



## Summary of Natural Hazard Statistics for 2011 in the United States



This National Weather Service (NWS) report summarizes fatalities, injuries and damages caused by severe weather in 2011. The NWS Office of Climate, Water and Weather Services and the National Climatic Data Center compiled this Summary of U.S. Natural Hazard Statistics from Storm Data, a report comprising statistics from NWS forecast offices in the 50 states, Puerto Rico, Guam, and the Virgin Islands.

### Summary of 2011 Weather Events, Fatalities, Injuries, and Damage Costs

Weather Event	Fatalities	Injuries	Property Damage (million \$)	Crop Damage (million \$)	Total Damage (million \$)
<b>Convection</b>					
Lightning	26	187	45.37	0.11	45.49
Tornado	553	5483	9,684.15	29.60	9,713.75
Thunderstorm Wind	56	384	376.02	137.48	513.50
Hail	0	31	450.53	81.85	532.38
<b>Extreme Temperatures</b>					
Cold	29	8	19.45	338.95	358.40
Heat	206	2430	9.89	0.10	9.99
<b>Flood</b>					
Flash Flood	69	30	1,356.25	86.44	1,442.69
River Flood	44	10	6,621.69	152.72	6,774.41
<b>Marine</b>					
Coastal Storm	4	1	281.32	0.00	281.32
Tsunami	1	0	57.55	0.00	57.55
Rip Current	41	39	0.26	0.00	0.26
<b>Tropical Cyclones</b>					
Tropical Storm / Hurricane	9	3	343.87	309.81	653.68
<b>Winter</b>					
Winter Storm	16	15	132.88	0.19	133.06
Ice	1	0	36.01	0.28	36.29
Avalanche	11	8	0.06	0.00	0.06

<b>Other</b>					
Drought	0	0	810.14	1,815.33	2,625.47
Dust Storm	0	4	0.85	0.00	0.85
Dust Devil	0	8	0.03	0.00	0.03
Rain	1	1	11.88	20.71	32.59
Fog	2	0	0.68	0.00	0.68
High Wind	20	79	182.01	74.86	256.86
Waterspout	0	0	5.11	0.00	5.11
Fire Weather	6	138	667.22	19.02	686.24
Mud Slide	1	0	22.01	0.02	22.03
Volcanic Ash	0	0	0.00	0.00	0.00
Miscellaneous	0	0	0.02	0.00	0.02
<b>Total</b>	<b>1096</b>	<b>8859</b>	<b>21,115.23</b>	<b>3,067.46</b>	<b>24,182.69</b>

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Weather-related deaths more than doubled in 2011, reaching 1,096 victims, up from 491 in 2010. This number is well above the 10-year average (2002-2011) of 641. Tornadoes were the most deadly hazard, claiming 553 victims in 2011, up drastically from 45 in 2010. Heat was the next most deadly weather category, with 206 deaths, up from 138 in 2010, followed by floods with 113 victims, up from 103 in 2010.

Of the 2011 weather-related fatalities, males again accounted for more deaths than females but the numbers were much closer than usual, 54% (594) males to 44% (487) female, with less than 2% unknown. In most years, there are almost twice as many male victims of weather as female, a pattern reflecting the higher percentage of men who hold outdoor jobs such as construction, and who take part in sports and other outside activities. This year's closer number reflects the higher than average number of victims who were indoors but still became victims of tornadoes or excessive heat. Males were more likely to be victims in all age ranges except the 80+ categories, where the percentage of women who reach this age range exceeds that of men.

In contrast to 2010 when heat made July the deadliest month, in 2011, April claimed 413 lives, most from tornadoes, followed by May with 210 victims and July with 162 deaths.

Weather related injuries almost quadrupled in 2011 with 8,859 reported weather-related injuries or illnesses, up from 2,374 in 2010 and from 1,876 in 2009. Tornadoes again caused the most injuries, with 5,483, up dramatically from 699 victims in 2010, followed once more by heat with 2,430, more than quadruple the 592 in 2010, and thunderstorm and other high winds, with 463 injuries, up from 388.

Which state had the most dangerous weather in 2010? Alabama, with 250 weather-related fatalities, took that dubious honor from Tennessee, which numbered the most in 2010. Almost all the Alabama deaths were due to tornadoes (245). Missouri was the next hardest hit, with 180 victims, again, largely tornadoes victims from the deadly Joplin, MO, event. Texas lost 65 residents, 46 of whom were victims of excessive heat. Weather claimed 57 lives in Pennsylvania, 36 of whom were heat victims and 16 of which died as a result of flooding during Tropical Storm Lee.

Extreme weather caused approximately \$24.2 billion in combined property and crop damages in 2011, more than double the \$11.7 billion in 2010. Property damages were estimated at \$21.1 billion, almost triple the 2010 total of \$7 billion and 2009 total of \$6.8 billion. Tornadoes lead the way in accounting for more than \$9.6 billion in total losses. As in 2010, flooding was also a major culprit, accounting for more than \$8 billion in losses. The majority of the total crop damage was due to drought, which caused about \$1.8 billion in losses to farmers, followed by cold with \$338 million, and tropical storms with \$309 million in crop losses.

### 2011 Summary of Fatalities for All Hazards by Age and Gender

	Female	Male	Unknown	Total	Percent
0 to 9	27	28	2	57	5.20
10 to 19	22	29	0	51	4.65
20 to 29	39	58	0	97	8.85
30 to 39	44	45	0	89	8.12
40 to 49	52	87	0	139	12.68
50 to 59	72	104	0	176	16.06
60 to 69	70	94	0	164	14.96
70 to 79	71	81	0	152	13.87
80 to 89	54	39	0	93	8.49
90 to --	24	9	0	33	3.01
Unknown	12	20	13	45	4.11
<b>Total</b>	487	594	15	1096	
<b>Percent</b>	44.43	54.20	1.37		

### 2011 Monthly Weather Related Fatalities

