

Sewage backup factsheet

What is a sewage backup?

Sewage consists of wastewater from toilets, sinks, tubs, showers, dishwashers and clothes washers. A sewage backup occurs when sewage from a private sewage system or sanitary sewer enters a home and/or onto the property. Sewage backups can be caused by a blockage or plumbing problem. Blockages that lead to backups are often caused by people putting improper things down the drain or toilet, such as cooking grease, wipes, paper towels, food or other garbage. Use the green bin or garbage to dispose these items.

Health concerns

Water contaminated with sewage may carry pathogenic micro-organisms which can make people ill upon exposure. Sewage backups can also contaminate drinking water supplies, surface water and property.

Where does my sewage go?

There are two types of sewage treatment systems – private or municipal. Sewage goes to a private disposal system or to a municipal system where it is transported to a water resource recovery facility (WRRF) for treatment.

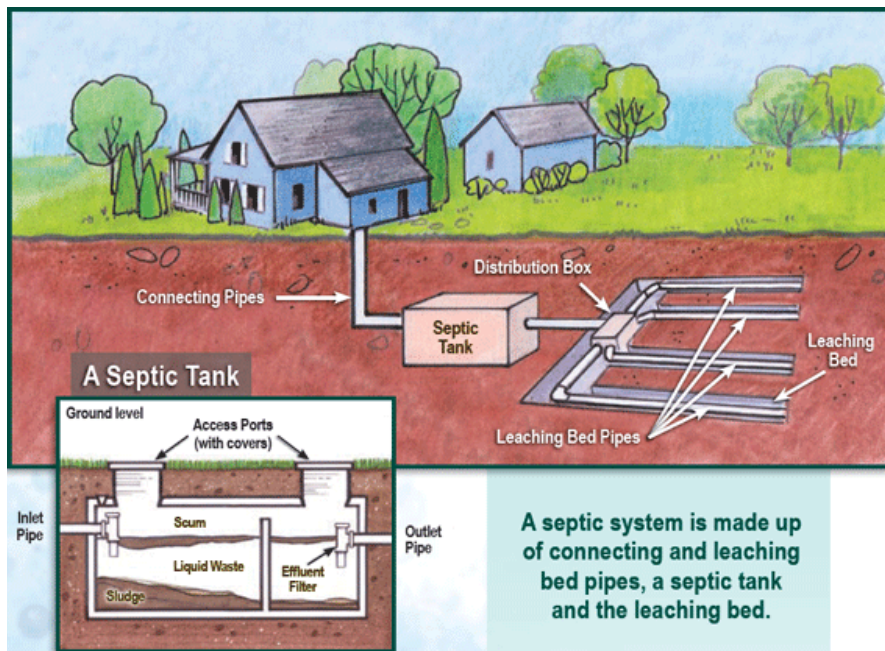
Private sewage systems

Private sewage systems fall under the authority of the *Ontario Building Code Act*, part 8 - Sewage Systems. A permit issued by the Municipal Building Department is required for all new homes serviced by a private sewage system or for any alteration to an existing system or building. The Ontario Ministry of the Environment and Climate Change has jurisdiction over private sewage systems greater than 10,000 litres. If you need information on your private sewage system, contact your local municipality.

In a private sewage system, household wastewater flows through drain pipes to an outdoor, underground septic or holding tank. In a septic system, solids settle and separate from the liquid. The liquid waste flows through a series of pipes and is slowly released into the leaching bed. The leaching bed is made up of porous materials, such as sand and gravel, and acts as a filter to clean the water before it seeps back into the ground. The heavier solids settle to the bottom of the septic tank where they are gradually decomposed by bacteria. Some non-decomposed solids remain, forming a sludge layer that must be pumped out every three to five years.



Private sewage disposal system



Courtesy of Conservation Ontario

Municipal sewer systems

What is a sanitary sewer?

A sanitary sewer system is designed to collect wastewater and direct it to a water resource recovery facility (WRRF). All drains and toilets in a home discharge to a sanitary sewer pipe that runs from the home to the property line and is owned and maintained by the homeowner. The local municipality is responsible for the portion of the sanitary sewer between the property line and the main sewer. York Region is responsible for the main sewer which collects wastewater from the local municipal sanitary sewers and transports it to a sewage treatment facility where the solids are burned to provide energy and the liquids are cleaned and discharged back into the environment.

What is a storm sewer?

Storm sewers collect and transport storm water such as rain and melted snow or ice from roofs, streets, parking lots and other paved areas to storm water holding ponds or directly into streams, creeks, rivers and lakes without treatment. A storm sewer under a local road is the responsibility of the local municipality, while a storm sewer under a regional road is York Region's responsibility. Storm sewer blockages are often caused when engine oils, sand and other debris are put into storm drains. Storm sewer backups can lead to flooding in surrounding areas. Homes with improper storm water drainage may be at greater risk of basement flooding because the water pools and can be

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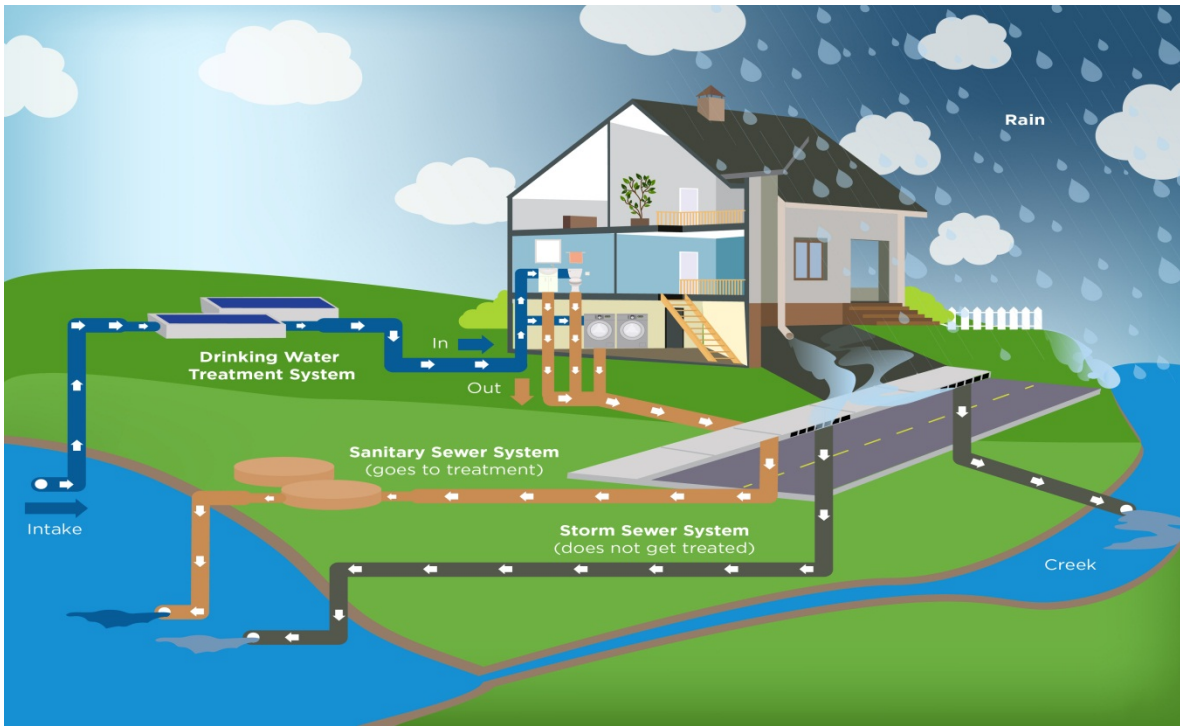
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redirected back to the house where it can leak into cracks in floors and foundations and through window wells.

Municipal sewer systems



How can I prevent a sewer backup at home?

- Do not dispose of paper towels, wipes (including flushable wipes), diapers or feminine hygiene products in your toilet. Use the York Region Environmental Services Bindicator available at york.ca/bindicator to find the best option for item disposal.
- Avoid pouring cooking oils and grease down household drains or toilets as it will harden and eventually clog the drain; see [A Home Owner's Guide to Safe Disposal of Fats, Oil and Grease](#) for helpful disposal tips
- Review your home insurance policy and/or contact your agent to verify if your policy covers damages as a result of a sewer backup
- Contact a licensed plumber to have an approved backwater valve installed to reduce the risk of sewage entering the basement if your home is served by a municipal sewer system. Your local municipality may have information on approved backwater valves.
- Ensure your property has good drainage and is free from cracks in the foundation walls and floors; see the Institute for Catastrophic Loss Reduction's [Handbook for Reducing Basement Flooding](#) for more information



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- Keep all eavestroughs and downspouts clean and clear to allow proper drainage and direct water over land and away from your home. Ensure downspouts and weeping tiles are disconnected from the sanitary sewer system.

What should I do immediately after a sewage backup?

- Stop using your plumbing until the sewer problem is checked
- Stay out of sewage floodwater as much as possible, especially near electrical lines or outlets
- Turn off power at the breaker box if there is standing water or the possibility of wires getting wet. Ask your electrical utility for help if needed.
- Contact a licensed professional to investigate and assess the source of the problem if your home is served by a private sewage system. Your local building department can also provide direction.
- Contact your local public works department and make a request to investigate and assess the source of the problem if your home is served by a municipal sewer system. You may be advised to contact a licensed plumber if the problem is linked to the drain or toilet system of your home.
- Contact your landlord if you are a tenant
- Check your insurance policy to see if you have sewer backup coverage

Public health precautions to take when preparing to clean up after a sewage backup

- Never touch raw sewage with your bare hands. Wear rubber boots and gloves, eye protection and a face mask when cleaning and disinfecting.
- Always wash hands with soap and clean water after cleanup activities or after handling articles contaminated by sewage. If soap and water are not available for hand washing, use a hand sanitizer.
- Seek medical attention if you are exposed to the sewage water and you develop diarrhea, vomiting or fever
- If open cuts are exposed to sewage water, cleanse with soap and clean water and apply antibiotic ointment. If redness or swelling occurs, seek medical attention.
- Do not eat food that has been in contact with sewage, including contents in the freezer, fridge, bottled drinks and products in cans and jars. If you are unsure whether an item is spoiled or contaminated with sewage flood water, throw it out.
- If your private well has been contaminated with sewage water, do not use the water for cooking, drinking or bathing. Use bottled water or water from an approved source. Flooded wells should be tested for bacteria before water is consumed.



Steps to cleaning up after a sewage backup

- Dry out the affected space by opening doors and windows and using fans and dehumidifying equipment
- Clean, disinfect or replace materials damaged by sewage waters and discard soaked items such as mattresses, pillows, stuffed toys and paper products. Professional assistance may be required to remove carpets, drywall, or insulation soaked or damaged by flood waters.
- All drywall that has been exposed to high humidity or standing water for a prolonged period of time should be removed and discarded. Persistent mould growth may require professional assistance.
- Clean and disinfect children's toys, as well as floors, walls and surfaces with hot water and soap first, followed by disinfection using a bleach solution. Mix two cups (500mL) of undiluted household bleach (5.25%) with 18 cups (4.5L) of clean water. Ensure the bleach remains on the surface for at least 10 minutes to ensure items are properly disinfected. Toys should be rinsed thoroughly with clean water after disinfection. When making bleach and water solution, always add the bleach to the water. DO NOT add water to the bleach as this can cause an adverse chemical reaction.

For more information on this or any other health-related topic, please contact York Region Health Connection at 1-800-361-5653; TTY 1-866-512-6228 or visit york.ca

Resources

York Region: [*A Home Owner's Guide to Safe Disposal of Fats, Oil and Grease*](#)

Conservation Ontario: [*Septic Systems*](#)

Ontario Ministry of Environment and Climate Change: [*Your Septic System, Protecting Your Investment and the Environment*](#)

Government of Canada: [*After a flood*](#)

Canada Mortgage and Housing Corporation: [*About Your Home – Fighting Mold: The Homeowner's Guide*](#)

York Region Emergency Management: [*York Region's Emergency Preparedness Guide*](#)
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Institute for Catastrophic Loss Reduction: [*Handbook for reducing Basement flooding*](#)



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