



Assessing Fitness to Drive 2011

National medical standards for vehicle drivers

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for
National Transport Commission &
Austroads

Acknowledgements



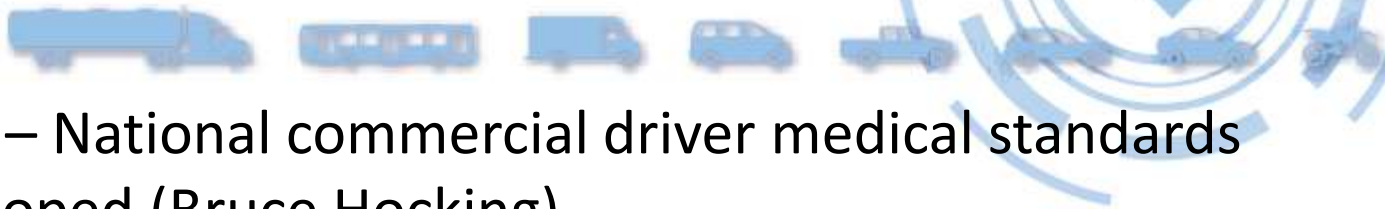
- Dr Bruce Hocking – Medical Advisor
- Claire McRae, Lea Morgan, Ben Piper
National Transport Commission
- Austroads
- State and Territory Drive Licensing Authorities
- Medical stakeholders and contributing professional organisations
- Other stakeholders including industry and consumer organisations

Outline



- Overview of the review of Assisting Fitness to Drive (AFTD): 2011
 - Purpose and process
 - Issues arising, key changes, implications
- Relevance and application to fitness for duty
- Comparisons with New Zealand standards (2009)
- Supporting resources

History



- **1994** – National commercial driver medical standards developed (Bruce Hocking)
- **1998** – First national medical standards for private vehicle drivers developed in Australia
- **2003** - Standards for private and commercial drivers combined, following the format of the private standards but featuring:
 - specific licensing criteria (as distinct from ‘fit to drive’)
 - specific criteria for conditional licences
 - requirement for specialist review for commercial vehicle drivers on conditional licences

History



- **2005** - Interim review conducted - confirmed conditional licences as an appropriate and acceptable means of monitoring drivers with conditions that may impact on driving
- **2009** – Revised New Zealand standards released
- **2009** – Review of Australian standards (road and rail) commenced
- **2011** – Australian driver standards due for release
- **2012** – Australian rail safety worker standards due for release



Aim of review



- Ensure medical standards reflect current medical evidence
- Ensure they meet the practical needs of drivers, driver licensing authorities and health professionals
- Ensure they support consistent patient management with respect to driving

Scope of review



- Included medical content and some administrative matters, such as requirements for specialist assessment and review
- Did not include issues determined at a State and Territory level such as:
 - Reporting requirements for health professionals (e.g mandatory reporting)
 - Specific requirements for periodic health assessments (e.g for heavy vehicle drivers, older drivers)
 - Forms

Review process



- Content review aspect overseen by the National Transport Commission
 - Based on NH&MRC approach for guideline development
 - Reference Group with wide stakeholder representation
 - Initial stakeholder input – July 2009 – inputs from health professionals, licensing authorities, consumers, industry, etc
 - Evidence base – MUARC review (November 2010)
 - Expert input – various professional societies, coronial enquiries
 - Draft for public consultation (April 2010)
 - Endorsement by professional bodies (underway)
 - Approval by ministers (November 2011)

Review process



- Publication, distribution and promotion will be overseen by Austroads
 - Distribution to key health professionals (over 55,000 throughout Australia)
 - Comprehensive communication strategy
 - Online access via Austroads website
 - Online learning
 - Patient resources
 - Potential inclusion in patient management software
 - Ongoing input from stakeholders to support uptake and awareness.

Review process



- Due diligence
 - Project Report details all major inputs and responses and discusses implications for stakeholders; will be available on the Austroads website www.austroads.com.au
 - Report also features recommendations in relation to out-of-scope issues and ongoing implementation

Evidence base - MUARC review

 **MONASH University**
Accident Research Centre

**INFLUENCE OF CHRONIC ILLNESS ON CRASH
INVOLVEMENT OF MOTOR VEHICLE DRIVERS:
2ND EDITION**

by

Judith Charlton
Sjaanie Koppel
Morris Odell
Anna Devlin
Jim Langford
Mary O'Hare
Chelvi Kopinathan
Dale Andrea
Geoff Smith
Bereha Khodr
Jessica Edquist
Carlyn Mur
Michelle Scully

November, 2010

Report No. 300



Influence of chronic illness on crash involvement of motor vehicle drivers

[www.monash.edu.au/muarc/
reports/muarc300.pdf](http://www.monash.edu.au/muarc/reports/muarc300.pdf)

Limitations of available evidence



- “Healthy driver” effect may contribute to a lower crash risk than may otherwise be expected.
- Definition and incidence of “crashes” often depends on self-reporting which may lead to over or under reporting in some studies.
- The definition of a medical condition is by self report in some studies and may not be accurate
- The “exposure metric” (i.e. km travelled) is often not controlled for yet is crucial for determining risk of a crash.

Limitations of available evidence



- Sample sizes may be small and not representative of the population of drivers
- The control group may not be properly matched by age and sex
- Comorbidities may not be adjusted for e.g. alcohol use
- The review was limited to drivers of private vehicles

Improving management of health in relation to driving



- Revise the standard so as to improve understanding of:
 - the driving task
 - the health attributes required for safe driving
 - the key health conditions likely to impact on driving
 - the assessment requirements
 - the medical criteria
 - the processes involved in managing patients with respect to their driving - where possible, improving those processes

Understanding the driving task



Sensory input (e.g. vision)



Machine - envt
interaction

Decision
making

Musculoskeletal actions

Understanding the health attributes required for driving



- Vision
- Visuospatial perception
- Memory
- Attention and concentration
- Insight
- Judgement
- Reaction time
- Sensation
- Muscle power
- Coordination

Understanding the key health conditions affecting fitness to drive



1. Blackouts
2. Cardiovascular conditions
3. Diabetes
4. **Hearing**
5. Musculoskeletal conditions
6. Neurological conditions (including dementia, epilepsy, vestibular and other neurological)
7. Psychiatric conditions
8. Sleep disorders
9. Substance misuse
10. Vision & eye disorders

Understanding the key conditions affecting fitness to drive



- **Focus on key chronic conditions likely to affect driving** leading to 10 main chapters (22 chapters previously).
- **Deletion of chapters and criteria** relating to short term conditions which do not impact on licensing (but may impact on short term fitness to drive and fitness for duty) e.g. anaesthesia, pregnancy, fractures. Covered briefly in Part A.
- **Deletion of chapters** on gastrointestinal conditions, HIV/AIDS, metabolic conditions, renal conditions and respiratory conditions in favour of applying general principles.

Understanding the key conditions affecting fitness to drive



- Deletion of chapter on **older drivers** – general guidance provided in Part A including multiple medical conditions.
- **Cancer** subsumed into neurological as the main consideration was in relation to brain tumours / space occupying lesions. Effects of drug treatment of cancer included in Part A.
- **Neurological conditions** combined into a single chapter (previously in 4 chapters), including sections on dementia, epilepsy, vestibular and other neurological conditions.
- Separate chapter on **blackouts** retained to help guide management of the various causes of blackout.

Understanding the key conditions affecting fitness to drive



- **Alcohol dependence and drug misuse**, combined into one chapter – Substance misuse
- Chapter on **prescription and OTC drugs** deleted – considerations for **prescribed drugs** (excluding misuse) covered in Part A
- Inclusion of a **comprehensive index**

AFTD 2011 chapters (Australia)

MAFTD 2009 chapters (New Zealand)



1. **Blackouts** (replaces Syncope)
2. Cardiovascular conditions
3. Diabetes
4. Hearing
5. Musculoskeletal conditions
6. Neurological conditions (including dementia, epilepsy, vestibular and other neurological)
7. Psychiatric conditions
8. **Sleep disorders**
9. Substance misuse
10. Vision & eye disorders

1. Neurological & related conditions
2. Cardiovascular conditions
3. Diabetes
4. Locomotor conditions
5. Visual standards
6. Hearing standards
7. Mental disorders
8. **Problems associated with increasing age**
9. Miscellaneous conditions
10. **Effects of medication, drugs and abuse of substances**
11. **Driving after surgery**

Understanding of the assessment requirements



- Improved information around the impact of health conditions on driving ability and crash risk, based on the MUARC evidence
- Increased emphasis on functional aspects of a condition rather than pathology – e.g. for musculoskeletal, neurological, psychiatric
- Improved guidance around use of assessment tools
- Flow charts to guide assessment processes and decision making

Understanding of the medical criteria



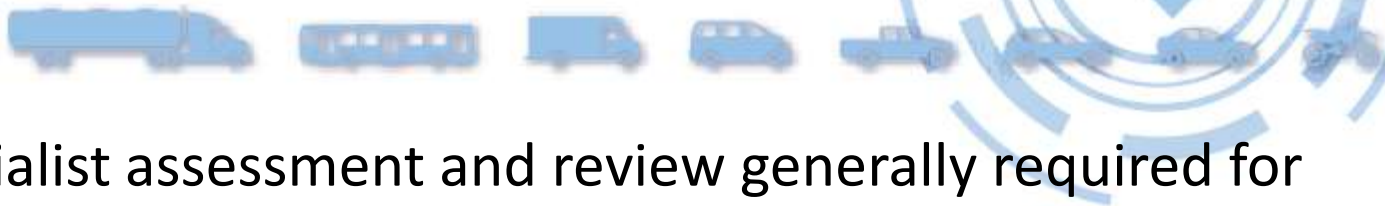
- Substantial editorial changes to improve consistency and clarity, including simplification of language
- Clarity around the role of the driver licensing authority in making decisions about licensing
- Again, increased emphasis on functional aspects of a condition rather than pathology – e.g. for musculoskeletal, neurological, psychiatric.

Fitness for licensing v fitness for duty



- AFTD specifically developed to guide fitness for licensing:
 - Focuses on long term conditions
 - Does not provide criteria for short term conditions that may affect short term fitness to drive (and therefore fitness for duty)
 - General guidance on short term conditions provided in Part A
 - When used for fitness for duty, all aspects of the workers task need to be considered – not just driving

Role of specialists – Commercial vehicle drivers



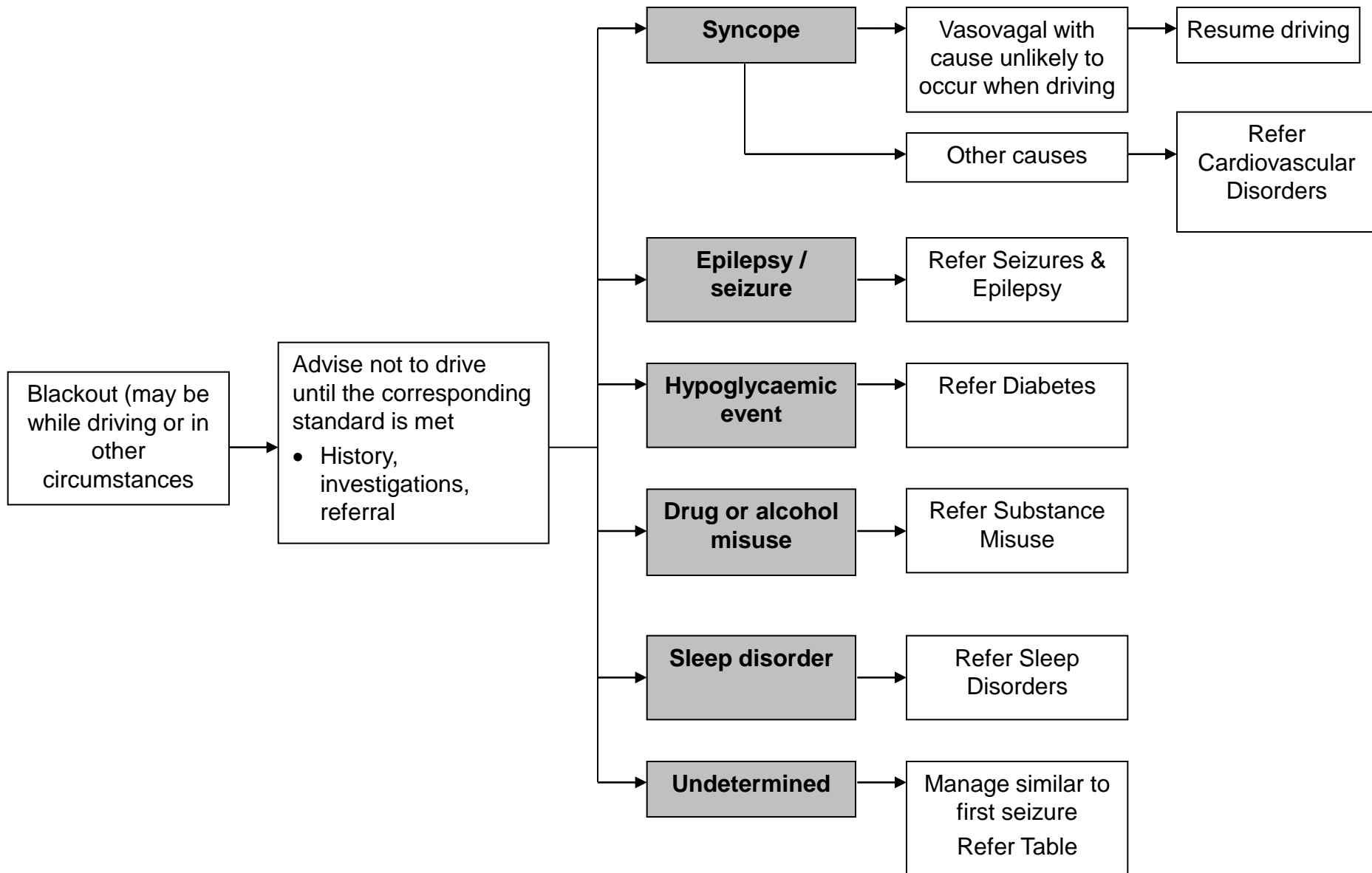
- Specialist assessment and review generally required for conditional licences
- Limited exceptions for common conditions such as hypertension and diabetes controlled by metformin alone
- Where access limited
 - initial specialist assessment followed by periodic review by treating GP, with agreement of specialist, GP and DLA
 - temporary granting of a conditional licence based on GP opinion pending assessment by a specialist – only for conditions where there is no risk of sudden incapacity or loss of concentration e.g. early diabetes
 - use of telemedicine encouraged, and now covered by Medicare

Blackouts

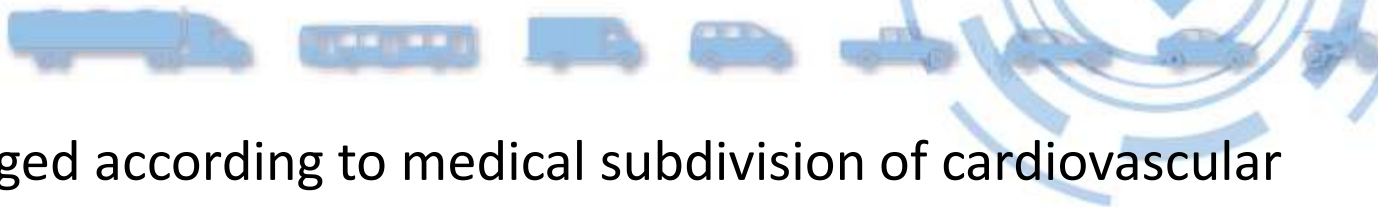


- Feedback pointed to lack of consistency amongst the various causes of blackout
- Extensively revised to cover all causes of blackouts with cross references to appropriate chapters
- Non-driving periods made consistent with related conditions
- For blackouts of **undetermined origin** there is an increased non-driving period for commercial drivers -from 6 months to 5 years, consistent with a first seizure.

Management of blackouts and driving



Cardiovascular conditions



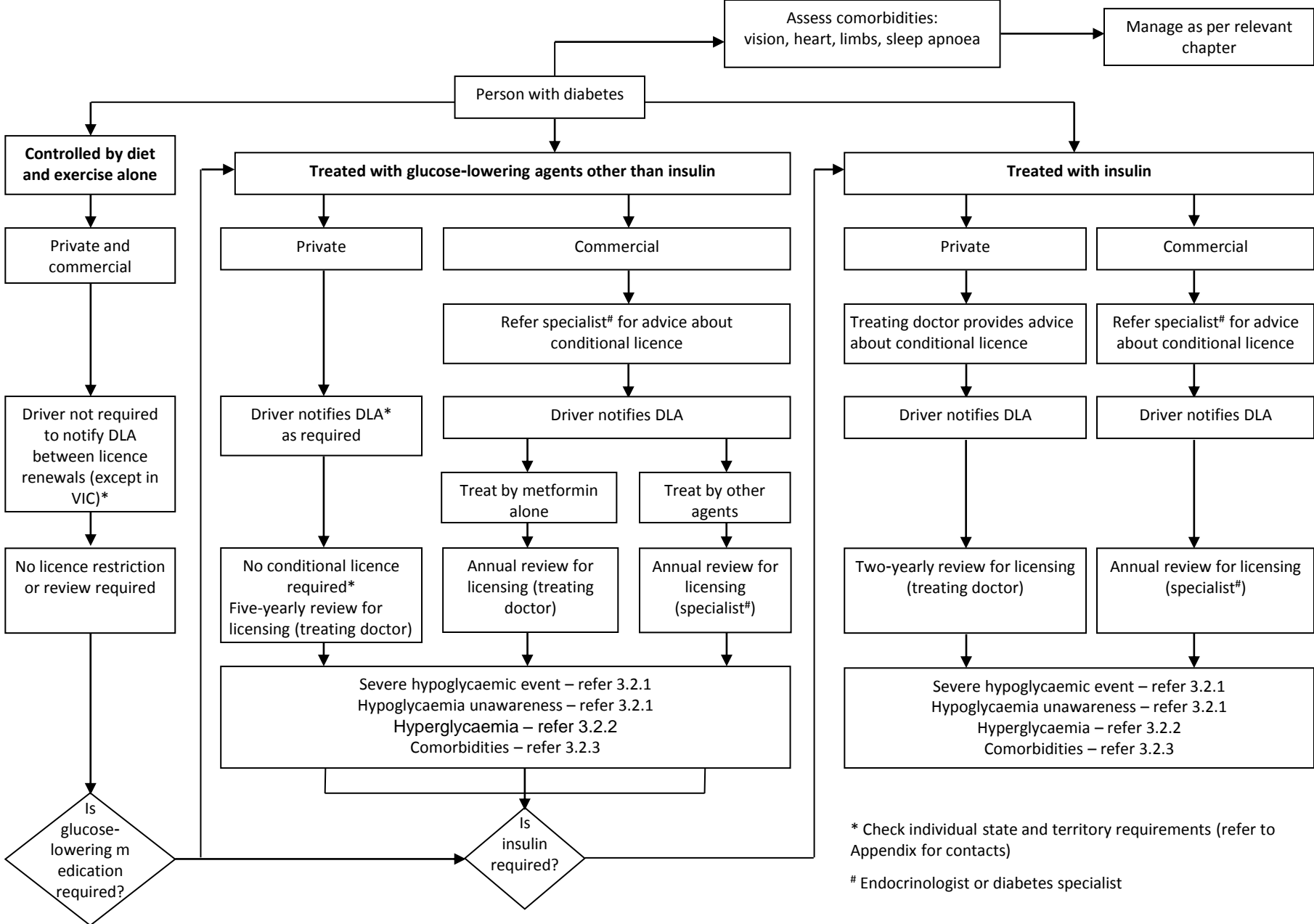
- Arranged according to medical subdivision of cardiovascular conditions for ease of use e.g. ischaemia, arrhythmia, etc.
- Non-driving period for commercial vehicle drivers after an AMI reduced from 3 months to 4 weeks.
- Non-driving period for commercial drivers after cardiac arrest set at 6 months – previously at discretion of treating specialist.
- Inclusion of age adjustment to make Bruce Step Test fairer.
- Standard for high blood pressure reflects the main risk being very high BP
- Consideration given to inclusion of cardiac risk score

Diabetes



- Increased focus on risks associated with hypoglycaemic unawareness - excludes holding a commercial licence until treated.
- GP may undertake conditional licence reviews for commercial drivers on metformin alone.
- Clearer guidelines on management of severe hypoglycaemic episodes.
- Definition of “adequate control” has been included (HbA1C <9%)
- Diabetes Society has developed useful resources to support driver education

Management of diabetes and driving



* Check individual state and territory requirements (refer to Appendix for contacts)

Endocrinologist or diabetes specialist

Hearing



- Road standard is largely unchanged (no standard for private, standard for commercial vehicle drivers)
- Allowance is now made for commercial vehicle drivers with congenital or childhood hearing loss
- Identified for major review next time as evidence lacking for crash risk associated with hearing loss
- NZ standard considers hearing requirements for communication for public passenger drivers – this is fitness for duty and not considered in the AFTD standard

Musculoskeletal conditions



- New standard is based on functional requirements to control a vehicle – not simple anatomical considerations
- Congenital and non-progressive disorders may not require ongoing periodic review
- Clarity regarding role of practical driver assessments
- Reference to non-driving period for fractures deleted

Neurological conditions

a) Dementia



- Chapter on older drivers deleted in place of general guidance in Part A regarding multiple medical conditions and age-related changes
- Content on dementia expanded and updated to provide advice regarding assessment and management of Alzheimer's disease and other forms of cognitive impairment
- Given the progressive nature of the condition, diagnosis of dementia now the trigger for consideration of a conditional licence and periodic review
- Inclusion of links to driver / carer resources
- Clarity around role of practical driver assessment

Neurological conditions

b) Epilepsy



- Extensively revised for clarity, logic and internal consistency
- The standard is based on a default position (1 year seizure free non-driving period for private, 10 years for commercial drivers)
- Some “reductions” in the non-driving period allowed (e.g for childhood seizures, sleep only seizures etc). Most do not apply to commercial vehicle driver
- There is some allowance for special cases on the advice of a specialist in epilepsy

Psychiatric conditions



- Revised to place emphasis on conditions having severe impact on behaviour, cognitive function or perception – not having a psychiatric condition *per se*.
- Advice is given on use of MSE in assessment.
- No specified non-driving periods for commercial drivers.

Sleep disorders



- Minimal changes - mainly to improve clarity.
- Ability to test for OSA by mail packages will help assessments in rural areas.
- Some stakeholders suggested inclusion of criteria relating to obesity as a risk factor for sleep disorders – not within scope of licensing criteria but may be a consideration of “fit for duty subject to review”

Substance misuse



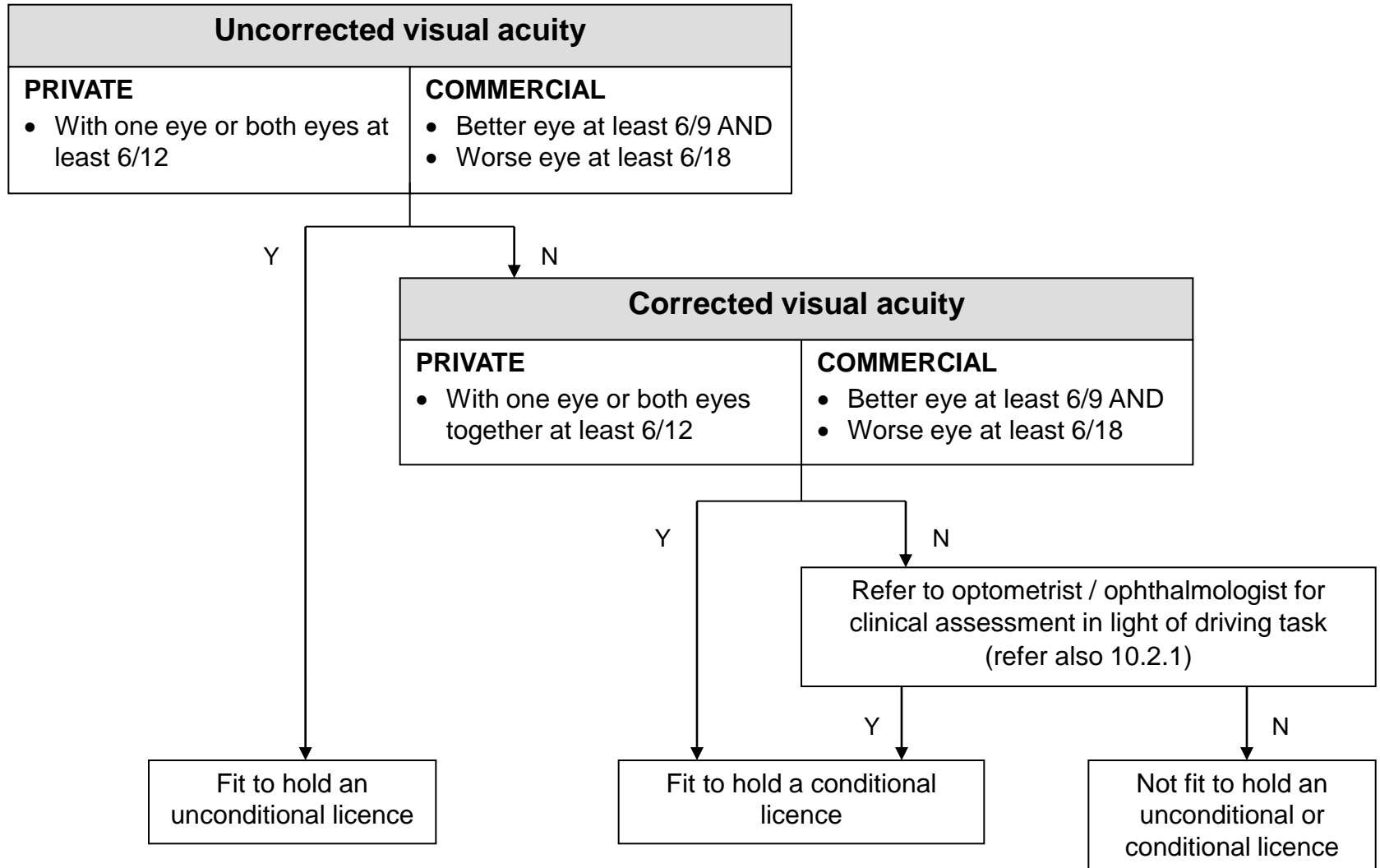
- Chapter combines chronic alcohol use, prescribed and illicit drug misuse as the functional impact is similar.
- Minimal content in relation to acute impairment.
- Non driving remission period of at least 3 months for commercial drivers – verifiable by biological monitoring.
- Advice on prescribed medication is now in Part A.

Vision



- Criteria remain unchanged although improved clarity.
- Flow chart for testing acuity supports understanding of the steps and criteria.
- When detailed visual field testing is required use Esterman (not Goldman).
- Night blindness standard abolished (RANZCO).

Visual acuity requirements



Resources and support

- New Austroads website
- Client information sheets
- Links to State based resources



Driving and Your Health

YOUR QUESTIONS ANSWERED

For most people being able to drive a motor vehicle is a key part of their daily life. For many people it's a key part of their ability to work, study, and for accessing their everyday needs, such as food and recreation. Driving might also be essential for work or school.

But with the benefits of being able to drive, also come certain responsibilities, and one of those responsibilities is to make sure you are well enough to drive safely.

Certain health conditions can affect your ability to drive safely, either in the short term or more permanently. This brochure explains:

- The types of illnesses that might affect your ability to drive safely
- How medical advice in terms of assessing driving and roadworthiness from licensing authorities
- How your doctor can help you
- Where to go for further information and assistance

WHAT TYPE OF HEALTH CONDITIONS MIGHT AFFECT YOUR ABILITY TO DRIVE SAFELY?

Driving a motor vehicle is a complex task requiring attention, good judgement, responsiveness and reasonable physical capability. A range of medical conditions, as well as treatment, may therefore impact your driving ability. Certain examples include:

- Stroke or falling
- Dementia and cognitive impairment
- Seizures and epilepsy
- Other neurological conditions
- Diabetes
- Psychiatric conditions
- Heart disease
- Sleep disorders
- Vision problems
- Alcohol and substance misuse
- Age-related decline

Just because you have a disease or condition that might affect your driving doesn't mean that you won't be able to drive at all. It might mean that you have to see your doctor more often to check that your condition is well managed and it might mean that there are some conditions placed on your driving.

WHO MAKES THE RULES ABOUT WHETHER YOU ARE WELL ENOUGH TO DRIVE?

The rules about health and driving are developed by medical experts and are agreed to by all driver licensing authorities.

Your doctor does not make the rules but provides advice about how your particular health condition might affect your ability to drive safely and how it might be managed. The driver licensing authority always makes the final decision about your licence status. They will consider the advice of your doctor as well as other factors such as your accident history and the type of vehicle you drive (for example a truck, car or a public passenger vehicle).

WHAT ARE YOUR LEGAL RESPONSIBILITIES?

All states and territories in Australia have laws about reporting health conditions that might affect your ability to drive safely. These laws have been created to protect public safety.

The laws require you to report to your driver licensing authority, any permanent or long term illness that is likely to affect your ability to drive safely.

Your doctor is able to advise you on whether or not you should be requiring a condition to the driver licensing authority. When you report your illness it doesn't necessarily mean that your licence will be taken away, it does mean that the driver licensing authority can work with you and your doctor to manage your condition with respect to your driving.

WHAT IF YOUR CONDITION IS ONLY TEMPORARY?

Many temporary conditions will prevent you from driving. For example, following an operation your doctor will advise you not to drive for 24 hours or more. An injury, such as a broken leg may also prevent you from driving. In these types of circumstances your doctor will advise you about the need to restrict your driving in the short term. It is most cases your doctor's advice will be effective and you will not need to report the temporary medical condition to the driver licensing authority.

HOW WILL YOUR DOCTOR ASSESS WHETHER OR NOT YOU SHOULD BE DRIVING?

When assessing your ability to drive safely, your doctor will consider your physical and psychological health. He or she will refer to a book of medical standards which is used by all doctors throughout Australia and which describes specific requirements for various diseases and conditions. You can view these standards on the internet at: www.austroads.com.au

Sometimes it can be difficult to make an assessment and your doctor may refer you for a practical driver assessment or to a medical specialist.

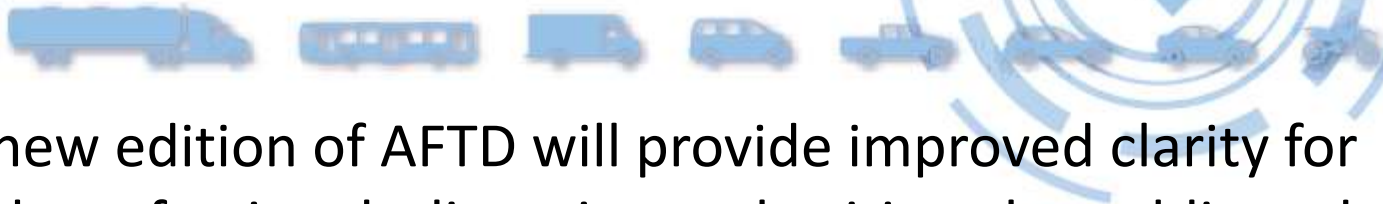
Resources and support



- Safe Drive Medical course
 - Accredited by RACGP
 - Attracts 1 CME point per hour for RACP
 - Can contribute to the 25 hour per year requirements for nursing CPD



Conclusions



- The new edition of AFTD will provide improved clarity for health professionals, licensing authorities, the public and the courts about the assessment of persons regarding fitness to drive
- There are a number of significant changes but the majority of criteria remain unchanged
- There remains a number of administrative inconsistencies between the States and Territories which impact on consistency of patient management with respect to driving
- There remains a need for fitness for duty standards for high risk commercial vehicle drivers.