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# After a Flood

This fact sheet provides basic information only. It must not take the place of medical advice, diagnosis or treatment. Always talk to a health care professional about any health concerns you have, and before you make any changes to your diet, lifestyle or treatment.

### After a Flood

After a flood, it is important to restore your home as soon as possible to protect your health and prevent further damage to your house and its contents.

Flooding may not only cause damage to the structure of the house, but the flood water can also contain sewage, particularly in rural areas, that may pose a serious health hazard.

Dug or drilled wells can also be contaminated by flood water. It is important that you do not drink the water until you can get your well tested to confirm it is safe to drink. Refer to *Keeping Food and Water Safe after a Flood* fact sheet and Health Canada's fact sheet <a href="http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/well-puits\_e.html">http://www.hc-sc.gc.ca/ewh-semt/pubs/water-eau/well-puits\_e.html</a> for information on safe drinking water and how to correctly disinfect your well.

Another concern from flooding is the possible growth of mould that could contribute to adverse health effects. Remedial action should be undertaken as soon as possible to reduce or eliminate conditions that support mould growth.

### **Safety Tips**

- Before entering your house, complete a
  perimeter check to ensure there is no
  structural damage. If structural damage is
  present, contact your local building
  department for advice.
- Put your own safety first. Avoid electrical shocks by wearing rubber boots, keeping

- extension cords out of the water and shutting the power off to the flooded area at the breaker box. You may wish to contact your electrical utility for help if you need it.
- If you detect vapours or smell unusual odours such as gasoline, natural gas or propane, leave the property immediately and call your local gas company and fire department.

# What you should do before you begin the clean up:

- It is important to wear protective clothing, including rubber gloves, rubber boots, masks, protective eyewear, etc.
- Contact your insurance company immediately. Take photographs and keep a record of the damage, including any discarded items.

## The Clean Up

A home that has experienced extensive water damage or has been flooded with high levels of sewage contamination may require the assistance of a professional to complete a thorough clean up.

If you have property insurance, you should consult with your adjuster prior to undertaking any clean up.

### Removal of Water, Dirt and Debris

 Remove water from your flooded home slowly. Draining in stages (about one third



- of the volume daily) will prevent any additional buckling of the walls or floor.
- Open windows and doors to air naturally.
- Remove standing water with pumps or pails, then with a wet/dry vacuum.
- Remove all soaked and dirty materials and debris, including wet insulation and drywall, residual mud and soil, furniture, appliances, clothing and bedding.
- Remove any dirt sticking to the walls and furnishing by hosing and then rinsing several times. Next, clean all the floors. Any flooring that has been deeply penetrated by flood water or sewage should be discarded (i.e. carpet, rugs).
- All drywall and insulation affected by flood water should be removed at least half a meter above the high-water line.
   Removing only the affected part of the wall can be done if action is taken immediately after the flood. Drywall that has been exposed to high humidity or standing water for a prolonged period of time should be removed in its entirety and discarded. Ceiling tiles and paneling should be treated like drywall.

### **Cleaning and Disinfection**

- Wash and wipe/scrub down all affected or flooded surfaces by following these 2 steps
  - Wash with soap and clean warm water
  - Rinse with clean water
- Concrete surfaces can be cleaned with a solution of TSP (tri-sodium phosphate) in water (one half cup TSP to one gallon of warm water).
- If floodwaters are contaminated by sewage, disinfection is recommended following cleaning.
  - Disinfect with a household bleach solution of 1 cup of bleach mixed with 5 gallons of water.
    Caution: bleach may permanently discolour some items. When using bleach, it is recommended that gloves and eye protection are worn.)
- Surfaces that are dry and/or have not been directly affected by the flood water should be vacuumed with a HEPA vacuum cleaner. Washable surfaces can be cleaned with a mixture of detergent and water.

- After cleaning the surfaces, ventilate or dehumidify the house until it is completely dry. Rapid drying is important to prevent the growth of mould.
- After completing the cleanup, wash your hands with soap and warm water. If clean water is not available, use water that has been at a rolling boil for 1 minute (allow the water to cool before washing your hands) or bottled water.
- Wash all clothes worn during the cleanup in hot water and detergent. These clothes should be washed separately from uncontaminated clothes and linens.

### What to do with the contents in your house

It is often difficult to make decisions about what to keep and what to throw out. It is best practice that "if in doubt, throw it out"! Household items (i.e. absorbent items such as insulation, carpets, rugs, upholstered furniture, and mattresses) that have been contaminated by sewage, or that have been wet for a long time, will have to be bagged, tagged and discarded according to local waste management requirements.

### Mould

After a flood, the excess moisture and standing water may contribute to the growth of mould in homes. When returning to a home that has been flooded, be aware that mould may be present and may be a health risk for your family.

- To minimize mould growth, if possible, move items to a cool, dry area within 48 hours and set up fans and/or dehumidifiers.
- Any wet drywall and insulation should be removed in accordance with the recommended steps above. The space created by the removal should be allowed to dry thoroughly before new drywall and insulation is installed.
- If there is an extensive amount of mould in your home or the mould quickly reappears after cleaning, call your local health department for advice (http://www.health.gov.on.ca/english/publi c/contact/phu/phuloc\_mn.html).

### Before Moving Back In

 Do not use flooded appliances, electrical outlets, switch boxes or fuse/breaker

- panels until they have been checked by your local utility.
- If they have been soaked, consult an HVAC (Heating, Ventilation and Air Conditioning) contractor to replace the furnace blower motor, switches and controls, insulation and filters. Inspect all flooded forced air heating ducts and return-duct pans and have them cleaned out or replaced. Seek advice from your local utility about a water heater that has been wet. Refrigerators and freezers may need to be replaced.
- Flush floor drains and sump pits with detergent and water and scrub them to remove greasy dirt and grime. Clean up, footing drains outside the foundation if necessary.

### Sources

Canada Mortgage and Housing Corporation – *After the Flood: A Homeowner's Checklist* <a href="http://www.cmhc-schl.gc.ca/en/co/maho/em/em\_001.cfm">http://www.cmhc-schl.gc.ca/en/co/maho/em/em\_001.cfm</a>

Centers for Disease Control and Prevention - *After* a *Hurricane* or *Flood:* Cleanup of Flood Water <a href="http://www.bt.cdc.gov/disasters/floods/cleanupwater.asp">http://www.bt.cdc.gov/disasters/floods/cleanupwater.asp</a>

Centers for Disease Control and Prevention – *After a Flood* http://www.bt.cdc.gov/disasters/floods/after.asp