



---

Swiss Re *sigma* study: 2003 catastrophes claim 60,000 lives,  
while causing USD 18.5 billion in insured losses

---

**Contact:**

Aurelia Zanetti, Zurich  
Telephone + 41 43 285 2544

Thomas Holzheu, New York  
Telephone + 1 212 317 5190

Clarence Wong, Hong Kong  
Telephone + 852 2582 5644

Group Media Relations, Zurich  
Telephone +41 43 285 7171

Swiss Reinsurance Company  
Mythenquai 50/60  
P.O. Box  
CH-8022 Zurich

Telephone +41 43 285 2121  
Fax +41 43 285 2999  
[www.swissre.com](http://www.swissre.com)

**Zurich, 3 March 2004 – According to updated figures from Swiss Re, 60,000 people worldwide were killed by natural and man-made catastrophes in 2003. Over two thirds of these were the victims of earthquakes. According to the latest *sigma* report published today, overall economic losses from catastrophes in 2003 amounted to an estimated USD 70 billion. Property insurers across the globe had to contend with losses of some USD 18.5 billion.**

There were 380 catastrophes registered in 2003 in which almost 60,000 people lost their lives. The number of fatalities has risen substantially from when *sigma* published preliminary figures at the end of last year and is now considered the seventh highest in over 30 years. The most tragic disaster in terms of loss of life was the December earthquake in the Iranian city of Bam in which 41,000 people were killed. Globally, the earthquake was the fourth largest in terms of victims since 1970. In addition the earthquake which hit the region of Boumerdès in Northern Algeria during May claimed the lives of 2260 victims.

**Economic losses from catastrophes in 2003 were USD 70 billion**

In financial terms total damage attributable to natural and man-made catastrophes in 2003 was USD 70 billion. At an estimated USD 14 billion, the drought conditions in central, southern and eastern Europe produced the largest economic loss. Typhoon Maemi in South Korea also contributed a further USD 5.5 billion.

Of the 2003 total, man-made disasters accounted for USD 12 billion of economic losses, more than half of which was due to the three-day power outage in the US during August.

**Insurers to pay over USD 18 billion for catastrophes**

The property insurance industry bore USD 18.5 billion, or one quarter, of the total damage from catastrophes in 2003. Last year was notable for the several billion dollar catastrophes.

---

Six events generated insured property losses in excess of one billion dollars, together accounting for more than half of all insured catastrophe losses reported in 2003.

During April, a storm system swept across the US from the North East to the Mid-West, bringing snow and ice, while in May, a record series of more than 400 tornadoes hit the US Mid-West with hailstorms. These two events cost insurers USD 3.2 billion and USD 1.6 billion respectively. In September, Hurricane Isabel stormed across the US states along the Eastern Seaboard and Ontario, generating an insured property loss of USD 1.7 billion. Between the end of October and beginning of November, two forest fires raged in California resulting in extensive property damage in the populated forestry zones. In December 2003, flash floods in the South of France caused insured losses of USD 1 billion.

Natural catastrophes were responsible for significantly more losses than major man-made disasters which caused insured losses of USD 2.3 billion in 2003, mainly from large industrial fires, explosions and the loss of space satellites.

### **Burden for property insurers: rising trend**

While the insured property loss figure of USD 18.5 billion is below those of recent record years, 2003 can be added to the list of costly loss years. Catastrophes have caused billions of losses in every year since the late eighties (an inflation-adjusted annual average of USD 20 billion since 1987). There are strong indications that the billion-dollar loss trend will continue, and the 2003 figures confirm this trend towards high losses, which is being driven by increasingly densely populated areas, higher concentrations of insured values and the development of endangered zones.

2003 was the hottest summer on record for many countries in Europe, and in 2002 there were heavy flash floods in parts of Europe during July and August. As the report outlines there is increasing evidence for a rise in extreme weather events, and hence in insured catastrophe losses. It also shows how the catastrophe bond market is complementing the traditional way of insuring and reinsuring catastrophes.

### Most costly insured losses in 2003

| <i>Insured losses<br/>(in USD bn)</i> | <i>Victims<br/>(dead and missing)</i> | <i>Date<br/>(beginning)</i> | <i>Event</i>                    | <i>Country</i> |
|---------------------------------------|---------------------------------------|-----------------------------|---------------------------------|----------------|
| 3.2                                   | 45                                    | 02.05.2003                  | Tornadoes and hail              | US             |
| 1.7                                   | 36                                    | 18.09.2003                  | Hurricane Isabel                | US, Canada     |
| 1.6                                   | —                                     | 04.04.2003                  | Storms and hail                 | US             |
| 1.1                                   | 14                                    | 25.10.2003                  | Cedar Fire - urban forest fires | US (CA)        |
| 1.0                                   | 4                                     | 21.10.2003                  | Old Fire - urban forest fires   | US (CA)        |
| 1.0                                   | 7                                     | 01.12.2003                  | Floods                          | France         |

### Most deadly catastrophes in 2003

| <i>Victims<br/>(dead and missing)</i> | <i>Date<br/>(beginning)</i> | <i>Event</i>                    | <i>Country</i>    |
|---------------------------------------|-----------------------------|---------------------------------|-------------------|
| 41000                                 | 26.12.2003                  | Earthquake in Bam               | Iran              |
| 2266                                  | 21.05.2003                  | Earthquake in Bormerdès         | Algeria           |
| 1392                                  | 14.05.2003                  | Heat wave                       | India             |
| 650                                   | 13.06.2003                  | Floods, landslides              | India, Bangladesh |
| 528                                   | 08.07.2003                  | Capsize of the ferry MV Nasreen | Bangladesh        |
| 373                                   | 15.07.2003                  | Floods and landslides           | Pakistan, India   |

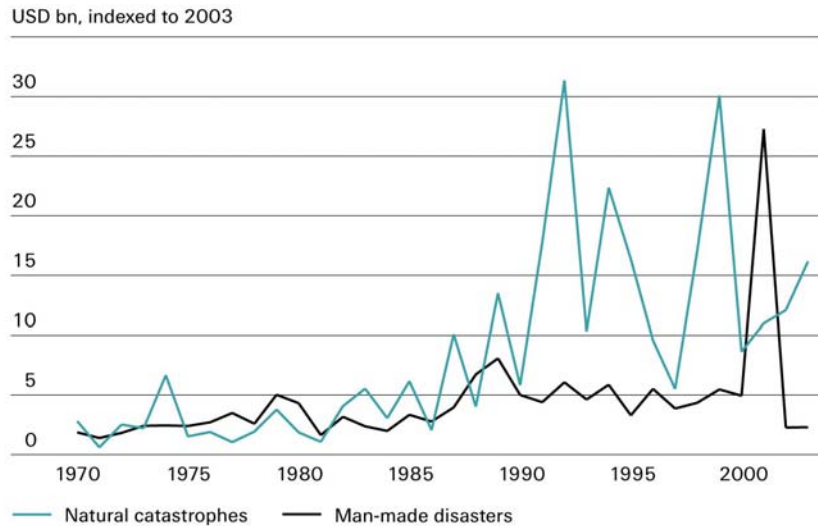
### Natural catastrophes: the most costly insurance losses 1970–2003

| <i>Insured loss<br/>(in USD bn,<br/>indexed to<br/>2003)</i> | <i>Victims<br/>(dead and<br/>missing)</i> | <i>Date<br/>(beginning)</i> | <i>Event</i>          | <i>Country</i>         |
|--|---|-----------------------------|-----------------------|------------------------|
| 20.9   | 43  | 23.08.1992                  | Hurricane Andrew      | US, Bahamas            |
| 17.3   | 60  | 17.01.1994                  | Northridge earthquake | US                     |
| 7.6  | 51  | 27.09.1991                  | Typhoon Mireille      | Japan                  |
| 6.4  | 95  | 25.01.1990                  | Winterstorm Daria     | France, UK et al.      |
| 6.4  | 110                                       | 25.12.1999                  | Winterstorm Lothar    | France, CH et al.      |
| 6.2  | 71  | 15.09.1989                  | Hurricane Hugo        | Puerto Rico, US et al. |

### Natural catastrophes: the worst events in terms of victims 1970–2003

| <i>Victims<br/>(dead and<br/>Missing)</i> | <i>Date<br/>(beginning)</i> | <i>Event</i>                | <i>Country</i> |
|---|-----------------------------|-----------------------------|----------------|
| 300 000                                   | 14.11.1970                  | Storm and flood catastrophe | Bangladesh     |
| 250 000                                   | 28.07.1976                  | Earthquake in Tangshan      | China          |
| 138 000                                   | 29.04.1991                  | Tropical cyclone Gorky      | Bangladesh     |
| 60 000                                    | 31.05.1970                  | Earthquake in Piura         | Peru           |
| 50 000                                    | 21.06.1990                  | Earthquake in Gilan         | Iran           |
| 41 000                                    | 26.12.2003                  | Earthquake in Bam           | Iran           |

## Insured losses 1970–2003



### Notes for editors:

Swiss Re is a leading reinsurer and the world's largest life and health reinsurer. The company is global, operating from 70 offices in 30 countries. Since its foundation in 1863, Swiss Re has been in the reinsurance business. Swiss Re has three business groups: Property & Casualty, Life & Health and Financial Services. Swiss Re offers a wide range of traditional reinsurance products and related services, which are complemented by insurance-based corporate finance solutions and supplementary services. Swiss Re is rated "AA" by Standard & Poor's, "Aa1" by Moody's and "A+" by AM Best.

### How to obtain a copy of the *sigma* catastrophe study:

The English, German, French, Spanish and Italian versions of the sigma study "Natural and man-made catastrophes 2003" are available electronically on Swiss Re's website <http://www.swissre.com/sigma>

Printed editions of sigma No. 1/2004 can now be ordered. English and German versions are currently available, those in French, Spanish, Italian, Chinese and Japanese will be available soon. Please send your orders, complete with your full postal address to:

|            |  |                     |
|------------|--|---------------------|
| E-mail:    | <a href="mailto:sigma@swissre.com">sigma@swissre.com</a> |                     |
| Zurich:    | Tel. +41 43 285 2551,                                    | Fax +41 43 285 4749 |
| New York:  | Tel. +1 212 317 5135,                                    | Fax +1 212 317 5455 |
| Hong Kong: | Tel. +852 25 82 5691,                                    | Fax +852 25 11 6603 |

### How to obtain a copy of this *sigma* press release:

The English, German and French versions of the *sigma* press release are available electronically on Swiss Re's website: <http://www.swissre.com>

This media release is also distributed by e-mail. To receive your copy, please contact [sigma@swissre.com](mailto:sigma@swissre.com)