Health

Key Information	Why is this Useful?	What is Happening?
Life expectancy for Christchurch residents.	Life expectancy calculates the age an individual can expect to live given certain factors. This information can be used as an indicator of the health of a population.	↑ In 1996 the life expectancy of a new born baby boy in Christchurch was 73.5 years and 79.1 years for a female. This compares with 70.3 and 76.4 years for boys and girls respectively in 1986.
The infant mortality rate.	This is the number of infant deaths per 1,000 live births. It is a useful indicator of the relative health of a population.	↓ In 1997 there were 5.2 infant deaths per 1,000 live births in Christchurch City compared with 15.7 in 1988.
Major causes of death in Christchurch.	This type of data can be used to help target campaigns directed at encouraging healthy lifestyles and preventing ill-health. It may also be used to assess the success of health strategies and programmes.	● In 1997, cancer, ischaemic heart disease, and stroke were the major causes of death in Christchurch City.
Proportion of Christchurch's population who smoke regularly.	The smoking rate is a useful indicator of the relative health of the population because of its links to a variety of cancers, chronic bronchitis and emphysema, lower birth weight and increased health problems in infants.	● In 1996, 50,334 or 20 per cent of Christchurch residents aged 15 years and over smoked cigarettes regularly (ie one or more per day).

Other Related Sections: Population Growth, Profile of Christchurch Residents, Part 2: The City's Natural and Physical Environment.

The following section provides information on the health of Christchurch residents. It focuses on three traditional quantitative indicators of health: life expectancy, infant mortality and major causes of death. It also includes information from the 1996 Population Census relating to smoking.

Life Expectancy

Medical advances, improvements in preventative health care and lifestyle changes have resulted in New Zealanders living longer. Before the mid-1960s much of the improvement in life expectancy was due to declining infant mortality rates. This has continued to be a major factor in the last three decades. Significant gains have also resulted from falling death rates at older ages.

At a national level, life expectancy at birth has increased substantially during this century, although marked variations remain between men and women[14]. Between 1995 and 1997 the life expectancy for males at birth was 74.3 years, seven years longer than those born between 1950 and 1952. For females, life expectancy increased by eight years during this period to over 79.6 years.

Although New Zealand ranks among the top 20 countries worldwide in terms of longevity, there is some way to go before New Zealand's life expectancy reaches the high levels achieved by other developed countries such as Japan, Hong Kong and Sweden (Table 1.16).

[14] It is interesting to note that the gender gap in life expectancy at birth has narrowed. Overseas research has identified changes in risk factors such as smoking and alcohol consumption as possible contributors.

Table 1.16 International Comparison of Life Expectancy at Birth (in Years)

Country	Year / Period	Male	Female	Difference
Japan	1996	77.0	83.6	6.6
France(1)	1996	74.0	81.9	7.9
Hong Kong(1)	1997	76.4	81.9	5.5
Switzerland(1)	1996	75.7	81.9	6.2
Canada(1)	1996	75.7	81.5	5.8
Sweden(1)	1996	76.5	81.5	5
Australia	1994-96	75.2	81.1	5.9
Norway(1)	1996	75.1	81.1	6
Finland	1996	73.0	80.5	7.5
Netherlands	1996	74.7	80.4	5.7
Austria	1996	73.9	80.2	6.3
Germany(1)	1996	73.3	79.8	6.5
England and Wales	1994-96	74.4	79.6	5.2
New Zealand	**1995-97**	**74.3**	**79.6**	**5.3**
United States(1)	1996	72.7	79.4	6.7
Northern Ireland	1994-96	73.3	78.7	5.4
Portugal(1)	1996	71.0	78.5	7.5
Denmark	1995-96	72.9	78	5.1
Scotland	1994-96	72.1	77.6	5.5

(1) Provisional.
Source: Statistics New Zealand.

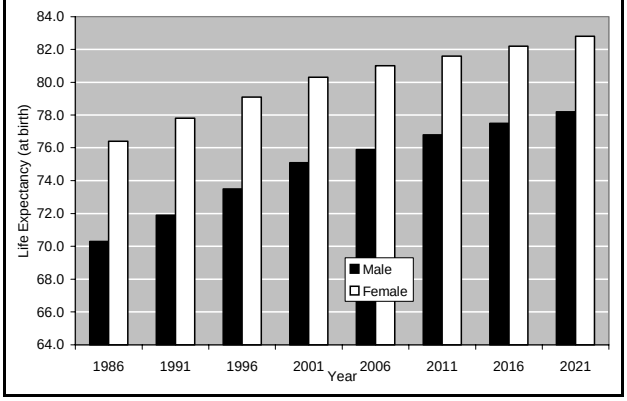
In 1996 life expectancy at birth in Japan was 83.6 years for females and 77 years for males. A new-born Japanese baby can therefore expect to outlive its New Zealand counterpart by 3.4 years (Table 1.16).

Life expectancy has increased markedly in Christchurch City. In 1996 the life expectancy of a new-born baby boy was 73.5 years and 79.1 years for a baby girl. This compares with 70.3 and 76.4 years for boys and girls respectively in 1986.

Over the next 20 years the life expectancy of people born in Christchurch is expected to steadily increase. According to latest population projections, a male born in 2021 can expect to live about 78.2 years and a female to around 82.8 years (Figure 1.18).

It is important to note, however, that increasing longevity may not necessarily mean an increase in disability-free life. Ageing is generally associated with increasing risk of disability. As a person ages there is both a higher incidence of chronic disease and a greater risk of injury. This has major implications for health and social services providers in the future. These will not only have to make provision for a large elderly population but one with potentially greater needs.

Fig 1.18 Historical and Projected Life Expectancy at Birth



Source: Statistics New Zealand, Christchurch City Population Projections (Adjusted 1996 Base).

Infant Mortality[15]

The infant mortality rate[16] is recognised as being a sensitive indicator of social and economic conditions and is often used to make international comparisons, especially in less developed countries.

Infant mortality in New Zealand has steadily declined over the last three decades from a rate of 22.6 per 1,000 total births in 1960 to 16.7 in 1970, 13.0 in 1980 and 6.8 in 1997. However, New Zealand's rate is still notably higher than a number of other developed countries. Some of these have achieved a rate of 4.0 per 1,000 live births, or about 40 per cent below the current New Zealand level (Table 1.17).

Table 1.17 International Comparisons of Infant Mortality

Country	Year	Infant Mortality Rate (1)
Finland	1996	4.0
Hong Kong(2)	1997	4.0
Norway	1996	4.0
Sweden	1996	4.0
Japan	1996	4.5
Switzerland(2)	1996	4.8
France	1996	5.0
Germany(2)	1996	5.0
Austria	1996	5.1
Netherlands(2)	1996	5.3
Denmark	1996	5.6
Northern Ireland(2)	1996	5.8
Canada	1995	6.1
England and Wales(2)	1996	6.1
Scotland(2)	1996	6.2
New Zealand	**1997**	**6.8**
Portugal	1996	6.9
United States	1996	7.2

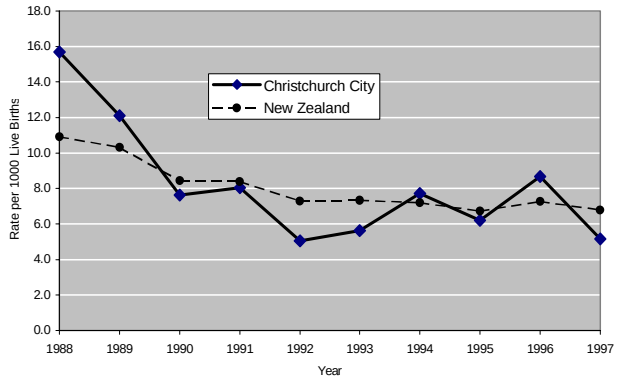
(1) Deaths of Infants under one year of age per 1,000 live births.
(2) Provisional

Like New Zealand, the infant mortality rate in Christchurch has declined. In 1997 the death rate was 5.2 deaths per 1,000 live births, compared with 15.7 deaths per 1,000 live births recorded in 1988 (Figure 1.19).

The primary cause of death for children aged under one year (in both Christchurch and New Zealand) between 1988 and 1997 was sudden infant death syndrome (SIDS), also known as 'cot death'. Despite being the major cause of infant death, the number of deaths per 1,000 live births due to SIDS generally declined during this period both in Christchurch and at a national level (Figure 1.20). This overall decline coincided with a major educational campaign on known factors associated with SIDS.

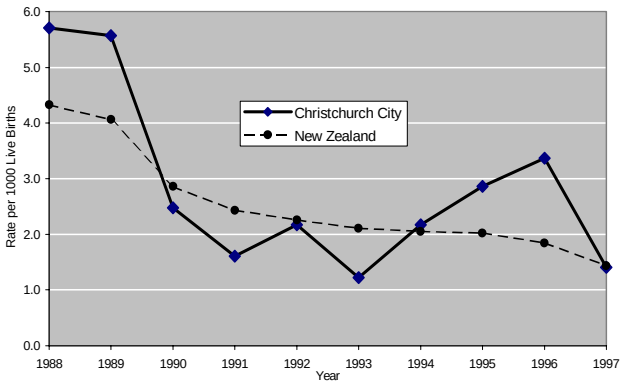
[15] Infant death is defined as a live born infant dying before the first year of life is completed. Infant deaths consist of early neonatal deaths, late neonatal deaths and post-neonatal deaths.
[16] Deaths of children under one year per 1,000 live births.

Fig 1.19 Infant Deaths per 1,000 Live Births



Source: Ministry of Health Information Service, Mortality Data.

Fig 1.20 Infant Death per 1,000 Live Births from SIDS (Children Aged less than One Year)

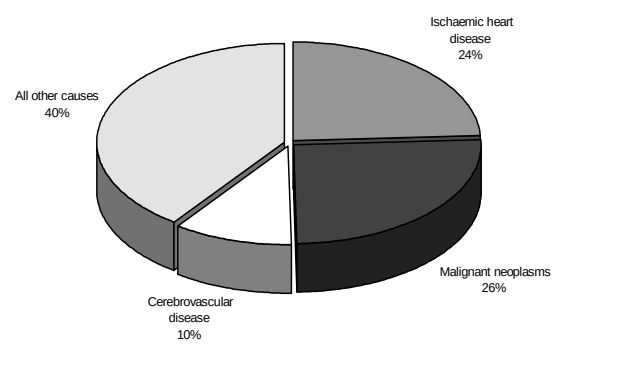


Source: Ministry of Health Information Service, Mortality Data.

Major Causes of Death

The three leading causes of death in Christchurch, as in the rest of New Zealand, are malignant neoplasm (cancer), ischaemic heart disease and cerebrovascular disease (stroke). In 1997 these causes collectively accounted for almost 60 per cent of all deaths in the City (Figure 1.21).

Fig 1.21 Major Causes of Death, 1997



Source: Ministry of Health Information Service, Mortality Data.

Each age group has its own characteristic health problems causing death. Mortality statistics relating to Christchurch City show that death through suicide and motor vehicle accidents is higher for younger age groups, while the incidence of death from ischaemic heart disease, cancer and strokes increases as people get older (Figure 1.22 and 1.23).

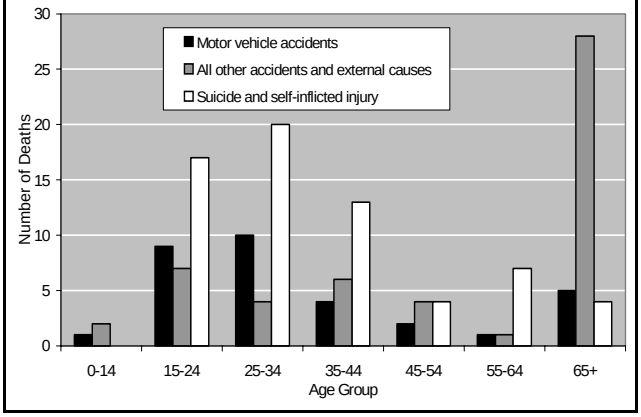
In 1997 suicide and self-inflicted injury was the leading cause of death in the 15-24 and 25-34 year age groups. Motor vehicle accidents were also a major cause of death for these age groups. Significantly more males died from these causes than females.

Cancer was the major cause of death for the 35-44 age group, followed by suicide and self-inflicted injury and accidental causes. Christchurch residents, aged 45-64 years, died predominantly from cancer and ischaemic heart disease.

For people aged 65 years and over, ischaemic heart disease and cancer were the main causes of death, followed by stroke. Death from respiratory disorders and accidental causes was also comparatively high for this group, especially among the very old.

The number of deaths from ischaemic heart disease was higher for men in the 65-74 age group, but this trend was reversed in the 75 years and over age group, reflecting gender differences in life expectancy.

Fig 1.22 Deaths from Accidents and Suicide by Age, 1997

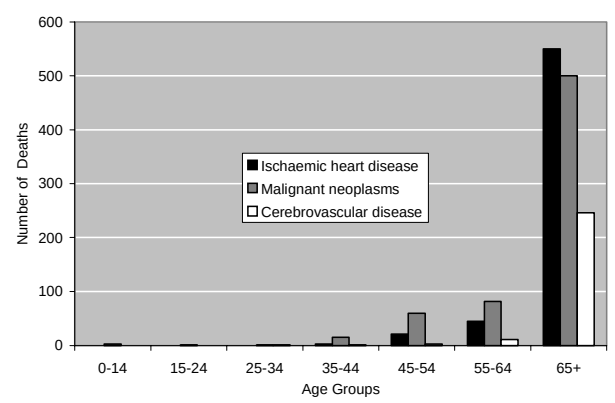


Source: Ministry of Health Information Service, Mortality Data.

People Who Smoke Regularly

Smoking is estimated to be the largest single preventable cause of disease and is a major causal factor in deaths from lung cancer, chronic bronchitis and emphysema. It is also linked to a number of other cancers and is associated with lower birth weight and increased health problems in infants[17] .

Fig 1.23 Deaths from Selected Causes by Age, 1997



Source: Ministry of Health Information Service, Mortality Data.

According to the 1996 Population Census, 50,334 Christchurch residents aged 15 years and over - or 20 per cent of adults - smoked cigarettes regularly (one or more per day). This percentage was slightly lower than the national figure (Table 1.18).

Of those who said that they did not currently smoke regularly, 51,570 (27.5 per cent) indicated that they were once regular smokers. This compares with 28.5 per cent of adults New Zealand-wide who were former smokers.

Table 1.18 Residents who Smoke, 1996

	Christchurch City	% of Popn Aged 15 years +	New Zealand	% Popn Aged 15 years +
Smoke Regularly	50,334	20.2	609,297	21.9
Do Not Smoke Regularly	187,758	75.4	2,016,489	72.4
Not Specified	10,944	4.4	160,434	5.8
Total	249,036	100.0	2,786,220	100.0
Ex Smokers ie non smokers who once smoked	51,570	27.5 % of non smokers	565,722	28.1 % of non smokers

Source: Statistics New Zealand, Census of Population and Dwellings, 1996.

[17] Statistics New Zealand, New Zealand A Regional Profile: Canterbury, 1999.