



## Summary of Natural Hazard Statistics for 2003 in the United States



This National Weather Service (NWS) report summarizes fatalities, injuries and damages caused by severe weather in 2003. 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 2003 Weather Events, Fatalities, Injuries, and Damage Costs

LAST UPDATED : 6/17/2004

<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>
<b><u>Convection</u></b>					
Lightning	43	236	\$ 25.7	\$ 0.0	\$ 25.7
Tornado	54	1087	1,265.6	15.9	1,281.5
Tstm Wind	19	226	355.8	66.5	422.3
Hail	0	121	522.5	110.0	632.5
<b><u>Extreme Temperatures</u></b>					
Cold	20	14	0.9	28.2	29.1
Heat	36	174	0.0	0.0	0.0
<b><u>Flood</u></b>					
Flash Flood	67	61	2,123.9	18.3	2,142.2
River Flood	18	5	418.7	139.8	558.5
Small Stream/Urban Flood	1	4	0.5	0.0	0.5
<b><u>Marine</u></b>					
Coastal Storm	14	6	11.4	0.0	11.4
Tsunami	0	0	0.0	0.0	0.0
Rip Current	41	47	0.0	0.0	0.0
<b><u>Tropical Cyclones</u></b>					
Tropical Storm/Hurricane	14	233	1,879.5	40.8	1,920.3
<b><u>Winter</u></b>					
Winter Storm	28	112	499.4	8.6	508.0
Ice	0	0	0.0	0.0	0.0
Avalanche	9	7	0.0	0.0	0.0
<b><u>Other</u></b>					
Drought	0	0	645.2	572.5	1,217.7
Dust Storm	2	91	0.3	0.0	0.3
Dust Devil	1	3	0.1	0.0	0.1
Rain	5	34	8.4	69.8	78.2
Fog	0	0	0.0	0.0	0.0
High Wind	24	156	166.2	41.0	207.2
Waterspout	0	0	0.0	0.0	0.0
Fire Weather	0	2	2,331.6	0.0	2,331.6
Mud Slide	15	16	5.6	0.0	5.6
Volcanic Ash	0	0	0.0	0.0	0.0
Miscellaneous	27	289	7.8	31.2	39.0
<b>TOTALS</b>	<b>438</b>	<b>2924</b>	<b>\$10,269.1M</b>	<b>\$1,142.6M</b>	<b>\$11,411.7M</b>

## **Summary of 2003 Natural Hazard Statistics**

In 2003, there were 438 weather-related fatalities, a significant decrease from 542 in 2002, and moderately below the 10-year average (1994-2003) of 521. In a departure from the previous 5 years, extreme heat ranked as one of least dangerous weather-related killers. In 2003, flooding took the most lives, claiming 86 weather related victims. The next biggest killer in 2003 was tornadoes with 54 fatalities, followed by lightning with 43 deaths and rip currents with 41.

Weather-related injuries dropped in 2003 to 2,924 from 3,089 in 2002. Tornadoes were by far the largest source of injuries with 1,087 (37%). Coming a distant second, third and fourth for weather related injuries with 8% each were lightning, tropical storms/hurricanes and thunderstorm winds.

In 2003, severe weather caused \$11.4 billion in damages, up from \$5.7 billion in 2002. Fire weather--contributing to wildfires--was the most costly severe weather, accounting for an estimated \$2.330 billion in losses and displacing tropical storms/hurricanes as the most expensive weather in 2002. Flooding was the next most expensive weather, accounting for \$2.142 billion in damages. California suffered the highest weather related property and crop damages totaling \$2.351 billion in losses, mostly due to wildfires and flooding.

Of the 438 weather-related fatalities, males accounted for about twice as many deaths as females. As in the past, males were affected more by weather in all categories except cold and tornadoes. Cold and heat most heavily impacts the elderly and tornadoes were hazardous to even those in permanent homes. Deaths spanned the age ranges, hitting those under 20 most lightly.

March was the deadliest month with 68 fatalities, 38 of which were from tornado events occurring on 5/4/2003 in Kansas, Tennessee, and Missouri. In 2003, California and Florida were hardest hit by weather, losing 56 and 51 citizens, respectively. California was hit heavily by wildfires with additional losses to floods and heat. Florida, as in the past, is impacted heavily by rip currents and lightning.

## 2003 Summary of all Natural Hazards

### 2003 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	22	0	36	8
10 TO 19	13	34	0	47	11
20 TO 29	15	35	0	50	11
30 TO 39	21	47	0	68	16
40 TO 49	24	37	0	61	14
50 TO 59	16	39	0	55	13
60 TO 69	15	22	0	37	8
70 TO 79	13	22	0	35	8
80 TO 89	10	10	0	20	5
90 TO --	2	3	0	5	1
UNKNOWN	3	19	2	24	5
<b>TOTAL</b>	<b>146</b>	<b>290</b>	<b>2</b>	<b>438</b>	<b>100</b>
<b>PERCENT</b>	<b>33</b>	<b>66</b>	<b>0</b>	<b>100</b>	

### 2003 MONTHLY WEATHER RELATED FATALITIES

