Hot Off The Press

Latest statistics from Statistics New Zealand

Statistics New Zealand
TATAURANGA AOTEAROA

Embargoed until 10:45am – 22 February 2010

Births and Deaths: December 2009 quarter

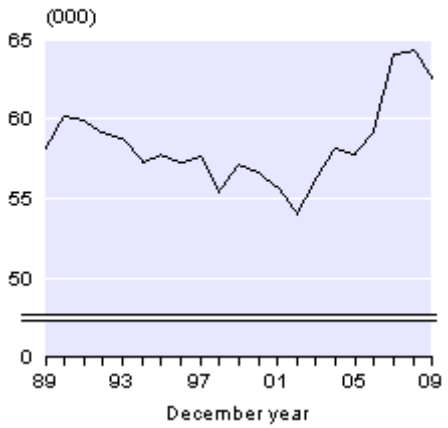
Highlights

- Life expectancy at birth was 82.4 years for females and 78.4 years for males in 2007–09.
- The gap between male and female life expectancy has narrowed from 6.4 years in 1975–77 to 4.0 years in 2007–09.

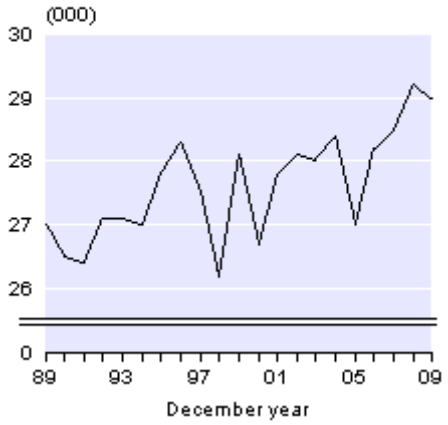
In the December 2009 year:

- 62,540 live births were registered in New Zealand, down from 64,340 in the December 2008 year.
- 28,960 deaths were registered.
- Births exceeded deaths by 33,580.
- The total fertility rate was 2.1.

Live Births
1989–2009



Deaths
1989–2009



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Commentary

Live births

There were 62,540 live births registered in New Zealand in the December 2009 year, down 1,800 (3 percent) from the December 2008 year. During the December 2009 year, the births of 32,110 boys and 30,430 girls were registered to mothers resident in New Zealand. Live births registered in the December 2009 quarter totalled 15,220, a decrease of 620 (4 percent) from the December 2008 quarter.

In the first decade of the new millennium more than half a million (588,500) births were registered in New Zealand. The number of births dropped from 56,600 in the December 2000 year to a low of 54,020 in 2002 before increasing to a high of 64,340 in 2008.

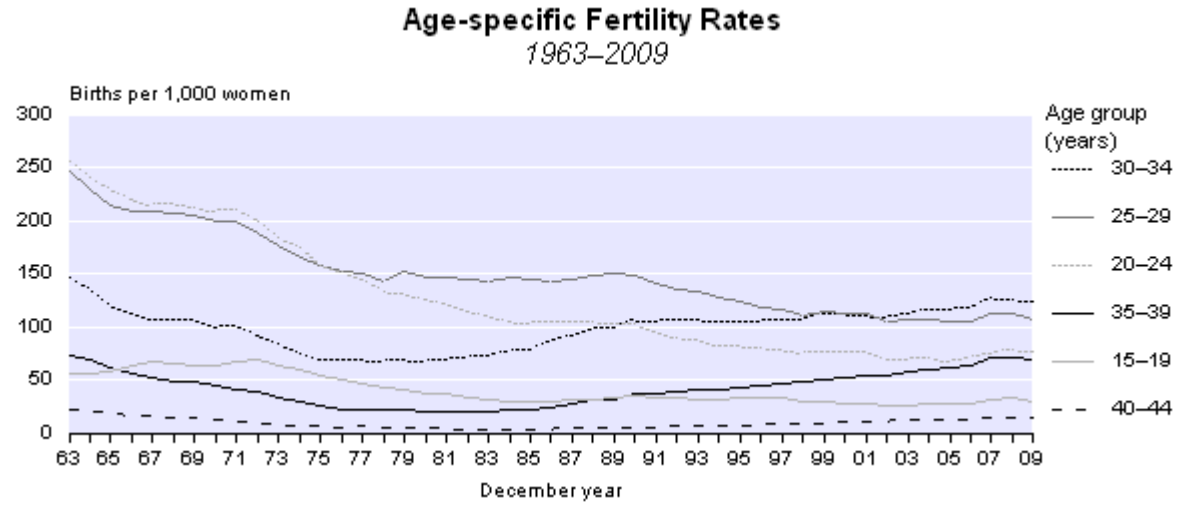
The highest number of births registered in any December year was 65,390 in 1961. At that time New Zealand's population numbered just 2.5 million, compared with 4.3 million in 2009. A record number of 625,560 births were registered during the decade spanning 1960–1969.

Fertility rates and mother's age

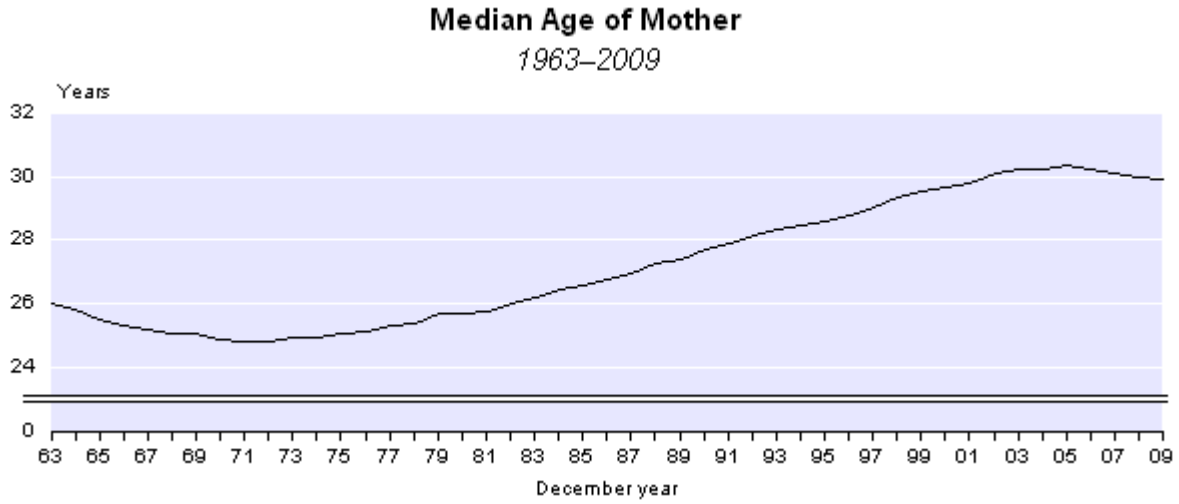
In the December 2009 year, women aged 30–34 years had the highest fertility rate (123 births per 1,000 women aged 30–34 years), followed by those aged 25–29 years (107 per 1,000) and 20–24 years (77 per 1,000). Compared with the high fertility seen in the early 1960s, women in all age groups now have 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).

Compared with 2002, when birth numbers were relatively low, there were more births to women in all age groups in 2009. The biggest increase was in the 35–39 year age group, closely followed by those aged 30–34 years. For every 1,000 women aged 35–39 years there were 15 more births in 2009 than in 2002. Women aged 30–34 had, on average, 14 more births per 1,000 women than in 2002.

Fertility rates in 2009 were lower for women in all age groups, apart from 40–44 years, compared with the December 2008 year.



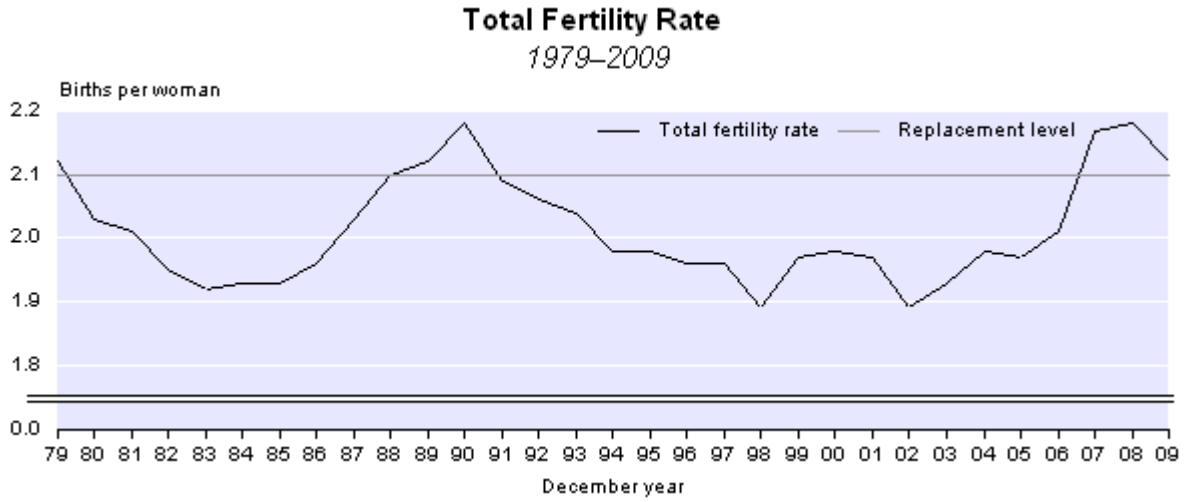
The median age (half are younger and half older than this age) of New Zealand women giving birth is now 30 years, compared with 26 years in 1963. The median age dropped to just under 25 years in the early 1970s. Although there has been a significant increase in the median age since the 1970s, it has been relatively stable at around 30 years in the past decade. While there has been a small drop since the December 2005 year, this 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 all women aged 15–39 years has dropped by just over one year since 2001.



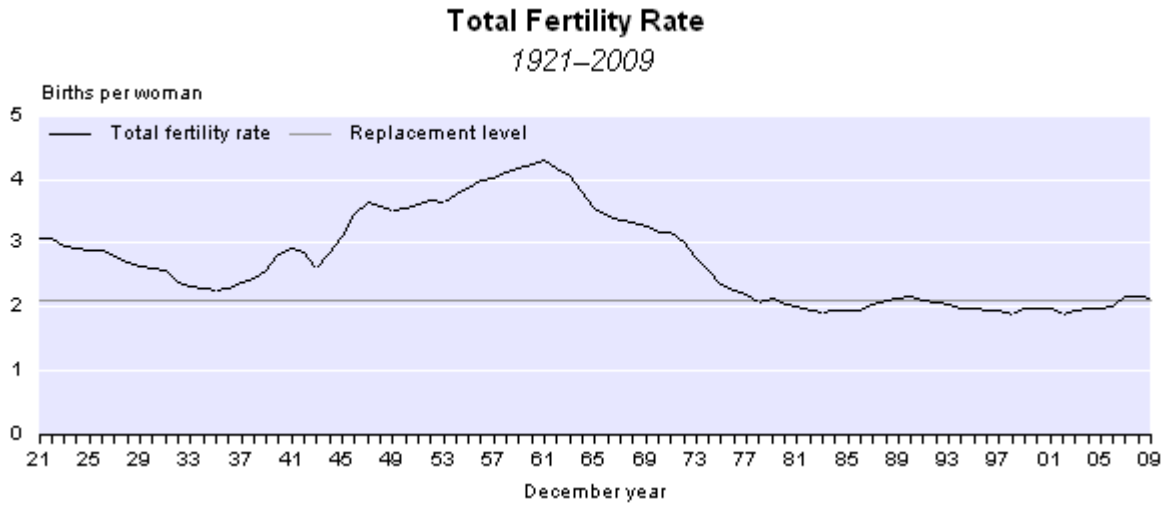
The median age of women giving birth to their first child (based on children in the current relationship only) was 28 years in the year ended December 2009, and has been relatively stable over the last decade.

Total fertility rate

The total fertility rate summarises the age-specific fertility rates into a single number indicator of fertility. The total fertility rate for the December 2009 year indicates that New Zealand women averaged 2.12 births per woman, down from 2.18 in the December 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 2008. Annual fluctuations in the total fertility rate do not necessarily indicate changes in family size, but rather changes in the timing of births.



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 1.89 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.



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 2.0 in 2008), England and Wales (up from 1.6 in 2001 to 2.0 in 2008), Norway (up from 1.8 in 2002 to 2.0 in 2008), Scotland (up from 1.5 in 2002 to 1.8 in 2008), and Sweden (up from 1.5 in 1999 to 1.9 in 2008).

Births by ethnicity

In the December 2009 year, the European ethnic group gained 43,290 babies, Māori 18,030, Pacific peoples 10,070, Asian 7,490, MELAA (Middle Eastern, Latin American and African) 1,180, and 'other' (including New Zealanders) 490. Where a baby has multiple ethnicities, the baby is included in every ethnic group specified. 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.

The total fertility rate for Māori women in the December 2009 year was 2.80 births per woman, down from 2.95 in 2008 and well above the rate for the total population (2.12 births per woman). In the December 2009 year, there were 14,130 live births registered to Māori women. Māori women giving birth tend to be younger, with a median age of 26 years in the December 2009 year. The median age for Pacific, Asian, and European women was 27, 30, and 31 years, respectively.

Regional live births

Auckland region had the highest number of births in the December 2009 year (22,600), accounting for 36 percent of all live births registered in New Zealand. This was followed by the Canterbury (7,160), Wellington (6,790), and Waikato (6,150) regions. Together, these four regions accounted for just over two-thirds of all live births registered in the December 2009 year. This is consistent with their share of New Zealand's population.

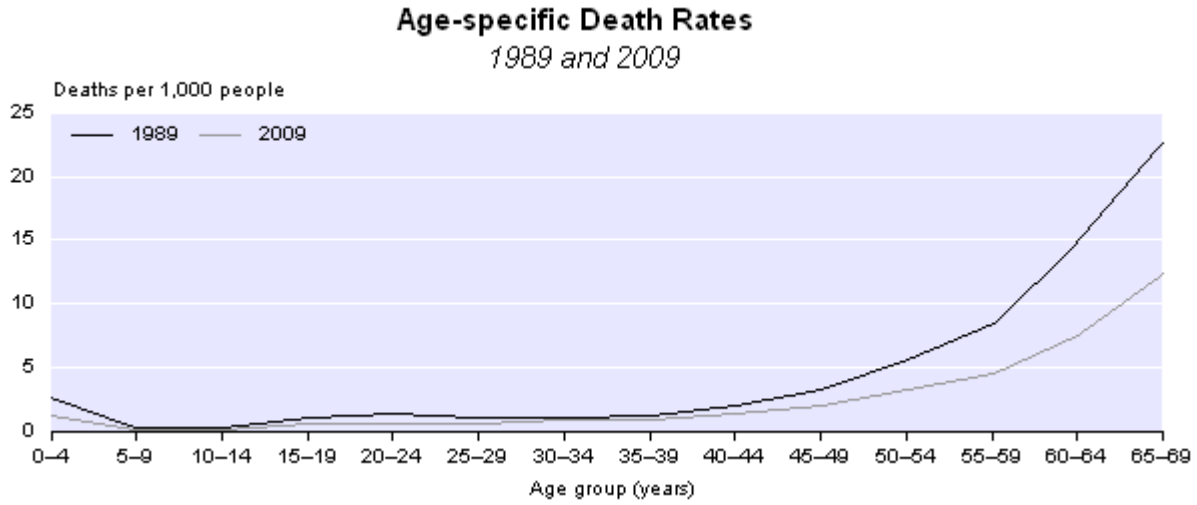
The median age of women giving birth varies across the regions. In 2009, Gisborne had the youngest median age (27 years), followed by Northland, Manawatu-Wanganui, and Bay of Plenty (all 28 years). In Southland, Waikato, West Coast, Hawke's Bay, and Taranaki the median age was 29 years. Marlborough and Auckland's median age was comparable with the national median age (30 years). The remaining regions (Nelson, Canterbury, Otago, Tasman, and Wellington) had the highest median ages (31 years). The variation in the median age of women giving birth reflects both the different age structures of the regional populations, and different childbearing patterns across the regions.

Fertility rates for regions are only produced for the census years 1996, 2001, and 2006. These can be found on the Births page on the Statistics New Zealand website.

Deaths and death rates

Deaths registered during the December 2009 year totalled 28,960, down slightly from 29,190 in 2008. The number of deaths has gradually increased over time due to population growth in the older age-groups, partly offset by longer life expectancy. Fifty years ago, in the December 1959 year, deaths numbered 21,130. The number of deaths increased over the following 10 years, to 24,160 in 1969, then more slowly to 25,340 in 1979, and 27,040 in 1989. Statistics New Zealand's mid-range population projections (series 5) indicate deaths will continue to increase, surpassing 40,000 in 2029 and 50,000 in 2042.

Between 1989 and 2009 death rates dropped significantly for all ages. Overall, deaths are increasingly concentrated in the older age groups. The median age at death in the December 2009 year was 77 years for males and 83 years for females, compared with 72 for males and 78 for females in 1989.



Age-specific death rates by five-year age group and sex for each year from 1971 are available from Statistics NZ's Infoshare database (www.stats.govt.nz/infoshare).

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 December 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 trends of populations with very different age structures. The standardised 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 December 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, respectively, in the December 1999 year.

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 trends across populations and time.

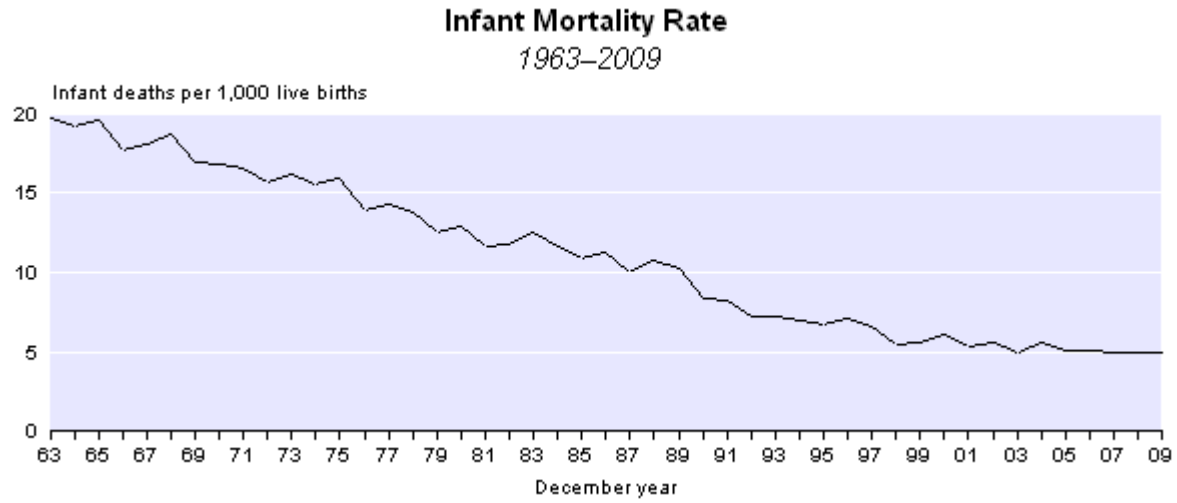
Life expectancy

According to the provisional New Zealand abridged period life table for 2007–09, a newborn girl can be expected to live, on average, 82.4 years, and a newborn boy 78.4 years. This represents longevity gains since 2006–08 of 0.2 years for both females and 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 2007–09. Since 1975–77, life expectancy at birth has increased by 6.9 years for females and 9.4 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. Complete life tables present mortality measures for each single year of age, while abridged life tables present mortality measures for age groups. The latest complete life tables, in the New Zealand Life Tables: 2005–07 report (Statistics New Zealand, 2009), 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 December 2009 year, the number of infant deaths (under one year of age) registered in New Zealand totalled 310. The infant mortality rate (infant deaths per 1,000 live births) has dropped over the last 40 years. In the December 2009 year, the infant mortality rate was 4.9 per 1,000, down from 5.6 in the December 1999 year, and 16.9 in 1969. The Māori infant mortality rate was 7.2 per 1,000 in the December 2009 year, down from 22.2 in 1969.



Neonatal deaths (under four weeks of age) made up 57 percent of infant deaths in the December 2009 year. The neonatal mortality rate (neonatal deaths per 1,000 live births) was 2.8 in 2009, down from 10.9 in 1969. The post-neonatal mortality rate (infant deaths over 27 days of age per 1,000 live births) also dropped, from 6.1 in 1969, to 2.1 in 2009.

Australia has also experienced a drop in infant mortality rates in the last decade. In the December 1998 year, New Zealand's infant mortality rate was 5.5 per 1,000 live births, compared with 5.0 per 1,000 in Australia. By 2008, New Zealand's infant mortality rate had dropped to 5.0 per 1,000 and Australia's rate had dropped to 4.1 per 1,000. (The 2008 data is the most recent available for Australia.)

England and Wales (4.8 per 1,000 live births) had a similar infant mortality rate to New Zealand's in 2008. However, a number of other low-fertility countries had lower infant mortality rates, for example Sweden (2.5), Finland (2.6), Norway (2.7), France (3.6), and Denmark (4.0).

There were 380 stillbirths in the December 2009 year. This corresponds to 6.1 stillbirths per 1,000 births (live and stillbirths combined).

Regional deaths and life expectancy

During the December 2009 year, the Auckland region had the highest number of deaths (7,390). 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.

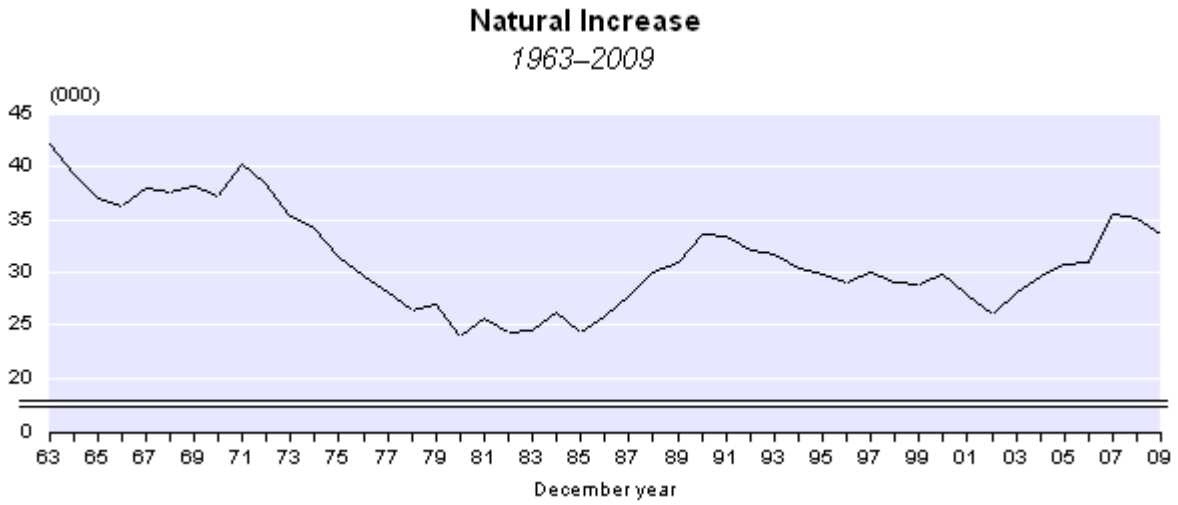
The New Zealand Life Tables 2005–07 report includes the latest information from abridged life tables for regions. The highest life expectancy during 2005–07 was in the Auckland region, for both males (79.4 years) and females (83.2 years). Other regions where life expectancy exceeded the national average were Wellington, Tasman, Nelson (males only), Canterbury, and

Otago. The 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 the 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 33,580 in the December 2009 year, down from 35,160 in the December 2008 year. The rate of natural increase was 7.8 per 1,000 mean estimated resident population in the December 2009 year. The 2009-base mid-range national population projections (series 5) show that natural increase is likely to decline over the next 50 years, dropping to 5,500 in 2061.



All regions in New Zealand had more births than deaths in the December 2009 year. Auckland's natural increase (15,220) made up 45 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 (3,840), followed by Waikato (3,390), and Canterbury (2,960).

Final figures and revised demographic rates

The vital statistics and infant mortality rates for the December 2009 year quoted above, and contained in the appended tables, are final. Fertility rates and other death rates for the December 2009 year are provisional. For further details see 'Technical notes' in this release.

Review of vitals outputs

Statistics New Zealand has completed a review of its vitals outputs (births, deaths, marriages, civil unions, and divorces). The purpose of the review was to ensure information remains relevant and easily accessible. As a result of this review, a number of changes have been made to the vitals data available in Infoshare. (Infoshare is a free online tool that provides access to a range of time series data.)

Three new subject groups have been created with revised content. The new groups are:

- Births – VSB (replaces Vital Statistics – Births – VTB)
- Deaths – VSD (replaces Vital Statistics – Deaths – VTD)
- Marriages, Civil unions, and Divorces – VSM (replaces Vital Statistics – Marriages – VTM).

The original vital statistics groups will remain available until 30 June 2010 to allow users time to familiarise themselves with the new groups.

The following subject groups have been renamed to more clearly indicate the content of the groups:

- Demography – Fertility Measures – DFM is now Birth Rates – DFM
- Demography – Mortality Measures – DMM is now Death Rates – DMM
- Demography – Marriage Rates – DMR is now Marriage and Divorce Rates – DMR.

Additional tables are also available. For further information see Vitals data on Infoshare.

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Next release ...

Births and Deaths: March 2010 quarter will be released on 17 May 2010.

Technical notes

Births

Births data from 1991 are based on births registered in New Zealand to mothers resident in New Zealand by date of registration. Before 1991, births data are based on births registered in New Zealand to mothers resident in New Zealand and mothers visiting from overseas by date of registration. Births data exclude late registrations under section 16 of the Births, Deaths, Marriages, and Relationships 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, Marriages, and Relationships 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. 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 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. Details, including life tables 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, December year 2009
7. Age-specific death rates, 1996–2009