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# Guiding Principles of the Vital Statistics System

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United Nations Sub-regional workshop on applying *Principles and Recommendations for a Vital Statistics System* for implementing the Regional Action Framework for CRVS in Asia

15-18 September 2015, Istanbul, Turkey



## Definition of a vital statistics

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- ❑ Vital statistics constitute the collection of statistics on vital events in a lifetime of a person as well as relevant characteristics of the events themselves and of the persons(s) concerned
  
- ❑ For statistical purposes vital events refer to life and death of the individuals as well as their family and civil status
  
- ❑ Reading material: *Principles and Recommendations, paras 1 - 57*



## Definition of vital events

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- Vital events proper
  - Live births
  - Deaths, including foetal deaths
- Dual events – occurring simultaneously in the lives of two individuals which cannot occur again in the life of either individual without a previous change
  - Marriage (legal partnership, where appropriate)
  - Divorces (legal dissolution of partnership, where appropriate)
  - Annulment
  - Judicial separation
- Vertical family events involving a descendant
  - Adoption
  - Legitimation
  - Recognition



## Uses of vital statistics

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- ❑ Knowing size and characteristics of the population – prerequisite to socio-economic planning and informed decision-making
- ❑ Monitoring programmes on health care, social security, family planning, maternal and child care, education, nutrition ...
- ❑ Estimating size and growth of population
  - ❑ Particular emphasis on small areas
- ❑ Use in implementing and evaluating the success of programmes
  - Mortality
  - Life births by weight and place of occurrence
  - Age of mother in terms of family planning programmes
  - Fertility
  - Use in producing development indicators



## Principles and Recommendations - History

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### **The original version in 1953**

- vital statistics system was defined as including the legal registration, statistical recording and reporting of the occurrence, and collection, compilation, analysis, presentation and distribution of statistics pertaining to vital events, which in turn include live births, deaths, foetal deaths, marriages, divorces, adoptions, legitimating, recognitions, annulments and legal separations
- essentially civil registration was defined as a part of vital statistics system



## Principles and Recommendations - History

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### **The first revision - 1973**

- vital statistics system, irrespective of how it is organized, is defined as the total process of (a) collecting by registration, enumeration or indirect estimation, of information on the frequency of occurrence of certain vital events, as well as characteristics of events themselves and of the person(s) concerned, and (b) compiling, analysing, evaluating, presenting and disseminating these data in statistical form
- introducing enumeration and indirect estimation – recognizing the reality of the lack of civil registration in many countries



## Principles and Recommendations - History

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### **The second revision - 2001**

- vital statistics system as the total process of (a) collecting information by civil registration or enumeration on the frequency of occurrence of specified and defined vital events, as well as relevant characteristics of the event themselves and of the persons or persons concerned, and (b) compiling, processing, analyzing, evaluating, presenting and disseminating these data in statistical form
- omits indirect estimation – as *ad hoc* and temporary methods



## Revision rationale

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### **Initiative for revising the current set based on:**

- The need to restructure the current principles and recommendations along the lines of distinguishing between vital statistics and its sources
- The need to update and elaborate on
  - Population registers
  - Core topics
  - Health institutions records and causes of death
  - Align with current versions of international classifications and definitions





## Expert Group Meeting – June 2011

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Discussions on:

**Overall - the needs for revision and the proposed table of contents**

**Definition and uses of vital statistics**

**Vital Statistics System**

**Sources of vital statistics**

Civil Registration System

Population register

Use of health services records

Other administrative records

Population censuses and sample surveys

**Strategies for improving civil registration and vital statistics systems**

**Computerization**

**Evaluating the quality of civil registration information and register-based vital statistics**



## Expert Group Meeting – June 2011

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Major recommendations from the EGM:

- Sharpening the distinction between vital statistics and its sources
- Elaborating on population registers
- Re-visiting core topics
- Addressing the role of health institutions within the vital statistics system
- Aligning the principles and recommendations with current international classifications
- Updating and upgrading all the parts with contemporary approaches to producing quality official statistics



## Revision 3 – Content

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### Three parts

- Part One: The Vital Statistics System
- Part Two: Sources of Vital Statistics
- Part Three: Key Elements of the Vital Statistics System
  
- Annexes
  - Recommended tabulations
  - Index, glossary
  - References



## Revision 3 – Part One: The Vital Statistics System

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- ❑ Chapter 1. Definition, concepts and uses of the vital statistics
  - ❑ Definition of vital statistics and vital events for statistical purposes
  - ❑ Uses of vital statistics
- ❑ Chapter 2. Vital statistics system and the guiding principles
  - ❑ Definition of a vital statistics system
  - ❑ Source of vital statistics
  - ❑ Priority in data collection
  - ❑ Principles of the vital statistics system
  - ❑ Organizational structure
  - ❑ Integration, coordination and collaboration
  - ❑ Quality assurance and assessment
  - ❑ Role of in-depth sample surveys



## Revision 3 – Part One: The Vital Statistics System

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- ❑ Chapter 3. Topics and themes to be covered
  - ❑ Selection
  - ❑ Vital statistics topics and themes derived from civil registration
  - ❑ Vital statistics topics and themes collected by population censuses and household surveys
  - ❑ Definition and specification of topics
- ❑ Chapter 4. Compiling and processing vital statistics
  - ❑ Planning
  - ❑ Coverage
  - ❑ Compilation
  - ❑ Tabulation
- ❑ Chapter 5. Presentation and data dissemination
  - ❑ Types of data dissemination
  - ❑ Broadcasting of data



## Revision 3 – Part Two: Sources of Vital Statistics

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- ❑ Chapter 1. Introduction
- ❑ Chapter 2. Civil registration
  - ❑ Definition, method and system
  - ❑ The fundamental role of civil registration
  - ❑ Recommended vital events to be registered
  - ❑ Characteristics of the civil registration
  - ❑ Civil registration process
  - ❑ Computerization of civil registration
- ❑ Chapter 3. The use of population registers for vital statistics
- ❑ Chapter 4. The role of health institutions
  - ❑ Informant function
  - ❑ Certification of causes of death



## Revision 3 – Part Two: Sources of Vital Statistics

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- ❑ Chapter 4. The role of health institutions
  - ❑ Informant function
  - ❑ Certification of causes of death
- ❑ Chapter 5. Population censuses and surveys
  - ❑ Complementary sources for a vital statistics system
  - ❑ Available information on vital events and rates
  - ❑ Techniques for estimation if vital rates and ratios



## Revision 3 – Part Three: Key elements

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- ❑ Chapter 1. Quality assurance and assessment of civil registration and register-based vital statistics
  - ❑ Basic framework
  - ❑ Quality assessment and assurance standards
  - ❑ Quality assurance
  - ❑ Quality assessment methods
  - ❑ Direct and indirect assessment
  - ❑ Selecting appropriate methods
- ❑ Chapter 2. Strategies for improving civil registration and vital statistics systems
  - ❑ Engaging high-level politicians
  - ❑ Training and related strategies
  - ❑ Public education
  - ❑ Evaluation
  - ❑ Use of information technology and automation





## Revision 3 – Annexes

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- ❑ Annexes
  - ❑ Recommended tabulations
    - ❑ For each core topic
    - ❑ Annotated
  - ❑ Index, glossary
  - ❑ References



## Definition of a vital statistics system

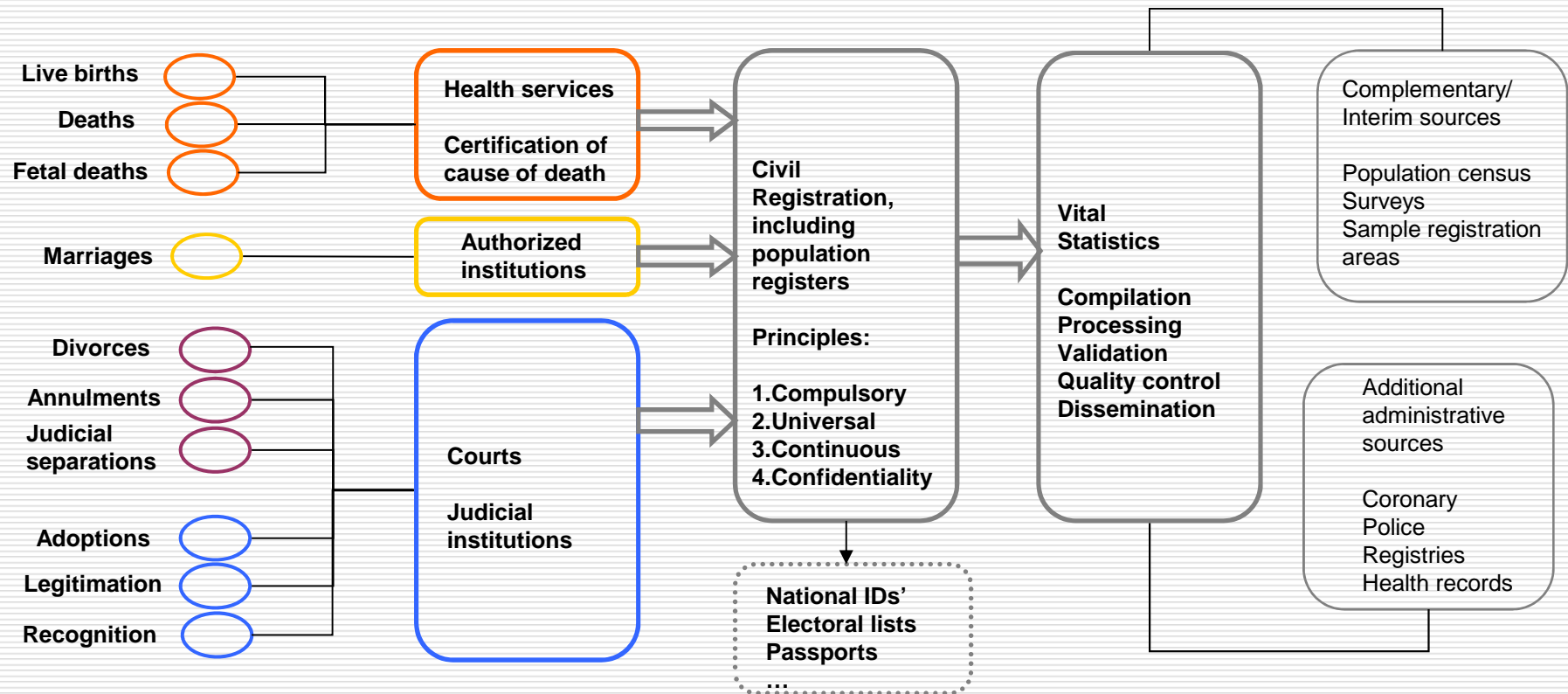
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- ❑ A system – set of interacting or independent components forming an integrated whole
  - ❑ Legal registration
  - ❑ Statistical reporting
  - ❑ Collection, compilation and dissemination of statistics pertaining to vital events



# Definition of a vital statistics system

## Vital Statistics System



United Nations Sub-regional workshop on applying *Principles and Recommendations for a Vital Statistics System* for implementing the Regional Action Framework for CRVS in Asia

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## Sources of vital statistics

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- ❑ Critical source – records of vital events derived from civil registration
  
- ❑ Complementary sources – for evaluation and enrichment of statistics
  - ❑ Population censuses
  - ❑ Household surveys
  
- ❑ Additional sources – used in the absence of civil registration and in combination with indirect techniques
  - ❑ Questions in population censuses
  - ❑ Household surveys
  - ❑ Sample registration and health records



## Priority in data collection

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- First priority**
  - Births
  - Deaths (including causes of deaths)
  - Foetal deaths
- Second priority**
  - Marriages
  - Divorces
- Third priority**
  - Annulments
  - Judicial separations
  - Adoptions
  - Legitimations
  - Recognitions



## Principles of a vital statistics system

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### **Continuity**

- Short-term fluctuations
- Seasonality
- Long-term patterns

### **Confidentiality**

- Fundamental principles of official statistics
- Personal information used only for statistical purposes

### **Regular dissemination**

- Monthly/quarterly
- Comprehensive annual tabulations



## Organizational structure

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### Legal framework should

- Assign the function of establishing and operating the system
- Provide clear designation of duties and responsibilities for
  - Registration
  - Recording
  - Reporting
  - Collection
  - Compilation
  - Analysis
  - Evaluation
  - Presentation
  - Dissemination



## Organizational structure (continued)

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### **Legal framework should**

- Establish the organizational structure for
  - Management
  - Operation
  - Maintenance
- Link the production of vital statistics to the civil registration system
- Designate a central government agency for maintaining the standards for the design and conduct of various operations





## Organizational structure (continued)

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- Depending on national circumstances ...**
  - Centralized and decentralized structure
  - Vital registration part of official statistics
  - Vital registration separate from official statistics
  - Role of courts
  - Role of health institutions
  - Protocols for ensuring quality of statistics



## Integration, coordination and collaboration

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### **Principles for coordination**

- Uniform legislation and regulations
- Identical definitions of vital events
- Statistical concepts, classifications and definitions
- Consistency between the numerator and denominator
- Implementation of international standards

### **Inter-agency coordination committee**

### **Coordination within the system**

- Communication (conferences, workshops, training courses ...)
- Evaluation
- Professional association (statisticians/registrars/health workers)



## Quality assurance and assessment

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- Strategies and procedures for ensuring the quality of vital statistics
- At each operational stage
- Regular and routine
- Quality of vital statistics is measured by:
  - Completeness
  - Correctness or accuracy
  - Availability
  - Timeliness