

Osteoporosis

Introduction

Osteoporosis is the thinning of the bones resulting from a loss of bone density. It occurs when not enough new bone is formed, too much bone is reabsorbed, or both. Osteoporosis causes bones to become brittle and fragile, which can lead to fractures even in the absence of injury. Osteoporosis usually develops slowly and is most common in older people.

Women are particularly prone to osteoporosis as the drop in oestrogen that occurs at menopause results in accelerated bone loss. Other modifiable risk factors include tobacco smoking, low body weight, low calcium intake, heavy alcohol consumption, low levels of weight-bearing physical activity, and the long-term use of some medications, including oral steroids (Lindsay and Cosman 2005).

What were the survey questions?

In the 2006/07 New Zealand Health Survey adult participants were asked if they had ever been told by a doctor they have osteoporosis; that is, thin or thinning bones. If so, they were then asked the age they were diagnosed and if they currently have any treatment for osteoporosis.

Osteoporosis is rare for children. The figures presented here are for the adult population only.

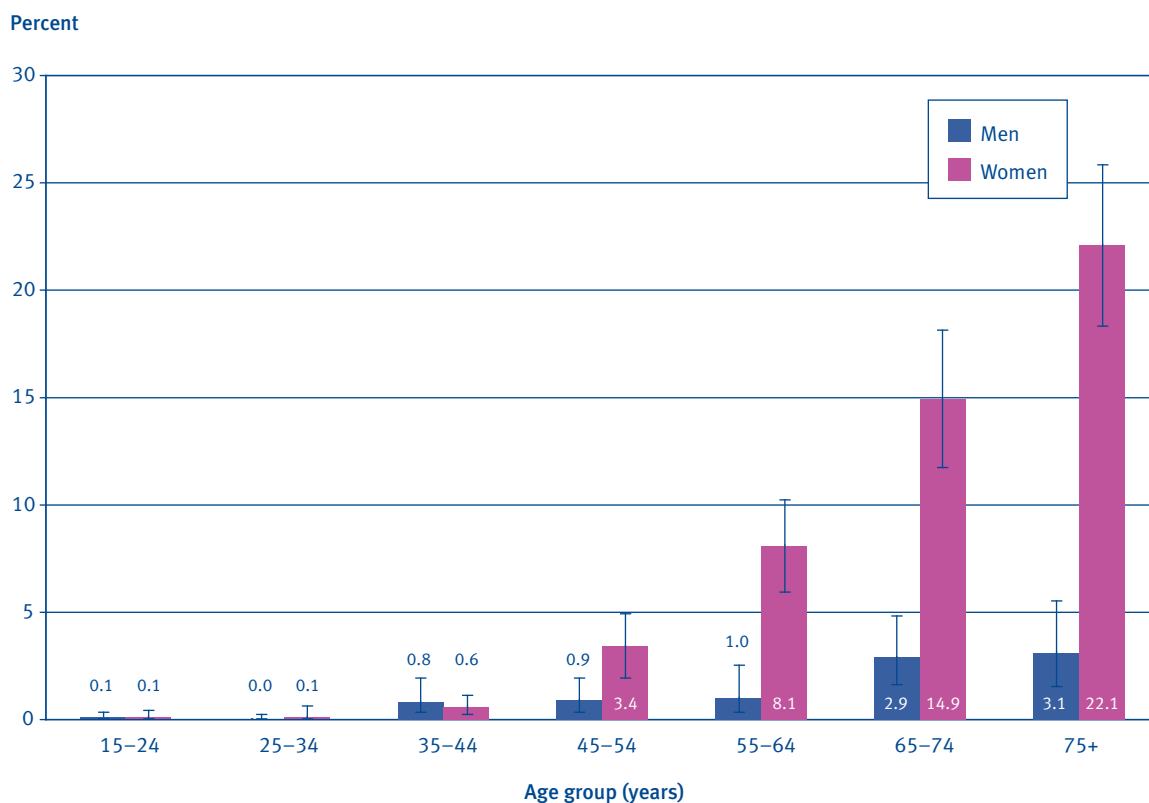
Prevalence of osteoporosis for adults

One in 34 adults (2.9%, 2.6–3.2) had been told by a doctor they have osteoporosis. This equates to 90,000 adults. The age standardised prevalence of osteoporosis was much higher in women (3.5%, 3.1–4.0) than in men (0.8%, 0.5–1.0).

Prevalence of osteoporosis, by age group

In women the risk of osteoporosis increased rapidly as age increased (Figure 3.31). One in five women aged 75 years and over had been diagnosed with osteoporosis (22.1%, 18.3–25.8). In men this increasing relationship was present, but was not statistically significant.

Figure 3.31: Osteoporosis for adults, by age group and gender (unadjusted prevalence)



Source: 2006/07 New Zealand Health Survey

Prevalence of osteoporosis, by ethnic group

Table 3.20 gives an indication of the burden of osteoporosis in New Zealand's main ethnic population groups.

Table 3.20: Osteoporosis for adults, by ethnic group (unadjusted)

Ethnic group	Prevalence (95% CI)	Number of adults
European/ Other	3.2 (2.8–3.6)	81400
Māori	1.5 (1.1–1.9)	5400
Pacific	1.0 (0.4–2.1)	1800
Asian	1.4 (0.8–2.2)	4000

Source: 2006/07 New Zealand Health Survey

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

Due to large sample errors created by the small number of people with osteoporosis in the survey sample, it was difficult to see statistically significant differences by ethnic group, so a rate ratio graph has not been presented.

Prevalence of osteoporosis, by neighbourhood deprivation

There was no difference in the prevalence of osteoporosis between NZDep2006 quintile 1 (least deprived) and quintile 5 (most deprived) for both men and women.

Treatment for osteoporosis

Two out of three adults with osteoporosis (65.9%, 60.6–71.3) were using medication for osteoporosis. One in eight adults with osteoporosis (12.3%, 8.4–16.1) were treated with exercise or physiotherapy without any medical treatment from injections, tablets or pills.

One in four adults with osteoporosis (25.7%, 21.3–30.1) reported not using any treatment.

Time trend in prevalence of osteoporosis

Between 2002/03 and 2006/07 there was no significant change in the prevalence of osteoporosis for men (0.7%, 0.4–1.1 in 2002/03 and 0.8%, 0.6–1.1 in 2006/07) or women (2.9%, 2.4–3.4 in 2002/03 and 3.5%, 3.0–3.9 in 2006/07).

Time trends for Māori are not shown due to small numbers.