

Despite a historically slow start to tornado season in 2015, more than 400 tornadoes were reported in May alone, roughly double the average in recent years. May was also the second most active tornado month since 1950. While some states are more susceptible to violent weather than others, all states could be struck by a natural disaster at any time.

Using data from the National Weather Service (NWS), 24/7 Wall St. reviewed weather-related fatalities from 2010 through 2014. Nationally, 2,950 people died from natural disasters over that time, or fewer than two people per million residents in each of the five years reviewed. In Alabama, 12 people died per one million residents over that time, the most of any state. These are the states with the most dangerous weather.



Tornadoes are some of the most fatal natural disasters. From 2010 through 2014, twisters killed 723 people nationally, or 25% of all weather-related deaths. Oklahoma, the state with the seventh most weather-related fatalities, lies in the heart of Tornado Alley, which runs north from Texas to North Dakota and is the most active tornado region in the world. At least 57 Oklahomans died from tornadoes from 2010 through 2014, 49 of them in 2013 alone.

States outside of Tornado Alley are also susceptible to twisters. Alabama, the state with by far the most weather-related fatalities over the period reviewed, was hit in 2011 with 62 tornadoes in a single day, killing 250 people and causing roughly \$3 billion in insured losses. This was the second most costly tornado in U.S. history.

Extreme temperatures — both hot and cold — are another major contributor to weather-related fatalities across the country. Nationally, nearly 600 people died from heat stroke over the five-year period reviewed. Nevada, the majority of which is covered in desert, accounted for a substantial share of heat-related deaths across the country.

Flooding can also cause many fatalities. Flooding particularly impacts northern states such as Wyoming and Montana, where warmer spring temperatures can cause snow to melt faster and overrun riverbanks and levees. Heavy rainfall can also cause floods.

In addition to being deadly, natural disasters are also responsible for billions of dollars in crop and property damage each year. From 2010 through 2014, severe weather resulted in more than \$93 billion of damage, the bulk of which was to properties.

In each year from 2010 through 2014, fewer than 600 people died as a result of severe weather. Often, a single, extremely deadly storm can have an outsized effect on a state's weather-related fatality rate. This was likely the case in Tennessee and Mississippi, which were each hit hard by a single storm over that time, despite having relatively few weather-related deaths during most of the period.

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Nine States with the Most Dangerous Weather

To determine the states with the most dangerous weather, 24/7 Wall St. compiled data from the National Weather Service on total weather-related fatalities for each year from 2010 through 2014. Because many of the numbers are small and susceptible to large fluctuations, our rank is based on the annual average number of weather-related deaths over the five-year period reviewed. Using population figures from the U.S. Census Bureau, we calculated severe weather fatalities per 1 million residents. Also from the National Weather Service we reviewed the total value of damage caused by natural disasters, as well as breakdowns of the kind of weather responsible for the death: extreme temperature, flooding, lightning, tornadoes, wind, and winter storms.

These are the nine states with the most dangerous weather.

9. Tennessee

- 5-year average annual weather-related fatalities: 3.8 per 1 million residents
- 5-year total weather-related fatalities: 121 (6th highest)
- 5-year total damage: \$4.7 billion (5th highest)

From 2010 through 2014, there were 3.8 weather-related fatalities per 1 million residents on average each year, the ninth highest such rate in the country. More than 80% of the state's weather-related fatalities in the five-year period occurred in 2010 and 2011. In those two years, FEMA declared a state of emergency eight times for flooding and severe storms. One storm in the spring of 2011 left 300 dead across multiple states, 34 of them in Tennessee. In the same year, storms caused more than \$2 billion in property damages.

8. Montana

- 5-year average annual weather-related fatalities: 3.8 per 1 million residents
- 5-year total weather-related fatalities: 19 (19th lowest)
- 5-year total damage: \$142 million (8th lowest)

Like in other states with the most dangerous weather, tornadoes, wind, and flooding resulted in nearly all of Montana's 19 weather-related deaths from 2010 through 2014. Montana's weather has been less destructive in recent years. The state reported no weather-related fatalities in 2013, but at least six people died due to weather in 2014. And while in 2010, storms caused roughly \$100 million in damage to the state, storms caused just \$2.8 million in damage in 2014.

7. Oklahoma

- 5-year average annual weather-related fatalities: 5.0 per 1 million residents
- 5-year total weather-related fatalities: 96 (11th highest)
- 5-year total damage: \$3.5 billion (8th highest)

Oklahoma, the bulk of which lies in Tornado Alley, led the country in fatalities from weather in 2013 with 49 deaths. Nearly all weather-related deaths that year were caused by a category five tornado that ripped through Moore, a suburb of Oklahoma City. The tornado was one of the deadliest in recent history, with children accounting for more than 40% of the deaths it caused. Apart from the lives it took, the tornado, and other storms that year, caused nearly \$2.5 billion in property and crop damage, the second highest figure in the country that year. Since then, deadly storms have been less frequent. Two people died from dangerous weather incidents in 2014, far fewer than any other year reviewed.

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6. Mississippi

- 5-year average annual weather-related fatalities: 6.2 per 1 million residents
- 5-year total weather-related fatalities: 93 (12th highest)
- 5-year total damage: \$3.0 billion (11th highest)

Mississippi had 6.2 weather-related deaths per 1 million residents on average each year from 2010 through 2014, a rate more than three times higher than across the country. Whereas other states with dangerous weather had a few bad storms in a single year that pushed the average death rate higher, Mississippi has had deadly weather more frequently. In three of the five years reviewed, 20 or more people died from severe weather, one of the higher counts in the country. In 2013, a tornado touched down in Hattiesburg, registering winds of up to 145 miles per hour, and injuring at least 60 people. Miraculously, that storm did not cause any death, despite all the damage it did. In all, severe weather killed two people in Mississippi that year, and was responsible for \$610 million in damage.

5. Nevada

- 5-year average annual weather-related fatalities: 7.2 per 1 million residents
- 5-year total weather-related fatalities: 99 (10th highest)
- 5-year total damage: \$417 million (21st lowest)

Living in a desert, as many Nevadans do, can leave residents susceptible to heat stroke. Temperatures of 115 degrees and higher in 2013 left many hospitalized. All of Nevada's 42 weather-related fatalities that year were due to heat, by far the most in the country from that cause. While not contributing to fatalities in 2013, Nevada's wildfires are another example of the state's destructive weather. In 2013, the state was engulfed in two fires that each covered roughly 25 square miles. More than 750 firefighters worked to put out the fires. In total, Nevada reported roughly 600 weather-related injuries in 2013, which accounted for more than 20% of all such injuries in the country that year.

4. Arkansas

- 5-year average annual weather-related fatalities: 7.9 per 1 million residents
- 5-year total weather-related fatalities: 117 (7th highest)
- 5-year total damage: \$1.2 billion (21st highest)

Despite being home to less than 1% of the country's population, Arkansas accounted for 4% of the country's weather-related fatalities over the five years ending in 2014. Roughly half of those deaths were attributable to floods. In 2010 and 2011, flash floods killed 40 people, accounting for roughly a fifth of all flood deaths in the country during those years. Tornadoes are also responsible for a large number of weather-related deaths in the state. In 2011, a tornado hit Vilonia, destroying homes and at least four people. At least some of the \$632.5 million in damages that year was caused by this tornado. More recently, tornadoes swept through the state in 2014, killing 15 people and injuring more than 200.

3. Wyoming

- 5-year average annual weather-related fatalities: 8.0 per 1 million residents
- 5-year total weather-related fatalities: 23 (20th lowest)
- 5-year total damage: \$104 million (6th lowest)

Unlike most of the states on this list, Wyoming is not known for its destructive weather. From 2010 through 2014, the state had fewer than five weather-related fatalities on average, one of the lower figures. However, the state's small population gave Wyoming the third-highest weather-related death rate in the country. Nevertheless, flooding after spring rains or

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winter snow thaws is quite common. In 2010, FEMA declared a state of emergency when higher-than-average temperatures helped cause the Laramie River to overflow. In the same year, natural disasters wrought more than \$60 million in damage. Since then, Wyoming has not had many significant severe weather events.

2. Missouri

- 5-year average annual weather-related fatalities: 8.4 per 1 million residents
- 5-year total weather-related fatalities: 253 (2nd highest)
- 5-year total damage: \$5.3 billion (7th highest)

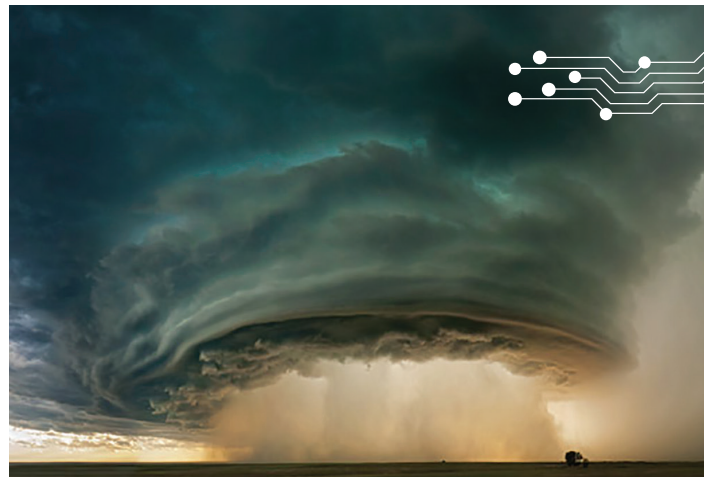
Despite having less than 2% of the country's population, Missouri accounted for 8.6% of the country's weather-related fatalities from 2010 through 2014. Nearly two-thirds of Missouri's total weather fatalities were the result of a single storm. In May 2011, a category five tornado touched down in Joplin. In just 38 minutes, 160 people lost their lives, and thousands more were injured. The Joplin tornado was not only the deadliest in recent decades, but also the costliest single tornado in U.S. history, causing \$2.8 billion in damages.

1. Alabama

- 5-year average annual weather-related fatalities: 12.0 1 per million residents
- 5-year total weather-related fatalities: 519 (the highest)
- 5-year total damage: \$12.2 billion (2nd highest)

Not known for its severe weather, Alabama was one of six states hit by a category five tornado in April 2011. The tornado traveled more than 300 miles, with wind speeds of 260 miles per hour at times. Roughly 250 people died from tornadoes in Alabama that year, nearly more deaths than the total five-year death toll in every other state from 2010 through 2014. Total damage from natural disasters in 2011 was \$4.4 billion, accounting for 18.3% of all weather-induced damage in the country that year. Alabama's weather has recently become increasingly deadly. In 2014, 63 people died from extreme temperatures, 54 people died as the result of wind, 47 died from tornadoes, and 38 died from flooding. Each figure was the highest in the nation.

Source: Alexander Kent, 24/7 Wall Street



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