



Risk Control

The Flood Preparation Guide

Even if your business made it through the winter season unscathed, it's important to implement a plan for weather-related property damage throughout the year. In addition to the threat of floods that occur when severe weather hits, snow and ice have been known to pile up, leaving you open to flooding risks. When temperatures rapidly increase, so does the rate at which snow and ice melt. As spring temperatures begin to rise, it's imperative for businesses to create emergency plans for flooding, which could cause costly property damage or disrupt your routine business operations.

While flooding is commonly defined as the rise and overflow of a body of water that covers land not usually under water, you should check the specific wording and coverages outlined around flood and flood coverage in your insurance policy. In Canada, overland flooding costs the Canadian economy more than any other hazard, and is the single largest draw on the Disaster Financial Assistance Arrangements (DFAA). Flood mapping identifies the boundaries of a potential flood event and is critical to support informed decisions and investments to reduce the impacts of flooding in communities across Canada. In consultation with provincial and territorial partners and key stakeholders, the federal government has developed the Federal Flood Mapping Guidelines Series. These are a series of evergreen guidelines that help advance flood mapping activities across Canada. Although no single official public source for flood hazard information is available, most of Canadian provinces have developed online access to maps of floodplains and reports on various portions of Canada's territory. Use it to find your official flood map, access a range of other flood hazard products, and take advantage of tools for better understanding flood risk. In addition to public safety government materials, insurers have resources to help in the planning, preparation and prompt action will help minimize the risk of flooding affecting your facility and interrupting your business.

Help minimize business interruptions through planning and preparation.

During floods, the greatest effort should be made to keep water out, rather than planning to remove it once it fills the building. In planning for floods, a detailed list should be developed, indicating the order in which processes are to be shut down and the facility secured. Where flood shields are provided, they will help keep water out. These are permanent parts of a structure, but need to be slid into place or bolted on before the flood waters rise. If your facility doesn't have flood shields, either sandbags or sheet metal coverings can be used to seal openings, but these supplies must be on hand. It is important to keep boiler houses and pump rooms as dry as possible.

Impacts of flooding

Basic flooding concerns:

- Undermining foundations of facility.
- Structural damage to facility.
- Water damage to equipment and contents.
- Utility disruption.
- Increased fire risk.
- Electrical panels above maximum water level.

Before flooding occurs (when a Flood Watch is issued)

- Know your flood zone and create a plan of steps to take if a flood should occur.
- Use flood shields, sandbags or sheet metal covers to help keep floodwaters out.
- Move stored goods raised off the floor or moved to higher floors, especially in basement areas.
- Fill storage tanks either within the building or nearby if they are not anchored securely enough to keep from floating.
- Place barriers around sprinkler risers, gravity tank risers and key equipment to keep them from being damaged by floating debris.
- Shut down hazardous processes.
- Turn off all open flames, shut off the main gas valve and close discharge valves on all tanks that contain flammable liquids or dangerous chemicals.
- Move or raise chemicals that produce heat or noxious gases when reacted with water to upper levels.

Increased fire hazard concerns

- Fire hazard can be serious during flooding conditions.
- Fire departments may be unable to respond during severe flooding.
- Sprinklers are the only line of defense during flooding.
- Water supplies may be unavailable.
- Lightning strike, electrical malfunction or flammable release are possible during flooding.

Increased Electronic Data Processing (EDP) concerns

- Place sandbags at vulnerable building openings, and divert water from critical EDP areas, such as holes in foundations, doorways and sills.
- Update important backup records and move them to a location not vulnerable to flooding.

- Move important equipment and reports to higher elevations.
- By knowing the past flooding history of the area, reasonably safe areas can be selected. If major equipment cannot be moved, coat vulnerable metal surfaces with grease.
- Shut down IT processes safely and shut off electrical power to buildings in imminent danger of flooding. Electric motors or other electrical equipment that might be running during flooding will have greater damage.

As the water recedes

- An immediate damage assessment should be made.
- Pay special attention to possible fire hazards or impairment of fire protection equipment.
- Salvaged operations should be initiated.
- Use extreme caution around damaged or submerged power lines. A qualified electrician or maintenance team member should check the status of electrical systems before others enter the area.
- Drains should be cleared of debris.
- Emergency/salvage teams should not smoke or use heat producing devices if flammable liquids or gases are present.

After flooding subsides

- After all floodwaters recede, assess damage and begin salvage.
- Repair damaged fire protection equipment first.
- Avoid power lines to minimize risk of electrocution.
- Clear drains of debris.
- Clean and dry all electrical equipment, then test for proper operation.
- Check for mechanical damage due to weight of floodwaters and water pressure.
- Clean and purge gas lines before restarting boilers.

To learn more about how CNA's Risk Control services can help you manage your risks and increase efficiencies, please contact your local CNA Risk Control Consultant, or visit cnacanada.ca.