



BUILDING STRONGER VITAL STATISTICS IN **KIRIBATI**: PROGRESS, CHALLENGES, AND THE ROAD AHEAD

© SPC, Beryl Fulilagi

1. INTRODUCTION

This brief presents key summary statistics on registered births and deaths in Kiribati, for the five-year period 2020–2024. It was prepared by Kiribati’s Civil Registry Office (CRO), Ministry of Justice (MoJ) with support from the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), the Pacific Community (SPC) and the Bloomberg Philanthropies Data for Health Initiative. The brief provides an overview of the current status of the civil registration and vital statistics (CRVS) system in Kiribati, documenting progress made between 2020 and 2024 in strengthening birth and death registration, as well as the challenges that continue to constrain the production of reliable civil registration-based vital statistics.

Kiribati (Republic of) is a widely dispersed Pacific island nation comprising 32 atolls (of which 21 are permanently inhabited) and reef islands, and one raised coral island. The islands are dispersed over 3.5 million square kilometres of ocean, with communities spread across the Gilbert, Line, and Phoenix I¹ Kiribati has a population of approximately 134,518 people (2024). The majority of the population resides on South Tarawa, the capital and administrative centre, where population density is among the highest in the Pacific. Kiribati is classified by the World Bank as a lower-middle income country.

The registration of births and deaths in Kiribati is governed by the *Births, Deaths and Marriages Registration Ordinance (1968)* and responsibility for civil registration lies with the CRO under the Ministry of Justice, headed by the Registrar General. The national civil registry is located in Bairiki, South Tarawa, with registration functions carried out at district level across the outer islands by designated registration officers. The CRO is responsible for the compilation, analysis and dissemination of civil registration-based vital statistics. The health sector operates a routine monthly reporting mechanism. All clinics in Kiribati submit birth and death data to

¹ United Nations, *World Population Prospects (2024)*, <https://population.un.org/wpp/>

the Health Information Unit through the MS1 (Monthly Consolidated Statistical Reports). These reports are completed by Medical Assistants or Public Health Nurses and submitted on a monthly basis. Major hospitals, including Betio Hospital, Southern Kiribati Hospital and London Kiritimati Hospital, also report births and deaths through the MS1 system, while Tungaru Central Hospital (TCH) in South Tarawa uses a separate data collection system, with births and deaths subsequently incorporated into national health statistics.

Over recent years, Kiribati has undertaken a series of reforms to strengthen and modernize its CRVS system, centered on the transition from paper-based registration to a centralized digital platform. Key developments include improved coordination between the Civil Registry Office and the health sector, system upgrades enabling direct entry of birth information at Tungaru Central Hospital (TCH), engagement in regional initiatives on cause-of-death certification, and mobile registration campaigns across outer islands to improve access and coverage in remote communities (with support from UNICEF).² Assistant Social Welfare Officers (ASWOs) serve as frontline, district-level registration officers on Kiribati's outer islands, supporting the notification and registration of births and deaths in areas with limited access to permanent civil registry services. These developments reflect a growing national commitment to building a more responsive, accessible and reliable CRVS system that supports both legal identity and the production of vital statistics.

In 2025, the CRO completed a comprehensive data-cleaning initiative aimed at validating birth and death records and identifying duplicate entries in the national registration database. This brief presents preliminary analyses of registered vital events occurring between 2020 and 2024, incorporating supplementary data from the Ministry of Health and Medical Services (MoHMS) and estimates of total births and deaths from the United Nations World Population Projections (UNWPP).

2. REGISTERED BIRTHS

A total of 14,564 live births occurring between 2020 and 2024 were registered in Kiribati.³ Registered births declined from 3,105 in 2020 to 2,452 in 2024 (*Table 1* and *Figure 1*). This downward trend is expected due to the effect of late or delayed registrations. For instance, a birth that occurred in 2020 but was registered in 2024 is included in these figures. Conversely, a birth that occurred in 2024 but is registered after the data extraction date (e.g., in 2026) will not appear in this dataset. This timing gap means that more recent years typically show lower counts because late registrations have not yet been captured.

Table 1. Number of live births registered in Kiribati (MoJ) by year of birth, compared to births reported to MoHMS and estimated total births (2020–2024)

Year of birth	Number of births registered by the Civil Registry Office (MoJ)	Number of births reported to the Health Information Unit (MoHMS) ⁽¹⁾	Estimated total number of births (UNWPP) ⁽²⁾
2020	3,105	3,133	3,449
2021	3,494	3,455	3,455
2022	2,942	3,404	3,445
2023	2,571	3,159	3,421
2024	2,452	2,995	3,405
TOTAL (2020–2024)	14,564	16,146	17,175
AVERAGE (2020–2024)	2,913	3,229	3,435

Note: (1) Number of births reported to HIU (collected from KHIS and MS1), published in the Kiribati Annual Health Bulletins; (2) Birth estimates are derived from the United Nations World Population Prospects (2024). Figures for the period 2020–2023 are retrospective estimates based on reconstructed demographic trends using available empirical data, while figures for 2024 are projections based on the medium fertility variant.

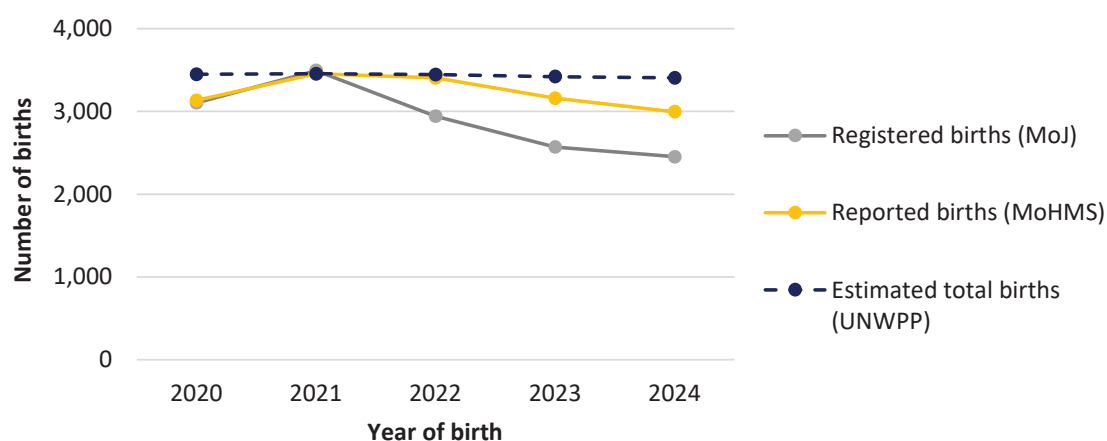
² <https://repository.unescap.org/items/5a260175-8be9-4fcb-9138-f88861928a49>

³ These counts reflect the civil registration data as extracted on 25 September 2025. Births that occurred during the reference period (2020–2024) may have been registered after this extraction date and are therefore not included in the reported totals.

The average number of registered births between 2020 and 2024 was 2,913 per year, compared to an estimated annual average total of 3,435 births in Kiribati based on UNWPP estimates and projections.

Figure 1 presents the number of live births registered by the civil registry by year of birth, alongside the number of births reported to the Health Information Unit (HIU) under the MoHMS. The figure clearly illustrates a widening divergence over time between the number of births registered through the civil registration system and those reported by the health sector, highlighting the persistence of late and delayed birth registration.

Figure 1. Number of live births registered by the civil registry (MoJ), compared with births reported to the Health Information Unit (MoHMS), by year of birth (2020–2024)



2.1. Birth registration completeness

Birth registration completeness was assessed by comparing the number of births registered by the CRO (numerator) with the estimated total number of births in Kiribati derived from UNWPP (denominator).

Over the five-year period (2020–2024), approximately 85% of births were registered, regardless of when registration took place (including late and delayed registrations) (**Table 2**). In 2021, the estimated completeness of birth registration exceeds 100%, which does not indicate a true over-registration of births, but rather reflects inconsistencies between the number of registered births (numerator) and the comparison estimates used as the denominator.⁴

Approximately 74% of births were registered within one year of occurrence. Over the five-year period observed, performance fluctuates, peaking at 86% for births occurring in 2021, and the most recent estimate suggesting 71% of births occurring in 2024 were registered within one year.

Over the same five-year period, approximately 94% of births occurring between 2020 and 2024 were reported to the HIU, managed by the MoHMS, when compared with the annual estimated total births produced by the UNWPP. This relatively high level of reporting completeness presents an important opportunity to strengthen linkages between the health sector and the civil registry, ensuring that all births captured by the HIU are subsequently registered.

⁴ Several factors may contribute to this pattern. First, uncertainty in model-based birth estimates, such as those produced by the UNWPP, may result in underestimation of births for specific years, particularly during the COVID-19 period when population data collection, migration patterns and fertility behaviours were disrupted in many countries. In addition, residual duplication in civil registration data may also contribute marginally (e.g., hospital-initiated registration records later re-entered at the CRO and were not detected during the data cleaning process).

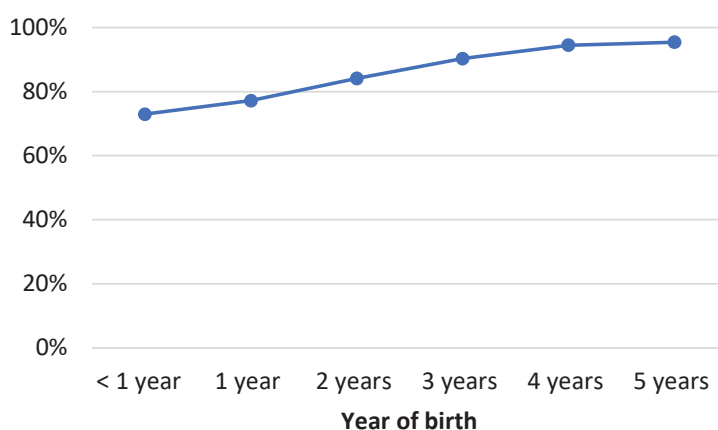
Table 2. Completeness of birth registration and births reported to MoHMS, compared to estimates of total births (UNWPP), 2020–2024

Year of birth	Completeness of birth registration (% ever registered) ⁽¹⁾	Completeness (% of births registered within 1 yr of occurrence) ^{(1) (2)}	Completeness of births reported to the Health Information Unit (MoHMS) ⁽¹⁾
2020	90.0%	67.4%	90.8%
2021	101.1%(3)	86.1%	100.0%
2022	85.4%	77.5%	98.8%
2023	75.2%	68.1%	92.3%
2024	72.0%	71.3%	88.0%
TOTAL (2020–2024)	84.8%	74.1%	94.0%

Note: (1) Completeness of birth registration/reporting has been estimated using UNWPP (2024) estimates as the denominator; (2) This indicator should be interpreted with caution given the inconsistencies noted in the recording of date of registration; (3) Completeness rates exceeding 100% reflect inconsistencies between the numerator and denominator rather than true over-registration.

To provide an estimate of birth registration completeness using a more accurate, nationally representative denominator for total births, completeness was also calculated for the cohort of children aged 0 at the time of the 2020 census (**Figure 2**).

The observed increase in birth registration completeness with child's age reflects the prevalence of delayed registration practices in Kiribati. While 73% of births in 2020 were registered within one year, completeness rises to 95% by age five years, indicating that many registrations occur well after the recommended timeframe. This pattern is also observed in other Pacific Island Countries and Territories, such as Fiji⁵ and Samoa⁶, where registration is often delayed until school enrolment age.

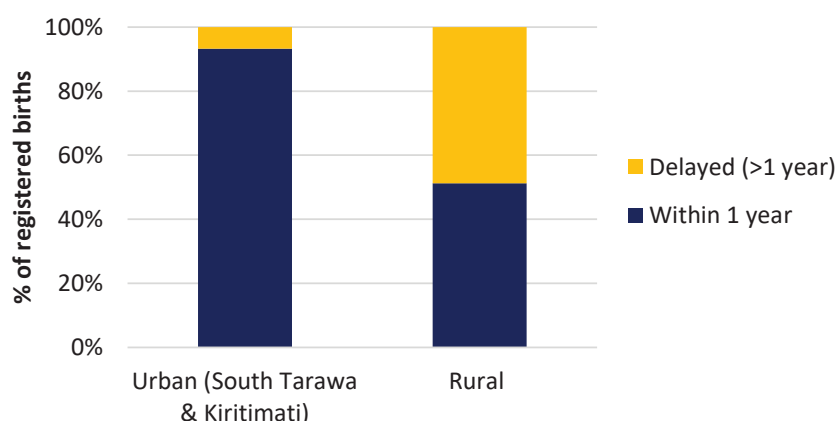
Figure 2. Birth registration completeness for the cohort of children aged 0 in the 2020 census

2.2. Birth registration timeliness, by place of birth

Among registered births that occurred between 2020 and 2024, there is a wide and statistically significant urban-rural gap in birth registration timeliness by place of birth. Among registered births in urban areas (South Tarawa or Kiritimati), 93% were registered within one year, compared to only 51% of registered births in rural areas. This indicates that in more remote and hard-to-reach outer islands, birth registration is substantially more likely to be delayed.

5 https://crvs.unescap.org/sites/default/files/resources/Fiji%20CRVS%20Inequality%20Assessment%20Report_1.pdf

6 <https://crvs.unescap.org/sites/default/files/resources/ESCAP-2025-RP-Assessing-inequalities-registration-births-samoa.pdf>

Figure 3. Birth registration timeliness by urban/rural place of birth, aggregated over 5-year period (2020–2024)

3. REGISTERED DEATHS

A total of 3,432 deaths occurring between 2020 and 2024 were registered in Kiribati (**Table 3** and **Figure 4**), of which 1,994 were male and 1,430 were female. A slight decline in registered deaths is observed in 2024, which is likely due to delayed registrations that have not yet been captured.

Table 3. Number of deaths registered in Kiribati (MoJ) by year of death, compared to deaths reported to MoHMS and estimated total deaths (2020–2024)

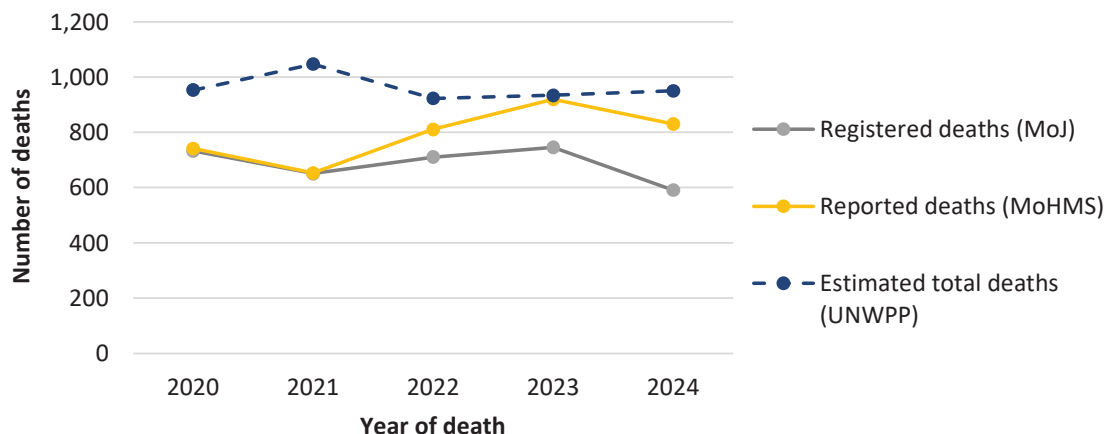
Year of death	Number of deaths registered by the Civil Registry Office (MoJ)			Number of deaths reported to the Health Information Unit (MoHMS) ⁽²⁾	Estimated total number of deaths (UNWPP) ⁽³⁾
	Male	Female	Total ⁽¹⁾		
2020	398	328	733	742	953
2021	390	261	651	653	1,047
2022	423	288	711	811	923
2023	439	306	746	920	934
2024	344	247	591	830	950
TOTAL (2020–2024)	1,994	1,430	3,432	3,956	4,807
AVERAGE (2020–2024)	399	286	686	791	961

Note: (1) Includes 8 records where no sex of the decedent was recorded; (2) Number of deaths reported to HIU (collected from KHIS and MS1), published in the Kiribati Annual Health Bulletins; (3) Death estimates are derived from the United Nations World Population Prospects. Figures for the period 2020–2023 are retrospective estimates based on reconstructed demographic trends using available empirical data, while figures for 2024 are projections based on the medium fertility, mortality and migration variants. As such, comparisons with civil registration data for 2024 should be interpreted with caution.



Figure 4 shows a widening divergence over time between the number of deaths registered through the civil registration system and those reported by the health sector, highlighting the persistence of late and delayed registration.

Figure 4. Number of deaths registered by the civil registry (MoJ), compared with deaths reported to the Health Information Unit (MoHMS), by year of death (2020–2024)



3.1. Death registration completeness

Death registration completeness was assessed by comparing the number of deaths registered by the CRO (numerator) with the estimated total number of deaths in Kiribati based on UNWPP projections (denominator).

Over the five-year period (2020–2024), approximately 71% of deaths were registered, regardless of when registration took place (including late and delayed registrations) (**Table 4**). Completeness declines gradually from approximately 77% for deaths occurring in 2020 to 62% for deaths in 2024. This decrease is expected because the measure captures cumulative registrations over time; deaths in earlier years have had a longer exposure period for registration, while more recent deaths have had less opportunity for delayed or late registrations to be processed. Consequently, completeness estimates for recent years tend to underestimate the true level of registration, reflecting timeliness rather than overall system performance.

Furthermore, the decline in registration observed in 2021 (62%) may partly reflect limitations in the comparator data from UNWPP. Modelled estimates for that year may have overstated the number of deaths in Kiribati due to assumptions applied to account for COVID-19 impacts. Consequently, the estimate for 2021 should be interpreted with caution.

Table 4. Completeness of death registration and deaths reported to MoHMS, compared to estimates of total deaths (UNWPP), 2020–2024

Year of death	Completeness of death registration (% ever registered) ⁽¹⁾	Completeness (% of deaths registered within 1 yr of occurrence) ⁽²⁾	Completeness of deaths reported to the Health Information Unit (MoHMS)
2020	76.9%	-	77.9%
2021	62.2%	54.0%	62.4%
2022	77.0%	68.3%	87.9%
2023	79.9%	71.4%	98.5%
2024	62.2%	60.5%	87.4%
TOTAL (2020–2024)	71.4%	52.9%	82.3%

Note: (1) Includes late and delayed registrations; (2) The years 2020–2021 marked the transition to a new digital civil registration interface, which likely affected data quality. Over 500 records for deaths occurring in 2020 did not have a date of registration as the civil registration system was undergoing an upgrade. As a result, the completeness estimate for deaths registered within one year of occurrence has not been provided for 2020.

Approximately 61% of deaths that occurred in 2024 were registered within one year. Registration completeness for earlier years (2020–2021) should be interpreted with caution, as the rollout of a new digital civil registration interface during that period likely affected data quality. In addition, more than 500 deaths that occurred in 2020 had no recorded date of registration, further limiting the reliability of completeness estimates for those years.

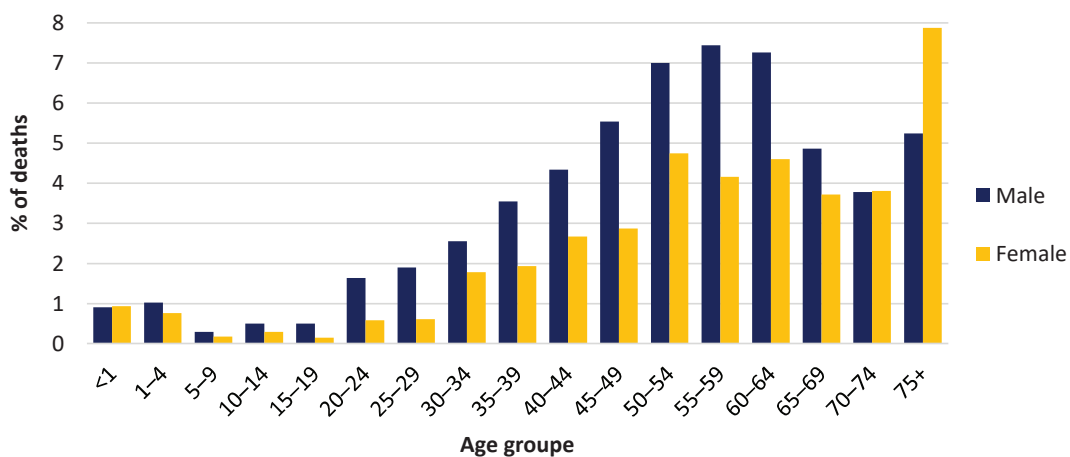
Over the five-year period from 2020 to 2024, approximately 82% of deaths were reported to the Health Information Unit, managed by the MoHMS.

3.2. Differentials in death registration by age and sex

The age–sex distribution of registered deaths in Kiribati for the five-year period (2020–2024) (*Figure 5*) shows a clear increase in the proportion of deaths with age for both males and females, with most deaths occurring after age 40 and especially after age 50. This pattern is broadly consistent with an adult mortality profile dominated by non-communicable diseases and ageing-related causes. Across most adult age groups (roughly 20–69), males account for a higher share of deaths than females, which likely reflects real differences in mortality risk linked to behavioural, occupational, and health factors observed in countries with similar demographic and epidemiological profiles. However, further analysis of death registration completeness by sex, using appropriate denominator data on the total estimated number of deaths by sex, would help identify any potential under-registration of female deaths.

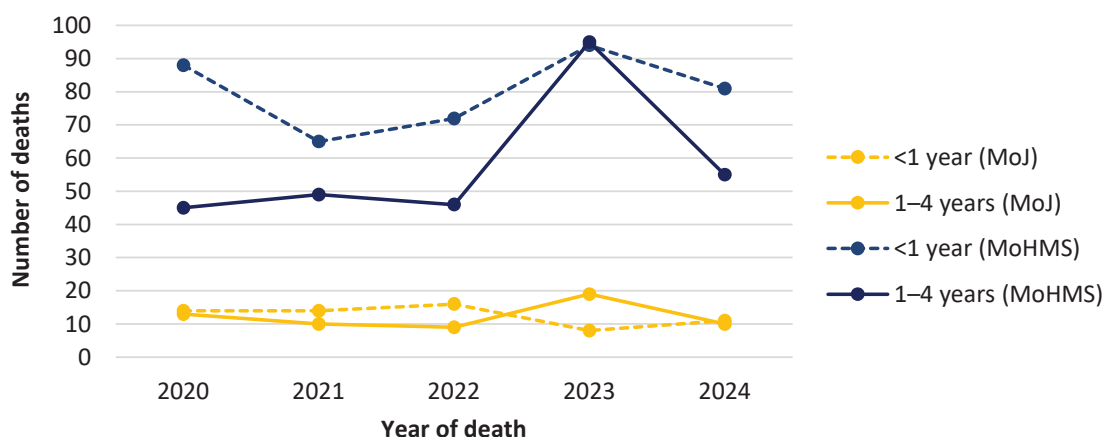
At the oldest ages (75+ years), females account for a larger share of deaths than males. This is a normal demographic pattern because women tend to live longer, meaning more women survive into the oldest age groups. It does not necessarily indicate higher mortality risk among elderly women, but rather differences in population survival and age structure.

Figure 5. Age-sex distribution of deaths registered by the Civil Registry Office (MoJ), for deaths occurring between 2020–2024



The most important data quality issue visible in the age-sex distribution of registered deaths, is the very small proportion of deaths recorded at younger ages, particularly among infants and children. This likely reflects under-registration of deaths at young ages, rather than true low mortality. Further examination of the number of infant and child deaths registered (*Figure 6*), compared to those reported to MoHMS, indicates that there is significant under-registration of deaths occurring in the youngest age groups. Over the five-year period (2020–2024), a total of 690 deaths for children under five years were reported to MoHMS, whilst only 124 were registered by the Civil Registry Office. During this period there was a spike in deaths of 1–4 year olds in 2023, which appears to be due to an increase in malnutrition in outer-islands. This warrants further analysis.

Figure 6. Number of infant and child deaths registered by the CRO, compared to deaths reported to MoHMS (2020–2024)



Source: Data on the number of deaths occurring in children under-5 years was extracted from the Annual Public Health Bulletins for Kiribati.

3.3. Summary and next steps

This preliminary analysis of birth and death registration data indicates that, while Kiribati has made notable progress in expanding access to registration services, particularly through outreach campaigns in outer island communities and strengthened collaboration with the health sector, several persistent challenges continue to constrain the completeness, timeliness and quality of registration data.

Moving forward, continued strengthening of Kiribati’s CRVS system will require focused, coordinated action. Priorities include expanding and institutionalising mobile and community-based registration services; deepening integration of registration processes within routine health service delivery; and improving interoperability and routine-data sharing between the CRO, MoHMS and the NSO. Enhancing data quality through clearer workflow definitions, standardised data entry fields, routine deduplication and improved capture of usual residence will be essential.

Increasing the regular production and public release of CRVS data (including preliminary tabulations), creates powerful incentives for ongoing improvement. When data are shared transparently and used by governments, research, development partners and communities, errors become more visible and easier to address.



© SPC, Jeff Montgomery