigerate if it is not cold to the touch, or if it shows obvious signs of spoilage.

If food has been contaminated by floodwaters, it is best to simply throw it out. If you have concerns about doing this, contact Skagit County Public Health, Environmental Health Section at 360-336-9380.

Onsite Sewage Disposal (Septic Systems)

Before the flood

- Minimize water use.
- Be sure all tanks such as septic tanks and pump tanks are water tight with secure lids and risers.

During the flood

- If floodwaters have covered your septic tank, pump tank and/or drainfield do not use the septic system. The drainfield will be saturated due to higher water tables and surface water, and cannot accommodate or treat the wastewater from your home. Use emergency shelters provided by Red Cross. If you are still in your home during and after the flood, you can use the toilet bowl but do not flush. Use minimal paper. If necessary you can use a bucket with kitty litter or portable toilet (either a toilet in recreational vehicle or one provided by a company).

After the flood

- Minimize water use until flood waters completely recede. After flood waters recede if your toilets do not flush or sinks do not drain there may be several reasons:
 - The septic tank may be overfull
 - The pump tank may be overfull and/or the pump is inoperable
 - The drainfield is still saturated.
- Do not use the system until drains flow again. Use emergency shelters provided by Red Cross or portable toilets as above.
- If you have continued problems after flood waters recede call the Skagit County Health Dept.

Mold and Indoor Air Quality

If your home has had flood waters in it, there are steps you can take to reduce mold growth in your home. Also, you need to be careful of exposing yourself to dangerous levels of certain gases in an attempt to dry out your home.

- Remove standing water as much as possible from floors, carpets, clothing, etc.
- Remove wet materials that cannot be dried within 48 hours.
- Flooded basements should be emptied only one-third of the volume each day, beginning once the surrounding floodwater has receded.
- Dry the inside of the house. Open windows, closets, doors, the attic, eaves, and other vents. Warm the house at least 15 degrees higher than outside temperature and open a few windows to allow for moisture to leave the house (make sure the electrical and gas systems are not hazardous first before using). To dry areas between walls, remove the baseboards and drill or punch holes in the wall about two inches from the floor
- **Avoid Carbon Monoxide poisoning.** Carbon Monoxide can build up rapidly if certain types of combustion devices (such as gasoline-powered generators, camp stoves, lanterns, and charcoal-burning devices) are used indoors. Do not use combustion devices designed for outdoor use. Information in several languages is available at the following website: <http://www.doh.wa.gov/Topics/weather.htm>
- Check for gas leaks. If you smell gas or hear a blowing or hissing noise, open the window and quickly leave the building. Turn off the gas at the outside main valve if you can and call the gas company from a neighbor's home. If you turn off the gas for any reason it must be turned back on by a professional.

Solid Waste, Chemicals, Vectors and Animal Carcasses

Properly disposing of garbage, chemicals and possible dead animals will help ensure you stay healthy.

Before and during a flood event:

Place all solid waste in plastic bags or containers that will not fall apart when wet. Secure containers in buildings or to objects that are not going to float away if water floods the area.

Pay special attention to bags, containers or barrels of chemicals and hazardous substances such as: pesticides, paints, oil, fuels, propane and gas canisters and tanks. Secure the containers in buildings or to objects that will not float away if water floods the area. Make sure all lids are secure and closed on all containers and barrels so that the chemicals can not spill or leak out of the container. Whenever possible, place the chemicals above the expected high water mark in a secure location to keep them dry and prevent them from floating away.

After the flood waters subside:

Bag up all garbage and place in garbage cans and containers (such as metal or plastic) that keep rodents and other animals from getting into the garbage. Dispose of all food that was contaminated by floodwaters into containers that keep

rodents and other critters from feeding on the food waste. Clean up debris such as flood damaged carpeting and furniture to eliminate hiding places for rats and mice.

As soon as possible haul garbage to the nearest solid waste disposal site. The Skagit County Transfer Station (424-7807) and the Sauk Transfer site (853-8810) are the best locations to dispose of solid waste during and immediately after a flood event.

The Skagit County Transfer Station has a Household Hazardous Waste Facility (424-3873) that can dispose of chemical and hazardous wastes. The transfer station hazardous waste facility can dispose of fuels that are contaminated by water and other chemical wastes.

Dead animals should be buried or contact a dead animal disposal company to pick up the carcass as soon as possible after flood waters subside. Bury the carcass at least two feet below the ground surface. Bury the dead animal at least 100 feet away from drinking water wells or where streams or lakes are normally present.

Skagit County Public Health Department

360-336-9380

700 South 2nd Street, Room #301, Mount Vernon, WA 98273

www.skagitcounty.net/health