

# Dealing with Sewer Back-Ups and Basement Flooding

This information is provided to the Citizens of Dearborn following the unfortunate circumstance of a sewer backup.

A sewer backup can be very frustrating and stressful. This is a situation that must be dealt with in a very careful manner. If not handled properly, health and safety problems can occur, as well as significant property loss.



This valuable information has been prepared for you by the

**City of Dearborn  
Customer Service Steering Committee  
&  
The Department of Public Works  
Mayor John B. O'Reilly**

## Introduction

It is never pleasant to deal with a sewer back-up. While sewer back-ups may occur for a number of reasons, they are usually caused by internal plumbing problems in the home and, in rare cases, the public sewer line.

The City of Dearborn continually maintains and repairs the public sewer system to keep it in good working condition, thus reducing the potential for backups.

The information contained in this brochure can help protect you and your family from the hazards of raw sewage in your basement and show you practical methods for proper sanitation of your home and its contents if a back-up occurs. A quick response will go a long way toward limiting the possibility of long term health effects and property damage.

This brochure also includes helpful phone numbers where you can receive additional information and advice. Keep it in a handy place for quick reference if you have a sewer problem.

Sincerely,

Dearborn Customer Service Committee

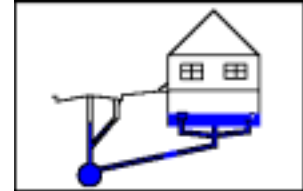
## COPING WITH A SEWER BACKUP

### How Do Sewer Backups Occur?

Sewer backup may vary from clean water to raw sewage that causes contamination and may discolor exposed items. The following describes causes for water in basements:

**Storm water** seeping in walls, floors or windows. This is normally due to inadequate drainage or grading around a home, malfunctioning sump pumps, gutters or footer drains.

**Sewer** backups through the basement drain. Back-ups may result from a variety of conditions, most commonly, heavy rain events. When excess water overloads the sewer because of blockages caused by grease, debris or tree roots, or collapses, a sewer back-up may occur. Sometimes the private home's sewer system is in such poor condition that a back-up will occur when a toilet is flushed, or a load of laundry is washed.



### Will the Combined Sewer Overflow (CSO) Project affect Sewer Back-ups?

No.

The CSO facilities that will be built from 2005 to 2010 are designed to accept the same amount of sewage flow that the city's sewer system currently delivers. This means that the CSO project will not cause any restrictions in the system and will not cause additional sewer back-ups.

### First Steps

If you have a backup, call the City of Dearborn **Department of Public Works-Sewerage Division** at **313-943-2042**, Monday through Friday 7:00 AM - 3:30 PM, or the **City non-emergency number** at **313-943-2100** during all other hours.

We will dispatch a maintenance crew to your address to determine if the stoppage is in the City main or your private line (sewer lateral). If the sewer main is found to be clear, it is then the responsibility of the property owner to call a licensed plumber or drain service to correct the problem. The City cannot recommend any plumber. Check your Yellow Pages or Business White Pages. You may want to get more than one estimate from reputable plumbers and check their references.

If a blockage is found in city sewer, the Water and Sewerage Division will perform any cleaning or repair to that line. This work will be done as soon as possible and you will be kept informed about what is being done. If you have repeated problems and you have determined that your sewer needs a major repair, contact the **DPW Engineering Division at 313-943-2145** to learn about the "Must Fix" program (there is a fee for this program).



### Cleaning Up After Floods/Sewer Backups How do I clean up after floods/sewer backups?

Proper responses to sewer backups can greatly minimize losses from negative health effects and property damage. Every backup is unique and will require different responses but there are some universal principles that can be applied to all situations.

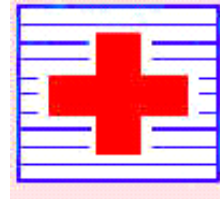
Sewer backup can lead to disease, destruction of your valuables, damage to your house, and the risk of electrocution. Prompt cleanup of affected property can help minimize the inconvenience and damage.

#### Health and Safety Issues

Please be aware and keep in mind the risk of potential health and safety problems when addressing the cleanup of your home. Sewage and floodwaters contain bacteria, fecal material, viruses and other hazardous microorganisms which can cause disease. These "germs" can be transmitted by touching contaminated items or by tracking them into uncontaminated areas on shoes. Children and pets are especially vulnerable.



Odors from sewage backups are unpleasant but not harmful. The speedy removal and cleanup of sewer water is very important and necessary.



### To protect yourself and your family during cleanup, please follow these guidelines:

- Avoid skin contact with sewer water, especially cuts and sores. Keep them clean and covered.
- If you should suffer a cut while working in flood or sewer water, contact your physician or the Health Department about receiving a tetanus shot.
- Do not allow children to play in areas contaminated by sewage backup.
- Do not eat or drink anything exposed to sewer water.
- Keep contaminated objects, water, and hands away from mucous membranes (mouth, eyes, and nose).
- Wash hands frequently, especially after bathroom use, before eating, and immediately following contact with sewer water or contaminated objects/surfaces.
- Disinfect all areas and equipment that came into floodwater contact with a solution of 8 tablespoons of liquid chlorine bleach to a gallon of water. This is a very effective method of removing odors and bacteria. Bleach solutions are the most effective disinfectants, but may cause discoloration of many materials.

**NEVER MIX BLEACH WITH AMMONIA  
THIS PRODUCES CHLORINE GAS, A VERY  
TOXIC AND DANGEROUS  
SUBSTANCE.**



## Do's and Don'ts of Clean-up

Because of the unsanitary nature of a sewer backup in the home, it is essential that all affected areas where the backup occurred be cleaned and disinfected as soon as possible. Generally, small household items that are affected or exposed to the sewage should be discarded. It is important to make a list of discarded items, and if possible, provide photographs for insurance purposes.

**All affected appliances should be inspected prior to putting them back into operation.**

Many private companies can handle the cleanup for you.

***We recommend that you immediately arrange for a thorough, professional, sanitized cleanup of your affected property.***

Check the yellow pages under the listing "Fire and Water Damage Restoration." Some companies will also inspect and repair major appliances (furnaces, water heaters, washers and dryers). If a private company is contracted to do cleaning and/or restoration, be sure to keep all receipts for insurance purposes.



If you chose to cleanup your property yourself, the following information is provided as a recommendation to assist with your cleanup efforts:

- Potential health and safety hazards must be identified and eliminated prior to implementing cleaning or restoration procedures. Before entering the affected area the potential for electrical shock hazards and gas leaks must be assessed.
- Wear protective clothing such as rubber boots, gloves and eye protection during cleanup and removal. To remove gloves, turn them inside out, without touching the contaminated exterior. Dispose of them properly.
- Treat all water soaked surfaces, furnishings and items as contaminated until properly cleaned & sanitized.
- Do not use any electrical equipment while standing in water.
- Wet-vacuum to remove spillage.
- Operate wet vacuums only when plugged into a ground fault circuit interrupter or ground fault equipped outlet.
- Remove and discard carpet and steam clean or discard drapes.
- Remove and discard upholstered furniture and porous wood furniture stained by sewage.
- Discard or properly wash and disinfect toys, clothing and other contaminated objects.
- Sanitize and clean hardwood furniture, then thoroughly wipe, dry and apply an oil-based wood polish.



## Do's and Don'ts of Clean-up (continued)

- Ventilate the affected area with floor fans and a dehumidifier, if available, to properly dry the area. If it has not been directly contacted by water, activate the building's heating, ventilation and doors when conditions are favorable.



- Clean appliances and/or ductwork. If electric motors, wiring or insulation have been saturated, have a qualified service technician remove the motor, dry it, and inspect for damage before plugging it back in and turning it on.
- Do not use heat to dry closed building interiors; mildew and expanded water damage may result.
- If your basement walls are finished with drywall, all the areas contacted by water must be removed and disposed of within 24 hours. Once these items get wet, they retain moisture long enough to grow mold. Removing the wall board also allows air to circulate around the wood studs so that they dry completely and will not need to be replaced.
- Sanitize and repair, or remove and discard, paneling, wallboard or wall coverings.

- Unplug all electrical appliances, small electrical devices on wet floor covering or other wet areas and turn off the circuit breakers supplying electricity to affected areas.
- Turn off the gas (or other fuel source) to your furnace or heater and hot water heater.
- Avoid flushing toilets or using other water connected to appliances or fixtures. The discharge from these items may back up into the basement.
- After the waters have receded, flush out and disinfect plumbing fixtures before resuming normal use.
- Do not track sewage from the basement into living areas of the house.
- Keep children and animals out of the affected area.
- Take before-and-after photos.
- If a dishwasher, washing machine, shower, bathtub, toilet or other water fixture is operating shut it off immediately.
- Move any uncontaminated property away from the affected areas.
- Do not attempt to stop the flow of sewer backup through the floor drain or any other sewer drain. Any added obstruction could cause serious damage to your household drainage system and possibly a catastrophic rupture of the household sewer drainage system.



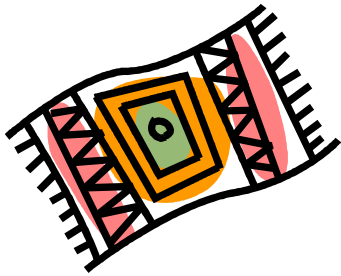
## Treatment of Rugs and Carpeting

For smaller, loose rugs, and wall-to-wall carpet installed on tacks, in-plant cleaning is the best option. The germicidal and cleaning treatment has to be thorough.

Both the carpet and the floor surface have to be completely cleaned and decontaminated. Germicides used for this have to be effective even against the bacteria of the E. Coli family, which is present in contaminated sewage.

For wall-to-wall carpets that are glued down, cleaning on-site may not be completely effective and in-plant cleaning may not be viable economically or practically.

Contaminated padding is best discarded and should not be reused.



### Related Links

[www.fema.gov/hazards/floods/pbuffd.shtm](http://www.fema.gov/hazards/floods/pbuffd.shtm)

[www.michigan.gov/deq](http://www.michigan.gov/deq)

[www.fema.gov](http://www.fema.gov)

[www.epa.gov/safewater/ecoli.html](http://www.epa.gov/safewater/ecoli.html)

[www.cdc.gov/nasd/docs/d001501-1600/d001564/d001564.html](http://www.cdc.gov/nasd/docs/d001501-1600/d001564/d001564.html)

## **What a Homeowner Needs To Know**

### **Public Act 222: Sewer Back-up Legislation**

The State of Michigan passed a new law, Act 222 of Public Acts of 2001, which clarifies when municipalities are liable for sewer backups. The Act sets standards to determine the extent to which a municipality is liable for backups and establishes a process that affected persons must follow to seek compensation when a backup occurs.

Anyone making a claim for property damage or physical injury must prove that the public sewer had a defect. In addition, it must be proven that the governmental agency knew, or in the exercise of reasonable diligence, should have known about the defect, and that the governmental agency having the legal authority to do so, failed to take reasonable steps in a reasonable amount of time to repair, correct, or remedy the defect.

If you experience an overflow or backup of a sewage disposal system or storm water system, and intend to make a claim, you must file a written claim with the City of Dearborn within 45 days after the overflow or backup is discovered. Claim forms are available at the Office of Corporation Counsel upon request. Claims must be mailed to Corporation Counsel, City of Dearborn, 13615 Michigan Avenue, Dearborn, Michigan 48126.

# TYPICAL RESIDENTIAL SEWER SYSTEM

