

# WATER IN YOUR BASEMENT? WHAT YOU NEED TO KNOW

Basement flooding can occur in some areas due to excessive rainfall, saturated ground conditions, and obstructions in sewer lines. One source of basement flooding can be from structural causes such as cracks in basement walls and floors coupled with saturated soils. Another source of flooding can be from backup of sewage from municipal wastewater collection systems. This may be from illegal material being put in the line, such as grease, diapers, etc. The City of Marion maintains separate storm and sanitary systems. Water from inside your home must empty into the sanitary line while water from foundation drains, sump pumps and downspouts must empty into the storm system. Problems may also arise when ground water seeps into cracked or broken customer service or city main (storm or sanitary) tile and fills the sanitary sewer lines to levels that exceed their capacity. When the carrying capacity of the pipe is exceeded, the sewage and storm water tend to back up into customer service lines and through floor drains into basements.

The City recommends property owners to enlist a reputable plumber to accurately locate all service lines, downspouts, foundation drains and any storm or sanitary lines. In addition to locating the lines, the plumber should verify the condition of each line and accurately identify any improvements that may be needed. The plumber should also verify that the homeowners sanitary and storm laterals are connected to the correct City main line.

## Prevention

Basement flooding from cracks and openings in basement walls can be prevented only if the walls and floor are in good condition. Footer drains and sump pumps are desirable in preventing flooding from this source. This type of flooding is beyond the scope of this discussion. Preventing backups from the sewage collection system can be categorized as short-term and long-term measures.

*The City cautions homeowners when using any preventive measures such as plugs, standpipes, or check valves. There can be significant value, but none are guaranteed to work every time, as conditions may vary during each high-water episode. Further, the use of these devices may expose hidden flaws in the home plumbing system that may have gone unnoticed. Pressure changes could reveal other issues in and around the home. Housing stock within the City varies widely from essentially new to homes more than 100 years old. Records of plumbing changes and homeowner activities over the years are impossible to track or accurately documents. Therefore, the City takes no responsibility for the use of plugs, standpipes, valves, etc.*

### **SHORT-TERM**

Preparation is the key to emergency prevention of basement backups. When backup is imminent, sandbags should be placed on the floor drains and in the plumbing fixture (toilets) to minimize the amount of water backing up into the basement. An alternative to sandbags would be a rubber plug. These are available at hardware stores and plumbing suppliers.

1. **Immediately stop all water use in the household when backup conditions are imminent or are occurring!**
2. Call the Marion City Water Pollution Control Department at 740-383-6051. After working hours, leave a voice message with your name, address, phone number and problem and someone will return your call. There may be blockages, pump malfunctions or other problems that can be corrected without much delay.

### **LONG-TERM**

Preventive measures are necessary if basement backups from the collection system are likely to occur. The following are suggested preventive measures.

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1. Plumbing modifications may be made. Basement floor drains may be permanently plugged or standpipes, to contain incoming water levels, may be installed. Sump pumps should be routed to run out onto the grass. Basement showers and toilets can be modified to pump into the household sewer at or near ground level. Usually, water will not back up into plumbing fixtures at the main floor level. Problems occur in basements because the private service lines are lower than the city's main sewer line.
2. Another type of plumbing change would be the installation of check valves (backwater valve). This type of valve prevents the reversal of flow or backup of sewage into the basement. Your plumbing contractor should be able to obtain and install this type of valve. These may be obtained from local suppliers of water and wastewater products or plumbing supplies.

## CLEANUP

If a backup of sewage does occur, the following steps should be taken to clean up the area:

1. First, turn off the electricity and remove the remaining standing water. Materials which have been water soaked should be removed from the basement. Such items could include bedding, rugs, upholstered furniture, boxes, carpeting and padding and papers.
2. With electricity turned off, electrical outlets should be opened and drained and allowed to dry. Duct work should also be drained and allowed to dry.
3. Walls and hard-surfaced floors should be cleaned with soap and water and disinfected with a solution of 1/2 cup of bleach to one gallon of water. DO NOT MIX BLEACH AND SOAP. When using bleach, make sure the area is well ventilated. Thoroughly disinfect any food service areas or areas where children play.
4. Wash all linens in hot water or have them dry cleaned. Steam clean all carpeting, if salvageable. If not, discard. All carpet padding should be discarded.
5. Salvageable items should be dried within 24- 48 hours to reduce chances for mold and mildew growth.
6. If insulation, paneling, or sheetrock have become wet, it will need to be removed. Allow plenty of time for drying before reinstalling insulation to prevent mildew.
7. For more information, contact the Ohio Department of Health at 866-644-6224 [www.odh.ohio.gov](http://www.odh.ohio.gov) or the Center for Disease Control at 800-CDC-INFO (800-232-4636) or [www.cdc.gov](http://www.cdc.gov).

## PERSONAL HYGIENE

1. Wear rubber boots and waterproof gloves during a cleanup of sewage.
2. Wash hands with soap and water before preparing or eating food and after handling articles contaminated with sewage.
3. Avoid smoking while working in sewage contaminated water.
4. If you have any cuts or sores, avoid contact with the water. If they come in contact with this water, wash them thoroughly afterwards to control infection. If a wound develops redness, swelling or drainage, seek immediate medical attention.
5. Disinfect toys using a solution of 1/2 cup of bleach to one gallon of water.
6. Anyone receiving a puncture wound or a cut while cleaning up should have a doctor determine whether a tetanus booster is necessary.

For further information, contact us at:

**City of Marion Water Pollution Control**  
**1810 Marion-Agosta Road**  
**Marion, Ohio 43302**  
**Phone: (740)383-6051**