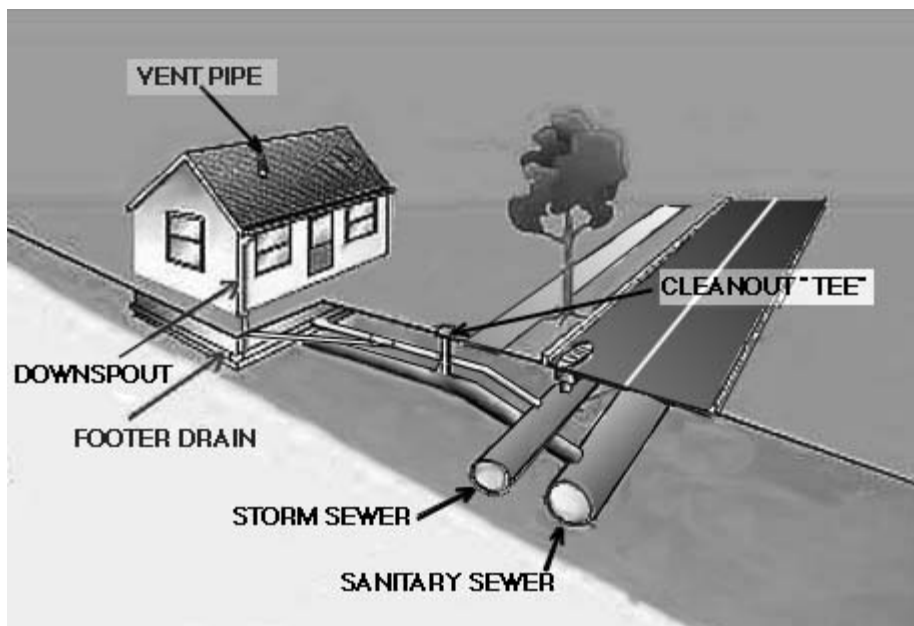




UNDERSTANDING YOUR SEWER SYSTEM

Your sewer system has a big job – to carry wastewater away from your house. In most houses here in northeastern Ohio, there are actually two different sewer lines, both connected to larger pipes in the street (*see illustration below.*) The **sanitary sewer** carries wastewater generated inside your house – by activities like bathing, dishwashing, or laundry – to a waste treatment plant, where the impurities are removed before the water is sent back to Lake Erie. The **storm sewer** carries water from outside your house – rain and melted snow from your gutters and any drains in your yard and/or driveway – directly back to the lake, bypassing the water treatment plant (since the water presumably does not need to be purified). In some communities, older homes may have “conjoined systems,” where the two lines join together and send all the water to the waste treatment plant.



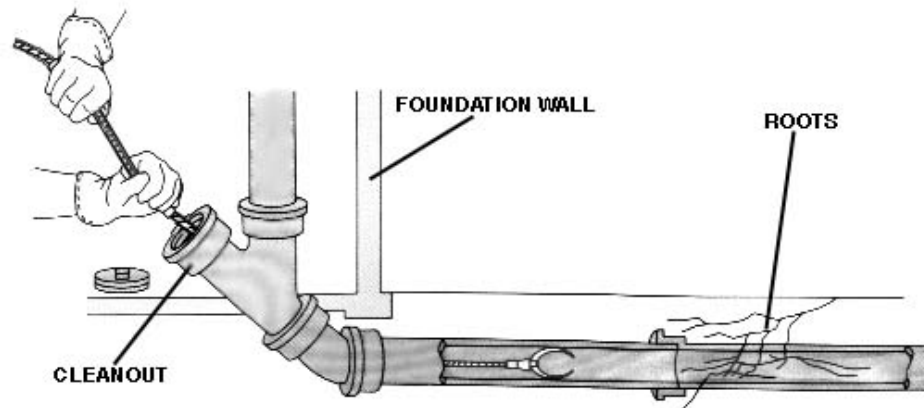
You probably never even think about this system, until there's a problem. But, when your laundry drain gets clogged with lint, or when roots invade either sewer line, water can no longer flow freely to the main sewers in the street. The result can be slow toilets, water backed up onto your basement floor, wet foundation walls, or soggy areas around your yard drain.

There is no chemical that will dissolve these obstructions in your drain lines. You have to snake them out, using a sewer snake with a thick enough cable and strong enough motor to chew through roots or other blockages.

The biggest problem can be getting access to the sewer line. If you're lucky, you'll have a **cleanout** where you can introduce the snake cable into your line (*see illustration next page.*) For your sanitary sewer, you may find a cleanout on the main stack or sticking up through the floor; for your storm sewer, a cleanout may have been installed at the bottom of one or more of the downspouts, where the downspout is connected to the underground system. If you don't

(continued)

have a cleanout, you can try gaining access in other ways. For a sanitary sewer, you can try snaking from a floor or laundry drain in your basement, although it may be difficult to get a thick snake cable through the trap beneath the floor. For a storm sewer, you can chip out the mortar around your downspout and lift it out of the clay crock, and then run the snake down the drain line from there. If none of these strategies are successful, your only other options may be to locate the **cleanout “Tee”** (usually in your front yard near the public sidewalk, where an access pipe comes up near the surface before your sewer line joins the main sewer in the street) and snake back toward the house, or to install a cleanout that you can use for snaking.



Although it's a lot of work, snaking your sewer line will clear most obstructions. If you find evidence that roots have grown into the line, you can add **copper sulfate** (a chemical sold in hardware and garden supply stores) to both storm sewers and sanitary sewers to slow down any new root growth; use it in the spring and fall when surges of root growth occur (and it won't hurt to use it in the summer and winter, as well.) If you have a small amount of dirt in the sewer line, a "mud head" can be used to remove it.

What snaking won't be able to remedy is a sewer line where the pipe has broken and collapsed. Until a few years ago, there was no sure way to know, without digging, if this was the cause of the problem. Now, however, many companies have **fiber-optic cameras** that can be sent on a cable down through the sewer line to visualize the situation below the surface of your yard. If you see a collapsed pipe, that portion of the line will need to be dug out and replaced.

Finally, some "slow" sanitary sewers may not be caused by a clogged drainpipe, but instead may be the result of a problem at the other end of the system. For wastewater to drain properly, air must be able to enter the sanitary sewer through the **vent pipe** that extends through your roof. Bird nests, critter carcasses or other obstructions can block the vent, and – just like a finger held over the end of a soda straw – prevent the flow of water out the other end.

In Cleveland Heights, homeowners can ask the City's Streets and Sewers Department (691-7330) to try to snake their main sanitary sewer line. (This service is *not available* for storm sewer lines.) The cost is usually less than a private contractor, although there will be a higher charge if the work cannot be done during regular working hours. The City can't promise that their crew will be able to open the line, but they won't charge you if they're not successful.

The City's crew prefers to work from the outside of your house, so it helps if you know where the cleanout "Tee" is on your tree lawn. The City's records were destroyed by fire in the 1970's, but if your "Tee" isn't marked, they may be able to locate it – or sometimes they can work from the basement.