

Goal 13: Take urgent action to combat climate change and its impacts

Target 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

Indicator 13.1.1: Number of deaths, missing persons and directly affected persons attributed to disasters per 100,000 population

## Institutional information

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### Organization(s):

United Nations Office for Disaster Reduction (UNISDR)

## Definition and Rationale

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### Definition:

This indicator measures the number of people who died, went missing or were directly affected by disasters per 100,000 population.

### Concepts:

**Death:** The number of people who died during the disaster, or directly after, as a direct result of the hazardous event.

**Missing:** The number of people whose whereabouts is unknown since the hazardous event. It includes people who are presumed dead, for whom there is no physical evidence such as a body, and for which an official/legal report has been filed with competent authorities.

**Directly affected:** The number of people who have suffered injury, illness or other health effects; who were evacuated, displaced, relocated or have suffered direct damage to their livelihoods, economic, physical, social, cultural and environmental assets. Indirectly affected are people who have suffered consequences, other than or in addition to direct effects, over time, due to disruption or changes in economy, critical infrastructure, basic services, commerce or work, or social, health and psychological consequences.

### Rationale and Interpretation:

The Sendai Framework for Disaster Risk Reduction 2015-2030 was adopted by UN Member States in March 2015 as a global policy of disaster risk reduction. Among the global targets, “Target A: Substantially reduce global disaster mortality by 2030, aiming to lower average per 100,000 global mortality between 2020-2030 compared with 2005-2015” and “Target B: Substantially reduce the number of affected people globally by 2030, aiming to lower the average global figure per 100,000 between 2020-2030 compared with 2005-2015” will contribute to sustainable development and strengthen economic, social, health and environmental resilience. The economic, environmental and social perspectives would include poverty eradication, urban resilience, and climate change adaptation.

The open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction (OIEWG) established by the General Assembly (resolution 69/284) has developed a set of indicators to measure global progress in the implementation of the Sendai Framework, which was endorsed by the UNGA (OIEWG [report A/71/644](#)). The relevant global indicators for the Sendai Framework will be used to report for this indicator.

Disaster loss data is greatly influenced by large-scale catastrophic events, which represent important outliers. UNISDR recommends countries report the data by event, so that complementary analysis can be undertaken to obtain trends and patterns in which such catastrophic events (that can represent outliers) can be included or excluded.

## Method of Computation and Other Methodological Considerations

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### Computation Method:

This indicator,  $X$ , is calculated as a simple summation of related indicators (death, missing people, and affected people) from national disaster loss databases divided by the global population data (from national censuses, World Bank or UN Statistical Commission information).

$$X = \frac{(A_2 + A_3 + B_1)}{\text{Global Population}} \times 100,000$$

Where:

$A_2$  Number of deaths attributed to disasters;

$A_3$  Number of missing persons attributed to disasters; and

$B_1$  Number of directly affected people attributed to disasters.

\* Detailed methodologies can be found in the Technical Guidance (see below the Reference section)

### Comments and limitations:

The Sendai Framework Monitoring System has been developed to measure the progress in the implementation of the Sendai Framework by UNGA endorsed indicators. Member States will be able to report through the System from March 2018. The data for SDG indicators will be compiled and reported by UNISDR.

### Proxy, alternative and additional indicators:

In most cases international data sources only record events that surpass some threshold of impact and use secondary data sources which usually have non uniform or even inconsistent methodologies, producing heterogeneous datasets.

## Data Sources and Collection Method

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### Data sources and collection method:

Data provider at national level is appointed Sendai Framework Focal Points. In most countries disaster data are collected by line ministries and national disaster loss databases are established and managed by special

purpose agencies including national disaster management agencies, civil protection agencies, and meteorological agencies. The Sendai Framework Focal Points in each country are responsible of data reporting through the Sendai Framework Monitoring System.

## Data Disaggregation

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Number of deaths attributed to disasters;  
Number of missing persons attributed to disasters; and  
Number of directly affected people attributed to disasters.

[Desirable Disaggregation]:

Hazard

Geography (Administrative Unit)

Sex

Age (3 categories)

Disability

Income

## References

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**Official SDG Metadata URL:** <https://unstats.un.org/sdgs/metadata/files/Metadata-01-05-01.pdf> **<to be updated with new docs>**

**Internationally agreed methodology and guideline URL:**

**Technical guidance for monitoring and reporting on progress in achieving the global targets of the Sendai Framework for Disaster Risk Reduction (UNISDR 2017)**

[https://www.preventionweb.net/files/54970\\_collectionoftechnicalguidancenoteso.pdf](https://www.preventionweb.net/files/54970_collectionoftechnicalguidancenoteso.pdf)

**Other references:**

**Report of the open-ended intergovernmental expert working group on indicators and terminology relating to disaster risk reduction (OEIWG).** *Endorsed by UNGA on 2<sup>nd</sup> February 2017.* Available at:

<https://www.preventionweb.net/publications/view/51748>

**Country examples:**

## Contact International Organization for Global Monitoring

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United Nations Office for Disaster Risk Reduction (UNISDR)