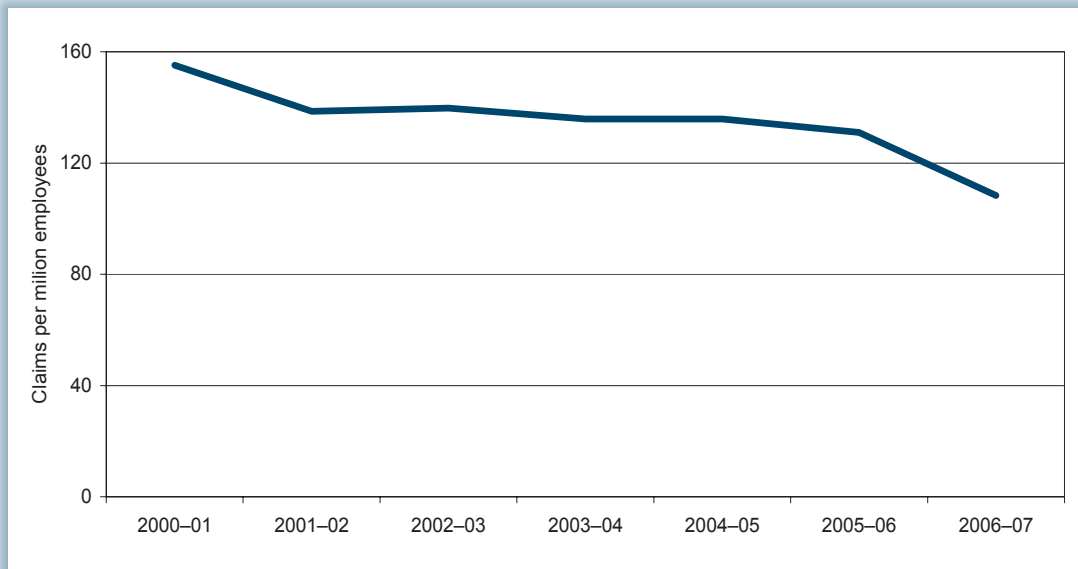


Workers' compensation claims for contact dermatitis: claims per million employees



Source: National Dataset for Compensation Based Statistics (NDS).

The incidence of compensation claims for contact dermatitis declined considerably between 2005-06 and 2006-07: from 131 to 108 claims per million employees. This decrease follows five years during which the rate remained relatively static.

students attending vocational training institutions about occupational contact dermatitis, to raise awareness about appropriate methods of prevention, and to reinforce safe work practices.

Further information

Occupational Contact Dermatitis in Australia, ASCC, 2006.

Collecting surveillance data on risks for occupational contact dermatitis, ASCC, 2008.

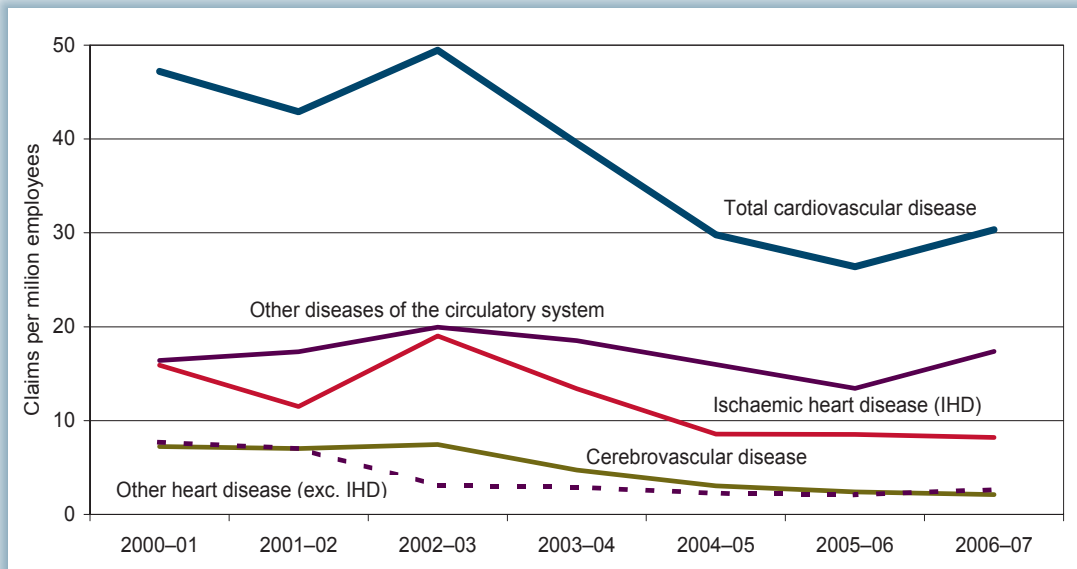
Guidance on the Prevention of Dermatitis Caused by Wet Work, ASCC, 2005.

Dermatitis: The facts starting from scratch, NSW Workcover, 2002.

Data notes

Other and unspecified dermatitis or eczema, has been included in the occupational contact dermatitis category in order to include all compensated contact dermatitis claims.

Workers' compensation claims for cardiovascular diseases: claims per million employees



Source: National Dataset for Compensation Based Statistics (NDS).

From 2000-01 to 2006-07 the overall rate of workers' compensation claims for diseases of the circulatory system declined from 47 to 30 claims per million employees. Underlying rates for ischaemic heart disease (IHD); cerebrovascular disease; and other heart disease (exc. IHD) also declined over the period.

Further information

Work-related Cardiovascular Disease, Australia, ASCC, 2006.

Data notes

Data for this indicator are drawn from the National Data Set for Compensation Based Statistics (NDS). This indicator is based on *all* compensation claims rather than just *serious* claims, as presented in earlier reports (for further details see 'Changes since the previous report', page vii).

Because there are few circumstances in which cardiovascular disease in an individual can be confidently connected to occupational exposures, workers' compensation data probably undercounts incidents of work-related cardiovascular disease in Australia. Nonetheless, compensation data provides an indication of shifts in incidence over time.

8

Occupational Cancers

The condition

Cancer is a term which groups diseases characterised by the abnormal division of cells. These new cells (neoplasms) can invade nearby tissues and spread throughout the body via the circulatory system and grow in major organs (metastasise).

Included under occupational cancer is mesothelioma, a typically fatal cancer which occurs in some people exposed to asbestos. It usually occurs 20 to 40 years after exposure to asbestos. Other occupational cancers include skin cancer (melanoma), usually related to ultra-violet light exposure; and neoplasms of the lymphatic and haematopoietic tissue; which include leukemia and lymphoma.

Known causes and impacts

Current theories on cancer suggest that its cause is a multi-step process arising from a combination of factors that vary by nature and degree of exposure to carcinogens over time, mediated by individual behaviour, as well as genetic factors. There are a number of known carcinogens, however the specific toxicity, potency and latency periods associated with many agents are unknown. Further, given the long latency period associated with many carcinogenic exposures, workplace exposures and the onset of a specific cancer may not be readily associated.

Occupations with the highest rates of workers' compensation claims over the three-year period 2004–05 to 2006–07 for cancers included Electrical distribution tradespersons; Freight & furniture handlers (these include Stevedores); Train drivers & assistants; Communications tradespersons; Carpentry & joinery tradespersons; Gardeners; Building & construction managers; Plumbers; and Electricians.

Preventative policy

The International Agency for Research on Cancer (IARC — <http://www.iarc.fr/>) has identified nearly 400 agents that are carcinogenic or potentially carcinogenic to humans. Elimination is the preferred method of dealing with known carcinogens used in the workplace (an example is the ban on the import and use of most asbestos products in Australia), usually by replacing the carcinogen with a safer alternative.

Skin cancer is the most commonly diagnosed cancer in Australia, and outdoor workers are at particular risk. Non-government organisations, such as the Cancer Council, publish extensive information on protection from excessive ultra-violet radiation exposure. All Australian work health and safety jurisdictions publish guidance information on protection from exposure to the sun for outdoor workers: in most jurisdictions publications are provided to both highlight the employer's responsibilities, and advise employees on skin cancer and personal protection from exposure.

Further information

Occupational Cancers in Australia, ASCC, 2006.

Mesothelioma in Australia: Incidence 1982 to 2006, Deaths 1997 to 2006, Safe Work Australia, 2010.

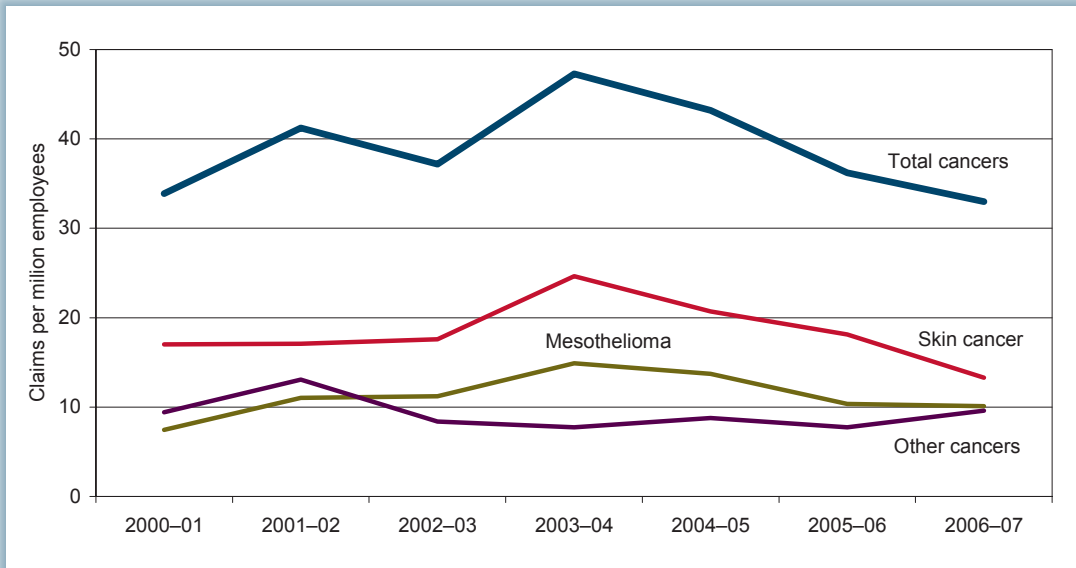
National Model Regulations for the Control of Scheduled Carcinogenic Substances, NOHSC, 1995.

Guidance note for the protection of workers from the ultra-violet radiation in sunlight ASCC, 2008.

Data notes

Because claims for compensation for some cancers, including mesothelioma, can also be made through the New South Wales Dust Diseases Board and diagnosis of cancers can rarely be confidently connected to occupational exposures, it is likely that workers' compensation data greatly understate the actual incidence of work-related cancer.

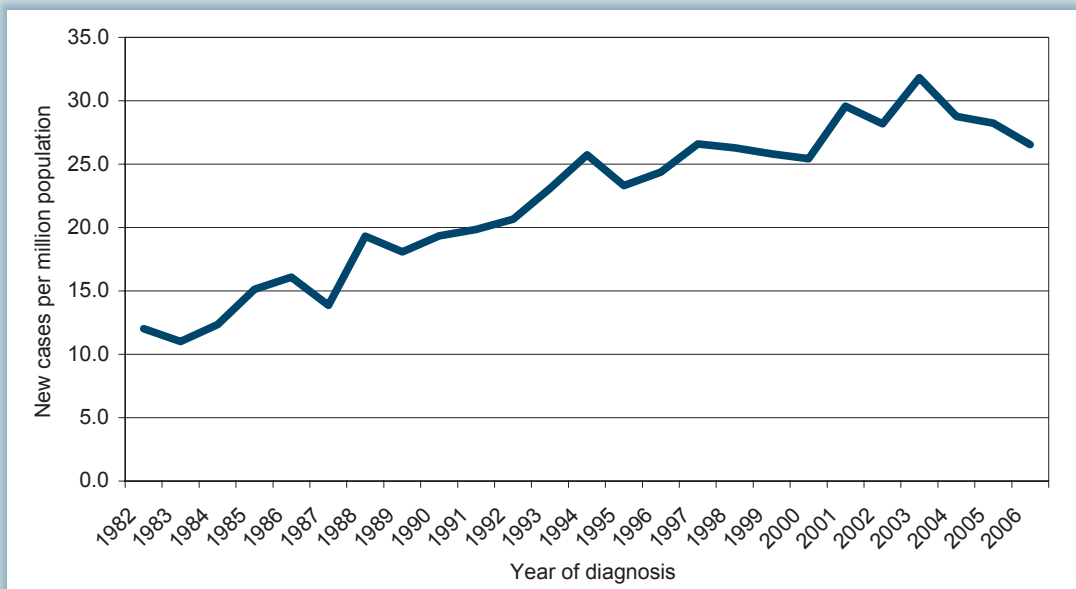
Workers' compensation claims for cancers: claims per million employees



Source: National Dataset for Compensation Based Statistics (NDS).

The overall incidence rate of workers' compensation claims for occupational cancer peaked in 2003-04 but by 2006-07 had returned to the level recorded in 2000-01. This reflected a similar pattern in the incidence rates for skin cancers and mesothelioma (see Data notes) while the incidence rate for other cancers has remained relatively stable.

New diagnosis of mesothelioma: notifications per million population



Source: Australian Institute of Health and Welfare, ACIM workbook on mesothelioma, age-standardised rates.

The highest recorded incidence rate of new cases of mesothelioma notified to cancer registries was 32 new cases per million population in 2003. Slight declines in 2004 (29), 2005 (28), and 2006 (27) may indicate that the rates are declining. However, due to the long latency of this disease and the exposure periods to asbestos it has been estimated that this rate will continue to increase, reaching a peak in the next 10 to 15 years.

Explanatory notes

Several data sets were examined in order to collect work-related disease information for this publication. The data sources used are the:

- > National Data Set for Compensation Based Statistics (NDS)
- > National Hospital Morbidity Database (NHMD)
- > National Notifiable Disease Surveillance System (NNDSS), and
- > National Cancer Statistics Clearing House (NCSCH).

A summary of the data sources used for each disease category is presented in Table 1, with further information on these sources detailed below.

Table 1 Summary of data sources

Disease	Indicator	Data Source/s
Musculoskeletal disorders	Incidence of musculoskeletal claims per million employees	NDS
Mental disorders	Incidence of mental disorders claims per million employees	NDS
Noise-induced hearing loss	Incidence of noise-induced hearing loss per million employees	NDS
Infectious disease	Incidence of infectious disease per million employees	NDS
	Notification rate of selected zoonoses per million adults	NNDSS
Respiratory disease	Incidence of respiratory disease claims per million employees/ persons	NDS
	Hospitalisation rate of asbestosis, legionnaires and other respiratory diseases due to substances, cases per million adults	NHMD
Contact dermatitis	Incidence of contact dermatitis per million employees	NDS
Cardiovascular disease	Incidence of cardiovascular claims per million employees	NDS
Cancer	Incidence of cancer claims per million employees	NDS
	Incidence of new mesothelioma cases per 100 000 population	NCSCH

National Data Set for Compensation Based Statistics (NDS)

The NDS data set used in this report comprise all accepted workers' compensation claims lodged in the reference year. Temporary claims involving only medical costs are not included in the NDS dataset. Claims that fall within jurisdiction excess periods may be under-reported. The excess period is the time the employer must fund a compensation claim before being covered by the workers' compensation authority. Although employer-funded claims should be reported to the workers' compensation authority, they are known to be under-reported.

NDS data are based on information received annually from Australian workers' compensation authorities. Supplied data includes both new data, for the most recent year available, and updated data for the 5 years prior. Because some claims lodged in the most recent year may not be accepted until the following year, the number of accepted claims reported lodged in the most recent year is likely to increase by about 3% when updated. Because of these issues, only updated data is used for time series comparison in this publication.

The NDS is the only national data set that provides information on workers' compensation claims that involve work-related disease. For a claim to be accepted, the workers' compensation authorities require that the connection between workplace and disease be made by a medical practitioner. This may lead to considerable under-reporting of occupational disease in the NDS. The reader should also note that claims data are based on date of lodgement of claims which is usually closer to the date of diagnosis than the date of exposure. Further information on the NDS can be found on the Safe Work Australia website.

Table 2 shows the Type of Occurrence Coding System (TOOCS2.1) codes for the disease data extracted from the NDS.

Table 2: TOOCS Nature of injury/disease variables used in this report

Disease group and diseases included	NDS code	Specific Variables
Musculoskeletal disorders (limited to <i>Body Stressing</i> mechanism of injury or disease)		
Skeletal disorders	010	Fractures
	020	Fracture of vertebral column with or without mention of spinal chord lesion
	030	Dislocation
	310	Arthropathies & related disorders - disorders of the joints
	320	Dorsopathies - disorders of the spinal vertebrae & intervertebral discs
	340	Osteopathies, chondropathies & acquired musculoskeletal deformities
Muscular disorders	040	Sprains & strains of joints & adjacent muscles
	330	Disorders of muscle, tendons & other soft tissues
	450	Hernia
Mental disorders (limited to claims with <i>Mental Stress</i> mechanism of injury or disease)		
Mental disorders	910	Mental disorders
Deafness (limited to claims with <i>Long-term exposure to sound</i> mechanism of injury or disease)		
Deafness	250	Deafness
Infectious and parasitic diseases		
Intestinal infectious diseases	510	Intestinal infectious diseases
Specified zoonoses	521-525	Specified zoonoses (includes anthrax, brucellosis, Q-fever, leptospirosis & 'Other' zoonoses)
Viral diseases excluding hepatitis	540	Viral diseases excluding hepatitis, sexually transmitted diseases & Acquired immune deficiency syndrome (AIDS)
Hepatitis	550	Viral hepatitis
Other infectious diseases	530	Protozoal diseases
	560	Specified sexually transmitted diseases excluding AIDS
	561	Human Immunodeficiency virus (HIV) - AIDS
	570	Mycoses
	580	Other Infectious & parasitic diseases
Respiratory diseases		
Asthma	610	Asthma
Legionnaires disease	620	Legionnaires disease
Asbestosis	630	Asbestosis (excludes mesothelioma)
Pneumoconioses (exc. asbestosis)	640	Pneumoconioses due to other silica or silicates
	650	Pneumoconioses excluding asbestosis or silicosis
Other respiratory conditions due to substances	660	Other respiratory conditions due to substances
Other respiratory disease	670	Chronic bronchitis, emphysema & allied conditions
	680	Other diseases of the respiratory system
Contact dermatitis		
Contact dermatitis	410	Contact dermatitis
	420	Other & unspecified dermatitis & eczema
Cardiovascular disease		
Ischaemic heart disease (IHD)	710	Ischaemic heart disease
Other heart disease excluding IHD	720	Other heart disease excluding IHD
Cerebrovascular disease	730	Cerebrovascular disease
Arterial disease	740	Arterial disease
Other diseases of the circulatory system	750	Hypertension (high blood pressure)
	760	Varicose veins
	780	Other diseases of the circulatory system

Occupational cancer		
Mesothelioma	810	Malignant neoplasm of pleura (mesothelioma)
Skin cancer	820	Malignant melanoma of skin
	830	Other malignant neoplasm of skin
	850	Carcinoma in situ of skin
Other cancer	840	Malignant neoplasm of lymphatic & haematopoietic tissue
	860	Other malignant neoplasms & carcinomas
	890	Neoplasms of uncertain or unspecified nature

National Hospital Morbidity Database (NHMD)

The NHMD provides data on patients admitted to hospital in Australia (both public and private hospitals): these are counted as hospitalisations. This data set is compiled by the Australian Institute of Health and Welfare (AIHW). Data items include principal diagnosis, duration of hospital stay and procedures performed. Work relatedness is not consistently recorded in the data set. Therefore, only diseases considered to have a high attribution to work are presented in this report. NHMD data may include the same individual presenting for multiple hospitalisations during the year and transfers of a patient between one hospital and another. Consequently, the data could overstate the incidence of disease.

The National Notifiable Diseases Surveillance System (NNDSS)

The NNDSS was established in 1990 by the Communicable Disease Network of Australia who publish these data on a quarterly basis. The system co-ordinates the national surveillance of more than 50 communicable diseases or disease groups. Under this system, notifications are made to the State or Territory health authorities under the public health legislation in their jurisdiction. Computerised, de-identified unit records of notifications are supplied to the Commonwealth Department of Health and Ageing for collation, analysis and publication on the internet and in the quarterly journal, *Communicable Diseases Intelligence*. Only Infectious diseases with a high attribution to the workplace have been used in this report.

AIHW — National Cancer Statistics Clearing House (NCSCCH)

The NCSCCH receives data from individual State and Territory cancer registries on cancer diagnosed in residents of Australia. This data set is maintained by the AIHW. Data for new cases of cancers date back to 1982 and are currently available until 2006. The NCSCCH produces reports of national incidence and mortality data. Periodically, additional reports are produced which analyse specific cancer sites, cancer histology, differentials in cancer rates by country of birth, geographical variation, trends over time and survival rates. The aim of the NCSCCH is to foster the development and dissemination of national cancer statistics in Australia.

Calculation of incidence rates

The calculation of incidence rates from NDS data requires the number of employees in the Australian work force. These data are supplied to Safe Work Australia by the Australian Bureau of Statistics (ABS) and are specifically calculated to match the scope of workers' compensation coverage. More information on the NDS can be found in the NDS Technical Manual on the Safe Work Australia website.

Data obtained from the NHMD and NNDSS are drawn from the general population as work-relatedness is not consistently identifiable using these data sources. As a result, ABS estimated resident population data are used when calculating incidence rates for these data sources. The figures used are estimated for June of the reference year and are limited to residents aged 15 years and over (referred to in graphs and text as adults).

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