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VITAL STATISTICS REPORTING

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EXECUTIVE SUMMARY

Civil registration systems are recognised by the United Nations as being the most reliable sources of vital statistics (including statistics on causes of death). This paper underlines the importance of vital statistics data and encourages civil registration officials of Pacific countries to make available registration data for vital statistics analysis in line commitments made under the Asia and Pacific decade for civil registration and vital statistics and the regional action framework. The paper provides guidance on recommended tabulations (basic) and indicators to be compiled from civil registration data as well as guidance on how to monitor the performance of civil registration systems. As an initial step in this regard, it is recommended that countries make available to SPC data on live births and deaths registered by calendar year, disaggregated by age group and sex, to be used to monitor regional progress on the performance of civil registration systems.

INTRODUCTION

1. Demographic measures of fertility and mortality are routinely required by governments to understand changes in the size, structure and characteristics of populations, and to monitor progress against health and other development targets that governments set. Administrative data sources, and in particular civil registration systems are universally recognised for their fundamental function of providing governments with a continuous and permanent source of population data and statistics. These systems are recognised by the United Nations, as being the most reliable and cost-effective sources of vital statistics (including statistics on causes of death).
2. Vital event data collated by from civil registration systems is central to the monitoring of a broad range of the goals, targets and indicators of the 2030 sustainable development agenda, including goal 16 which calls for universal birth registration as the basis for a legal identity, the health targets and indicators, outlined under goal 3 which require death registration and cause of death data, as well as the regional priorities set under the Pacific Healthy Islands Framework.
3. While the past few years have seen substantive improvements in civil registration systems of many countries, it is often still difficult to access vital event data at both the national and regional level. In other cases, data is routinely published, but the format does not allow for the data to be easily collated and used for planning. As countries face increasing reporting pressures for monitoring within the current international agreements, and with the ongoing health challenges in the region, it will be increasingly

important that decision makers have easy access to high quality, timely data; and that data is able to be shared in a consistent format with international agencies to reduce duplicative requests. It is further crucial that the status of performance of civil registration systems is continuously monitored and documented; this enables users to understand the quality of the data (from a completeness perspective), builds confidence in the reporting system and also assists in addressing any reporting anomalies that may exist.

MONITORING PERFORMANCE OF CIVIL REGISTRATION SYSTEMS

4. Basic monitoring of the performance of civil registration systems entails estimating the completeness of birth and death registration at national and sub-national levels. The latter requires a comparison of the number of vital events registered in a given year against the expected number of events (derived from an independent source) that is considered to be complete such as a country's most recent census data or the health information system. Completeness can be estimated at a national as well as subnational level; subnational level monitoring is crucial in highlighting the geographical areas that are lagging behind in registration coverage and completeness hence requiring special intervention measures. The basic formula used to estimate birth and death registration completeness is provided below:

$$\text{Birth registration completeness} = \frac{\text{No of births registered within one year of occurrence}}{\text{Expected number of births}} * 100$$

$$\text{Death registration completeness} = \frac{\text{No of deaths registered within one year of occurrence}}{\text{Expected number of deaths}} * 100$$

It is crucial to note that for an accurate estimate of completeness, the numerator should exclude any event that registered outside the referenced one year timeline. For example, if estimating completeness for year 2018, reference would be made to vital events that occurred between 1st of January and 31st December of the same year. Any child born in the previous year(s) whose birth was registered within year 2018 should therefore not be included in the completeness count for that particular year. To improve the accuracy of this estimate, it is important that countries collate data on both the date of occurrence of the event and the date of registration of the event. Other important variables to monitor are the (i) the proportion of deaths with a medically certified cause; (iii) the proportion of ill-defined causes of death.

5. To facilitate consistency in monitoring the performance of civil registration systems at a regional level, as an initial step, countries are requested to make available to SPC annual data on live births and deaths that occur and are registered by the 31st of March of each year, disaggregated by age group (mothers age group and age group of the deceased) and sex. Tables 1 and 2 provide the recommended templates for this reporting.

Table1 Births by age of mother (births)

Age group	Males	Females	Total
10-14			
15-19			
20-24			
25-29			
30-34			
35-39			
40-44			
45-49			
50+			

Table 2: Deaths by age and sex of the deceased

Age Group	Male (%)	Female (%)	
<28 days			
28 days to <1Year			
1-4			
5-9			
10-14			
15-19			
20-24			
25-29			
30-34			
35-39			
40-44			
45-49			
50-54			
55-59			
60-64			
65-69			
70-74			
75+			
Grand Total			

RECOMMENDED TABULATIONS FOR VITAL STATISTICS DATA

6. Statistics offices of Pacific countries with relatively complete registration systems (over 80% completeness for birth and death registration) are encouraged to establish a routine practice of analysing vital event data provided by civil registration systems and to make both basic tabulations and key indicators (aggregated over multiple years) available publically on an agreed annual basis. While rates and indicators should be reported on 3-5 years of aggregated data to reduce instability due to the small population sizes, tabulations should be reported for the events that occurred in previous calendar year. Countries are encouraged to report key indicators on fertility, mortality and cause of death in line with existing commitments including the SDG Pacific Headline Indicators and the Pacific Healthy Islands Framework. Countries that require assistance to complete these calculations or develop capacity to undertake this work can access assistance from the Brisbane accord group.

Table 3. Recommended Tabulations for Vital Statistics Data

Live Births (Please note that the data captured in these tables should strictly be exclusive to live births. Foetal deaths and still births should not be included in live birth data, but may be reported as separate tabulations)
<ul style="list-style-type: none"> • Total Number of live births, • Live births by sex of child • Live births by place of occurrence (Home, hospital, other or unknown) • Live births by place of usual residence of mother • Live births by age of mother (Classified by 5 year age group: <15, 15-19, ..., 50+). • Live births by gestational age (category) • Live table by birth weight (category)

<i>Deaths (including cause of death)</i>
<ul style="list-style-type: none"> • Total number of deaths • Deaths by sex and age at death (Classified by age group: <28 days, 28 days to <1 year, 1-4, 5-9, 10-14....., 70-74, 75+ years) • Deaths by place of usual residence and sex • Deaths by place of occurrence and sex • Deaths by type of cause data provided (medical certification, verbal autopsy, other or not stated) • Proportion of medically certified deaths coded as ill-defined or with no cause provided • Number of deaths by age group*, sex, and underlying cause of death (according to the International Classification of Diseases (ICDv10) – General Mortality list 1). <p>* Age group should at a minimum be disaggregated to <5, 5-14, 15-34, 35-59, 60+; however countries are highly encouraged to disaggregate to 5 year age groups and separate the first category into <1 and 1-4 years where there is sufficient data to do so.</p>

RECOMMENDATIONS

During this meeting, Heads of civil registration offices are particularly encouraged to:

- Monitor the performance of their civil registration systems, through routine estimation of birth and death registration completeness.
- Make available to SPC data on live births and deaths registered by calendar year, disaggregated by age group and sex, to be used to monitor regional progress on the performance of civil registration systems.

Further national statistics offices of Pacific countries are encouraged to:

- Establish a national schedule for the publication of vital statistics from administrative sources;
- Take note of the regional guidelines on the development of a vital statistics report available at https://sdd.spc.int/images/documents/Conferences_and%20Workshops/Workshops/2018_DARW_CRVS/Vital_statistics_reporting_template.docx

REFERENCES

- United Nations, 2014. "Principles and Recommendations for a Vital Statistics System." Statistical Papers, Series M No. 19/Rev.3. New York, NY: UN. Available at: <http://unstats.un.org/unsd/Demographic/standmeth/principles/M19Rev3en.pdf>
- Regional guidelines on the development of a vital statistics report available at www.spc.int

ANNEX

The Figures provide a mapping of the status of completeness of civil registration systems in the Pacific on the data provided by countries during past workshops.

