



## Small Steps Reduce Likelihood of Big Sewer Problems

By Dan Overmore, Wastewater Technician

Kitchen sink draining slow? Bathtub not draining? Floor drain backing up? What's the problem? What do I do? Who do I call? Sounds like the sewer line is plugged up. Do I need to dig up my whole yard to find out? Is there an easier way to find where the plug is and unplug it?

The problem may not be as bad as it seems. The sanitary sewer lateral or the sanitary sewer main may be plugged, not allowing passage of wastewater. What is the difference between a sewer lateral and a sewer main?

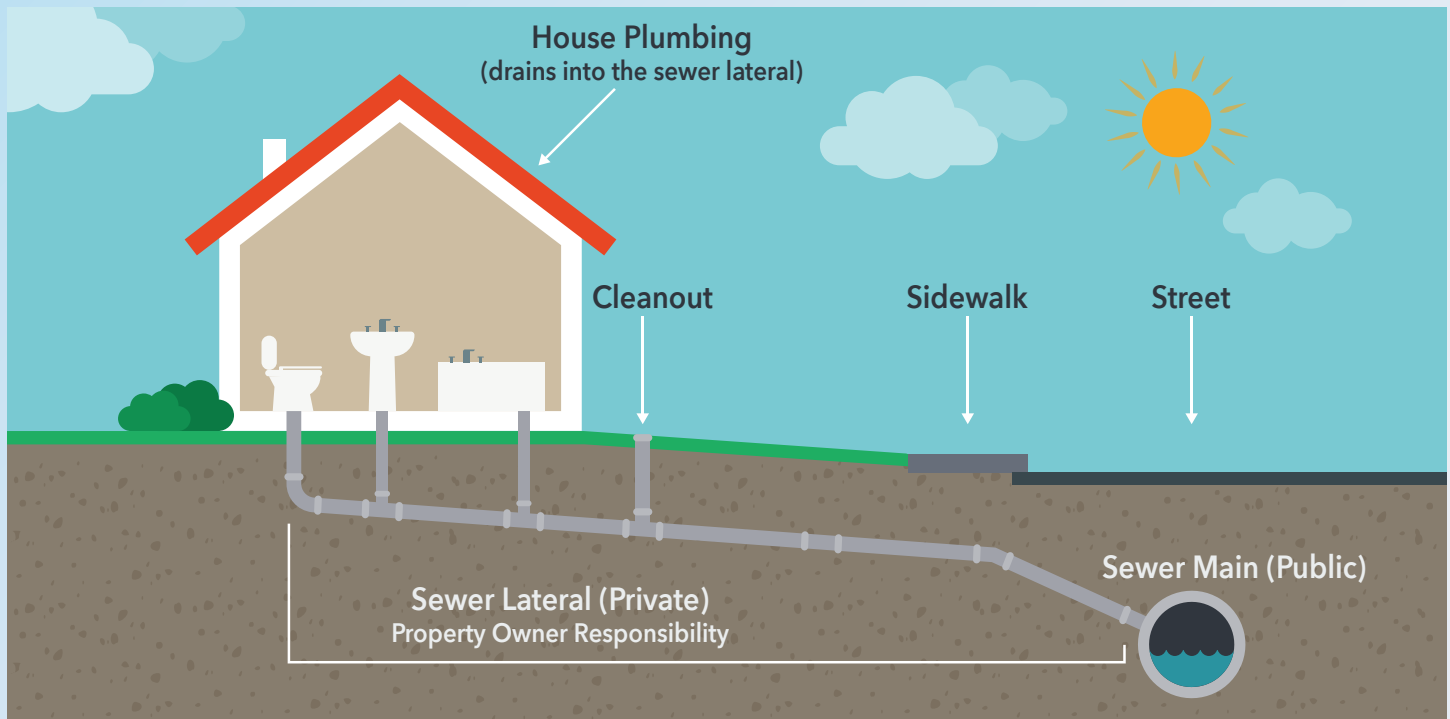
Your sanitary sewer lateral is the pipe that carries your wastewater from your home (toilets, sinks, showers, laundry, floor drains, etc.) to the public sanitary sewer main that is typically under the street. These lateral pipelines are smaller pipelines connecting homes and

businesses to the main sewer line, typically four inches in diameter.

The main sewer pipe is the primary pipeline in a sewage system running under the public street collecting wastewater from lateral connections. The main sewer pipe carries the wastewater from the laterals to the wastewater lagoon or treatment plant where the wastewater is treated before being safely discharged. Typical size of sewer mains is eight inches in diameter but can be smaller or larger depending on how many connections and how much wastewater goes through them.

What can cause a sewer to be plugged or back up? Sewage backups are caused when wastewater cannot flow away from your home. As a result, it builds up in the sewer pipes and eventually backs up into your house. Different things that can cause the sewer line to plug are fats, food

### TYPICAL SEWER CONNECTION





*Sewer inspection camera.*

waste, hair, flushable wipes and many more things. If there is a crack in the sewer line, tree roots can get through those cracks and plug up a sewer line. Older sewer lines can also collapse causing a plugged sewer line.

What do I do now? Most cities have public workers that are trained to help with this. They can be contacted and asked to see if there is any blockage in the sanitary sewer main that is usually owned and operated by the city. The public worker will pull several manhole covers that can access the sanitary sewer main and see if any backup is occurring. If there is backup in the sanitary sewer main, they will send a jetter, which produces high pressure water flow, through the pipe which usually unplugs the pipe allowing the wastewater to flow again. If this does not unplug the pipe, a camera can be used to go down the pipe to locate and see what is causing the blockage. If bad enough, the city may need to excavate down to the pipe and repair the damage or remove the blockage.

If the sanitary sewer main is flowing free without any blockage, it means the blockage is in the homeowner's sanitary sewer lateral. Most homes or businesses will have a sewer clean-out. The clean-out is for times like this. A camera run through this pipe can locate the blockage and see what the blockage is. If the lateral is plugged due to normal household waste that was put down the drain, a smaller jetter can be used to unplug the blockage in most cases.

With all this in mind, preventative maintenance is a key to keeping sewer laterals and sewer mains free and clear of wastes that can create blockages. Jetting sewer mains and laterals periodically can stop a blockage from occurring and prevent wastewater from backflowing into your house.

### **TIPS FOR PREVENTING A SEWER BACKUP**

- Never pour fats, oils, celery or coffee grounds down the drain, even if you have a garbage disposal
- Avoid putting so-called flushable bathroom wipes in the toilet
- Never flush disposable diapers or hygiene products down the toilet
- Use a hair catcher in showers and bathtubs

North Dakota Rural Water System is here to assist communities when the issues mentioned above arise. It can provide technical assistance along with the use of our sewer pipeline cameras for determining where the blockage is occurring. Please contact your city Public Works to work out a schedule for our wastewater technical advisors to come and assist your needs.