Glossary

Age-standardized rate

A rate designed to minimize the effects of differences in age composition when comparing rates for different populations.

ACME

Automated Classification of Medical Entities; this program automates the underlying cause-of-death coding rules. The input to ACME is the multiple cause-of-death codes (from the ICD) assigned to each entity (e.g. disease condition, accident or injury) listed on cause-of-death certifications, preserving the location and order as reported by the certifier. ACME then applies the WHO rules to the ICD codes and selects an underlying cause of death. ACME has become the de facto international standard for the automated selection of the underlying cause of death.

Birth

See "Live birth".

Capture-recapture

Capture—recapture methods can be used to assess the completeness of registration. The basic idea is to use two separate sources or methods to identify births or deaths, and to examine the proportion of cases identified by the second method that were also identified by the first. From this information, it is possible (through mathematical models) to estimate the total number of cases

Capture–recapture can be used to assist in monitoring trends over time, but it assumes closed populations.

Causes of death

"All those diseases, morbid conditions or injuries that either resulted in or contributed to death and the circumstances of the accident or violence that produced any such injuries." (27)

Census

See "Population census".

Certification of cause

of death

Process by which a doctor confirms the fact of death, states the causes leading to it and issues a certificate that specifies the underlying cause of death, according to the rules and procedures of the ICD.

Child mortality

Deaths of children under 5 years of age (i.e. in the exact age range 0–4 years old); usually measured as the probability of a neonate dying before their 5th birthday.

Citizen

A person who holds the legal nationality of the country they are living in and, as such, benefits from all the constitutional rights of that country but also is subject to the obligations and regulations that apply to its citizens.

Civil registration

"The continuous, permanent, compulsory, and universal recording of the occurrence and characteristics of vital events (live births, deaths, fetal deaths, marriages and divorces) and other civil status events pertaining to the population as provided by decree, law or regulation, in accordance with the legal requirements in each country. Civil registration establishes and provides legal documentation of such events. These records are also the best source of vital statistics" (1).

Civil registrar

Official charged with the responsibility for registering vital events in a defined area (e.g. a country, district, municipality or parish) and for reporting these for legal and statistical purposes.

Civil society

The voluntary participation of citizens in the civic and social bodies that form the basis of a functioning society, as opposed to state and commercial institutions.

Completeness of registration

The extent to which all births or deaths are registered in a population; usually expressed as a percentage of the total deaths and births in a population. Sometimes also referred to as the coverage of registration. Any deviation from complete coverage is measured by coverage error.

Delayed registration

The registration of a vital event after the prescribed period specified in existing laws, rules or regulations (including any specified grace period). Delayed registration is usually considered to be the registration of a vital event one year or more after the event has occurred. (Not to be confused with "late registration".)

Demographic surveillance

The practice of registering, on a continuous basis, all demographic events (including cause of death, which is usually assessed by verbal autopsy) in one or more geographically defined populations. The major drawback of demographic surveillance is that it does not produce nationally representative data but only information for the specific sites chosen.

Fetal death

"Death prior to the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy; the death is indicated by the fact that after such separation the fetus does not breathe or show any evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles" (27).

Improving the quality and use of birth, death and cause-of-death information 73

Glossary

Household surveys

Household surveys are generally unreliable sources of data on adult and cause-specific mortality, because of the relative rarity of such deaths and the limitations of sample size. Due to sample-size limitations, reliable estimates are usually only possible at national level and for major subregions. Population-based surveys include more detailed questions on mortality and fertility than can be asked during a census, and can thus be used to generate estimates of fertility, child and adult mortality. DHS, PAPCHILD and MICS are examples of survey programmes that have yielded useful estimates of vital statistics rates, particularly fertility and child mortality.

ICD-10

International statistical classification of diseases and related health problems, 10th revision (ICD-10; sometimes shortened to the International classification of diseases) (*28*). ICD-10 is a classification maintained by the WHO for coding diseases, signs, symptoms and other factors causing morbidity and mortality. It is used worldwide for classifying morbidity and mortality statistics, and is designed to promote international comparability in the collection, processing, classification and presentation of statistics.

Ill-defined cause of death

A collection of vague diagnoses that should not be used as the underlying cause of death, and consisting of: "symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified" (Chapter XIII of ICD-10). For further information, see Section 4.1.10 in ICD-10, Volume 2.

Infant mortality

Deaths in children occurring before their first birthday, usually measured as infant deaths per

1000 live births.

Late registration

Registration of a vital event after the prescribed time period but within a specified grace period. Since the grace period is usually considered to be one year following the vital event, late registration means the registration of a vital event within one year of the event occurring. (Not to be confused with delayed registration.)

Life expectancy

Average number of years a person could expect to live if current mortality trends continue for the rest of that person's life.

Life table

A tabular display of life expectancies and the probability of dying at each age (or age group) for a given population, calculated from age-specific death rates prevailing at that time. The life table gives a complete picture of a population's mortality.

Live birth

The result of the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of pregnancy, which after such separation breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached; each product of such a birth is considered to be live born.

Maternal death

Death of a woman while pregnant or within 42 days of termination of pregnancy (irrespective of the duration and the site of the pregnancy) from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes.

Metadata

Information about data including definitions, attributes (e.g. name, size and data type), sources, estimation methods and other characteristics.

Millennium Development Goals (MDGs) Eight major development goals and associated targets and indicators, endorsed by Member States of the UN in the year 2000.

Mode of death

The way a person died; for example, "respiratory failure". To write this on a death certificate is not sufficient because it does not indicate what disease or condition caused the death.

Mortality rate

The ratio of the number of people dying in a year to the total mid-year population in which the deaths occurred. This rate is also called the crude death rate. The mortality rate may be standardized when comparing mortality rates over time (or between countries), to take account of differences in the population; the rate is then called the age-standardized death rate.

Notification

The paper documentation needed to obtain a permit to bury a deceased person, and that serves as documentary evidence for the civil registration to register the birth or death.

Perinatal mortality

Deaths occurring in the perinatal period that commences at 22 completed weeks (154 days) of gestation (the time when birth weight is normally 500 g) and ends 7 completed days after birth (28).

Population census

The total process of collecting, compiling, evaluating, analysing and publishing or otherwise disseminating demographic, economic and social data pertaining, at a specified time, to all persons in a country or in a well delimited part of a country (*35*). Data from population censuses can be used to estimate birth and death rates. Also, they can provide the best source of data on at-risk populations (numerators and denominators) in small geographical or administrative areas, and the baseline for sample vital registration.

Population register

A mechanism for the continuous recording of selected information pertaining to each member of the resident population of a country or area, making it possible to have up-to-date information about the size and characteristics of the population at selected points in time. Because of the nature of a population register, both its organization and operation should have a legal basis. Population registers start with a base consisting of an inventory of the inhabitants of an area and their characteristics (e.g. date of birth, sex, marital status, place of birth, place of residence, citizenship and language). To assist in locating a record for a particular person, household or family in a population register, a unique identification number is provided for each entity.

The population register can contain other socioeconomic data, such as occupation or education. The population register should be updated by births, deaths, marriages and divorces, which are part of the civil registration system of the country. The population register is also updated by migration. Thus, notifications of certain events, which may have been recorded originally in different administrative systems, are automatically linked to a population register on a current basis. The method and sources of updating should cover all changes, so that the characteristics of individuals in the register remain current (1).

Quality of data

In a vital statistics system, quality of data is usually measured according to the degree of completeness, accuracy, timeliness and availability.

Registrar general

The head of the civil registration office or department with jurisdiction usually extending over the entire national territory.

Registration

The formal act of reporting a birth or death, and obtaining a birth or death certificate issued by the civil registration authority.

Sample vital registration

The registration of all demographic events on a continuous basis (as in full civil registration) but only for a nationally representative sample of administrative areas for which a baseline population census has been taken. Cause of death is assessed from hospital records where these are available. In all other cases, death is first notified to the sample registration office, and the household is later visited and a verbal autopsy is conducted to determine the cause of death. The system yields nationally representative vital statistics that include the major causes of death. If properly conducted and carefully expanded, sample registration is the best way to gradually expand into a national civil registration system. However, if the population under surveillance is too small or not representative, the data will be biased or too small to yield reliable cause-specific death rates.

Sample vital registration with verbal autopsy (SAVVY)

The MEASURE Evaluation project based at the University of North Carolina at Chapel Hill and the United States Census Bureau have together created a series of sample vital registration with verbal autopsy (SAVVY) manuals for mortality surveillance.¹⁰

Stakeholders

Persons or institutions with a shared interest (financial or otherwise) in a given event, process or outcome.

Stillbirth

See "Fetal death".

Technical assistance

Development aid or cooperation provided by governmental and nongovernmental agencies to assist the economic, social and political development of populations. It also covers the transfer of knowledge from individual experts and scientists to countries as part of cooperative projects.

Underlying cause of death

Either (a) The disease or injury that initiated the train of morbid events leading directly to death; or (b) the circumstances of the accident or violence that produced the fatal injury. The underlying cause of death is used as the basis for the tabulation of mortality statistics.

Usual residence

The geographical location within a country, locality or other civil division where a specified person (the deceased, or a mother or father) usually resides. For vital statistics purposes, the place of usual residence for a birth or fetal death is the place where the mother usually resides.

¹⁰The manuals are available at http://www.cpc.unc.edu/measure/publications/index.php

Glossary

Verbal autopsy A structured interview with caregivers or family members of households after a death occurs;

used to determine the probable cause or causes of death in populations where most deaths

occur outside health facilities, and where direct medical certification is rare.

Vital event "The occurrence of a live birth, death, fetal death, marriage, divorce, adoption, legitimation,

recognition of parenthood, annulment of marriage, or legal separation" (1).

Vital statistics Statistics on vital events compiled from all sources of vital-events data (including civil registration,

censuses and surveys).

Vital statistics system "The total process of (a) collecting information by civil registration or enumeration on the

frequency or occurrence of specified and defined vital events, as well as relevant characteristics of the events themselves and the person or persons concerned, and (b) compiling, processing,

analyzing, evaluating, presenting, and disseminating these data in statistical form" (1).

WHO-FIC WHO's Family of international disease and health related classifications.