Occupational Lung Disease in Australia

Everyone should be able to work in an environment free from harm.

Complacency has led to hundreds of people being diagnosed with preventable and incurable lung diseases.

A national approach across every state and territory in Australia is required to protect workers from exposure to hazardous dust, gases or fumes.

Occupational lung diseases are an important and under-recognised cause of respiratory ill health in Australia (1). These disorders are a preventable and treatable cause of much sickness, disability and death. In addition to the traditional "dust diseases", occupational lung disease encompasses a wide spectrum of disorders. Some of the most common examples include:

- Work-related asthma
- Asbestos-related conditions (mesothelioma, asbestosis, lung cancer and benign pleural conditions)
- Silicosis
- Coal dust pneumoconiosis (Black Lung)
- Chronic Obstructive Pulmonary Disease (COPD)
- Chronic Bronchitis
- Other pneumoconiosis (hard metal lung disease, chronic beryllium disease, talcosis)
- Hypersensitivity pneumonitis (farmers lung, bagassosis)

Occupational lung disease is under-recognised in Australia, and there are limited data available on disease prevalence (1). There is also, often a long latency period of many years between exposure and diagnosis and because of this, the link to occupation and current disease may not be made. However, international studies have shown that approximately 15% of adult-onset cases of asthma and COPD are related to occupational exposures, and, importantly, 10-25% of cases of lung cancer (1). One quarter of working people with asthma either have their asthma caused by their work or made worse by their working conditions (1). There is a wide spectrum of occupational causes of interstitial lung disease that if not considered may result in the misdiagnosis of idiopathic pulmonary fibrosis. Idiopathic pulmonary fibrosis (IPF) is known to be more common amongst those exposed to excessive dust in their work environments (2). Australia has a rate of malignant mesothelioma among the highest in the world, and the legacy of past occupational asbestos exposure remains a heavy burden (3).

Recently, there has been a re-emergence of silicosis and coal workers' pneumoconiosis from exposure to dusts from cutting engineered stone and also from coal mine dust exposure. This has been due to inadequacies of hazard recognition and control, but also

failings of occupational respiratory health surveillance practices (4). Silica exposure is also a cause of lung cancer, COPD and autoimmune disease (5) (6) (7).

All causes of occupational lung disease are preventable and should not be occurring in Australia in the 21st century. New causes such as silicosis from cutting engineered stone is an example of new risks that require ongoing monitoring and education.

National action on occupational lung disease

There is a need to address the complacency that has developed leading to the re-emergence of many occupational lung disease in Australia. A national approach is required to eliminate the risk of exposure to dust, gas and fumes for people working in a variety of settings including mining, manufacturing and agriculture. A coordinated response is required across Australia where effective engagement from employers, employees, and representative organisations will be critical to success.

Action is required to address inconsistencies across jurisdictional boundaries and work towards a national approach, taking into account the need for:

- Governments to:
    - Enact legislative and regulatory frameworks to address the risk to workers of occupational lung disease
    - Conduct more audits to determine compliance with existing occupational, health and safety regulations
    - Undertake a review of the current regulations to ensure that the latest evidence on protection for workers is incorporated.
    - Develop codes of practice in collaboration with stakeholders
    - Establish an occupational lung disease register to support research on evidence-based management and translation into clinical practice
- Stakeholders to:
    - Develop and deliver an education program for employers and employees to support them to identify and mitigate hazards specifically related to exposure in the workplace to dust, gas and fumes. This includes the development of resources to support the education.
    - Develop and deliver a community awareness campaign to highlight the issue of occupational lung disease and motivate community action.
- Peak professional bodies to:
    - Establish processes for the monitoring of the health of workers at higher risk including symptom identification and referral processes into a service where people can access lung health assessments and evidence-based care. This may include telephone coaching for those diagnosed.
    - Educate health professionals to assist in identification, diagnosis and management.
    - Provide clinical practice audits for health professionals in the primary care setting.

Lung Foundation support

If you are diagnosed with lung cancer or COPD, ring our information services to make an appointment with the nurse, telephone 1800 654 504.

Worksafe contacts in each state and territory

State and territory governments are responsible for implementing, regulating and enforcing work health and safety and workers' compensation schemes.

SafeWork NSW
https://www.safework.nsw.gov.au/
Phone: 13 10 50
Workplace Health and Safety Queensland
https://www.worksafe.qld.gov.au/
Phone: 1300 362 128
WorkSafe Victoria
https://www.worksafe.vic.gov.au/
Phone: 1800 136 089
WorkSafe ACT
https://www.accesscanberra.act.gov.au/app/home/workhealthandsafety/worksafeact
Phone: 02 6207 3000
SafeWork SA
https://www.safework.sa.gov.au/
Phone: 1300 365 255
NT WorkSafe
http://www.worksafe.nt.gov.au/Pages/default.aspx
Phone: 1800 019 115
WorkSafe WA
https://www.commerce.wa.gov.au/worksafe
Phone: 1300 307 877
WorkSafe Tasmania
https://www.worksafe.tas.gov.au/
Phone: 1300 366 322
Comcare
http://www.comcare.gov.au/
1300 366 979

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