# OVERVIEW

# Building national capacity, skills and knowledge Civil Registration and Vital Statistics (CRVS) Data for Health Initiative

## Course Prospectus
## August 2016

# Civil Registration and Vital Statistics, Data for Health Initiative

Globally, about 65% of all deaths, or around 35 million each year, go unrecorded. And millions of deaths do not have a documented cause. Many records do not provide medically accurate or specific information. Without this information, government officials, public health leaders and donors cannot make informed decisions on priorities including how and where to direct public health resources.

The registration of births and deaths, including the accurate recording of cause of death, are the foundation of any public health system. To help countries improve public health and save lives, the Data for Health Initiative will help countries build and strengthen their civil registration and vital statistics (CRVS) systems. Interventions include technical assistance to increase the registration of births and deaths, improve the quality of cause of death information at hospitals, apply verbal autopsy to better understand probable causes of death in communities, and to produce high-quality data sets and data analysis skills for policy and program analysis.

A major component of the CRVS Improvement Program is the development and delivery of capacity-building training materials and courses.

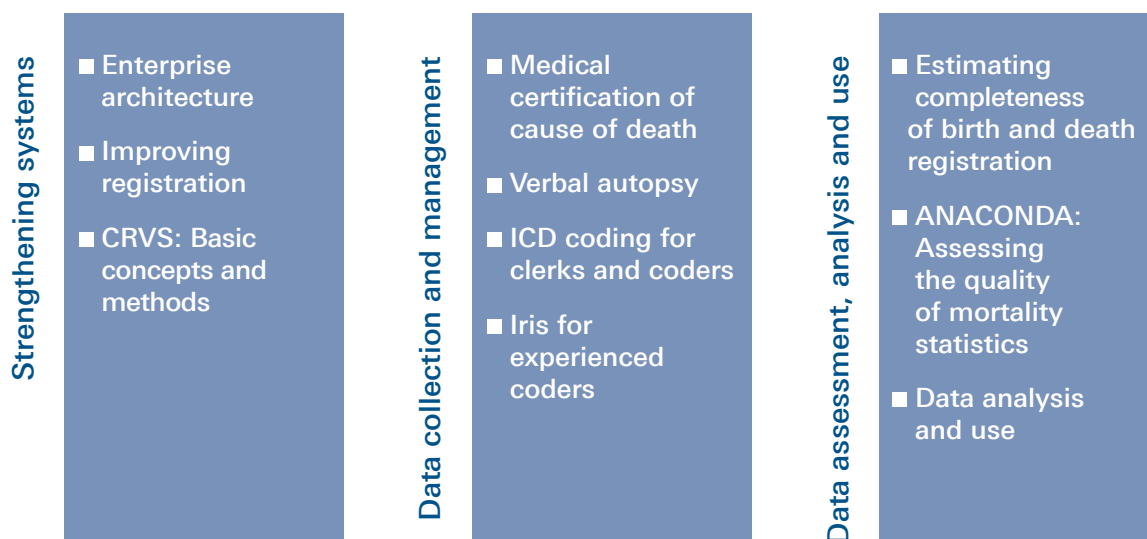# Improving national capacity, skills and knowledge for CRVS

Improving national capacity, skills and knowledge is a critical component of any strategy to strengthen a civil registration and vital statistics system. Capacity development is needed to ensure high-quality registration of births and deaths and ascertainment of causes of death. Capacity is also needed in ensuring that the data collected are properly and promptly compiled, checked, analysed and transformed into vital statistics that are used for policy and planning.

Seven training courses are available as part of the D4H CRVS Improvement Program, with several more under development. These courses are currently only open to those countries enrolled as part of the D4H Initiative CRVS Improvement Program, but it is expected that course content will eventually be available online for wider dissemination and use.

As part of the preparation and planning for each course, a training needs assessment should be completed. This will help identify individual training needs and capacity, and also identify any system or structural issues that may impact on the success of the course.

Each course has been developed with a specific training need in mind (see Figure 1). These training courses are intended to form part of a broader strategy to support CRVS systems development in countries, and should be given comparable importance as specific measures designed to improve data collection practices.

**Figure 1:** CRVS courses available and in development, CRVS D4H Initiative

**Strengthening systems**
- Enterprise architecture
- Improving registration
- CRVS: Basic concepts and methods

**Data collection and management**
- Medical certification of cause of death
- Verbal autopsy
- ICD coding for clerks and coders
- Iris for experienced coders

**Data assessment, analysis and use**
- Estimating completeness of birth and death registration
- ANACONDA: Assessing the quality of mortality statistics
- Data analysis and use

# CRVS courses available through the University of Melbourne

## CRVS enterprise architecture

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| Description | This course will introduce participants to the basic principles of enterprise architecture (EA) business process mapping and help participants develop the skills needed to apply this system analysis approach to CRVS systems. This training also aims to facilitate understanding and usage of EA products and outputs in strategic planning processes in D4H countries. The term "enterprise" here refers to the CRVS organizations' complete socio-technical systems, including people, information, processes and technologies. EA is a conceptual blueprint that defines the structure and operation of a CRVS system |
| Duration | 2 to 3 days |
| Target audience | Individuals and organisations directly involved in, and knowledgeable in the process of, civil registration and vital statistics (including, but not limited to, ministries or departments of health, national statistics offices, and civil registry offices) |
| Pre-requisites | In depth knowledge of the operation of the country's CRVS system |

## Medical certification of cause of death

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| Description | Reliable knowledge about causes of death is critical for policy making. The medical certification of cause of death should be completed by a doctor, following best practice as outlined in the *International Classification of Diseases (ICD)*. It is critically important that they do so correctly. This course is delivered as a 'training of trainers' program for doctors on ICD-compliant death certification practices. Doctors who attend this training program will become master trainers for training doctors in their own country |
| Duration | 2 to 3 days |
| Target audience | Doctors with responsibility for cause of death certification |
| Pre-requisites | Familiarity with the WHO international cause-of-death medical certificate |

## Verbal autopsy

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| Description | When doctors are not available, verbal autopsy (VA) is a method for collecting information from families about an individual's signs and symptoms prior to their death, and using this to diagnose the probable cause of death. A comprehensive training package is required for any country interested in implementing VA, and includes aspects such as understanding the tools for electronic data capture; how to conduct VA interviews; and how to assign causes of death, and systems issues related to the introduction of verbal autopsies, particularly IT |
| Duration | Minimum one-week for introduction and overview, with ongoing support for VA implementation |
| Target audience | Training is required for a number of different 'user groups' including interviewers, supervisors, IT staff and data management staff |
| Pre-requisites | Familiarity with the ICD and methods for collecting cause of death data in populations |

## International Classification of Diseases (ICD) mortality coding

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| Description | Reliable data on causes of death are critical for policy making. This course is intended for staff directly involved in coding death certificates. It aims to produce a skilled cadre of ICD-10 coders who can correctly code the underlying cause of death, following internationally agreed standards. Pending previous training and current country capacity, the course can either be run for five- or ten-days, with the option of including additional time for 'training of trainers' |
| Duration | 5 to 10 days |
| Target audience | In-country coding staff |
| Pre-requisites | Basic understanding of medical terminology; adequate quality of medical records; availability of ICD volumes in-country |

| Estimating completeness of birth and death registration | |
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| Description | This course is designed to improve participants' ability to utilise a range of methods to estimate the completeness of birth and death registration. This information is essential in determining and monitoring strategies to rapidly increase vital events registration in countries; it can also help data users adjust for biases when using vital statistics to generate policy-relevant fertility and mortality measures. The course can be adapted for local contexts based on a prior assessment of training needs and available data |
| Duration | Up to 5 days (pending country requirements) |
| Target audience | Analysts with routine responsibility for generating and analysing vital statistics data from civil registration records |
| Pre-requisites | Experience with using Excel or a statistics program such as Stata or SPSS<br>Basic understanding of fertility and mortality measures |

| Assessing the quality of mortality and cause of death statistics (ANACONDA) | |
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| Description | This course introduces participants to a series of steps to help them check the accuracy and completeness of mortality and cause of death data for potential errors and inconsistencies using an electronic tool (ANACONDA: Analysis of Causes of Death for National Development and Action) into which Excel files with cause of death data by age and sex can be imported. Participants receive guided instruction and practice in using the ANACONDA tool and interpreting the results |
| Duration | 3 days |
| Target audience | Those with routine responsibility for generating mortality statistics and analysis at the national and sub-national level |
| Pre-requisites | Basic understanding of ICD-10 concepts<br>Access to laptops or desktop computers<br>Cause of death data-set, by age and sex, compiled into ICD-10 three-digit codes<br>Participants should have basic computer skills and some knowledge of the ICD in order to understand the concepts and rational of classifications used to analyse the data |

# Courses under development

## IRIS AUTOMATED MORTALITY CODING

Building on the core principles taught in 'ICD mortality coding', this course is for experienced coders, and teaches the use of the automated mortality coding software, Iris. The course is generally taught over five days and provides participants with the opportunity for installing and practising coding using the Iris software.

## CRVS: BASIC CONCEPTS AND METHODS

This course is intended to provide participants with a broad overview of the importance of CRVS systems in guiding policy and improving population health. It will introduce the core concepts, functions, and processes of a civil registration system, including common data challenges and ways to address them.

## IMPROVING BIRTH AND DEATH REGISTRATION

This practical, hands-on training course will look at innovative strategies for improving birth and death registration, including basic methods for identifying and addressing system barriers.

## CRVS DATA ANALYSIS AND USE

The CRVS Data Use Training Course is a collaboration between Vital Strategies (VS), the University of Melbourne (UoM) and the Centers for Disease Control and Prevention (CDC). It will be of interest to participants from Ministries of Health, National Statistics Offices, and Civil Registry Office staff in project countries involved in analysing, disseminating, or using vital statistics. The course builds skills in conducting and interpreting basic vital statistics data analysis; participants will become familiar with more advanced analytical concepts and uses of CRVS data, including how to create high-quality vital statistics visualisations and reports, and how to more effectively disseminate CRVS data to multiple audiences.
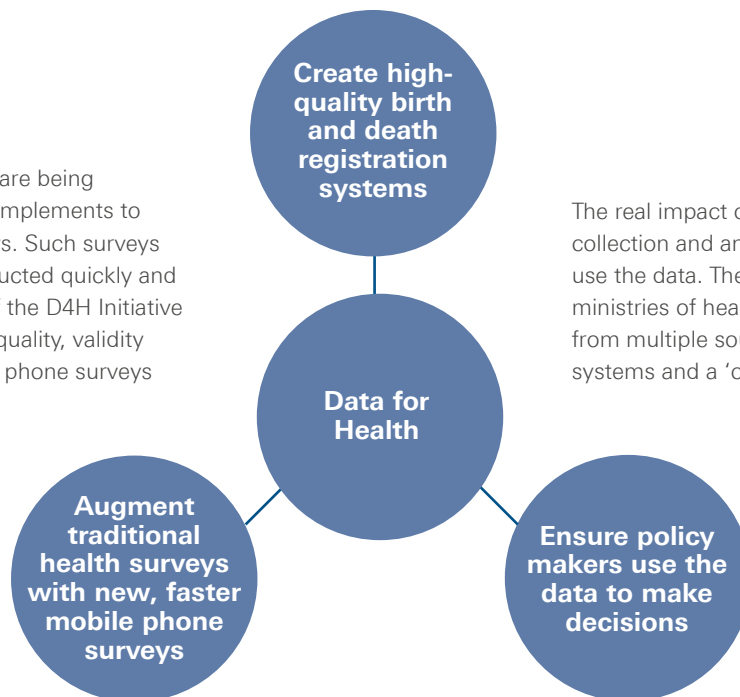
# Data for Health Initiative

Record keeping is necessary to tackle public health problems, but 150 nations cannot reliably track what kills their citizens. In addition, non-communicable diseases (NCDs) such as heart disease and diabetes are becoming increasingly important drivers of poor health and premature deaths. Bloomberg Philanthropies Data for Health Initiative has been launched with the ultimate goal of saving more lives by ensuring countries have more accurate public health information.

The Bloomberg Data for Health Initiative, in partnership with the Australian Department of Foreign Affairs and Trade, will work to improve public health data so that governments, aid organizations, and public health leaders are equipped with the tools and systems to collect and use data to prioritize health challenges, develop policies, deploy resources, and measure success.

Working with partners including the CDC Foundation, Johns Hopkins University, the World Health Organization, Union North America and The University of Melbourne – over the next four years, Data for Health aims to help more than one billion people in 20 countries across Africa, Asia, and Latin America live healthier, longer lives.

Mobile phone-based surveys are being increasingly considered as complements to traditional face-to-face surveys. Such surveys have the potential to be conducted quickly and cheaply. The NCD program of the D4H Initiative will determine the feasibility, quality, validity and reliability of using mobile phone surveys for NCD surveillance

The real impact of improved data collection and analysis is when people use the data. The D4H Initiative will assist ministries of health in leveraging data from multiple sources, and in creating systems and a 'culture of data uset'

**Create high-quality birth and death registration systems**

**Data for Health**

**Augment traditional health surveys with new, faster mobile phone surveys**

**Ensure policy makers use the data to make decisions**

**For more information, contact your CRVS Improvement Program Focal Point, Technical Lead, Program Officer, or Country Coordinator. Or you can email CRVS-info@unimelb.edu.au**

The program partners on this initiative include: The University of Melbourne, Australia; CDC Foundation, USA; Vital Strategies, USA; Johns Hopkins Bloomberg School of Public Health, USA; World Health Organization, Switzerland.

Civil Registration and Vital Statistics partners:

**For more information, contact:**
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