

National Administrative

# Department of Statistics



## Methodology of Vital Statistics

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## LIST OF ANNEXES

- Annex A Live Birth Certificate, antecedent for civil registration form
- Annex B Live Birth Statistical Certificate form
- Annex C Death Certificate, antecedent for public registration form
- Annex D Death Statistical Certificate form



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## PRESENTATION

The National Administrative Department of Statistics (DANE), as the coordinator entity of the National Statistical System (NSS), within the framework of the “Statistical Planning and Harmonization Project”, works to strengthen and consolidate the NSS.

Within this context, DANE coordinates the production of strategic statistics; the generation, adaptation, adoption and dissemination of standards, the consolidation and harmonization of statistical information, and the connection of instruments, stakeholders, initiatives and products, in order to improve quality, availability, timeliness and accessibility of the strategic information as an answer to the increasing demand of statistical information.

DANE aware of the need and obligation to provide the users with better products, developed a standard presentation guide for methodologies. The aim of this guide is to contribute to the visualization and understanding of the statistical processes, allowing further analysis, control, replicability and evaluation. The documents are presented in a standard and comprehensive manner, thus facilitating the understanding of the main technical characteristics involved in the processes and sub-processes of each research, making them available for both specialized users and the general public.

These series of guides promote the transparency and credibility of the technical expertise of DANE, for a better understanding and use of the statistical information. This information is produced according to the principles of coherence, comparability, integrality and quality of the statistics.



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## INTRODUCTION

DANE's mission, as a guarantor, of both the availability and quality of the strategic statistical information and the leading, planning, performing, coordination, regulation and evaluation of the production and dissemination of basic official information (Decree 262 of 2004), involves it in a permanent process of revision, updating and methodological, technical and operational modernization of the economic and social statistics it is responsible for, with the purpose of assuring their quality, efficiency and timeliness.

In accordance with the institutional mission, the Censuses and Demography Division, through this document, provides the users with the methodology used for the production and dissemination of the official statistical information of the vital events, regarding the country's births and deaths, being the gathering source the System of Civil Registration and Vital Statistics<sup>1</sup> (Manual of Principles and Procedures, Resolution 1346 of 1997).

Chapter by chapter, this document presents a description of the methodological process covering the production and publication of vital statistics in DANE. The first chapter shows a brief reference to the background; the second one restates the conceptual framework, statistical design and legal basis, as a foundation for indicators and tools created to validate the consolidated information. The third chapter describes the statistical production process, by identifying the collection and compilation of data, both in physical means and online, transmission, data processing, as well as the methods and mechanisms implemented for the quality control of information. Chapter four describes the Vital Statistics dissemination process, making specific reference on the management of the data repository and the products to be disseminated. Chapter five presents a list of the documents submitted, and finally, a glossary for the reader to clearly understand the Vital Statistics language.

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<sup>1</sup> In Colombia, the Civil Registration and Vital Statistics System (SRCEV) is made up by two independent and complementary subsystems: the Civil Registration Subsystem and the Vital Statistics Subsystem. On the one hand, the Civil Registration Subsystem looks for the consolidation regarding the civil information of the different vital facts in order to recognize the live birth's civil rights as well as to provide any information on the lifelong legal situation of the individual against the family and society. On the other hand, the Vital Statistics Subsystem purpose is to collect the births and deaths information nationwide, for DANE to produce and disseminate the official statistical information of fetal and non-fetal births and deaths.



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## 1. BACKGROUND

Before the year 1987, the birth statistics performed by DANE, were prepared by collecting information from mayor's offices, notary's offices and parishes. As of 1987, by legal and constitutional mandate, the Registrar Office assumed such responsibility and received the archives from the National Record Service (SNI), kept by DANE until that time.

The death data for statistical purposes have historically been produced by DANE based on the death certificates collected from all municipalities nationwide.

Information on births and deaths produced by DANE for statistical purposes started to be captured as from 1998, by the live birth certificates and death certificates, which are made up by two parts: one antecedent certificate and one statistical certificate.

The live birth and death certificate forms must be filled out by medical staff, or by authorized health staff (nurses, nursing assistants and health promoters), attending the vital event. When the death is caused by an external and/or violent event, or when there are doubts about the initial diagnosis causing the death, certificate forms must be filled out by the physicians of the National Institute of Legal Medicine and Forensic Sciences (INML-CF).

For those cases when the vital event has occurred without being attended by the health sector, certificate forms should be filled out by officials of the notary and registrar's offices.

In the year 2005, DANE jointly with the Ministry of Social Protection – currently the Ministry of Health and Social Protection- started the technological modernization process of the Vital Statistics Subsystem, by implementing an electronic platform belonging to the Integrated Information System of Social Protection (SISPRO), through the births and deaths module of the Affiliate Unique Registry (RUAF), for the vital events data - the births and deaths - to be captured online and in a synchronized manner.

In accordance with this idea, the Coding Central Group was established in DANE aiming to improve the mortality coding process using the ICD-10, responsible for researching that subject. Since then, DANE jointly with the Ministry of Health and Social Protection, have made progress on the adjustment and adaptation of all processes required to improve the data quality beginning from the basic source.

## 2. DESIGN

### 2.1 CONCEPTUAL FRAMEWORK

#### 2.1.1 Objectives

**General Objective:**

- To produce the official statistical information on births and deaths nationwide.

**Specific Objectives:**

- To compile and consolidate the number of live births and deaths nationwide occurring in the geographical subdivisions (regions, departments and municipalities), and in the different population groups nationwide.
- To provide the inputs as well as the conceptual and methodological elements needed in order to facilitate the calculation of the main indicators of public health such as: gross birth rate, fertility rate, infant mortality rate, general mortality rate, maternal mortality ratio, life expectancy at birth, among others.
- To provide the inputs to make the estimates for the mortality and fertility level and structure, which are fundamental for population projections;
- To provide the inputs required to measure the following Millennium Development Goals (MDGs):
  - MDG 4. Reduce child mortality (infant mortality rate and mortality rate in children under 5 years).
  - MDG 5. Improve maternal health (maternal mortality ratio).
  - MDG 6. Combat HIV/AIDS, malaria and other diseases (mortality rate associated to HIV/AIDS, malaria and dengue).

#### 2.1.2 Reference framework

In order to analyze the status and dynamics of a population; the observation and collection of information about the events experienced by individuals in a given space and time, are required.

Information collection and compilation may be carried out at a given time through census and surveys or in a continuous pattern as the events occur.

The production of the births and deaths statistical information enables the description and quantification of the variables of time, manner and place of occurrence of the vital event

and also the identification of the features of the persons related to the vital event; such information is useful to make the demographic analysis and to focus on the health public policy.

### 2.1.3. Organization of the Civil Registration and Vital Statistics System

#### 2.1.3.1. System Components

- Central Level

The top level is made up by the Intersectoral Commission of Vital Statistics Management, a consultative and advisor body which guides, governs and coordinates the Civil Registration and Vital Statistics System (Decree 955 of 2002).

- Departmental Level

It is made up by the Departmental Committees of Vital Statistics, which are responsible for the operational and technical area of the Civil Registration and Vital Statistics System in each one of the country's Departments (Resolution 3114 of 1998).

- Local/District Level

These consist of Local and District Committees of Vital Statistics, responsible for overseeing the articulated operation of the Civil Registration and Vital Statistics System.

#### 2.1.3.2. Operational Organization of the System

Organization levels of the Civil Registration and Vital Statistics System

Organization Levels	Civil Registration	Vital Statistics
<b>INTERSECTORAL COMMISSION OF VITAL STATISTICS MANAGEMENT – Decree 955 of 2002</b>		
National	National Civil Registry Office – National Civil Registry Department	<ul style="list-style-type: none"> <li>• National Administrative Department of Statistics (DANE) – Censuses and Demography Division.</li> <li>• Ministry of Health and Social Protection – Epidemiology and Demography Department.</li> <li>• National Institute of Legal Medicine and Forensic Sciences.</li> </ul>
<b>VITAL STATISTICS COMMITTEES - Resolution 03114 of 1998</b>		



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Organization Levels	Civil Registration	Vital Statistics
Departmental	National Civil Registry Office and departmental delegations	<ul style="list-style-type: none"><li>• Territorial branches and sub-branches of DANE.</li><li>• Departmental Directorates and Secretariats of health.</li><li>• Regional and Sectional Offices of Institute of Legal Medicine and Forensic Sciences.</li></ul>
Local/District	Authorized Municipal Civil Registry Offices, Notary's offices, town's subdivision and Principal-Town Jurisdictions.	<ul style="list-style-type: none"><li>• Health Municipal, Local/District Directorates and Secretariats.</li><li>• Basic Units of Legal Medicine and Forensic Sciences Institute.</li><li>• Public and Private IPSs (Institutions Providers of Health Services), and Private Doctors</li></ul>

## 2.1.4 Regulatory framework of the Civil Registration and Vital Statistics System

### 2.1.4.1. Legal Framework of the Civil Registration

The civil status registration was established in 1883 as a function of the State with the creation of the Civil Code. In order to comply with this function, Act 57 of 1887 was enacted and according to Article 22, the baptism, marriage and death parochial certificates of persons who belonged to the Catholic Church, were accepted as the main evidence of the vital event. This fact was due to the in-force concordat entered into between the Catholic Church and the State established in 1886, whereby its hegemony was legitimated.

Civil registration is regulated by Decree-Law 1260 of 1970, which was established by the Civil Status Registration Statute. The Statute defines the civil registration as the legal situation of an individual regarding the family and society and also determines its capacity to exercise certain rights and assume certain obligations.

Among the facts and acts requiring registration are the births, marriages and deaths.

The Civil Status Registration Statute points out:

1. The facts and acts subjected to registration
2. The competent officers to carry out such function



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3. The terms and documents to make the records of births, marriages and deaths
4. The manner to make the records
5. The manner to correct any mistakes that may arise in the records
6. The evidential value of the records and other aspects related to the civil status of Colombians.

The officers that are responsible for completing, collecting and filing the civil registration forms are the notaries, registrars of the Civil Registry Office and consuls of Colombia abroad. In some exceptional cases, such function can be performed by the police inspectors and the township counselors duly authorized by the National Registrar.

The National Civil Registry Office, assumed the function of civil registration by legal mandate, - Act 96 of 1985 (Article 60) - and further by the constitutional regulation of 1991. Likewise, by Decree 1028/89 the functions of the National Service of Registration (SNI) under the responsibility of DANE were assigned to the National Civil Registry Office.

According to Decree 1260 of 1970, births that occurred in the national territory, births that occurred abroad from Colombian father and mother, births that occurred abroad from Colombian father or mother by birth or adoption, and children born to foreigners residing in the country at the request of the concerned party should be recorded in the civil registry. No stillborn child should be recorded in the death registration according to Article 78, but such event will be taken into account for statistical production purposes.

For a birth to be recorded within the established term (one month following the event occurrence), the live birth certificate – antecedent issued by the physician or authorized health staff attending the mother at the time of delivery - must be submitted at the Civil Registry Offices.

If the birth was not attended by health staff, the Civil Registry officer, in addition to recording the vital event in the civil registration, shall complete the live birth certificate to collect the statistical data. (Circular 9/98 and 24/99 of the National Civil Registry Office).

In the event that the birth registration was made out of time, it shall be proved with authentic documents such as a copy of the parochial birth certificate, if the person belongs to the Catholic religion, otherwise the religious-origin annotations if it belongs to another religious denomination; and as a last resource, it shall be supported by declarations of witnesses. Likewise, the live birth certificate must be submitted.

Deaths which occurred within the country must be recorded in the civil registration, to wit:

- Of Colombians by birth or adoption
- Of foreigners residing in the country whose death occurred abroad
- At the request of the concerned party reporting the event
- The enforceable court judgments declaring the presumption of death due to disappearance.

Deaths must be recorded at the Civil Registry offices, within two working days following the time when either the event was known or the corpse was found. These deaths must be evidenced before the Civil Registry officer, by means of the death certificate issued under

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oath and the declarations of two competent witnesses. However, for death by natural causes, Decree 1536 of July, 1989<sup>2</sup> allowed the out-of-time registry and established the respective procedure.

Violent deaths and true deaths<sup>3</sup> must be registered by means of judicial authorization. In these cases, the two-day term does not apply to make the record.

Notaries, registrars and any other persons responsible for the civil registration, are obliged to send a copy of the birth and death civil registrations to the National Service of Record (SNI) for the files to be updated and for the assignment of the single identification number in the birth records.

With respect to deaths, the record voucher attached to the civil registration document, should be sent to the National Civil Registry Office (Section of inputs, outputs and cancellations) for the removal of the respective identification document.

#### 2.1.4.2. Legal Framework of the Vital Statistics

The National Administrative Department of Statistics (DANE) was created by Decree 2666 of 1953.

Decree 1151 of 2000 modified DANE's structure whereby it was designed as the body of the National System of Statistical Information, reiterating its fundamental mission to assure the availability, quality and impartiality of the strategic statistical information for the social, economic and political development of the country. Subsequently, Decree 262 of 2004, currently in force, adds to its mission the management, planning, execution, coordination, regulation and evaluation of the production and dissemination of the basic official information. Within this process, the responsibility of producing the strategic statistical information with respect to censuses and demography was assigned to the Censuses and Demography Division, among whose functions are the demographic records including births and deaths for the official production of statistics of these two vital events.

#### 2.1.5. International Benchmarks

The United Nations Statistics Division, Vital Statistics section, has published the following documents that serve as international benchmarks:

- *Principles and recommendations for a Vital Statistics System*, Revision 2 (United Nations publication, Sales No. 01.XVI.10)
- *Handbook on Civil Registration and Vital Statistics Systems. Management, Operation and Maintenance*. (United Nations publication, Sales No. 98.XVII.11)
- *Handbook on Civil Registration and Vital Statistics Systems: Preparation of a Legal Framework*. (United Nations publication, Sales No. 98.XVII.7)
- *Handbook on Civil Registration and Vital Statistics Systems: Developing Information, Education and Communication*. (United Nations publication, Sales No. 98.XVII.4).

<sup>2</sup> It amended Article 75 of Decree 1260 of 1970

<sup>3</sup> Those cases where death is fully confirmed, but corpse is not found or it does not exist.

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- *Handbook on Civil Registration and Vital Statistics Systems: Policies and Protocols for the Release and Archiving of Individual Records.* (United Nations publication, Sales No.98.XVII.6).
- *Handbook on Civil Registration and Vital Statistics Systems: Computerization.* (United Nations publication, Sales No.98.XVII.10)
- *Handbook on Vital Statistics Systems and Methods, Vol. I: Legal, Organization and Technical Aspects.* (United Nations publication, Sales No. 91.XVII.5).
- *Manual X. Indirect Techniques for Demographic Estimation.* United Nations, New York, 1986.
- *International Statistical Classification of Diseases and Related Health Problems (ICD-10).* Pan-American Health Organization (PAHO), Pan-American Sanitary Bureau, World Health Organization (WHO), Regional Office. Tenth Revision.
- *PAHO 6/67 list for tabulation of mortality data ICD-10.* Pan-American Health Organization (PAHO), 1999.

## 2.2 STATISTICAL DESIGN

### 2.2.1. Basic Components

*a) Type of statistical operation:*

Continuous record of the occurrences of births and deaths attended and certified by the health sector, as well as the deaths certified by the National Institute of Legal Medicine and those vital events not certified by the health sector but captured by the Civil Registry offices and the notary's offices.

*b) Universe:*

Vital event: live birth/death occurred nationwide each calendar year.

*c) Target Population:*

Births and deaths occurred nationwide, which are captured by the Civil Registration and Vital Statistics Subsystem.

*d) Statistical Unit of Observation.*

Live birth, stillborn and live birth who dies

*e) Reference period:*

Calendar year

*f) Collection Period:*

January 1<sup>st</sup> to December 31<sup>st</sup> of each year

*g) Collection periodicity:*

Continuous

*h) Geographical coverage:*

National, Departmental and Municipal

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*i) Nomenclatures and classifications used:*

- The International Statistical Classification of Diseases and Related Health Problems (ICD-10), whereby codes are assigned upon the different diseases and the basic cause of death is selected. This reference is critical for the production of mortality statistics. Such classification is officially accepted, and it enables local and international comparison.
- PAHO 6/67 list for tabulation of mortality data ICD-10. Short list grouping the causes of death, and it is presented at three (3) digits.
- Colombia 105 list: It tabulates mortality data in 105 groups and it homologates through a correlative, the ICD 10 and ICD 9 classifications.
- Coding for the political-administrative division of Colombia (Divipola), the maximum disaggregation level is at eight (8) digits.
- Adjustment of georeferencing of census units protocol.

*j) Collection instruments.*

Live birth certificate and death certificate. Each one consists of the *antecedent* for civil registration, which contains the essential variables for the registration of the vital event before the Civil Registry office, and the *certificate* which contains all the variables for statistical and public health purposes.

*k) Output tables (in absolute values) and periodicity with respect the publication of results:*

*Births:*

Table 1 Births by area of occurrence and sex, according to groups of mother's age, national total

Table 2. Births by area and sex, according to department and municipality of occurrence

Table 3. Births by area and sex, according to department and municipality of residence of the mother

Table 4. Births by type of delivery, according to department of occurrence and place of delivery

Table 5. Births per person who attended the birth by department, municipality of occurrence and place of delivery

Table 6. Births by birth weight, according to department and residence area of the mother

Table 6a. Births by birth weight, according to department, municipality and residence area of the mother

Table 7. Births by age-group of mother according to department and municipality of residence of the mother

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Table 7a. Births by age-group of mother, according to department of residence of the mother

Table 8. Births by gestation time, according to department, municipality and residence area of the mother

Table 9. Births by number of children born alive, according to department, municipality of residence of the mother

Table 10. Births by type of delivery, according to department of residence of the mother and multiplicity of pregnancy

Table 11. Births by area and sex, according to department of residence of the mother and ethnical designation of the live birth

Table 12. Births by place of delivery, according to department, municipality of occurrence and social security regime of the mother

*Non-fetal deaths:*

Table 1 Deaths by area where the death occurred and sex, according to age groups. National total

Table 2. Deaths by person certifying the death, according to department, area and place where the death occurred

Table 3. Deaths by age groups and sex, according to department, municipality and area where the death occurred

Table 4. Deaths by age groups and sex, according to department, municipality and area of residence

Table 5. Deaths by age groups and sex, according to department, municipality of residence and groups of causes of death (PAHO list of grouped causes 6/67 (ICD-10))

Table 6. Deaths by site where the death occurred, according to department of occurrence and social security regime

Table 7. Maternal deaths, by age groups, according to department of residence and groups of causes of death (PAHO list of grouped causes 6/67 ICD-10)

Table 8. Maternal deaths, by age groups, according to list of causes at 3 digits ICD-10

Table 9. Death by ethnical belonging of the deceased and sex, according to department of residence

Table 10. Death by probable manner of death and sex, according to department of occurrence

Table 11. Deaths by age group and sex, according to department of occurrence and groups of causes of death (Colombia 105 list for the tabulation of mortality)

Table 12. Deaths by age group and sex, according to department of residence and groups of causes of death (Colombia 105 list for the tabulation of mortality)

### *Deaths of infants under one year of age*

#### a. By causes of death

Table 1. Deaths of infants under one year of age by groups of age and sex, according to department of residence of the mother and groups identifying causes of death (Colombia 105 list for the tabulation of mortality)

#### b. By age of the mother:

Table 2. Deaths of infants under one year of age by age groups and sex, according to department of residence and age group of the mother

### *Deaths by external cause:*

Table 1. Deaths by groups of age and sex, according to department, municipality of occurrence and groups identifying external causes (PAHO list of grouped causes 6/67 ICD-10)

### *Main causes of death:*

Table 1. First ten causes of death, according to department of residence

### *Fetal deaths:*

Table 1. Fetal deaths by area and sex, according to department of occurrence, national total

Table 2. Fetal deaths by site where the death occurred and sex, according to department of occurrence

Table 3. Fetal deaths by mother's age group, according to department of residence of the mother and groups identifying causes of death (Colombia 105 list for the tabulation of mortality)

Table 4. Fetal deaths by time of gestation, according to department of residence and age group of the mother

Table 5. Fetal deaths by multiplicity of pregnancy and death related to delivery, according to department of residence and age group of the mother

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Table 6. Fetal deaths by sex, according to department, municipality of residence of the mother and groups identifying causes of death (PAHO list of grouped causes 6/67 ICD-10)

Table 7. Fetal deaths by time of gestation, according to department of residence of the mother and groups identifying causes of death (Colombia 105 list for the tabulation of mortality)

Table 8. Fetal deaths by number of born-alive children, according to department, municipality of residence and age groups of the mother

Table 9. Fetal deaths by age groups of the mother, according to department of residence and educational level of the mother

Table 10. Fetal deaths by birth weight, according to department of residence and age group of the mother

The definitive data of vital statistics are published 18 months following the reference period. Preliminary data were being published semiannually; however, as from 2012, the publication of preliminary data is quarterly (March 30, June 30, September 30, and December 30).

### 2.2.2 Design of indicators

Based on the collected data and once all quality controls have been made on the processes of critique, typing, extraction-transformation-load, consolidation, coding and data processing, and the required indicators for the measurement of the Millennium Development Goals (MDGs): infant mortality rate and mortality rate of infants under five years.

In addition, for the context analysis, information is reported for the following indicators to be calculated: percentage of low birth weight, institutional care of the delivery, care of the delivery by qualified staff, prenatal controls, mortality rate associated to HIV/AIDS, malaria and dengue. Also, inputs are delivered for the construction of other indicators that enable the analysis of the different causes of death and other birth and death variables.

### 2.2.3 Design of instruments

#### Live Birth Certificate:

The Live Birth certificate (Annex B ) consists of 3 parts:

- The first part (questions 2 to 18) includes the birth data itself which is indispensable information for the event to be recorded in the Civil Registration;
- The second part (questions 19 to 33) is intended for the gathering of some data from the parents of the newborn;
- The third part (question 34 to 40) contains the data of the person certifying the birth.

The Live Birth Certificate consists of: 1) one antecedent certificate for the Civil registration (Annex A), which once completed, must be delivered to the parents of the newborn, for the

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pertinent steps before the Civil Registry and 2) one statistical certificate to be sent by the health institution to the territorial health directorate and then to DANE.

DANE performs quality control on the processes of critique, typing, extraction-transformation-load, consolidation, coding, data processing and production of output tables in absolute values.

For the particular case of the certificate completed online - RUAF-ND application software, the antecedent for civil registration is completed by physical means and the statistical certificate online.

Certificates completed by non-medical staff, are always issued by physical means (paper-based form). Currently there is not an established role in the RUAF application software for such cases.

*General purposes of the Live Birth Certificate:*

- To serve as a legal instrument; the antecedent is the evidence of birth, since it enables the recording of the vital event before the respective office of Civil Registry.
- To serve as an instrument of public health; the statistical data obtained from the live birth certificate are used in the postnatal care programs of the mother and the child; for example, in the planning of vaccination and immunization programs against common infant diseases, nutrition programs, family planning services, social programs, and in general, for the provision of health services.
- To serve as a demographic input; the statistical data taken from the live birth certificate is used for fertility trends analysis, which provides information for the formulation of hypothesis of demographic projections.

**Death Certificate:**

The Death Certificate (Annex D) consists of six parts:

- The first part (questions 2 to 24) contains the general information of death;
- The second part (questions 25 to 36) includes aspects related to fetal deaths or deaths of infants under one year of age;
- The third part (questions 37 to 39) contains aspects related with deaths of women of childbearing age, information used to capture the maternal mortality during the pregnancy, delivery, puerperium, and late maternal mortality;
- The fourth part (questions 40 to 42) is for the specific use for those cases of violent deaths;
- The fifth part (questions 43 to 46) is used to record the causes of death, otherwise the likely cause of death in those cases confirmed by non-medical staff (authorized health staff and Civil Registry officers);
- The sixth part (questions 47 to 53) contains data of the person certifying the death.

The Death Certificate consists of: 1) one antecedent for the civil registration (Annex C), which once completed, must be delivered to the family of the deceased person, for them to make the pertinent steps before the Civil Registry, and 2) one statistical certificate, which is received by the Territorial Health Directorate and sent to DANE, where they perform the



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quality controls of critique, typing, extraction-transformation-load, consolidation, coding, data processing and production of output charts in absolute values.

For the case of the certificate in electronic means, RUAF, there is an antecedent for the civil registration by physical means with printed numeration, which is delivered to the family of the deceased and from where the number is taken to be assigned to the death certificate that is electronically completed and whose form is exactly equal to the certificate in physical means.

### *General purposes of the Death Certificate:*

- To serve as a legal instrument; the antecedent is the evidence of death to complete the death civil registration and to issue the burial or cremation license.
- To serve as a public health instrument; the statistical data obtained from the death certificate makes it possible to identify cases of diseases requiring epidemiological monitoring; it is useful to measure the extent of health issues, evaluate programs, and to carry out studies with respect to risk factors. The death data are also used in medical research and epidemiological studies.
- To serve as a demographic input; the statistical data obtained from the death certificate makes it possible to know the volume of deaths and classify them by age, sex and the other variables characterizing the population dynamics.



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## 3. STATISTICAL PRODUCTION

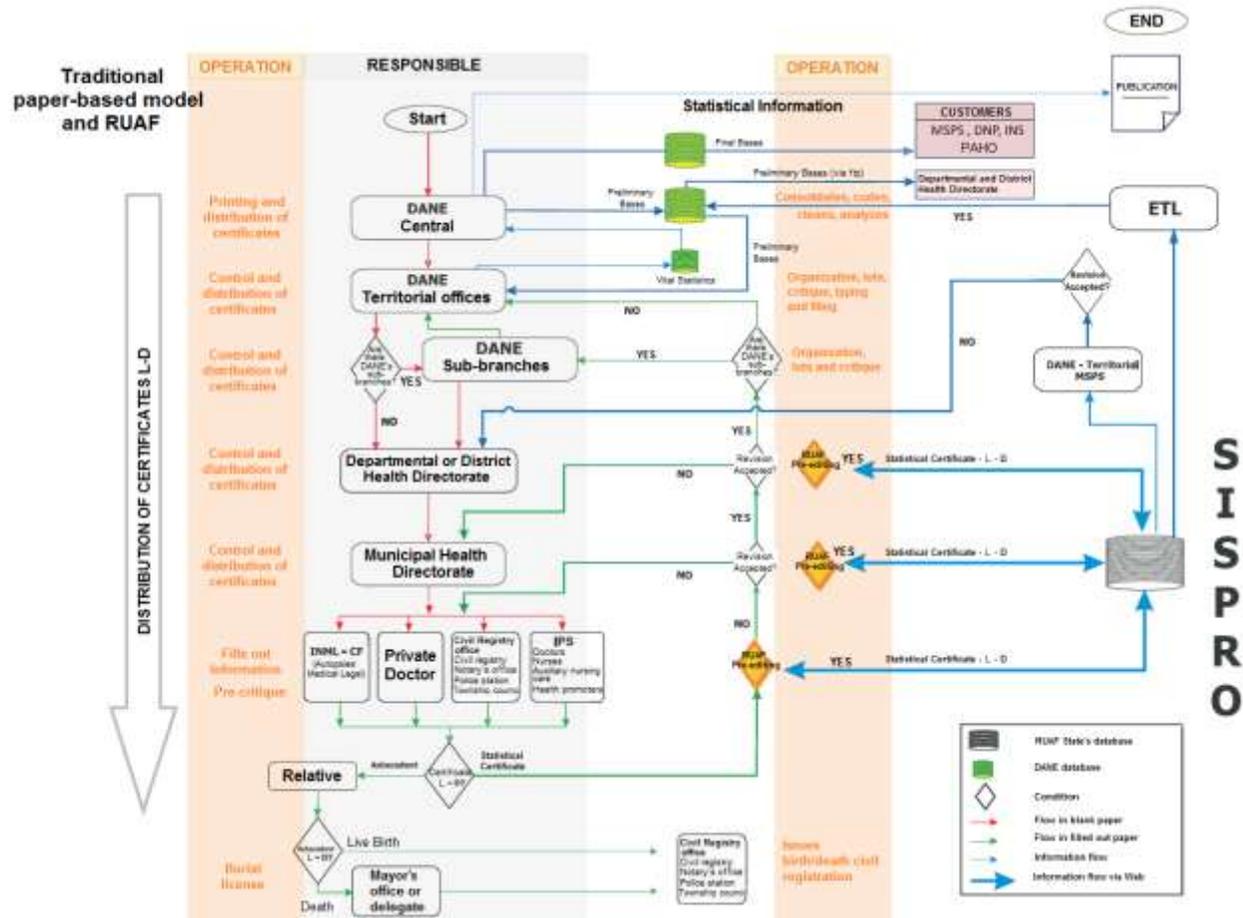
### 3.1 COMPILATION OF INFORMATION

The following flow chart summarizes the operational processes carried out for the production of vital statistics.

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Operational chart: distribution and collection flows (transition: physical means and RUAF-ND electronic means)



Design: Procedure roundtable and Vital Statistics working team – DANE Central Territorial Direction



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*Acronyms used in the flowchart above*

DNP – National Planning Department

INML-CF – National Institute of Legal Medicine and Forensic Sciences

INS – National Institute of Health

MSPS – Ministry of Health and Social Protection

RUAF – Affiliate Unique Registry

SISPRO- Integrated Information System of Social Protection

The sites generating the Live Birth Certificates and the Death Certificates are:

## **a. Non-Computerized Process (Physical Means)**

- Non-Computerized Process in institutions that are providers of health services, National Institute of Legal Medicine and Forensic Sciences, private physicians and civil registry offices (Notary and civil registry Offices).
- Non-Computerized process in Municipal Health Directorates

DANE prints the Live Birth and Death Certificate forms (statistical certificate and antecedent), and distributes them to the territorial health directorates, through its territorial branches. The local or municipal health directorates receive from the departmental directorates the certificate forms to be delivered to hospitals, clinics, health centers, IPSs, Basic Units of Legal Medicine, private physicians and civil registry offices (civil registry and notary's offices).

The antecedent for the live birth and death civil registration must be submitted as a requisite to make the record of the vital event before the civil registry office (registry office, notary's office, town's subdivision officers and authorized township councils).

Certificates for statistical purposes, which include all of the variables are sent to DANE territorial branches, where quality controls on the critique and typing process are made. The extraction-transformation-load, consolidation, coding, processing and production of output tables processes are controlled in DANE central.

Printed certificate (physical means), continues to be used in those sites with no technological resources for the electronic capture of the certificate, also in those cases where such certificate is completed by non-medical staff and in contingency cases.

## **b. Computerized Process (RUAF- ND Electronic Means).**

- Computerized process in institutions that are providers of health services
- Computerized process in municipal health directorates



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- Computerized process in departmental health directorates

The computerized process contemplates the use of the internet, since it enables the online capture and updating of births and deaths information from the site where the service is available, by completing the information through online electronic certificates (RUAF electronic means).

Physicians of the Institutions Providers of Health Services (IPS) are responsible for the online (electronic means, ND module of RUAF) Live Birth and Death Certificates, if the required infrastructure is available.

In those sites lacking physicians, this function is performed by nurses, nursing assistants or health promoters who shall complete the certificate by physical means.

In those remote areas lacking permanent health resources or when the vital event has not been known by the health staff, the Civil Registry offices are authorized to complete certificates by physical means.

## c. Critique and coding process

Once the certificates have been received by physical means, they are reviewed by the supervisor and then a computerized *critique process* is performed, whereby inconsistencies and mistakes due to a deficient filling of the information by the persons in charge thereof, are detected.

The main purposes of the critique process are:

- To improve the information quality and facilitate the recording and construction of databases.
- To review the data submitted by the informing source to complete any missing data, to the extent that the logical deduction enables it to do so, from the worked variables.
- To code the information in accordance with the values assigned to each answer, to facilitate the systematization process.
- To detect and remove any duplicated information (more than one box ticked or duplicated certificates)
- To detect and correct obvious inconsistencies in answers.

If during the *critique* process any inconsistencies are detected, that given the importance of the information may require a clarification by the source, a photocopy thereof is sent back to the sub-branch or to the origin institution to be corrected.

Once the *critique* process has been done, - for the particular case of the Death Certificates - the information reaches DANE Central, where the respective coding of the causes of death and the assignation of the basic cause starts to be performed, based on the International Classification of Diseases (ICD-10).

The coding process of the causes of mortality is the responsibility of the Coding Central Group. A sampling is carried out on a monthly basis for the quality control of the coding process and every maternal death is reviewed individually.



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## 3.2 DATA TRANSMISSION AND PROCESSING

### 3.2.1 Data capture and consolidation in DANE Territorial branches

This process consists of the set of activities aimed at inputting into the information system the data contained in the physical-means live birth and death certificates received in DANE territorial branches from those sources that still are not online. It is done by using different software applications, designed to improve the data quality and consistency.

**a. Quality control:** This is to assure the accomplishment of the concepts and imputations set forth under the Critique Manual for the Live Birth and Death Certificates. This option enables, through the “live birth quality control” or “death quality control” module, to verify the information of duplicates by number of certificate, duplicates by I.D. number, mistakes where all variables of the Live Birth or Death Certificate are validated, according to the control being executed.

Such control generates a report with the inconsistencies found, that after being analyzed, can be corrected over the database, by using the “correction of records” option of the quality control module.

**b. Exportation of data table.** By entering into the information system of the vital statistics and through the “Remittances to DANE Central” option, the tables of births and tables of fetal and non-fetal deaths are exported and sent in 3 files in *zip* formats, by using the protocol for FTP file transfer, a system which enables the sending and receiving of information between computers through the network.

In addition, the relevant roadmaps and the novelties report for births and deaths are attached in the event of any corrections to previously submitted databases. Such information is listed in an e-mail confirming the remittance.

### 3.2.2 Data transmission to DANE Central (remittance of preliminary data tables)

Databases are sent to DANE Central by the territorial branches on a monthly basis, according to schedule.

It is verified that the databases received (DBF format) from the 6 territorial branches can be opened and that the whole records sent by the territorial branches, are listed and match with the information contained in the database loaded in FTP.

Databases from RUAF-ND are automatically unloaded on a daily basis through an information transference protocol, jointly established between MSPS and DANE. For this effect ETL tools (Extract Transform and Load) are used to extract, transform and load the databases from RUAF-ND to DANE Central.

Then quality control is applied in order to determine if the data table presents any inconsistencies. Subsequently, a report is sent to the respective Territorial Division in order to verify it against the form and to work any inconsistency out. In case it is a certificate captured in RUAF-ND, it must be clarified with the IPS issuing the certification.

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The Territorial Division sends the file back to DANE Central with the pertinent corrections, and IPSs update such information on RUAF-ND. Once the corrections are made, the unloading of the updates is done, and the quality control is executed again. Then the consolidated national data table is obtained and recorded in a server which meets the information safety standards, and it is made available for the persons responsible for making the special mistake analysis.

### 3.2.3 Data processing, types of coding and classifications.

The mortality coding process is made by using the “Coding module” with the necessary information for the ICD-10 code to be manually assigned by the DANE Central Codification Group, whereby the codes are assigned to the causes of death and the basic cause of death is chosen.

**a. Manner of Coding:** The Death Certificate is the source of mortality statistics. As from this information, the Codification Group (DANE Central) turns the diagnosis (established in Chapter 5 of the certificate, Causes of Death) into codes, so as to facilitate the systematization required for the statistics production.

ICD-10 International Statistical Classification of Diseases and Related Health Problems – tenth revision, is the tool used by the data entry operator to assign the relevant code to the causes of death written down by the physician to choose and code the basic cause of death, thus to subsequently process the information and present the country’s mortality statistics.

The selection of the basic cause of death is the process whereby the pathology that originated the chain of events leading to death is determined. The condition listed on the last line of Part One under Chapter Five of the certificate, is the basic cause of death if the certificate has been filled out correctly.

However, in most of the cases this condition is not met, and for such a reason the rules established by ICD must be applied in order to select the basic cause of death.

The selection process of the basic cause is summarized as follows:

- Assignment of codes to direct causes and antecedent causes reported.
- Selection of the original antecedent cause.
- Selection of the basic cause of death, by applying the selection and modification ICD-10 rules, if necessary

In addition to the ICD’s three volumes required for the coding process, the following documentation must be taken into account:

- Critique Manual of Live Birth and Death Certificates -Vital Statistics (TRD-EEVV-MCR-01).
- Rules and guidelines for the coding of fetal and neonatal mortality - DANE.
- Rules and guidelines for the coding of maternal mortality - DANE .
- Medical dictionary.



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## **b. Generation of live births and deaths output tables**

Using the SAS statistics software, the output tables previously designed are scheduled and information is processed, in order to generate the output tables to be published through the DANE Website and to be sent to users.

### **3.3 MECHANISMS FOR QUALITY CONTROL**

There is an automated quality control module available, which by crossing variables is able to identify duplicated certificates enabling the inconsistencies and the information missing in variables to be detected.

Once the inconsistency or information missing is identified, DANE Central through its territorial branches, requests from the Institutions Providers of Health (IPS) the verification of such datum through the Departmental Health Directorates

Likewise, the revision of the consistency and quality of the consolidated information is accomplished by data crossing, analysis and evaluation, according to the rules and instructions established in the international standards and those defined by the country. Information is validated against other systems such as SIVIGILA or INML-CF; in this process, the information is evaluated and analyzed and figures are approved for their publication.

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## 4. DIFFUSION

### 4.1 DATA REPOSITORY MANAGEMENT

In the Vital Statistics server located at DANE, a folder is created, where a copy of the definitive data tables and the relevant output tables, documentation and source programs of the investigation are kept.

### 4.2 AVAILABLE YEARS AND PERIODS

**Births:** The annual definitive figures are available going back to 1998; the period is closed eighteen months following the reference year, with the publication of the definitive data. Thus, the definitive figures for year 2010 were available as of June 30, 2012.

**Non-fetal deaths:** The annual definitive figures are available going back to 1979; the period is closed eighteen months following the reference year, with the publication of the definitive data. Thus, the definitive figures for year 2010 were available as of June 30, 2012,

**Fetal Deaths:** The annual definitive figures are available since 1992; the period is closed eighteen months following the reference year, with the publication of the definitive data. Thus, the definitive figures for year 2010 were available as of June 30, 2012.

Preliminary figures of births, non-fetal deaths and fetal deaths of the periods following the definitive year published, are released quarterly, with the cut-off being at the end of the immediately previous quarter.

### 4.3 DIFFUSION PRODUCTS

Data tables are available at the data bank in DANE Central and the output tables in DANE's Website and Data Banks. Databases are sent to the State entities and are available to users at the DANE Data Banks.

The following documents are published in DANE's Website:

- Methodological datasheet
- Methodology of Vital Statistics
- Methodology for the Estimate of the Municipal Infant Mortality Rate 2005 – 2007
- Estimate of the change in the departmental and municipal infant mortality levels, based on vital statistics, year 2008 – 2009
- Output tables containing annual results of births and fetal and non-fetal deaths
- Query Viewfinder: "Estimates of the national, departmental and municipal Infant Mortality Rate, 2005 – 2009 period"



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- Estimates of the national, departmental and municipal Infant Mortality Rate, 2005 – 2009 period.
- Birth and Death Certificates
- Mortality classification

## 5. RELATED DOCUMENTATION <sup>a</sup>

- National Administrative Department of Statistics (DANE). (November, 2010). *Manual of Principles and Procedures Vital Statistics, Censuses and Demography Division* (developing).
  - National Administrative Department of Statistics (DANE), Censuses and Demography Division. (May, 2010). *Critique Manual for Live Birth and Death Certificates Vital Statistics*.
  - National Administrative Department of Statistics (DANE). (October, 2009) Censuses and Demography Division. *Methodological Datasheet of Vital Statistics*.
  - National Administrative Department of Statistics (DANE). (April, 2009). Censuses and Demography Division. *Glossary of Terms, Vital Statistics*.
  - National Administrative Department of Statistics (DANE). Censuses and Demography Division. (April 2009). *User Manual, Software for Network Capture for Live Birth and Death Records – Vital Statistics*.
  - National Administrative Department of Statistics (DANE). Censuses and Demography Division. (April, 2009). *User Manual for the Capture in MS Excel Quality Indicators – Vital Statistics DANE Central*.
  - National Administrative Department of Statistics (DANE). Censuses and Demography Division. (October, 2008). *Vital Statistics Processes Documentation*.
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<sup>a</sup> *The translation of the above titles is for reference purposes only*

## GLOSSARY

**Abortion:** Termination of pregnancy, by expulsion or removal of a dead embryo or fetus, that is, it does not breathe and does not have any other signs of life. This before 22 weeks of gestation or it otherwise weighs less than 500 grams (WHO). If the dead product of conception has more than 22 weeks of gestation and/or weighs 500 grams or more, it is considered stillbirth.

### Adapted Entities of Health (EAS)

These are part of the transitional regime and have a very transient existence, which expires upon termination of employment of members or the period of retirement of pensioners, in the time of entry into force of the new social security health system.

If the law maker, due to the new organizational culture, decides that, after the effective date of Act 100 of 1993, the health services could be provided only by the Health Promoters Entities (EPS), and therefore, the other public entities that were providing such services should become one of them or should be liquidated, it is obvious that those entities that did not do it for convenience or lack of requirements could not operate on an equal basis with the EPS. This is the reason for them to be authorized to continue operating, but only temporarily.

Adapted Entities of Health were created by Act 100 of 1993 and are regulated by Decree 1890 of 1995. Among these are the funds, entities and public sector entities, that enable them to continue providing health services or covering their members against risks of general sickness and maternity.

Currently, there are only two entities of this kind: The Medical Service of Public Utilities Company of Medellin and the Pension Fund of National Railways. The Adapted Health Entities belonging to the public universities got new management under Act 647/01. The rest of the Adapted Entities of Health, were gradually liquidated by administrative decisions, since according to officials of the Superintendency of Health: "out of the liquidated Adapted Entities of Health, none of them was liquidated by procedures applied by Superintendency, but by decrees from the national government or by decisions of each entity".

**Apgar test:** Assessment that shall be carried out to the newborn at one and five minutes following the birth; such assessment consists of examining their appearance, pulse, gestures, activity and respiration.

The one made at the first minute is to assess the spontaneous cardio-respiratory function of the newborn or during the newborn's resuscitation; and the other made at five minutes is useful to foresee issues at long term. The Apgar corresponds to the sum of the scores of each of the assessed signs, according to the table below.



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SIGN	SCORE		
	0	1	2
Appearance (coloration)	Blue, pale	Pink body; blue limbs	Completely pink
Pulse (heart rate)	Absent	Less than 100	More than 100
Gestures (reflex irritability in response to planta pedis stimulation)	No response	Grimace	Weeping
Activity (muscular tone)	Weak	Some flexion of limbs	Active movements
Breathing (respiratory effort)	Absent	Slow, uneven	Good, strong crying

**Attending physician:** Doctor who treated the patient in life, as family physician, or the one who attended the patient before death, i.e. the one who knew the patient alive and provided medical care to them (e.g. Emergency Room). It is supposed that during this short period, the doctor may have performed a physical examination or initiated any treatment.

**Authorized personnel of health:** Nurses, auxiliary nursing care or health promoters who are responsible for filling out the death certificate in those cases where a doctor is not available. In those areas of the country where a permanent doctor is not available, as is the case with those scattered rural areas, the Ministry of Health authorizes nurses, auxiliary nursing care and health promoters to complete the death certificate.

**Blood group:** Manner of grouping certain blood characteristics that depend on the compatibility between red blood cells and serum of a donor and a receiver. The determination of these groups, which at first was limited to the selection of donors and recipients for blood transfusion, has been extended to determine the exclusion of paternity and the identification in criminology.

**Civil registry:** It is a public institution whose purpose is to record and store, for legal and administrative purposes, any data regarding the vital events. The registration is defined as a mandatory, permanent and continuous record of all the vital events that have occurred and their features, with some specific requirements of a legal nature.

**Critique:** Task consisting of the identification and correction of the respective inconsistencies or missing data on the collected information.

**Data table:** File where all records are contained, whether live-births or deaths.

**Death:** Permanent disappearance of any sign of life, whatever the time elapsed as from the live birth (postnatal cessation of any vital functions without the possibility of resuscitation). This definition excludes fetal deaths.

**Death by sequel of direct obstetric cause (MSO):** Death of a woman due to direct obstetric causes after one year from the termination of pregnancy.

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**Death related to the pregnancy (MRE):** Death of a woman while pregnant or within 42 days following the termination of pregnancy, regardless of the cause of death.

**Direct obstetric deaths (MMD):** Maternal deaths resulting from any obstetric complications with respect to pregnancy, delivery or puerperium, interventions, omissions, incorrect treatment, or by a chain of events that originated from any of the foregoing circumstances.

**Indirect obstetric deaths (MMI):** Maternal deaths resulting from any disease present before the pregnancy or taking place during pregnancy, not due to obstetric causes, but exacerbated due to physiological effects of pregnancy.

**Late maternal death (MMT):** Death of a woman due to direct (MMTD) or indirect (MMTI) obstetric causes, after the 42-day period but before one year from the termination of pregnancy (post-puerperium).

**Maternal death:** It is the death of a woman while under pregnancy or within 42 days following the termination of pregnancy, irrespective of the duration and anatomical site of pregnancy, as a consequence of any cause related to, or exacerbated by the pregnancy itself or its treatment but not due to accidental or incidental causes.

**Fetal death:** Death of the product of conception, before the full ejection or extraction from the mother's body, regardless of the duration of pregnancy. Death is confirmed by the fact that after separation, fetus does not breathe or give any evidence of life, such as heartbeats, pulsations of the umbilical cord or any effective movements of the muscles of voluntary contraction.

**Dispersed rural:** It covers the rural area, i.e. the one outside of the urban perimeter of the municipal seat.

**District Financial Health Fund:** By Accord 20 of 1990, the District Financial Health Fund was established as a public establishment of the district with legal status, administrative autonomy and independent patrimony.

The District Financial Health Fund, with resources coming from supply subsidy, contracts the provision of health services with both the State Social Companies and IPSs of the unregistered network, in compliance with the provisions set forth by Decree 806 of 1998. Thus, it provides comprehensive care to both the population covered with no payment capacity, and the population under the subsidized regime with events that are not covered by the POS-S<sup>4</sup>.

## Educational level and passing grades

- **Basic preschool.** Preparatory level for primary education; it includes the three nursery school grades: pre kinder (pre-kindergarten), kinder (kindergarten) and transition.

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<sup>4</sup> In Colombia, this refers to the Subsidized Mandatory Health Plan

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- **Basic elementary.** The first cycle of basic teaching is assimilated to this level, consisting of five grades, according to that set forth under Article 11 of Act 115 of 1994.
- **Basic secondary.** For Census 2005, the basic secondary education covers grades 6th (sixth) to 9th (ninth) set forth under Article 11 of Act 115 of 1994.
- **Middle secondary or classic high school.** It consists of the completion, consolidation and progress in the achieving of the previous levels and includes two grades, tenth (10th) and eleventh (11th). By the end thereof the high school degree is obtained enabling the student to enter into higher education at any level and careers
- **Middle technical (technical high school).** It consists of two (2) grades, tenth (10th) and eleventh (11th), and prepares students for working in one of the production or service sectors and also enables them to enter into higher education.

It is aimed to qualified training in specialties such as agriculture, trade, finance, management, ecology, environment, industry, computer sciences, mining, health, recreation, tourism, sports and others required by the productive sector and services.

- **Normalist:** Consists of four (4) grades, tenth (10th), eleventh (11th), twelfth (12<sup>th</sup>) and thirteenth (13th). Grades 12<sup>th</sup> and 13<sup>th</sup> are complementary cycles; if the student wants to accomplish a bachelor degree, they can study 2 more years, through covenants agreed upon with universities and training colleges.
- **Higher Education** This level requires the completion of the middle or secondary education, and it intends for the accomplishment of the professional education ending up with the achievement of a technological or professional university title. It includes the following modalities: professional technical, technological, university, and advanced or graduate studies. It is governed by Act 30 of 1992.
  - **Professional technical:** It consists of educational programs on tasks of an operational and instrumental nature, as well as specialization in its respective scope. Usually, this level requires four (4) semesters, (2 years).
  - **Technological:** This level includes training programs in fields with a strong emphasis on the “know-how” enabling students to apply their knowledge in the middle levels of any organization. The study time is six (6) semesters, three (3) years
  - **Professional:** It covers the study plan delivered by Higher Education Institutions, ending up in a professional university title with a duration of up to six (6) years.
  - **Specialization:** This program requires a previous undergraduate study plan of a professional level, making possible the implementation of knowledge in

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the same occupation, profession, discipline or of like areas. Two (2) years of duration after having obtained a professional university title.

- **Master's degree:** It requires up to three (3) years of studies after having obtained a professional-level university title.
- **PhD:** It requires up to six (6) years of studies after having obtained the master's degree.

## Ethnicity

- **Black, Mulatto, Afro-Colombian or Afro-descendant.** Black population whose set of families of Afro-Colombian descent, has its own culture, shares a history and has its own traditions and customs disclosing and keeping identity awareness, all of which making them different from other ethnic groups (Act 70 of 1993). Black populations are established along the Pacific Coast.
- **Indigenous people.** Group of families of Amerindian origin, sharing feelings of identification with their aboriginal past by keeping traits and values typical of their traditional culture, as well as their own organizational structures and social control making them particularly different from other communities. According to the 1993 Population Census, in Colombia there are 82 indigenous groups clearly differentiated by their cultural features, mostly of them maintaining their own language which is considered by the National Constitution as their official language within the scope of their territory.
- **Palenquero de San Basilio.** This afro-descendant people established within the Department of Bolivar (on the Atlantic Coast), has been recognized for its own cultural characteristics, such as keeping Palenquero as a unique language in the world, which is a mix of Creole with Spanish substratum. Given its particular characteristics, UNESCO has named it as a world historic heritage, and Colombia as a heritage of intangible culture.
- **Raizal from archipelago of San Andres y Providencia:** This native islander population is located in the Department Archipelago of San Andrés, Providencia and Santa Catalina. This population is Afro-descendant and due to their own cultural and geographical characteristics, it has been a subject matter of differentiated national policies looking for protecting the rights of its members as a way to preserve the cultural diversity, among other things.
- **ROM (gypsy).** ROM people, better known as Gypsies, are communities with a proper ethnic and cultural identity; and are characterized by having a nomadic tradition, a common origin, and so a shared history. They have their own language which is the Romani. In addition, they have their own laws and social organization.

**Forensic doctor:** Physician in charge of all deaths due to external causes, including violent deaths, and those where there are doubts whether it was or not a natural death, for

example, in those cases where by medical criterion there is no correlation between the findings in the corpse and clinical recording or the information given by relatives.

Any doctor can perform the functions of a forensic doctor, for example, the doctor under Mandatory Social Service who performs a necropsy meets forensic doctor functions, even if they had been the attending physician.

**Gestational age:** Time of gestation or gap in full weeks, between the first day of the last period of the mother and the day when the delivery has occurred.

**Health management entity:** Entity responsible for enrolling users, collecting and administering contributions and assuring the provision of benefit plans. Types of entities:

- Health Promoter Entity
- Subsidized Health Promoter Entity
- Adapted Entity of Health
- Special Entity of Health
- Excepted Entity of Health

**Social Security in Health:** Set of rules and procedures aimed at assuring the health service in all levels of care to the entire population, including the benefit plan offered as being affiliated with the General System of Social Security in Health (SGSSS). According to Act 100 of 1993 and Act 647 of 2001, the following regimes are defined within the SGSSS:

- **Contributory Regime.** It consists of a set of norms governing the link of individuals and families to the General System of Social Security in Health, when such link is made by means of the payment of an installment, individual and family or a previous economic contribution, directly funded by the beneficiary thereof, or in conjunction with the latter and their employer.
- **Exceptional Regime.** It covers the members of the Armed Forces and National Police; as well as the Civil officials under the Ministry of Defense and National Police who were linked before the enforcement of Act 100/93, non-paid members of the public corporations, public servants of ECOPETROL and its retirees, employees affiliated with the National Fund of Social Benefits of the Teacher Association and public servants of Military Forces and National Police higher education.
- **Special Regime.** It covers the employees of public entities or universities who are covered by the health services and other services, to wit:
  - Universidad de Antioquia
  - Universidad de Cartagena
  - Universidad Militar Nueva Granada
  - Universidad Pedagógica y Tecnológica de Colombia (Tunja - Boyacá)
  - Universidad del Cauca
  - Universidad del Valle
  - Universidad Industrial de Santander (UIS).

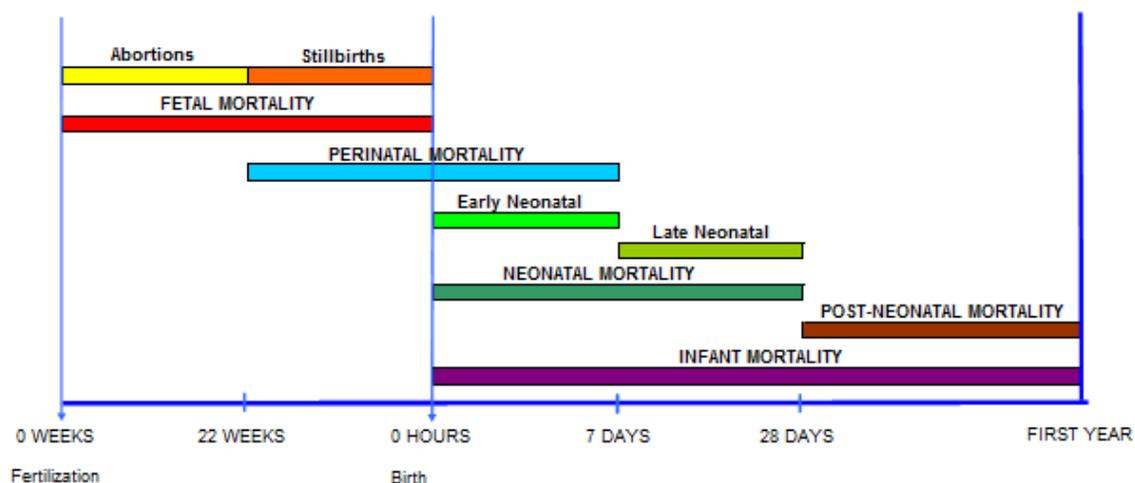
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- **Subsidized Regime.** It consists of a set of norms governing the link of individuals to the General System of Social Security in Health, when such link is made by paying a totally or partially subsidized installment, with tax or solidarity resources set forth under the Act regulating the Subsidized Regime.
- **Uninsured.** Persons who do not meet the conditions set forth under the contributory or subsidized regime. Included under this category are persons who are under the socioeconomic levels 1, 2, and 3 but according to SISBEN<sup>5</sup> have not been registered or affiliated under the General System of Social Security in Health (SGSSS), as well as those persons who having payment capacity, do not belong to the contributive regime.

**Infant Mortality:** It refers to the death of children less than one year of age.

### Diagram of the Fetal and Neonatal Mortality



Source: DANE, DCD – Vital Statistics

**Live birth:** Complete expulsion or extraction of the product of conception from the mother's body, regardless of the duration of pregnancy, which after such separation, it breathes, or shows any other sign of life such as heartbeats, pulsations of the umbilical cord or effective movements of the muscles of voluntary contraction, irrespective of whether the umbilical cord has been cut off or placenta has been detached. Each product of any birth gathering such conditions is deemed to be a live birth (Definition of WHO).

**Marital status:** It refers to the situation of a person with respect to cohabitation with a partner, legalized or *de facto*. The different types are as follows:

<sup>5</sup> SISBEN: System of identification and classification of potential beneficiaries for social programs.

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- **Married:** Person who has established with another person of the opposite sex a relationship legally approved, involving economic cooperation, sexual and residential cohabitation.
- **Common law and living with a partner for two or more years:** Person establishing a relationship with another person of the opposite sex, that by the time it has completed two years or more, it implies economic cooperation, sexual and residential cohabitation, and such relationship is maintained exclusively by the partners' own free will, without any legal bonds.
- **Separated or divorced:** Person whose union (whether married or common law) has been legally dissolved, has not remarried and they are not living with a partner.
- **Single.** Person who has never married nor is living with a partner.
- **Widower/widow.** Person whose spouse or partner died and they have not remarried again nor are they living with a partner since.

**Non-attending physician:** Doctor who did not meet the patient in life, but for social and institutional responsibility, they got indirect knowledge of the individual; for the effects of their work, they should obtain support either on the data of the clinical recording or on any data of additional laboratory examinations or by interviewing family members or witnesses.

**Occupational accident:** According to Decree 1295 of 1994, it is defined as "any sudden event which arises by reason of, or in connection with labor and causes any organic lesion, functional disorder, disability or death to the worker." The following are considered occupational accidents:

- Those caused in the performance of the daily or occasional work in the company.
- Any accident caused while in the regular job, following orders or on behalf of the employer, either outside working hours or in the company's facilities.
- Any accident occurring during the move between the residence and the work place in any means of transportation provided by the employer.
- No occupational accident is considered as such, with respect to any accident that occurs during a paid or unpaid leave (whether it be union, sporting, recreational and/or cultural activities where employees are not acting for or on behalf of the company).

**Occupational disease:** Any permanent or temporary pathological condition arising as a direct and forced consequence of the type of work performed by the worker, or the environment they have been forced to work in, previously determined by the National Government as an occupational disease (Decree 1295 of 1994, Article 11).

In Colombia, the occupational disease concept was first recognized under Articles 200 and 201 of the Substantive Labor Code in 1950 showing a list of 18 diseases recognized by the National Government. Currently, in the table of classification of occupational diseases, contained in Decree 1832 of 1994, there are 42 diseases that have a compelling and direct link with work.

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**Perinatal period:** This period begins at 22 completed weeks (154 days) of gestation (when the fetus reaches approximately 500 grams) and ends up seven completed days after birth. Therefore, perinatal deaths are those occurring during such period, that is, fetal deaths occurred as from the 22<sup>nd</sup> week of gestation and the live births that die during the first seven (7) days of life.

**Rh factor:** Substance making part of the surface of the red blood cells. Given its presence (Rh positive) or absence (Rh negative), it will respond to certain reactions in laboratory conditions.

**Sequence:** It refers to two or more diseases or events listed on successive lines under Death Certificate, Part I, Chapter V (causes of death), where each disease is considered an acceptable cause of that recorded on the upper line thereof.

**Traffic accident:** Accident where at least one automobile or another type of transportation vehicle are involved. Any vehicle accident occurring on public roads (originated in, ending up in, or partially affecting other vehicle on the public road); it is assumed that a vehicle accident occurs on public roads unless otherwise specified, with the exception of those accidents only referred to motor vehicles designed to be used off the road.

**Typing:** Action of capturing data derived from the critique and coding using the pertinent programs and procedures.

#### Types of delivery:

- **Cesarean birth (C-Section):** Surgical procedure, extraction of the fetus through the section of the abdominal and uterine walls.
- **Operative vaginal birth:** Refers to forceps or vacuum-assisted delivery.
- **Spontaneous birth:** Expulsion of fetus by natural means, also called natural childbirth.

**Usual place of residence:** The usual place of residence is the geographical place of the country, locality or administrative division, or the foreign country where the relevant person usually lives in. It does not necessarily have to be the same place where such person was located when the event occurred or where the investigation was made; nor does it have to be the person's place of legal residence.

In Vital Statistics, the usual place of residence shall be determined as follows:

- **For Live Births:** Usual place of residence of the mother on the delivery date of the live birth.
- **For Fetal Deaths:** Usual place of residence of the woman on the date when the expulsion or extraction of the dead fetus took place.



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- **For Deaths of children under one year of age:** The usual place of residence of the mother on the date when the child's death took place (otherwise child's residence if the mother has died).
- **Deaths:** Usual place of residence of the deceased on the date of death.

**Vital statistics:** Process that gathers information on the frequency of vital events (births and deaths) and their characteristics, for subsequent compilation, analysis, evaluation and dissemination of the resulting data.



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<sup>b</sup> The translation of the above titles is for reference purposes only



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## Annex A. Live Birth Certificate, antecedent for civil registration form

 Ministry of Social Protection		Republic of Colombia LIVE BIRTH CERTIFICATE ANTECEDENT FOR CIVIL REGISTRATION		
Data required by DANE in this form are strictly confidential; they are protected under statistical reserve by Act 79 of 1993, Article 5		NUMBER OF LIVE BIRTH CERTIFICATE _____ <small>(see directions on the back of this page)</small>		
PLACE OF BIRTH Department _____ Municipality _____				
AREA OF BIRTH <input type="checkbox"/> Municipal township <input type="checkbox"/> Population center _____		<input type="checkbox"/> Dispersed Rural _____		
Town's subdivision, small village, hamlet				
DATE OF BIRTH Year: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Month: <input type="text"/> <input type="text"/> Day: <input type="text"/> <input type="text"/>	TIME OF BIRTH Hour: <input type="text"/> <input type="text"/> Minutes: <input type="text"/> <input type="text"/> <input type="checkbox"/> Unknown	SEX OF THE BORN ALIVE <input type="checkbox"/> Male <input type="checkbox"/> Female	BLOOD CLASSIFICATION OF THE LIVE BIRTH Blood group: _____ Rh Factor: _____	
MOTHER'S FAMILY NAMES (AS SHOWN ON THE IDENTITY DOCUMENT) Family Names: _____ Second Last name: _____ First Name: _____ Middle name: _____				
MOTHER'S TYPE OF I.D. DOCUMENT <input type="checkbox"/> Civil Record <input type="checkbox"/> Identity Card <input type="checkbox"/> Citizen I.D. <input type="checkbox"/> Foreign I.D. <input type="checkbox"/> Passport <input type="checkbox"/> No information			MOTHER'S NUMBER OF I.D. DOCUMENT (AS SHOWN ON THE IDENTITY DOCUMENT) _____	
<b>DATA OF THE PERSON CERTIFYING THE BIRTH</b>				
FAMILY NAMES (AS SHOWN ON THE IDENTITY DOCUMENT) Family Names: _____ Second Last name: _____ First Name: _____ Middle name: _____				
TYPE OF IDENTIFICATION DOCUMENT <input type="checkbox"/> Citizen I.D. <input type="checkbox"/> Foreign I.D. <input type="checkbox"/> Passport	NUMBER OF I.D. DOCUMENT (AS SHOWN ON THE IDENTITY DOCUMENT) _____	PROFESSION OF THE PERSON CERTIFYING THE BIRTH <input type="checkbox"/> Doctor <input type="checkbox"/> Nurse <input type="checkbox"/> Nursing care auxiliary <input type="checkbox"/> Health promoter	PROFESSIONAL LICENSE _____	
PLACE AND DATE OF ISSUANCE OF THE CERTIFICATE Department: _____ Year: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Municipality: _____ Month: <input type="text"/> <input type="text"/> Day: <input type="text"/> <input type="text"/>			SIGNATURE OF THE PERSON CERTIFYING THE BIRTH _____	



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## Annex B. Live Birth Statistical Certificate form



Ministry of Social Protection

Republic of Colombia  
LIVE BIRTH CERTIFICATE



Data required by DANE in this form are strictly confidential; they are protected under statistical reserve by Act 79 of 1993, Article 5

1. NUMBER OF LIVE BIRTH CERTIFICATE

(see directions on the back of this page)

I. DATA OF BIRTH			
2. PLACE OF BIRTH Department: _____ Municipality: _____		4. SITE OF DELIVERY <input type="checkbox"/> 1. Health institution <input type="checkbox"/> 2. Domicile <input type="checkbox"/> 3. Other place Which? _____	
3. AREA OF BIRTH <input type="checkbox"/> 1. Municipal township <input type="checkbox"/> 2. Population center <input type="checkbox"/> 3. Dispersed Rural Town's subdivision, small village, hamlet		6. SEX OF THE LIVE-BORN <input type="checkbox"/> 1. Male <input type="checkbox"/> 2. Female	
5. NAME OF THE HEALTH INSTITUTION Name: _____ Code: _____		7. BIRTH WEIGHT OF THE LIVE-BORN _____ Grams	
8. HEIGHT OF THE LIVE-BORN AT BIRTH <input type="checkbox"/> Centimeters		10. TIME OF BIRTH Hour <input type="checkbox"/> Minutes <input type="checkbox"/> Unknown	
9. DATE OF BIRTH ____ Year ____ Month ____ Day		12. TIME OF GESTATION OF THE LIVE-BORN <input type="checkbox"/> Complete weeks <input type="checkbox"/> Unknown	
11. DELIVERY ATTENDED BY: <input type="checkbox"/> 1. Doctor <input type="checkbox"/> 2. Nurse <input type="checkbox"/> 3. Nursing care auxiliary <input type="checkbox"/> 4. Health promoter <input type="checkbox"/> 5. Midwife <input type="checkbox"/> 6. Other person Which? _____		13. NUMBER OF PRENATAL CONSULTATIONS OF THE LIVE-BORN'S MOTHER <input type="checkbox"/> Consultations	
14. TYPE OF DELIVERY OF THIS BIRTH <input type="checkbox"/> 1. Spontaneous <input type="checkbox"/> 2. C-Section <input type="checkbox"/> 3. Operative vaginal birth <input type="checkbox"/> 4. Unknown		15. MULTIPLICITY OF PREGNANCY <input type="checkbox"/> 1. Single <input type="checkbox"/> 2. Twofold <input type="checkbox"/> 3. Threefold <input type="checkbox"/> 4. Fourfold or more	
16. APGAR TEST OF THE LIVE-BORN At one Min- <input type="checkbox"/> (1-10) At five Min. <input type="checkbox"/> (1-10)		17. BLOOD CLASSIFICATION OF THE LIVE-BORN Blood group _____ Rh Factor _____	
18. ACCORDING TO CULTURE, PEOPLE, OR PHYSICAL TRAITS, THE LIVE-BORN IS RECOGNIZED BY ITS PARENTS AS:- <input type="checkbox"/> 1. Indigenous. Which indigenous people does it belong to? <input type="checkbox"/> 2. ROM (Gypsy) <input type="checkbox"/> 3. Raizal from Archipelago of San Andres and Providence <input type="checkbox"/> 4. Palanquero from San Basilio <input type="checkbox"/> 5. Black, Mulatto, Afrocolombian or Afrodescent <input type="checkbox"/> 6. None of the above			
II. DATA OF THE LIVE-BORN'S PARENTS			
DATA OF THE LIVE-BORN'S MOTHER			
19. MOTHER'S FAMILY NAMES (AS SHOWN ON THE IDENTITY DOCUMENT) Family Names: _____ Second Last name: _____ First Name: _____ Middle name: _____			
20. MOTHER'S TYPE OF I.D. DOCUMENT. <input type="checkbox"/> 1. Civil Record <input type="checkbox"/> 2. Identity Card <input type="checkbox"/> 3. Citizen I.D. <input type="checkbox"/> 4. Foreign I.D. <input type="checkbox"/> 5. Passport <input type="checkbox"/> 6. No information		21. MOTHER'S NUMBER OF I.D. DOCUMENT (AS SHOWN ON THE IDENTITY DOCUMENT)	
22. MOTHER'S AGE AT THE DATE OF DELIVERY <input type="checkbox"/> Actual age		23. MOTHER'S MARITAL STATUS <input type="checkbox"/> 1. Common law and two or more years living with her partner <input type="checkbox"/> 2. Common law and two or less years living with her partner <input type="checkbox"/> 3. Separated, divorced <input type="checkbox"/> 4. Single <input type="checkbox"/> 5. No information <input type="checkbox"/> 6. Married	
24. LAST YEAR OF STUDIES PASSED BY MOTHER <input type="checkbox"/> 1. Preschool <input type="checkbox"/> 2. Basic elementary <input type="checkbox"/> 3. Basic secondary <input type="checkbox"/> 4. Academic middle or classical <input type="checkbox"/> 5. Middle technical <input type="checkbox"/> 6. Normalist <input type="checkbox"/> 7. Technical professional <input type="checkbox"/> 8. Technological <input type="checkbox"/> 9. Professional <input type="checkbox"/> 10. Specialization <input type="checkbox"/> 11. Master's Last year or grade passed <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> 12. Ph.D <input type="checkbox"/> 13. None <input type="checkbox"/> 14. No information			



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## Annex B. Live Birth Statistical Certificate form (Cont.)

25. MOTHER'S USUAL PLACE OF RESIDENCE		
Country _____	Department _____	Municipality _____
26. MOTHER'S USUAL AREA OF RESIDENCE		
<input type="checkbox"/> 1. Municipal township	Neighborhood _____	
<input type="checkbox"/> 2. Population center	Address _____	Location or commune _____
<input type="checkbox"/> 3. Rural dispersed	Rural area name _____	
27. NUMBER OF LIVE-BORN CHILDREN THE MOTHER HAS HAD, INCLUDING THIS ONE	28. DATE OF BIRTH OF THE FORMER LIVE-BORN CHILD	
<input type="checkbox"/> Children	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> Year	<input type="checkbox"/> <input type="checkbox"/> Month <input type="checkbox"/> <input type="checkbox"/> Day
29. NUMBER OF PREGNANCIES, INCLUDING THIS ONE		
<input type="checkbox"/> <input type="checkbox"/> Pregnancies		
30. MOTHER'S HEALTH SOCIAL SECURITY REGIME		
<input type="checkbox"/> 1. Contributive	<input type="checkbox"/> 2. Subsidized	<input type="checkbox"/> 3. Exceptional
<input type="checkbox"/> 4. Special	<input type="checkbox"/> 5. Uninsured	
31. HEALTH MANAGEMENT ENTITY THE MOTHER BELONGS TO		
Type of Management Entity	<input type="checkbox"/> 1. Entity Promoter of Health	<input type="checkbox"/> 2. Entity Promoter of Subsidized Health
	<input type="checkbox"/> 4. Special Entity of Health	<input type="checkbox"/> 5. Excepted Entity of Health
Name of the management entity _____		
<b>DATA OF THE LIVE-BORN'S FATHER</b>		
32. FATHER'S AGE AT THE DATE OF BIRTH OF THIS CHILD.	33. LAST YEAR OF STUDIES PASSED BY FATHER	
<input type="checkbox"/> <input type="checkbox"/> Actual age	<input type="checkbox"/> 1. Preschool	<input type="checkbox"/> 2. Basic elementary
	<input type="checkbox"/> 7. Technical professional	<input type="checkbox"/> 8. Technological
	<input type="checkbox"/> 13. None	<input type="checkbox"/> 99. No information
	<input type="checkbox"/> 3. Basic secondary	<input type="checkbox"/> 4. Academic middle or classical
	<input type="checkbox"/> 9. Professional	<input type="checkbox"/> 10. Specialization
	<input type="checkbox"/> 5. Middle technical	<input type="checkbox"/> 11. Master's
	<input type="checkbox"/> 6. Normalist	<input type="checkbox"/> 12. PhD.
	Last year or grade passed <input type="checkbox"/>	
<b>III DATA OF THE PERSON CERTIFYING THE BIRTH</b>		
34. FAMILY NAMES (AS SHOWN ON THE IDENTITY DOCUMENT)		
Family Names: _____	Second Last name _____	First Name: _____ Middle name: _____
35. TYPE OF IDENTIFICATION DOCUMENT	36. NUMBER OF I.D. DOCUMENT (AS SHOWN ON THE IDENTITY DOCUMENT)	37. PROFESSION OF THE PERSON CERTIFYING THE BIRTH
<input type="checkbox"/> 1. Citizen I.D.	_____	<input type="checkbox"/> 1. Doctor
<input type="checkbox"/> 2. Foreign I.D.		<input type="checkbox"/> 2. Nurse
<input type="checkbox"/> 3. Passport		<input type="checkbox"/> 3. Nursing care auxiliary
		<input type="checkbox"/> 4. Health promoter
		<input type="checkbox"/> 5. Civil Registry officer
39. PLACE AND DATE OF ISSUANCE OF THE CERTIFICATE		38. PROFESSIONAL LICENSE
Department _____	Year <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	_____
Municipality _____	Month <input type="checkbox"/> <input type="checkbox"/> Day <input type="checkbox"/> <input type="checkbox"/>	
		40. SIGNATURE OF THE PERSON CERTIFYING THE BIRTH
		_____



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## Annex C. Death Certificate, antecedent for civil registration form



Republic of Colombia  
**DEATH CERTIFICATE**  
ANTECEDENT FOR CIVIL REGISTRATION



Data required by DANE in this form are strictly confidential; they are protected under statistical reserve by Act 79 of 1993. Article 5

NUMBER OF DEATH  
CERTIFICATE

(see directions on the back of this page)

### I. GENERAL INFORMATION

#### PLACE WHERE THE DEATH OCCURRED

Department \_\_\_\_\_

Municipality \_\_\_\_\_

#### AREA WHERE DEATH OCCURRED

Municipal township

Population center

Town's subdivision, small village, hamlet \_\_\_\_\_

Dispersed Rural

#### TYPE OF DEATH

Fetal

Non-Fetal

#### DATE OF DEATH

\_\_\_\_ Year

\_\_\_\_ Month

\_\_\_\_ Day

#### TIME OF DEATH

\_\_\_\_

Hour

\_\_\_\_

Minutes

Unknown

#### SEX OF THE DECEASED

Male

Female

Undetermined

#### FAMILY NAMES AND GIVEN NAMES OF THE DECEASED (AS SHOWN ON THE IDENTITY DOCUMENT)

Family Names: \_\_\_\_\_

Last name: \_\_\_\_\_

First Name: \_\_\_\_\_

Middle name: \_\_\_\_\_

#### TYPE OF I.D. OF THE DECEASED.

Civil registry

Identity Card

Citizen I.D

Foreign I.D.

Passport

No information

#### NUMBER OF IDENTIFICATION DOCUMENT OF THE DECEASED (AS SHOWN ON THE IDENTITY DOCUMENT).

#### PROBABLE MANNER OF DEATH

Natural

Violent

Under study



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## Annex C. Death Certificate, antecedent for civil registration form (Cont.)

DATA OF THE PERSON CERTIFYING THE DEATH			
FAMILY NAMES (AS SHOWN ON THE IDENTITY DOCUMENT)			
Family Names: _____	Second Last name: _____	First Name: _____	Middle name: _____
TYPE OF IDENTIFICATION DOCUMENT	NUMBER OF I.D. DOCUMENT (AS SHOWN ON THE IDENTITY DOCUMENT)	PROFESSION OF THE PERSON CERTIFYING THE DEATH	PROFESSIONAL LICENSE
<input type="checkbox"/> Citizen I.D. <input type="checkbox"/> Foreign I.D. <input type="checkbox"/> Passport	_____	<input type="checkbox"/> Doctor <input type="checkbox"/> Nurse <input type="checkbox"/> Nursing care auxiliary <input type="checkbox"/> Health promoter	_____
PLACE AND DATE OF ISSUANCE OF THE CERTIFICATE		SIGNATURE OF THE PERSON CERTIFYING THE DEATH	
Department: _____		_____	
Municipality: _____			
_____ □□□□ Year    □□ Month    □□ Day			



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## Annex D. Death Statistical Certificate form



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Republic of Colombia  
DEATH CERTIFICATE

Data required by DANE in this form are strictly confidential; they are protected under statistical reserve by Act 79 of 1993. Article 5

1. NUMBER OF  
DEATH CERTIFICATE

(see directions on the back of this page)

## I. GENERAL INFORMATION

2. PLACE WHERE THE DEATH OCCURRED  
Department \_\_\_\_\_ Municipality \_\_\_\_\_

3. AREA WHERE THE DEATH OCCURRED

1. Municipal township       2. Population center \_\_\_\_\_  
Town's subdivision, small village, hamlet       3. Dispersed Rural

4. SITE WHERE THE DEATH OCCURRED

1. Hospital/Clinic       2. Health center/post       3. Home/Domicile  
 4. Place of work       5. Public road       6. Other site, Explain \_\_\_\_\_  
 9. No information

5. NAME OF THE HEALTH INSTITUTION WHERE THE DEATH OCCURRED \_\_\_\_\_

Code

6. TYPE OF DEATH

1. Fetal       2. Non-Fetal

7. DATE OF DEATH

- Year        Month        Day

8. TIME OF DEATH

- Hour   Minutes         Unknown

9. SEX OF THE DECEASED

1. Male       2. Female       3. Undetermined

**if fetal death, go  
to question 19**

10. FAMILY NAMES AND GIVEN NAMES OF THE DECEASED (AS SHOWN ON THE IDENTITY DOCUMENT)

Family Names:

Last name

First Name

Middle name:

\_\_\_\_\_



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## Annex D. Death Statistical Certificate form (Cont.)

<b>11. TYPE OF I.D. OF THE DECEASED.</b> <input type="checkbox"/> 1. Civil record <input type="checkbox"/> 2. Identity Card <input type="checkbox"/> 3. Citizen I.D. <input type="checkbox"/> 4. Foreign I.D. <input type="checkbox"/> 5. Passport <input type="checkbox"/> 9. No information			<b>12. NUMBER OF IDENTIFICATION DOCUMENT OF THE DECEASED (AS SHOWN ON THE IDENTITY DOCUMENT).</b> _____		<b>13. DATE OF BIRTH OF THE DECEASED</b> <input type="checkbox"/> <input type="checkbox"/> Year                      Month                      Day	
<b>14. MARITAL STATUS OF THE DECEASED.</b> <input type="checkbox"/> 1. Common law and two or more years living with their partner <input type="checkbox"/> 5. Single <input type="checkbox"/> 2. Common law and two or less years living with their partner <input type="checkbox"/> 6. Married <input type="checkbox"/> 3. Separated, divorced <input type="checkbox"/> 9. No information <input type="checkbox"/> 4. Widow/widower			<b>15. AGE OF THE DECEASED</b> <input type="checkbox"/> 0. Under one hour (minutes) (00-59) <input type="checkbox"/> 1. Under one day (hours) (01-23) <input type="checkbox"/> 2. Under one month (days) (01-29) <input type="checkbox"/> 3. Under one year (months) (01-11) <input type="checkbox"/> 4. One year or more (actual age in years) Age <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>			
<b>16. LAST YEAR OF STUDIES PASSED BY THE DECEASED</b> <input type="checkbox"/> 1. Preschool <input type="checkbox"/> 2. Basic elementary <input type="checkbox"/> 3. Basic secondary <input type="checkbox"/> 4. Academic middle or classical <input type="checkbox"/> 5. Middle technical <input type="checkbox"/> 6. Normalist <input type="checkbox"/> 7. Technical professional <input type="checkbox"/> 8. Technological professional <input type="checkbox"/> 9. Professional <input type="checkbox"/> 10. Specialization <input type="checkbox"/> 11. Master <input type="checkbox"/> 12. PhD <input type="checkbox"/> 13. None <input type="checkbox"/> 99. No information      Last year or grade passed <input type="checkbox"/> <input type="checkbox"/>						
<b>17. COULD OCCUPATION BE A CAUSE OR BE ASSOCIATED WITH THE DEATH?</b> <input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No. <input type="radio"/> Occupational accident <input type="radio"/> Occupational disease Which was the last usual occupation of the deceased? _____			<b>18. ACCORDING TO CULTURE, PEOPLE, OR PHYSICAL TRAITS, THE DECEASED WAS RECOGNIZED/ RECOGNIZED ITSELF AS</b> <input type="checkbox"/> 1. Indigenous <input type="checkbox"/> 2. ROM (Gypsy) <input type="checkbox"/> 3. Raizal from Archipelago of San Andres and Providence <input type="checkbox"/> 4. Palanquero from San Basilio <input type="checkbox"/> 5. Black, Mulatto, Afrocolombian or Afrodescent <input type="checkbox"/> 6. None of the above What ethnicity did the deceased belong to? _____			
<b>19. PLACE OF USUAL RESIDENCE OF THE DECEASED (FOR FETAL/UNDER ONE YEAR OF AGE DEATH, THE MOTHER'S)</b> Country _____ Department _____ Municipality _____						
<b>20. AREA OF USUAL RESIDENCE OF THE DECEASED (FOR FETAL/UNDER ONE YEAR OF AGE DEATH, THE MOTHER'S)</b> <input type="checkbox"/> 1. Municipal township      Neighborhood _____ Address _____ Locality or quarter _____ <input type="checkbox"/> 2. Population center      (Town's subdivision, small village, hamlet) _____ <input type="checkbox"/> 3. Dispersed Rural      Name of rural area _____						



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## Annex D. Death Statistical Certificate form (Cont.)

<p>21. HEALTH SOCIAL SECURITY REGIME OF THE DECEASED (FOR FETAL/UNDER ONE YEAR OF AGE DEATH, THE MOTHER'S)</p> <p><input type="checkbox"/> 1. Contributive      <input type="checkbox"/> 2. Subsidized      <input type="checkbox"/> 3. Exceptional</p> <p><input type="checkbox"/> 4. Special      <input type="checkbox"/> 5. Uninsured</p>	<p>22. HEALTH MANAGEMENT ENTITY THE DECEASED BELONGED TO</p> <p>Type of Management entity</p> <p><input type="checkbox"/> 1. Entity Promoter of Health      <input type="checkbox"/> 2. Entity Promoter of Subsidized Health      <input type="checkbox"/> 3. Adapted Entity of Health</p> <p><input type="checkbox"/> 4. Special Entity of Health      <input type="checkbox"/> 5. Excepted Entity of Health</p> <p>Name of the management entity _____</p>
<p>23. PROBABLE MANNER OF DEATH</p> <p><input type="checkbox"/> 1. Natural      <input type="checkbox"/> 2. Violent</p> <p><input type="checkbox"/> 3. Under study</p>	<p>24. DEATH CERTIFICATE ISSUED BY</p> <p><input type="checkbox"/> 1. Attending physician      <input type="checkbox"/> 2. Non-attending physician      <input type="checkbox"/> 3. Forensic doctor</p> <p><input type="checkbox"/> 4. Health authorized personnel      <input type="checkbox"/> 5. Civil Registry Officer</p>

## II. FETAL DEATHS OR DEATHS OF CHILDREN UNDER ONE YEAR

<p>25. THE FETAL DEATH OR THE DEATH OF THE CHILD UNDER ONE YEAR OCCURRED IN RELATION WITH DELIVERY</p> <p><input type="checkbox"/> 1. Before      <input type="checkbox"/> 2. During</p> <p><input type="checkbox"/> 3. After      <input type="checkbox"/> 4. Unknown</p>	<p>26. TYPE OF DELIVERY - THE DECEASED FETUS OR CHILD UNDER ONE YEAR WAS BORN BY:</p> <p><input type="checkbox"/> 1. Spontaneous birth      <input type="checkbox"/> 2. C-Section</p> <p><input type="checkbox"/> 3. Operative vaginal birth      <input type="checkbox"/> 4. Unknown birth</p>	<p>27. MULTIPLICITY - THE DECEASED FETUS OR CHILD UNDER ONE YEAR WAS BORN OF A PREGNANCY:</p> <p><input type="checkbox"/> 1. Single      <input type="checkbox"/> 2. Two-fold      <input type="checkbox"/> 3. Three-fold</p> <p><input type="checkbox"/> 4. Four-fold or more      <input type="checkbox"/> 5. Unknown</p>
<p>28. GESTATION TIME OF THE DECEASED FETUS OR CHILD UNDER ONE YEAR</p> <p><input type="checkbox"/> Complete weeks      <input type="checkbox"/> Unknown</p>		<p>29. WEIGHT AT BIRTH OF THE DECEASED FETUS OR CHILD UNDER ONE YEAR</p> <p><input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> Grams      → Continue on the back of this page</p>



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## Annex D. Death Statistical Certificate form (Cont.)

II. FETAL DEATHS OR DEATHS OF CHILDREN UNDER ONE YEAR (conclusion)		
DATA OF THE MOTHER OF THE DECEASED FETUS OR CHILD UNDER ONE YEAR		
30. MOTHER'S FAMILY NAMES (AS SHOWN ON THE IDENTITY DOCUMENT)		
Family Names:	Last name	First Name: Middle name:
31. TYPE OF IDENTIFICATION DOCUMENT OF THE MOTHER		32. NUMBER OF IDENTIFICATION DOCUMENT OF THE MOTHER (AS SHOWN ON THE IDENTITY DOCUMENT).
<input type="checkbox"/> 1. CMI record <input type="checkbox"/> 2. Identity card <input type="checkbox"/> 3. Citizen I.D. <input type="checkbox"/> 4. Foreign I.D. <input type="checkbox"/> 5. Passport <input type="checkbox"/> 9. No information		33. MOTHER'S AGE <input type="checkbox"/> Actual age
34. NUMBER OF LIVE BORN AND STILLBORN CHILDREN OF THE MOTHER		35. MOTHER'S MARITAL STATUS
<input type="checkbox"/> 1. Live Birth <input type="checkbox"/> 2. Stillborn		<input type="checkbox"/> 1. Common law and two or more years living with her partner <input type="checkbox"/> 3. Separated, divorced <input type="checkbox"/> 4. Widow <input type="checkbox"/> 5. Common law and two or less years living with her partner <input type="checkbox"/> 6. No information <input type="checkbox"/> 8. Single <input type="checkbox"/> 9. Married
36. MOTHER'S LAST YEAR OF STUDIES PASSED		
<input type="checkbox"/> 1. Preschool <input type="checkbox"/> 2. Basic elementary <input type="checkbox"/> 3. Basic secondary <input type="checkbox"/> 4. Academic middle or classical <input type="checkbox"/> 5. Middle technical <input type="checkbox"/> 6. Normalist <input type="checkbox"/> 7. Technical professional <input type="checkbox"/> 8. Technological <input type="checkbox"/> 9. Professional <input type="checkbox"/> 10. Specialization <input type="checkbox"/> 11. Master's <input type="checkbox"/> 12. PhD <input type="checkbox"/> 13. None <input type="checkbox"/> 99. No information Last year or grade passed <input type="checkbox"/>		
III. DEATH OF FEMALES OF CHILD-BEARING AGE (10 TO 54 YEARS OF AGE)		
37. WAS SHE PREGNANT WHEN SHE DIED?	38. WAS SHE PREGNANT IN THE LAST 6 WEEKS?	39. WAS SHE PREGNANT IN THE LAST 12 MONTHS?
<input type="checkbox"/> 1. Yes (Go to 40) <input type="checkbox"/> 2. No <input type="checkbox"/> 9. No information	<input type="checkbox"/> 1. Yes (Go to 40) <input type="checkbox"/> 2. No <input type="checkbox"/> 9. No information	<input type="checkbox"/> 1. Yes (Go to 40) <input type="checkbox"/> 2. No <input type="checkbox"/> 9. No information



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IV. VIOLENT DEATHS	
40. PROBABLE MANNER OF DEATH <input type="checkbox"/> 1. Suicide <input type="checkbox"/> 2. Homicide <input type="checkbox"/> 3. Traffic accident <input type="checkbox"/> 4. Other accident <input type="checkbox"/> 5. Under study	
41. HOW DID THE EVENT TAKE PLACE If injured (type of weapon); drowned (small stream, river, pond, pool, etc.); knocked down (motor vehicle, bicycle, animal traction, etc., specifying if the deceased was the driver, passenger, pedestrian); if poisoned (kind of poison, drug, medicament, gases or vapors).	
_____	
42. PLACE OR ADDRESS WHERE THE EVENT TOOK PLACE	
Department _____	Municipality _____
Address where the event took place _____	

V. CAUSES OF DEATH FOR ALL CASES	
43. HOW WAS THE DEATH CAUSE DETERMINED? <input type="checkbox"/> 1. Necropsy <input type="checkbox"/> 2. Clinical record <input type="checkbox"/> 3. Laboratory test <input type="checkbox"/> 4. Questions to relatives or witnesses	44. DID THEY RECEIVE MEDICAL CARE DURING THE PROCESS LEADING THEM TO DEATH? <input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No <input type="checkbox"/> 3. Unknown
45. CAUSES OF DEATH (in case of fetal death, or death of children under 7 days, please report the direct or indirect maternal causes on c and d)  (report one cause per line)	Approx. Time between the start of each cause and death
I. DIRECT CAUSE: mechanism or pathophysiological state directly causing the death  a) Due to: _____	Time: Measurement unit (minutes, hours, days, weeks, months, years) <input type="checkbox"/> _____
ANTECEDENT CAUSES: morbid states, if any, which produced the cause written in a), being mentioned in the last place the basic or fundamental cause  b) Due to: _____	<input type="checkbox"/> _____
c) Due to: _____	<input type="checkbox"/> _____
d) Due to: _____	<input type="checkbox"/> _____
II. OTHER IMPORTANT PATHOLOGICAL STATES contributing to death, but not associated with both the disease or morbid state that caused the death _____	<input type="checkbox"/> _____
46. DEATH WITHOUT MEDICAL CERTIFICATE (CERTIFICATE ISSUED BY AUTHORIZED HEALTH PERSONNEL (NURSE, NURSING CARE AUXILIARY, HEALTH PROMOTER)	

Annex D. Death Statistical Certificate form (Cont.)



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## DATA OF THE PERSON CERTIFYING THE DEATH

### 47. FAMILY NAMES (AS SHOWN ON THE IDENTITY DOCUMENT)

Family Names:

Second Last name

First Name:

Middle name:

### 48. TYPE OF IDENTIFICATION DOCUMENT

- Citizen I.D.  
 Passport  
 Foreign I.D.

### 49. NUMBER OF I.D. DOCUMENT (AS SHOWN ON THE IDENTITY DOCUMENT)

\_\_\_\_\_

### 50. PROFESSION OF THE PERSON CERTIFYING THE DEATH

1. Doctor  2. Nurse  
 3. Nursing care auxiliary  4. Health promoter  
 5. Civil Registry officer

### 51. PROFESSIONAL LICENSE

\_\_\_\_\_

### 52. PLACE AND DATE OF ISSUANCE OF THE CERTIFICATE

Department

\_\_\_\_\_

Municipality

\_\_\_\_\_

Year  Month  Day

### 53. SIGNATURE OF THE PERSON CERTIFYING THE DEATH

\_\_\_\_\_