



**Consultation Report** 

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# 1 About this project

# **Key points**

The National Transport Commission (NTC) is reviewing the National Standard for Health Assessment of Rail Safety Workers (the Standard) to ensure it continues to support rail operators in effectively managing the risks posed by ill health of rail safety workers. This section outlines the scope of this report and provides an overview of the project and approach.

# 1.1 Introduction

The <u>National Standard for Health Assessment of Rail Safety Workers</u><sup>1</sup> is a publication of the NTC that is developed in consultation with industry, rail unions, rail safety regulators and health professionals. The NTC is undertaking a review of the 2017 edition of the Standard.

# 1.1.1 Scope of this report

This report explains the changes to the Standard proposed as a result of the review, including:

- Changes flowing from the review of the commercial vehicle driver standards contained in the 2022 edition of <u>Assessing fitness to drive</u> (AFTD).<sup>2</sup>
- Changes recommended by expert medical specialists and the Chief Medical Officers Council (CMOC).
- Changes recommended by the Rail Health Advisory Group (RHAG), comprising medical, regulator, government, industry and union representatives.
- Feedback received since the release of the 2017 edition of the Standard.

This report is presented in sections that describe:

- Issues and changes relating to Parts 1 to 3 of the Standard (containing the health risk management system and procedures for conducting health assessments).
- Issues and changes relating to Parts 4 and 5 of the Standard (containing the fitness for duty criteria for Safety Critical Worker health assessments and fitness for duty criteria for Category 3 workers).
- Issues and changes relating to the model forms.
- Various issues that were out of scope of the review but of interest to stakeholders.

This report is to be read in conjunction with the draft revised Standard available on the NTC website.

<sup>&</sup>lt;sup>1</sup> National Transport Commission (2017) **National Standard for Health Assessment of Rail Safety Workers**, accessed 23 May 2022.

<sup>&</sup>lt;sup>2</sup> Austroads (2022) <u>Assessing fitness to drive: for commercial and private vehicle drivers</u>, accessed 12 October 2022.

# 1.2 Project overview

# 1.2.1 Background to the review

The Standard was first published in 2004 and contains nationally agreed health management systems, procedures and fitness for duty criteria for the purposes of determining the fitness for duty of rail safety workers throughout Australia.

The NTC has an ongoing responsibility to develop, monitor and maintain uniform or nationally consistent regulatory and operational reforms relating to road, rail and intermodal transport.

Since 2017, when the Standard was last fully reviewed, there have been medical, legal and social developments that need to be considered in applying the Standard.<sup>3</sup>

# 1.2.2 Purpose of the review

The purpose of the review is to ensure the Standard continues to meet its objectives in supporting rail transport operators to manage the risks posed by ill health of rail safety workers, as part of their overall management of rail network safety.

# 1.2.3 Scope of the review

The review has focused on the medical aspects of the Standard. The sections of the Standard that relate to medical aspects include:

- Part 1 The purpose, application, scope and structure of the Standard. It outlines the legislative and program interfaces, as well as responsibilities and relationships.
- Part 2 The health risk management system (which defines the nature and extent of health assessment for various categories of rail safety workers).
- Part 3 Procedures for conducting health assessments.
- Part 4 Fitness for duty criteria for Safety Critical Worker health assessments (comprising guidance regarding assessment and management and tables of fitness for duty criteria).
- Part 5 Fitness for duty criteria for Category 3 workers.
- Part 6 Forms (which reflect changes in the assessment process and fitness for duty criteria).

In revising these aspects of the Standard, consideration has been given to:

- Significant changes in job requirements or operating environments that may impact health requirements for rail safety workers.
- Changes in legal requirements that may impact the content or application of the Standard.
- Advances in medical knowledge that may impact rail worker assessment, treatment and management, including advances identified in the review of AFTD.
- Social developments that may impact the content or application of the Standard.
- Findings of investigations into accidents and incidents that may point to a deficiency in the Standard.

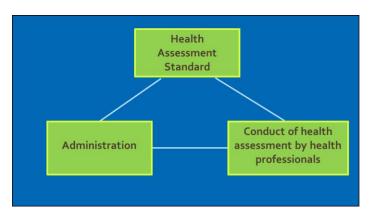
<sup>&</sup>lt;sup>3</sup> National Transport Commission, 2016, Review of National Standard for Health Assessment of Rail Safety Workers: Final Report August 2016.

- Findings of audits.
- Stakeholder feedback on the operation and application of the Standard (including significant problems that have been encountered by medical professionals undertaking assessments and issues arising in the interaction between Authorised Health Professionals and rail transport operators).
- Errors and mistakes that require correction.
- Language that requires clarification.
- Reference material and other information requiring updating.

# 1.2.4 Out of scope of the review

The review has focused on the Standard itself and the medical aspects, however the NTC acknowledges that these aspects do not operate in isolation and that other issues affecting implementation have been raised, including those associated with administration of the Standard and the conduct of health assessments by Authorised Health Professionals (Figure 1).

Figure 1. The Standard in the broader context of implementation (the three-legged stool)





The out-of-scope issues are contained in section 8 of this report.

The review will not:

- Seek to resolve inconsistencies in implementation between jurisdictions, although the changes made may resolve such issues by providing clarity around the requirements.
- Include commissioning new primary research into gaps in knowledge about medical conditions, although if any gaps are identified in the course of the review these will be documented in the review report.
- Address aspects that are already addressed or best addressed under work health and safety policies and legislation, although interfaces with these requirements may be identified for management.

The review assumes that the Standards will continue to operate as they currently do.

# 1.3 Approach

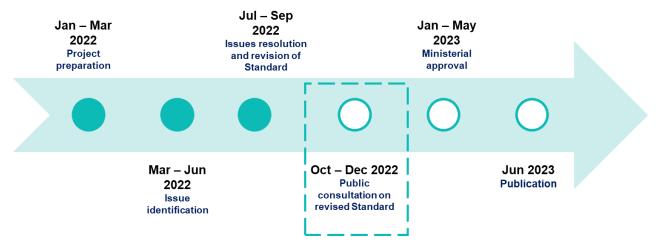
#### 1.3.1 Project approach

The NTC intends to submit a revised Standard for approval at the May 2023 Infrastructure and Transport Minister's Meeting (ITMM).

There are six phases of the project (Figure 2):

- 1. Project preparation (January to March 2022).
- 2. Issue identification (March to June 2022).
- 3. Issues resolution and revision of the Standard (July to September 2022).
- 4. Public consultation on the revised Standard (October to December 2022).
- 5. Ministerial approval (January to May 2023).
- 6. Publication (June 2023).

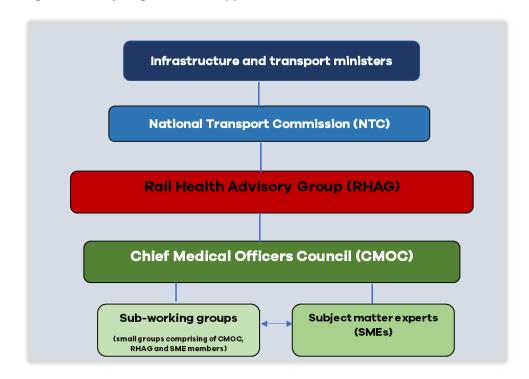
Figure 2. Project phased approach



# 1.3.2 Governance approach

The NTC has utilised several stakeholder groups to inform the review, each with different roles and responsibilities These include subject matter experts, sub-working groups, the Chief Medical Officers Council (CMOC) and the Rail Health Advisory Group (RHAG) (Figure 3). Consultation performed with these groups is contained in Appendix C.

Figure 3. Project governance approach



# **Infrastructure and Transport Ministers**

Infrastructure and transport ministers are the final decision makers. The NTC will review the draft Standard based on submissions received and seek approval on a final Standard from ITMM in May 2023.

# National Transport Commission and Project Health

Using the feedback elicited from this process, the NTC has produced a draft revised Standard and this consultation report for public consultation.

Project Health has been engaged to assist and advise the NTC throughout the review.

# **Rail Health Advisory Group**

The RHAG is an advisory group representing medical professionals, jurisdictions, rail regulators, unions and the rail industry. The role of the RHAG is to raise issues during the review, provide advice on the proposed revisions and assist in resolving issues as they arise. The RHAG has reviewed the Standard following review from CMOC and medical specialists.

The RHAG member list is contained in Appendix A.

#### **Chief Medical Officers Council**

The CMOC has provided medical expertise to guide the revision of the Standard. Members of the CMOC have been invited to participate in sub-working groups to discuss issues identified for consideration. This feedback has formed the basis of the revised Standard.

# **Sub-working groups**

The NTC has convened small sub-working groups on discrete topics, including:

- cardiovascular conditions
- diabetes
- sleep disorders
- hearing
- neurodevelopmental disorders.

The findings and recommendations from the sub-working groups have been shared with the CMOC. The CMOC has reviewed and endorsed the findings and recommendations from a medical perspective and shared with the wider RHAG for discussion and agreement.

The working group member list is contained in Appendix B.

# Subject matter experts

The NTC has engaged subject matter experts to provide medical advice on discrete topics, including the Cardiac Society of Australia, Diabetes Society, Australasian Sleep Association, Audiology Australia and the Australian Psychological Society College of Clinical Neuropsychologists.

# 1.4 Public consultation

This document has been prepared to assist stakeholders to understand and provide feedback on the proposed changes in the Standard.

The NTC is seeking feedback from the public on the revised draft Standard and the below set of questions.

| 4                            |  |
|------------------------------|--|
| Question 1:                  | Are the proposed changes to Part 1 appropriate?20  |
| Question 2:<br>in Part 1?    | Do you have any further comments on this issue or other issues to be considered 20   |
| Question 3: clarifying the   | Are the proposed changes to Triggered Health Assessments appropriate in nature and application of such assessments (section 2.2.6 of the Standard)?25      |
| Question 4:<br>for duty cate | Do you see any risks emerging as a result of the proposed changes to the fitness gorisation (section 2.3 of the Standard)?25                               |
| Question 5: strengthened     | Do you have any suggestions as to how the risk assessment process could be d in the Standard (section 2.4 of the Standard) or as part of implementation?25 |
| Question 6: scope sectio     | Are there any implementation issues that should be addressed in the out-of-n?25  |
| Question 7:<br>in Part 2?    | Do you have any further comments on this issue or other issues to be considered 25   |
| Question 8:                  | Have any of the proposed changes introduced any gaps in Part 3?27  |
| Question 9: scope sectio     | Are there any implementation issues that should be addressed in the out-of-n?27  |
| Question 10:<br>in Part 3?   | Do you have any further comments on this issue or other issues to be considered 27   |
| Question 11: other issues    | Do you have any comments on the changes to the cardiovascular chapter or that need to be considered?31   |
|                              | Do you have any comments on the changes to the diabetes chapter or other eed to be considered?33   |
|                              | Do you have any comments on the changes to the dementia chapter or other eed to be considered?34   |
|                              | Do you have any comments on the changes to the epilepsy chapter or other eed to be considered?36   |
|                              | Do you have any comments on the changes to the neurodevelopmental apter or other issues that need to be considered?38                                      |
|                              | Should new criteria and guidance be included regarding psychogenic non-<br>cures as per changes to AFTD?40   |
| Question 17:                 | Do you have any comments on the changes to the psychiatric conditions chapter es that need to be considered?40   |
|                              | Do you have any comments on the changes to the sleep disorders chapter or that need to be considered?45  |
|                              | Do you have data (highlighted in bold in Table 3) to support the cost benefit he proposed changes to the sleep criteria?                                   |
| Question 20: issues that n   | Do you have any comments on the changes to the hearing chapter or other eed to be considered?49  |
|                              | Do you have data (highlighted in bold in Table 4) to support the cost benefit he proposed changes to the hearing criteria?49                               |

|  | Do you have any comments on the changes to the vision chapter or other issues be considered?51   |
|--|--|
| Question 23:                             | Are the proposed changes to Part 5 appropriate?53  |
| Question 24:<br>in Part 5?               | Do you have any further comments on this issue or other issues to be considered 53   |
| Question 25:                             | Are the proposed changes to Part 6 appropriate?56  |
| Question 26:<br>would rail tra           | What transitional arrangements should the Standard allow for? How much time insport operators need to transition to changes to the fitness for duty criteria?56  |
| Question 27:<br>in Part 6?               | Do you have any further comments on this issue or other issues to be considered 56   |
| Question 28:<br>Standard, ind<br>system. | Please provide information about your experiences with implementation of the cluding but not limited to the performance of the Authorised Health Professional 59 |
|  | What are your preferences as to how implementation of the Standard should be and assessed going forward?59   |

Stakeholders are invited to provide comments on the proposed changes via the NTC website (www.ntc.gov.au). The consultation period will close on **Monday 12 December 2022**.

# 1.5 Review of Assessing fitness to drive

AFTD is a joint publication of Austroads and the NTC. It contains nationally agreed medical standards for the purposes of driver licensing. The NTC undertook a review of AFTD in 2021 to ensure the standards reflect current medical evidence and best practice.<sup>4</sup>

The NTC has considered the changes to the commercial vehicle driver 2022 AFTD standards when drafting the revised Standard.

Despite the differences in application of the two documents, the medical criteria for commercial vehicle drivers in AFTD are similar to that for rail safety workers, and where appropriate alignment with these standards is maintained as a result of the reviews. Table 1 summarises whether the changes made to AFTD have been carried over to the Standard.

Following the review of the Standard it is likely that some recommendations will be made for amendments to AFTD.

<sup>&</sup>lt;sup>4</sup> National Transport Commission, 2022, Assessing Fitness to Drive 2020-21 review: Final Report February 2022; Austroads, 2022, Assessing Fitness to Drive: Summary of changes.

Table 1. Summary of fitness for duty criteria changes to the National Standard for Health Assessment of Rail Safety Workers

| CHAPTER                   | Change<br>to<br>criteria<br>(YES/NO) | Detail of change to Assessing fitness to drive criteria and significant guidance   | Relevance to the National<br>Standard for Health<br>Assessment of Rail Safety<br>Workers |
|---------------------------|--------------------------------------|--|--|
| Blackouts                 | NO                                   | Psychogenic non-epileptic seizures   | Psychogenic non-epileptic seizures   |
|                           |                                      | Reference to psychogenic non-<br>epileptic seizures included and<br>cross-referenced to new criteria in<br>Psychiatric conditions.   | This change has been adopted – refer also to Psychiatric conditions below.               |
| Cardiovascular conditions | YES                                  | Implantable cardioverter defibrillator (ICD)   | Implantable cardioverter defibrillator   |
| Conditions                |                                      | Advances in technology are now such that commercial drivers with   | This change has been adopted for Category 1 workers.                                     |
|                           |                                      | ICDs inserted for prophylaxis may<br>be considered for a conditional<br>licence, subject to meeting several<br>criteria.   | Category 2 criteria remain unchanged – individually assessed.                            |
|                           | YES                                  | Congenital disorders   | Congenital disorders   |
|                           |                                      | Criteria are now included in relation to surgical management, including  | This change has been adopted for Category 1 workers.                                     |
|                           |                                      | non-driving periods for recovery for private and commercial drivers.  Commercial driver criteria have been expanded to provide greater clarity of the required clinical outcomes.  | Category 2 criteria remain unchanged.  |
|                           | YES                                  | Ventricular assist devices (LVAD, BiVAD)   | Ventricular assist devices (LVAD, BiVAD)   |
|                           |                                      | Based on new evidence, private drivers with BiVADs may now be considered for a conditional licence, subject to the same criteria as previously required for LVAD. Ventricular assist devices of any type remain unacceptable for commercial vehicle driving. | Not applicable.  |
| Diabetes                  | NO                                   | Hypoglycaemia  | Hypoglycaemia  |
|                           |                                      | Guidance is provided regarding the use of glucose monitors to support awareness of hypoglycaemia (Section 3.2.1).  | Guidance adopted.  |
|                           |                                      | General guidance updated under<br>Impaired hypoglycaemic<br>awareness.   |  |
| Hearing                   | NO                                   | Role of hearing professionals  | Role of hearing professionals  |
|                           |                                      | Guidance is provided regarding the role of different hearing professionals (for commercial drivers).   | Guidance adopted.  |
| Musculoskeletal           | YES                                  | Conditional licensing criteria   | Conditional licensing criteria   |
| conditions                |                                      | Medication effects and condition stability are emphasised as factors the health practitioner may consider in their assessment.   | Guidance and criteria adopted.   |

| CHAPTER                                       | Change<br>to<br>criteria<br>(YES/NO) | Detail of change to Assessing fitness to drive criteria and significant guidance  | Relevance to the National<br>Standard for Health<br>Assessment of Rail Safety<br>Workers   |
|---|--------------------------------------|---|--|
|   | NO                                   | Recommendation of prosthetic devices  New information is included to guide the recommendation of prosthetic devices to support drivers.   | Recommendation of prosthetic devices  Not included as it is specific to driving.   |
| Neurological conditions: General and dementia | YES                                  | Guidance for preclinical and prodromal dementia or mild cognitive impairment  | Guidance for preclinical and prodromal dementia or mild cognitive impairment   |
|   |                                      | A person with dementia is not fit to hold an unconditional private or commercial licence. A qualifying note has been included that excludes preclinical and prodromal dementia unless there are clinically significant symptoms.  | Guidance and criteria amendments adopted.  |
| Neurological                                  | YES                                  | When EEG is required  | When EEG is required   |
| conditions: seizures and epilepsy             |                                      | For the relevant commercial medical standards, it has been emphasised that EEG (electroencephalography) demonstrating no epileptiform activity is only required on initial granting of the conditional licence and not for the ongoing periodic review.   | Guidance and criteria amendments adopted.  |
|   | YES                                  | Resumption of unconditional licence after first seizure and acute symptomatic seizures Assessment criteria relating to antiseizure medication have been added to the commercial medical standards for first seizure and acute symptomatic seizures.   | Resumption of unconditional fitness for duty after first seizure and acute symptomatic seizures Criteria changes adopted.  |
|   | NO                                   | Description of 'safe' seizures Explanatory text has been added to describe a type of seizure that can be managed to the 'safe' seizure medical standard (private drivers).  | Description of 'safe' seizures  'Safe' seizures are not applicable for commercial drivers so not adopted for Safety Critical Workers.  |
|   | YES                                  | Assessment of provoking factors (in Seizure in a person whose epilepsy was previously 'well controlled') A clarification is included that sleep deprivation is definitely not considered a provoking factor when managing private drivers who have had a seizure but were previously well controlled. | Assessment of provoking factors (in Seizure in a person whose epilepsy was previously 'well controlled' including provoked seizures) Guidance added to text. Note, not applicable to Category 1 Safety Critical Workers. |
|   | YES<br>(new)                         | Criteria for unreliable or doubtful clinical information  | Criteria for unreliable or doubtful clinical information Guidance and criteria amendments adopted.   |

| CHAPTER                           | Change<br>to<br>criteria<br>(YES/NO) | Detail of change to Assessing fitness to drive criteria and significant guidance   | Relevance to the National<br>Standard for Health<br>Assessment of Rail Safety<br>Workers   |
|-----------------------------------|--------------------------------------|--|--|
|                                   |                                      | New assessment criteria have been included for private and commercial drivers to address circumstances where the clinical information is unreliable or doubtful. The person should be assessed as unfit to drive in these circumstances.   |  |
|                                   | YES                                  | Clarifications on medication withdrawal or change A note has been added to explain that the three-month non-driving period still applies if a driver is being switched from one antiepileptic drug to another – private vehicles only.   | Clarifications on medication withdrawal or change  Not applicable – no change.   |
|                                   | YES                                  | Recommended reduction in dosage of anti-epileptic medication in a person who satisfies the standard to hold a conditional licence Clarification is included for both private and commercial drivers to help assess changes in medication dosage due to temporary situations (for example, pregnancy).  | Recommended reduction in dosage of anti-epileptic medication in a person who satisfies the standard for Fit for Duty Subject to Review Change in criteria adopted. |
|                                   | YES                                  | Applying the seizure and reduction criteria  Additional text has been included to guide application of the standards if there is more than one circumstance for which a reduced non-driving seizure-free period applies.  Page 137 (green box) 'The longer non-driving period applies if the situation is covered by more than one standard.'  | Applying the seizure and reduction criteria  Additional text adopted.  |
| Neurological<br>Conditions: other | YES                                  | Stroke  The assessment requirements for private drivers post stroke have been refined to reduce unnecessary assessments and reporting. Private drivers who are discharged from specialist care within four weeks of a stroke and have been assessed as fit to drive when discharged may continue to drive on their current licence and without need for reassessment, unless otherwise indicated. There are clearer licensing criteria for situations when a person may require a conditional licence after a stroke.  The criteria also indicate that periodic assessment is not required if the driver's condition is stable.  New text is also included: 'Documentation of the assessment | Stroke  No changes to commercial driver standards so changes not adopted.  |

| CHAPTER                      | Change<br>to<br>criteria<br>(YES/NO) | Detail of change to Assessing fitness to drive criteria and significant guidance  | Relevance to the National<br>Standard for Health<br>Assessment of Rail Safety<br>Workers        |
|------------------------------|--------------------------------------|---|---|
|                              |                                      | should be provided at discharge, which includes details of the driver's licence, indicate that they have not suffered any permanent neurological deficits that will impact driving, and that they are fit to drive at the end of the non-driving period.'   |   |
|                              | YES                                  | Subarachnoid haemorrhage Cases involving low-risk non- aneurysmal subarachnoid haemorrhage restricted to the cerebral convexity are excluded from the requirements of the standard, unless impairments are present.   | Subarachnoid haemorrhage Guidance and revised criteria adopted.                                 |
| Neurodevelopmental disorders | NO                                   | Autism spectrum disorder (ASD) Assessment guidance is now provided in the text.   | Autism spectrum disorder Changes have informed the new chapter on neurodevelopmental disorders. |
| Psychiatric conditions       | YES                                  | Periodic review by a general practitioner (commercial drivers)  | Periodic review by a general practitioner (commercial drivers)                                  |
| Conditions                   |                                      | Reflecting the usual management of stable psychiatric conditions, periodic reviews may be performed by a person's general practitioner under specified circumstances (in place of specialist reviews). The psychiatrist must perform the initial assessment, and all must agree to the arrangement. | No changes made in relation to specialist assessment.   |
|                              | YES                                  | Psychogenic non-epileptic seizures (PNES)   | Psychogenic non-epileptic seizures  |
|                              | (new)                                | Medical standards have been included for seizures diagnosed as psychogenic (pseudo-seizures). The medical standards include details on seizure-free periods, criteria to consider conditional licensing, and a description of the treating specialists.   | Guidance and criteria amendments adopted.   |
|                              | NO                                   | ADHD Additional information is included regarding assessment for ADHD (attention deficit hyperactivity disorder) but not specific criteria.   | ADHD Changes have informed the new chapter on neurodevelopmental disorders.                     |
|                              | NO                                   | Other Specific 'contraindications' for driving have been highlighted to draw attention to high-risk circumstances (page 172).   | Other Changes not included as related to driving.   |
| Sleep disorders              | NO                                   | Sleep disorder assessment   | Sleep disorder assessment   |
|                              |                                      | More detailed guidance has been provided for assessment and management of sleep apnoea, as  | Changes have informed the revisions to the Standard.  |

| CHAPTER                         | Change<br>to<br>criteria<br>(YES/NO) | Detail of change to Assessing fitness to drive criteria and significant guidance   | Relevance to the National<br>Standard for Health<br>Assessment of Rail Safety<br>Workers                              |
|---------------------------------|--------------------------------------|--|---|
|                                 |                                      | well as management of driving and periodic review. This content will assist management and support consistent application of the medical criteria.   |   |
| Substance misuse and dependence | YES                                  | Periodic review by a general practitioner (commercial drivers)  As for psychiatric conditions, and reflecting the usual management of stable conditions, periodic reviews may be performed by a person's general practitioner under specified circumstances (in place of specialist reviews). The specialist must perform the initial assessment, and all must agree to the arrangement.                         | Periodic review by a general practitioner (commercial drivers)  No changes made in relation to specialist assessment. |
|                                 | YES                                  | Clarification of criteria  The criteria have been modified to emphasise the conditional licensing requirements and include the use of alcohol interlocks where appropriate for private vehicle drivers.  Additional changes to the text provide greater clarity regarding assessment requirements, including objective measures of abstinence.   | Clarification of criteria  No changes made. Information about remission already included.                             |
| Vision and eye disorders        | NO                                   | Visual acuity - orthokeratology Orthokeratology is an established therapy which can be used to meet the standards for a conditional licence. This treatment is managed similarly to corrective lenses. Guidance is provided about the nature of orthokeratology and the considerations for driving and licensing. There are no changes to the criteria as such, only a cross-reference to the guidance material. | Visual acuity – orthokeratology Guidance material not adopted.  |
|                                 | YES                                  | Diplopia Clarification on the criteria for experiencing diplopia within central fixation. The change of wording is for clarification and does not impact the intention of the standard.  | <b>Diplopia</b> Wording change adopted.   |
|                                 | YES                                  | Monocular vision and commercial licensing  Minimum visual standards for commercial monocular driving are now included to provide clarity.  | Monocular vision and commercial licensing Wording change adopted.   |
|                                 | NO                                   | Telescopic lenses (bioptics)   | Telescopic lenses (bioptics)  More detailed guidance adopted.   |

| CHAPTER | Change<br>to<br>criteria<br>(YES/NO) | Detail of change to Assessing fitness to drive criteria and significant guidance   | Relevance to the National<br>Standard for Health<br>Assessment of Rail Safety<br>Workers |
|---------|--------------------------------------|--|--|
|         |                                      | There continues to be considerable interest in these devices. While the requirements remain unchanged, more detailed information is included to provide a rationale for the position, including the supporting evidence. |  |

# 2 Part 1: Introduction

# **Key points**

Changes to Part 1 of the Standard have resulted in clarity regarding the roles and responsibilities of organisations and individuals involved in overseeing implementation of the Standard, as well as those involved in managing and delivering the health assessments for rail safety workers.

# 2.1 Introduction

This section of the report describes the feedback and changes to Part 1 of the Standard.

Part 1 of the Standard explains the purpose, application, scope and structure. It outlines the legislative and program interfaces, as well as responsibilities and relationships.

# 2.2 Inputs from stakeholders

A number of stakeholders provided submissions regarding Part 1 of the Standard. These include:

- Chief Medical Officers Council
- Rail Health Advisory Group
- Rail Industry Worker group.

Any issues that were out of scope for the review are discussed in section 8.

# 2.3 Issues and recommendations

The issues raised regarding Part 1 of the Standard centred on providing clarity for the roles and responsibilities of Chief Medical Officers and Authorised Health Professionals and high-level implementation responsibilities.

# Roles and responsibilities of Chief Medical Officers and Authorised Health Professionals

Stakeholders sought clarity on the Chief Medical Officers' role in the Standard, especially in relation to the management of decisions made by Authorised Health Professionals.

A separate heading for Chief Medical Officers has been included in section 1.5.2 of the Standard with a clearer structured description detailing the specific roles and responsibilities Chief Medical Officers have in relation to the Standard. Additional content has been included to clarify the Authorised Health Professionals' responsibilities, including performing the clinical examination, to be distinguished from signing off on an assessment performed by a person who is not an Authorised Health Professional.

#### High-level implementation responsibilities

Stakeholders suggested an additional section be included to articulate the responsibilities of the NTC, Office of the National Rail Safety Regulator (ONRSR) and Rail Industry Safety and

Standards Board (RISSB) in overseeing implementation of the Standard and its development. This was related to issues arising regarding implementation of the Standard (refer to section 8).

New content and a diagram have been included in section 1.5.1 of the Standard to explain the various roles and responsibilities held by these parties.

# 2.4 Implications

# Rail transport operators

Rail transport operators will have a clearer understanding of the roles and responsibilities in relation to implementation and operationalisation of the Standard, which will assist in managing the delivery of health assessments by Authorised Health Professionals.

# Health professionals

Authorised Health Professionals will have a clearer understanding of their obligations and how their conduct of health assessments interfaces with the roles of Chief Medical Officers.

# Rail safety workers

Rail safety workers will have a clearer understanding of their roles and responsibilities as well as the responsibilities of other organisations and individuals involved in the implementation and application of the Standard.

# 2.5 Consultation questions

Stakeholders are invited to respond to the following questions by Monday 12 December 2022.

Question 1: Are the proposed changes to Part 1 appropriate?

Question 2: Do you have any further comments on this issue or other issues to be

considered in Part 1?

# 3 Part 2: The health risk management system

# **Key points**

- The changes to Part 2 provide clarity around key concepts of the Standard, including defining expiry dates for fitness for duty certificates, the application of Triggered Health Assessments, streamlining fitness for duty categories, requirements for privacy and audit of health assessments.
- The changes will support consistent application of the Standard by rail transport operators and Authorised Health Professionals.
- The changes will also strengthen quality management of the health assessments, which has been identified as a significant issue (refer to section 8).

# 3.1 Introduction

This section of the report describes the feedback and changes to Part 2 of the Standard.

Part 2 of the Standard describes the health risk management system, including the overall risk management approach, the main features of the system and the processes associated with the system.

# 3.2 Inputs from stakeholders

A number of stakeholders provided submissions regarding Part 2 of the Standard. These include:

- Chief Medical Officers Council
- Rail Health Advisory Group
- Rail Industry Worker group.

Any issues that were out of scope for the review are discussed in section 8.

# 3.3 Issues and recommendations

# Definition and management of assessment 'expiry' dates

Stakeholders sought clarification as to whether the scheduled expiry date of medical certification should be strictly based on the last assessment date or whether a rolling fixed expiry date could be applied so as to ease the administrative burden.

Section 2.2.6 of the Standard has been amended to include the ability for rail transport operators to choose the method by which Periodic Health Assessment due dates (and Triggered Health Assessment dates) are calculated.

It remains the requirement of the Standard that a rail safety worker cannot undertake rail safety work without a valid fitness for duty report.

# **Triggered Health Assessments**

The previous review in 2016<sup>5</sup> identified a lack of understanding of the purpose and application of Triggered Health Assessments and the content of this section was revised significantly at that time.

Stakeholders again raised concerns about the lack of understanding of the purpose and process for Triggered Health Assessment referrals. This misunderstanding, and potentially miscommunication between rail transport operators and Authorised Health Professionals, can lead to full assessments being undertaken inappropriately, rather than a focused assessment related to the triggering issue.

Section 2.2.6 of the Standard has been amended to clarify the three circumstances in which a Triggered Health Assessment may occur. These include:

- Assessments related to specific monitoring of a medical condition, including more frequent review as required (Fit for Duty Subject to Review).
- Assessments related to further investigation to diagnose/treat a medical condition (Fit for Duty Subject to Review and Temporarily Unfit for Duty).
- Health assessment triggered by concern about a worker's health (triggered by a worker or the rail transport operator).

It is noted that clarification of the definitions does not substitute the need for rail transport operators and Authorised Health Professionals to effectively assess and communicate the health assessment needs of the individual rail safety worker rather than default to a full assessment. A 'full assessment' may not only result in unnecessary testing (for example, repeat hearing tests), it may also result in inadequate assessment of the particular condition for which the rail safety worker was referred.

# Standard reporting framework: Categorisation of fitness for duty

# Simplification of assessment outcome categories

Stakeholders identified scope for improvement regarding the logic and explanation of fitness for duty categories to improve consistency of reporting outcomes by Authorised Health Professionals. The proposed changes were based on recent changes to the *Health Assessment Standard for Marine Pilots (NSW)*, which resulted from similar reporting issues.

Section 2.3 of the Standard has been amended to remove Fit for Duty Conditional as a formal category, as it relates to a narrow range of circumstances involving the wearing of aids such as corrective lenses and hearing aids. Workers who are required to wear these aids will have this requirement identified independent of their main category. The requirement is proposed to appear at the top of the report form if it is an existing requirement.

Similarly, Fit for Duty Subject to Job Modification is no longer considered a main category but is a sub-category within the Fit for Duty Subject to Review category. Revised content, along with the inclusion of a new table and amendments to model forms have been included. See also section 7 of this document for discussion of the changes to the Model Forms.

The four fitness for duty categories are as follows:

<sup>&</sup>lt;sup>5</sup> National Transport Commission (2016) Review of the National Standard for Health Assessment of Rail Safety Workers: Final Report.

- Fit for Duty Unconditional
- Fit for Duty Subject to Review (this category will encompass requirements for job modification)
- Temporarily Unfit for Duty
- Permanently Unfit for Duty.

# Definition and application of 'Permanently Unfit' categorisation

Stakeholders advised the definition of 'Permanently Unfit' is ambiguous.

Section 2.3.4 of the Standard has been amended to clearly state that 'Permanently Unfit' means that a worker has a permanent and/or progressive condition that is predicted to render them unfit for their current rail safety duties for 12 months or more. It is a predicted assessment and workers do not need to be off work for 12 months to be assessed to this category.

# Categorisation of rail safety workers awaiting test results

Stakeholders raised that the Standard does not adequately cover the situation where a worker is awaiting a test result, such as a stress test, specialist letter, sleep study, and so on. Stakeholders suggested applying an estimated duration of time that might apply to this situation.

Part B of the model Request and Report Form has been updated to include a section to indicate whether an assessment report is an 'interim' or 'final' report. The content in the Standard now includes '3 months' as an estimate but not a definitive timeframe for workers categorised as Temporarily Unfit for Duty or Fit for Duty Subject to Review while awaiting test results.

# Appointing and authorising health professionals

# Quality of assessments and training of Authorised Health Professionals

Stakeholders raised concerns about the consistency of training of Authorised Health Professionals and the quality of assessments being conducted.

The updated content in Section 1.5.2 of the Standard clarifies the expectations for Authorised Health Professionals and describes the role of Chief Medical Officers in overseeing the quality of assessments and the training of Authorised Health Professionals. The issue is further explored in section 8.

# **Privacy**

Stakeholders suggested the content regarding privacy could be strengthened and aligned with other health assessment standards.

Section 2.6.2 of the Standard has been amended to cover: privacy laws, collection and disclosure of health information, consent for disclosure and retention and security of health information.

# **Quality control**

Stakeholders advised that, while the Standard identifies that 'rail transport operators should establish that Authorised Health Professionals are correctly interpreting and applying the requirements of the Standard in terms of fitness or otherwise for duty,' it does not specifically mention medical audits of Authorised Health Professional records to assess compliance.

Section 2.7.3 of the Standard has been amended to ensure assessment quality is captured in the audit process. The revised audit points include maintaining suitable systems and procedures for managing and conducting health assessments, including the use of appropriate forms, timeliness of various aspects of health assessments from initial assessment to reporting and follow up as required, and so on. This now aligns with other Safety Critical Worker standards.

# Risk assessment and categorisation of rail safety workers

Risk assessment and categorisation of rail safety workers is the foundation of the health assessment system. While issues with this process were not raised formally in the review process, it became evident that there was a lack of confidence in the process and inconsistencies in the outcomes leading to workers with similar jobs being categorised differently and therefore potentially assessed differently under the Standard.

Medical stakeholders recommended that medical input into the risk assessment process was essential and that this should be strengthened. The Standard already recommends involvement of Authorised Health Professionals in the process; this has been amended to include reference to Chief Medical Officers and other occupational physicians familiar with rail (refer section 2.4 of the Standard).

# 3.4 Implications

# Rail transport operators

Clarity regarding the definition and application of Triggered Health Assessments should support utilisation of this type of assessment to address health conditions that arise between Periodic Health Assessments. Effective implementation of such health assessments remains to be addressed by rail transport operators and Authorised Health Professionals through internal procedures, communication and education.

Amendment and simplification of the fitness for duty categories should support more consistent application of the Standard and improved management of workers who do not meet the unconditional fitness for duty criteria.

With clearer guidance regarding audit criteria, rail transport operators should be better equipped to monitor and manage the quality of health assessments delivered by Authorised Health Professionals, which was an issue identified during the review (refer section 8).

# **Health professionals**

Clarity regarding the definition and application of Triggered Health Assessments should support utilisation of this type of assessment to address health conditions that arise between Periodic Health Assessments. Effective implementation of such health assessments remains to be addressed by rail transport operators and Authorised Health Professionals through internal procedures, communication and education.

Amendment and simplification of the fitness for duty categories should support more consistent application of the Standard and improved management of workers who do not meet the unconditional fitness for duty criteria.

# Rail safety workers

Amendment and simplification of the fitness for duty categories should support more consistent application of the Standard and improved management of workers who do not meet the unconditional fitness for duty criteria.

# 3.5 Consultation questions

Stakeholders are invited to respond to the following questions by Monday 12 December 2022.

- **Question 3:** Are the proposed changes to Triggered Health Assessments appropriate in clarifying the nature and application of such assessments (section 2.2.6 of the Standard)?
- **Question 4:** Do you see any risks emerging as a result of the proposed changes to the fitness for duty categorisation (section 2.3 of the Standard)?
- **Question 5:** Do you have any suggestions as to how the risk assessment process could be strengthened in the Standard (section 2.4 of the Standard) or as part of implementation?
- **Question 6:** Are there any implementation issues that should be addressed in the out-of-scope section?
- **Question 7:** Do you have any further comments on this issue or other issues to be considered in Part 2?

# 4 Part 3: Procedures for conducting health assessments

# **Key points**

- Part 3 now provides clearer guidance for Authorised Health Professionals with removal of content duplicated between Parts 3 and 4.
- The content regarding prescription and non-prescription drugs has been updated to reflect changes in this area, with clarity around medicinal cannabis not being permitted for rail safety workers, in line with the Rail Safety National Law.

# 4.1 Introduction

This section of the report describes the feedback and changes to Part 3 of the Standard.

Part 3 of the Standard includes administrative and clinical procedures to guide Authorised Health Professionals through these aspects of the assessment. There is some overlap with the clinical content in Parts 3 and 4 of the Standard.

# 4.2 Inputs from stakeholders

A number of stakeholders provided submissions addressing Part 3 of the Standard. These include:

- Chief Medical Officers Council
- Rail Health Advisory Group
- Office of the National Rail Safety Regulator.

Any issues that were out of scope for the review are discussed in section 8.

# 4.3 Issues and recommendations

# **Prescription drugs and Safety Critical Work**

Stakeholders sought advice about the use of medicinal cannabis, which is increasingly being prescribed for a range of conditions. They recommended the Standard have a position on the use or otherwise for rail safety workers.

Section 3.5.7 of the Standard has been amended to clarify that a rail safety worker must not carry out or attempt to carry out rail safety work while there is any presence in their system of alcohol or a 'prescribed drug' comprising cannabis (THC), speed (methamphetamine) or ecstasy (MDMA).

#### Content removed regarding details of the medical examination and fitness for duty criteria

Stakeholders advised of confusion regarding some information being duplicated between Parts 3 and 4, particularly in terms of the nature of the assessment and the management of outcomes.

All specific content related to the assessment of particular medical conditions has been removed in favour of general principles and a cross reference to the Record for Health Professional. Authorised Health Professionals are referred to Parts 4 and 5 for details of the clinical assessment process and management of outcomes.

# 4.4 Implications

# Rail transport operators

There are no significant implications for rail transport operators.

# Health professionals

Authorised Health Professionals will be clearer about where to access information about the general conduct and management of the assessment (Part 3) versus the specific assessment and management approach to various conditions, and the fitness for duty criteria (Part 4 and Part 5). They will also be clearer about the use of medicinal cannabis.

# Rail safety workers

There are no significant implications for rail safety workers.

# 4.5 Consultation questions

Stakeholders are invited to respond to the following questions by Monday 12 December 2022.

Question 8: Have any of the proposed changes introduced any gaps in Part 3?

Question 9: Are there any implementation issues that should be addressed in the

out-of-scope section?

Question 10: Do you have any further comments on this issue or other issues to be

considered in Part 3?

# 5 Part 4: Fitness for duty criteria for Safety Critical Worker health assessments (Categories 1 and 2)

# **Key points**

- Part 4 incorporates numerous changes to align with developments in other relevant standards, including Assessing fitness to drive (AFTD), and developments in the assessment and management of various conditions specifically relevant to rail safety workers.
- Some significant changes in the assessment of both Safety Critical and Non-Safety Critical Workers will result in improved identification and management of serious conditions likely to affect safety, for example, sleep disorders.
- Another significant change is in the definition of hearing loss and the level at which
  workers will be referred for further hearing tests. Workers most affected will be those
  required to hear speech in noise, as even mild hearing loss can affect this capability.
- Various chapters include improved guidance for Authorised Health Professionals, which will help support consistent implementation of the Standard.
- Changes in review requirements reduce unnecessary review of stable conditions and enable Authorised Health Professionals to directly assess fitness for duty where appropriate without the need for reports from treating health professionals.

# 5.1 Introduction

This section of the report describes the feedback and changes to Part 4 of the Standard.

Part 4 of the Standard contains information to guide Authorised Health Professionals in assessing and managing conditions that may impact Category 1 and Category 2 rail safety workers' fitness for duty. It is arranged alphabetically in two main sections:

- conditions causing sudden incapacity
- senses and task-specific requirements.

# 5.2 Sections with no material changes

No specific feedback was received from stakeholders about the following sections:

- blackouts (see Table 5 in Appendix D)
- substance misuse and dependence (see Table 14 in Appendix D)
- musculoskeletal conditions (see Table 17 in Appendix D).

Minor changes to these sections have been made in terms of wording to improve understanding and general flow of information and incorporating minor changes from AFTD. The AFTD changes are described in Table 1.

# 5.3 Cardiovascular conditions

# 5.3.1 Inputs from stakeholders

A number of stakeholders provided submissions addressing cardiovascular conditions in Part 4 of the Standard. These include:

- Chief Medical Officers Council
- Rail Health Advisory Group.

Changes were also made flowing from a review of AFTD.

Any issues that were out of scope for the review are discussed in section 8.

#### 5.3.2 Issues and recommendations

A comparison of the 2017 fitness for duty criteria and the proposed changes are contained in Table 6 of Appendix D.

# Changes to assessment of cardiac risk

Stakeholders advised that the cardiac risk level content should be amended to reflect changes in medical practice.

Section 4.2.2 of the Standard includes periodic cardiac risk assessment of Category 1 workers to support early management of cardiovascular disease risk and early identification and management of established cardiovascular disease. The assessment uses the Australian Absolute Cardiovascular Disease Risk calculator, with the result score expressed in terms of probability of a cardiac event in the next five years. This then guides management as per the flow chart in Figure 19 of the Standard.

The risk calculator remains the basis for assessing cardiac risk based on expert advice received to date, and it continues to be used in other safety critical standards, including those for airline and marine pilots.

The requirement that the blood used for assessing cholesterol as part of the cardiac risk assessment be a fasting specimen is proposed to be changed to non-fasting in keeping with general medical practice and advice from pathologists. The change does not affect the calculation of cardiac risk.

Stakeholders also considered developments in the investigation and management of rail safety workers found to have raised cardiac risk based on the calculator. Currently this investigation includes referral for stress electrocardiogram (stress ECG) if a rail safety worker's risk is 10 per cent or greater, or if their overall risk (assessed clinically and taking into account factors that are not included in the cardiac risk score) warrants a stress ECG.

Pending input from the Cardiac Society of Australia and New Zealand, the stress echocardiogram is proposed as an alternative to the stress ECG. This test is more sensitive than the stress ECG. Reference is also made to the coronary artery calcium score (CACS) as a further tool that may be recommended by a cardiologist to support stratification but is not mandated as part of the risk stratification process and is not initiated independently by Authorised Health Professionals.

Stakeholders considered various other aspects of the cardiac risk assessment, including the review periods, actions and investigations. To ensure clarity and internal consistency a tabulated

version of the risk stratification and management of the cardiac risk score has been developed and is included in Table 6 of section 4.2.3 of the Standard.

# Review periods for cardiac conditions

Stakeholders identified that the review periods for people diagnosed with various cardiac conditions did not align with other standards, with the requirement for annual review being omitted.

Table 8 of section 4.2.3 of the Standard has been updated to include review periods of 'at least annual review' for Category 1 workers. There is flexibility for Category 2 workers.

#### Intracardiac defibrillator

The review of AFTD for commercial vehicle drivers resulted in a change to the Standard so that a prophylactic intracardiac defibrillator (ICD) may be worn by commercial vehicle drivers with conditions such as hypertrophic cardiomyopathy (HCM) under strict conditions. This small relaxation is based on cardiologist advice provided to the review of AFTD regarding the lower rates of shock frequency and syncope where ICD is used prophylactically.<sup>6</sup>

This change has been adopted for Category 1 workers and is reflected in Table 8 of section 4.2.3 of the Standard.

# **Aneurysms**

Following publication of AFTD in 2017, an amendment was made in relation to the criteria for aneurysms, specifically the diameter of aortic aneurysms which may be acceptable for fitness to drive. This change was based on a submission from vascular surgeons.

The criteria for Category 1 workers have been aligned with this change and is reflected in Table 8 of section 4.2.3 of the Standard.

# Congenital heart disease

In line with the changes to AFTD, criteria are now included for Category 1 workers in relation to surgical management, including non-working periods for recovery and greater clarity of the required clinical outcomes.

# 5.3.3 Implications

#### Rail transport operators

The changes provide clarity around the management of cardiac risk for Category 1 workers, which will support consistent management.

#### Health professionals

The changes provide clarity around the management of cardiac risk for Category 1 workers, which will support consistent management.

#### Rail safety workers

<sup>6</sup> National Transport Commission, 2022, Assessing Fitness to Drive 2020-21 review: Final Report February 2022.

The changes to the criteria for ICDs will enable a small number of workers to continue Safety Critical Work and provide clarity and greater certainty for how their conditions will be assessed.

Ongoing improvement in the management of cardiac risk will enable early management of risk factors and cardiac disease.

# 5.3.4 Consultation questions

Stakeholders are invited to respond to the following question by Monday 12 December 2022.

**Question 11:** Do you have any comments on the changes to the cardiovascular chapter or other issues that need to be considered?

# 5.4 Diabetes

# 5.4.1 Inputs from stakeholders

A number of stakeholders provided submissions regarding the diabetes section of the Standard. These include:

- Chief Medical Officers Council
- Rail Health Advisory Group
- Diabetes Society of Australia.

Changes were also made flowing from a review of AFTD.

Any issues that were out of scope for the review are discussed in section 8.

#### 5.4.2 Issues and recommendations

A comparison of the 2017 fitness for duty criteria and the proposed changes are contained in Table 7 of Appendix D.

# Specialist and general practitioner review requirements

The requirements for specialists' review of workers with diabetes have received ongoing attention in the review of various standards, taking into consideration the regular management of rail safety workers as well as the access to specialists, particularly in rural and remote areas.

Stakeholders advocated for specialist review requirements to be reconsidered for workers on metformin and those being managed by their general practitioner, whose diabetes is satisfactorily controlled. They advocated for Authorised Health Professionals review in cases where the worker's diabetes was satisfactorily controlled, and they were on a treatment regimen, such as metformin, with minimal risk of hypoglycaemia.

With input from the Diabetes Society, a clearer framework of review requirements has been developed in Table 9 of section 4.3.2 of the Standard, replacing the previous management flowchart.

#### Satisfactory control

Stakeholders requested guidance as to what level of HbA1c would render a worker Temporarily Unfit for Duty. Currently the Standard advises that a level greater than 9 per cent warrants referral for specialist review.

Section 4.3.2 of the Standard has been updated to reflect advice from the Diabetes Society of Australia that an HbA1c greater than 10 per cent is a level at which the worker should be assessed as Temporarily Unfit for Duty and referred for specialist medical intervention.

#### Other

Changes from AFTD relating to improved guidance about lack of hypoglycaemia awareness have been incorporated into the Standard.

References to the requirement for fasting for blood tests have been removed from the Standard, including in the fitness for duty criteria chapters and the forms.

The fitness for duty criteria for diabetes are the same for Category 1 and 2 workers, however Category 2 workers do not undergo active screening for diabetes. Rather, diabetes in this group is identified through self-report on the Health Questionnaire. Similar to other concerns about the accuracy of self-reported information, stakeholders have expressed concern that diabetes is not being systematically identified and managed for Category 2 workers. Stakeholders have suggested the inclusion of a urine glucose test to detect diabetes in these workers. This test can be done at the time of the appointment, with a positive result requiring a follow up blood test. This will be explored during consultation and if accepted, assessment procedures and fitness for duty criteria will be developed accordingly.

# 5.4.3 Implications

# Rail transport operators

The removal of the requirement for fasting blood tests for diabetes will assist the administration of Periodic Health Assessments.

The removal of the requirement for specialist assessment of workers on metformin alone will also assist administration and avoid problems associated with access to specialists. There is no added risk associated with this change.

The inclusion of a urine glucose test for Category 2 workers will support consistent identification and management of workers with diabetes across the network. The inclusion of the urine test will not add significantly to the cost of health assessments. Concerns from workers regarding possible drug testing may need to be managed through appropriate communication.

# Health professionals

The process for review of rail safety workers with diabetes will be streamlined as a result of the changes.

The addition of a urine test for diabetes for Category 2 workers will not add significantly to the workload of Authorised Health professionals or the cost of delivering the health assessments.

#### Rail safety workers

Category 1 workers will benefit from not having to fast prior to blood tests.

They will benefit from not having to access specialist reports in circumstances where their condition is being managed by their general practitioner.

Category 2 workers undergoing urine tests for diabetes will need to receive appropriate communication to explain the test and to reassure that the test is not for drug screening.

# 5.4.4 Consultation questions

Stakeholders are invited to respond to the following question by Monday 12 December 2022.

**Question 12:** Do you have any comments on the changes to the diabetes chapter or other issues that need to be considered?

# 5.5 Neurological conditions: Dementia

# 5.5.1 Inputs from stakeholders

A number of stakeholders provided submissions addressing dementia in Part 4 of the Standard. These include:

- Chief Medical Officers Council
- Rail Health Advisory Group.

Changes were also made flowing from a review of AFTD.

Any issues that were out of scope for the review are discussed in section 8.

#### 5.5.2 Issues and recommendations

A comparison of the 2017 fitness for duty criteria and the proposed changes are contained in Table 8 of Appendix D.

Section 4.4 of the Standard has been amended to reflect changes to AFTD, which address preclinical dementia and mild cognitive impairment.

# 5.5.3 Implications

# Rail transport operators

The changes provide clarity for the management of early-diagnosed dementia.

# **Health professionals**

The changes provide clarity for the management of early-diagnosed dementia.

# Rail safety workers

The changes provide clarity for the management of early-diagnosed dementia.

#### 5.5.4 Consultation questions

Stakeholders are invited to respond to the following question by Monday 12 December 2022.

**Question 13:** Do you have any comments on the changes to the dementia chapter or other issues that need to be considered?

# 5.6 Neurological conditions: Epilepsy

# 5.6.1 Inputs from stakeholders

A number of stakeholders provided submissions addressing epilepsy in Part 4 of the Standard. These include:

- Chief Medical Officers Council
- Rail Health Advisory Group.

Changes were also made flowing from a review of AFTD.

Any issues that were out of scope for the review are discussed in section 8.

#### 5.6.2 Issues and recommendations

A comparison of the 2017 fitness for duty criteria and the proposed changes are contained in Table 9 of Appendix D.

Stakeholders identified that the Standard needs to be clearer regarding the fitness for duty categorisation of workers who experience a seizure.

Part 4.5 of the Standard has been updated to include a default position that a Category 1 Safety Critical Worker is Temporarily Unfit for Duty following a seizure. This applies to incumbent workers and is differentiated from situations where a worker has had a seizure at any time in the past.

Part 5.5.3 of the Standard has also been updated to include a default position that a Category 3 worker is Temporarily Unfit for Duty following a seizure. This position has been referenced for Category 2 workers where sudden collapse is an issue (i.e., those Category 2 workers who work around the track).

Stakeholders noted that the Standard was unclear about management of Category 2 workers who work around the track. It is now noted that Category 2 workers who work around the track must be assessed against the Category 3 standards for epilepsy. This applies for other conditions where risk of collapse is an issue.

The review of AFTD identified the need to include criteria related to circumstances where the examining health professional is not confident about the accuracy of information provided about seizure history, either because the person does not accurately recall their seizures, or they are untruthful in reporting them. This new criterion is included in the revisions to the Standard. A number of other wording refinements have also been carried over from AFTD. They largely represent clarification of existing requirements.

#### 5.6.3 Implications

# Rail transport operators

The changes provide clarity about the application of the Standard and should support consistent implementation.

#### Health professionals

The changes provide clarity about the application of the Standard and should support consistent implementation.

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The new criteria regarding circumstances where the examining health professional is not confident about the accuracy of information provided by the worker will support management of this difficult area.

# Rail safety workers

The changes provide clarity about the application of the Standard and should support consistent implementation.

# 5.6.4 Consultation questions

Stakeholders are invited to respond to the following question by Monday 12 December 2022.

**Question 14:** Do you have any comments on the changes to the epilepsy chapter or other issues that need to be considered?

# 5.7 Neurodevelopmental disorders

# 5.7.1 Inputs from stakeholders

A number of stakeholders provided submissions addressing neurodevelopmental disorders which are not currently covered in the Standard. These include:

- Chief Medical Officers Council
- Rail Health Advisory Group
- Australian Psychological Society (APS) College of Clinical Neuropsychologists.

Changes were also made flowing from a review of AFTD.

Any issues that were out of scope for the review are discussed in section 8.

#### 5.7.2 Issues and recommendations

A comparison of the 2017 fitness for duty criteria and the proposed changes are contained in Table 11 of Appendix D.

Stakeholders identified neurodevelopmental disorders such as attention deficit hyperactivity disorder (ADHD) and autism spectrum disorder (ASD) require more specific attention in the Standard to ensure safety, while managing disability discrimination risks and supporting affected people working within the rail industry.

A new section 4.7 of the Standard has been drafted based on specialist input from the APS College of Clinical Neuropsychologists, working group members and recent changes to AFTD. The model forms have been updated to include questions to identify neurodevelopmental disorders in rail safety workers.

# 5.7.3 Implications

#### Rail transport operators

The specific guidance and criteria for rail safety workers with neurodevelopmental disorders will help improve identification and appropriate selection at pre-employment and support rail safety. The new guidance will also help management of incumbent workers who experience these disorders.

# **Health professionals**

The specific guidance and criteria for rail safety workers with neurodevelopmental disorders will help improve identification and appropriate selection at pre-employment. The new guidance will also help management of incumbent workers who self-identify during Periodic Health Assessments or are referred for a Triggered Health Assessment as a result of behavioural or performance issues associated with such disorders.

#### Rail safety workers

The specific guidance will support fair management of candidates with these disorders at preemployment and support fair management and support of incumbents who declare these disorders.

# 5.7.4 Consultation questions

Stakeholders are invited to respond to the following question by Monday 12 December 2022.

**Question 15:** Do you have any comments on the changes to the neurodevelopmental disorders chapter or other issues that need to be considered?

# 5.8 Psychiatric conditions

# 5.8.1 Inputs from stakeholders

A number of stakeholders provided submissions addressing psychiatric conditions in Part 4 of the Standard. These include:

- Chief Medical Officers Council
- Rail Health Advisory Group.

Any issues that were out of scope for the review are discussed in section 8.

#### 5.8.2 Issues and recommendations

The psychiatric conditions chapter has remained largely unchanged in the 2006, 2012 and 2016 editions of the Standard, and there was limited feedback during this review.

A comparison of the 2017 fitness for duty criteria and the proposed changes are contained in Table 12 of Appendix D.

# Screening for anxiety and depression

Stakeholders identified that a shift to verbal delivery of the K10 questionnaire may improve its utility and reliability for identifying workers with mental health issues. This aligns with moves within other safety critical standards, such as for marine pilots, fire fighters and airline pilots. The questionnaire has been removed from the Health Questionnaire and is included in Record for Health Professional. Stakeholders also proposed the inclusion of other validated questionnaires such as the DASS21, which has been referred to as an option in the revised Standard.

Reflecting developments in other Safety Critical Worker standards, notably the *Health Assessment Standard for Marine Pilots (NSW)*, the general guidance in this chapter has been enhanced to include information about the important role of Triggered Health Assessments in responding to concerns about mental health issues.

#### Other changes

References to ADHD and other neurodevelopmental disorders have been removed and are now covered in the new section devoted to this area.

New criteria and guidance regarding psychogenic non-epileptic seizures have been included to align with changes to the commercial vehicle standard in AFTD.

#### 5.8.3 Implications

## Rail transport operators

These revisions help rail transport operators to better understand the role of the Standard in supporting and managing the mental health of rail safety workers, with an emphasis on the role of Triggered Health Assessments in this regard.

The requirement to verbally administer the K10 questionnaire and the option to utilise other validated questionnaires as required will also strengthen the Standard.

# Health professionals

The requirement to verbally administer the K10 questionnaire and the option to utilise other validated questionnaires as required will strengthen the assessment approach.

Ongoing education of Authorised Health Professionals should focus on approaches that support genuine engagement with rail safety workers and improve the ability of the assessments to identify and manage mental health conditions.

# Rail safety workers

Rail safety workers will have an opportunity to engage more meaningfully regarding mental health issues.

# 5.8.4 Consultation questions

Stakeholders are invited to respond to the following questions by Monday 12 December 2022.

- **Question 16:** Should new criteria and guidance be included regarding psychogenic non-epileptic seizures as per changes to AFTD?
- **Question 17:** Do you have any comments on the changes to the psychiatric conditions chapter or other issues that need to be considered?

# 5.9 Sleep disorders

# 5.9.1 Inputs from stakeholders

A number of stakeholders provided submissions addressing sleep disorders in Part 4 of the Standard. These include:

- Chief Medical Officers Council (CMOC)
- Rail Health Advisory Group
- Australasian Sleep Association (ASA)
- Office of Best Practice Regulation.

Changes were also made flowing from a review of AFTD.

Any issues that were out of scope for the review are discussed in section 8.

#### 5.9.2 Issues and recommendations

A comparison of the 2017 fitness for duty criteria and the proposed changes are contained in Table 13 of Appendix D.

# **Relevance to Safety Critical Work**

Stakeholders proposed that the adverse impacts of untreated and undertreated mild and moderate disordered sleep on other conditions that impact rail safety should be emphasised.

This recommendation has been addressed in the revisions to section 4.9.2 of the Standard, with reference to relevant evidence included.

# Sleep disorders assessment

Concerns regarding dishonest completion of the Epworth Sleepiness Scale (ESS) by rail safety workers, as well as transport workers more generally, have been long standing and were again raised by stakeholders during the review.

Advice was sought from the ASA as to whether this tool could be substituted with another approach. The ASA's advice was that while workers may not always complete this questionnaire honestly, there is evidence of increased accident risk for individuals who score greater than 15 out of 24 in the ESS (irrespective of the underlying cause of sleepiness). Therefore, they recommended that this validated instrument be retained to assess subjective reported sleepiness. It is proposed that the ESS be retained in the Health Questionnaire. It may be potentially revisited (e.g., through verbal discussion) and reconfirmed in the course of the examination if the worker scores high on the STOP-Bang questionnaire.

The assessment of sleep apnoea risk as a basis for referral for a sleep study has also been a significant focus of previous reviews, with objective markers of sleep apnoea included as a result of the last review. Despite these changes, stakeholders feel that many workers with severe

<sup>&</sup>lt;sup>7</sup> That is, a BMI greater than or equal to 40; or a BMI greater than or equal to 35 if associated with diabetes type 2 or high blood pressure requiring two or more medications for control; or a history of habitual loud snoring during sleep or of witnessed apnoeic events (such as in bed by a spouse or partner)).

sleep apnoea remain undetected and untreated. Unpublished evidence to this effect drawn from health assessments of Safety Critical Workers in Australia was considered as part of the review.

CMOC members and the ASA agree that inclusion of the STOP-Bang questionnaire would formally incorporate assessment of risk factors such as habitual loud snoring as well neck circumference, male gender and age and thus enable risk to be better quantified and managed.<sup>8</sup>

In their advice, the ASA noted that because the STOP-Bang questionnaire includes objective measures such as BMI, being treated for high blood pressure and neck circumference (see Table 2), it is essential that the completion of the questionnaire be undertaken by a qualified health care professional (for example, a doctor or nurse). Workers may choose to misreport the snoring and tiredness questions, but the measurements are objective measures.

The ASA recommended that the STOP-Bang questionnaire be applied in conjunction with the ESS in the health assessment. It is proposed that workers scoring 3 or more on the STOP-Bang questionnaire would be referred for a sleep study. They will generally be categorised Fit for Duty Subject to Review while being investigated unless excessive daytime sleepiness is demonstrated.

The STOP-Bang questionnaire is the property of University Health Network. Permission to use the questionnaire has been granted in principle (no cost). This will be confirmed following the consultation period. For more information, see the <u>official STOP-Bang tool website</u>.

Table 2. The STOP Bang questionnaire (administered by the Authorised Health Professional)

| Snoring?  Do you snore loudly (loud enough to be heard through closed doors or your bed-partner elbows you for snoring at night)?            | ☐ Yes | □ No |
|--|-------|------|
| <b>Tired?</b> Do you often feel tired, fatigued, or sleepy during the daytime (such as falling asleep during driving or talking to someone)? | ☐ Yes | ☐ No |
| Observed? Has anyone observed you stop breathing or choking/gasping during your sleep?   | ☐ Yes | □ No |
| Pressure?  Do you have or are being treated for high blood pressure?   | ☐ Yes | □ No |
| <b>BMI</b> Body Mass Index more than 35 kg/m2?   | ☐ Yes | ☐ No |
| Age older than 50?   | ☐ Yes | ☐ No |
| Neck size large? (Measured around Adams apple) Is your shirt collar 16 inches / 40cm or larger?  | ☐ Yes | ☐ No |
| Gender = Male?   | ☐ Yes | □ No |

<sup>&</sup>lt;sup>8</sup> The STOP-Bang questionnaire is a validated 8-item screening tool specifically for obstructive sleep apnoea. It was developed by an anaesthetist from Toronto, Canada and was originally validated for use as a screening tool for obstructive sleep apnoea (OSA) in a preoperative elective surgery population. It has subsequently been validated for the general population cohort. It consists of eight yes or no questions including age, gender, history of snoring, body mass index (BMI) and neck circumference. A high risk for obstructive sleep apnoea is defined as a positive response to 3 or more items. The questionnaire has a sensitivity of 94 per cent, and a specificity of 32 per cent.

#### Scoring

OSA - Low Risk: Yes to 0 - 2 questions / OSA - Intermediate Risk: Yes to 3 - 4 questions / OSA - High Risk: Yes to 5 - 8 questions

#### Role of Maintenance of Wakefulness Test

The Standard notes that Safety Critical Workers who refuse treatment may be offered a Maintenance of Wakefulness Test. Stakeholders advised of concerns that rail safety workers with obstructive sleep apnoea (OSA) were avoiding treatment on this basis and posed an unacceptable risk to the rail network.

In providing advice to the review, the ASA noted that there were limited alternatives, but that application of the test could be improved by providing more guidance around how the test should be applied and managed, and in what circumstances treatment of OSA should be mandated.

# Shiftwork sleep disorder

The recently revised *Health Assessment Standard for Marine Pilots (NSW)* includes reference to shiftwork sleep disorder (but no specific criteria), which has symptoms of excessive tiredness and often depressed mood. This is relevant to train drivers and other rail safety workers who work shifts.

Reference has been included in section 4.9.2 of the Standard, but no specific criteria has been developed.

#### Sleep disorder management

The initial granting of Fit for Duty Subject to Review currently relies on information from a sleep specialist, showing evidence of compliance and response to treatment. Stakeholders expressed concern that such compliance and response to treatment is often not well demonstrated in the reports received from sleep specialists.

Stakeholders recommended closer involvement of Authorised Health Professionals in the ongoing management of compliance to overcome this issue, noting that the Authorised Health Professional should be able to review data from the workers' continuous positive airway pressure (CPAP) machine and based on agreed criteria, certify the worker Fit for Duty Subject to Review. Stakeholders recommended the Standard should specify the duration of printout to demonstrate compliance and control. Ideally this should be 12 months leading up to the assessment, to avoid short-term use of the CPAP machine leading up to the assessment.<sup>9</sup>

Stakeholders recommended review by a sleep physician should be reserved for workers who are non-compliant, or where treatment effectiveness is suboptimal. The requirement to have four parties agree to a specialist report not being needed is unworkable. Table 18 of section 4.9.4 of the Standard has been updated to include this option.

<sup>&</sup>lt;sup>9</sup> The Medicare guideline requires 70 per cent of days of at least 4 hours usage per night. Higher levels are to be encouraged.

# Cost benefit analysis for proposed changes to sleep criteria

The NTC consulted with the Office of Best Practice Regulation (OBPR) regarding the proposed change to the sleep screening criteria and including the STOP-Bang questionnaire.

Based on the data and information provided, the OBPR was of the view that this policy change will not have a major impact and does not meet the major threshold for requiring a regulation impact statement (RIS). The RIS trigger involves considering the major economic impact a change may have and whether this change would impact and limit the movement of freight.

In the interests of best practice policy, the NTC intends to perform a cost benefit analysis to explore the estimated value of the proposed changes. The NTC has identified the required information in Table 3 to perform the cost benefit analysis and is seeking input from stakeholders on the gaps. A complete cost benefit analysis will be provided in the final consultation report.

Table 3. Cost benefit analysis information required for changes to sleep criteria

| Description of impact   | Description of cost or benefit  | Estimated value per annum   |
|---|---|---|
| Including STOP-Bang questionnaire increases the number of rail safety workers referred for a sleep study.                           | Approximately <b>x</b> additional sleep tests will be required. These cost approximately <b>\$x</b> .  Of these <b>x</b> additional sleep tests, <b>x</b> per cent is expected to detect the presence of sleep apnoea whereas <b>x</b> per cent will show no sleep apnoea present.  Approximately <b>x</b> workers will be unable to work until successful treatment is confirmed. This is expected to result in the loss of <b>x</b> person days per year. | Total value of additional sleep apnoea tests: \$x  Total value of lost work time: \$x   |
| Better identification and treatment of sleep apnoea reduces the number of safety-related incidents caused by untreated sleep apnoea | Currently, there are [insert description of number and type of safety incidents and their consequences in injuries, lives lost, etc.].  | Estimated safety benefits: <b>\$x</b> per annum or state expected reduction as a percentage range   |
| Better identification and treatment of sleep apnoea allows affected rail safety workers to seek treatment.                          | Active treatment and management of sleep apnoea reduces the negative health effects for affected rail safety workers whose sleep apnoea would not have been detected using the previous screening process.  | Not quantified. There would<br>be both an unknown<br>reduction in costs to the<br>government through reduced<br>health expenditure and a<br>better quality of life for<br>affected rail safety workers. |

# 5.9.3 Implications

## Rail transport operators

The changes are expected to result in identification of more workers at risk of sleep apnoea and being referred for sleep study. In turn this will result in more workers being diagnosed with moderate to severe sleep apnoea requiring treatment and monitoring (Fit for Duty Subject to Review) and impose a cost on rail transport operators to test a higher number of workers.

In the short term, diagnosed workers will be absent from Safety Critical Work while their treatment is established, and they are categorised as Temporarily Unfit for Duty. Rail transport operators will need to take this into account for rostering purposes.

In the long term, treatment of sleep disorders will reduce the burden associated with comorbid conditions such as cardiovascular disease and diabetes.

# **Health professionals**

Authorised Health Professionals' monitoring of well controlled sleep disorders aims to support the effectiveness of monitoring from a compliance and safety point of view and support overall efficiency of health assessments and may reduce costs.

Authorised Health Professionals will need to undergo training in relation to CPAP and sleep disorder monitoring.

## Rail safety workers

Rail safety workers with sleep disorders are more likely to have their condition identified, managed and monitored under the revisions to the Standard.

For workers who are diagnosed with sleep apnoea under the proposed change, this will reduce risks to rail safety and improve their long-term health, not only in relation to sleep disorders but associated chronic conditions such as diabetes and heart disease.

# 5.9.4 Consultation questions

Stakeholders are invited to respond to the following questions by Monday 12 December 2022.

**Question 18:** Do you have any comments on the changes to the sleep disorders chapter or other issues that need to be considered?

**Question 19:** Do you have data (highlighted in bold in Table 3) to support the cost benefit analysis for the proposed changes to the sleep criteria?

# 5.10 Hearing

# 5.10.1 Inputs from stakeholders

A number of stakeholders provided submissions addressing hearing in Part 4 of the Standard. These include:

- Chief Medical Officers Council
- Rail Health Advisory Group
- Audiology Australia.

Changes were also made flowing from a review of AFTD.

Any issues that were out of scope for the review are discussed in section 8.

#### 5.10.2 Issues and recommendations

A comparison of the 2017 fitness for duty criteria and the proposed changes are contained in Table 15 of Appendix D.

Stakeholders recommended a general review of the chapter based on developments in hearing aid technology. The NTC requested Audiology Australia provide an update at the CMOC meeting and subsequently invited Audiology Australia to provide advice on identified issues raised and to review the chapter in more general terms. Its advice is incorporated below.

#### Hearing assessment - frequencies

The Standard currently specifies audiometry be conducted at the following frequencies – 500, 1000, 2000, 3000, 4000 and 6000 Hz.

Audiology Australia recommended being guided by the determination of permanent impairment guidelines for industrial hearing loss, such as worker's compensation guidelines in Queensland and New South Wales. These specify that the worker's hearing levels are to be tested separately for the left and right ears at audiometric test frequencies of 500, 1000, 1500, 2000, 3000 and 4000 Hz, and if there is a requirement for hearing above 4000 Hz, at 6000 and 8000 Hz. Thresholds at frequencies above 4000 Hz are typically affected first in cases of noise exposure and hearing status at these frequencies can affect clarity of speech, especially when listening in noisy environments.

Therefore, Audiology Australia recommend that hearing testing for rail safety workers should include testing at 500, 1000, 1500, 2000, 3000, 4000, 6000 and 8000 Hz. Section 4.11.3 and Figure 32 in the Standard have been updated to reflect this advice.

#### Hearing loss criteria

The hearing loss threshold in the current Standard is 40 dB or greater in the better ear. The World Health Organisation (WHO) criteria define 'disabling' hearing loss as hearing thresholds in the better hearing ear of 35 dB HL or greater and 'mild' hearing loss as hearing thresholds between 20 dB and 34 dB HL. The WHO has identified that mild hearing loss presents differently in quiet and noisy environments, with typically little impact on speech understanding in quiet environments but difficulty following conversation in noisy environments.

Therefore, Audiology Australia recommends criteria of 35 dB HL for rail safety workers who typically work in quiet environments and 20 dB HL for those who rely on speech understanding in 'noisy' environments (as defined below).

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Audiology Australia notes that testing of speech in noise understanding of a client wearing hearing aids would require audiologists to have calibrated, free field speech in noise testing facilities. This would need to be ascertained before a rail safety worker attended a clinic for testing.

Table 20 in section 4.11.4 of the Standard has been revised to include this change.

# Consideration of quiet and noisy environments

Audiology Australia also considered the definition of noisy environments noting that this depends on the nature of the work in terms of performance, rather than the level of noise per se. A 'noisy' working environment that interferes with or masks normal conversational levels of speech is between 60 and 65dB.

Therefore, Audiology Australia recommended amendments to both the hearing testing and use of hearing aids in the Standard that refer to identifying and recognising the work environment in which the rail safety worker usually communicates, as distinct from the usual definition of a noisy environment in relation to hearing damage (over 85 dB).

#### Hearing aids

Audiology Australia also provided advice in relation to hearing aids, in light of the significant developments in technology in recent years. It noted that the current limitations imposed by the Standard around the hearing aid functions not allowable would unnecessarily preclude many workers with hearing aids from working.

Section 4.11.3 of the Standard has been amended to remove the prescriptive hearing aid requirements.

# Categorisation of workers requiring a hearing aid

Stakeholders discussed how workers with hearing aids should be categorised in light of earlier recommendations to remove the Fit for Duty Conditional category. Some argued that they could be Fit for Duty Unconditional with the requirement to identify hearing aids, and with review at the scheduled Periodic Health Assessment. Others proposed Fit for Duty Subject to Review as currently categorised, with the review period to be advised by the Authorised Health Professional.

Audiology Australia advised that hearing loss could not be considered a stable condition and therefore advised to retain the categorisation of Fit for Duty Subject to Review. It recommended annual review to measure both hearing status and the functioning of the hearing aid. This advice has been reflected in Table 20 of section 4.11.4 of the Standard and throughout the model forms.

#### Repetition of speech discrimination testing

Stakeholders sought clarification about when or if speech discrimination testing should be repeated. For example, if a worker passes speech discrimination testing and their baseline hearing (without a hearing aid) is unchanged at a subsequent medical, should speech discrimination testing be ordered at each subsequent assessment. The view put forward was that repeat testing would only be required if their baseline test had deteriorated. This is generally agreed and consistent with the overall response to static conditions, which can be made clear in the text and highlighted elsewhere if not clear in relation to static conditions.

#### Hearing criteria

A stakeholder noted the need for consistency in terms of how the criteria are expressed in the Standard and in the Record for Health Professional.

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The criteria table in the Standard expresses the standard as follows:

A person is not Fit for Duty Unconditional:

• if hearing loss is ≥ 40dB averaged over 0.5, 1, 2, and 3 kHz in the better ear.

#### The model form indicates:

Acceptable < 40dB averaged over 0.5, 1, 2 and 3 kHz in the better ear.</li>

The stakeholder sought clarification about whether the results would be interpreted as intended and how these could be expressed more consistently in both the Standard and the form.

The Record for Health Professional has been amended to align with the Standard.

# Cost benefit analysis for proposed changes to hearing speech in noise criteria

In the interests of best practice policy, the NTC intends to perform a cost benefit analysis to explore the estimated value of the proposed changes. The NTC has identified the required information in Table 4 to perform the cost benefit analysis and is seeking input from stakeholders on the gaps. A complete cost benefit analysis will be provided in the final consultation report.

Table 4. Cost benefit analysis information required for changes to hearing criteria

| Description of impact  | Description of cost or benefit   | Estimated value per annum  |
|--|--|--|
| The revised hearing criteria will result in more workers being required to wear hearing aids.        | Approximately <b>x</b> additional rail safety workers will be required to have hearing aids fitted. These cost approximately <b>\$x</b> for initial fitting.  Hearing aids need to be checked every <b>x</b> years, at an approximate cost of <b>\$x</b> .  Hearing aids need to be replaced every <b>x</b> years.  Approximately <b>x</b> rail safety workers per annum would need to take approximately <b>x</b> hours off work to have hearing aids fitted. This is expected to result in lost time of <b>x</b> person days | Total value of additional hearing aids fitted per annum:  Ongoing cost of checking of \$x every x years.  Regular replacement of hearing aids would be expected to cost \$x per annum  Annual value of lost work time: |
| Rail safety workers with<br>hearing loss would be<br>required to re-test their<br>hearing every year | Approximately <b>x</b> rail safety workers per annum would need to attend a test costing approximately <b>\$x</b> .  | Ongoing additional testing cost estimated at <b>\$x</b> per annum.   |

| Description of impact   | Description of cost or benefit  | Estimated value per annum  |
|---|---|--|
| Better identification of hearing loss and wearing of hearing aids reduces the number of safety-related incidents caused by hearing loss | Currently, there are [insert description of number and type of safety incidents and their consequences in injuries, lives lost, etc.] | Estimated safety benefits: <b>\$x</b> per annum or state expected reduction as a percentage range. |

#### 5.10.3 Implications

# Rail transport operators

The lowering of the threshold for hearing loss for rail safety workers working in noise is a significant shift in the Standard and will likely result in increased testing of this group. These changes will also mean that hearing requirements for tram drivers no longer aligned with those for commercial vehicle drivers as per AFTD.

# **Health professionals**

The lowering of the threshold for hearing loss for rail safety workers working in noise is a significant shift in the Standard and will likely result in increased testing of this group.

# Rail safety workers

The lowering of the threshold for hearing loss for rail safety workers working in noise is a significant shift in the Standard and will likely result in increased testing of this group.

Earlier identification of hearing loss will be beneficial for workers' long-term health, both in relation to hearing and other associated conditions.

The individualisation of hearing aid fitting and management should ensure fairness in application of the Standard.

#### 5.10.4 Consultation questions

Stakeholders are invited to respond to the following questions by Monday 12 December 2022.

**Question 20:** Do you have any comments on the changes to the hearing chapter or other issues that need to be considered?

**Question 21:** Do you have data (highlighted in bold in Table 4) to support the cost benefit analysis for the proposed changes to the hearing criteria?

# 5.11 Vision and eye disorders

# 5.11.1 Inputs from stakeholders

A number of stakeholders provided submissions addressing vision and eye disorders in Part 4 of the Standard. These include:

- Chief Medical Officers Council
- Rail Health Advisory Group.

Changes were also made flowing from a review of AFTD.

Any issues that were out of scope for the review are discussed in section 8.

#### 5.11.2 Issues and recommendations

A comparison of the 2017 fitness for duty criteria and the proposed changes are contained in Table 19 of Appendix D.

# Categorisation and management of workers with stable vision conditions or impairments versus progressive vision disorders

In the discussions regarding fitness for duty categories, stakeholders identified that the preference was for people with stable visual impairment to be categorised as Fit for Duty Unconditional so that they weren't subject to unnecessary review.

At the same time, it was recognised that progressive conditions were not well defined in the criteria nor well differentiated from stable conditions, there being a reference in the text to progressive conditions requiring regular review but nothing specific in the tables.

Section 4.12.3 of the Standard addresses these issues and Table 21 of section 4.12.4 separates the criteria for stable and progressive conditions.

#### Acuity and colour vision

Recent research shared with the project team points to the effect of reduced acuity on colour recognition. This is included in the chapter but does not affect the fitness for duty criteria.

## Signal lights

Editorial changes have been made to clarify 'panel lights' for signallers and for progressive eye conditions.

# Railway LED Lantern Test

Stakeholders noted that the only valid lantern test for the rail industry in Australia is the Railway LED Lantern Test.

Section 4.12 of the Standard has been updated to only reference the Railway LED Lantern Test.

#### Monocular vision

Stakeholders noted inconsistency in the management of workers with monocular vision between the text and the table. This has been resolved. Some stakeholders argued that stable monocular conditions should not require review, however, it was noted that the review requirement is associated with the remaining eye, and that the health of that eye was essential to safe working.

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This rationale is now made clear in the Standard and some flexibility provided in terms of review based on the level of vision in the remaining eye.

# 5.11.3 Implications

# Rail transport operators

There is now clear alignment between the vision criteria and the management of workers in practice (including the report forms). This will support consistency in management and avoid unnecessary reassessment of stable conditions.

## Health professionals

The changes will support consistency in management and avoid unnecessary reassessment of stable conditions.

# Rail safety workers

The changes will support consistency in management and avoid unnecessary reassessment of stable conditions.

# 5.11.4 Consultation questions

Stakeholders are invited to respond to the following question by Monday 12 December 2022.

**Question 22:** Do you have any comments on the changes to the vision chapter or other issues that need to be considered?

# 6 Part 5: Fitness for duty criteria for Category 3 workers

# **Key points**

- The content from the separate technical note for Category 3 workers has now been integrated into the Standard.
- It is noted that these criteria apply to Category 2 workers who also work around the track.
- Additional changes reflect alignment with the changes made to Part 4 of the Standard.

# 6.1 Introduction

This section of the report describes the feedback and changes to Part 5 of the Standard.

Part 5 of the Standard outlines the requirements for a Category 3 health assessment. These include eyesight and hearing tests, and an assessment to ensure safe mobility around the track, as well as a questionnaire to help identify any other serious conditions that could affect safety around the track.

# 6.2 Inputs from stakeholders

A number of stakeholders provided submissions addressing Part 5 of the Standard. These include:

- Chief Medical Officers Council
- Rail Health Advisory Group
- Office of the National Rail Safety Regulator
- Rail Industry Safety and Standards Board (RISSB).

Any issues that were out of scope for the review are discussed in section 8.

#### 6.3 Issues and recommendations

A comparison of the 2017 fitness for duty criteria and the proposed changes are contained in Table 18, Table 19, Table 20 and Table 21 of Appendix D.

## Identification and management of serious health issues

In 2018, stakeholders raised that the Standard did not list what other serious conditions may affect track safety for Category 3 workers resulting in Authorised Health Professionals making subjective and inconsistent decisions regarding worker fitness. Following consultation on this issue, the NTC recommended that a Category 3 guideline be developed.

The RISSB subsequently published the 'Technical note for AHPs on Category 3 Assessments'.<sup>10</sup> This technical note has been well received and used by Authorised Health Professionals since 2019 with no reported issues. Section 5.5.3 of the Standard has been amended to incorporate the RISSB technical note, along with other changes to align with the Category 1 and 2 changes where relevant (including for vision, hearing and epilepsy).

Subsequently, the content regarding seizures and epilepsy has been amended to define the 'default criteria' being a non-working seizure-free period, which was found to be missing as a foundation for the management of seizures.

The categorisation of Temporarily Unfit for Duty has also been added to clarify the management of an incumbent worker who has experienced a seizure. This was previously not specified.

# 6.4 Implications

#### Rail transport operators

Implementation of the Standard will be facilitated through the formal integration of the Category 3 worker requirements into the Standard.

Rail transport operators should take steps to reassure themselves that the seizure and epilepsy criteria have been appropriately implemented.

#### Health professionals

Implementation of the Standard will be facilitated through the formal integration of the Category 3 worker requirements into the Standard.

Authorised Health professionals should work with rail transport operators to reassure themselves that the seizure and epilepsy criteria have been appropriately implemented.

## Rail safety workers

There are no significant implications for rail safety workers, assuming the seizure and epilepsy criteria were implemented as intended.

# 6.5 Consultation questions

Stakeholders are invited to respond to the following questions by Monday 12 December 2022.

Question 23: Are the proposed changes to Part 5 appropriate?

**Question 24:** Do you have any further comments on this issue or other issues to be considered in Part 5?

<sup>&</sup>lt;sup>10</sup> Rail Industry Safety Standards Board (2019) <u>National Standard for Health Assessment of Rail Safety Workers</u>, <u>Technical note for AHPs on Category 3 assessments</u>, accessed 24 May 2023.

# 7 Part 6: Clinical tools, forms and transition arrangements

# **Key points**

- This part of the Standard now includes a new section in which the main clinical tools used in the Standard are compiled.
- The forms have been updated in line with the changes to the Standard and to support implementation.
- The case studies have been removed. Their use as educational tools will be discussed with the RIW group.

# 7.1 Introduction

This section of the report describes the feedback and changes to Part 6 of the Standard.

The model forms contained in Part 6 of the Standard provide a standard format to support implementation of the assessments for rail safety workers. There are two sets of forms, one for Category 1 and Category 2 workers and one for Category 3 workers.

The transition arrangements set out implementation requirements associated with a new edition of the Standard. These are revised for each edition following a risk assessment of the changes made as the result of the review.

# 7.2 Inputs from stakeholders

A number of stakeholders provided submissions addressing Part 6 of the Standard. These include:

- Chief Medical Officers Council
- Rail Health Advisory Group
- Rail Industry Worker (RIW) group.

Any issues that were out of scope for the review are discussed in section 8.

# 7.3 Issues and recommendations

#### Clinical tools

The appropriate use of clinical tools is an important consideration for the quality of rail safety worker health assessments. The tools are presented in various ways and with varying explanatory detail throughout the Standard. It is recommended that they be collated in one section with consistent levels of supporting information.

#### **Forms**

Stakeholders recommended the following changes regarding the forms:

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- Inclusion of a question about neurodevelopmental disorders (for example, ASD and ADHD) for Category 1, 2 and 3 workers. This now aligns with the new section 5 covering neurodevelopmental disorders.
- Inclusion of a question about 'habitual loud snoring' for Category 1 and 2 workers. This has
  not been adopted but is included in the STOP-Bang questionnaire which will be
  administered by the Authorised Health Professional. Refer also to Figure 26 in section 4.9.3
  of the Standard.
- Updating of the worker disclosure statement about information use to cover upload of health assessment to RIW and research. This has been included.
- Updates to the Request and Report Form to clarify fitness for duty categories and ensure accurate completion of the form by Authorised Health Professionals. Refer also to discussion regarding fitness for duty categories in section 2.3 of the Standard.
- Verbal delivery of the K10 questionnaire (this is now included in the Record for Health Professional). Refer to section 4.8.2 of the Standard.
- Completion date and details of last health assessment to facilitate access to information about the previous health assessment. Refer to section 4.5 of the Request and Report Form.
- Type of assessment required, included who a Triggered Health Assessment has been initiated by. Refer to section 4.5 of the Request and Report Form.
- Moving open questions about the worker's experiences since their last assessment to the beginning of the Health Questionnaire, including adding additional questions about drug tests and health issues. Refer to Part B of the Worker Notification and Health Questionnaire.
- Expanded question about illicit drug use to include previous use as distinct from current use. Refer to section 11 of the Worker Notification and Health Questionnaire.
- Included worker's declarations in same place. Refer to Part C of the Worker Notification and Health Questionnaire.

Section 6.2 of the Standard contains the updated versions of the model forms which address feedback to date and extensive consultation with Chief Medical Officers. The forms are still under development and reflect as accurately as possible the current status of the fitness for duty criteria and requirements under the Standard. The forms will continue to evolve during public consultation.

#### Case studies

The case studies from the 2017 version of the Standard have been removed and will be provided to the RIW group who can determine whether they are suitable for training and education of Authorised Health Professionals.

# **Transition requirements**

The transition requirements will be developed at the completion of the review and will be based on feedback from stakeholders during public consultation.

From a preliminary perspective, the areas of significant change and need for transition requirements includes sleep disorders and hearing.

The transition from the 2017 to the 2023 fitness for duty criteria will adopt a risk-based approach and prioritise screening of workers at highest risk.

For example, the updated hearing fitness for duty criteria may be prioritised to workers with current hearing loss and require these workers to undergo testing within 12 months of the new Standard coming into force. The next cohort may involve those workers who need to hear speech and noise.

Similarly, for example, in sleep screening, Safety Critical Workers in older age groups may be prioritised for initial screening under the new criteria.

# 7.4 Implications

#### Rail transport operators

Amendments to the forms will support effective implementation of the Standard.

# Health professionals

Amendments to the forms will support effective implementation of the Standard.

The comprehensive section on clinical tools should also support consistent application of these by Authorised Health Professionals.

# Rail safety workers

There are no significant implications for rail safety workers.

# 7.5 Consultation questions

Stakeholders are invited to respond to the following questions by Monday 12 December 2022.

- Question 25: Are the proposed changes to Part 6 appropriate?
- **Question 26:** What transitional arrangements should the Standard allow for? How much time would rail transport operators need to transition to changes to the fitness for duty criteria?
- **Question 27:** Do you have any further comments on this issue or other issues to be considered in Part 6?

# 8 Out-of-scope issues

# **Key points**

- The review has raised issues regarding the implementation of the Standard, particularly with respect to the quality and consistency of health assessments conducted by Authorised Health Professionals.
- There is evidence of poor quality of assessments as well as evidence that unauthorised health professionals are conducting health assessments.
- Factors contributing to poor quality are thought to include a lack of experience in conducting health assessments among the current group of Authorised Health Professionals two thirds of Authorised Health Professionals have conducted 20 or fewer assessments in the last three years; a third have conducted no health assessments since undertaking training.
- There is a need to systematically investigate the Authorised Health Professional system to ensure it is fit for purpose.
- There is a need to gain a more complete understanding of other factors that may be contributing to gaps in implementation and to address these systematically.

# 8.1 Introduction

This section of the report describes the out-of-scope feedback and changes relating to the Standard.

# 8.2 Inputs from stakeholders

A number of stakeholders provided submissions addressing out-of-scope issues relating to the Standard. These include:

- Chief Medical Officers Council (CMOC)
- Rail Health Advisory Group
- Rail Industry Safety and Standards Board (RISSB)
- Office of the National Rail Safety Regulator (ONRSR)
- Rail Industry Worker (RIW) group.

# 8.3 Issues

In 2005, the Waterfall Special Commission of Inquiry final report identified a number of deficiencies in the medical assessment system and provided several recommendations to address these issues. Recommendation 57(b) of the inquiry's final report stated:11

<sup>&</sup>lt;sup>11</sup> Waterfall Special Commission of Inquiry (2005) Final Report Government Response, accessed 10 October 2022.

'medical examinations must be conducted by medical practitioners with an understanding of the duties and responsibilities of the safety critical employees being examined.'

The concept of an Authorised Health Professional was created in response to this recommendation and is detailed in the Standard. Systems have been created to deliver training and register trained professionals on the RIW website. The RIW system also monitors feedback about Authorised Health Professionals and the quality of assessments undertaken.

Despite these efforts, stakeholder feedback has consistently raised issues regarding suboptimal quality of the health assessments and issues with the processes associated with health assessment administration through health assessment providers.

Consultation with stakeholders, including CMOC, RISSB, RIW group and the ONRSR, has identified a number of particular issues:

## Common quality issues

Health assessment quality is an issue identified by stakeholders at various levels. RIW data shows the common quality issues include poor completion of forms (missing signatures, dates missing), incorrect fitness for duty categorisation of the worker and final outcomes not being recorded on the report forms.

Chief Medical Officers also report issues associated with the clinical aspects of the assessments. Some rail transport operators employ dedicated staff within their Chief Medical Officer office to review each Authorised Health Professional's health assessment decision.

Variable quality of health assessments has also been observed within other safety critical industries, such as assessments for marine pilots in New South Wales.

# High proportion of Authorised Health Professionals not regularly using and maintaining their skills

RIW data suggests there are 1,543 individuals who have received training and have been approved as Authorised Health Professionals. Of these, a third (514) have not completed any health assessments since being approved. A further 480 (31 per cent) have completed 1 to 20 health assessments in the last three years (since June 2019). This data indicates that a large proportion (almost two thirds) of trained Authorised Health Professionals have completed little to no health assessments recently and are not applying their knowledge and skills on a regular basis, which may be a contributing factor to poor quality outcomes.

# Non-compliance with Standard requirements

Despite the Standard requiring the assessments only be undertaken by Authorised Health Professionals, it has become evident during this review that a significant number of assessments are being conducted by unauthorised personnel and being 'signed off' by an Authorised Health Professional. These cases are being investigated and the Standard has been updated to make it explicitly clear that Authorised Health Professionals must directly undertake the clinical assessment of the rail safety worker and determine their fitness for duty based on their own assessment.

The above examples point to the need for further evaluation of the implementation of the Standard, particularly in relation to the system of Authorised Health Professionals. The NTC is interested in hearing further from stakeholders to understand this issue in more detail.

The NTC is also proposing to seek further information to inform our understanding of:

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- The conduct and outcomes of audits undertaken by rail transport operators (as required by the Standard).
- The adequacy of training for Authorised Health Professionals.
- The role of RIW system in monitoring the performance of the health assessment system.
- The roles and collaboration of various organisations in ensuring implementation of the Standard.

The NTC will present a final out-of-scope issues list to senior government officials for visibility and seek advice on further direction.

# 8.4 Consultation questions

Stakeholders are invited to respond to the following questions by Monday 12 December 2022.

- **Question 28:** Please provide information about your experiences with implementation of the Standard, including but not limited to the performance of the Authorised Health Professional system.
- **Question 29:** What are your preferences as to how implementation of the Standard should be investigated and assessed going forward?

# Appendix A Rail Health Advisory Group members

| Name                 | Organisation   |
|----------------------|--|
| Catherine Dowe       | Office of the National Rail Safety Regulator                                     |
| Karin Cooke          | Department of Transport and Main Roads (Qld)                                     |
| Dan O'Neil           | Transport for NSW  |
| Paul Salter          | Department of Transport (Vic)  |
| Guy Riley            | Department of Infrastructure, Planning and Logistics                             |
| Kyle Waters          | Public Transport Authority WA  |
| Bill Reid            | Department for Infrastructure and Transport (SA)                                 |
| Dr Dinesh Arya       | ACT Health Directorate   |
| Tegan Pearce         | Department of State Growth (Tas)   |
| Alicia Tong          | Department of Infrastructure, Transport, Regional Development and Communications |
| Simon Bourke         | Australasian Railways Association  |
| Louisa Hackenberg    | Queensland Rail  |
| Patrick Maney        | KiwiRail   |
| Graham Jackson       | Rail Industry Standards Board  |
| Mitchell McDonald    | Australian Rail Track Corporation  |
| Martin Nicholas      | McConnell Dowell Constructors  |
| Peter Anderson       | Association of Tourist & Heritage Rail Australia Inc                             |
| Anissa Thompson      | Rio Tinto  |
| Shayne Kummerfeld    | Rail Bus & Tram Union  |
| Jacquie Lyons        | Metro (Vic)  |
| Dr Chris Walls       | Occupational Medicine specialist (NZ)  |
| Dr Simon Ryder-Lewis | Occupational Medicine specialist (NZ)  |
| Dr Maria Mazaheri    | Chief Medical Officer, Aurizon   |
| Dr Armand Casolin    | Chief Medical Officer, Sydney Trains   |
| Dr Keith Adam        | Chief Medical Officer and Senior Occupational Physician                          |
| Dr Stuart Turnbull   | Chief Medical Officer, Metro (Vic)   |
| Josie Thomas         | National Transport Commission  |
| Jeremy Wolter        | National Transport Commission  |
| Fiona Landgren       | Project Health   |

# Appendix B Working group members

# Cardiovascular conditions working group

| Name              | Organisation                         |
|-------------------|--------------------------------------|
| Dr Armand Casolin | Chief Medical Officer, Sydney Trains |
| Dr Maria Mazaheri | Chief Medical Officer, Aurizon       |
| Dr June Sim       | Occupational Physician               |

# **Diabetes working group**

| Name                     | Organisation                         |
|--------------------------|--------------------------------------|
| Dr Armand Casolin        | Chief Medical Officer, Sydney Trains |
| Dr Maria Mazaheri        | Chief Medical Officer, Aurizon       |
| A/Prof Sof Andrikopoulos | Diabetes Society                     |
| Jane Holmes-Walker       | Diabetes Society                     |

# Sleep disorders working group

| Name               | Organisation                         |  |
|--------------------|--------------------------------------|--|
| Dr Armand Casolin  | Chief Medical Officer, Sydney Trains |  |
| Dr Maria Mazaheri  | Chief Medical Officer, Aurizon       |  |
| Dr June Sim        | Occupational Physician               |  |
| Dr Tim Drew        | Jobfit Rail Specialist               |  |
| Dr Graeme Edwards  | Chief Medical Officer, ARTC          |  |
| Dr Linda Schachter | Australasian Sleep Association       |  |

# Neurodevelopmental disorders working group

| Name              | Organisation                               |
|-------------------|--|
| Dr Armand Casolin | Chief Medical Officer, Sydney Trains       |
| Dr Graeme Edwards | Chief Medical Officer, ARTC                |
| Dr June Sim       | Occupational Physician                     |
| Dr Nicola Gates   | APS College of Clinical Neuropsychologists |

# **Hearing working group**

| Name              | Organisation                         |
|-------------------|--------------------------------------|
| Dr Armand Casolin | Chief Medical Officer, Sydney Trains |
| Dr June Sim       | Occupational Physician               |
| Dr Barbra Timmer  | Audiology Australia                  |

# Appendix C Consultation

| Date                 | Stakeholder  |
|----------------------|--|
| 16 March 2022        | CMOC meeting #1  |
| March – October 2022 | Written feedback from CMOC members   |
| May – October 2022   | Written feedback from RHAG members   |
| 15 June 2022         | RHAG meeting #1  |
| 1 August 2022        | CMOC meeting # 2   |
| 1 August 2022        | Cardiovascular working group Diabetes working group Hearing working group Neurodevelopmental disorders working group Sleep working group |
| 17 August 2022       | Rail Industry Worker meeting   |
| 5 September 2022     | Office of Best Practice Regulation meeting   |
| 6 September 2022     | CMOC meeting #3  |
| 12 September 2022    | Sleep working group  |
| 13 September 2022    | RHAG meeting #2  |
| 27 September 2022    | CMOC meeting #4  |
| 28 September 2022    | Audiology Australia meeting  |
| 7 October 2022       | Draft revised Standard shared with CMOC and RHAG for feedback ahead of release for public consultation                                   |

# Appendix D Comparison of 2017 and proposed fitness for duty criteria

The below tables provide a comparison of the fitness for duty criteria for each chapter from the 2017 version to the proposed revised Standard.

Table 5. Summary of fitness for duty criteria changes: Blackouts

| Condition   | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers   | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|---|-----------------------------------|---|---|
| Blackouts: episode(s) of impaired consciousness of uncertain nature | NO                                | Category 1 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if the person has experienced blackouts that cannot be diagnosed as syncope, seizure or another condition.  If there has been a single blackout or more than one blackout within a 24-hour period, Fit for Duty Subject to Review may be determined subject to at least annual review, taking into account information provided by an appropriate specialist as to whether the following criterion is met:  • there have been no further blackouts for at least 5 years.  If there have been 2 or more blackouts separated by at least 24 hours, Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account information provided by an appropriate specialist as to whether the following criterion is met:  • there have been no further blackouts for at least 10 years.  Category 2 Safety Critical Workers  Refer to text. | Category 1 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if the person has experienced blackouts that cannot be diagnosed as syncope, seizure or another condition.  If there has been a single blackout or more than one blackout within a 24-hour period, Fit for Duty Subject to Review may be determined subject to at least annual review, taking into account information provided by an appropriate specialist as to whether the following criterion is met:  • there have been no further blackouts for at least 5 years.  If there have been 2 or more blackouts separated by at least 24 hours, Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account information provided by an appropriate specialist as to whether the following criterion is met:  • there have been no further blackouts for at least 10 years.  Category 2 Safety Critical Workers  Refer to text. |

| Condition         | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|-------------------|-----------------------------------|--|---|
| Exceptional cases | NO                                | Category 1 and Category 2 Safety Critical Workers  | Category 1 and Category 2 Safety Critical Workers   |
|                   |                                   | Where a person with one or more blackouts of undetermined mechanism does not meet the above criteria, Fit for Duty Subject to Review may be determined, based on consideration of the nature of the task and subject to annual review:                               | Where a person with one or more blackouts of undetermined mechanism does not meet the above criteria, Fit for Duty Subject to Review may be determined, based on consideration of the nature of the task and subject to annual review:  |
|                   |                                   | if, in the opinion of the treating specialist and in consultation with the Authorised Health Professional and the operator's Chief Medical Officer (or an occupational physician experienced in rail), the risk to the network caused by blackout is acceptably low. | if, in the opinion of the treating specialist and in consultation with the Authorised Health Professional and the rail transport operator's Chief Medical Officer (or an occupational physician experienced in rail), the risk to the network caused by blackout is acceptably low. |

Table 6. Summary of fitness for duty criteria changes: Cardiovascular conditions

| Condition          | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers  |
|--------------------|-----------------------------------|--|--|
| Cardiac risk level | YES                               | Category 1 Safety Critical Workers   | Category 1 Safety Critical Workers   |
|                    |                                   | The cardiac risk level is to be interpreted in the context of  | Refer to Table 6.  |
|                    |                                   | overall cardiovascular risk assessment.  | Refer to related criteria as required (e.g., hypertension and  |
|                    |                                   | If cardiac risk level has a:   | diabetes).   |
|                    |                                   | <ul> <li>Probability of 25% in 5 years (red and orange cells):</li> </ul>  | Category 2 Safety Critical Workers   |
|                    |                                   | worker is unfit for Category 1 Safety Critical Work.<br>Refer for stress ECG and classify as Temporarily<br>Unfit for Duty pending results. Review annually. | There are no specific criteria for fitness for duty for Category 2 workers since the major risk is in relation to sudden incapacity. However, if in the course of the examination, |
|                    |                                   | Probability of 10–24% in 5 years (light orange, yellow   | raised cardiovascular risk levels are found the worker should  |
|                    |                                   | and blue cells): refer for stress ECG. While awaiting results, classify as Fit for Duty Subject to Review or   | be referred to their general practitioner.   |
|                    |                                   | Temporarily Unfit for Duty depending on overall risk   |  |

| Condition                                 | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail<br>Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers                                    |
|---|-----------------------------------|---|--|
|   |                                   | assessment. Review annually.  |  |
|   |                                   | <ul> <li>Probability of 5–9% in 5 years (dark green cells):<br/>refer to general practitioner for risk factor<br/>modification or refer for stress ECG if<br/>appropriate. While awaiting</li> </ul>  |  |
|   |                                   | investigation, classify as Fit for Duty Subject to<br>Review or Temporarily Unfit for Duty depending on<br>overall risk assessment. Review annually.  |  |
|   |                                   | <ul> <li>Probability of &lt; 5% in 5 years (light green cells):     assess risk factors and other clinical data, and refer     to general practitioner as appropriate. Classify as Fit     for Duty or Fit for Duty Subject to Review depending     on overall risk assessment. Review as appropriate.</li> </ul> |  |
|   |                                   | Refer to related criteria as required (e.g. hypertension and diabetes).   |  |
|   |                                   | Category 2 Safety Critical Workers  |  |
|   |                                   | There are no specific criteria for fitness for duty for Category 2 workers since the major risk is in relation to sudden incapacity. However, if in the course of the examination, raised cardiovascular risk levels are found the worker should be referred to their general practitioner.                       |  |
| Ischaemic heart disea                     | ıse                               |   |  |
| Acute                                     | YES                               | Category 1 Safety Critical Workers  | Category 1 Safety Critical Workers   |
| myocardial infarction (AMI) Refer also to |                                   | A Category 1 Safety Critical Worker should be categorised<br>Temporarily Unfit for Duty for at least 4 weeks following an<br>acute myocardial infarction.   | A person should be categorised Temporarily Unfit for Duty for at least 4 weeks following an acute myocardial infarction. |
| percutaneous coronary                     |                                   | A person is not Fit for Duty Unconditional:   | A person is not Fit for Duty Unconditional:  |

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| Condition   | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers  |
|---|-----------------------------------|--|---|
| intervention (PCI) Refer also to coronary artery bypass grafting (CABG) | (YES/NO)                          | <ul> <li>if the person has had an acute myocardial infarction.</li> <li>Fit for Duty Subject to Review may be determined, taking into account the nature of the work and information provided by the treating specialist as to whether the criteria described below are met.</li> <li>it is at least 4 weeks after an uncomplicated acute myocardial infarction; and</li> <li>there is a satisfactory response to treatment; and</li> <li>there is an exercise tolerance of ≥ 90% of the age/sex predicted exercise capacity according to the Bruce protocol (or equivalent exercise test protocol); and</li> <li>there is no evidence of severe ischaemia (i.e. &lt; 2 mm ST segment depression on an exercise ECG, or a reversible regional wall abnormality on an exercise stress ECG, or absence of a large defect on a stress perfusion scan); and</li> <li>there is an ejection fraction of &gt; 40%; and</li> <li>there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness).</li> <li>Category 2 Safety Critical Workers</li> <li>A person is not Fit for Duty Unconditional:</li> <li>if the person has had an acute myocardial infarction; and</li> <li>they have symptoms (chest pain, palpitations, breathlessness) that may impair performance of</li> </ul> | <ul> <li>if the person has had an acute myocardial infarction.</li> <li>Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account the nature of the work and information provided by the treating specialist as to whether the criteria described below are met: <ul> <li>it is at least 4 weeks after an uncomplicated acute myocardial infarction; and</li> <li>there is a satisfactory response to treatment; and</li> <li>there is an exercise tolerance of ≥ 90% of the age/sex predicted exercise capacity according to the Bruce protocol (or equivalent exercise test protocol); and</li> <li>there is no evidence of severe ischaemia (i.e. &lt; 2 mm ST segment depression on an exercise ECG, or a reversible regional wall abnormality on an exercise stress ECG, or absence of a large defect on a stress perfusion scan); and</li> <li>there is an ejection fraction of &gt; 40%; and</li> <li>there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness).</li> </ul> </li> <li>Category 2 Safety Critical Workers</li> <li>The non-working period (Temporarily Unfit for Duty) should be determined on clinical grounds.</li> <li>A person is not Fit for Duty Unconditional: <ul> <li>if the person has had an acute myocardial infarction; and</li> <li>they have symptoms (chest pain, palpitations,</li> </ul> </li> </ul> |
|   |                                   | the task.  The non-working period should be determined on clinical   | breathlessness) that may impair performance of the task.  |

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| Condition | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers   | Proposed under revised National Standard for Health Assessment of Rail Safety Workers  |
|-----------|-----------------------------------|---|--|
|           |                                   | grounds.  Fit for Duty Subject to Review may be determined, taking into consideration information provided by the treating specialist and based on a consideration of the nature of the work.   | Fit for Duty Subject to Review may be determined, with the review period being determined by the Authorised Health Professional, taking into consideration information provided by the treating specialist and based on a consideration of the nature of the work.   |
| Angina    | YES                               | <ul> <li>Category 1 Safety Critical Workers</li> <li>A person is not Fit for Duty Unconditional: <ul> <li>if the person is subject to angina pectoris.</li> </ul> </li> <li>Fit for Duty Subject to Review may be determined, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met: <ul> <li>there is an exercise tolerance of ≥ 90% of the age/sex predicted exercise capacity according to the Bruce protocol (or equivalent exercise test protocol); and/or</li> <li>there is no evidence of severe ischaemia (i.e. &lt; 2 mm ST segment depression on an exercise ECG or a reversible regional wall abnormality on an exercise stress echocardiogram or absence of a large defect on a stress perfusion scan); and</li> <li>there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness).</li> </ul> </li> <li>Myocardial ischaemia  If myocardial ischaemia is demonstrated (as per the criteria above), a coronary angiogram may be offered.</li> </ul> | A person is not Fit for Duty Unconditional:  • if the person is subject to angina pectoris.  Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met:  • there is an exercise tolerance of ≥ 90% of the age/sex predicted exercise capacity according to the Bruce protocol (or equivalent exercise test protocol); and/or  • there is no evidence of severe ischaemia (i.e., < 2 mm ST segment depression on an exercise ECG or a reversible regional wall abnormality on an exercise stress echocardiogram or absence of a large defect on a stress perfusion scan); and  • there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness).  Myocardial ischaemia  If myocardial ischaemia is demonstrated (as per the criteria above), a coronary angiogram may be offered. |
|           |                                   | The person may be classified as Fit for Duty Subject to (annual) Review:  • if the result of the angiogram shows lumen diameter   | The person may be classified as Fit for Duty Subject to Review, subject to at least annual review:  • if the result of the angiogram shows lumen diameter reduction of < 70% in a major coronary branch and <  |

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| Condition | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers   |
|-----------|-----------------------------------|--|--|
|           |                                   | reduction of < 70% in a major coronary branch and < 50% in the left main coronary artery.  If the result of the angiogram shows a lumen diameter reduction of > 70% in a major coronary branch and < 50% in the left main coronary artery (or if an angiogram is not conducted), Fit for Duty Subject to (annual) Review may be considered if:  • there is an exercise tolerance of ≥ 90% of the age/sex predicted exercise capacity according to the Bruce protocol (or equivalent exercise test protocol); and  • there is no evidence of severe ischaemia (i.e. < 2mm ST segment depression on an exercise ECG or a reversible regional wall abnormality on an exercise stress echocardiogram or absence of a large defect on a stress perfusion scan); and  • there is an ejection fraction of > 40%; and  • there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness).  Where surgery or percutaneous coronary intervention (PCI) is undertaken to relieve the angina, the requirements listed for PCI apply (see below)  Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if the person is subject to angina pectoris; and  • they have symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task. | <ul> <li>50% in the left main coronary artery.</li> <li>If the result of the angiogram shows a lumen diameter reduction of &gt; 70% in a major coronary branch and &lt; 50% in the left main coronary artery (or if an angiogram is not conducted), Fit for Duty Subject to Review, subject to at least annual review may be considered if: <ul> <li>there is an exercise tolerance of ≥ 90% of the age/sex predicted exercise capacity according to the Bruce protocol (or equivalent exercise test protocol); and</li> <li>there is no evidence of severe ischaemia (i.e., &lt; 2mm ST segment depression on an exercise ECG or a reversible regional wall abnormality on an exercise stress echocardiogram or absence of a large defect on a stress perfusion scan); and</li> <li>there is an ejection fraction of &gt; 40%; and</li> <li>there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness).</li> </ul> </li> <li>Where surgery or percutaneous coronary intervention (PCI) is undertaken to relieve the angina, the requirements listed for PCI apply (see below).</li> <li>Category 2 Safety Critical Workers</li> <li>A person is not Fit for Duty Unconditional: <ul> <li>if the person is subject to angina pectoris; and</li> <li>they have symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.</li> </ul> </li> <li>Fit for Duty Subject to Review may be determined, with the review period determined by the Authorised Health</li> </ul> |
|           |                                   | Fit for Duty Subject to Review may be determined, taking into  | Professional, taking into account information provided by the  |

| nge<br>riteria<br>S/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
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|                         | account information provided by the treating specialist and based on a consideration of the nature of the work.  | treating specialist and based on a consideration of the nature of the work.   |
|                         | Category 1 Safety Critical Workers  A Category 1 Safety Critical Worker should be categorised as Temporarily Unfit for Duty for at least 3 months following coronary artery bypass grafting.  A person is not Fit for Duty Unconditional:  • if the person requires or has had coronary artery bypass grafting.  Fit for Duty Subject to Review may be determined, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met:  • it is at least 3 months after coronary artery bypass grafting; and  • there is a satisfactory response to treatment; and  • there is an exercise tolerance of ≥ 90% of the age/sex predicted exercise capacity according to the Bruce protocol (or equivalent exercise test protocol); and  • there is no evidence of severe ischaemia (i.e. < 2mm ST segment depression on an exercise ECG or a reversible regional wall abnormality on an exercise stress echocardiogram or absence of a large defect on a stress perfusion scan); and  • there are minimal symptoms relevant to performing | A person should be categorised as Temporarily Unfit for Duty for at least 3 months following coronary artery bypass grafting.  A person is not Fit for Duty Unconditional:  • if the person requires or has had coronary artery bypass grafting.  Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met:  • it is at least 3 months after coronary artery bypass grafting; and  • there is a satisfactory response to treatment; and  • there is an exercise tolerance of ≥ 90% of the age/sex predicted exercise capacity according to the Bruce protocol (or equivalent exercise test protocol); and  • there is no evidence of severe ischaemia (i.e., < 2mm ST segment depression on an exercise ECG or a reversible regional wall abnormality on an exercise stress echocardiogram or absence of a large defect on a stress perfusion scan); and  • there is an ejection fraction of > 40%; and  • there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness); and       |
| ri<br>S                 | iteria   | account information provided by the treating specialist and based on a consideration of the nature of the work.  Category 1 Safety Critical Workers  A Category 1 Safety Critical Worker should be categorised as Temporarily Unfit for Duty for at least 3 months following coronary artery bypass grafting.  A person is not Fit for Duty Unconditional:  if the person requires or has had coronary artery bypass grafting.  Fit for Duty Subject to Review may be determined, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met:  it is at least 3 months after coronary artery bypass grafting; and  there is a satisfactory response to treatment; and  there is an exercise tolerance of ≥ 90% of the age/sex predicted exercise capacity according to the Bruce protocol (or equivalent exercise test protocol); and  there is no evidence of severe ischaemia (i.e. < 2mm ST segment depression on an exercise ECG or a reversible regional wall abnormality on an exercise stress echocardiogram or absence of a large defect on a stress perfusion scan); and  there is an ejection fraction of > 40%; and |

| Condition                         | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
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|                                   |                                   | there is minimal residual musculoskeletal pain after<br>the chest surgery.   | chest surgery.  |
|                                   |                                   |  | Category 2 Safety Critical Workers  |
|                                   |                                   | Category 2 Safety Critical Workers   | The non-working period (Temporarily Unfit for Duty)   |
|                                   |                                   | A person is not Fit for Duty Unconditional:  | should be determined on clinical grounds.   |
|                                   |                                   | <ul> <li>if the person requires or has had coronary artery<br/>bypass grafting; and</li> </ul>   | <ul><li>A person is not Fit for Duty Unconditional:</li><li>if the person requires or has had coronary artery</li></ul>   |
|                                   |                                   | <ul> <li>they have symptoms (chest pain, palpitations,</li> </ul>  | bypass grafting; and  |
|                                   |                                   | breathlessness) that may impair performance of the task.   | <ul> <li>they have symptoms (chest pain, palpitations,<br/>breathlessness) that may impair performance of the</li> </ul>  |
|                                   |                                   | The non-working period should be determined on clinical grounds.   | task.  Fit for Duty Subject to Review may be determined, with the   |
|                                   |                                   | Fit for Duty Subject to Review may be determined, taking into consideration information provided by the treating specialist and based on a consideration of the nature of the work.            | review period determined by the Authorised Health Professional, taking into consideration information provided by the treating specialist and based on a consideration of the nature of the work.                                 |
| Percutaneous                      | YES                               | Category 1 Safety Critical Workers   | Category 1 Safety Critical Workers  |
| coronary<br>intervention<br>(PCI) |                                   | A Category 1 Safety Critical Worker should be categorised Temporarily Unfit for Duty for at least 4 weeks after percutaneous coronary intervention (PCI).                                      | A person should be categorised Temporarily Unfit for Duty for at least 4 weeks after percutaneous coronary intervention (PCI).  |
| (e.g. angioplasty)                |                                   | A person is not Fit for Duty Unconditional:  | A person is not Fit for Duty Unconditional:   |
|                                   |                                   | <ul> <li>if the person requires or has had PCI.</li> </ul>   | <ul> <li>if the person requires or has had PCI.</li> </ul>  |
|                                   |                                   | Fit for Duty Subject to Review may be determined, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met: | Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met: |
|                                   |                                   | <ul> <li>it is at least 4 weeks after the PCI; and</li> </ul>  | <ul> <li>it is at least 4 weeks after the PCI; and</li> </ul>   |
|                                   |                                   | there is a satisfactory response to treatment; and   | there is a satisfactory response to treatment; and  |
|                                   |                                   | <ul> <li>there is an exercise tolerance of ≥ 90% of the</li> </ul>   | <ul> <li>there is an exercise tolerance of ≥ 90% of the age/sex</li> </ul>  |

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| Condition              | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
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|                        |                                   | age/sex predicted exercise capacity according to the Bruce protocol (or equivalent exercise test protocol); and  • there is no evidence of severe ischaemia (i.e. < 2mm ST segment depression on an exercise ECG or a reversible regional wall abnormality on an exercise stress echocardiogram or absence of a large defect on a stress perfusion scan); and  • there is an ejection fraction of > 40%; and  • there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness).  Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if the person requires or has had PCI; and  • they have symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.  The non-working period should be determined on clinical grounds.  Fit for Duty Subject to Review may be determined, taking into consideration information provided by the treating specialist and based on a consideration of the nature of the work. | predicted exercise capacity according to the Bruce protocol (or equivalent exercise test protocol); and  • there is no evidence of severe ischaemia (i.e., < 2mm ST segment depression on an exercise ECG or a reversible regional wall abnormality on an exercise stress echocardiogram or absence of a large defect on a stress perfusion scan); and  • there is an ejection fraction of > 40%; and  there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness).  Category 2 Safety Critical Workers  The non-working period (Temporarily Unfit for Duty) should be determined on clinical grounds.  A person is not Fit for Duty Unconditional:  • if the person requires or has had PCI; and  • they have symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.  Fit for Duty Subject to Review may be determined, with the review period determined by the Authorised Health Professional, taking into consideration information provided by the treating specialist and based on a consideration of the nature of the work. |
| Disorders of rate, rhy | thm and con                       | duction  |   |
| Atrial fibrillation    | YES                               | The non-working period will depend on the method of treatment (see below).  Category 1 Safety Critical Workers   | Category 1 Safety Critical Workers  The non-working period (Temporarily Unfit for Duty) will depend on the method of treatment (see below).   |
|                        |                                   | A person is not Fit for Duty Unconditional:  | A person is not Fit for Duty Unconditional:   |

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|           |                                   | <ul> <li>if the person has a history of recurrent or persistent<br/>arrhythmia, which may result in syncope or<br/>incapacitating symptoms.</li> </ul>   | <ul> <li>if the person has a history of recurrent or persistent<br/>arrhythmia, which may result in syncope or<br/>incapacitating symptoms.</li> </ul>  |
|           |                                   | Fit for Duty Subject to Review* may be determined, taking into account the nature of the work and information provided by the treating specialist as to whether any of the following criteria are met: | Fit for Duty Subject to Review* may be determined, subject to at least annual review, taking into account the nature of the work and information provided by the treating specialist as to whether any of the following criteria are met: |
|           |                                   | there is a satisfactory response to treatment; and   | there is a satisfactory response to treatment; and  |
|           |                                   | there are minimal symptoms relevant to performing<br>Safety Critical Work (chest pain, palpitations,<br>breathlessness); and   | <ul> <li>there are minimal symptoms relevant to performing<br/>Safety Critical Work (chest pain, palpitations,<br/>breathlessness); and</li> </ul>  |
|           |                                   | subject to appropriate follow-up.  | subject to appropriate follow-up.   |
|           |                                   | *Where the condition is considered to be cured, the requirement for periodic review may be waived.   | *Where the condition is considered to be cured, the requirement for periodic review may be waived.  |
|           |                                   | The person should not perform Safety Critical Work for:  | The person should not perform Safety Critical Work for at least:  |
|           |                                   | at least 4 weeks following percutaneous intervention   | 4 weeks following percutaneous intervention   |
|           |                                   | <ul> <li>at least 4 weeks following initiation of successful medical treatment</li> </ul>  | 4 weeks following initiation of successful medical treatment  |
|           |                                   | <ul> <li>at least 3 months following open chest surgery.</li> </ul>  | 3 months following open chest surgery.  |
|           |                                   | If the person is taking anticoagulants, refer to the anticoagulant therapy section, below.   | If the person is taking anticoagulants, refer to the anticoagulant therapy section, below.  |
|           |                                   | Category 2 Safety Critical Workers   | Category 2 Safety Critical Workers  |
|           |                                   | A person is not Fit for Duty Unconditional:     if the person has symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.   | The non-working period following treatment (Temporarily Unfit for Duty) should be determined on clinical grounds.  A person is not Fit for Duty Unconditional:  |
|           |                                   | The non-working period following treatment should be determined on clinical grounds.   | if the person has a history of recurrent or persistent arrhythmia, and  |

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|  |                                   | Fit for Duty Subject to Review may be determined, taking into account information provided by the treating specialist and based on a consideration of the nature of the work.  | they have symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.  Fit for Duty Subject to Review may be determined, with the review period determined by the Authorised Health Professional, taking into account information provided by the treating specialist and based on a consideration of the nature of the work.   |
| Paroxysmal   | YES                               | The non-working period is at least 4 weeks.  | Category 1 Safety Critical Workers   |
| arrhythmias  (e.g., supraventricular tachycardia [SVT] atrial flutter, idiopathic ventricular tachycardia) |                                   | Category 1 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if there was near or definite collapse.  Fit for Duty Subject to Review* may be determined, taking into account the nature of the work and information provided by the treating specialist as to whether any of the following criteria are met:  • there is a satisfactory response to treatment; and  • there are normal haemodynamic responses at a moderate level of exercise; and  • there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness).  *Where the condition is considered to be cured, the requirement for periodic review may be waived.  The person should not perform Safety Critical Work for:  • for at least 4 weeks following percutaneous intervention;  • for at least 4 weeks following initiation of successful medical treatment. | A person should be categorised as Temporarily Unfit for Duty for at least 4 weeks following initiation of treatment.  A person is not Fit for Duty Unconditional:  • if there was near or definite collapse.  Fit for Duty Subject to Review* may be determined, subject to at least annual review, taking into account the nature of the work and information provided by the treating specialist as to whether any of the following criteria are met:  • there is a satisfactory response to treatment; and  • there are normal haemodynamic responses at a moderate level of exercise; and  • there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness).  *Where the condition is considered to be cured, the requirement for periodic review may be waived.  The person should not perform Safety Critical Work for:  • for at least 4 weeks following percutaneous intervention;  • for at least 4 weeks following initiation of successful |

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|                |                                   | If the person is taking anticoagulants, refer to the anticoagulant therapy section, below.  Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if the person has symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.  The non-working period following treatment should be determined on clinical grounds.  Fit for Duty Subject to Review may be determined, taking into consideration information provided by the treating specialist, and based on a consideration of the nature of the work. | medical treatment.  If the person is taking anticoagulants, refer to the anticoagulant therapy section, below.  Category 2 Safety Critical Workers  The non-working period (Temporarily Unfit for Duty) following treatment should be determined on clinical grounds.  A person is not Fit for Duty Unconditional:  if the person has a history of paroxysmal arrythmias, and  they have symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.  Fit for Duty Subject to Review may be determined, with the review period determined by the Authorised Health Professional, taking into consideration information provided by the treating specialist, and based on a consideration of the nature of the work. |
| Cardiac arrest | YES                               | Category 1 Safety Critical Workers  A Category 1 Safety Critical Worker should be categorised as Temporarily Unfit for Duty for at least 6 months following a cardiac arrest.  A person is not Fit for Duty Unconditional:  • if the person has suffered a cardiac arrest.  Fit for Duty Subject to Review may be determined, taking into account the nature of the work and information provided by the treating specialist as to whether any of the following criteria are met:   | Category 1 Safety Critical Workers  A person should be categorised as Temporarily Unfit for Duty for at least 6 months following a cardiac arrest.  A person is not Fit for Duty Unconditional:  • if the person has suffered a cardiac arrest.  Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account the nature of the work and information provided by the treating specialist as to whether any of the following criteria are met:  • it is at least 6 months after the arrest; and   |

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|                   | (YES/NO)                          | <ul> <li>it is at least 6 months after the arrest; and</li> <li>a reversible cause is identified and recurrence is unlikely; and</li> <li>there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness).</li> <li>Category 2 Safety Critical Workers</li> <li>A person is not Fit for Duty Unconditional:         <ul> <li>if the person has suffered a cardiac arrest; and</li> <li>they have symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.</li> </ul> </li> </ul> | <ul> <li>a reversible cause is identified and recurrence is unlikely; and</li> <li>there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness).</li> <li>Category 2 Safety Critical Workers</li> <li>The non-working period (Temporarily Unfit for Duty) should be determined on clinical grounds.</li> <li>A person is not Fit for Duty Unconditional:         <ul> <li>if the person has suffered a cardiac arrest; and</li> <li>they have symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.</li> </ul> </li> <li>Fit for Duty Subject to Review may be determined, with the</li> </ul> |
|                   |                                   | The non-working period should be determined on clinical grounds.  Fit for Duty Subject to Review may be determined, taking into consideration information provided by the treating specialist and based on a consideration of the nature of the work.  | review period determined by the Authorised Health Professional, taking into consideration information provided by the treating specialist and based on a consideration of the nature of the work.  |
| Cardiac pacemaker | YES                               | Category 1 Safety Critical Workers   | Category 1 Safety Critical Workers   |
|                   |                                   | A Category 1 Safety Critical Worker should be categorised as Temporarily Unfit for Duty for at least 4 weeks after insertion of a pacemaker.   | A Category 1 Safety Critical Worker should be categorised as Temporarily Unfit for Duty for at least 4 weeks after insertion of a pacemaker.   |
|                   |                                   | A person is not Fit for Duty Unconditional:  | A person is not Fit for Duty Unconditional:  |
|                   |                                   | <ul> <li>if a cardiac pacemaker is required, or has been implanted or replaced.</li> </ul>   | <ul> <li>if a cardiac pacemaker is required or has been implanted or replaced.</li> </ul>  |
|                   |                                   | Fit for Duty Subject to Review may be determined, taking   | Category 1 Safety Critical Workers   |
|                   |                                   | into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met:  | A person should be categorised as Temporarily Unfit for Duty for at least 4 weeks after insertion of a pacemaker.  |

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|                                 | <ul> <li>it is at least 4 weeks after insertion of the cardiac pacemaker; and</li> <li>the relative risks of pacemaker dysfunction have been considered; and</li> <li>there are normal haemodynamic responses at a moderate level of exercise; and</li> <li>there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness).</li> <li>Category 2 Safety Critical Workers</li> <li>A person is not Fit for Duty Unconditional:</li> <li>if a cardiac pacemaker is required, or has been implanted or replaced; and</li> <li>they have symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.</li> <li>The non-working period should be determined on clinical grounds.</li> <li>Fit for Duty Subject to Review may be determined, taking into consideration information provided by the treating specialist and based on a consideration of the nature of the work.</li> </ul> | <ul> <li>A person is not Fit for Duty Unconditional:</li> <li>if a cardiac pacemaker is required or has been implanted or replaced.</li> <li>Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met: <ul> <li>it is at least 4 weeks after insertion of the cardiac pacemaker; and</li> <li>the relative risks of pacemaker dysfunction have been considered; and</li> <li>there are normal haemodynamic responses at a moderate level of exercise; and</li> <li>there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness).</li> </ul> </li> <li>Category 2 Safety Critical Workers <ul> <li>The non-working period (Temporarily Unfit for Duty) should be determined on clinical grounds.</li> </ul> </li> <li>A person is not Fit for Duty Unconditional: <ul> <li>if a cardiac pacemaker is required, or has been implanted or replaced; and</li> <li>they have symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.</li> </ul> </li> <li>Fit for Duty Subject to Review may be determined, with the review period determined by the Authorised Health Professional, taking into consideration information provided by the treating specialist and based on a consideration of the</li> </ul> |

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| Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers   | Proposed under revised National Standard for Health Assessment of Rail Safety Workers  |  |   |
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| ,                                 |   | nature of the work.  |  |   |
| YES                               | Category 1 Safety Critical Workers  | Category 1 Safety Critical Workers   |  |   |
|                                   | r   | • it   | A person is not Fit for Duty Unconditional:     if the person requires or has an ICD for ventricular arrhythmias, including those implanted for prophylaxis. | Category 1 workers may continue to perform Category 1 work if they have had an ICD implanted for primary prevention of ventricular arrythmias. Other applications are not compatible with Category 1 work (i.e., secondary prevention). |
|                                   | Category 2 Safety Critical Workers  | A person should be categorised Temporarily Unfit for Duty for at least 6 months after the ICD is implanted.  |  |   |
|                                   | <ul> <li>A person is not Fit for Duty Unconditional:</li> <li>if the person requires or has a ICD for ventricular arrhythmias, including those implanted for prophylaxis; and</li> <li>if the person has symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.</li> <li>The non-working period should be determined on clinical grounds.</li> <li>Fit for Duty Subject to Review may be determined, taking into consideration information provided by the treating specialist and based on a consideration of the nature of the work.</li> </ul> | A person may be classified Fit for Duty Subject to Review, subject to annual review, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met:  • the ICD was implanted for primary prevention; and  • it is at least 6 months after the insertion of the ICD; and  • there are no episodes of atrial fibrillation; and  • there are no discharges from the defibrillator; and  • interrogation of the ICD shows no evidence of antitachycardic pacing; and  • there is an ejection fraction ≥ 40%; and  • there is an exercise tolerance > 90% of the age/sex predicted exercise capacity according to the Bruce protocol or equivalent functional test protocol; and  • there is no evidence of severe ischaemia – that is, less than 2mm ST segment depression on an exercise test or reversible regional wall abnormality on an exercise stress echocardiogram or absence of a large defect on a stress perfusion scan; and |  |   |
|                                   | to criteria<br>(YES/NO)   | YES  Category 1 Safety Critical Workers  A person is not Fit for Duty Unconditional:  if the person requires or has an ICD for ventricular arrhythmias, including those implanted for prophylaxis.  Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:  if the person requires or has a ICD for ventricular arrhythmias, including those implanted for prophylaxis; and  if the person has symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.  The non-working period should be determined on clinical grounds.  Fit for Duty Subject to Review may be determined, taking into consideration information provided by the treating specialist  |  |   |

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|  |                                   |   | pain, palpitations, and breathlessness).   |  |
|  |                                   |   | Category 2 Safety Critical Workers   |  |
|  |                                   |   | Fitness for duty for Category 2 workers should be individually assessed based on the nature and stability of the underlying condition.   |  |
| ECG changes                            | YES                               | The person should not perform Safety Critical Work for  | Category 1 Safety Critical Workers   |  |
| (e.g. strain patterns,                 |                                   | at least 3 months following initiation of treatment.  | A person should be categorised as Temporarily Unfit for  |  |
| bundle branch<br>blocks or heart block |                                   | Category 1 Safety Critical Workers  | Duty for at least 3 months following initiation of treatment.  |  |
| and left ventricular                   |                                   | A person is not Fit for Duty Unconditional:   | A person is not Fit for Duty Unconditional:  |  |
| hypertrophy)                           |                                   | left bundle branch block, right bundle branch pre-excitation, prolonged QT interval or left ventricular hypertrophy, or changes suggesting  | ventricular hypertrophy, or changes suggestive of myocardial ischaemia or previous myocardial  | if the person has an ECG abnormality—for example, left bundle branch block, right bundle branch block, pre-excitation, prolonged QT interval or left ventricular hypertrophy, or changes suggestive of myocardial ischaemia or previous myocardial infarction. |
|  |                                   | Fit for Duty Subject to Review* may be determined, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met: | Fit for Duty Subject to Review* may be determined, subject to at least annual review, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met: |  |
|  |                                   | <ul> <li>if the condition has been treated medically for<br/>at least 3 months or follow-up investigation<br/>has excluded underlying cardiac disease; and</li> </ul>                           | <ul> <li>if the condition has been treated medically for at least 3<br/>months or follow-up investigation has excluded<br/>underlying cardiac disease; and</li> </ul>  |  |
|  |                                   | <ul> <li>there are minimal symptoms relevant to performing<br/>Safety Critical Work (chest pain, palpitations,<br/>breathlessness).</li> </ul>  | <ul> <li>there are minimal symptoms relevant to performing<br/>Safety Critical Work (chest pain, palpitations,<br/>breathlessness).</li> </ul>   |  |
|  |                                   | *Where the condition is considered to be cured, the requirement for periodic review may be waived.  | *Where the condition is considered to be cured, the requirement for periodic review may be waived.   |  |
|  |                                   | Category 2 Safety Critical Workers  | Category 2 Safety Critical Workers   |  |
|  |                                   | A person is not Fit for Duty Unconditional:   | The non-working period (Temporarily Unfit for Duty)  |  |

| Condition                | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail<br>Safety Workers   | Proposed under revised National Standard for Health Assessment of Rail Safety Workers  |
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|                          |                                   | <ul> <li>if the person has symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.</li> <li>Fit for Duty Subject to Review may be determined, taking into consideration information provided by the treating specialist, and based on a consideration of the nature of the work.</li> </ul> | following initiation of treatment should be determined on clinical grounds.  A person is not Fit for Duty Unconditional:  if the person has an ECG abnormality, and  they have symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.  Fit for Duty Subject to Review may be determined, with the review period determined by the Authorised Health Professional, taking into consideration information provided by the treating specialist, and based on a consideration of the nature of the work. |
| Vascular disease         |                                   |  |  |
| Aneurysms                | YES                               | Category 1 Safety Critical Workers   | Category 1 Safety Critical Workers   |
| (abdominal and thoracic) |                                   | A person is not Fit for Duty Unconditional:     if the person has an unrepaired aortic aneurysm, thoracic or abdominal.  | A person should be categorised as Temporarily Unfit for Duty for at least 3 months following repair of the aneurysm.   |
|                          |                                   | The worker should be categorised Temporarily Unfit for Duty for at least 3 months post-repair.   | A person is not Fit for Duty Unconditional:  • if the person has an unrepaired aortic aneurysm,  |
|                          |                                   | Fit for Duty Subject to Review may be determined, taking into account the nature of the work and information provided by the treating specialist as to whether either of the following criteria are met:  • the aneurysm (repaired or unrepaired) is less than   | thoracic or abdominal.  Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account the nature of the work and information provided by the treating specialist as to whether either of the following criteria are met:  |
|                          |                                   | 50mm for aneurysm associated with genetic  | <ul> <li>In the case of a repaired aneurysm:</li> </ul>  |
|                          |                                   | aortopathy; or   | it is at least 3 months after repair; and  |
|                          |                                   | <ul> <li>the aneurysm (repaired or unrepaired) is less<br/>than 55mm for artherosclerotic aneurysm or</li> </ul>   | the response to treatment is satisfactory,   |

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|                               |                                   | aneurysm associated with the biscupid aortic valve; and  in the case of repaired aneurysm, it is at least three months after repair.  Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:  if, following repair of aneurysm, the person has symptoms that may impair performance of the task.  The non-working period should be determined on clinical grounds.  Fit for Duty Subject to Review may be determined, taking into consideration information provided by the treating specialist and based on a consideration of the nature of the work. | <ul> <li>according to the treating vascular surgeon;</li> <li>OR</li> <li>in the case of atherosclerotic aneurysm or aneurysm associated with the bicuspid aortic valve, the aneurysm diameter is less than 55 mm; or</li> <li>the diameter is less than 50 mm for all other aneurysms.</li> <li>Category 2 Safety Critical Workers</li> <li>The non-working period (Temporarily Unfit for Duty) should be determined on clinical grounds.</li> <li>A person is not Fit for Duty Unconditional:</li> <li>if, following repair of aneurysm, the person has symptoms that may impair performance of the task.</li> <li>Fit for Duty Subject to Review may be determined, with the review period determined by the Authorised Health Professional, taking into consideration information provided by the treating specialist and based on a consideration of the nature of the work.</li> </ul> |
| Deep vein<br>thrombosis (DVT) | YES                               | Category 1 and Category 2 Safety Critical Workers  A Category 1 Safety Critical Worker should be categorised as Temporarily Unfit for Duty for at least 2 weeks after a DVT.  The non-working period for a Category 2 Safety Critical Worker should be determined on clinical grounds.  There are no specific criteria for long-term fitness for duty.  For long-term anticoagulation refer to Long-term anticoagulant therapy.  | Category 1 and Category 2 Safety Critical Workers  A person should be categorised as Temporarily Unfit for Duty for at least 2 weeks after a DVT.  The non-working period (Temporarily Unfit for Duty) for a Category 2 Safety Critical Worker should be determined on clinical grounds.  There are no specific criteria for long-term fitness for duty.  For long-term anticoagulation refer to Long-term anticoagulant therapy.  Also refer to Section 4.2.2.  |

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|                                   |  |  |   |
| Pulmonary                         | YES  | Category 1 and Category 2 Safety Critical Workers  | Category 1 and Category 2 Safety Critical Workers   |
| embolism (PE)                     |  | There are no specific Safety Critical Work criteria for long-<br>term fitness for duty for PE.   | There are no specific Safety Critical Work criteria for long-term fitness for duty for PE.  |
|                                   |  | A Category 1 Safety Critical Worker should be categorised as Temporarily Unfit for Duty for at least 6 weeks after a PE.   | A Category 1 Safety Critical Worker should be categorised as Temporarily Unfit for Duty for at least 6 weeks after a PE.  |
|                                   |  | The non-working period for a Category 2 Safety Critical Worker should be determined on clinical grounds.   | The non-working period (Temporarily Unfit for Duty) for a Category 2 Safety Critical Worker should be determined  |
|                                   |  | Refer to Long-term anticoagulant therapy. Also refer to  | on clinical grounds.  |
|                                   |  | Section 18.2.2. General assessment and management guidelines in the text.  | Refer to Long-term anticoagulant therapy. Also refer to Section 4.2.2.  |
| Valvular heart                    | YES  | The person should not perform Safety Critical Work   | Category 1 Safety Critical Workers  |
| disease (including treatment with | ng for at least 3 months following valve repair. | A person should be categorised as Temporarily Unfit for  |   |
| Mitra Clips and                   |  | Category 1 Safety Critical Workers   | Duty for at least 3 months following valve repair.  |
| Transcutaneous                    |  | A person is not Fit for Duty Unconditional:  | A person is not Fit for Duty Unconditional:   |
| Aortic Valve<br>Replacement       |  | if the person has any history or evidence of valve disease, with or without surgical repair or replacement, associated with symptoms or a history of embolism, arrhythmia, cardiac enlargement, abnormal ECG, high blood pressure, | <ul> <li>if the person has any history or evidence of valve<br/>disease, with or without surgical repair or replacement,<br/>associated with symptoms or a history of embolism,<br/>arrhythmia, cardiac enlargement, abnormal ECG, high<br/>blood pressure, or</li> </ul> |
|                                   | or • if the pe                                   | -  | <ul> <li>if the person is taking long-term anticoagulants.</li> </ul>   |
|                                   |  | <ul> <li>if the person is taking long-term anticoagulants.</li> </ul>  | Fit for Duty Subject to Review may be determined, subject to  |
|                                   |  | Fit for Duty Subject to Review may be determined, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria  | at least annual review, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met:  |
|                                   |  | are met:     the person's cardiological assessment shows valvular disease of no haemodynamic significance;   | the person's cardiological assessment shows valvular disease of no haemodynamic significance; or  |

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|  |                                   | <ul> <li>it is 3 months following surgery and there is no evidence of valvular dysfunction; and</li> <li>there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness); and</li> <li>there is minimal residual musculoskeletal pain after chest surgery.</li> <li>Category 2 Safety Critical Workers</li> <li>A person is not Fit for Duty Unconditional: <ul> <li>if the person has symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.</li> </ul> </li> <li>The non-working period following treatment should be determined on clinical grounds.</li> <li>Fit for Duty Subject to Review may be determined, taking into account consideration information provided by the treating specialist, and based on a consideration of the nature of the work.</li> </ul> | <ul> <li>it is 3 months following surgery and there is no evidence of valvular dysfunction; and</li> <li>there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness); and</li> <li>there is minimal residual musculoskeletal pain after chest surgery.</li> <li>Category 2 Safety Critical Workers</li> <li>The non-working period (Temporarily Unfit for Duty) following treatment should be determined on clinical grounds.</li> <li>A person is not Fit for Duty Unconditional: <ul> <li>if the person has valvular disease, and</li> <li>they have symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.</li> </ul> </li> <li>Fit for Duty Subject to Review may be determined, with the review period determined by the Authorised Health Professional, taking into account consideration information provided by the treating specialist, and based on a consideration of the nature of the work.</li> </ul> |
| Myocardial diseases                                      |                                   |  |   |
| Dilated<br>cardiomyopathy<br>(see also heart<br>failure) | YES                               | Category 1 Safety Critical Workers     A person is not Fit for Duty Unconditional:              if the person has a dilated cardiomyopathy.  Fit for Duty Subject to Review may be determined, taking into account the nature of the work and information provided by the treating specialist as to whether the  | Category 1 Safety Critical Workers     A person is not Fit for Duty Unconditional:         • if the person has a dilated cardiomyopathy.  Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account the nature of the work and information provided by the treating specialist as to   |

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|-------------------------|-----------------------------------|--|--|
|                         |                                   | following criteria are met:  | whether the following criteria are met:  |
|                         |                                   | <ul> <li>the ejection fraction is ≥ 40%; and</li> </ul>  | <ul> <li>the ejection fraction is ≥ 40%; and</li> </ul>  |
|                         |                                   | <ul> <li>there are minimal symptoms relevant to performing<br/>Safety Critical Work (chest pain, palpitations,<br/>breathlessness); and</li> </ul>   | <ul> <li>there are minimal symptoms relevant to performing<br/>Safety Critical Work (chest pain, palpitations,<br/>breathlessness); and</li> </ul>   |
|                         |                                   | the person is not subject to arrhythmias.  | <ul> <li>the person is not subject to arrhythmias.</li> </ul>  |
|                         |                                   | Category 2 Safety Critical Workers   | Category 2 Safety Critical Workers   |
|                         |                                   | A person is not Fit for Duty Unconditional:  | A person is not Fit for Duty Unconditional:  |
|                         |                                   | if the person has dilated cardiomyopathy; and  | if the person has dilated cardiomyopathy; and  |
|                         |                                   | <ul> <li>they have symptoms (chest pain, palpitations,<br/>breathlessness) that may impair performance of<br/>the task.</li> </ul>   | <ul> <li>they have symptoms (chest pain, palpitations,<br/>breathlessness) that may impair performance of the<br/>task.</li> </ul>   |
|                         |                                   | Fit for Duty Subject to Review may be determined, taking into account information provided by the treating specialist, and based on a consideration of the nature of the work                  | Fit for Duty Subject to Review may be determined, with the review period determined by the Authorised Health Professional, taking into account information provided by the treating specialist, and based on a consideration of the nature of the work |
| Hypertrophic            | YES                               | Category 1 Safety Critical Workers   | Category 1 Safety Critical Workers   |
| cardiomyopathy<br>(HCM) |                                   | A person is not Fit for Duty Unconditional:  | A person is not Fit for Duty Unconditional:  |
| (FIGIN)                 |                                   | if the person has HCM  | if the person has hypertrophic cardiomyopathy.   |
|                         |                                   | Fit for Duty Subject to Review may be determined, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met: | Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met:                      |
|                         |                                   | the left ventricular ejection fraction is 40% or over; and   | <ul> <li>the left ventricular ejection fraction is 40% or over; and</li> </ul>   |
|                         |                                   | <ul> <li>there is an exercise tolerance of ≥ 90% of the<br/>age/sex predicted exercise capacity according to<br/>the Bruce protocol (or equivalent exercise test</li> </ul>                    | <ul> <li>there is an exercise tolerance of ≥ 90% of the age/sex<br/>predicted exercise capacity according to the Bruce</li> </ul>  |

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|                      |                                   | protocol); and   | protocol (or equivalent exercise test protocol); and  |
|                      |                                   | there is an absence of a history of syncope,<br>severe left ventricle hypertrophy, a family<br>history of sudden death or ventricular  | <ul> <li>there is an absence of a history of syncope, severe left<br/>ventricle hypertrophy, a family history of sudden death<br/>or ventricular arrhythmia on Holter testing; and</li> </ul>   |
|                      |                                   | <ul> <li>arrhythmia on Holter testing; and</li> <li>there are minimal symptoms relevant to performing<br/>Safety Critical Work (chest pain, palpitations,</li> </ul>                           | <ul> <li>there are minimal symptoms relevant to performing<br/>Safety Critical Work (chest pain, palpitations,<br/>breathlessness).</li> </ul>  |
|                      |                                   | breathlessness).   | Category 2 Safety Critical Workers  |
|                      |                                   | Category 2 Safety Critical Workers   | A person is not Fit for Duty Unconditional:   |
|                      |                                   | A person is not Fit for Duty Unconditional:  | <ul> <li>if the person has hypertrophic cardiomyopathy; and</li> </ul>  |
|                      |                                   | if tthe person has HCM; and  | <ul> <li>they have symptoms (chest pain, palpitations,</li> </ul>   |
|                      |                                   | they have symptoms (chest pain, palpitations,<br>breathlessness) that may impair performance of  | breathlessness) that may impair performance of the task.  |
|                      |                                   | Fit for Duty Subject to Review may be determined, taking into account information provided by the treating specialist, and based on a consideration of the nature of the work.                 | Fit for Duty Subject to Review may be determined, with the review period determined by the Authorised Health Professional, taking into account information provided by the treating specialist, and based on a consideration of the nature of the work. |
| Other cardiovascular | diseases                          |  |   |
| Anticoagulant        | YES                               | Category 1 Safety Critical Workers   | Category 1 Safety Critical Workers  |
| therapy              |                                   | A person is not Fit for Duty Unconditional:  | A person is not Fit for Duty Unconditional:   |
|                      |                                   | if the person is on long-term anticoagulant therapy.   | if the person is on long-term anticoagulant therapy.  |
|                      |                                   | Fit for Duty Subject to Review may be determined, taking into account the nature of the work and information provided by the treating specialist as to whether the following criterion is met: | Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account the nature of the work and information provided by the treating specialist as to whether the following criterion is met:                       |
|                      |                                   | <ul> <li>anticoagulation is maintained at the appropriate<br/>degree for the underlying condition.</li> </ul>  | <ul> <li>anticoagulation is maintained at the appropriate degree<br/>for the underlying condition.</li> </ul>   |

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|                         |                                   | Category 2 Safety Critical Workers  There are no specific criteria for fitness for duty for Category 2 workers, since the major risk is in relation to sudden incapacity.  | Category 2 Safety Critical Workers  There are no specific criteria for fitness for duty for Category 2 workers since the major risk is in relation to sudden incapacity.   |
| Congenital<br>disorders | YES                               | <ul> <li>Category 1 Safety Critical Workers A person is not Fit for Duty Unconditional: <ul> <li>if the the person has a complicated congenital heart disorder.</li> </ul> </li> <li>Fit for Duty Subject to Review may be determined, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met:</li> <li>there is a minor congenital heart disorder of no haemodynamic significance, such as pulmonary stenosis, atrial septal defect, small ventricular septal defect, bicuspid aortic valve, patent ductus arteriosus or mild coarctation of the aorta; and</li> <li>there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness).</li> </ul> | A person should be categorised as Temporarily Unfit for Duty:  • for at least 3 months following surgical treatment for congenital heart disease • for at least 4 weeks following percutaneous intervention for congenital heart disease.  A person is not Fit for Duty Unconditional: • if the person has a complicated congenital heart disorder.  Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met: • there are minimal symptoms relevant to Safety Critical Work (chest pain, palpitations, breathlessness); and |
|                         |                                   | Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:      if the person has a congenital heart disorder; and      they have symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.  Fit for Duty Subject to Review may be determined, taking into account information provided by the treating specialist, and based on a consideration of the nature of the work   | <ul> <li>the ejection fraction is ≥ 40%; and</li> <li>there is a minor congenital heart disorder of no haemodynamic significance, such as pulmonary stenosis, atrial septal defect, small ventricular septal defect, bicuspid aortic valve, patent ductus arteriosus or mild coarctation of the aorta; or</li> <li>there has been surgical/percutaneous correction of the congenital lesion including atrial septal defect, ventricular septal defect, patent ductus arteriosus, coarctation, pulmonary stenosis, total correction of</li> </ul>   |

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|               |                                   |  | tetralogy of Fallot or total correction of transposition of the great arteries and there are no or minimal symptoms.   |
|               |                                   |  | Category 2 Safety Critical Workers   |
|               |                                   |  | The non-working period (Temporarily Unfit for Duty) following treatment should be determined on clinical grounds.  |
|               |                                   |  | A person is not Fit for Duty Unconditional:  |
|               |                                   |  | if the person has a congenital heart disorder; and   |
|               |                                   |  | <ul> <li>they have symptoms (chest pain, palpitations,<br/>breathlessness) that may impair performance of the<br/>task.</li> </ul>   |
|               |                                   |  | Fit for Duty Subject to Review may be determined, with the review period determined by the Authorised Health Professional, taking into account information provided by the treating specialist, and based on a consideration of the nature of the work |
| Heart failure | YES                               | Category 1 Safety Critical Workers   | Category 1 Safety Critical Workers   |
|               |                                   | A person is not Fit for Duty Unconditional:  | A person is not Fit for Duty Unconditional:  |
|               |                                   | if the person has heart failure.   | if the person has heart failure.   |
|               |                                   | Fit for Duty Subject to Review may be determined, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met: | Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met:                      |
|               |                                   | there is a satisfactory response to treatment; and   | there is a satisfactory response to treatment; and   |
|               |                                   | <ul> <li>there is an exercise tolerance of ≥ 90% of the<br/>age/sex predicted exercise capacity according to<br/>the Bruce protocol (or equivalent exercise test<br/>protocol); and</li> </ul> | <ul> <li>there is an exercise tolerance of ≥ 90% of the age/sex<br/>predicted exercise capacity according to the Bruce<br/>protocol (or equivalent exercise test protocol); and</li> </ul>   |

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|------------------|-----------------------------------|---|--|
|                  |                                   | <ul> <li>there is an ejection fraction of 40% or over; and</li> <li>the underlying cause of the heart failure is considered; and</li> <li>there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness).</li> <li>Category 2 Safety Critical Workers</li> <li>A person is not Fit for Duty Unconditional: <ul> <li>if the person has heart failure; and</li> <li>they have symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.</li> </ul> </li> <li>Fit for Duty Subject to Review may be determined, taking into account information provided by the treating specialist, and based a consideration of the nature of the work.</li> </ul> | <ul> <li>there is an ejection fraction of ≥ 40%; and</li> <li>the underlying cause of the heart failure is considered; and</li> <li>there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness).</li> <li>Category 2 Safety Critical Workers</li> <li>A person is not Fit for Duty Unconditional:         <ul> <li>if the person has heart failure; and</li> <li>they have symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.</li> </ul> </li> <li>Fit for Duty Subject to Review may be determined, with the review period determined by the Authorised Health Professional, taking into account information provided by the treating specialist, and based a consideration of the nature of the work.</li> </ul> |
| Heart transplant | YES                               | Category 1 Safety Critical Workers  A Category 1 Safety Critical Worker should be categorised Temporarily Unfit for Duty for at least 3 months after transplant.  A person is not Fit for Duty Unconditional:  if the person requires or has had a heart or heart/lung transplant.  Fit for Duty Subject to Review may be determined, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met:  | Category 1 Safety Critical Workers  A person should be categorised Temporarily Unfit for Duty for at least 3 months after transplant.  A person is not Fit for Duty Unconditional:  if the person requires or has had a heart or heart/lung transplant.  Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account the nature of the work and information provided by the treating specialist as to whether the following criteria are met:  it is at least 3 months after transplant; and  |

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|--------------|-----------------------------------|--|---|
|              |                                   | <ul> <li>it is at least 3 months after transplant; and</li> <li>there is a satisfactory response to treatment; and</li> <li>there is an exercise tolerance of ≥ 90% of the age/sex predicted exercise capacity according to the Bruce protocol (or equivalent exercise test protocol)</li> <li>there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness).</li> <li>Category 2 Safety Critical Workers</li> <li>A person is not Fit for Duty Unconditional:         <ul> <li>if the person requires or has had a heart or heart/lung transplant; and</li> <li>they have symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.</li> </ul> </li> <li>The non-working period should be determined on clinical grounds.</li> <li>Fit for Duty Subject to Review may be determined, taking into account information provided by the treating specialist, and based on a consideration of the nature of the work.</li> </ul> | <ul> <li>there is a satisfactory response to treatment; and</li> <li>there is an exercise tolerance of ≥ 90% of the age/sex predicted exercise capacity according to the Bruce protocol (or equivalent exercise test protocol)</li> <li>there are minimal symptoms relevant to performing Safety Critical Work (chest pain, palpitations, breathlessness).</li> <li>Category 2 Safety Critical Workers</li> <li>The non-working period (Temporarily Unfit for Duty) should be determined on clinical grounds.</li> <li>A person is not Fit for Duty Unconditional:         <ul> <li>if the person requires or has had a heart or heart/lung transplant; and</li> <li>they have symptoms (chest pain, palpitations, breathlessness) that may impair performance of the task.</li> </ul> </li> <li>Fit for Duty Subject to Review may be determined, with the review period determined by the Authorised Health Professional, taking into account information provided by the treating specialist, and based on a consideration of the nature of the work.</li> </ul> |
| Hypertension | YES                               | Category 1 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if the person has blood pressure consistently ≥ 170   | Category 1 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if the person has blood pressure consistently ≥ 170  |
|              |                                   | mmHg systolic or ≥ 100 mmHg diastolic (treated or untreated).  Management of the person and subsequent categorisation will depend on:  | mmHg systolic or ≥ 100 mmHg diastolic (treated or untreated).  Management of the person and subsequent categorisation will depend on the:   |

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|-----------|-----------------------------------|--|---|
| Condition | to criteria                       |  |   |
|           |                                   | relevant to Safety Critical Work.  • If the person's blood pressure remains ≥170/100 after 4 weeks of treatment, they should be categorised Temporarily Unfit for Duty and referred to an appropriate specialist for investigation and treatment. Categorisation will subsequently depend on response to treatment, the cardiac risk score | If the person's blood pressure remains ≥ 170/100 after     4 weeks of treatment, they should be categorised     Temporarily Unfit for Duty and referred to an     appropriate specialist for investigation and treatment.     Categorisation will subsequently depend on response to     treatment, the cardiac risk score and meeting of other |

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|-----------|-----------------------------------|--|---|
|           |                                   | and meeting of other criteria as above.  | criteria as above.  |
|           |                                   | <ul> <li>If blood pressure remains ≥170 mmHg systolic or<br/>≥100 mm Hg diastolic despite treatment, the<br/>person should be categorised Permanently Unfit<br/>for Duty.</li> </ul>   | <ul> <li>If blood pressure remains ≥ 170 mmHg systolic or ≥ 100<br/>mm Hg diastolic despite treatment, the person should<br/>be categorised Permanently Unfit for Duty.</li> </ul>  |
|           |                                   | For blood pressure ≥200mmHg systolic or ≥100mmHg diastolic :   | For blood pressure ≥ 200 mmHg systolic or ≥ 110 mmHg diastolic:   |
|           |                                   | The person should be categorised Temporarily     Unfit for Duty and referred to an appropriate specialist for investigation and treatment.   | <ul> <li>The person should be categorised Temporarily Unfit for<br/>Duty and referred to an appropriate specialist for<br/>investigation and treatment.</li> </ul>  |
|           |                                   | • If the person's blood pressure is <170 mmHg systolic and <100 mmHg diastolic after 4 weeks of treatment, they should have their cardiac risk level calculated based on the new level of blood pressure and they should be managed and categorised accordingly (refer to High blood pressure (Hypertension)), including whether they meet the following criteria: | <ul> <li>If the person's blood pressure is &lt; 170 mmHg systolic and &lt; 100 mmHg diastolic after 4 weeks of treatment, they should have their cardiac risk level calculated based on the new level of blood pressure and they should be managed and categorised accordingly (refer to High blood pressure (Hypertension)), including whether they meet the following criteria:         <ul> <li>there are no side effects from the medication</li> </ul> </li> </ul> |
|           |                                   | there are no side effects from the medication that will impair Safety Critical Work; and   | that will impair Safety Critical Work; and  there is no evidence of damage to target organs   |
|           |                                   | <ul> <li>there is no evidence of damage to target organs<br/>relevant to Safety Critical Work.</li> </ul>  | relevant to Safety Critical Work.  If blood pressure remains ≥ 170 mmHg systolic or ≥ 100   |
|           |                                   | If blood pressure remains ≥170 mmHg systolic or ≥100 mmHg diastolic despite treatment, the person should be categorised Permanently Unfit for Duty.  | mmHg diastolic despite treatment, the person should be categorised Permanently Unfit for Duty.  |
|           |                                   |  | Category 2 Safety Critical Workers  |
|           |                                   | Category 2 Safety Critical Workers  There are no specific criteria for Category 2 Safety Critical Workers; however their blood pressure should still be measured as part of the assessment and if found raised referred to their general practitioner.   | There are no specific criteria for Category 2 Safety Critical Workers; however their blood pressure should still be measured as part of the assessment and if found raised referred to their general practitioner.  |
| Stroke    | NO                                | Refer to Section 18.4. Neurological conditions.  | Refer to Section TBC Neurological conditions.   |

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| Condition  | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers  |
|--|-----------------------------------|--|--|
| Syncope due to hypotension Refer also to Section TBC Blackouts | to criteria                       |  |  |
|  |                                   | impair performance of the task.  Fit for Duty Subject to Review may be determined, taking into account information provided by the treating specialist, and based a consideration of the nature of the work. | Fit for Duty Subject to Review may be determined, with the review period determined by the Authorised Health Professional, taking into account information provided by the treating specialist, and based a consideration of the nature of the work. |

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Table 7. Summary of fitness for duty criteria changes: Diabetes

| Condition                  | Change to criteria (YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers  |
|----------------------------|-----------------------------|--|---|
| Screening for              | YES                         | Category 1 Safety Critical Workers   | Category 1 Safety Critical Workers  |
| diabetes                   |                             | Diabetes may be diagnosed on history or on HbA1c testing on fasting or random blood:   | Diabetes may be diagnosed on history or on HbA1c testing on non-fasting blood:  |
|                            |                             | <ul> <li>If HbA1c is equal to or greater than 53 mmol/mol<br/>(7%) regard as diabetic.</li> </ul>  | <ul> <li>If HbA1c is equal to or greater than 48 mmol/mol (6.5%)<br/>regard as having diabetes.</li> </ul>  |
|                            |                             | <ul> <li>If HbA1c is 48 mmol/mol (6.5%) or greater but<br/>less than 53 mmol/mol (7%) arrange a repeat<br/>(confirmatory) test.</li> </ul>                               | <ul> <li>If HbA1c is 48 mmol/mol (6.5%) or greater but less<br/>than 53 mmol/mol (7%) arrange a repeat<br/>(confirmatory) test.</li> </ul>  |
|                            |                             | <ul> <li>If the repeat (confirmatory) HbA1c is 48<br/>mmol/mol (6.5%) or greater, diagnosis of<br/>diabetes is confirmed.</li> </ul>                                     | <ul> <li>If the repeat (confirmatory) HbA1c is 48 mmol/mol<br/>(6.5%) or greater, diagnosis of diabetes is<br/>confirmed.</li> </ul>  |
|                            |                             | <ul> <li>If repeat test is not raised, regard as non-<br/>diabetic and review as per normal periodic<br/>schedule.</li> </ul>  | <ul> <li>If repeat test is not raised, regard as not having<br/>diabetes and review as per normal periodic<br/>schedule.</li> </ul>   |
|                            |                             | <ul> <li>If the initial test is less than 48 mmol/mol<br/>(6.5%), regard as non-diabetic and review as<br/>per normal periodic schedule.</li> </ul>                      | <ul> <li>If the initial test is less than 48 mmol/mol (6.5%), regard<br/>as not having diabetes and review as per normal<br/>periodic schedule.</li> </ul>                            |
|                            |                             | Category 2 Safety Critical Workers   | Category 2 Safety Critical Workers  |
|                            |                             | Diagnosis of diabetes is by self-report via the Health Questionnaire.  | Diagnosis of diabetes is by self-report via the Health Questionnaire.   |
| Diabetes controlled        | NO                          | Category 1 and Category 2 Safety Critical Workers  | Category 1 and Category 2 Safety Critical Workers   |
| by diet and exercise alone |                             | A person with diabetes controlled by diet and exercise alone may perform Safety Critical Work without restriction. More frequent reviews may not be necessary.           | A person with diabetes controlled by diet and exercise alone may perform Safety Critical Work without restriction. More frequent reviews may not be necessary.                        |
|                            |                             | They should be reviewed by their treating doctor periodically regarding progression of diabetes. A report from the treating doctor should be available for review by the | They should be reviewed by their treating doctor periodically regarding progression of diabetes. The Authorised Health Professional may determine fitness for duty at Periodic Health |

| Condition   | Change to criteria (YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|---|-----------------------------|--|---|
|   |                             | Authorised Health Professional at periodic health assessment appointments.   | Assessment based on HbA1c and clinical assessment. They may request a report from the treating doctor.  |
|   |                             | The worker should be instructed to request a triggered assessment if their condition deteriorates or their treatment changes.  | The worker should be instructed to request a Triggered Health Assessment if their condition deteriorates or their treatment changes.  |
| Diabetes treated by   | YES                         | Category 1 and Category 2 Safety Critical Workers  | Category 1 and Category 2 Safety Critical Workers   |
| glucose-lowering<br>agents other than                         |                             | A person is not Fit for Duty Unconditional:  | A person is not Fit for Duty Unconditional:   |
| insulin (oral agents<br>and other agents<br>e.g., injectable) |                             | <ul> <li>if the person has non-insulin-treated diabetes<br/>mellitus and is being treated with glucose-<br/>lowering agents other than insulin.</li> </ul>   | <ul> <li>if the person has non-insulin-treated diabetes mellitus<br/>and is being treated with glucose-lowering agents other<br/>than insulin.</li> </ul>   |
|   |                             | Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account the nature of the work and information provided by a specialist (endocrinologist / consultant physician specialising in diabetes) on whether the following criteria | Fit for Duty Subject to Review may be determined, subject to a least annual review*, taking into account the nature of the wor and information provided by a specialist (endocrinologist / consultant physician specialising in diabetes)* on whether the following criteria are met: |
|   |                             | the condition is satisfactorily controlled (refer to Section 18.3.2. General assessment and management guidelines) and the person is compliant with treatment; and   | <ul> <li>the condition is satisfactorily controlled (refer to Section<br/>4.3.2) and the person is compliant with treatment; and</li> </ul>   |
|   |                             |  | <ul> <li>there is no history of a severe hypoglycaemic event<br/>during recent years as assessed by the specialist; and</li> </ul>  |
|   |                             | there is no history of a severe hypoglycaemic<br>event during recent years as assessed by<br>the specialist; and   | <ul> <li>the person experiences early warning symptoms<br/>(awareness) of hypoglycaemia (refer to Section 4.3.2);</li> <li>and</li> </ul>   |
|   |                             | the person experiences early warning symptoms     (awareness) of hypoglycaemia (refer to Section   | <ul> <li>the person is following a treatment regimen that<br/>minimises the risk of hypoglycaemia; and</li> </ul>   |
|   |                             | 18.3.2. General assessment and management guidelines); and   | <ul> <li>there is an absence of end-organ effects that may affect working as per this Standard.</li> </ul>  |
|   |                             | the person is following a treatment  | * Following are exceptions to the above requirements  |
|   |                             | regimen that minimises the risk of hypoglycaemia; and  | For workers treated with metformin alone:   |

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| Condition                | Change to criteria (YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers  |
|--------------------------|-----------------------------|--|---|
|                          |                             | there is an absence of end-organ effects that may affect working as per this Standard.  *For workers treated by oral agents, the Authorised Health Professional may determine that review by the worker's treating general practitioner is sufficient if there is an established pattern of compliance and good response to treatment. The initial granting of Fit for Duty Subject to Review must be based on information provided by a specialist (endocrinologist / consultant physician specialising in diabetes). | <ul> <li>The initial determination of fitness for duty must be made based on a report from the treating doctor/general practitioner.</li> <li>If the person's diabetes is satisfactorily controlled, subsequent reviews may be conducted by the Authorised Health Professional based on HbA1c.</li> <li>The Authorised Health Professional may recommend an appropriate review period (less frequently than annual review) if the person's diabetes is satisfactorily controlled.</li> <li>For workers treated with other oral agents or injectables other than insulin:         <ul> <li>The initial determination of fitness for duty must be made based on a report from a specialist (endocrinologist / consultant physician specialising in diabetes).</li> </ul> </li> <li>Subsequently, a report from the treating general practitioner may be acceptable where a worker has demonstrated a significant period of satisfactory control.</li> </ul> |
| Insulin-treated diabetes | NO                          | Category 1 and Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:   | Category 1 and Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:  |
|                          |                             | if the person has insulin-treated diabetes   | if the person has insulin-treated diabetes.   |
|                          |                             | Fit for Duty Subject to Review may be considered, taking into account the nature of the work and information provided by a specialist in endocrinology or diabetes on whether the following criteria are met, subject to at least annual review:  • the condition is satisfactorily controlled (refer to Section 18.3.2. General assessment and management guidelines) and the person is   | Fit for Duty Subject to Review may be considered, taking into account the nature of the work and information provided by a specialist in endocrinology or diabetes on whether the following criteria are met, subject to at least annual review:  • the condition is satisfactorily controlled (refer to Section 4.3.2 General assessment and management guidelines) and the person is adherent with treatment; and   |

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| Condition Change to criteria (YES/NO) | Safety Workers  | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers  |
|---------------------------------------|---|---|
|                                       | <ul> <li>adherent with treatment; and</li> <li>there is no history of a severe hypoglycaemic event during recent years as assessed by the specialist; and</li> <li>the person experiences early warning symptoms (awareness) of hypoglycaemia (refer to Section 18.3.2. General assessment and management guidelines); and</li> <li>the person is following a treatment regimen that minimises the risk of hypoglycaemia; and</li> <li>there is an absence of end-organ effects that may affect working as per this Standard</li> </ul> | <ul> <li>there is no history of a severe hypoglycaemic event during recent years as assessed by the specialist; and</li> <li>the person experiences early warning symptoms (awareness) of hypoglycaemia (refer to Section 4.3.2); and</li> <li>the person is following a treatment regimen that minimises the risk of hypoglycaemia; and</li> <li>there is an absence of end-organ effects that may affect working as per this Standard.</li> </ul> |

Table 8. Summary of fitness for duty criteria changes: Neurological conditions – dementia

| Condition  | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|--|-----------------------------------|--|---|
| Dementia (including preclinical/prodromal forms) | YES                               | Category 1 and Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:  if the person has a diagnosis of dementia.  Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account:  the nature of the work and work performance reports; and  information provided by an appropriate specialist | Category 1 and Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if the person has a diagnosis of dementia or preclinical or prodromal/Mild Cognitive Impairment stages of the disease.  Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account:  • the nature of the work and work performance reports; |
|  |                                   | the nature of the work and work performance reports;     and   | at least annual review, taking into account:  |

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| Condition | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|-----------|-----------------------------------|---|---|
|           |                                   | attention, reaction time or memory.                                   | regarding the likely progression of the condition; and  |
|           |                                   |   | <ul> <li>information provided by an appropriate specialist<br/>about the level of impairment of any of the following:<br/>visuospatial perception, insight, judgement, attention,<br/>reaction time or memory.</li> </ul> |

Table 9. Summary of fitness for duty criteria changes: Neurological conditions – seizures and epilepsy

| Condition   | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers   |
|---|-----------------------------------|--|--|
| Category 2  |                                   |  |  |
| All cases Category 2 workers (refer also to text) | YES                               | Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if the person has experienced a seizure.  Fit for Duty Subject to Review may be determined, based on a consideration of the nature of the task and subject to annual review:  • if, in the opinion of the treating specialist and in consultation with the Authorised Health Professional and the operator's Chief Medical Officer (or an occupational physician experienced in rail), the risk to the network caused by a seizure is acceptably low; and  • the person follows medical advice, including adherence to medication if prescribed | Category 2 Safety Critical Workers  A person should be categorised Temporarily Unfit for Duty following a seizure.  A person is not Fit for Duty Unconditional  if the person has ever experienced a seizure.  Fit for Duty Subject to Review may be determined, based on a consideration of the nature of the task and subject to annual review:  if, in the opinion of the treating specialist and in consultation with the Authorised Health Professional and the rail transport operator's Chief Medical Officer (or an occupational physician experienced in rail), the risk to the network caused by a seizure is acceptably low; and  the person follows medical advice, including adherence to medication if prescribed. |

| Condition   | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers  |
|---|-----------------------------------|--|---|
|   |                                   |  | Category 2 workers who work around the track should be assessed as per the Category 3 worker criteria – refer Part 5, page 203.   |
| Unreliable or<br>doubtful clinical<br>information   | YES                               |  | Where the reliability of relevant clinical information is not clear (e.g., unreported seizures likely due to the person not recognising the occurrence of seizures or deliberately not reporting seizures), the person is not fit for duty.   |
| Category 1 – Default of   | riteria                           |  |   |
| All cases Category 1 (default criteria)  Applies to all Category 1 workers who have experienced a seizure.  Exceptions may be considered only if the situation matches one of those listed below. | YES                               | Category 1 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if the person has experienced a seizure.  Fit for Duty Subject to Review may be determined, subject to annual review, taking into account information provided by a specialist in epilepsy as to whether the following criteria are met:  • there have been no seizures for at least 10 years; and  • an EEG conducted in the last six months has shown no epileptiform activity and no other EEG conducted in the last 12 months has shown epileptiform activity; and  • the person follows medical advice, including adherence to medication if prescribed or recommended.  Note: Category 2 Safety Critical Workers should be individually assessed. | A person should be categorised Temporarily Unfit for Duty following a seizure.  A person is not Fit for Duty Unconditional:  • if the person has ever experienced a seizure.  Fit for Duty Subject to Review may be determined, subject to at least annual review*, taking into account information provided by a specialist in epilepsy as to whether the following criteria are met:  • there have been no seizures for at least 10 years**; and  • an EEG conducted in the last six months has shown no epileptiform activity and no other EEG conducted in the last 12 months has shown epileptiform activity***; and  • the person follows medical advice, including adherence to medication if prescribed or recommended.  * If a worker undergoing treatment for epilepsy has experienced an extended seizure free period (more than 20 years) consideration may be given to reduce review |

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| Condition  | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail<br>Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|--|-----------------------------------|---|---|
|  |                                   |   | ** Shorter seizure-free periods may he considered if the workers situation matches one of those in the tables that follow.  *** This is only required for initial review and not for subsequent annual review.  |
| Category 1 - possible  | reductions i                      | n the non-working seizure-free periods for Fit for Duty Subject   | ct to Review  |
| History of a benign seizure or epilepsy syndrome limited to childhood  (e.g., febrile seizures, benign focal epilepsy, childhood absence epilepsy) | YES                               | Category 1 Safety Critical Workers  A history of a benign seizure or epilepsy syndrome limited to childhood does not disqualify the person from being Fit for Duty, as long as there have been no seizures after 11 years of age.  If a seizure has occurred after 11 years of age, there is no reduction and the default standard applies unless the situation matches one of those listed below.  Category 2 Safety Critical Workers should be individually assessed. | A history of a benign seizure or epilepsy syndrome limited to childhood does not disqualify the person from performing Category 1 Safety Critical Work, as long as there have been no seizures after 11 years of age.  If a seizure has occurred after 11 years of age, there is no reduction, and the default criteria applies unless the situation matches one of those listed below.   |
| First seizure (of any type)  Note: 2 or more seizures in a 24-hour period are considered a single seizure  | YES                               | Category 1 Safety Critical Workers  Fit for Duty Subject to Review may be determined, subject to annual review, taking into account information provided by a specialist in epilepsy as to whether the following criteria are met:  • there have been no seizures for least 5 years (with or without medication); and  • an EEG shows no epileptiform activity  Category 2 Safety Critical Workers should be individually assessed.                                     | A Category 1 Safety Critical Worker should be categorised Temporarily Unfit for Duty following a first seizure (see definition in text).  A person is not Fit for Duty Unconditional:  if the person has ever experienced a seizure.  Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account information provided by a specialist in epilepsy as to whether the following criteria are met:  the seizure met the definition of 'first seizure'  there have been no seizures for least 5 years (with or without medication); and |

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| Condition   | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers  |  |
|---|-----------------------------------|--|--|--|
|   |                                   |  | <ul> <li>an EEG conducted in the last 6 months shows no<br/>epileptiform activity and no other EEG conducted in<br/>the last 12 months has shown epileptiform activity.*</li> </ul>            |  |
|   |                                   |  | Resumption of Fitness for Duty Unconditional may be considered, taking into account information provided by a specialist in epilepsy as to whether the following criteria are met:             |  |
|   |                                   |  | <ul> <li>antiseizure medication has not been prescribed in the<br/>last 12 months; and</li> </ul>  |  |
|   |                                   |  | <ul> <li>there have been no seizures for at least 10 years; and</li> </ul>   |  |
|   |                                   |  | <ul> <li>an EEG conducted in the last 6 months has shown no<br/>epileptiform activity and no other EEG conducted in<br/>the last 12 months has shown epileptiform activity.</li> </ul>         |  |
|   |                                   |  | * This is only required for initial review and not for subsequent annual review.   |  |
| Acute symptomatic seizures Seizures occurring   | YES                               | Category 1 Safety Critical Workers  Fit for Duty Subject to Review may be determined, subject to annual review, taking into account information provided by a                                | A Category 1 Safety Critical Worker should be categorised Temporarily Unfit for Duty following an acute symptomatic seizure (see definition in text).  |  |
| only during a   |                                   | specialist in epilepsy as to whether the following criteria are met:   | The minimum non-working seizure free period is 12 months.  |  |
| temporary brain disorder or metabolic   |                                   |  | A person is not Fit for Duty Unconditional:  |  |
| disturbance in a person without   |                                   |  | <ul> <li>there have been no further seizures for at least 12<br/>months; and</li> </ul>  | <ul> <li>if the person has ever experienced an acute<br/>symptomatic seizure.</li> </ul> |
| previous seizures. This includes head injuries, and withdrawal from drugs                 |                                   | <ul> <li>an EEG conducted in the last six months has shown<br/>no epileptiform activity and no other EEG conducted<br/>in the last 12 months has shown epileptiform<br/>activity.</li> </ul> | Fit for Duty Subject to Review may be determined, subject to annual review, taking into account information provided by a specialist in epilepsy as to whether the following criteria are met: |  |
| or alcohol. This is not<br>the same as provoked<br>seizures in a person<br>with epilepsy. |                                   | If there have been 2 or more separate transient disorders causing acute symptomatic seizures, the default standard applies (refer above).  | there have been no further seizures for at least 12 months; and  |  |
| with ophopsy.   |                                   | Category 2 Safety Critical Workers should be individually  | an EEG conducted in the last 6 months has shown no   |  |

| Condition                               | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers  |
|---|-----------------------------------|--|---|
|   |                                   | assessed.  | epileptiform activity and no other EEG conducted in the last 12 months has shown epileptiform activity*.  |
|   |                                   |  | If there have been 2 or more separate transient disorders causing acute symptomatic seizures, the default criteria apply (refer above).   |
|   |                                   |  | Resumption of Fitness for Duty Unconditional may be considered, taking into account information provided by a specialist in epilepsy as to whether the following criteria are met:  |
|   |                                   |  | <ul> <li>antiseizure medication has not been prescribed in the<br/>last 12 months; and</li> </ul>   |
|   |                                   |  | <ul> <li>there have been no seizures for at least 10 years; and</li> </ul>  |
|   |                                   |  | <ul> <li>an EEG conducted in the last 6 months has shown no<br/>epileptiform activity and no other EEG conducted in the<br/>last 12 months has shown epileptiform activity*</li> </ul>  |
|   |                                   |  | * This is only required for initial review and not for subsequent annual review.  |
| Psychogenic<br>nonepileptic<br>seizures |                                   |  | Refer to Section 4.8 Psychiatric conditions.  |
| Exceptional cases                       | NO                                | Category 1 Safety Critical Workers  Where a person with seizures or epilepsy does not meet the above criteria, Fit for Duty Subject to Review may be determined, based on consideration of the nature of the task and subject to annual review:  • if, in the opinion of a medical specialist with specific expertise in epilepsy, and in consultation with the Authorised Health Professional and the operator's Chief Medical Officer (or an occupational physician experienced in rail), the risk to the network caused | Where a person with seizures or epilepsy does not meet the above criteria, Fit for Duty Subject to Review may be determined, based on consideration of the nature of the task and subject to annual review:  • if, in the opinion of a medical specialist with specific expertise in epilepsy, and in consultation with the Authorised Health Professional and the rail transport operator's Chief Medical Officer (or an occupational physician experienced in rail), the risk to the network caused by a seizure is acceptably low; and |

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| Condition   | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers   | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers   |
|---|-----------------------------------|---|--|
| Other factors that ma   | ay influence                      | by a seizure is acceptably low; and  • the person follows medical advice, including adherence to medication if prescribed.  Category 2 Safety Critical Workers should be individually assessed.  fitness for duty status  | the person follows medical advice, including adherence to medication if prescribed.  |
| Epilepsy treated by surgery  (where the primary goal of surgery is the elimination of epilepsy) | YES                               | Category 1 Safety Critical Workers  Fit for Duty Subject to Review may be determined, subject to annual review, taking into account information provided by a specialist in epilepsy as to whether the following criteria are met:  • there have been no seizures for at least 10 years; and  • an EEG conducted in the last six months has shown no epileptiform activity and no other EEG conducted in the last 12 months has shown epileptiform activity; and  • the person follows medical advice with respect to medication adherence. The vision standard may also apply if there is a visual field defect.  Withdrawal of any anti-epileptic medication is incompatible with performing Safety Critical Work.  Category 2 Safety Critical Workers should be individually assessed. | <ul> <li>A person is not Fit for Duty Unconditional:</li> <li>if they have had surgery aimed at eliminating epilepsy.</li> <li>Fit for Duty Subject to Review may be determined, subject to annual review, taking into account information provided by a specialist in epilepsy as to whether the following criteria are met:</li> <li>there have been no seizures for at least 10 years; and</li> <li>an EEG conducted in the last six months has shown no epileptiform activity and no other EEG conducted in the last 12 months has shown epileptiform activity*; and</li> <li>the person follows medical advice with respect to medication adherence.</li> <li>The vision criteria may also apply if there is a visual field defect.</li> <li>Withdrawal of any anti-epileptic medication is incompatible with performing Safety Critical Work.</li> <li>* This is only required for initial review and not for subsequent annual review.</li> </ul> |
| Recommended reduction in dosage of anti-  | NO                                | Safety Critical Work may continue:  • if the dose reduction is due only to the presence of  | Safety Critical Work may continue (Fit for Duty Subject to Review):  • if the dose reduction is due only to the presence of  |

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| Condition  | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers | Proposed under revised National Standard for Health Assessment of Rail Safety Workers  |
|--|-----------------------------------|---|--|
| epileptic medication in a person who satisfies the standard for Fit for Duty Subject to Review |                                   | dose-related side effects and is unlikely to result in a seizure.     | <ul> <li>dose-related side effects and is unlikely to result in a seizure; or.</li> <li>if the dose is being reduced after an increase due to a temporary situation that has now resolved (e.g., pregnancy) to the dose that was effective before the increase.</li> </ul> |
|  |                                   |   | In circumstances other than the above, the person will no longer meet the criteria for fitness for duty.   |

Table 10. Summary of fitness for duty criteria changes: Neurological conditions – other

| Condition  | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|--|-----------------------------------|--|---|
| Aneurysms  | YES                               | Category 1 Safety Critical Workers   | Category 1 Safety Critical Workers  |
| (unruptured  |                                   | A person is not Fit for Duty Unconditional:  | A person is not Fit for Duty Unconditional:   |
| intracranial aneurysms) and other vascular                           | r                                 | <ul> <li>if the person has an unruptured<br/>intracranial aneurysm or other vascular</li> </ul>  | <ul> <li>if the person has an unruptured intracranial aneurysm<br/>or other vascular malformation.</li> </ul>   |
| malformations of the brain  (refer also to Subarachnoid haemorrhage) |                                   | so to chnoid   | malformation.  Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account:  • information provided by an appropriate specialist regarding the risk of   |
| 3 /  |                                   | symptomatic haemorrhage; and  the response to treatment.  If there is any neurological deficit, the worker should be assessed to determine if there is impairment of any of the following: visuospatial perception, insight, | <ul> <li>the response to treatment.</li> <li>If there is any neurological deficit, the worker should be assessed to determine if there is impairment of any of the following: visuospatial perception, insight, judgement, attention, reaction time, sensation, memory, muscle power, balance, coordination or vision (including visual fields).</li> </ul> |
|  |                                   | judgement, attention, reaction time, sensation, memory, muscle power, balance, coordination or vision (including   | If treated surgically, the Intracranial surgery advice applies  |

| Condition                                    | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers   | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers  |
|--|-----------------------------------|---|---|
| Cerebral palsy (refer also to Neuromuscular) | NO                                | visual fields).  If treated surgically, the Intracranial surgery advice applies.  If the person has had a seizure, the seizure and epilepsy standards apply (refer to Section 18.4.2. Seizures and epilepsy).  Category 1 and Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if the person has cerebral palsy producing significant impairment of any of the following: visuospatial perception, insight, judgement, attention, reaction time, sensation, muscle power, balance, coordination or vision (including visual fields).  Fit for Duty Subject to Review may be considered, taking into account:  • the nature of the work and reports on work performance; and  • information provided by an appropriate specialist regarding the level of impairment. | <ul> <li>(see below).</li> <li>The non-working period (Temporarily Unfit for Duty) should be based on the advice of the treating specialist if treated intra-arterially.</li> <li>If the person has had a seizure, the seizure and epilepsy standards apply (refer to Section 4.5).</li> <li>Periodic review is not required if the condition is considered cured based on the advice of the treating specialist.</li> <li>Category 1 and Category 2 Safety Critical Workers</li> <li>A person is not Fit for Duty Unconditional: <ul> <li>if the person has cerebral palsy producing significant impairment of any of the following: visuospatial perception, insight, judgement, attention, reaction time, sensation, muscle power, balance, coordination or vision (including visual fields).</li> </ul> </li> <li>Fit for Duty Subject to Review may be considered, taking into account: <ul> <li>the nature of the work and reports on work performance; and</li> <li>information provided by an appropriate specialist regarding the level of impairment.</li> </ul> </li> <li>Periodic review is not required if the condition is static.</li> </ul> |
| Head injury                                  | NO                                | Periodic review is not required if the condition is static.  Category 1 and Category 2 Safety Critical Workers  | Category 1 and Category 2 Safety Critical Workers   |
| (refer also to Intracranial surgery)         |                                   | A person is not Fit for Duty Unconditional:     if the person has traumatic brain injury producing significant impairment of any of the following:  | A person is not Fit for Duty Unconditional:     if the person has traumatic brain injury producing significant impairment of any of the following:  |

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| Condition            | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers  |
|----------------------|-----------------------------------|--|---|
|                      |                                   | visuospatial perception, insight, judgement, attention, reaction time, sensation, muscle power, balance, coordination or vision (including visual fields).  Fit for Duty Subject to Review may be considered, taking into account:  • the nature of the work and reports on work performance; and  • information provided by an appropriate specialist regarding the level of impairment and the presence of other disabilities that may impair Safety Critical Work according to this Standard; and  • the results of neuropsychological testing, as appropriate. Periodic review is not required if the condition is static.  A person is not Fit for Duty Unconditional:  • if they have a high risk of post traumatic epilepsy [penetrating brain injury, brain contusion, subdural haematoma, loss of consciousness/alteration of consciousness or post traumatic amnesia greater than 24 hours].  Fit for Duty Subject to Review may be considered,  • if the person has had no seizures for at least 12 months If a seizure has occurred, refer page 117. | visuospatial perception, insight, judgement, attention, reaction time, sensation, muscle power, balance, coordination or vision (including visual fields).  Fit for Duty Subject to Review may be considered, taking into account:  • the nature of the work and reports on work performance; and  • information provided by an appropriate specialist regarding the level of impairment and the presence of other disabilities that may impair Safety Critical Work according to this Standard; and  • the results of neuropsychological testing, as appropriate.  Periodic review is not required if the condition is static.  A person is not Fit for Duty Unconditional:  • if they have a high risk of post traumatic epilepsy [penetrating brain injury, brain contusion, subdural haematoma, loss of consciousness/alteration of consciousness or post traumatic amnesia greater than 24 hours].  Fit for Duty Subject to Review may be considered, if the person has had no seizures for at least 12 months. If a seizure has occurred, refer to Section 4.5. |
| Intracranial surgery | NO                                | Category 1 Safety Critical Workers   | Category 1 Safety Critical Workers  |
|                      |                                   | A person should be categorised Temporarily Unfit for Duty for 12 months following supratentorial surgery or surgery that involves retraction of the cerebral hemispheres.  | A person should be categorised Temporarily Unfit for Duty for 12 months following supratentorial surgery or surgery that involves retraction of the cerebral  |

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| Condition          | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|--------------------|-----------------------------------|--|---|
|                    |                                   | Category 1 and 2 Safety Critical Workers  If there are seizures or long-term neurological deficits, refer to Section 18.4.2. Seizures and epilepsy or Section 18.4.3. Other neurological and neurodevelopmental conditions.  | hemispheres.  Category 1 and 2 Safety Critical Workers  If there are seizures or long-term neurological deficits, refer to Section 4.5, or Other neurological conditions below (page 144)   |
| Ménière's disease  | NO                                | Category 1 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if the person has Ménière's disease.  Fit for Duty Subject to Review may be determined, subject to annual review, taking into account the nature of the work and work performance reports, and information provided by the treating neurologist/ear, nose and throat specialist as to whether the following criteria are met:  • if, in the opinion of a relevant specialist the risk to the network caused by an attack is acceptably low; and  • the person follows medical advice, including adherence to medication if prescribed; and  • the appropriate hearing standard is met.  Category 2 Safety Critical Workers  Category 2 Safety Critical Workers require an individual risk assessment of their job. They may be classed Fit for Duty if acute incapacity is not detrimental to safety. They may require good hearing. Restrictions in relation to work around the track may need to apply. | Category 1 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if the person has Ménière's disease.  Fit for Duty Subject to Review may be determined, subject to annual review, taking into account the nature of the work and work performance reports, and information provided by the treating neurologist/ear, nose and throat specialist as to whether the following criteria are met:  • if, in the opinion of a relevant specialist the risk to the network caused by an attack is acceptably low; and  • the person follows medical advice, including adherence to medication if prescribed; and  • the appropriate hearing standard is met.  Category 2 Safety Critical Workers  Category 2 workers require an individual risk assessment of their job. They may be classed Fit for Duty if acute incapacity is not detrimental to safety. They may require good hearing, refer to Section 4.11 Restrictions in relation to work around the track may need to apply (refer Part 5, page 203). |
| Multiple sclerosis | NO                                | Category 1 and Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:   | Category 1 and Category 2 Safety Critical Workers A person is not Fit for Duty Unconditional:   |

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| Condition  | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail<br>Safety Workers   | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers   |
|--|-----------------------------------|--|--|
|  |                                   | <ul> <li>if the person has multiple sclerosis.</li> <li>Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account:</li> <li>the nature of the work and reports on work performance; and</li> <li>information provided by an appropriate specialist regarding the level of impairment of any of the following: visuospatial perception, insight, judgement, attention, reaction time, memory, sensation, muscle power, balance, coordination or vision (including visual fields).</li> </ul> | <ul> <li>if the person has multiple sclerosis.</li> <li>Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account:</li> <li>the nature of the work and reports on work performance; and</li> <li>information provided by an appropriate specialist regarding the level of impairment of any of the following: visuospatial perception, insight, judgement, attention, reaction time, memory, sensation, muscle power, balance, coordination or vision (including visual fields).</li> </ul>   |
| Neuromuscular conditions (peripheral neuropathy, muscular dystrophy, etc.) | NO                                | A person is not Fit for Duty Unconditional:  • if the person has peripheral neuropathy, muscular dystrophy or any other neuromuscular disorder that significantly impairs muscle power, sensation or coordination.  Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account:  • the nature of the work and reports on work performance; and  • information provided by an appropriate specialist regarding the level of impairment of muscle power, sensation balance or coordination.    | Category 1 and Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if the person has peripheral neuropathy, muscular dystrophy or any other neuromuscular disorder that significantly impairs muscle power, sensation or coordination.  Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account:  • the nature of the work and reports on work performance; and  • information provided by an appropriate specialist regarding the level of impairment of muscle power, sensation balance or coordination. |
| Parkinson's disease  | NO                                | Category 1 and Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if the person has Parkinson's disease.   | Category 1 and Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if the person has Parkinson's disease.   |

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| Condition  | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers   | Proposed under revised National Standard for Health Assessment of Rail Safety Workers  |
|--|-----------------------------------|---|--|
|  |                                   | Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account:   | Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account:  |
|  |                                   | the nature of the work and reports on work performance; and   | <ul> <li>the nature of the work and reports on work<br/>performance; and</li> </ul>  |
|  |                                   | <ul> <li>information provided by an appropriate specialist<br/>regarding the level of motor and cognitive<br/>impairment, and the response to treatment.</li> </ul>   | <ul> <li>information provided by an appropriate specialist<br/>regarding the level of motor and cognitive<br/>impairment, and the response to treatment.</li> </ul>  |
| Stroke   | NO                                | Category 1 and Category 2 Safety Critical Workers   | Category 1 and Category 2 Safety Critical Workers  |
| (cerebral infarction or intracerebral haemorrhage) |                                   | A person should be categorised Temporarily Unfit for Duty for at least 3 months following a stroke.   | A person should be categorised Temporarily Unfit for Duty for at least 3 months following a stroke.  |
|  |                                   | A person is not Fit for Duty Unconditional:   | A person is not Fit for Duty Unconditional:  |
|  |                                   | <ul> <li>if the person has had a stroke.</li> </ul>   | <ul> <li>if the person has had a stroke.</li> </ul>  |
|  |                                   | Fit for Duty Subject to Review may be determined subject to at least annual review, taking into account:  | Fit for Duty Subject to Review may be determined subject to at least annual review, taking into account:   |
|  |                                   | <ul> <li>the nature of the work and reports on work<br/>performance; and</li> </ul>   | <ul> <li>the nature of the work and reports on work<br/>performance; and</li> </ul>  |
|  |                                   | <ul> <li>information provided by an appropriate specialist<br/>regarding the level of impairment of any of the<br/>following: visuospatial perception, insight, judgement,<br/>attention, reaction time, memory, sensation, muscle<br/>power, balance, co-ordination or vision (including<br/>visual fields)</li> </ul> | <ul> <li>information provided by an appropriate specialist<br/>regarding the level of impairment of any of the<br/>following: visuospatial perception, insight, judgement,<br/>attention, reaction time, memory, sensation, muscle<br/>power, balance, co-ordination or vision (including<br/>visual fields).</li> </ul> |
|  |                                   |   | Periodic review may not be required if the worker has recovered or if the condition is static based on specialist advice.  |
| Transient ischaemic attack (TIA)                   | NO                                | Category 1 Safety Critical Workers  | Category 1 Safety Critical Workers   |
|  |                                   | A person should be categorised Temporarily Unfit for Duty for at least 4 weeks following a TIA.   | A person should be categorised Temporarily Unfit for Duty for at least 4 weeks following a TIA.  |

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| Condition   | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail<br>Safety Workers  | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers  |
|---|-----------------------------------|---|---|
|   |                                   | The worker may then be classed as Fit for Duty Subject to Review by an appropriate specialist if there is no long-term impairment and risk of recurrence is low.  | The worker may then be classed as Fit for Duty Subject to Review by an appropriate specialist if there is no long-term impairment and risk of recurrence is low.  |
|   |                                   | Category 2 Safety Critical Workers  | Category 2 Safety Critical Workers  |
|   |                                   | A person should be categorised Temporarily Unfit for Duty for at least 2 weeks following a TIA.   | A person should be categorised Temporarily Unfit for Duty for at least 2 weeks following a TIA.   |
|   |                                   | The worker may then be classed as Fit for Duty Subject to Review by an appropriate specialist if there is no long-term impairment and risk of recurrence is low.  | The worker may then be classed as Fit for Duty Subject to Review by an appropriate specialist if there is no long-term impairment and risk of recurrence is low.  |
| Space- occupying lesions (including brain tumours) (refer also to Intracranial surgery) | NO                                | Category 1 and Category 2 Safety Critical Workers   | Category 1 and Category 2 Safety Critical Workers   |
|   |                                   | A person is not Fit for Duty Unconditional:   | A person is not Fit for Duty Unconditional:   |
|   |                                   | <ul> <li>if the person has a space-occupying lesion.</li> </ul>   | if the person has a space-occupying lesion.   |
|   |                                   | Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account:   | Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account:   |
|   |                                   | <ul> <li>the nature of the work and reports on work<br/>performance; and</li> </ul>   | <ul> <li>the nature of the work and reports on work<br/>performance; and</li> </ul>   |
|   |                                   | <ul> <li>information provided by an appropriate specialist<br/>about the level of impairment of any of the<br/>following: visuospatial perception, insight,<br/>judgement, attention, reaction time, sensation,<br/>memory, muscle power, balance, coordination or<br/>vision (including visual fields).</li> </ul> | <ul> <li>information provided by an appropriate specialist<br/>about the level of impairment of any of the following:<br/>visuospatial perception, insight, judgement, attention,<br/>reaction time, sensation, memory, muscle power,<br/>balance, coordination or vision (including visual<br/>fields).</li> </ul> |
|   |                                   | If seizures occur, the standards for seizures and epilepsy apply (refer to Section 18.4.2. Seizures and epilepsy).  | If seizures occur, the standards for seizures and epilepsy apply (refer to Section 4.5).  |
|   |                                   | If surgically treated, the criteria for Intracranial surgery apply.   | If surgically treated, the criteria for Intracranial surgery apply.   |
| Subarachnoid  | NO                                | Category 1 and Category 2 Safety Critical Workers   | Category 1 Safety Critical Workers  |
| haemorrhage   |                                   | A Category 1 worker should be categorised Temporarily   | A Category 1 worker should be categorised Temporarily   |

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| Condition                    | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers   | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers  |
|------------------------------|-----------------------------------|---|---|
| (refer also to<br>Aneurysms) |                                   | Unfit for Duty for at least 6 months after a subarachnoid haemorrhage and a Category 2 worker for 3 months.   | Unfit for Duty for at least 6 months following a subarachnoid haemorrhage.  |
| , <b>,,</b>                  |                                   | A person is not Fit for Duty Unconditional:   | A person is not Fit for Duty Unconditional:   |
|                              |                                   | <ul> <li>if the person has had a subarachnoid haemorrhage.</li> </ul>   | <ul> <li>if the person has had a subarachnoid haemorrhage*.</li> </ul>  |
|                              |                                   | Fit for Duty Subject to Review may be determined after 6 months (Category 1) or 3 months (Category 2), taking   | Fit for Duty Subject to Review may be determined after 6 months, taking into account:   |
|                              |                                   | <ul><li>into account:</li><li>the nature of the work and reports on work</li></ul>  | <ul> <li>the nature of the work and reports on work performance; and</li> </ul>   |
|                              |                                   | <ul> <li>performance; and</li> <li>information provided by an appropriate specialist about the level of impairment of any of the following: visuospatial perception, insight, judgement, attention, reaction time, sensation, memory, muscle power, balance, coordination or vision (including visual fields).</li> </ul> | <ul> <li>information provided by an appropriate specialist<br/>about the level of impairment of any of the following:<br/>visuospatial perception, insight, judgement, attention,<br/>reaction time, sensation, memory, muscle power,<br/>balance, coordination or vision (including visual<br/>fields).</li> </ul> |
|                              |                                   | ,   | Category 2 Safety Critical Workers  |
|                              |                                   |   | A Category 2 worker for should be categorised Temporarily Unfit for Duty for at least 3 months following a subarachnoid haemorrhage.  |
|                              |                                   |   | A person is not Fit for Duty Unconditional:   |
|                              |                                   |   | <ul> <li>if the person has had a subarachnoid haemorrhage*.</li> </ul>  |
|                              |                                   |   | Fit for Duty Subject to Review may be determined after 3 months, taking into account:   |
|                              |                                   |   | <ul> <li>the nature of the work and reports on work<br/>performance; and</li> </ul>   |
|                              |                                   |   | <ul> <li>information provided by an appropriate specialist<br/>about the level of impairment of any of the following:<br/>visuospatial perception, insight, judgement, attention,<br/>reaction time, sensation, memory, muscle power,<br/>balance, coordination or vision (including visual</li> </ul>              |

| Condition   | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers   | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|---|-----------------------------------|---|---|
|   |                                   |   | fields).  |
|   |                                   |   | * This does not include a minor non-aneurysmal<br>subarachnoid haemorrhage restricted to the cerebral<br>convexity unless impairments are present – refer to page<br>140.   |
| Other neurological  | NO                                | Category 1 and Category 2 Safety Critical Workers   | Category 1 and Category 2 Safety Critical Workers   |
| conditions  |                                   | A person is not Fit for Duty Unconditional:   | A person is not Fit for Duty Unconditional:   |
| (see also section 4.7<br>Neurodevelopmental<br>disorders) |                                   | <ul> <li>if the person has a neurological disorder that<br/>significantly impairs any of the following:<br/>visuospatial perception, insight, judgement,<br/>attention, reaction time, sensation, memory,<br/>muscle power, coordination, balance or vision<br/>(including visual fields).</li> </ul> | <ul> <li>if the person has a neurological disorder that<br/>significantly impairs any of the following: visuospatial<br/>perception, insight, judgement, attention, reaction<br/>time, sensation, memory, muscle power,<br/>coordination, balance or vision (including visual<br/>fields).</li> </ul> |
|   |                                   | Fit for Duty Subject to Review may be determined subject to at least annual review, taking into account:  | Fit for Duty Subject to Review may be determined subject to at least annual review, taking into account:  |
|   |                                   | <ul> <li>the nature of the work and reports on work<br/>performance; and</li> </ul>   | <ul> <li>the nature of the work and reports on work<br/>performance; and</li> </ul>   |
|   |                                   | <ul> <li>information provided by an appropriate specialist<br/>about the likely impact of the neurological<br/>impairment on Safety Critical Work.</li> </ul>   | <ul> <li>information provided by an appropriate specialist<br/>about the likely impact of the neurological impairment<br/>on Safety Critical Work.</li> </ul>   |
|   |                                   | Periodic review may not be necessary if the condition is static.  | Periodic review may not be necessary if the condition is static.  |

Table 11. Summary of fitness for duty criteria changes: Neurodevelopmental disorders

| Condition  | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers  |
|--|-----------------------------------|---|---|
| Neurodevelopmental disorders (Including ADHD, ASD) | YES<br>(NEW)                      | No separate criteria  | Category 1 and Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if the person has a neurodevelopmental disorder that significantly impairs any of the following: insight, judgement, behaviour, attention, concentration, language, social communication, planning or organisation.  Fit for Duty Subject to Review may be determined subject to periodic review* taking into account the nature of the work, work performance reports and information provided by a psychiatrist or other appropriate specialist as to whether the following criteria are met:  • the diagnosis has been confirmed by an appropriate specialist;  • the person has insight into their condition and the potential impacts on safe working; and  • the condition and any comorbidities are well controlled.  * Periodic review may not be necessary if the condition is static. |

Table 12. Summary of fitness for duty criteria changes: Psychiatric conditions

| Condition   | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers   | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers  |
|---|-----------------------------------|---|---|
| K10 score   | NO                                | Category 1 and Category 2 Safety Critical Workers   | Category 1 and Category 2 Safety Critical Workers   |
| The scores are a guide and should be interpreted in conjunction with clinical assessment  To be administered verbally |                                   | <ul> <li>If the person has a K10 score of ≥ 19, the person may be classified as Temporarily Unfit for Duty or Fit for Duty Subject to Review while the causes are being assessed and managed (refer to Table 17: K10 risk levels and interventions):</li> <li>For scores of 19–24, the worker may be classified Fit for Duty Subject to Review without external referral if the examining doctor feels the issues can be managed within the consultation.</li> <li>For scores of 25–29, the worker must be referred back to their treating doctor for further management.</li> <li>If score is &gt; 30, the worker must be classified Temporarily Unfit for Duty pending further management.</li> </ul> | <ul> <li>If the person has a K10 score of ≥ 19, the person may be classified as Temporarily Unfit for Duty or Fit for Duty Subject to Review while the causes are being assessed and managed (refer to Section 6.1.2):</li> <li>For scores of 19–24, the worker may be classified Fit for Duty Subject to Review without external referral if the examining doctor feels the issues can be managed within the consultation.</li> <li>For scores of 25–29, the worker must be referred back to their treating doctor for further management.</li> <li>If score is &gt; 30, the worker must be classified Temporarily Unfit for Duty pending further management.</li> </ul> |
| Psychiatric<br>disorders  | NO                                | Category 1 and Category 2 Safety Critical Workers   | Category 1 and Category 2 Safety Critical Workers   |
| aisoraers   |                                   | A person is not Fit for Duty Unconditional:   | A person is not Fit for Duty Unconditional:   |
|   |                                   | <ul> <li>if the person has a psychiatric disorder of sufficient severity that it may impair behaviour, cognitive ability or perception required for Safety Critical Work (refer to Section 18.5.1. Relevance to Safety Critical Work); or</li> <li>if the examining doctor believes that there is a significant risk of a previous psychiatric</li> </ul>   | <ul> <li>if the person has a psychiatric disorder of sufficient severity that it may impair behaviour, cognitive ability or perception required for Safety Critical Work (refer to Section 4.8.1); or</li> <li>if the Authorised Health Professional believes that there is a significant risk of a previous psychiatric condition relapsing.</li> </ul>  |
|   |                                   | condition relapsing.  Fit for Duty Subject to Review may be determined, subject to annual review, taking into account the nature of the work, work performance reports and information provided by a psychiatrist as to whether the following criteria are met:   | Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account the nature of the work, work performance reports and information provided by a psychiatrist as to whether the following criteria are met:  |

| Condition   | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers   | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers   |
|---|-----------------------------------|---|--|
|   |                                   | <ul> <li>the condition is well controlled and the person is compliant with treatment over a substantial period, and the person has insight into the potential effects of their condition on safe working; and</li> <li>there are no adverse medication effects that may impair their capacity for safe working; and</li> <li>the impact of comorbidities has been considered (e.g. substance abuse).</li> </ul> | <ul> <li>the person has the psychological capacities to undertake their Safety Critical role; and</li> <li>the condition is well controlled and the person is compliant with treatment over a substantial period, and the person has insight into the potential effects of their condition on safe working; and</li> <li>there are no adverse medication effects that may impair their capacity for safe working; and</li> <li>the impact of comorbidities has been considered (e.g. substance abuse).</li> </ul>  |
| Psychogenic<br>nonepileptic<br>seizures<br>(Refer also 4.5<br>Seizures and<br>epilepsy) |                                   |   | A person should be categorised Temporarily Unfit for Duty following a psychogenic non-epileptic seizure.  A person is not Fit for Duty Unconditional:  • if the person has ever experienced a psychogenic non-epileptic seizure.  Fit for Duty Subject to Review may be considered subject to at least annual review, taking into account information provided by the treating neurologist or psychiatrist as to whether the following criteria are met:  • seizures are identified as psychogenic only with no epileptic seizures*; and  • there have been no further psychogenic seizures for at least 3 months.  * The seizure and epilepsy standards also apply in cases where there is co-existent epilepsy (refer to Section 4.5). If psychogenic and epileptic seizures cannot be differentiated, the |

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| Condition | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers                  |
|-----------|-----------------------------------|---|---|
|           |                                   |   | Section 4.1). If more than one standard applies, the standard with the longer non-driving period prevails |

Table 13. Summary of fitness for duty criteria changes: Sleep disorders

| Condition  | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|--|-----------------------------------|--|---|
| Sleep disorder risk<br>assessment<br>(refer Figure 26,<br>Figure 27) | YES                               | Category 1 and Category 2 Safety Critical Workers  Demonstrated sleepiness (refer Figure 24)  A person is not Fit for Duty Unconditional:  • if there is evidence of excessive daytime sleepiness such as:  - an ESS score of 16 or greater; or  - a history of self-reported sleepiness at work; or  - work performance reports indicating excessive sleepiness; or  - incident reports plausibly caused by inattention or sleepiness  They should be classed Temporarily Unfit for Duty and promptly assessed by a specialist in relation to a possible sleep disorder.  If a sleep disorder is diagnosed, see relevant standards below.  If excessive daytime sleepiness is not evident, assess risk factors as below.  Risk factors (refer Figure 24)  A person is not Fit for Duty Unconditional: | Category 1 and Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if there is evidence of excessive daytime sleepiness such as:  - an ESS score of 16 or greater; or  - a history of self-reported sleepiness at work; or  - work performance reports indicating excessive sleepiness; or  - incident reports plausibly caused by inattention or sleepiness  They should be classed Temporarily Unfit for Duty and promptly assessed by a specialist in relation to a possible sleep disorder.  If a sleep disorder is diagnosed, see relevant standards below. |

| Condition                                | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail<br>Safety Workers   | Proposed under revised National Standard for Health Assessment of Rail Safety Workers  |
|--|-----------------------------------|--|--|
|  |                                   | <ul> <li>if they are assessed as being at risk of sleep disorder,<br/>as evidenced by:</li> </ul>  |  |
|  |                                   | <ul> <li>a history of habitual loud snoring during<br/>sleep or of witnessed apnoeic events<br/>(such as in bed by a partner); or</li> </ul> |  |
|  |                                   | <ul> <li>a BMI ≥ 40; or</li> </ul>   |  |
|  |                                   | <ul><li>a BMI ≥35 and either:</li></ul>  |  |
|  |                                   | <ul> <li>diabetes type 2; or</li> </ul>  |  |
|  |                                   | <ul> <li>high blood pressure requiring 2 or more<br/>medications for control.</li> </ul>   |  |
|  |                                   | They should be classed Fit for Duty Subject to Review and promptly assessed by a specialist in relation to a possible sleep disorder.        |  |
|  |                                   | If a sleep disorder is diagnosed, see relevant standards below.  |  |
| Obstructive                              | YES                               |  | Category 1 and Category 2 Safety Critical Workers  |
| sleep apnoea<br>(OSA) risk               |                                   |  | A person is not Fit for Duty Unconditional:  |
| assessment<br>(STOP-Bang)<br>(refer TBC) |                                   |  | <ul> <li>if they are assessed as being at moderate risk (or<br/>higher) of obstructive sleep apnoea, as evidenced by<br/>a STOP-Bang score of ≥ 3</li> </ul> |
| (IEIEI IDO)                              |                                   |  | They should be classed Fit for Duty Subject to Review or Temporarily Unfit for Duty and promptly referred for over-night sleep study.                        |
|  |                                   |  | If a sleep disorder is diagnosed, see relevant standards below.  |
| Sleep apnoea                             | YES                               | Category 1 and Category 2 Safety Critical Workers  | Category 1 and Category 2 Safety Critical Workers  |
|  |                                   | A person is not Fit for Duty Unconditional:  | Sleep apnoea syndrome  |

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| to | Change<br>o criteria<br>YES/NO) | 2017 - National Standard for Health Assessment of Rail<br>Safety Workers   | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers   |
|----|---------------------------------|--|--|
|    |                                 | <ul> <li>if the person has established sleep apnoea syndrome (see Section 18.6.2. Relevance to Safety Critical Work); or</li> <li>if the person has severe sleep apnoea on a diagnostic sleep study with or without self-reported excessive daytime sleepiness.</li> <li>Fit for Duty Subject to Review may be determined, subject to annual review, taking into account the nature of the work and information provided by a specialist* in sleep disorders as to whether the following criteria are met:         <ul> <li>the person is compliant with treatment**; and</li> <li>the response to treatment is satisfactory.</li> </ul> </li> <li>*The Chief Medical Officer of a rail organisation may determine that review by the worker's treating general practitioner is sufficient if there is an established pattern of compliance and good response to treatment. The initial granting of Fit for Duty Subject to Review must be based on information provided by a specialist.</li> <li>***If person refuses treatment, refer text</li> </ul> | <ul> <li>if the person has established sleep apnoea syndrome, defined as excessive daytime sleepiness in combination with sleep apnoea on overnight monitoring.</li> <li>They should be categorised Temporarily Unfit for Duty while treatment is established.</li> <li>Fit for Duty Subject to Review may be determined, subject to annual review, taking into account the nature of the work and information provided by an appropriate specialist* in sleep disorders as to whether the following criteria are met:         <ul> <li>the person is compliant with treatment**; and</li> <li>the response to treatment is satisfactory.</li> </ul> </li> <li>Severe sleep apnoea (with or without excessive daytime sleepiness)</li> <li>A person is not Fit for Duty Unconditional:         <ul> <li>if the person has severe sleep apnoea on a diagnostic sleep study (defined as AHI ≥ XX) with or without self-reported excessive daytime sleepiness.</li> </ul> </li> <li>They should be categorised Temporarily Unfit for Duty while treatment is established.</li> <li>Fit for Duty Subject to Review may be determined, subject to annual review, taking into account the nature of the work and information provided by an appropriate specialist* in sleep disorders as to whether the following criteria are met:         <ul> <li>the person is compliant with treatment**; and</li> <li>the response to treatment is satisfactory.</li> </ul> </li> </ul> |

| Condition  | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers                          | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|------------|-----------------------------------|--|---|
|            |                                   |  | Moderate sleep apnoea (with or without excessive daytime sleepiness)  |
|            |                                   |  | A person is not Fit for Duty Unconditional:   |
|            |                                   |  | <ul> <li>if the person has moderate sleep apnoea on a<br/>diagnostic sleep study (defined as AHI = ) with or<br/>without self-reported excessive daytime sleepiness.</li> </ul>   |
|            |                                   |  | They may be categorised Fit for Duty Subject to Review unless excessive daytime sleepiness is suspected, in which case they should be categorised Temporarily Unfit for Duty while treatment is established.  |
|            |                                   |  | Fit for Duty Subject to Review may be determined, subject to annual review, taking into account the nature of the work and information provided by an appropriate specialist* in sleep disorders as to whether the following criteria are met:  |
|            |                                   |  | <ul> <li>the person is compliant with treatment**; and</li> </ul>   |
|            |                                   |  | <ul> <li>the response to treatment is satisfactory.</li> </ul>  |
|            |                                   |  | *The Chief Medical Officer of a rail transport organisation may determine that review by the worker's treating general practitioner is sufficient if there is an established pattern of continuing compliance and good response to treatment. The initial granting of Fit for Duty Subject to Review must be based on information provided by a specialist. |
|            |                                   |  | **If a person refuses treatment, they may be offered a Maintenance of Wakefulness Test <b>only</b> if they have moderate sleep apnoea (refer text for details). Category 1 Safety Critical Workers who have severe sleep apnoea or confirmed sleep apnoea syndrome should be categorised Temporarily Unfit for Duty if they refuse treatment                |
| Narcolepsy | NO                                | Category 1 and Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional: | Category 1 and Category 2 Safety Critical Workers   |

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| Condition                                    | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|--|-----------------------------------|--|---|
|  |                                   | <ul> <li>if narcolepsy is confirmed.</li> <li>Fit for Duty Subject to Review may be determined, subject to annual review, taking into account the nature of the work and information provided by a specialist in sleep disorders as to whether the following criteria are met: <ul> <li>a clinical assessment has been made by a sleep physician; and</li> <li>cataplexy has not been a feature in the past; and</li> <li>medication is taken regularly; and</li> <li>there have been no symptoms for 6 months; and</li> <li>normal sleep latency present on Maintenance of Wakefulness Test (MWT) (on or off medication).</li> </ul> </li></ul> | <ul> <li>A person is not Fit for Duty Unconditional: <ul> <li>if narcolepsy is confirmed.</li> </ul> </li> <li>Fit for Duty Subject to Review may be determined, subject to annual review, taking into account the nature of the work and information provided by a specialist in sleep disorders as to whether the following criteria are met: <ul> <li>a clinical assessment has been made by a sleep physician; and</li> <li>cataplexy has not been a feature in the past; and</li> <li>medication is taken regularly; and</li> <li>there have been no symptoms for 6 months; and</li> <li>normal sleep latency present on Maintenance of Wakefulness Test (MWT) (on or off medication).</li> </ul> </li></ul> |
| Other causes of excessive daytime sleepiness | NO                                | Refer to guidelines in the text.   | Refer to guidelines in the text.  |

Table 14. Summary of fitness for duty criteria changes: Substance misuse and dependence

| Condition           | Change<br>to criteria<br>(YES/NO) | 2017 – National Standard for Health Assessment of Rail<br>Safety Workers   | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers  |
|---------------------|-----------------------------------|--|---|
| AUDIT questionnaire | NO                                | Category 1 and Category 2 Safety Critical Workers  | Category 1 and Category 2 Safety Critical Workers   |
|                     |                                   | If the person has an AUDIT score of > 8, the person may be classified as Fit for Duty Subject to Review or Temporarily Unfit for Duty while causes are being assessed and managed (refer to page 163): | If the person has an AUDIT score of > 8, the person may be classified as Fit for Duty Subject to Review or Temporarily Unfit for Duty while causes are being assessed and managed (refer to Section 6.1.5): |
|                     |                                   | <ul> <li>Workers with scores of 8–15 may be managed within</li> </ul>  | <ul> <li>Workers with scores of 8–15 may be managed within</li> </ul>   |

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| Condition        | Change<br>to criteria<br>(YES/NO) | 2017 – National Standard for Health Assessment of Rail<br>Safety Workers  | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers  |
|------------------|-----------------------------------|---|---|
|                  |                                   | the consultation by providing simple advice and information on the alcohol guidelines and risk factors. If the risk is assessed as being low, they should be classified as Fit for Duty Subject to Review.  | the consultation by providing simple advice and information on the alcohol guidelines and risk factors. If the risk is assessed as being low, they should be classified as Fit for Duty Subject to Review.  |
|                  |                                   | <ul> <li>Workers with scores of 16–19 should be managed by<br/>a combination of simple advice, brief counselling and<br/>continued monitoring. Follow-up and referral to the<br/>worker's general practitioner is necessary. They<br/>should be classified as</li> <li>Fit for Duty Subject to Review or Temporarily Unfit for</li> </ul> | <ul> <li>Workers with scores of 16–19 should be managed by a<br/>combination of simple advice, brief counselling and<br/>continued monitoring. Follow-up and referral to the<br/>worker's general practitioner is necessary. They should<br/>be classified as Fit for Duty Subject to Review or<br/>Temporarily Unfit for Duty pending further assessment.</li> </ul> |
|                  |                                   | Duty pending further assessment.  Workers with scores of 20 or more should be referred to specialist services to consider withdrawal, pharmacotherapy and other more intensive treatments. They should be assessed as Temporarily Unfit for Duty pending further assessment.  | <ul> <li>Workers with scores of 20 or more should be referred to<br/>specialist services to consider withdrawal,<br/>pharmacotherapy and other more intensive treatments.<br/>They should be assessed as Temporarily Unfit for Duty<br/>pending further assessment.</li> </ul>  |
| Substance misuse | NO                                | Category 1 and Category 2 Safety Critical Workers   | Category 1 and Category 2 Safety Critical Workers   |
|                  |                                   | A person is not Fit for Duty Unconditional:   | A person is not Fit for Duty Unconditional:   |
|                  |                                   | if there is evidence of substance misuse.   | if there is evidence of substance misuse.   |
|                  |                                   | The person should be classified Temporarily Unfit for Duty while being assessed and managed.  | The person should be classified Temporarily Unfit for Duty while being assessed and managed.  |
|                  |                                   | Fit for Duty Subject to Review may be determined, with review in 6 months:  | Fit for Duty Subject to Review may be determined, with review in 6 months:  |
|                  |                                   | <ul> <li>if the risk of further substance misuse is assessed as<br/>being low.</li> </ul>   | <ul> <li>if the risk of further substance misuse is assessed as<br/>being low.</li> </ul>   |
|                  |                                   | Fit for Duty may be determined if there is no evidence of substance misuse at the 6 month review.  In the case of chronic or heavy substance misuse or  | If there is no evidence of substance misuse at the 6-month review, they may not require more frequent review, but their risk of substance misuse should be specifically addressed at subsequent Periodic Health Assessments.  |
|                  |                                   | substance dependence, Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into  | In the case of chronic or heavy substance misuse or   |

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| Condition | Change<br>to criteria<br>(YES/NO) | 2017 – National Standard for Health Assessment of Rail Safety Workers   | Proposed under revised National Standard for Health Assessment of Rail Safety Workers  |
|-----------|-----------------------------------|---|--|
|           | (TES/NO)                          | account the nature of the work and information provided by an appropriate specialist (such as an addiction medicine specialist or addiction psychiatrist) as to whether the following criteria are met:  • the person is involved in a treatment program and has been in remission* for at least 6 months as confirmed by biological monitoring; and  • there is an absence of cognitive impairments relevant to safe working; and  • there is absence of end-organ effects that impact on safe working (as described elsewhere in this Standard); and  • the risk of further substance misuse is assessed as being low.  * Remission is defined in the text (refer to page 152). | substance dependence, Fit for Duty Subject to Review may be determined, subject to at least annual review, taking into account the nature of the work and information provided by an appropriate specialist (such as an addiction medicine specialist or addiction psychiatrist) as to whether the following criteria are met:  • the person is involved in a treatment program and has been in remission* for at least 6 months as confirmed by biological monitoring; and  • there is an absence of cognitive impairments relevant to safe working; and  • there is absence of end-organ effects that impact on safe working (as described elsewhere in this Standard); and  • the risk of further substance misuse is assessed as |
|           |                                   |   | being low.  * For the purpose of this Standard, remission/recovery is attained when there is abstinence from use of illicit drugs or where the use of other substances, such as alcohol, has reduced in frequency to the point where it is unlikely to cause impairment of Safety Critical Work or to result in a positive test at work.  Remission must be confirmed by biological monitoring (e.g., urine drug screening, LFT, CDT, hair analysis for drugs) over a period of at least 6 months. At the conclusion of any monitoring a worker with remission may be certified Fit for Duty Subject to Review on a long-term basis.   |

Table 15. Summary of fitness for duty criteria changes: Hearing

| Condition  | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|--|-----------------------------------|--|---|
| Hearing Safety Critical Workers required to hear speech in quiet or in noise | YES                               | Compliance with the Standard should be initially assessed by audiometry without hearing aids.  A person is not Fit for Duty Unconditional:  • if hearing loss is ≥ 40 dB averaged over 0.5, 1, 2, and 3 kHz in the better ear.  If the person passes an appropriate speech discrimination test with or without hearing aids, they may be determined to be Fit for Duty Subject to Review, taking into account the opinion of an audiologist*or ears, nose and throat (ENT) specialist and the nature of the work, and if periodic reviews are specified.  Hearing aids are to be used as per the text (refer to page 167).  Cochlear implantees should be assessed on an individual basis by an ENT surgeon or audiologist. An appropriate speech discrimination test must be passed.  * An audiologist should be a member of the Audiological Society of Australia (ASA) and/or a member of the New Zealand Audiological Society (NZAS). Members contacts are available at www.audiology.asn.au or www.audiology.org.na | Compliance with the Standard should be initially assessed by audiometry without hearing aids.  For roles requiring hearing in quiet  A person is not Fit for Duty Unconditional:  • if hearing loss is ≥ 35 dB averaged over 0.5, 1, 2, and 4 kHz in the better ear.  Fit for Duty Subject to Review may be determined, subject to periodic review, taking into account the opinion of an audiologist or ears, nose and throat (ENT) specialist and the nature of the work:  • if the person passes an appropriate speech discrimination in quiet test with or without hearing aids.  For roles requiring hearing in noise  A person is not Fit for Duty Unconditional:  • if hearing loss is ≥ 20 dB averaged over 0.5, 1, 2, and 4 kHz in the better ear.  Fit for Duty Subject to Review may be determined, subject to periodic review, taking into account the opinion of an audiologist* or ears, nose and throat (ENT) specialist and the nature of the work:  • if the person passes an appropriate speech discrimination in noise test with or without hearing aids.  If hearing aids are required to meet the Standard, they must be worn while working.  The use of cochlear implants should be assessed on an individual basis by an ENT surgeon or audiologist. An appropriate speech discrimination test must be passed. |

| Condition   | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|---|-----------------------------------|--|---|
| Hearing—tram<br>drivers   | YES                               | Compliance with the Standard should be initially assessed by audiometry without hearing aids.  | Compliance with the Standard should be initially assessed by audiometry without hearing aids.   |
| If hearing speech is  |                                   | A person is not Fit for Duty Unconditional:  | A person is not Fit for Duty Unconditional:   |
| required, tram drivers should be managed as per Safety Critical |                                   | <ul> <li>if hearing loss is ≥ 40 dB averaged over 0.5, 1, 2, and<br/>3 kHz in the better ear.</li> </ul>   | <ul> <li>if hearing loss is ≥ 35 dB averaged over 0.5, 1, 2, and 4<br/>kHz in the better ear.</li> </ul>  |
| Workers (above)   |                                   | If the person is able to meet the Standard with a hearing aid, they may be determined to be Fit for Duty Subject to Review taking into account the opinion of an audiologist*/ ENT specialist and the nature of the work, and if periodic reviews are specified. | Fit for Duty Subject to Review may be determined, subject to periodic review, taking into account the opinion of an audiologist or ENT specialist and the nature of the work:  • if the person meets the Standard with a hearing aid. |
|   |                                   | Hearing aids are to be used as per the text (refer to page 167).   | If hearing aids are required to meet the Standard, they must be worn while working (refer to page 185)  |
|   |                                   | Cochlear implantees should be assessed on an individual basis by an ENT surgeon or audiologist.* An appropriate speech discrimination test must be passed.   | The use of cochlear implants should be assessed on an individual basis by an audiologist or ENT surgeon. An appropriate speech discrimination test must be passed.  |
|   |                                   | * An audiologist should be a member of the Audiological<br>Society of Australia (ASA) and/or a member of the New<br>Zealand Audiological Society (NZAS). Members contacts are<br>available at www.audiology.asn.au or www.audiology.org.na                       |   |

Table 16. Summary of fitness for duty criteria changes: Vision and eye disorders

| Condition | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health<br>Assessment of Rail Safety Workers  |
|-----------|-----------------------------------|--|---|
| Acuity    | YES                               | Category 1 and Category 2 Safety Critical Workers  | Category 1 and Category 2 Safety Critical Workers   |
|           |                                   | A person is not Fit for Duty Unconditional:  | Category 1 and Category 2 workers are required to meet the following visual acuity criteria (uncorrected or corrected):   |
|           |                                   | <ul> <li>if the person's uncorrected visual acuity is worse than<br/>6/9 in the better eye; or</li> </ul>  | <ul> <li>better than or equal to 6/9 in the better eye; or</li> </ul>   |
|           |                                   | <ul> <li>if the person's uncorrected visual acuity is worse than</li> </ul>  | <ul> <li>better than or equal to 6/18 in the worse eye.</li> </ul>  |
|           |                                   | 6/18 in either eye.  | Categorisation will depend on the stability of the condition  |
|           |                                   | Fit for Duty Subject to Review may be determined if the standard is met with corrective lenses.  | (see below).  |
|           |                                   |  | Stable conditions   |
|           |                                   | If the person's vision is worse than 6/18 in the worse eye, Fit for Duty Subject to Review may be determined, provided the visual acuity in the better eye is 6/9 (with or without corrective lenses). In cases of latent nystagmus made manifest by the occlusion of one eye for the purpose of testing, a binocular visual acuity of 6/9 is acceptable if the visual acuity of the better eye is below 6/9 with occlusion of the fellow eye. The same minimum standard of vision in the worse eye applies. | A person who has a stable visual impairment that is not associated with a progressive condition may be categorised Fit for Duty Unconditional if their corrected vision meets the above criteria.   |
|           |                                   |  | If the person's vision is worse than 6/18 in the worse eye, Fit for Duty Subject to Review may be determined, provided the visual acuity in the better eye is 6/9 (with or without corrective lenses).  |
|           |                                   |  | The person must wear the appropriate aids when undertaking rail safety work. The suitability of these aids in meeting the fitness for duty requirements will be monitored by the Authorised Health Professional at each Periodic Health Assessment. |
|           |                                   |  | Progressive conditions  |
|           |                                   |  | A person is not Fit for Duty Unconditional:   |
|           |                                   |  | <ul> <li>if the person has a progressive eye condition that may<br/>affect visual acuity.</li> </ul>  |
|           |                                   |  | Fit for Duty Subject to Review may be determined subject to at least annual review, and taking into account the nature of   |

| Condition     | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers   | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|---------------|-----------------------------------|---|---|
| Visual fields | to criteria                       |   |   |
|               |                                   | Safety Critical Workers who do not work on or around the track (e.g. train controllers) usually require only a limited field of vision and may be exempted from this criterion. | Progressive conditions  A person is not Fit for Duty Unconditional:  • if the person has a progressive eye condition that may |

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| 1                | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers  |
|------------------|-----------------------------------|--|--|
| Monocular vision | YES                               | A person is not Fit for Duty Unconditional:  • if the person is monocular.  A monocular person may be determined to be Fit for Duty Subject to (annual) Review, taking into account the nature of the work and if the treating optometrist or ophthalmologist states that the visual field of the remaining eye is 140°.  In exceptional circumstances, the Chief Medical Officer may classify a worker with less than that visual field in the remaining eye as Fit for Duty Subject to (annual) Review if an ophthalmologist or optometrist with expertise in visual fields assesses that the person may be safe for Safety Critical Work. Safety Critical Workers who do not work on or around the track (e.g. train controllers) usually require only a limited field of vision and may be exempted from this criterion. | affect visual fields.  Fit for Duty Subject to Review may be determined subject to at least annual review, and taking into account the nature of the work and the opinion of the treating optometrist or ophthalmologist as to whether:  • the person meets the visual field criteria as stated above; and  • the visual field loss is unlikely to progress rapidly.  A person is not Fit for Duty Unconditional:  • if the person is monocular.  Fit for Duty Subject to Review may be determined, subject to review, taking into account the nature of the work and information provided by the treating optometrist or ophthalmologist, as to whether the following criteria are met:  • the visual acuity in the remaining eye is 6/9 or better, with or without correction; and  • the visual field in the remaining eye has a horizontal extent of at least 140 degrees within 10 degrees above and below the horizontal midline; and  • there is no other significant visual field loss that is likely to impede Safety Critical Work.  In exceptional circumstances, the Chief Medical Officer may classify a worker with less than that visual field in the remaining eye as Fit for Duty Subject to Review if an ophthalmologist or optometrist with expertise in visual fields assesses that the person may be safe for Safety Critical Work.  Safety Critical Workers who do not work on or around the track (e.g., train controllers) usually require only a limited field of vision and may be exempted from this criterion. |

| Condition     | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers   | Proposed under revised National Standard for Health Assessment of Rail Safety Workers  |
|---------------|-----------------------------------|---|--|
| Colour vision |                                   | Colour vision requirements are determined by a risk assessment and communicated by the rail operator to the Authorised Health Professional.  Colour vision should be screened using Ishihara plates; 3  | Colour vision requirements are determined by a risk assessment and communicated by the rail transport operator to the Authorised Health Professional.  Colour vision should be screened using Ishihara's plates; 3 or  |
|               |                                   | or more errors out of 12 plates is a fail.  In the event of a fail, further assessment may be done as per the text and flow chart in Figure 32.   | more errors out of 12 plates is a fail.  In the event of a fail, further assessment may be done as per the text and flow chart in Figure 35.   |
| Diplopia      | NO                                | Category 1 and Category 2 Safety Critical Workers A person is not Fit for Duty Unconditional:  • if the person experiences any diplopia (other than physiological diplopia) when fixating objects within the central 20° of the primary direction of gaze.  The person may be determined to be Fit for Duty Subject to Review, if it is considered appropriate taking into account the nature of the work and if the treating optometrist or ophthalmologist states that the following criteria are met:  • the standard can be met with suitable treatment; and  • other criteria are met as per this section, including visual fields | Category 1 and Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if the person experiences any diplopia (other than physiological diplopia) within 20 degrees from central fixation.  Fit for Duty Subject to Review may be determined, taking into account the nature of the work and the opinion of the treating optometrist or ophthalmologist as to whether the following criteria are met:  • the standard can be met with suitable treatment; and  • other criteria are met as per this section, including visual fields. |

Table 17. Summary of fitness for duty criteria changes: Musculoskeletal conditions

| to                        | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail<br>Safety Workers   | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|---------------------------|-----------------------------------|--|---|
| Musculoskeletal disorders | NO                                | Category 1 and Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if lack of range of movement, pain, weakness, instability or another impairment from a musculoskeletal condition results in either of the following  - inability to perform the inherent job requirements of the rail safety work in question  - increased risk of exacerbation of a pre-existing injury.  The person may be determined to be Fit for Duty Subject to Review, if, after taking into account the opinion of the treating doctor and the nature of the work, the condition can be adequately treated and function can be restored. Conditions that are stable, such as amputations, do not need to be reviewed more frequently than the usual periodic assessment.  The person may be determined to be Fit for Duty Subject to Job Modification, after taking into consideration the nature of the work. It is the employer's decision whether any job modifications can be accommodated. A functional assessment or practical assessment at the workplace may also be considered. | Category 1 and Category 2 Safety Critical Workers  A person is not Fit for Duty Unconditional:  • if lack of range of movement, pain, weakness, instability or another impairment from a musculoskeletal condition results in either of the following  - inability to perform the inherent job requirements of the rail safety work in question  - increased risk of exacerbation of a pre-existing injury.  The person may be determined to be Fit for Duty Subject to Review, if, after taking into account the opinion of the treating doctor and the nature of the work:  • the condition can be adequately treated, and function can be restored; and  • treatments do not impair capacity for safe working.  Conditions that are stable, such as amputations, do not need to be reviewed more frequently than the usual Periodic Health Assessment.  The person may be determined to be Fit for Duty Subject to Review, Fit for Duty Subject to Job Modification, after taking into consideration the nature of the work. It is the employer's decision whether any job modifications can be accommodated. A functional assessment or practical assessment at the workplace may also be considered. |

Table 18. Summary of fitness for duty criteria changes: Hearing (Category 3)

| Condition | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers  |
|-----------|-----------------------------------|--|--|
| Hearing   | YES                               | Compliance with the Standard should be initially assessed by audiometry without hearing aids.  | Compliance with the Standard should be initially assessed by audiometry without hearing aids.  |
|           |                                   | A person is not Fit for Duty Unconditional:  | A person is not Fit for Duty Unconditional:  |
|           |                                   | <ul> <li>if hearing loss is ≥ 40 dB averaged over 0.5, 1 and 2</li> <li>KHz in the better ear without hearing aids</li> </ul>                | <ul> <li>if hearing loss is ≥ 35 dB averaged over 0.5, 1, 2 and 4<br/>KHz in the better ear with or without hearing aids.</li> </ul>   |
|           |                                   | Fit for Duty conditional on wearing hearing aids may be recommended if the standard is met with hearing aids.                                | Fit for Duty Subject to Review may be recommended if the standard is met with hearing aids.  |
|           |                                   | If a rail safety worker requires hearing aids, the aids should:  • suppress feedback  • be noise limited to 80 dB                            | If a rail safety worker requires hearing aids, the aids should be fitted by an audiologist with due consideration to the individual needs of the worker, the nature of their work and the nature of the working environment. |
|           |                                   | <ul><li>have no noise-cancellation feature</li><li>have no directional microphones.</li></ul>  | Fit for Duty Subject to Review (Job Modification) may be considered; for example, if the worker is to be escorted at all times when around the track.  |
|           |                                   | Fit for Duty Subject to Job Modification may be considered; for example, if the worker is to be escorted at all times when around the track. |  |

Table 19. Summary of fitness for duty criteria changes: Vision (Category 3)

| Condition Change to crit (YES/ | eria | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|--------------------------------|------|--|---|
| Visual acuity YES              |      | A person is not Fit for Duty Unconditional:  • if the person's best corrected visual acuity is worse than 6/12 in the better eye.  Fit for Duty conditional on wearing corrective lenses may be determined if the standard is met with spectacles or contact lenses.  Fit for Duty Subject to Review may be determined if the person meets the standard but has a condition that may result in their vision deteriorating before the next routine review date. | A Category 3 worker is required to meet the following visual acuity criteria (uncorrected or corrected):  • better than or equal to 6/12 in the better eye.  Categorisation will depend on the stability of the condition (see below).  Stable conditions  A person who has a stable visual impairment that is not associated with a progressive condition may be categorised Fit for Duty Unconditional if their corrected vision meets the above criteria.  The person must wear the appropriate aids when undertaking rail safety work. The suitability of these aids in meeting the fitness for duty requirements will be monitored by the Authorised Health Professional at each Periodic Health Assessment.  Progressive conditions  A person is not Fit for Duty Unconditional:  • if the person has a progressive eye condition that may affect visual acuity.  Fit for Duty Subject to Review may be determined subject to periodic review, and taking into account the nature of the work and the opinion of the treating optometrist or ophthalmologist as to:  • the progression of the condition and the response to treatment;  • whether the visual acuity standard is met, with or without corrective lenses; and |

| Condition     | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers  | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|---------------|-----------------------------------|--|---|
|               |                                   |  | whether other criteria are met per this standard, including visual fields.  |
| Visual fields | NO                                | <ul> <li>if their binocular visual field (or the visual field in the remaining eye in the case of monocular vision) does not have a horizontal extent of at least 110° within 10° above and below the horizontal midline; or</li> <li>if there is any significant visual field loss (scotoma within a central radius of 20° of the foveal fixation or hemianopia).</li> <li>Fit for Duty Subject to Review may be determined if the visual field standard is met and provided that the visual field loss is unlikely to progress rapidly.</li> <li>Fit for Duty Subject to Job Modification may be considered; for example, if the worker is to be escorted at all times when around the track.</li> </ul> | A Category 3 worker is required to meet the following criteria for visual fields:  • the binocular visual field (or the visual field in the remaining eye in the case of monocular vision) must have an extent of at least 110° within 10° above and below the horizontal midline; and  • they must have no significant visual field loss (scotoma) within a central radius of 20° of the foveal fixation or other scotoma likely to affect work performance); and  • they must have no significant visual field loss (scotoma) with more than four contiguous spots within a 20-degree radius from fixation.  Stable conditions  A person who has a stable visual field loss that is not associated with a progressive condition may be categorised Fit for Duty Unconditional if their vision meets the above criteria.  Progressive conditions |
|               |                                   |  | <ul> <li>A person is not Fit for Duty Unconditional:</li> <li>if the person has a progressive eye condition that may affect visual fields.</li> </ul>   |
|               |                                   |  | Fit for Duty Subject to Review may be determined subject to periodic review, and taking into account the nature of the work and the opinion of the treating optometrist or ophthalmologist as to whether:   |
|               |                                   |  | the person meets the visual field criteria as stated  |

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| Condition | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|-----------|-----------------------------------|---|---|
|           |                                   |   | above; and  |
|           |                                   |   | <ul> <li>the visual field loss is unlikely to progress rapidly.</li> </ul>  |
|           |                                   |   | Fit for Duty Subject to Review (Job Modification) may be considered; for example, if the worker is to be escorted at all times when around the track. |

Table 20. Summary of fitness for duty criteria changes: Musculoskeletal (Category 3)

| Condition                | Change<br>to criteria<br>(YES/NO) | 2017 - National Standard for Health Assessment of Rail Safety Workers   | Proposed under revised National Standard for Health Assessment of Rail Safety Workers  |
|--------------------------|-----------------------------------|---|--|
| Musculoskeletal function | NO                                | <ul> <li>A person is not Fit for Duty Unconditional:         <ul> <li>if pain, weakness, instability or other impairment from a musculoskeletal or medical condition results in interference with the ability to walk on coarse ballast and/or move rapidly from the path of an oncoming train.</li> </ul> </li> <li>Fit for Duty Subject to Review may be determined, taking into consideration the opinion of the treating doctor and the nature of the work if the condition is adequately treated and function is restored.</li> <li>Fitness for Duty Subject to Job Modification may be considered, for example, if the person is to be accompanied at all times when around the track.</li> </ul> | <ul> <li>A person is not Fit for Duty Unconditional:</li> <li>if pain, weakness, instability or other impairment from a musculoskeletal or medical condition results in interference with the ability to walk on coarse ballast and/or move rapidly from the path of an oncoming train.</li> <li>Fit for Duty Subject to Review may be determined, taking into consideration the opinion of the treating doctor and the nature of the work if the condition is adequately treated and function is restored.</li> <li>Fit Duty Subject to Review (Job Modification) may be considered, for example, if the person is to be accompanied at all times when around the track.</li> </ul> |

Table 21. Summary of fitness for duty criteria changes: Other (Category 3)

| Condition      | Change<br>to criteria<br>(YES/NO) | 2017 -<br>National<br>Standard for<br>Health<br>Assessment<br>of Rail Safety<br>Workers | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|----------------|-----------------------------------|---|---|
| Blackouts      | YES                               |   | A person is not Fit for Duty Unconditional:   |
|                |                                   |   | <ul> <li>if the person has experienced blackouts of an unknown cause that cannot be diagnosed as syncope,<br/>seizures or other recognised medical causes of loss of consciousness.</li> </ul>  |
|                |                                   |   | Fit for Duty Subject to Review may be recommended taking into account the opinion of the treating doctor and the nature of the work:  |
|                |                                   |   | <ul> <li>In the case of blackouts that were confined to a single 24-hour period, where there have been no<br/>further blackouts for at least 6 months.</li> </ul>   |
|                |                                   |   | <ul> <li>If there have been 2 or more blackouts separated by at least 24 hours, where there have been no<br/>further blackouts for at least 12 months.</li> </ul>   |
|                |                                   |   | Fit for Duty Subject to Job Modification or Fit for Duty Subject to Review following a lesser period without further blackouts may be considered on a case-by-case basis following discussion with the Chief Medical Officer of the rail transport operator and consideration of the duties that will be performed. |
| Cardiovascular | YES                               |   | Unstable angina, angina on mild exertion or heart failure   |
| conditions     |                                   |   | A person is not Fit for Duty Unconditional if:  |
|                |                                   |   | <ul> <li>the person has a history of unstable angina, angina on mild exertion or heart failure that could interfere with their capacity to move quickly from the path of an oncoming train.</li> </ul>  |
|                |                                   |   | Fit for Duty Subject to Review may be recommended taking into consideration the opinion of the treating doctor and the nature of the work if:   |
|                |                                   |   | satisfactory treatment has been instituted; and   |
|                |                                   |   | <ul> <li>the person's exercise tolerance has improved such that they can reliably move from the path of an<br/>oncoming train.</li> </ul>   |
|                |                                   |   | Syncope   |

| Condition                | Change<br>to criteria<br>(YES/NO) | 2017 -<br>National<br>Standard for<br>Health<br>Assessment<br>of Rail Safety<br>Workers | Proposed under revised National Standard for Health Assessment of Rail Safety Workers  |
|--------------------------|-----------------------------------|---|--|
|                          |                                   |   | A person is not Fit for Duty Unconditional if:   |
|                          |                                   |   | the person has a history of episodes of syncope without warning due to any medical condition.  |
|                          |                                   |   | Fit for Duty Subject to Review may be recommended taking into consideration the opinion of the treating doctor and the nature of the work if:  |
|                          |                                   |   | the underlying cause has been identified; and  |
|                          |                                   |   | satisfactory treatment has been instituted; and  |
|                          |                                   |   | the person has been symptom-free for at least four weeks.  |
| Diabetes                 | YES                               |   | A person is not Fit for Duty Unconditional if:   |
|                          |                                   |   | <ul> <li>the person has had a recent 'severe hypoglycaemic event' (within 6 weeks) and/or is subject to<br/>recurrent episodes of severe hypoglycaemia.</li> </ul>   |
|                          |                                   |   | Fit for Duty Subject to Review may be recommended taking into consideration the opinion of the treating doctor and the nature of the work if:  |
|                          |                                   |   | <ul> <li>any recent 'severe hypoglycaemic event' has been satisfactorily treated; and</li> </ul>   |
|                          |                                   |   | the person is following a treatment regimen that minimises the risk of recurrent hypoglycaemia; and  |
|                          |                                   |   | <ul> <li>the person experiences early warning symptoms (awareness) of hypoglycaemia or has a<br/>documented management plan for lack of early warning symptoms.</li> </ul>   |
| Neurological             | YES                               |   | A person is not Fit for Duty Unconditional if:   |
| conditions<br>(Cognitive |                                   |   | the person has cognitive impairment.   |
| Impairment)              |                                   |   | Fit for Duty Subject to Review may be recommended taking into consideration information provided by the treating doctor regarding the level of impairment of visuospatial perception, insight, judgement, attention, reaction time and memory, and the likely impact of any impairments on the person's capacity to reliably detect and move rapidly from the path of an oncoming train. |

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| Condition                | Change<br>to criteria<br>(YES/NO) | 2017 -<br>National<br>Standard for<br>Health<br>Assessment<br>of Rail Safety<br>Workers | Proposed under revised National Standard for Health Assessment of Rail Safety Workers  |
|--------------------------|-----------------------------------|---|--|
| Neurological             | YES                               |   | A person should be categorised Temporarily Unfit for Duty following a seizure.   |
| conditions –             |                                   |   | A person is not Fit for Duty Unconditional if they have ever experienced a seizure.  |
| Seizures and<br>Epilepsy |                                   |   | Fit for Duty Subject to Review may be recommended following an appropriate seizure-free period and provided the person follows medical advice including adherence to medication if prescribed or recommended.  |
|                          |                                   |   | The default non-working seizure-free period is 12 months.  |
|                          |                                   |   | The default criteria apply except in the following circumstances.  |
|                          |                                   |   | Fit for Duty Subject to Review may be recommended taking into consideration the opinion of the treating doctor and the nature of the work:   |
|                          |                                   |   | <ul> <li>In the case of a first seizure if there have been no further seizures (with or without medication) for at<br/>least 6 months.</li> </ul>  |
|                          |                                   |   | <ul> <li>In the case of epilepsy treated for the first time, if the person has been treated for at least 6 months,<br/>there have been no seizures in the preceding six months, if any seizures occurred after the start of<br/>treatment, they happened only in the first six months after starting treatment and not in the last six<br/>months, and the person follows medical advice including adherence to medication.</li> </ul> |
|                          |                                   |   | <ul> <li>In the case of acute symptomatic seizures if there have been no further seizures for at least 6 months. If there have been two or more separate transient disorders causing acute symptomatic seizures the default criteria apply.</li> </ul>   |
|                          |                                   |   | <ul> <li>In the case of safe seizures with no loss of consciousness, if 'safe' seizures have been present for at<br/>least 2 years, there have been no seizures of any other type for at least 2 years, and the person follows<br/>medical advice with respect to medication if prescribed.</li> </ul>   |
|                          |                                   |   | In the case of sleep only seizures:  |
|                          |                                   |   | <ul> <li>there have been no previous seizures while awake, the first sleep-only seizure was at least 12<br/>months ago, and the person follows medical advice including adherence to medication if prescribed;<br/>or</li> </ul>   |
|                          |                                   |   | <ul> <li>there have been previous seizures while awake but not in the preceding 2 years, sleep-only</li> </ul>   |

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| Condition   | Change<br>to criteria<br>(YES/NO) | 2017 -<br>National<br>Standard for<br>Health<br>Assessment<br>of Rail Safety<br>Workers | Proposed under revised National Standard for Health Assessment of Rail Safety Workers  |
|-------------|-----------------------------------|---|--|
|             |                                   |   | seizures have been occurring for at least 2 years, and the person follows medical advice including adherence to medication if prescribed.  |
|             |                                   |   | <ul> <li>In the case of a seizure in a person whose epilepsy was previously well controlled:</li> </ul>  |
|             |                                   |   | <ul> <li>the seizure was caused by an identified provoking factor that can be reliably avoided and that has<br/>not caused previous seizures, there have been no seizures for at least 4 weeks and the person<br/>follows medical advice including adherence to medication; or</li> </ul>  |
|             |                                   |   | <ul> <li>no cause was identified, there have been no seizures for at least 3 months and the person follows<br/>medical advice including adherence to medication.</li> </ul>  |
|             |                                   |   | <ul> <li>If the person has experienced one or more seizures during the 12 months leading up to the last<br/>seizure, there is no reduction, and the default criteria applies.</li> </ul>   |
|             |                                   |   | <b>Exceptional circumstances:</b> Fit for Duty Subject to Job Modification or Fit for Duty Subject to Review following a lesser seizure-free period may be considered on a case-by-case basis following discussion with the Chief Medical Officer of the rail transport operator and consideration of the duties that will be performed. |
| Psychiatric | YES                               |   | A person is not Fit for Duty Unconditional if:   |
| Disorders   |                                   |   | <ul> <li>the person has psychiatric disorder that is likely to impair insight, judgement, perception, behaviour or<br/>cognitive function and affect the person's capacity to move rapidly from the path of an oncoming<br/>train.</li> </ul>  |
|             |                                   |   | Fit for Duty Subject to Review may be recommended taking into consideration the opinion of the treating doctor and the nature of the work if:  |
|             |                                   |   | the condition is well controlled   |
|             |                                   |   | the person has been compliant with treatment   |
|             |                                   |   | <ul> <li>there are no adverse medication effects that may affect the person's ability to move rapidly from the<br/>path of an oncoming train, and</li> </ul>   |
|             |                                   |   | the impact of co-morbidities has been considered (e.g., substance abuse).  |

| Condition        | Change<br>to criteria<br>(YES/NO) | 2017 -<br>National<br>Standard for<br>Health<br>Assessment<br>of Rail Safety<br>Workers | Proposed under revised National Standard for Health Assessment of Rail Safety Workers   |
|------------------|-----------------------------------|---|---|
| Substance Misuse | YES                               |   | A person is not Fit for Duty Unconditional if:  |
|                  |                                   |   | there is evidence of substance misuse.  |
|                  |                                   |   | Fit for Duty Subject to Review may be recommended taking into account the opinion of the treating doctor and the nature of the work if the worker has been assessed and managed and the risk of further substance misuse has been assessed as being low.  |
|                  |                                   |   | In the case of workers with more severe substance use problems a longer period of demonstrated remission should be considered. Remission is attained when there is abstinence from use of illicit drugs or where the use of other substances, such as alcohol, has reduced in frequency to the point where it is unlikely to cause impairment or to result in a positive test at work. The workers substance use history, response to treatment and level of insight should be considered, as well as the drug and alcohol management program and rehabilitation policies of the rail transport operator. Remission must be confirmed by biological monitoring. |

# Appendix E Glossary

| Term                           | Definition   |
|--------------------------------|--|
| Authorised Health Professional | Health professional who has been selected by a rail transport operator, on the basis of their compliance with the specified selection criteria, to perform rail safety worker health assessments. Generally, a Chief Medical Officer will be considered an Authorised Health Professional. |
| Chief Medical Officer          | A Chief Medical Officer is employed by a rail transport operator to advise them about a range of issues related to the health of rail safety workers and health risks associated with their rail operations.   |
| Chief Medical Officers Council | The Chief Medical Officers Council is a governance group that is auspiced by RISSB for the rail industry and is responsible for providing medical expertise and oversight in the implementation of the Standard.   |
| Fit for Duty Subject to Review | This assessment category indicates that the worker does not meet the criteria for Fit for Duty Unconditional.  |
| Fit for Duty Unconditional     | This assessment category indicates that the worker meets all the criteria for Fit for Duty Unconditional in the Standard and is to be reviewed in line with the normal Periodic Health Assessment schedule.  |
| Health Questionnaire           | The self-administered questionnaire is a screening tool to help identify conditions that might affect the performance of safety critical work.   |
| Periodic Health Assessment     | Periodic Health Assessments are conducted to identify health conditions that may affect safe performance of rail safety work. They should be conducted for Category 1, 2 and 3 rail safety workers according defined frequencies in the Standard.  |
| Permanently Unfit for Duty     | This assessment category indicates that the worker has a permanent and/or progressive condition that is predicted to render them unfit for their current rail safety duties for 12 months or more.   |
| Record for Health Professional | This record guides the clinical examination and provides a convenient standardised template for recording a general assessment of fitness for rail safety duty.  |

| Request and Report Form     | The Request and Report Form is the key means of communication between the rail transport operator and the Authorised Health Professional.   |
|-----------------------------|---|
| Safety Critical Work/er     | These are workers whose action or inaction may lead directly to a serious incident affecting the public or the rail network. Their vigilance and attentiveness to their job is crucial, and they are therefore the focus of this Standard. These workers require health assessments to ensure ill-health does not affect their vigilance and attentiveness to the job, and therefore the safety of the public or the rail network. Safety Critical Workers' tasks are distinguished from tasks that affect only individual worker safety. |
| Temporarily Unfit for Duty  | This assessment category indicates that the worker does not meet the criteria for Fit for Duty Unconditional or Fit for Duty Subject to Review and cannot presently perform current rail safety duties.   |
| the Standard                | National Standard for Health Assessment of Rail Safety Workers  |
| Triggered Health Assessment | Triggered Health Assessments are additional health assessments undertaken earlier than the scheduled Periodic Health Assessment, because of concerns about an individual's health, or because there is a requirement for more frequent monitoring of a medical condition.   |

# Appendix F Acronyms and abbreviations

| Term  | Definition                                      |
|-------|---|
| ADHD  | attention deficit hyperactivity disorder        |
| AFTD  | Assessing fitness to drive                      |
| ASD   | autism spectrum disorder                        |
| СМОС  | Chief Medical Officers Council                  |
| СРАР  | continuous positive airway pressure             |
| ECG   | Electrocardiograph                              |
| EEG   | Electroencephalography                          |
| ESS   | Epworth Sleepiness Scale                        |
| ITMM  | Infrastructure and Transport Ministers' Meeting |
| NTC   | National Transport Commission                   |
| OSA   | obstructive sleep apnoea                        |
| RHAG  | Rail Health Advisory Group                      |
| RISSB | Rail Industry Safety and Standards Board        |
| RIW   | Rail Industry Worker Program                    |

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