



Summary of Natural Hazard Statistics for 1999 in the United States



This National Weather Service (NWS) report summarizes fatalities, injuries and damages caused by severe weather in 1999. 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 1999 Weather Events, Fatalities, Injuries, and Damage Costs

LAST UPDATED : 10/19/2000

| <u>Weather Event</u> | <u>Fatalities</u> | <u>Injuries</u> | <u>Amount of Property Damage (M)</u> | <u>Amount of Crop Damage (M)</u> | <u>Total Prop/Crop Damage (M)</u> |
|------------------------------------|-------------------|-----------------|--|--|---|
| <u>Convection</u> | | | | | |
| Lightning | 46 | 243 | \$ 32.5 | \$ 0.0 | \$ 32.5 |
| Tornado | 94 | 1842 | 1,989.9 | 8.3 | 1,998.2 |
| Tstm Wind | 29 | 325 | 313.5 | 75.2 | 388.7 |
| Hail | 0 | 46 | 443.0 | 157.8 | 600.8 |
| <u>Extreme Temperatures</u> | | | | | |
| Cold | 7 | 32 | 1.7 | 155.5 | 157.2 |
| Heat | 502 | 1477 | 3.3 | 0.0 | 3.3 |
| <u>Flood</u> | | | | | |
| Flash Flood | 60 | 290 | 1,201.8 | 357.2 | 1,559.0 |
| River Flood | 5 | 0 | 214.7 | 14.5 | 229.2 |
| Small Stream/Urban Flood | 3 | 11 | 4.2 | 0.0 | 4.2 |
| <u>Marine</u> | | | | | |
| Coastal Storm | 28 | 42 | 0.7 | 0.0 | 0.7 |
| Tsunami | 0 | 0 | 0.0 | 0.0 | 0.0 |
| <u>Tropical Cyclones</u> | | | | | |
| Tropical Storm/Hurricane | 19 | 10 | 4,190.1 | 1,418.7 | 5,608.8 |
| <u>Winter</u> | | | | | |
| Winter Storm | 39 | 316 | 61.9 | 0.0 | 61.9 |
| Ice | 2 | 86 | 0.3 | 0.0 | 0.3 |
| Avalanche | 26 | 10 | 0.1 | 0.0 | 0.1 |
| <u>Other</u> | | | | | |
| Drought | 0 | 0 | 0.1 | 1,332.9 | 1,333.0 |
| Dust Storm | 1 | 49 | 0.6 | 0.1 | 0.7 |
| Dust Devil | 0 | 0 | 0.0 | 0.0 | 0.0 |
| Rain | 8 | 7 | 30.3 | 0.0 | 30.3 |
| Fog | 3 | 84 | 0.9 | 0.0 | 0.9 |
| High Wind | 33 | 148 | 86.7 | 5.3 | 92.0 |
| Waterspout | 0 | 0 | 0.3 | 0.0 | 0.3 |
| Fire Weather | 2 | 127 | 141.0 | 1.6 | 142.6 |
| Mud Slide | 0 | 0 | 0.0 | 0.0 | 0.0 |
| Volcanic Ash | 0 | 0 | 0.0 | 0.0 | 0.0 |
| Miscellaneous | 1 | 3 | 3.7 | 5.0 | 8.7 |
| TOTAL | 908 | 5148 | \$8,721.3M | \$3,532.1M | 12,253.4M |

Summary of 1999 Natural Hazard Statistics

In 1999, there were 908 weather-related fatalities—221 more than in 1998. The 10-year average for weather-related fatalities (1990-1999) is 602. Extreme heat ranked as the #1 weather-related killer with 502 deaths—nearly three times higher than 1998's death toll of 173. Tornadoes resulted in 94 fatalities, followed by flooding with 68 and lightning with 46.

Weather-related injuries significantly dropped from 11,171 in 1998 to 5,148 in 1999. Tornadoes and heat caused the greatest number of injuries with 1,842 and 1,477, respectively. In 1998, flooding alone caused 6,440 injuries with tornadoes causing 1,868 injuries.

In 1999, severe weather accounted for more than \$12 billion in damages. Hurricanes/tropical storms were the most destructive weather with \$5.6 billion in property and crop losses. Tornadoes were the second most destructive, costing nearly \$2 billion. Hurricanes generated almost \$4.2 billion in property losses. Hurricanes and drought caused devastating losses to crops: \$1.4 and \$1.3 billion, respectively. States suffering more than a billion dollars in damage include Florida, North Carolina and Oklahoma. A tornado outbreak struck Oklahoma in May generating more than \$1 billion in damage. Hurricane Floyd in September and October caused inland flooding amounting to more than \$4 billion in damage.

Of the 908 people who died because of severe weather, 555 were male, 334 were female and 19 unknown. The 40- to 89-age group accounted for the largest number of fatalities—632.

July was the deadliest month with 477 fatalities, most caused by extreme heat. May ranked second with 75 fatalities, primarily from the tornado outbreak in Oklahoma.

In 1999, Illinois suffered the highest number of deaths with 147; Pennsylvania had 101 fatalities. Topping the injuries list were Oklahoma with 706 and Missouri with 424.

In 1998-99, extreme heat ranked as the #1 weather killer in the United States, outranking floods. The 30-year average (1970-1999) for floods is 130; for lightning, 76; for tornadoes, 70; for hurricanes, 16. The 10-year average for cold related deaths is 26; for heat, 194.

1999 Summary of all Natural Hazards

1999 SUMMARY OF FATALITIES FOR ALL HAZARDS BY AGE AND GENDER

| | <u>FEMALE</u> | <u>MALE</u> | <u>UNKNOWN</u> | <u>TOTAL</u> | <u>PERCENT</u> |
|----------------|---------------|-------------|----------------|--------------|----------------|
| 0 TO 9 | 14 | 18 | 0 | 32 | 4 |
| 10 TO 19 | 18 | 21 | 0 | 39 | 4 |
| 20 TO 29 | 18 | 52 | 0 | 70 | 8 |
| 30 TO 39 | 18 | 62 | 0 | 80 | 9 |
| 40 TO 49 | 39 | 90 | 0 | 129 | 14 |
| 50 TO 59 | 22 | 92 | 0 | 114 | 13 |
| 60 TO 69 | 33 | 79 | 0 | 112 | 12 |
| 70 TO 79 | 82 | 72 | 0 | 154 | 17 |
| 80 TO 89 | 70 | 53 | 0 | 123 | 14 |
| 90 TO -- | 18 | 7 | 0 | 25 | 3 |
| UNKNOWN | 2 | 9 | 19 | 30 | 3 |
| TOTAL | 334 | 555 | 19 | 908 | 100 |
| PERCENT | 37 | 61 | 2 | 100 | |

1999 MONTHLY WEATHER RELATED FATALITIES

