Template and guidelines for developing a Vital Statistics Report

Workshop on Vital Statistics for North and Central Asian Countries

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Outline

• Background
• Guidelines
• Template
Background

• Statistics Norway (SN) approached by ECA in 2015, later joined by ESCAP
• SN long experience with CRVS:
  • Compilation and use of CR data and publication of VS reports (since 1876)
  • Recently published: *Status Analysis on Civil Registration and Vital Statistics* (2014)
  • Projects and consultancies on CRVS in several countries, including Palestine, Mozambique, Uganda, Albania, Bangladesh and Vietnam
  • Currently involved in developing two eLearning modules on CRVS for the World Bank
Challenges

• Organization of the document:
  Two parts, many boxes and examples

• Countries very different with regard to
  – Organization of Civil Registration - and the statistical system
  – Coverage of vital events
  – Experience in developing vital statistics reports

• Difficult to find good examples, especially in Africa

• Deciding on the appropriate technical level
  – Too simple for some, too difficult for other

• Not repeating everything that has been written about CRVS recently. Meant to be a practical guide.
Limitations of Template

- Almost nothing on marriages and divorces
- Very little on causes of death
- Almost nothing on migration – but not considered to be a vital event
Document consists of two parts

• Part 1: Guidelines
  – About the template and how to use it
• Part 2: Template
  – An attempt to make a generic VS report which the user can use to fill in text, charts and numbers about his/her own country
• Annexes:
Part 1: Guidelines

I. Purpose
II. Rationale
III. Target audience and important considerations
IV. Link with other activities
V. Initial focus on key vital events
VI. Reasons for publishing a Vital Statistics Report
VII. How to use this document
Contents of Template

1. Introduction
2. The Civil Registration system of the country
3. Data: quality, coverage and definitions
4. Births
5. Deaths
6. Cause of death
7. Summary tables
   References
   Attachments
Boxes for special topics

Box 5: Definition of vital statistics and vital events for statistical purposes
Box 6: Tabulation programs
Box 7: Confidentiality of data
Box 8: CRVS organization in Kenya
Box 9: Sub counties and CR office overview for Kenya
Box 10: Timeliness of birth registration
Box 11: Civil Registration and Population Registers
Box 12. Importance of coordination and cooperation
Box 13: Data quality
Box 14: Coverage rates
Box 15: Examples of graphs and maps showing coverage of birth registration
Box 16: Presenting data
Box 17: Key birth registration variables
Box 18: Tables on live births recommended by United Nations
Box 19: Key death registration variables
Box 20: Tables on deaths recommended by United Nations Statistical Division
Box 21: Summary cause of death table from Kenya
Box 22: Summary tables
Box 23: Expected population size
Map of local CR offices in Kenya
2. Civil Registration system of the country

2.1 History
2.2 Legal and administrative issues
2.3 Organizational structure, registration process and information flows
2.4 Incentives and disincentives for registration
Figure 2.1 Possible organizational chart presenting different levels and cooperation partners
Chart 1: Complete Civil Registration and Vital Statistics Systems and their Multi-sectoral Services and Linkages in a Country
3. Data: quality, coverage and definitions

3.1 Quality of data
3.2 Coverage
3.2.1. Coverage by group
3.2.2. Coverage rates over time
Figure 2.1 Possible organizational chart presenting different levels and cooperation partners

- National level
  - Ministry responsible for Health
  - National Civil Registration authority
  - Regional registration office
  - Local registration offices
  - Health facilities

- Regional level
  - Vital statistics compiling office

- Local level
4. **Births**

(i) Characteristic of the event
(ii) Characteristics of the newborn
(iii) Characteristics of the mother
(iv) Characteristics of the father
(v) Characteristics of population at risk
Box 18. Tables on live births recommended by UN

LB-1  Live births by place of occurrence and sex of child
LB-2  Live births by place of occurrence and place of usual residence of mother
LB-3  Live births by place of registration, month of occurrence and month of registration
LB-4  Live births by month, place of occurrence and place of usual residence of mother
LB-5  Live births by age, place of usual residence and marital status of mother
LB-6  Live births by age of father
LB-7  Live births by place of usual residence, age and educational attainment of mother
LB-8  Live births by educational attainment and age of mother, and live-birth order
LB-9  Live births by place of usual residence and age of mother, sex of child and live-birth order
LB-10 Live births by live-birth order and interval between last and previous live births to mother
Box 18. Tables on live births recommended by UN, contd.

LB-11 Live births by place of birth, place of usual residence and age of mother
LB-12 Live births by place of usual residence and age of mother and legitimacy status
LB-13 Live births by place of occurrence, site of delivery and attendant at birth
LB-14 Live births by site of delivery, attendant at birth and birth weight
LB-15 Live births by birth weight and place of usual residence and educational attainment of mother
LB-16 Live births by gestational age, place of usual residence of mother and birth weight
LB-17 Live births by birth weight, place of usual residence of mother and month in which prenatal care began
LB-18 Live births by age and place of usual residence of mother and month in which prenatal care began
LB-19 Live births by live-birth order, place of usual residence of mother and month in which prenatal care began
LB-20 Live births by place of usual residence of mother and duration of residence at the current usual residence
Table 4.1. Registered live births by place of occurrence, – 201x

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Health facility</th>
<th>At home</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4.1. Registered live births by age of mother, 201x

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total</th>
<th>Urban</th>
<th>Rural</th>
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</thead>
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<td>10-14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-19</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25-29</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30-34</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35-39</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40-44</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>45-49</td>
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<td></td>
<td></td>
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<td>50+</td>
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<td>Not known</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. Deaths
Box 20. Tables on deaths recommended by UN

DE-1 Deaths by place of usual residence and sex of decedent
DE-2 Deaths by place of occurrence and place of usual residence and sex of decedent
DE-3 Deaths by month and place of occurrence and place of usual residence of decedent
DE-4 Deaths by place of registration, month of occurrence and month of registration
DE-5 Deaths by place of occurrence and site of occurrence
DE-6 Deaths by place of usual residence, age and sex of decedent
DE-7 Deaths by age, sex, place of usual residence and marital status of decedent
DE-8 Deaths by place of usual residence, age, sex and educational attainment of decedent
DE-9 Deaths by sex, cause of death, place of usual residence and age of decedent
DE-10 Deaths by month of occurrence and cause of death
DE-11 Deaths by place of occurrence, sex of decedent and type of certification
DE-12 Maternal deaths by cause of death and age of woman
DE-13 Deaths by age and type of usual activity of decedent
Table 5.1 Registered deaths by age and gender, 201x

<table>
<thead>
<tr>
<th>Age (years)</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-14</td>
<td></td>
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<td></td>
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<td>15-19</td>
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<td></td>
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<tr>
<td>...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>95-99</td>
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<td></td>
</tr>
<tr>
<td>100+</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not known</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. **Cause of death**

### Table 8: Top 10 leading causes of death by sex, 2013

<table>
<thead>
<tr>
<th>Cause (male)</th>
<th>Male</th>
<th>Female</th>
<th>Cause (male)</th>
<th>Male</th>
<th>Female</th>
<th>Cause (male)</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td></td>
<td></td>
<td>%</td>
<td></td>
<td></td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>Malaria</td>
<td>11.8</td>
<td>12,721</td>
<td>Malaria</td>
<td>12.8</td>
<td>11,068</td>
<td>Malaria</td>
<td>12.2</td>
<td>23,789</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>11.5</td>
<td>12,392</td>
<td>Pneumonia</td>
<td>12.2</td>
<td>10,526</td>
<td>Pneumonia</td>
<td>11.8</td>
<td>22,918</td>
</tr>
<tr>
<td>Other Cause</td>
<td>7.9</td>
<td>8,537</td>
<td>HIVAIDS</td>
<td>7.5</td>
<td>6,477</td>
<td>HIVAIDS</td>
<td>7.4</td>
<td>14,465</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>6.7</td>
<td>7,243</td>
<td>Cancer</td>
<td>6.9</td>
<td>5,928</td>
<td>Cancer</td>
<td>6.3</td>
<td>12,287</td>
</tr>
<tr>
<td>HIVAIDS</td>
<td>6.4</td>
<td>6,895</td>
<td>Tuberculosis</td>
<td>6.8</td>
<td>5,869</td>
<td>Tuberculosis</td>
<td>5.9</td>
<td>11,448</td>
</tr>
<tr>
<td>Cancer</td>
<td>6.2</td>
<td>6,663</td>
<td>Other Cause</td>
<td>6.3</td>
<td>5,392</td>
<td>Other Cause</td>
<td>5.8</td>
<td>11,186</td>
</tr>
<tr>
<td>Sudden death</td>
<td>5.2</td>
<td>5,579</td>
<td>Sudden death</td>
<td>5.2</td>
<td>4,523</td>
<td>Sudden death</td>
<td>4.2</td>
<td>8,125</td>
</tr>
<tr>
<td>Anemia</td>
<td>3.8</td>
<td>4,088</td>
<td>Anemia</td>
<td>4.7</td>
<td>4,037</td>
<td>Anemia</td>
<td>2.5</td>
<td>4,942</td>
</tr>
<tr>
<td>Road traffic accid.</td>
<td>3.3</td>
<td>3,552</td>
<td>Heart disease</td>
<td>2.9</td>
<td>2,493</td>
<td>Heart disease</td>
<td>2.5</td>
<td>4,898</td>
</tr>
<tr>
<td>Other accidents</td>
<td>3.2</td>
<td>3,471</td>
<td>Meningitis</td>
<td>2.6</td>
<td>2,270</td>
<td>Meningitis</td>
<td>34.2</td>
<td>66,554</td>
</tr>
<tr>
<td>Total</td>
<td>100.0</td>
<td>108,132</td>
<td>All other Cause</td>
<td>32.0</td>
<td>27,617</td>
<td>All other Cause</td>
<td>34.2</td>
<td>66,554</td>
</tr>
</tbody>
</table>

**Source:** Kenya Annual Vital Statistics Report for 2013
7. **Summary tables recommended by UN**

ST-1 Live births, deaths, infant deaths, foetal deaths, marriages and divorces by place of usual residence
ST-2 Crude birth rate, crude death rate, infant mortality rate by sex, foetal mortality rate, crude marriage rate and crude divorce rate, by place of usual residence
ST-3 Time series of live births by place of usual residence of mother (past 10 years)
ST-4 Time series of deaths by place of usual residence of decedent (past 10 years)
ST-5 Time series of infant deaths by place of usual residence of mother (past 10 years)
ST-6 Time series of foetal deaths by place of usual residence of mother (past 10 years)
ST-7 Time series of marriages by place of usual residence of groom (past 10 years)
ST-8 Time series of divorces by place of usual residence of husband (past 10 years)
ST-9 Times series of vital events in the country (past 10 years)
### Table 7.2 Time series of vital rates, .... – 2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Crude Birth Rate</th>
<th>Crude Death Rate</th>
<th>Population size</th>
<th>Population growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2014</td>
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</tr>
</tbody>
</table>
Appendices

- Notification and/or registration forms for births and deaths
- Other relevant CRVS forms and documents, including forms for sending aggregate numbers to the NSI
Population size and distribution

• Required to produce health-related and other statistics and indicators that are required to know the population size by age and sex, such as:
  – TFR, IMR, U5MR, MMR, Life expectancy ...

• Data sources for population size
  – Population census
  – Population projections
  – Sample surveys
  – Population register

• CRVS useful - and necessary - for establishing and updating a population register
THANK YOU FOR YOUR ATTENTION