SDG indicator metadata

(Harmonized metadata template - format version 1.1)

0. Indicator information (SDG_INDICATOR_INFO)

0.a. Goal (SDG_GOAL)

Goal 3: Ensure healthy lives and promote well-being for all at all ages

0.b. Target (SDG_TARGET)

Target 3.6: By 2020, halve the number of global deaths and injuries from road traffic accidents

0.c. Indicator (SDG_INDICATOR)

Indicator 3.6.1: Death rate due to road traffic injuries

0.d. Series (ERIES_DESCR)

SH_STA_TRAF - Death rate due to road traffic injuries [3.6.1]

SH_STA_TRAFN - Number of deaths rate due to road traffic injuries [3.6.1]

0.e. Metadata update (META_LAST_UPDATE)

2024-12-20

0.f. Related indicators (SDG_RELATED_INDICATORS)

3.5, 11.2

0.g. International organisations(s) responsible for global monitoring (SDG_CUSTODIAN_AGENCIES)

World Health Organization (WHO)

1. Data reporter (CONTACT)

1.a. Organisation (CONTACT_ORGANISATION)

World Health Organization (WHO)

2. Definition, concepts, and classifications (IND_DEF_CON_CLASS)

2.a. Definition and concepts (STAT_CONC_DEF)

Definition:
For World Health Organization and the health sector, the actual interpretation of the definition of a road traffic fatality is revealed in the recording or coding of information in medical records by health personnel. This recording is based on the International Classification of Diseases (World Health Organization 1994), which covers road traffic deaths under Chapter XX: External Causes of Morbidity and Mortality, in a section on Transport Accidents (V01–V99). According to ICD-10: "Road traffic deaths are fatalities caused by injuries sustained in traffic accidents involving one or more moving vehicles on public highway". ICD-10 provides a detailed classification of road traffic injuries and deaths, with specific codes depending on the type of vehicle involved, the role of the injured person, and the circumstances of the accident. Common codes include:

- **V01–V09**: Pedestrians injured in transport accidents
- **V10–V19**: Cyclists injured in transport accidents

- **V20–V29**: Motorcycle riders injured in transport accidents
- **V30–V39**: Occupants of three-wheeled motor vehicles injured in transport accidents
- **V40–V49**: Car occupants injured in transport accidents
- **V50–V59**: Occupants of pick-up trucks or vans injured in transport accidents
- **V60–V69**: Occupants of heavy transport vehicles injured in transport accidents
- **V70–V79**: Bus occupants injured in transport accidents
- **V80–V89**: Other land transport accidents (e.g., animal-drawn vehicles, streetcars)

Death rate due to road traffic injuries as defined as the number of road traffic fatal injury deaths per 100,000 population.

Concepts:

Numerator: Number of deaths due to road traffic crashes

Absolute figure indicating the number of people who die as result of a road traffic crash.

Denominator: Population (number of people by country)

2.b. Unit of measure (UNIT_MEASURE)

Per 100,000 population

2.c. Classifications (CLASS_SYSTEM)

Road injuries are defined in terms of the International Classification of Diseases, Tenth Revision (ICD-10) (See Annex A of the WHO methods and data sources for global causes of death, 2000–2021)

For countries where the ICD-10 has four characters, the codes to be filtered are as follows:
V011:V019, V021:V029, V031:V039, V041:V049,V061:V069, V092 ,V093 ,V103:V109, V113:V119, V123:V129, V133:V139, V143:V149, V154:V159, V164:V169,V174:V179, V184:V189, V194:V199, V203:V209, V213:V219, V223:V229, V233:V239, V243:V249, V253:V259,V263:V269, V273:V279, V283:V289, V294:V299, V304:V309, V314:V319,V324:V329, V334:V339, V344:V349,V354:V359, V364:V369, V374:V379, V384:V389, V394:V399, V404:V409, V414:V419, V424:V429, V434:V439,V444:V449, V454:V459, V464:V469, V474:V479, V484:V489, V494:V499, V504:V509, V514:V519, V524:V529,V534:V539, V544:V549, V554:V559, V564:V569, V574:V579, V584:V589, V594:V599, V604:V609, V614:V619,V624:V629, V634:V639, V644:V649, V654:V659, V664:V669, V674:V679, V684:V689, V694:V699, V704:V709,V714:V719, V724:V729, V734:V739, V744:V749, V754:V759, V764:V769, V774:V779, V784:V789, V794:V799,V803:V805, V811, V821, V828, V829, V830:V833, V840:V843, V850:V853, V860:V863, V870:V879, V892, V893, V899, V99, Y850, X594;

3. Data source type and data collection method (SRC_TYPE_COLL_METHOD)

3.a. Data sources (SOURCE_TYPE)

For the road traffic deaths, we have two sources of data. Data from Global Status Report on Road Safety survey and Vital registration or certificate deaths data that WHO receive every year from member states (ministries of health).

For the population, we used data from the United Nations/Department of Economic and Social Affairs/ Population division.

3.b. Data collection method (COLL_METHOD)

The methodology for collecting data involved engaging multiple sectors and stakeholders within each country. WHO Regional Advisors established regional networks in collaboration with WHO Regional Data Focal Points (RDFPs) and government-appointed National Data Focal Points (NDFPs), who were trained in the project methodology.

As representatives of their respective ministries, NDFPs were tasked with identifying up to ten National Data Collaborators (NDCs)—road safety experts from various sectors such as health, police, transport, non-governmental organizations, and academia. They also facilitated a consensus meeting among these collaborators.

Each expert initially responded to the questionnaire based on their specific expertise. During the consensus meeting led by the NDFPs, participants reviewed and discussed all responses, ultimately agreeing on a finalized dataset that most accurately reflected their country's situation at that time. This consolidated information was then submitted to the World Health Organization.

Further details can be found in the Global Status Report on Road Safety 2023 and the WHO Methods and Data Sources for Global Causes of Death, 2000–2021.

3.c. Data collection calendar (FREQ_COLL)

WHO annually requests tabulated death registration data, including statistics on all causes of death, by sending an official letter to all focal points. Member States can provide these annual cause-of-death statistics to WHO on a continuous basis.

3.d. Data release calendar (REL_CAL_POLICY)

Data for the Global Status Report on Road Safety is collected every two or three years, with the most recent report published in 2023.

3.e. Data providers (DATA_SOURCE)

The road traffic deaths data were provided nationally by mainly three ministries, namely, ministry of health, ministry of interior and ministry of transport.

3.f. Data compilers (COMPILING_ORG)

WHO is the organization responsible for compilation and reporting on this indicator at the global level.

3.g. Institutional mandate (INST_MANDATE)

According to Article 64 of its constitution, WHO is mandated to request each Member State to provide statistics on mortality. Furthermore, the WHO Nomenclature Regulations of 1967 affirms the importance of compiling and publishing statistics of mortality and morbidity in comparable form. Member States started to report mortality data to WHO since the early fifties and this reporting activity is continues till date.

4. Other methodological considerations (OTHER_METHOD)

4.a. Rationale (RATIONALE)

Road traffic crashes are a major public health issue due to their significant contribution to global morbidity and mortality, causing 1.19 million deaths annually and leaving millions injured or disabled. These crashes disproportionately affect young people, especially in low- and middle-income countries. In 2021, road traffic injuries became the leading cause of death for individuals aged 5 to 29 and the 14th leading cause of death across all age groups. The economic and social consequences are severe, particularly in developing countries, where over 90% of road casualties occur.

4.b. Comment and limitations (REC_USE_LIM)

There are no vital registration data for all countries to make a comparison against the data received on the survey. Also, WHO cannot collect road traffic data every year using this methodology outlined in the Global status report.

4.c. Method of computation (DATA_COMP)

The methods used for the analysis of causes of death depend on the type of data available from countries:

For countries with a high-quality vital registration system including information on cause of death, the vital registration that member states submit to the WHO Mortality Database were used, with adjustments where necessary, e.g. for under-reporting of deaths, unknown age and sex, and ill-defined causes of deaths.

For countries without high-quality death registration data, cause of death estimates are calculated using other data, including household surveys with verbal autopsy, sample or sentinel registration systems, special studies.

Death rate due to road traffic injuries as defined as the number of road traffic fatal injury deaths per 100,000 population.

4.d. Validation (DATA_VALIDATION)

The number of deaths due to road injury were country consulted with country designated focal points (usually at the Ministry of Health or National Statistics Office) as part of the full set of causes of death prior to the release.

4.e. Adjustments (ADJUSTMENT)

Deaths of unknown sex were redistributed pro-rata within cause-age groups of known sexes, and then deaths of unknown age were redistributed pro-rata within cause-sex groups of known ages.

4.f. Treatment of missing values (i) at country level and (ii) at regional level (IMPUTATION)

- At country level

  For countries with high-quality cause-of-death statistics, interpolation/extrapolation was done for missing country-years; for countries with only low-quality or no data on causes of death, modelling was used. Complete methodology may be found here:

WHO methods and data sources for global causes of death, 2000-2021 (https://cdn.who.int/media/docs/default-source/gho-documents/global-health-estimates/ghe2021_cod_methods.pdf?sfvrsn=dca346b7_1

- At regional and global levels
  Not applicable

4.g. Regional aggregations (REG_AGG)

Country estimates of number of deaths by cause are summed to obtain regional and global aggregates.

4.h. Methods and guidance available to countries for the compilation of the data at the national level (DOC_METHOD)

The cause of death categories (including road injury) follow the definitions in terms of the International Classification of Diseases, Tenth Revision (ICD-10). Please see Annex Table A of the WHO methods and data sources for global causes of death, 2000–2021

https://cdn.who.int/media/docs/default-source/gho-documents/global-health-estimates/ghe2021_cod_methods.pdf?sfvrsn=dca346b7_1

4.i. Quality management (QUALITY_MGMNT)

The World Health Organization (WHO) established a Reference Group on Health Statistics in 2013 to provide advice on population health statistics to WHO with a focus on methodological and data issues related to the measurement of mortality and cause-of-death patterns. The group facilitated interaction between multilateral development institutions and other independent academic groups with WHO expert groups in specific subject areas including methods to the estimation on causes of death.

4.j Quality assurance (QUALITY_ASSURE)

The data principles of the World Health Organization (WHO) provide a foundation for continually reaffirming trust in WHO's information and evidence on public health. The five principles are designed to provide a framework for data governance for WHO. The principles are intended primarily for use by WHO staff across all parts of the Organization in order to help define the values and standards that govern how data that flows into, across and out of WHO is collected, processed, shared and used. These principles are made publicly available so that they may be used and referred to by Member States and non-state actors collaborating with WHO.

4.k Quality assessment (QUALITY_ASSMNT)

All statements and claims made officially by WHO headquarters about population-level (country, regional, global) estimates of health status (e.g. mortality, incidence, prevalence, burden of disease), are cleared by the Department of Data and Analytics (DNA) through the executive clearance process. This includes the Guidelines for Accurate and Transparent Health Estimates Reporting (GATHER) statement. GATHER promotes best practices in reporting health estimates using a checklist of 18 items that should be reported every time new global health estimates are published, including descriptions of input data and estimation methods. Developed by a working group convened by the World Health Organization, the guidelines aim to define and promote good practice in reporting health estimates.

5. Data availability and disaggregation (COVERAGE)

Data availability:
Almost 70 countries currently provide WHO with regular high-quality data on mortality by age, sex and causes of death, and another 58 countries submit data of lower quality. However, comprehensive cause-of-death estimates are calculated by WHO systematically for all of its Member States (with a certain population threshold) every 3 years.

Time series:
From 2000 to 2021

Disaggregation:
Sex, age group

6. Comparability / deviation from international standards (COMPARABILITY)

Sources of discrepancies:
WHO's estimation of road traffic rates is, in many countries, different from the official estimates for the reasons described above that relate to our methodology.

There are also differences in the data used for the population between the national data and the estimates produced by the United Nations Population Division.

7. References and Documentation (OTHER_DOC)

URL:

http://www.who.int/violence_injury_prevention

References:

Global status report on road safety 2023
https://iris.who.int/bitstream/handle/10665/375016/9789240086517-eng.pdf?sequence=1

WHO methods and data sources for global causes of death, 2000–2021
https://cdn.who.int/media/docs/default-source/gho-documents/global-health-estimates/ghe2021_cod_methods.pdf?sfvrsn=dca346b7_1
(https://www.who.int/docs/default-source/gho-documents/global-health-estimates/ghe2019_cod_methods.pdf)