Former coal mine workers and respiratory health

This information sheet is for former coal mine workers’ who may be concerned about their respiratory health.

Overview

Coal mine dust can cause a number of respiratory conditions collectively termed coal mine dust lung disease. Coal miners who breathe respirable coal dust over many years are at risk of developing coal workers’ pneumoconiosis (or black lung), emphysema, chronic bronchitis and lung function impairment.

Coal workers’ pneumoconiosis

Coal workers’ pneumoconiosis is an occupational lung disease caused by prolonged exposure to respirable coal dust. As the dust accumulates in the lungs, the lung tissue can react to its presence and small scars begin to form. If enough scar tissue forms, lung function can be reduced. This condition develops gradually, usually after many years of excessive occupational exposure. It has a long latency period between first exposure and identification of the disease. The likelihood of pneumoconiosis developing is directly related to the intensity and duration of exposure to coal mine dust.

There are two types of coal workers’ pneumoconiosis: simple (early stage) coal worker’s pneumoconiosis; and complicated coal workers’ pneumoconiosis, also known as progressive massive fibrosis (PMF).

Symptoms

Simple pneumoconiosis may be associated with symptoms of shortness of breath and/or chronic cough with or without production of phlegm. Alternatively, there may be no symptoms.

PMF may be a debilitating and life-threatening condition, and individuals may develop more severe symptoms including shortness of breath, chronic cough, black sputum, lung dysfunction, pulmonary hypertension and heart problems.

Have you worked in a coal mine?

Current Queensland coal mine workers are required by legislation to undertake regular health assessments under the Coal Mine Workers’ Health Scheme. Workers who leave the industry are no longer required to undertake these health assessments. Due to the long latency period of diseases like coal workers’ pneumoconiosis, former coal mine workers who have concerns about their lung health are encouraged to see their general practitioner (GP).

Talking with your GP

It is important to tell your GP that you are a former coal mine worker. Testing can include:

- A thorough occupational history
- Use of a standardised respiratory symptom questionnaire
- Past medical history
- Smoking history
- Testing lung function (spirometry)
- Chest X-ray.

High resolution CT scans may be required to assist a diagnosis.
If your GP requests a chest X-ray for a suspected case of coal workers’ pneumoconiosis, it is recommended that the X-ray is first read by an Australian radiologist on the Royal Australian and New Zealand College of Radiologists (RANZCR) Register of Clinical Radiologists for CWP Screening, and is assessed using the International Labor Organization International Classification of Radiographs of Pneumoconioses (ILO standard).

The Department of Natural Resources and Mines will assist GPs to have these chest X-rays dual read (at no cost) by a National Institute for Occupational Safety and Health (NIOSH) approved reader in the United States. The Thoracic Society of Australia and New Zealand maintains a register of lung health physicians in Queensland for coal mine dust lung disease.

**Treatment options**

There is no specific treatment for coal workers’ pneumoconiosis aside from managing the symptoms. The scarring of the lungs cannot be reversed. People diagnosed with the disease should avoid further exposure to high concentrations of coal dust.

Other coal mine dust diseases may be treatable.

**More information**

For more information or to refer your doctor to facilitate a second read of a chest X-ray in the United States, please call the department’s Health Surveillance Unit on (07) 3818 5424 or email cmwhs@dnrm.qld.gov.au.

For Australian radiologists registered for CWP screening please visit the RANZCR website at www.ranzcr.edu.au.

For lung health physicians registered with the Thoracic Society of Australia and New Zealand please visit the society’s website at www.thoracic.org.au.

Information about the Coal Mine Workers’ Health Scheme is available at www.qld.gov.au.