

Submission to: National Transport Commission
Title: Assessing Fitness to Drive: 2014 Review
Date: 5 December 2014



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1. About the Australian Trucking Association

The Australian Trucking Association (ATA) is the peak body that represents the trucking industry. Its members include state and sector based trucking associations, some of the nation's largest transport companies and businesses with leading expertise in truck technology.

2. Summary of recommendations

Recommendation 1

The commercial medical standards in AFTD should be split into two categories, with a new category 1 commercial standard to include sleep apnoea screening, diabetes screening and cardiac screening where clinically relevant.

Recommendation 2

The proposed category 1 commercial standard should include the objective screening test for sleep apnoea used in the rail medical standards, as amended. A commercial driver referred for investigation on the basis of this screening test should continue to be able to drive without restriction until a diagnosis is made.

Recommendation 3

The proposed category 1 commercial standard should include the AUSDRISK screening test for diabetes. Drivers recording 12 points or more on the assessment should be referred for a fasting glucose or HBA1C test. Drivers who are referred for testing should be able to continue driving without restriction until a diagnosis is made.

Recommendation 4

If recommendation 5 in this submission is adopted, drivers referred for a cholesterol test as part of their cardiac risk assessment should also have a fasting glucose or HBA1C test to check for diabetes.

Recommendation 5

The proposed category 1 commercial medical standard should include cardiac screening for drivers, but only for the segment of the driver population where it is clinically relevant. A driver referred for further tests should be able to continue driving without restriction until a diagnosis is made.

Recommendation 6

The review of AFTD should include, as an integral part, the development of suitably revised model medical certificates, patient questionnaires and clinical examination forms. These model forms should be released in an editable format so they can be uploaded as templates into doctors' practice management systems.

3. Introduction

Assessing Fitness to Drive (AFTD) sets out the national medical standards for private and commercial vehicle drivers. The current edition of AFTD was published in 2012 after an extensive review.

The ATA made a detailed submission to the review, which included a survey of 24 TruckSafe endorsed medical practitioners. In the submission, the ATA argued that AFTD needed to address more of the key medical issues facing heavy vehicle drivers, including diabetes and sleep apnoea. Most of the ATA's recommendations were not implemented.

Since then, the ATA has repeatedly called for stronger medical standards. In 2012, for example, the ATA arranged for sleep apnoea researcher Lisa Sharwood to address Federal MPs and Senators. The findings of her research into undiagnosed sleep apnoea in long distance truck drivers are an important part of the evidence underpinning this submission.

4. Inclusion of fitness for duty standards in AFTD

The medical standards in AFTD focus on a driver’s fitness to hold a licence, rather than fitness for duty.

Nonetheless, the National Heavy Vehicle Accreditation Scheme (NHVAS), Western Australian Heavy Vehicle Accreditation (WAHVA), the ATA’s TruckSafe scheme and the state dangerous goods licensing schemes all use AFTD as a fitness for duty standard.

This should continue: there are great advantages to accreditation schemes using a common medical standard. AFTD is familiar to medical practitioners and readily accessible.

Trucking operators in accreditation schemes – and particularly TruckSafe – are justifiably proud that their commitment to medical testing detects serious medical issues with their drivers. They speak about how their membership of TruckSafe has saved lives because those medicals have picked up type 2 diabetes or incipient cardiovascular disease.

The problem is that AFTD does not screen for those conditions. When they are detected as part of driver medicals, they are detected because doctors look beyond the instructions on the clinical examination form and use their medical judgment.

Accordingly, the ATA proposes dividing the commercial standards in AFTD into two categories, as shown in table 1.

What this submission will call the **category 1 commercial standard** could apply to drivers in accreditation schemes, as well as DG licensing. Medicals in this category would include fitness for duty elements applicable to all road transport businesses: sleep apnoea screening (section 6), diabetes screening (section 7) and cardiac screening for some drivers (section 8).

The **category 2 standard** would apply to commercial licensing medicals generally.

Table 1: Proposed commercial medical standards under AFTD

Standard	Application	Content
Category 1 commercial	NHVAS, WAHVA, TruckSafe DG licensing	Existing commercial standard, plus: <ul style="list-style-type: none"> • Sleep apnoea screening • Diabetes screening • Cardiac screening where clinically relevant
Category 2 commercial	Driver licensing for hire and reward (R, C, LR), driving instructors, MR, HC, MC.	Current commercial standard

In addition to the safety and health benefits of this approach, a further advantage is that it could reduce the number of medicals that drivers now need to complete.

The ATA is aware of cases where drivers have been asked to undertake four or more medicals, with each client of their employer insisting on their own medical. This is an unnecessary burden on the trucking industry, particularly in remote areas where medicals can cost more than \$400 and travel time is a significant concern.

Including fitness for duty elements in AFTD may encourage those clients to accept medicals done against the AFTD standards instead of requiring their own.

Recommendation 1

The commercial medical standards in AFTD should be split into two categories, with a new category 1 commercial standard to include sleep apnoea screening, diabetes screening and cardiac screening where clinically relevant.

5. Sleep apnoea

Sleep apnoea is a breathing disorder that occurs when people are asleep; it is characterised by repeated disruptions or pauses in breathing. It can be caused by obstructions to the upper airway (obstructive sleep apnoea) or cardiac or neurological conditions (central sleep apnoea).

Because sleep apnoea leads to broken sleep, it can cause excessive sleepiness during the day. Studies have shown that road users with sleep apnoea are 2-7 times more likely to have accidents than other drivers.¹ Sleep apnoea can be treated with options including lifestyle changes, weight loss, mandibular advancement splints, and the use of continuous positive air pressure (CPAP) pumps.²

The model AFTD patient questionnaire uses the Epworth Sleepiness Scale as a tool to screen for sleep apnoea. This part of the questionnaire asks drivers to consider eight situations and mark down their chance of dozing off on a scale from zero to three. The situations range from sitting and reading, to lying down to rest in the afternoon, to being stopped in a car for a few minutes in traffic. A driver with an Epworth Sleepiness Scale Score of 16 to 24 does not meet the criteria for a commercial licence until the excessive sleepiness is investigated and treated.

In its 2009 submission, the ATA warned that the use of the Epworth Sleepiness Scale led to the under-reporting of excessive sleepiness because it was subjective. The ATA argued that patients became accustomed to their broken sleep and tiredness during the day and considered it normal.

The ATA recommended that objective physical measurements should be included in the AFTD sleep apnoea screening process.³

The ATA's concerns are confirmed by recent academic research and experience in other industries.

Between 2008 and 2011, a team of researchers led by Professor Mark Stevenson (MUARC) carried out a large case control study of long distance truck drivers.⁴ In the study, 325 drivers were provided with nasal airflow monitors and asked to use them overnight. The study found that **41 per cent** of the drivers had obstructive sleep apnoea, but only **12.2 per cent** recorded a positive (>10) score when they filled in the ESS.⁵

One peer-reviewed paper that resulted from the study concluded:

These findings suggest that screening instruments dependent on self-report may be unreliable in this population and point to the importance of identifying accurate and acceptable ways to screen CMV drivers for sleep apnoea.⁶

The ATA has been advised that a questionnaire for sleep apnoea was included for a six-month trial period as part of the coal industry health assessments performed in Queensland. Within the six-month period, the number of detections dropped to zero.

¹ Grunstein, R et al (2004) *The Interaction Of Mild Obstructive Sleep Apnea, Sleep Deprivation, Circadian Factors and Alcohol In Driving Fatigue Risk*. Study document prepared for the NSW Motor Accidents Authority. p43.

² Kee, K (2009) "Sleep Apnoea: a general practice approach," in *Australian Family Physician*, 38:5, p287.

³ ATA, *Submission to the NTC review of transport medical standards*, August 2009, pp6-7.

⁴ Elkington, J and M Stevenson (2013) *The heavy vehicle study—final report*, p4.

⁵ Sharwood, L et al (2012) "Assessing sleepiness and sleep disorders in Australian long-distance commercial vehicle drivers: self-report versus an 'at home' measuring device" in *Sleep* 35:4, p472.

⁶ Sharwood, p472.

Unlike AFTD, the rail medical standards include an objective test for sleep disorders. The rail standards use the ESS, but also require persons with the following risk factors to be assessed for sleep disorders through a sleep study:

- a BMI \geq 40 or
- a BMI \geq 35 and either:
 - type 2 diabetes or
 - high blood pressure requiring two or more medications to control or
 - a history of habitual loud snoring during sleep or witness apnoeic events (such as in bed by a partner).⁷

The concurrent review of the rail medical standards could result in amendments to this test, because there have been some practical difficulties with its implementation.

The ATA considers that the objective test in the rail standards (as amended) should be incorporated into the proposed category 1 commercial standard. Because it is a screening test and is not diagnostic, a driver meeting the criteria and referred for a sleep study should continue to be able to drive without restriction until a diagnosis is made.

A driver with confirmed sleep apnoea should be able to continue driving on a conditional licence subject to the requirements in the existing commercial standards.⁸

Recommendation 2

The proposed category 1 commercial standard should include the objective screening test for sleep apnoea used in the rail medical standards, as amended. A commercial driver referred for investigation on the basis of this screening test should continue to be able to drive without restriction until a diagnosis is made.

6. Type 2 diabetes

Type 2 diabetes is a serious disease. Undiagnosed or poorly managed type 2 diabetes can lead to coronary artery disease, stroke, kidney failure, limb amputations and blindness.⁹

AFTD points out that diabetes can affect a person's ability to drive in two ways. There is the risk of a severe hypoglycaemic event, and there is the risk posed by the side effects of the disease, including its effects on vision, the heart and the potential for sleep apnoea.¹⁰ These also affect a driver's fitness for duty, ability to work, personal well-being and family life.

In 2008, the Queensland Centre for Medical Health Research reported that the prevalence of diabetes in truck drivers was about double the Australian norm. 6.3 per cent of the drivers in the QCMHR study reported they were diabetic; the Australian norm reported in the study was 3.1 per cent. Long haul drivers reported a higher prevalence of diabetes (7.0 per cent) than short haul owner operators (2.7 per cent) or short haul drivers (5.3 per cent).¹¹

The Stevenson study reached similar conclusions. It found that 6.3 per cent of the drivers in the study had previously been diagnosed with diabetes.¹²

In line with the importance of diabetes as a disease affecting truck drivers, the 2003 edition of AFTD asked examining doctors to carry out a urine glucose test.¹³ The test was removed in the 2012 edition, because urinalysis is now deprecated as a way of screening for diabetes. The urine glucose test was not replaced with a more up to date screening tool.

⁷ National Transport Commission (2012) *National standard for health assessment of rail safety workers*. (As amended to 16 March 2013) p123.

⁸ See AFTD 2012, p108.

⁹ Royal Australian College of General Practitioners (2014) *General practice management of type 2 diabetes*, p1.

¹⁰ AFTD 2012, p56

¹¹ Queensland Centre for Medical Health Research (2008) *Health Survey of the NSW Trucking Industry*. Work Outcome Research Cost-Benefit (WORC) Project. p63.

¹² Elkington, p27.

¹³ AFTD 2003, p112.

Trucking businesses and their employees highly value the ability of driver medical checks to detect diabetes. As one South Australian trucking operator told the ATA:

As an operator totally committed to good driver health, I am a firm believer through our own experience that diabetes testing, monitoring and checking is a vital component in forming part of a complete health screen for our drivers. The lifestyle of some drivers certainly lends itself to being exposed to diabetes and with early detection and treatment drivers can continue to successfully fulfil their careers knowing their conditions are being monitored and that we as a company have done our very best to ensure the person behind the wheel is safe and medically fit for duty.

Accordingly, the ATA recommends that the proposed category 1 commercial standard should include an up to date diabetes screening tool for all drivers, plus a fasting glucose or HBA1C blood test for drivers asked to undertake a blood test as part of their cardiac risk assessment (see section 7).

The NHMRC recommends that initial screening for type 2 diabetes should be carried out using the Australian Type 2 Diabetes Risk Assessment Tool (AUSDRISK).¹⁴ AUSDRISK is a questionnaire. It asks patients ten questions, including their age group, their ethnicity, their physical activity and their waist measurement.

A person scoring 12 points or more on the questionnaire is at high risk of developing type 2 diabetes. Under the NHMRC guidelines, their examining doctor should then refer them for a fasting glucose blood test.¹⁵

AUSDRISK is a screening tool and is not diagnostic. Only one person in 14 who scores 12-15 points on the test will be diagnosed with diabetes. As a result, drivers who are referred for further testing should be able to continue driving without restriction until a diagnosis is made.

A driver with confirmed type 2 diabetes should be able to continue driving on a conditional licence subject to the requirements of the existing commercial standards.¹⁶

Section 7 of this submission recommends that the category 1 commercial standard should include an absolute cardiac risk assessment for drivers when it is clinically relevant. Because this assessment requires a blood cholesterol test, it would be reasonable to carry out a fasting glucose or HBA1C test for diabetes at the same time.

Recommendation 3

The proposed category 1 commercial standard should include the AUSDRISK screening test for diabetes. Drivers recording 12 points or more on the assessment should be referred for a fasting glucose or HBA1C test. Drivers who are referred for testing should be able to continue driving without restriction until a diagnosis is made.

Recommendation 4

If recommendation 5 in this submission is adopted, drivers referred for a cholesterol test as part of their cardiac risk assessment should also have a fasting glucose or HBA1C test to check for diabetes.

7. Cardiovascular disease

Cardiovascular disease is a most significant issue for the trucking industry.

The ATA's 2009 survey found that 58 per cent of the doctors who participated had recommended, in the previous year, that a commercial driver should not hold a licence because of cardiovascular disease.¹⁷

As table 2 shows, the doctors identified a series of cardiac risk factors as major health issues for the commercial drivers they examined.

¹⁴ NHMRC (2009) *National evidence based guidelines for case detection and diagnosis of type 2 diabetes*, p6

¹⁵ NHMRC, type 2 diabetes guidelines, p6.

¹⁶ See AFTD 2012, p160.

¹⁷ ATA, pp2-3.

Table 2: Cardiac risk factors identified as major health issues, 2009

Risk factor	Doctors who raised as a major health issue for commercial drivers %
Hypertension	58
Smoking	54
Overweight or obese	96
Inactivity	71

More recently, the Stevenson study concluded that 37.3 per cent of the drivers who participated were overweight; a further 47.2 per cent were obese. 46.2 per cent were smokers.¹⁸

The AFTD medical exam does not include routine screening for cardiac risk factors.¹⁹

In contrast, the rail medical standards require doctors to calculate a cardiac risk score for each patient. Every category 1 rail safety worker, regardless of age, is required to have the tests necessary to calculate the score. The risk management rules for category 1 workers are extremely stringent. For example, a patient assessed as having a 25 per cent risk of a heart attack over the next five years must be classed as Temporarily Unfit for Duty and referred for a stress ECG and appropriate management.²⁰

In the last review, a number of stakeholders argued that AFTD should be amended to bring it into parity with the rail standards. But the NTC concluded that:

While the need for parity between medical standards of safety critical activities was recognised, the diversity of driving tasks encompassed by the medical standards for commercial vehicle drivers was also acknowledged. While it was considered that the cardiac risk score may be appropriate for inclusion in a fitness-for-duty standard in the future, it was not considered appropriate to include it as a routine requirement for commercial licensing.²¹

Dividing the commercial standards into two categories would enable cardiac screening based on the relevant NHMRC guidelines to be introduced for category 1 medicals.²²

In contrast to the rail medical standards, the screening should be targeted on the basis of clinical relevance to minimise the time and expense involved in conducting tests that turn out to be negative.

The NHMRC guidelines point out that the clinical relevance of absolute cardiovascular disease assessment is greatest for people who are middle aged. The guidelines recommend using it for adults aged 45-74.²³ Based on these guidelines, it would clearly not be necessary to screen every driver undertaking a category 1 medical.

Absolute cardiac disease risk assessment is a screening tool. It assesses the risk that a person will contract a cardiac disease. It does not confirm that they have one. A driver referred for further tests should be able to continue driving without restriction until a diagnosis is made.

A driver with confirmed cardiovascular disease should be able to continue driving on a conditional licence subject to the requirements of the existing commercial standards.²⁴

¹⁸ Elkington, p26. These percentages are across both the case and control groups.

¹⁹ AFTD 2012, p37.

²⁰ NTC, rail medical standards, p60.

²¹ NTC, (2011) *Review of transport medical standards: final report for the review of Assessing Fitness to Drive*, p17.

²² NHMRC (2009) *Guidelines for the assessment of absolute cardiovascular disease risk*. An online version of the cardiac risk assessment tool is available at www.cvdcheck.org.au.

²³ NHMRC, cardiovascular disease risk assessment guidelines, p21.

²⁴ See AFTD 2012, p43.

A driver with a high risk of cardiovascular disease seeking to drive under an accreditation scheme should be able to continue driving, subject to an agreed action plan and, if necessary, a shorter medical review interval as determined by the examining doctor.

Recommendation 5

The proposed category 1 commercial medical standard should include cardiac screening for drivers, but only for the segment of the driver population where it is clinically relevant. A driver referred for further tests should be able to continue driving without restriction until a diagnosis is made.

8. Forms

The 2012 edition of AFTD did not include updated versions of the model medical certificate, patient questionnaire, clinical examination proforma and medical condition notification form that appeared in the 2003 edition.

In its final report on the review, the NTC said:

The forms were best suited for commercial driver medicals and therefore will be addressed as part of the separate fitness-for-duty project (see Out-of-scope section). Deleting the forms will avoid any confusion between the current forms and any new versions produced. Additionally, the forms did not cover all conditions and would have to be expanded extensively and focus tested to assist the medical assessment process, which can be done more effectively in the aforementioned fitness-for-duty project.²⁵

The fitness for duty project did not eventuate, with the result that the NTC had to commission a separate, urgent project to develop the forms needed to support NHVAS, WAHVA and TruckSafe medicals.

With the benefit of hindsight, the development of the revised forms should have been an integral part of the AFTD review. The model forms should be released in an editable format so they can be uploaded as templates into doctors' practice management systems.

Recommendation 6

The review of AFTD should include, as an integral part, the development of suitably revised model medical certificates, patient questionnaires and clinical examination forms. These model forms should be released in an editable format so they can be uploaded as templates into doctors' practice management systems.

²⁵ NTC (2011) *Review of transport medical standards: final report for the review of Assessing Fitness to Drive*, p125.
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Appendix: NTC feedback templates

ASSESSING FITNESS TO DRIVE ISSUES PAPER FEEDBACK

Stakeholder details

Organisation: Australian Trucking Association

Section of standard: throughout

What is the current standard, guideline or information?

The NTC has previously recognised that AFTD does not deal appropriately with fitness for duty issues.

What is the issue or problem, if any?

Insufficient coverage of these key medical issues

What options could be considered to address any issues or problems?

What do you recommend, and why?

The commercial medical standards in AFTD should be split into two categories, with a new category 1 commercial standard to include sleep apnoea screening, diabetes screening and cardiac screening for drivers where it is clinically relevant.

Supporting information (e.g. research or findings):

See ATA submission, section 4

Likely impact of the change on commercial drivers and other drivers:

See ATA submission, section 4

ASSESSING FITNESS TO DRIVE ISSUES PAPER FEEDBACK

Stakeholder details

Organisation: Australian Trucking Association

Section of standard: Section 8: sleep disorders

What is the current standard, guideline or information?

See section 8 of AFTD.

What is the issue or problem, if any?

Section 8 of AFTD uses the Epworth Sleepiness Scale (ESS) as a screening tool for sleep apnoea. Evidence cited in the ATA submission shows the ESS is not reliable and should be augmented by an objective test.

What options could be considered to address any issues or problems?**What do you recommend, and why?**

The proposed category 1 commercial standard should include the objective screening test for sleep apnoea used in the rail medical standards, as amended. A commercial driver referred for investigation on the basis of this screening tool should continue to be able to drive without restriction until a diagnosis is made.

Supporting information (e.g. research or findings):

See ATA submission, section 5

Likely impact of the change on commercial drivers and other drivers:

See ATA submission, section 5

ASSESSING FITNESS TO DRIVE ISSUES PAPER FEEDBACK

Stakeholder details

Organisation: Australian Trucking Association

Section of standard: Section 3: diabetes mellitus

What is the current standard, guideline or information?

See section 3 of AFTD.

What is the issue or problem, if any?

Type 2 diabetes is a serious disease that is of special concern for the trucking industry, but AFTD 2012 does not include a screening test for this disease.

What options could be considered to address any issues or problems?**What do you recommend, and why?**

The proposed category 1 commercial standard should include the AUSDRISK screening test. Drivers recording 12 points or more on the assessment should be referred for a fasting glucose or HBA1C test. Drivers who are referred for testing should be able to continue driving without restriction until a diagnosis is made.

If recommendation 5 in the ATA submission is adopted, drivers referred for a cholesterol test as part of their cardiac risk assessment should also have a fasting glucose or HBA1C test to check for diabetes.

Supporting information (e.g. research or findings):

See ATA submission, section 6

Likely impact of the change on commercial drivers and other drivers:

See ATA submission, section 6

ASSESSING FITNESS TO DRIVE ISSUES PAPER FEEDBACK

Stakeholder details

Organisation: Australian Trucking Association

Section of standard: Section 2: cardiovascular conditions

What is the current standard, guideline or information?

See section 2 of AFTD.

What is the issue or problem, if any?

Unlike the rail medical standards, AFTD does not include a cardiovascular risk assessment.

What options could be considered to address any issues or problems?

What do you recommend, and why?

The proposed category 1 commercial medical standard should include cardiac screening, but only where it is clinically relevant. A driver referred for further tests should be able to continue driving without restriction until a diagnosis is made.

Supporting information (e.g. research or findings):

See ATA submission, section 7.

Likely impact of the change on commercial drivers and other drivers:

See ATA submission, section 7.

ASSESSING FITNESS TO DRIVE ISSUES PAPER FEEDBACK

Stakeholder details

Organisation: Australian Trucking Association

Section of standard: Appendix 2: forms

What is the current standard, guideline or information?

See appendix 2 of AFTD.

What is the issue or problem, if any?

The 2012 edition of AFTD did not include updated versions of the model medical certificate, patient questionnaire, clinical examination proforma and medical condition notification form that appeared in the 2003 edition. The NTC had to commission a separate, urgent project to develop the forms needed to support NHVAS, WAHVA and TruckSafe medicals.

What options could be considered to address any issues or problems?**What do you recommend, and why?**

The review of AFTD should include, as an integral part, the development of suitably revised model medical certificates, patient questionnaires and clinical examination forms. These model forms should be released in an editable format so they can be uploaded as templates into doctors' practice management systems.

Supporting information (e.g. research or findings):

See ATA submission, section 8.

Likely impact of the change on commercial drivers and other drivers:

See ATA submission, section 8.