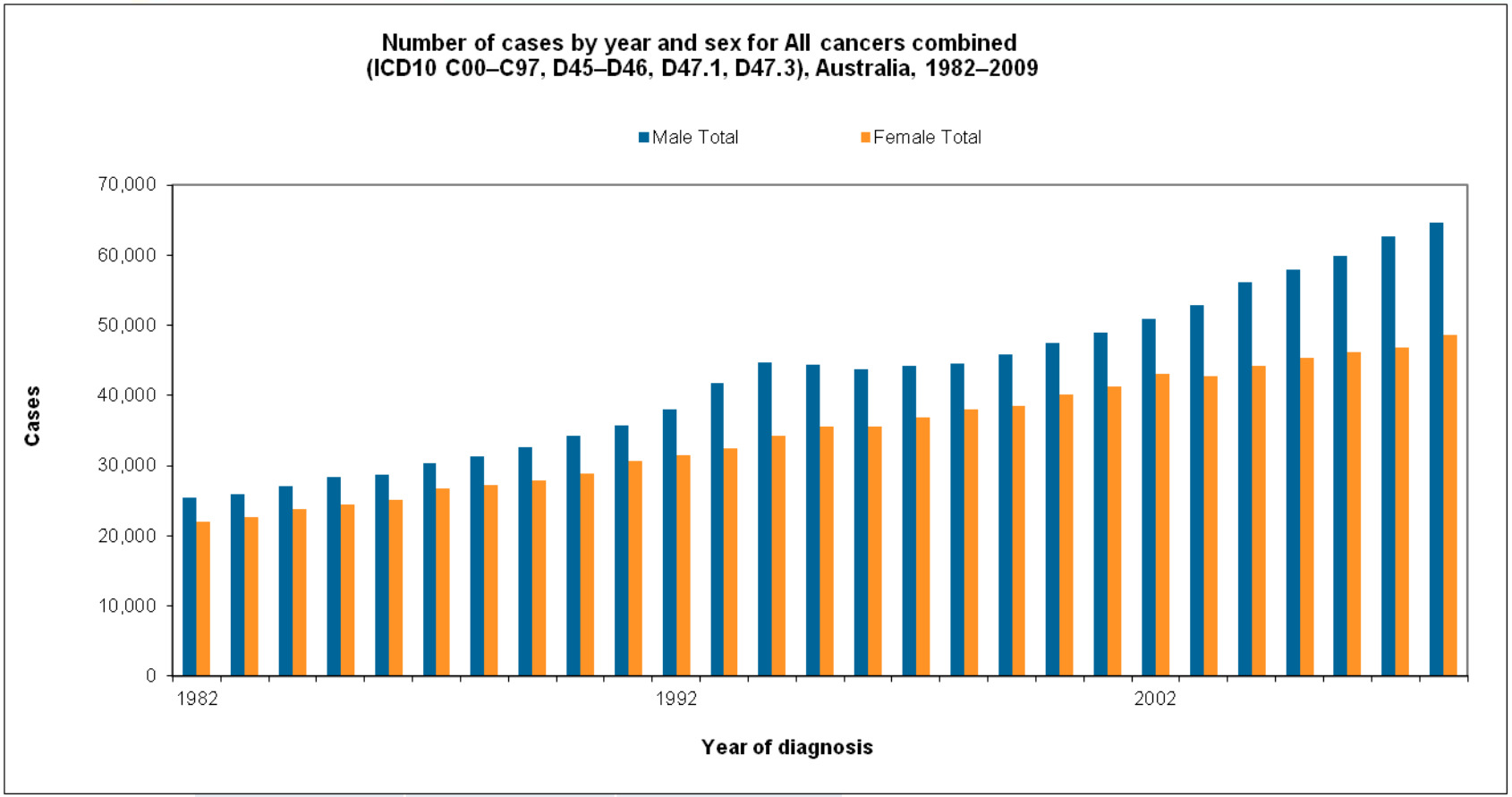
Asbestos and other workplace carcinogens: An Australian perspective (Learning from our mistakes)

Terry Slevin

Chair, Occupational and Environmental Cancer Committee.
Cancer Council Australia (CCA)

Cancer Council Western Australia

Number of new cases of cancer in Australia 1983 - 2009



In 2009

Males	64,342	583.5
Females	49,795	404.2
Persons	114,137	485.7

Male/Female ratio 1.4

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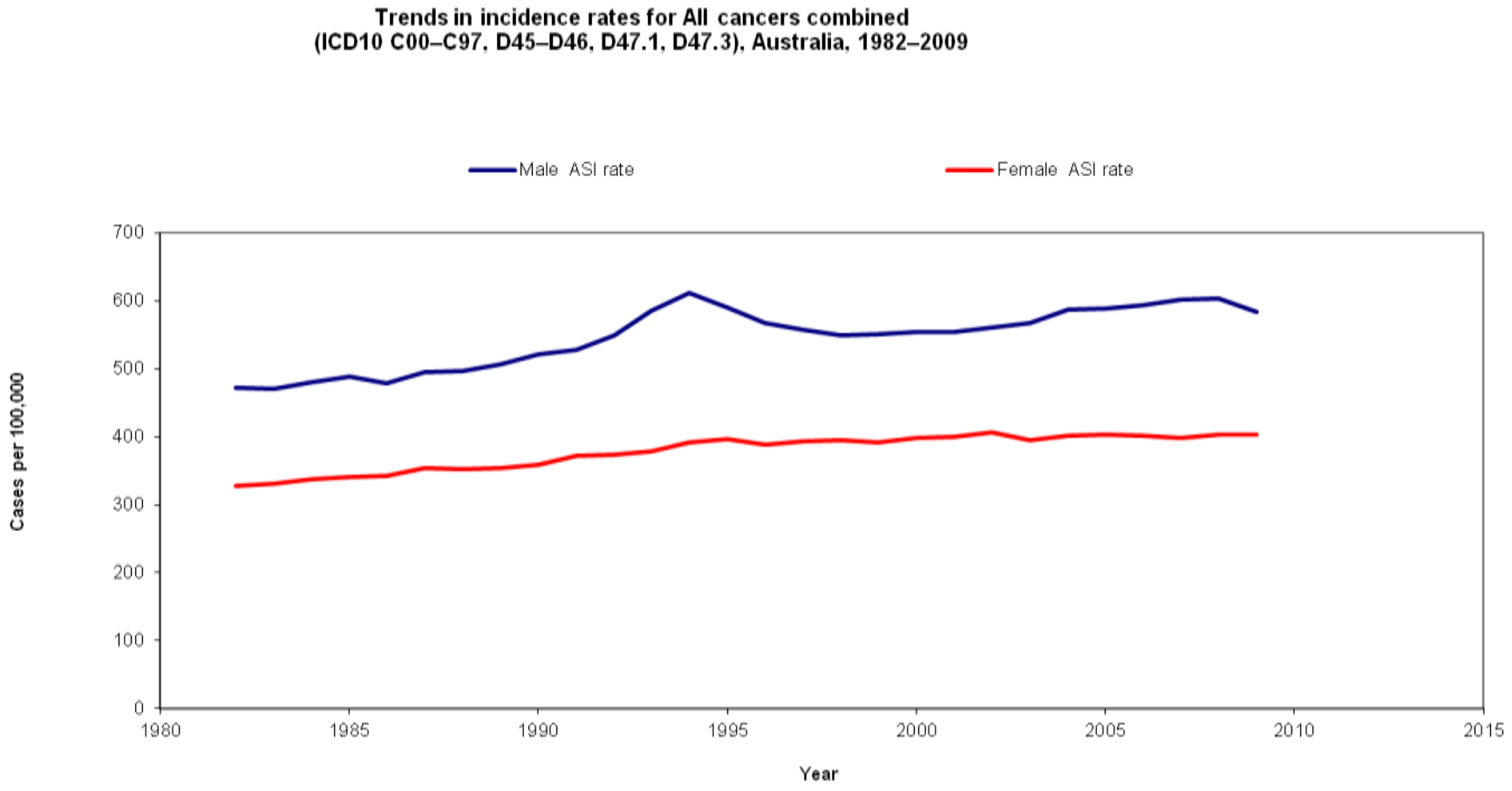
Cancer Incidence (new cases) RATES in Australia 1983 - 2009



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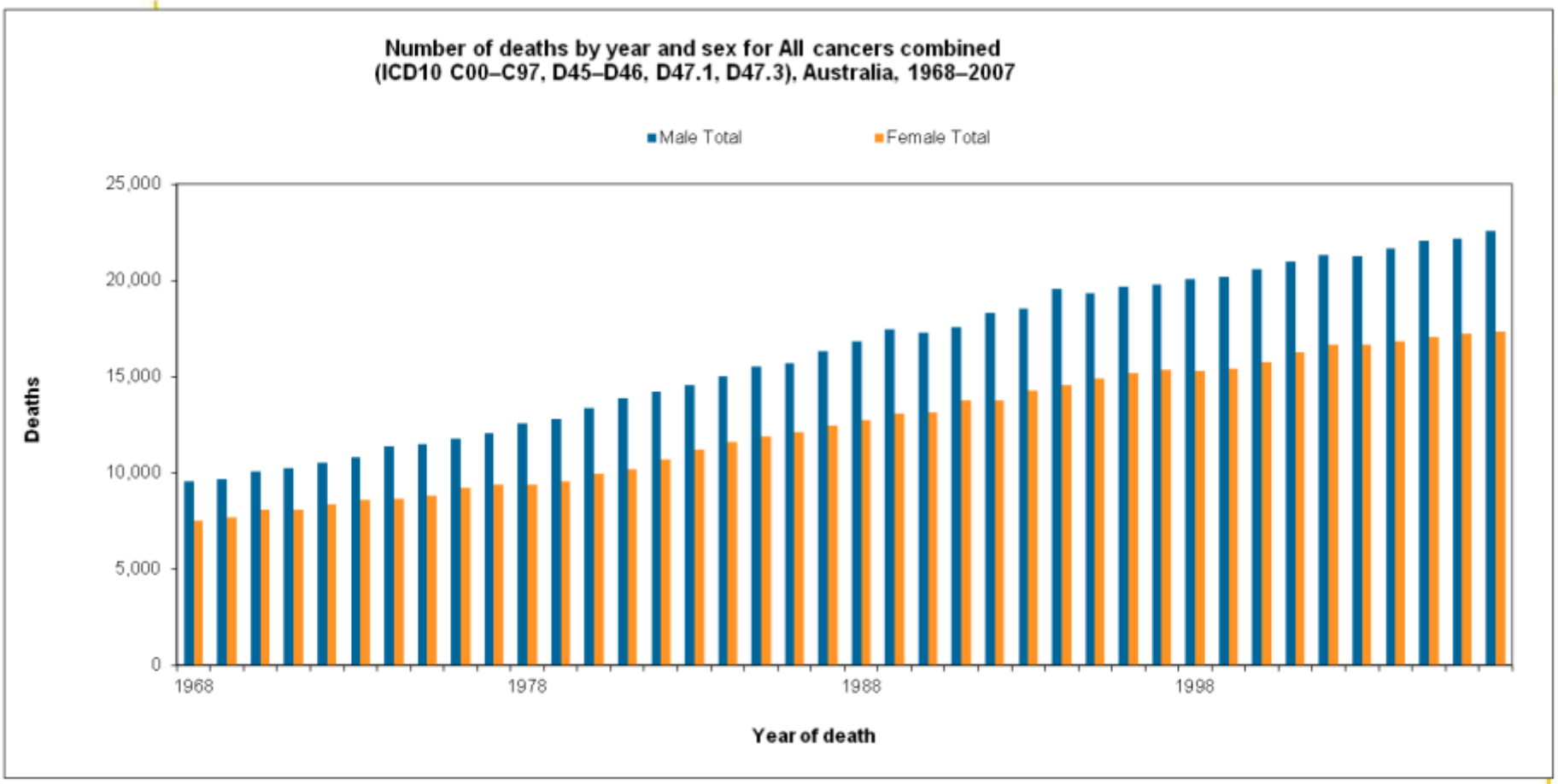
Cancer Mortality Count Aust 1968 - 2007



In 2007

Males	22,562
Females	17,322
Persons	39,884

Male/Female ratio 1.6

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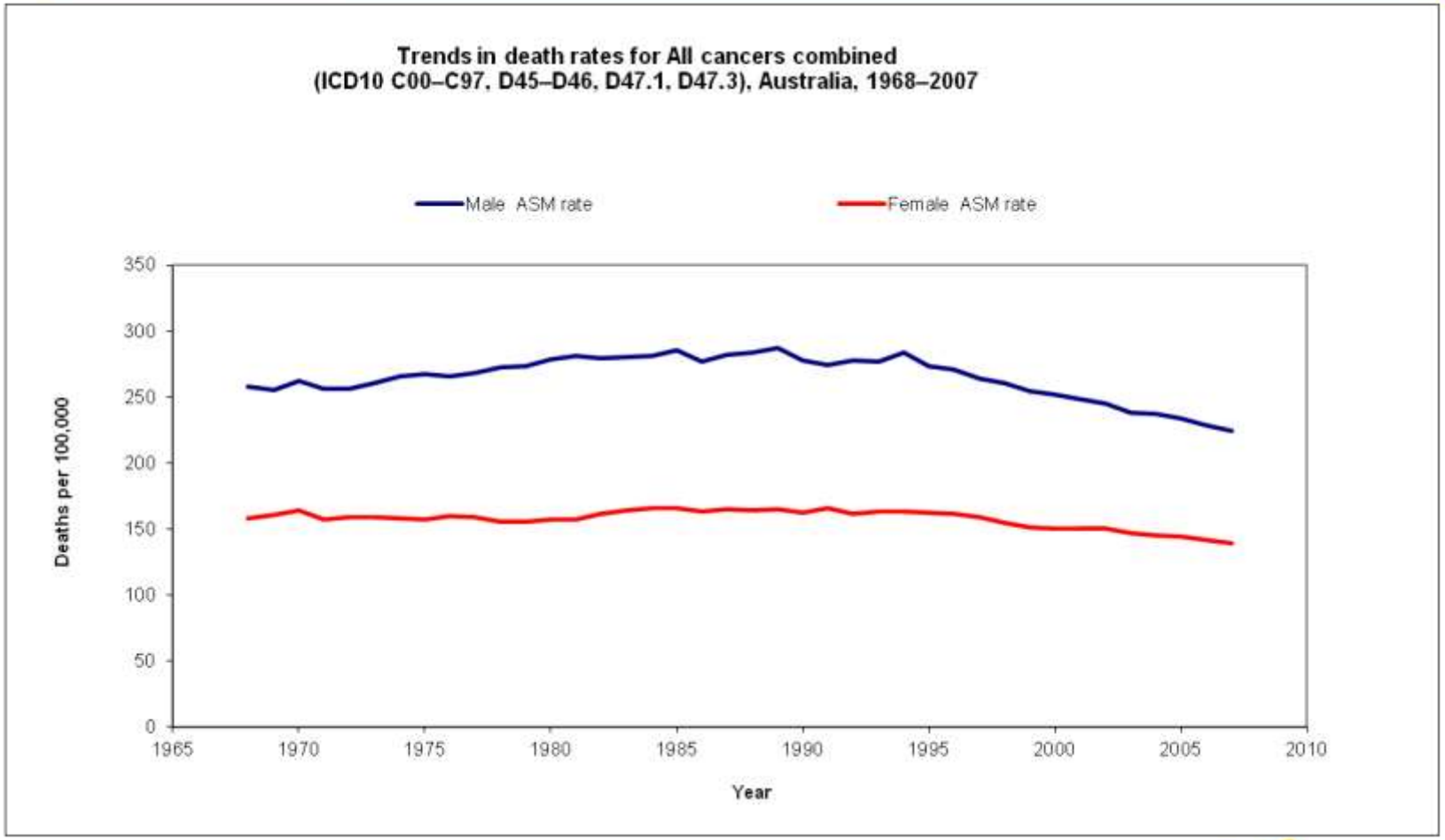
Cancer Mortality Rate Aust 1968 - 2008



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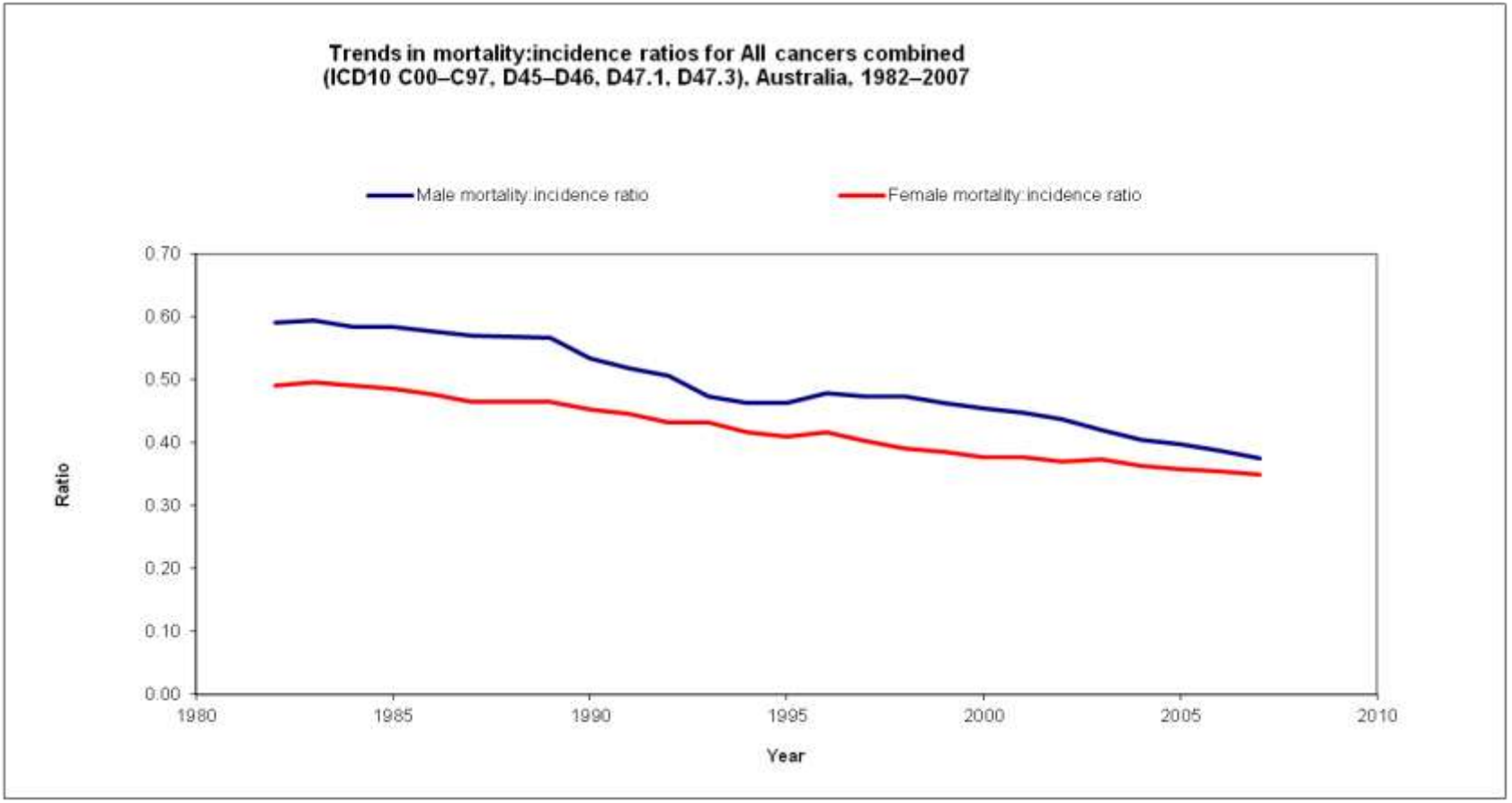
Cancer deaths as a proportion of cases diagnosed



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Cancer risks in the workplace

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How many cancers are due to occupational exposures ?

- No one knows for certain
- Estimates are conservative as good data is not collected in terms of exposure or causality
- Best estimates suggest between 3.5 and 5%

"In Australia, we estimate that 5,000 invasive cancers and 34,000 non-melanoma skin cancers per year are caused by occupational exposures and 1.5 million workers are exposed to known carcinogens". **(Fritschi and Driscoll ANJPH 2006)**

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An international problem – Some recent UK data

- Occupational Cancer **3.7% (11,494 cases)** of all cancers in the UK are attributable to occupational exposures
- Of those asbestos exposure contributes approx. **4,200 cases**
- Industries where asbestos exposure is a possibility include Shipbuilding, construction, mining and milling, by-product manufacture, insulating, sheet metal work, asbestos cement industry

Parkin M Cancers Attributable to occupational exposures in the UK 2010 BJC 2011 105 S70 – 72

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Cancer Site	Asbestos	Shift work	Min. oils	Solar rad^{n}	Silica	DEE	PAHs (Tars)	Painters	Dioxins	ETS	Radon	Welders	All
Bladder			296			106		71					550
Brain													14
Breast		1,957											1,969
Cervix													18
Kidney													3
Larynx	8												56
Leukaemia													38
Liver													5
Lung	2,223		470		907	695		282	215	284	209	175	5,442
LH cancers													1
Melanoma eye													6
Mesothelioma	1,937												1,937
Multiple Myeloma													10
Nasopharynx													15
NHL									74				140
NMSC			902	1,541			475						2,862
Oesophagus													188
Ovary													33
Pancreas													1
Sinonasal			55										126
STS									27				27
Stomach	47							83					157
Thyroid													1
Total Attrib. Registrations	**4,216**	**1,957**	**1,722**	**1,541**	**907**	**801**	**475**	**437**	**316**	**284**	**209**	**175**	**13,598**

How many are exposed ?

To cite: Carey RN, Driscoll TR, Peters S, *et al.* *Occup Environ Med* Published Online First: [*please include* Day Month Year] doi:10.1136/oemed-2013-101651

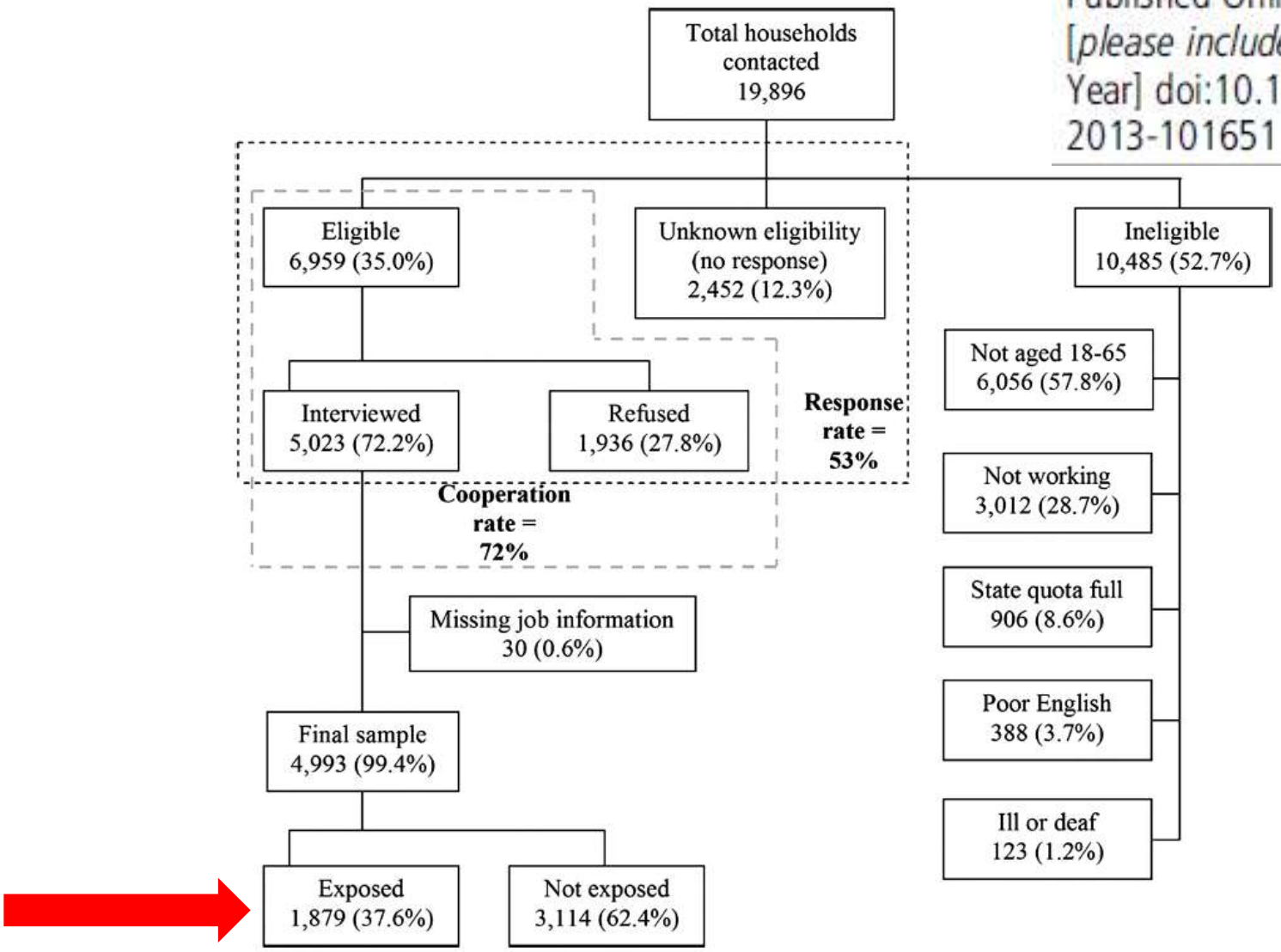

Figure 1 Response flow chart for the Australian Work Exposures Study (AWES) Sample, Australia, 2011–2012.

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Table 3 Proportion of final sample and Australian working population estimated to be occupationally exposed by carc

Carcinogen*	Most common occupational groups	Sample n (%)	Population n (%)
Solar UVR	Farmer, animal/horticultural, painter	963 (34.8)	1 737 500 (37.
Diesel engine exhaust	Farmer, heavy vehicle driver, miner	796 (28.8)	1 344 500 (28.
ETS	Painter, plumber, hospitality	589 (21.3)	1 164 000 (24.
Benzene	Farmer, animal/horticultural, automobile driver	370 (13.4)	636 440 (13.
Lead	Painter, vehicle worker, plumber	295 (10.7)	502 100 (10.
Silica	Miner, construction, engineer	289 (10.5)	543 390 (11.
Wood dust	Carpenter, painter, handyperson	271 (9.8)	449 470 (9.
Artificial UVR	Farmer, vehicle worker, metal worker	247 (8.9)	391 770 (8.
PAHs	Farmer, emergency worker, food service	239 (8.6)	454 160 (9.
Shiftwork‡	Nurse, miner, passenger transport	203 (7.3)	396 120 (8.
Chromium VI	Painter, metal worker, carpenter	168 (6.1)	291 930 (6.
Asbestos	Vehicle worker, emergency worker, miner	138 (5.0)	251 960 (5.
Formaldehyde	Carpenter, painter, emergency worker	118 (4.3)	200 150 (4.
Nickel	Metal worker, plumber, vehicle worker	98 (3.5)	170 840 (3.
Ionising radiation	Health professional, miner, scientist	74 (2.7)	127 800 (2.
Trichloroethylene	Farmer, metal worker, plumber	44 (1.6)	73 570 (1.
Arsenic	Carpenter, office worker, heavy vehicle driver	33 (1.2)	49 750 (1.
Vinyl chloride	Emergency worker, machine operator	19 (0.7)	40 780 (0.
Ethylene oxide	Emergency worker, food factory, scientist	22 (0.8)	46 240 (1.
1,3-butadiene	Emergency worker	21 (0.8)	44 650 (1.
Cadmium	Metal worker, vehicle worker, electrical worker	13 (0.5)	20 840 (0.
Nitrosamines	Metal worker, scientist	8 (0.3)	14 710 (0.
Acid mists	Machine operator, metal worker, engineer	5 (0.2)	11 060 (0.

*Includes only those priority carcinogens with five or more workers exposed.

asbestos

research
prevention
support

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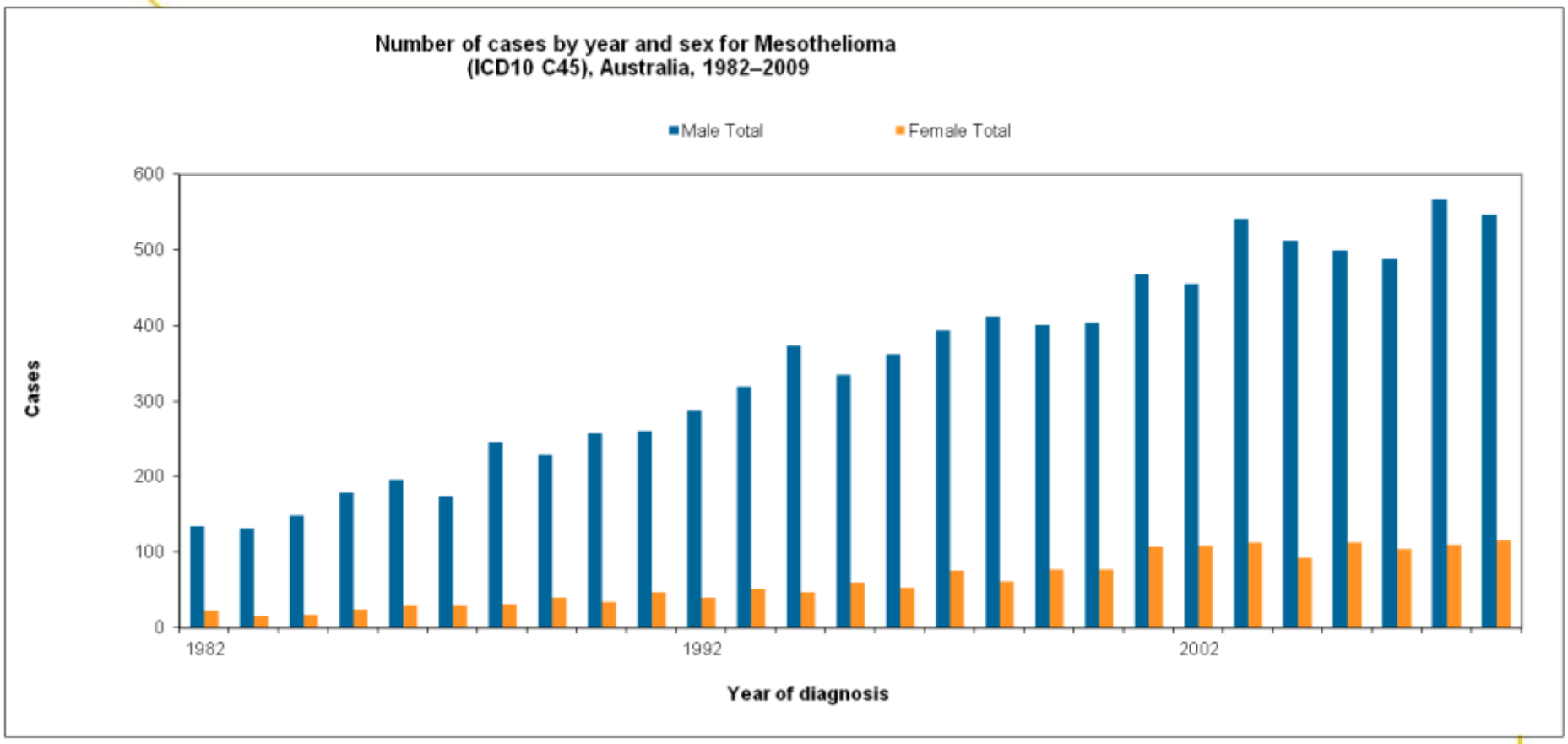
We know about the health effects of Asbestos ?



Mesothelioma in Australia 2009 - 666 new cases and 551 deaths Plus about 1200 Asbestos related lung cancers (McCormak et al 1.8 multiplier) and roughly (guessing !!) 1000 cases of Asbestosis – so a total of about 2,860 new asbestos related disease cases a year.

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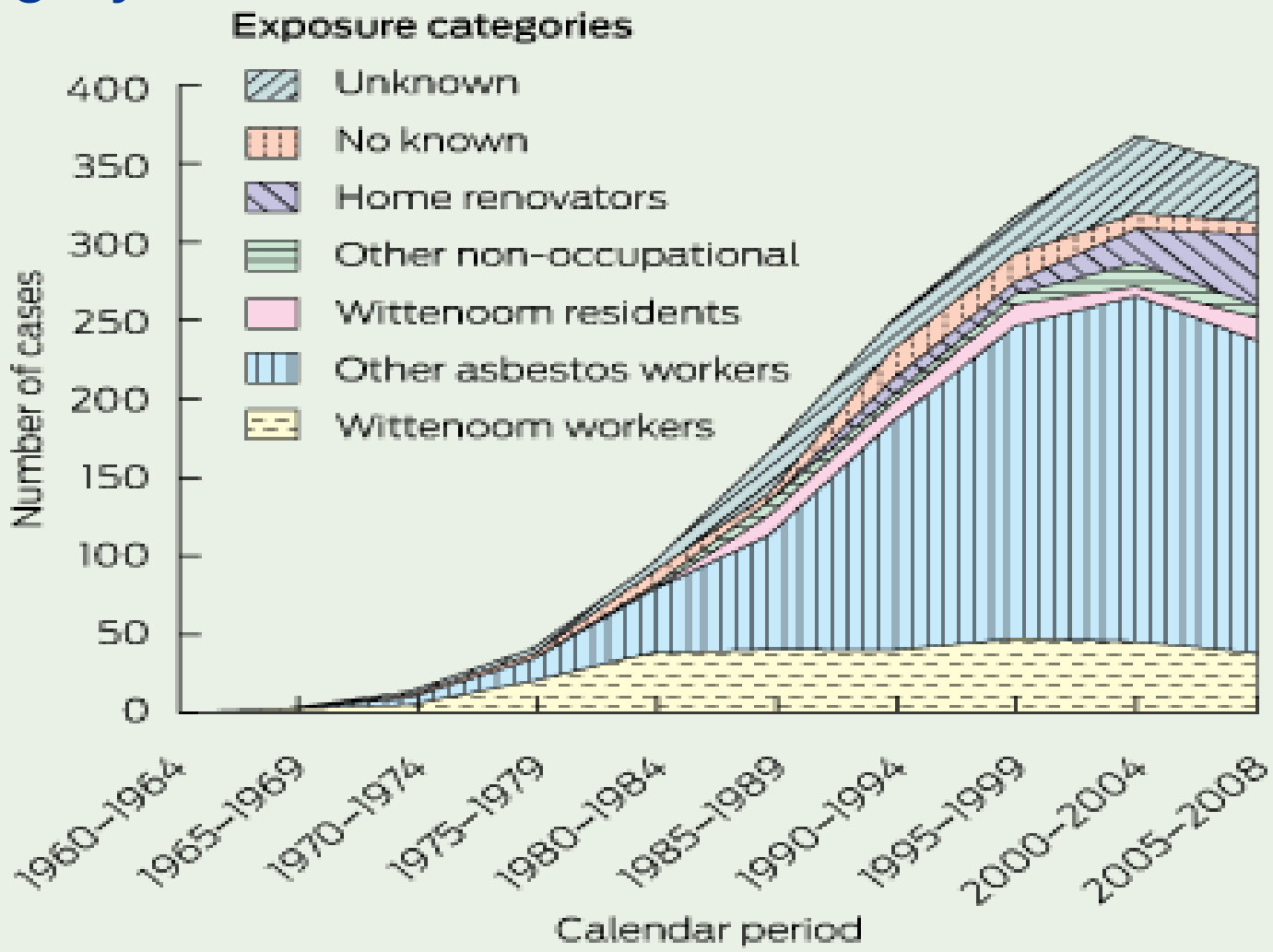
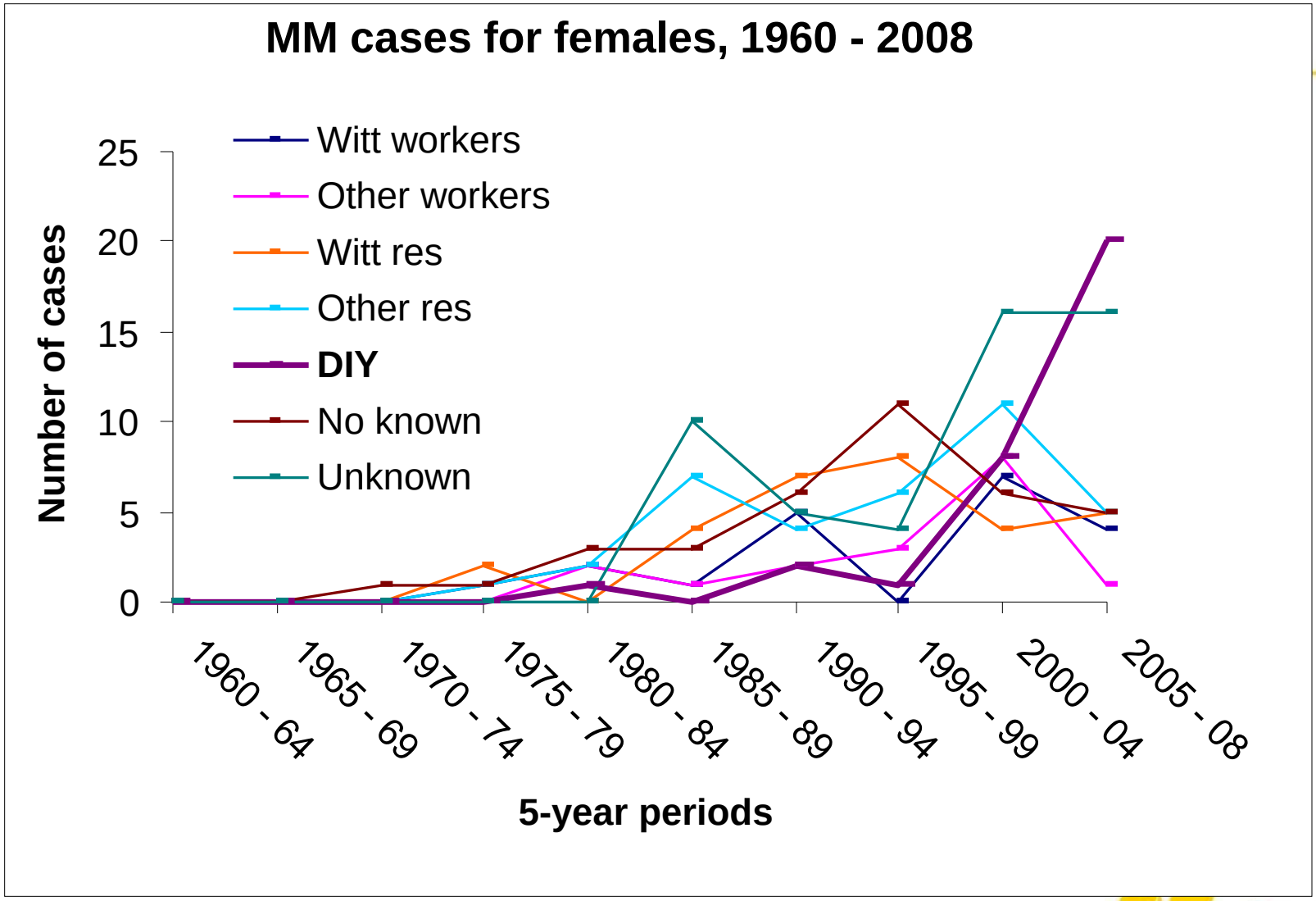
Mesothelioma in Western Australia by Exposure Category (Olsen N et al Med J Aust 2011; 195 (5): 271-274).



Females



In the period 2005 – 08 DIY cases account for ~36% of total

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WA Tradespeople survey on Asbestos

- A survey was undertaken in late 2010 among 232 WA tradespersons.
- Almost all tradespersons have spent more than 10 years in their respective trade, half self employed
- Over 75% of respondents have not received any training in regard to identification, safe handling and disposal of ACM‟s.
- The majority that did receive training, did so in their apprenticeship. Over 70% of respondents were over 45 years old

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Personal protection

- 75% of tradespersons considered the consequences of asbestos related diseases to be extremely serious
- 90% may come into contact with asbestos whilst working in their trade
- 15% do not take precautions when handling Asbestos Containing Materials (ACM‟s).
- Personal Protective Equipment (PPE) was the most common form of controlled protection
- One third of respondents wash up/decontaminate after working with ACM‟s.

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Barriers

Several key barriers were identified that reduced the likelihood of the safe handling of asbestos. They include:

- Lack of knowledge, experience and skill in identifying ACMs, arising potentially from a lack of training.
- The stigma associated with asbestos and public or community concern partially determines the work practices of the tradesperson.
- Tradespersons belief that because exposure is low, it is unlikely they will be affected.

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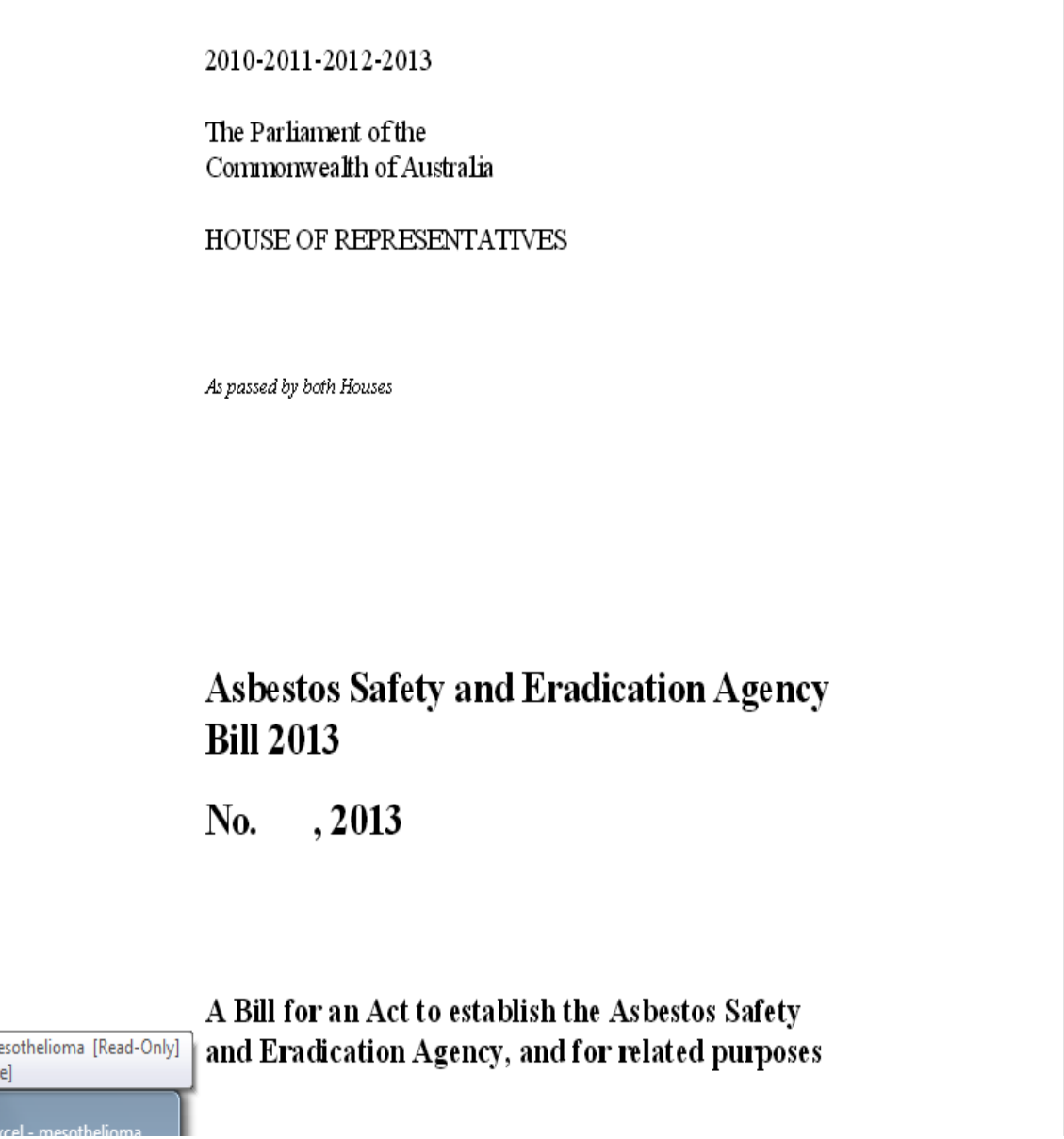
Action on Asbestos in Australia

www.deewr.gov.au/WorkplaceRelations/Policies/AMR/Pages/default.aspx



2010-2011-2012-2013

The Parliament of the
Commonwealth of Australia

HOUSE OF REPRESENTATIVES

As passed by both Houses

Asbestos Safety and Eradication Agency Bill 2013

No. , 2013

A Bill for an Act to establish the Asbestos Safety and Eradication Agency, and for related purposes

- Led by then Workplace Relations Minister (now opposition leader) Bill Shorten
- Bipartisan support
- Parliamentary Asbestos interest group since 2011
- Act ascent 21 June 2013

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National Asbestos Strategic Plan

The Plan aims to prevent exposure to asbestos fibres in order to eliminate asbestos related disease in Australia. It will achieve this by:

- **increasing public awareness of the dangers posed by working with or being exposed to asbestos**
- **moving towards developing a prioritised removal program across Australia**
- **developing nationally consistent better practice in asbestos handling and management**
- **coordinating national research to minimise the risk of exposure to asbestos for the Australian community**
- **playing a leadership role in a global campaign for a worldwide asbestos ban.**

http://www.asbestossafety.gov.au/files/National_Strategic_Plan_0.pdf

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Asbestos setbacks to NBN laid bare

MITCHELL BINGEMANN AND ANNABEL HEPWORTH | THE AUSTRALIAN |
NOVEMBER 05, 2013 12:00AM

THE company building the National Broadband Network has warned that asbestos-related problems could crunch its profit-making ability, blow out construction costs and lead to potential litigation.

NBN Co has also said that asbestos-related delays could hit the financing arrangements for the nation's biggest infrastructure project.

"The presence - or potential presence of asbestos - could significantly increase network build costs as well as lead to potential litigation and related costs," NBN Co says.

The admissions were contained in a decision by NBN Co to refuse a Freedom of Information request by The Australian to release the company's risk register and detail the impact that asbestos contamination could have on construction of the mammoth project.

They emerged as The Australian confirmed that, since January, federal workplace safety regulator Comcare had received 66 complaints related to asbestos in telecommunication pits that were part of the NBN rollout, of which 40 warranted further detailed investigation.

In a 12-page rejection of the FOI request, NBN Co said it would not release the information as it could be used by potential and current business partners to inflate their prices and increase the risk to the company's commercial position due to

Asbestos researcher named WA Australian of Year

Professor Bruce Robinson

Cancer researcher Professor Bruce Robinson AM has been named WA's Australian of the Year 2014 for his world leading study of asbestos related cancer.

WA Governor Malcolm McCusker congratulated the 2014 WA's Australian of the Year Award recipients at an awards ceremony at Government House yesterday.

Professor Robinson, 63, leads a big research team at the University of WA's School of Medicine and Pharmacology which is studying cancer immunology and asbestos diseases. He and his team have been responsible for many world-first breakthroughs, including the first blood test for mesothelioma.

After establishing medical clinics focused on patients' emotional and physical needs, Professor Robinson initiated the highly successful Breaking Bad News course to help doctors with difficult conversations.

He is also a vocal advocate for fathering and has produced a number of books and DVDs on the topic, and also directs the Fathering Project at the UWA which aims to connect children with father figures.

A passionate volunteer who has donated many hours of service to rural Indonesian medical clinics, Bruce's personal philosophy is to turn compassion into action.

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Some solutions ?

Levy scrapped to stop asbestos waste being dropped in city streets

EXCLUSIVE MALCOLM HOLLAND ENVIRONMENT REPORTER • THE DAILY TELEGRAPH •
NOVEMBER 07, 2013 12:00AM

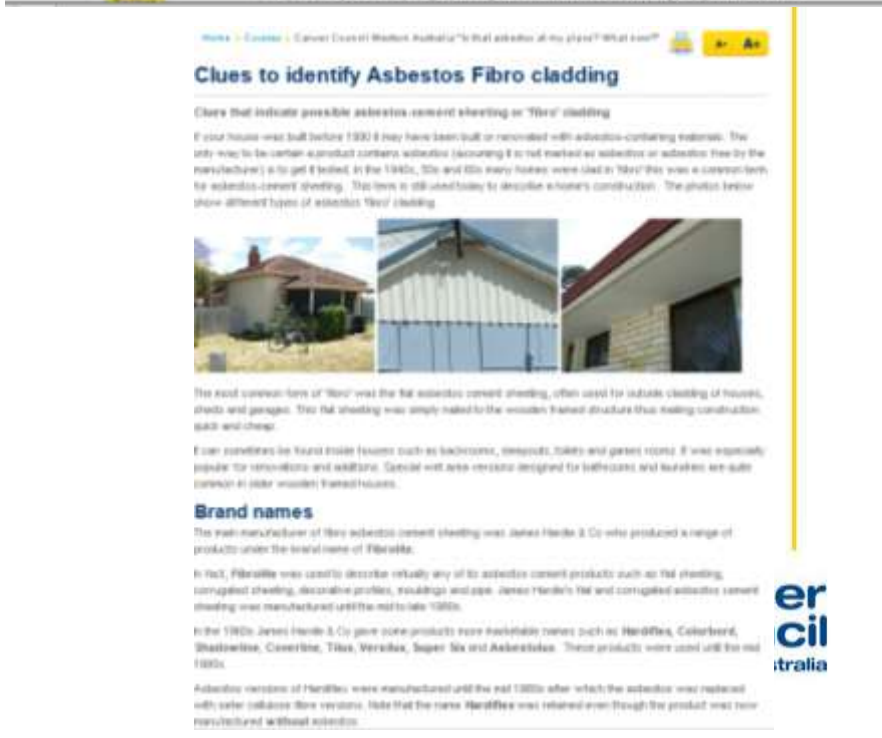
THE state government will scrap the waste levy on asbestos from home renovations sent to tips in an effort to stop the potentially deadly material being dumped on city streets.

Environment Minister Robyn Parker will also announce today that, under the $3 million trial scheme, the Environmental Protection Authority will pay $50 towards the cost of removing and transporting asbestos to tips and landfill sites.

Asbestos dumping has become a major problem across the state, despite new laws that threaten imprisonment instead of a fine.

Dumpers are trying to avoid the waste levy, which is charged at tips and landfill sites and costs $107.80 per tonne in Sydney and $53.70 a tonne in regional NSW.

Health inspectors contain an asbestos dump in



Courses

kNOw asbestos in your home

Working indoors – a SunSmart balance for vitamin D and skin cancer prevention

Sign Up

Ready to get started? Register to access an eLearning course.

Sign up

Contact Us

Looking for more information?

Contact

Welcome to Cancer Council Australia's eLearning site.

Cancer Council plays a major role educating Australians about cancer prevention and early detection.

Our courses, which can be accessed free of charge, aim to assist GPs, health practitioners, OH&S professionals and workers who may face exposure to carcinogens.

Find out more

Courses

kNOw asbestos in your home

Exposure to asbestos fibres increases the risk of developing asbestos-related diseases such as mesothelioma and asbestosis. Both home maintenance and renovations involving asbestos-containing building products are activities responsible for a growing number of people being exposed to asbestos. Any jobs around the home involving asbestos are a source of concern, given the large number of homes in Australian cities and towns thought to have been built with asbestos-containing products.

This course is designed to give the DIY home renovator basic knowledge about asbestos, and the risks and safe practices when working with or removing, small amounts of asbestos-containing material. If you are thinking of doing a renovation (ranging from painting to the removal of asbestos) this course will be invaluable.

Let's start by finding out more details about the course and about online learning.

Find out more

Sitemap • Contact Us • Privacy Policy • Disclaimer

http://elearning.cancer.org.au/

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UV exposure and skin cancer risk at work

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prevention
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Effect of UV exposure in Australia

- Australia is the skin cancer capital of the world
- 750,000 diagnosis and over 1,800 deaths per year
- Cost to the healthcare system were calculated at over $500 million in 2010
- 2/3 deaths are men
- In Australia, melanoma is a the most common cancer in those aged 15-39 year olds
- Men are far more likely to be diagnosed with and die as a result of skin cancer than women (2:1 ratio)

Image courtesy Queensland Health

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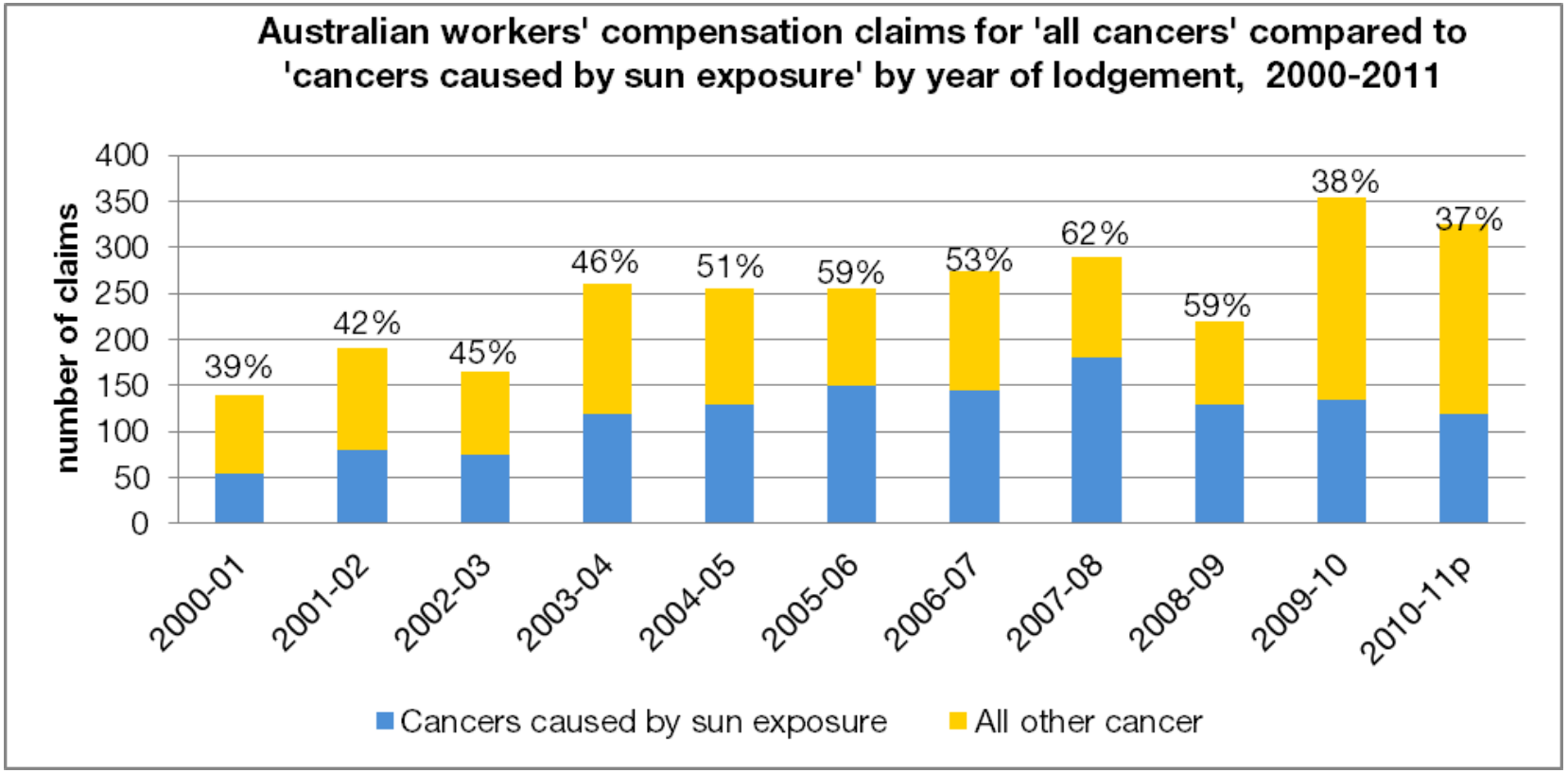
Sun related cancers vs. all cancers



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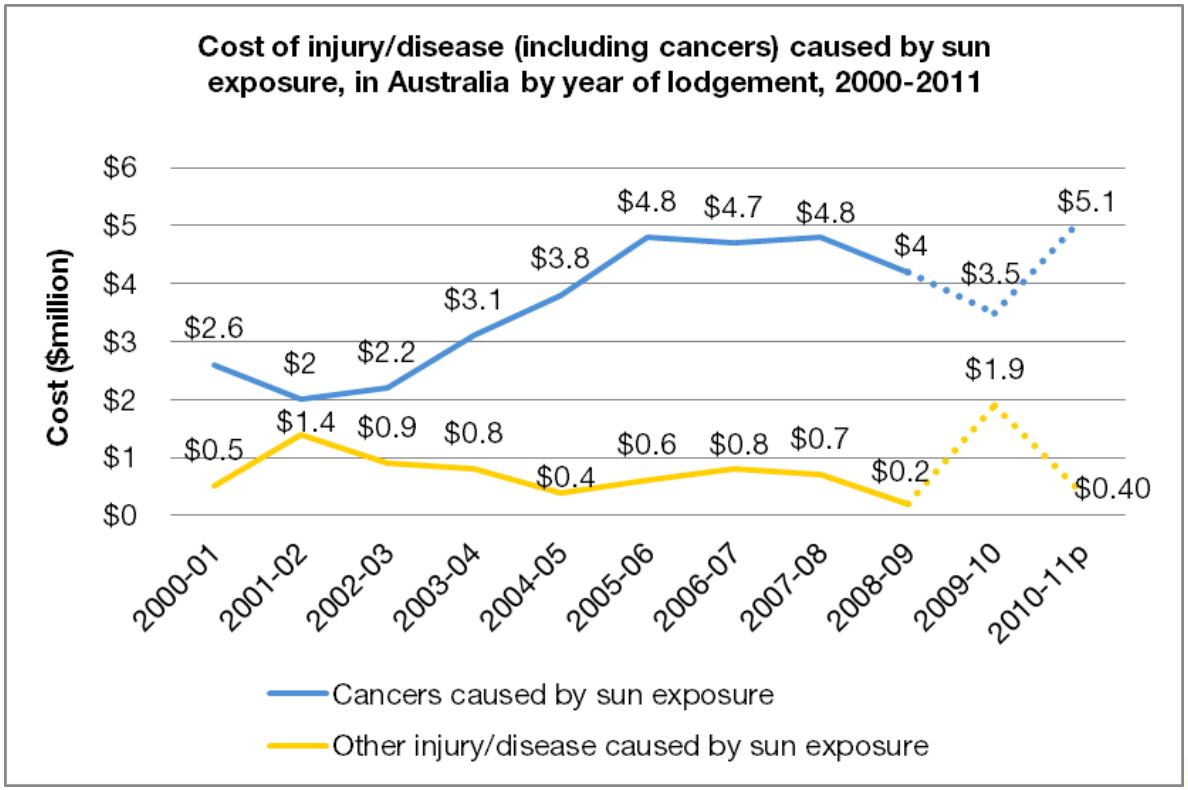
Sun related injury/disease costs 2000-2009 & beyond

A total of $38.4 million has been paid for sun related workers' compensation claims in Australia from 2000-2009

(cancers = $32.1million; other sun related injury $6.3 million)



Data from 2009-10 and 2010-11 shows the costs are continuing to increase.

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Code of practice - Safe Work Australia

In August 2013, Safe Work Australia released a revised version of the Guide on Exposure to Solar Ultraviolet Radiation (UVR) and contains specific information on:

- **Strength of UVR**
- **Differentiating between heat stress and UVR**
- **Workplace UVR exposure auditing**
- **Hierarchy of risk management control**
- **Expanded PPE information**
- **Sun protection policy advice including a sample policy**

Cancer Council continues to advocate that the guidance note be developed into a model WHS Code of Practice to have regulatory force

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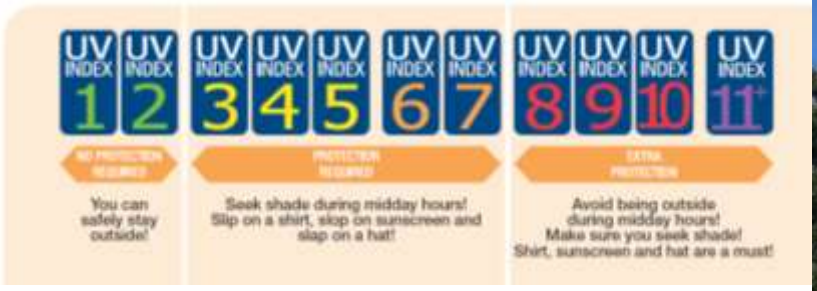
The UV Index



WHO's UV Index and related sun protection behaviours

Live UV Readings in recreational and occupational settings

what else is going on in occupational cancer in Australia ?

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Occupational cancers are not going away

- We are an aging society
- We are getting more cancer
- We are staying at work for longer so we are an aging workforce
- Inevitably we will see more cancer diagnosed in the active workforce
- Some will believe (**rightly or wrongly**) that their cancer may have been caused by exposures at work
- We need better systems to deal with these concerns

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safe work australia

By 2020 the aim is to reduce incidence of work-related death, injury and illness, *achieved by*

reduced exposure to hazards and risks, *using*

improved hazard controls, *and supported by*

an improved national work health and safety infrastructure

Target disorders

Musculoskeletal disorders

Mental disorders

Cancers (including skin cancer)

Asthma

Contact dermatitis

Noise-induced hearing loss.

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Controlling occupational cancers in Australia

We have no strategy for measuring rates, mitigating risk and meeting individuals' needs

Work-related cancer attracts considerable public and media attention, but has received limited attention from researchers and policymakers in Australia, particularly in comparison to other cancers, such as those related to tobacco use and sun exposure. During the 1980s, the National Health and Medical Research Council (NHMRC) issued model regulations for the control of carcinogenic substances, and the National Occupational Health and Safety Commission (NOHSC) was formed to coordinate efforts to improve OHS. Policies and strategies on occupational cancer were developed by the NOHSC, and the Australian Mesothelioma Registry was funded. In 2005, the NOHSC was replaced by the Australian Safety and Compensation Council (ASCC).[1] In turn, in 2008 the ASCC was replaced by Safe Work Australia, which has the primary responsibility of "improving work health and safety and workers' compensation arrangements across Australia".[2] Despite these initiatives, little progress has been made on Australia's regulatory approach to occupational carcinogen exposure.

The number of cancers resulting from occupational exposures is difficult to estimate. Occupational cancers are not easily identifiable, as they have no unique pathological or clinical features and the lag time between exposure and cancer diagnosis may be decades. There is no unique independent system for collection of data on work-related cancers, and compensation data are of little help because of considerable underclaiming. By applying European attributable fraction estimates to Australian employment data, it has been estimated that about 5000 cancers a year are caused by occupational exposures.[3] In making this estimate, major assumptions needed to be made regarding the frequency and extent of exposure to occupational carcinogens in Australian industry, since definitive local information is lacking.

International best practice

In Australia, there is limited systematic work aimed at identifying occupational carcinogens, informing users about carcinogenic risks, and reducing the use of chemicals in industry. Internationally, there are several such initiatives that could be considered for the Australian context.

A number of authoritative independent agencies, such as the International Agency for Research on Cancer, have programs that review evidence regarding potential carcinogens and classify agents according to their carcinogenic potential.[4] Other agencies, such as the American Conference of Governmental Industrial Hygienists[5] and the United States National Toxicology Program,[6] classify agents with respect to carcinogenicity and set occupational and general population exposure standards that are regularly updated and revised. Germany maintains a database of international exposure limits for chemical agents.[7] Australian regulations related to carcinogens make use of these international classifications when identifying carcinogenic substances (eg, the Australian Model Work Health and Safety Regulations contain a limited schedule of nine prohibited and 11 restricted carcinogens).[8] However, there is no system to regularly update regulations and schedules based on best international knowledge.

The United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS) is being adopted internationally.[9] The GHS classifies chemicals by type of hazard (including carcinogenicity) and proposes standard labels and safety data sheets containing information on physical hazards and toxicity. The proposed Australian Model Work Health and Safety Regulations implement the GHS for chemical classification and hazard communication requirements.

The European Union (EU) introduced legislation in 2007 for the registration, evaluation, authorisation and restriction of chemicals (REACH).[10] The REACH approach is based on the premise of "no data, no use". That is, toxicological and epidemiological data must be provided for substances manufactured or imported into the EU in excess of 1 tonne. For some substances, derived no-effect levels (DNELs) for workers and the general population must be set. No human health effects are expected if exposure is kept below the relevant DNEL. REACH does not apply outside the EU, but it does apply to all substances on the EU market, including those imported from Australia.

A very successful example of legislation aimed at reducing exposure to toxic agents (including some carcinogens) is the Massachusetts Toxics Use Reduction Act (TURA).[11] Under TURA, a list of toxic or hazardous substances ("toxics") has been created, and any firm that uses, generates or imports any of these must prepare a toxics use reduction plan, report the quantities of toxics they deal with and pay a levy based on the quantity reported. An institute was established to provide resources and tools to support the TURA, including education, community outreach, research into less toxic alternatives, and incentives.[12] Between 1990 and 2009, and after adjusting for production decreases, reports to the program showed that emissions decreased by 56% and use of toxic chemicals decreased by 21%.[13]

Another legislative approach to reducing carcinogen exposure was introduced in Finland in 1979. Companies and institutions are required to report workplace exposures to specific carcinogens to a public register. The aim is to reduce the risk of occupational cancers by improving the

Lin Fritschi
MB BS, PhD, FAFPHM, Professor

Renae C Fernandez
BHlthSci, BComm, MPH, Research Assistant

Deborah A Vallance
MB BS, BMedSci, MPH, National Occupational Health and Safety Coordinator

Terry J Slevin
MPH, FFPHA, Education and Research Director

Alison Reid
PhD, Associate Professor

Timothy R Driscoll
MB BS, MOHS, PhD, Associate Professor

Deborah C Glass
PhD, Senior Research Fellow

1 Western Australian Institute for Medical Research, University of Western Australia, Perth, WA.
2 Australian Manufacturing Workers Union, Melbourne, VIC.
3 Cancer Council Western Australia, Perth, WA.
4 Sydney School of Public Health, University of Sydney, Sydney, NSW.
5 Epidemiology and Preventive Medicine, Monash University, Melbourne, VIC.

fritschi@waimr.uwa.edu.au

doi: 10.5694/mja11.10485

Ref: Fritschi, L et al
Controlling occupational cancers in Australia
Medical J of Aust 196 (3) 162 – 164 20 Feb 2012

What are the big issues?

1. **Get occupational cancer issues “higher on the agenda”**
2. **Get better data**
3. **Get better systems**
   - TURA,
   - CAREX,
   - REACH

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Toxic Use Reduction Act TURA (Mass. USA)

- The Toxic Use Reduction Act was passed by the state of Massachusetts in 1989 after a significant industrial incident involving chemical exposure
- A list of hazardous substances (toxics) was established. Those who used any of these had to establish a plan to reduce their use.
- Between 1990 and 2009 there was a **56% reduction in emissions and 21% reduction of toxics used**
- Is being taken up in various forms in some Canadian provinces

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CAREX Canada Monitoring and reporting on the problem

- CAREX is developing estimates of the number of Canadians exposed to known, probable and possible carcinogens in workplace and community environments.
- Using a model from the Finnish Institute for Occupational Health CAREX Canada was created in the late 1990s at the University of British Columbia.

http://www.carexcanada.ca/

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REACH Europe – "No data – no use"

- REACH is the European Community Regulation on chemicals and their safe use (EC 1907/2006).
- It deals with the Registration, Evaluation, Authorisation and Restriction of Chemical substances. The law entered into force on 1 June 2007 via the European Commission
- The REACH Regulation places greater responsibility on industry to manage the risks from chemicals and to provide safety information on the substances.
- Manufacturers and importers are required to gather information on the properties of their chemical substances

http://ec.europa.eu/environment/chemicals/reach/reach_intro.htm

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Table 1: The list of priority carcinogens for Australia.

Agent group	Agent
Combustion products (3)	Engine exhaust, diesel
	Polycyclic Aromatic Hydrocarbons (PAHs)[a]
	Tobacco smoke, second-hand
Inorganic dusts (2)	Asbestos[b]
	Silica dust, crystalline, in the form of quartz or cristobalite
Organic Dusts (2)	Leather dust
	Wood dust
Metals (7)	Arsenic and inorganic arsenic compounds
	Beryllium and beryllium compounds
	Cadmium and cadmium compounds
	Chromium (VI) compounds
	Cobalt metal and tungsten carbide
	Lead compounds, inorganic
	Nickel compounds
Radiation (4)	Artificial ultraviolet radiation (UVA, UVB, UVC)
	Ionising radiation[c]
	Radon-222 and it's decay products
	Solar radiation

Ref: Fernandez, Driscoll et al ***A priority list of carcinogenic agents for preventive action in Australia*** Aust NZ J Public Health 24 Feb 2012

Other industrial chemicals (19)	Acid mists, strong inorganic Acrylamide Alpha-Chlorinated toluenes[d] Benzene 1, 3-Butadiene Diethyl sulphate Dimethyl sulphate Epichlorhydrin Ethylene oxide Formaldehyde Glycidol 4, 4′-Methylenebis(2-chloroaniline) (MOCA) Nitrosamines[e] *ortho*-Toluidine (2-Aminotoluene) Polychlorinated biphenyls (PCBs)[f] Styrene-7, 8-oxide Tetrachloroethylene (Perchloroethylene) Trichloroethylene Vinyl chloride
Non-chemical agents (1)	Shiftwork that involves circadian disruption

a Includes benzo[a]pyrene, coal-tar pitch, creosotes, cyclopenta[cd]pyrene, dibenz[a,h]anthracene, dibenzo[a,l]pyrene, frying emission from high temperatures, mineral oils (treated or mildly treated), soots.

b All forms including actinolite, amosite, anthophyllite, chrysotile, crocidolite, tremolite). Includes mineral substances that contain asbestos.

c Fission products including Strontium-90, ionising radiation (all types), neutron radiation, phosphorus-32 as phosphate, radioiodines including iodine-13, internally deposited alpha- and beta-emitting radionuclides, radium-224 and its decay products, radium-226 and its decay products, radium-228 and its decay products, thorium-232 and its decay products, x- and gamma-radiation.

d Includes benzal chloride, benzotrichloride and benzyl chloride and benzoyl chloride (combined exposures).

e Includes N-Nitrosodimethylamine and N-Nitrosodiethylamine.

f Includes 3, 4, 5, 3', 4'-Pentachlorobiphenyl (PCB-126).

The next step is to identify priority industries and priority job classes so as to focus our efforts

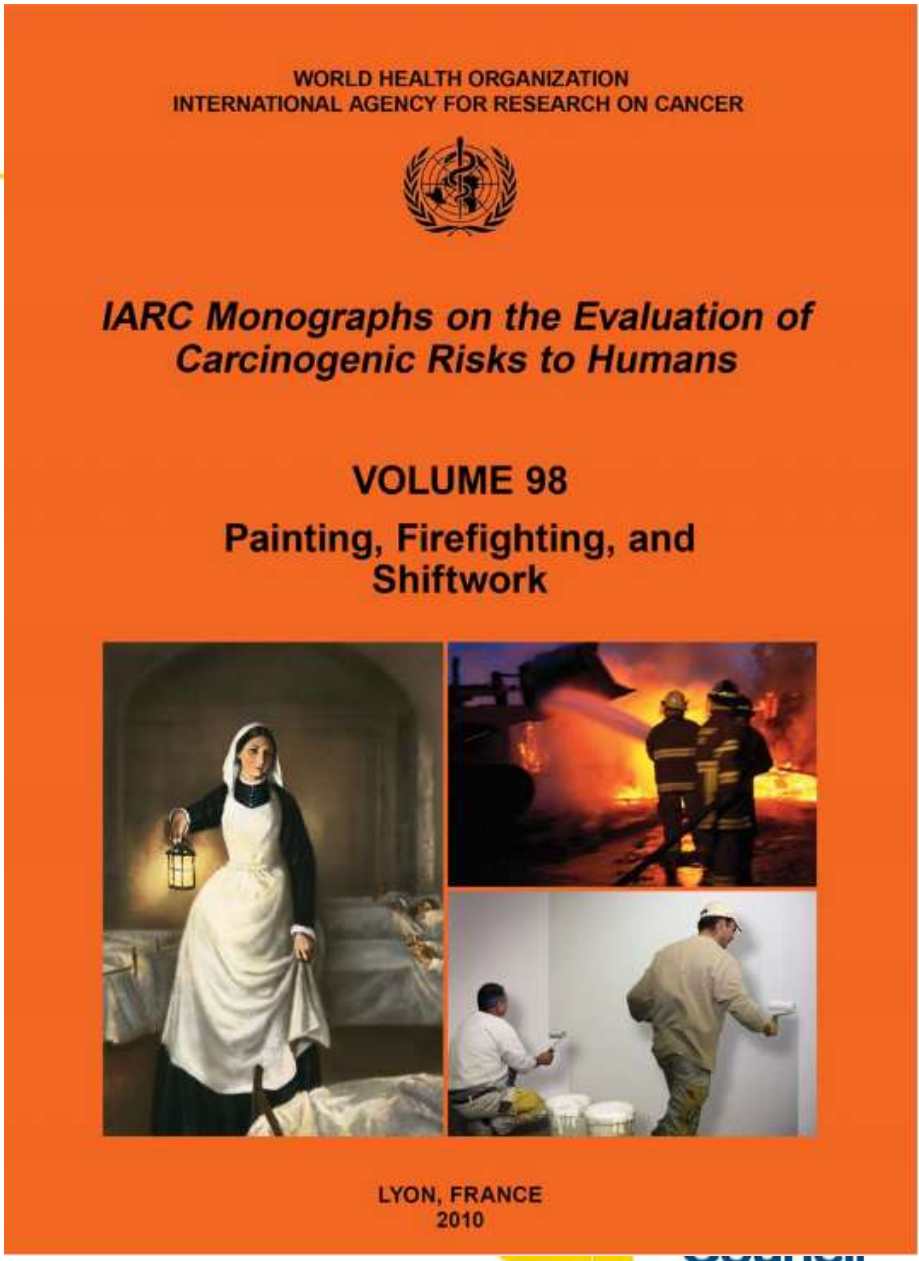
Painters Firefighters and Shiftworkers

Cancer Council
Western Australia

Painters

"There is sufficient evidence in humans for the carcinogenicity of occupational exposure as a painter. Occupational exposure as a painter causes cancers of the lung, and of the urinary bladder." (Cat 1)

"At the time of writing, solvent-borne paints contain much less solvent (high-solids paints) and less hazardous solvents than a decade ago. Sometimes, the solvent content is reduced to such an extent that volatile organic compounds (VOCs) emission levels are similar to those of waterborne paints."



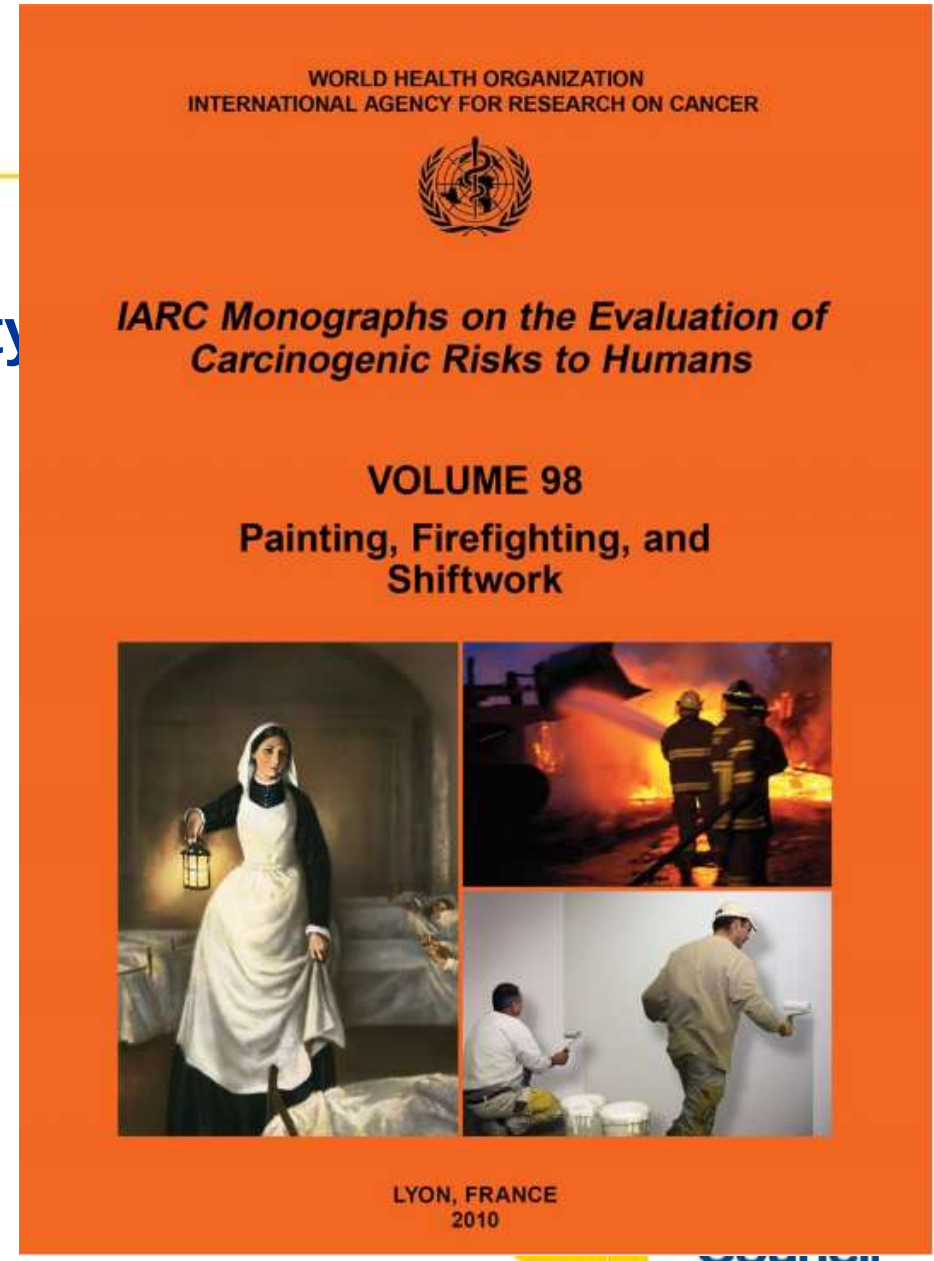
Fire Fighters

There is limited evidence

in humans for the carcinogenicity of occupational exposure

as a firefighter. ” (Cat. 2B)

“The terms ‘firefighting’ and ‘firefighters’ are broad and encompass several types of fire scenarios such as municipal, wildland, industrial, aviation, military, and oil wells. Some municipal firefighters may be perman ently assigned to tasks other than fighting fires, including fire scene investigation (i.e. the investigation of suspected criminal fires started by arsonists), hazardous material response, building safety inspections, or technical and administrative support”

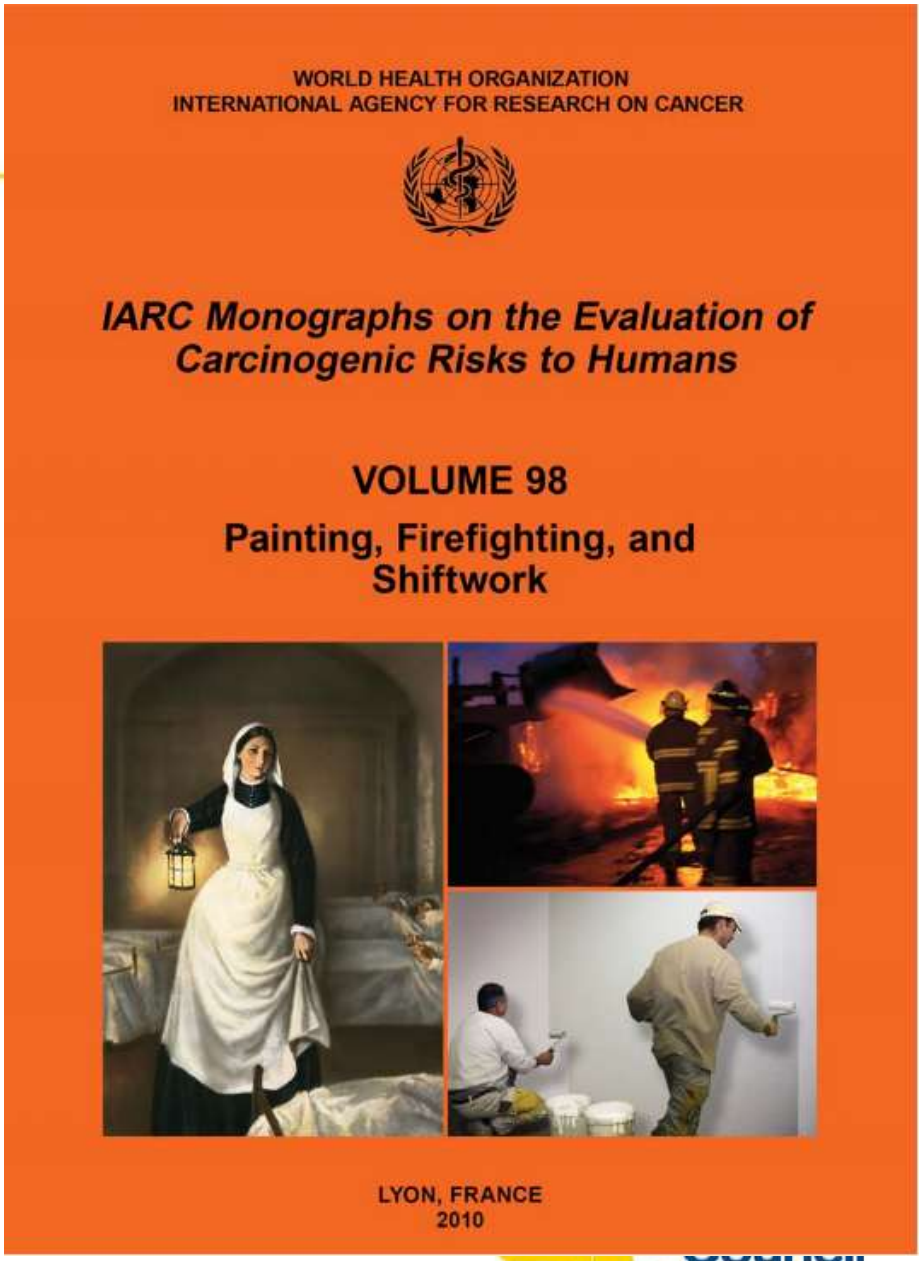


Shiftworkers

"There is limited evidence in humans for the carcinogenicity of shiftwork that involves night work. " (Cat 2A)

"…. consistently pointed towards a modestly increased risk of breast cancer among long-term employees who performed night shiftwork, defined in different ways. Most studies reported this increased risk after controlling for potential confounders.."

This is complicated !!!!!!!!



Western Australia

Occupational cancer in Australia
Where to from here ?

- Much work to be done
- More data
- More action
- Focused efforts
- Small but constructive steps
- Investment from Cancer Organisations
- Persistence, persistence, persistence…

Cancer Council
Western Australia

Any questions?

Terry Slevin,

Ph +61 893884345 or terry@cancerwa.asn.au

Cancer Council Western Australia