

## **Monday**

### **Flood Safety - Preparedness and Awareness**

Nearly every day, flooding happens somewhere in the United States or its territories. Flooding can occur in any of the fifty states or U.S. territories at any time of the year. It causes more damage in the United States than any other weather related event. On average, floods cause eight billion dollars in damages and eighty nine fatalities annually. Being prepared and knowing how to stay safe will help you and your loved ones survive a flood.

#### **Prepare:**

Knowing your flood risk is the best way to prepare for flooding. Find out which flooding hazards impact your state at [www.floodsafety.noaa.gov/map.shtml](http://www.floodsafety.noaa.gov/map.shtml). You can also find out if you live in a flood plain by visiting our partners at FEMA at <https://msc.fema.gov>. There are many tips for what to do before, during and after a flood on our newly redesigned Flood Safety Website at [www.floodsafety.noaa.gov](http://www.floodsafety.noaa.gov).

#### **Be Aware:**

Find the latest forecasts and hazardous weather conditions at [weather.gov](http://weather.gov) and [water.weather.gov](http://water.weather.gov). Forecasters in NWS offices work around the clock to ensure watches, warnings and advisories are issued to alert the public to hazardous conditions. The same information is available on your mobile device at <http://mobile.weather.gov>. Some smart phones are able to receive Flash Flood Warning alerts via the Wireless Emergency Alerts system. Visit [www.nws.noaa.gov/com/weatherreadynation/wea.html](http://www.nws.noaa.gov/com/weatherreadynation/wea.html) for more information!

Another tool to alert you to hazardous conditions is NOAA All Hazards Radio. This nationwide network of radio stations broadcasts continuous weather, river and other emergency information direct from NWS offices and emergency officials. For more information, visit [www.nws.noaa.gov/nwr/](http://www.nws.noaa.gov/nwr/)

Stay safe during a flood by knowing your risk and where to get the latest forecast and hazard information. Be a Force of Nature! [www.nws.noaa.gov/com/weatherreadynation/force.html](http://www.nws.noaa.gov/com/weatherreadynation/force.html)

Join us tomorrow for information on the NWS Turn Around Don't Drown program.

## Tuesday

### **Turn Around Don't Drown**

Turn Around Don't Drown, or TADD for short, is a NOAA National Weather Service campaign used to educate people about the hazards of driving a vehicle or walking through flood waters.

This year is the 10<sup>th</sup> anniversary of the TADD program. Hundreds of signs depicting the message have been erected at low water crossings during the past decade. The phrase "Turn Around Don't Drown" has become a catchphrase in the media, classroom, and even at home. It's one thing to see or hear the phrase, and another to put it into practice.

Flooding is the 2<sup>nd</sup> leading cause of weather related fatalities in the U.S. (behind heat). On average, flooding claims the lives of 89 people each year. Most of these deaths occur in motor vehicles when people attempt to drive through flooded roadways. Many other lives are lost when people walk into flood waters. This happens because people underestimate the force and power of water, especially when it is moving. The good news is most flooding deaths are preventable with the right knowledge.

Just six inches of fast-moving water can knock over an adult. Only eighteen inches of flowing water can carry away most vehicles, including large SUVs. It is impossible to tell the exact depth of water covering a roadway or the condition of the road below the water. This is especially true at night when your vision is more limited. It is never safe to drive or walk through flood waters. Any time you come to a flooded road, walkway, or path, follow this simple rule: Turn Around Don't Drown.

For more information on the TADD program, visit <http://tadd.weather.gov>.

For flood safety tips, visit our newly redesigned website at [www.floodsafety.noaa.gov](http://www.floodsafety.noaa.gov).

Join us tomorrow for information on flood hazards.

## Wednesday

### **Floods Hazards**

A flood is defined as any high flow, overflow, or inundation of water that causes or threatens damage. Flooding can occur with prolonged rainfall over several days, intense rainfall over a short period of time, or when water from an existing source moves too quickly (i.e. snowmelt, dam break, etc.). Brief descriptions of the various types of flooding you may experience are found below. More information about these flood hazards can be found on the NWS Flood Safety Website at [www.floodsafety.noaa.gov](http://www.floodsafety.noaa.gov).

**Flash Flooding:** Flash flooding is a rapid and extreme flow of high water into a normally dry area, or a rapid water level rise in a stream or creek above a predetermined flood level, beginning within six hours of the causative event (i.e. intense rainfall, dam failure, ice jam).

**River Flooding:** River flooding occurs when rivers rise and overflow their banks, inundating areas that are normally dry.

**Tropical Systems and Coastal Flooding:** At any time of year, a storm from over the ocean can bring heavy precipitation to the U.S. coasts. Whether such a storm is tropical or not, prolonged periods of heavy precipitation can cause freshwater flooding in coastal areas, as well as further inland as the storm moves onshore. In addition to the freshwater flood threat, tropical systems and nor'easters can bring the threat of storm surge related coastal flooding.

**Burn Scars/Debris Flows:** Wildfires burn away the vegetation of an area, leaving behind bare ground that tends to repel water. When rain falls, it runs off a burn scar towards a low lying area, sometimes carrying branches, soil and other debris along with it. Without vegetation to hold the soil in place, flooding can produce mud and debris flows.

**Snowmelt:** Flooding due to snowmelt most often occurs in the spring when warming temperatures quickly melt the snow. The water runs off the still partially frozen or already saturated ground into nearby streams and rivers, causing them to rapidly rise and sometimes overflow their banks.

**Ice and Debris Jams:** A backup of water into surrounding areas can occur when a river or stream is blocked by a build-up of ice or other debris.

**Dry Wash:** When heavy rain falls over dry land, the water rushes towards low-lying areas, which may include dried up canyon or stream beds. This can quickly turn a dry channel into a raging river.

**Dam Break and Levee Failure:** A break or failure can occur with little to no warning. Most often they are caused by water overtopping the structure, excessive seepage through the surrounding ground, or a structural failure.

Understanding the different flood hazards and knowing the actions to take before, during, and afterwards can help you protect your life, the lives of your loved ones, and your property. Prepare now by visiting [www.floodsafety.noaa.gov](http://www.floodsafety.noaa.gov)

Join us tomorrow for information on flood related services provided by the National Weather Service.

## **Thursday**

### **National Weather Service Water Resources**

The NWS homepage, [www.weather.gov](http://www.weather.gov), provides up to date weather and water advisory, watch, and warning information for the U.S. and its territories. However, the NWS provides many additional resources to help emergency managers, public officials and private citizens make water decisions.

### **Advanced Hydrologic Prediction Service (AHPS)**

AHPS provides a suite of river and flood forecasts and water information to protect life and property and helps ensure the nation's economic well-being. [water.weather.gov](http://water.weather.gov)

### **Flood Inundation Mapping**

The ability to look into the future to see how many city blocks and roads might be flooded is becoming clearer with flood inundation mapping. NOAA's NWS and National Ocean Service are collaborating with the USGS, USACE, FEMA and other partners to develop these inundation maps for flooding.

<http://water.weather.gov/ahps/inundation.php>

### **Weather Prediction Center (WPC) Precipitation Forecasts**

WPC provides precipitation forecasts for the entire U.S., including Puerto Rico. WPC also issues excessive rainfall forecasts, short-range discussions on heavy rainfall events, and snowfall and freezing rain probabilities. [www.wpc.ncep.noaa.gov/](http://www.wpc.ncep.noaa.gov/)

### **NWS River Forecast Centers (RFCs)**

The National Weather Service has a network of thirteen RFCs across the United States. These RFCs collect, process, and provide water resource and river forecasts and information for major river basins across the country. <http://water.weather.gov/ahps/rfc/rfc.php>

### **Flood Safety Awareness Website**

On this page, you will find information on what to do before, during and after a flood.

[www.floodsafety.noaa.gov](http://www.floodsafety.noaa.gov)

Staying aware of an evolving weather situation can help you prepare when flooding or other weather hazards impact your area. Be a Force of Nature! [www.nws.noaa.gov/com/weatherreadynation/](http://www.nws.noaa.gov/com/weatherreadynation/)

Join us tomorrow on the final day of flood safety awareness week to find out about some great flood resources offered by several NWS partners!

## **Friday**

### **Partner Resources**

The National Weather Service works with and relies on strategic partners involved in river observations, reservoir management, floodplain management, flood hazard mitigation, and flood preparedness and safety to reduce the loss of life and property due to floods. Today we are sharing some great tools from several of our partners.

#### **American Red Cross**

Family Disaster Plan: [www.redcross.org/prepare/location/home-family](http://www.redcross.org/prepare/location/home-family)

#### **Federal Alliance for Safe Homes (FLASH)**

Flood Safety Information: [www.flash.org/peril\\_flood.php](http://www.flash.org/peril_flood.php)

#### **Federal Emergency Management Agency (FEMA)**

Safety Information: [www.ready.gov](http://www.ready.gov).

Safety Kit Assembly: [www.ready.gov/build-a-kit](http://www.ready.gov/build-a-kit)

Property Protection and Flood Insurance: [www.floodsmart.gov](http://www.floodsmart.gov).

Assess Your Flood Risk: <https://msc.fema.gov>.

#### **United States Army Corps of Engineers**

Flood Information: <http://www.usace.army.mil/Missions/EmergencyOperations/Floods.aspx>

#### **United States Geological Survey**

Water Watch: <http://waterwatch.usgs.gov/index.php?id=ww>

Water Alert - National Water Information System: <http://maps.waterdata.usgs.gov/mapper/wateralert/>

The National Weather Service works with many key partners to complete the mission of protecting life and property. Some additional key partners are the National Hydrologic Warning Council, Association of State Floodplain Managers, the National Safety Council, media outlets, and many other government and private sector organizations. For more information about any of our partners, or to learn about partners local to your area, contact your local NWS office.

As we wrap up the 2014 Flood Safety Awareness Week, remember, flooding can occur in any of the fifty states or U.S. territories at any time of the year. Prepare yourself, your family, and your home. Be aware of potential flooding in your area, Turn Around Don't Drown, and help make the U.S. a more Weather Ready Nation! <http://www.nws.noaa.gov/com/weatherreadynation/>