

Asbestos is responsible for an increasing number of deaths in Australia. In 2010 over 700 Australian families were devastated to learn that a loved-one had been diagnosed with mesothelioma. Experts have estimated that there were at least another 1,500 Australians with lung cancer caused by asbestos.

Asbestos was mined in Australia for over 100 years until 1983. Finally in December 2003, the use and importation of all forms of this dangerous product was prohibited. In the previous century, domestic production and importation made Australia the world's highest per-capita user of asbestos. This high rate of usage was in part the reflection of the unique thermal and mechanical properties of asbestos. These properties led to its use in a multitude of building and industrial products. Also the armed services were among its users. Asbestos was used in the Navy (for pipe lagging and insulation) and was present in thousands of other products also utilised by servicemen of Army and Air Force, thereby endangering their lives.

All cases of cancer in Australia are notifiable by legislation to the National Cancer Statistics Clearing House. However, to obtain comprehensive information about the exposure to asbestos, the Asbestos Diseases Research Institute (ADRI) is part of a consortium which recently established the Australian Mesothelioma Registry. In recent years it is becoming

# ADRI



## Asbestos Diseases Research Institute

clear that asbestos present in our environment may also take its toll and it is worthwhile mentioning that the number of cases of mesothelioma in women is significantly increasing. It is expected that non-occupational asbestos exposure will play a more important role in the future.

When asbestos was mined or processed, or when asbestos-based products are sanded, sawn, drilled or just worn down, it can form a fine airborne dust made up of tiny fibres. These airborne fibres can be easily breathed in. Due to the small size and elongated shape of the fibres they can resist the lung's natural cleaning process and may cause serious health problems 30-40 years later. Inhaled fibres can penetrate the airways and work their way through the lung tissue to reach the membrane that surrounds the lungs. Once there the bio-persistent fibres cause chronic inflammation, which eventually may lead to:

- lung cancer
- mesothelioma (cancer of the membranes lining the lung or abdominal organs)

The recently opened (January 2009) Asbestos Diseases Research Institute is a state-of-the-art research facility at the Bernie Banton Centre on

the Concord Hospital Campus in Sydney. In the past, little attention has been paid to asbestos-induced cancers in comparison with other cancers. Through translational research - using all the unique opportunities of a modern research laboratory on patient materials - ADRI's research staff aims to improve the diagnosis and treatment of asbestos-related diseases. Quality of life of asbestos victims and the development of effective preventive measures for people exposed to asbestos are important study targets.

To achieve our aims we need your support to ensure that the much needed research into these hideous man-made diseases will successfully continue. Become a friend of ADRI, be kept up to date with our research, and help us to fulfill our commitment to prevention and amelioration of asbestos-related diseases. For further information visit our website at [www.adri.org.au](http://www.adri.org.au) or contact us on 02 9767 9800.

**From the Asbestos Diseases Research Institute, Concord Hospital**

