



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 flood waters are usually very dirty. Items that have come into contact with flood water should be handled carefully. Flood waters passing over land 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?

Do not return home until authorities have advised that it is safe to do so. You should not live in a flooded home until clean-up is finished, a supply of safe water is available and proper disposal of human waste and garbage has been arranged.

If a public water supply system serves your home, 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 HealthLinkBC File #05b Well Water Testing. If the water in the well looks clear, you may be able to use it after disinfection.

For information on how to disinfect your drinking water see <u>HealthLinkBC File #49b Disinfecting Drinking Water</u>.

Should I worry about asbestos?

If you must remove building materials such as drywall or insulation, assume they contain asbestos until testing indicates otherwise. It is impossible to assess whether a building or material contains asbestos without appropriate testing. If asbestos is present, asbestos-containing materials should be removed by certified

professionals. Other clean-up work can continue, as asbestos poses little risk when it is undisturbed. For more information, see HealthLinkBC File #32 Asbestos: When Should I Worry.

How can I protect myself during the cleanup?

Wear appropriate protective equipment for all clean-up activities including puncture-proof and water-proof boots, protective gloves, eye protection and a well-fitted respirator such as an N95.

During cleaning, avoid touching exposed skin with contaminated gloves or items. You should wash clothing worn while cleaning separately in hot water and detergent. You should not wear footwear used during clean up into clean areas.

Remember to bathe or shower using soap and warm water after you have finished any cleaning activities. Seek healthcare for any rashes, eye irritation or onset of gastrointestinal illness.

How can I disinfect surfaces?

A mixture of 40 mL of household bleach in 1 L of water is an effective disinfectant for killing bacteria and suppressing mold. A fungicidal treatment is needed to kill mold completely. Always follow manufacturer safety instructions when handling disinfectants and fungicides.

How do I clean my flooded home and outbuildings?

You must clean, disinfect or discard all items and surfaces that came into contact with flood water. Surfaces up to 60 cm above the flood line should also be cleaned, disinfected and dried.

All movable furnishings should be assessed for their contact with flood waters. Upholstered furniture that has come in contact with water should be discarded or reclaimed with the help of a professional. Similarly, all flooded insulation, particleboard furniture, mattresses, bedding and stuffed toys should be discarded. Thoroughly scrub and clean all other surfaces and floors with hot water and detergent as soon as possible after the water level has gone down. Clean all woodwork with soap and water. After cleaning surfaces, treat them with a disinfectant. All standing water in flooded basements should be slowly removed before clean-up begins. Pump only 20% of the standing water per day to prevent collapse of the surrounding soils damage to the building structure.

Once the water has been removed from the basement, remove all the silt and mud as soon as possible. You may need to use a hose, buckets of water and rough scrubbers. Open all windows to help with drying and apply heat using a furnace or stove if possible. Clean all surfaces exposed to flood waters by washing them with detergent and then treat with a disinfectant.

All sheds, garages and other buildings that have been flooded also need to be cleaned and disinfected, particularly if goods are stored in these spaces.

What about septic systems and waste disposal?

Flooding can seriously affect your septic system by undermining the soil that supports it. Disinfectants can also affect septic system performance. After the flood waters recede and you return home, seek advice on restoring your septic system from a professional (ex. Professional Engineer) or Registered Onsite Wastewater Practitioner.

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?

When food and food-contact surfaces (drawers, shelves, cutting boards and countertops) come into contact with flood waters:

- Throw out all non-perishable food that isn't packaged in a waterproof container. You should also throw out any bottles or containers that were not sealed before the flood
- 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
- During power outages, a full freezer will keep foods frozen for up to 2 days. Foods in a freezer that have thawed and remained above 4°C for more than 2 hours should be thrown out and not refrozen. For more information see: Food Safety During Flood Disasters
- If you are under a boil water advisory, use bottled or boiled water for washing and preparing foods that will not be cooked. Tap water can still be used for washing hands with soap for 20 seconds, and in foods cooked to 74°C and higher
- Wash your hands often if you have been cleaning up after a flood, especially before handling or eating food. Use hand sanitizers
- Throw out canned goods if there is a damaged seal, bloated can or the contents show signs of seepage. Canned foods with a small amount of surface rust are acceptable if the rust can easily be removed with a cloth. Discard heavily rusted cans because pinholes can allow dangerous bacteria to enter
- Cans that are in good condition only after taking off the label, thoroughly washing the can in warm soapy water and putting it into a disinfecting mixture. Remember to clearly mark the contents on the container if it will not be used right away
- Clean all cookware, dishes, utensils, containers and food contact surfaces with warm soapy water and then disinfect them

