



This information sheet summarises the key points from the 2009 report: *Costs of skin cancer to New Zealand*.

Skin cancer costs the New Zealand health system around \$57 million a year. Much of this cost could be prevented, yet skin cancer prevention continues to have a low priority.

## Types of Skin Cancer

Skin cancers include:

- **Melanoma:** the least common but most serious form of skin cancer. Melanoma can spread rapidly and is life threatening if left untreated.
- **Squamous cell carcinoma (SCC):** easily treated if found early, but can be fatal if left untreated.
- **Basal cell carcinoma (BCC):** the most common and least dangerous skin cancer.

## Skin cancer rate

New Zealand and Australia have the highest melanoma incidence rates in the world, around three times the rates in other countries, including Europe and the Americas.

In New Zealand there are around 2000 new melanoma cases, and 250 deaths from melanoma annually. In 2007, melanoma was the fourth most commonly registered cancer, accounting for 11% of all new cancer registrations.

While cases of NMSC are not required to be registered, deaths from non-melanoma skin cancers (NMSC) are registered. There are around 100 deaths from NMSC, and an estimated 67,000 new cases each year. Therefore, skin cancer is clearly the most common cancer in New Zealand, compared to a total of about 16,000 registrations for all other new cancers.

Most skin cancer cases occur among older people. But

melanoma has a significantly lower average age of incidence, and mortality, than NMSC. In 2007, among people aged 25 to 44 years, melanoma was the leading cancer among males, while among females aged 25 to 44 years it was the second most common cancer.

## Hospital discharges for skin cancer

From 2004-2007, there was an average of 9,135 discharges annually from public hospitals for melanoma and NMSC. Melanoma accounted for 13.4 % and NMSC 86.6%. Therefore, NMSC hospital discharges outnumbered melanoma discharges by 6.5 to 1.

## Costs of skin cancer treatment

Skin cancer is the most costly cancer in New Zealand. Although NMSC can frequently be successfully treated, the large number of cases results in significant costs to the health system. The annual cost of treating skin cancers in hospital is about \$28.9 million excluding GST (in 2007/08 prices). In addition to this, treating skin cancer outside of hospital is estimated to cost around \$28.2 million, excluding GST, (in 2007/08 prices). These costs include GP consultations, lab tests, specialist (dermatologists and plastic surgeons) consultations and procedures, pharmaceuticals, residential and hospice care. This means the total direct health system costs of skin cancer to New Zealand are approximately \$57.1 million annually.

A number of methods were used to calculate these costs to produce the best possible information; however the figures may be conservative. More precise estimates of cost could be made if there was better information available e.g. on the incidence of NMSC and the actual costs of skin cancer treatment in New Zealand.

Financial costs for people with skin cancer and their families are significant. These costs include travel and accommodation to receive treatment; loss of income while receiving care; and non-medical costs during illness. Intangible costs include stress and the loss of enjoyment of life.

In discussing these costs to the health system, it should be remembered that the greatest cost is premature death due to skin cancer. It is calculated in the report that 4,741 potential years of life were lost in 2006, due to premature deaths from skin cancer. In addition these persons if alive would have made an economic contribution through employment of an estimated additional NZ\$66 million in 2006 (in 2007/08 prices).

Therefore, the total annual economic costs to New Zealand of skin cancer in 2006 was NZ\$123.1 million, (in 2007/08 prices). The size of these costs, and the deaths and ill-health caused by skin cancer, show the importance of maintaining and improving preventive, early diagnosis, and treatment.

## Skin Cancer Preventive Expenditures in New Zealand

Prevention of skin cancer includes outlays of over \$2 million annually on community preventive measures, by organisations and agencies such as the Cancer Society and the Health Sponsorship Council.

Other sources of expenditure include individual expenditures on sunscreen, sun-hats, etc; and promotion of such products by their manufacturers. Data supplied by A C Nielsen Ltd. shows that all supermarket sales of sunscreen for the six months to 22nd March 2009 were \$10.6 million, and \$9.7 million for the same period a year earlier (sales in remaining months are minimal). However, a large amount of this expenditure would be to avoid sunburn rather than, or as well as, consciously reducing skin cancer risk.

## Use of estimates for evaluating preventive campaigns

New Zealand now has an 'order of magnitude' estimate of the incidence of NMSC, and also of the cost of treatment of skin cancer. This new information should help with the evaluation of public health campaigns aimed at reducing the incidence of skin cancer.

## Summary Table: Costs of Skin Cancer and Related Conditions to New Zealand 2006.

### Skin Cancer in New Zealand (\$ values in 2007/08 prices)

#### Key Statistics

	Melanoma	Non-melanoma	Total
New cases each year	2,017 (in 2007)	67,000 (estimate)	69,000
Deaths (2007)	292	122	371
Life-years lost in 2006 due to skin cancer in years prior to and including 2006.	3,811	930	4,741
Potential Years of Life Lost per Skin Cancer Death. (2004)	17.4	9.9	15.5

#### Economic costs (exl GST: 2007/08 prices)

	Melanoma	Non-melanoma (including related neoplasms)	
Health care costs (NZ \$mn; excl GST)	\$5.7 mn	\$51.4mn	\$57.1 mn
Lost production (NZ \$mn)	\$59.3 mn	\$ 6.7 mn	\$66.0 mn
Total Economic Costs			\$123.1mn

Source: O'Dea, D. (2009). The Costs of Skin Cancer to New Zealand. A Report to The Cancer Society of New Zealand. October 2009.

A full copy of the report available at:  
<http://bit.ly/1Qbvds9>