



INFORMATION NOTE C

Cause of Death Data

I. Purpose

This is a non-official document, for information only, prepared by the Working group of co-organizers of the Ministerial Conference on Civil Registration and Vital Statistics in Asia and the Pacific to be held in Bangkok, 24 November to 28 November 2014. It provides additional background information to delegations attending the Regional Preparatory Meeting for the Ministerial Conference on 28 and 29 August 2014. Published in English only.

II. Background and relevance to CRVS

The registration of deaths and the recording of key characteristics of the deceased person, including age, sex and cause of death, provides data essential for health policy and planning, disease prevention and control, and monitoring programme effectiveness. Reliable information on age, sex and cause distribution of mortality is essential in order to tackle the complex and urgent health and development challenges facing the world, including:

- The 'unfinished agenda' of preventable mortality in infants and children;
- The rising toll of premature mortality in adults;
- Shifting patterns of causes of death from communicable, maternal and perinatal conditions to noncommunicable diseases;
- Widening inequities in health outcomes and in levels and patterns of preventable mortality among the poor, marginalized and hard-to-reach populations, including in high-income settings;
- People's growing expectations for health equity and universal coverage of health care.

Statistics on causes of death are widely used in health policy development and monitoring of progress. The World Health Assembly regularly endorses resolutions relating to reducing mortality from specific diseases, relying on cause of death statistics to determine health priorities and measure progress. Cause of death information is used for analysis of global mortality levels and patterns, burden of disease analysis, and for the formulation of disease prevention and mitigation strategies.



International goals and conventions rely on cause-specific mortality data to establish directions, and monitor progress. The Millennium Development Goals include targets for child and maternal mortality. The UN Convention on the Rights of the Child expands a State's responsibilities to ensure the health and safety of a child, including taking action to reduce infant and child mortality, and eradicate high priority diseases.

The appendix shows the current poor status of death registration and cause of death globally. WHO reports that only 34 of 193 Member States, and only six countries in the UNESCAP region, can report high quality cause of death data¹. The World Bank has also noted the dearth of countries that can produce quality cause of death data, and have produced targets for cause of death improvement, in particular that collection and analysis of causes of death in hospitals and communities are improved².

III. Outline of key international conventions, recommendations and/or standards

The *International Classification of Diseases* (ICD) is endorsed by the World Health Assembly as the standard used to classify deaths and diseases using death certificates and health records.

- At the twentieth World Health Assembly (WHA) 1967, WHO Member States committed to 'compile mortality and morbidity statistics in accordance with the current revision of ICD'.
- The most recent revision of ICD (ICD-10) was endorsed by the Forty-third World Health Assembly in May 1990 and came into use in WHO Member States from 1994.
- The 2013 UN *Principles and Recommendations for a Vital Statistics System* (3rd revision) includes recommendations on capturing cause of death as part of a functioning vital statistics system.

IV. Key considerations

Establishing a universal and responsive CRVS system through the implementation of the Regional Action Framework would significantly enhance the quality of cause of death reporting and contribute to improved policy and planning at the national, regional and global levels.

Only a medically trained person can reliably diagnose causes of death in accordance with World Health Organization (WHO) standards; coding of causes of death into the ICD classification should be performed by specially trained coders. The cause of death information can be used for both legal and statistical purposes. When medical certification is not possible, alternative methods can be used to estimate probable cause of death patterns

¹ World Health Organization. (2012). *World Health Statistics 2012*.

² World Bank/World Health Organization. (2014). *Global Civil Registration and Vital Statistics: Scaling Up Investment Plan 2015-2024*.

at the population level. For example, verbal autopsy methods are used in the Indian and Bangladeshi Sample Registration Systems, using verbal autopsy methods that involve interviews with family members and caregivers. It is also possible to estimate certain causes of death by applying direct and indirect demographic techniques to data collected in censuses and household surveys. However, these methods do not establish cause of death at the individual level and cannot produce detailed information on a wide range of causes, for the whole country, on a continuous basis and at subnational levels. Verbal autopsy methods are also not a long-term alternative for functioning CRVS systems.

Key actions for countries to improve the availability and quality of causes of death statistics include:

- Ensuring that legislation and regulations are in place to support the universal registration of deaths and the recording and compilation of information on the deceased person's age, sex and cause of death.
- Developing a national strategic plan for improving mortality data in collaboration with stakeholders from the health sector, medical training establishments, academia, and researchers.
- Ensuring that medical training establishments and hospitals introduce and use the International Form of the Medical Certificate of Cause of Death according to WHO standards.
- Implementing or improving medical certification through training and quality assurance. Implementing ICD coding for the compilation of cause of death statistics through specially trained coders.

V. Relevance to the Regional Action Framework

The Regional Action Framework acknowledges the importance of capturing causes of death as part of a comprehensive suite of vital statistics, and sets the following targets:

- By 2024, at least ... % of all deaths recorded by the health sector in the territory and jurisdiction in the given year have a medically certified cause of death recorded using the international form of the death certificate.
- By ... (year), annual nationally representative statistics on deaths – disaggregated by age, sex, cause of death defined by the ICD, latest version as appropriate, geographic area and administrative subdivision – are produced from registration records or, alternatively, other valid administrative data sources.
- By 2024, at least ... % of deaths occurring in health facilities or with the attention of a medical practitioner has a cause of death code derived from the medical certificate according to the standards defined by the ICD, latest version as appropriate.
- By 2024, the proportion of deaths coded with ill-defined causes has been reduced by at least ... % of all deaths registered in the territory and jurisdiction.

- By 2024, at least ... % of deaths taking place outside of a health facility and without the attention of a medical practitioner has their cause of death code determined through verbal autopsy in line with international standards.

These targets are consistent with the goal set by the World Bank/WHO in the *Global civil registration and vital statistics: scaling up investment plan 2015-2024* for ‘...Universal civil registration of births, deaths, and other vital events, including reporting cause of death, and access to legal proof of registration for all individuals by 2030’. The World Bank also calls for specific targets related to causes of death:

- Deaths in given year reported, registered, and certified with key characteristics - 80% by 2030.
- Maternal and newborn deaths reported, registered, and investigated - 100% by 2030.
- Deaths in children under 5 reported, disaggregated by age and sex - 80% by 2030.
- Cause of deaths in hospitals reliably determined and officially certified - 100% by 2030.
- Countries have community assessments of probable cause of death determined by verbal autopsies using international standards - 80% by 2030.

VI. Links to further information

General information

World Bank/World Health Organization. (2014). *Global Civil Registration and Vital Statistics: Scaling Up Investment Plan 2015-2024*.

<http://documents.worldbank.org/curated/en/2014/05/19581045/global-civil-registration-vital-statistics-scaling-up-investment-plan-2015-2024>

World Health Organization. (2012). *Strengthening civil registration and vital statistics for births, deaths and causes of death: Resource Kit*.

http://www.who.int/healthinfo/CRVS_ResourceKit_2012.pdf?ua=1

World Health Organization. Strengthening CRVS Systems through innovative approaches in the health sector (Technical Meeting), 17-18 December 2013.

http://www.who.int/healthinfo/civil_registration/TechnicalMeeting_December2013/en/

World Health Organization. CRVS Investment Planning (Technical Consultation), 28-29 April 2014.

http://www.who.int/healthinfo/civil_registration/TechnicalConsultation_April2014/en/



Tools for improving the ascertainment of cause of death

Online cause of death quality tools (eg. WHO ANACoD, CoDEdit Tool)

http://www.who.int/healthinfo/civil_registration/en/

World Health Organization. (2010a). *Cause of Death on the Death Certificate in line with ICD-10: Quick reference guide*. (Flyer for doctors on how to fill in a death certificate - print double sided)

http://apps.who.int/classifications/apps/icd/icd10training/ICD-10%20Death%20Certificate/html/ICD-10_Resources/causeofdeathflyer.pdf

World Health Organization. (2010b). *International Form of the Medical Certificate of Cause of Death* (10th revision). Vol.2. Instruction Manual

http://www.who.int/classifications/icd/ICD10Volume2_en_2010.pdf

World Health Organization. *International Classification of Diseases*. (Online training, including medical certification and coding introduction)

<http://www.who.int/classifications/icd/en/>

World Health Organization. *International Classification of Diseases*. (Offline training, including medical certification and coding introduction)

<http://apps.who.int/classifications/apps/icd/ClassificationDownload/DLArea/OfflineTrainingPackage.zip>

VII. Contacts

Dr. Claudia Stein

Director, Division of Information, Evidence, Research and Innovation
World Health Organization (WHO) - Regional Office for Europe (EURO)
UN City
Marmorvej 51
DK-2100 Copenhagen Ø, Denmark
Telephone: +45 45 33 70 00
Email: postmaster@euro.who.int

Dr. Azza Badr

Technical Officer, Vital Statistics & Country Support (CRVS)
World Health Organization (WHO) - Regional Office for the Eastern Mediterranean (EMRO)
Monazamet El Seha El Alamia Str, Extension of Abdel Razak El Sanhoury Street
P.O. Box 7608, Nasr City
Cairo 11371, Egypt
Telephone: +20 2 22765000
Email: postmaster@emro.who.int



Mr. Mark Landry

Team Leader, Health Information, Evidence & Research
World Health Organization (WHO) - Regional Office for the Western Pacific (WPRO)
P.O. Box 2932
1000 Manila, Philippines
Telephone: +63 2 528 8001
Email: postmaster@wpro.who.int

Ms. Jyotsna Chikersal

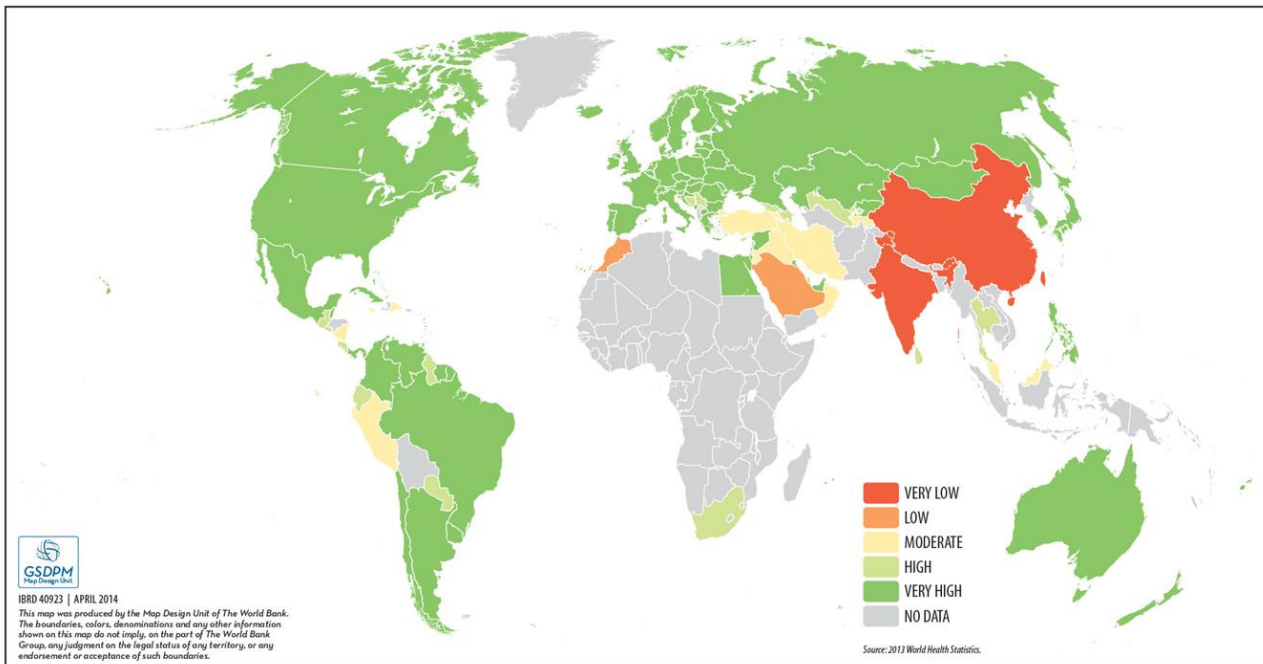
Regional Adviser, Evidence-Based Health Situation & Trends Assessment
World Health Organization (WHO) - Regional Office for South-East Asia (SEARO)
World Health House
Indraprastha Estate
Mahatma Gandhi Marg
New Delhi 110 002, India
Telephone: +91 11 2337 0804
Email: perrec@searo.who.int

Ms. Anneke Schmider

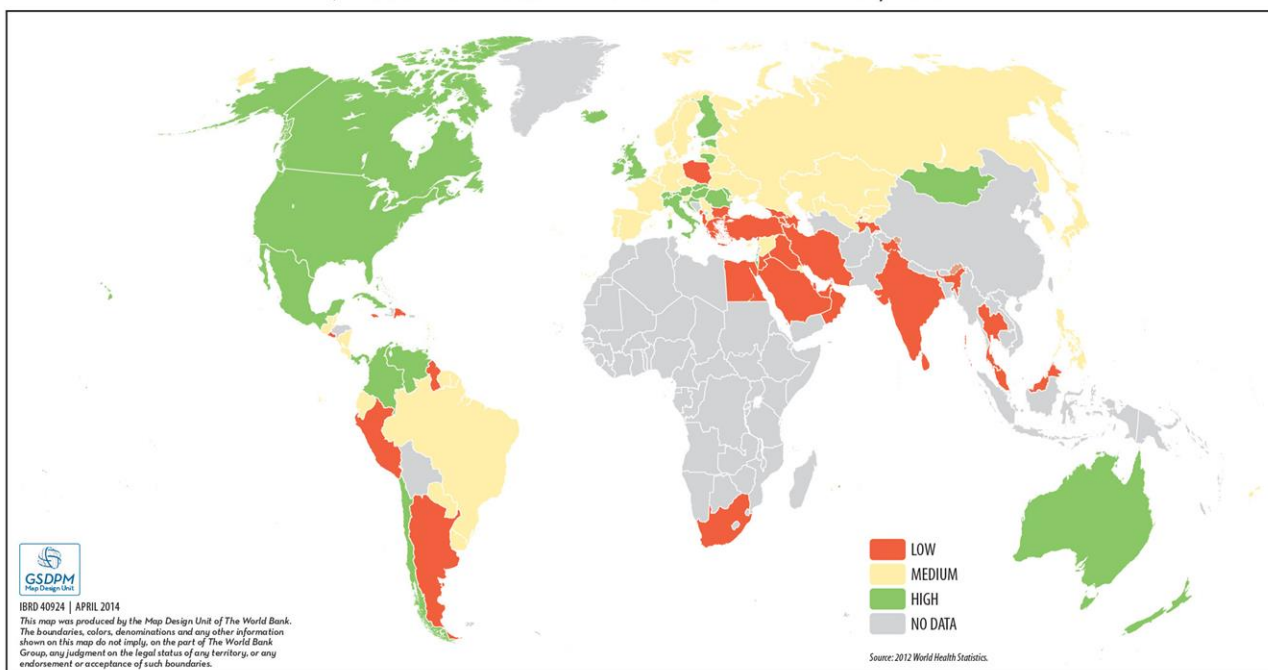
Technical Officer (CRVS), Health Statistics and Information Systems
World Health Organization (WHO) - Headquarters
Avenue Appia 20
1211 Geneva 27, Switzerland
Telephone: + 41 22 791 21 11
Email: schmdera@who.int

Appendix – Global Death Registration and Cause of Death³

DEATH REGISTRATION COVERAGE, 2013



QUALITY OF CAUSE-OF-DEATH STATISTICS, 2012



³ World Bank/World Health Organization. (2014). *Global Civil Registration and Vital Statistics: Scaling Up Investment Plan 2015-2024*.