



Summary of Natural Hazard Statistics for 2016 in the United States



This National Weather Service (NWS) report summarizes fatalities, injuries and damages caused by severe weather in 2016. 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 2016 Weather Events, Fatalities, Injuries, and Damage Costs

Weather Event	Fatalities	Injuries	Property Damage (million \$)	Crop Damage (million \$)	Total Damage (million \$)
Convection					
Lightning	38	120	23.02	0.01	23.03
Tornado	18	325	181.16	2.32	183.48
Thunderstorm Wind	20	116	144.89	4.48	149.37
Hail	0	21	3,512.67	23.73	3,536.40
Extreme Temperatures					
Cold	31	6	0.00	0.37	0.37
Heat	94	411	0.00	0.00	0.00
Flood					
Flash Flood	86	25	3,641.30	22.28	3,663.58
River Flood	40	6	7,066.22	176.94	7,243.16
Marine					
Coastal Storm	1	0	220.94	0.00	220.94
Tsunami	0	0	0.00	0.00	0.00
Rip Current	58	34	32.48	0.00	32.48
Tropical Cyclones					
Tropical Storm / Hurricane	11	8	3,053.92	3.05	3,056.97
Winter					
Winter Storm	12	89	22.92	0.00	22.92
Ice	0	0	9.62	0.00	9.62
Avalanche	18	3	0.00	0.00	0.00

Other					
Drought	0	0	1.74	6.16	7.90
Dust Storm	3	1	1.29	0.00	1.29
Dust Devil	0	0	0.05	0.00	0.05
Rain	0	0	4.38	0.00	4.38
Fog	0	0	0.19	0.00	0.19
High Wind	23	87	95.80	1.54	97.34
Waterspout	0	0	0.02	0.00	0.02
Fire Weather	4	17	181.50	2.42	183.92
Mud Slide	0	3	0.62	0.00	0.62
Volcanic Ash	0	0	0.00	0.00	0.00
Miscellaneous	1	4	0.00	0.00	0.00
Total	458	1276	18,194.70	243.29	18,438.00

Summary of 2016 Natural Hazard Statistics

Weather-related deaths dropped in 2016 to 458, down from 534 in 2015. Unfortunately, that number is well above the 388 in 2014 but below the 10-year average (2007-2016) of 541 deaths. For the second consecutive year, flooding was the most deadly hazard, claiming 126 victims, down from 187 in 2015. Heat was the second most deadly hazard, claiming 94 lives, 39 of whom were babies or toddlers left in locked vehicles. Rip Currents were the third greatest hazard, numbering 58 victims, up from 2015, which numbered 56. Thunderstorm winds and high winds were the next most deadly weather events, totaling 43 deaths (46 if dust storms are included), down from 66 thunderstorm wind and high wind fatalities in 2015.

Of the 2016 weather-related deaths, males, as usual, accounted for more deaths, 307 (67%), than females, 133 (29%) with 18 (4%) victims not identified. This gender breakdown is typical. In most years, there are almost twice as many male victims of extreme weather as female, a pattern likely reflecting the higher percentage of men who hold outdoor jobs such as construction and who take part in sports and other outside activities such as fishing and boating. In 2016, males were more likely to be victims in all age ranges except the 90+ category, where the percentage of women who reach this age range exceeds that of men.

Which were the deadliest months in 2016? Reverting to a typical pattern, the summer months were most dangerous with June numbering 99 deaths, July, 75 and August, 52, likely because people are outdoors more in the summer. The least deadly months were November, with 9 victims and September and March with 16 and 17, respectively.

In 2016, weather related injuries and illnesses numbered 1,276, down significantly from 2,142 in 2015. Heat caused by the far the most illnesses with 411 victims, followed by tornadoes with 325 injuries and thunderstorm and high winds with 203.

Which state had the most dangerous weather in 2016? Texas again took that dubious honor, this year with 54 victims, 38 of whom were flood victims. Texas was followed closely by sparsely populated Nevada with 53 casualties, 50 of which were heat victims. North Carolina lost 38 residents to weather, 20 from flooding.

Weather-related damages in 2016 were more than three times the 2015 total, coming in at \$18,438 billion, up from \$4,799 billion in 2015. Property damages were estimated at \$18,195 billion, up from \$4,154 billion in 2015. The most costly weather culprit for property owners was again floods, which caused \$10.7 billion in damages, followed again by hail (\$3.5 billion) and this year by tropical storms, (\$3.1 billion). Crop damages in 2015 totaled about \$243 million, less than half the 2015 total of \$645 million. Once again, flooding caused the most crop damage, accounting for \$199 million. Louisiana accrued the most in damages in 2016, \$9.2 billion in losses, mostly from flooding.

2016 Summary of Fatalities for All Hazards by Age and Gender

	Female	Male	Unknown	Total	Percent
0 to 9	7	11	0	18	3.93
10 to 19	7	19	0	26	5.68
20 to 29	20	42	0	62	13.54
30 to 39	11	42	0	53	11.57
40 to 49	13	31	0	44	9.61
50 to 59	23	53	0	76	16.59
60 to 69	16	40	0	56	12.23
70 to 79	13	37	0	50	10.92
80 to 89	11	14	0	25	5.46
90 to --	3	2	0	5	1.09
Unknown	9	16	18	43	9.39
Total	133	307	18	458	
Percent	29.04	67.03	3.93		

2016 Monthly Weather Related Fatalities

