Occupational Cancer: How can Cancer Societies be involved - what should we do?

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WHY SHOULD CANCER SOCIETIES BE INVOLVED?

Occupational cancers
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
• As data capture improves more cancers may be found to be linked to occupational exposures
• We need better systems to deal with these concerns
OK – so it is a real issue…

SO WHAT DO WE NEED TO DO?
What can Cancer Societies do?

1. **Tell them** - Get occupational cancer issues "higher on the agenda"

2. **Do it** - Prioritise with research funding so we can get better data

3. **Policy** — Advocate for better research, policy and practice

4. **Co-operate** — Find partners with a common cause — eg Unions
TELL THEM - Educate your community about the links between cancer and work exposures
How many cancers in your country 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)
<table>
<thead>
<tr>
<th>Agent group</th>
<th>Agent</th>
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<tbody>
<tr>
<td>Combustion products (3)</td>
<td>Engine exhaust, diesel, Polycyclic Aromatic Hydrocarbons (PAHs)(^a)</td>
</tr>
<tr>
<td></td>
<td>Tobacco smoke, second-hand</td>
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<tr>
<td>Inorganic dusts (2)</td>
<td>Asbestos(^b)</td>
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<td></td>
<td>Silica dust, crystalline, in the form of quartz or cristobalite</td>
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<tr>
<td>Organic Dusts (2)</td>
<td>Leather dust</td>
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<td>Wood dust</td>
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<tr>
<td>Metals (7)</td>
<td>Arsenic and inorganic arsenic compounds</td>
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<tr>
<td></td>
<td>Beryllium and beryllium compounds</td>
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<td>Cadmium and cadmium compounds</td>
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<td></td>
<td>Chromium (VI) compounds</td>
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<td>Cobalt metal and tungsten carbide</td>
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<td></td>
<td>Lead compounds, inorganic Nickel compounds</td>
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<tr>
<td>Radiation (4)</td>
<td>Artificial ultraviolet radiation (UVA, UVB, UVC)</td>
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<td></td>
<td>Ionising radiation(^c)</td>
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<td></td>
<td>Radon-222 and its decay products</td>
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<td>Solar radiation</td>
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Ref: Fernandez FC Driscoll T et al
*A priority list of carcinogenic agents for preventive action in Australia*
Aust NZ J Public Health 24 Feb 2012
The next step is to identify priority industries and priority job classes so as to focus our efforts.
OK so the numbers are scary…..

So what about the costs?
Occupational exposure to ultraviolet radiation:
Workers’ compensation claims paid in Australia 2000-2009

This report highlights to employers and OSH reps the risks of a compensation claim and provides scope for implementing policy and procedures to protect workers from overexposure.

Key points:

• UV radiation and skin cancer risks in Australia
• Legislative responsibilities for employers and workers
• Compensation claim statistics and examples
• Further assistance
A total of 1,360 workers compensation claims for sun related injury/disease have been made in Australia from 2000-2009 (cancers = 1,070; other sun related injury/disease = 290)
The costs of compensation across all cancers in Australia 2000 - 2009

Total compensation payments made over 9 years = $236.4 million

Of that total figure Payment made to people with mesothelioma was $178.9 million

This is likely to be a significant underestimate of the total that SHOULD have been paid due to

a. Incomplete identification of legitimate claimable cases

b. Poor data on link between occupational exposures and cancer outcome
We know about the health effects of Asbestos

Mesothelioma in Australia 2007 - 660 new cases and 551
Plus about 900 Asbestos related lung cancers and roughly
(guessing !!) 1000 cases of Asbestosis – so a total of about 2500
new asbestos related disease cases a year
Policy – proposing better ways forward
Get organised - Occupational and Environmental Cancer Committee

Made up mostly of experts with clinical and academic expertise in

- Toxicology
- Epidemiology
- Occupational Hygiene
- Occupational Physicians
- Union representatives
- Cancer Council Advocacy and communications
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. 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 (ASC). 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. Despite these initiatives, little progress has been made on Australia’s regulatory approach to occupational cancer.

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 underreporting. 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. 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. Other agencies, such as the American Conference of Governmental Industrial Hygienists and the United States National Toxicology Program, classify agents with respect to carcinogenicity.

The European Union (EU) introduced legislation in 2007 for the registration, evaluation, authorisation and restriction of chemicals (REACH). 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 certain target populations 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). 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.

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
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.
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.

http://www.carexcanada.ca/
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
COOPERATION AND COLLABORATION
Cancer Council Australia jointly hosting meetings on key occupational cancer issues with the Australian Council of Trades Unions (ACTU)
Key take home messages

1. Cancer remains a major health issue and occupational cancers have been a “cinderella” issue
2. Cancer Societies are proven and effective agents for change
3. There is much work to do in research, monitoring, organisational structure, political lobbying and more
4. This is best done in collaboration with all those willing to put their shoulder to the wheel
5. Working together – while debating the best way forward – is crucial
Questions?

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