

## POTENTIAL FLOOD HAZARDS and PERSONAL SAFETY PRECAUTIONS

### General Information



Flooding can cause many serious safety and health hazards, unless appropriate steps are taken to protect ourselves and the environment. Flood water can be heavily contaminated with sewage and other pollutants, such as pesticides, oil or chemical waste. Also, only 60 centimetres of moving water can cause a car to be swept away, and as little as 15 centimetres of water can cause unstable footing.

There are a number of precautions you can take to prevent illness and serious injury. Here are some hazards to be aware of and some prevention and precaution tips:

#### Hazards

- Never try to drive through floodwater. Water can be deeper than it appears, and levels can rise very quickly. If a car stalls in floodwater, get out quickly and move to higher ground.
- Many materials can cause contamination of water and soil. Move all chemicals such as pesticides (including herbicides), fertilizers, etc. and store in water-proof containers above flood levels. If you see or have knowledge about a serious spill or contamination, report to 1-800-663-3456.
- Floating garbage can cause serious health problems and is often overlooked by homeowners. If you are in danger of being flooded ensure that all garbage and refuse is removed to higher ground or removed.
- If you see downed power lines, do not try to repair or grab them. Even when flood water levels appear to have subsided, electrical currents can travel through the remaining water over a distance of more than 100 metres. Contact your local utility company or police department to report downed power lines.
- Submerged gas control valves, circuit breakers and fuses pose explosion and fire hazards. Replace all gas control valves, circuit breakers and fuses that have been under water.
- Electrical appliances – Unplug electrical appliances and move them to a higher level
- Get information about electrical safety [www.bchydro.com/safety/](http://www.bchydro.com/safety/) or [www.safetyauthority.ca/?q=flooding\\_information](http://www.safetyauthority.ca/?q=flooding_information)
- Natural gas – Know how to safely turn off your gas go to: [www.terasengas.com/Safety/SafetyHomeWork/EmergencyPreparedness/Floods/default.htm](http://www.terasengas.com/Safety/SafetyHomeWork/EmergencyPreparedness/Floods/default.htm)
- Leaking propane tanks or natural gas can cause a fire or explosion. If you must evacuate your home or property, know how to secure and shut off all propane tanks and gas lines. Upon return, get a qualified professional to turn gas back on.
- The longer you allow water to stand in your home or other buildings, the higher the risk of health problems from bacteria or mould carried in the floodwaters. Washing affected areas with a solution of one part household bleach to ten parts water will remove mould and mildew. The risk of moulds growing will continue as long as there is any significant moisture still remaining in your home, as moulds thrive on moisture and warmth.
- For more information go to: One Step at a Time to Flood Recovery <http://www.pep.gov.bc.ca/floods/docs/FloodRecoveryGuide.pdf>

## Safety Precautions

- If you see livestock or other animals being evacuated, stay out of the area so the evacuation can be done safely. Frightened animals can be difficult to control. Loud equipment and vehicles, including low-flying aircraft, can startle animals unnecessarily.
- If you can, wear gloves and boots to avoid skin contact with anything that has been contaminated by floodwaters. Parents should not allow children to play in flooded areas.
- Wash your hands frequently with soap and disinfected water to prevent the spread of disease. This should be done before preparing or eating food, after toilet use, and after flood clean up when you may have come into contact with contaminated articles.
- If your well has been flooded, assume the water in your home has been contaminated. If you are on a public water system, listen to your local media for news from your health authority to find out if your water is contaminated. Each Health Authority will have a list of boil water advisories for their area. Find your local Health Authority at <http://www.healthservices.gov.bc.ca/socsec/index.html> :
- If water is contaminated, bottled water is the best choice, or please check out "How to Disinfect Drinking Water" at <http://www.bchealthguide.org/healthfiles/hfile49b.stm>
- Any of the following food items exposed to flood waters should be disposed of:
  - the contents of your freezer or refrigerator, including all meats, fresh fruit and vegetables,
  - all boxed foods such as cereals,
  - all bottled drinks and products in jars, including home preserves – since the area under the seal of jars and bottles cannot be properly disinfected,
  - all medicines, cosmetics and other toiletries.
- All undamaged canned goods should be thoroughly washed and disinfected and any cans with large dents or leaks of any kind should be disposed of.
- Wash and disinfect all dishes and utensils to prevent possible illness from contamination.
- If you lose power during or after a flood, NEVER USE a gas oven, range, barbeque, hibachi or portable propane heater to heat your home. These units use up the oxygen and give off carbon monoxide, which can cause suffocation and death if used indoors.
- If electric motors such as washers and dryers have been flooded, do not re-start until they have been fully inspected by a qualified electrician. If gas has been turned off, it must be turned back on by a qualified professional.
- If your home has been flood damaged, do not attempt to turn the power back on in your home; have all wiring inspected by the electrical inspector or an electrician.
- Stay out of buildings if floodwaters remain around or in the building and ensure that BC Hydro has disconnected the electricity before you enter.
- If the building is primarily flood water-free, inspect the foundations for cracks or other damage before entering. Once inside, examine walls, floors, doors, and windows to make sure that the building is not in danger of collapsing.
- Most flood deposits do not contaminate soil enough for concern. If there is a danger, public warnings will be issued.
- In most instances, flooding will not seriously affect septic tanks. However, flooding may cause damage to your sewage disposal field if you use the system before flood waters have dropped below the distribution trenches in your septic field. It is suggested that you get more information before using your septic system after a flood.