



Hot Off The Press

LATEST STATISTICS FROM STATISTICS NEW ZEALAND

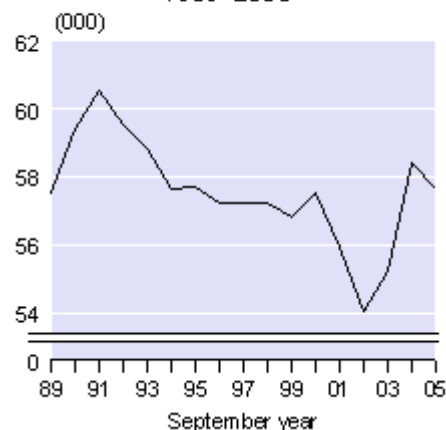
Embargoed until 10:45am – 18 November 2005

Births and Deaths September 2005 quarter

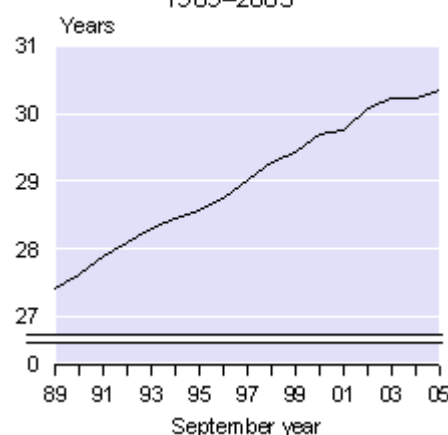
Highlights

- There were **57,620** live births registered in New Zealand in the September 2005 year.
- New Zealand women average **2.00** births per woman.
- Women aged **30–34** years had the highest fertility rate – 119 births per 1,000 women.
- The median age of women giving birth was **30** years in the September 2005 year.
- The infant mortality rate was **5.6** deaths per 1,000 live births in the September 2005 year.
- There were **27,730** deaths registered during the September 2005 year.
- Births exceeded deaths by **29,890** in the September 2005 year.

Live Births
1989–2005



Median Age of Mother
1989–2005



Brian Pink
Government Statistician

18 November 2005
Cat 32.900 Set 05/06 – 081

There is a companion Media Release published – [Births and Deaths: September 2005 quarter](#).

Commentary

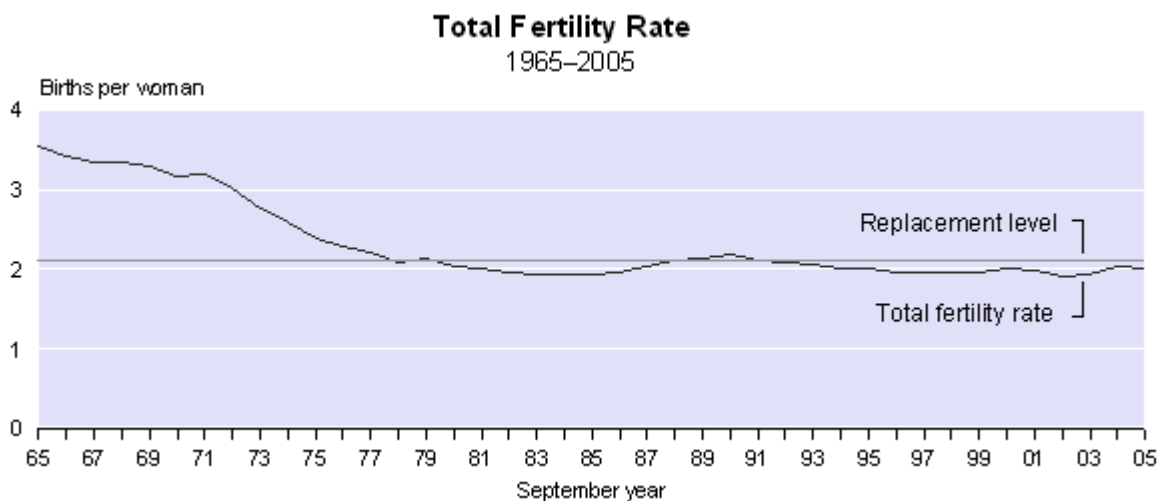
Live births

There were 57,620 live births registered in New Zealand in the September 2005 year, 1.6 percent higher than the annual average over the last decade (56,690). During the September 2005 year, the births of 29,500 boys and 28,120 girls were registered to mothers resident in New Zealand.

Live births for the September 2005 quarter totalled 14,110, a decrease of 370 compared with the September 2004 quarter.

Annual fertility rates

The latest fertility rates indicate that New Zealand women average 2.00 births per woman. This figure is below the level required by a population to replace itself without migration (2.1 births per woman). Apart from a short period around 1990, fertility in New Zealand has been below the 'replacement level' since 1980.



Sub-replacement fertility is a common demographic phenomenon among developed countries, including France (1.9 births per woman), Australia (1.8), the Netherlands, England and Wales, and Sweden (all 1.7). Some countries, notably Italy and Spain, have recorded very low fertility levels in recent years (fewer than 1.3 births per woman). The United States' total fertility rate has been similar to New Zealand's in recent years.

In New Zealand, the transition to sub-replacement fertility occurred later than in other developed countries. The transition occurred in Denmark and Sweden in the late 1960s; in Germany, the United States and Canada in the early 1970s; and in other developed countries, including Australia, in the mid-1970s. Sweden and New Zealand both experienced a brief recovery to replacement level around 1990.

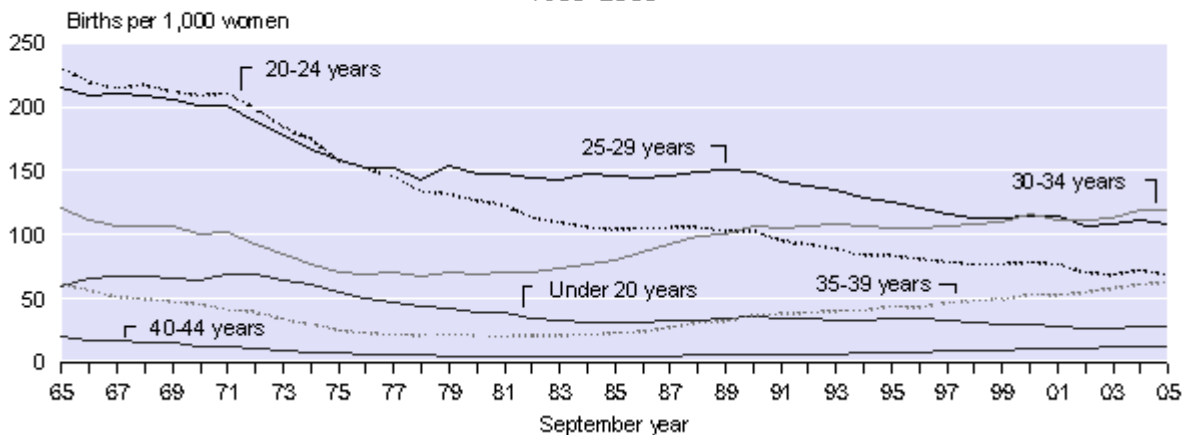
Trend toward later childbearing

The trend towards later marriages, delayed motherhood and smaller families is consolidating. Fewer New Zealand women in their teens and early twenties are having children. However, a growing proportion of births are to women in their thirties. In the September 2005 year, 48 percent of all newborn babies had a mother aged in her thirties, compared with 39 percent in the September 1995 year. In contrast, the number of newborn babies with a mother in her twenties dropped from 52 percent in 1995, to 41 percent in 2005.

In the September 2005 year, women aged 30–34 years had the highest fertility rate (119 births per 1,000 women), followed by those aged 25–29 years (107 per 1,000). This is a significant departure from the early 1970s, when early marriage and early childbearing were the norm, and 20–24 years was the most common age group for childbearing (about 200 per 1,000). At that time, the fertility rate for women aged 25–29 years (about 190 per 1,000) was twice that for women aged 30–34 years (about 95 per 1,000).

Age-specific Fertility Rates

1965–2005



Between the 1995 and 2005 September years, fertility rates for women aged under 30 years dropped. The largest decreases occurred among women aged under 20 and 20–24 years; both down 18 percent. In contrast, fertility rates for women aged 30 years and over have increased over the last decade. Despite the trend towards lower fertility among women aged under 30 years, their combined fertility rate (102 births per 1,000 women aged under 30 years) is still slightly higher than for women aged 30 years and over (98 births per 1,000 women aged 30 years and over).

On average, New Zealand women now have children about five years later than their counterparts in the early 1970s. The median age (half are younger, and half older, than this age) of New Zealand women giving birth is now 30.4 years, compared with 28.6 years in 1995, and 25.1 years in 1975.

The median age of women giving birth to their first child (based on children in the current relationship only) was 28.5 years in the year ended September 2005.

Regional births

The Auckland Region (20,630) had the highest number of births in the September 2005 year, accounting for 36 percent of all live births registered in New Zealand. This was followed by Canterbury (6,520), Wellington (6,220) and Waikato (5,690). Together, these four regions accounted for about two-thirds of all live births registered in 2005.

Births by ethnicity

During the September 2005 year, 13,120 Māori mothers registered a birth and 16,450 Māori children were registered. The total fertility rate for Māori women in 2005 was 2.64 births per woman, well above the rate for the total population (2.00 births per woman). Māori mothers also tend to be younger; their median age at birth was 26.1 years in the September 2005 year.

Day of birth

The preceding births data are based on live births by date of registration. In this section, live births have been analysed by 'day of birth'. Because a birth can be registered up to two years after the event, 'day of the week' patterns for births occurring in 2002 have been investigated.

According to the nursery rhyme, "Saturday's child works hard for a living and the child that is born on the Sabbath day, is bonny and blithe and good and gay". However, both are relatively less common than children born on other days of the week.

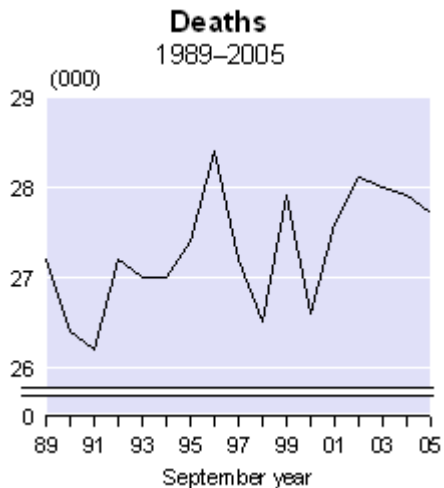
While births are roughly evenly spread across all days of the week, there is a tendency for slightly fewer babies to be born on Saturday and Sunday and slightly more on Tuesday to Friday. If births occurred evenly throughout the week, roughly 14 percent (one-seventh) of births would occur on a particular day of the week. However, in 2002 only 12 percent of births occurred on a Sunday and 13 percent on a Saturday. In comparison, 15 percent of births occurred on either Tuesday, Wednesday, Thursday or Friday. Monday accounted for 14 percent of births.

There is also a tendency for fewer babies to be born on statutory holidays. For example, in 2002 there were 100 babies born on Queen's Birthday holiday (Monday), compared with average daily births of 150.

The trend for fewer births on weekends and statutory holidays is probably due to elective caesarean sections and inductions being scheduled on week days (Source: Ministry of Health).

Deaths and longevity

Deaths registered during the September 2005 year totalled 27,730, compared with 27,930 in the September 2004 year. There were 7,270 deaths in the September 2005 quarter, a decrease of 710 compared with the September 2004 quarter.



The median age at death in the September 2005 year was 75.8 years for males and 81.9 years for females. There were 13,740 male deaths and 13,990 female deaths. The only other September year where female deaths exceeded male deaths was 2003. Just over three-quarters of the deceased were aged 65 years or over, while only 6 percent were aged under 40 years.

The crude death rate (deaths per 1,000 mean estimated resident population) was 6.8 in the September 2005 year, down from 7.5 in 1995. Because the crude death rate is influenced by the age structure of the population, it does not provide a true measure of the trends in mortality. Life tables are used to give a more accurate description of the mortality experience.

According to the New Zealand abridged life table for 2002–2004, a newborn girl can expect to live, on average, 81.3 years, and a newborn boy 77.0 years. These levels represent longevity gains since 1995–1997 of 1.7 years for females and 2.6 years for males. These gains were due largely to the reduction in mortality rates at late-working and retirement ages (50–89 years). Since 1975–1977, life expectancy at birth has increased by 5.8 years for females and 8.0 years for males. While differences in mortality between males and females still remain, their longevity gap has narrowed. Newborn females in 2002–2004 can expect to outlive newborn males by 4.3 years, down from a peak of 6.4 years in 1975–1977.

Abridged life tables are produced annually for the total population only. Complete life tables are produced for the Māori, non-Māori and total populations every five years. The latest available cover the period 2000–2002. Non-Māori have a significant longevity advantage over Māori. Life expectancy at birth for females of Māori ethnicity in 2000–2002 was 73.2 years, compared with 81.9 years for non-Māori females. For males, the equivalent figures were 69.0 years for Māori and 77.2 years for non-Māori. This difference of about 8.5 years between Māori and non-Māori is slightly less than the estimated difference of 9.1 years in 1995–1997.

Life tables for other ethnicities, such as the broad Pacific and Asian ethnic groups, have not been produced because of the small number of death registrations and the uncertainty associated with ethnic identification and measurement.

Infant mortality

During the September 2005 year, the number of infant deaths (under one year of age) registered in New Zealand totalled 320. The infant mortality rate (infant deaths per 1,000 live births) has dropped over the last thirty years. In the September 2005 year, the infant mortality rate was 5.6 per 1,000, down from 6.8 per 1,000 in the September 1995 year and 16.0 per 1,000 in 1975.

Regional deaths

There were 7,020 deaths of residents in Auckland Region during the 2005 September year. This accounts for about one-quarter of all New Zealand deaths, while Auckland Region is home to approximately one-third of New Zealand's population. The number of deaths in each region is influenced by the size and age structure of the population. The proportion of deaths in Auckland Region is lower than expected because it has a relatively young population. Only 9 percent of Auckland Region's population is aged 65 years and over, compared with 12 percent for the national population.

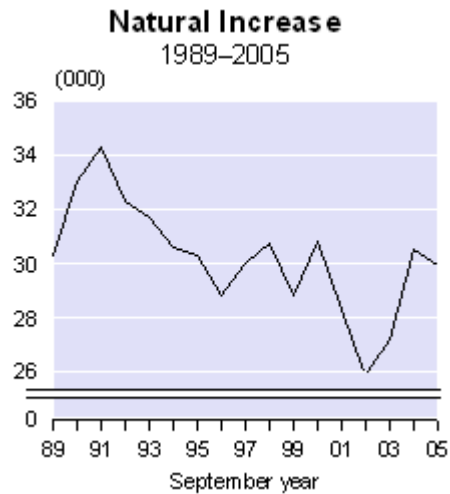
According to the 2000–2002 abridged life tables for regions, life expectancy at birth ranged from 72.6 to 77.5 years for males and 78.9 to 82.2 years for females. The reasons for subnational differences in longevity and mortality are difficult to identify precisely and are probably due to a combination of interrelated factors including the proportion of the population who are Māori, the proportion of the population who smoke (or have smoked), the proximity to health and hospital services, the degree of urbanisation and socio-economic factors.

Natural increase of population

Natural increase of population represents the excess of births over deaths. Births outnumbered deaths by 29,890 in the September 2005 year. The natural increase was 30,330 in the September 1995 year.

During the September 2005 year, New Zealand's population increased by 34,900 (0.9 percent). Natural increase contributed roughly four-fifths to this population growth, and net migration the remaining one-fifth. These proportions have varied in recent years, because of significant shifts in the migration balance. During the 1998–2000 December years, population growth was due solely to natural increase, as net migration was negative.

The rates of natural increase in the September 2005 and 2004 years were 7.3 and 7.5 per 1,000 mean population, respectively. This compares with 8.3 per 1,000 mean population in the September 1995 year.



Final figures

The vital statistics and infant mortality rates for the September 2005 year quoted above, and contained in the appended tables, are final. Fertility rates, crude death rates and rate of natural increase for the September 2005 quarter and year are provisional. Final demographic indices will be released in February 2006.

For technical information contact:
 Anne Howard or Nicola Somerville
 Christchurch 03 964 8700
Email: demography@stats.govt.nz

Technical Notes

Births

Birth data for the March, June, September and December quarters of 1998 are based on the number of notifications received by the Department of Internal Affairs. All other birth data are based on live births registered in New Zealand to mothers resident in New Zealand by date of registration. Birth data exclude late registrations under section 14 of the Births, Deaths, and Marriages Registration Act 1995. Section 14 births are those which were not registered in the ordinary way at the time the birth occurred. Such registrations can occur as late as retirement age.

Replacement level fertility

Replacement level fertility is the average number of children a woman needs to have to produce one daughter who survives to childbearing age. Replacement level fertility is also described as the total fertility rate required for the population to replace itself, without migration.

The internationally accepted replacement level is 2.1 births per woman. Replacement level fertility allows for child mortality (children who die before reaching reproductive age) and the birth of more boys than girls. On average, throughout the world 105 boys are born for every 100 girls. The actual replacement level will vary slightly from country to country, depending on child mortality rates. In countries with high child mortality, the total fertility rate will need to be higher than 2.1 births per woman to achieve replacement level.

Total fertility rate

The total fertility rate is the average number of live births that a woman would have during her life if she experienced the age-specific fertility rates of a given period (usually a year). It excludes the effect of mortality.

Children of this relationship

The birth registration forms ask whether there are any other children of this relationship. However, it is possible that children from previous relationships are included. Unfortunately, this question does not produce an accurate measure of all live births to a woman (needed for accurate measures of birth parity). For privacy reasons it is deemed unacceptable to ask women about children outside their current relationship.

Life tables

A life table is a standard demographic device that provides a detailed description of the mortality experience prevailing in a population during a given period. It comprises an array of measures, including probabilities of death, probabilities of survival and life expectancies at various ages. The 2000–2002 life tables relating to New Zealand Māori, non-Māori and total populations, were released by Statistics New Zealand on 30 March 2004. These are available on the Statistics New Zealand website (www.stats.govt.nz). More details on life table methodology and results are included in the publication [New Zealand Life Tables 2000–2002](#).

The 1995–1997 life tables for the total New Zealand, Māori and non-Māori populations published in July 1998 have been revised. For all populations, the revision incorporates updated population estimates (at 30 June 1996) and a revised method of estimating death rates at the oldest ages. For the Māori life table, smooth adjustment factors have also been applied to Māori deaths, by age, to allow for under-reporting of Māori deaths (relative to the Māori population). For the non-Māori life table, corresponding adjustments have been applied to non-Māori deaths, by age. These adjustment factors affect Māori life expectancy at birth by about 0.7 years and non-Māori life expectancy at birth by about 0.1 years. Revised figures for 1995–1997 are included in the publication entitled New Zealand Life Tables 2000–2002.

Resident population concept

Unless otherwise stated, this release refers to vital events (births and deaths) registered in New Zealand by date of registration. It excludes births to women who normally reside overseas, and deaths of people who normally reside overseas. Demographic rates are calculated using the mean estimated resident population.

Rounding

Birth and death figures contained in the tables attached to this release are unrounded. All other figures have been rounded. Derived figures (for example, percentage annual increase) have been calculated using unrounded data.

More information

For more information about [births](#) and [deaths](#), follow the links from the Technical notes of this release on the Statistics New Zealand website.

Copyright

Information obtained from Statistics New Zealand may be freely used, reproduced, or quoted unless otherwise specified. In all cases Statistics New Zealand must be acknowledged as the source.

Liability

While care has been used in processing, analysing and extracting information, Statistics New Zealand gives no warranty that the information supplied is free from error. Statistics New Zealand shall not be liable for any loss suffered through the use, directly or indirectly, of any information, product or service.

Timing

Timed statistical releases are delivered using postal and electronic services provided by third parties. Delivery of these releases may be delayed by circumstances outside the control of Statistics New Zealand. Statistics New Zealand accepts no responsibility for any such delays.

Next release

Births and Deaths: December 2005 quarter will be released on 17 February 2006.

Statistics New Zealand: The first source of independent information for your key decisions.

Tables

The following tables can be downloaded from the Statistics New Zealand website in Excel 97 format. If you do not have access to Excel 97 or higher, you may use the [Excel file viewer](#) to view, print and export the contents of the file.

List of tables

1. Births, deaths and selected rates, 1991-2005
2. Live births by regional council, 1992-2005
3. Deaths by regional council, 1992-2005
4. Age-specific fertility rates, 1995-2005