

# Flood and Flash Flood Safety Tips



Photo: Sadie Holbrook, NCPR NEWS

## Prevent Sewage Backflow by Installing Sewage Backflow Valves

Once you have determined that your home is in a flood prone area, you should consider installing sewage backflow valves. They stop sewage backup caused by flooding to enter your home, avoiding both the mess and hazard of raw sewage in the home (it is a severe health concern due to bacteria present in raw sewage).

There are two main types: flap valves and gate valves. Flap valves operate by closing when sewage is flowing the wrong way in the pipe, but is not as tight a seal as gate valves. Gate valves have a tighter seal, but must be initiated by hand when needed, leading to a risk of non-use if a flood happens suddenly or when you are not home.

Both must be installed by a licensed plumber under your local building codes. Gate valves are usually more expensive than flap valves. Valves should be installed on all pipes that leaves the house or are connecting to things that may be below the flood height, including washing machine drain lines, laundry sinks, fuel oil lines, rain downspouts, sewer/septic connections, and sump pumps. Sumps pumps connected to underground drain lines are especially challenging.

## Before a Flood:

- Find out your flood hazard risk from your local emergency management agency or independent research on local flood history

This includes finding out your properties flood elevation and risk, and your local communities warning systems.

- Become prepared by following these basic emergency preparedness steps:

If you live in a flood prone area, consider making an emergency evacuation kit and plan that includes routes to get to safety. Check with your locality for the location of emergency shelters and have multiple safe routes planned, in case one is flooded.

Prepare your house for a flood with both mitigation (elevating structures, installing check valves to prevent floodwaters / sewage infiltration) and emergency supplies like plywood, plastic sheeting, sandbags, and hammers, nails, and shovels and sand.

Acquire emergency supplies such as: flashlights and batteries, battery operated radio, first aid kit and manual, emergency food and water, non-electric can opener and safe food heating source, essential medications, cash and credit cards, sturdy shoes.

Place your town information here

Address  
Line 2  
Phone

## **Develop an Emergency Communication Plan**

Should the family be separated during a flood event, have a plan to meet at a designated location and/or have a method to communicate.

Due to possible service outage or overloading, cell phones may not be available; therefore, it may be easier to call long distance to someone outside the affected area to coordinate plans. Have this person be designated beforehand, and make sure everyone has memorized their number.

Ensure all family members know how to respond and stay safe in a flood emergency.

Teach children how to call 911, their local police and/or which to tune in to local broadcasts of information.

## **Act now to be prepared**

Ask your insurance agent about flood insurance; homeowner policies do not cover flood damage.

Make an itemized list of valuables in the house and keep in safe place.

Plan what to do with your pets.

Keep automobile fuelled, and have disaster supply kit in trunk.

## **During a Flood Watch**

Listen to local stations for latest information.

Fill bathtubs, sinks, and jugs with clean water in case supply becomes contaminated.

Bring outdoor furniture and décor in, if possible. Also move valuable items from lower floor to higher floors if time allows.

Keep pets indoors. Gather carrying cases.

Be prepared to evacuate, or follow other directives from local authorities.

## **During a Flood**

*If indoors;* turn on battery powered radio for information updates. Get your preassembled emergency supplies.

If told to leave, do so immediately. Bring everyone who lives there with you.

*If outside;* climb to high ground and stay there. Do not walk through floodwaters, even six inches can sweep you away if it is swift.

*If in your car;* DO NOT drive into a flooded area, turn around and try another way. Many people have drowned from driving through floodwaters they thought were safe.

If your car stalls, abandon it immediately and seek higher ground.

## **During an evacuation**

If advised to evacuate, do so immediately. It will be easier and safer earlier, and may not be possible later.

Remember to take your pets, time permitting.

## **Three ways to treat water**

During a flood, water may become contaminated by harmful microorganisms. You should treat all water you are uncertain of its purity.

The methods below treat most microorganisms, but some are not removed. Other contaminants may be in flood waters.

**Boiling** is the safest method to treat water. Bring water to a roiling boil for 3 – 5 minutes, keeping in mind some will evaporate. Let water cool before drinking.

**Disinfection** is the method using liquid household bleach (plain bleach, not scented, color-safe, or with added cleaners).

Add 16 drops of bleach per gallon of water, stir and let sit 30 minutes. If water does not have faint bleach smell, repeat procedure and let sit for 15 minutes.

**Distillation** involves catching the vapor from boiling water and condensing it.

