



Summary of Natural Hazard Statistics for 2008 in the United States



This National Weather Service (NWS) report summarizes fatalities, injuries and damages caused by severe weather in 2008. 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 2008 Weather Events, Fatalities, Injuries, and Damage Costs

Weather Event	Fatalities	Injuries	Property Damage (million \$)	Crop Damage (million \$)	Total Damage (million \$)
Convection					
Lightning	27	216	60.11	0.10	60.21
Tornado	126	1714	1,845.60	20.00	1,865.60
Thunderstorm Wind	28	271	1,261.50	29.66	1,291.16
Hail	1	13	464.34	173.61	637.95
Extreme Temperatures					
Cold	44	0	0.04	140.99	141.03
Heat	71	217	0.05	0.50	0.55
Flood					
Flash Flood	58	30	1,289.13	912.95	2,202.08
River Flood	24	16	2,116.59	1,264.95	3,381.54
Marine					
Coastal Storm	15	0	9,926.62	0.85	9,927.47
Tsunami	0	0	0.00	0.00	0.00
Rip Current	68	79	10.63	0.00	10.63
Tropical Cyclones					
Tropical Storm / Hurricane	12	24	7,619.12	473.66	8,092.77
Winter					
Winter Storm	21	121	931.89	19.70	951.59
Ice	0	0	104.14	0.00	104.14
Avalanche	26	15	1.13	0.00	1.13
Other					
Drought	0	0	0.10	1.59	1.69
Dust Storm	0	0	0.00	0.00	0.00
Dust Devil	1	14	0.06	0.00	0.06
Rain	2	16	7.15	4.50	11.65

Fog	0	0	6.64	0.00	6.64
High Wind	42	122	1,222.79	172.18	1,394.97
Waterspout	0	0	0.01	0.00	0.01
Fire Weather	3	35	236.59	2.06	238.65
Mud Slide	0	0	2.43	0.00	2.43
Volcanic Ash	0	0	0.00	0.00	0.00
Miscellaneous	0	0	0.18	0.00	0.18
Total	569	2903	27,106.82	3,217.30	30,324.12

Summary of 2008 Natural Hazard Statistics

Weather-related deaths were up in 2008 to 569 fatalities from 515 in 2007. This number is still below the 10-year average (1999-2008) of 649. Tornadoes were the most deadly weather, claiming 126 lives in 2008, up from 82 tornado deaths in 2007. Flooding was the next most deadly weather category, with 82 victims. Extreme heat, traditionally, the major weather killer, resulted in 71 deaths.

Of the 2008 weather-related fatalities, males again accounted for almost twice as many deaths (374) as females (184), 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. Males were more likely to be victims in all age ranges except the under 9 year old and 80+ categories. June was the deadliest month in 2008, claiming 87 lives, followed by February, during which 76 deaths were recorded.

Although weather related fatalities were up, injuries were down in 2008. There were 2,903 reported weather-related injuries/illnesses, down from 3,733 in 2007 and 3,489 in 2006. Mirroring fatalities numbers, tornadoes were the major cause of injuries in 2008, causing 1,714 injuries, followed by thunderstorms and high winds with 393 victims, heat with 217 and lightning with 216.

Which state has the most dangerous weather in 2008? Tennessee won that dubious honor with 37 victims, 31 of which were from tornadoes. Following closely were Texas with 36 weather related deaths, Illinois and Arkansas with 35 each, Florida with 33 and Pennsylvania with 31.

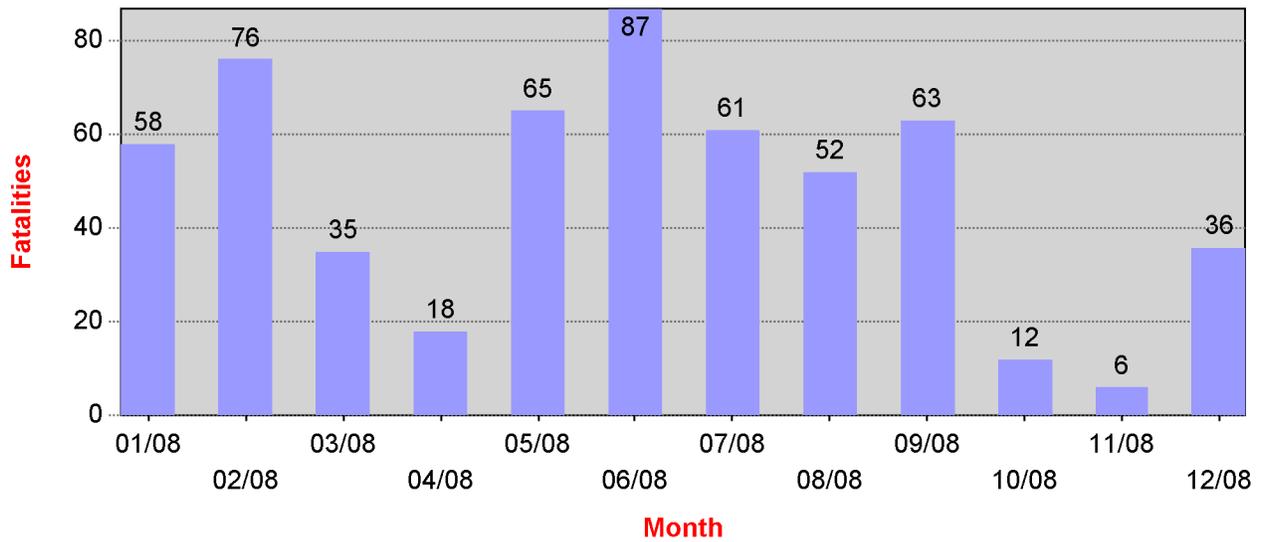
Extreme weather caused approximately \$30.3 billion in combined property and crop damages in 2008, up from \$12.3 billion in 2007. Property damages were estimated to top \$27.1 billion, up significantly from \$7.4 billion in 2007. In contrast to 2007 when cold, drought, wildfires, tornadoes and ice caused the most total damage, in 2008 coastal storms and tropical storms/hurricanes were the most destructive. Crop damage was most affected by flooding, which accounted for \$2.1 billion in damages to farmers, followed by tropical storms/hurricanes which resulted in another \$474 million in lost crops.

Texas took the biggest hit in terms of combined property and crop damages in 2008 with almost \$16.6 billion in losses. Following distantly were Louisiana with \$2.4 billion, and Iowa, Ohio and Indiana with approximately \$1.6 billion. Texas also had the most property damage, more than \$16.2 billion, followed by Louisiana and Ohio with \$1.6 billion and Iowa with \$1.3 billion. Crop losses were most severe in Louisiana, which totaled \$758 million in losses, followed by Indiana with \$693 million and Iowa with \$367 million.

2008 Summary of Fatalities for All Hazards by Age and Gender

	Female	Male	Unknown	Total	Percent
0 to 9	10	10	0	20	3.51
10 to 19	10	46	0	56	9.84
20 to 29	19	49	0	68	11.95
30 to 39	15	35	0	50	8.79
40 to 49	22	54	0	76	13.36
50 to 59	26	61	0	87	15.29
60 to 69	26	33	0	59	10.37
70 to 79	18	39	0	57	10.02
80 to 89	22	20	1	43	7.56
90 to --	5	4	0	9	1.58
Unknown	11	23	10	44	7.73
Total	184	374	11	569	
Percent	32.34	65.73	1.93		

2008 Monthly Weather Related Fatalities



2008 Summary of Hazardous Weather Fatalities, Injuries, and Damage Costs by State

State	Fatalities	Injuries	Property Damage (million \$)	Crop Damage (million \$)	Total Damage (million \$)
AK (Alaska)	3	0	12.17	0.00	12.17
AL (Alabama)	15	139	41.89	0.01	41.89
AM (Atlantic South)	1	3	0.00	0.00	0.00
AN (Atlantic North)	3	4	0.18	0.00	0.18
AR (Arkansas)	35	247	729.78	40.69	770.47
AS (American Samoa)	0	0	0.00	0.00	0.00
AZ (Arizona)	9	82	48.80	0.00	48.80
CA (California)	15	61	252.04	30.83	282.86
CO (Colorado)	12	101	166.23	0.36	166.59
CT (Connecticut)	2	7	1.68	0.00	1.68
DC (District of Columbia)	0	10	0.08	0.00	0.08
DE (Delaware)	0	62	1.46	0.00	1.46
FL (Florida)	33	50	305.16	40.39	345.54
GA (Georgia)	11	114	319.94	0.50	320.44
GM (Gulf of Mexico)	1	0	0.01	0.00	0.01
GU (Guam)	3	1	1.15	0.85	2.00
HI (Hawaii)	3	1	0.00	0.00	0.00
IA (Iowa)	18	146	1,274.87	367.57	1,642.43
ID (Idaho)	3	7	13.94	0.00	13.95
IL (Illinois)	35	48	227.14	41.04	268.18
IN (Indiana)	27	60	888.68	693.03	1,581.71
KS (Kansas)	7	32	133.04	32.25	165.29
KY (Kentucky)	9	97	241.22	72.11	313.32
LA (Louisiana)	13	24	1,642.76	758.18	2,400.93
LC (Lake St.Clair)	0	0	0.10	0.00	0.10
LE (Lake Erie)	0	0	0.00	0.00	0.00
LH (Lake Huron)	0	0	0.00	0.00	0.00
LM (Lake Michigan)	0	0	0.10	0.00	0.10
LO (Lake Ontario)	0	0	0.00	0.00	0.00
LS (Lake Superior)	1	0	0.00	0.00	0.00
MA (Massachusetts)	2	29	55.84	1.30	57.14
MD (Maryland)	3	3	6.76	0.01	6.77
ME (Maine)	2	0	35.18	0.00	35.18
MI (Michigan)	8	4	67.92	5.46	73.38
MN (Minnesota)	6	39	61.76	22.55	84.31
MO (Missouri)	30	355	254.88	86.53	341.41
MS (Mississippi)	4	81	329.22	60.66	389.87
MT (Montana)	5	5	3.68	0.02	3.70

NC (North Carolina)	12	47	50.91	5.29	56.20
ND (North Dakota)	1	7	8.20	17.45	25.65
NE (Nebraska)	0	10	87.30	49.58	136.88
NH (New Hampshire)	2	5	48.89	0.00	48.89
NJ (New Jersey)	14	88	9.70	17.25	26.95
NM (New Mexico)	7	0	44.45	0.16	44.61
NV (Nevada)	21	6	8.55	0.10	8.65
NY (New York)	10	18	57.26	92.92	150.19
OH (Ohio)	13	19	1,660.19	15.56	1,675.75
OK (Oklahoma)	14	214	834.48	0.02	834.49
OR (Oregon)	4	2	18.66	19.81	38.47
PA (Pennsylvania)	31	63	52.73	0.01	52.74
PK (Gulf of Alaska)	0	0	0.00	0.00	0.00
PR (Puerto Rico)	5	0	28.90	0.00	28.90
PZ (East Pacific)	2	0	0.03	0.00	0.03
RI (Rhode Island)	5	0	0.55	0.00	0.55
SC (South Carolina)	5	32	16.08	1.17	17.24
SD (South Dakota)	1	19	19.94	2.87	22.81
TN (Tennessee)	37	171	278.38	1.00	279.38
TX (Texas)	36	103	16,222.07	349.76	16,571.83
UT (Utah)	6	3	0.79	0.01	0.80
VA (Virginia)	4	230	53.72	0.00	53.72
VI (Virgin Islands)	0	0	0.00	0.00	0.00
VT (Vermont)	0	0	9.85	0.00	9.85
WA (Washington)	7	5	31.78	105.00	136.78
WI (Wisconsin)	6	33	435.23	285.05	720.28
WV (West Virginia)	0	2	9.65	0.00	9.65
WY (Wyoming)	7	14	0.87	0.00	0.87
Total	569	2903	27,106.82	3,217.30	30,324.12