



CS Health

Cardiovascular Risk Management Guidelines for the NSW coal industry

Information for Order 43 Assessing Doctors

November 2019

Cardiovascular risk management guidelines for the NSW coal industry

The primary purpose of the NSW coal industry health surveillance scheme is to monitor workers' health for any adverse health conditions as a result of their employment. The medicals also serve a secondary purpose by monitoring for other health issues such as cardiovascular disease and diabetes.

It is well established that the early detection of disease can allow for better treatment options and improved health outcomes. Likewise, detection of increased risk and modification of risk factors with lifestyle or medication can delay the onset of disease.

Given the risks associated with coal mining, the assessment of absolute cardiovascular risk has been a routine element of the NSW coal industry periodic medical assessment for several years. This has been primarily for the benefit of the worker to encourage them to seek follow up for elevated risk.

It has long been agreed that those with moderate or higher risk should be referred to their General Practitioner (GP), but until now there have not been any agreed guidelines for medical certification.

Increased rates of obesity, along with an aging and predominantly male workforce make this an increasingly important issue for the NSW coal industry.

This information pack includes:

- An overview of the cardiovascular risk management guidelines
- Frequently asked questions
- Contact details

Overview of the guidelines

The *Cardiovascular Risk Management Guidelines for the NSW Coal Industry* (the guidelines) were developed with reference to the resources found at the end of this document.

The guidelines outline a consistent methodology as to how workers without any known cardiovascular disease, but who have been identified with elevated cardiovascular risk factors during an Order 43 medical, are to be managed within the NSW coal industry.

Note: In all instances outlined below where a worker has been referred to their GP for further investigation, the Order 43 Assessing Doctor must review all information provided and re-certify accordingly.

Absolute cardiovascular risk should be calculated using the online calculator at:

<https://www.cvdcheck.org.au/>

Miners under the age of 35 years should be entered as 35 years. As the tables were not designed for this age group, doctors should use care and their clinical judgement interpreting the results. Individual risk factors are still worth managing, but stress testing may not be appropriate.

Risk level	Management guideline
Low risk (<10%)	Those assessed can be cleared with respect to this issue unless there are other known adverse factors which may significantly increase their risk. In the latter case, these workers should be referred to their GP for further investigation and cleared to continue to work, subject to review, for a period of three months while these investigations are completed.
Moderate risk (10-15%)	Without other known adverse factors, workers should be referred to their GP for management of risk factors and reviewed in 12 months. If other adverse risk factors are identified, the worker should be referred to their GP for further investigation. The Order 43 Assessing Doctor should determine if the worker is temporarily fit or unfit and subject to review within three months. This determination should be based on the worker's overall medical presentation and the worker's job role based on a review of their Similar Exposure Group (SEG).
High risk (16-24%)	Workers should be referred to their GP for further investigation, including stress testing, and certified as fit subject to review within three months. If other adverse factors are identified, the Order 43 Assessing Doctor should determine if the worker is temporarily unfit and subject to review within three months. This determination should be based on the worker's overall medical presentation and the worker's job role based on a review of their SEG.
Very high risk (25% or greater)	Workers should be referred to their GP for further investigation, including stress testing. Workers in a safety critical role should be made temporarily unfit for their current role until all relevant information is available to the Order 43 Assessing Doctor.

	<p>The worker may be eligible and assessed as fit for other suitable duties. In this instance the Order 43 Assessing Doctor should make contact with the employer to discuss the medical findings and the options for the determination. This should be discussed in consultation with the worker and their employer.</p> <p>Workers in a non-safety critical role may be able to continue in their current role based on the level of risk and subject to a three-month review.</p>
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Currently, increased waist measurement and obesity are known to be associated with increased cardiovascular risk. Current [cardiovascular risk predictive tables/calculators](#) do not adequately account for these risk factors. Therefore, the assessed value should be taken to be the minimum risk in those with a BMI of 30 and over. As with the other risk factors, a value should be chosen beyond which the level of risk is deemed unacceptable.

Weight, independent of BMI, can be very important for ensuring adequately rated equipment for the use of the worker, including rescue situations. New South Wales Health and Ambulance services have a bariatric policy from 120kg or where the dimensions of the patient exceed standard equipment. There is also equipment in underground and surface mines that may not be suitable for workers weighing 120kg or over.

The following table indicates how the issue of obesity should be assessed by Order 43 Assessing Doctors.

Body Mass Index (BMI)	Management guidelines
30-39	Referral to GP for medical management, including dietary and exercise advice where appropriate. The actual BMI and the presence of comorbidities such as diabetes and/or hypertension may indicate that a referral for a sleep study and early review is recommended. Workers with a weight of 120kg or more should be referred to their GP for weight management and certified for use of appropriately weight-rated equipment and review in not more than 12 months.
40-49	Referral to GP for medical management, including dietary and exercise advice. The Order 43 Assessing Doctor should also request a sleep study and may request a stress test depending on overall risk assessment. Subject to other findings, they may be certified for use of appropriately weight-rated equipment (if relevant) and review in not more than 12 months.
50+	<p>Safety critical role: Temporarily unfit for current role but may be assessed as fit for other suitable duties. In this instance, the Order 43 Assessing Doctor should make contact with the employer to discuss the medical findings and the options for the determination. This should be discussed in consultation with the worker and their employer. Referral to GP for sleep study, stress test and medical management.</p> <p>Non-safety critical role: Consult with employer regarding their role. Referral to GP for sleep study, stress test and medical management.</p>

Examples of adverse risk factors in addition to those used in the calculation include, but are not limited to:

- Having a BMI of 40 or more
- A history of premature cardiac disease in a first degree relative
- A history of unexplained chest pain and/or shortness of breath on exertion
- Chronic renal disease
- Diabetes with proteinuria
- Total cholesterol over 7.5 mmol/L or familial hypercholesterolaemia
- Waist circumference of more than 102 cm
- Sleep apnoea
- Lack of physical exercise
- Systolic blood pressure of 180mmHg or over
- Atrial fibrillation, especially if 65 years or over
- Over 74 years old
- Aboriginal or Torres Strait Islanders

Reference documents

[Absolute cardiovascular disease risk assessments – a guide for professionals](#)

[Absolute CVD risk quick reference guide 2018](#)

[AFP focus OSA and obesity 2017](#)

[AusGov Clinical practice guidelines for the management of overweight etc.](#)

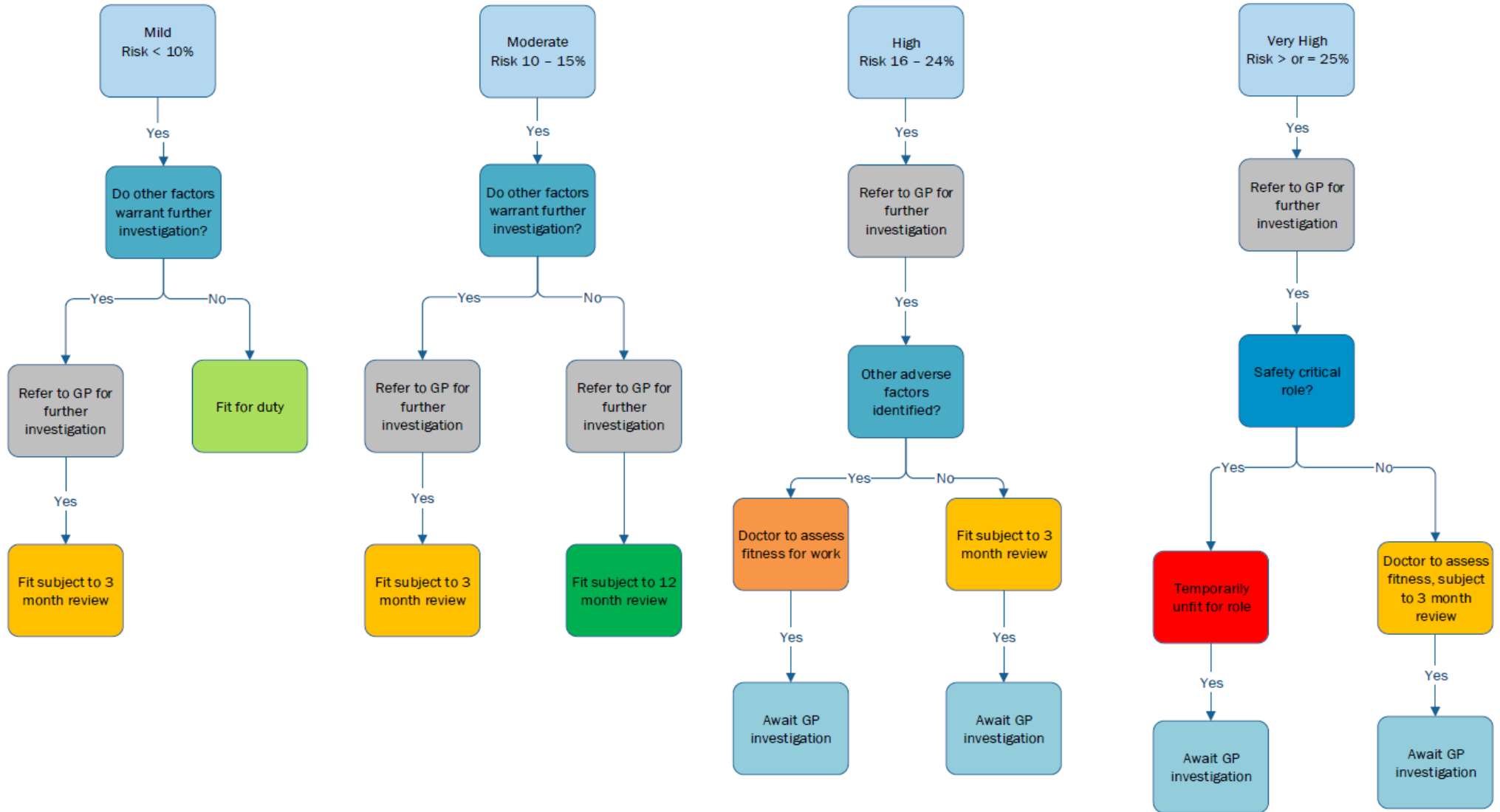
[Influence of chronic illness on crash involvement of motor vehicle drivers – 2nd edition](#)

[Guidelines for the management of absolute CVD risk](#)

[Management of obesity in general practice](#)

[National standard for health assessment of rail safety workers](#)

[The obesity management algorithm 18.10.2016](#)



Frequently asked questions

When will the guidelines be implemented?

The guidelines will be implemented to take effect from 1 January, 2020.

Why have the guidelines been introduced?

Medical data gathered by CS Health over many years has shown that a significant proportion of the coal industry workforce have multiple risk factors for cardiovascular disease. The guidelines are necessary to continue to ensure the health and safety of workers, as well as delivering other health benefits to workers.

What do the guidelines aim to do?

It is important to note that CS Health isn't doing anything different in terms of performing Order 43 medicals.

The assessment of absolute cardiovascular risk has been a routine element of the NSW coal periodic medical assessment since 2011; mainly to encourage workers showing elevated risk to seek further advice from their general practitioner (GP).

However, until now there has not been an agreed guideline for medical certification where the worker is referred to their GP.

The guidelines establish a consistent process for Order 43 Assessing Doctors to follow and also give employers an understanding of our guiding principles.

Which workers will be affected?

The guidelines make recommendations for Australian adults aged 45 years and over (35 years for Aboriginal and Torres Strait Islander people) who have no previous history of cardiovascular disease.

However; the guidelines being implemented are not age dependent. While older workers are more likely to have cardiovascular issues, age alone is not the only factor.

Who determines the worker's fitness for work?

The Order 43 Assessing Doctor assesses the worker's cardiovascular health as part of the Order 43 medical process.

The worker's GP is responsible for organising further medical investigations and providing these results to the Order 43 Assessing Doctor to allow them to determine the worker's fitness.

The GP does not determine a worker's fitness.

What is the process for notifying employers about a worker's fitness for work?

If a worker is deemed to be temporarily unfit for their current role, please contact CS Health's Head of Health Services *prior to contacting the employer*.

Who is responsible for payment of follow-up assessments and/or treatment?

The cost of further assessments or treatment will be at the worker's expense. In most cases, these will be covered by Medicare or Private Health Insurance. Such assessments are not considered to be compensable health issues and are not covered by CS Health, Coal Mines Insurance or the employer.

In the instance where the Order 43 Assessing Doctor has requested a review earlier than the three-year periodic health review timeframe, CS Health will cover the cost of a review appointment at CS Health. Neither the worker nor the employer will be charged.

Who is responsible for ensuring the worker attends his/her health review?

It is up to the worker and the employer to ensure attendance at a health review. CS Health will send reminders to both the worker and the employer when the review is due.

Contact us

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