



Sendai Framework for Disaster Risk Reduction

**Suggested List of Hazards for the Purpose of
Measuring Global Targets of the Sendai Framework**



Suggested List of Hazards for the Purpose of Measuring Global Targets of the Sendai Framework

*“(d) Systematically evaluate, record, share and publicly account for disaster losses and understand the economic, social, health, education, environmental and cultural heritage impacts, as appropriate, in the context of **event-specific hazard-exposure** and vulnerability information;*

*(e) Make non-sensitive **hazard exposure, vulnerability, risk, disaster and loss-disaggregated** information freely available and accessible, as appropriate;”*



Suggested List of Hazards for the Purpose of Measuring Global Targets of the Sendai Framework

*15. This Framework will apply to the risk of small-scale and large-scale, frequent and infrequent, sudden and slow-onset disasters caused by **natural or man-made hazards, as well as related environmental, technological and biological hazards and risks.***



Suggested List of Hazards for the Purpose of Measuring Global Targets of the Sendai Framework

Disaster Loss databases owners have collected data for many years.

Individual Countries, EMDAT, DesInventar, MunichRe, SwissRe, WMO, GLIDE and others have developed lists of hazards



Suggested List of Hazards for the Purpose of Measuring Global Targets of the Sendai Framework

Some countries have legislation that dictates a list of hazards that is to be used by authorities.

Examples: Indonesia, Sri Lanka.

IRDR Hazard Glossary and Classification

(Natural and Biological)

Family

Geophysical

Hydrological

Meteorological

Climatological

Biological

Extraterrestrial

Main Hazard

Earthquake
Mass Movement
Volcanic Activity

Flood
Landslide
Wave Action

Convective Storm
Extratropical Storm
Extreme Temperature
Fog
Tropical Cyclone

Drought
Glacial Lake Outburst
Wildfire

Animal Incident
Disease
Insect Infestation

Impact
Space Weather

Perils

Ash Fall
Fire following EQ
Ground Movement
Landslide following EQ
Lahar
Lava Flow
Liquefaction
Pyroclastic Flow
Tsunami

Avalanche: Snow, Debris
Coastal Flood
Coastal Erosion
Debris/Mud Flow/Rockfall
Expansive Soil
Flash Flood
Ice Jam Flood
Riverine Flood
Rogue Wave
Seiche
Sinkhole

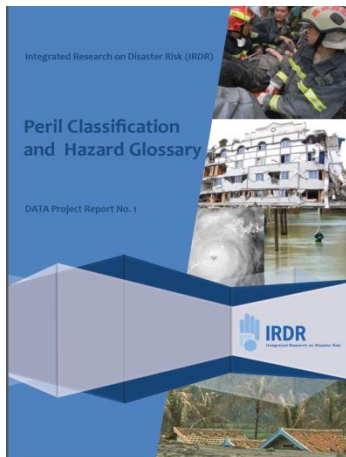
Cold Wave
Derecho
Frost/Freeze
Hail
Heat Wave
Lightning
Rain
Sandstorm/Dust storm
Snow/Ice
Storm Surge
Tornado
Wind
Winter Storm/Blizzard

Forest Fire
Land fire: Brush, Bush,
Pasture
Subsidence

Bacterial Disease
Fungal Disease
Parasitic Disease
Prion Disease
Viral Disease

Airburst
Collision
Energetic Particles
Geomagnetic Storm
Radio Disturbance
Shockwave

Integrated Research
on Disaster Risk
IRDR - DATA Group



The association of perils with main hazard is solely a suggestion. Some perils may change their main hazard association based on the actual event and loss trigger.

Suggested List of Hazards for the Purpose of Measuring Global Targets of the Sendai Framework

Family

Sub-Family

Natural hazards

Geophysical

Hydrological

Meteorological

Climatological

Extra-terrestrial

Environmental Hazards

Environment degradation

Biological hazards

Biological hazards
(on Human, Animal, Plants)

Man-made hazards
(Anthropogenic hazards)

Technological hazards

Chemical and radiological hazards

Major Transportation Accidents

The association of families and sub-families is solely a suggestion, and intended only for clarity purposes, matching Sendai scope.

Suggested List of Hazards for the Purpose of Measuring Global Targets of the Sendai Framework

Family	Sub-Family	Hazard (and Sub-Hazards)
Natural hazards	Geophysical	Earthquake, Tsunami
		Mass movement by geological events (may overlap with landslide types)
		Volcanic activity, eruption, lava flow, ash fall, pyroclastic flow, lahar
	Hydrological	Flood, riverine flood, coastal flood, ponding flood, urban flood, flash flood,
		Landslide, avalanche, rock fall, mud flow, debris flow, subsidence
		Wave Action, coastal erosion, shoreline change.
	Meteorological	Convective Storm, rain, wind, hail, snow, ice, blizzard, lightning, sand, dust, derecho, tornado
		Extra-tropical storm
		Extreme temperature, cold wave, heat wave, frost, freeze
		Fog
		Tropical cyclone, cyclonic wind, cyclonic rain, cyclone surge
	Climatological	Drought
		Glacial lake outburst (GLOF)
		Wildfire
Extra-terrestrial	Impact	
	Space weather	
Environmental Hazards	Environment degradation	Erosion
		Deforestation
		Salinization
		Desertification
		Asian Dust cloud
		Wetland loss/degradation
		Glacier retreat/melting
Biological hazards	Biological hazards *	Epidemics
		Pandemics
		Epizootics
		Pest
		Insect infestation
		Animal Incidents
		Pollution

** The association of hazards with families and sub-families is solely a suggestion. Some hazards may change their family association based on the actual event and loss trigger.*

** Countries could customize specific sub-hazards to specify the type of disease, i.e. Zika, Ebola, Malaria, foot-and-mouth diseases, influenza.*

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Family	Sub-Family	Hazard (and Sub-Hazards)
Man-made hazards (Anthropogenic hazards)	Technological hazards	Industrial disaster
		Structural collapse
		Power outage
		Fire
		Industrial Explosion
		Mine disaster
	Chemical and radiological hazards	Chemical Spill
		Oil Spill
	Transportation Accidents (Major?)	Radiation contamination, Nuclear incident
		Aviation Accident
Rail Accident		
Road Accident		
	Navigation Accident	
	Space Accident	

The association of hazards with families and sub-families is solely a suggestion. Some hazards may change their family association based on the actual event and loss trigger.

Available from the Secretariat: Proposal for **Definition of hazards for the Purpose of Measuring Global Targets of the Sendai Framework**