

SDG Goal 3	Good health and well-being
SDG Target 3.9	By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination
SDG Indicator 3.9.2	Mortality rate attributed to unsafe water, unsafe sanitation and lack of hygiene (exposure to unsafe Water, Sanitation and Hygiene for All (WASH) services)
Time series	Mortality due to contact to unsafe water, unsafe sanitation and lack of hygiene

1. General information on the time series

- Date of national metadata: 04 November 2021
- National data: <http://sdg-indikatoren.de/en/3-9-2/>
- Definition: The time series is defined as the number of deaths from inadequate water, sanitation and hygiene.
- Disaggregation: type of disease

2. Comparison with global metadata

- Date of global metadata: July 2017
- Global metadata: <https://unstats.un.org/sdgs/metadata/files/Metadata-03-09-02.pdf>
- The time series is compliant with the global metadata.

3. Data description

- Data on deaths are derived from the causes of death statistics conducted by the Federal Statistical Office (analysis of the official death certificates).
Data on population are the results of the latest population census (currently: 2011 Census) rolled forward in a breakdown by sex, age, marital status and citizenship, using both statistics of population change (migration, births, deaths, entering into marriages or registered same-sex partnerships) and information on changes in citizenship and the dissolution of marriages or registered same-sex partnerships. For 2010 the results for population were calculated backwards using the census 2011 and migration, birth and death statistics.
The time series is defined as the number of persons having died with one of the following relevant causes of death according to ICD-10 within one year:
 - fractions of diarrhoea: A00, A01, A03, A04, A06-A09,
 - intestinal nematode infections: B76-B77, B79,
 - protein-energy malnutrition: E40-E46.
 ICD-10 is the International Statistical Classification of Diseases and Related Health Problems 10th Revision (German Modification).

4. Accessibility of source data

- Causes of death in depth - Detailed 4-digit codes of ICD10 classification (only available in German):
https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Gesundheit/Todesursachen/_inhalt.html#sprg234240
- Intercensal population updates as annual average – GENESIS online 12411-0040:
<https://www-genesis.destatis.de/genesis//online?operation=table&code=12411-0040&bypass=true&language=en#abreadcrumb>
- Population data based on Census 2011 – 1991 to 2011 (only available in German):
https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Bevoelkerung/Bevoelkerungsstand/_inhalt.html#sprg233540

5. Metadata on source data

- Quality Report - Causes of Death Statistics (only available in German):
<https://www.destatis.de/DE/Methoden/Qualitaet/Qualitaetsberichte/Gesundheit/todesursachen.pdf>
- Quality Report - Microcensus 2020 (only available in German):
<https://www.destatis.de/DE/Methoden/Qualitaet/Qualitaetsberichte/Bevoelkerung/mikrozensus-2020.pdf>

6. Timeliness and frequency

- Timeliness: t + 20.5 months
- Frequency: Annual

7. Calculation method

- Unit of measurement: Per 100,000 inhabitants
- Calculation method:

$$\text{Mortality rate}_i = \frac{\text{Deaths of persons}_i [\text{number}]}{\text{Population} [\text{number}]}$$

i = Diarrhorea (ICD-10 : A 00, A 01, A 03, A 04, A 06 to A 09);
Intestinal nematode infections (ICD-10 : B 76, B 77, B 79);
Protein-energy malnutrition (ICD-10 : E 40 to E 46)