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BLUEPRINT FOR SAFETY NEWS

W A S H I N G A W A Y




Flood Misconceptions

Among natural disasters, a flood is an overachiever. It is the most common natural disaster in the United States and happens in every state.

In fact, more than 60% of the 305 federal disaster declarations made from 2000 to 2005 involved flooding. 2006 is well on track to match this figure – from Jan. 1 to Aug. 1, more than 60% of 35 disaster declarations included flooding.

But a flood doesn't have to receive a federal declaration to be a disaster to you. In addition to endangering your family, a flood can do considerable damage to your home and property, and jeopardize you financially.

The devastation caused by floods is made worse by three major misconceptions:

-  A flood won't happen to me.
-  If it does, I'm protected because my standard homeowners insurance policy covers flood.
-  There's nothing I can do to strengthen my home against flood.

This issue of *Blueprint for Safety News* aims to wash away these misconceptions.

A flood won't happen to me – or will it?

No state is immune from flooding. From Jan. 1, 2000, to Aug. 1, 2006, all but three states experienced floods bad enough to warrant a federal disaster declaration. However, the three states that escaped this designation for the last five years, Colorado, Rhode Island, and Wyoming, have all experienced floods in the past and will do so again.

The Federal Emergency Management Agency estimates that 10 million households are located in flood-prone areas. The agency also says that, if your home is in a flood-prone area, there is a 26% chance that you will experience a flood during the life of a 30-year mortgage compared to a 9% chance of fire.

Don't make the mistake of assuming a flood won't happen to you. Find out if your home is at risk by visiting the official site of the National Flood Insurance Program at www.FloodSmart.gov. Your local government's floodplain management officials can help also.

My homeowners insurance covers flood, right? Wrong!

The devastation caused by floods is made worse by the fact that most homes in the United States are not covered by flood insurance, leaving a majority of homeowners personally responsible for the cost of repairs or rebuilding.

Floods happen so often and cause so much damage that the majority of private insurance companies do not offer flood coverage. So, it is likely that, unless you've purchased a flood insurance policy, you are not covered for flood.

Flood insurance is a special policy backed by the federal government through the National Flood Insurance Program, with cooperation from local communities and private insurance companies.

If you do not have a flood insurance policy, you are not alone. A recent survey conducted for the Chubb Group of Insurance Companies revealed that only 14 percent of Americans say they have purchased flood insurance for their homes.

See "Insuring Against Flood Losses" inside this newsletter for more information about flood insurance.

My Home Can't Be Strengthened Against Flood

All is not lost if you live in a floodplain. You can take steps to better protect your home against flood. Depending on your home and situation, these steps might include: elevating your home, wet or dry flood proofing, and a number of steps designed to protect your home's appliances, electrical system, interior and furnishings. See "Stemming the Tide: Steps to Protect Your Home from Flood" inside this newsletter to learn more.



This family was only able to reach their flooded home by boat after the Tar River overflowed its banks due to heavy rains brought by Hurricane Floyd in 1999. Dave Galley/FEMA

To Be A Success Story, Face Flood Threat Before It Happens

By Leslie Chapman-Henderson, President & CEO, Federal Alliance for Safe Homes, Inc. (FLASH®)

If it seems to you that you are always seeing news about devastating floods happening somewhere in the United States, you are probably right. Floods occur in every state and just about all times of year.

But what you usually don't see in the news about floods are the success stories of the people whose homes suffered little or no damage due to the steps they took to retrofit them beforehand. Let's face it. Video and pictures of houses crumbling into a raging river are scary and attention-grabbing. What could be exciting about a family returning to their retrofitted home after a flood to find it virtually unscathed?

I bet if there was a camera crew with that family, we'd see something quite dramatic – a tearful mother cradling her family photo albums, a child excitedly running into her perfect bedroom, a thankful father reverently touching the walls of his home as if afraid he was dreaming.

This issue of *Blueprint for Safety News*, the second issue printed as part of our "Retrofitfitness" campaign, focuses on flood. With it we aim to provide to you the techniques and information you need to better protect your family and home against flood. Should a flood happen to you, we want your story to be a happy one.



CEO'S CORNER

STEMMING THE TIDE:

STEPS TO PROTECT YOUR HOME FROM FLOOD



A Marin County, California, resident raises his home to avoid further repetitive losses caused by flooding from a nearby creek. Adam Dubrowa/FEMA

While flooding is the most common natural disaster, there are steps you can take to better protect your home.

First, get a realistic assessment of your home's flood risk. The National Flood Insurance Program provides a useful tool for measuring residential flood risk at www.FloodSmart.gov – look for the “What’s your flood risk?” tab at the top right of the homepage.

Second, compare the elevation of your property to the Base Flood Elevation (BFE). BFE refers to the height that water will reach in the event of a “100-year flood,” or a flood with a 1% chance of occurring in any given year. You can find this information by contacting your local building officials or local floodplain management officials. You can also get additional information and requirements for buildings in the floodplain as well as permitting requirements.

Use the information you have gathered about your home's flood risk to select from the following retrofitting techniques you can use before a flood strikes.

Elevate your home. Raise your home so that the lowest floor is above the flood level or BFE. Use building piers or columns to create an open foundation. Sacrifice the first floor – build a false floor above the BFE and elevate the roof.

Wet flood proofing. Install flood vents that create permanent openings in the foundation's walls so water can flow through the structure. This retrofit requires at least two vents on different walls. You would need 7 square feet of vents for a 1,000 square-foot house.

Dry flood proofing. To prevent floodwaters from entering the house, install new brick veneer over asphalt coating and apply a polyethylene film over the existing walls.



Two houses side by side in Englehard, North Carolina. The house on the right was not elevated and suffered flooding in October 2003 due to Hurricane Isabel. While the house on the left experienced the same storm, it was not flooded because it had been elevated with FEMA mitigation funds. Mark Wolfe/FEMA



When elevating a structure to mitigate against flooding, it is important to elevate outdoor appliances as well, like this air conditioning unit. Mark Wolfe/FEMA



This water heater in the basement of a home has been elevated to protect it from flood. Dave Saville/FEMA



Straps held these fuel tanks in place during a flood. Dave Gatlley/FEMA

Additional Recommendations

Here are some additional recommendations to protect your home from floods. Some are simple and inexpensive, while others require a professional contractor.

- Locate the main electric panel and elevate all electric outlets, switches, light sockets, baseboard heaters and wiring at least 12” above the BFE. In areas that could get wet, connect all receptacles to a GFI circuit to avoid the risk of shock or electrocution. Have electrical wiring done by a licensed electrician.
- Elevate the furnace, water heater, washer and dryer, outside air conditioning compressor, heat pump or package unit at least 12” above the BFE on a base of masonry, concrete or pressure treated lumber. Have work done by licensed contractors and get the necessary permits.
- Anchor fuel tanks securely to the ground floor or wall. Make sure vents and fill line openings are above the BFE.
- Install a floating floor drain plug at the current drain location. If the floor drain backs up, the float will rise and plug the drain. Also have a licensed plumber install an interior or exterior backflow valve to prevent floodwater causing sewage to back up and enter your home. As a last resort, use large corks or stoppers to plug showers, tubs or basins.

Going Home After A Flood

Your home has fallen victim to a flood. Now what? There are several precautions and actions you should take upon first reentering a home that's been flooded due to natural disaster:

If you can turn off the main power from a dry location, do so. If you must enter standing water to reach the main power switch, call an electrician to turn it off. **NEVER turn power on or off yourself or use an electric tool or appliance while standing in water.**

Have an electrician check the house's electrical system before turning the power on again.

If the house has been closed for several days, enter briefly to open doors and windows to air out the house for at least 30 minutes before you stay for any length of time.

If your home has been flooded for several days presume your home has been contaminated with mold. If your home has been flooded, it also may be contaminated with sewage. To learn how to protect your family's health from mold and sewage, visit the Centers for Disease Control website at: <http://www.bt.cdc.gov/disasters/floods/>.

If flood water has entered your home, dry it out as soon as possible by following these steps:

- If you have electricity and an electrician has said it's safe to turn it on, use a "wet-dry" shop vacuum, an electric-powered water transfer pump, or sump pump to remove standing water.
- Use fans to remove excess moisture. Place the fans at a window or door to blow air out rather than in.
- Use of dehumidifiers can significantly reduce moisture inside the house. It is not necessary to use the air conditioning systems to dehumidify the house.
- If lower humidity exists outside, open windows and doors of a house to aid in drying the house out.

Before you turn it on, have your home heating, ventilating, and air-conditioning system checked and cleaned by a professional experienced in mold clean-up. If the system was flooded with water, turning it on will spread mold throughout the house. Professional cleaning will kill the mold and prevent later mold growth.



A Bridgeville, Pennsylvania, resident cleans up after a flash flood caused by two tropical storms that struck the area within a two week period in September 2004. All the baseboards and insulation had to be removed to prevent an outbreak of mold and mildew. Bob McMillan/FEMA

Test the Waters



See how much damage a few inches of water can cause with an interactive demonstration available at www.FloodSmart.gov, an official site of the National Flood Insurance Program.

INSURING AGAINST FLOOD LOSSES

If you are among the many people who believe that standard homeowners insurance policies cover flooding, you are wrong. While standard homeowners insurance covers damage resulting from most natural disasters, such as fire or windstorm, floods are covered by separate policies.

Flood insurance is a special policy backed by the federal government through the National Flood Insurance Program, with cooperation from local communities and private insurance companies. About 88 insurance companies, possibly including the company that already handles your homeowners insurance, write and service flood insurance policies for the government, which finances the program through premiums.

You can buy flood insurance if your home is located inside or outside a floodplain, with very limited exceptions, as long as it is located in a participating community. A community can participate in the National Flood Insurance Program only if it undertakes certain floodplain management activities, such as stricter zoning and building measures to control floods. If a community goes beyond the minimum requirements of the National Flood Insurance Program, flood insurance premium rates may be discounted to reflect the reduced flood risk resulting from the community's actions.

Remember, a flood insurance policy generally doesn't take effect until 30 days after you purchase a policy. Take action now. Learn about your flood risk, estimate your premium, and find an insurance agent who writes flood insurance in your area by visiting www.FloodSmart.gov.

New Guide Teaches Homeowners About Insurance And Natural Disasters



Does your homeowners insurance policy protect your home against flood? How do you file a homeowners insurance claim? What is the difference between open perils and named perils? These questions and others are answered in a new guide co-published by FLASH and The Actuarial Foundation. Eleven sections will give you basic information about homeowners insurance, tell you how you may be able to lower your premium, give you tips on reducing potential damages due to several disasters, and much more! Download the 37-page guide at www.flash.org or call 877-221-SAFE for a free copy.

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Flooded Roads are Dangerous –

Turn Around, Don't Drown!

The stories are all too common:

— The body of a Massachusetts man is found in a swollen river, not far from where his submerged vehicle was discovered on a flooded road.

— A firefighter in Ohio drowns trying to save two teens that drove around a barricade and attempted to cross a washed-out bridge. The teens survived.

In an average year, more than 100 people are killed in the United States by flooding. Most of these deaths occur because careless or unsuspecting motorists try to drive their vehicles across flooded roads. As in the example given above, rescuers sometimes become victims themselves. Countless other people are more fortunate and are able to escape their stalled vehicles for safety, or are saved by rescue teams.

Why do so many people try to drive across flooded roadways? It seems many of us have a false sense of security in our "heavy" cars and trucks. But a 3,000-pound car is usually no match for 18-24 inches of moving water. And trucks and SUVs don't fare much better.

The rule of thumb for anyone who comes to a flooded roadway is **Turn**

Around, Don't Drown!



Floodwaters across this road in Tarboro, North Carolina, hid a dangerous road washout. Dave Gatley/FEMA

Follow these safety rules:

- Avoid flooded areas or those with rapid water flow. Do not attempt to cross a flowing stream. It takes only six inches of fast flowing water to sweep you off your feet, and 18-24 inches of moving water can sweep away a vehicle!
- Flooded roads could have significant damage hidden by floodwaters. NEVER drive through floodwaters or on flooded roads. If your vehicle stalls, leave it immediately and seek higher ground.
- Be especially cautious at night when it is harder to recognize flood dangers.



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