



United Nations Statistics Division

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Demographic Evidence from Civil Registration Systems

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Purpose of presentation

- Provide a review of the availability of basic statistics and deaths compiled from the records of civil registration systems, and their quality
- A global review and by region
 - Africa, Asia, America North, America South, Europe, Oceania,
 - 1995-2014 reference period
 - Using the UN Demographic Yearbook database; data and info as of mid-September 2015
- Provide additional insight on challenges and areas needing work and improvement

Vital statistics Demographic Yearbook

- UNSD collects annually statistics on vital events and quality of quality via the Demographic Yearbook Vital Statistics questionnaire, completed by the National Statistics Offices (NSOs).

- The template of the questionnaire is available online
<http://unstats.un.org/unsd/demographic/products/dyb/dybquest.htm>

- The questionnaire is comprised of many tabulations of a wide range of vital events according to the **Principles and Recommendations for a Vital Statistics System**

<http://unstats.un.org/unsd/demographic/standmeth/principles/default.htm>

Vital statistics Demographic Yearbook

- The aim is to collect vital statistics at the national level, outputs of civil registration systems.
- For simplicity, in this presentation we denote by “CRVS births” and “CRVS deaths” statistics on respectively births and deaths from the records of civil registration systems of countries and reported thereafter by NSOs to UNSD.
- The collected data are reviewed, processed and stored in Demographic Yearbook database.

Information on the other vital events or additional ways of disaggregating the availability of data is provided upon request.

Vital statistics on births and deaths

- As part of the vital statistics data collection, NSOs are requested annually the total numbers of live births and deaths that have occurred in the calendar year (and by sex and urban or rural residence), as well as for births by age of mother and sex of newborn and deaths by age.
- NSOs are requested to provide as well, an estimate of the completeness of the national level and also for all ages combined in the case of deaths and births and deaths numbers reported.
- The completeness of births and deaths data, depends respectively on the coverage and completeness of births and deaths registration.
- For the purpose of Demographic Yearbook, an estimate of more than 90 per cent refers to “complete” data, otherwise “incomplete”.

Births and deaths statistics –

Figure 1: Availability of total births reported to Demographic Yearbook, percentage of countries/areas

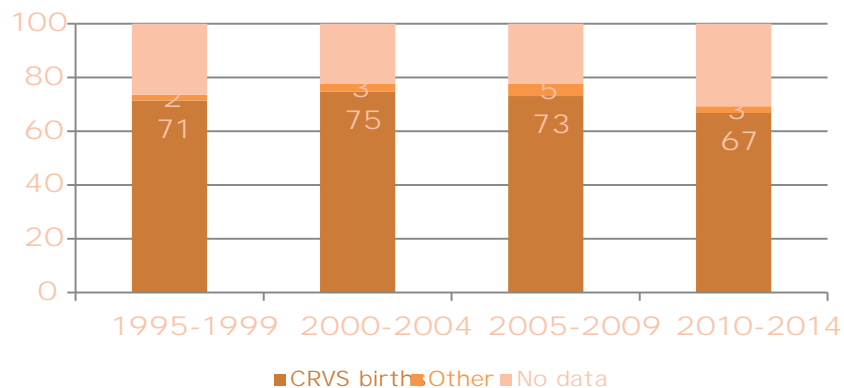


Figure 2: Availability of births by age of mother reported to Demographic Yearbook, percentage of countries/areas

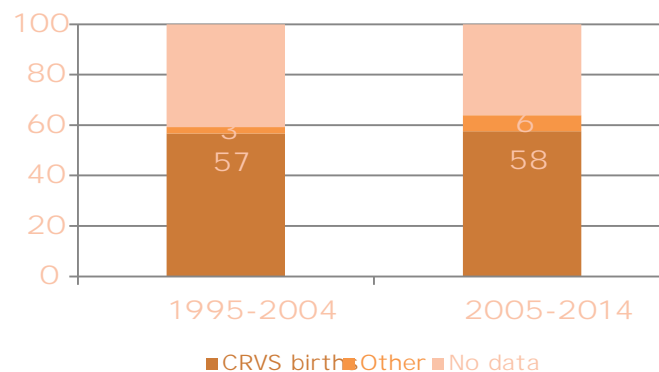


Figure 3: Availability of total deaths reported to Demographic Yearbook, percentage of countries/areas

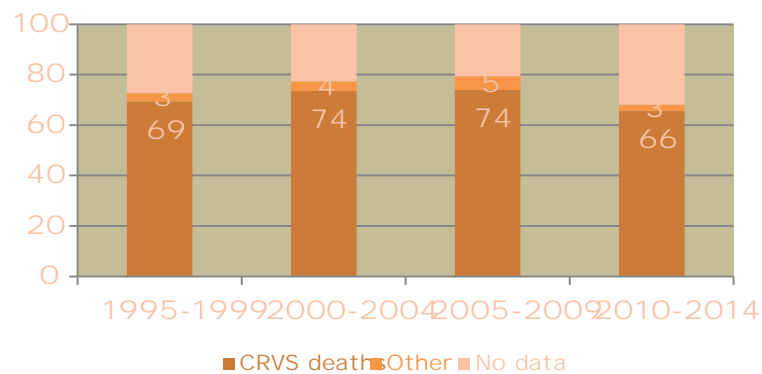
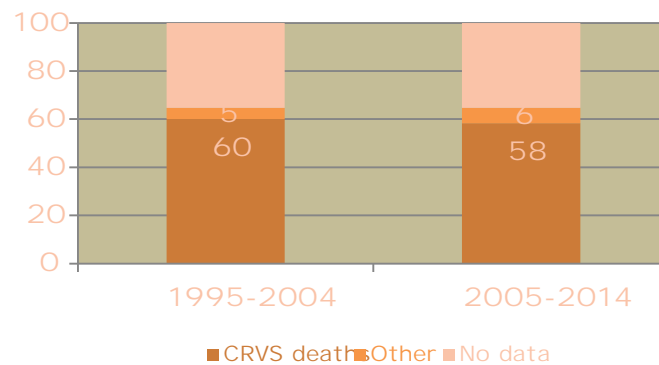


Figure 4: Availability of deaths by age reported to Demographic Yearbook, percentage of countries/areas



Births and deaths statistics –

- Information is presented since 1995 by five-year reference periods for total births and deaths
- and by two-year reference periods for births by age of mother (and sex of born) and deaths by age and sex; these reference periods coincide with the 2010 rounds of population censuses
- The “Other” portion of the bars include countries or areas that have reported number of births or household deaths, compiled from census declarations for a 12-month period (or any other appropriate period) before a census, and only with sample vital registration systems or a large demographic survey.
- Some of the reporting countries that have used census as a source for deaths are: Bhutan, Bolivia, Botswana, DPR Korea, Ghana, Jamaica, Liberia, Mali, Mozambique, Namibia, Nepal, Republic of South Sudan, Samoa, Saudi Arabia, Senegal, Sierra Leone, State of Palestine, Swaziland, Tokelau, Tonga, Zambia

Births and deaths statistics –

some conclusions

- Availability of total births or deaths compiled as outputs of CR systems only slight improvements during 2002-2009 compared to 1995 dropping again for 2010-2014.
- For the reference period 2010-15 the percentage of countries that could report CRVS births (complete or incomplete) is at most 73 per cent. The analogous figure for deaths is 74 per cent.
- The availability of CRVS data is lower for the more detailed datasets. Over two decades, the availability of CRVS births by age of mother has remained at 58 per cent, and of deaths by age and sex at 58. These numbers refer to complete or incomplete data.

Births and deaths statistics Africa

Figure 5: Africa, availability of total CRVS births, number of countries/areas

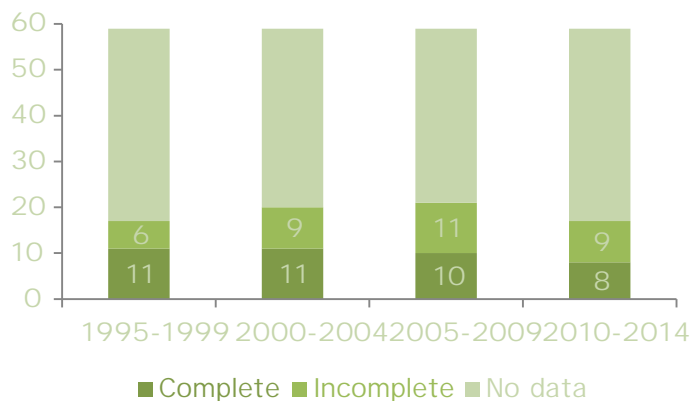


Figure 5a: Africa, availability of total CRVS births, percentage of countries/areas

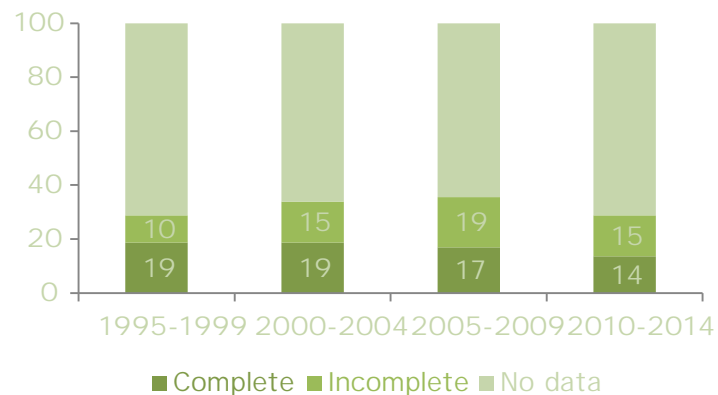


Figure 6: Africa, availability of total CRVS deaths, number of countries/areas

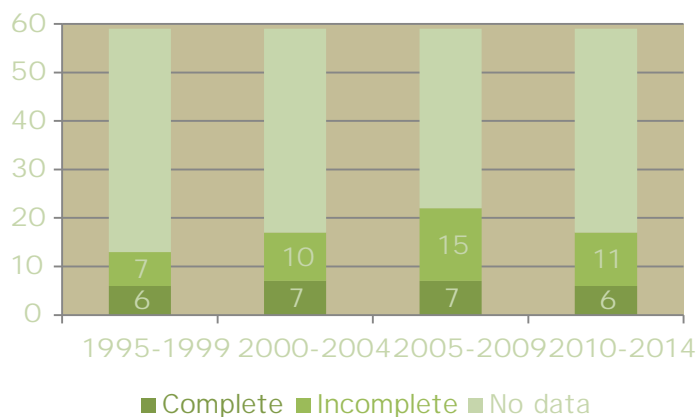
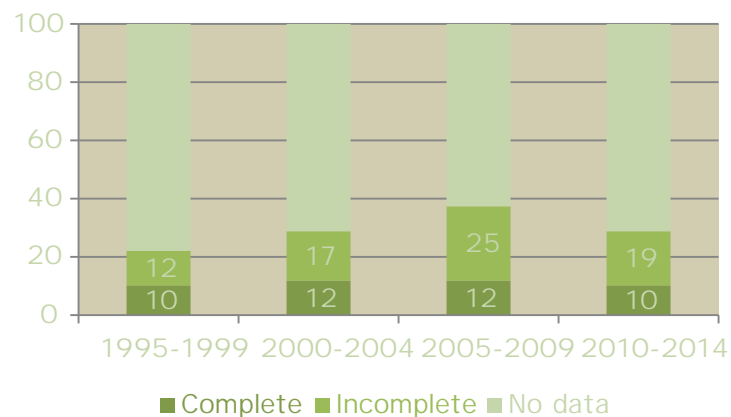


Figure 6a: Africa, availability of total CRVS deaths, percentage of countries/areas



Births and deaths statistics Africa

- The availability of total CRVS births has shown small improvements during the second and subsequently the third time period (from 29 to 34 the 36 per cent), however it falls back to 29 per cent for reference years 2014.
- The number of countries that could produce complete total CRVS births has decreased (11 during 1995-2004, 10 during 2005-2009 and 8 during 2010-2014).
- CRVS births by age of mother are available for 9 countries during 1995-2004 (7 complete and 2 incomplete) and for 12 countries during 2005-2014 (6 complete, 6 incomplete).

Births and deaths statistics Africa

- The availability of total CRVS deaths has also shown small improvement during the decade 2000-9, rising up to 37 per cent.
- However the number of countries/areas that could produce complete total CRVS deaths remains at 6 countries since 1995.
- CRVS deaths by age are available for 11 countries during 1995-2004 (5 complete and 6 incomplete) and for 13 countries during 2005-2014 (5 complete and 8 incomplete).

A notable number of countries have relied on censuses of population and surveys to produce fertility and mortality indicators.

Births and deaths statistics in North America

Figure 7: North America's availability of total CRVS births, number of countries/areas

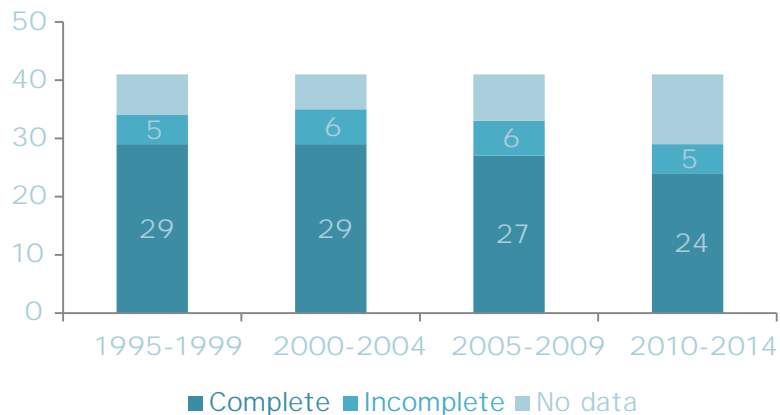


Figure 7a: North America's availability of total CRVS births, percentage of countries/areas

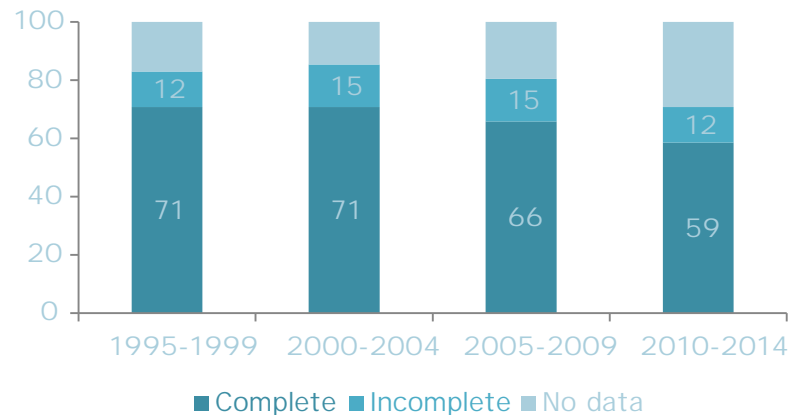


Figure 8: North America's availability of total CRVS deaths, number of countries/areas

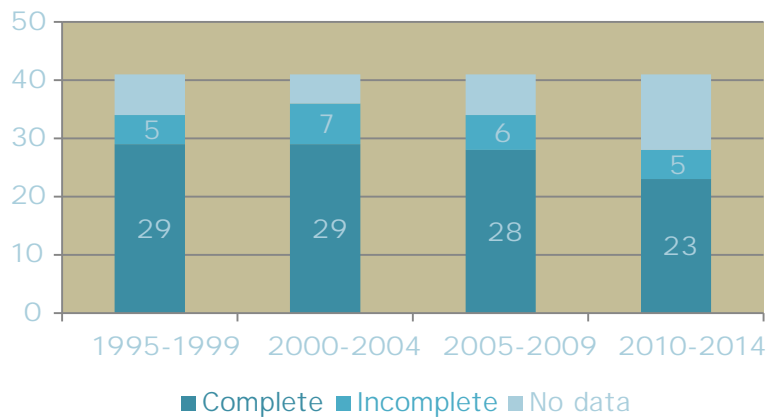
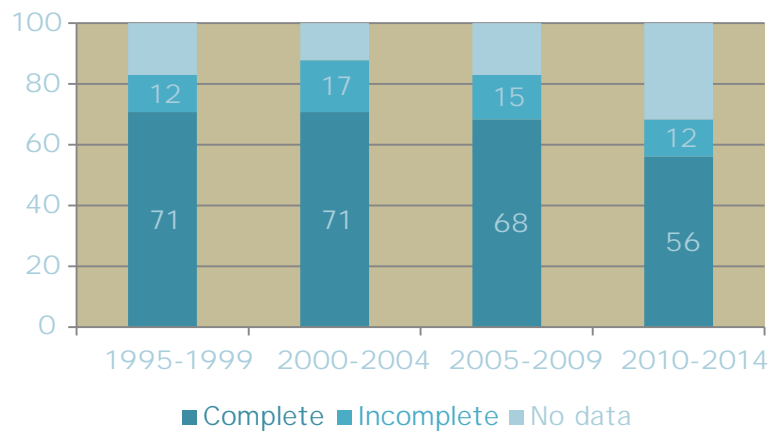


Figure 8a: North America's availability of total CRVS deaths, percentage of countries/areas



Births and deaths statistics in America, North

- The availability of total CRVS and deaths is above 80 per cent during 1995-2009, however it starts declining during 2010 and subsequently drops to 71 per cent for CRVS births and to 68 per cent CRVS deaths during 2014.
- Several Caribbean countries or areas have not reported vital statistics during the recent years.
- Among the reporting countries, the number reporting complete CRVS births and deaths is much higher than the number reporting incomplete ones.

Births and deaths statistics in America, North

- Most of the countries that have reported total numbers of CRVS births and deaths, have reported as well datasets on births by age of mother and deaths by age
- Datasets on CRVS births by age of mother are available for 29 countries during 1995-2004 (24 complete, 5 incomplete) and for 28 countries during 2005-2014 (23 complete, 5 incomplete)
- Datasets on CRVS deaths by age are available for 34 countries during 1995-2004 (28 complete, 6 incomplete) and for 27 countries during 2005-2014 (24 complete, 3 incomplete).

Births and deaths statistics in South America

Figure 9: South America availability of total CRVS births, number of countries/areas

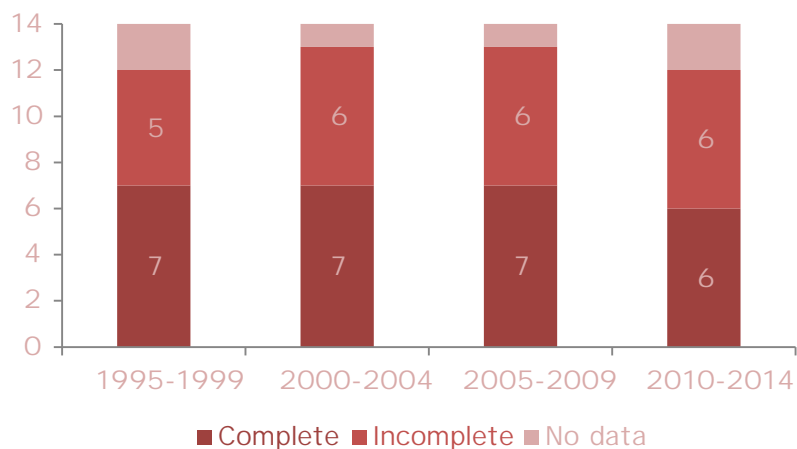


Figure 9a: South America availability of total CRVS births, percentage of countries/areas

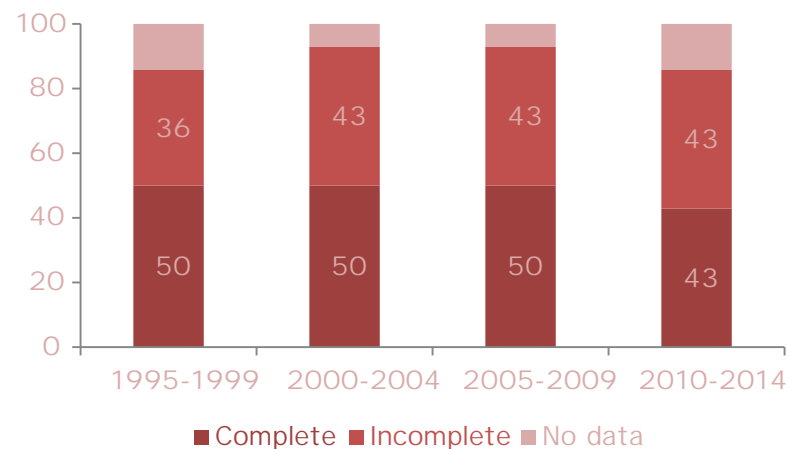


Figure 10: South America availability of total CRVS deaths, number of countries/areas

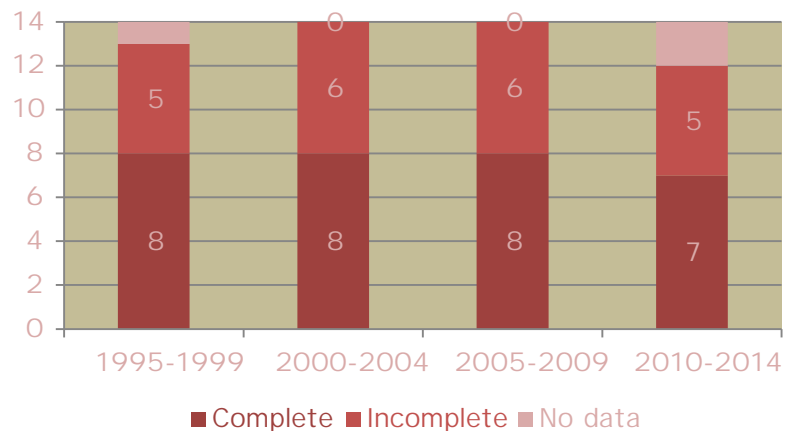
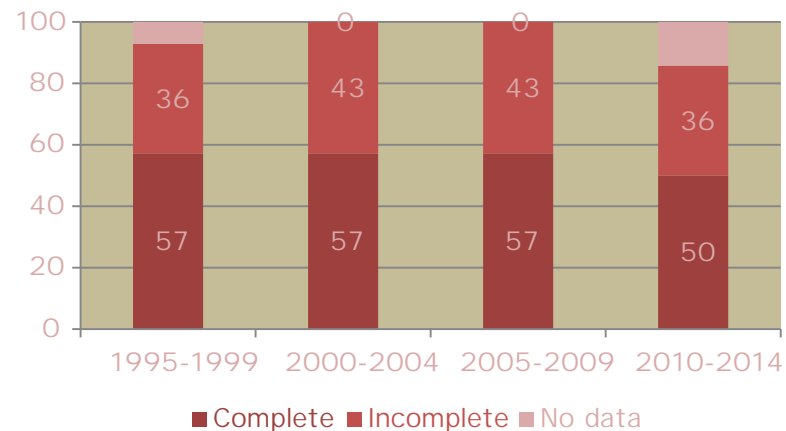


Figure 10a: South America availability of total CRVS deaths, percentage of countries/areas



Births and deaths statistics in America, South

- The availability of CRVS total births and deaths reporting is 86 per cent more, with only 12 non-reporting countries/areas during certain periods.
- The issue however is the completeness of data with 5 (out of 14) reporting births or deaths classified as incomplete.
- One of the issues in some countries is the incomplete combined with delayed registration. Work is being done in some countries to capture delayed registration of births and allocate such births to the year of occurrence, by recording during registration and tabulating for vital statistics the year of birth or the age of individuals registered, in addition to the date of registration, and other characteristics such as sex, residence of the mother, etc.

Births and deaths statistics in South America

- The incompleteness issue is reflected also in reporting CRVS births by of mother and sex of newborn and CRVS deaths by age and sex.
- Out of 14 countries/areas in South America, 10 have reported CRVS b by age of mother during 1995-2004 (6 complete, 4 incomplete) and 11 during 2005-2014 (6 complete, 5 incomplete).
- CRVS deaths by age have been reported by 12 countries during 1995-2004 (7 complete, 5 incomplete) and by 11 countries during 2005-2014 (6 complete, 5 incomplete).

Births and deaths statistics – Asia

Figure 11: Asia, availability of total CRVS births, number of countries/areas

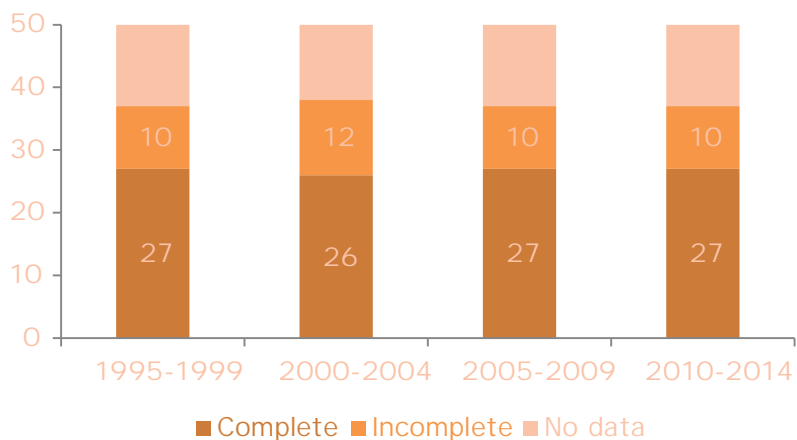


Figure 11a: Asia, availability of total CRVS births, percentage of countries/areas

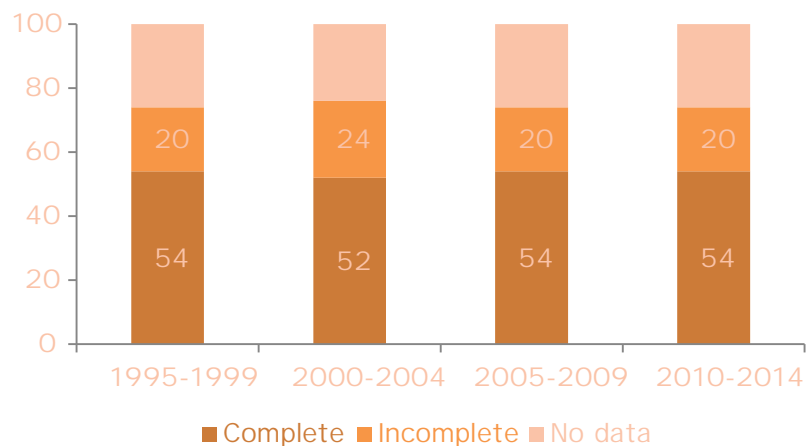


Figure 12: Asia, availability of total CRVS deaths, number of countries/areas

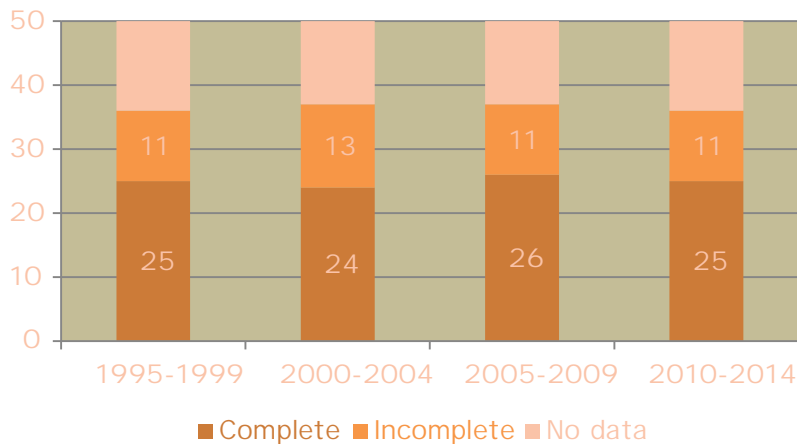
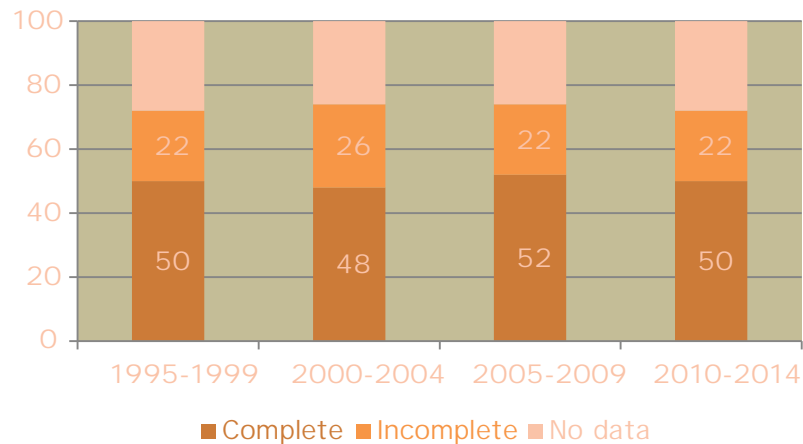


Figure 12a: Asia, availability of total CRVS deaths, percentage of countries/areas



Births and deaths statistics – Asia

- The level of total CRVS births and deaths availability has remained almost the same for the past 20 years 76 at 74 per cent of the number of countries for births and 74 per cent for deaths.
- The percentage of countries reporting complete total births is 52 per cent, whereas incomplete ones 24 per cent.
- The percentage of countries reporting complete total deaths is 48 per cent, whereas incomplete ones 26 per cent.
- Among the reporting countries, the share between the ones reporting complete and incomplete data has not visibly changed during the past years.

India and Bangladesh that provide data from sample registration and China based on national survey on population changes are not included in CRVS numbers.

Births and deaths statistics – Asia

- The numbers of countries that have reported CRVS births by age of mother (and sex of newborn) and deaths by age (and sex) are respectively lower than the ones reporting total births (and by sex of newborn) and total deaths (and by sex).
- Out of 50 countries in Asia, CRVS births by age of mother are available for 29 countries during 1995-2004 (23 complete, 6 incomplete) and 28 countries for 2005-2014 (23 complete, 5 incomplete).
- CRVS deaths by age are available for 26 countries during 1995-2014 (22 complete, 4 incomplete) and 29 countries for 2014-2015 (23 complete, 6 incomplete).

Births and deaths statistics Europe

Figure 13: Europe, total CRVS births, number of countries/areas

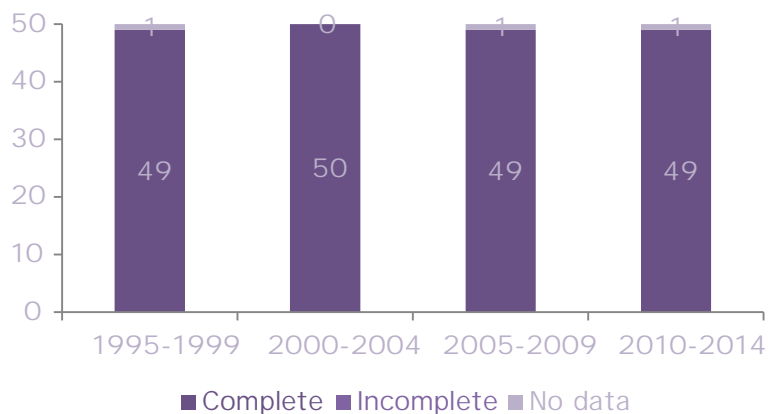


Figure 13a: Europe, total CRVS births, percentage of countries/areas

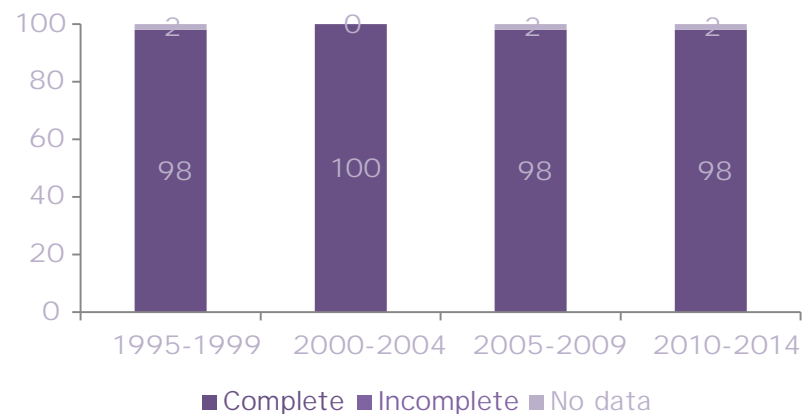


Figure 14: Europe, total CRVS deaths, number of countries/areas

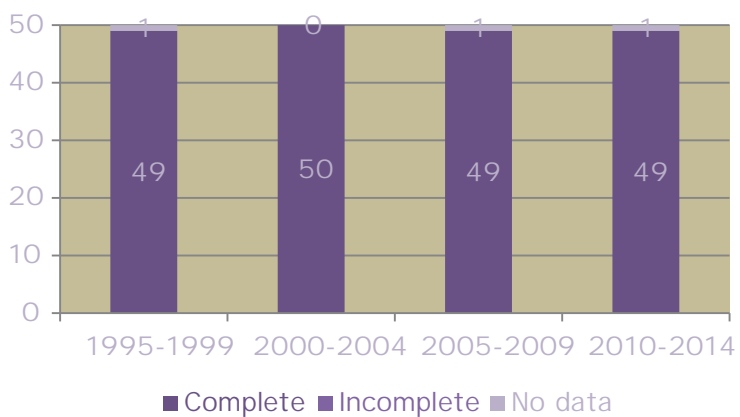
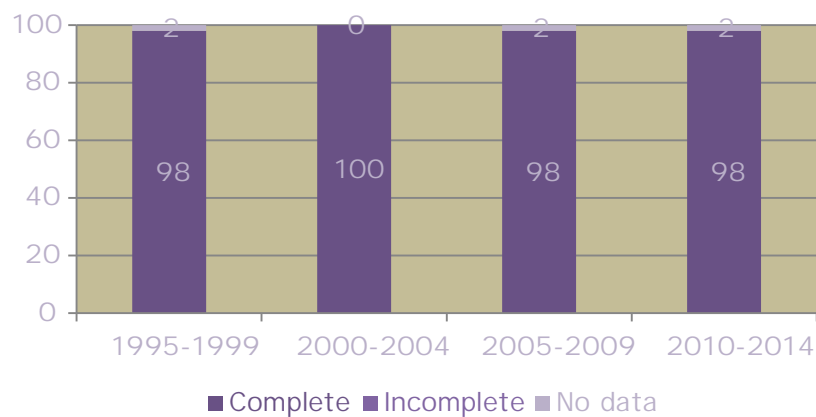


Figure 14a: Europe, total CRVS deaths, percentage of countries/areas



Births and deaths statistics in Europe

- In Europe, the reporting of total CRVS births and deaths, is complete for all countries or areas.
- However a few countries/areas have not reported the CRVS datasets for births by age of mother and sex of child and deaths by age and sex.
- Out of 50 countries/areas, 44 have reported births by age of mother during 1995-2004 and 46 during 2005-2014.
- 45 countries have reported datasets of deaths by age and sex during 2004 and 44 countries during 2005-2014.
- All the above statistics are complete (i.e. refer to 90 per cent or more of the events occurred in the reference year).

Births and deaths statistics Oceania

Figure 15: Oceania, total CRVS births, number of countries/areas

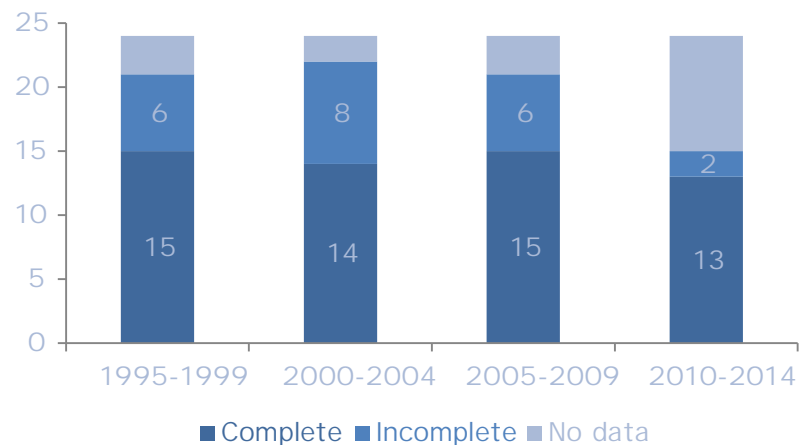


Figure 15a: Oceania, total CRVS births, percentage of countries/areas

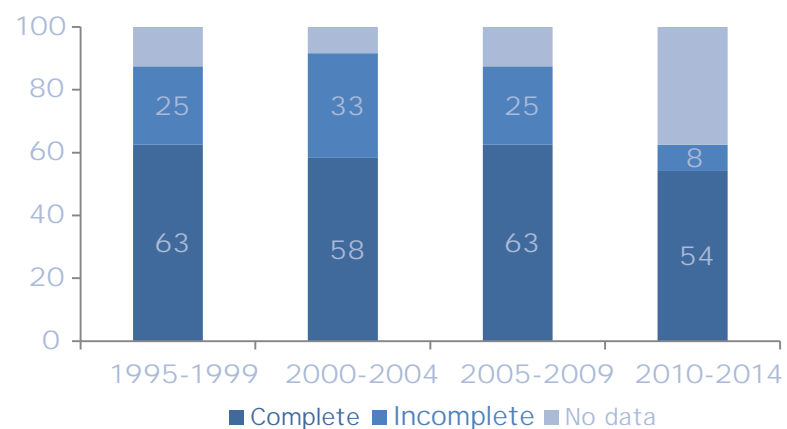


Figure 16: Oceania, total CRVS deaths, number of countries/area

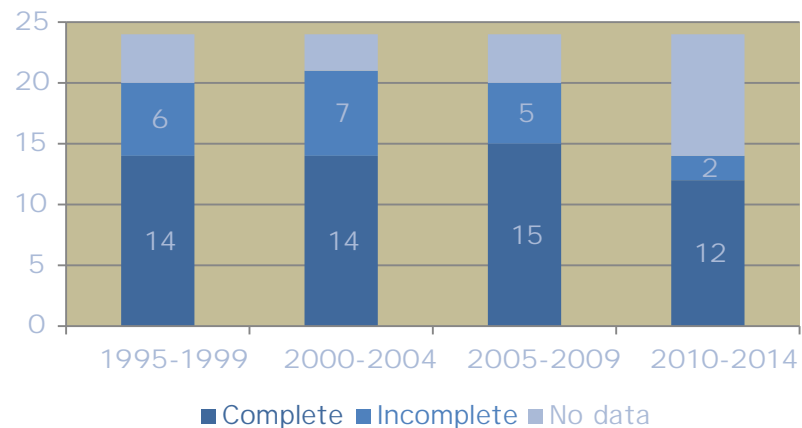
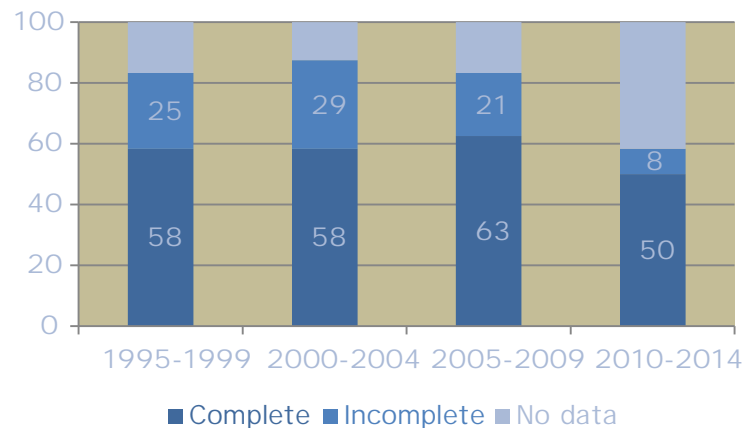


Figure 16a: Oceania, total CRVS deaths, percentage of countries/areas



Births and deaths statistics Oceania

- The availability of CRVS births and deaths in Oceania has decreased during the past 10 reference years, with a sharp decrease during the last five years.
- Many island nations or areas have not been able to report vital statistics recently.
- For the reference years 2000-2014, 15 countries/areas out of 24 have reported total CRVS births (13 complete and 2 incomplete).
- For the reference years 2000-2014, 14 countries/areas have reported total CRVS deaths (12 complete and 2 incomplete).

Births and deaths statistics Oceania

- CRVS births by age of mother are available for 14 countries/areas or 50 per cent during 1995-2014 (9 complete, 5 incomplete) and for 12 countries/areas or 50 per cent during 2010-2014 (10 complete, 2 incomplete).
- Datasets on CRVS deaths by age are available for 15 countries/areas or 50 per cent during 1995-2014 (11 complete, 4 incomplete) and the same numbers also for 2010-2014.
- Oceania has seen the sharpest decrease in availability of basic births and deaths datasets as a percentage of countries/areas.

Summary

Figure 17: Availability of total CRVS births, by period and region, percentages

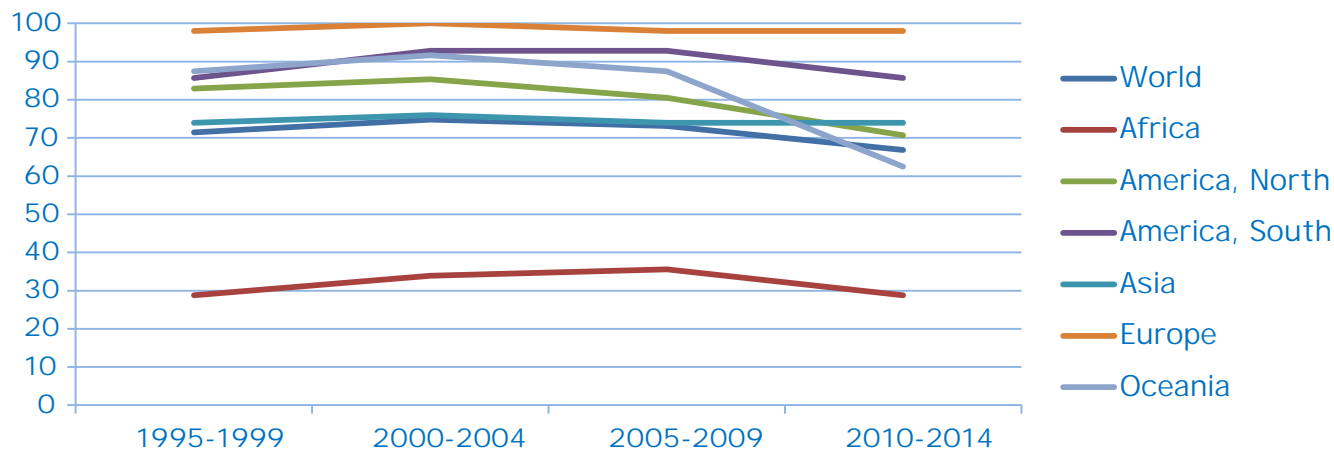
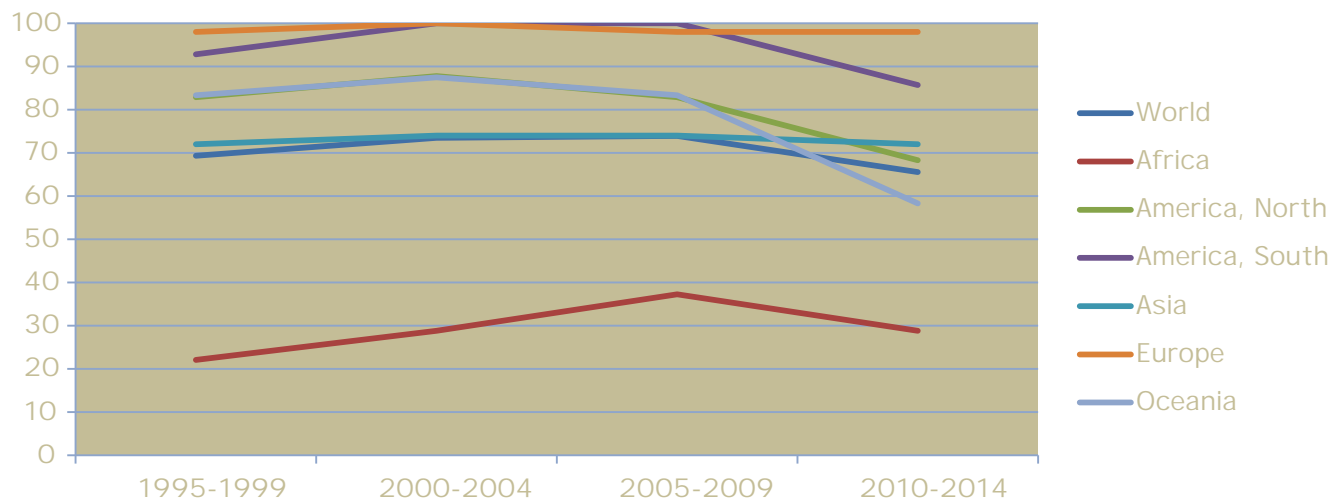


Figure 18: Availability of total CRVS deaths by period and region, percentages



Summary

Figure 19: Availability of total CRVS births, by completeness status and region, 2010-2014, percentage of countries/areas

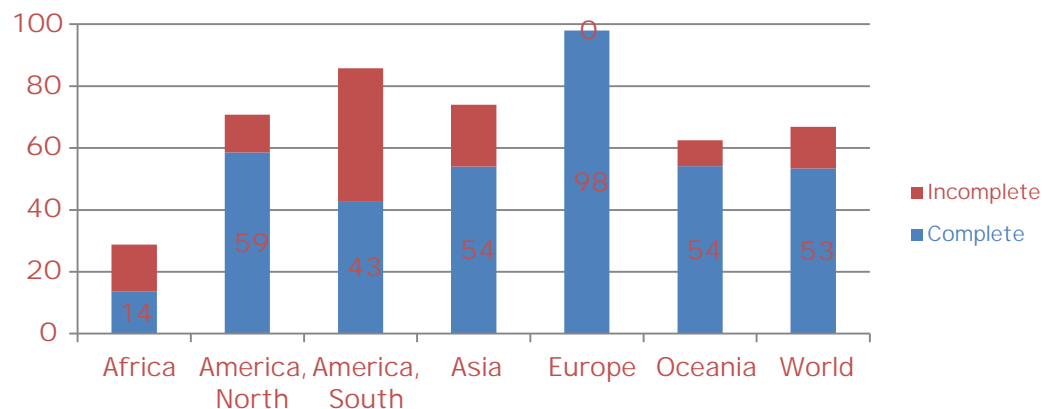
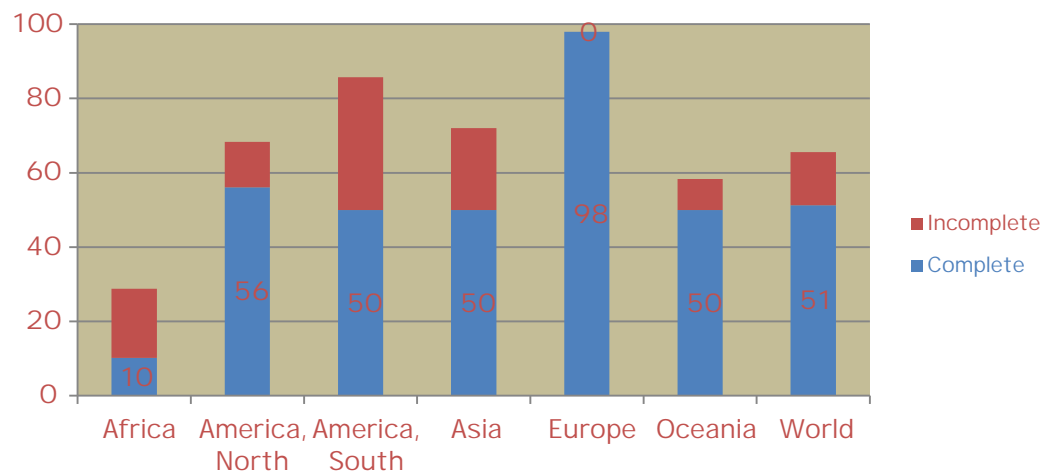


Figure 20: Availability of total CRVS deaths by completeness status and region, 2010-2014, percentage of countries/areas



Summary

- The availability of basic statistics on births and deaths compiled from records of civil registration systems overall has not improved during the past two decades,
- by region, and consequently globally.
- Differences among regions that existed in the past still persist.
- For some regions there is a decrease in availability.
- The more details are required of the basic statistics on births and deaths, the less is the number of countries able to provide such datasets at the national level.

Thank you