

CUSTOMER GUIDE

to Sewer Backups and Other Issues



**METROPOLITAN
SEWER DISTRICT**
OF GREATER CINCINNATI



INSIDE THIS GUIDE

The purpose of this guide is to help customers understand the difference between private plumbing problems and issues caused by the MSD public sewer, who is responsible, and how to prevent recurring issues and protect your property.

Check out MSD's YouTube channel to view our Sewer Backup (SBU) Program videos!

youtube.com/@CincinnatiMSD



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YOUR PRIVATE BUILDING SEWER EXPLAINED

Overview

Private building sewers are the underground sewer pipes that connect your home or business to the MSD public sewer system.



Wastewater from sinks, toilets, showers, and other drains flows away from your home through your private building sewer and into the public sewer. The public sewer system transports the wastewater to a treatment plant, where it is cleaned and then released into a local river or stream.

Ownership

If you own a building, you own a building sewer. Private building sewers extend from the building to the point of connection with the MSD public sewer.

Property owners own the entire pipe, even the parts that lie under sidewalks and publicly owned streets (**see illustration below**).

Responsibility

Property owners are responsible for:

- Keeping the entire length of the private building sewer clear of clogs.
- Repairing broken or collapsed portions that are located on your private property.

The public sewer is owned and operated by MSD. MSD is responsible for:

- Keeping the public sewer clear of clogs.
- Fixing broken private building sewers if the broken section is located within an easement or public right-of-way (ROW), typically located beneath the sidewalk or street.

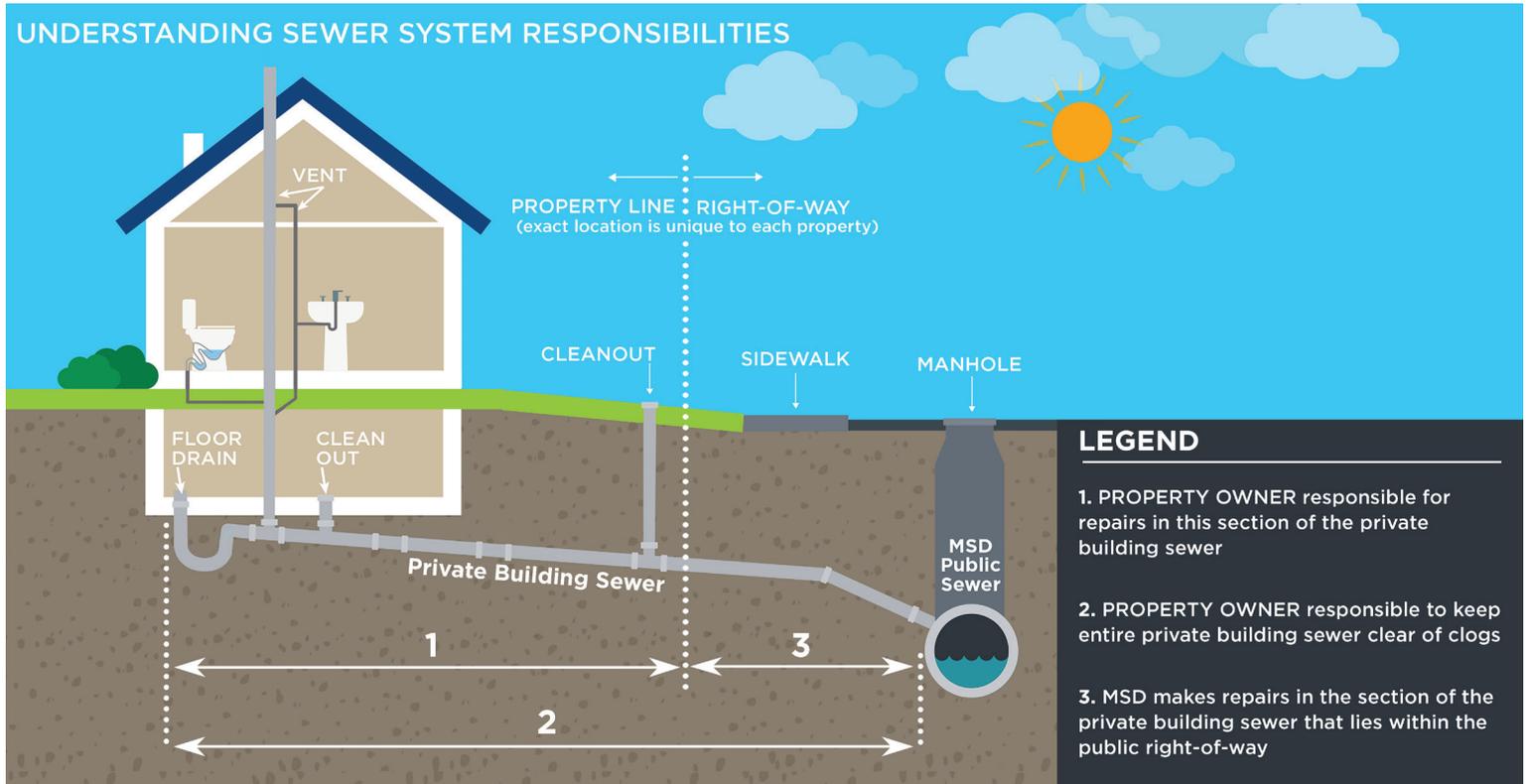
Clogs and Breaks

Clogs and breaks in private building sewers are caused by materials that don't dissolve in water and partly or completely block the pipe, such as:

- Tree roots that grow into the pipe
- Cooking fats, grease, and oil
- Wet wipes, diapers, hygiene products, etc.

Other causes include deterioration due to age and external stresses such as ground shifting/settlement.

UNDERSTANDING SEWER SYSTEM RESPONSIBILITIES



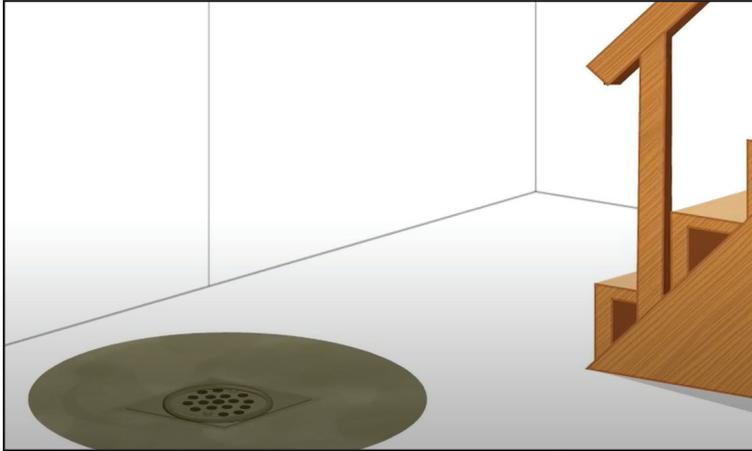
UNDERSTANDING SEWER BACKUPS

Overview

For most people, sewers are out of sight and out of mind, that is, until something goes wrong.

Sewer backups can cause unwanted water and sewage to spew out of floor drains or other plumbing fixtures, entering basements and lower levels of buildings.

Sewer backups can be caused by either your private building sewer or the public sewer.



Reporting a Sewer Backup

If a sewer backup occurs at your home or business, please report it to MSD as soon as possible. You can report a sewer backup by:

- Calling **(513) 352-4900**, 24/7
- Reporting it online at msdgc.org/sbu

Private Sewer Backups

Did you know most (>85%) sewer backups are caused by clogs or breaks in private building sewers?

Clogs and breaks are most commonly caused by:

- Tree roots
- Flushing or disposing of items that don't dissolve in water such as cooking grease and wet wipes.

To learn more, read [Private Building Sewers Explained on page 2 in this booklet.](#)

Public Sewer Backups

Public sewer backups occur when the public sewer system fills up with too much stormwater combined with sewage or due to clogs or breaks.

When a sewer's capacity is overwhelmed or flow is blocked, wastewater can stop moving forward and start backing up through manhole lids, stormwater drains, and into local streams and rivers.

The wastewater can also get pushed backward through private building sewers and end up in the lower levels of homes and businesses.

Sewer Backup Investigation & Findings

Once reported, MSD will dispatch a crew to your home, usually within 4 hours, to investigate the cause of the backup.

Heavy or prolonged rainfall can sometimes delay our response time. Please understand we will be there as quickly as we can.

MSD investigates every report of a sewer backup to determine whether it's eligible for assistance.

Eligible for Assistance: If a sewer backup is caused by the MSD public sewer, MSD offers assistance through our Sewer Backup (SBU) Program to eligible customers (property owners and tenants). To learn more, read about MSD's SBU Program on page 4 of this booklet.

Not Eligible for Assistance: If a sewer backup is caused by a private issue, the property owner is responsible for the cleanup and/or repairs. MSD strongly recommends hiring a licensed plumber to investigate the issue and a certified water/flood restoration company to take care of the cleanup.

To learn more, read [Resources for Private Sewer Backups on pages 5-8 of this booklet.](#)

MSD'S SEWER BACKUP (SBU) PROGRAM

Overview

To address sewer backups from the public sewer, MSD has established a special response initiative known as the Sewer Backup (SBU) Program, which is regulated by our federal Consent Decree.

Services

The following services are provided to MSD customers who experience backups:

- **24/7 customer service** for reporting backups: **(513) 352-4900** or online at **msdgc.org/SBU**.
- **Free cleanup assistance** if the public sewer system caused the backup.
- **Protection from backups** when recurring backups are caused by capacity issues in the public sewer.
- **Payment of damage claims**, when eligibility criteria is met.



Prevention Program Eligibility

MSD offers sewer backup prevention devices to customers who have experienced two or more sewer backups over a 5-year period caused by inadequate capacity in the public sewer system.

Backups related to private building sewers or to stormwater runoff **do not qualify**.

If you would like more information about this program, please call MSD at **(513) 244-5100** or visit **msdgc.org/prevention**.



Cleanup Assistance Eligibility

You are eligible for free cleanup assistance from MSD if you meet both of the following requirements:

- You are an MSD customer. This means your property is in the MSD service area, and it is connected to the public sewer system.
- Your sewer backup was caused by a problem related to the public sewer.

If you have questions about cleaning services, please call MSD at **(513) 244-5100** or visit **msdgc.org/cleaning**.



SBU Damage Claim Eligibility

MSD offers reimbursement for eligible damages from sewer backups caused by the public sewer. You must report your backup to MSD **within 48 hours of discovery** to be potentially eligible.

- Damage claims are usually resolved within 60 days.
- Your claim must be received by MSD no later than 2 years after the date of your backup.

Private Insurance

- Ohio law requires MSD to take your homeowner or renter's insurance into account.
- Although you are NOT REQUIRED to file an insurance claim, MSD will not reimburse you for allowable compensation from your insurer.
- You should contact your insurance company to report the incident and get claim instructions.

How to File a Claim

- Visit **msdgc.org/claims** to fill out or download a claim form.
- Call **(513) 244-5100** for a paper form.

If you are not satisfied with the decision on your claim, you can call the SBU Ombudsman at the Legal Aid Society of Greater Cincinnati at (513) 362-2801.



HIRING A QUALIFIED PLUMBER

Overview

If you're experiencing a private sewer issue, you will need a qualified plumber to check out your private building sewer and the plumbing inside your home.

If you don't know a good plumber, it's hard to know who you should hire.

While MSD cannot recommend or endorse any particular plumber or company, we do have some tips and advice for finding a plumber to help you with your sewer backup problem:

Tip #1: Get Referrals

If you don't already know of a trusted plumber, ask friends and family for referrals.

Tip #2: Check Directories

Check directories such as Angi.com, The Better Business Bureau, or the Cincinnati Master Plumbers Association (CMPA).

Tip #3: Shop and Compare

Compare quotes from at least two or more plumbers.

Tip #4: Ask Questions

The following is a list of questions you can ask companies to help you choose the right plumber:

- **“Are you licensed and insured (or bonded)?”** A licensed plumber has gone through plumbing school and is usually familiar with MSD policies and procedures. A bonded plumber protects the homeowner if the plumber damages their private property.
- **“Do you have enough chains to clean out my private building sewer completely?”** Some plumbers only carry 50 feet of chains. That's enough to snake out building drains but usually not enough to snake private building sewers all the way to the public sewer. Try to find a plumber who has at least 100 feet of chains.
- **“Can you locate underground pipes?”** You want a plumber who can trace the location of the private building sewer and find the problem areas. This will help determine if the problem is on private property or in the public ROW. The ability to locate may indicate the plumber is familiar with private building sewer investigations.

Additional Helpful Tips



- **Ask the plumber to use the largest root cutting saw possible for the size of your pipe (usually a 2.5” or 3.5” saw). You want your plumber to clean out the entire pipe, not just do the minimum to get it to drain.**
- **1.25” chains are the preferred size for snaking a pipe, especially when dealing with root intrusion.**
- **If your problem is with sewer odors in your house (and NOT a sewer backup), ask the plumber about a “smoke test.” This procedure can be used for odor investigations, and a plumber who knows how to do smoke tests is probably experienced with odor investigations.**

- **“Can you video my private building sewer?”** Plumbers can use a video camera to inspect pipes for damage or blockages. The plumber should always clean out the building sewer prior to video inspecting it. Make sure the plumber can make a recording of the inspection so it can be submitted to MSD if needed.

If your plumber finds a problem in an area maintained by MSD, please call us at **(513) 352-4900** and send the video inspection and other documents to: **MSDCustomerDocumentation@cincinnati-oh.gov**

- **“Do you offer root maintenance programs?”** Tree roots that invade private building sewers are a common cause of sewer backups. If tree roots are a problem on your property, it's good to hire a plumber with knowledge and experience with root problems. Maintenance programs can provide you with some assurance that the root problem will be addressed, not just temporarily fixed.
- **“Do you guarantee your work?”** This is an important point, especially if there are any problems that need fixing after the initial work.

HELPFUL TIPS FOR SELF CLEANING SEWER BACKUPS

Overview

When a sewer backup is caused by a problem in a private building sewer, the property owner must take care of the cleanup.

MSD strongly suggests you consider hiring a certified water/flood restoration company for professional cleaning services.

But, if you decide to clean it up yourself, here are some recommendations for cleaning it up safely:

Staying Safe and Healthy

A sewer backup can cause more than just a big mess. Water from a sewer backup can create possible health and safety hazards, as well as damage to your property. After the water goes down, it's important to take steps to minimize risks.

- Avoid shocks or explosions. Gas or electric equipment and appliances may become hazardous in the presence of water.
 - › After a severe sewer backup (several or more inches of water), you may need to **contact the power company to shut off your electric and/or gas.**
 - › **Do not touch any electrical equipment** or step in puddles or standing water where electric appliances are present until the electric is shut off.
 - › **Do not light matches** or try to relight pilot lights, in case of a gas leak.
- **Keep children and pets away** from areas where sewage backed up.
- **Protect yourself.** Sewer backup waters may contain bacteria, viruses, and other germs that can make you sick. Avoid skin contact with contaminated areas and items by wearing rubber boots, gloves, and protective eyewear. If you have any cuts or sores, be sure to cover them with bandages.
- **Do not touch your mouth, eyes, or nose** while you are cleaning.
- **Do not track possible contamination** into other parts of your house. Remove your boots before walking from the sewer backup area to other areas of your house. Wash your work clothes in hot water.
- **Wash your hands with antibacterial soap** and warm water after being in the affected area.

Cleaning the Property

Step 1: Document the Damages

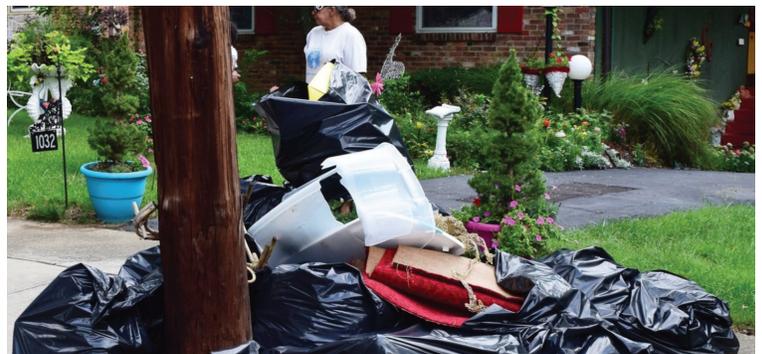
Step 2: Drain or Pump Out Any Standing Water

Step 3: Sort Contaminated Items

- Anything that has been touched by water from a sewer backup is contaminated.
- Items that CANNOT be cleaned and disinfected can harbor the germs found in the backup water or create an environment for mold growth.
- We recommend disposing of all items that CANNOT be cleaned.

Step 4: Remove Contaminated Items

- Place everything that cannot be cleaned and disinfected into heavy-duty garbage bags. Tie these bags tightly and remove them from your house.
- Cut out any affected carpet, padding, drywall, and paneling and remove them from your house.



Step 5: Clean and Disinfect Items

- Clean hardwoods, metals, plastics, house/building foundation, and tile flooring using a detergent solution.
- Let the items air dry.
- Then, disinfect with a solution of one part chlorine bleach to nine parts water.

Step 6: Dry/Dehumidify the Area

- Drying the area of the sewer backup is important to prevent mold and mildew. Use large fans and dehumidifiers to remove moisture from the area. This process can take a few days, depending on the size and scope of the area.



What Not to Flush

Do not flush or drain non-water soluble materials, as they can block or restrict the flow of wastewater.

This includes wet wipes, cooking fats, oil, and grease (FOG), plastics, personal hygiene items, kitty litter, food waste, meds, and chemicals. Even “flushable wipes” can wreak havoc on your private building sewer (and the public sewer).



Keep Roots Out

Plants and trees seeking water can grow into your private building sewer and cause blockages or pipe damage.

Annual cleaning of your private building sewer can keep it clear of roots.

When planting new trees or shrubs, do not plant over or near your private building sewer pipe.



Clean Your Gutters

Downspouts from gutters are sometimes tied directly into private building sewers, especially in neighborhoods with older homes.

Leaves and twigs from gutters can go through downspouts and get into private building sewers, which can cause blockages.

Clean your gutters periodically to prevent this.



Consider Private Building Sewer Insurance

Private building sewer insurance can help offset the cost of repairing private building sewers and is available through insurance companies and some municipalities.



Install a Backup Prevention Device

Talk to a plumber about installing a sewer backflow valve in your private building sewer. A backflow valve can help prevent the risk of sewage backing up into your home.



Inspect Your Private Building Sewer Annually

Have a professional plumber inspect and clean your private building sewer once a year.

You should also call a professional plumber to remove clogs or repair/replace broken private building sewers.

For helpful tips on hiring a plumber, please see page 5.

OTHER CAUSES OF WET BASEMENTS

Overview

Water intrusion into your basement or lowest level can be commonly mistaken for a sewer backup. Wet basements are a common headache for many homeowners, especially those who live in older homes.

Some of the most common causes of wet basements are:

- Surface water
- Groundwater
- Stormwater sewer backups



Surface Water

Surface water is rainwater, melted snow, or flood water that collects on top of the ground. If the ground around your property slopes toward your house, water can seep inside through joints or cracks in the foundation walls and floors, window wells, or outside basement doors.

Sidewalks, driveways, and downspouts that direct surface water toward your home can also cause wet basement problems.

Groundwater

Groundwater sometimes causes wet basements, especially if the ground has been soaked by heavy rains or melting snow.

When the soil around your home is saturated, water in the ground pushes against your foundation floor and walls and can seep inside.

Homes built on or near natural springs, lakes, drained ponds, and drained wetlands are more likely to have groundwater problems.

Stormwater Sewer Backups

Stormwater drains installed around the foundation of your home or in low-lying areas of your property can also cause wet basements. While they are designed to collect rainwater and direct it away from your property to a storm sewer pipe or a nearby creek, they can break or become clogged.

In addition, if storm sewers fill up with too much rainwater, the water may travel backward in the pipe toward your home.

Fixing the Problem

Depending on the severity and source of the problem, your wet basement solution can be either simple or complex.

Every case is different. The key is finding the right solution for your home. This can include:

- Cleaning your gutters
- Installing new foundation drains
- Waterproofing your basement
- Purchasing a sump pump
- Changing the slope of your yard away from your house
- Keeping stormwater inlets on your property or along the public street free and clear of debris.

Local agencies are also available to help with surface water and flood control issues, including:

- Hamilton County Soil & Water Conservation District, **(513) 772-7645**, hcswcd.org
- Hamilton County Planning & Development, **(513) 946-4550**, hamiltoncountyohio.gov/pd
- City of Cincinnati Stormwater Management Utility (SMU), **(513) 591-5050**, cincinnati-oh.gov/stormwater
- Your local public works department

SEWER ODORS INSIDE BUILDINGS

Overview

Sewer odors are caused when the waste in sewage decays or breaks down. Sewage can break down quickly, even before it gets to the wastewater treatment plant. In fact, some breakdown occurs as the waste is going through your building's plumbing.

This process can generate smelly gases within the sewer pipes.

How Your Building Plumbing Works

The plumbing system inside your building is a network of pipes, vents, and traps (*see the illustration below*).

- Pipes carry solid and liquid wastes away from your home.
- Vents enable the wastewater to flow freely through the pipes and away from your house.
- Traps hold a small amount of water within the pipes near drains. This trapped water seals off any sewer gases in the pipes, which prevents them from coming through the drains or plumbing fixtures and into your building.

Virtually all wastewater systems have sewer gases within them. These gases expand within the space in the pipes and can drift back toward your building.

A plumbing system that is properly built and maintained prevents sewer gases from entering your building and causing inside sewer odors.

How Can I Eliminate the Odors?

Most often when you can smell sewer odors inside, the cause is a dry trap, especially if there is a sink that is seldom used or a floor drain that is always dry.

The solution is simple: **pour about a gallon of water into each of your drains.**

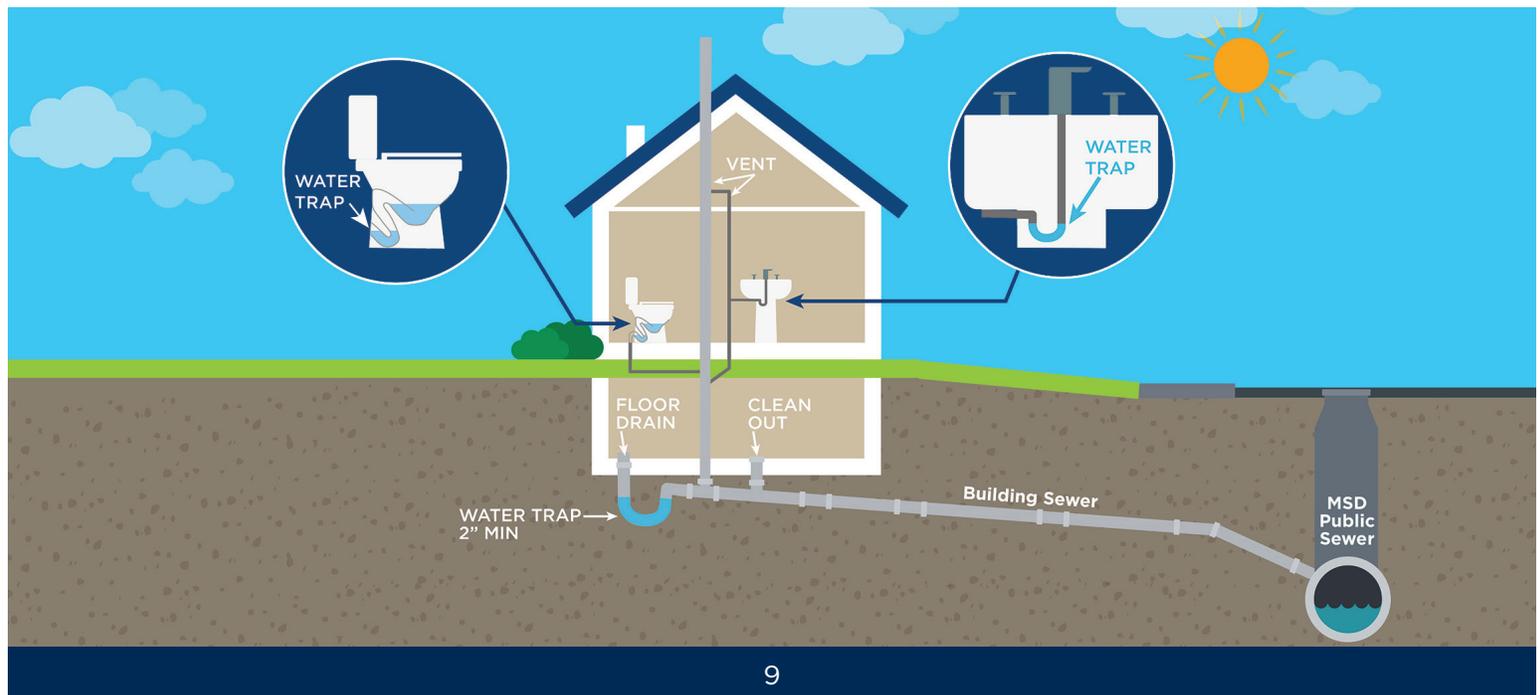
If this solves the problem, make it a part of your routine to pour water into your drains once every month or so.

If pouring water into the drains does not solve the odor problem, you will need to look for other possible sources of sewer odors, including:

- Loose or unsealed joints in wastewater pipes.
- Broken, cracked, or clogged pipes.
- Old or dried out wax toilet ring seal.
- Cracked or broken vent pipes.

You may need to hire a plumber to help troubleshoot the sewer odors in your home. A plumber can use various tests and tools, such as smoke testing or a video camera, to check your plumbing for problems.

If you have questions about sewer odors, please call us at **(513) 352-4900**.



CAVE-IN (SINKHOLE)

Overview

A cave-in typically occurs when soil enters pipes and other structures through cracks or fractures. Over time, this can create a hollow space above the pipe and below the ground's surface. If a big enough void forms, the ground or pavement above sinks or collapses because there is nothing to support it.

Cave-ins can easily be identified by depressions in the soil or pavement. They also happen around manholes and storm inlets where pipes enter or exit the structure.



Reporting a Cave-In

To report a cave-in, please call MSD's 24-hour sewer emergency hotline at **(513) 352-4900**. MSD will investigate the cause to determine the source.

Many cave-ins are not associated with MSD structures. One of the most common causes of cave-ins is a defective private building sewer.

Investigating and Repairing a Cave-In

After a cave-in is reported, an MSD crew will secure the area to protect the public's safety. The crew will then conduct a dye test to determine if the cave-in was caused by a defect in the public sewer system.

If the cave-in was caused by the public sewer, MSD will make necessary repairs, which could include:

- Grouting the joints from inside or outside the pipe.
- Slip lining a section of pipe.
- Repairing or replacing the pipe or structure.

If the cave-in was not caused by MSD, the property owner or another local utility will be notified.

SEWAGE SURFACING

Overview

Sewage surfacing typically occurs when there is a clog or break in a private building sewer or public sewer.

Over time, the sewage backs up enough to flow into the ground or pavement above the defective pipe or structure. Sewage surfacing can be identified by the unexpected presence of odorous or discolored water.

Reporting Sewage Surfacing

To report sewage surfacing, please call MSD's 24-hour sewer emergency hotline at **(513) 352-4900**.

Investigating Sewage Surfacing

After sewage surfacing is reported, an MSD crew will investigate the cause. This may include dye testing or video inspection of the surrounding public sewers to determine if repairs may be needed.

If the sewage surfacing is not related to the MSD public sewer, it may be the result of a defective private building sewer.

It also may not be sewage at all. In some cases, it could be a water main leak or groundwater.

If the sewage surfacing was not caused by MSD, the property owner or another local utility will be notified.





For more information:

MSD Customer Service: [\(513\) 244-1300](tel:5132441300) or
MSD.Communications@cincinnati-oh.gov

Sewer Emergency Hotline: [\(513\) 352-4900](tel:5133524900) 24/7

Sewer Backup website: msdgc.org/sbu