

Stroke

Introduction

Stroke refers to a sudden interruption of the blood supply to the brain, which can cause permanent damage. The interruption of the blood supply can be caused by either blood clots (ischaemic stroke) or bleeding in the brain (haemorrhagic stroke). The majority of strokes are due to blood clots. Modifiable risk factors for stroke include high blood pressure, high blood cholesterol, smoking, high alcohol consumption, overweight and obesity, and physical inactivity (Smith et al 2005).

What were the survey questions?

In the 2006/07 New Zealand Health Survey all adult participants were asked if they had ever been told by a doctor that they had had a stroke. Mini-strokes (transient ischaemic attacks) were excluded.

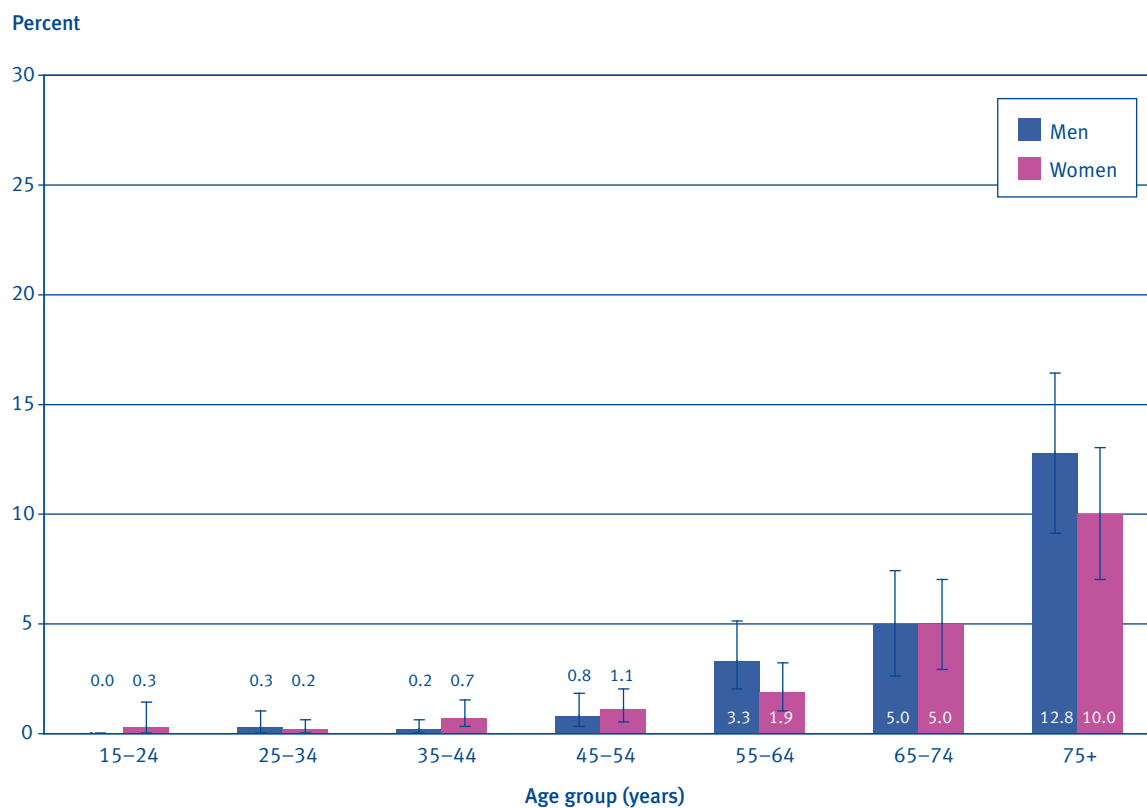
Prevalence of stroke for adults

One in 56 adults (1.8%, 1.6–2.1) had ever experienced a stroke (excluding transient ischaemic attack or mini-stroke). This equates to 57,700 adults. There was no significant difference in the age standardised prevalence of stroke between men (1.5%, 1.1–1.8) and women (1.4%, 1.1–1.6).

Prevalence of stroke, by age group

The prevalence of stroke increased with age. One in ten people aged 75 years or older had ever been diagnosed with a stroke (Figure 3.10).

Figure 3.10: Stroke for adults, by age group and gender (unadjusted prevalence)



Source: 2006/07 New Zealand Health Survey

Prevalence of stroke, by ethnic group

Table 3.7 gives an indication of the burden of stroke in New Zealand's main ethnic population groups.

Table 3.7: Stroke for adults, by ethnic group (unadjusted)

Ethnic group	Prevalence (95% CI)	Number of adults
European/ Other	1.9 (1.6-2.2)	48300
Māori	1.8 (1.2-2.4)	6400
Pacific	2.1 (1.1-3.7)	3400
Asian	1.0 (0.5-1.7)	2700

Source: 2006/07 New Zealand Health Survey

Note: Total response standard output for ethnic groups have been used.

Due to large sample errors created by the small number of people with stroke in the survey sample, it was difficult to see statistically significant differences by ethnic group, so the rate ratios have not been presented.

Prevalence of stroke, by neighbourhood deprivation

There were no significant differences in the prevalence of stroke between NZDep2006 quintile 1 (least deprived) and quintile 5 (most deprived) for both men and women.

Prevalence of stroke, by DHB area

There were no significant differences in the prevalence of stroke by DHB area, with the exception of Waitemata DHB, where the prevalence was lower than the total national rate (Table 3.8).

Table 3.8: Stroke for adults, by DHB area (unadjusted)

DHB area	Prevalence (95% CI)	Number of adults
Northland / Tairāwhiti / Hawke's Bay / Lakes / Whanganui	2.5 (1.8–3.2)	9300
Waitemata	0.9 (0.4–1.7) –	3400
Auckland	2.1 (1.2–3.5)	6900
Counties Manukau	1.5 (0.9–2.3)	4800
Waikato	1.8 (1.1–2.5)	4700
Bay of Plenty / Taranaki / MidCentral	2.2 (1.5–2.9)	7700
Wairarapa / Hutt Valley / Capital and Coast	1.5 (0.9–2.5)	5200
Canterbury	2.4 (1.5–3.5)	8800
Nelson Marlborough / West Coast / South Canterbury / Otago / Southland	1.7 (1.0–2.9)	6900
New Zealand total	1.8 (1.6–2.1)	57700

Source: 2006/07 New Zealand Health Survey

Notes: Estimates indicated with a + are significantly higher than the national rate, and estimates indicated with a – are significantly lower than the national rate. Data are based on direct survey estimates and could be confounded by different population characteristics in each DHB. Due to small sample size, some DHB areas have been combined. Survey population is the estimated resident population living in permanent private dwellings at 31 June 2007.

Time trends in stroke prevalence

Between 2002/03 and 2006/07 there was no change in the prevalence of stroke for adults, adjusted for age.

Treatment for stroke

One in three adults who had experienced a stroke (29.1%, 20.8–37.5) were taking aspirin regularly. Aspirin thins the blood to reduce the risk of further stroke (Antiplatelet Trialists' Collaboration 1994). One in nine adults who had had a stroke (10.7%, 6.6–16.3) were using exercise or rehabilitation (speech therapy, occupational therapy or physiotherapy) for treatment of their stroke.

One in three adults who had had a stroke (32.6%, 25.6–39.6) did not use anything to treat the effects of a stroke or to prevent further stroke.