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What exactly is a natural disaster?

Here are the types of extreme weather you may face — from tornadoes to floods to snow storms — and the officials who determine how severe it is and how financial assistance is distributed.

By Lyndsey Gilpin

When a major storm blows through town, local, state, and tribal governments rely on federal funding to help them recover. Rebuilding schools and roads, repairing power lines, and cleaning up debris stretch local budgets, and families need assistance to rebuild or repair their homes or cover the cost of temporary housing. Securing money from the federal government, however, can take months, and distributing it can take even longer. As of late May, the Federal Emergency Management Agency, or FEMA, had a backlog of emergency declaration requests from winter and spring storms and rejected some requests for aid. The Trump administration has signaled that it wants states to shoulder more of the burden of disaster relief, but as of June, FEMA has not yet implemented any changes to the disaster declaration process.

What are the major types of natural disasters?

Natural disasters include all types of severe weather, including winter storms, floods, tornadoes, hurricanes, and wildfires. Extreme heat, though not considered an official disaster by FEMA, can be just as dangerous.

These events pose a significant threat to human health and safety, as well as infrastructure. Below are more details on different types of natural disasters. (For simplicity, they will be referred to as “disasters” throughout this toolkit.)

Hurricanes

A hurricane is a tropical storm with sustained winds that top 74 miles per hour. The National Weather Service rates hurricanes on a scale of Category 1 through 5 based on their wind speeds. Category 5 storms are considered the strongest, with wind speeds over 157 miles per hour.

Rising global temperatures are changing the dynamics of hurricanes, and wind speed does not always equate to severity: Lower category storms may produce more rainfall and more damage from flooding. Some researchers have advocated for adjusting how storms are categorized to better reflect their hazards. The National Oceanic and Atmospheric Association, or NOAA,

designates June 1 to November 30 as hurricane season in the Atlantic Ocean and Gulf of Mexico, as well as the Pacific Ocean. But most hurricanes that make landfall occur between August and October, when the conditions for a hurricane — warm waters and high winds — are most likely.

The National Hurricane Center, run by NOAA, tracks hurricanes. NOAA also has a website with much more information about hurricanes.

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Wildfires

Wildfires are unplanned fires that often start in forests, rangelands, and grasslands and quickly spread. In 2024, for instance, they burned over 8 million acres. The Western U.S. is often considered the epicenter for wildfires, but these blazes also happen — and are becoming more severe — in the South, Midwest, and Northeast. The seasons for wildfires are typically summer and fall, but that is changing as well as the warming climate alters precipitation patterns. The Los Angeles area wildfires in 2025, for instance, happened in January. Wildfires can start from natural causes such as lightning, but they are also often caused by humans forgetting to extinguish campfires, or by faulty electrical lines. The National Interagency Fire Center has more information about wildfire conditions.

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Tornadoes

Tornadoes form when warm and cool air masses collide, resulting in strong winds that begin to rotate in a column reaching the ground at speeds anywhere between 100 and 500 miles per hour. Heavy rain or hail may accompany them. These conditions typically happen during thunderstorms, but that's not always the case. Read more from NOAA about tornadoes.

A tornado itself may be relatively small in size, but it can travel across dozens of miles before wind speeds drop, carving a path of destruction. In North America, tornadoes tend to occur in the southern plains from May to June, early spring along the Gulf Coast, and June and July in the Midwest. But they can pop up any time of year, almost anywhere, and that's happening more frequently: Some evidence suggests that "tornado alley," the area of the U.S. where tornadoes are most likely, is moving eastward. Tornadoes are not as easy to predict as hurricanes or wildfires and can change direction quickly, so you may not have much time to prepare once you hear a tornado siren or get an alert about a warning. There are many myths about tornadoes, including that they do not hit large cities or cross bodies of water. The Missouri state government has a list of other misconceptions here.

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Floods

Flooding is an overflowing of water onto land. This can happen during heavy rainfall or when dams or levees break. Flash floods can happen within minutes of intense rain, which makes them especially dangerous. They can happen anywhere, at any time — not just on the coast or near a river. Floodwaters can fill small creeks and streams that normally run dry; in cities, water can overwhelm storm systems and submerge streets; storm surge from hurricanes can inundate cities. Inland flooding is common and growing in some parts of the country, particularly in the Appalachian Mountains.

You can read more details about types of floods on NOAA's website, and Grist has more information on how climate change exacerbates storms and flooding. Even if your home isn't in a flood zone, you might still be at risk. More than a quarter of claims filed through FEMA's National Flood Insurance Program include homes that are not in official flood zones. Though there's a common misconception that flooding rarely occurs in winter, flooding, especially inland flooding, can happen at any time of year.

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Winter storm

Winter storms can bring extreme heavy snow or ice, freezing rain, sleet, and high winds that can block roads, damage homes, cause power outages, and put lives in danger — especially if temperatures drop well below freezing and stay there. Winter storms can happen all over the U.S., even in places that don't typically see snow. In 2021, Texas and the Deep South experienced a historic winter storm that left people without power and water for days. Read more about winter weather here from FEMA.

How is a disaster officially 'declared'?

There is a specific process cities, states, and tribal governments must go through to receive federal disaster aid that allows them to access federal funding and resources for both local infrastructure and individual household repairs and rebuilds. Here's how it works:

Step 1: Local emergency managers and public officials work with FEMA on a preliminary damage assessment.

This assessment, done by local officials and a regional FEMA office, examines the damage caused by the natural disaster, the cost estimates for the work ahead, and types of federal assistance needed. The assessment, according to FEMA, must "show that the disaster is of such severity and magnitude that effective response is beyond the capabilities of the state and the affected local governments or Indian tribal government."

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Step 2: State governor or tribal government requests presidential disaster declaration within 30 days of the disaster.

They must show they're using all their available resources and describe what type of federal assistance is needed to the president through their FEMA regional office (there are 10 total). Tribal governments go through a different process, which is outlined here. States or tribal governments may decide that the extent of a disaster isn't large enough to warrant a damage assessment, or they might apply and get rejected by the president for additional aid.

Step 3: Federal aid is allocated after approval by the FEMA regional office and president.

There are two types of declarations, which both allow for federal spending on aid: Emergency declarations supplement local government efforts in providing emergency services; major disaster declarations provide a wide range of federal assistance programs for individuals and public infrastructure.

The federal government can disagree with the damage assessment that a state submits or deny requests for aid. In extreme cases, the president can also expedite a disaster declaration without having to catalog the full cost because damages are so widespread and severe. Remember, many disasters are not federally declared, or even declared by the state, but still cause damage and disruption.

Sophie Hurwitz and Katie Myers contributed to this story.
