



Summary of U.S. Natural Hazard Statistics for 1997



This National Weather Service (NWS) report offers a summary of fatalities, injuries and damage costs caused by severe weather in 1997. The NWS Office of Meteorology (OM) compiles this *Summary of U.S. Natural Hazard Statistics* from *Storm Data*, a report submitted electronically by NWS forecast offices in the 50 states, Puerto Rico, Guam and the Virgin Islands.

Summary of 1997 Weather Events, Fatalities, Injuries, and Damage Costs

LAST UPDATED : 3/17/99

<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	42	306	\$ 40.3	\$ 0.3	\$ 40.6
Tornado	67	1033	730.7	5.8	736.5
Tstm Wind	37	425	200.7	41.4	242.1
Hail	0	5	202.1	198.9	401.0
<u>Extreme Temperatures</u>					
Cold	51	9	4.1	304.3	308.4
Heat	81	530	0.0	0.0	0.0
<u>Flood</u>					
Flash Flood	86	463	864.2	25.8	890.0
River Flood	29	60	6,016.1	91.0	6,107.1
Small Stream/Urban Flood	3	2	30.3	0.1	30.4
<u>Marine</u>					
Coastal Storm	22	13	0.7	0.0	0.7
Tsunami	0	0	0.0	0.0	0.0
<u>Tropical Cyclones</u>					
Tropical Storm/Hurricane	1	32	667.6	207.8	875.4
<u>Winter</u>					
Winter Storm	84	573	688.6	85.0	773.6
Ice	6	43	0.4	0.0	0.4
Avalanche	4	0	0.0	0.0	0.0
<u>Other</u>					
Drought	0	0	24.0	253.0	277.0
Dust Storm	0	36	0.3	0.0	0.3
Dust Devil	0	2	0.0	0.0	0.0
Rain	33	29	11.4	0.7	12.1
Fog	10	103	1.7	0.0	1.7
High Wind	38	126	41.1	3.0	44.1
Waterspout	0	1	0.1	0.0	0.1
Fire Weather	1	7	33.1	10.0	43.1
Mud Slide	5	1	0.0	0.0	0.0
Volcanic Ash	0	0	0.0	0.0	0.0
Miscellaneous	0	0	0.0	1.0	1.0
TOTALS	600	3799	\$9,557.5M	\$1,228.1M	10,785.6M

Summary of all Severe Weather

In 1997, there were 600 weather-related fatalities—60 more than in 1996. The average number of deaths per year for the past 10 years is 524, increasing slightly from last year's average of 499. As usual, floods accounted for the greatest number of fatalities with 118 (20%), followed by winter storms/blizzards with 84 (14%).

The total number of weather-related injuries in 1997 climbed to 3,799, compared to 2,711 in 1996—an increase of 1,088 (29%). Tornadoes caused the most injuries again this year with 1,033 (27%). Winter storms/blizzards and extreme heat ranked second and third with 573 (15%) and 530 (14%) injuries, respectively.

Damage caused by severe weather cost the Nation nearly \$10.8 billion in 1997. Flooding caused the greatest amount of property damage with \$6.9 billion. Tornadoes ranked second in property loss with \$730.7 million followed closely by winter storms/blizzards with \$688.6 million and tropical storms/hurricanes with \$667.6 million. Extreme cold was responsible for the greatest amount of crop damage with \$304.3 million. Drought ranked second with \$253 million.

Of the 600 weather-related fatalities, almost two-thirds (368 or 61%) were males. Sixty-nine (69%) percent of the male fatalities were between the ages of 20 to 70. Male deaths out paced female deaths in all age categories except 80 to 90 age group.

The deadliest weather month in 1997 was January with 108 fatalities, followed by July with 91 and March with 85. Most of the January deaths were due to winter storms/blizzards, although there were a few fatalities caused by tornadoes and flash flooding. Four people died in Hawaii while attempting to save a person who was swept into the rough surf while taking photographs. Many of the July fatalities were a result of extreme heat in the Philadelphia area. Of the March fatalities, 26 were victims of tornadoes in Arkansas and Mississippi. Most of the remaining March fatalities were a result of flooding and winter weather.

In 1997, Texas recorded the highest number of fatalities with 67, including 42 victims of tornadoes in Jarrell, TX. Flash flooding resulted in many of the remaining Texas fatalities. Next hardest hit were Pennsylvania (49), Illinois (46) and California (43). Arkansas had the most injuries with 456, followed by Texas with 387. Flooding of the Red River caused more than \$3.7 billion in property damage to North Dakota. When Pacific Hurricane Nora crossed into Arizona from Baja California, it caused \$200 million in crop damage. Temperatures dropped into the low 20s in Florida on January 19, causing more than \$214 million in crop damage.

Again, in 1997, flooding ranked as the #1 weather killer in the United States. The 30-year average (1968-1997) for flash floods/flood fatalities rose slightly from 138 in 1996 to 140 in 1997. As of 1997, the 30-year average fatality rate for lightning was 81; tornadoes, 69; and hurricanes, 24. The 10-year average (1988-1997) for cold related fatalities is 38; for heat related, 131.

1997 Summary of all Natural Hazards

1997 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	10	11	0	21	4
10 TO 19	26	41	0	67	11
20 TO 29	18	50	0	68	11
30 TO 39	40	60	0	100	17
40 TO 49	25	58	0	83	14
50 TO 59	27	46	0	73	12
60 TO 69	17	41	0	58	10
70 TO 79	16	29	0	45	8
80 TO 89	20	15	0	35	6
90 TO --	4	4	0	8	1
UNKNOWN	2	13	27	42	7
TOTALS	205	368	27	600	100
PERCENT	34	61	5	100	

Weather Related Fatalities 1997 by Month

