2

REGISTERING ALL DEATHS AND CAUSES OF DEATHS

Death registration plays a vital legal and administrative role for individuals and the state. A death certificate serves as a permanent, official record that is essential for legal processes related to inheritance, pensions, insurance claims and survivors' benefits. At a national level, death registration and the recording of cause-of-death data form the foundation of mortality statistics. In turn, these statistics are critical for public health planning, disease surveillance and resource allocation.

Equally important is the role of death registration in formally retiring an individual's identity. In member states and associated member states with interconnected databases, such as the Republic of Korea and Türkiye, the registration of a death initiates the transfer of information to multiple government and private systems, streamlining administrative processes.

The Regional Action Framework established six targets related to death registration and the recording and of cause of death data. Similar to birth registration targets (1A and 2A), targets 1D and 2B focus on ensuring that all deaths are registered and the accompanying death certificate is issued. Target 1E mandates that all deaths occurring in health facilities or with the attention of a medical practitioner have a medically certified cause of death recorded using the international form of the death certificate.

However, certification alone is not enough. To be useful for vital statistics, causes of death must be accurately described and coded in accordance with the International Classification of Diseases (ICD). Target 3C tracks the proportion of medically certified deaths that have an underlying cause coded using ICD standards.

The overall quality of cause of death statistics depends on both the accuracy of information included in the medical certificates and the cause of death coding. To further improve quality, target 3D aims to reduce the use of ill-defined codes. Recognizing that many deaths occur outside of health facilities and without medical practitioner's attendance, target 3E promotes the use of verbal autopsies to gather information on these cases and produce aggregate-level health statistics. These targets and their interlinkages are illustrated in figure V.

Figure V: Registration of deaths and recording of causes of death

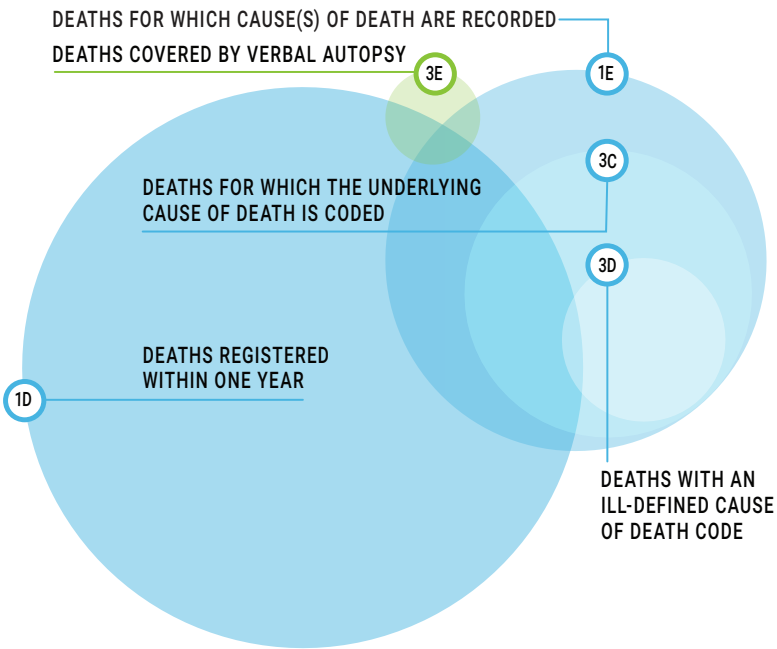
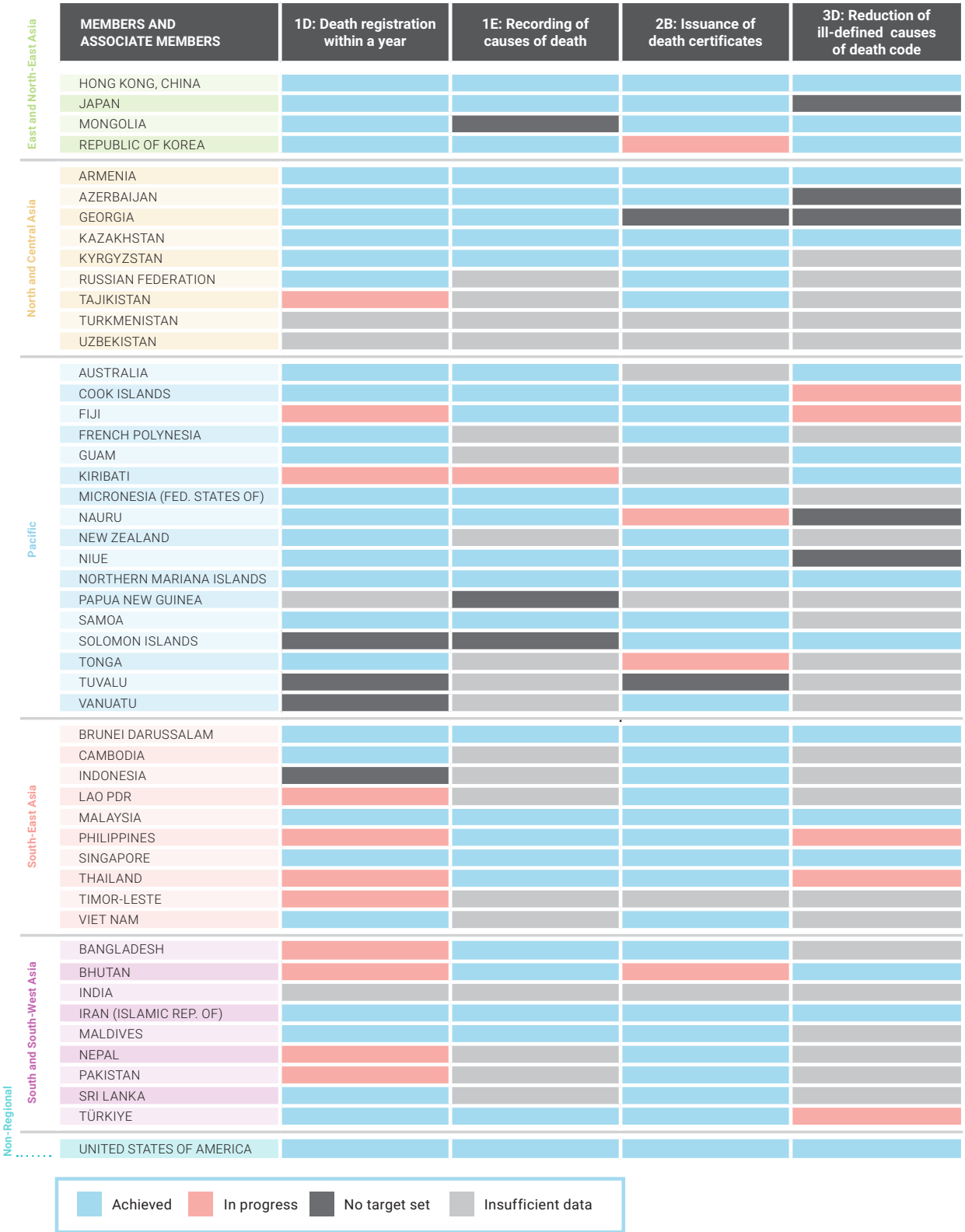
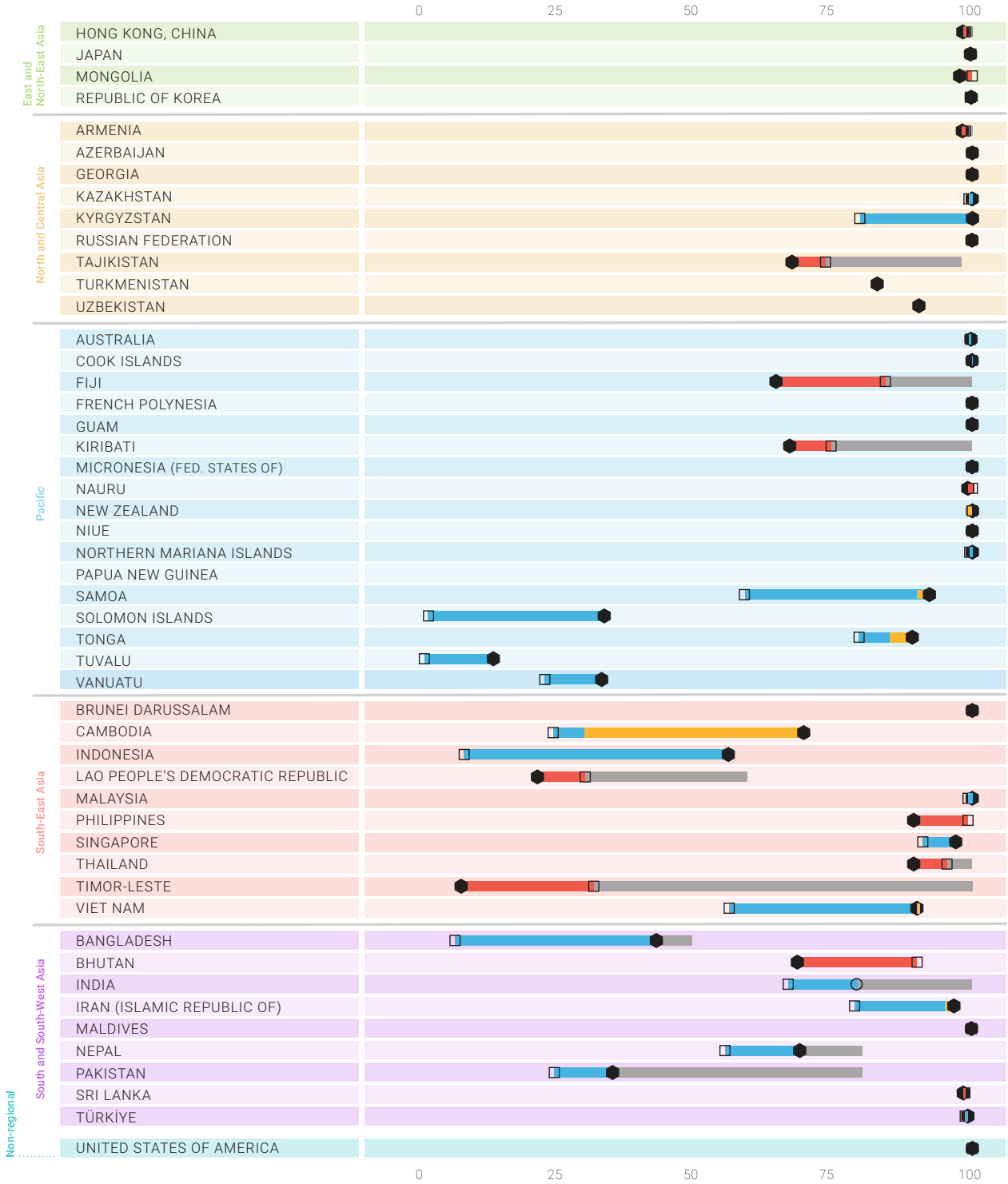


Figure VI: Overview of achievement against targets on death registration and the recording of causes of death



Note: Progress was assessed only for members and associate members that had submitted the 2025 review questionnaire. If the latest data (2022–2023) are not available, they are considered as having 'insufficient data'. Members and associate members were considered having 'achieved' their national target if the latest available data (2022–2023) was superior or equal to their target or was within 2 percentage points of 100 per cent if they had not set a target. Otherwise, it is considered 'in progress'. For most members and associate members, the 2025 review data are from 2023.

Figure VII: Death registration completeness – Progress towards target 1D

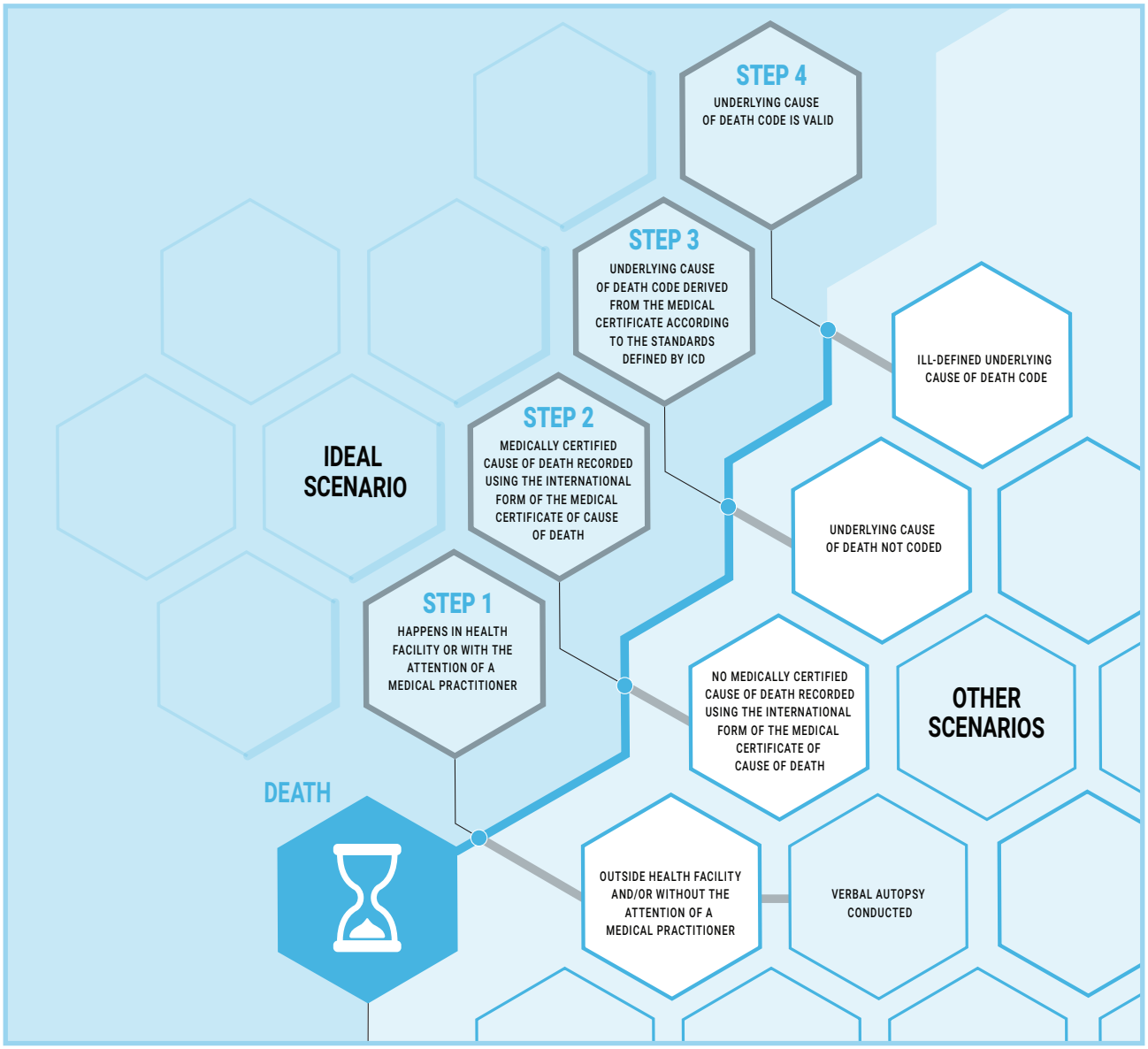


Note: Progress is compared from the baseline to the 2025 review. If a country does not have the latest available data (2022–2023), the baseline data is compared with the midterm data (2018). Death registration completeness depends on the quality of the estimated number of deaths, which is difficult to produce. The figures should therefore be interpreted with caution and be understood as a general indicator of the situation rather than an exact representation of reality. National estimates for the total number of deaths were used for computation of death registration completeness when available. Otherwise, the latest 2024 World Population Prospects (WPP) estimates were used. There are 17 members and associate members that have not set a national target.

Figures VI and VII provide snapshots of progress toward these targets. More than half of reporting members and associate members have achieved their target for death registration completeness (target 1D), and nearly three quarters have met their goal for timely issuance of death certificates (target 2B). This progress helps families access entitlements such as insurance and pensions more easily. Meanwhile, more than half of the reporting members and associate members have reached the target for medical certification of causes of death (target 1E). However, only one third have succeeded in reducing ill-defined codes below their national target (target 3D), and nearly half were unable to report on targets 1E and 3D due to insufficient data, highlighting the urgent need for investment in cause-of-death certification and coding systems.

More deaths registered, but gaps persist

Death registration completeness has improved significantly during the CRVS Decade, especially among those members and associate members starting from low baselines. In 2015, Bangladesh and Indonesia had death registration completeness rates below 10 per cent. By 2024, those rates had climbed to 43 per cent and 57 per cent, respectively (figure VII).



Trends show progress and uneven gains

Members and associate members in the Pacific and South-East Asia have shown notable progress in meeting death registration targets in 2024 compared to 2015. Cambodia, Samoa, Tonga and Viet Nam have exceeded their targets for registering deaths within one year of occurrence. However, regional progress remains uneven. Some members and associate members have yet to meet their targets, and a few have even regressed. Overall, an estimated 6.9 million deaths, approximately 21 per cent of all deaths, go unregistered annually in Asia and the Pacific, underscoring the need for continued investment and targeted interventions.

More death certificates issued upon registration

By the end of 2024, three fourths of members and associate members had met their national targets for timely death certificate issuance, up from two thirds in 2015. This progress is partly driven by national laws requiring a death certificate to proceed with burial or cremation, such as in Maldives, Northern Mariana Islands, Philippines and Türkiye. Incentives, both financial and procedural, also play a role. For example, in the Philippines, a death certificate is required to access funeral arrangements, insurance, pensions and estate settlements.[16]

However, some members and associate members, such as Republic of Korea, Nauru and Tonga, fell short of their targets because death certificates are issued only upon request and often incur fees, posing barriers to timely access. Other members and associate members lacked sufficient data to assess progress. Ensuring timely and affordable access to death certificates remains critical for enabling families to fulfil legal, financial and cultural obligations.

Quality and availability of causes-of-death data lag behind

Many members and associate members have yet to meet their targets related to recording causes of death. Medical certification of cause of death is possible for deaths that have occurred at a health facility or with the attention of a medical practitioner, and the resulting certificate serves both administrative and legal purposes. Three fourths of reporting members and associate members medically certify causes of death using the international form of the medical certificate of cause of death. Three additional countries use their own standardized form. However, just over half of the reporting members and associate members have reached their national targets on medically certifying causes of death using the international form of the death certificate. While some of these deaths may be subject to verbal autopsies or may be covered through survey efforts, the majority will likely never appear in any mortality statistics and these deaths will not count when health policies are developed.

Once a medical certificate is completed, the next step is ICD coding of the underlying cause. These codes enable the production of high-quality, internationally comparable mortality data. Yet by 2024, only 50 per cent of reporting members and associate members had achieved their target for ICD coding of medically attended deaths. The quality of these codes is also variable, with 0.4 to 57.1 per cent of cases classified as ill-defined, undermining their utility for evidence-based decision-making (box 5).

16 https://psahelpline.ph/psa-death-certificate.

BOX 5

IMPROVEMENTS IN THE QUALITY OF CAUSES OF DEATH DATA IN ASIA AND THE PACIFIC

Accurate mortality data with cause of death are essential for tracking epidemiological trends and identifying emerging health concerns, as well as evidence-informed policy. While members and associate members of ESCAP have invested in expanding CRVS coverage to routinely produce such data, data completeness alone is not sufficient—data accuracy is equally critical. A high proportion of deaths classified as ill-defined, vague, or unknown can skew the cause-of-death distribution. This misrepresentation can mislead decision-makers, potentially diverting resources away from preventing deaths caused by major diseases or conditions.

Inadequate training of physicians in completing the medical certificates of the cause of death according to the International Statistical Classification of Diseases (ICD), coupled with limited awareness of the importance of accurate cause-of-death data for public health planning and response, are core factors contributing to low data quality.

Over the past decade, several countries have taken significant steps to improve the quality of their cause-of-death data. Notably, Thailand and the Philippines have implemented reforms which have included investing significantly in training of medical doctors in certifying causes of death in line with ICD requirements. Also, national authorities have taken initiatives to improve the coding and selection of the underlying cause of death and additionally, they have implemented mechanisms to regularly monitor the quality of cause-of-death statistics. These concerted efforts have led to a substantial decline in the proportion of ill-defined causes between 1998 and 2019, as reflected in data submitted to the WHO.

Expanding cause-of-death recording for community deaths

A large share of deaths in Asia and the Pacific occurs outside health facilities or without the attention of medical practitioners, making accurate cause-of-death data challenging to obtain. Capturing community deaths is therefore essential to building a complete picture of population health. In 2024, the proportion of such community deaths ranging from 6 to 83 per cent of all recorded deaths in members and associate members of ESCAP. Yet without medical certification, these deaths often go undocumented in mortality statistics, rendering them effectively invisible and skewing public health data and resource allocation.

Verbal autopsy is a practical tool for determining probable cause of death in settings where access to medical professionals is limited. It involves structured interviews with family members or caregivers to gather information about symptoms and circumstances preceding death.[17] While it does not provide a legal determination of cause at the individual level, verbal autopsy is an essential tool for generating population-level cause-of-death statistics where it would otherwise not be possible. Despite its usefulness, verbal autopsy remains underutilized in the region. In 2024, only 30 per cent of reporting members and associate members employed verbal autopsies to produce cause-of-death information for community deaths. Expanding the use and enhancing the quality of verbal autopsy is critical to improving the completeness and reliability of mortality statistics including in resource-poor settings yet. In 2024, only 16 per cent of members and associate members provided regular training to frontline or community-based workers responsible for conducting these interviews.

17 See ESCAP/MCCRVS/2021/INF/2.

BOX 6

INNOVATION IN CAUSES OF DEATH ANALYSIS IN THE PACIFIC: JOINT CAUSES OF DEATH CODING BETWEEN FIJI, TONGA AND TUVALU

Mortality data accuracy has long been a challenge in the Pacific, despite efforts to improve CRVS systems. The Action Plan for Pacific CRVS (2023–2026) prioritizes strengthening cause-of-death certification and coding to address these challenges.

De-identified cause-of-death information is being exchanged between Fiji, Tonga and Tuvalu in a pilot project supported by the Pacific Community (SPC) that sees the countries sharing expertise towards better health outcomes. The project is testing a regional approach where mortality coders from Pacific countries collaborate, share workloads and specialized tools.

Underway since 2024, key activities have included developing terms of reference and securing funding from Vital Strategies, the Government of New Zealand and SPC; forming a regional team of trained Pacific coders; establishing support for training, technical assistance and quality review; strengthening medical certification processes in Tonga and Tuvalu; and providing peer-to-peer sessions on morbidity data collection and reporting.

The pilot successfully developed data-sharing standards and agreements among participating countries; created a process for anonymized cause-of-death records to be coded across borders; established a secure digital workspace for authorized staff to access death records; and implemented a governance mechanism for quality review and monitoring of coding results.

'One of the biggest problems we had before this programme is the lack of skilled people on the ground,' said Mr. Ronnie Samuel of Tuvalu's Ministry of Health. 'This programme has been really helpful for us.'

'Data quality for mortality data has been a challenge which required significant improvement,' said Mr. Walter Hurrell, chief information officer with the Ministry of Health in Tonga. 'In order to address these data quality challenges, this platform leverages the capacity of ICD coders in Fiji.'

Following a positive evaluation in December 2024, the pilot will continue, with plans for wider imple-mentation. Additional countries, including Kiribati and Palau, have expressed interest, supported by funding from Bloomberg Philanthropies.

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What can the region do to improve death registration and cause-of-death recording?

While many interventions to improve birth registration are also relevant for death registration and cause-of-death recording, the diverse sociocultural contexts across Asia and the Pacific require tailored approaches. Some countries in the region have partnered in innovative ways to analyse and record causes of death (box 6). What works in one country may not be effective in another, highlighting the importance of context-specific solutions and approaches to improve death registration and causes of death recording.

Regardless of the approach, the involvement of the health sector is essential for meaningful and sustained improvements. Shifting reporting responsibilities from families to health professionals can streamline registration. In many Asia-Pacific countries, legislation mandates that health professionals report vital events.[18] These professionals are responsible for reporting births and deaths, validating the information, which supports the registration of these events. Increasingly, these notifications are electronic and automatically shared with the civil registration authorities.

In some systems, such as those in Armenia and Singapore, civil registrars are stationed in hospitals to provide registration services directly at the point of care, while other countries empower health administrators to serve as registrars who are entrusted with verifying and validating reports from families and community members.

Training remains critical. Doctors, coroners and coders must understand international standards to avoid misclassification and incomplete data. Yet by 2024, just over half of reporting members and associated members offered regular training on medical certification and ICD coding. Encouragingly, 40 per cent have introduced or updated training in medical schools since the start of the CRVS Decade. As members and associated members transition to the International Statistical Classification of Diseases 11th Revision (ICD-11), maintaining updated training materials is essential. As of 2024, three members and associated members in the region had implemented ICD-11, with three more planning to follow in 2025. Box 7 provides more information on ICD-11.

BOX 7

IMPLEMENTATION OF THE INTERNATIONAL CLASSIFICATION OF DISEASES 11TH REVISION (ICD-11)

The International Classification of Diseases (ICD) is a globally recognized system that provides a common language for recording and monitoring diseases, injuries and causes of death. It plays a crucial role in enabling the comparison of health statistics across different regions and time periods. In terms of mortality, the ICD is essential for coding and classifying causes of death. This standardized coding system allows for the consistent recording of mortality data on death certificates, which is essential for public health surveillance, policymaking and research.

The ICD origins date back to 1893 when the International Statistical Institute adopted the first international classification. With the founding of the World Health Organization (WHO) in 1948, the organization assumed responsibility for maintaining and updating the classification. It endorsed the sixth revision, then known as the International List of Causes of Death. Since then, the ICD has undergone several more revisions.

To address new technologies and the evolving needs of countries the eleventh revision of the International Classification of Diseases (ICD-11) was released in 2019, and it came into effect globally on 1 January 2022. The ICD-11 enhances the process of generating mortality information, making it faster, more accurate and cost-effective, while incorporating the latest scientific updates. Designed for the digital age, it ensures smooth application and interoperability with digital health systems for electronic health records.

The ICD-11 is accompanied by a comprehensive suite of freely available digital tools designed to support countries in its implementation, including resources for coding, identifying the underlying cause of death and analysing data. Unlike ICD-10 which presented significant challenges for many low-income countries, particularly due to costs associated with printed materials and training, the fully digital ICD-11 significantly lowers these barriers. It is available in both online and offline versions to accommodate varying digital infrastructure.

Several countries in the region are currently planning the implementation of ICD-11, including conducting training and piloting initiatives.

18 See ESCAP/MCCRVS/2021/3.