



# FEMA

# Hurricane Season Flooding: Understanding and Reducing the Risk

## WHAT RESIDENTS SHOULD KNOW

Don't be caught off guard. Get the facts. Know the risks. Take action to protect yourself, your family, your business, and your finances—before a weather event occurs and it's too late.

While many immediately think of strong winds when they think of hurricanes, other accompanying effects—storm surge, heavy rains, inland flooding—are equally destructive and dangerous.

### SUMMER FLOOD RISKS

**Heavy Rains.** Hurricanes, tropical storms, and summer thunderstorms can bring several inches of precipitation in just hours or can stall over an area for days. These heavy rains can lead to severe flooding by oversaturating the ground, overflowing storm drains, or causing rivers to spill over their banks or levees.

**Flash Flooding.** A flash flood is a rapid flooding of low-lying areas in less than six hours that is caused by intense rainfall from a hurricane, tropical storm, or thunderstorm. Flash floods also can occur when there are drought-like conditions.

**Storm Surge & Inland Floods.** Storm surge, the water that is pushed toward the shore by strong storm winds, can cause severe flooding in coastal areas. Combined with high tides, storm surge can be extremely dangerous and destructive. But coastal communities are not the only ones who should prepare for hurricane flooding. Hurricanes and tropical storms are powerful systems that can travel far inland from the initial strike zone and continue to bring powerful and heavy rains.

### FLOOD HISTORY

Hurricane Irene, lasting from August 20-29, 2011, was the first hurricane to hit the US since 2008. Irene made three landfalls along the Atlantic Coast and caused widespread flood devastation, resulting in more than \$7.3 billion in total damages. Significant storm surge damage, similar to that from Hurricane Isabel in 2003, occurred in the Hampton Roads area and along coastal sections of the Delmarva Peninsula from Ocean City, Maryland southward. In eastern Pennsylvania, heavy rain from Irene caused record breaking inland flooding.

Just after Hurricane Irene, the remnants of Tropical Storm Lee hit the already rain-soaked Mid-Atlantic states, bringing heavy rainfall from Virginia to New England. The storm caused more than one billion dollars in total losses. In Pennsylvania alone, about 100,000 people were forced to evacuate due to flooding. In Dauphin and Lebanon Counties in the greater Harrisburg area, nearly 5,000 homes were damaged or destroyed.

### KNOW YOUR RISK

Everyone is at risk for flooding, yet many in your area remain unprotected. Just a few inches of water can cause tens of thousands of dollars in damage. Between 2007 and 2011, the average flood claim was more than \$33,000. That's more than many survivors can afford to pay out-of-pocket for damages due to flooding, and without flood insurance, many must cover the costs to repair or rebuild on their own. Consider your risk and the consequences of a flood event, and make the choice to protect yourself.

STATE FLOOD FACTS		
State	Flood Insurance Policies	Policies in High-Risk Areas
DC	2,032	283
Delaware	25,133	17,885
Maryland	70,502	48,597
Pennsylvania	70,137	40,080
Virginia	113,512	59,209
West Virginia	21,421	15,589

## BE FLOODSMART – REDUCE YOUR RISK

A flood does not have to be a catastrophic event to bring high out-of-pocket costs, and you don't have to live in a high-risk flood area to suffer flood damage. Around 20 percent of flood insurance claims occur in moderate-to-low-risk zones. Property owners should remember:

- **The time to prepare is now.** Visit [ready.gov/hurricanes](http://ready.gov/hurricanes) for more on family preparedness for flood and other emergencies. There are a number of steps individuals and families can take to better prepare for flooding and reduce their risks. Gather supplies in case of a storm, strengthen your home against damage, and review your insurance coverages. Remember to have a family evacuation plan, put an emergency kit together, and keep important papers and valuables in a safe, dry place.
- **Only flood insurance covers flood damage.** Most standard homeowners policies do not cover flood damage. Remember: it typically takes 30 days for a new flood insurance policy to go into effect, so get or renew your policy now. Flood insurance is also affordable. An average flood policy costs around \$600 a year, and rates start at just \$129 a year for homes in moderate-to-low-risk areas.

Visit [FloodSmart.gov](http://FloodSmart.gov) (or call 1-800-427-2419) to learn more about individual flood risk, explore coverage options, and find an agent in your area.

### Before a Flood

- **Practice your family emergency plan.** Plan and practice flood evacuation routes from home, work, and school that are on higher ground.
- **Conduct a thorough home inventory.** Thorough documentation of your belongings will help you file your flood insurance claim. For more information, visit <http://www.ready.gov/insurance-vital-records>.

### During a Flood

- **Listen to the radio or TV for information.** Be sure to follow the instructions of local authorities.
- **Avoid areas already flooded, especially when water flows fast.** Do not attempt to cross flowing streams. Just six inches of moving water can knock you off your feet.
- **Never drive through flooded roadways.** Roadbeds may be washed out under flood waters and just two feet of moving water can sweep an SUV off the road.

### After a Flood

- **Check for damage.** Check for structural damage before re-entering your home. If you suspect damage to water, gas, electric, or sewer lines, contact authorities.
- **Remove wet contents immediately.** Wet carpeting, furniture, bedding and any other items holding moisture can develop mold within 24 to 48 hours. Clean and disinfect everything touched by floodwaters.
- **Plan before you repair.** Contact your local building inspections or planning office or your county clerk's office to get more information on local building requirements.
- **File your flood insurance claim.** Be sure to provide: the name of your insurance company, your policy number, and contact information. Take photos of any water in the house and damaged personal property. Make a detailed list of all damaged or lost items.