



**World Health
Organization**

CRVS Technical Partners Meeting

Summary Report

November 2021

EXECUTIVE SUMMARY

INTRODUCTION

Good public health decision-making is dependent on reliable and timely data on births and deaths, including cause of death, ideally collected through a well-functioning civil registration and vital statistics (CRVS) system.

The COVID-19 pandemic has underscored the importance of well-functioning CRVS systems which, as the [SCORE for Health Data Technical Package](#) assessment has shown, are still not producing data of sufficient quality to guide public health decision-making in many parts of the world.

In response, World Health Organization (WHO) is working with partners to prioritize CRVS strengthening at global, regional, and country levels. Efforts to strengthen CRVS systems by countries have already led to important lessons and experiences that WHO and partners together draw from as CRVS work is advanced.

Earlier this year WHO published the [WHO CRVS Strategic Implementation Plan 2021-2025](#), which is based on four strategic objectives to accelerate CRVS system strengthening in Member States through more effective engagement and leadership by the health sector. This Report forms part of Strategic Objective 1 which outlines the need to 'strengthen coordination between health sector and both national CRVS stakeholders and international CRVS partners.

There is now a unique window of opportunity to build synergies through collective efforts in strengthening national CRVS systems.

The main objectives of the CRVS Technical Partners Meeting were to:

- **Introduce partners to WHO's global efforts in CRVS strengthening and the WHO CRVS Strategic Implementation Plan 2021-2025;**
- **Promote a stronger role of the health sector in CRVS and ensure alignment with current WHO Regional CRVS strategies, addressing the key concerns of the different WHO Regions;**
- **Note CRVS partners' activities and discuss potential collaborative opportunities; and**
- **Identify and address the current gaps in CRVS systems.**

KEY LESSONS

The WHO CRVS Strategic Implementation Plan 2021-2025 provides leadership and guidance to partners to strengthen the capacity of the health sector in countries to notify all births and deaths and ensure that all causes of death are comprehensively assigned and correctly certified.

All partners should review/intensify their collaboration and support to countries, moving away from the siloed approach of the past.

Universal Health Coverage (UHC) cannot be achieved without universal birth and death registration, which requires high-level political commitment to develop CRVS systems.

Without rapid progress to strengthen birth and death reporting systems many countries will be unable to reliably monitor trends in the United Nations (UN) Sustainable Development Goal (SDG) indicators that rely on CRVS data.

The COVID-19 pandemic has provided opportunity, visibility, and urgency to the need for improving the timeliness and completeness of death registration and notification systems; WHO acknowledge this and have established a new initiative to collect information from countries on excess mortality due to COVID-19.

All global agencies and financing facilities need to be encouraged to meet the demands for resources that are currently not available in all countries to build CRVS systems that function properly.

Meeting Agenda

Day 1: Tuesday 9 November 2021 (15:00-17:00 CET)

15:00 - 15:20 Session 1: Welcome and introduction to the CRVS Technical Partners Meeting

Welcome remarks - Dr Samira Asma - Assistant Director-General, Division of Data, Analytics and Delivery for Impact, WHO

- Acknowledgement that the world has fallen short to accurately count the tragic losses of lives and the cause of death due to COVID-19, leading to poor vaccine distribution
- Official statistics are a significant undercount compared to official reports
- More ambitious investment and financing to scale improvements and CRVS at speed is needed
- We have a window of opportunity to work together towards a common goal on CRVS, which is supposed to be universal and continuous
- CRVS is not just a data issue, but it is about equity, human rights and good governance (and Universal Health Coverage)
- Progress towards the triple billion targets, Universal Health Coverage and tackling the non-communicable disease (NCD) epidemic are all limited by poorly functioning CRVS systems
- Only half of deaths globally have an assigned cause
- Accurate and complete CRVS data is a fundamental human right
- The World Bank estimates 1 billion people worldwide remain essentially invisible, affecting their access to healthcare, education, legal services, social services, etc.
- United Nations (UN) Sustainable Development Goal (SDG) indicators that rely on CRVS will not be met unless we "get this right"
- Thanked all CRVS partners, data and health initiative partners, on behalf of the DG and WHO
- WHO is continuously assessing the status of CRVS
- Acknowledgement of the UN Children's Fund (UNICEF) and other partners' guidance on health sector strengthening so that this guidance can be implemented in countries, with particular reference to the 'counting everyone' campaign
- "Better collaboration and investments" will accelerate progress; the health sector has a clear role to play in strengthening vital health certificates
- Indication of a target of 75% completeness of birth and death registration globally by 2025

Meeting objectives - Dr Steve MacFeely - Director, Department of Data and Analytics, WHO

- Birth and death are defining moments in life
- CRVS is the personification of the SDG agenda to "leave no one behind"
- COVID-19 has highlighted the need to register and understand deaths
- The projected increases in the population of Africa and the very low current vital event registration rates also underline the need to improve CRVS system functionality
- Universal registration of deaths, births and causes of deaths is critical to understanding the SDGs and meeting the triple billion targets
- The importance of partnership and sticking together for the next 8 years to meet the 2030 agenda (goal to meet 75% by 2025 and achieve universal coverage by 2030)
- The first international conference on health statistics is expected to take place in 2023

COVID-19 excess mortality - Dr William Msemburi - Technical Officer, WHO

- Approximately 250 million confirmed cases of COVID-19 that have been reported by countries to WHO, and just over 5 million deaths
- Not all reported data is equal or when judged according to timeliness, reliability and completeness; reported numbers do not give us a complete picture
- Excess mortality is an objective measure of the impact of the COVID-19 pandemic

- The challenge to estimating excess mortality is a result of gaps in CRVS – ‘all-cause’ mortality data is required to calculate excess mortality
- Only a subset of countries has the data necessary to track excess mortality directly and in many regions these gaps are staggering
- Early in 2021 96% of the countries in Africa Region didn't have the requisite data for tracking this vision; 91% for South-East Asia and over 60% for the Americans, Eastern Mediterranean and Western Pacific
- WHO has responded through the COVID-TAG (COVID-Technical Advisory Group) to identify the best data sources and statistical methods to estimate excess mortality for all countries
- The TAG is looking at alternate sources of data, as we may not have access to any necessary quality adjustments to the data that we do have, and the best statistical models for us to apply to fill the gaps
- Since May 2021, the TAG is working to update methods, data sources and models, to generate country-specific estimates of excess mortality
- The TAG is currently in the middle of a country consultation in which they have shared the methods and estimates with focal points from the countries
- Currently the TAG has excess mortality data calculated for the entirety of 2020 (including disaggregation by age and sex) and for the first half of 2021
- Final estimates of excess mortality will be published in December 2021

15:20 - 16:00 Session 2: State of CRVS from the SCORE for Health Data Technical Package assessment, and opportunities to support countries; Moderated by Dr Somnath Chatterji

Objectives of Session 2:

- To emphasize the reasons why vital statistics matter
- To outline the role the health sector plays in vital statistics production
- To illustrate how we work in partnership across the regions
- To demonstrate how CRVS data comes to WHO and how it is used to track health trends

Global review of CRVS and WHO's CRVS Strategic Implementation Plan 2021-2025 - Dr Azza Badr - Technical Officer, CRVS, WHO

- The "failure to register every global birth and death is the single most critical failure of development over the last 30 years", Richard Horton, The Lancet (2015)
- Without timely and disaggregated statistics, achieving 100% vital event registration is not possible
- Gaps in CRVS result in gaps in equality and Universal Health Coverage
- We can't expect countries to promote robust and inclusive development and health policies without evidence, nor to be able to reliably monitor progress towards health and development goals
- The WHO SCORE technical package shows that 44% of countries have nascent or limited capacity to count births, deaths and causes of deaths
- The assessment also shows that the regional distribution differs for birth and death registration
- The role of the health sector in CRVS strengthening is a reporting role/notification of vital events
- Gaps need to be filled to interpret vital statistical trends and understand where they are likely to occur, e.g. where population explosions are expected to occur
- The health sector is dependent on strong CRVS systems for achieving Universal Health Coverage
- The CRVS systems are only as strong as the investments put into them (WHO, governments, and partners)
- The WHO CRVS Strategic Implementation Plan 2021-2025 aims to encourage and empower Member States to better use and mobilize the health sector to lead CRVS systems in order to

maximize benefit from systems that are already in place and need to use investments as a means to building CRVS analytical capacities in countries

Regional review of the progress and plans to accelerate the development of CRVS systems in all WHO regions and partnership - Dr Sebastian Garcia Saiso - Director, Evidence and Intelligence for Action in Health, WHO Regional Office for the Americas

- The COVID-19 pandemic has not only shown challenges, but also opportunities for CRVS system development
- There is great heterogeneity of CRVS system functionality across regions, but even countries with effective CRVS systems have major challenges in reporting death
- No CRVS system is 100% effective – key challenges include lack of coordination between stakeholders, fragmented data systems, and inadequate data security and protection
- These findings are not to say that progress has not been made in CRVS, but that more needs to be done
- Strengthening health information systems (HIS) with intersectoral work with other partners and CRVS partners is critical to addressing gaps
- WHO/WPRO – Challenges include; low quality of death certification, data visualization at the country level, and low capacity of newly initiative CRVS systems. Priorities include; developing strategic approaches to CRVS system strengthening, practical knowledge on country experiences of CRVS development, data analysis, usage and interpretation, and CRVS application methods and tools.
- WHO/SEARO – Challenges include; availability, quality and use of cause of death data, inappropriate business processes, no legal provision, lack of demand for data for policy makers. Priorities include; implementation of the regional strategy (2015).
- WHO/AFRO – Challenges include; while capacity has improved significantly, only one country can be described as being fully developed. Priorities include; implementation of CRVS activities across the Region and capacity building, supporting community reporting by political will/dialogue with the Ministry of Health (MoH).
- WHO/EMRO – Challenges include; working to scale up the HIS, with focus on morbidity and mortality registry, and capacity building on cancer registration and coding. Priorities include; standardized of death notification forms, mortality lists, digital platforms, and scaling up hospital mortality registration systems.
- WHO/EURO – Challenges include; strengthening HIS data analysis to generate useful information, capacity building for data quality and monitoring strategies, integrating IT systems, quality of coding of death certificates. Priorities include; digitalization of paper systems and collaboration between different administrative agencies/governmental organizations.
- WHO/PAHO – Challenges include; continuing work with the regional network to create and maintain synergies and collaboration. Priorities include; implementation of the regional plan of action strengthening of vital statistics 2017-2022, development of specific national roadmaps based on the recently finalized the maturity assessment of HIS/IS4H in all 49 countries and territories

WHO mortality statistics - Ms Doris Ma Fat - Statistician, WHO

- The biggest challenge is to produce cause of death statics within CRVS systems
- The WHO mortality database is designed to be the cornerstone of global health, and has been established since 1950
- A core mandate of WHO data collection is to request Member States to provide statistics on mortality
- Mortality data provides alerts on health transition, e.g. increasing trends in NCDs
- The database substantiates major publications' findings and is key to meeting SDG indicators and helps identify trends and potential trends
- Currently WHO has received only 30 datasets on mortality for 2020 – not having timely data reporting means we have significant gaps in significant health events like pandemics

- WHO plans to build a new platform to strengthen the cause of death database end-to-end journey, which will be operational by mid-2022
- WHO also plans to set up a global rapid mortality surveillance portal to track and access all-cause mortality data at national and global levels, which will be operational by early-2022
- WHO and partners need to support countries to have a coordinated approach to tracking health trends in order to be able to deliver the appropriate interventions at the right time and in the right place

16:00 - 17:00 Session 3: Birth registration systems: Gaps and potential solutions; Moderated by Dr Craig Burgess

Objective of Session 3:

- To provide a range of views on the current gaps, challenges, and potential solutions to birth registration systems

United Nations Economic Commission for Africa (UNECA) - Dr Oliver Chinganya - Director, Africa Centre for Statistics

- Overview of challenges in birth events and vital events, e.g. birth registration in Africa is estimated to have approximately 52% completeness
- Functional registration systems are needed (that are also functional and fit-for-purpose in practice), in order to be able to not hinder the registrations of vital events
- It is very difficult for any government to achieve universal registration if it does not effectively understand the publishing structure of vital events
- Ignorance and lack of awareness on legal requirements and impact this causes on certain populations
- Lack of awareness of the purpose and importance of birth registration (both community and government levels)
- Cultural practice around birth and death events (e.g. role of fathers, foster parents), and how this can act as a facilitator and barrier to vital event registration
- There is a lack of information around events and recording procedures
- Cost of registration of births (indirect costs including; travel to registration, late registration, geographical accessibility of registration offices, etc.)
- Physical barriers to registration (e.g. location) can be overcome by opening in accessible locations
- Registration compliance and fines/penalties are a significant barrier to system interaction
- The fear of persecution from government policies (e.g. late registration, neonatal deaths) is very common
- Solutions need to be routed in effective communication messages and materials that inform and educate, including; communicating with the public on birth registration, abolishing or decreasing cost of registration and certification, reducing the number of visits required for registration, and increasing resource mobilization, political commitment and strengthening digital solutions
- A key challenge faced by many registrars is that they have multiple responsibilities, and therefore they need to be mandated to make vital event registration a priority
- Business compliances of registration forms – there is a need to ensure forms are accessible to all, including in languages that are accessible to all of the population (e.g. mobile applications)
- Make policy makers aware of the benefits of CRVS – high-level political commitment is needed, e.g. through ministerial conferences
- Update outdated laws, recommendations and principles which prevent access to registration services
- Integrate vital event registration and other services, e.g. vaccination, to increase incentivization
- Data protection and privacy needs to be in place to protect registration data and individuals

United Nations Children's Fund (UNICEF) - Mr Bahaskar Mishra - Civil Registration and Vital Statistics and Legal Identity Specialist

- The drop off in participation exists between notification and registration and certification
- Before the COVID-19 pandemic, 166 million children under 5 and around 14 million children under 1 were not registered
- COVID-19 has furthered the gap of registration – a recent UNICEF study suggests a further 2% decline in birth registration
- Challenges to birth registration include:
 - Gaps in legislation framework and disconnect the implementation of laws
 - Indirect and direct discrimination to preventing registration
 - Bottlenecks in the digital registration platforms, including; multiple steps, multiple widgets, useability issues, and indirect costs
 - Technological solutions that are very often not aligned with the business processes, especially regarding birth and death registration forms
 - A lack of necessary statistical data limits the statistical power of the CRVS system
 - Passive engagement with the health sector and lack of effective engagement with the senior leadership that limits getting attention of decision makers
- Key question for CRVS systems: Do they adequately meet the requirement of native populations and are they aligned with the international recommendations and best practices?

The Global Financing Facility for Women, Children and Adolescents (GFF) - Ms Maletela Tuoane - Senior Health Specialist: CRVS

- The current gaps in birth registration have been gaps for a long time in low- and middle-income countries (LMICs)
- Notable increases have been made, but key challenges remain
- Technical partners working to strengthen CRVS systems need to have a holistic review (not mandate-specific investment)
- We need to work together for a common goal
- CRVS has been embraced well at country levels for many, however it still requires more strengthening and resources – current resourcing does not match the work that is still needed to preserve the human right of birth registration (i.e. it is an under-funded priority)
- There is an over-reliance on Multiple Indicator Cluster Surveys (MICS) and other surveys, which are insufficient to provide the real-time data required observe progress, and are not legally regulated like CRVS systems
- Potential solutions; adoption of a holistic approach, appropriate coordination at regional, country and international levels, and practical solutions at the country level
- Resources are limited and we need to leverage existing systems in cost effective ways, e.g. civil registration office expansion
- Strategic plans need to be reproduced and continuously evaluated/reflected upon
- Regular data use from the CRVS system will assist strategic planning, tracking improvement, provision of evidence for resource channelling

Global Health Advocacy Incubator (GHAi) - Ms Chrystie Swiney - Legal Adviser

- GHAi assists participating countries in reviewing their CRVS legal frameworks to show where they do or do not align with best practices
- "The law can be the problem, or the law can be the solution"
- Strong CRVS laws lead to high vital event registration rates
- Examples of how the law can be a barrier (and potential solutions):
 - Lack of definitions provided for the key vital events, or do not align with UN definitions (governments can include the UN definitions in the development of laws)

- Late registration requires a court order, which acts as a disincentive for registration due to cost, access, and confusion (remove the costs required for late registration, and incentivize early registration)
- National/civil registration ID required to register, leading to targeting/discrimination of certain populations (remove ID document requirements, or allow alternative ID documents to be permissible)
- Requirement for registration in person, hindering the advancement of technology/digitization of registration and targets people who are unable to travel leading to multiple trips and complex processes (hand over the role of registration to the health sector)
- Most barriers can be resolved through changing the law around registration
- Australia Example (i.e. not just an issue for low income countries): indigenous births were over represented in late birth registrations, the main reason being geographical remoteness, leading to the launch of online registration in 2018 (along with an online campaign) and an immediate increase in birth registration observed
- Philippines Example: for in-facility births, the health administrator is the informant, leading to significant increases in birth and death registration rates
- It is critical that countries evaluate and then constantly re-evaluate the alignment of their legal frameworks with the international understanding of best practice, and then strengthen them accordingly

African Union Commission (AUC) - Ms Leila Ben Ali - Head of Statistics Division, AUSTAT

- Africa is making considerable process by promoting health platforms and civil registration
- Political engagement has been crucial to progress, e.g. African Charter on Human Rights, the UN Convention on the Rights of the Child, African Charter on the Rights and Welfare of the Child
- However – birth registration rates significantly fluctuate according to geography
- The African Union Assembly in July 2016 declared the decade for the repositioning of CRVS (2017-2026)
- UNICEF and the African Union learning campaign on birth registration ('no name', launched in June 2020) is designed to bring countries on board to raise awareness of the urgency to accelerate birth registration
- 5 countries were chosen to lead the campaign and share best practices, and the campaign aims to be integrated with immunization communication campaigns
- A lack of legal identity disproportionately affects marginalized groups and communities (including the poor, women and girls, refugees, migrants, etc.) – understanding and implementing means to address and communicate with these communities is key

WHO Regional Office for South-East Asia - Mr Manoj Jhalani - Director, Department of Health Systems Development

- Birth registration levels across the South-East Asian Region are diverse, and the reasons for this vary from country to country, e.g. cost, travel, lack of demand, multiple visits required, paper-based systems, lack of internet, legal framework limitations, poor services/products, etc.
- All governments need to be engaged on CRVS and to get that engagement they need to understand the benefit of CRVS
- Ministries should engage across their governments to link to other related departments (education, health, social services, etc.)
- Political commitment is needed to ensure data harmonization – advocacy work by WHO and other partners is key
- Multisectoral liaison and capitalizing on community services can become a major tool in registration and creating an operating system that addresses accessibility concerns

WHO Regional Office for the Western Pacific - Dr Duan Mengjuan - Technical Officer, Health Information and Innovation

- The CRVS systems in the Western Pacific Region (WPR) are reasonably developed, but the Region encompasses huge diversity
- Six WPR countries have started to introduce ICD-11 (International Classification of Diseases, version 11), whereas other countries are struggling to introduce ICD at all
- Cross-sectional collaboration with birth registration, school registration, and immunization system solutions being implemented in some states of the Region
- Data gaps and inconsistencies from different systems are challenges to these innovative approaches
- Cross sectional collaboration (e.g. across government ministries) is a lesson learned from the COVID-19 pandemic

Day 2: Wednesday 10 November 2021 (15:00-18:00 CET)

15:00 - 16:00 Session 4: Death notification and registration systems and causes of deaths: Progress updates from partner initiatives; Moderated by Dr Steve MacFeely

Objective of Session 4:

- To understand the current progress of death notification and registration systems globally, as well as the strides being made to improve cause of death capture and quality

Bill & Melinda Gates Foundation (BMGF) - Dr Samantha Dolan - Program Officer

- The country-wide mortality surveillance for action platform and the Child Health and Mortality Prevention Surveillance Network (CHAMPS) platforms in several countries have demonstrated how to improve individual cause of death data over the last four/five years
- There is a pressing need to build routine, population-representative platforms, that leverage pathology-informed cause of death attribution and for this to be accessible by more countries
- We need to understand how these platforms can be integrated into existing surveillance systems and CRVS systems

Bloomberg Data for Health Initiative (D4H) - Dr Jennifer Ellis - Director, Data for Health Initiative

- Data for health is an asset for death registration and notification
- The Data for Health Initiative has partnered with more than 30 countries since 2015 who have shown a keen interest in improving data systems
- The process for prioritizing approaches to addressing notification and registration of deaths and causes of death begins with country driven work planning to identify country priorities and opportunities for technical collaboration
- Many countries have keen interest in working in this space and are ready to commit to improvements to their CRVS systems
- The key first step is to collaborate on conducting a systematic mapping of current data systems in place to identify opportunities for reducing redundancies and introducing new steps to being to improve notification and registration processes
- While there are parts of the systems that take time to change, progress on CRVS has been mostly fast paced

Vital Strategies - Mr Martin Bratschi - Technical Director, CRVS Public Health Programs

- Vital Strategies is one of the partners supporting a range of countries to strengthen their CRVS systems through the Bloomberg Philanthropies Data for Health Initiative
- Two major gaps in death registration and cause of death data collection:

- Importance of CRVS system building. Of critical importance to the building of CRVS systems is the analysis and improvement of processes in order to promote quality data production by ensuring quality assurance measures are in place, government structures are established, compliance measures are enforced, doctors/mortality coders are trained appropriately, etc. It is the implementation of the combination of these measures as a system that will promote the collection of high-quality information.
- Strong coordination and leadership in the CRVS system. Collaboration between government agencies and partners is needed – e.g. the #CountingEveryone campaign was designed to share best practice examples of leadership in and for CRVS systems through the Data for Health Initiative

WHO Medical Certification of Causes of Death (MCCOD) and ICD-11 mortality coding - Dr Robert Jakob - Unit Head, Classifications and Terminologies, WHO

- ICD-11 is a scientifically updated, fully digital end-to-end solution for the coding of cause of death, incorporating all desired clinical details, and is the health data standard mandated by international law
- ICD-11 can be used independent of language, culture, or setting
- ICD-11 is useful for both life and death – i.e. it can be used to understand morbidity and epidemiological trends, as well as MCCOD, data coding, and so on
- We don't need more tools, rather we need partners to work with WHO, using and implementing ICD-11 and associated tools that have been developed (e.g. quality analysis tools, data visualisation tools, etc.)
- WHO is supporting implementation officers with technical expertise in offices around the globe
- A tool for training physicians in how to examine the dead body will be released before the end of the year

United Nations Children's Fund (UNICEF) - Mr Remy Mwamba - Statistics & Monitoring Specialist

- Reminder of the joint guidelines published by WHO and UNICEF in June 2021 on health sector contributions to improving birth registration in LMICs – training to be rolled out
- Acknowledgement of missed opportunities – epitomized by the fact that birth registration lags behind maternal health services and immunization
- Health information that health workers routinely collect can be leveraged to support death and cause of death notification, e.g. decedents name, ID, place of occurrence, etc.
- Examination of the question: how can we embed vital event notification into health systems?

Centers for Disease Control and Prevention (CDC) - Dr Erin Nichols - Global Civil Registration and Vital Statistics Team, Division of Vital Statistics, National Center for Health Statistics

- With colleagues across the CDC, the organization supports various surveillance efforts to strengthen mortality information, which CDC recognizes as core public health information
- CDC supports work with direct investments and technical assistance throughout the world and also with countries at the continent level to promote CRVS, often collaborating with the Data for Health Initiative
- We need to combine and unify system investments to produce higher quality systems for mortality projection
- CDC contributes to the development of standards and international guidance, including hosting the North American WHO Collaborating Centre
- CDC support the WHO verbal autopsy (VA) reference group, which has undertaken processes to standardize the VA instrument, as well as studying the impact of the revised automated algorithms and the current questionnaire

Swiss Tropical Health Institute (TPH) - Dr Daniel Cobos - Project Leader, Health Systems and Policies Research Group, Household Economics and Health Systems Research Unit, Epidemiology and Public Health Department

- Mortality surveillance systems in many countries are fragmented and are operating in silos – holistic analysis of the system is needed
- As part of the VA reference group for WHO, a new work plan (2021-2022) has been developed with six strategic lines, e.g. cause of death analysis, user engagement and VA advocacy
- Current work revolves around creating a knowledge base to assist collaboration on the integration of medical certification and VA systems, and how best to achieve this
- Mortality surveillance systems should be looked at as a whole (10 CRVS Milestones) – digitisation of a system is not going to work unless we look at the process of weak notification to ensure no deaths are being missed from the beginning (notification is the biggest challenge for many countries in terms of capturing deaths not defined to the registration system)

Child Health and Mortality Prevention Surveillance Network (CHAMPS) - Dr Dianna Blau - Senior Director, Science

- CHAMPS is currently active in seven sites across Sub-Saharan Africa and South Asia
- CHAMPS aims to capture and better characterize the main causes of under-5 mortality (at a national and subnational level), through a comprehensive approach to population-based, real-time mortality surveillance (including more complete data collection, minimally invasive tissue sampling (MITS), etc.), in order to ultimately reduce child mortality
- CHAMPS data can be utilized to assist CRVS mortality surveillance and is being used to corroborate VA data

WHO Regional Office for Africa - Dr Benson Droti - Technical Officer, Health Information Systems

- The MoH in most African countries is not taking a leadership role in CRVS, and if the MoH is not playing a leadership role we will struggle to get the political buy-in needed to improve CRVS systems
- CRVS in Africa – CRVS plans and policies should be developed within the overall framework of the national HIS, with the MoH playing a central leadership role
- Technical support and training for MCCOD and ICD-11 is desperately needed
- VA community reporting of death events needs to be simplified for better roll-out and implementation
- Better mortality surveillance is needed, alongside more support in the analysis on mortality data
- Electronic tools for MCCOD linked to DHIS2 (District Health Information Software 2) are being developed, with a greater focus on the integration and harmonization of systems
- strengthening partnerships
- Only one WHO Collaborating Centre is in Africa, with the focus on ICD-11 implementation – more centres need to be established, with a broader remit

WHO Regional Office for the Eastern Mediterranean - Dr Eman Aly - Technical Officer, Health Information Systems

- Focused on death and causes of death registration and data use, family of international classification of disease, CRVS systems and partnership collaborations, and mortality data analysis in the context of COVID-19
- Acknowledged that the CRVS systems in the Eastern Mediterranean Region (EMR) have diverse capacity, but common challenges do exist
- A plan is in place to develop a mortality database so the Region can present and analyse the data to be publicly available
- Acknowledgement of the role of the WHO Collaborating Centre in documenting shared experiences and ICD-11 implementation (five EMR countries have implemented ICD-11)

16:00 - 16:40 Session 5: Production of vital statistics to monitor progress towards the SDGs: Global Health Estimates, gender, equity, and human rights; Moderated by Dr Steve MacFeely

Objective of Session 5:

- To discuss how the production and dissemination of vital statistics is vital to monitor progress towards achieving the SDGs, with a particular focus on how the compilation and analysis of these data can support gender equality, equity and preservation of human rights

United Nations Division of Social and Economic Statistics (UNSD) - Dr Srdjan Mrkić - Chief, Demographic Statistics Section

- Vital statistics are not possible without universal civil registration
- The UN Demographic Yearbook has been established for 70 years, but less than half of all countries are able to produce vital statistics on a regular basis to contribute to this Yearbook
- COVID-19 has amplified the issues with being able to conduct and gather survey information
- Civil registration processes do not always cover all the vital events that are needed for data completion
- UNSD is introducing the UN legal identity agenda task force, which consists of 15 UN agencies that have activities related to CRVS or identity management
- Legal identity and its connection to human rights is inherently linked to the data collection issues
- Governments are committing to develop CRVS systems, but they are not held accountable for this – governments should be committed to upholding their human rights obligations which means putting into place effective CRVS data collection mechanisms

United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP) - Dr Petra Nahmias - Chief of Population and Social Statistics Section

- First ministerial conference on CRVS in Asia and the Pacific took place in 2014, with governments committing to 'get everyone in the picture'
- UNESCAP are currently reviewing the mid-stage of the decade, and how much progress has been made in the countries against the regional action framework
- Significant scale-ups in Cambodia, Laos, and Bangladesh are very positive
- The quality of the recording of causes of death needs to be still improved in all the sub-regions
- Data on deaths outside of health facilities is still difficult to collect – progress on VA is assisting in this endeavor
- Producing vital statistics from CRVS systems is creating opportunities to use these systems to help leverage vital statistics data – however, 17 countries still lag behind and are yet to publish their first vital statistics report
- Focus on supporting inequality assessments by developing practical recommendations, guidance and tools – vulnerable and marginalized groups must be included in CRVS system data capture, but it is difficult to gain the relevant data and also know where they are being included

United Nations Economic and Social Commission for Western Asia (UNESCWA) - Dr Ismail Lubbad - Statistician/Demographer

- CRVS data is a rich source of data if it is completed and updated regularly
- UNESCWA has supported countries to undertake censuses and household surveys, which are good for monitoring the SDGs, but the data cannot be disaggregated over small areas and it does not contribute to CRVS system development
- CRVS capacity development opportunities to be implemented soon are being discussed, in order to decrease the gap in vital statistics availability and compile data on related SDG indicators

United Nations Population Fund (UNFPA) - Dr Romesh Silva - Demographer, CRVS

- Centre of Excellence for CRVS Systems transitioned from the International Development Research Centre (IDRC) to UNFPA
- There are major gaps in global vital statistics production and dissemination capacity, as well as inter- and intra-regional heterogeneity in progress
- Outlined several challenges to CRVS (and potential solutions):
 - Siloed approach to CRVS (life course approach to CRVS)
 - System misalignment (integrated, whole-of-systems approach)
 - Understanding system strengths and weaknesses (assess subnational differentials in completeness)
 - Perception of low civil registration data quality (a culture of vital statistics production and dissemination)
 - Perception civil registration data is not readily usable (close capacity gap in demographic data assessment, and analyse what you collect and publish what you analyse)
 - Low vital statistics usage (client orientation to vital statistics users)

United Nations Children's Fund (UNICEF) - Dr Mark Hereward - Associate Director, Data & Analytics, Division of Data, Analytics, Planning and Monitoring

- A quarter of all children are not registered at birth or immediately after – half of these children are in Africa
- Even if we look at accelerating the progress made to date, we fall significantly short of the 2030 goal of 100% global vital event registration completeness
- The preferred source for monitoring child survival is the CRVS system, but fully functioning registration systems exist in only 60 countries
- 85 countries don't have quality data on child survival
- Evidence-based estimation of child mortality is indispensable for monitoring progress towards established goals/targets
- Still births – nearly a third of countries don't have adequate quality still birth data, those that do are most commonly high-income nations
- Countries that have the worst data problems have the biggest data gaps
- The average lag of vital registration data for mortality is 2.2 years – timeliness of vital statistics data is a key issue, meaning better monitoring tools are desperately needed

Vital Strategies, Data for Impact - Ms Ruxana Jina - Director, Data Impact Program

- We need to develop and strengthen CRVS systems that are sustainable
- Vital statistics report guidance is critical for assisting countries to assist them in producing vital statistics reports for the first time
- We need to connect policy makers to vital statistics data and reports to see this data translated in policy making
- A toolkit to support vital statistics production and dissemination was published in 2020
- A technical guide on vital statistics process mapping and improvement is expected to be published in 2022

WHO Regional Office for the Americas - Ms Adrienne Cox - Senior Advisor, Health Analysis, Metrics and Evidence

- Acknowledgement of CRVS challenges, including; gaps in coverage, quality and timeliness, pre- and post-evaluation training for ICD coders (especially to understand the impact of that training at subnational level)
- The pre-pandemic and during the pandemic scenarios that need to be considered
- Acknowledgement of the gaps in mortality under-registration, data availability, etc. that need to be addressed

- Ecuador Example: the country releases vital statistics data even when it is not complete, which shows how incomplete data is still useful to helping build a picture or where gaps exist
- There is a push to have disaggregated data to do health equity analysis – linked to the role/use of the Global Health Estimates
- Areas to focus efforts on:
 - Measuring quality indicators at national and subnational levels
 - Encouraging the development and consolidation of critical mass of research on causes of death in regions
 - Focusing policy on countries with major needs, and tailored to their priorities
 - Promoting the use of VA and other tools
 - Enhancing partnerships
 - Etc.

WHO Global Health Estimates - Dr Bochen Cao - Technical Officer, WHO

- Global Health Estimates (GHE) provide an overview of WHO process for monitoring and publishing health outcomes at national, regional, and global levels
- Broad spectrum of demographics – WHO perform our analysis on data reported to WHO (cause of death data by country, year, age and sex)
- There is clearly an urgent need for death registration data of good quality – 71 countries matched WHO's inclusion criteria for the calculation of GHEs, with 45 countries having relevant data from 2017 or later

Institute of Health Metrics and Evaluation (IHME), University of Washington - Prof. Awoke Temesgen - Ethiopian Institute of Public Health Discussion

- Emphasis on having strong data management systems at the national level
- Local analysis without CRVS data is not easy
- A 'National Data Management Centre' has been created for Ethiopia, which brings data sources together, can be utilized with ease, and is directly linked to the SDGs
- The aim is to promote open-access data and the need for evidence-informed action

16:40 - 17:20 Session 6: Digitalization of CRVS systems; Moderated by Dr Steve MacFeely

Objective of Session 6:

- To outline the progress made in the digitalization of CRVS systems, and how such technological advancement can assist in accelerating the development of CRVS systems

Asia eHealth Information Network (AeHIN) - Dr Alvin Marcelo – Director

- The AeHIN is representative of 25 Asian countries, focused on capacity building
- The AeHIN has developed a 'GAPS' framework which aims to assist in the success of digital health interventions, focusing on Governance, Architecture, Programme/People management, and Standards/interoperability
- For several countries, the AeHIN has assisted MoH-led meetings (convergence workshops) that bring in all industries including other Ministries to assist collaboration and coordination
- The findings/conclusions of the meetings are shared with the other countries in the network to promote best practice

UN Legal Identity Agenda (UNLIA) - Dr Niall McCann - Policy Advisor/Project Manager, Legal Identity

- Topic was covered by **Dr Srdjan Mrkić - Chief, Demographic Statistics Section**, as co-Chair of UNLIA in his earlier intervention

The Partnership in Statistics for Development in the 21st Century (PARIS21) - Dr Rajiv Ranjan - Innovation Team Lead, PARIS21 Secretariat, Statistics & Data Directorate

- PARIS21 is a global partnership of national, regional and international statistics experts and policymakers, trying to support the statistical capacity in LMICs
- Acknowledgement that CRVS data assists in better allocation of resources, as well as prioritising policies across multiple sectors
- Digital CRVS – just automating a part of the CRVS process won't solve CRVS challenges and issues, effective governance, legal frameworks, etc. are required
- Digitalization is not without risks – security of data protection is needed and ensure there are no human rights violations
- CRVS system development can't just be looked at as a digital solution

World Bank Group - Mr Sam Mills - Senior Health Specialist

- Apologised for absence due to urgent commitment

WHO Regional Office for Europe - Dr Karapet Davtyan - Technical Officer, Data, Metrics and Analytics

- Many European countries can demonstrate the positive impact of CRVS digitization
- European Programme of Work, 2020-2025 measurement framework developed in collaboration with Member States, to better monitor and understand progress towards SDGs through HIS, including CRVS
- ICD-11 implementation is a top priority in the Region, leading to the development of a regional network for WHO Family of International Classifications, including ICD-11 to support the implementation

United Nations High Commissioner for Refugees (UNHCR) - Mr Cosmas Chanda - Representative to the African Union and UNECA

- *Colleague spoke on Mr Cosmas Chanda's behalf*
- Acknowledgement of the impact of COVID-19 on the registration of refugees, internally displaced persons (IDPs), etc.
- Remote registration was carried out in various remote regions and countries during the pandemic – the UNHCR has had to adapt to this new environment, leading to 'best guesswork', glass room dividers, etc.
- Online and telephone training in vital event registration has taken place
- Lack of official identity affects the poorest and most vulnerable groups of society, including marginalized women and girls, migrants, refugees, IDPs, etc., especially in conflict settings

17:20 - 17:55 Session 7: Collaboration and financing for CRVS strengthening in countries; Moderated by Dr Steve MacFeely

Objectives of Session 7:

- To understand how, from the country perspective, CRVS system development can be achieved through effective collaboration
- To appreciate the challenges and scale of funding required to reach the desired global and national targets for CRVS system development, and how such funding may be acquired and utilized most effectively
- To build the case and strengthen the evidence base on the value of investing in CRVS systems

Bill & Melinda Gates Foundation (BMGF) - Dr Scott Dowell - Deputy Director, Epidemiology and Surveillance, Vaccine Development, Global Health Program

- Trying to understand COVID-19 mortality in Africa using data from a variety of limited sources, leading to very poor and incomplete modelling and analysis
- The total excess mortality approach that has been useful in high- and middle-income countries but may actually be very misleading in poor countries where there's significant baseline mortality from communicable disease pathogens (i.e. those that are transmitted from person to person), because these deaths decrease or go away with the kinds of measures we've seen, e.g. school closures, gathering restrictions, other shutdown measures
- The pandemic has really highlighted just how important CRVS is, and especially accurate cause of death information
- BMGF are strong partners with the Bloomberg Philanthropies Data for Health Initiative, working to understand how CRVS data can be used effectively to understand mortality and disease burden
- Sample registration systems can be quite useful, as the BMGF uses mortality and civil surveillance for COVID-19 and for tracking population immunity to a range of important health conditions
- The Foundation wants to better understand country preferences and the demand for more accurate cause of death information through sample registration approaches, in addition to CRVS

Bloomberg Philanthropies - Ms Betsy Fuller - Senior Program Officer

- Bloomberg Philanthropies are hoping to secure further financial investment for the Data for Health Initiative beyond 2023
- Many of the successes the Initiative has witnessed reading vital statistics strengthening, are not in fact due to large in country investments, rather through prioritizing the importance of partnerships with key government agencies across ministries
- Some significant system wide success has been observed in countries such as Peru and Bangladesh, which have shown the immediate benefit and increased demand for a well-functioning CRVS systems
- The Initiative focuses on utilizing data for policy purposes, increasing the demand for well-functioning CRVS systems
- Partners encourage interventions that are sustainable, by drawing on political support across stakeholders, strengthening existing linkages between agencies and identifying the barriers through exercises, e.g. CRVS legal review
- Introduction of the Global Grants program, that is open to all LMICs, to support results-orientated projects that improve public health data
- The organisation is committed to developing and implementing tools to ensure CRVS and health systems are addressing issues of gender equity and equity more broadly, relative to the country context and needs

Foreign, Commonwealth & Development Office (FCDO) - Dr Meena Gandhi - Senior Health Adviser

- The FCDO is a member and representative of the Health Data Collaborative, which aims to improve coordination around data so many data initiatives, including a CRVS working group
- The FCDO have supported a range of programs, including the World Bank's efforts to secure inclusive digital ID and CRVS systems
- It is clear to see the value of CRVS for not only for health, but also basic human rights
- Health leadership is vital to observe development of CRVS systems
- Governments need to ask for vital statistics to be front and centre as a health issue, it has always been on the side-line in health discussions

- Efforts need to be coordinated, e.g. needing to bring in the private sector and tech to offer solutions

Open Data Watch - Dr Shaida Badiie - Managing Director and Co-founder

- Open Data Watch (ODW) is an international, non-profit organization working at the intersection of open data and official statistics. ODW supports national statistical offices in their efforts to build capacity along all stages of the data value chain, from production, to dissemination, to use.
- ODW work very closely with PARIS21, on the tracking and financing of development data
- CRVS systems in LMICs are under-funded and under-functioning
- The cost estimate is US\$1.5 billion in development assistance, matched by an equal level of domestic funding, adding to the complexity of the need for financing
- Many initiatives are underway, but there is a huge shortfall in the funding needed for CRVS investments, as detailed in the latest PRESS 2021 report by PARIS21
- Investments alone will not strengthen CRVS systems; coordinated donor efforts and better data financing are also needed – fragmented and duplicated efforts pose a barrier to progress
- We need better data to improve how we track investment in CRVS systems
- Tracking of financial flows for CRVS can be improved by; partial support vs primary support, consistent donor tracking, use of global initiatives such as the Bern Network and the Clearinghouse for Financing Sustainable Development Data, etc.
- Call for increased financing for initiatives aimed at building capacity in countries adopting a holistic approach to CRVS systems as well as partnerships between sector experts (health, gender, ID, humanitarian) and CRVS stakeholders

The Partnership in Statistics for Development in the 21st Century (PARIS21) - Dr Johannes Jutting - Executive Head

- Presentation of the 'Clearing House for financing development data' webpage, including where funding for CRVS is coming from and what these funds are being used for – it should act as tool to bring together those coming from health and statistical perspectives
- Introduction of the Cape Town action plan for more and better development data, and linked funding plan
- Key Questions: Where can the funds be sourced from? How can resources be mobilised internationally and nationally?
- System change will only come if national partners in-country see the improvement of development data as a priority
- There are different communities tackling the problems surrounding vital statistics; registration communities, vital statistics, health, and development – these communities need to learn to speak a similar language to bring them together and increase efficiency of CRVS system investment and development

Health Data Collaborative (HDC) and SDG Global Action Plan (GAP) - Dr Mwenya Kasonde - Consultant, WHO

- The SCORE technical package, developed through significant partner-wide support, has shown us that most LMICs lack data on deaths
- SCORE serves as a basis for investment frameworks by guiding strategic investments towards the needs and priority interventions that have the most impact on the ground, by specifically identifying areas of weakness in HIS
- Ministries of finance, as well as donors, can invest according to need using SCORE – example of the collaboration of ministries in Kenya, leading to the rapid improvements in the CRVS system
- SCORE can be adapted to local contexts, making targeted investments in the HIS more impactful

- More than 70% of deaths in Sub-Saharan Africa are going unreported, with about 25% unreported deaths in Latin America
- The most important thing healthcare partners can do is share information – collaboration transparency, and alignment in the management of knowledge, processing of information, and analysis of data is crucial
- The Health Data Collaborative has developed a new technical working group focusing on data and digital governance and disseminating standards and tools for better data security, quality and mobility

17:55 - 18:00 Session 8: Conclusion and future outlook

Closing remarks - Dr Samira Asma - Assistant Director-General, Division of Data, Analytics and Delivery for Impact, WHO

- Only when we come together can we achieve the most fundamental task of 'leaving no-one behind', by accurately counting births, deaths and causes of death
- We are still challenged by very daunting gaps
- 40% of deaths worldwide are going unregistered
- Over 150 countries are still facing challenges to report on causes of death
- We know the solutions are only as good as the political commitment at the highest level, backed by financial investment and country-led plans
- We have the tools, we know the gaps; now we need to come together to turn the corner
- It is critical we remain collectively aligned together and ready for the long haul, and we should be able to get to the destination

Recommendations made by the CRVS Technical Partners Meeting

1. The meeting welcomed the WHO's CRVS Strategic Implementation Plan 2021-2025 and recommended that WHO provide leadership and guidance to CRVS partners in order to:
 - a. support the health sector in each country to facilitate the notification of all births and deaths to national registration authorities; and
 - b. strengthen capacity of the health sector in countries to ensure that causes of death are comprehensively assigned and correctly certified.
2. All partners should review and intensify their collaboration and support to countries, moving away from the siloed approach of the past and more effectively supporting countries to achieve full registration/recording of all births and deaths, i.e. 'leaving no one behind'
3. Recognizing that Universal Health Coverage could not be achieved without universal birth and death registration, and that high-level political commitment to develop CRVS systems was crucial for this to occur, the meeting recommended that all countries:
 - a. review their CRVS legislation to ensure that it was supporting rather than hindering the efficient functioning of notification, certification and registration of all vital events so that all citizens were able to obtain a legal identity, and government authorities, at all levels, were provided with reliable data on which to base their planning;
 - b. develop or update business process maps of the functioning of their CRVS systems, and use this information to guide the development of CRVS system improvement plans; and
 - c. partners intensify collaboration to strengthen country capacity to implement and use business process mapping to rationalize and improve their CRVS systems.
4. Recognizing that without rapid progress to strengthen their birth and death reporting systems many countries would be unable to reliably monitor trends in those SDG indicators that rely on CRVS data, the meeting recommended that countries prioritize:
 - a. improving processes for the notification of all vital events as well as their registration, exploiting the opportunities provided by the health sector;
 - b. strengthening capacity to assess and improve the quality of birth and death data they collect to ensure that these data are fit for purpose and can be relied upon for policy and monitoring;
 - c. moving as quickly as possible towards system digitization for the timely and efficient operation of CRVS systems, applying a holistic, whole-of-system approach in order to ensure full benefits for countries; and
 - d. encouraging partners to strengthen collaboration, drawing on their areas of technical expertise, to support countries to build local capacity and processes that will meet these needs and ensure their sustainability.
5. The meeting acknowledged the key mandate of WHO to routinely and reliably monitor the global health situation and welcomed the new initiative by WHO to collect information from countries on excess mortality due to COVID-19. Moreover, the meeting recognized the opportunity, visibility, and urgency that the pandemic brought to the need for improving the timeliness and completeness of death registration and notification systems. It therefore recommended that countries be better supported, if needed, to:
 - a. evaluate the completeness and quality of their cause of death statistics;
 - b. improve the capacity of certifying doctors to correctly certify the cause of death, avoiding ill-defined and vague diagnoses;
 - c. integrate the efficient use of VA methods to diagnose the cause of home deaths, including from COVID-19, into routine CRVS systems;
 - d. calculate excess mortality due to COVID-19 using established methods based on comparing expected deaths with reported deaths; and

- e. adopt ICD-11, including adoption of WHO recommendations for correctly certifying COVID-19 deaths, for medically certified deaths.
6. The meeting recognized that building CRVS systems that function properly demands resources that currently are not available in all countries. It therefore encouraged all global agencies and financing facilities to:
- a. increase resources to assist countries, particularly in Africa, to support the development of national notification and registration systems for births, deaths and causes of death;
 - b. combine and coordinate assistance efforts in countries to work with national and local governments to foster and better nascent systems and promote best practices. Current experience has shown that where efforts are combined it is possible to make substantial progress in a relatively short time; and
 - c. assist countries to reduce or eliminate fragmentation and duplication within systems, primarily through promoting more extensive business process mapping and increased inter-sectoral collaboration in countries. This action could release funds that are desperately needed to generate the data that countries need for their social and human development. The health sector is a key player in leading this drive.

Annex. Links to publications and resources relevant to the CRVS Technical Partners Meeting *(alphabetical order)*

African Union (2020) [No Name Campaign](#)

African Union & United Nations Economic Commission for Africa (2019) [Guidelines on the drafting of memorandums of understanding for better coordination among national stakeholders of civil registration and vital statistics systems at the country level](#)

Africa Programme on Accelerated Improvement of Civil Registration and Vital Statistics and partners (2021) [CRVS Systems Improvement Framework, Version 1.0](#)

[Asia eHealth Information Network webpage](#)

Bloomberg Philanthropies Data for Health Initiative (2019) [Global Grants Program](#)

[Bloomberg Philanthropies Data for Health Initiative webpage](#)

Centers for Disease Control and Prevention (2015) [International Technical Assistance on CRVS](#)

[Centre of Excellence for CRVS systems webpage](#)

[Child Health and Mortality Prevention Surveillance \(CHAMPS\) webpage](#)

[CLEARINGHOUSE For Financing Development Data webpage](#)

[Get every one in the picture, Information note: National multi-sectoral CRVS coordination mechanisms](#)

Global Health Advocacy Incubator (2021) [Civil Registration, Vital Statistics & Identity Management \(CRVSID\)](#)

Global Health Advocacy Incubator (2021) [Legal and Regulatory Review Toolkit for CRVSID](#)

[Health Data Collaborative webpage](#)

Horton R. (2007) [Counting for health](#)

Muñoz D. C., Abouzahr C. and de Savigny D. (2018) [The 'Ten CRVS Milestones' framework for understanding Civil Registration and Vital Statistics systems](#)

[National Data Management Center for Health webpage](#)

[Open Data Watch webpage](#)

Pacific Community and partners (2021) [Best Practice Guidelines for Digital CRVS Systems, Draft for Consultation](#)

[PARIS21 \(2021\) Partner Report on Support to Statistics \(PRESS\)](#)

[PARIS21 webpage](#)

United Nations Department of Economic and Social Affairs (2015) [Transforming our world: the 2030 Agenda for Sustainable Development](#)

[United Nations Economic and Social Commission for Asia and the Pacific 'Get every one in the picture' webpage](#)

United Nations Economic and Social Commission for Asia and the Pacific (2020) [Production of a Vital Statistics Report \(Resource Kit\)](#)

United Nations Economic and Social Commission for Asia and the Pacific (2014) [Regional Action Framework on Civil Registration and Vital Statistics in Asia and the Pacific](#)

United Nations High Commissioner for Refugees (2018) [Guidance on Registration and Identity Management](#)

United Nations Statistics Division (2021) [Demographic Yearbook System](#)

United Nations Statistics Division (2021) [United Nations Legal Identity Agenda](#)

University of Melbourne and Data for Health Initiative partners (2020) [CRVS Knowledge Gateway](#)

Vital Strategies – [Civil Registration and Vital Statistics webpage](#)

Vital Strategies – [CRVS Systems Improvement Framework e-learning course](#)

Vital Strategies – [Data Impact webpage](#)

Vital Strategies (2020) [Estimating Completeness of Birth and Death Registration, Methods and Options for Estimating Completeness of Civil Registration](#)

Vital Strategies – [Guidance for Civil Registration and Vital Statistics \(CRVS\) Governance Mechanisms](#)

Vital Strategies – [Strengthening CRVS Systems Guides](#)

World Bank and World Health Organization (2014) [Global CRVS Scaling Up Investment Plan 2015-2024](#)

World Health Organization (2021) [Global Health Estimates](#)

World Health Organization (2021) [ICD-11: International Classification of Diseases 11th Revision](#)

World Health Organization (2021) [SCORE for Health Data Technical Package](#)

World Health Organization (2021) [The Triple Billion targets: A visual summary of methods to deliver impact](#)

World Health Organization (2019) [Thirteenth general programme of work 2019-2023](#)

World Health Organization (2021) [Universal Health Coverage \(UHC\)](#)

World Health Organization (2021) [WHO Civil Registration and Vital Statistics Strategic Implementation Plan 2021-2025](#)

World Health Organization Regional Office for South-East Asia (2015) [Regional Strategy for strengthening the role of the health sector for improving CRVS, 2015-2024](#)

World Health Organization Regional Office for the Eastern Mediterranean Region (2014) [Regional Strategy for the Improvement of Civil Registration and Vital Statistics Systems, 2014-2019](#)

World Health Organization & United Nations Children's Fund (2021) [Health sector contributions towards improving the civil registration of births and deaths in low-income countries; Guidance for health sector managers, civil registrars and development partners.](#)