

# Births 2018

# Steep decline in the birth rate continued

According to Statistics Finland's data on population changes, the birth rate fell for the eighth year in a row. At the fertility rate prevailing in 2018, a woman would give birth to an average of 1.41 children. The figure is now the lowest of all times. A total of 47,577 babies were born in 2018, which is 2,744 fewer than in the year before.

### Total fertility rate in 1900 to 2018



When the number of births is taken as a proportion to the number of women of childbearing age, the birth rate can be examined. The birth rate is commonly measured with the total fertility rate, which indicates how many children a women would give birth to during her life time if the birth rate remained the same as in the year on which the calculation is based.

In 2018, the total fertility rate measuring the birth rate was the lowest of all times, 1.41 children per woman. The birth rate fell clearly from the previous year, when the figure was 1.49. The birth rate has been falling throughout the 2010s and the decline has become steeper after 2015. Before 2017 and 2018, the birth rate was at its lowest in 1973, when the total fertility rate was 1.50 per woman. Since 1969, the birth rate has been below the population regeneration rate, which is 2.1 children per woman.

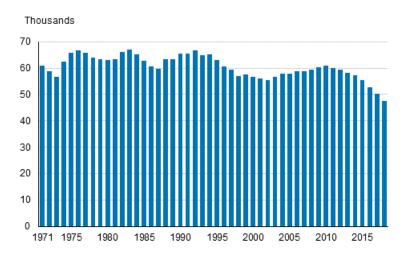
Compared to the year before, the birth rate went down for women of nearly all ages (Appendix figure 1). In 2018, women who gave birth to their first child were, on average, 29.4 years of age. The average age was 29.2 in the previous year and in ten years it has risen by 1.2 years. Correspondingly, the average age

of all women that gave birth rose from the previous year by 0.2 years, to 31.1. In the past ten years, it has risen by 1.0 years (table).

First-time fathers were aged 31.4 years, on average. The average age of all men who became fathers was 33.5 years. Data on fathers are based on population data in the statistical reference period, according to which a father is recorded for nearly 98 per cent of children in the Population Information System.

A total of 47,577 persons were born in 2018. In all, 5.5 per cent, or 2,744 fewer children were born than in 2017.

#### Live births in 1971 to 2018



### Birth rate fell in all regions

For the first time during the decline in the birth rate in the 2010s, the birth rate fell from the previous year in all regions (<u>database table 10</u>). The decline in the birth rate was in relative terms steepest in South Karelia, 11 per cent, South Ostrobothnia, 10 per cent, and in Satakunta, 9 per cent.

The birth rate was above the rate for the whole country in ten regions. At the 2018 birth rate, most children would be born in the regions of Ostrobothnia: On average, 1.92 children per woman in Central Ostrobothnia, 1.70 in North Ostrobothnia, 1.68 in Ostrobothnia, and 1.64 in South Ostrobothnia. The lowest numbers of children would be born in Southwest Finland, an average of 1.32 children per woman, and in Uusimaa, South Karelia and Pirkanmaa, in all 1.33 children per woman. The birth rate was not above the population regeneration rate in any region in 2018.

## Birth rate highest in Seinäjoki and lowest in Helsinki

In municipalities with at least 50,000 inhabitants, the birth rate was highest in Seinäjoki, where the total fertility rate was 1.70 in the five-year period of 2014 to 2018. The second highest rates were found in Porvoo, 1.70 and Espoo, 1.66. The figure for the whole country in the five-year period was 1.56.

Respectively, the birth rate was lowest in the period 2014 to 2018 in Helsinki, where the total birth rate was 1.23. The rate was 1.26 in Turku and 1.29 in Tampere. In a comparison of all municipalities, the birth rate in the last-mentioned towns was also among the lowest.

## Number of live births, total fertility rate and mother's mean age by live births in 2009 to 2018

Year	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Number of live births	60 430	60 980	59 961	59 493	58 134	57 232	55 472	52 814	50 321	47 577
Total fertility rate	1,86	1,87	1,83	1,80	1,75	1,71	1,65	1,57	1,49	1,41
Mother's mean age by all live births	30,1	30,1	30,3	30,3	30,4	30,5	30,6	30,8	30,9	31,1
Mother's mean age by first live birth	28,2	28,3	28,4	28,5	28,6	28,6	28,8	29,1	29,2	29,4

# Contents

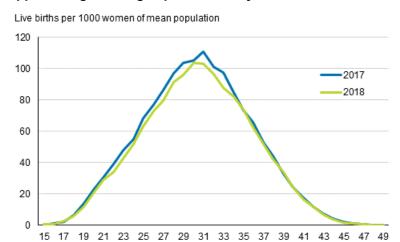
# Figures

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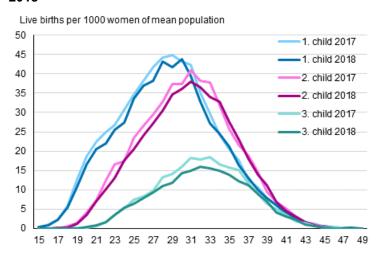
Appendix figure 1. Age-specific fertility rates 2017 and 2018
Appendix figure 3. Total fertility rate by municipality for the years 2014–2018
Quality description, births 2018

# Appendix figures

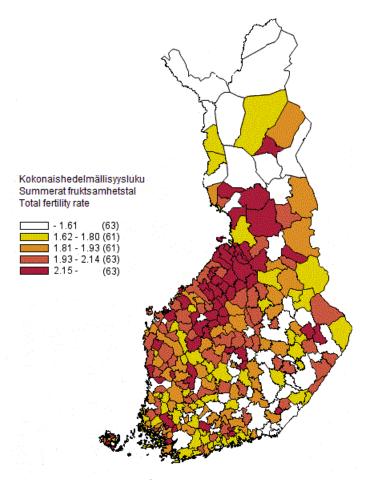
### Appendix figure 1. Age-specific fertility rates 2017 and 2018



# Appendix figure 2. Age-specific fertility rates by birth order 2017 and 2018



# Appendix figure 3. Total fertility rate by municipality for the years 2014–2018



Aluejako - Områdesindelningen - Regional division 1.1.2019

# Quality description, births 2018

### 1. Relevance of statistical information

The main source used when producing Finnish population statistics is the Population Information System, which is maintained by the Population Register Centre and local register offices. Changes in the data on the vital events of the resident population are updated into the Population Information System continuously by local population register authorities. From 1975 Statistics Finland has obtained population data from the Population Register Centre.

The last population registration was carried out in Finland on 1 January 1989. After that the Population Information System has been updated by notifications of changes. The data stored in the Population Information System are specified in the act on Population Information System and the certicate services of the Population Register Centre (21 August 2009/661). Notifications on population changes for the past year are expected by the last day of January of the following year.

Statistics Finland's function is to compile statistics on conditions in society (Statistics Finland Act of 24 January 1992/48). These also include demographic statistics. Statistics Finland's Rules of Procedure defines the Population and Social Statistics unit as the producer of demographic statistics (Statistics Finland's Rules of Procedure, TK-00-954-18).

In accordance with the Act on the Municipality of Domicile, the municipality of domicile and the place of residence of individuals are recorded in the Population Information System. The municipality in which a person lives or the one construed by the inhabitant as the municipality of domicile on the grounds of residence, family ties, livelihood or other equivalent circumstances, or to which the inhabitant has close links due to the aforementioned circumstances is deemed the municipality of domicile. (Act on the Municipality of Domicile, 201/1994.) The population registered in the Population Information System is divided into those present and those absent. Those present are permanent residents of Finland, either Finnish nationals or aliens. Those absent are Finnish nationals who when emigrating from the country have reported that they intend to be absent from Finland for more than one year, with the exception of Finnish nationals who are diplomats and those working in development co-operation (Act on the Municipality of Domicile, 201/1994.) Only changes in the population resident in Finland are taken into account when compiling statistics on vital events. Persons moving to Finland from abroad are classified in the population statistics if the place of residence they have declared as their municipality of domicile is later confirmed as their place of residence.

#### **Births**

'Liveborn' is the term for a newborn who breaths or shows other signs of life after birth. Only liveborn children of women permanently resident in Finland are taken into account in the population statistics.

According to the World Health Organisation (WHO) definition, 'stillborn' is the term for a newborn with a birth weight of at least 500 g or, if the birth weight is not available, a newborn born dead after a pregnancy lasting 22 weeks or more. The WHO definition has been in use since 1987. From the 2003 vital statistics onwards, the same national definition is used as in the cause-of-death statistics: 'stillborn' is the term for a newborn with a birth weight of at least 500 g, or a newborn born dead after a pregnancy lasting 22 weeks or more.

Children are classified according to family status as legitimate or illegitimate. A child born in wedlock is legitimate. A widow can give birth to a legitimate child if the pregnancy began while still married. A child born out of wedlock is illegitimate. Cases where the mother has married the child's father after the child's birth are also considered illegitimate in these statistics. According to law, such children only become legitimate as of the date when their parents enter into a marriage contract with each other. In this vital statistics publication the child's family status is primarily given by the mother's marital status, that is, whether the mother was married or not. Unmarried, widowed and divorced women, and women widowed after a registered partnership, separated from a dissolved registered partnership or living in a registered partnership are classified as not being married at the time of the child's birth.

The birth order is determined in two ways: either all live births to the mother are taken into account, or only the live births during the present marriage are included.

The health care unit has to report liveborn children to the Population Information System or to the register office of the mother's place of domicile to enter the information in the Population Information System. In exceptional cases the report is made to the register office of the child's place of birth. (Statute, 128/2010).

The population registrar ensures that a child is entered in the Population Information System within two months of birth. Registration in an Evangelical-Lutheran or Greek Orthodox parish presupposes baptism. Where parents belong to different parishes, the child is usually registered in the mother's parish. According to the Freedom of Religion Act (767/1969), where parents belong to different religious affiliations and have not agreed otherwise, the child is entered in the mother's register. The Population Register Centre issues the child an identity number on the basis of the child's notice of registration.

The Population Register Centre does not collect data on stillbirths. These data are obtained from stillbirth certificates written out by physicians. The health care unit or the physician in question forwards the certificate to the National Institute for Health and Welfare, which sends it to Statistics Finland (Statute 948/1973 and Act 459/1973).

In the vital statistics the number of stillbirths may differ somewhat from the number of stillbirths in the cause of death statistics. The deadline for data on stillbirths is shorter for the vital statistics than for the cause of death statistics.

The excess of births over deaths, that is, natural population increase means the difference between births and deaths. The crude birth rate refers to the number of births per 1,000 persons of the mean population. The proportion of stillbirths refers to the number of stillborn children per 1,000 liveborn and stillborn children. The general fertility rate indicates the number of liveborn children per 1,000 women of the mean population aged 15 to 49. The age-specific fertility rate indicates the number of live births per 1,000 women of the mean population in the age group in question. This same principle is applied for calculating age-specific legitimate or non-marital fertility rates. The legitimate fertility rate is calculated per married women and the non-marital fertility rate per non-married women. The total fertility rate is obtained by adding up the fertility rates calculated for one year. The rate refers to the estimated number of children born to a woman, given that the fertility rate of that statistical year prevails during the whole reproductive period of this woman on condition that the woman does not die before the end of the said period. The reproduction of the population refers to a change of a generation into a new one. Reproduction is measured by gross reproduction rates or net reproduction rates that generally indicate the ratio between the sizes of the daughter's and mother's generations. The fertility and mortality of the mother's generation before the end of the childbearing age is taken into account in the calculation of the net reproduction rate. In the gross reproduction rate this mortality is not taken into consideration. If the net reproduction rate calculated per one woman is less than one, the daughter's generation is smaller than the mother's generation and the mother's generation has not reproduced itself.

# 2. Methodological description of survey

The main source used when producing Finnish population statistics is the Population Information System of the Population Register Centre. Local register office updates a Population Information System with information it gets from persons experiencing vital events and parishes of the Evangelical-Lutheran and Greek Orthodox churches. Hospitals send information of births to the maintenance of the Population Information System. Local courts take information of decisions of adoptions and divorces dealt in the court into the Population Information System. Statistics Finland receives the updated data on vital events on a weekly basis from the Population Register Centre.

The deadline for delivering data to Statistics Finland on vital events in the statistical year is the end of January of the following year. The exception to this is the data on stillbirths, which were expected by the end of September. Data on population changes in statistical year delivered to Statistics Finland after this date are included in the data of the following year. Data on events relating to years (statistical year-4) through to (statistical year-1) and reported between February (statistical year) and January (statistical year+1) are included in the statistical year data.

Starting from the statistical reference year 2018, additions or corrections are expected to the background data in the population change data until the end of February following the statistical reference year. The total number of vital events established at the end of January does not change, however, but the aim of the additions and corrections is to improve the quality of the data.

### 3. Correctness and accuracy of data

In general, the Population Information System of the Population Register Centre can be considered very exhaustive as regards persons. In order that a person obtains a personal identity code, he or she has to be registered in the Population Information System. It is difficult to live in Finland without a personal identity code. A personal identity code is needed so that one can work legally, open a bank account, have dealings with authorities and so on. It can be safely assumed that Finland cannot have any substantial numbers of 'moonlighters' who receive their pay in cash for periods of over one year, for example. Staying in Finland for at least one year is the prerequisite for registering into the population of Finland.

After abolishment of yearly checking of domicile registers (January 1) in 1989 the Population Information System has been maintained only by notifications of changes to population information. Their correctness is determined by a reliability survey made on the addresses in the Population Information System.

The Population Register Centre has charged Statistics Finland with the task of conducting a sample survey on correctness of address information. Around 11,000 people are asked whether their address in the Population Information System is correct. In the most recent survey in 2012, the address was correct for 98.9 per cent of the respondents.

In connection with municipal elections, returned notifications of voting sent to foreigners usually reveal around 1,000 persons who have moved from the country without giving notice and are thus still included in the Finnish population. The local register office removes them from the resident population in the Population Information System before the following turn of the year.

## 4. Timeliness and promptness of published data

Final vital statistics are published yearly in April to May, except for those on stillbirths, which are available in October. Since 1999 the regional division used has been that of the first day of the following year. Thus the municipalities that unite on the first day of the new year are already combined in the statistics on the last day of the previous year. Information on the vital statistics of the united municipalities before the unification is available from 2003 onwards.

Preliminary population data by municipality are available by quarterly.

# 5. Accessibility and transparency/clarity of data

Basic population data are available in electronic form by municipality or with larger regional divisions than municipality in Statistics Finland's free 'Population' online service (Statistical databases) at: <a href="http://tilastokeskus.fi/tup/tilastotietokannat/index\_en.html">http://tilastokeskus.fi/tup/tilastotietokannat/index\_en.html</a>

General information and long time series on the population of the whole country can be found from the home page of Demographic Statistics at: <a href="http://tilastokeskus.fi/til/synt/tau">http://tilastokeskus.fi/til/synt/tau</a> en.html

Population statistics from 1750 have been digitised into PDF format in the National Library's Doria service:

<u>Publications on Population structure and Vital statistics in Doria (in Finnish)</u>. <u>Publications on Population censuses in Doria (in Finnish)</u>.

The chargeable information service contains more specified information about the population by sub-area of municipality, for example.

### 6. Comparability of statistics

Comparable regional vital statistics time series are available free in the StatFin online database service. The tables always indicate which regional division is used.

Vital statistics data on the numbers of births, deaths and marriages contracted are available from 1749 onwards. From 1776 there are data about mothers having given birth by five-year age group and from 1936 about all children born by age of mother. After the statistical revision of 1877 collection of data on deaths was started by one-year age group, which made it possible to begin calculation of accurate mortality and lifetime tables from the 1880s onwards. On account of this statistical revision, annual collection of data on migration and divorces was also started from 1878.

### 7. Coherence and consistency/uniformity

Statistics Finland's other statistics use the data of demographic statistics as basic information on population. Consequently, Statistics Finland's other statistics correspond to demographic statistics.

THL, the National Institute for Health and Welfare, maintains a register of births and publishes information about parturients, deliveries and newborns. The figures of THL differ somewhat from those of Statistics Finland. Statistics Finland's figures include among women giving birth those who are permanently resident in Finland at the time of the birth of the child, while the THL register of births contains all women having given birth in Finland and their children.



Suomen virallinen tilasto Finlands officiella statistik Official Statistics of Finland

Population 2019

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Source: Births 2018. Statistics Finland