

SECRETARIAT OF THE PACIFIC COMMUNITY

REGIONAL MEETING OF HEADS OF PLANNING AND HEADS OF STATISTICS (HOPS)  
(Noumea, New Caledonia, 22–26 July 2013)

**Session 2: Civil Registration and Vital Statistics (CRVS)**

(Document presented by the Secretariat of the Pacific Community, in collaboration with Brisbane Accord Group)

**EXECUTIVE SUMMARY**

1. The *Pacific Vital Statistics Action Plan (PVSAP) 2011–2014*, which is aligned with the *Ten Year Pacific Statistics Strategy (TYPSS)*, was developed by the *Brisbane Accord Group* to highlight the importance of improving access to quality statistics on births, deaths and causes of deaths. This information is indispensable for accurate monitoring of population health, identifying health priorities and evaluating health program impacts; it also provides valuable context for a broad range of social development investment, pertaining to education, social security and child protection.

**Achievements**

2. Assessment and planning work has commenced in all 15 countries and three territories, with most having completed draft plans and started implementation of improvement activities. Planning work has included staff from the Ministry of Health, National Statistics Office, and the Civil Registry Office along with other key partners. Implementation of country plans has included: Medical certification training, policy changes, and analytical capacity building.

**Challenges**

3. Key challenges implementing the PVSAP include maintaining the momentum in countries to progress national plans and implementation, and ensuring that system improvements are reflected in an actual improvement in the availability and reliability of data, through the regular publication of CRVS data.
4. The lack of a common IT system or architecture for CRVS across the region also poses a number of challenges in providing support to countries where IT systems are either not functional or are not integrated well with reporting structures, and in regional data collation. Several countries and territories are currently planning for IT upgrades or purchases.
5. The UQ HIS Hub, a BAG coordinating partner, is currently winding up operations, affecting both available technical and secretariat support. At the same time, the partnership is experiencing increasing interest and engagement from countries, with associated support needs.

**Recommendations on proposed way forward**

6. Countries are encouraged to formalise their CRVS committees, and ensure CRVS is explicitly included in national statistics strategies. Regional activities underway include: development of a set of minimum standards for CRVS IT systems to help countries make responsible investments and facilitate improved technical assistance and regional data sharing; and a desktop review of legislation as a basis for further in-country discussions.
7. Countries are encouraged to endorse development of a regional guideline on what data they should generate from their CRVS systems and how frequently, and in what format this should be reported.
8. HOPS is invited to endorse the TYPSS Phase 1 Mid-Term review recommendation Nr. 12, which calls for continued funding for BAG activities.

## INTRODUCTION

1. Accurate data on births, deaths and cause-of-death are indispensable for accurate monitoring of population health, identifying health priorities and evaluating health program impacts. It also provides valuable context for a broad range of social development investment, pertaining to education, social security and child protection. This is particularly important in the Pacific due to the need to continue to monitor and report progress against the MDGs and the subsequent post 2015 development agenda; and the need to respond to the impact of non-communicable diseases on the population. In addition, the rise of the NCD epidemic has meant that many of the traditional methods for calculating life expectancy and adult mortality from census data are less reliable as they do not sufficiently account for this higher proportion of premature adult deaths. Civil registration and vital statistics is therefore an essential source of population data. Improved vital statistics data (focusing on births, deaths and causes of death) is a priority area for phase I (2011-2014) under the Ten Year Pacific Statistics Strategy.
2. Significant progress has been made in improving reporting processes and data quality since the inception on TYPSS, although much remains to be done. Implementation of work related to CRVS is undertaken as a collaborative effort through multiple agencies under the Brisbane Accord Group (BAG), coordinated by SPC and the Health Information Systems Hub at the University of Queensland (UQ HIS Hub).
3. The Brisbane Accord Group was established in 2010 including SPC, UQ, UNFPA, WHO, UNICEF, PHIN (Pacific Health Information Network), ABS (Australian Bureau of Statistics), QUT (Queensland University of Technology), UNSW (University of New South Wales) and FNU (Fiji National University), with the aim of supporting countries to improve their vital statistics and to improve coordination between development partners. Through this group the Pacific Vital Statistics Action Plan (PVSAP) 2011 – 2014 was developed to assist Pacific Island countries to understand the critical importance of vital statistics on births, deaths and causes of deaths and to improve their availability, accuracy and use.
4. The basic premise of the plan is to work with countries to undertake an assessment of their collection and reporting systems for births, deaths and causes of death. Assessment findings are used by countries to develop a country-specific Vital Statistics Improvement Plan. Partner agencies are then able to focus their support in a coordinated manner to meet the technical assistance needs identified in the country plans. This country driven approach recognizes the importance of local context; it acknowledges that while there are similarities in the issues that face countries in strengthening their civil registration and vital statistics systems, for technical support to be appropriate and for its desired impact to have a chance to become sustainable requires a good understanding of existing processes and structures.
5. The plan aims to implement activities within four categories of countries for which development priorities and needs are likely to be similar. Country groups are based loosely on geography, cultural affiliations, size, and known level of system development and are as follows: **Group 1:** Cook Islands, Nauru, Niue, Tokelau, Tuvalu; **Group 2:** Federated States of Micronesia, Marshall Islands, Palau (with CNMI and Guam), and American Samoa (who joined the program in early 2013); **Group 3:** Fiji, Tonga, Samoa; and **Group 4:** Papua New Guinea, Solomon Islands, Vanuatu, and Kiribati.

## KEY ACHIEVEMENTS

6. Assessment and planning work has commenced in all 15 countries and three territories, with most having completed draft plans and started implementation of improvement activities. In each country planning work has included staff from the Ministry of Health, National Statistics Office, and the Civil Registry Office along with other key partners.
7. Countries from group 1 have developed draft plans for improving CRVS that are currently being implemented (to varying levels). The initial workshop for Group 1 countries was held in Suva in September 2011, followed by in-country visits in 2012, and a further workshop October 2012.

The follow up workshop was an opportunity for countries to present progress, highlight potential barriers and discuss solutions and agree on a continued way forward. BAG partners are focussing on addressing remaining technical assistance needs identified through the earlier workshop and country visit processes.

8. An initial visit (and preliminary assessment) was conducted for each of the Group 2 countries in Nov/Dec 2011, with the initial sub-regional workshop held in April 2012 in Guam. Countries and states mapped current processes, conducted an assessment of existing systems, and identified priorities for action. These will form the basis of draft country or state plans for improvement of vital statistics. Follow up visits were conducted for RMI and FSM in early 2013. BAG has also been working with PIHOA to integrate follow up for the CRVS planning with Health Information Systems (HIS) training conducted in the region.
9. Group 3 countries are larger populations that had already undertaken extensive assessments of their HIS and CRVS systems. These countries have been encouraged to draw findings and priorities from these assessments together to develop a national plan that can be supported by all key stakeholders. All three countries have formed national CRVS improvement committees. In-country workshops have been supported by BAG in Fiji and Tonga to undertake mapping and prioritisation exercises with key stakeholders and both have draft plans which they are working to implement. A similar workshop has been proposed for Tonga and is expected to be held later this year.
10. The process envisaged for group 4 countries includes the following steps:
  - a. An inter-country workshop bringing together key leaders in civil registry, health and statistics from each country, for up-skilling in the assessment process. This will help ensure a country owned assessment process supported by BAG agencies.
  - b. Each country is then anticipated to need a national (in-country) workshop to kick off the assessment process, establish necessary committee(s) and assign tasks.
  - c. A series of TA visits are anticipated as required to help each country work through components of its respective assessment.
  - d. A final national workshop would then be required in each country to pull together assessment findings into an agreed national plan.

This work will be done in conjunction with other initiatives such as the joint European Union/UNICEF project on birth registration.

11. The initial inter-country workshop for group 4 was held in Brisbane in February, attended by Kiribati, Solomon Islands and Vanuatu (with PNG unable to attend). A further stakeholder mapping workshop has since been held in the Solomon Islands, along with several follow up visits to Vanuatu in the lead up to a national launch of their CRVS improvement process. A preliminary scoping visit has been conducted with PNG, and a “catch-up” workshop will be offered for the PNG national CRVS committee once a suitable time can be identified with key stakeholders.
12. The PVSAP and implementation work by countries and the BAG group of agencies was presented and has been recognised as a best practice model at the Global CRVS summit held in Bangkok in April 2013. CRVS was also included in the recent Ministers of Health Meeting in Apia Samoa.
13. Highlights to date have included:
  - a. Medical certification training with doctors and medical students (**Fiji, Samoa, Tonga, Tuvalu, Tokelau, Cook Islands, Niue, Nauru, FSM**).
  - b. Updating curriculum for medical students on certification practices and procedures (**Fiji National University, Oceania University of Medicine Samoa**).
  - c. Policy changes to adopt the WHO International Cause-of-Death Certificate (**Tuvalu, Fiji, Tonga, Samoa**).
  - d. Analytical capacity building through participation in a one-week Civil Registration and Vital Statistics Short Course at the University of Queensland (**Fiji, Tonga, Samoa, Solomon Islands**).

- e. Completing analytical and reporting writing attachments with SPC for vital statistics data **(Niue, Nauru, Tonga)**.
- f. Producing a comprehensive vital statistics report **(Niue)**.

## CHALLENGES

14. A range of challenges face countries in obtaining complete, high quality vital statistics and cause of death data. These are identified as part of the assessment process for each country. Common issues include difficulties capturing events that occur in outer islands/ remote areas; lack of cooperation between different ministerial offices, such as health, statistics and civil registration; a lack of procedures for verification; poor certification and coding for cause of death; and a high reporting burden on health facilities caused by the multiple, vertical information systems that exist for different diseases and disease programs. In addition, the role of analysing and reporting data from the CRVS system is often poorly defined or not assigned at all.
15. A key challenge for countries in improving their CRVS systems is maintaining the momentum required to progress their national plans and implementation. Many factors contribute to this; including the ongoing nature of the data collection (as opposed to the shorter intense effort required for a survey or census) which makes this easy to put aside as “less urgent”, and the multi-sectoral nature of this data collection. Progress across the region, even within country groups has been varied with some countries making great inroads into their implementation plan, and others progressing only as or when technical visits from partners are able to be arranged. Progress has been most notable in those countries that have taken ownership of the process, and who have developed clear mechanisms for leadership and accountability.
16. IT systems to support CRVS span Health (HIS systems and stand alone systems), civil registry and Statistics offices. The lack of a common IT system or architecture for CRVS across the region poses a number of challenges in providing support to countries: both where IT systems are either not functional or are not integrated well with reporting structures, but also in the ability to provide assistance in analysis or the collation and comparison of data and key indicators at a regional level as all data sets are collected in a different format. Efforts to improve CRVS systems in the past have frequently focussed on the introduction of new software systems to collect and report data, often with either mixed or poor results and little consideration of the sustainability of the system. Several countries and territories are currently planning for or are in the process of IT upgrades or purchases. These developments are happening rapidly, with work underway now likely to lock countries in to specific systems for the foreseeable future. Under the PVSAP process, countries are encouraged to focus on ensuring IT systems support good procedures and practices rather than having to adapt reporting structures to the available IT. Countries are however developing their IT solutions alongside these review processes and in most cases it is not feasible to ask countries to delay critical IT investments until national planning around CRVS is completed. Countries have also heavily invested already in a range of different IT platforms, and as such the current potential for introducing a standard IT system for CRVS in the region is somewhat limited.
17. As countries work towards improving their CRVS systems, a number of countries are now moving to a position where their routine administrative processes either can, or soon will be able to generate reasonably reliable data. Ensuring that system improvements are reflected in an actual improvement in the availability and reliability is a key regional challenge. It is critical that this data is analysed, reported and made available to decision makers. This may be a significant change for many NSO’s who have not previously had a clear role in the analysis or reporting of this data.
18. The UQ HIS Hub, a coordinating partner in BAG, is currently winding up operations, affecting both the technical and secretariat support available. Additionally several key technical people from BAG partner agencies have recently moved on to other roles. At the same time, the partnership is experiencing increasing interest and engagement from countries, with associated support needs.

## PROPOSED WAY FORWARD

19. At the national level, progress in improving CRVS closely reflects the level of political commitment to the assessment and planning process. Countries are **encouraged to formalise their CRVS committees to ensure that they have articulated political support**. Regardless of whether the NSO has formal leadership of this group, NSOs play a key leadership role in the process of building a sustainable CRVS system and bring a level of expertise around data management, use and connecting with data users that other departments may not have.
20. Priority actions for countries to consider should include:
  - a. **If not already done, conduct an assessment of the CRVS systems**. These assessments should be coordinated and implemented through the national committee.
  - b. **Develop detailed national CRVS improvement plans**. These plans should build upon results from the assessments, and contain a prioritised list of actions to guide countries and partners to coordinate and streamline investments. Plans should be made available to improve accountability. The national committee should oversee implementation of the plan, including tracking progress.
  - c. **Obtain high-level endorsement and support for the improvement plans**. Coordination and leadership at the national (and regional) level is crucial for the success of any plan.
  - d. **Ensure CRVS is embedded in the National Statistics Strategy**. The CRVS data relies on multi-sectoral cooperation, and is an important source of population data in the national statistics system.
  - e. **Ensure vital statistics are routinely updated in NMDIs**. NMDIs are a useful tool for countries to ensure data is accessible for decision makers. The sharing of data between countries (such as through the NMDIs) is also important for accountability, and facilitates the use of country-level data as the basis for planning, evaluation and priority setting at a regional and global level.
21. **Data standards and reporting**: In order to assist countries integrate the analysis and reporting into their national CRVS improvement plans, and to ensure these data sources are captured in key regional databases (such as NMDIs and HIIPS) and planning decisions, it would be useful to have an agreed regional guideline on what data countries should be able to generate and how this will be collated regionally. A draft set of reporting guidelines is therefore attached to this report for consideration as a starting point for further discussion.
22. **IT development for CRVS**: Drafting work has begun on developing a set of minimum standards for IT systems around CRVS in the Pacific in order to help countries make responsible investments, ensure that IT developments support the core functions required in a CRVS system, and start to provide a greater level of standardisation in the region to facilitate improved technical assistance and regional data sharing. These standards will be developed into a decision support tool for countries. Countries will be requested to assist with a review of appropriate standards as they are drafted.
23. **Framework for legal assessment**: A desktop review of legislation related to CRVS in the Pacific is underway to identify core components that should be included in the legislation, assess existing legislation frameworks around these core components and identify best practice examples from the region. This will then provide a framework for further country-specific discussion and review.
24. **Ongoing training for and engagement with doctors**: Accurate reporting of deaths and cause of death will require continued up-skilling and engagement with the medical sector. BAG partners such as WHO and UQ are working to ensure that there is a body of medical professionals in the region who have undertaken train-the-trainer courses on medical certification of death who can act as a resource for countries who identify this as a need in their national CRVS improvement plan.
25. A list-server has been developed to assist countries and partners to share information, and those who have not yet joined are encouraged to do so at <http://lyris.spc.int/read/allforums/> and searching for **Pacific Vital Statistics**.

26. BAG partners are committed to continuing to support countries to improve their CRVS systems under the Pacific Vital Statistics Action Plan, with this commitment confirmed by all partners at the BAG strategic planning meeting in Noumea. The partnership represents the strengths of many agencies, however as the impact of the resourcing changes become evident, additional resources will need to be sought to assist the group to provide a level of support to countries that meets the growing take-up of the program and interest across the region.

**POINTS FOR DISCUSSION**

27. The meeting is invited to comment on:
  - a. The recommendations for country actions and role of NSOs in this process
  - b. The need for regional guidelines and standards for reporting and IT
  - c. Participants are also encouraged to make contact with the legal expert here (Mr Ian McDonnell) during this meeting to share their thoughts on the legislation review.

## Appendix 1: Overview of BAG activities 2012-2013

### 2012

#### **January**

ESCAP vital statistics planning meeting  
PNG technical visit – preliminary scoping visit  
(Group 4)  
Niue follow up country visit (Group 1)

#### **February**

BAG partners meeting  
Tuvalu follow up country visit (Group 1)

#### **March**

Tokelau follow up visit (country office in  
Apia) (Group 1)

#### **April**

Group 2 initial inter-country workshop - Guam

#### **May**

#### **June**

Cook Islands follow up country visit (Group 1)  
Nauru follow up country visit (Group 1)

#### **July**

#### **August**

Technical attachment at SPC from Niue  
(Group 1)

#### **Sept**

#### **October**

Technical attachments at SPC from Tuvalu  
(Group 1) and Palau (Group 2)  
Fiji country meeting with BAG members  
(Group 2)  
BAG partners meeting  
Establishment of Vital Statistics List Server to  
facilitate ongoing support to countries  
Presentation at PIHOA workshop on HIS and  
IT for Group 2 countries

#### **November**

Group 1 follow up workshop - Fiji  
Medical certification of death training for  
doctors – Fiji (Groups 1, 3)  
Support for attendance at CRVS training  
workshop at UQ for selected countries

#### **December**

Technical visit to Samoa to meet with national  
committee (Group 3)  
ESCAP High Level Meeting on Vital Statistics

### 2013

#### **January**

Scoping work for Legal review and IT  
standards

#### **February**

Group 4 inter-country workshop – Brisbane  
(Kiribati, Solomon Islands, Vanuatu – PNG  
invited but did not attend)  
Coding assessment and training  
WHO/ SPC technical collaboration on IT  
standards development  
BAG logistics meeting

#### **March**

RMI follow up visit / CRVS workshop / Child  
protection report launch (Group 2)  
FSM follow up visit (Group 2)  
Vanuatu initial visit and rapid assessment  
exercise (Group 4)  
Coding training and assessment - Samoa

#### **April**

Am. Samoa – initial committee meeting and  
planning visit (new addition to program)  
Tokelau – follow up visit (Group 1)  
Samoa – follow up visit – assist committee in  
prioritisation exercise (Group 3)  
Global CRVS summit (and ESCAP regional  
plan update meeting)  
BAG agency strategic planning meeting

#### **May**

Solomon Islands – initial Mapping / Planning  
meeting with committee (Group 4)  
Vanuatu – follow up visit(s) with national  
CRVS committee (Group 4)  
UNV placement for RMI due to commence  
Tuvalu – follow up review (in-country) with  
national CRVS committee (Group 1)

#### **June**

HIS leadership course in Fiji (Groups 3 and 4)  
Coding training and assessment - FSM  
Vanuatu – follow up visit with national CRVS  
committee (Group 4)

#### **July**

Pacific Ministers of Health Meeting – Samoa  
(CRVS to be included in meeting agenda)  
Heads of Planning and Statistics Meeting –  
including CRVS  
Desktop legislation review

## **Appendix 2: Draft regional guidelines for reporting CRVS data.**

(Prepared by SPC-SDD for stakeholder consultations)

### **INTRODUCTION**

Accurate data on births, deaths and cause-of-death by age group and sex, are critical for monitoring population health, identifying health priorities and evaluating the impact of health programs. This data is also important for a broad range of social and development applications including basic population statistics, education, social security and child protection. CRVS data are particularly important in the Pacific in the context of policy and planning and for meeting international commitments to monitor progress on the Millennium Development Goals (MDGs) and track improvements in maternal and child health, understanding low life expectancies (with limited improvements over the last 20 years), and evaluating programs to address the emergence of non-communicable diseases (NCD's) as a major public health emergency in the region.

Over the last couple of years most Pacific countries have started to make significant improvements in their CRVS systems, with a concurrent (ongoing) improvement in the quality and availability of data collected through these systems. It is critical that this empirical data is made available and used in planning and evaluation in order to reduce over time the reliance on internationally modelled estimates and census estimates derived from models that do not adequately account of adult mortality, and that subsequently may or may not accurately reflect current conditions. Yet, even for countries that are able to produce reliable data on births and deaths by age/ sex (and in some cases cause), accessibility of this data remains an issue.

This guideline has therefore been developed to clearly outline the data required, and a process for making this data available at both national and regional levels for decision making and evaluation. In order to tabulate and report data at a regional level in a meaningful way, it is important that data presentation (and the data itself) is standardised as much as practicable. As such, reporting requirements have been taken directly from the agreed regional reporting structures such as the NMDI and the relevant international guidelines.

### **ANNUAL DATA COLLECTION FROM COUNTRIES**

#### **Minimum data**

Countries are encouraged / required to generate and report the following minimum information annually. A template to capture this data for deaths is attached in Appendix 1. This could be completed manually or (preferably) extracted as an automated report from a reliable country CRVS data system. Countries are requested to supply this information for the previous calendar year (i.e. 1 January to 31 December) by the 31 March the following year, as data for the regional MDG report is tabulated in April. Such reporting is already required for a range of regional reporting commitments (such as for NMDIs, MDGs, WHO NCD framework etc), although data is frequently either incomplete or derived from indirect sources such as census and survey estimates.

#### **Births**

- # births for the year
- # births by age of mother (5 year age groups)
- # births by geographic sub-region

#### **Deaths**

- # deaths for the year
- # deaths by sex and age (<1, 1-4, 5-9, 10-14.....65-59, 70-74, 75+)
- # deaths by geographic region by sex and broad age group (<5, 5-14, 15-59, 60+)



# neonatal deaths (aged 28 days or less)

### **Cause of death**

# deaths by age (<1, 1-4, 5-9, 10-14.....65-59, 70-74, 75+), sex and cause (according to the ICDv10 103 cause – General Mortality list 1).

Note: all PICTs except the US affiliated territories have agreed to tabulate cause of death based on ICDv10. For the US affiliated territories – there is a roughly equivalent list of 113 causes, and deaths should still be tabulated according to the main ICD9 chapter headings for regional comparison.

### **Data source**

Data source for births and deaths should be reported, along with any information about data completeness or quality if known. The data source should note whether the official statistics were derived from registered births and deaths (i.e. completed registrations through the national civil registration authority) or from other sources (such as health registration).

### **Data collection and reporting**

Countries are encouraged to formally document who is responsible for collation of the required data and reporting to external agencies, including SPC, through formal procedural manuals or data sharing agreements. SPCs point of contact for this information will initially be the national statistical agencies.

### **ANNUAL REPORTING AT SPC**

The basic data collection of routinely collected vital statistics from countries allows calculation and reporting annually at a regional level of key measures of fertility and mortality, aggregated over 3-5 years for stability. It also allows key causes of death at a regional level to be monitored to guide regional health and development investments.

Where data is considered reliable, key measures that will be calculated include

- Infant mortality rate (IMR)
- Neonatal mortality rate (NMR)
- Under 5 mortality (U5M)
- Adult mortality (by sex)
- Life expectancy at birth (by sex)
- Maternal mortality ratio (MMR)
- Probability of dying from key NCDs (ages 30-70) - as per WHO reporting requirements.

As data becomes more reliable and available, key measures will also be calculated and reported at a regional and sub-regional level for global comparison and benchmarking.

### **COUNTRY BASED REPORTS**

In addition to the basic counts that countries are encouraged to produce annually, countries are also encouraged to analyse and publish their vital statistics and cause of death data at least every three years. There is no prescribed timeframe or format for this reporting, however a draft report template is attached that may provide guidance for those that do not currently undertake such reporting. SPC and other BAG partner agencies are able to provide advice and assistance to countries that need/ would like assistance in how to undertake the required analysis, interpreting the results or reviewing draft reports.

### **Reporting standards for calculated measures of fertility and mortality**

In order to minimise stochastic variation (and subsequent misrepresentation) due to small population sizes, rates will be calculated on a minimum aggregation of 3 years of data, and wherever possible will be reported with appropriate confidence intervals. Where annual reporting is required,

a three year rolling aggregation will be used i.e. 2013 will use data from 2011-2013, and 2014 will use data from 2012-2014 etc. The use of shorter time periods is discouraged for all Pacific Islands due to the instability this produces in the data. The plausibility of the calculated data point in light of historical trends should also be considered given the small populations involved, especially for the very small countries or when data is disaggregated to produce rates that refer to sub-national levels or specific age group or causes of death.

Causes of death should be tabulated according to either ICD chapter or the 103 cause list (General mortality list one ICDv10) according to the level of detail required and number of deaths.

Data sources and known issues with under-count or data quality should also be reported. This also applies to the population data used to derive population based rates included in the reports.