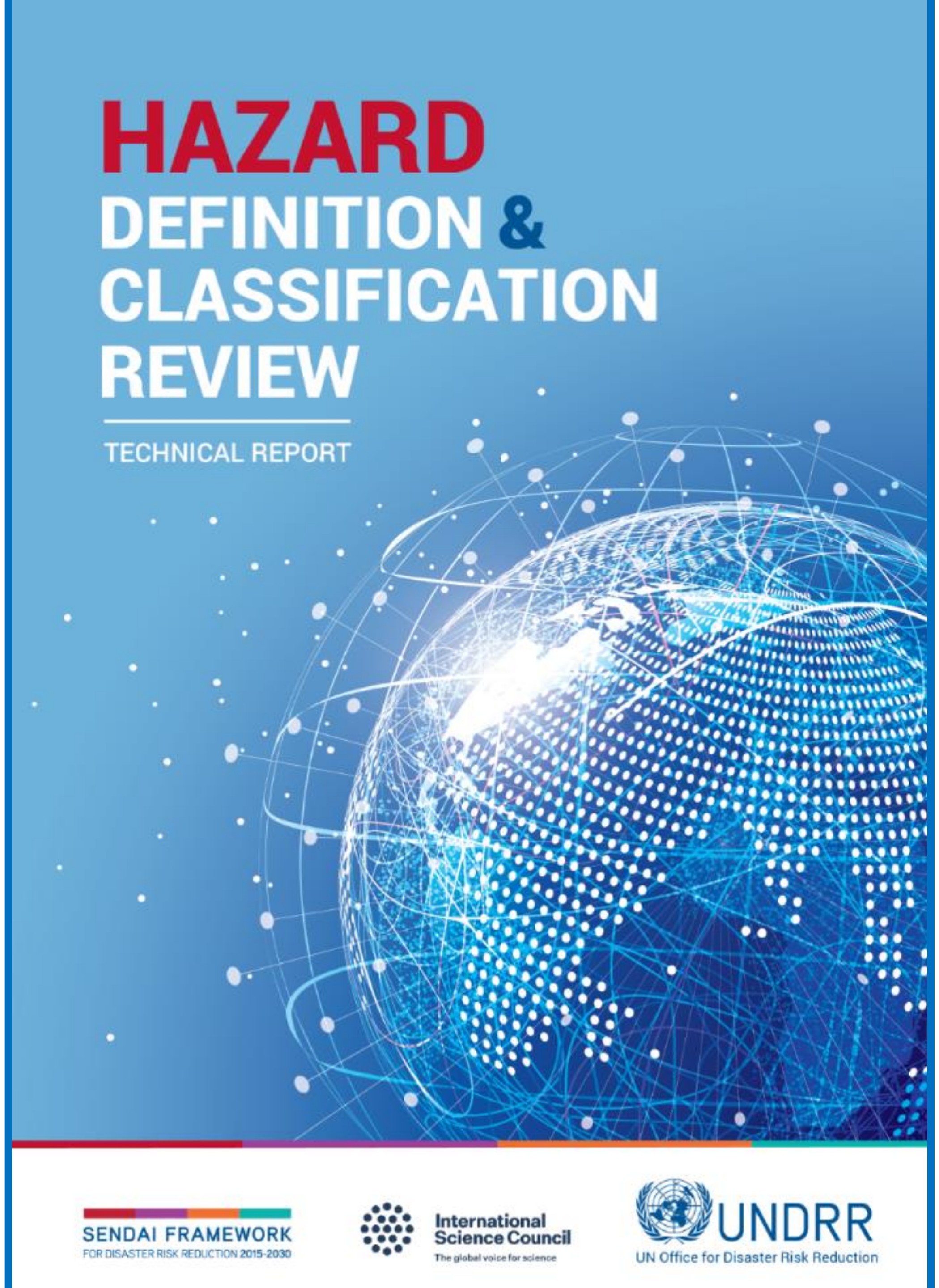
UNDRR
UN Office for Disaster Risk Reduction

International Science Council

UNDRR / ISC Sendai Hazard Definition and Classification Review
TECHNICAL REPORT
29 July 2020

Professor Virginia Murray
Head of Global Disaster Risk Reduction, Public Health England
Chair of UNDRR/ISC Technical Working Group



https://council.science/publications/hazards/
https://www.undrr.org/publications

1989 International Decade for Natural Disaster Reduction (IDNDR)

1994 Yokohama Strategy and Plans on Action

1999 International Strategy for Disaster Reduction

ISDR

2005 Hyogo Framework for Action 2005-2015

HFA

2015 **Sendai Framework for Disaster Risk Reduction 2015-2030**

Sendai Framework for Disaster Risk Reduction 2015 - 2030

United Nations

Sendai Framework for Disaster Risk Reduction 2015-2030

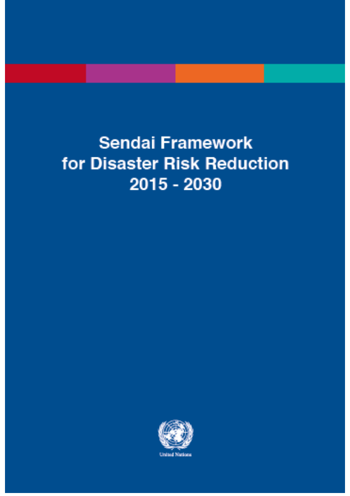
- 1 Global Outcome
- 13 Guiding Principles
- 4 Priorities for Action at all levels
- 7 Global Targets

7 GLOBAL TARGETS

Reduce	Increase
Mortality/ global population 2020-2030 Average << 2005-2015 Average	**Countries with national & local DRR strategies** 2020 Value >> 2015 Value
Affected people/ global population 2020-2030 Average << 2005-2015 Average	**International cooperation** to developing countries 2030 Value >> 2015 Value
Economic loss/ global GDP 2030 Ratio << 2015 Ratio	**Availability and access to multi-hazard early warning systems & disaster risk information and assessments** 2030 Values >> 2015 Values
Damage to critical infrastructure & disruption of basic services 2030 Values << 2015 Values	

UNISDR


UNISDR
PreventionWeb
English
SENDAI FRAMEWORK
FOR DISASTER RISK REDUCTION
MEASURING IMPLEMENTATION OF THE SENDAI FRAMEWORK
ANNOUNCEMENT
The Sendai Framework Monitor system is now live!
After the adoption of Sendai Framework in 2015, 38 indicators were defined to measure progress in achieving its 7 Global targets. This system is the official tool to report these indicators to both the Sendai Framework and SDG's reporting processes.



Sendai Framework for Disaster Risk Reduction 2015-2030

- **To strengthen technical and scientific capacity** to capitalize on and consolidate existing knowledge and to develop and apply methodologies and models **to assess disaster risks, vulnerabilities and exposure to all hazards**; *(paragraph 24 j)*

UNDRR/ISC Technical Working Group on the Hazard Terminology Review and Classification

The reason for the project

- Many hazard definition lists exist or are under development in different sectors and are informed from different risk contexts (e.g., economic, social, political)
  - Annex 4 lists the many scientific glossaries
  - Annex 5 lists the many UN glossaries
- The need for a single technical review identified:
  - to provide a comprehensive picture of hazards to help inform policy, practice and reporting of disaster risk reduction
  - to enable implementation of global and regional framework agreements such as the Sendai Framework, the SDGs, the Paris Agreement and the International Health Regulations

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UNDRR/ISC Technical Working Group on the Hazard Terminology Review and Classification

Global Platform May 2019 Co-Chairs Summary

- A critical, fundamental and urgent re-examination of how we deal with risk is needed, The past is not a sufficient indicator for the future. An interconnected approach is required to address systemic risks supported by multi-hazard and multidisciplinary risk assessment. The Global Risk Assessment Framework will facilitate this approach. **Experts from science, the United Nations, and the private sector launched a new technical working group to develop a definitions' list of the Sendai Framework Hazards.** These, amongst others, will contribute to enhancing understanding of risk, inform decision making, and transform behaviour. *(paragraph 14)*

UNDRR/ISC Technical Working Group on the Hazard Terminology Review and Classification

Aim of project

To provide a review of Sendai Framework hazard terminology and classification for partners addressing the all hazards paradigm

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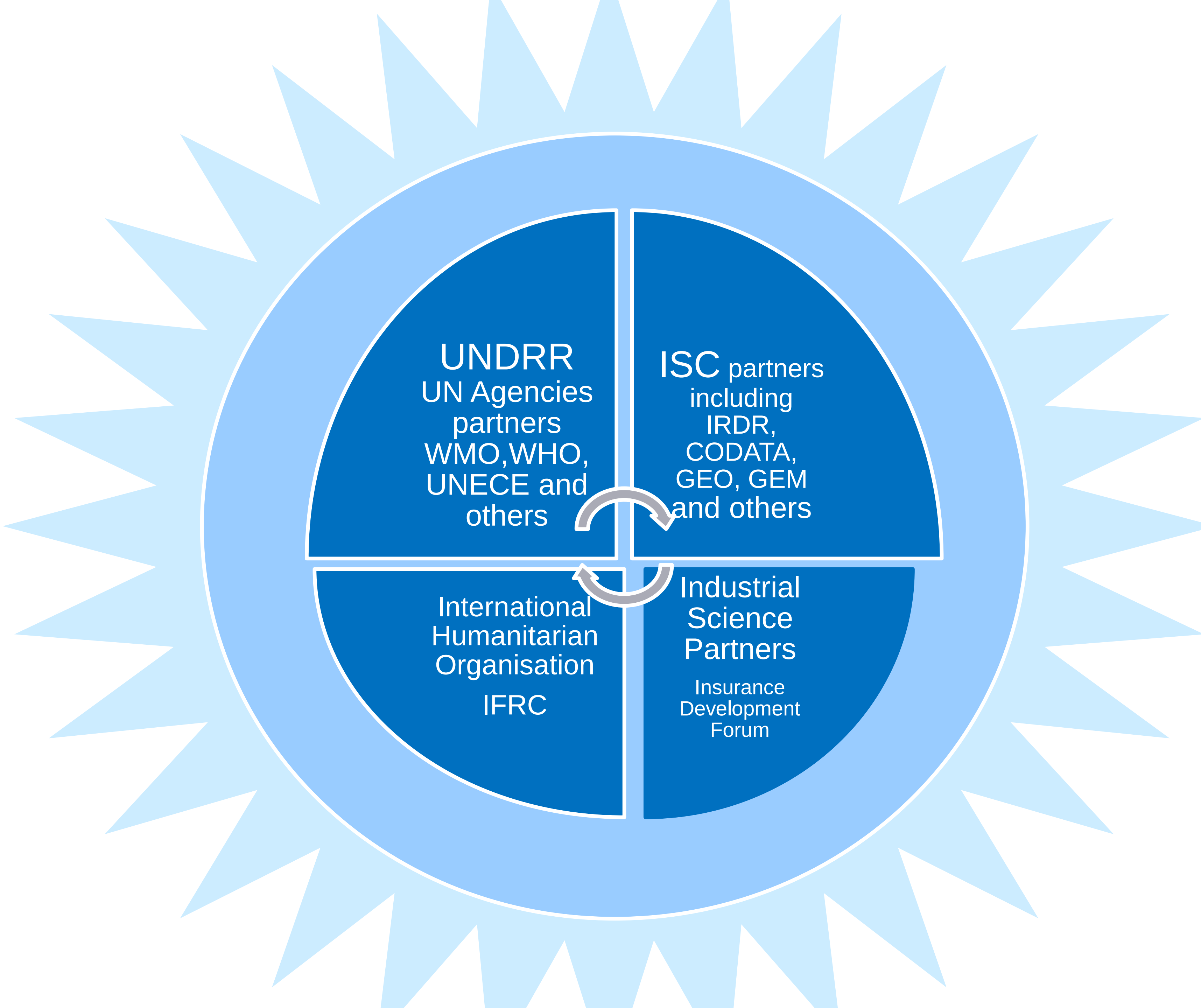

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The Hazard Review and Classification Project: the process

The Hazard Review and Classification project: the process

Expanded scope of hazards of the Sendai Framework

UNGA definition of hazard as a process, phenomenom, or human activity that may cause harm or damage

The data sources:

- Scientific hazard glossaries
- IRDR Peril Classification
- UN glossaries
- Sendai Monitor hazard list
- Survey of scientists on hazards relevant for Sendai
- Consultations of expert communities within the UN and scientific community

Inclusion criteria:

1. The hazard has the potential to impact on a community
2. Proactive and reactive measures are available
3. The hazard has measurable spatial and temporal components

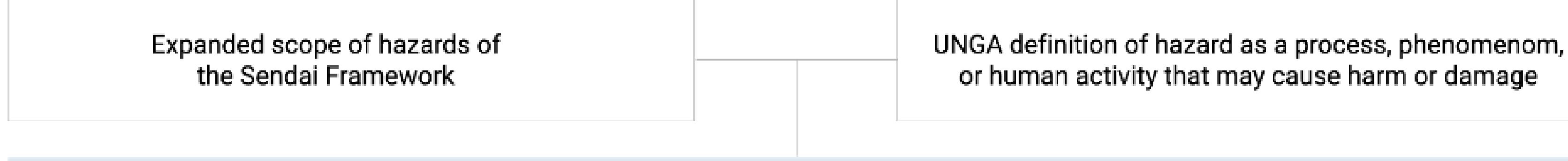
Hazard list:

302 hazards across these hazard types: hydromet, extraterrestrial, geological, environmental, biological, chemical, technological and societal.

Recommendations:

1. Regular review and update
2. Facilitate the development of a multi-hazard information system
3. Standardise definitions across users and sectors
4. Engage policy-makers and scientists in evidence-based national risk assessment processes, disaster risk reduction and risk-informed sustainable development.
5. Conduct further work to operationalise parameters for exposure, vulnerability and capacity, building on the UNGA definitions
6. Address cascading and complex hazards and risks

Dialogue towards a more holistic and consistent approach to hazards identification and definition



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The Hazard Review and Classification Project: the process

United Nations A/71/644

General Assembly

Distr.: General
1 December 2016

Original: English

https://www.preventionweb.net/files/50683_oiewgreportenglish.pdf

Seventy-first session
Agenda item 19 (c)
Sustainable development: disaster risk reduction

Report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction

Note by the Secretary-General

The Secretary-General has the honour to transmit herewith the report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction established by the General Assembly in its resolution 69/284 for the development of a set of possible indicators to measure global progress in the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030, coherent with the work of the Inter-Agency and Expert Group on Sustainable Development Goal Indicators, and the update of the publication entitled "2009 UNISDR Terminology on Disaster Risk Reduction".

United Nations

General Assembly

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UN Office for Disaster Risk Reduction

WHO WE ARE | WHAT WE DO | WHERE WE WORK | WHO WE WORK WITH

HOME > WHAT WE DO > WE INFORM > TERMINOLOGY

Terminology

TERMINOLOGY ON DISASTER RISK REDUCTION

Basic definitions on disaster risk reduction to promote a common understanding on the subject for use by the public, authorities and practitioners.

https://www.unisdr.org/we/inform/terminology#letter-h

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United Nations

General Assembly

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Hazard

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Hazard

A process, phenomenon or human activity that may cause loss of life, injury or other health impacts, property damage, social and economic disruption or environmental degradation.

Annotations: Hazards may be natural, anthropogenic or socionatural in origin. **Natural hazards** are predominantly associated with natural processes and phenomena. **Anthropogenic hazards**, or human-induced hazards, are induced entirely or predominantly by human activities and choices. This term does not include the occurrence or risk of armed conflicts and other situations of social instability or tension which are subject to international humanitarian law and national legislation. Several hazards are **socionatural**, in that they are associated with a combination of natural and anthropogenic factors, including environmental degradation and climate change.

Hazards may be single, sequential or combined in their origin and effects. Each hazard is characterized by its location, intensity or magnitude, frequency and probability. Biological hazards are also defined by their infectiousness or toxicity, or other characteristics of the pathogen such as dose-response, incubation period, case fatality rate and estimation of the pathogen for transmission.

Multi-hazard means (1) the selection of multiple major hazards that the country faces, and (2) the specific contexts where hazardous events may occur simultaneously, cascadingly or cumulatively over time, and taking into account the potential interrelated effects.

Hazards include (as mentioned in the Sendai Framework for Disaster Risk Reduction 2015-2030, and listed in alphabetical order) biological, environmental, geological, hydrometeorological and technological processes and phenomena.

Biological hazards are of organic origin or conveyed by biological vectors, including pathogenic microorganisms, toxins and bioactive substances. Examples are bacteria, viruses or parasites, as well as venomous wildlife and insects, poisonous plants and mosquitoes carrying disease-causing agents.

WHO WE WORK WITH

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Environmental hazards may include chemical, natural and biological hazards. They can be created by environmental degradation or physical or chemical pollution in the air, water and soil. However, many of the processes and phenomena that fall into this category may be termed drivers of hazard and risk rather than hazards in themselves, such as soil degradation, deforestation, loss of biodiversity, salinization and sea-level rise.

Geological or geophysical hazards originate from internal earth processes. Examples are earthquakes, volcanic activity and emissions, and related geophysical processes such as mass movements, landslides, rockslides, surface collapses and debris or mud flows. Hydrometeorological factors are important contributors to some of these processes. Tsunamis are difficult to categorize: although they are triggered by undersea earthquakes and other geological events, they essentially become an oceanic process that is manifested as a coastal water-related hazard.

Hydrometeorological hazards are of atmospheric, hydrological or oceanographic origin. Examples are tropical cyclones (also known as typhoons and hurricanes); floods, including flash floods; drought; heatwaves and cold spells; and coastal storm surges. Hydrometeorological conditions may also be a factor in other hazards such as landslides, wildland fires, locust plagues, epidemics and in the transport and dispersal of toxic substances and volcanic eruption material.

Technological hazards originate from technological or industrial conditions, dangerous procedures, infrastructure failures or specific human activities. Examples include industrial pollution, nuclear radiation, toxic wastes, dam failures, transport accidents, factory explosions, fires and chemical spills. Technological hazards also may arise directly as a result of the impacts of a natural hazard event.

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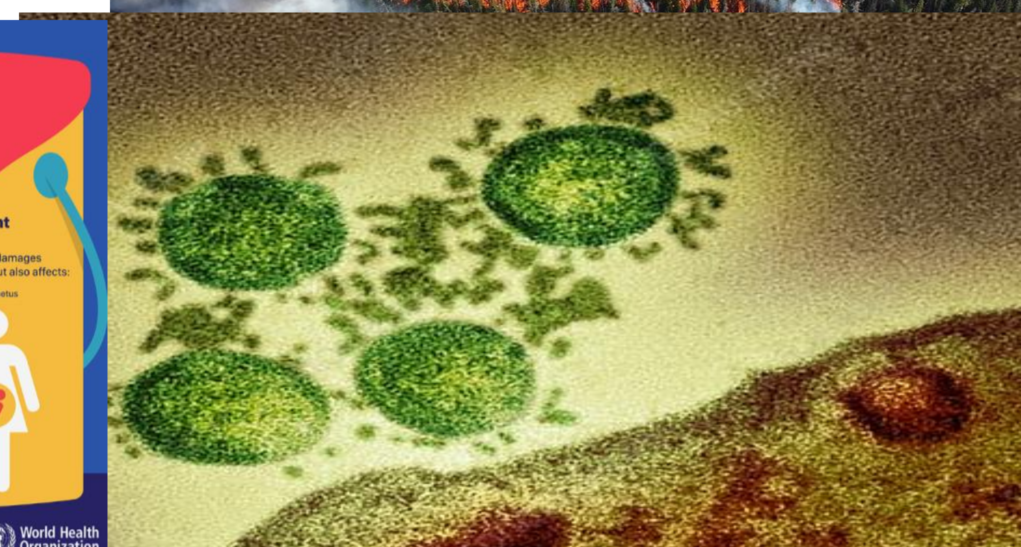
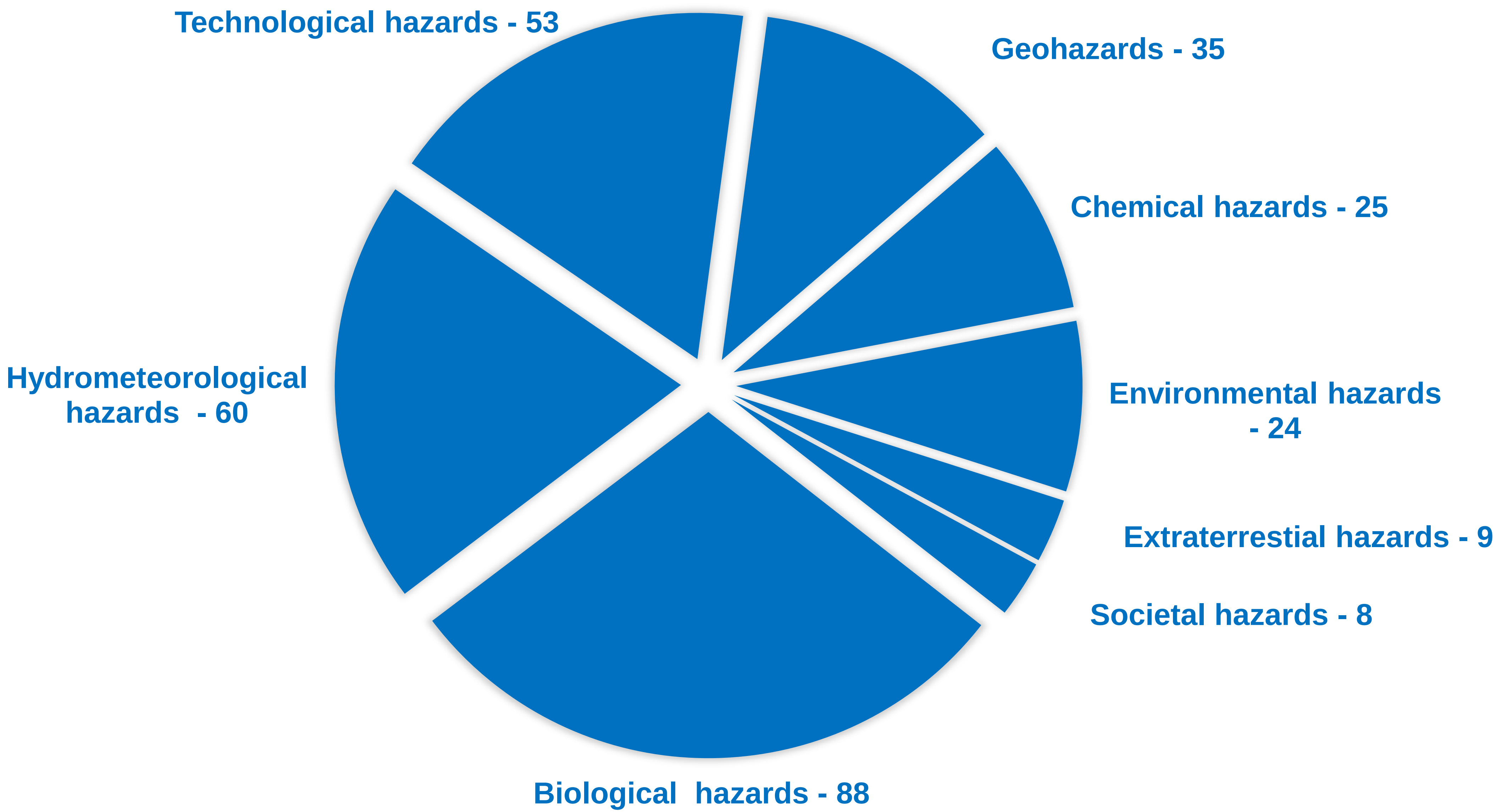
25


#BanLeadPaint
AD IS TOXIC
KIDNEYS
LIVER
BLOOD
REPRODUCTIVE SYSTEM
In adults
lead exposure increases the risk of:
ischaemic heart disease
stroke
In pregnant women
lead exposure damages many organs but also affects:
the developing foetus
level of lead exposure
World Health Organization



In total 302 hazards are currently included in the Hazard List



Number

HAZARD

Primary definition

Brief Definition of hazard: this should be no more than 3 lines/2 sentences.

This should be sourced from the highest possible authority and be applicable to all parties and is preferably a simple UN definition but also recognised as the highest level that UN member states can use and apply.

REFERENCE/ hyperlink/Web site

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Metrics, numerical limits or defined guidelines

Any globally agreed metrics, numerical limits or guidelines defined
Should be globally agreed as a recognised standard, if it is only at a regional level than state this as a reference.
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Any essential annotations

Such as ‘drivers’ to cause the hazard and any secondary hazards which may be caused by this hazard (if applicable)

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Name of Contributor/s to hazard definition and dates, updating using version control

LIQUEFACTION FROM EARTHQUAKES

DEFINITION:

Liquefaction [soil]: In saturated, cohesionless soil, the transformation from a solid to a liquid state as a result of increased pore pressure and reduced effective stress. It is typically caused by rapid loading of the soil during earthquake shaking (American Geosciences Institute 2017).

REFERENCE:

American Geosciences Institute (2017). Liquefaction [soil]. Available at www.americangeosciences.org/word/liquefaction-soil. Accessed 24 November 2019.

ANNOTATIONS:

Additional scientific description:
For liquefaction to occur, the shear strength of the soil volume (e.g., the strength due to contact between individual soil grains) must be reduced to near-zero. In the case of earthquakes, strong shaking applies a cyclic load to the soil body. If the soil body compresses under this load, the pore-water pressure will increase, causing the grains to separate thus reducing the soil strength (Kramer 1996).

Soil compression increases the pore-water pressure, causing the water to move toward the Earth's surface where pressure is lower. Under typical loading (e.g., from temperature changes, increased groundwater), the water then drains, and contact between grains retain their strength. However, when loading cycles occur rapidly, such as during an earthquake, intermittent drainage is prohibited and liquefaction may initiate (Kramer 1996).

The following characteristics are common to deposits most susceptible to liquefaction (Kramer 1996):

- Loose, sandy soils (but liquefaction has occasionally been observed in gravels and coarse silts)
- Rounded, well-sorted grains (e.g., uniform grain size); these compact most easily
- Recently deposited, especially of Holocene age (<11.7 ky), uncompacted soils including human-made deposits
- Soils that are saturated, below sea level, or within a few meters of groundwater

Some of the most common landforms in which liquefaction occurs are marshlands, riverbanks, beaches, and floodplains. Post-earthquake field studies have shown that earthquake-triggered liquefaction often recurs at the same locations (Kramer 1996). Earthquake-induced liquefaction can have varied effects on the surrounding built environment. Buildings, infrastructure, and utilities normally supported by the soil may sink, or undergo cracking or other structural damage; pile foundations may buckle or tilt; and lightweight, buried masses such as pipelines may become buoyant and float to the surface. Liquefaction can also cause rapid settling of sediments, flooding (including breaches of earthen embankments or other retaining structures), and lateral spreading of soils (Kramer 1996).

Metrics and numeric limits:
In general, sites closer to an earthquake's epicentre are more likely to liquefy, while the distance at which sites are susceptible to liquefaction increases with moment magnitude (M_W) and the duration (or number of cycles) of ground motion. The smallest earthquake for which liquefaction records exist was $M_W \sim 5$, with the most distant observed liquefaction reaching only ~2 km; by contrast, the most distant liquefaction for an earthquake of $M_W > 7$, may exceed 100 km (Ambraseys 1988). During the 2011 M_W 9.0 Tohoku earthquake,

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Power failure

DEFINITION.
In the electric power domain, especially in power transmission and distribution, a *power failure* (PF) usually refers to a partial or total loss of power supply to some end user (e.g. population, enterprises, critical systems). PFs can spark from both the supply and demand side, due to triggers such as accidents, equipment breakdowns, malicious acts, organisational failures, or natural hazards. Finally, cascading effects can occur inside the electric system and beyond, with potential socio-economic consequences due for instance to pre-existing vulnerabilities, technological and infrastructure dependencies.

REFERENCE.
The definition has been derived by a cross-comparison of the state of art scientific literature, institutional glossaries and policy documents.

ANNOTATIONS.
Terminology and definitions may vary, even significantly, with context; among the many examples, FEMA (2018) indicates that *"a power outage is when the electrical power goes out unexpectedly"*. Moreover, closely related concepts are those of *power disruption*, usually referring to the reduction in supply or supply capacity, and *power damage/destruction*, which are about the impairment of the infrastructure, in itself a potential cause of disservice.
Synonyms: electricity failure, power cut, power loss, power outage.

Additional scientific description.
Power failures can manifest in various forms, including transient faults, brownouts, and blackouts. In some cases, PFs also materialize as the result of situational response, such as in order to prevent worse consequences (e.g. rolling blackouts). Event severity of PFs may sometimes exceed the ordinary by far; for instance, the Electric Infrastructure Security Council (2019) defines a *Black Sky Hazard* as *"a catastrophic event that severely disrupts the normal functioning of our critical infrastructures in multiple regions for long durations"*. The process of full restoration of the electricity network after the total or partial shutdown of the grid is sometimes termed as *black start* (UK Risk Register 2017).
In time, power failure avoidance strategies have to deal with the change in technologies, markets, and many other factors. Since the early 2000s, larger impacts of power outages have been associated with growing and varying demand, power network size and complexity, as well as market deregulation (Helbing et al. 2006). The steady availability of electricity is key to sectors such as transport, communication and healthcare (Little 2002, Rinaldi et al. 2001, Van Eeten et al. 2011, Klinger et al. 2014). Among others, Dobson et al. (2007) studied how large blackouts can be followed by a sequence of cascading events, impacting the system as a whole and increasing the possibility of subsequent disturbance and failures. Also, references such as Petermann et al. (2011), RAE (2016), and Pescaroli et al. (2017) illustrated how PFs can heavily disrupt societal and economic functions both *directly* (due to the lack of energy they rely upon) and *indirectly* (e.g. through dependencies). The concurrence of weather extremes and climate change may exacerbate such impacts.

Metrics and numeric limits.
Various metrics are in place to capture and combine the many facets of a PF, for objectives ranging from reliability evaluation, to impact quantification and policy specification. Some of these metrics come from standards such as IEEE 1366-2012 ("IEEE Guide for Electric Power Distribution Reliability Indices"), energy security assessments (Sovacool & Mukherjee 2011, Winzer 2012), or PF reports such as (Muir & Lopatto 2004). The literature is also assessing the broader impact spectrum of events from the past. Next, we synthesize some of the key aspects.

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studied how large blackouts can be followed
whole and increasing the possibility of sub
Petermann et al. (2011), RAE (2016), and Pesc
and economic functions both *directly* (due to
dependencies). The concurrence of weather e

Metrics and numeric limits.
Various metrics are in place to capture and
reliability evaluation, to impact quantificatio
standards such as IEEE 1366-2012 ("IEEE Gui
security assessments (Sovacool & Mukherjee
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EBOLA VIRUS DISEASE

DEFINITION:

Ebola Virus Disease (EVD) is a rare but severe viral infectious disease caused by the Ebola virus. It can lead to haemorrhagic fever and is often fatal in humans. EVD can trigger epidemics with high case-fatality rates (World Health Organization 2019).

REFERENCE:

World Health Organization (2019). Ebola virus disease. Available at www.who.int/news-room/fact-sheets/detail/ebola-virus-disease. Accessed 19 November 2019.

ANNOTATIONS:

Synonym(s): Ebola; Ebola haemorrhagic fever

Additional scientific description:

The Ebola virus is from the *Filoviridae* family and has six identified species: Zaire, Bundibugyo, Sudan, Taï Forest, Reston and Bombali. Ebola is introduced into the human population through close contact with the blood, secretions, organs or other bodily fluids of infected animals such as fruit bats, chimpanzees, gorillas, monkeys, forest antelope or porcupines found ill or dead or in the rainforest. In particular, it is thought that fruit bats of the *Pteropodidae* family are natural Ebola virus hosts. EVD then spreads through human-to-human transmission via direct contact (through broken skin or mucous membranes) with:

- Blood or body fluids of a person who is sick with or has died from Ebola
- Objects that have been contaminated with body fluids (like blood, feces, vomit) from a person sick with Ebola or the body of a person who died from Ebola (World Health Organization 2019).

People remain infectious as long as their blood contains the virus. The incubation period is from 2-21 days. The symptoms of EVD can be sudden and include flu-like symptoms followed by diarrhoea, vomiting, rash, internal and external bleeding (such as oozing from the gums or blood in stools), and symptoms of impaired kidney and liver function. The average EVD case fatality rate is around 50%. Case fatality rates have varied from 25% to 90% in past outbreaks (World Health Organization 2019).

It can be difficult to clinically distinguish EVD from other infectious diseases such as malaria, typhoid fever and meningitis. Laboratory confirmation that symptoms are caused by Ebola virus infection are made using the following diagnostic serological and virological tests:

- antibody-capture enzyme-linked immunosorbent assay (ELISA)
- antigen-capture detection tests
- serum neutralization test
- reverse transcriptase polymerase chain reaction (RT-PCR) assay
- electron microscopy
- virus isolation by cell culture.

LIQUEFACTION FROM EARTHQUKES

DEFINITION:

Liquefaction [soil]: In saturated, cohesionless s
result of increased pore pressure and reduced
soil during earthquake shaking (American Geos

REFERENCE:

American Geosciences Institute (2017). Liquefa
www.americangeosciences.org/word/liquefact

ANNOTATIONS:

Additional scientific description:

For liquefaction to occur, the shear strength of
individual soil grains) must be reduced to near-
cyclic load to the soil body. If the soil body com
increase, causing the grains to separate thus re

Soil compression increases the pore-water pres
where pressure is lower. Under typical loading
the water then drains, and contact between gr
occur rapidly, such as during an earthquake, in
initiate (Kramer 1996).

The following characteristics are common to de

- Loose, sandy soils (but liquefaction ha
- Rounded, well-sorted grains (e.g., unif
- Recently deposited, especially of Holo made deposits
- Soils that are saturated, below sea lev

Some of the most common landforms in which
floodplains. Post-earthquake field studies have
at the same locations (Kramer 1996). Earthqua
surrounding built environment. Buildings, infra
sink, or undergo cracking or other structural da
buried masses such as pipelines may become b
rapid settling of sediments, flooding (including
structures), and lateral spreading of soils (Kram

Metrics and numeric limits:

In general, sites closer to an earthquake's epic
sites are susceptible to liquefaction increases w
cycles) of ground motion. The smallest earthqu
most distant observed liquefaction reaching on
earthquake of $M_W > 7$, may exceed 100 km (Am

Power failure

DEFINITION.

In the electric power domain, especially in p
refers to a partial or total loss of power s
systems). PFs can spark from both the supply
breakdowns, malicious acts, organisational fa
inside the electric system and beyond, with p
existing vulnerabilities, technological and infr

REFERENCE.

The definition has been derived by a cross-c
glossaries and policy documents.

ANNOTATIONS.

Terminology and definitions may vary, even
(2018) indicates that *"a power outage is when*
related concepts are those of *power disruptio*
and *power damage/destruction*, which are a
cause of disservice.

Synonyms: electricity failure, power cut, pow

Additional scientific description.

Power failures can manifest in various forms,
cases, PFs also materialize as the result c
consequences (e.g. rolling blackouts). Event
instance, the Electric Infrastructure Security
event that severely disrupts the normal funct
durations". The process of full restoration of t
grid is sometimes termed as *black start* (UK R
In time, power failure avoidance strategies ha
other factors. Since the early 2000s, larger im
varying demand, power network size and co
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PANDEMIC INFLUENZA

DEFINITION:

An influenza pandemic is a global epidemic caused by a new influenza virus to which there is little or no pre-existing immunity in the human population (World Health Organization 2019).

REFERENCE:

World Health Organization (2019). Pandemic Influenza. Available at www.euro.who.int/en/health-topics/communicable-diseases/influenza/pandemic-influenza. Accessed on 19 November 2019.

ANNOTATIONS:

Synonym(s): pan flu

Additional scientific description:

The constant evolving nature of influenza virus makes influenza among the top few infectious hazards with significant impact. There will be another influenza pandemic. A pandemic occurs when an influenza virus emerges to which there is little or no immunity in the global human population and which can transmit efficiently among people. The pandemic virus can be a virus strain jumping directly from animals or reassorted from animal viruses with or without human seasonal viruses.

Three influenza pandemics occurred at intervals of several decades during the 20th century, the most severe of which was the so-called 'Spanish Flu' (caused by an A(H1N1) virus), estimated to have caused 20–50 million deaths in 1918–19. Milder pandemics occurred subsequently in 1957–58 (the 'Asian Flu' caused by an A(H2N2) virus) and in 1968 (the 'Hong Kong Flu' caused by an A(H3N2) virus), which were estimated to have caused 1–4 million deaths each. The most recent pandemic was caused by the A(H1N1) virus in 2009.

The current status of knowledge and technology means that prediction of the next influenza pandemic – when, where, which virus strain, how severe – is impossible. Consequently, pandemic vaccines cannot be developed before the pandemic virus emerges. Innovative research (e.g. at www.who.int/influenza/resources/research/en/) is key to inform and advance pandemic influenza preparedness. Meanwhile, global influenza surveillance, through the WHO Global Influenza Surveillance and Response System (GISRS), timely sharing or viruses and associated information, and national capacity building via seasonal influenza programs are critical to mitigate the impact of inevitable next pandemic.

Metrics and numeric limits:

The most recent pandemic occurred in 2009 and was caused by an influenza A (H1N1) virus. It is estimated to have caused between 100,000 and 400,000 deaths globally in the first year alone. Children and young adults were disproportionately affected in comparison to seasonal influenza, which causes severe disease mainly in the elderly, persons with chronic conditions and pregnant women (World Health Organization Europe 2019).

Key relevant UN convention/multilateral treaty:

UNDRR
UN Office for Disaster Risk Reduction

International Science Council

The Hazard Review and Classification Project: the process

Expanded scope of hazards of the Sendai Framework

UNGA definition of hazard as a process, phenomenom, or human activity that may cause harm or damage

The data sources:

- Scientific hazard glossaries
- IRDR Peril Classification
- UN glossaries
- Sendai Monitor hazard list
- Survey of scientists on hazards relevant for Sendai
- Consultations of expert communities within the UN and scientific community

Inclusion criteria:

1. The hazard has the potential to impact on a community
2. Proactive and reactive measures are available
3. The hazard has measurable spatial and temporal components

Hazard list:

302 hazards across these hazard types: hydromet, extraterrestrial, geological, environmental, biological, chemical, technological and societal.

Recommendations:

1. Regular review and update
2. Facilitate the development of a multi-hazard information system
3. Standardise definitions across users and sectors
4. Engage policy-makers and scientists in evidence-based national risk assessment processes, disaster risk reduction and risk-informed sustainable development.
5. Conduct further work to operationalise parameters for exposure, vulnerability and capacity, building on the UNGA definitions
6. Address cascading and complex hazards and risks

Recommendations

1: Regular review and update

2: Facilitate the development of a multi-hazard information system

3: Engaging with users and sectors for greater alignment and consistency of hazard definitions

4: Use this hazard list to actively engage policymakers and scientists in evidence-based national risk assessment processes, disaster risk reduction and risk-informed sustainable development, and other actions aimed at managing risks of emergencies and disasters

5: Conduct further work to operationalise parameters for exposure, vulnerability and capacity, building on the UNGA definitions

6: Address cascading and complex hazards and risks

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Dialogue towards a more holistic and consistent approach to hazards identification and definition

The Hazard Review and Classification Project: the process

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The Hazard Review and Classification Project: the process

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Thanks to Advisory Group Over 400 colleagues volunteered to join the UNDRR/ISC Sendai Hazard Definition and Classification Review Advisory Group and have been very engaged, committed and supportive of the work – we thank them for their support.

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The Hazard Review and Classification Project: the process

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The Hazard Review and Classification Project: the process

Review of the HIPs

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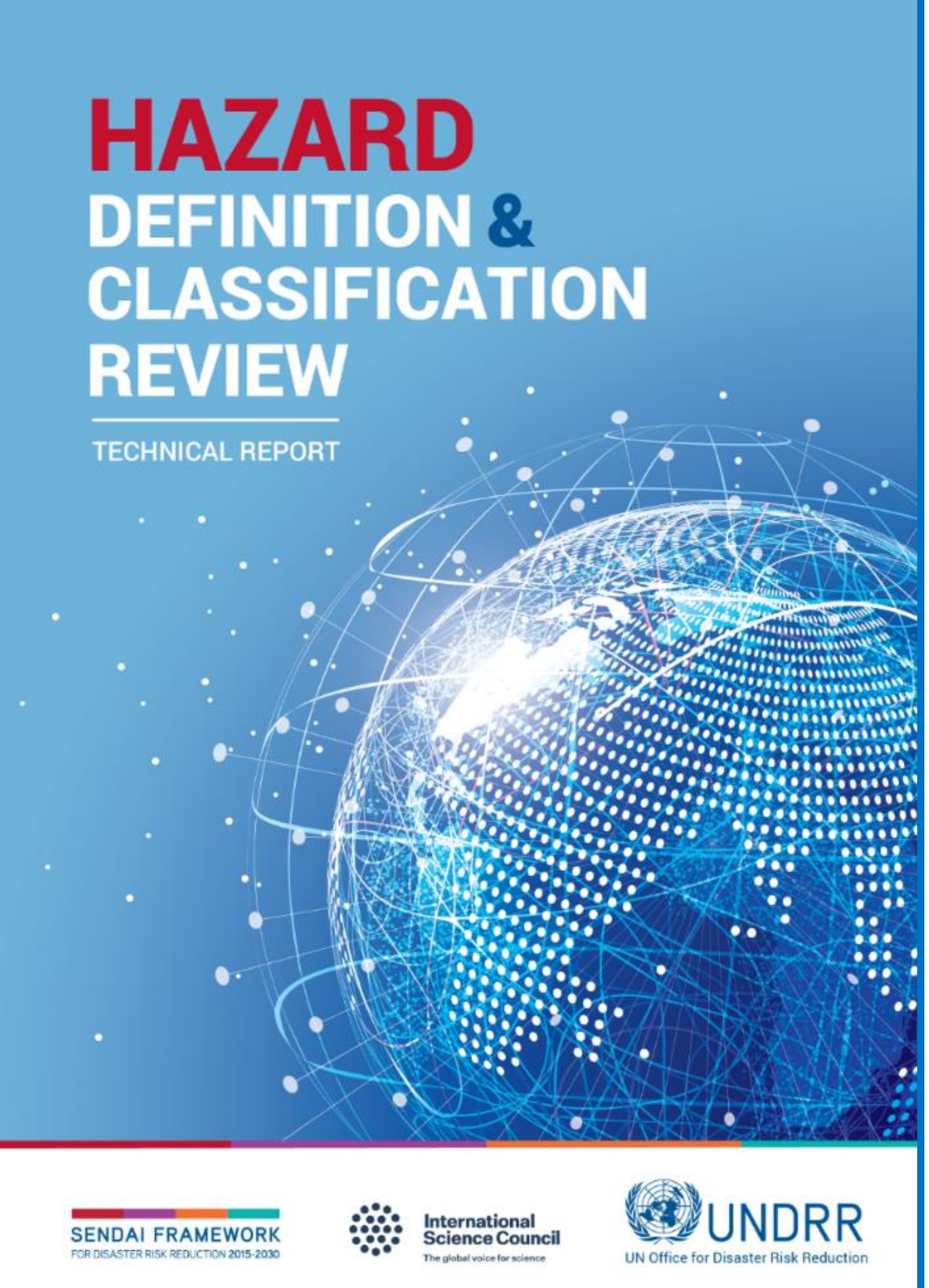

The Sendai Framework for Disaster Risk Reduction 2015–2030 (‘the Sendai Framework’) was one of three landmark agreements adopted by the United Nations in 2015. The other two being the Sustainable Development Goals of Agenda 2030 and the Paris Agreement on Climate Change.

The UNDRR/ISC Sendai Hazard Definition and Classification Review Technical Report supports all three by providing a common set of hazard definitions for monitoring and reviewing implementation which calls for “a data revolution, rigorous accountability mechanisms and renewed global partnerships”.