

# Occupational Health Society of Australia (WA)

Seminar 13<sup>th</sup> July 2017



*“The future role of occupational physicians in monitoring and improving the health of workers under the Model WHS laws.”*

Assoc Prof Peter Connaughton

President AFOEM



# Overview

- Health Surveillance Principles
- Lessons from Queensland
- The Role of the OEP

# Health Surveillance Principles



# Health Surveillance (HS)

Monitoring of a person for the purpose of identifying changes in the person's health status resulting from exposure to a hazardous substance

*OSH Reg 1996, s. 5.1(1)*

# Aims

- Monitor health
- Identify potential early adverse health effects from occupational exposure
- Early intervention to prevent harm to health

# Health Surveillance

## Concepts

- Screening tool
- Absorption of hazardous substance → biological sample / physiological / physical change

## Tools

- Questionnaire
- Tests (urine, blood, lung function, chest x-ray etc)
- Medical examination
- Explanation, counselling

# Health Hazards - examples

- Noise
- Occupational overuse
- Asbestos
- Lead dust or fumes
- Isocyanates
- Organophosphates
- MOCA
- Infectious diseases



# Health Hazards

- Risks may not be obvious
- Tests for health effects may not be available
- Effects or disease may be delayed (months, years or be subclinical)
- Risks to health depends on dose, duration, method of use, PPE, previous exposure, individual health status
- Uncertainty and anxiety

# Schedule 5.3

## Hazardous Substances requiring Health Surveillance

Acrylonitrile

Arsenic (inorganic)

Asbestos

Benzene

Cadmium

Chromium (inorganic)

Creosote

Isocyanates

Mercury (inorganic)

MOCA 4,4'-methylene bis 2-chloroaniline

Organophosphate pesticides

Pentachlorophenol (PCP)

Polycyclic aromatic hydrocarbons (PAH)

Silica (crystalline)

Thallium

Vinyl chloride

# Appointed Medical Practitioner (AMP)

- Appointed by employer (& pays for the service)
- Understand the principles of health surveillance;
  - understand the toxicology of hazardous substances and have an awareness of current medical literature;
- Apply the WorkSafe WA guidelines;
- Comply with the OSH Regulations 1996

# Duties of AMP

- Supervise the HS program
- Notify the employee of HS results and provide an explanation
- Provide feedback to the employer
  - Results of HS
  - Need for remedial action
- Notify Worksafe of the results of HS
- Advise of removal from work
- Maintain HS records




**WorkSafe Health Surveillance  
Notification: LEAD**



Occupational Safety and Health Act 1984; Regulation 5.24

**Confidential**

Please complete all sections neatly. A copy of laboratory report must be attached ▶▶▶▶▶▶▶▶▶▶   
Return to : Occupational Physician, WorkSafe, Locked Bag 14, Cloisters Square PERTH WA 6850  
Tel: 6251 2200 Fax: 6251 2827 Email: [bsa@commerce.wa.gov.au](mailto:bsa@commerce.wa.gov.au)

**1. EMPLOYER (Principal)**

Company/Organisation name:

Site address:

Tel:  Fax:  Contact Name:  Mobile:

**2. LABOUR HIRE (if worker is employed through Agency)**

Company/Organisation name:

Address:

Tel:  Fax:  Contact Name:

**3. EMPLOYEE / WORKER** (✓) all relevant boxes

Last name:  Given names:

Date of birth   Male  Female

Address:

Current Job:  Tel (h):  Mob:

Female of reproductive capacity  Yes  No Breastfeeding  Yes  No

**7 . RISK ASSESSMENT (AMP to complete) Indicate (✓)**

1.  New to lead work.
2.  New employee but with previous exposure to lead.
3.  Current employee continuing in lead work.
4. Satisfactory personal hygiene  Yes  No
5. Satisfactory workplace controls  Yes  No
6. Clinical picture indicative of adverse health effects from lead  
 Yes  No  Maybe

**Comment:**

Light blue shaded area for entering a comment.

## 8 . RECOMMENDATIONS (AMP to complete) Indicate (✓)

1.  Suitable to work with lead
  - Review / Repeat blood lead level in \_\_\_\_\_ months/ weeks.
2.  Not suitable to work with lead
  - Remove from exposure to lead
  - Counselling employee
  - Informed employer to review and implement controls in workplace.
  - Medical examination within 7 days on \_\_\_\_\_
  - Review / Repeat test in \_\_\_\_\_ months/ weeks.
  - Referral to medical specialist \_\_\_\_\_ Appointment date \_\_\_\_\_
    - Occupational Physician     Physician (specify)
3.  Suitable to resume lead work after removal

Next review date: \_\_\_\_\_

Comment: \_\_\_\_\_



Occupational Safety and Health Act 1984

## **Extracts from Occupational Safety and Health Regulations 1996**

*appointed medical practitioner* means a medical practitioner who is —

- (a) adequately trained to conduct health surveillance in relation to the hazardous substance in question; and
- (b) appointed by the employer, a main contractor or a self-employed person, as the case requires, after consultation with the person in respect of whom the health surveillance is to be conducted and after giving the person a reasonable choice in the selection of the medical practitioner;



# Lessons from Queensland



# Black lung white lies

## Inquiry into the re-identification of Coal Workers' Pneumoconiosis in Queensland

*The first priority and concern of all in the coal mining industry must be the health and safety of its most precious resource – the miner.*

Section 2(a), Federal Coal Mine Safety and Health Act of 1969 U.S. Public Law 91-173 (USA)

**Report No. 2, 55th Parliament**

**Coal Workers' Pneumoconiosis Select Committee**

**May 2017**



## Inquiry into the re-identification of Coal Workers' Pneumoconiosis in Queensland

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### Executive Summary

#### Introduction

This report contains the findings and recommendations of the Coal Workers' Pneumoconiosis (CWP) Select Committee (committee) of the Queensland Parliament on its inquiry into the re-identification of CWP in Queensland. The committee found that there has been a catastrophic failure, at almost every level, of the regulatory system intended to protect the health and safety of coal workers in Queensland. As a result of that failure, 21 Queensland coal miners have now been diagnosed with CWP – an insidious but entirely preventable disease. Many more coal miners are likely to be diagnosed with this latent onset disease in future. Significant reform of the regulatory framework for coal mining in Queensland is urgently needed.

## Inquiry into the re-identification of Coal Workers' Pneumoconiosis in Queensland

Coal is our leading export, generating \$21.4 billion in export revenue in 2015-16. The coal industry contributed \$1.6 billion in royalties, out of a Queensland total of \$2.2 billion from the resources industry, in 2015-16. This represents over 10 per cent of the state's total taxation and royalty revenue.

The coal mining industry in Queensland employed 29,428 workers as at September 2016. Of these, 24,146 worked in open-cut or exploration coal mines and an additional 5,282 were employed in underground coal mines.

During the coal mining boom, mine operators and workers often appear to have focused on increased production targets, with sometimes inadequate regard for health and safety. In the same period, the number of contract employees working across the industry increased.

The committee heard from a number of sources that labour hire or contract mine workers are less likely to raise concerns about safety issues or to challenge decisions, due to the insecurity or lack of permanency in their employment arrangements – a perception that persists throughout Queensland’s mining industry.

# The Role of the Occupational Physician



The Royal Australasian  
College of Physicians

## Occupational and Environmental Medicine Training Curriculum

*Australasian Faculty of  
Occupational and Environmental Medicine*



Australasian Faculty of  
Occupational and Environmental Medicine

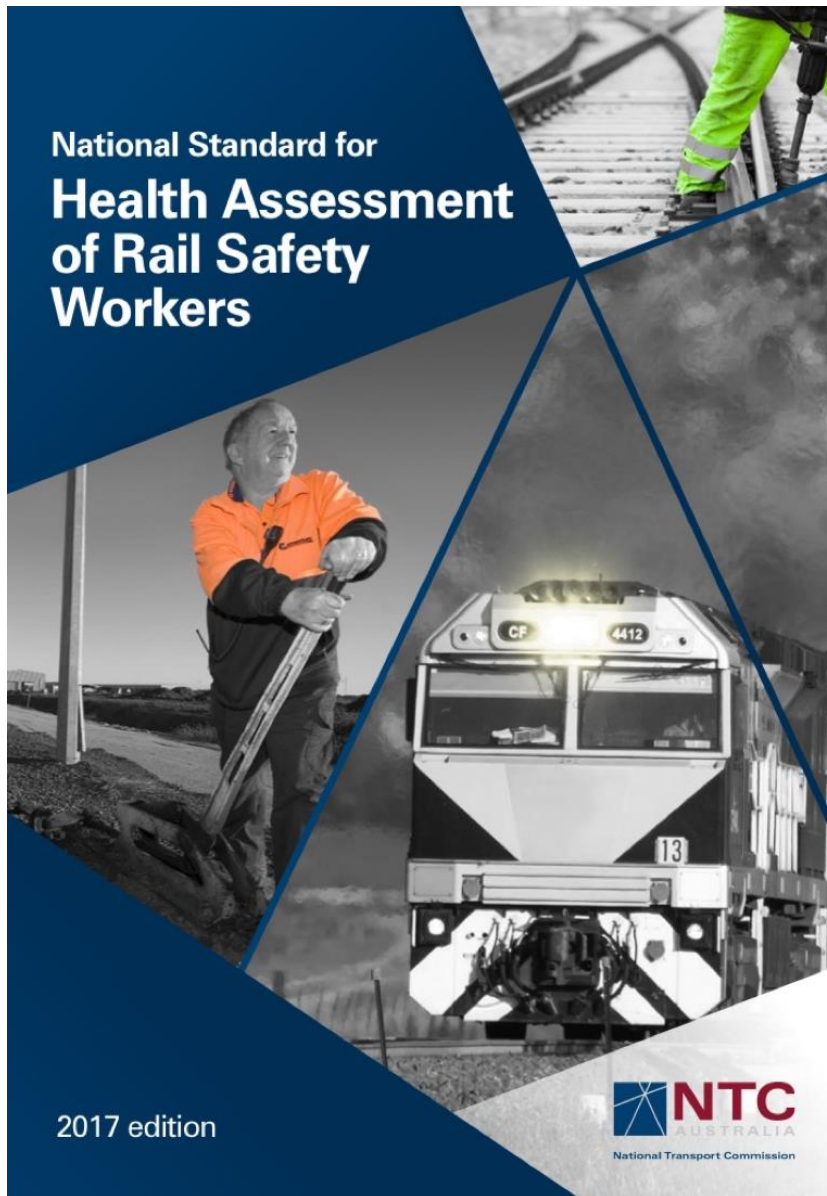


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Occupational and Environmental Medicine

# National Standard for Health Assessment of Rail Safety Workers



2017 edition



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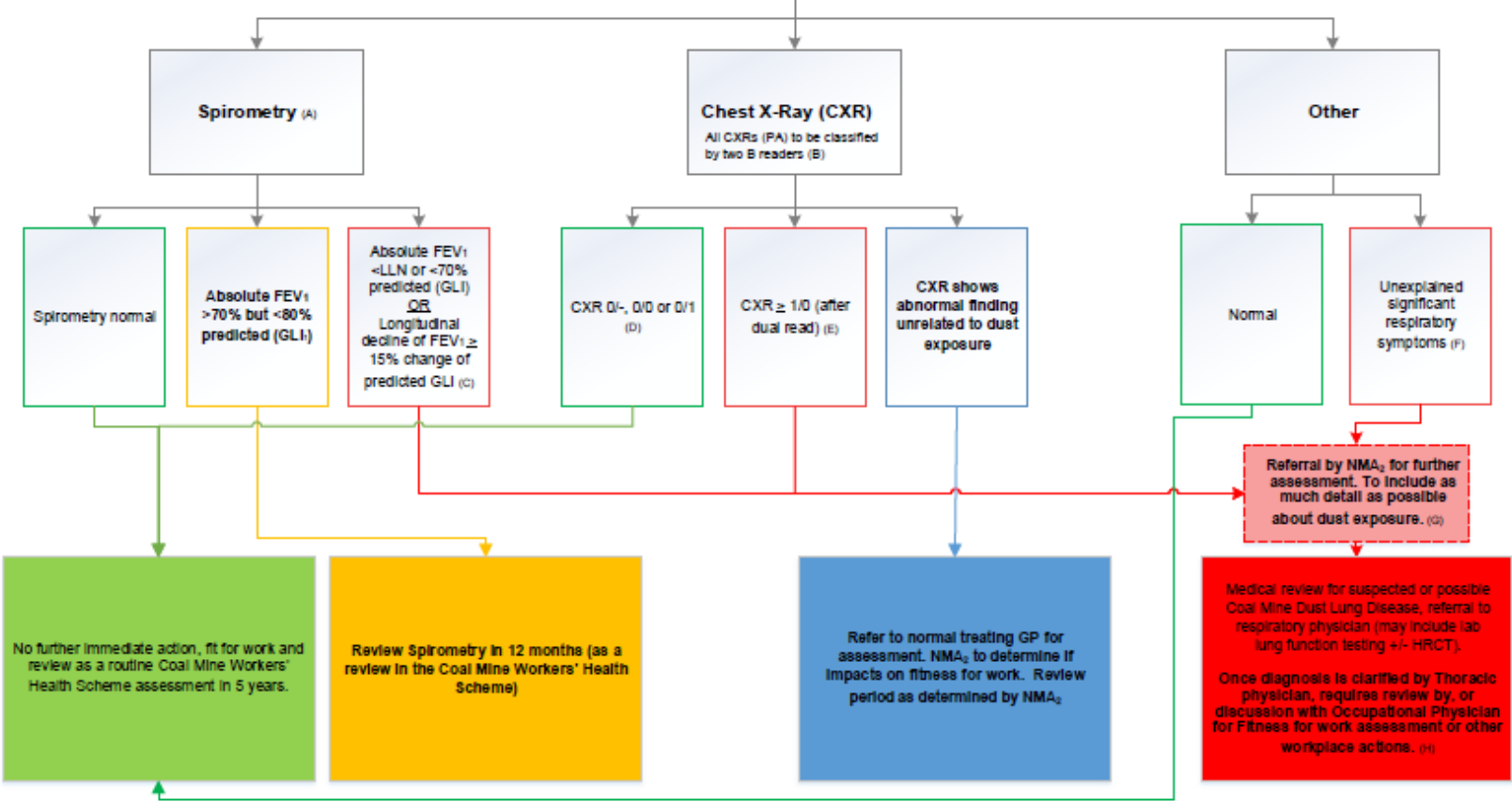


# Assessing Fitness to Drive

for commercial and private vehicle drivers



**Coal Mine Workers' Health Scheme  
Clinical Pathways Guidelines**



## Supporting Documentation for Coal Mine Workers' Health Scheme Clinical Pathway Guidelines

**A:** High quality spirometry is essential (including quality assurance processes for the equipment and training)

**B:** All CXRs (PA) are classified by two B-readers, with additional readers available for adjudication. A total of up to 5 readers may be required.

*Please Note: The CMDLD Collaborative Group recommends the following transitional arrangements in jurisdictions that do not immediately adopt the use of B-readers: until 31/01/2019, this task may also be performed by registered radiologists whose names appear on the register of clinical radiologists for CWP screening, maintained by the Royal Australian and New Zealand College of Radiologists.*

**C:**

- The “threshold” for FEV<sub>1</sub> and impairment is defined by the comparison of absolute measurements to reference values, or longitudinal studies that show excessive declines in FEV<sub>1</sub>. The threshold is met if:
  - The absolute value is less than the Lower Limit of Normal (L.L.N) or less than 70% predicted, from Global Lung function Initiative (GLI) reference values – whichever is lower – assuming that age, height and race are entered correctly.
    - *Please Note: The decision to use <70% FEV<sub>1</sub> as a cut-off was reached because choosing a higher cut-off value (such as <80%) would have resulted in a greater number of false positive results. Such false positives would, for example, have included workers without CWP, but with mild dysfunction due to other respiratory conditions*
    - *Please Note: It is planned that FEV<sub>1</sub> level will be reviewed within 2 years*
- A longitudinal decline of  $\geq 15\%$  of reference over any period of time (GLI) Abnormalities are an indicator of 'suspected CWP' and a trigger for referral and medical review (as CXR pathway)
- Abnormal Pre-employment lung function needs an individualised approach
- If COPD is suspected, then a suitable FFW assessment is required (similar to 1/0).
- These guidelines are suitable for assessing former coal mine workers.

# Summary

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# Discussion

