HARNESSING CIVIL REGISTRATION RECORDS FOR VITAL STATISTICS

Vital statistics are essential for evidence-informed policymaking, efficient resource allocation and effective governance. As the backbone of national development efforts, they provide continuous and up-to-date information on key life events, such as births, deaths and marriages, enabling Governments to design responsive policies and deliver services that meet the needs of their entire population. These data are especially critical in sectors such as health and education and for social protection.

In times of crisis, be it natural disasters, conflicts, or pandemics, the value of timely and reliable vital statistics becomes even more evident. They allow governments and development partners to assess impact, allocate resources effectively and implement targeted interventions to mitigate harm to vulnerable populations. To fulfil this role, vital statistics must be representative of the entire population, including hard-to-reach communities and those in vulnerable situations. Accounting for everyone ensures no one is left behind when it comes to accessing disaster relief, healthcare and social protection in times of need.

Vital statistics are ideally produced from civil registration data. Compared to surveys and censuses, civil registration provides a continuous, timely and cost-effective source for generating vital statistics. In addition to basic event data, civil registration records contain essential demographic and health-related information, ideally for the full population.

Other types of identity management systems may not provide the same type or granularity of data or be complete for the full population. As an example, many members and associate members only issue national identification cards at a certain age and collecting minimal information about individual characteristics, meaning the underlying data cannot produce fertility estimates. These data can contribute to the monitoring of 67 SDG indicators (figure VIII), including those related to infant, child and maternal mortality, adolescent birth rates and deaths due to communicable and non-communicable diseases.

Figure VIII: **Number of SDG indicators benefiting from civil registration data and vital statistics**
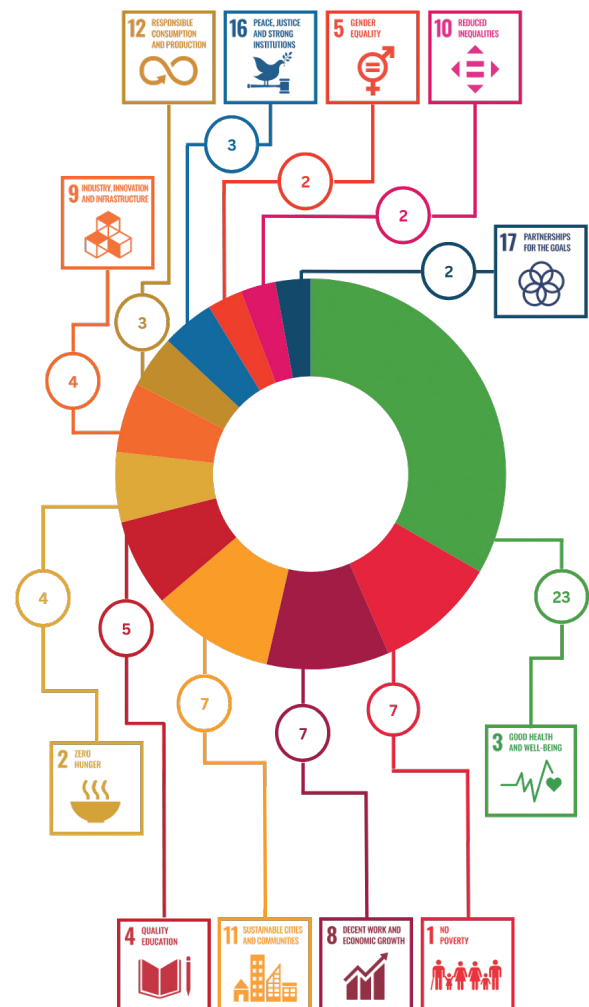
Source: The World Bank (2017). Civil registration and vital statistics (CRVS) for monitoring the Sustainable Development Goals (SDGs)

By continuously recording births and deaths disaggregated by age, sex and location, CRVS systems support the production of accurate population estimates, which are crucial for calculating any population-based indicator both within the SDG framework or beyond.

Vital statistics are a core focus of Goal 3 of the Regional Action Framework. Five specific targets track national progress in producing and disseminating statistics derived from civil registration systems:

Targets 3A and 3B assess whether members and associate members produce annual, nationally representative statistics on births and deaths using civil registration records, disaggregated by age of mother, sex of child, geographic area and administrative subdivision. Targets 3F and 3G focus on dissemination of vital statistics, requiring the annual publication of key summary tabulations on births, deaths and causes of death within one or two calendar years. Target 3H calls for the publication of a complete, accurate and timely vital statistics report for the previous two years, based primarily on civil registration data. These reports not only present data but also provide narrative insights that help explain key trends, identify disparities and guide policy responses.

High-quality vital statistics serve several key functions. They enable evidence-based policymaking by providing reliable data on births, deaths and causes of death, allowing governments to monitor population health trends, allocate resources more efficiently and design interventions that meet community needs. They also promote equity and inclusion, as disaggregated data by sex, age and geographic location reveal disparities and help shape policies that address inequalities, particularly for women and marginalized groups. In addition, comprehensive and timely vital statistics support effective planning and preparedness by underpinning long-term development strategies and strengthening the ability to respond to public health crises and demographic changes.

Figure IX: **Production of vital statistics on births and deaths from registration records by country in Asia and the Pacific, 2015 baseline and 2025 review**
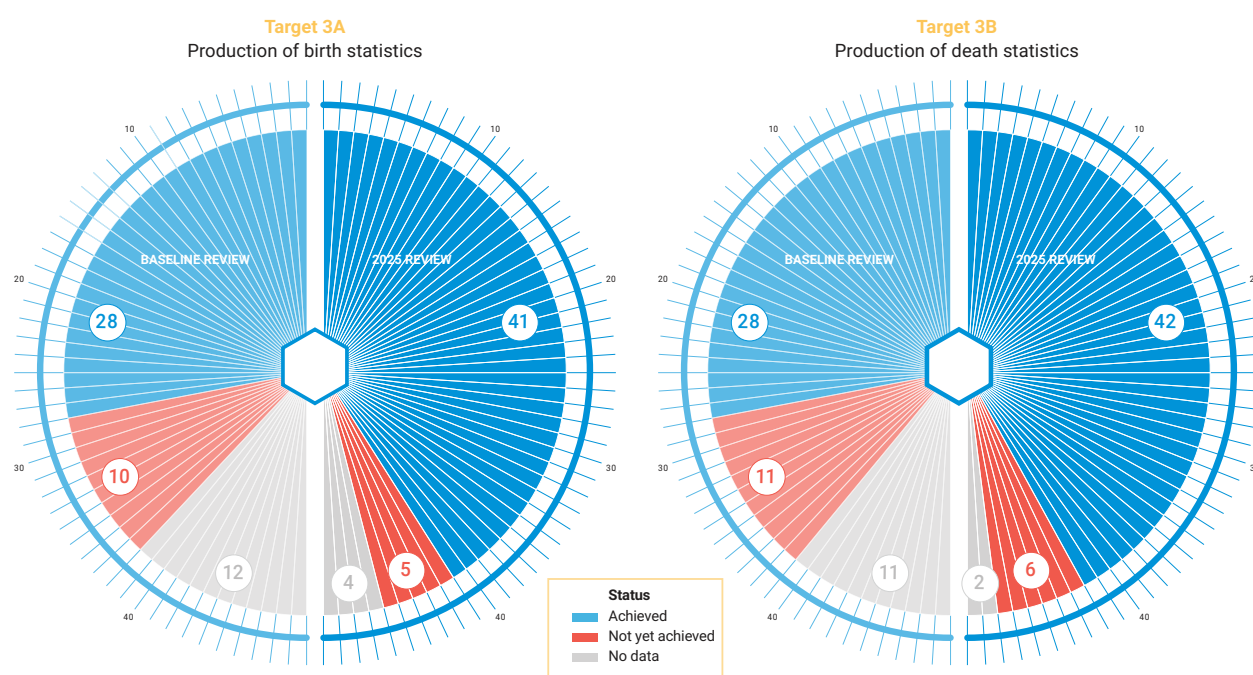
Note: Baseline review accounts for all questionnaires including late submissions. Members and associate members were able to update their baseline data when completing the 2025 review questionnaire.

Increased production of vital statistics from civil registration data

At the start of the CRVS Decade, many CRVS systems in the region were fragmented or still paper based. In the 2015 baseline review, only 28 members and associate members (56 per cent) reported using civil registration data to produce statistics on births and deaths (figure IX). By 2024, this number had grown dramatically: 41 (82 per cent) produced statistics on births and 42 (84 per cent) produced statistics on deaths.

The substantial improvement underscores the increasing recognition of civil registration as the most reliable data source for vital statistics. The trend has been facilitated in part by the increased digitalization of civil registration systems across the region.

BOX 8

ACCURATE, COMPLETE AND TIMELY VITAL STATISTICS REPORT PRODUCTION USING CIVIL REGISTRATION DATA: EXAMPLES FROM BANGLADESH, INDONESIA AND VIET NAM

Vital Strategies has provided crucial technical assistance and coordination support in strengthening CRVS systems in Bangladesh, Indonesia and Viet Nam—countries making significant strides toward the regular production of national vital statistics reports based on civil registration data.

Bangladesh's efforts to produce vital statistics from civil registration data began in earnest in 2016. Coordination support and multi-stakeholder engagement are enabling steps towards inter-agency coordination and data sharing between the Office of the Registrar General (ORG) and the Bangladesh Bureau of Statistics (BBS). These efforts culminated in the landmark signing of a Memorandum of Understanding (MoU) on 27 February 2025, which established a formal data sharing mechanism between ORG and BBS. This breakthrough helps Bangladesh to move beyond the sample vital registration system and toward the production of comprehensive, gender-disaggregated and age-specific vital statistics based on civil registration data, critical for national planning and policies.
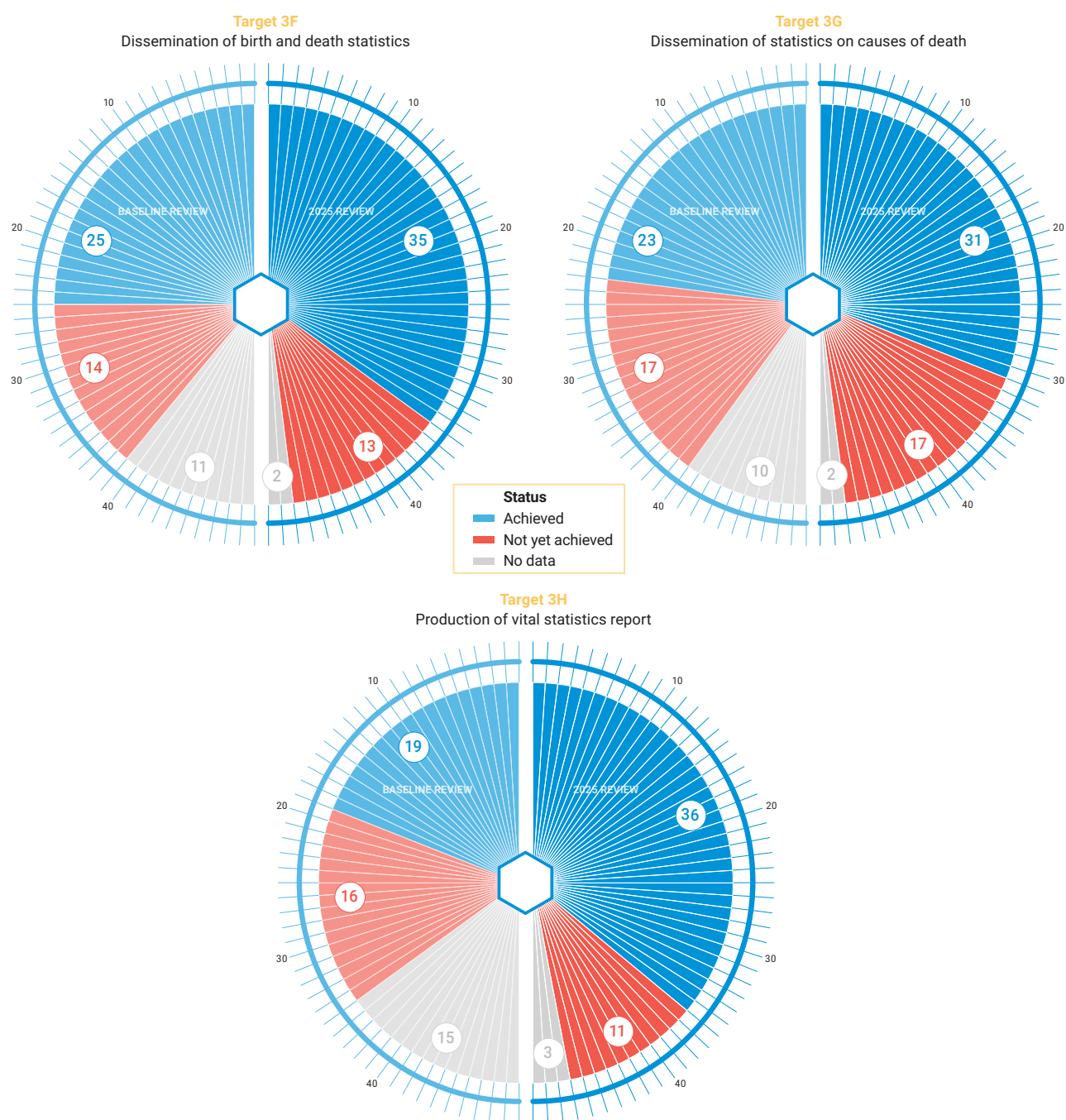
In Viet Nam, a multi-agency MoU was signed between the Ministry of Justice, the General Statistics Office (GSO) and Ministry of Health, facilitated through technical and coordination support from Vital Strategies through the CRVS and Data Impact initiatives. The agreement designated GSO as the lead agency for developing national vital statistics reports and led to the release of the country's first such report, which shall be officially launched in April 2025. This achievement aligns with the goals of the National Action Plan on CRVS (2017–2024) and was made possible through activities to identify data flow gaps, build consensus among ministries and ensure adherence to United Nations principles and standards.

Indonesia published its first national vital statistics report covering 2019–2023 in October 2024, following nearly two years of cross-ministerial collaboration. With support from the Data Impact team at Vital Strategies, the country developed a shared understanding of vital statistics production, issued a Ministerial Decree defining institutional roles and organized capacity-building workshops for key government bodies including the Ministry of Home Affairs (MoHA), Central Bureau of Statistics (BPS), Ministry of Health (MoH) and BAPPENAS. The event for the report launch underscored the government's commitment to sustaining vital statistics production and improving interoperability between systems.

36 reports in 2025

19 reports in 2014
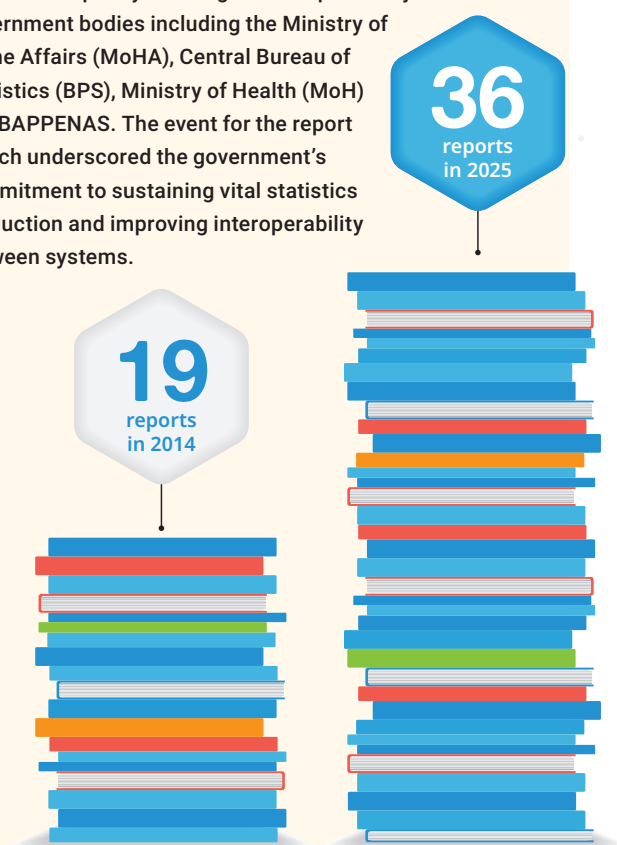
In South-East Asia, the number of members and associate members producing vital statistics on births and deaths based on civil registration records more than doubled since 2015. By the end of 2024, all reporting members and associate members in East and North-East Asia and the Pacific had produced vital statistics from civil registration data. Several examples of vital statistics can be found in box 8. Although this progress is commendable, it is important to note that the production process has not been institutionalised everywhere, so some of these reports may have been ad hoc reports and not produced on an ongoing regular basis.

Figure X: Dissemination of vital statistics and production of vital statistics report from registration records by country in Asia and the Pacific, 2015 baseline and 2025 review

Target 3F
Dissemination of birth and death statistics

Target 3G
Dissemination of statistics on causes of death

Target 3H
Production of vital statistics report

Status
- Achieved
- Not yet achieved
- No data

Note: Baseline review accounts for all questionnaires including late submissions. Members and associate members were able to update their baseline data when completing the 2025 review questionnaire.

Vital statistics are now more widely disseminated

Timely publication of vital statistics is essential to enable evidence-informed decision-making by national and subnational governments, civil society, private entities and the public. Governments, for instance, use complete and accurate vital statistics to design targeted health interventions or determine infrastructure needs, such as the number of schools per administrative area. To maximize impact, key summary tabulations of births, deaths and causes of death should be made publicly available in electronic format on an annual basis. This not only fosters transparency and accountability but also ensures that vital statistics are used to their full potential in supporting evidence-informed governance.

South-East Asia has made remarkable progress in the dissemination of vital statistics. Since 2015, the number of members and associate members in the subregion who published vital statistics on births and deaths electronically quadrupled. During the same period, the number of members and associate members disseminating data on causes of death more than doubled in South-East Asia. The Pacific also saw a noticeable increase in dissemination efforts, rising from just five members and associate members in 2015 to nine publishing vital statistics on births and deaths and eight also disseminating data on cause of death. By the end of 2024, at least half of the reporting members and associate members across all subregions have published key tabulations of vital statistics on births, deaths and causes of death (see figure X).

Dissemination of comprehensive vital statistics reports also improved. In South-East Asia, the number of members and associate members producing full reports increased fourfold. The Pacific and South and South-West Asia each doubled the number of members and associate members publishing vital statistics reports since 2015. By the end of 2024, more than two thirds of reporting members and associate members in all subregions had produced a vital statistics report using civil registration data.

What more can be done to enhance vital statistics?

Improving the availability and quality of vital statistics is closely linked with enhancing the inclusivity and resilience of CRVS systems. Given the multisectoral nature of CRVS, collaboration across civil registration, health and national statistics authorities is essential. A coordinated approach ensures that the production of vital statistics remains a priority, even during crises.

As an example, experts from the Ministry of Health can contribute crucial insights on the procedures and information required to register deaths and recording causes of death, including through verbal autopsy and medicolegal death investigation (see box 9). In 2024, over a quarter of the reporting members and associate members use verbal autopsy to obtain causes of death information, and nearly 60 per cent routinely conducted medicolegal death investigations.

Development partners have been offering technical and financial assistance to improve civil registration data quality and facilitate its use in policymaking.

Timely sharing of civil registration data with national statistical offices is essential for continuous production and dissemination of vital statistics. Real-time or near-real-time transfer supports rapid analysis and response, especially during emergencies. Achieving this requires robust legal frameworks and national digital infrastructure to ensure secure and systematic data exchange. These issues are explored further in the final chapter of this report.

BOX 9

UNCOVERING CAUSES OF DEATH FOR UNNATURAL DEATHS: MEDICOLEGAL DEATH INVESTIGATION

Medicolegal death investigation (MLDI) systems are government systems that examine unnatural deaths as specified by a country's legal framework. MLDI systems are complex given the involvement of various stakeholders, including health and law enforcement and the different aims in their examinations of the cause and circumstances of death. Law enforcement focuses on the determination of wrongdoing. Health focuses on the determination of cause and manner of death for the completion of the medical certificate of cause of death which is essential for generating data that informs public health decisions. Despite complexities and limitations that may hamper MLDI system functions, MLDI systems exist in all countries.

A well-functioning MLDI system that produces good quality cause of death data can greatly benefit public health through targeted policy and improved allocation of funds to prevent preventable deaths. MLDI system statistics have been used to improve car, road traffic, airplane, occupation,

building, swimming, consumer product and therapeutic drug safety standards which have directly resulted in the prevention of thousands of deaths.

Due to the complexity of a country's MLDI system, the number of stakeholders and resource limitations, it may feel overwhelming to identify the first step for system improvements. Good starting points for MLDI system strengthening include stakeholder mapping, a method to identify all potential actors engaged in the MLDI system and processes, and business process mapping, a method bringing stakeholders together to map out a specific MLDI process, commonly the notification of an unnatural death all the way through its inclusion in vital statistics. These methods provide a current understanding of system functions while bringing stakeholders together, often for the first time, for a common understanding of the system. This facilitates discussions on system challenges and solutions and the prioritization of the latter to support system strengthening.

When regular data sharing is established, national statistical offices can provide timely feedback to civil registration authorities on the coverage and completeness of records, helping to improve overall data quality. For example, inequality assessments of CRVS systems can be conducted by combining civil registration data with secondary sources such as censuses, surveys, or health information management systems. These assessments help identify population gaps and highlight groups that may be left behind, enabling the implementation of targeted policies to strengthen the inclusivity of civil registration and enhance the production of vital statistics.

Strengthening civil registration authorities through statistical data use

Using civil registration data for vital statistics creates a powerful feedback loop that strengthens both data quality and system performance. Continuous monitoring helps identify inconsistencies, errors and gaps in the data, prompting corrective actions in collaboration with the civil registration authority. Data validation further uncovers quality issues that can be addressed through improved procedures and targeted training. As processes are refined, operations are streamlined, bottlenecks are reduced and data collection tools and software are enhanced. Strengthening training ensures that staff, from civil registrars to data analysts, are equipped to manage and use data effectively. Moreover, accurate vital statistics are essential for policy development and resource allocation, enabling governments to make informed decisions in public health, education and other social sectors. This, in turn, drives the ongoing improvement of civil registration systems to meet the growing demand for reliable data.

Public dissemination of vital statistics fosters transparency and accountability. While it may reveal data gaps or limitations, it also provides a valuable opportunity for learning and improvement. National CRVS coordination mechanisms can use these insights to drive reforms and justify investments. For this reason, all members and associate members are encouraged to publish an annual vital statistics report, even when registration completeness is still low. These reports also contribute to global reporting efforts, such as the Demographic Yearbook System of the United Nations Statistics Division.

Enhancing capacity to produce vital statistics

During the CRVS Decade, several development partners have supported capacity-building activities aimed at increasing the use of civil registration data for the production of vital statistics, as well as facilitating the dissemination of these statistics and their application in policymaking. While the availability of data has significantly improved, transforming this data into actionable evidence requires strong organizational capacity for policy analysis. By strengthening staff capabilities and building systems that better connect data to policymaking processes, government agencies can more effectively use evidence to improve population health, address inequities and inform a range of policies.

Thirty-five reporting members and associate members indicated that they had actively promoted the use of vital statistics to inform and improve policies and programmes. In their responses, members and associate members highlighted the use of vital statistics in developing and monitoring national development strategies, as well as using population characteristics and distribution data to guide the preparation of programmes, strategies and policies. Several members and associate members also noted broader efforts to raise statistical awareness and build capacity among educational institutions and the public. These activities sometimes included competitions and public talks.

Producing high-quality vital statistics requires significant efforts to assess and maintain data quality. Many members and associate members have used the Analysing mortality levels and causes-of-death (ANACoD) tool to evaluate the quality of cause-of-death data, alongside the implementation of routine data quality management protocols as part of the day-to-day operations of CRVS systems. In addition to quality assessment, data must be cleaned, edited and analysed, a process that demands skills in demography, which are sometimes limited in lower- and middle-income settings.

Thirty-four reporting members and associate members indicated that government staff had received training on the production, analysis and/or dissemination of vital statistics. Several members and associate members have established training programmes within their national statistical offices to build staff capacity for analysing civil registration data for statistical purposes. Others, particularly smaller members and associate members, continue to rely on development partners to support skills development and capacity-building.