

# Prevent Sewer Back Up and Basement Flooding

## Protecting your home from sewer back up

Sewer back up results when the volume of water and sewage flowing into the sewer system exceeds its capacity. Heavy rains are a major cause of sewer back up. Other causes are blockages from tree roots, collapsed sewer pipes and improper use of the sewer system.

Here are some of the best ways to protect your home from sewer back up:

- Have a mainline automatic sewer backwater valve installed by a professional contractor in the sewer line as it leaves your house.
- Install an automatic sump pump that discharges outside and away from your home.
- As a secondary form of protection against flooding or blockages, such as tree roots, consider installing branch line backwater valves.
- Disconnect all rainwater downspouts from your basement sewer system and have them discharge outside and away from the house.
- Keep sewer caps on all sewer outlets (floor drains, washer stack, sump holes, etc.) during rainstorms.

### Important features to look for in a sewer backwater valve:

- It is certified and conforms with the plumbing code.
- It operates automatically, even if you're not at home.
- It protects your whole home, not just branch lines.
- It is easy to inspect for blockages and access for maintenance.
- It requires professional installation by a plumbing contractor.
- It requires the removal of some concrete from your basement floor during installation.

**Note:** If you have a backwater valve and suspect it is closed due to a sewer system back up, such as during a heavy rainstorm, you should avoid using the toilet, sink, shower, washer, dishwasher or any other appliance that uses water. Your household waste water will not be able to get past your backwater valve if it is closed to protect your home.

Automatic sewer backwater valves require occasional maintenance to ensure your home is protected. Ask your plumber to give you advice on what is required.

## Preventing ground water flooding

Many homes are equipped with a weeping/drain tile system near the foundation designed to collect ground water and direct it to a sump pit. Homeowners should have a sump pump installed in the sump pit by a certified professional. Water from the sump pump should be directed outside the home away from the foundation. The best type of sump pump includes a battery backup in case of power failures. Some examples of available sump pumps are illustrated below.



Submersible



Pedestal



Submersible with battery backup

**Note:** Be sure to check the operation of your sump pump regularly from spring to fall to ensure it's working and your home is protected.

## ► Tips to reduce basement flooding in your home

- Make sure your lot grading slopes away from the foundation of your house.
- Use window well covers for below ground windows.
- Avoid pouring fats, oils or grease down household drains.
- Install a sump pump to remove excess ground water.



## ► Preventative measures you can take after a sewer back up loss

If you have suffered a sewer back up loss, you will be required to have a mainline backwater valve professionally installed in your dwelling as a basic loss prevention measure to be eligible for the broadest sewer back up coverage available to you.

Ask your insurance broker to explain how your policy covers basement flooding and sewer back up. Please advise your broker if you have a mainline backwater valve, as you may qualify for a discount on your Home Pak premium.

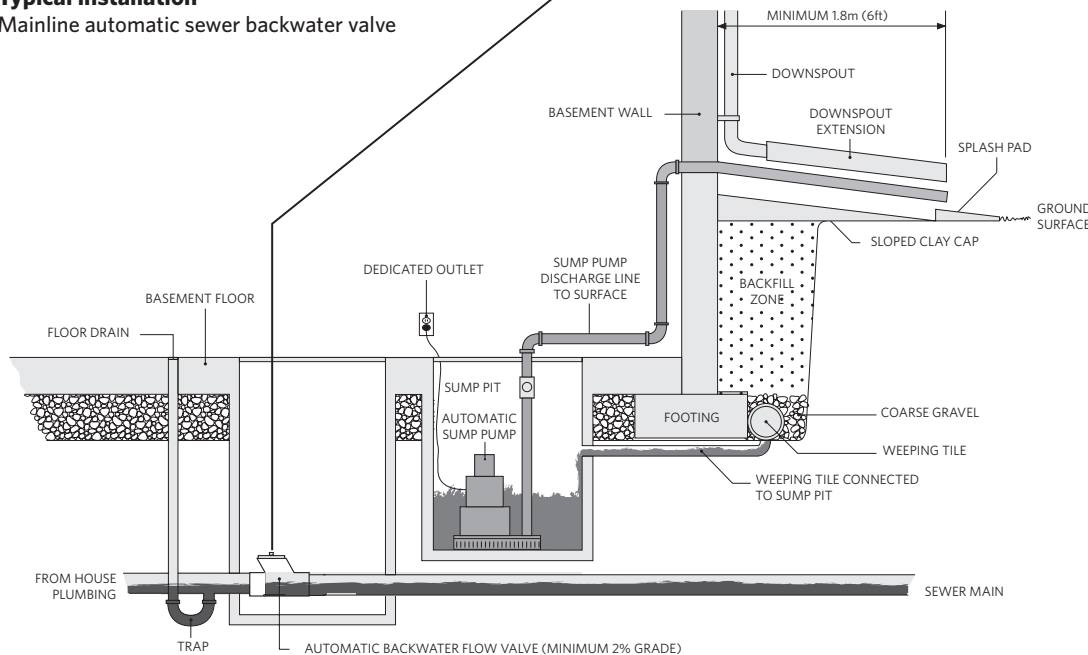
For more loss prevention and insurance information, please visit [www.sgicanada.ca](http://www.sgicanada.ca). You may also watch an informative video on reducing basement flooding at [www.sgicanada.ca/sk/sewer](http://www.sgicanada.ca/sk/sewer)

Produced in association with:

- City of Regina
- City of Saskatoon
- Mechanical Contractors Association of Saskatchewan
- Institute for Catastrophic Loss Reduction

### Typical installation

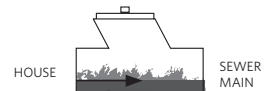
#### Mainline automatic sewer backwater valve



#### Backwater valve operation



**Closed position**  
Prevents surcharge from backing up into building.



**Open position**  
Allows normal operation of the sewer lateral.

Backwater valves normally stay open until a sewer back up occurs. An open valve allows sewage and sewer gas to flow properly, and only the normally open type of backwater valve is allowed to be installed in sanitary sewer laterals under many provincial building codes. When a sewer back up occurs, the sewage pushes the valve closed. When the valve is closed, sewage cannot get in, or out, of a building. (Information courtesy of the Institute for Catastrophic Loss Reduction)

