

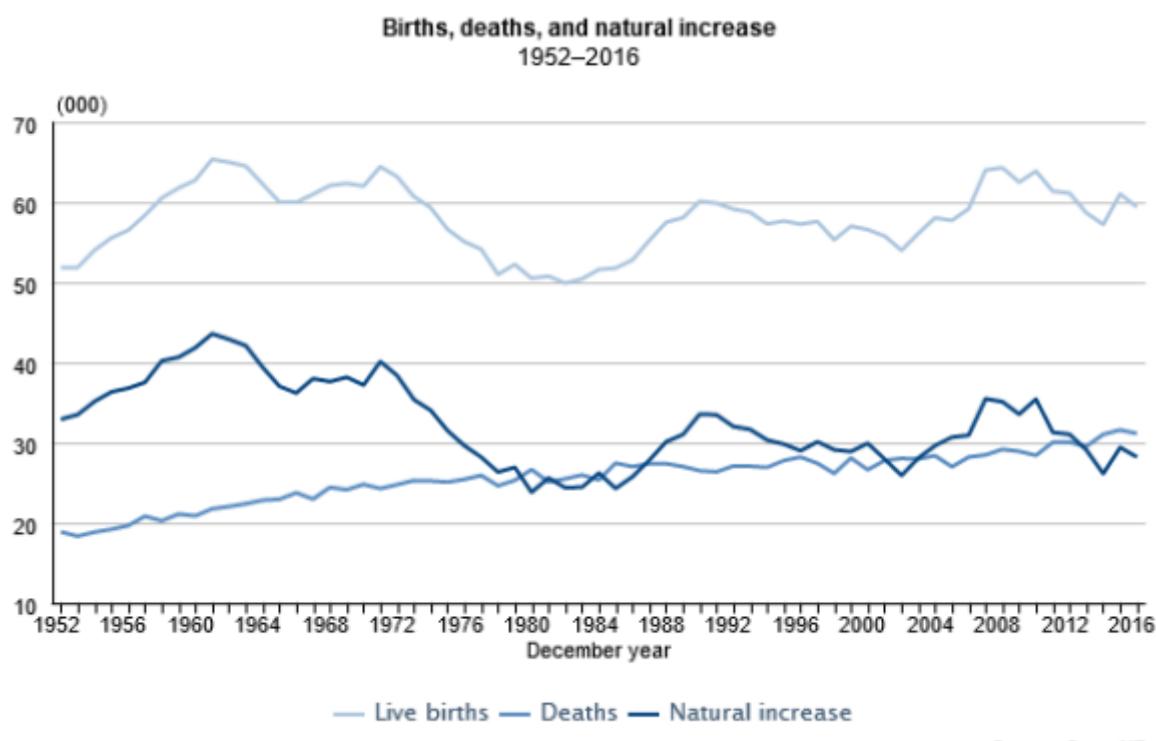
## Births and Deaths: Year ended December 2016 and March 2017

Embargoed until 10:45am – 16 May 2017

### Key facts

In the December 2016 year:

- 59,430 live births and 31,179 deaths were registered in New Zealand, resulting in a natural increase (live births minus deaths) of 28,251.
- There were 1,608 fewer births and 429 fewer deaths compared with 2015.
- The total fertility rate dropped to a low of 1.87 births per woman, compared with an annual average of about 2.02 from 1980–2015.
- The infant mortality rate was 3.6 deaths per 1,000 live births.
- All regions had more births than deaths.



See [Tables](#) for how to access March 2017 data.

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## **Commentary**

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### **Quake delays births and deaths information release**

Due to the 14 November 2016 earthquake, the *Births and Deaths: Year ended December 2016* information release was delayed. We are now able to provide this information release along with updated [Infoshare](#) tables for the December 2016 year and quarter, and the March 2017 year and quarter.

### **Fertility rates lower for all age groups in 2016**

There were 59,427 live births registered in New Zealand in 2016, down 1,608 (3 percent) from 2015.

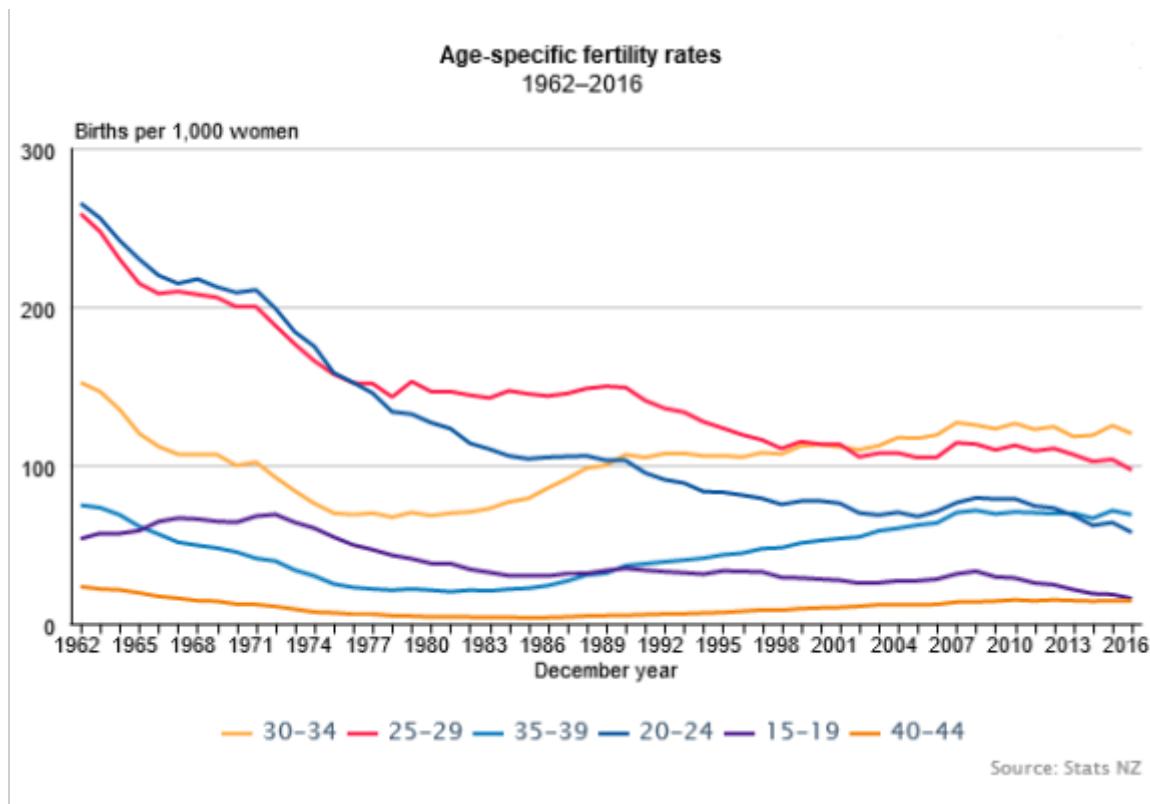
In part, annual fluctuations in births reflect changes in the size and age of the population, the age at which women have children, and the number of children they have. In turn, the number of births influences the future size and age of the population.

Age-specific fertility (or birth) rates measure the number of live births 1,000 women in a particular age group have in a given period (usually a year).

In 2016, compared with 2015, the proportion of women having a baby decreased for every age group, including women aged:

- 30–34 years – down from 125 birth per 1,000 to 120 (this group has had the highest fertility rate since 2002)
- 25–29 years – down from 104 to 97
- 35–39 years – down from 71 to 69
- 20–24 years – down from 64 to 58.

Nine out of 10 births were to women in these age groups.

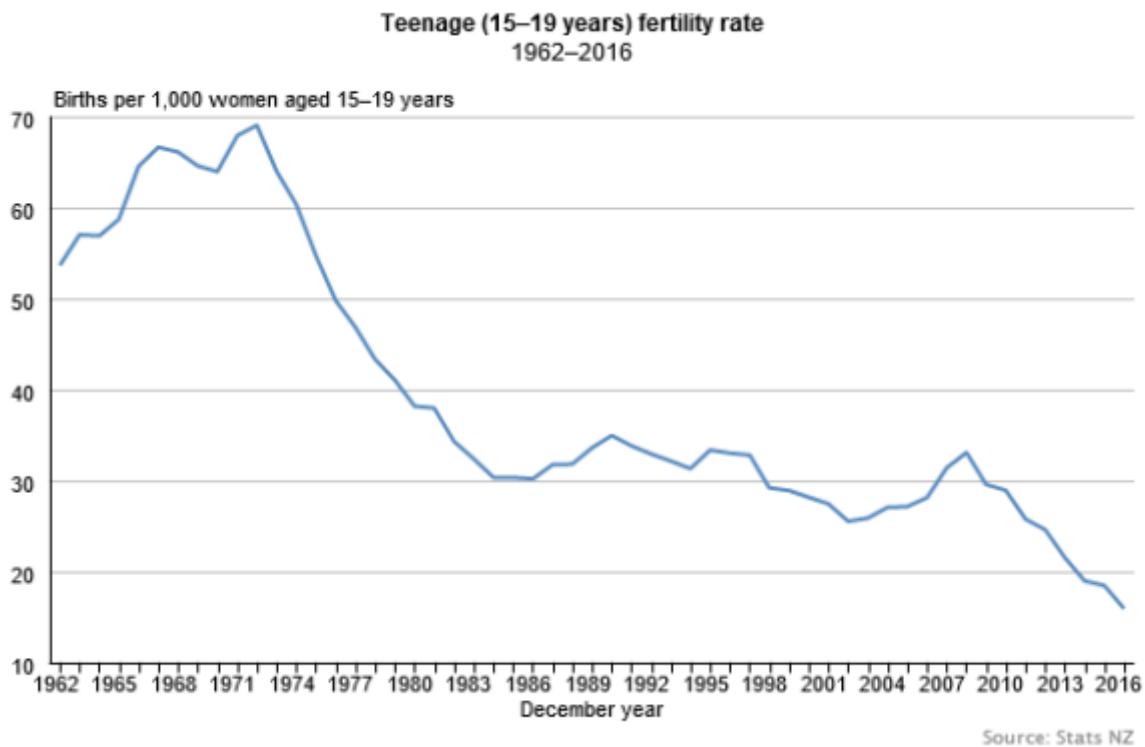


## Teenage fertility rate halves since 2008

The teenage fertility rate has dropped each year since 2008. In 2016, the rate was 16 births per 1,000 women aged 15–19 years – half the 2008 rate of 33.

In 1962, when fertility rates were highest for women in their twenties, the teenage fertility rate was 54 births per 1,000. While rates dropped for women in their twenties throughout the 1960s and 1970s, the teenage rate increased to a peak of 69 per 1,000 in 1972. The teenage rate then decreased to 30 per 1,000 in 1984.

(New Zealand rates in this section refer to live births to women aged 15–19 years per 1,000 women aged 15–19 years.)



The teenage fertility rate has also fallen across the Tasman, but Australia's rates remains lower than in New Zealand. The teenage fertility rate in Australia dropped from 18 per 1,000 in 2008 to 12 in 2015. (Fertility rates for 2016 are not available for Australia.)

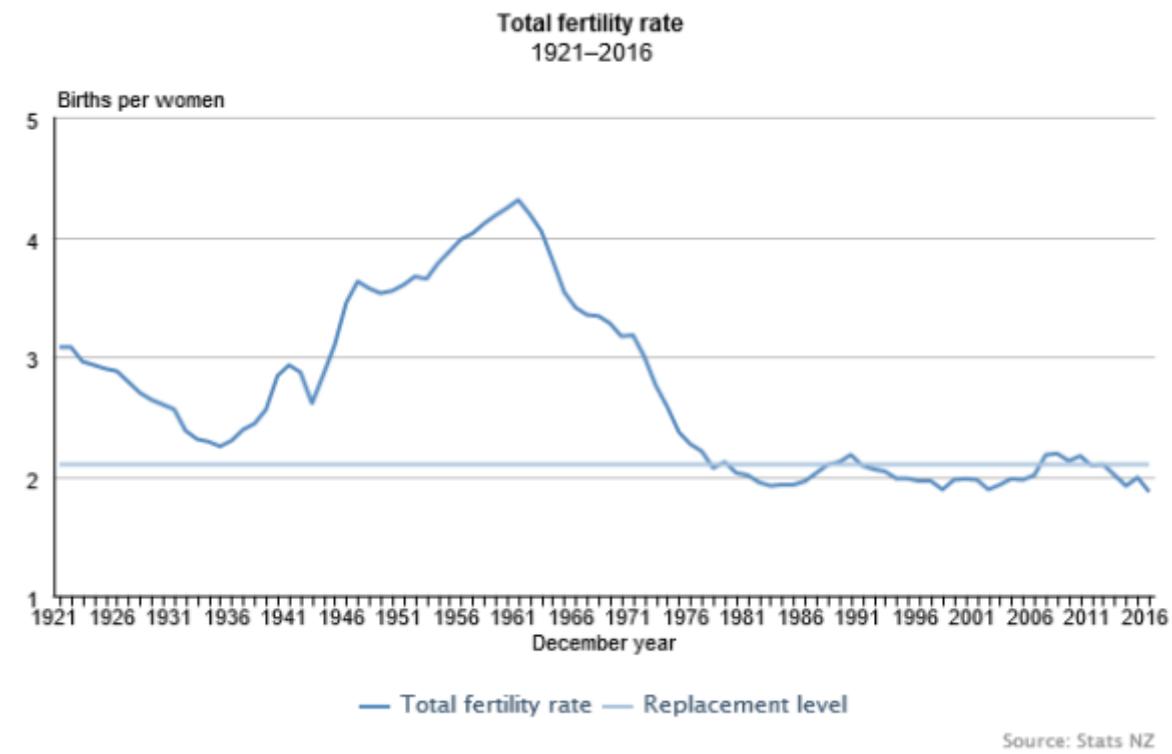
Within the 15–19 age group, fertility rates increase with age – from 2 births per 1,000 at age 15, to 35 at age 19. All ages in this group had significantly lower rates in 2016 compared with 2008.

## Total fertility rate drops to a record low

The total fertility rate summarises the age-specific fertility rates into a single-number indicator of fertility. It indicates, on average, the number of babies a woman would have in her lifetime if the age-specific fertility rates in a given period stayed the same throughout her life. Annual fluctuations in the total fertility rate do not necessarily indicate changes in family size, but rather changes in the timing of births.

In 2016, the total fertility rate dropped to 1.87 births per woman, the lowest total fertility rate recorded in New Zealand. The total fertility rate has dropped below 1.90 births twice before – to 1.89 in 1998 and 2002.

New Zealand's total fertility rate has been relatively stable since 1980, averaging 2.01 births per woman. During this period, the total fertility rate varied from 1.87 births per woman (2016) to 2.19 (in 2008). In contrast, fertility rates increased dramatically from the mid-1940s, peaking at 4.31 births per woman in 1961. New Zealand then experienced decreasing fertility over the following two decades.



## Number of deaths is projected to increase

The number of deaths registered during 2016 was 31,179. Deaths have gradually increased over time due to population growth in the older age groups, although this is partly offset by longer life expectancy.

Back in 1957, the number of deaths had increased to 20,862. It took a further 16 years to increase to 25,311 (in 1973) and 38 years to reach 30,081 (in 2011). Our population projections (median projection) indicate that the number of deaths will continue to increase, passing 40,000 in 2033 and 50,000 in 2044.

As death rates have dropped and life expectancy has increased, deaths have become increasingly concentrated in the older age groups. The median age at death in 2016 was 78 years for males and 83 years for females. Forty years ago, in 1976, the median age at death was 69 years for males and 75 years for females.

The age standardised death rate was 3.44 in 2016 – down from 8.15 in 1976. This decrease suggests that when death numbers are adjusted for changes in the size, age, and sex of the population, far fewer people died in 2016 than in 1976.

It is important to note that standardised death rates can only be used to compare mortality trends for populations that have been standardised against the same standard population. Life tables give a more detailed and comparable description of mortality trends across populations and time. According to the [New Zealand Abridged Period Life Table: 2014–16](#), a newborn girl can be expected to live, on average, 83.4 years, and a newborn boy 79.9 years.

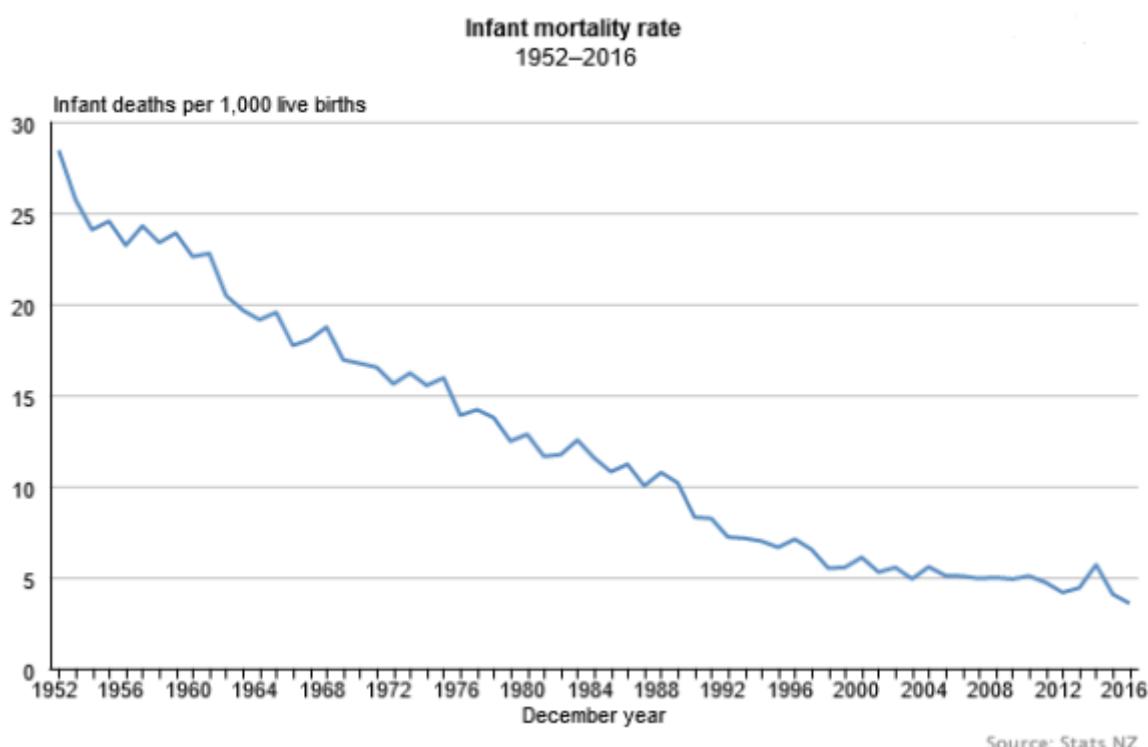
Abridged period life tables are produced annually for the total population only. Complete period life tables are typically produced every five years based on a census year. Complete period life tables present mortality measures for each single year of age, while abridged period life tables present mortality measures for age groups. The latest complete period life tables, in [New Zealand Life Tables: 2012–14](#), show that life expectancy was 83.2 years for females and 79.5 years for males in 2012–14, compared with 75.5 years and 69.0 years in 1975–77.

A third type of life table (cohort life tables) calculates mortality measures based on year of birth. Use our [How long will I live?](#) calculator to estimate your life expectancy. Knowing how long you can expect to live can be useful when thinking about future needs and retirement planning. This calculator is based on [cohort life tables](#) combined with information from the [national population projections](#).

## Infant mortality rate 3.58 deaths per 1,000 live births

During 2016, the number of infant deaths (under one year of age) registered in New Zealand was 210. The infant mortality rate (infant deaths per 1,000 live births) was 3.58 per 1,000, down from 5.07 in 2006. Most of the decrease in infant mortality between 2006 and 2016 was due to fewer post-neonatal deaths (from four weeks up to one year of age). In 2016, there were 1.31 post-neonatal deaths per 1,000 live births – down from 2.40 in 2006.

Long-term trends indicate that while the infant mortality rate has dropped over the last decade, the decline has been slower than in previous decades. The rate declined from 23.2 in 1956, to 13.9 in 1976, and 7.1 in 1996.



Annual registrations for neonatal deaths (infants under four weeks of age) may differ from the actual number of events in a given year due to the lag between the date of death and the date of registration, and also under-registration, so treat annual fluctuations in infant and neonatal

deaths with caution. [Information about Deaths](#) has more information about infant and neonatal rates.

## More births than deaths in all regions

In 2016, 59,430 live births and 31,179 deaths were registered in New Zealand, resulting in a natural increase (live births minus deaths) of 28,251. All regions had more births than deaths in 2016 and have had in every December year since regional councils were established.

Auckland had the highest rate of natural increase (9 people per 1,000 estimated population, compared with 6 for New Zealand). Natural increase in the Auckland region contributed almost half (13,803) of New Zealand's natural increase. Auckland's high natural increase is due to the region's relatively young age structure, which leads to proportionally fewer deaths. Although the Auckland region is home to approximately one-third of New Zealand's population, it only accounted for around one-quarter of New Zealand's deaths. The median age of the Auckland region's population is 34 years, compared with 37 years for New Zealand. Auckland has the lowest median age of all the regions.

Regional figures are based on the usual residence of the deceased and the home address of the mother, not the place of death or birth. Stats NZ does not compile statistics on place of death or birth.

## Births and deaths data is randomly rounded

We are committed to ensuring confidentiality by not releasing information that could identify individuals, households, or businesses. To ensure confidentiality we random round to base 3 (RR3) in all tables.

What is RR3? Random rounding is used to disguise small counts, but all cells in a table are randomly rounded. Counts that are already a multiple of three are left unchanged. Those not a multiple of three are rounded to one of the two nearest multiples. For example, a one will be rounded to either a zero or a three. Each value in the table is rounded independently. This means counts may not sum to totals, but ensures that published totals are within two of the original number.

We apply random rounding to all published tables and to customised tables provided to researchers.

In some tables, where rows or columns contain many cells with low values, we may also suppress, collapse, or aggregate rows or columns. For example, for live births by single year of age, ages above 46 years are aggregated into a single category: 47 years and over.

[Safeguarding confidentiality](#) provides more information about how we adjust our data to make sure that individual responses remain confidential and how the data may be affected by these adjustments.

## Find data tables

For more detailed data, see the Excel tables in the 'Downloads' box.

## Related links

- [Next releases](#)
- [Past releases](#)
- [Data quality](#)
- [Related information](#)

### Next releases

*Births and Deaths: Year ended June 2017 – tables* will be available in Infoshare on 16 August 2017.

*Births and Deaths: Year ended December 2017* (the next available information release) will be released in February 2018.

[Subscribe to information releases](#), including this one, by completing the online subscription form.

[The release calendar](#) lists all information releases by date of release.

### Past releases

[Births and Deaths](#) has links to past releases.

### Data quality

#### **[Births – DataInfo+](#)**

General methodology used to produce birth statistics, and related metadata.

#### **[Deaths – DataInfo+](#)**

General methodology used to produce death statistics, and related metadata.

#### **[Births concepts – DataInfo+](#)**

Definitions of terms used in this release.

#### **[Deaths concepts – DataInfo+](#)**

Definitions of terms used in this release.

### Related information

[Births](#) has links to reports and articles and information about birth statistics and birth rates.

[Deaths](#) has links to reports and articles and information about death statistics, death rates, and life expectancy.

[Estimates and projections](#) has links to reports and articles and information about population estimates and projections.

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## Tables

The following tables are available in Excel format from the 'Downloads' box. If you have problems viewing the files, see [Opening files and PDFs](#).

1. Births, deaths, and selected rates
2. Live births by regional council areas
3. Deaths by regional council areas
4. Age-specific fertility rates
5. Live births by mother's age
6. Deaths by age and sex, year ended December 2016
7. Age-specific death rates

## Access more data on Infoshare

Use [Infoshare](#) to access time-series data specific to your needs. For this release, select the following categories from the Infoshare homepage:

Subject category: **Population**

Groups: **Births, birth rates, deaths, and death rates**

You can access data for March 2017 in Infoshare.

## Next release

*Births and Deaths: Year ended December 2017* will be released in February 2018.