EM-DAT Glossary

The EM-DAT Glossary

A | B | C | D | E | F | G | H | I | j | k | L | M | n | O | P | q | R | S | T | U | V | W | x | y | z | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9

Click one of the letters above to advance the page to terms beginning with that letter.

A

Affected
People requiring immediate assistance during a period of emergency, i.e. requiring basic survival needs such as food, water, shelter, sanitation and immediate medical assistance.

Airburst
An explosion of a comet or meteoroid within the Earth's atmosphere without striking the ground.

Animal accident
Human encounters with dangerous or exotic animals in both urban and rural developments.

Ash Fall
Fine (less than 4 mm in diameter) unconsolidated volcanic debris blown into the atmosphere during an eruption; can remain airborne for long periods of time and travel considerable distance from the source.

Avalanche
A large mass of loosened earth material, snow, or ice that slides, flows or falls rapidly down a mountainside under the force of gravity.

- Snow Avalanche: Rapid downslope movement of a mix of snow and ice.
- Debris Avalanche: The sudden and very rapid downslope movement of unsorted mass of rock and soil. There are two general types of debris avalanches - a cold debris avalanche usually results from an unstable slope suddenly collapsing whereas a hot debris avalanche results from volcanic activity leading to slope instability and collapse.

Go to top

B

Bacterial disease
An unusual increase in the number of incidents caused by the exposure to bacteria either through skin contact, ingestion or inhalation. Examples include salmonella, MSRA, and cholera, among others.

Biological hazard
A hazard caused by the exposure to living organisms and their toxic substances (e.g. venom, mold) or vector-borne diseases that they may carry. Examples are venomous wildlife and insects, poisonous plants, and mosquitoes carrying disease-causing agents such as parasites, bacteria, or viruses (e.g. malaria).

Go to top

C

Chemical spill
Accident release occurring during the production, transportation or handling of hazardous chemical substances.

Climatological hazard
A hazard caused by long-lived, meso- to macro-scale atmospheric processes ranging from intra-seasonal to multi-decadal climate variability.

Coastal erosion
The temporary or permanent loss of sediments or landmass in coastal margins due to the action of waves, winds, tides, or anthropogenic activities.

Coastal flood
Higher-than-normal water levels along the coast caused by tidal changes or thunderstorms that result in flooding, which can last from days to weeks.

Cold wave
A period of abnormally cold weather. Typically a cold wave lasts two or more days and may be aggravated by high winds. The exact temperature criteria for what constitutes a cold wave vary by location.

Collapse
Accident involving the collapse of building or structure. Can either involve industrial structures or domestic / non-industrial structures.

Complex disasters
Major famine situation for which the drought was not the main causal factor.

Convective storm
A type of meteorological hazard generated by the heating of air and the availability of moist and unstable air masses. Convective storms range from localised thunderstorms (with heavy rain and/or hail, lightning, high winds, tornadoes) to meso-scale, multi-day events.

Country-level disaster
A disaster that has affected a particular country. A disaster event [see « Disaster event»] that affects several countries will have a number of country-level disaster entries equal to the number of countries that have been affected. Each of these country-level disasters will have the same DISNO identifier. In the case of multi-country disasters, the EM-DAT inclusion criteria apply to the disaster event, and not to the country-level disaster.

Crop failure
Abnormal reductions in crop yield such that is insufficient to meet the nutritional or economic needs of the community

Go to top

D

Death
Number of people who lost their life because the event happened.

Derecho
Widespread and usually fast-moving windstorms associated with convection/convective storm. Derechos include downburst and straight-line winds. The damage from derechos is often confused with the damage from tornadoes.

Disaster
Situation or event, which overwhelms local capacity, necessitating a request to national or international level for external assistance (definition considered in EM-DAT); An unforeseen and often sudden event that causes great damage, destruction and human suffering. Though often caused by nature, disasters can have human origins.

Disaster Event
A disaster meeting the EM-DAT criteria and which is recorded in EM-DAT. A disaster event can affect one country or several [see «Country-level disaster»]. In the case of the latter, the disaster event will result in several country-level disasters being entered into the database. A disaster event will always have a unique DISNO identifier.

Disease
Either an unusual, often sudden, increase in the number of incidents of an infectious disease that already existed in the region (e.g., flu, E. coli) or the appearance of an infectious disease previously absent from the region (e.g., plague, polio).

Drought
An extended period of unusually low precipitation that produces a shortage of water for people, animals and plants. Drought is different from most other hazards in that it develops slowly, sometimes even over years, and its onset is generally difficult to detect. Drought is not solely a physical phenomenon because its impacts can be exacerbated by human activities and water supply demands. Drought is therefore often defined both conceptually and operationally. Operational definitions of drought, meaning the degree of precipitation reduction that constitutes a drought, vary by locality, climate and environmental sector.

Go to top

E

Earthquake
Sudden movement of a block of the Earth’s crust along a geological fault and associated ground shaking.

El Niño
(« little child » in Spanish): Anormalous warming of ocean water resulting from the oscillation of current in the South Pacific, usually accompanied by heavy rainfall in the coastal region of Peru and Chile, and reduction of rainfall in equatorial Africa and Australia.

Energetic particles
Emissions from solar radiation storms consisting of pieces of matter (e.g., protons and other charged particles) moving at very high speed. The magnetosphere and atmosphere block (solar) energetic particles (SEP) from reaching humans on Earth but they are damaging to the electronics of space-borne technology (such as satellites) and pose a radiation hazard to life in space and aircrafts travelling at high altitudes.

Epicentre
Point on the earth's surface directly above the place of origin (i.e. focus, or hypocenter) of an earthquake.

Epidemic
Either an unusual increase in the number of cases of an infectious disease, which already exists in the region or population concerned; or the appearance of an infection previously absent from a region.

Estimated Damage
The amount of damage to property, crops, and livestock. In EM-DAT estimated damage are given in US$ ('000). For each disaster, the registered figure corresponds to the damage value at the moment of the event, i.e. the figures are shown true to the year of the event.

Expansive soil
Earthen material, particularly clays that, upon wetting, freezing, or drying will alternately expand or contract causing damage to foundations of buildings and other structures. Shrinkage is generally referred to as desiccation.

Explosions
Explosions involving buildings or structures. Can either involve industrial structures.

Extra-tropical storm
A type of low-pressure cyclonic system in the middle and high latitudes (also called mid-latitude cyclone) that primarily gets its energy from the horizontal temperature contrasts (fronts) in the atmosphere. When associated with cold fronts, extratropical cyclones may be particularly damaging (e.g. European winter/windstorm, Nor'easter).

Extraterrestrial hazard
A hazard caused by asteroids, meteoroids, and comets as they pass near-earth, enter the Earth's atmosphere, and/or strike the Earth, and by changes in interplanetary conditions that effect the Earth's magnetosphere, ionosphere, and thermosphere.

Extreme winter conditions
Damage caused by snow and ice. Winter damage refers to damage to buildings, infrastructure, traffic (esp. navigation) inflicted by snow and ice in form of snow pressure, freezing rain, frozen waterways etc.

Go to top

F

Famine
Catastrophic food shortage affecting large numbers of people due to climatic, environmental and socio-economic reasons.

Flash flood
Rapid inland floods due to intense rainfall A flash flood describes sudden flooding with short duration. In sloped terrain the water flows rapidly with a high destruction potential. In flat terrain the rainwater cannot infiltrate into the ground or run off (due to small slope) as quickly as it falls. Flash floods typically are associated with thunderstorms. A flash flood can occur at virtually any place.

Flood
A general term for the overflow of water from a stream channel onto normally dry land in the floodplain (riverine flooding), higher-than- normal levels along the coast and in lakes or reservoirs (coastal flooding) as well as ponding of water at or near the point where the rain fell (flash floods).

Fog
Water droplets that are suspended in the air near the Earth's surface. Fog is simply a cloud that is in contact with the ground.

Food shortage
Lack of alimentation bases.

Forest fire
A type of wildfire in a wooded area.

Freeze
Freeze occurs when the air temperature is at (32℉/0℃) or below over a widespread area for a climatologically significant period of time. Use of the term is usually restricted to advective situations or to occasions when wind or other conditions prevent frost. Frost and freeze are particularly damaging during the crop growing season.

Frost
Frost is the consequence of radiative cooling resulting in the formation of thin ice crystals on the ground or other surfaces in the form of needles, feathers, scales, or fans. Frost occurs when the temperature of surfaces is below freezing and water vapor from humid air forms solid deposits on the cold surface.

Fungal disease
Exposure to fungi either through skin contact, ingestion or inhalation of spores resulting in an unusual increase in the number of incidents. Examples are fungal pneumonia, fungal meningitis, etc.

Go to top

G

Geomagnetic storm
A type of extraterrestrial hazard caused by solar wind shockwaves that temporarily disturb the Earth's magnetosphere. Geomagnetic storms can disrupt power grids, spacecraft operations, and satellite communications.

Geophysical disasters
Events originating from solid earth.

Geophysical hazard
A hazard originating from solid earth. This term is used interchangeably with the term geological hazard.

Glacial lake outburst
A flood that occurs when water dammed by a glacier or moraine is suddenly released. Glacial lakes can be at the front of the glacier (marginal lake) or below the ice sheet (sub-glacial lake).

Ground shaking
Surface displacement of earthen materials due to ground shaking triggered by earthquakes or volcanic eruptions.

Go to top

H

Hail storm
Storm with hailstones as dominant type of precipitation. A hail storm is a type of storm that is characterised by hail as the dominant part of its precipitation. The size of the hailstones can vary between pea size (6mm) and softball size (112mm) and therefore cause considerable damage.

Hazard
Threatening event, or probability of occurrence of a potentially damaging phenomenon within a given time period and area.

Heat wave
A period of abnormally hot and/or unusually humid weather. Typically a heat wave lasts two or more days. The exact temperature criteria for what constitutes a heat wave vary by location.

Homeless
Number of people whose house is destroyed or heavily damaged and therefore need shelter after an event.

Hurricane
Large-scale closed circulation system in the atmosphere above the western Atlantic with low barometric pressure and strong winds that rotate clockwise in the southern hemisphere and counter-clockwise in the northern hemisphere. Maximum wind speed of 64 knots or more [See « cyclone » for the Indian Ocean and South Pacific and eastern Pacific and « typhoon » for the western Pacific].

Hydrological hazard
A hazard caused by the occurrence, movement, and distribution of surface and subsurface freshwater and saltwater.

Go to top

I

Ice jam flood
The accumulation of floating ice restricting or blocking a river's flow and drainage. Ice jams tend to develop near river bends and obstructions (e.g. bridges).

Impact
A type of extraterrestrial hazard caused by the collision of the Earth with a meteoroid, asteroid or comet.

Industrial accident
Disaster type term used in EM-DAT to describe technological accidents of an industrial nature/involving industrial buildings (e.g. factories).

Injured
People suffering from physical injuries, trauma or an illness requiring immediate medical assistance as a direct result of a disaster.

Insect infestation
Pervasive influx and development of insects or parasites affecting humans, animals, crops and materials.

Insured losses
Insured losses are those which are covered by the insurance sector and paid directly to the owner of the damaged or destroyed property or crops and livestock or the primary insurance company (in case of reinsurance).

Go to top

L

Lahar
Hot or cold mixture of earthen material flowing on the slope of a volcano either during or between volcanic eruptions

Landslide
Any kind of moderate to rapid soil movement incl. lahar, mudslide, debris flow. A landslide is the movement of soil or rock controlled by gravity and the speed of the movement usually ranges between slow and rapid, but not very slow. It can be superficial or deep, but the materials have to make up a mass that is a portion of the slope or the slope itself. The movement has to be downward and outward with a free face.

Lava flow
The ejected magma that moves as a liquid mass downslope from a volcano during an eruption.

Lightening
Hazards/losses caused by lightning stroke. Lightning is an atmospheric discharge of electricity, which typically occurs during thunderstorms, and sometimes during volcanic eruptions or dust storms.

Liquefaction
The transformation of (partially) water-saturated soil from a solid state to a liquid state caused by an earthquake. Liquefaction reduces the strength and stiffness of soil causing buildings to topple over.

Go to top

M

Mass movement
Any type of downslope movement of earth materials.

Meteorological disasters
Events caused by short-lived/small to mesoscale atmospheric processes (in the spectrum from minutes to days).

Miscellaneous accident
Disaster type term used in EM-DAT to describe technological accidents of a non-industrial or transport nature (e.g. houses).

Missing
The number of people whose whereabouts since the disaster is unknown, and who are presumed dead (official figure when available).

Go to top

O

Orographic storm
Local windstorm refers to strong winds caused by regional atmospheric phenomena which are typical for a certain area. These can be katabatic winds, foehn winds, Mistral, Bora etc.

Go to top

P

Parasitic disease
Exposure to a parasite–an organism living on or in a host–causes an unusual increase in the number of incidents. Exposure to parasites occurs mostly through contaminated water, food or contact with insects, animals (zoonotic), pets, etc. Examples are malaria, chagas disease, giardiasis and trichinellosis.

Poisoning
Poisoning of atmosphere or water courses due to industrial sources.

Prion disease
A type of biological hazard caused by prion proteins. Prion diseases or transmissible spongiform encephalopathies (TSEs) are a family of rare progressive neurodegenerative disorders that affect both humans and animals characterised by long incubation periods and neural loss. Examples are Bovine Spongiform Encephalophathy (BSE), Creutzfeldt- Jakob-Disease (CJD), Kuru, etc.

Pyroclastic flow
Extremely hot gases, ash, and other materials of more than 1,000 degrees Celsius that rapidly flow down the flank of a volcano (more than 700 km/h) during an eruption.

Go to top

R

Radio disturbance
Triggered by x-ray emissions from the Sun hitting the Earth's atmosphere and causing disturbances in the ionosphere such as jamming of high and/or low frequency radio signals. This affects satellite radio communication and Global Positioning Systems (GPS).

Rain
Water vapour condenses in the atmosphere to form water droplets that fall to the Earth.

Richter scale
Devised by C.F. Richter in 1935, an index of the seismic energy released by an earthquake (as contrasted to intensity that describes its effects at a particular place) expressed in terms of the motion that would be measured by a specific type of seismograph located 100 km from the epicentre of an earthquake.

Risk
Expected losses (of lives, persons injured, property damaged and economic activity disrupted) due to a particular hazard for a given area and reference period. Based on mathematical calculations, risk is the product of hazard and vulnerability.

Rogue wave
An unusual single crest of an ocean wave far out at sea that is much higher and/or steeper than other waves in the prevailing swell system

Go to top

S

Sandstorm/Dust storm
A sandstorm/dust storm typically occurs in arid or semi-arid regions if high wind speeds cause the transportation of small particles like sand or fine clastic sediment by saltation and/or suspension. e.g. in deserts.

Scrub fire
Fires in scrub or bush that cover extensive damage. They may start by natural causes such as volcanic eruptions or lightning, or they may be caused by arsonists or careless smokers, by those burning wood, or by clearing a forest area.

Seiche
A standing wave of water in a large semi- or fully-enclosed body of water (lakes or bays) created by strong winds and/or a large barometric pressure gradient.

Shockwave
A shockwave carries energy from a disturbance through a medium (solid, liquid, gas) similar to a wave though it travels at much higher speed. It can be a type of extraterrestrial hazard caused by the explosion (airburst) or impact of meteorites that generate energy shockwaves capable of shattering glass, collapsing walls, etc.

Sinkhole
Collapse of the land surface due to the dissolving of the subsurface rocks such as limestone or carbonate rock by water.

Storm surge
An abnormal rise in sea level generated by a tropical cyclone or other intense storms.

Subsidence
Subsidence refers to the sinking of the ground due to groundwater removal, mining, dissolution of limestone (e.g. karst, sinkholes), extraction of natural gas, and earthquakes.

Go to top

T

Tornado
A violently rotating column of air that reaches the ground or open water (waterspout).

Total affected
In EM-DAT, it is the sum of the injured, affected and left homeless after a disaster.

Total deaths
In EM-DAT, it is the sum of deaths and missing.

Transport accident
Disaster type term used in EM-DAT to describe technological transport accidents involving mechanised modes of transport. It comprises of four disaster subsets: accidents involving aeroplanes, helicopters, airships and balloons « Transport:Air »; accidents involving sailing boats, ferries, cruise ships, other boats « Transport:Boat »; accidents involving trains « Transport:Rail »; and accidents involving motor vehicles on roads and tracks « Transport:Road ».

Tropical storm
A tropical storm originates over tropical or subtropical waters. It is characterised by a warm-core, non-frontal synoptic-scale cyclone with a low pressure centre, spiral rain bands and strong winds. Depending on their location, tropical cyclones are referred to as hurricanes (Atlantic, Northeast Pacific), typhoons

(Northwest Pacific), or cyclones (South Pacific and Indian Ocean).

Tsunami

« wave in the port » in Japanese: A series of waves (with long wavelengths when traveling across the deep ocean) that are generated by a displacement of massive amounts of water through underwater earthquakes, volcanic eruptions or landslides. Tsunami waves travel at very high speed across the ocean but as they begin to reach shallow water they slow down and the wave grows steeper.

Typhoon

Large-scale closed circulation system in the atmosphere above the western Pacific with low barometric pressure and strong winds that rotate clockwise in ther southern hemisphere and counter-clockwise in the northern hemisphere. Maximum wind speed of 64 knots or more [See « hurricane » for the western Atlantic and eastern Pacific and « cyclone » for the Indian Ocean and South Pacific].

Go to top

U

Urban fire

Urban fire involving buildings or structures. Can either involve industrial structures.

Go to top

V

Volcanic activity

A type of volcanic event near an opening/vent in the Earth's surface including volcanic eruptions of lava, ash, hot vapour, gas, and pyroclastic material.

Vulnerability

Degree of loss (from 0% to 100%) resulting from a potential damaging phenomenon.

Go to top

W

Wildfire

Any uncontrolled and non-prescribed combustion or burning of plants in a natural setting such as a forest, grassland, brush land or tundra, which consumes the natural fuels and spreads based on environmental conditions (e.g., wind, topography). Wildfires can be triggered by lightning or human actions.

Wind

Differences in air pressure resulting in the horizontal motion of air. The greater the difference in pressure, the stronger the wind. Wind moves from high pressure toward low pressure.

Winter storm/Blizzard

A low pressure system in winter months with significant accumulations of snow, freezing rain, sleet or ice. A blizzard is a severe snow storm with winds exceeding 35 mph (56 km/h) for three or more hours, producing reduced visibility (less than 0.25 mile (400 m)).

Go to top