



Sewer Inspections – Signs to Look For

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Last winter I was inspecting a vacant home. As I came to a bathroom I did all the normal things, turned on the shower, the sink and flushed the toilet at the same time. All looked fine. Then I went to the next bathroom which was in the basement and did the same thing. Then on to the kitchen. Later in the inspection while I was walking past the basement bathroom I noticed some dirt in the shower pan. It was odd because I didn't see dirt there when I first inspected it. Where could that dirt have come from? As I investigated further I noticed water coming out from under the toilet and onto the floor. Down the hall I found a pool forming on the furnace room floor. The normal course of my work had led to the discovery of a problem my client would want to know about. One that obviously needed fixing.

But what's the right way to fix the problem? Does the drain line simply need roto-rooting? Maybe. The three main causes of plugged sewer lines are roots, grease, and structural problems. Roots and grease can be removed fairly inexpensively (\$100-\$200), however if there are structural problems with the drain, the piping will need to be repaired or replaced. This typically costs between \$2500 and \$14,000.

Sometimes there may not be obvious symptoms such as the ones I mentioned above. The owner may regularly have the drain roto-rooted and think that it is perfectly normal and not mention it in a disclosure. For buyer protection the best course of action is to have a drain line inspected with a video-scope under certain circumstances. A video-scope allows inspection of the drain piping from the house out to the city sewer. It is done by feeding a fiber optic cable into the drain. A video tape can be produced at the same time so the buyer does not have to be present to "see for themselves" or to show to whomever buys the house next the conditions that existed at the time of the inspection.

Circumstances that warrant a drain inspection are water backing up inside the house or crawlspace, large trees in the yard, houses built more than 25 years ago, and movement of the ground around the house. Having water back up in the home is a clear indication that there is an existing problem. A video-scope will tell you how serious the problem is. Large trees in the yard in the area of the drain line can grow their roots into the drainpipe looking for water. Roto-rooting on a regular basis may be an acceptable solution. Pipe replacement may also be needed. Homes built before 1984 usually have clay sewer pipes. This type of pipe is particularly vulnerable to being crushed or broken. Drain inspectors recommend that all homes in this age range have their drains video inspected. The last red flag for possible drainpipe damage is moving soils. We've all seen homes with structural problems due to moving soils. The same can happen to underground piping. If there is major shifting in surface soils seen at driveways or sidewalks, there's possibly some shifting going on down at the level of the drain as well.

In all of these cases the only way to assess a potential or existing problem is to have a video inspection performed. Video inspections are beyond the scope of a typical home inspection. While it would be nice if all home inspectors looked for conditions that may warrant a video inspection, many may not. So if any of the above circumstances exist it's a good idea to recommend to your client that a video inspection of their sewer line be performed.

Video inspections run between \$100 and \$175. About the same cost as a radon test. The financial risk of not doing a video inspection of the sewer line when indicated can be up to \$14,000. As I mentioned in a previous article, radon can be mitigated for round \$1000. The financial risk of not inspecting a sewer line is potentially 14 times that of not testing for radon. Something to consider.

One more thing to be aware of is how often a major problem (i.e. greater than \$1500) is found during a video inspection. I contacted three sewer inspectors and they all had different answers. One said about 10%, another said 20%, and the last said a full 60%. The last inspector I spoke with said that his high number was only for the older (pre 1984) clay pipes. Hopefully these numbers give you a feel for the magnitude of problems out there and how to deal with them.