

Vital Statistics

Methodology

1 Aim

The main aim of Vital Statistics is to know the number of births, marriages and deaths which occur on Spanish territory, as well as the principal characteristics related to these demographic phenomena.

2 Type of operation

Vital Statistics gather group data in the form of tables which are broken down into: Autonomous Communities, provinces, capitals, municipalities with more than 20,000 inhabitants and, in some tables, municipal level.

3 Content

Vital Statistics, which refer to the number of births, marriages and deaths which occur on Spanish territory, constitute one of the first projects ever undertaken by the National Statistics Institute. The General Commission of Union Statistics published the first volume in 1863. It comprised data related to the period 1858 to 1861 and was drawn up from Parish registers. Since then a continuous stream of information on demographic phenomena has been published in Spain. This has only been interrupted once, between 1871 and 1885, when the Registry of births, marriages and deaths was set up. The aforementioned would later provide the data for these statistics.

The demographic concepts used for the elaboration of these publications were practically the same every year without other variations except those originated by the change in information source which fundamentally consists of the replacement of those baptised for those registered in the Registry of births, marriages and deaths and common law marriage for civil marriage.

3.1 BIRTHS STATISTICS

As is the case for the other statistics in Vital Statistics, Birth Statistics draw on the data of the statistical bulletins filled in at the time of registering such information with the Registry of births, marriages and deaths. Due to this, Vital Statistics used the concepts of birth, deceased infant, marriage and death with the meaning expressed in the Civil Code.

Bearing in mind that for civil purposes "the foetus will only be considered born if it has a human face and lives for twenty-four hours entirely separate from the maternal environment." (art. 30 civil code). The statistics on births and deaths carried out until 1975 did not adjust to the demographic concepts recognised internationally as these do not include those born alive who died before 24 hours of existence, which in the Civil Code, are called "deceased infants" (art.745).

Although the use of this concept does not significantly alter the global figures on births and deaths considerably, it does modify some specific mortality rates (infant, neonatal, perinatal, etc.) To get round this, it is necessary to extract from the so-called Abortions Statistic those born alive to calculate the "rectified rates".

Since 1975 the concept of birth in Vital Statistics is identified by the biological term "born alive", which is that used in the demographic field with the corresponding effect on deaths.

In order to avoid any confusion for those who have to fill in the statistical bulletins, legal criteria were respected whilst the data was gathered. Otherwise, when a deceased infant, which had been born alive, was to be registered, a bulletin of birth and a bulletin of death would have to be stamped for statistical purposes. It is for this reason that the conceptual variables mentioned are introduced during the information treatment phase.

The instrument used to gather the information is the Statistical Bulletin of Infants who died within 24 hours.

STUDY AND CLASSIFICATION VARIABLES, BOTH DIRECT AND DERIVED.

The variables used in these statistics are the following:

Variables

Registry of births, marriages and deaths	Number of children given birth to including this birth
Municipality of registration	Number of children given birth to who were born alive
Province of registration	Previous child's birth day
Day of registration	Previous child's birth month
Month of registration	Previous child's birth year
Year of registration	Marital status.- Married or single
Registry of births, marriages and deaths	First marriage
Registration Book	Wedding day
Registry of births, marriages and deaths	Wedding month
Registration Book	Wedding year
Registry of births, marriages and deaths	
Registration Book	
Day of registration in the Deceased	
Infants Registry	
Month of registration in the Deceased	Father's name
Infants Registry	Father's surname (first part)
Year of registration in the Deceased	Father's surname (second part)
Infants Registry	Father's National Identity Document
Birth day	Father's Tax Identity Number letter
Birth month	
Birth year	
Municipality of birth	Father's birth day
Province of birth	Father's birth month
Gestation period (weeks)	Father's birth year
Place of birth: Health care centre, home or other	Father's profession
Assisted birth: by health care staff or unassisted by health care staff	Father's nationality
Multiple births: single, double, triple, quadruple or more	Father's municipality of residence
Maturity: Normal term or premature	Father's province of residence
Normality: normal or dystocia (abnormal or difficult labour)	Father's home road type
Mother's name	Name of father's home road
Mother's surname (first part)	Road number of father's home
Mother's surname (second part)	Father's home stairs number
Mother's National Identity Document	Father's home floor number
Mother's Tax Identity Number letter	Father's home door number
Mother's birth day	Newborn's first name
Mother's birth month	Newborn's surname (first part)
Year of birth of the mother	Newborn's surname (second part)
Mother's profession	Sex of newborn
Nationality of the mother	Live birth or stillbirth
Mother's municipality of residence	Lived for more or less than 24 hours
Mother's province of residence	Newborn's weight
Mother's home road type	Municipality of registration size
Name of mother's home road	Municipality of residence size
Road number of mother's home	Mother's age at birth

Mother's home stairs number	Mother's age at time of marriage
Mother's home floor number	Years married
Mother's home door number	
Birth interval.- is the interval between two consecutive births. The first interval, or the protogenetic interval, refers to the period of time between marriage and the first birth.	
Order of birth.- refers to the total number of children born alive by the mother, including the one classified.	
Age of father	
For stillbirths and live births who live less than 24 hours, the following variables are used:	
Newborn's death due to maternal reasons	
Death of foetus caused by reasons pertaining to the foetus	
First digit of newborn's cause of death code	
Second and third digit of newborn's cause of death code	
Fourth digit of newborn's cause of death code	

3.2 LATE FOETAL DEATHS STATISTICS

From a theoretical perspective, a late foetal death is death before complete expulsion or extraction of a viable product of conception from its mother. The notion of viability serves to differentiate between late foetal deaths and abortions. In the past, the World Health Organisation (WHO) linked foetus viability to a gestation age of over 28 full weeks of pregnancy. Nevertheless, the WHO currently recommends using weight at the time of expulsion or extraction of the foetus as the criterion. However, the minimum number of grams necessary for the foetus to be deemed viable is under debate.

Considering the global discrepancy over weight, the difficulty in obtaining precise weights of all the foetuses after expulsion and moreover, the fact that in Spain only foetal deaths over 180 gestation days must be communicated to the registry of births, marriages and deaths (Art.45 of the Law of 8 June 1957), and for the purposes of these statistics, the criterion adopted for late foetal death is that of a foetus which dies after a gestation period of six months or more.

It is to be noted that the content of the Late Foetal Death Statistics is the continuation of what was called Abortion Statistics until 1974. However, the latter encompassed live births which died within the first 24 hours of life and all foetal deaths which had been registered, regardless of the gestation period. Late Foetal Death Statistics suppose greater content consistency and closeness to medical-biological terminology because, as it has been established, abortion only means the expulsion or extraction of an unviable product of conception from its mother.

The characteristics used to classify late foetal deaths are similar to those used in the births table. However, it is worth highlighting that to study perinatal mortality in detail, the causes of the late foetal deaths have also been included. These have been given a four-digit classification, as laid out under the tenth revision of the WHO International Classification of Disease (ICD).

The instrument used to gather information in this case is also the Statistical Bulletin of Infants who died within 24 hours.

The variables included in these statistics are the same as those in the Births Statistics.

3.3 BIRTH STATISTICS

The Births and Late Foetal Deaths Statistics are fully complemented by the Birth Statistics. The definition of birth coincides with the medical-biological concept. In other words, expulsion or extraction of a viable product of conception from its mother. Therefore, abortion or expulsion of the unviable foetus is excluded.

The reason for dealing with Birth Statistics independently is to show viable fertility as it encompasses births as well as late foetal deaths.

The relationship between these three concepts is the following:

Single births + twice double births + three times triple births + ... = births + late foetal deaths.

The content of Birth Statistics is the continuation of what was previously called Statistics on Births. However, in the latter all deaths were included regardless of the gestation period.

The base information is provided by the Statistical Bulletin of Infants who died after 24 hours.

STUDY AND CLASSIFICATION VARIABLES, BOTH DIRECT AND DERIVED

The variables used in these statistics are the same as those in the Birth Statistics

3.4 MARRIAGES STATISTICS

These statistics are clearly those which have changed the least within Vital Statistics. This is due to the same concept of marriage being used in previous statistics, viz. marriages registered in the Registry of births, marriages and deaths.

Nevertheless, the information provided on marriages as from 1975 is much more extensive because, on the one hand, those characteristics used before this date (age, marital status of the spouses, place of registration of marriage and month of celebration) are now studied in greater depth. On the other hand, the marriages are studied according to the type of celebration (catholic religion, other religion or only civil), the previous residence of each spouse, the future home of the married couple, year of birth, and the profession of both spouses.

Two kinds of bulletins are used to gather information: the Statistical Bulletin of Marriages and the Church Bulletin of Marriages.

STUDY AND CLASSIFICATION VARIABLES, BOTH DIRECT AND DERIVED.

The variables used in these statistics are the following:

Variables

Registry of births, marriages and deaths	Name of man's home road
Municipality of celebration/registration of marriage	Home road number
Province of celebration/registration of marriage	Man's home stairs number
Year of registration	Man's home floor number
Month of registration	Man's home door number
Day of registration	Man's province of residence
Registry of births, marriages and deaths	Man's municipality of residence
Registration Book	Woman's surname (first part)
Registry of births, marriages and deaths	Woman's surname (second part)
Registration Volume	Woman's first name
Registry of births, marriages and deaths	
Registration Page	
Year of celebration of marriage	
Month of celebration of marriage	Year of birth of the woman
Day of celebration of marriage	Month of birth of the woman
Marriage celebration type	Day of birth of the woman
Married couple's municipality of residence	Woman's marital status
Married couple's province of residence	Woman's year of divorce
Couple's home road type	Woman's month of divorce
Name of couple's home road	Woman's day of divorce
Road number of couple's home	Woman's marriage registration number
Couple's home stairs number	Woman's profession
Couple's home floor number	Woman's nationality
Door number of couple's home	Woman's home road type
Man's surname (first part)	Name of woman's home road
Man's surname (second part)	Road number of woman's home
Man's first name	Woman's home stairs number
Year of birth of the man	Woman's home floor number
Man's birth month	Door number of woman's home
Man's birth day	Woman's province of residence
Man's marital status	Woman's municipality of residence
Man's year of divorce	Size of municipality where marriage was celebrated
Man's month of divorce	Size of married couple's municipality of residence
Man's day of divorce	Size of man's municipality of residence
Man's marriage registration number	Size of woman's municipality of residence
Man's profession	
Man's nationality	
Man's home road type	

3.5 DEATHS STATISTICS

In the past, as was shown whilst dealing with the Births and Late Foetal Deaths Statistics, the statistical concept of death in Spain encompassed all those who had lived for more than 24 hours. In 1975 this concept was broadened to include live births who die within the first 24 hours. This change was of great significance as it meant that the death criteria recommended by international bodies was adopted.

It is important to note that deaths are classified by age and year of birth. The age of death is calculated by taking the difference between the date of death and the date of birth. However, this is not the case for deaths within the first 24 hours. Another significant change made is the classification of deaths by residence, although classification by place of death is still included. As is the case in other parts of Vital Statistics, demographic phenomena are classified by residence except when another classification criteria is expressly stated in the table.

The study of deaths by cause of death is particularly noteworthy. This was tabulated with three digits according to the WHO International Classification of Disease but since 1975 four digits have been used, the maximum specification allowed by the ICD.

The information is provided by the Statistical Bulletin of Infants who died after 24 hours and by the Statistical Bulletin of Infants who died within 24 hours.

STUDY AND CLASSIFICATION VARIABLES, BOTH DIRECT AND DERIVED.

The variables used in these statistics are the following:

Variables

Registry of births, marriages and deaths	Home floor number
Municipality of death/registration	Home door number
Province of death/registration	Province of residence
Year of registration	Municipality of residence
Month of registration	Profession
Day of registration	Year of death
Registry of births, marriages and deaths	Month of death
Registration Book	Day of death
Registry of births, marriages and deaths	First digit of cause of death code
Registration Volume	Second and third digit of cause of death code
Registry of births, marriages and deaths	
Registration Page	
Man's surname (first part)	
Surname of deceased (second part)	Fourth digit of cause of death code
First name of deceased	Cause of immediate death
National Identity Number of deceased	Cause of intermediate death
Year of birth	Cause of final death
Month of birth	Other processes
Day of birth	Years old
Province of Birth	Months old
Municipality of birth	Days old
Sex	Size of municipality of birth
Marital status	Size of municipality of residence
Nationality	Reduced death cause
Home road type	Perinatal death cause
Home road name	Infant death cause
Home road number	
Home stairs number	

4 Characteristics of the statistical procedure

4.1 DATA ADMINISTRATIVE SOURCE

The administrative source of the data in Vital Statistics is the Registry of births, marriages and deaths.

4.2 THE LEGAL BASIS OF THE ADMINISTRATIVE SOURCE

Article 20 of the Registry of births, marriages and deaths regulations states that Registry of births, marriages and deaths officials shall give the National Statistics Institute, through their Delegations, the bulletins of births, marriages and deaths.

4.3 OBSERVATION UNITS TO WHICH ADMINISTRATIVE SOURCE PRIMARY DATA REFER.

The observation units are the births, marriages and deaths registered with the Registry of births, marriages and deaths.

4.4 COLLECTION METHOD FOR ORIGINAL ADMINISTRATIVE DATA

The data are collected in the appropriate bulletins (birth, marriage and death) which are published by the National Statistics Institute. These bulletins are sent to all Registry of births, marriages and deaths offices where they are completed and returned to the INE Delegation in the corresponding province.

These bulletins are coded and saved on the computer systems of the INE provincial delegations. These delegations undertake the necessary checks and correct any mistakes found. They update the Electoral Census by erasing the province's deceased. The same occurs with the Municipal Register of Inhabitants, in which the deceased are erased and births are registered. In the provinces where a collaboration agreement exists with the Autonomous Community for the drawing up of these statistics, the Delegations must send the Autonomous Community the recording and documentation provided for in the agreement.

All of the information is then sent to the INE Central services, where its treatment continues. The information is filtered and inputted and finally the corresponding publications are produced.

4.5 FREQUENCY OF COLLECTION OF ORIGINAL ADMINISTRATIVE DATA

The data are gathered every month.

4.6 COLLECTION METHOD OF DATA FOR STATISTICAL PURPOSES BASED ON THE ORIGINAL ADMINISTRATIVE DATA

Complete list of the original administrative data

4.7 STATISTICS FORMS

The following statistics bulletins are used:

- Statistical Bulletin of Infants who died within 24 hours, Births and Late Foetal Deaths : gathers information on all of the births registered with the Registry of births, marriages and deaths and their characteristics. For example, multiple births, mortality, information on parents, information on infant/infants, etc.
- Statistical Bulletin of Infants who died after 24 hours gathers information on infants who died after 24 hours and their characteristics.

– Statistical Bulletin of Marriages: gathers information on marriages registered with the Registry of births, marriages and deaths and their characteristics.

– Church Bulletin of Marriages: is used by the Catholic Church for marriages of this religion. It is often the case that a statistical bulletin is used for marriages celebrated according to the Catholic faith as the parish did not have a church bulletin. The content of the latter is similar to that of the statistical bulletin of marriages.

The Statistical Bulletin of Infants who died within 24 hours changed its format and content in 1994. New variables were introduced, such as: National Identity Document of the mother and father, nationality of the mother and father, father's name and surname, father's province and municipality of residence, fathers' home, and name and surname of newborn infant or infants. Furthermore, bilingual versions were made in Balear, Catalan, Galician, Valencian and Basque.

Statistical Bulletin of Infants who died after 24 hours changed its format and content in 1993. The following variables were introduced: province and municipality of birth of deceased, National Identity Document of deceased, and nationality of deceased. As was undertaken for the Statistical Bulletin of Infants who died within 24 hours, bilingual versions were made in Balear, Catalan, Galician, Valencian and Basque.

The Statistical and Church bulletin of marriages has not seen any changes in its content. The format was changed and bilingual versions were made.

5 Diffusion plan and frequency of diffusion

The INE publishes the **Provisional Data** within six months of the end of the information reference year and the **Definitive Data** year and a half after the aforementioned reference period. The latter are based on the annual files received from the Autonomous Communities which they draw up using INE monthly files after they have been filtered and the causes of death (in the case of deaths) coded.

The definitive data comprise an electronic publication at national level (Volume 1) and an electronic publication at Autonomous Community level (Volume 2).

Microdata files for every year are available.

Specific requests for information are accepted.