



Summary of Natural Hazard Statistics for 2010 in the United States



This National Weather Service (NWS) report summarizes fatalities, injuries and damages caused by severe weather in 2010. 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 2010 Weather Events, Fatalities, Injuries, and Damage Costs

Weather Event	Fatalities	Injuries	Property Damage (million \$)	Crop Damage (million \$)	Total Damage (million \$)
Convection					
Lightning	29	182	71.14	0.45	71.59
Tornado	45	699	1,136.92	27.64	1,164.57
Thunderstorm Wind	15	325	214.38	10.56	224.94
Hail	0	42	3,404.11	99.82	3,503.93
Extreme Temperatures					
Cold	34	1	28.58	746.59	775.17
Heat	138	592	3.93	0.38	4.31
Flood					
Flash Flood	67	188	833.80	85.18	918.98
River Flood	36	127	3,093.92	1,101.80	4,195.72
Marine					
Coastal Storm	0	0	8.16	0.00	8.16
Tsunami	0	0	0.31	0.00	0.31
Rip Current	64	70	50.96	0.00	50.96
Tropical Cyclones					
Tropical Storm / Hurricane	0	0	14.87	4.01	18.88
Winter					
Winter Storm	20	33	333.31	15.00	348.31
Ice	1	1	29.74	0.00	29.74
Avalanche	22	20	0.20	0.00	0.20

Other					
Drought	0	0	0.50	52.54	53.04
Dust Storm	0	0	0.14	0.00	0.14
Dust Devil	0	0	0.06	0.00	0.06
Rain	0	7	5.09	3.60	8.69
Fog	0	0	1.27	0.00	1.27
High Wind	18	63	60.17	1.16	61.33
Waterspout	0	0	0.00	0.00	0.00
Fire Weather	2	24	244.89	1.93	246.82
Mud Slide	0	0	17.40	0.00	17.40
Volcanic Ash	0	0	0.00	0.00	0.00
Miscellaneous	0	0	0.00	0.00	0.00
Total	491	2374	9,553.84	2,150.66	11,704.50

Summary of 2010 Natural Hazard Statistics

Weather-related deaths were up in 2010 to 491 deaths, from 373 fatalities in 2009. This number is well below the 10-year average (2001-2010) of 579. Heat was the most deadly hazard, claiming 138 lives in 2010, up significantly from 45 in 2009. Flooding was the next most deadly weather category, with 103 victims, up from 56 in 2009, followed by rip currents with 64, up from 55 victims in 2009.

Of the 2010 weather-related fatalities, males again accounted for almost twice as many deaths (320) as females (161), a common pattern reflecting the higher percentage of men who hold outdoor jobs such as construction, and who take part in sports and other outside activities. The one category where female deaths exceeded male fatalities was tornadoes, for which most deaths occurred in a trailer or in a permanent home, likely without a basement or storm shelter. Males were more likely to be victims in all age ranges except 0-9 year old children, where tragedies involving girls exceeded boys by 1 and in the 90+ category, where the percentage of women who reach this age range exceeds that of men. July was the deadliest month in 2010, claiming 109 lives, most from heat, followed by June with 79 and August with 73 weather-related deaths.

Weather related injuries were up significantly in 2010. There were 2,374 reported weather-related injuries/illnesses, up from 1,876 in 2009 but down from 2008 with tallied 2,903. Tornadoes caused the most injuries, with 699 victims up 351 in 2009, followed by heat with 592, up from 204 in 2009, and thunderstorm and other high winds, with 388 injuries, up from 257 the previous year.

Which state had the most dangerous weather in 2010? Tennessee, with 53 weather-related fatalities, took that dubious honor from Florida, which numbered the most in 2009. Tennessee deaths were mainly a result of extensive flooding, 22, and high heat, 22. Arkansas followed with 36 fatalities, the majority from flooding, 22, and Illinois with 29, most from cold, 18. For weather-related injuries, Oklahoma unfortunately numbered 410.

Extreme weather caused approximately \$11.7 billion in combined property and crop damages in 2010, up substantially \$7.5 billion in 2009. Property damages were estimated at \$9.5 billion, up slightly from \$6.8 billion in 2009 but well below 2008, which came in at \$27.1 billion. In contrast to 2009, when hail and thunderstorm damage caused the heaviest property losses, in 2010 flooding was the chief culprit, responsible for \$5.1 billion in losses, followed by hail damages with \$3.5 billion in losses. Crop damage was most affected by flooding as well, which accounted for \$1.2 billion in damages to farmers, followed by drought and cold which each accounted for about \$750 million in crop losses.

Arizona took the biggest hit by far in terms of combined property and crop damages in 2010 with \$2.86 billion in losses. Tennessee was second with \$2.36 billion in losses, followed by Iowa with \$1.32 billion. Not surprisingly, Arizona also had the most property damages: more than \$2.86 billion, followed by Tennessee, \$2.36 billion. For the second year, crop losses were most severe in Iowa, which totaled \$1.07 billion in losses, distantly followed by Florida, \$745 million in losses.

2010 Summary of Fatalities for All Hazards by Age and Gender

	Female	Male	Unknown	Total	Percent
0 to 9	17	16	1	34	6.92
10 to 19	14	23	0	37	7.54
20 to 29	11	28	0	39	7.94
30 to 39	10	30	0	40	8.15
40 to 49	15	47	0	62	12.63
50 to 59	19	57	0	76	15.48
60 to 69	26	46	0	72	14.66
70 to 79	16	29	1	46	9.37
80 to 89	15	22	0	37	7.54
90 to --	10	2	0	12	2.44
Unknown	8	20	8	36	7.33
Total	161	320	10	491	
Percent	32.79	65.17	2.04		

2010 Monthly Weather Related Fatalities

