







# **PREPARING**

#### WHAT CAUSES FLOODING

**Heavy Rains** - although most cities and towns have infrastructures in place to control rising water (dams, basins, reservoirs, and, levees), heavy rains can overwhelm these safeguards, as seen in New Orleans during Hurricane Katrina.

**Overflowing Rivers** - even if your area does not experience heavy rainfall, you may still be at risk for river flooding if heavy rains or extensive snow melt occur further upstream.

**Overflow of Urban Drainage Basins** - This type of flooding primarily impacts large cities located in low-lying areas. Heavy rains can quickly overwhelm city drainage systems leading to water backups in streets and homes. This type of flooding is common in cities such as Las Vegas, Los Angeles, and Phoenix, where drainage systems can not handle large amounts of water.

**Storm Surges** - Heavy winds from hurricanes and tropical storms can push massive amounts of water inland, flooding low lying coastal cities.

**Tsunamis** - underwater earthquakes can trigger waves in the open ocean that pick up speed and height as they reach shallower depths. In 2004, a massive earthquake in the Indian Ocean released a tsunami that slammed into coastlines along the Indian Ocean, killing 227,898 people in 14 countries.



#### KNOW YOUR AREA'S RISK

Communities located in river flood plains, low lying areas and along coastlines have an elevated risk of flooding.

FEMA's Flood Map Service Program (MSP) provides detailed flood hazard information and maps by address (msc.fema.gov/portal).

#### FLOOD INSURANCE

Homeowners insurance policies do not cover flood damage. One inch of flood water in your home averages \$25,000 in damages. If you are in a flood zone, you must purchase supplement insurance coverage.

FEMA manages the National Flood Insurance Program, a network of approximately 60 insurance companies providing flood coverage.

Visit floodsmart.gov for more information on the National Flood Insurance program and how to apply for coverage.

#### FEDERAL DISASTER ASSISTANCE

Federal relief for flood victims is only activated during a Presidential Disaster Declaration. According to FEMA, most floods are not declared disasters and any money received is typically loaned with interest.



#### PREPARE YOUR HOME

- Purchase flood insurance coverage.
- Do not store valuable items in the basement.
- Elevate and anchor utilities such as appliances, heating and cooling systems, propane tanks, and electrical panels.
- Install a sump pump with battery-backup in your basement along with a water alarm.
- Keep gutters and downspouts clean of debris.
- Store essential documents, including identification, birth certificates, insurance policies, and financial records, in a secure, water and fire proof container. Include a household inventory (a list and photos or video of your belongings).

### IDENTIFY EVACUATION ROUTES

Learn the evacuation routes outlined by safety officials in your community. Identify shelters in your area by using the FEMA app or checking with local officials. Check with the shelter if pets are allowed. If not, make plans to shelter them with friends or family who reside outside the evacuation zone. Review your shelter's COVID-19 guidelines. Practice driving your evacuation routes.



#### **BUILD A KIT**

Store your survival kit in an easily accessible location or in your vehicle. Your kit should include the following items:

**Food and Water:** a 7-day supply of fresh water and non-perishable food for each person in your family. Include food and water for your pets.

**Shelter Supplies:** thermal mylar blankets, sleeping bags, portable tents, tarps, and plastic sheeting

**Hygiene Items:** waterless shampoo and toothpaste, comb, toilet paper, tissue paper, wipes, portable toilet, disposable bags

**First Aid:** family-sized first aid kit and extra prescription medications

**PPE:** masks for each family member, sanitation wipes, hand sanitizer

**Lighting:** hand-crank/solar-powered flashlights, extra batteries, candles

**Communication Device:** Hand-crank/solarpowered radio with access to the NOAA weatherband emergency alert channels. Do not rely on your cell phone for news and evacuation bulletins

**Tools:** shovels and pry bars for performing search and rescue operations, gas/water shut-off wrench

**Clothing:** keep a pair of rubber boots, and extra clothing in your kit for each family member



# SURVIVING

#### FLOOD WARNINGS AND ALERTS

**Flood Advisory - Be Aware:** conditions do not indicate severe, wide-spread flooding, but exercise caution.

**Flood Watch - Be Prepared:** conditions are favorable for flooding. A flood may not occur, but the possibility exists.

**Flood Warning - Take Action!** A flood is imminent or occurring. Take safety measures immediately if you are in the impact area.

**Flash Flood Warning - Take Action!** A flash flood is imminent or occurring. A flash flood is a sudden violent flood that can develop within minutes. If you are in a flood-prone area, move immediately to higher ground.

source: weather.gov

#### WHEN A FLOOD IS IMMINENT

- Monitor the news or radio for changing conditions and evacuation alerts. Ensure you have access to the Emergency Alert System (EAS).
- If time permits, move furniture and valuables to higher levels in your house.
- Tie down or move outside furniture inside.
- Unplug appliances to reduce risk of electric shock and turn off gas.



### FLOOD WARNING - EVACUATION ORDERED

- Gather your family and pets and leave immediately if you are instructed to evacuate.
- Follow recommended evacuation routes. Do not take shortcuts; they may be flooded, get to higher ground.
- Bring your Survival Kit.
- Wear sturdy shoes and clothing that provides some protection, such as long pants, longsleeved shirts, and a cap.
- If you have farm animals, free cattle and horses and lead animals to higher ground.
- Do not swim in moving water.
- Do not touch electrical equipment or devices submerged in water.

#### TURN AROUND, DON'T DROWN

Do not drive through standing water! The majority of flood related deaths occur when motorists attempt to drive through flooded roadways.

6 in. of water can knock down a person.1 ft. of water can carry off a car.

Do not drive or walk on bridges over fast moving flood waters. Poorly built bridges may wash away.



## RECOVERING

#### AFTER THE FLOOD

- Do not return home until the flood waters recede and you receive the all-clear from authorities.
- When it is safe to return home, wear protective clothing - long sleeve shirts, pants, rubber boots, gloves, and N95 face masks to protect from mold and contaminated water.
- Begin documenting and taking photos of damaged property.

#### FILING A CLAIM

- Contact your flood insurance company as soon as possible.
- Do not throw anything away all damage must be documented in order to file a complete claim.

#### RECOVER

- Do not drink or clean with the water in your home until it is tested.
- Clean and disinfect all surfaces with one part bleach and 5 parts water.
- Throw away anything that cannot be cleaned such as rugs, furniture and wall coverings to prevent toxic mold buildup.
- Communicate with and assist your neighbors and community. You are all in this together.



## RESOURCES

READY.GOV/FLOODS

FEMA.GOV/FLOOD-INSURANCE

MSC.FEMA.GOV/PORTAL

FEMA.GOV/ASSISTANCE - FLOOD MAPS BY ADDRESS

REDCROSS.ORG/GET-HELP

WEATHER.GOV

CENTERS FOR DISEASE CONTROL (CDC.GOV/DISASTERS/FLOODS)

THE NATIONAL CHILD TRAUMATIC STRESS NETWORK (NCTSN.ORG)

QUAKEKARE.COM/RESOURCES

