



INFORMATION NOTE A

Sources of Vital Statistics

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

Vital statistics is defined as a collection of statistics on vital events in a lifetime of a person and relevant characteristics of the events themselves and of the persons concerned. For statistical purposes, vital events refer to events concerning life and death of individuals, as well as their family and civil status. Thus they include live births, deaths and fetal deaths, marriages, registered partnerships, separations, divorces, legal dissolutions of registered partnerships and annulment of marriage, as well as adoptions, legitimation and recognition. Vital statistics provide crucial and critical information on the population in a country.

The preferred source of vital statistics is a comprehensive civil registration system that collects information soon after the events occur using standardized administrative mechanisms by trained individuals. Because civil registration is compulsory and universal, the resulting vital statistics are comprehensive and accurate and not subject to response or sampling errors that arise when vital statistics are estimated using household surveys or censuses.

Once the civil registration system is established, obtaining vital statistics is relatively cost effective because they are a by-product of an administrative process. A well-functioning civil registration system will generate vital statistics for the entire population that can be compared across time and that can be disaggregated by age, sex, administrative unit, and population subgroup in any way that is required. Unlike periodic data collection, the civil registration system can provide continuous and timely data for planning, administration and research.



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

Standards for civil registration and vital statistics are contained in the UN Statistics Division *Principles and Recommendations for a Vital Statistics System* and the associated handbooks on implementation issues.

IV. Key considerations

The information on vital events recorded in the civil registration system generates essential statistical information on the population of a country, including the numerators used in calculations of fertility and mortality rates. In order to ensure universal registration of vital events and the production of comprehensive vital statistics, it is essential to simplify registration processes, limit costs of registration, and maximize accessibility of offices. Improved reporting can be achieved through public education and incentive schemes to address lack of public awareness or interest. An important modality of recording vital events is through health institutions, whose staff act as informants of occurrence of births, fetal deaths and deaths, and whose physicians are responsible for performing the certification of causes of death. Where health institutions are scarce, verbal autopsy is an interview carried out with family members and/or caregivers of the deceased to assign a probable underlying cause of death. Maintaining strong lines of communication between health departments and administrators of civil registration can improve vital statistics availability and quality.

Statistics on births, deaths and causes of death can be generated from other sources, including by applying direct and indirect demographic techniques to data collected in censuses and household surveys, and through demographic and health surveillance in selected or nationally representative sites. Compared with civil registration, these methods are suboptimal. Censuses are usually undertaken every ten years and involve costly, direct interaction with and cooperation by the population during enumeration. Sample registration systems are used in countries, such as India, where civil registration systems are not fully developed. They record vital events for selected sample registration areas on a continuous basis but cannot provide vital rates estimates for small areas. A typical demographic surveillance system (DSS) monitors births, deaths and causes of death within a defined population over time but the statistics are not nationally representative.

Data on vital events collected from censuses and surveys are subject to retrospective recall problems, mis-statements of age, and reference-period errors. Another limitation is the infrequency of censuses and surveys, which provide information on the vital characteristics of the population (or a sample of this) at a single point in time. Whereas censuses provide data to the lowest geographic area, surveys do not. Additionally, surveys are subject to sampling errors, may not be nationally representative and can be costly when compared to civil registration systems.

None of the alternatives matches up to functional CRVS systems, either in terms of their ability to produce data – for the whole country, on a continuous basis and at subnational levels – upon which local administrations can base planning, or in terms of the benefits to individuals of legal documentation.

V. Relevance to the Regional Action Framework

Goal 3 of the Regional Action Framework (RAF) highlights the critical importance of civil registration being linked to the production and quality assurance of vital statistics on the occurrence and characteristics of vital events, and stipulates that “Accurate, complete and timely vital statistics (including on causes of death) are produced based on registration records and disseminated.” The production of vital statistics should allow for key disaggregations, namely by age, sex, geographic area, administrative subdivisions, other subgroups, and characteristics of the vital event, such as cause of death using the International Classification of Diseases (ICD).

The RAF recognizes the need for the progressive realization of this goal given that for many governments, the routine generation of accurate complete and timely statistics on births, deaths and causes of death will require medium-term strategic and prioritized investment to improve civil registration and the national statistical system. In the interim, needs for data to track progress towards improved health outcomes and broader development goals can be met using alternative sources, including censuses, household surveys and sample registration methods. While each method has some advantages, none is able to replicate the key strengths of civil registration as a source of vital statistics, namely universality in coverage, permanence and continuity, and archiving of records. In countries and areas where it is legislated that all births and deaths should be recorded by the Ministry of Health, the data collected should be seen as a possible valid administrative data source of vital statistics. There should be systems in place to ensure the data is shared with the civil registry and national statistical system.

The RAF specifies targets for Goal 3, including:

- By ... (year), annual nationally representative statistics on births – disaggregated by age of mother, sex of child, geographic area and administrative subdivision – are produced from registration records or, alternatively, other valid administrative data sources.
- 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, 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.
- By ... (year), key summary tabulations of vital statistics on births and deaths using registration records as the primary source, are made available in the public domain in electronic format annually, and within one calendar year.
- By ... (year), key summary tabulations of vital statistics on causes of death using registration records as the primary source, are made available in the public domain in electronic format annually, and within one calendar year.
- By ... (year), an accurate, complete and timely vital statistics report for the previous biennium, using registration records as the primary source, is made available in the public domain.

VI. Links to further information

Asian Development Bank. (2010). *Administrative Data Sources for Compiling Millennium Development Goals and Related Indicators: A Reference Handbook on Using Data from Education, Health, and Vital Registration Systems Featuring Practices and Experiences from Selected Countries*.

<http://www.adb.org/publications/administrative-data-sources-compiling-millennium-development-goals-and-related-indicator>

United Nations. (2013). *Principles and Recommendations for a Vital Statistics System* (3rd revision).

http://unstats.un.org/unsd/demographic/standmeth/principles/unedited_M19Rev3en.pdf

Papers on behalf of the Monitoring of Vital Events (MoVE) writing group:

Hill, K et al. (2007). Interim measures for meeting needs for health sector data: births, deaths, and causes of death. In *The Lancet. Who Counts? 3. Series*

<http://www.who.int/healthinfo/statistics/WhoCounts3.pdf>

Setel, P W et al. (2007). A scandal of invisibility: making everyone count by counting everyone. In *The Lancet. Who Counts? 1. Series*

<http://www.who.int/healthinfo/statistics/WhoCounts1.pdf>

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