

Embargoed until 10:45 am – 17 August 2009

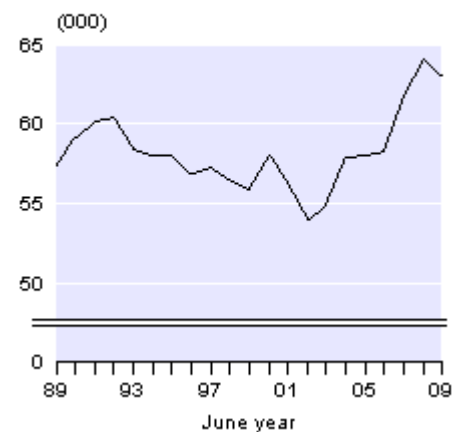
Births and Deaths: June 2009 quarter

Highlights

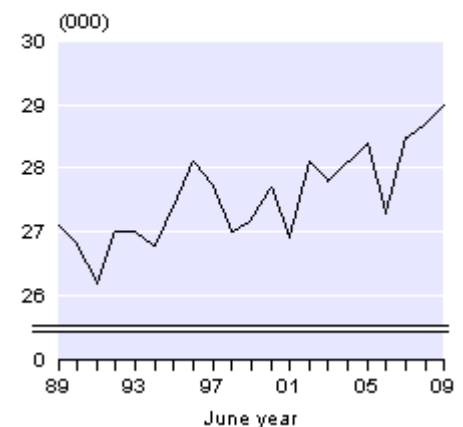
In the June 2009 year:

- 62,960 live births were registered in New Zealand, down from 64,140 in the June 2008 year.
- The drop in live births was largely due to fewer births in the Auckland region.
- The birth rate was 2.1 births per woman.
- Women aged 30–34 years had the highest fertility rate (123 births per 1,000 women).
- 28,960 deaths were registered.
- The age-standardised death rate was 4.0 deaths per 1,000 mean estimated resident population.
- The infant mortality rate was 4.6 deaths per 1,000 live births.
- Births exceeded deaths by 34,000.

Live Births
1989–2009



Deaths
1989–2009



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17 August 2009
ISSN 1178-0436

Commentary

Live births

There were 62,960 live births registered in New Zealand in the June 2009 year, down 1,180 (2 percent) from the June 2008 year. This decrease in births follows six years of increasing birth numbers. The latest figure is 7 percent higher than the average of 58,600 births per year over the last decade, when the number of births varied from a low of 53,970 in the June 2002 year to a high of 64,140 in the June 2008 year.

The highest number of births registered in any June year was 66,110 in 1962. At that time New Zealand's population numbered just 2.5 million, compared with 4.3 million in 2009.

During the June 2009 year, the births of 32,670 boys and 30,300 girls were registered to mothers resident in New Zealand. Normally, there are more boys born than girls, with an average of 105 boys born for every 100 girls.

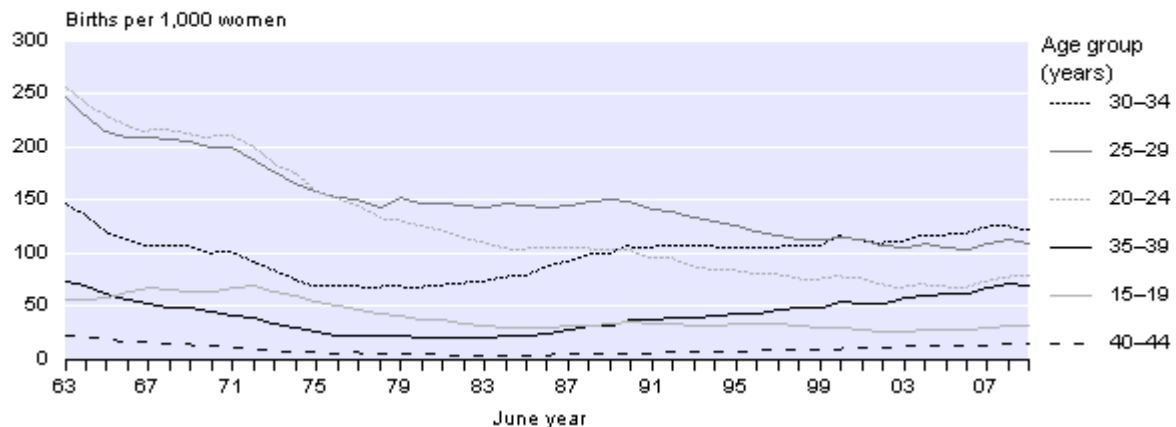
Live births registered in the June 2009 quarter totalled 15,460, a decrease of 1,200 (7 percent) compared with the June 2008 quarter (16,650).

Fertility rates and mother's age

Compared with the June 2008 year, there were fewer births to women in most age groups, except those aged 20–24 years and 40–44 years.

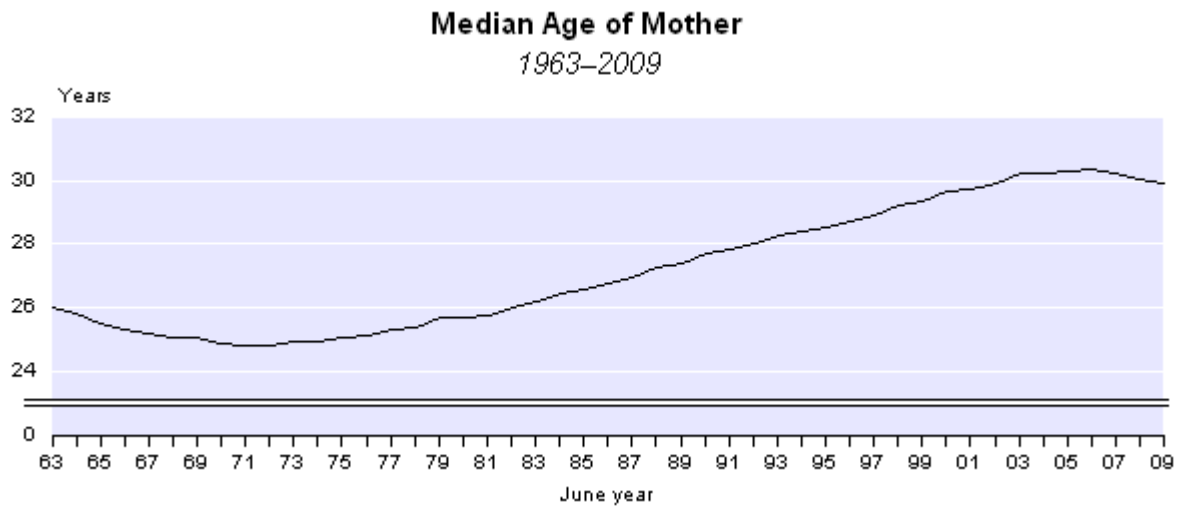
In the June 2009 year, women aged 30–34 years had the highest fertility rate (123 births per 1,000 women aged 30–34 years), followed by those aged 25–29 years (109 per 1,000) and 20–24 years (78 per 1,000). Compared with the high fertility seen in the early 1960s, women in all age groups now have fewer babies. In 1963, women aged 20–24 years had the highest fertility rate (256 per 1,000), followed by those aged 25–29 years (248 per 1,000) and 30–34 years (147 per 1,000). (Age-specific fertility rates before 1992 are based on December years.)

Age-specific Fertility Rates
1963–2009



The median age (half are younger and half older than this age) of New Zealand women giving birth is now 30 years, compared with 26 years in 1963. The median age dropped to just below 25 years in the early 1970s. Although there has been a significant increase in the median age since

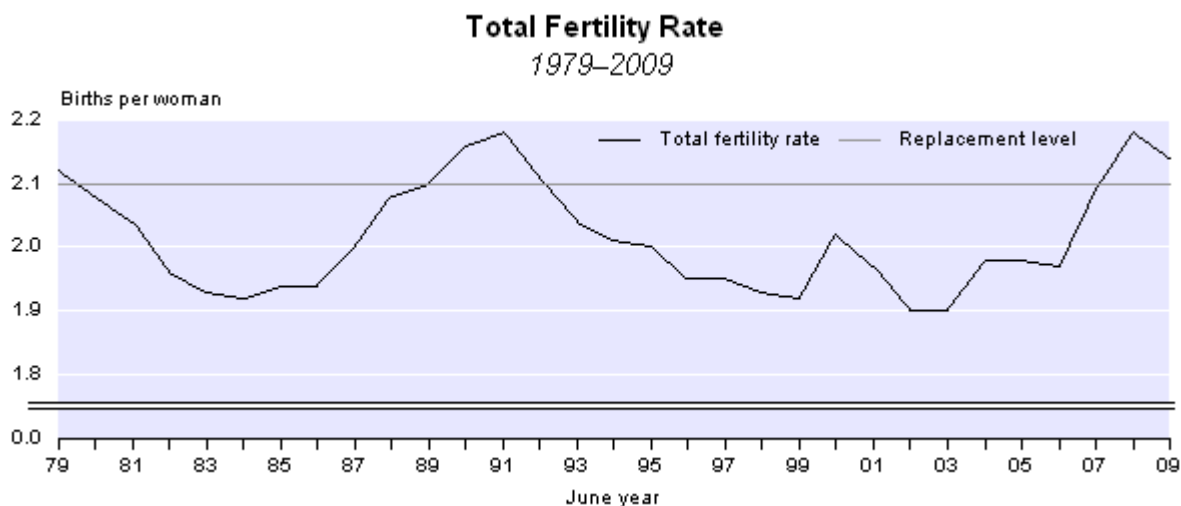
the 1970s, it has been relatively stable at around 30 years in the past decade. The small drop since the June 2006 year is not necessarily indicative of a reversal in the trend towards older childbearing, but partly reflects changes in age structure within the childbearing age group. The median age of women aged 15–39 years has dropped by one year since 2002.



The median age of women giving birth to their first child (based on children in the current relationship only) was 28 years in the year ended June 2009, and has been relatively stable over the last decade.

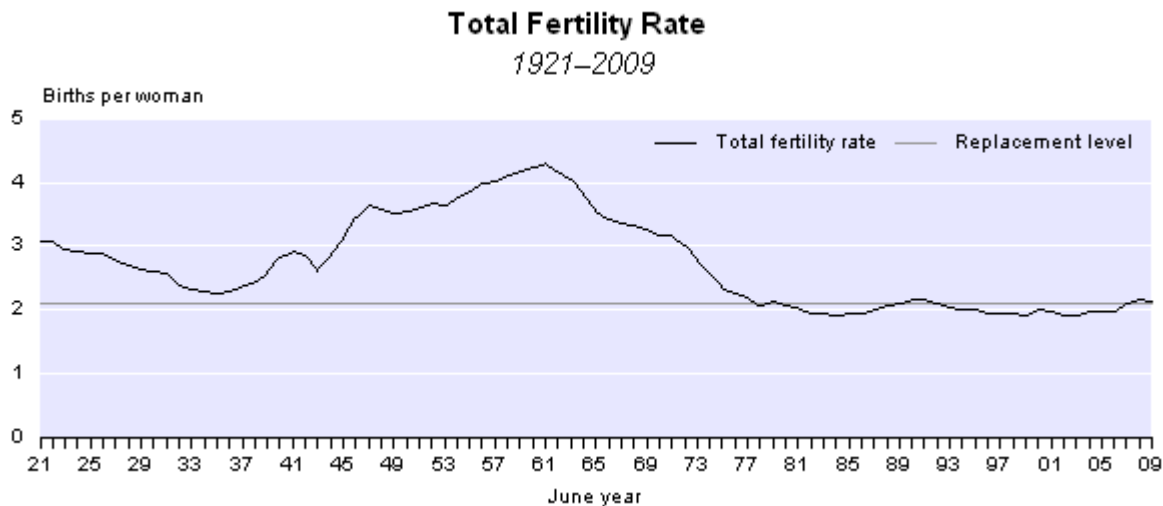
Total fertility rate

Age-specific fertility rates for the June 2009 year indicate that New Zealand women averaged 2.14 births per woman, down from 2.18 in the June 2008 year. The level required by a population to replace itself in the long term, without migration, is 2.1 births per woman. However, fertility rates of close to, or higher than, 2.1 births per woman need to be sustained over many years before 'replacement level' fertility can be claimed. Since 1980, fertility in New Zealand has been slightly below the replacement level, with the exception of short periods around 1990 and the present.



New Zealand's total fertility rate has been relatively stable over the last three decades, averaging 2.01 births per woman. During this period, the total fertility rate varied from 1.90 to 2.18 births

per woman. 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, with the total fertility rate dropping to 4.05 in 1963, 3.00 in 1972, and 2.12 in 1979. (Total fertility rates before 1980 are based on December years.)



The total fertility rate summarises the age-specific fertility rates into a single number indicator of fertility. However, annual fluctuations do not necessarily indicate changes in family size, but rather changes in the timing of births.

A number of other low-fertility countries have experienced slight recoveries in their fertility rates in recent years, including Australia (up from 1.7 births per woman in 2001 to 1.9 in 2007), England and Wales (up from 1.6 in 2001 to 1.9 in 2007), Norway (up from 1.8 in 2002 to 2.0 in 2008), Scotland (up from 1.5 in 2002 to 1.7 in 2007), and Sweden (up from 1.5 in 1999 to 1.9 in 2008).

Births by ethnicity

The 2006 Census showed that 10 percent of the census usually resident population identified with more than one ethnic group. Birth registrations for the June 2009 year show that 13 percent of mothers and 25 percent of babies identified with more than one ethnic group. This suggests that younger generations are becoming increasingly multicultural. Two-thirds of Māori babies and one-half of Pacific babies belonged to multiple ethnic groups, compared with just under one-third of babies within the European and Asian ethnic groups.

In the June 2009 year, the European ethnic group gained 43,570 babies, Māori 18,480, Pacific peoples 10,040, Asian 7,340, MELAA (Middle Eastern, Latin American and African) 1,190, and Other (including New Zealanders) 500.

The total fertility rate for Māori women in the June 2009 year was 2.88 births per woman, down from 2.93 in 2008 and well above the rate for the total population (2.14 births per woman). In the June 2009 year, there were 14,490 live births registered to Māori women. Māori women giving birth tend to be younger, with a median age of 26 years in the June 2009 year. The median age for Pacific, Asian and European women was 27, 30, and 31 years, respectively.

Regional live births

Births in the Auckland region dropped by 1,050 (or 4.5 percent) in the June 2009 year compared with the June 2008 year (23,420). This drop accounted for 89 percent of the overall decrease in the number of births in the June 2009 year. Despite the decrease, the Auckland region had the highest number of births in the June 2009 year (22,370), accounting for 36 percent of all live births registered in New Zealand. This was followed by Canterbury (7,300), Wellington (6,910), and Waikato (6,370). Together, these four regions accounted for just over two-thirds of all live births registered in the March 2008 year. This is consistent with their share of New Zealand's population.

Deaths

Deaths registered during the June 2009 year totalled 28,960, up from 28,690 in the June 2008 year. There were 14,410 male deaths and 14,550 female deaths. The number of deaths has gradually increased over time due to population growth, particularly in the older ages, partly offset by longer life expectancy. Fifty years ago, in the June 1959 year, deaths numbered 20,860. The number of deaths increased by about one-fifth over the following 10 years, to 24,470 in 1969, but the rate of growth since has been slower. Statistics New Zealand's mid-range population projections (series 5) indicate deaths will continue to increase, surpassing 40,000 in 2031, 50,000 in 2042, and 60,000 in 2056.

Deaths continue to be increasingly concentrated in the older age groups. The median age at death in the June 2009 year was 77 years for males and 83 years for females, compared with 71 for males and 78 for females in 1989. Only 5 percent of the deceased were aged under 40 years in the June 2009 year, compared with 9 percent in 1989.

The crude death rate (deaths per 1,000 mean estimated resident population) is influenced by the age structure of the population, and therefore does not provide a true measure of the trends in mortality. For example, the crude death rate for the Māori population (4.5) was much lower than for the total population (6.7) in the June 2009 year. This lower rate is due to the much younger age structure of the Māori population.

Age-standardised death rates provide an alternative summary of the mortality experience of populations with very different age structures. They are calculated by applying the age-specific death rates of the subject populations to a standard population, in this case the mean estimated population for the December 1961 year. On this basis, the standard death rate for the Māori population (7.0 deaths per 1,000 mean estimated population) was much higher than that for the total population (4.0) in the June 2009 year. Standardised death rates for both the Māori and total populations have dropped over the last 10 years, down from 9.3 and 5.1 per 1,000 in the December 1999 year. (Standardised death rates for June years are not available before 2002.)

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 accurate and detailed description of the mortality experience across populations and time.

Life expectancy

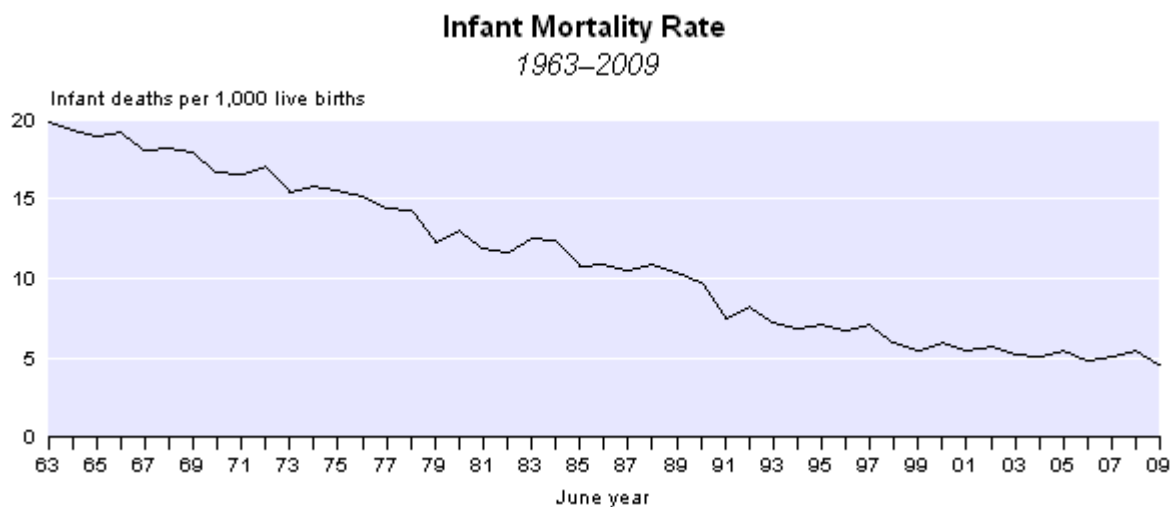
According to the *New Zealand abridged period life table* for 2006–08, a newborn girl can be expected to live, on average, 82.2 years, and a newborn boy, 78.2 years. This represents longevity

gains since 2000–02 of 1.1 years for females and 1.9 years for males. While female life expectancy is still higher than male life expectancy, the longevity gap has narrowed from 6.4 years in 1975–77 to 4.0 years in 2006–08. Since 1975–77, life expectancy at birth has increased by 6.8 years for females and 9.2 years for males.

Abridged period 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 complete life tables, *New Zealand Life Tables: 2005–07*, show that Māori life expectancy was 75.1 years for females and 70.4 years for males in 2005–07.

Infant mortality and stillbirths

During the June 2009 year, the number of infant deaths (under one year of age) registered in New Zealand totalled 290. The infant mortality rate (infant deaths per 1,000 live births) has dropped over the last 40 years. In the June 2009 year, the infant mortality rate was 4.6 per 1,000, down from 5.5 in the June 1999 year, and 18.0 in 1969. The Māori infant mortality rate was 6.3 per 1,000 in the June 2009 year, down from 25.6 in 1969.



Neonatal deaths (under four weeks of age) made up 56 percent of infant deaths in the June 2009 year. The neonatal mortality rate (neonatal deaths per 1,000 live births) was 2.6 in 2009, down from 3.0 in 1999. The post-neonatal mortality rate (infant deaths over 27 days of age per 1,000 live births) also dropped, from 2.5 in 1999, to 2.0 per 1,000 in 2009.

Australia has also experienced a drop in infant mortality rates in the last decade. In the December 1997 year, New Zealand's infant mortality rate was 6.5 per 1,000 live births, compared with 5.3 per 1,000 in Australia. By 2007, New Zealand's infant mortality rate had dropped to 4.9 per 1,000 and Australia's rate had dropped to 4.2 per 1,000. (December year 2007 is the most recent data available for Australia.)

Scotland (4.7 per 1,000 live births), and England and Wales (4.8) had similar infant mortality rates to New Zealand's in 2007. However, a number of other low-fertility countries had lower infant mortality rates: Sweden (2.2), Finland (2.7), Norway (3.1), France (3.6), and Denmark (4.0).

There were 410 stillbirths in the June 2009 year. This corresponds to 6.5 stillbirths per 1,000 births (live and stillbirths combined).

Regional deaths and life expectancy

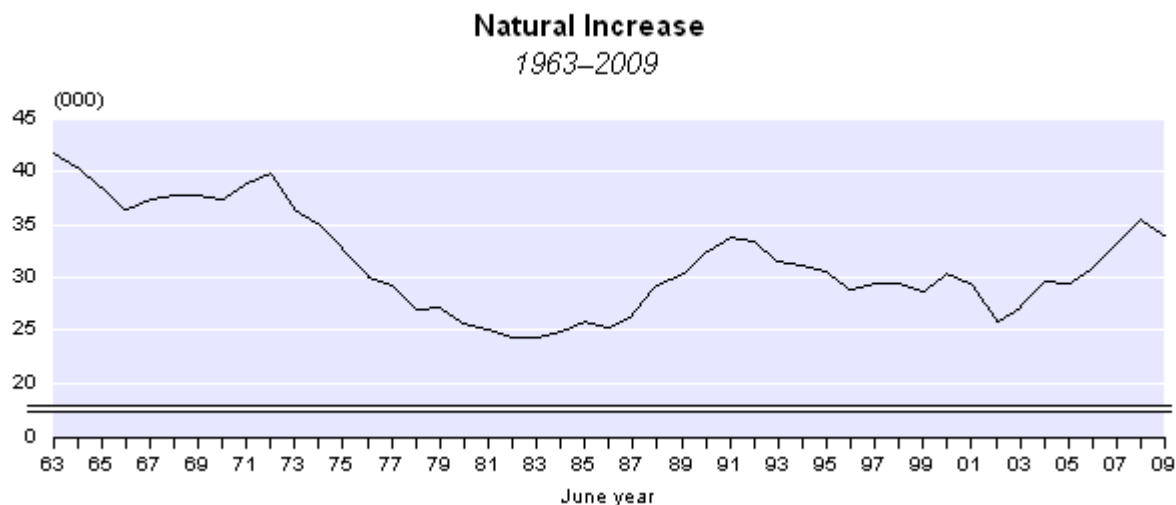
During the June 2009 year, there were 7,280 deaths of residents in the Auckland region. Although the Auckland region is home to approximately one-third of New Zealand's population, it only accounted for about one-quarter of New Zealand's deaths. This is due to the region's relatively young age structure. Only 10 percent of the Auckland region's population is aged 65 years and over, compared with 13 percent for the national population.

Statistics NZ's report *New Zealand Life Tables 2005–07*, released in May 2009, includes the latest information from abridged life tables for regions. The highest life expectancy during 2005–07 was in the Auckland region, for both males (79.4 years) and females (83.2 years). Other regions where life expectancy exceeded the national average were Wellington, Tasman, Nelson (males only), Canterbury, and Otago. Gisborne region had the lowest life expectancy for both males (73.8 years) and females (78.1 years).

All regions experienced increases in life expectancy between 1995–97 and 2005–07. The regions with the highest life expectancy gains were West Coast (up 4.6 years for males and 3.3 years for females), Auckland, and Wellington (each up 4.2 years for males and 3.0 years for females).

Natural increase of population

Natural increase of population represents the excess of births over deaths. Births outnumbered deaths by 34,000 in the June 2009 year, down from 35,460 in the June 2008 year. The rate of natural increase was 7.9 per 1,000 mean estimated resident population in the June 2009 year. The 2006-base national population projections show that natural increase is likely to decline over the next 50 years, with deaths projected to outnumber births from 2055.



All regions in New Zealand had more births than deaths in the June 2009 year. Auckland's natural increase (15,080) made up 44 percent of the national natural increase. Auckland's large share of New Zealand's natural increase is due to the small number of deaths relative to the number of births and the size of its population. The next highest natural increase was in Wellington (3,910), followed by Waikato (3,570), and Canterbury (3,210).

Final figures and revised demographic rates

The vital statistics and infant mortality rates for the June 2009 year quoted above, and contained in the appended tables, are final. Fertility rates and crude death rates for the June 2009 quarter and year are provisional. For further details see the technical notes of this release.

Free online database

Statistics NZ's *Infoshare database* (www.stats.govt.nz/Infoshare) is a free-of-charge online tool that gives you access to a range of time-series data. A number of tables are available for each of the following subjects, which can be found under 'Population' on the 'Browse' page of Infoshare:

- Vital Statistics – Births
- Vital Statistics – Deaths
- Demography Fertility Measures
- Demography Mortality Measures.

Output review of vitals data

Statistics NZ is currently undertaking a review of its vitals outputs (ie births, deaths, marriages, and divorces). The review aims to ensure information remains relevant and easily accessible. Proposed changes include: integrating de facto and resident series, adding data previously published elsewhere to Infoshare, and replacing urban area data with District Health Board data for births and deaths

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Next release ...

Births and Deaths: September 2009 quarter will be released on 17 November 2009.

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 16 of the Births, Deaths, and Marriages Registration Act 1995. Section 16 births are those that were not registered in the ordinary way at the time the birth occurred.

Stillbirths

The Births, Deaths and Marriages Registration Act 1995, which took effect from 1 September 1995, redefined a stillbirth as a child who is born dead and weighs 400g or more or is born dead after the 20th week of gestation. Before the new Act, a stillbirth was defined as a child born dead after 28 weeks of gestation. This change in definition means that stillbirths from September 1995 onwards are not directly comparable with earlier years.

Deaths

Deaths data from 1991 onwards are based on deaths registered in New Zealand of New Zealand residents by date of registration. Before 1991, deaths data are based on deaths registered in New Zealand of New Zealand residents and people visiting from overseas by date of registration.

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 in the long term, 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.

Standardised death rates

The overall death rate that would have prevailed in a standard population if it had experienced the age-specific (usually age-and-sex-specific) death rates of the population or area being studied. In this Hot Off The Press, the age and sex distribution of the mean estimated population for the year ended 31 December 1961 is used to derive standardised death rates.

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 *New Zealand Period Life Tables: 2005–2007* relating to New Zealand Māori, non-Māori and total populations were released by Statistics New Zealand on 10 November 2008. More detailed results, including for subnational areas, and the life tables methodology are included in the New Zealand Life Tables: 2005–2007 report, released in May 2009.

Demographic rates

Demographic rates from 1991 onwards are calculated using the mean estimated resident population. Rates before 1991 are calculated using the mean estimated de facto population.

Rounding

Birth and death figures contained in the tables attached to this release are unrounded. All other figures have been rounded. This may result in a total differing slightly from the sum of its components. Derived figures (for example percentage annual increase) have been calculated using unrounded data.

More information

For more information, follow the [link](#) from the Technical notes of this release on the Statistics NZ website.

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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 NZ. Statistics NZ accepts no responsibility for any such delays.

Tables

The following tables are printed with this Hot Off The Press and can also be downloaded from the Statistics New Zealand website in Excel format. If you do not have access to Excel, you may use the [Excel file viewer](#) to view, print and export the contents of the file.

1. Births, deaths and selected rates, 1993–2009
2. Live births by regional council, 1996–2009
3. Deaths by regional council, 1996–2009
4. Age-specific fertility rates, 1993–2009
5. Live births by mother's age, 1993–2009
6. Deaths by age and sex, June year 2009