

Vital Statistics

Methodology

Madrid, May 2023

Index

1	Objective	3ç
2	Background	3
3	Death Statistics	4
3.1	Content	4
3.2	Information collection and processing	4
3.3	Variables: Definitions and concepts	5
3.4	Publication of results	6
3.5	Advanced results. Estimated number of weekly deaths	7
4	Birth Statistics	7
4.1	Content	7
4.2	Information collection and processing	8
4.3	Variables: Definitions and concepts	9
4.4	Publication of results	12
4.5	Advanced results. Monthly Births Estimates	12
5	Marriage Statistics	13
5.1	Content	13
5.2	Information collection and processing.	13
5.3	Variables: Definitions and concepts	14
5.4	Publication of results	15
5.5	Advanced results	16
6	Scope of the Statistic	16
7	Dissemination plan and frequency	17
8	Methodology Annex	17
8.1	Summary of methodological changes	17
8.2	Educational level assignment, relationship with labour activity, and occupation. Obtaining method and user advisory	18

1 Objective

The main objective of Vital Statistics is to determine the number of births, marriages and deaths that take place within Spain, as well as the main characteristics relating to said demographic phenomena.

2 Background

Vital Statistics are one of the tasks with the most long-standing tradition within the National Statistics Institute. The first volume was published in 1863 by the General Statistics Commission of the Kingdom, and included data concerning the period from 1858 to 1861 which had been obtained through parish records. Since then, demographic phenomena information has been published in Spain without interruptions, except for the period from 1871 to 1885 period, when the Office of Vital Records was established and from which the information for said statistics would be obtained thereafter.

The first publication, currently preserved in the National Statistics Institute, corresponds to the year 1877 and contains the data on the Vital Statistics of Spain during the 1861-1870 decade. From 1871 to 1899 there are no Vital Statistics publications available. The only exception is a series of births, marriages and deaths by provinces corresponding to the years 1893-1900, which can be found in the publication of the year 1900. From the year 1900 onward, all publications are available¹.

The demographic concepts used for drafting these publications have undergone slight modifications throughout all these years.

One of the most relevant modifications has been accounting for live births, which affects both births and deaths. Since 1975, in order to conform to international demographic concepts, live births are considered to be those that are born alive, regardless of their hours of life. Therefore, any live birth² that passes away is also considered a death, regardless of their hours of life.

Before 1975, the only ones deemed live births were those who lived for twenty-four hours once completely detached from the womb, with the corresponding impacts on the concept of death.

This modification does not affect global data significantly, but does have an incidence on mortality rates (infant, newborn, perinatal, etc.)

¹ <https://www.ine.es/inebaseweb/libros.do?tnp=205002#>

² Since April 2011, the legal concept of live birth and the statistical concept have coincided with the amendment of article 30 of the Civil Code (third final provision of Law 20/2011 on the Civil Registry), which states that "Legal personality is acquired at the time of live birth, once the complete detachment from the mother's womb has taken place.

Likewise, the Marriage Statistic has undergone a significant change as well. In 2005, as a result of the entry into force of Law 13/2005 of 1 July, which amended the Civil Code regarding the right to enter into obligations of any kind. Thus, from the second half of 2005 onwards, Marriage Statistics include all marriages registered in the Civil Registry, regardless of whether they are between persons of the same sex or different sexes.

The administrative sources of information are the entries of the civil registry.

Starting several years ago, the Ministry of Justice has been using an application called INFOREG (and its successor, DICIREG) to keep a record of registry entries. Currently, not all Civil Registries are computerised, although approximately 93% of deaths, 96% of births and 92% of marriages are recorded in these applications. The computerisation of civil registers implies the following advantages for Vital Statistics:

- It ensures statistics coverage.
- It improves the quality, filtering and validation of the data obtained through the statistical bulletins or the authorised applications.
- It allows for the publication of advanced data on deaths and births.
- The computerised recording of entries in the civil registries with Inforeg/Dicireg has made it possible to eliminate the Statistical Bulletin of Marriages from the end of 2019 in the computerised civil registers, and of the Statistical Birth Bulletin, in those cases where registration is carried out from the health centre, as of October 2015.

3 Death Statistics

3.1 CONTENT

Death statistics are composed of those deaths that took place in Spain during the period analysed.

A death is considered to be the demise of any person who passes away, regardless of the number of hours they lived.

3.2 INFORMATION COLLECTION AND PROCESSING

Information is obtained through the following data collection tools:

- In the case of death by natural causes, the collection tool is:

The **Medical Certificate of Death/Statistical Death Bulletin (CMD/BED**, per its Spanish initials): there are versions in Spanish and in the co-official languages as well. The first sheet corresponds to the medical death certificate and must always

be completed by the doctor certifying the death, while the Statistical Deaths Bulletin can be completed by the reporting party or, failing that, by the Civil Registrar.

This paper document is delivered to the Civil Registry of the municipality where the death took place. On a monthly basis, the CMD/BEDs are sent from the civil registries to the corresponding INE provincial office. At said office, it is scanned and processed.

As a consequence of the Vital Statistics modernisation process, from 2009 onwards, recording techniques using optical character recognition were incorporated into the CMD/BED.

– In the case of violent deaths, or suspected criminal deaths, the collection tools used are:

The Statistical Deaths Bulletin with Judicial Intervention is filled out in a web application designed by the INE, which the courts can access through the Punto Neutro Judicial (inter-agency communication network). From 2020 onwards, deaths involving judicial investigation are mainly recorded by the Institutes of Forensic Medicine and Forensic Sciences through an application designed by the INE.

All information relating to Death Statistics is recorded and compiled in the computers of the INE provincial offices, where the appropriate checks are carried out and any errors detected are corrected.

Provincial offices have an ongoing communications system in place with their provinces' Civil Registries so as to guarantee the coverage, quality and punctuality of the information they receive from them.

There are collaboration agreements with the Autonomous Communities for the development of these statistics. To this end, the INE, through secure mechanisms, provides the monthly information established in the agreement signed. Subsequently, all the information is transmitted to the INE Central Services, which continues processing the information, carrying out the filtering phases until the corresponding publications are obtained.

Deaths are notified to the local municipalities and to the Electoral Census so that they can proceed with their removal.

3.3 VARIABLES: DEFINITIONS AND CONCEPTS

Death: A death is considered to be the demise of any person who passes away, regardless of the number of hours they lived.

Age: The age in years at the date of death.

Children who die within the first 24 hours of life are recorded with 0 days, regardless of whether the child died the day after birth. Therefore, for zero-day

deaths, only the number of hours lived (24 hours) is taken into account and not the number of days that have elapsed since birth.

Marital status: Legal marital status is defined as the status that each individual has, pursuant to the country's marriage law.

Sex: Sex refers to the person's biological sex.

Nationality: This refers to the nationality on the reference date, classified as Spanish as long as the individual has said nationality, and they may also have other nationalities.

Country of birth: Country where the birth took place.

Primary residence: The place where a person normally spends their daily periods of rest, regardless of temporary absences for leisure travel, holidays, visits to family and friends, business, medical treatment or religious pilgrimage.

Place of death: This variable indicates whether the death occurred in a private home, hospital, nursing home, workplace or some other place.

Level of studies, relationship with labour activity and occupation: See annex 8.2.

The Death statistic compiles the following death variables:

- **Variables relating to the registration:** Province, municipality, date of the record, volume, page and reverse side of the death record.
- **Variables relating to the deceased:** Name and surname, identity document (DNI, passport and NIE), date of birth, country, province and municipality of birth, country of nationality, country, province and municipality of residence, full address, size of the municipality of birth and residence, highest level of studies completed, occupation, relationship with the activity, marital status and date of death.
- **Death variables:** Place and date of death.

3.4 PUBLICATION OF RESULTS

The results of this statistic are published online (www.ine.es) in the section labelled INEbase/ Demography and population/ Demographic phenomena/ Death statistics.

The annual and monthly series of death statistics have been offered at both the Autonomous Community and provincial level since 1941. The results of the demographic phenomena included in the Vital Statistics at the municipal level since 1996 are available as well.

The INE provides micro-data on deaths since 1975. These files have been anonymised prior to their publication.

Detailed data has been published concerning deaths since the year 1996, according to the deceased person's residence, with a level of disaggregation by Autonomous Community, capital provinces and municipalities with more than 50,000 inhabitants. In case the province or municipality of the record is used, it is detailed in the name of the table. Finally, a section on foreigner deaths is published.

3.5 ADVANCED RESULTS. ESTIMATED NUMBER OF WEEKLY DEATHS

The weekly death estimates are intended to provide rapid estimates of the number of deaths occurring each week based on the entries recorded in the computerised Civil Registries, as well as on their comparison with historical death data since the year 2000. This allows the data to be interpreted with a historical perspective, which is necessary given the variability of deaths over time. Two types of data always coexist in the weekly Death statistics:

- Definitive data (deaths from year 2000 up to the last year published in the death statistics)
- Estimated data (completing the series up to the present day)

Data are published on a monthly basis and involve the period ending two weeks before the publication date.

The results of this statistic are published online (www.ine.es) in the section labelled INEbase/ Demography and population/ Demographic phenomena/ Weekly death estimates.

4 Birth Statistics

4.1 CONTENT

The birth statistics are composed of all births that took place in Spain during the period analysed.

The information published in the birth statistics is divided into three distinct phenomena:

- 1.- Births
- 2.- Late Foetal Deaths
- 3.- Deliveries

Where:

$\begin{aligned} &\text{No. of single childbirths} + (2 \times \text{No. of double childbirths}) + (3 \times \text{No. of} \\ &\quad \text{triple childbirths}) + \dots \\ &= \\ &\text{BIRTHS} + \text{LATE FOETAL DEATHS} \end{aligned}$
--

The rationale behind processing Childbirth as an independent phenomenon is grounded in the fact that it represents viable fertility as a whole, since it includes both births and late foetal deaths.

4.2 INFORMATION COLLECTION AND PROCESSING.

The information from the Birth Statistics derives from the administrative act of entry into the civil registry. The data is collected from several sources:

- As regards registrations that are carried out in person at the civil registry, the data is collected in a paper document called the Statistics Birth Bulletin (BEP, per its Spanish initials). This document is filled out by the parents, relatives or by those persons legally bound to declare the birth or, failing that, by the civil registrar. The BEP is available at Civil Registries as well as at the main maternity services of hospital centres.
- As regards electronic registrations of births at the health centres, they are done by means of the ANDES service. The information is obtained from the files provided by the Ministry of Justice
- In those cases when the birth information could not be obtained from the two aforementioned sources, the data is obtained from the information provided by the Ministry of Justice thanks to the recording of the birth entry in the computerised civil registers. In such cases, information on the delivery characteristics or the newborn baby's weight is not available.

The electronic registration of births from health centres started in October 2015 due to the partial entry into force of Law 20/2011. This application, called ANDES, collects information relating exclusively to the registration of live births, delivery and newborn characteristics, but does not include data on the mother's previous child or cohabitation status. The percentage of hospital registrations varies by province, but on the national level it is around 40% of birth registrations.

The only tool used for the collection of information on Late Foetal Deaths is the Statistical Birth Bulletin. In Spain, only foetal deaths (stillbirths) occurring after six months of gestation must be reported to the Civil Registry. However, for statistical

purposes, only those that meet the criteria described in section 4.3 are considered to be Late Foetal Deaths¹

As of 2011, live births that pass away within the first 24 hours have both a birth and a death record, so the main source of information used is the Medical Certificate of Death and each register is complemented by the corresponding Statistical Birth Bulletin.

In 2007, the Statistical Birth Bulletin changed its format and content so as to adapt to OCR recording techniques. In addition, changes have been made to its content so as to be able to analyse the influence of the characteristics and the socio-demographic changes of the current population regarding fertility. There are versions in Spanish and in the co-official languages.

All information relating to Birth Statistics is recorded in the computers of the INE provincial offices, where the appropriate checks are carried out and any errors detected are corrected.

Provincial offices have an ongoing communications system in place with their provinces' civil registries so as to guarantee the coverage, quality and punctuality of the information they receive from them.

There are different collaboration agreements with the Autonomous Communities for the development of these statistics.

Subsequently, all the information is transmitted to the INE Central Services, which continues processing the information, carrying out the filtering and automatic imputation phases until the corresponding publications are obtained.

Births are communicated to the Municipalities so that they may proceed with their registration.

4.3 VARIABLES: DEFINITIONS AND CONCEPTS

Born: The concept of born is identified with the biological concept of "live birth".

Late Foetal Death: This is the death occurring before complete expulsion or removal of a viable product of conception from the mother's body. It is precisely this characteristic of viability that serves to differentiate late foetal deaths from miscarriages. Currently, the World Health Organisation (WHO) has recognised foetal viability as stillbirths weighing at least 500 grams, and if this information is not available, with a gestational age of at least 22 weeks.

¹ It should be noted that the content of the Late Foetal Death Statistics is the continuation of what until 1974 was called Abortion Statistics. However, the latter included those live births that died within the first 24 hours of life as well as all reported foetal deaths regardless of their gestational age. Late Foetal Deaths Statistics provide greater content consistency and better alignment with medical and biological terminology

In Spain, it is mandatory to notify the Civil Registry of late foetal deaths of more than 180 days of gestation (Article 45 Civil Registry Law 1957/art. 171 and those articles that follow, Regulation 1958; Additional Provision 4th of Law 20/2011).

Childbirth: Expulsion or extraction from the mother's womb of the product of a viable conception.

Primary residence: The place where a person normally spends their daily periods of rest, regardless of temporary absences for leisure travel, holidays, visits to family and friends, business, medical treatment or religious pilgrimage.

Sex: It refers to the person's biological sex.

Age of both parents: It refers to the years of age at the time of birth of the son or daughter.

Birth order: Number of live births the mother has had in her lifetime, including this childbirth.

Inter-gestational interval: This means the period of time (calculated in months) between two consecutive births. The first interval—called the protogenetic interval—refers to the period of time between the date of marriage and the first birth.

Legal marital status: The legal marital status is defined as the status that each individual has, pursuant to the country's marriage law.

Nationality: This refers to the nationality on the reference date, classified as Spanish as long as the individual has said nationality, and they may also have other nationalities.

Country of birth: Country where the birth took place.

Province and municipality of registration: These concepts refer to the place where the birth was recorded, either in the province and municipality where the child was born or where one of the parents resides. With the entry into force of LAW 20/2011 in those Civil Registries where the DICIREG application is implemented, the province and municipality of registration coincides with the province and municipality of the childbirth.

Place of birth: Refers to the place where the birth took place, distinguishing between health centres, private homes and other places.

Assisted delivery: This variable aims to specify whether the delivery was assisted by health personnel or unassisted by health personnel.

Normality of childbirth: A distinction is made between childbirth with and without complications

Multiplicity of childbirth: This variable is intended to distinguish between childbirths that were single, double, triple or more.

Maturity: Maturity is a derived variable that is calculated based on the gestation weeks variable. A distinction is made between pre-term childbirths—which take place before the 37 weeks gestation—and term childbirths in all other cases.

Total number of children: Number of children the mother has had, including this childbirth as well as all the children she has had during her life, whether dead or alive

Number of live children from previous births: This variable collects the number of live children from previous births exclusively.

Birth statistics collect the following birth-related variables:

- **Variables relating to registration:** Province, municipality, date of the registration of birth and late foetal death as well as the volume, page and reverse side of the birth record.
- **Variables relating to the birth:** Date of birth, province and municipality where the birth occurred, size of the municipality of birth, place of birth, assisted birth, multiplicity, normality, caesarean section and weeks of gestation.
- **Variables relating to parent 1 (pregnant mother):** Name and surname, identity document (DNI, passport and NIE), date of birth, country, province and municipality of birth, country of nationality, country, province and municipality of residence, full address, size of the municipality of birth and residence, highest level of studies completed, occupation, relationship with the activity, marital status, date of marriage, years of marriage, cohabitation status (first marriage, cohabitation, date of beginning of current stable union, years of stable relationship), number of children in lifetime (live births or stillbirths) and number of live children from previous births.
- **Variables relating to the previous child:** Date of birth, country, province and municipality of birth and country of nationality.
- **Variables relating to parent 2:** Name and surname, identity document (DNI, passport and NIE), date of birth, country, province and municipality of birth, country of nationality, country, province and municipality of residence, size of municipality of birth and residence, full address, date of marriage, highest level of studies completed, occupation and relationship with the activity.
- **Variables relating to the birth:** Name and surname, sex, weight, indicator of whether the child born lived more than 24 hours and if not, indicator of whether it was born dead or alive. In the case of stillbirths or live birth with subsequent death within the first 24 hours, indicator of whether an autopsy was performed, and in the case of stillbirths, indicating whether it died before childbirth or during labour.

As of 2015, the following variables are **collected exclusively through the Statistical Birth Bulletin**, that is, they are not collected in registrations carried out electronically at health centres:

- **Variables relating to parent 1 (pregnant mother):** Years married, cohabitation status (married for the first time, cohabitation as a common-law couple, date of start of current stable union, years in stable relationship), number of children during lifetime (born alive or stillborn) and number of live children from previous births.
- **Variables relating to the previous child:** Date of birth, country, province and municipality of birth and country of nationality.

4.4 PUBLICATION OF RESULTS

The results of this statistic are published online (www.ine.es) in the section labelled INEbase/ Demography and population/ Demographic phenomena/ Birth statistics.

The annual and monthly series of birth statistics have been offered at both the Autonomous Community and provincial level since 1941. The results of the demographic phenomena included in the Vital Statistics at the municipal level since 1996 are available as well.

The INE has provided micro-data since 1975 on the three phenomena included in the Births statistic, distinguishing between births, late foetal deaths and childbirths. These files have been anonymised prior to their publication.

Detailed data has been published concerning births, late foetal deaths and childbirths since the year 1996, according to the pregnant mother's residence, with a level of disaggregation by Autonomous Community, capital provinces and municipalities with more than 50,000 inhabitants. Finally, a section on births from parents with a foreign nationality is published.

4.5 ADVANCED RESULTS. MONTHLY BIRTHS ESTIMATES

The purpose of the monthly birth estimates is to offer rapid estimates on the total number of births occurring, based on the records entered into the computerised Civil Registers on a monthly basis, as well as compare them with the historical data already published, which allows for interpreting the data with a much-needed historical perspective, given the variability and gradual decrease revealed by the birth figures over the last few years.

Thus, two types of data coexist within the Monthly Birth Statistics:

- Definitive data on births since the year 2016 up to the last year published.
- Estimated data on other births up to the last month published.

Updated birth estimates are published every m month, and span up to the full m-2 month.

All the complete information relating to this publication (results, methodology, etc.) is published online (www.ine.es) in the section labelled INEbase/ Demography and population/ Demographic phenomena/ Monthly birth statistic.

5 Marriage Statistics

5.1 CONTENT

The marriage statistics collect the number of marriages celebrated in Spain each year.

This statistic underwent significant variation in 2005, as a result of the entry into force of Law 13/2005 of 1 July (BOE of 2 July 2005), which amended the Civil Code regarding the right to become married. Pursuant to this law, marriage can be entered into between persons of the same sex or different sex, with full and equal rights and obligations irrespective of its composition. The sex variable of each of the partners was introduced into the bulletin of statistics. These statistics include all marriages recorded in the Civil Registry.

5.2 INFORMATION COLLECTION AND PROCESSING

The information from the Marriage Statistics derives from the administrative act of entry into the Civil Registry. The data is collected from two sources:

- Since October 2019, in computerised civil registries, the information is obtained through the marriage files sent by the Directorate-General for Legal Security and Certification, thanks to the implementation of the INFOREG/DICIREG application.
- In those civil registries that are not computerised, the information is collected through a paper document called the Statistical Bulletin of Marriages (BEM, per its Spanish initials). Said document is completed by the spouses or, failing that, by the civil registrar. The BEM is available in non-computerised civil registries (on the national level, approximately 8% of marriage records).

The only tool used for collecting information on marriages from before October 2019 was the Statistical Bulletin of Marriages and the Ecclesiastical Bulletin of Marriages.

The statistical bulletin of marriages changed its content in July 2005 in order to adapt to the latest amendment of Law 13/2005 of 1 July (BOE of 2 July 2005). Subsequently, the marriage statistics bulletin changed its format and content on 1 January 2008. In this new bulletin, the format was modified as well to adapt it to optic character recognition (OCR) techniques. In addition, changes were made to the content of said bulletin, incorporating new variables such as: level of studies of the partners, identity document number (DNI, passport, NIE) of the partners,

acquisition of nationality, etc. Likewise, the terminology was adapted by changing the terms husband/wife to partner1 /partner2.

The Ecclesiastical Bulletin of Marriages has not undergone any content modifications.

There are versions in Spanish and in the co-official languages of all the bulletins.

Based on the 2020 marriage data, for which the main source of information is the INFOREG/DICIREG file records, the residence of the married couple is obtained by cross-referencing the Register of the year following the data's reference year. After the year 2020, the country of residence of married couples that do not reside in Spain is not published in the micro-data.

All information relating to Marriage Statistics is recorded in the computers of the INE provincial offices, where the appropriate checks are carried out and any errors detected are corrected.

Provincial offices have an ongoing communications system in place with their provinces' civil registries so as to guarantee the coverage, quality and punctuality of the information they receive from them.

There are collaboration agreements with the Autonomous Communities for the development of these statistics. To this end, the INE, through secure mechanisms, provides monthly information that is established in the agreement signed.

Subsequently, all the information is transmitted to the INE Central Services, which continues processing the information, carrying out the filtering and automatic imputation phases until the corresponding publications are obtained.

5.3 VARIABLES: DEFINITIONS AND CONCEPTS

Marriage: Civil union between two people resulting from the agreement between both of them, stated expressly pursuant to the established legal formalities.

Marital status: The legal marital status is defined as the status that each individual has, pursuant to the country's marriage law (or the marriage practices, that is, the legal situation). This variable refers to the marital status prior to marriage (single, widowed or divorced)

Primary residence: The place where a person normally spends their daily periods of rest, regardless of temporary absences for leisure travel, holidays, visits to family and friends, business, medical treatment or religious pilgrimage.

Sex: It refers to the person's biological sex.

Age: Years of age at the time of marriage.

Nationality: This refers to the nationality on the reference date, classified as Spanish as long as the individual has said nationality, and they may also have other nationalities.

Country of birth: Country where the birth took place.

Province and municipality of registration: These concepts refer to the place where the marriage was registered, which corresponds to the same province and municipality as the place where the marriage took place.

Type of marriage: A distinction is made among exclusively civil marriages, catholic marriages and other religious marriages. As of 2020, when the main source of information were the file records of the INFOREG/DICIREG, the only distinction made is exclusively between civil marriages and other religious marriages.

Statistics of Marriage collect the following marriage-related variables:

- **Variables relating to the registration:** Province, municipality, date of the record, volume, page and reverse side of the marriage record.
- **Variables relating to the marriage:** Date and type of marriage celebration, province, municipality, residence address of the married couple.
- **Variables relating to partner 1 and partner 2:** Name and surname, identity document (DNI, passport and NIE), sex, date of birth, country, province and municipality of birth, country of nationality, country, province and municipality of residence, full address, size of the municipality of birth and residence, highest level of studies completed, occupation, relationship with the activity, prior marital status, date of death of the previous spouse in the case of widowed persons, divorce date in the case of divorcées, and order number of the marriage in the case of widowed and divorced people.

As of October 2019, the following variables are collected solely in the Statistic Bulletin of Marriages, which constitutes approximately 8% of marriage registrations:

- **Variables relating to partner 1 and partner 2:** Date of death of previous spouse if widowed, date of divorce if divorced and marriage order number if widowed or divorced.
- **Variables relating to the married couple:** Province, municipality and residence address of the married couple

5.4 PUBLICATION OF RESULTS

The results of this statistic are published online (www.ine.es) in the section labelled INEbase/ Demography and population/ Demographic phenomena/ Marriage Statistics.

The annual and monthly series of marriage statistics are offered at both the Autonomous Community and provincial level since 1941. The results of the demographic phenomena included in the Vital Statistics at the municipal level since 1996 are available as well.

The INE provides marriage micro-data since 1975. These files have been anonymised prior to their publication.

Detailed data has been published concerning marriages since the year 1996, according to the married couple's residence, with a level of disaggregation by Autonomous Community, capital provinces and municipalities with more than 50,000 inhabitants. Finally, a section on marriages between foreigners is published.

As of 2005, tables which segregate by same-sex and different-sex marriages were published.

5.5 ADVANCED RESULTS

The marriages statistic does not publish advanced data.

6 Scope of the Statistic

DEMOGRAPHIC

This includes all deaths, births and marriages that take place within the national territory, regardless of the place of origin or residence of the deceased, the newborn or the spouses.

Deaths, births or marriages of Spanish citizens or residents in Spain that take place outside of Spain are not included.

GEOGRAPHICAL

Vital Statistics cover the entire national territory

TEMPORAL

The reference period for the death, birth and marriage statistics is annual.

ADMINISTRATIVE SOURCE OF THE DATA

The administrative source of the Vital Statistics data is the Civil Registry.

OBSERVATION UNITS RELATING TO THE PRIMARY DATA OF THE ADMINISTRATIVE SOURCE

Observation units are births, marriages and deaths taking place within the national territory.

FREQUENCY OF THE ORIGINAL ADMINISTRATIVE DATA COLLECTION

Data is collected on a monthly basis.

LEGAL BASIS

- Law 20/2011, 21 July, of the Civil Registry.

- Law of 8 June 1957 on the Civil Registry.
- Decree of 14 November 1958, approving the Regulation of the Civil Registry Law.
- Directive of 9 October 2015 of the General Directorate for Registries and Public Notaries on electronic communications of births from health centres.

7 Dissemination plan and frequency

The definitive results describe the characteristics of childbirths, births, late foetal deaths, marriages and deaths occurring in the national territory throughout a specific year. They are disseminated annually at the national, Autonomous Community, provincial, capital and municipal levels.

The definitive results corresponding to year t are published during the last quarter of year $t+1$, along with the micro-data files from which they are obtained.

The advanced results are disseminated on a monthly basis by means of the following statistical operations:

- Estimated number of weekly deaths
- Monthly births estimates

The Marriages Statistic does not offer advanced data.

8 Methodology Annex

8.1 SUMMARY OF METHODOLOGICAL CHANGES

The following is a summary of methodological information that is important when taking advantage of the data:

8.1.1 Deaths

In February 2023, the marital status variable was revised within the death statistics, based on the data from the year 2016. The objective of this revision has been to incorporate highly reliable administrative information for those deaths where the marital status variable had been imputed when the final data was compiled.

To this end, the main source used was information from the computerised civil registry death records. Subsequently, for those deaths where the marital status was unavailable, the information from the pre-census population files at 1 January of each reference year was used instead. In addition, only the data derived from any of the following sources was selected:

- File provided by the INSS which includes the people who have received a widow's or widower's pension.
- Marital status declared in the Personal Income Tax form 100, provided by the Tax Agency and any equivalent forms of the Tax Offices of Araba/Álava, Bizkaia, Gipuzkoa and the Autonomous Community of Navarre.
- Marriage bulletins from INE's Vital Statistics (since 2005)
- Files of separations and divorces from the Civil Records, computerised since 2002.
- Civil status of foreigners registered in the Central Registry of Foreigners

Lastly, those deceased persons for whom no marital status information has been found in any of the administrative records available have been included in the No record category.

8.1.2 Marriages

For marriages taking place as of 2020, when the main source of information were the file records of the INFOREG/DICIREG, the only distinction made for the “Type of marriage” variable is exclusively between civil marriages and other religious marriages. Therefore, as of the 2020 reference year, it is not possible to differentiate between a Catholic and other religious marriages.

Likewise, since the 2020 reference year, the residence of the married couple is not obtained from the information collected in the Statistical Bulletin of Marriages, but rather its main source is the Register as of 1 January of the year following the data's reference year. From 2020 onwards, no information is provided by the micro-data regarding the country of residence for married couples not residing in Spain.

8.2 EDUCATIONAL LEVEL ASSIGNMENT, RELATIONSHIP WITH LABOUR ACTIVITY, AND OCCUPATION. OBTAINING METHOD AND USER ADVISORY

8.2.1 Introduction

The main objective is to improve the quality of the information in the classification variables collected in the birth, marriage and death bulletins by incorporating highly reliable administrative information. This information is incorporated into the VS files from the **year 2016 onwards**.

Using the numerous available data sources, assignment is made to parents (in the case of birth statistics), spouses (in that of marriage) and deceased (in death statistics), regarding labour activity and occupation for the population aged 16 and older (referred to 1 January of each year) and the educational level for those over 25 years of age.

Information from the pre-census population files that are being prepared for the 2021 Population and Housing Census were used for this purpose. The assignment of the three variables to the entire population is an essential part of the Census work and is subject to continuous revisions and improvements.

In some cases it is not possible to link the VS records (deceased persons, parents or spouses, depending on the statistics) with the same person in the pre-census file as of 1 January of the corresponding year. It should be noted that the pre-census files contain information derived from administrative sources for the resident population on 1 January of each year. Conversely, VS refer to events occurring in Spain and do not always concern the population residing in Spain on 1 January; in the case of non-residents on 1 January, these variables are not available, since no data is available in the corresponding pre-census file. For these reasons, a small percentage of “No data recorded” will appear in all cases.

Below are the three processes, differentiated by variable. Certain advisories are also given regarding this information’s use.

8.2.2 Assignment of the relationship with labour activity

This variable is subdivided into seven categories:

- **Economically active population:**
 - Employed
 - Unemployed
- **Economically inactive population:**
 - Retired, pre-retirement, pensioner or landlord
 - Student
 - Person with permanent disability
 - Other situations of inactivity

In order to provide this breakdown, there are numerous sources of economic, educational and tax administrative information.

Sources used

- Economic sources:
 - General Treasury of Social Security: Workers who contribute to Social Security who were registered during the week prior to January 1 of each year.
 - SEPE: Job seekers.
 - MUFACE, MUGEJU and ISFAS: Officials who do not contribute to Social Security and belong to one of these three state mutual insurance companies.
 - INSS: Persons with the Social Security system who received a pension (retirement, disability, orphanhood, widowhood).

- Passive classes: Persons who receive a pension but are not part of the Social Security system.
- Educational sources:
 - Students enrolled in university and non-university education.
- Tax-type sources:
 - Tax Agency: Model 190 tax information for the previous financial year as well as tax information from the Tax Offices.

Procedure for assigning the relationship with labour activity.

Each person is assigned a situation value in relation to the activity based on economic and educational sources in the week before 1 January of the reference year.

The relationship with the activity is based on presence in administrative records. Since so many sources are taken into account, it is normal for there to be different coexisting situations, which lead to conflict for each person. A series of priority rules are thus established based on the recommendations of the United Nations and the European Regulation for Censuses.

The methodological details of the assignment of the relationship with the activity in the census files can be consulted in the Census methodology:

https://ine.es/censos2021/censos2021_meto.pdf

8.2.3 Occupation assignment

All persons aged 16 years and over who were assigned the status of employed in the previous process will then be assigned an occupation. The breakdown of the occupation variable is to the first digit of CNO11²:

- Directors and managers
- Scientific professionals and intellectuals
- Technicians and associate professionals
- Clerical support workers
- Service and sales workers
- Skilled Agricultural, Forestry and Fishery workers
- Craft and related trades workers
- Plant and Machine operators and workers
- Basic occupations

It should be noted that from the 2021 reference year onwards, the CNO11 category "Military occupations" is not provided. To ensure the preservation of statistical

confidentiality the occupations have been re-coded and included under other categories.

The following sources are available to provide this breakdown:

Sources used

- Information from the state mutual insurance companies MUFACE, MUGEJU and ISFAS.
- SEPE's current contract file, which contains information from 2001 onwards on the last contract in force for each person as of 1 January of the reference year.
- 2011 and 2001 Censuses.
- DIRCE and TGSS auxiliary information

Procedure for obtaining the occupation

For all officials, information is looked for in their mutual insurance file. Although they may carry out another residual economic activity, the activity included in their mutual insurance file is considered their primary job.

For all workers affiliated with Social Security, their contractual information is looked for in the Spanish Public Employment Service (SEPE) contract file. A historical file, which has been available since 2001, contains information on the last contract held for the entire population registered at some point in said file.

In the event that no information is found for certain persons affiliated with Social Security, information from previous censuses (2011 and 2001) is used.

For employed people without information, or whose information is disregarded because it is not consistent with the rest of the information, an attempt is made to impute the occupation by other means. The basic information on the employed person and their educational level are taken into account, as well as the detail of the fourth digit INE—the latter, especially in the case of self-employed people. National Statistics Institute 64 of the activity according to the CNAE, available in the DIRCE and Treasury enables imputations to be made regarding the occupation. As regards wage earners, in addition to the aforementioned, a contributions category is used to better profile the deterministic imputations. Additionally, regarding the self-employed, a probabilistic imputation is made based on the CNAE activity and the level of training, which accounts for 14% of the total imputed within this employment situation.

With this process, a percentage of records—around 3%—remain unassigned.

The methodological details of the occupation assignment in the census files can be consulted in the Census methodology:

https://ine.es/censos2021/censos2021_meto.pdf

8.2.4 Assignment of educational level

In the VS, a level of studies is assigned to people over 25 years of age. Soon, this assignment will apply for people aged 15 and above.

A breakdown into 12 categories is provided, based on the Classification of Programmes, Qualifications and Certificates at Educational Levels Achieved (CNED-A¹):

- Illiterates
- Incomplete primary education
- Primary education
- First stage of secondary education and the like
- Second stage of secondary education, with general orientation
- Second stage of secondary education, with professional orientation
- Non-higher post-secondary education
- Vocational training, visual arts and design, and higher-level sports education and the equivalent; university degrees requiring a baccalaureate diploma, lasting two years or more.
- University degrees of 240 ECTS credits, university graduates, own university expert or specialist qualifications and equivalent.
- University degrees of over 240 ECTS credits, bachelor's degrees.
- Specialities in Health Sciences for the residence system and similar.
- University PhD.

Sources used

- **Municipal Register.** The school or academic title is a registration variable that must be collected by municipalities in their municipal register. As such, it appears on the registration forms. Incorporation in the Register is related to the creation of the Electoral Census. In the ongoing management of the Register, this information is thus collected from the municipalities, and is refined using information received every six months by the Ministry of Education and Professional Training regarding titles issued.
- **Ministry of Education and Professional Training Titles.** Information is available from the files of non-university and university degrees and standardisation of foreign degrees to university and non-university degrees. The Ministry of Education sends these to the National Statistics Institute on an ongoing basis.

¹

https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736177034&menu=ultiDatos&idp=1254735976614

- 2001 Census. For the nearly 34.5 million people 16 years of age or older who responded to the census questionnaire in 2001 with a reference date of 1 November 2001, we have information on the level of education achieved up to that date.
- 2011 Census. For the nearly 3.5 million people 16 years of age or older who responded to the census questionnaire in 2011 with a reference date of 1 November 2011, there is information on the level of education achieved up to that date.
- Job seekers from the State Public Employment Service (SEPE). For persons enrolled in public employment services, information on the level of studies completed is available.
- SEPE Professionalism Certificates. A record exists of historical professionalism certificates that certify skills recognized by the educational Administration; this serves to validate the corresponding professional module or modules.
- Central Registry of Foreigners. Information is available as of 1 January of each year for foreigners with valid authorisation to study in Spain.
- Enrolled in the educational system in non-university education of the Ministry of Education and Professional Training. Available from the 2014-2015 academic year onwards.
- Enrolled in university education through the Council of Universities. All enrolments are available from the 2010-2011 academic year onwards.
- University graduates. Historical information for persons graduated from University for the 2010-2011 academic year was included.
- SEPE contracts in force. Since 2001, information has been available that each person's last contract as of 1 January for the reference year and gives the worker's educational level.

Procedure for assignment of educational level

Information is retrieved from all available sources for the entire population and transformed into a homogeneous classification (proposed classification based on CNED-A with 12 headings).

The level of studies estimate is obtained by incorporating the administrative information relating to the highest educational level attained and found in the different administrative records mentioned above.

Since a person may have different educational levels recorded in different registers, those that are coherent with their school age will be considered valid. Thus, in the first instance an educational level can be assigned, either as an interval type (those cases where the person can have a level between several values) or a direct classification.

In addition, every person is cross-referenced with the enrolment files information. For each person, if available, the most recent enrolment at the date of the census and the one with the highest level is taken into account. Thus, in some cases, the educational level already reached can be imputed because it is a requirement to sign up for certain courses in which the person is enrolled.

Finally, for those residual cases lacking an assigned educational level or those cases that are in-between several values, probabilistic imputations are made.

Information is thus finally available for the entire population.

The methodological details of the assignment of the relationship with the educational level achieved in the census files can be consulted in the Census methodology:

https://ine.es/censos2021/censos2021_meto.pdf

8.2.5 General advisories on how this information should be used

The information provided by pre-census files is of high quality and represents a clear improvement for variables that were traditionally collected using bulletins with a very low response rate.

However, the provisional nature of these pre-census files and the possible differences in the estimated variables must be emphasized, due to the fact that the administrative information available is increasing.

A future revision of the values assigned to these variables in all VS statistics can therefore not be ruled out, at the point that more consolidated information becomes available