



## Clean-up after a Flood

### What are the health hazards after a flood?

Anyone who has had a flood at home is anxious to get back to ordinary life as soon as possible. However, it is important to remember that floodwaters are usually very dirty and items that have come into contact with flood water should be handled properly. During a flood, water leaves its normal course and washes over land, and may come into contact with farmyards, manure, garbage, overflowing septic systems and other sources of contamination and disease. Flood waters can become heavily contaminated and can make people sick.

### When is it safe to return home?

You should not live in a home that has been flooded until clean-up is finished, a supply of safe water is available, and proper disposal of human waste and garbage has been arranged.

If your home is served by a public water supply system, you will be notified if, and when, your water is safe to drink. If your water supply comes from your own well, you must assume that the water is contaminated and not fit to drink without additional treatment and tests to show the water is safe. For more information, see HealthLink BC File [#05b Should I Get My Well Water Tested?](#) If the water in the well looks clear, it may be used after it has been disinfected.

For more information see HealthLink BC File [#49b How to Disinfect Drinking Water](#).

### How do I clean my flooded home and outbuildings?

All movable furnishings should be taken outside. Upholstered furniture that has come in contact with water should be left outside to dry completely. Direct sunlight can be a strong disinfectant however, additional cleaning may be necessary. Thoroughly scrub and clean all surfaces and floors with hot water and detergent

as soon as possible after the water has gone down. Clean all woodwork with soap and water.

After cleaning surfaces, wash these with a sanitizing solution. The solution can be made by mixing 500g of chlorinated lime in 25 to 40 litres of water (1 pound of chlorinated lime in 6 to 10 gallons). Household laundry bleaches containing 5 to 6 percent sodium hypochlorite may also be used; information will be included on the label. Mix 1 litre of household bleach in 25 litres of water (1 quart of household bleach in 6 to 10 gallons of water). Be sure to wear protective gloves, eye protection, and boots, as strong solutions may irritate skin and eyes and cause respiratory symptoms. Clothing that has been worn while cleaning should be washed separately in hot water and detergent.

All standing water in flooded basements should be disinfected, but remember to wait until the flood waters have left the surrounding ground. Measure 2 litres of household bleach and distribute it evenly over any standing water. Stir the bleach and water together as much as possible. Repeat this every 4 to 5 days for as long as the water remains. When pumping basements, do not pump the area too quickly as water in the surrounding soil may cause the collapse of basement walls and/or uplifting of basement floors.

Once the water has been removed from the basement, remove all the silt and mud right away. You may need to use a hose, buckets of water, and rough scrubbing. Remove all items that have come into contact with the flood water including furniture, carpet, toys, clothing and other items. Open all windows to help with drying and apply heat using a furnace or stove if possible. Disinfect all surfaces exposed to flood waters by brushing on a sanitizing solution.

All sheds, garages and other buildings where goods are stored need to be cleaned and disinfected. In particular, utensils and containers used to prepare, preserve or store food need to be washed well and soaked in a chlorine solution.

### **What about septic tanks and disposal fields?**

Flooding can seriously affect your septic system by undermining the soil that supports it. After the flood waters recede and you return home, consult with your local public health inspector and an authorized person in septic system construction and maintenance for advice on your septic system. To contact a registered onsite wastewater practitioner in your area, visit <http://owrp.asttbc.org/c/finder.php>

Following the clean-up of buildings, you must remove flood-borne material from yards. For information on disposal services and regulations in your area, contact your municipality or regional district.

### **What precautions should be taken for food safety?**

The following precautions should be taken after a flood or when food comes into contact with flood waters:

- Food should be destroyed unless it has been packaged in waterproof containers that can be easily cleaned and sanitized. It is hard to make food directly exposed to flood waters safe to eat, especially if it has become heavily contaminated. Washing, sanitizing and properly cooking food may not destroy dangerous bacteria and chemical contaminants.
- Never eat or drink uncooked or raw foods exposed to flood waters, even if you have tried to wash and sanitize them.
- Throw out boxed foods, fresh vegetables and fruit, bottled drinks and home preserves.
- Throw out all perishable foods that have been at temperatures above 4°C for more than 2

hours such as, meat, poultry, eggs and dairy products.

- Wash your hands often if you have been cleaning up after a flood, especially before handling or eating food.
- Throw out canned goods if there is a damaged seal, bloated can, or the contents show signs of seepage. Open cans in good condition only after taking off the label, thoroughly washing the can in warm soapy water, and putting it into a sanitizing mixture. A sanitizing mixture can be made by mixing 40 mL of household bleach in 1 litre of water (5 ounces or 10 tablespoons of 5 to 6 per cent household bleach to 1 gallon of water. Remember to clearly mark the contents on the container if it will not be used right away.
- Throw out previously opened bottled food and drink products because it is very hard to clean under the caps. Throw out unopened bottles if the contents show signs of seepage.
- Wash with warm soapy water and then sanitize all contaminated utensils, dishes and food contact surfaces, such as drawers, shelves, cutting boards and countertops.

### **For More Information**

For more information about clean-up after a flood, please contact the environmental health officer at your local public health unit.

<http://www.health.gov.bc.ca/socsec/>



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