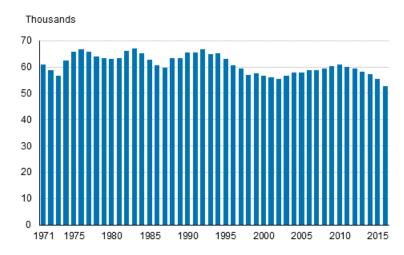


## Births 2016

## Fall in the number of births even steeper

According to Statistics Finland's data on population changes, 52,814 children were born in 2016. The number of births has now decreased for the sixth year in succession. The number of births was 2,658 children, i.e. 4.8 per cent fewer than in 2015. This yearly decrease is the highest since the beginning of the 1970s, when measured in relative terms.

#### Live births 1971-2016



When the number of births is proportioned to women in childbearing age, fertility can be examined. The total fertility rate is commonly used in measuring fertility. It indicates how many children a woman would give birth to calculatorily during her life time if age group-specific fertility rates remained the same as in the year on which the calculation is based.

In addition to the decreasing number of births, the total fertility rate also continued to go down in 2016. At the birth rate prevailing in 2016, a woman would give birth to an average of 1.57 children. The 2015 total fertility rate was 1.65 children per woman. The rate was last lower than 1.57 in 1973, when it was 1.50, an all-time low. Since 1969, the total fertility rate has been below the replacement level, which is 2.1 children per woman.

Compared to the year before, the total fertility rate went down for women under 38, most clearly for those aged 30. In 2016, women who gave birth to their first child were, on average, 29.1 years of age. The average age rose by 0.3 years from the year before and in ten years it has risen by 1.0 years.

Correspondingly, the average age of all women that gave birth went up by two decimals from the year before, to 30.8, but over the past ten years it has risen by eight decimals.

### Total fertility rate rose only in three regions

The total fertility rate was above the rate for the whole country in 13 regions. Measured with the total fertility rate of 2016, most children would be born in the regions of Ostrobothnia: On average, 2.13 children per woman in Central Ostrobothnia and 1.91 children per woman both in South Ostrobothnia and in North Ostrobothnia. The lowest total fertility rate of 1.45 would be recorded in the region of Uusimaa. The rate was above the replacement level only in Central Ostrobothnia.

Even though the total fertility rate for the whole country declined, the total fertility rates of three regions rose. The rate in the region of Kainuu went up from 1.68 to 1.79 children per woman and in relative terms 6.2 per cent. In Åland, the total fertility rate rose 6.1 per cent and in Central Ostrobothnia 5.8. This rise can be partly explained by the fact that the rates of Central Ostrobothnia and Kainuu in particular had declined steeply in the previous year and have now risen slightly.

Total fertility rate in the region of South Carelia declined from 1.68 to 1.52 children per woman. In relative terms, the figure decreased by 9.6 per cent from the previous year, which was the biggest relative change by region. The birth rate diminished the second most in relative terms in the region of Pohjois-Savo, by 8 per cent. In Pohjois-Savo, the total fertility rate went down from 1.68 to 1.54 children per woman.

### Total fertility rate highest in Seinäjoki and lowest in Helsinki

In municipalities with at least 50,000 inhabitants, total fertility rate was highest in Seinäjoki, where it was 1.87 in the five-year period of 2012 to 2016. The second highest rate was found in Oulu, 1.84, the third highest in Porvoo, 1.82, and the fourth highest in Espoo, 1.80. The figure for the whole country in the five-year period was 1.69.

Respectively, the total fertility rate was lowest in the period of 2012 to 2016 in Helsinki, where it was 1.30. The rate was 1.32 in Turku and 1.40 in Tampere. In a comparison of the whole country, the total fertility rate in the last mentioned municipalities was also among the lowest.

#### Number of live births, total fertility rate and mother's mean age by live births in 2007-2016

Year	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Number of live births	58 729	59 530	60 430	60 980	59 961	59 493	58 134	57 232	55 472	52 814
Total fertility rate	1,83	1,85	1,86	1,87	1,83	1,80	1,75	1,71	1,65	1,57
Mother's mean age by all live births	30,0	30,1	30,1	30,1	30,3	30,3	30,4	30,5	30,6	30,8
Mother's mean age by first live birth	28,1	28,2	28,2	28,3	28,4	28,5	28,6	28,6	28,8	29,1

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# Appendix tables

### Appendix table 1. Total fertility rate by region 2006–2016

Region <sup>1)</sup>	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Whole country	1,84	1,83	1,85	1,86	1,87	1,83	1,80	1,75	1,71	1,65	1,57
Uusimaa	1,70	1,68	1,70	1,69	1,70	1,65	1,60	1,58	1,55	1,51	1,45
Varsinais-Suomi	1,63	1,65	1,68	1,69	1,75	1,68	1,65	1,62	1,61	1,56	1,45
Satakunta	1,97	1,83	1,78	1,92	1,91	1,91	1,83	1,86	1,82	1,75	1,66
Kanta-Häme	1,95	1,93	1,95	1,99	1,86	1,88	1,82	1,83	1,80	1,68	1,59
Pirkanmaa	1,80	1,79	1,83	1,83	1,80	1,77	1,83	1,70	1,65	1,61	1,51
Päijät-Häme	1,80	1,78	1,84	1,79	1,82	1,73	1,82	1,67	1,64	1,64	1,51
Kymenlaakso	1,67	1,80	1,74	1,80	1,90	1,74	1,81	1,78	1,69	1,71	1,62
South Carelia	1,78	1,78	1,76	1,67	1,89	1,85	1,71	1,68	1,68	1,68	1,52
Etelä-Savo	1,78	1,81	1,82	1,81	1,77	1,89	1,65	1,77	1,72	1,59	1,58
Pohjois-Savo	1,84	1,79	1,85	1,88	1,89	1,85	1,85	1,77	1,70	1,68	1,54
North Carelia	1,83	1,85	1,80	1,83	1,84	1,94	1,83	1,78	1,78	1,69	1,61
Central Finland	1,98	1,93	1,90	1,98	1,94	1,91	1,87	1,78	1,78	1,69	1,60
South Ostrobothnia	2,08	2,08	2,18	2,18	2,18	2,17	2,20	2,02	2,01	1,99	1,91
Ostrobothnia	2,03	2,06	2,10	2,15	2,15	2,01	2,06	1,95	1,99	1,88	1,84
Central Ostrobothnia	2,17	2,34	2,25	2,38	2,37	2,37	2,26	2,30	2,32	2,01	2,13
North Ostrobothnia	2,34	2,36	2,38	2,40	2,40	2,33	2,37	2,24	2,17	2,05	1,91
Kainuu	1,96	2,04	1,98	2,16	2,04	1,94	1,94	2,01	1,98	1,68	1,79
Lapland	1,90	1,95	2,00	2,04	2,01	2,05	1,89	1,92	1,73	1,68	1,59
Åland	1,87	1,85	1,88	1,69	1,83	1,80	1,85	1,80	1,78	1,69	1,79

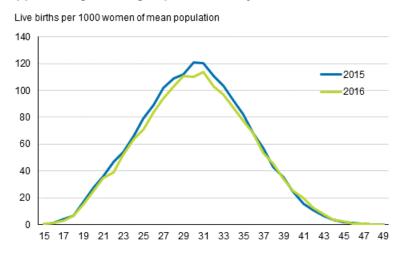
<sup>1)</sup> Regional division 1.1.2017

# Appendix figures

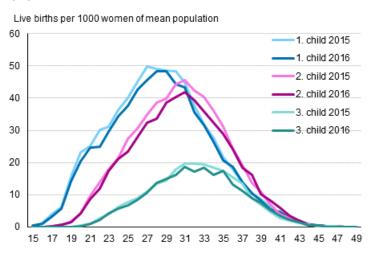
### Appendix figure 1. Total fertility rate 1900-2016



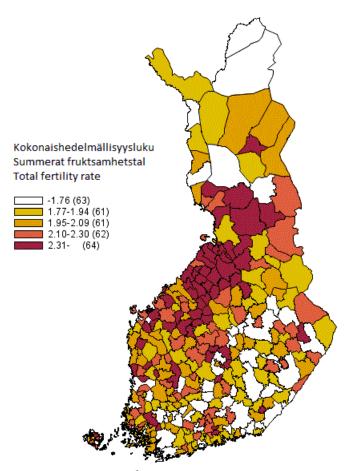
### Appendix figure 2. Age-specific fertility rates 2015 and 2016



# Appendix figure 3. Age-specific fertility rates by birth order 2015 and 2016



# Appendix figure 4. Total fertility rate by municipality for the years 2012–2016



Aluejako - Områdesindelningen - Regional division 1.1.2017

## Quality description, births 2016

### 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-00-1743-16).

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 August. 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.

### 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 charges Statistics Finland with the task of conducting yearly 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 2012 survey, the address was correct for 98.9 per cent of the respondents. The non-response rate of the survey was 16.9 per cent.

Incorrect addresses influence population statistics by municipality only if the incorrect address is in a different municipality than the correct one. Only some of the incorrect addresses are also in an incorrect municipality. 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 Population Register Centre removes them from the resident population in the Population Information System before the following turn of the year.

### 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 September. 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 month.

http://pxweb2.stat.fi/database/StatFin/vrm/vamuu/vamuu fi.asp

## 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: http://tilastokeskus.fi/tup/tilastotietokannat/index en.html

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\_en.html">http://tilastokeskus.fi/til/synt/tau\_en.html</a>

Population statistics from 1750 to 2000 have been digitised into PDF format in the National Library's Doria service.

Publications on Population structure in Doria (in Finnish).

Publications on Vital statistics in Doria (in Finnish).

Publications on Population censuses in Doria (in Finnish).

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 series are available free from 1987. 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 1773 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.

The population time series in the free Statfin database begin from the year 1980 or 1987. Vital statistics time series for the whole country is available from 1749.

### 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 2017

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Source: Births 2016. Statistics Finland