

CWP Inquiry
Sub No. 011



Submission to The Select Committee

Inquiry into the Re-emergence of Coal Workers' Pneumoconiosis – 'Black Lung' Disease

November, 2016

Queensland Nurses' Union
106 Victora St, West End Q 4101
GPO Box 1289, Brisbane Q 4001
P (07) 3840 1444
F (07) 3844 9387
E qnu@qnu.org.au
www.qnu.org.au

Introduction

The Queensland Nurses' Union (QNU) thanks the Select Committee (the Committee) for providing the opportunity to comment on the re-emergence of 'black lung' disease in Queensland miners.

Nurses and midwives form the largest occupational group in Queensland Health and one of the largest across the Queensland government. The QNU is the principal health union in Queensland covering all categories of workers that make up the nursing workforce including registered nurses (RN), registered midwives, enrolled nurses (EN) and assistants in nursing (AIN) who are employed in the public, private and not-for-profit health sectors including aged care.

Our more than 54,000 members work across a variety of settings from single person operations to large health and non-health institutions, and in a full range of classifications from entry level trainees to senior management. The vast majority of nurses and midwives in Queensland are members of the QNU.

In February this year, the QNU made a submission to the Senate Select Committee on Health regarding the re-emergence of Coal Workers' Pneumoconiosis in Queensland miners. As the largest health union in Queensland we reiterate the views contained in that submission and support measures to compensate the victims of this disease.

Coal Workers' Pneumoconiosis (CWP)

Coal Mine Dust Lung Disease (CMDLD) comprises a group of occupational lung diseases that result from the cumulative inhalation of respirable coal mine dust. Coal mine dust includes carbon, quartz and silicates, and it is thought that interactions between these dusts leads to a range of pathological changes in the lungs which result in CMDLD.

Coal miners are at risk of developing these diseases, which include the classic fibrotic lung diseases of Coal Workers' Pneumoconiosis (CWP), mixed dust pneumoconiosis and silicosis, as well as chronic bronchitis, emphysema and diffuse dust-related fibrosis. Progressive massive fibrosis (PMF) is also on the spectrum CMDLD, and is the most severe form of CWP (Monash University, 2016).

It is of great concern to the QNU that a preventable disease like CWP should re-emerge amongst Queensland's coal miners given the legislative and compliance regime that exists to protect workers against such an outcome. As part of this scheme, we understand all coal mine workers in the state are required to undergo a medical assessment prior to

commencing work and then at least once every five years (Lynham cited in Brisbane Times, 2015).

We also note the right of entry provisions enabling unions to inspect potential hazards on worksites are strictly enforced. Not so it seems for the procedures preventing CWP. The miners now affected by this disease undertook their work presuming their employer was complying with health and safety regulations and standards that would guard against any further risks.

In our view, it is not just the effects of this terrible illness but also the disregard for the self-regulation scheme surrounding it that should be addressed. Lack of integrity in the system and an apparent lack of concern for the workforce now find us with an increasing number of miners struck down by CWP. Queensland's coal miners, their families, communities, employers and the health system will all inevitably pay the price for failure to protect workers from a preventable disease.

Until recently in Australia, the possibility of a resurgence in reported cases of CWP has been low. In 2006, the Australian Government noted -

From the incomplete Australia data which are available, considerations of the situation in similar overseas countries and the likely PARs in Australia, we can cautiously conclude that the pneumoconioses have probably stabilised and are likely to reduce in future years (Australian Government, 2006).

Yet in a prescient statement in 2010, the Queensland Commissioner for Mine Health and Safety warned of the potential for the re-emergence of CWP amongst miners. As thousands of American miners have died from the disease, Commissioner Bell aimed to ensure Australian safety levels did not slide.

We don't want people to take their eye off the ball here and we end up in five years time in a US situation, where we could have problems. The Americans have had thousands of cases of black lung in the last few years (Bell cited in Latimer, 2010).

The National Institute for Occupational Safety and Health (NIOSH) is the U.S. federal agency responsible for conducting research and making recommendations for the prevention of work-related injury and illness. NIOSH conducts the Coal Workers' Health Surveillance Program where underground coal miners can volunteer to be periodically examined for the presence of CWP at no cost to the miner. Since 2000, results from this program show an increase in the prevalence of CWP, following a steady decline over the previous 30 years. In addition, severe cases of CWP are being identified in miners at younger ages (NIOSH, 2011).

Further, a U.S. Centre for Disease Control and Prevention (CDC)¹ report (2011) updating information on coal mine dust exposures and associated health effects from 1995 to the present found:

- After a long period of declining CWP prevalence, recent surveillance data indicate that the prevalence is rising;
- Coal miners are developing severe CWP at relatively young ages (<50 years);
- There is some indication that early development of CWP is being manifested as premature mortality;
- The above individuals would have been employed all of their working lives in environmental conditions mandated by the 1969 Coal Mine Health and Safety Act;
- The cause of this resurgence in disease is likely multifactorial. Possible explanations include excessive exposure due to increases in coal mine dust levels and duration of exposure (longer working hours), and increases in crystalline silica exposure. As indicated by data on disease prevalence and severity, workers in smaller mines may be at special risk.

The CCD recommended every effort needs to be made to reduce exposure to both coal mine dust and to crystalline silica dust.

Unfortunately, Queensland's coal miners also find themselves at risk of developing CWP. In 2015, the first case in 30 years was reported and in 2016 there are at least 16 confirmed cases (Queensland Government, 2016).

Monash Review

In response to the re-emergence of CWP, the Minister for State Development and Minister for Natural Resources and Mines, Dr Anthony Lynham, commissioned an independent review of the respiratory component of the Coal Mine Workers' Health Scheme. The Centre of Occupational and Environmental Health at Monash University (2016) undertook the review to determine if the current medical assessment regime was effective for the early detection of CWP and to identify any changes required to achieve accurate detection of the disease.

On 13 July, 2016, the Minister released the *Review of Respiratory Component of the Coal Mine Workers' Health Scheme* (the Monash Review). This report revealed major system failures at virtually all levels of the design and operation of the respiratory component of the current health assessment scheme, but also identified ways to modify the current

¹ CDC conducts science and provides health information to protect the U.S. against expensive and dangerous health threats, and responds when these arise (CDC, 2016).

scheme to make it more effective in undertaking medical screening in the future (Monash University, 2016).

The government agreed to adopt all 18 recommendations of the Monash Review and work is now progressing with a focus on three key areas:

1. preventing new cases of CWP;
2. identifying existing cases early;
3. providing a safety net for workers with the disease (Queensland Government, 2016).

The QNU notes the Monash Review team examined health surveillance systems for mine workers in other Australian states and overseas to determine components which could be incorporated to improve Queensland's current scheme. One of the factors common to the surveillance programs was that health assessments, including spirometry and chest X-Ray (CXR) interpretation and reporting are administered by trained medical and nursing staff (Monash University, 2016, p. 14).

Responses to a survey of staff who conduct health assessments including spirometry and CXR interpretation and reporting found:

- spirometry is mainly performed in General Practice (GP) (62%) or Occupational Medicine clinics (38%);
- testing is primarily administered by registered nurses (RNs) (77%) and medical practitioners (9%);
- the qualifications of other staff performing spirometry include science graduate, GP and administration staff.

In respect to RNs,

- about one third had up to 5 years' experience;
- approximately 20% performed 20 spirometry tests for the Coal Mine Workers' Health Scheme per month and more than 20 additional tests per week.

In respect to training:

- approximately two-thirds of testers had attended a training course;
- one-third were unable to specify the year this training was completed;
- 23% had completed their training more than three years ago;
- just over one-fifth of responders could not nominate their training course organisation;

- of the registered nurses performing spirometry, only 42% had undertaken a spirometry training course and could recall the name of the course.

In summary, the data indicated that a majority of the spirometry performed under the scheme is likely to be of poor quality and more ongoing training and quality assurance is needed to reach accepted standards (Monash University, 2016, p. 55).

The review also concluded that medical screening and surveillance is not a substitute for effective dust control, which should be the first line of action in protecting coal mine workers. This is particularly important since this group of diseases can progress even after dust exposure has ceased. Regular respiratory health assessments are an adjunct to dust control and can inform preventive programs, but only if such medical screening is effectively designed, implemented and monitored (Monash University, 2016, p. 17).

Recommendations

The QNU welcomes and supports Minister Lynham's commitment to implement the 18 recommendations of the Monash Review. We also acknowledge and thank Minister Grace for undertaking measures to compensate workers affected by this disease (Queensland Parliament, 2016, p. 3038).

The QNU recommends further training for registered nurses and other health practitioners on the spirometry equipment and greater testing of this equipment as outlined in the Monash Review (p. 55).

Conclusion

History shows us that CWP is preventable when workplace health and safety testing and monitoring standards are properly enforced. Workplace health and safety legislation, including the *Coal Mining Safety and Health Act 1999* and the *Mining and Quarrying Safety and Health Act 1999* rely on self-regulation, yet clearly this approach has not been rigorous enough to prevent the disease recurring.

Industry, government, workers and their unions must work together to identify high risk areas to reduce coal mine workers' exposure to dust and achieve compliance with statutory exposure standards. It is important exposure and testing standards are rigorously applied. The health and welfare of the mining workforce whose efforts have contributed so much to this country's wealth demands nothing less.

References

Australian Government (2006) *Occupational Respiratory Diseases in Australia*, Canberra.

Brisbane Times (2015) *Queensland Coal Miners Suffer Black Lung: Anthony Lynham* retrieved from <http://www.brisbanetimes.com.au/queensland/queensland-coal-miners-suffer-black-lung-anthony-lynham-20151201-glcauo.html#ixzz40OoggiHx>

Center For Disease Control and Prevention (2011) *Coal Mine Dust Exposures and Associated Health Outcomes: A Review of Information Published Since 1995*, Current Intelligence Bulletin 64.

Center For Disease Control and Prevention (2016) retrieved from <http://www.cdc.gov/about/organization/mission.htm>

Commissioner for Mine Safety and Health (2015) *Queensland Mines Inspectorate Annual Performance Report 2014–15* retrieved from www.dnrm.qld.gov.au

Latimer, C. (2010) 'Officials Warn Against Black Lung Rise', *Australian Mining*, 30 August retrieved from <http://www.australianmining.com.au/news/officials-warn-against-black-lung-rise>

Monash University (2016) *Review of Respiratory Component of the Coal Mine Workers' Health Scheme for the Queensland Department of Natural Resources and Mines Final Report* retrieved from https://www.dnrm.qld.gov.au/_data/assets/pdf_file/0009/383940/monash-qcwp-final-report-2016.pdf

National Institute for Occupational Safety and Health (2011) *Trend in Black Lung Cases Concerns NIOSH Researchers* retrieved from <http://www.cdc.gov/niosh/mining/features/blacklung.html>

Queensland Government (2016) *Coal Workers' Pneumoconiosis* retrieved from <https://www.business.qld.gov.au/industry/mining/safety-health/mining-safety-health/medicals/pneumoconiosis>

Queensland Parliament (2016) *Record of Proceedings*, 18 August retrieved from https://www.parliament.qld.gov.au/documents/hansard/2016/2016_08_18_WEEKLY.pdf