HAITI EARTHQUAKE BRIEF
JANUARY 13, 2010
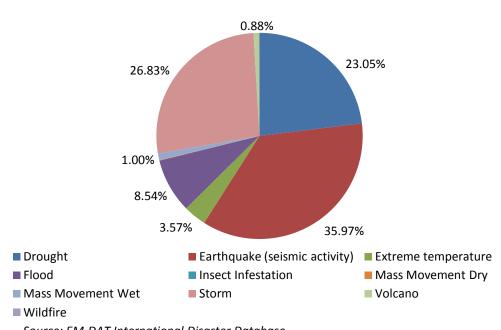
Global disaster occurrence and impact

Top 10 earthquakes globally by mortality (1970-2009)

Date	Country	Richter	Persons killed	Persons affected
July 27th, 1976	China	7.8	242,000	164,000
December 26th, 2004	Indian Ocean tsunami*	9	226,000	2,432,000
May 12th, 2008	China	7.9	88,000	45,977,000
October 8th, 2005	Pakistan, India, Afghanistan**	7.6	75,000	5,285,000
May 31st, 1970	Peru	7.8	67,000	3,216,000
June 21st, 1990	Iran	7.3	40,000	710,000
December 26th, 2003	Iran	6.6	27,000	268,000
December 7th, 1988	Armenia	6.9	25,000	1,642,000
September 16th, 1978	Iran	7.7	25,000	40,000
February 4th, 1976	Guatemala	7.5	23,000	4,993,000

Source: EM-DAT International Disaster Database

*Affected countries: Bangladesh (2 killed, 0 affected), India (16,400 killed, 654,500 affected), Indonesia (165,700 killed, 532,900 affected), Kenya (1 killed, 0 affected), Malaysia (80 killed, 5,100 affected), Maldives (102 killed, 27,200 affected), Myanmar (71 killed, 15,700 affected), Seychelles (3 killed, 4,800 affected), Somalia (298 killed, 105,100 affected), Sri Lanka (35,400 killed, 1,019,300 affected), Tanzania (10 killed, 0 affected), Thailand (8,300 killed, 67,000 affected).

**Pakistan (73,300 killed, 5,128,000 affected), India (1,309 killed, 156,600 affected), Afghanistan (1 killed).

Reported Deaths by Natural Disaster Types: 1970-2009

Source: EM-DAT International Disaster Database

As can be seen from the above figure, earthquakes are largest cause of natural disaster mortality, followed by storms, droughts and floods. Earthquakes are the least predictable of all natural disasters. In addition, the interval between an earthquake threat and occurrence is the briefest among the major disaster types. Partly due to this, earthquakes top the scale of immediate mortality and structural destruction.

Statistics published after the Kobe earthquake showed that 71% of all victims died within 14 minutes of the earthquake, with a further 10.7% dying within six hours of the tremors. About 54% of the deaths resulted from crush injuries and other types of physical trauma sustained in the collapse of buildings. [Alexander, D. 1996, The Health Effects of Earthquakes in the Mid-1990s, Disasters, 20(3), 231-247)].

Centre for Research on the Epidemiology of Disaster (CRED)
School of Public Health - Université catholique de Louvain
contact@cred.be, www.cred.be

Natural Disasters in Haiti

Earthquake occurrence in Haiti
October 27th, 1952 - 6 persons reported killed

Top 10 natural disasters in Haiti by mortality (1970-2008)

Date	Disaster type	Persons killed	Persons affected
September 2004	Storm (Tropical cyclone Jeanne)	2,754	315,594
May-June 2004	Flood	2,665	31,283
November 1994	Storm (Tropical cyclone Gordon)	1,122	1,587,000
September 2008	Storm (Tropical cyclone Hanna)	529	48,000
August 1980	Storm (Tropical cyclone Allen)	220	Not reported
September 1998	Storm (Tropical cyclone Georges)	190	12,029
October-November 2007	Storm (Tropical cyclone Noel)	90	108,763
August 2008	Storm (Tropical cyclone Gustav)	85	73,006
June 1986	Flood	79	98,860
May 1972	Flood	78	40,000

Source: EM-DAT International Disaster Database

Although there is some academic research on the prediction of the likely number of casualties from an earthquake, this requires detailed information that will not be available immediately. We do know however, that GNP per head and higher public-sector corruption are associated with higher fatality levels [Escaleras et al., 2007, pp209, 222].

Disaster Myths

[source: WHO, Myths and realities in disaster situations, http://www.who.int/hac/techguidance/ems/myths/en/]

Myth: Disasters are random killers.
Reality: Disasters strike hardest at the most vulnerable group, the poor -- especially women, children and the elderly.

Myth: Epidemics and plagues are inevitable after every disaster.
Reality: Epidemics do not spontaneously occur after a disaster and dead bodies will not lead to catastrophic outbreaks of exotic diseases. The key to preventing disease is to improve sanitary conditions and educate the public.

Myth: The fastest way to dispose of bodies and avoid the spread of disease is through mass burials or cremations. This can help create a sense of relief among survivors.
Reality: Survivors will feel more at peace and manage their sense of loss better if they are allowed to follow their beliefs and religious practices and if they are able to identify and recover the remains of their loved ones.

Myth: Foreign medical volunteers with any kind of medical background are needed.
Reality: The local population almost always covers immediate lifesaving needs. Only medical personnel with skills that are not available in the affected country may be needed.

Myth: Any kind of international assistance is needed, and it's needed now!
Reality: A hasty response that is not based on an impartial evaluation only contributes to the chaos. It is better to wait until genuine needs have been assessed.

Myth: Disasters bring out the worst in human behaviour.
Reality: Although isolated cases of antisocial behaviour exist, the majority of people respond spontaneously and generously.

Myth: The affected population is too shocked and helpless to take responsibility for their own survival.
Reality: On the contrary, many find new strength during an emergency, as evidenced by the thousands of volunteers who spontaneously unite to sift through the rubble in search of victims after an earthquake.

Myth: Things are back to normal within a few weeks.
Reality: The effects of a disaster last a long time. Disaster-affected countries deplete much of their financial and material resources in the immediate post-impact phase. Successful relief programs gear their operations to the fact that international interest wanes as needs and shortages become more pressing.

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