

Mini

Flood

Guide

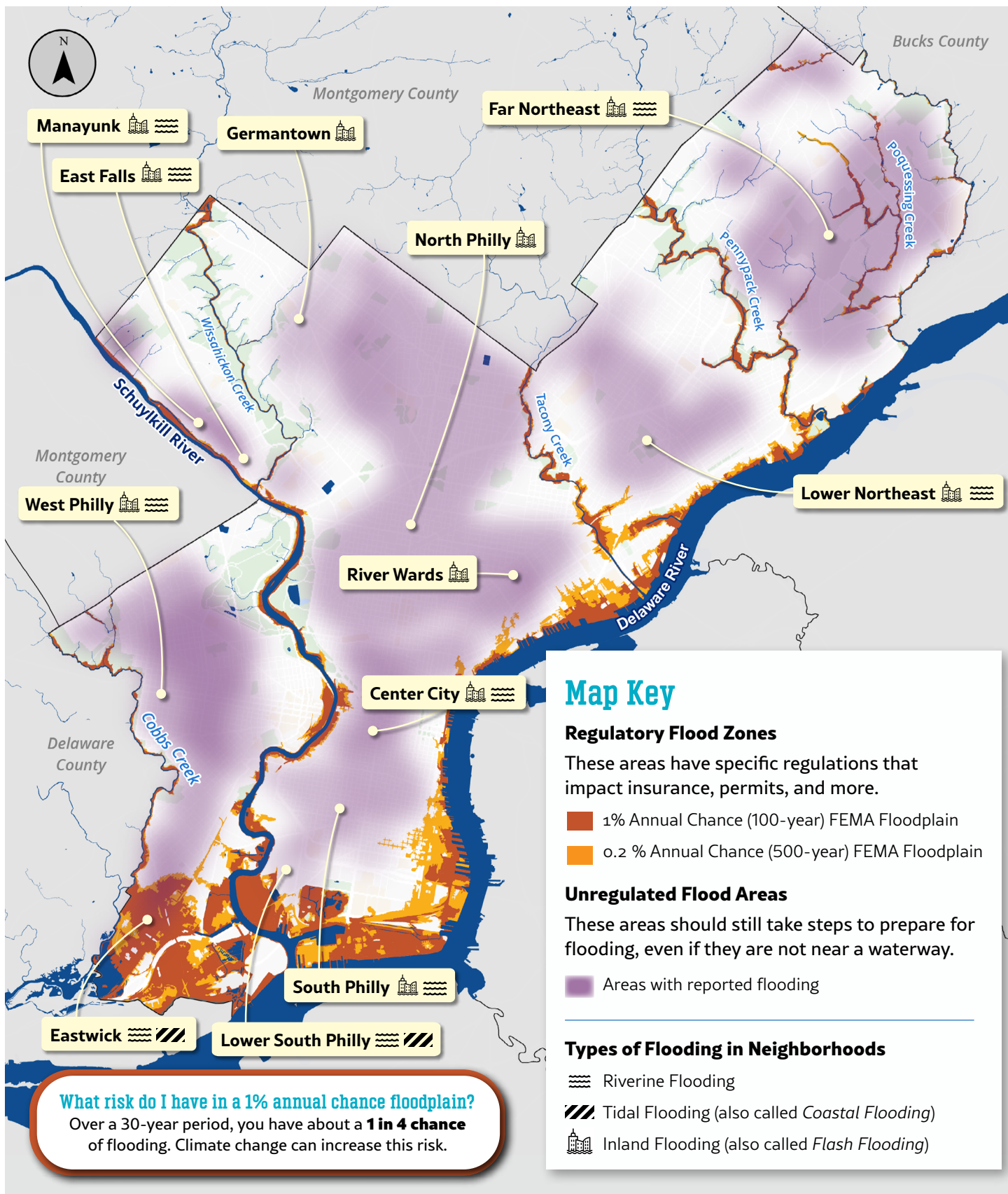
Keeping You &

Your Property Safe



Reported Flood Damages in Philadelphia

Use this map to make decisions that keep you and your property safe.



WHAT YOU CAN DO: BEFORE A FLOOD

1 Understanding Flood Risk Maps and Insurance

Homes and buildings with federally-backed mortgages in the 100-year Floodplain must carry flood insurance!

Where it rains, it can flood. Anyone in Philadelphia can buy flood insurance. The cost will be influenced in part by your flood zone, as determined by the Federal Emergency Management Agency (FEMA). Your property's actual flood risk is determined by many other factors, including the elevation of the building, the type of the building, and more.

WHAT DO FLOOD MAPS MEAN FOR YOU?

Reviewing flood maps can help homeowners and renters determine whether or not their home is in a FEMA-identified floodplain. (Note: even if your home or property is outside of an identified floodplain, you can still be at risk for flooding.) These maps are constantly updated due to changes in geography, construction and mitigation activities, weather events, and more. **Contact your insurance agent or company for a truly accurate determination of your flood risk.**

If your property is in the 1% annual chance floodplain (also commonly called the 100-year floodplain), it means there is a 1% chance of your property flooding in any given year. That means that over a 30-year time period (often the length of a mortgage) you have about a 1 in 4 chance that your property will flood. Climate change will increase this risk!

WHO SHOULD HAVE FLOOD INSURANCE?

Most property and rental insurance policies do not cover damages from floods, so all residents are encouraged to purchase flood insurance. However, property owners in the 100-year floodplain with mortgages from federally regulated or insured lenders are required to carry flood insurance. Flood insurance is available through the National Flood Insurance Program (NFIP), a federally underwritten program provided by nearly 100 insurance companies and written through licensed insurance agents. Contact your insurance agent to learn about lower-cost "Preferred Risk Policy" options offered by the NFIP for properties being mapped into higher-risk areas for the first time.

Even if you do not have a mortgage for a property located in the 100-year floodplain, it is still recommended that you purchase flood insurance. Over the life of a 30-year loan, there is about a three times greater chance of having a flood in your home than having a fire. Again, most homeowners' insurance policies do not provide coverage for damage due to flooding. Over 40% of National Flood Insurance claims are from properties outside of the areas where insurance is required.

Get started with flood insurance: [floodsmart.gov](https://www.floodsmart.gov)

Sign up for flood alerts from Philadelphia's Office of Emergency Management: phila.gov/ready

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WHAT YOU CAN DO: HOW-TO

Home Improvements that Help

Not every home faces the same flooding challenges. Once you've identified sources of flooding on your property, use these tips to make improvements that will help protect your home and valuables.

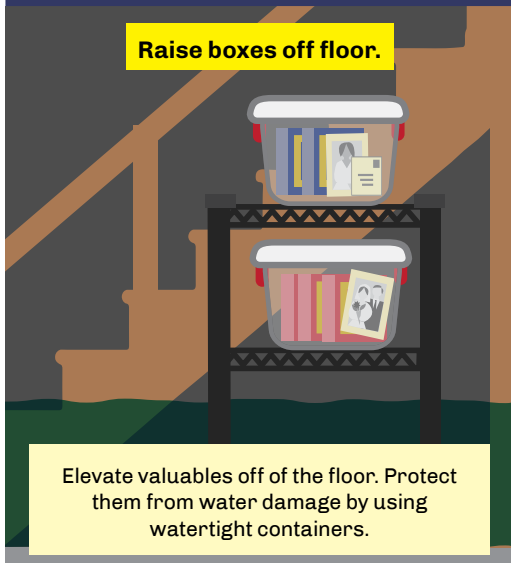
While we work to reduce flooding that impacts roadways and overwhelms sewers, many homeowners deal with flooding caused by issues on their property, such as poor drainage. Likewise, some homes are vulnerable due to structural issues, like the location of a garage or basement window.

Use the following tips to guard your home against flooding caused by sewer backups and overflows, groundwater infiltration, stormwater runoff from your roof and driveway, and poor drainage.



WHAT YOU CAN DO NOW TO PROTECT YOUR PROPERTY

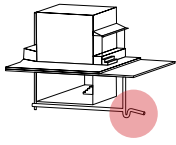
Raise boxes off floor.



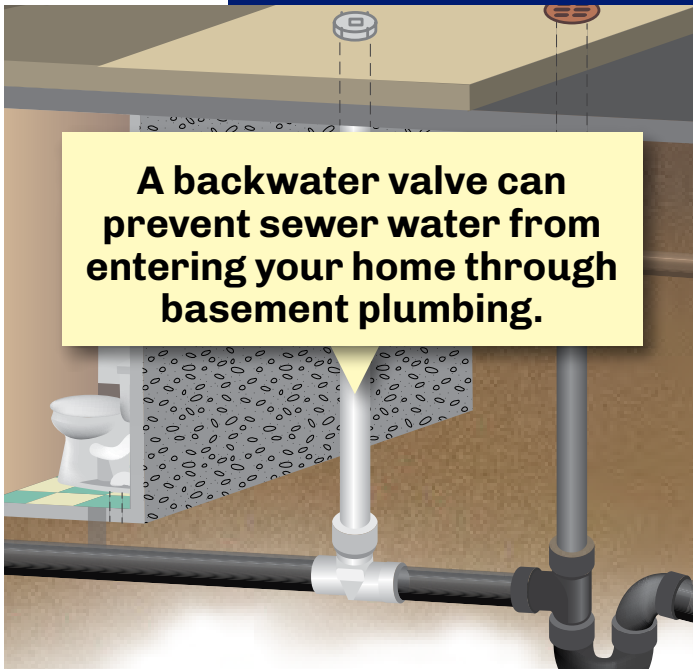
Elevate valuables off of the floor. Protect them from water damage by using watertight containers.



YOUR PROPERTY'S PLUMBING



Sewer Backups & Sewer Overflows



Solutions: Install backwater valves, drain plugs. Eliminate basement plumbing fixtures.

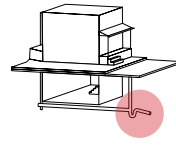
Under heavy rain conditions where the flow in the sewer meets or exceeds the sewer's capacity, basement plumbing fixtures such as toilets, sinks, and drains are vulnerable to backups.

Backwater flooding issues primarily impact buildings served by the combined sewer system.

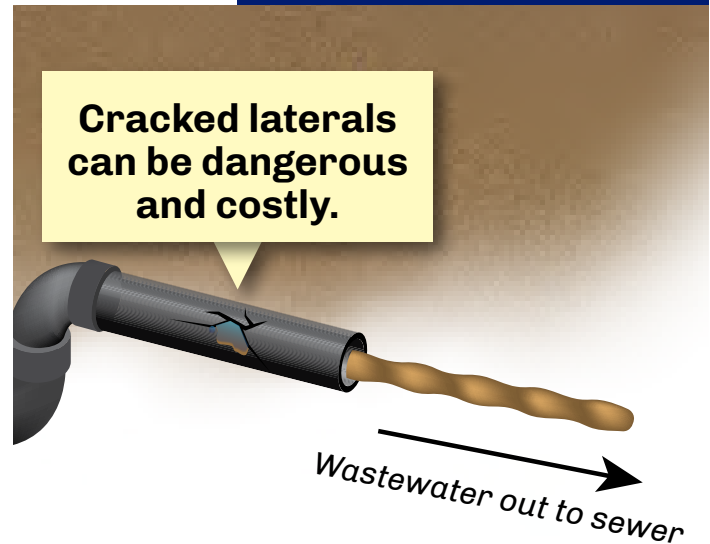
If your home is impacted by sewer overflows, you may qualify for free backwater valve installations on your basement fixtures or main house drain through the Philadelphia Water Department's (PWD's) Basement Backup Protection Program. Learn more at water.phila.gov/basement or call 215-685-6069.

If your property has floor drains, drain plugs can also help prevent sewer backups from flooding basements. A licensed master plumber can help find the best solution.

YOUR PROPERTY'S PLUMBING



Leaking, Clogged, or Cracked Lateral



Solution: Inspect laterals; hire a plumber; determine if you qualify for a HELP loan.

Homeowners are responsible for sewer pipes—called laterals—that connect to the City sewers.

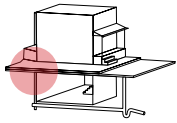
Clogged or cracked laterals prevent wastewater from flowing out of your home properly. Improper disposal of sanitary wipes, grease, and cooking oil can clog laterals and cause sewer backups in your home.

For frequent basement backups: call PWD before pumping water out at 215-685-6300 to schedule an inspection. This will allow PWD to sample the water and offer the best solution.

Detection of a cracked lateral will result in a "Notice of Defect" from the Philadelphia Water Department. It is the homeowner's responsibility to fix their lateral. Licensed plumbers can offer several options.

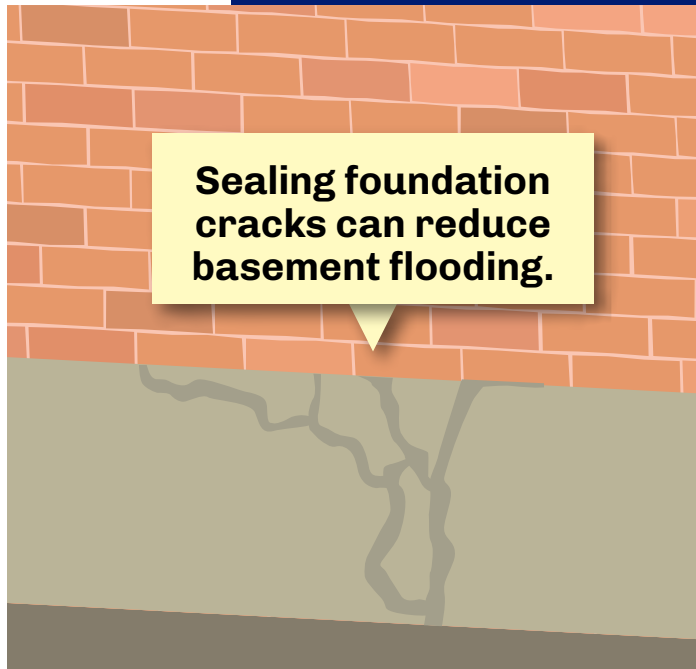
Qualifying property owners who receive a Notice of Defect can apply for the zero-interest Homeowner Emergency Loan Program (HELP). Learn more: water.phila.gov/help or 215-685-4901.

AROUND YOUR PROPERTY



Groundwater Infiltration

Sealing foundation cracks can reduce basement flooding.



Solutions: Seal cracks, use a sump pump, and slope ground.

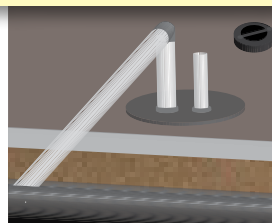
Groundwater flooding results when the ground around your home is saturated. When this happens, water can seep into your basement.

Use a waterproof sealant to seal cracks inside and outside of your home. Take measures to address drainage around your home and in your basement. Outside, note where the water pools in the low-lying areas.

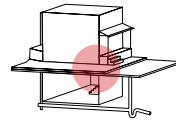
Walk around your home's exterior and ensure the ground is higher around the foundation walls and slopes down away from your home. Hire a contractor to slope the ground away from your home.

Sandbags can help to reduce flood water damage if they are properly filled and placed. They can move water around instead of through buildings. Sandbags will leak, and it's best to have a pump on the dry side to remove water that gets in.

Use a sump pump to remove basement water.

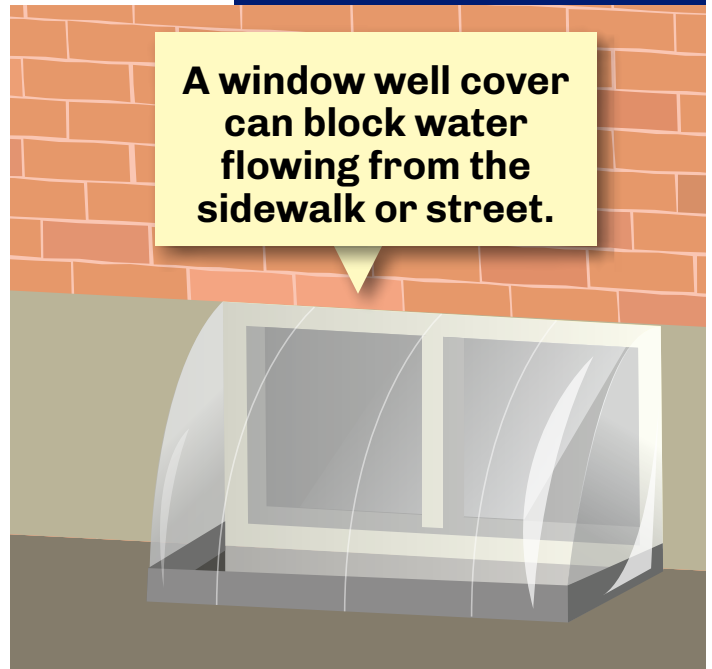


AROUND YOUR PROPERTY



Stormwater Runoff

A window well cover can block water flowing from the sidewalk or street.



Solutions: Identify where you can capture and divert water from storms; install a window well cover; sign up for Rain Check.

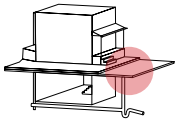
Visually inspect your property to see where water flows. Make sure the ground does not slope towards your home and that the windows are protected. Plant shrubs and other vegetation to capture and slow water on property.

Rain Check is a Philadelphia Water Department program that provides City residents with free rain barrels and other discounted stormwater tools to manage rainfall. Rain Check can help with some runoff issues, but shouldn't be considered as program for preventing flooding in your home.

Rain gardens, for example, may help in yards where water ponds or pools during rain events.

Learn more and sign up at pwdraincheck.org

AROUND YOUR PROPERTY



Blocked Storm Drain



Solution: Clear storm drains of trash, leaves, snow and debris.

The Philadelphia Water Department is constantly working to maintain our 3,700-mile network of sewers, which includes nearly 75,000 storm drains. Blocked storm drains prevent stormwater from entering the sewer and can lead to flooded streets and homes.

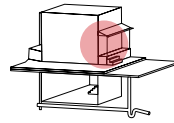
PWD cleans and maintains storm drains on a regular cycle, but trash and leaves can accumulate quickly.

Help sewers function at their best by keeping storm drains clear of litter, leaves, snow, and debris.

If you see a clogged storm drain near your home and there's rain in the forecast, consider removing the debris and placing it in the trash. Trash and leaves left in the street will clog the drain again when rain falls.

Get free "Keep It Clean" storm drain marking kits to promote clear storm drains in your neighborhood:
water.phila.gov/stormdrain-app

AROUND YOUR PROPERTY



Roof Runoff



Solution: Clean your gutters regularly; ensure proper downspout placement and roof drainage; install a rain barrel or downspout planter with Rain Check.

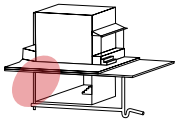
Roofs drains that are directed toward your home can cause flooding. Directing stormwater from your roof away from the foundation walls of your home is critical in keeping your basement dry.

Clean your gutters regularly to prevent stormwater from overflowing onto walls and ensure downspouts drain to the sewer or other appropriate drainage area.

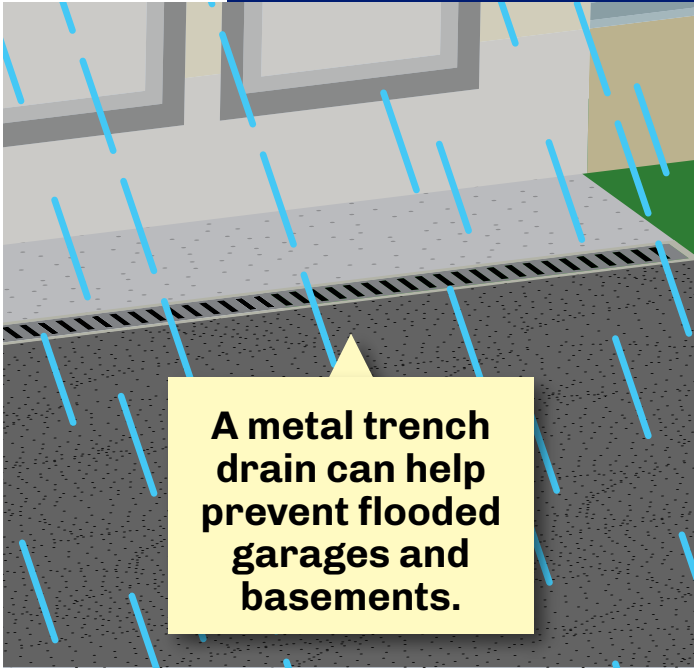
Consider getting a free rain barrel or a reduced-cost downspout planter through Rain Check at pwdraincheck.org. You can use water from the rain barrel for activities such as watering plants.

Extra water should be drained from the barrel after it rains using a hose that reaches at least 10 feet from your foundation.

IN THE BASEMENT



Inundated Basements

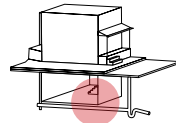


A metal trench drain can help prevent flooded garages and basements.

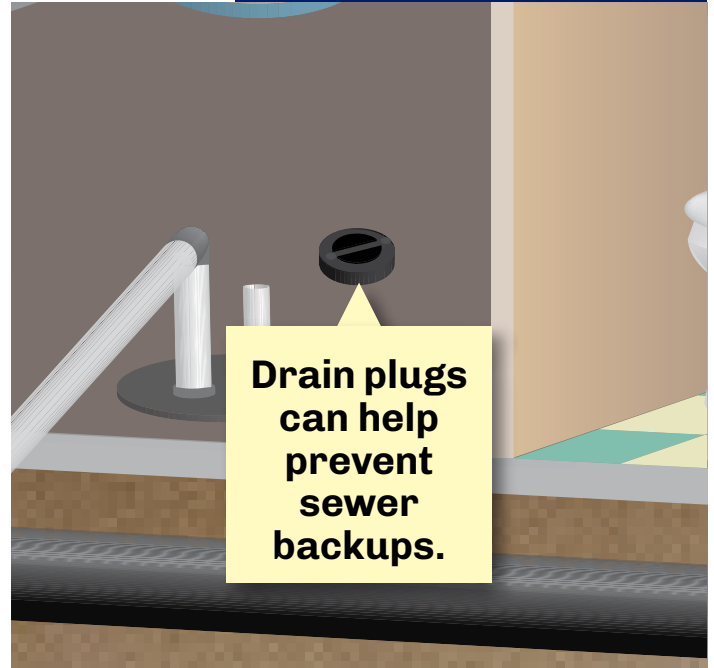
Solution: Installing a trench drain in your driveway helps redirect rainwater.

A trench drain is a good idea for redirecting rainwater away from the foundation of a house, especially where driveways slope toward the house. Trenches can be as deep as four feet, are made from a variety of materials, and connect to the house's sewer/stormwater drainage system. Grates covering the trench must be kept clear of leaves and debris and should be made of metal for durability. Consult a professional contractor to get the proper trench size and location for your driveway.

IN THE BASEMENT



Inundated Basements



Drain plugs can help prevent sewer backups.

Solution: Do not store valuables in the basement; install window wells; hire a contractor to install barriers at property/driveway entrances; stack sandbags.

Below street level spaces like underground garages are flood prone. Do not store valuables in the basement or other areas below street level. If you must use these spaces, keep items off the floor using shelves or rafter storage.

Visually inspect your property to determine how rainwater flows. Make sure area drains are open and functioning, and direct stormwater away from low-lying spaces with barriers or slope changes.

If water often goes to certain area, such as a basement door, sandbags can be a cost-effective option.

Other options include window wells, flood walls around doors, and flood gates at driveway entrances. A licensed professional engineer or architect can help you find solutions.

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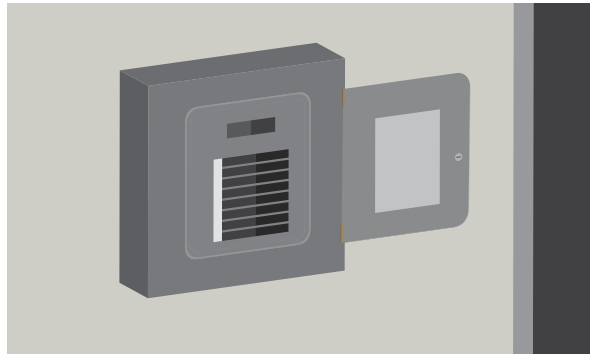
What to Do



Rushing into a recently flooded building can create **serious health risks**.



Avoid electrical shocks!
Do not stand in pools of water unless you know the electricity is turned off.



The first thing you should do in any flood event is to **turn off the electricity to the affected area**. If you can safely access it, find your circuit breaker and turn off the electricity.

MEDICINES, FOODS, and KITCHEN ITEMS



- Discard all medicines and foods in contact with floodwater. Throw out all perishable foods that have been out of refrigeration for more than six hours. Do not refreeze frozen foods that have been thawed.
- All cooking and eating utensils, food preparation surfaces, counters, and work surfaces that were touched or splashed by floodwater should be washed with soap and water and wiped with a diluted bleach solution.

PROTECTING YOUR HEALTH

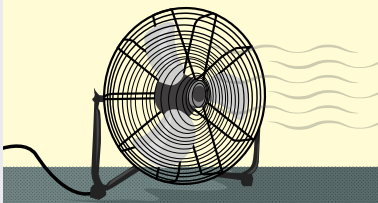
- Do not let children play with wet toys or other items until they have been cleaned and disinfected. Wipe these items with a diluted bleach solution or by washing the toys in a dishwasher using hot water.
- Those performing the cleanup should practice good personal hygiene by washing their hands after completing cleanup and before touching food or beverages, or smoking. Wear waterproof gloves and protective clothing. Protective gear should be discarded or washed after cleanup is completed each day.

- Keep children from playing on flooded lawns and fields until the ground surface has dried.
- Contact your physician or health care provider if you or a family member develops any of the following symptoms within five days: fever greater than 100 degrees, vomiting, diarrhea, and/or severe stomach cramps.
- If you receive a puncture wound or other injury during the flood or while you perform flood cleanup, talk with your health care provider about the need for treatment and/or a tetanus shot.

CLEANING YOUR HOME OR BUSINESS

- Remove all standing water by pumping, mopping, and opening clogged drains.
- If possible, open windows and doors during cleaning and for at least 24 hours after the cleaning to allow surfaces to thoroughly dry and prevent mold. Use fans and/or dehumidifiers to shorten drying times.
- After turning off the electricity, all wet light fixtures should be cleaned and dried thoroughly before turning the electricity back on.

CLEANING THE CARPET



Carpets can be saved by wet vacuuming, shampooing, and taking steps to ensure that the carpet is totally dry.

DISINFECTING SOLUTION

- $\frac{1}{4}$ cup bleach
- 1 gallon of clean water



Cabinets and household equipment should first be cleaned with soap and water. Then make a disinfecting solution and wipe down all areas touched by the floodwater. Disinfect all contaminated floors and other surfaces and allow them to dry.

- Remove and dispose of all wet ceiling tiles, paper products, baseboards, and gypsum board (also known as dry wall) to a level approximately four feet above the flood water line. Remove wet insulation and materials that absorb water.
- Wood and metal studs should be wiped with the bleach solution twice and allowed to air dry.
- Clothing and bedding exposed to flood water should be soaked in clean water to remove any mud and then washed in hot water. If hot water is not available, add a disinfectant such as bleach to the rinse water. Mattresses or other large items soaked with floodwater will probably have to be discarded. However, if they are made of foam rubber, it may be possible to wash, disinfect, and air dry these items.

For more information:



(267) 846-2711



phila.gov/programs/flood-management-program/