



Sláinte agus Tiomáint Medical Fitness to Drive Guidelines

Medical Fitness to Drive Guidelines (Group 1 and 2 Drivers)

March 2015

An tÚdarás Um Shábháilteacht Ar Bhóithre Road Safety Authority

This document will replace all preceding editions of <i>Sláinte agus Tiomáint</i> and <i>Medical Aspects of Driver Licensing A Guide for Registered Medical Practitioners 2010</i> . Further amendments, changes or editions will be made available electronically on www.rsa.ie and www.ndls.ie
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Údarás Um Shábháilteacht Ar Bhóithre Road Safety Authority

Sláinte agus Tiomáint Medical Fitness To Drive Guidelines

(Group 1 and Group 2 Drivers)

March 2015 4th Edition

National Programme Office for Traffic Medicine Royal College of Physicians of Ireland (RCPI)/Road Safety Authority (RSA)

Road Safety Authority

Legal Disclaimer

The Guidelines for medical fitness to drive *Sláinte agus Tiomáint* ('the Guidelines') have been compiled by the Road Safety Authority in conjunction with the National Programme Office for Traffic Medicine* using all reasonable care and are based on expert medical opinion and relevant literature at the time of printing. A limited number of sections relating to diabetes, epilepsy vision and neurology disease and obstructive sleep apnoea syndrome as set by 2009/113/EC and 2014/85/EU Directives (amending Directive 2006/126/EC) have the force of law implemented by regulations 12 and 20 of the Road Traffic (Licensing of Drivers) Regulations 2006, Statutory Instruments Number 537 of 2006, as amended by the Road Traffic (Licensing of Drivers) (Amendment) (No.) Regulations 2010, Statutory Instruments Number 544 of 2010. These will be marked with an EU Symbol in the Guidelines. Neither the Road Safety Authority nor the National Programme Office for Traffic Medicine nor the Royal College of Physicians of Ireland to which it is also associated accepts responsibility for any consequences arising from their application, including any liability in respect of any claim or cause of action arising out of, or in relation to, the use or reliance on the Guidelines.

Health professionals should keep informed of any changes in health care and health technology that may affect their assessment of drivers. They should also maintain an awareness of any changes in the law that may affect their legal responsibilities.

^{*}The National Programme Office for Traffic Medicine was established as a joint initiative between the Road Safety Authority and the Royal College of Physicians of Ireland of Ireland in 2011.

Foreword

Sláinte agus Tiomáint provides guidance on medical fitness for drivers and highlights the need for all of us to appreciate that the state of our health impacts, to a greater or lesser degree, on our ability to drive safely. Driver fitness is governed by EU law and regulations made in Ireland under the Road Traffic Acts. Sláinte agus Tiomáint is an interpretation of these laws; however, the Directive/regulations form the overriding legal basis for driver medical fitness in Ireland.

One of the objectives of Sláinte agus Tiomáint is to promote mobility and to do this in a way that is consistent with safety on our roads. Once a driver is aware of any health aspects that impact on driving and follows the advice of their doctor, they can continue to drive in most cases.

Sláinte agus Tiomáint forms one part of a broader information and communication campaign to increase awareness among medical professionals and the wider public about fitness to drive. Sláinte agus Tiomáint was developed by the National Programme Office for Traffic Medicine which has been established as a joint initiative between the Road Safety Authority and the Royal College of Physicians of Ireland. In developing the Guidelines, the National Programme Office for Traffic Medicine engaged widely with stakeholders to ensure that they reflect good practice.

The Office also works to ensure that all doctors, healthcare disciplines, medical professionals, An Garda Síochána and transport professionals have training and support for the practical implementation of the guidelines on the ground. Sláinte agus Tiomáint is an important addition to the range of initiatives that ensures we can continue to drive safely on our roads.

Moyagh Murdock, CEO **Road Safety Authority**

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AA Ireland

Nursing and Midwifery Board of Ireland

An Garda Síochána

Association of Occupational Therapists of Ireland

Association of Optometrists Ireland Clinical Pharmacology, RCSI College of Psychiatry of Ireland Coroners Society of Ireland

Coroners Society & Forensic and Legal Medicine and the

Medical Bureau of Road Safety Faculty of Occupational Medicine Faculty of Public Health Medicine Health and Safety Authority

Irish Association for Emergency Medicine Irish Association of Rehabilitation Medicine

Irish Cardiac Society

Irish College of General Practitioners

Irish College of Nephrology Irish College of Ophthalmologists

Irish Endocrine Society

Irish Institute of Clinical Neuroscience

Irish Institute of Trauma and Orthopaedic Surgery

Irish Association of Orthoptists Irish Patients Association

Irish Society of Community & Public Health Medicine

and HSE Principal Medical Officers Group Irish Society of Physicians in Geriatric Medicine

Irish Society of Rheumatology

Irish Thoracic Society

National Programme Office for Traffic Medicine

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Royal College of Physicians of Ireland

Mr Conor Faughnan Ms Kathleen Walsh

Superintendent Pat McCabe

Dr Tadhg Stapleton Mr Martin O'Brien Prof David Williams Dr Paul Fearon Dr Brian Farrell Prof Denis Cusack

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Part A: General information

Chapter 1

1.0 Introduction

This publication summarises Irish medical guidelines of fitness to drive. The information in these Guidelines are intended to assist doctors and other healthcare professionals in advising their patients on fitness to drive, requirements for reporting to their National Driver Licence Service (NDLS)* and guidance on review of stability, progression or improvement of these conditions. It should be used by health professionals when:

- Treating any patient who holds a driver licence whose condition may impact on their ability to drive safely. The majority of adults drive, thus a health professional should routinely consider the impact of a patient's condition on their ability to drive safely. Awareness of a patient's occupation or other driving requirements is also helpful.
- Undertaking an examination at the request of NDLS:
 - Assessing a person whose driving the NDLS believes may be unsafe (i.e. 'for cause' examinations).
 - For licence renewal of an older driver.

This publication focuses on long-term health and disability-related conditions and their associated functional effects that may impact on driving. It sets out clear minimum medical requirements for licensing and forms the medical basis of decisions made by the NDLS. This publication also provides general guidance with respect to patient management for fitness to drive.

This publication is intended for use by any health professional who is involved in assessing a person's fitness to drive including but not confined to:

- medical practitioners (general practitioners (GP and other specialists)
- optometrists
- · occupational therapists
- psychologists
- physiotherapists
- alcohol and drug addiction counsellors

These medical standards refer to Group 1 and Group 2 licence holders. The categories are outlined below.

These Guidelines are a part of a larger project of the National Programme Office for Traffic Medicine a joint initiative between the Road Safety Authority and the Royal College of Physicians of Ireland. This larger project will encompass the annual renewal and updating of Group 1 and Group 2 medical fitness to drive guidelines in conjunction with the delivery of education and research supports and developments such as conditional or restricted licences. The literature searches underpinning the annual review of the guidelines are available on the website of the National Programme Office for Traffic Medicine www.rcpi.ie/trafficmedicine

Group 1 Categories A, A1, A2, AM, B, BE, or W i.e. motorcycles, cars and tractors (with or without trailer).

Group 2 Categories C, CE, C1, C1E, D, DE, D1 or D1E i.e. truck and bus (with or without trailer).

The vehicles in Group 2 are regarded as higher-risk vehicles which require a higher standard of physical and mental fitness on the part of the driver.

Contact Details for Medical Fitness to Drive Email: medicalfitness@rsa.ie

Website: www.ndls.ie telephone no.: 1890406040

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1.1 Traffic medicine and the compilation of the guidelines

Although the first automobile fatality in the world occurred in Ireland in 1859¹, Traffic Medicine is a relatively new specialism embracing all those disciplines, techniques, and methods aimed at reducing the harm traffic crashes inflict on human beings (International Traffic Medicine Association, 2009). There is also an enabling/rehabilitative element which tries to ensure that transport mobility (an important constituent of well-being and social inclusion) is not hampered, or rendered unsafe, by remediable illness or functional loss.

It involves a wide range of disciplines, with a rapidly increasing research database which encompasses an active process of reflection, debate and consensus to maximise safe mobility. The most visible face of Traffic Medicine in most jurisdictions is the 'medical fitness to drive' aspect of driver licensing. Support for the approach of using evidence based guidelines is provided by evidence of a significant drop in crashes among drivers when such guidelines are systematically applied².

These Guidelines represent a synthesis of current research and clinical practice on medical fitness to drive as interpreted by the National Programme Office for Traffic Medicine, a joint initiative of the Road Safety Authority and the Royal College of Physicians of Ireland (see Acknowledgements). The contributors to the RCPI Working Group on Traffic Medicine includes virtually every medical specialty relevant to medical fitness to drive, as well as associated disciplines, the Irish Patients' Association, the Garda S'och‡na and the Automobile Association.

The Guidelines are based on four major sources of knowledge: i) Significant articles in the peer reviewed literature³;ii) Position papers by scientific organisations⁴; iii) National guidelines, particularly those of the UK Driver and Vehicle Licensing Agency, Australia's Austroads, the Canadian Medical Association (CMA), the American Medical Association (AMA) as well as the US FMCSA Medical Examiner Handbook Information for Group 2⁵; iv) the 'grey' literature including reports from the US Transportation Research Board, UK Transport Research Laboratory and other sources⁶. In addition, some key overview reports are used⁷ and the Directives of the European Union provide a legislative framework for some aspects, particularly vision, diabetes, epilepsy and sleep apnoea⁸.

Annual syntheses of emerging research from medical databases are prepared each year and distributed to the Working Group and its sub-groups to aid in the deliberations on potential revisions of each section. The key search strategy is through the Medical SubHeading term "Automobile Driving" in the MedLine database, with allocation of the results to the various sections of the guide (see NPOTM website for 2014 searches). Given that any one recommendation may affect practice across many disciplines, the various aspects of medical fitness to drive are examined by various sub-groups (Vision, Substance Abuse, Diabetes, Cardiology, Psychiatry and Rehabilitation) but also by the whole Working Group.

- 1. Fallon I, O'Neill D. The world's first automobile fatality. Accid Anal Prev 2005 Jul;37(4):601-3.
- Redelmeier DA, Yarnell CJ, Thiruchelvam D, Tibshirani RJ. Physicians' warnings for unfit drivers and the risk of trauma from road crashes. N Engl J Med. 2012 Sep 27;367(13):1228-36.
- 3. e.g. Laberge-Nadeau, Trucks and Diabetes, Diabetes Care, 2000;23:612-7; Hansotia P, Broste SK. The effect of epilepsy or diabetes on the risk of automobile accidents. N Eng J Med. 1991;324:22-26.
- e.g. American Diabetes Association, Lorber D, Anderson J, Arent S, Cox DJ, Frier BM, Greene MA, Griffin JW Jr, Gross G, Hathaway K, Kohrman DB, Marrero DG, Songer TJ, Yatvin AL. Diabetes and driving. Diabetes Care. 2013 Jan;36 Suppl 1:580-5; American Academy of Neurology, American Epilepsy Society, Epilepsy Foundation of America. Consensus statements, sample statutory provisions, and model regulations regarding driver licensing and epilepsy. Epilepsia. 1994;35:696-705; Iverson, D.J., et al., Practice parameter update: evaluation and management of driving risk in dementia: report of the Quality Standards Subcommittee of the American Academy of Neurology. Neurology, 2010. 74(16): p. 1316-24.
- 5. e.g. DVLA, http://www.gov.uk/government/publications/at-a-glance; Austroads, http://www.austroads.com.au/assessing-fitness-to-drive; / CMA, http://www.cma.ca/ AMA, http://www.ama-assn.org/ama; FMCSA, http://nrcme.fmcsa.dot.gov/mehandbook/part_4_work_ep.aspx;
- e.g. Medical Conditions and Driving: A Review of the Scientific Literature (1960–2000), Technical Report for the National Highway and Traffic Safety
 Administration and the Association for the Advancement of Automotive Medicine Project, Washington, TRB's Conference Proceedings 27 Transportation in an
 Aging Society: A Decade of Experience. Washington DC, Transportation Research Board, 2004; Tunbridge, RJ, Keigan, M, James, FJ. The incidence of drugs and
 alcohol in road accident fatalities, Crowthorne, Transport Research Laboratory, 2001.
- 7. Vaa T. (2003) Impairment, Diseases, Age and Their Relative Risks of Accident Involvement: Results from Meta-Analysis, TØI Report 690 for the Institute of Transport Economics, Oslo, Norway; Charlton JL, Koppel S, Odell M, Devin A, Langford J, O'Hare M, et al. Influence of chronic illness on crash involvement of motor vehicle drivers. 2nd ed. Report 300. Victoria, Australia: Monash University Accident Research Centre; 2010; Available: www.monash.edu.au/miri/research /reports/muarc300.html (accessed 2012 Oct. 10); Dobbs BM. (2005) DC; Marshall, Shawn C. (2008). The Role of Reduced Fitness to Drive Due to Medical Impairments in Explaining Crashes Involving Older Drivers. Traffic Injury Prevention, 9 (4), 291-298.
- 8. Directive 80/1263/EEC; Directive (91/439/EEC); Directive 2006/126; Directive 2009/113/EC; Directive 2014/85/EU.

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The determination of the guidelines, and their annual review. is based on a number of factors, including likelihood of crash relating to factors associated with each illness, the importance of personal transport, fit with the practice and working of the Irish health services, European Union legislation and interdisciplinary perspectives.

The perspective of both drivers and patients is incorporated through their review of the material processed through the Working Group: the incorporation of such perspectives is a topic which is not covered in the research literature on medical fitness to drive but thus far has been consensual in the development and review of the Irish guidelines.

In addition, and consistent with good practice in guideline preparation9, external review of the guidelines is undertaken by an international expert in the field. Finally, the NPOTM also reviews the utility and applicability of the guidelines with end users¹⁰. The NPOTM is joint-funded by the Road Safety Authority and RCPI, the preparation and review process of these guidelines is editorially independent from both bodies.

We are fortunate to be able to work with, and draw on the experience of, the UK Driver and Vehicle Licensing Authority (DVLA). The Irish Guidelines are to a very significant extent based on its At a Glance Guide to the current Medical Standards of Fitness to Drive, and some of the specialist contributors to the Guidelines are honorary members of the Advisory Panels of the DVLA. These Panels, which meet biannually, consist of doctors and other professionals eminent in the respective of cardiology, neurology, diabetes, vision, alcohol/substance misuse and psychiatry together with lay members. Consequently, both the Irish and UK standards are reviewed and updated regularly.

Whilst every effort has been made to ensure the accuracy of the information contained, no guarantees can be given concerning the completeness or up-to-date nature of the information provided in these Guidelines, which are only accurate at the time of publication. Health Professionals should keep themselves up-to-date with changes in medical knowledge and technology that may influence their assessment of drivers, and with legislation that may affect the duties of the health professional or the driver. Therefore, neither the Road Safety Authority nor the National Programme Office for Traffic Medicine nor the Royal College of Physicians of Ireland accept liability whatsoever arising from errors or omissions in the Guidelines.

It is also emphasised that the majority of these Guidelines are for use as guidance only, and should be viewed in the context of appropriate Continuing Professional Development on the topic of medical fitness to drive, as well as referral for appropriate specialist advice. However, a limited number, relating to diabetes, epilepsy vision, neurological diseases and obstructive sleep apnoea syndrome, have the force of law, by virtue of the confirmation of the 2009 Directive and 2014 Directive into regulations 12 and 20 of the Road Traffic (Licensing of Drivers) Regulations 2006, Statutory Instruments Number 537 of 2006, as amended by the Road Traffic (Licensing of Drivers) (Amendment) (No.) Regulations 2010, Statutory Instruments Number 544 of 2010. These will be marked with an EU Symbol in the Guidelines.

Rapoport MJ, Weegar K, Kadulina Y, BŽdard M, Carr D, Charlton J, Dow J, Gillespie I, Hawley C, Koppel S, McCullagh S, Molnar F, Murie-Fern‡ndez M, Naglie G, O'Neill D, Shortt S, Simpson C, Tuokko H, Vikljan B, Marshall S. AnInternational Study of the Quality of National-Level Guidelines on Driving with Medical Illness. QJM. 2015 Feb 5. pii: hcv038. [Epub ahead of print] PubMed PMID:25660605.

^{10.} Kahvedžić A, Mcfadden R, Cummins G, Carr D, O'Neill D. Impact of new guidelines and educational programme on awareness of medical fitness to drive among general practitioners in Ireland. Traffic Inj Prev. 2014 Oct 30:0. [Epubahead of print]

2.0 Roles and responsibilities

Table 1: Roles and responsibilities of drivers, health professionals and driver licensing authorities

Drive

- To report to the National Driver Licence Service (NDLS) and their insurance provider any long-term or permanent
 injury or illness that may affect their ability to drive without elevated risk: if holding a licence from an EU country
 other than Ireland, or a recognised country for licence exchange, and developing a condition which could elevate
 risk of impairment while driving, the driver must contact the NDLS to arrange for an exchange of their licence.
- To respond truthfully to questions from the health professional regarding their health status and the likely impact on their driving ability.
- To adhere to prescribed medical treatment and monitor and manage their condition(s) and any adaptations with ongoing consideration of their fitness to drive.
- To comply with requirements of their licence as appropriate, including periodic medical reviews.

Health professional

- To assess the person's medical fitness to drive based on the current Sláinte agus Tiomáint medical standards.
- To advise the person regarding the impact of their medical condition or disability on their ability to drive and recommend restrictions and ongoing monitoring as required.
- To advise the person of their responsibility to report their condition to the NDLS if their long-term or permanent injury or illness may affect their ability to drive.
- · To treat, monitor and manage the person's condition with ongoing consideration of their fitness to drive.
- To report to the NDLS regarding a person's fitness to drive in the exceptional circumstances where there is a risk to the public and the driver cannot or will not cease driving.

National Driver Licence Service (NDLS)

- To make all decisions regarding the licensing of drivers. The NDLS will consider reports provided by health
- To inform the driving public of their responsibility to report any long-term or permanent injury or illness to the NDLS if the condition may affect their ability to drive safely.
- Will act on reports of third parties, Gardaí, general public and healthcare workers regarding concerns of public safety relating to medical fitness to drive.

2.1 Roles and responsibilities of the NDLS

The responsibility for issuing, renewing, suspending, withdrawing, refusing or cancelling a person's driving licence lies ultimately with the NDLS. Licensing decisions are based on a full consideration of relevant factors relating to the driver's health and driving performance record. In making a licensing decision, the authority will seek input regarding a person's medical fitness to drive, either directly from the driver and/or from a health professional by way of D501 Medical Report. Where appropriate, the authority will also consider unsolicited reports from health professionals or the police regarding a person's fitness to drive. Payments for health examinations or assessments related to fitness to drive are not the responsibility of the NDLS.

An appeals mechanism is available for drivers who have been refused a licence on medical grounds. The NDLS will inform drivers of the appeals process when informing them of the licensing decision.

2.2 Roles and responsibilities of drivers

Irish and EU legislation requires that a driver should advise the NDLS of any long-term or permanent injury or illness that may elevate risk of impairment while driving.

Regulations 12 and 20 of the Road Traffic (Licensing of Drivers) Regulations 2006, Statutory Instruments Number 537 of 2006, as amended by the Road Traffic (Licensing of Drivers) (Amendment) (No. 2) Regulations 2010, Statutory Instruments Number 544 of 2010, give effect to Commission Directives regarding medical criteria for certification of fitness to drive, in particular relating to diabetes, epilepsy vision, neurological diseases and obstructive sleep apnoea syndrome.

At licence application and renewal, drivers complete a declaration regarding their health, including whether they have any relevant medical conditions from a list of 23 medical conditions. As advised on the Driver Application/Renew Form, when the listed medical conditions are present the NDLS requests that a medical examination is required to confirm a driver's fitness to hold a driver licence. In the case of medical examinations requested by the NDLS, drivers have a duty to declare their health status to the examining health professional. Drivers are also required to report to the NDLS when they become aware of a health condition that may affect their ability to drive safely.

A driver should not drive while medically unfit to do so and can be convicted of an offence for doing so. Under Sections 32 and 48 of the Road Traffic Act 1961, drivers should be aware that there may be long-term financial, insurance and legal consequences where there is failure to report a medical condition that may impact on their ability to drive safely to the NDLS and insurance provider. Drivers must adhere to prescribed medical treatment and monitor and manage their condition(s) and any adaptations with ongoing consideration of their fitness to drive.

2.3 Roles and responsibilities of health professionals

Drivers rely on health professionals to advise them if a permanent or long-term injury or illness could elevate risk of impairment while driving, and whether it should be reported to the NDLS. The health professional has an ethical obligation, and potentially a legal one, to give clear advice to the driver in cases where an illness or injury may elevate risk of impairment while driving, and to maximise health and function so as to facilitate ease and driving safety. In the case of an incident illness which may affect driving ability, it is the responsibility of the healthcare professional attending the patient for the relevant care episode to advise the patient on medical fitness to drive.

There may be options other than complete cessation of driving where a driver presents with a particular condition, a restriction such as a modified braking system can be coded on the driving licence allowing for safer mobility. In the future the RSA will be providing for additional codes which will include a code for restricting driving to daytime only. Health professionals are advised to note in the medical record the nature of the advice given.

When what appears to be dangerous driving, possibly related to medical fitness to drive issues, is reported to a healthcare professional by a third party, it is a misguided kindness to pursue an exclusively medical approach. Dangerous driving is a hazard to the driver and other road users and is a statutory offence so people who witness dangerous driving should report it immediately to the Gardaí - a useful number is the Traffic Watch lo-call number 1890 205 805. Unless witnessed by the healthcare professional directly, the onus for reporting lies with the person witnessing the alleged dangerous driving. The medical issues can be pursued at a later stage.

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Underlying the professional obligation to manage risk and fitness to drive, there is also a professional and moral obligation to recognise and support mobility through appropriate diagnosis, treatment and support, as the consequences of driving cessation can lead to serious health, mobility and quality of life concerns as well¹¹.

2.3.1 Confidentiality, privacy and reporting to the NDLS

Health professionals have both an ethical and legal duty to maintain patient confidentiality. The ethical duty is generally expressed through codes issued by professional bodies. The legal duty is expressed through legislative and administrative means, and includes measures to protect personal information about a specific individual. The duty to protect confidentiality also applies to the NDLS. The patient–professional relationship is built on a foundation of trust. Patients disclose highly personal and sensitive information to health professionals because they trust that the information will remain confidential. If such trust is broken, many patients could either forego examination/treatment and/or modify the information they give to their health professional, thus placing their health at risk.

Although confidentiality is an essential component of the patient-professional relationship, there are, on rare occasions, ethically and/or legally justifiable reasons for breaching confidentiality. With respect to assessing and reporting fitness to drive, the duty to maintain confidentiality is legally qualified in certain circumstances in order to protect public safety. The Irish Medical Council Guidelines provide for breach of confidentiality if the driver represents a risk to the safety of others, refuses or cannot inform the NDLS, fails to stop or adapt driving appropriately, and is not amenable to appropriate persuasion and discussion. The health professional should consider reporting directly to the NDLS in situations where the driver is:

- Unable or unwilling to appreciate the impact of their condition which is impacting on their fitness to drive;
- Unable or unwilling to take notice of the health professional's recommendations; and
- Continues driving despite appropriate advice and is likely to endanger the public.

If the situation is urgent and rises outside of normal NDLS working hours and in the opinion of the health professional is likely to prove a significant threat to the public, consideration should be given to inform the Gardaí.

A positive duty is imposed on health professionals to notify the relevant authority in writing of a belief that a driver is physically or mentally unfit to drive, poses a risk to public safety and is not compliant with professional advice to stop driving. It is preferable that any action taken in the interests of public safety should be taken with the consent of the driver wherever possible and should certainly be undertaken with the driver's knowledge of the intended action to the greatest extent possible. The driver should be fully informed as to why the information needs to be disclosed to the NDLS, and be given the opportunity to consider this information. Failure to inform the driver will only exacerbate the driver's (and others') mistrust in the patient–professional relationship.

It is recognised that there might be an occasion where the health professional feels that informing the driver of the disclosure may place the health professional at risk of violence. Under such circumstances, the health professional must consider how to appropriately manage such a situation. In making a decision to report directly to the NDLS, it may be useful for the health professional to consider:

- The seriousness of the situation (i.e. the immediate risks to public safety).
- The risks associated with disclosure without the individual's consent or knowledge, balanced against the implications
 of non-disclosure.
- The health professional's ethical and professional obligations.
- Whether the circumstances indicate a serious and imminent threat to the health, life or safety of any person.

^{11.} Oxley, J., & Whelan, M. (2008). It cannot be all about safety: the benefits of prolonged mobility. Traffic injury prevention, 9(4), 367-378

Examinations requested by the NDLS

When a driver presents for a medical examination at the request of the NDLS, the situation is different with respect to confidentiality. The driver will present with a form or letter from the NDLS, requesting an examination for the purposes of licence application or renewal. In the future the completed form will generally be returned by the driver to the NDLS, thus there is no risk of breaching confidentiality or privacy, provided only information relevant to the driver's driving ability is included on the form, and a copy of the form/report should be retained by the assessing clinician.

Privacy legislation

All health professionals and the NDLS should be aware of data protection and other applicable legislation when collecting and managing patient information and when forwarding such information to third parties.

2.3.2 Patient-health professional relationship

It is expected that the health professional will be able to act objectively in assessing a patient's fitness to drive. If this cannot be achieved, for example, where there may be the possibility of the patient ceasing contact or avoiding all medical management of their condition, health professionals should be prepared to disqualify themselves and refer their patient to another practitioner.

2.3.3 Adverse patient reaction towards the health professional

Sometimes patients feel affronted by the possibility of restrictions to their driving or withdrawal of their licence, and may be hostile towards their treating health professionals. In such circumstances, the health professional may elect to refer the driver to another practitioner or may refer them directly to the NDLS without a recommendation regarding fitness to drive with the former being the preference of the NDLS, as a completed D501 Medical Report is required in such cases to inform the licensing decision. The NDLS recognise that it is their role to enforce the laws on driver licensing and road safety and will not place pressure on health professionals that might needlessly expose them to risk of harassment or intimidation. In addition guidelines of the medical council on hostile and violent behaviour i.e. Guide to professional conduct and ethics for registered medical practitioners' s.14.1 should be considered. In addition, particularly for conditions such as dementia where insight may be reduced, helpful guides are available for the manner in which such conversations may be managed by doctors, families and patients from the Hartford Foundation http://hartfordauto.thehartford.com/UI/ Downloads/Crossroads.pdf and the Alzheimer Society of Ireland http://www.alzheimer.ie/Alzheimer/media/SiteMedia/ Helpline%20and%20Information%20Resources/pwd%20resources/Driving-and-dementia_FactSheet_web.pdf

2.3.4 Dealing with individuals that are not regular patients

Care should be taken when health professionals are dealing with drivers who are not regular patients. Some drivers may seek to deceive health professionals about their medical history and health status, and may 'doctor shop' for a desirable opinion. If a health professional has doubts about an individual's reason for seeking a consultation, they should consider:

- Asking permission from the individual to request their medical file from their regular health professional.
- · Conducting a more thorough examination of the individual than would usually be undertaken.

2.4 Role of the consultant including specialist occupational physician

In most circumstances, medical assessments of drivers can be conducted by a GP. However, if doubt exists about a patient's fitness to drive or if the patient's particular condition or circumstances are not covered specifically by the standards, review by a consultant experienced in the management of the particular condition is warranted and the GP should refer the patient to such a specialist.

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If in doubt about the patient's suitability to drive, referral to a further specialist and associated multi-disciplinary team (i.e. physiotherapy, occupational therapy, psychology, optometry) and/or on-road testing with a driving assessor qualified to assess driving among those with disabilities may be of assistance.

The consultant or specialist occupational physician should advise the driver's GP on the fitness to drive or otherwise relating to their specialist area of expertise. This would enable the GP to complete the D501 based on their assessment of the overall health of the driver, as well as incorporating the specialist opinion.

The D501 is the form in general use for all medical conditions: the D502 is used at original licence application, and if through medical or surgical intervention the driver's vision improves to the point that corrective lenses, previously specified on a driving licence application, are no longer needed.

2.4.1 Documentation

Clear documentation of the assessment results and communication with the patient and NDLS is important, as well as maintenance of a record of decisions and advice given to the driver. D501 (Medical Reports) or D502 (Eyesight Reports) are only accepted by NDLS if printed and signed as double-sided documents. The D501 (Medical Report) and D502 (Eyesight Report) forms are available for download at www.ndls.ie and www.rsa.ie. Where there is any doubt about how to complete the D501 (Medical Report) or D502 (Eyesight Report) forms please review the guide on our websites.

To aid the documentation of the assessment process, a Patient Advisory Form is available on the RSA and NDLS website that provides written information that can be given to the patient and it is also advisable to keep this form on file.

3.0 General considerations for assessing fitness to drive

The aim of determining fitness to drive is to achieve a balance between minimising any driving-related road safety risks for the individual and the community posed by the driver's permanent or long-term injury or illness, and maintaining the driver's lifestyle and employment-related mobility independence. Indeed, for many conditions, remediation and rehabilitation may improve driver comfort and safety.

The following pages outline the general principles and considerations for assessing driver fitness. Also included in this section is a summary of the assessment process. These principles should be considered in conjunction with the specific standards outlined in Part B of this publication.

3.1 Considerations for Group 2 licensing

The assignment of medical standards for vehicle drivers is based on an evaluation of the driver, passenger and public safety risk, where risk = likelihood of the event x severity of consequences.

Group 2 vehicle crashes may present a severe threat to passengers, other road users (including pedestrians and cyclists) and residents adjacent to the road. Such crashes present potential threats in terms of weight and height, spillage of chemicals, fire and other significant property damage.

Group 2 vehicle drivers generally spend considerable time on the road, thus increasing the likelihood of a motor vehicle crash. Crashes involving Group 1 drivers are likely to have less severe consequences.

Therefore, to ensure that the risk to the public is similar for Group 1 and Group 2 vehicle drivers, the medical fitness requirements for the latter must be more stringent. This is required in order to reduce to a minimum the risk of crash due to long-term injuries or illnesses. The standards outlined in this publication reflect these differences.

In developing the standards, a number of approaches have been adopted to manage the increased risk associated with driving a Group 2 vehicle. These approaches include:

There are generally longer non-driving periods prescribed for Group 2 vehicle drivers compared with private vehicles, for example, after a seizure or heart attack.

Licensing and medical fitness to drive

Some medical conditions may preclude a person from driving a Group 2 vehicle but they may still be eligible to hold a full or short period licence for a private vehicle, for example, early dementia.

Note:

In such cases, both sets of standards may need to be consulted. The standards are intended for application to drivers who drive within the ambit of ordinary road laws. Drivers who are permitted to exceed these laws, such as emergency service vehicle drivers, should have a risk assessment and an appropriate level of medical standard applied, as determined by the relevant occupational health service.

The review period for a short period licence for a Group 2 vehicle driver is 1, 3 or 5 years.

Group 2 standards are minimum standards and do not preclude employers setting higher standards in terms of the demands of driving and other tasks encountered in the course of employment.

3.2 Requirements of the driving task

Consideration of the requirements of the driving task is fundamental to assessing a person's medical fitness to drive. The driving task involves a complex and rapidly repeating cycle that requires a level of skill and the ability to interact with both the vehicle and the external environment at the same time. Information about the road environment is obtained via the visual and auditory senses. The information is operated on by many cognitive and behavioural processes including short and long-term memory and judgement, which leads to decisions being made about driving. Decisions are put into effect via the musculoskeletal system, which acts on the steering, gears and brakes to alter the vehicle in relation to the road.

The overall process is co-ordinated via a complex process involving behaviour, strategic and tactical abilities and personality¹² and adaptive strategies are important in maintaining the normal parameters of driving safety in the face of illness and disability¹³. This repeating sequence depends, among other elements, on:

- vision
- visuospatial perception
- hearing
- attention and concentration
- memory
- insight
- judgement
- adaptive strategies
- reaction time
- planning/organisation
- ability to self monitor
- sensation
- muscle power
- co-ordination

Given these requirements, it follows that many body systems need to be functional in order to ensure safe and timely execution of the skills required for driving.

^{12.} Fuller R. Towards a general theory of driver behaviour. Accid Anal Prev 2005;37(3):461-72.

Langford J, Braitman K, Charlton J, Eberhard J, O'Neill D, Staplin L, Stutts J. TRB Workshop 2007: Licensing authorities' options for managing older driver safety practical advice from the researchers. Traffic Inj Prev 2008;9(4):278-81.

Table 2: Environmental factors affecting driving performance

Driving tasks occur within a dynamic system influenced by complex driver, vehicle, task, organisational and external road environment factors including:

- The driver's experience, training and attitude.
- The driver's physical, mental and emotional health, including fatigue and the effect of prescription and non prescription (over the counter) medicines.
- The driver's insight, self-regulation of health and driving, and prudence
- The road system, for example, signs, other road users, traffic characteristics and road layout.
- Legal requirements, for example, speed limits and blood alcohol concentration.
- The natural environment, for example, night, extremes of weather and glare.
- Vehicle and equipment characteristics, for example type of vehicle, braking performance and maintenance.
- Personal requirements, trip purpose, destination, appointments, time pressures etc.
- Passengers and their potential to distract the driver.
- If the Group 2 driver is employed by a company, it may be helpful for the assessing doctor to ask the patient for a copy of the specifics of driving task and its nature and extent as identified and evaluated under his/her employer's risk assessment process.

3.3 Medical conditions likely to affect fitness to drive

Given the many causal factors in motor vehicle crashes, the extent to which medical conditions contribute is difficult to assess. There is, however, recognition of the potential for certain conditions to cause serious impairments. In general, this can occur through three different pathways:

- Suddenly disabling events
 - i.e., syncope, epilepsy, ICDs...
- Physical constraints
 - i.e., Parkinsonism, hemiplegia, vision...
- · Impairment of self-regulation
 - i.e., imprudence, psychiatric illness, cognitive impairment...

And a driver may present with a condition or conditions relevant to these pathways due to conditions such as:

- blackouts
- cardiovascular diseases
- diabetes
- musculoskeletal conditions
- neurological conditions such as epilepsy, dementia and cognitive impairment due to other causes
- psychiatric conditions
- · substance misuse/dependency
- sleep disorders
- · vision problems

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Treatments for medical conditions (including drug treatments and others) can also affect driving ability positively or negatively.

Drivers may present to treating health professionals with a range of conditions, some that affect driving temporarily, or may affect the driver's ability to drive at some time in the future, or that are complicated by the presence of multiple conditions. The content of this publication focuses on common conditions known to affect fitness to drive and, in particular, on determining the risk of a patient's involvement in a serious vehicle crash caused by loss of control of the vehicle.

It is accepted that other medical conditions or combinations of conditions may also be relevant and that it is not possible to define all clinical situations where an individual's overall function would compromise public safety. A degree of professional judgement, with more extensive assessment or specialist opinion as required, is therefore required in assessing fitness to drive.

Should a clinician require further assessment of a driver (for example, occupational therapy specialist opinion or on-road test), the doctor in charge of their care should be able to advise the driver whether or not it is appropriate for them to continue to drive during the period until these further assessments have been completed. Drivers may be reminded that if they choose to ignore medical advice to cease driving, there could be consequences with respect to their insurance cover.

3.4 Temporary conditions

There is a wide range of conditions that temporarily affect the ability to drive safely. These include conditions such as post major surgery, severe migraine, or injuries to limbs. These conditions are self-limiting and hence do not impact on licence status; therefore, the NDLS need not be informed. However, the treating health professional should provide suitable advice to such driver's regarding driving safely. Such advice should be based on consideration of the likely impact of the driver's condition and their specific circumstances on the driving task as well as their specific driving requirements. Table 3 provides guidance on some common conditions that may temporarily impact on driving ability. Note: this publication does not attempt to address every condition or situation that might temporarily affect safe driving ability. For conditions not specifically mentioned relevant clinical specialist advice may need to be invoked. See following table for examples of management of temporary conditions.

Barnett K, Mercer SW, Norbury M, Watt G, Wyke S, Guthrie B. Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. Lancet. 2012 Jul 7:380(9836):37-43.

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Table 3: Examples of management of temporary conditions

Condition and impact on driving

Anaesthesia

Physical and mental capacity may be impaired for some time post anaesthesia (including both general and local anaesthesia). The effects of general anaesthesia will depend on factors such as duration of anaesthesia, the drugs administered and the surgery performed. The effect of local anaesthesia will depend on dosage and the region of administration. The use of analgesics and sedatives should also be considered.

Management guidelines

In cases of recovery following surgery or procedures under general or local anaesthesia, it is the responsibility of the surgeon/dentist and anaesthetist to advise patients not to drive until physical and mental recovery is compatible with driving safety.

- Following minor procedures under local anaesthesia without sedation (e.g. dental block), driving may be acceptable immediately after the procedure.
- Following brief surgery or procedures with shortacting anaesthetic drugs, the patient may be fit to drive after a normal night's sleep.
- After longer surgery or procedures requiring general anaesthesia, it may not be safe to drive for 24 hours or more.

Post surgery

Surgery will impact on driving ability to varying degrees depending on the location, nature and extent of the The non-driving period post surgery should be determined by the treating health professionals.

Pregnancy

Under normal circumstances pregnancy should not be considered a barrier to driving. However, conditions that may be associated with some pregnancies should be considered when advising patients. These include:

- Fainting or light-headedness.
- Hyperemesis gravidarum.
- Hypertension of pregnancy.

A caution regarding driving may be required depending on the severity of symptoms and the expected effects of medication.

Temporary or short-term vision impairments

A number of conditions and treatments may impair vision in the short term, for example, temporary patching of an eye, use of mydriatics or other drugs known to impair vision, or eye surgery. For long-term vision problems, refer to Part B, Chapter 7, Vision and eye disorders.

People whose vision is temporarily impaired by a shortterm eye condition or an eye treatment should be advised not to drive for an appropriate period.

Deep vein thrombosis and pulmonary embolism

While deep vein thrombosis may lead to an acute pulmonary embolus there is little evidence that such an event causes crashes. Therefore there is no licensing standard applied to either condition. Non-driving periods are advised.

The non-driving period after stable or anticoagulation should be determined by the treating health professionals.

3.5 Undifferentiated conditions

A driver may present with symptoms that could have implications for their licence status but the diagnosis is not clear. Investigation of the symptoms will mean there is a period of uncertainty before a definitive diagnosis is made and before the licensing requirements can be confidently applied.

Each situation will need to be assessed individually, with due consideration being given to the probability of a serious disease or long-term or permanent injury or illness that may affect driving, and to the circumstances in which driving is required. However, patients presenting with symptoms of a potentially serious nature, for example, chest pains, dizzy spells or black-outs, or delusional states should be advised not to drive until their condition can be adequately assessed. During this interim period, in the case of private vehicle drivers, no formal communication with the NDLS is required. After a diagnosis is firmly established and the standards applied, normal notification procedures apply, if needed. The health professional should consider the impact on the driver's livelihood and investigate the condition as quickly as possible.

3.6 Multiple conditions and age-related change

Where a vehicle driver has multiple conditions or a condition that affects multiple body systems, there may be an additive or a compounding detrimental effect on driving abilities, for example, in:

- Congenital disabilities such as cerebral palsy, spina bifida and various syndromes.
- Multiple trauma causing orthopaedic and neurological injuries as well as psychiatric sequelae.
- Multi-system diseases such as diabetes, connective tissue disease and HIV.
- Dual diagnoses involving psychiatric illness and drug or alcohol addiction.
- Ageing-related changes in motor, cognitive and sensory abilities together with degenerative disease.
- Fatigue related to cancer and neurological conditions.

Although these medical standards are designed principally around individual conditions, clinical judgement is needed to integrate and consider the effects on safe driving of any medical conditions and disabilities that a driver may present with. For example, glaucoma may cause a slight loss of peripheral vision. If combined with cervical spondylosis and low insight, there is likely to be a substantial reduction in the driver's visual fields and possibly their perceptual abilities, thus increasing the risks of missing important visual information when driving.

Advanced age, in itself, is not a barrier to driving, and functional ability rather than chronological age should be the criterion used in assessing the fitness to drive of older people, although physicians should be mindful that multi-morbidity increases with age¹⁴. Age-related physical and mental changes vary greatly between individuals but will eventually affect the ability to drive safely. Professional judgement must determine what is acceptable decline (compensated by the driver's long experience and self-imposed limitations on when and where they drive) and what is irreversible, hazardous deterioration in driving-related skills, requiring reporting to the NDLS. This may require careful consideration and specialist referral: options include specialist medical referral, occupational therapy assessment, and an on-road assessment.

As all possible combinations of disabilities are too numerous to detail here, the following guidelines provide a general approach to assessing these drivers:

The driving task:

First, consider the ergonomics of the driving task. How might the various impairments (sensory, cognitive and musculoskeletal), disabilities and general fitness levels impact on function required to complete driving-related tasks?

General functionality:

Consider to what extent the person is currently able to function with regard to domestic or occupational requirements and what compensatory or coping strategies may have been developed. Information gained from relatives or carers is also likely to be important in this regard. Individuals may be likely to cope better with congenital or slow-onset conditions compared with traumatic or rapidly developing conditions.

14. Barnett K, Mercer SW, Norbury M, Watt G, Wyke S, Guthrie B. Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study. Lancet. 2012 Jul 7;380(9836):37-43.

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Clinical assessment:

The key considerations are:

- Cognition (including attention, concentration, presence of hallucinations and delusions, insight, judgement, memory, problem-solving skills, thought processing and visuospatial skills).
- Motor function (including joint movements, strength and co-ordination).
- Sensory (in particular visual acuity and visual fields but also cutaneous, muscle and joint sensation).

It may be necessary for the health professional to consider medical standards for each condition. However, it is insufficient simply to apply the medical standards contained in this publication for each condition separately, as a driver may have several minor impairments that alone may not affect driving but when taken together may make risks associated with driving unacceptable. It will, therefore, be necessary to integrate all clinical information, bearing in mind the additive or compounding effect of each condition on the overall capacity of the driver to control the vehicle, and to act and react in an appropriate and timely way to emergent traffic and road conditions.

Capacity to learn to drive:

Young people with multiple disabilities may seek the opportunity to gain a driving licence. In order to ensure they receive informed advice and reasonable opportunities for training, it is helpful if they are trained by a driving instructor with experience in the area of teaching drivers with disabilities.

Occupational therapy assessment:

A referral for an assessment by a generalist occupational therapist may be useful. It could request an evaluation of overall functioning (personal, mobility, community and work activities) as well as seek an opinion on general capacity for driving.

On-road driving assessment:

An on-road assessment may also be helpful.

In light of the information given above, the health professional may advise the driver regarding their fitness to drive and provide advice to the NDLS. The key question is: Is there a likelihood the person will be unable to control the vehicle and act or react appropriately to the driving environment in a safe, consistent and timely manner?

Where one or more conditions are progressive, it may be important to reduce driving exposure and ensure ongoing monitoring of the driver. The requirement for periodic reviews can be included as recommendations. This is also important for drivers with conditions likely to be associated with future reductions in insight and self-regulation. If lack of insight may become an issue in the future, it is important to advise the driver to report the condition(s) to the NDLS.

3.7 Progressive disorders

Often diagnoses of progressive disorders are made well before there is any need to question whether the driver remains safe to drive (e.g. multiple sclerosis). However, it is advantageous to raise issues relating to the likely effects of these disorders on personal independent mobility early in the management process so as to facilitate future planning, and possible eventual driving cessation and sourcing of alternative transportation.

In a mobile society, people frequently make choices about employment, place of residence and recreational and social activities based on the assumption of continued access to a car. Changing jobs, home and social contacts takes a great deal of time and places substantial emotional demands on drivers and their families.

It is, therefore, recommended that the driver be advised appropriately where a progressive condition is diagnosed that may result in future restrictions on driving. It is important to give the driver as much lead time as possible to make the lifestyle changes that may later be required. Assistance from an occupational therapist may be valuable in such instances.

3.8 Congenital conditions

People with congenital or childhood conditions may have developed coping strategies that enable safe driving despite their impairment. They will require individual assessment by a Specialist and may need tutoring prior to a practical assessment. While they may require specific vehicle modifications, if the condition is static they may not require periodic reviews.

3.9 Medications and driving

The definition of prescription medications for the purpose of these Guidelines is recommended as: Licensed medical product for human use requiring to be used in accordance with a prescription or medical product for human use requiring it to be used in accordance with prescription or medical or healthcarer (including pharmacist) advice.

Any medication that acts on the central nervous system has the potential to adversely affect driving skills, although it must be also recognised that many medications, such as antiparkinsonian medications, anti-inflammatory agents and antidepressants, may actually make driving safer and more comfortable.

Central nervous system depressants, for example, may reduce vigilance, increase reaction times and impair decision making in a very similar manner to alcohol. In addition, medications that affect behaviour may exaggerate adverse behavioural traits and introduce risk-taking behaviours. Group 2 drivers need to be mindful that such effects may be considered to be included in the Safety, Health and Welfare at Work Act (2005) s.13 (b) which stipulates that "employees must...ensure... that he or she is not under the influence of an intoxicant to the extent that he or she is in such a state as to endanger his or her own safety, health or welfare at work or that of any other person."

Acute impairment due to alcohol or drugs (including illicit, prescription and over-the-counter drugs) is managed through specific road safety legislation that prohibits driving over a certain blood alcohol concentration (BAC) or when impaired by drugs. This is a separate consideration to long-term medical fitness to drive and licensing, thus specific medical requirements are not provided in this publication. Dependency and substance misuse, including chronic misuse of prescription drugs, is a licensing issue and standards are outlined in Chapter 6.

Where medication is relevant to the overall assessment of fitness to drive in the management of specific conditions, such as diabetes, epilepsy and psychiatric conditions, this is covered in the respective chapters. Prescribing doctors and pharmacists do however, need to be mindful of the potential effects of all prescribed and over-the-counter medicines and to advise drivers accordingly. General guidance is provided below.

3.9.1 General guidance for prescription medicine and driving

While many medicines have effects on the central nervous system most, with the exception of benzodiazepines, tend not to pose a significantly increased crash risk when the medicines are used as prescribed, and once the driver is stabilised on the treatment. This may also relate to drivers' self-regulating their driving behaviour. When advising patients and considering their general fitness to drive, whether in the short or longer term, health professionals should consider the following:

- The balance between potential impairment due to the medicine and the driver's improvement in health on safe driving ability.
- The individual response of the patient some individuals are more affected than others.
- The type of licence held and the nature of the driving task, i.e. Group 2 vehicle driver assessments should be more
- The added risks of combining two or more medicines capable of causing impairment, including alcohol.
- The added risks of sleep deprivation on fatigue while driving, which is particularly relevant to Group 2 vehicle drivers.
- The potential impact of changing medications or changing dosage.
- The cumulative effects of medications.
- The presence of other medical conditions that may combine to adversely affect driving ability.
- Other factors that may exacerbate risks, such as known history of alcohol or drug misuse.

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For individual medicinal products, the summary of product characteristics (SmPC) and patient information leaflet (PIL) may be a useful source of information on the impact of these products on driving safety. SmPCs and PILs can be found on the IMB website: www.imb.ie.

Liaison between prescribing doctors and pharmacists is encouraged in the consideration of advice given to drivers taking medications which may impact on driving safety.

3.9.2 The effects of specific medicine classes

For the following psychoactive medications, the driver should be advised about concerns over sedation while initiating and changing treatment, and that driving should cease if such signs are noted: resumption should only recommence when such sedating side-effects have ceased.

Benzodiazepines

Benzodiazepines, particularly long-acting benzodiazepines, increase the risk of a crash. In many of these cases, benzodiazepines were either abused or used in combination with other impairing substances. If a hypnotic is needed, a shorter-acting medicine is preferred. Tolerance to the sedative effects of the longer-acting benzodiazepines used in the treatment of anxiety gradually reduces their adverse impact on driving skills.

Antidepressants

Although antidepressants are one of the more commonly detected drug groups in fatally injured drivers, this tends to reflect their wide use in the community. The ability to impair is greater with sedating tricyclic antidepressants, such as amitriptyline and dosulepin, than with less sedating serotonin reuptake inhibitors, such as fluoxetine and sertraline, and the mixed reuptake inhibitors. However, antidepressants can reduce the psychomotor and cognitive impairment caused by depression and return mood towards normal. This can improve driving performance.

Antipsychotics

This diverse class of drugs can improve performance if substantial psychotic-related cognitive deficits are present. However, most antipsychotics are sedating and have the potential to adversely affect driving skills through blockade of central dopaminergic and other receptors. Older drugs such as chlorpromazine are very sedating due to their additional actions on the cholinergic and histamine receptors. Some newer drugs are also sedating, such as clozapine, olanzapine and quetiapine, while others such as aripiprazole, risperidone and ziprasidone are less sedating. Sedation may be a particular problem early in treatment and at higher doses.

Opioids

There is little direct evidence that opioid analgesics such as hydromorphone, morphine or oxycodone have direct adverse effects on driving behaviour¹⁴. Cognitive performance is reduced early in treatment, largely due to their sedative effects, but neuroadaptation is rapidly established. This means that drivers on a stable dose of an opioid may not have a higher risk of a crash. This includes drivers on buprenorphine and methadone for their opioid dependency, providing the dose has been stabilised over some weeks and they are not abusing other impairing drugs. Driving at night may be a problem due to the persistent miotic effects of these drugs reducing peripheral vision.

Medicinal Cannabis

The Health Products Regulatory Authority (successor to the Irish Medicines Board) authorised, in July 2014, by issue of a product license, an approved human medicine containing the active ingredients of cannabis which may be prescribed as treatment for symptom improvement in adult patients with moderate to severe spasticity due to multiple sclerosis (MS). The therapeutic indication is for patients with MS who have not responded adequately to other anti-spasticity medication and who demonstrate clinically significant improvement in spasticity related symptoms during an initial trial of therapy. Medicinal cannabis may impair judgment and performance of skilled tasks. Research however suggests that drivers adapted to their medicinal dose generally, but not always, maintain their driving ability¹⁵. Drivers should be advised about potential effects of the medication on their driving and also advised to self-monitor accordingly for any indications of impairment of driving particularly when they first start to take the medication and until they are established on a stable daily dose.

^{14.} Mailis-Gagnon A, Lakha SF, Furlan A, Nicholson K, Yegneswaran B, Sabatowski R. Systematic review of the quality and generalizability of studies on the effect-sof opioids on driving and cognitive/psychomotor performance. Clin J Pain. 2012 Jul;28(6):542-55.

^{15.} Freidel, M., et al. "Drug resistant MS spasticity treatment with Sativex" add-on and driving ability." Acta Neurologica Scandinavica (2014).

4.0 The legal basis for the medical standards

Since January 2013 the Road Safety Authority is the licensing authority with the responsibility of ensuring that all licence holders are fit to drive. The legal basis of fitness to drive arises from the Road Traffic (Licensing of Drivers) Regulations 2006, Statutory Instrument Number 537 of 2006, as amended which provide for the medical standards in EU Directive 2006/126 as amended. (See table to follow).

Table 4: Legal considerations for licensing

• NDLS processes following medical advice

Driving licences are issued or maintained by the NDLS on the basis that the driver has not been advised to cease driving by a doctor or healthcare professional on the basis of clinical assessment and the advice contained within these Guidelines. Should a driver be advised to cease driving by a doctor or healthcare professional on the basis of clinical assessment and the advice contained within these Guidelines, he/she should inform the NDLS if so indicated in these Guidelines. It is then a matter for the NDLS to take appropriate action.

Appeals

Decisions about the granting of a driving licence are a matter for the NDLS and arrangements concerning the review or appeal against such decisions should be taken up with the NDLS.

• Age limits

Group1 Licences are normally issued for a 10 year period subject to expiry at age 70 years, unless restricted to a shorter duration for medical reasons. There is no upper limit but after age 70 renewal is necessary every 3 years, or every year if medical assessment so indicates. All licence applications after 70 currently require a medical report furnished by the applicant. Group 2 licences are issued for a maximum of 5 years up to the age of 70.

Garda/Army driver licensing

Responsibility for determining the standards, including medical requirements, to be applied to Garda/Army vehicle drivers, rests with the Garda Commissioner/Army Director of Services.

Taxi drivers

The provision of driving licences for small public service vehicles is the responsibility of An Garda Síochána. Responsibility for determining the standards, including medical requirements, to be applied to taxi drivers, over and above the Group 1 driving licence requirements, rests with the National Transport Authority, who are required to consult with the Garda Commissioner in relation to such proposals.

Part B: Medical fitness to drive

Chapter 2

Neurological disorders¹⁶



Group 2 standards are minimum standards and do not preclude employers setting higher standards in terms of the demands of the driving tasks encountered in the course of employment.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Epilepsy Epileptic attacks are the most frequent medical cause of collapse at the wheel. N.B. If within a 24 hour period more than one epileptic attack occurs, these are treated as a "single event" for the purpose of applying the epilepsy standards. Epilepsy includes all events: major, minor and auras.	The epilepsy standards apply. Provided a licence holder/applicant is able to satisfy the standards, a 3 year licence will be issued normally by the NDLS. Before age 70 a person must be seizure-free for 5 years to qualify for a 10 year licence in the absence of any other disqualifying condition. Fit to drive if seizure-free for 5 years since the last attack, with medication if necessary in the absence of any other disqualifying condition. (See appendix to this chapter for full standards). Driver must notify NDLS.	Standards require a driver to remain seizure-free for 10 years since the last attack without antiepileptic medication. The applicant should: • be without anti-epileptic medication for the required period of seizure freedom. • have appropriate medical follow-up completed. • after extensive neurological investigation, have no relevant cerebral pathology established and there is no epileptiform activity on the electroencephalogram (EEG). • have an EEG and an appropriate neurological assessment should be performed after the acute episode.

^{16.} Helpful recent reviews include: Devlin, A, et al. (2012). Epilepsy and driving: Current status of research. Epilepsy Research, 102, 135 — 152. Classen, S., et al., (2009). Traumatic brain injury and driving assessment: an evidence-based literature review [Review]. American Journal of Occupational Therapy, 63(5), 580-591.Klimkeit, E.I, et al., (2009). Driving ability in Parkinson's Disease: Current status of research. Neuroscience & Biobehavioral Reviews, 33, 223-231.Breen DA, Breen DP, Moore JW, Breen PA, O'Neill D. Driving and dementia. BMJ 2007 Jun 30;334(7608):1365-9.Peeters SY, Hoek AE, Mollink SM, Huff JS. Syncope: risk stratification and clinical decision making. Emerg Med Pract. 2014 Apr;16(4):1-22

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
First unprovoked seizure	6 months off driving from the date of the seizure unless there are clinical factors or investigation results which, in the opinion of the treating consultant suggest an unacceptably high risk of a further seizure, i.e. 20% or greater per annum. Driver must notify NDLS.	5 years off driving from the date of the seizure if the licence holder has undergone recent assessment by a neurologist and there are no clinical factors or investigation results (e.g. EEG, brain scan) which indicate that the risk of a further seizure is greater than 2% per annum. They should have taken no antiepileptic medication throughout the 5 year period immediately prior to the granting of the licence. Driver must notify NDLS. If risk of further seizure is greater than 2% per annum Group 2 epilepsy standards apply.

The following features are consistent with a person having a good prognosis:

- No relevant structural abnormality of the brain on imaging;
- No definite epileptiform activity on EEG;
- Clinical evaluation of the neurologist;
- Seizure risk considered to be 2% or less per annum for Group 2 licensing and 20% or less per annum for ordinary driving licensing.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Epilepsy/epileptic seizures General guidance for all neurosurgical conditions if associated with epilepsy or epileptic seizures.	In all cases where epilepsy has been diagnosed, the epilepsy standards apply. These cases will include all cases of single seizure where a primary cerebral cause is present and the liability to recurrence cannot be excluded. An exception may be made when seizures occur at the time of an acute head injury or intracranial surgery. When seizures occur at the time of intracranial venous thrombosis, 6 months is required, free from attacks, before resuming driving. Driver must notify NDLS.	In all cases where a "liability to epileptic seizures" either primary or secondary has been diagnosed, the specific epilepsy standard for this group applies. The only exception is a seizure occurring immediately at the time of an acute head injury or intracranial surgery, and not thereafter and/or where no liability to seizure has been demonstrated. Following head injury or intracranial surgery, the risk of seizure must have fallen to no greater than 2% per annum before returning to Group 2 driving. **Driver must notify NDLS.**
Withdrawal of antiepileptic medication and driving	(See Appendix to this chapter for full standards).	(See Appendix to this chapter for full standards).
Provoked seizures (Apart from alcohol or illicit drug misuse)	(See Appendix to this chapter for full standards).	(See Appendix to this chapter for full standards).
Non Epileptic seizure attacks	Can be considered once attacks have been satisfactorily controlled and there are no relevant mental health issues.	Can be considered once attacks have been satisfactorily controlled and there are no relevant mental health issues.

Loss of consciousness/loss of or altered awareness

Excluding Cough Syncope (See Chapter 9)

A full history is imperative to include pre-morbid history, prodromal symptoms, period of time unconscious, degree of amnesia and confusion on recovery. A neurological cause, for example, epilepsy, subarachnoid haemorrhage, can often be identified by the history, examination and the appropriate referral made. The relevant Sláinte agus Tiomáint guidelines will then apply. In 80% of all cases there is a cardiovascular cause and again, these can also be determined by history, examination and ECG. Investigate and treat accordingly and use the relevant Sláinte agus Tiomáint guidelines.

The remaining cases can be classified under five categories in the following table:

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
1. Reflex Vasovagal Syncope Definite provocational factors with associated prodromal symptoms and which are unlikely to occur whilst sitting or lying. Benign in nature.	No driving restrictions.	No driving restrictions.
If recurrent, will need to check the "3 Ps" apply on each occasion (provocation/prodrome/postural). (If not see Number 6 below).	NDLS need not be informed.	NDLS need not be notified. N.B. Cough Syncope see Chapter 9
2. Solitary loss of consciousness/ loss of or altered awareness likely to be unexplained syncope but with a high probability of reflex vasovagal syncope. These have no clinical evidence of structural heart disease and a normal ECG.	No driving restrictions. NDLS need not be informed.	Can drive 3 months after the event if no further recurrence. N.B. Cough Syncope see Chapter 9

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Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
3. Solitary loss of consciousness/ loss of or altered awareness likely to be cardiovascular in	No driving for 6 months if no cause identified.	No driving for 12 months if no cause identified.
origin (Excluding 1 or 2 directly preceding). Factors indicating high risk: A. Abnormal ECG. B. Clinical evidence of structural heart disease. C. Syncope causing injury, occurring at the wheel or whilst sitting or lying. D. More than one episode in previous 6 months. Further investigations such as ambulatory ECG (48hrs), echocardiography and exercise testing may be indicated after consultant opinion has been sought.	Can drive 4 weeks after the event if the cause has been identified and treated satisfactorily. Driver must notify NDLS.	Can drive 3 months after the event if the cause has been identified and treated satisfactorily. Driver must notify NDLS.
For Pacemakers see Chapter 3 4. Solitary loss of consciousness/ loss of or altered awareness with seizure markers. This category is for those where there is a strong clinical suspicion of a seizure but no definite evidence. Factors to be considered: Without reliable prodromal symptoms. Unconsciousness for more than 5 minutes. Amnesia longer than 5 minutes. Injury. Tongue biting. Incontinence. Remain conscious but with confused behavior. Headache post attack.	6 months off driving from the date of an episode of loss of consciousness/loss of or altered awareness. However, if a person has a previous history of epilepsy or a solitary seizure, 12 months' freedom from any further episode of loss of consciousness with seizure markers must be attained. If a person suffers recurrent episodes of loss of consciousness with seizure markers, 12 months' freedom from such episodes must be attained. Driver must notify NDLS.	5 years off driving from the date of an episode if the licence holder has undergone assessment by an appropriate consultant and no relevant abnormality has been identified on investigation, for example EEG and brain scan, where indicated. **Driver must notify NDLS.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
5. Solitary loss of consciousness/ loss of or altered awareness with no clinical pointers. This category will have had appropriate neurological and cardiac opinion and investigations but with no abnormality detected.	No driving for 6 months. Driver must notify NDLS.	No driving for 1 year if no further recurrence. Driver must notify NDLS.
6. Two or more episodes of loss of consciousness/loss of or altered awareness without reliable prodromal symptoms.	No driving for 12 months or until the risk has been reduced to < 20% per annum. Driver must notify NDLS.	No driving for 5 years or until the risk has been reduced to < 2% per annum. Driver must notify NDLS.
Primary/Central Hypersomnias Including Narcoleptic syndromes	Cease driving on diagnosis. Fit to drive when there has been a period of between 3 and 6 months satisfactory control of symptoms with appropriate treatment. If not on appropriate treatment, driving may be allowed subject to a satisfactory objective assessment of maintained wakefulness. Driver must notify NDLS if driving cessation is going to be 6 months or greater.	Cease driving on diagnosis. Fit to drive subject to consultant assessment and a satisfactory objective assessment of maintained wakefulness. Driver must notify NDLS if driving cessation is going to be 6 months or greater.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Chronic Neurological Disorders E.g. Multiple sclerosis, motor neurone disease, myopathy etc., which may affect vehicle control because of impairment of co- ordination and muscle power. See section: Drivers with disabilities, Chapter 10.	Providing medical assessment confirms that driving performance is not impaired, can drive. 1 or 3 year licence may be advised. Should the driver require a restriction to certain controls, the law requires this to be specified on the licence. Due consideration should be given to functional status, rehabilitation, specialist on-road assessment and adaptations which may help to adapt to, or overcome, relevant cognitive and physical impairment. Driver must notify NDLS.	May not drive if condition is progressive or disabling. If driving would not be impaired and condition stable, can be considered for licensing subject to satisfactory consultant assessment and annual review. **Driver must notify NDLS.**
Parkinson's disease and other forms of Parkinsonism	Should not drive if condition or functional status is sufficiently impaired so as to impair driving safety and/or there is clinically significant variability in motor function. Due consideration should be given to medication review (with due attention to tendency to drowsiness/ sleepiness), rehabilitation, specialist on-road assessment and adaptations which may help to adapt to, or overcome, relevant cognitive and physical impairment. If driving safety not impaired, can continue driving subject to satisfactory reports. Fitness to drive is subject to regular review. Driver must notify NDLS.	Should not drive if condition is disabling and/or there is clinically significant variability in motor function. If driving would not be impaired, can be considered for licensing subject to individual assessment by a consultant. Licence may be issued subject to annual review. Driver must notify NDLS.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Liability to sudden attacks of unprovoked or unprecipitated disabling dizziness or vestibular symptoms	Cease driving on diagnosis. Driving will be permitted when satisfactory control of symptoms achieved. If remains asymptomatic a 10 year licence or if over 60 a licence expiring at age 70, can be issued. After age 70 a one or 3 year licence, subject to medical report, can be issued. Driver must notify NDLS.	Cease driving on diagnosis. Consider underlying diagnosis and if likely to cause recurrent attacks, must be symptom- free and completely controlled for 1 year from last attack before resuming. Driver must notify NDLS.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Stroke/TIA	TIA NO need to notify NDLS. Must not drive for 4 weeks. Stroke Must not drive for 4 weeks. May resume driving after this period if the clinical recovery is satisfactory. There is no need to notify NDLS unless there is significant residual neurological deficit 4 weeks after the episode; of particular importance are visual field defects, cognitive defects including visual neglect and inattention and impaired limb function. Minor limb weakness alone will not require notification unless restriction to certain types of vehicle or vehicles with adapted controls is needed. Due consideration should be given to risk of reoccurrence, rehabilitation, specialist on-road assessment and adaptations which may help to adapt to, or overcome, relevant cognitive and physical impairment. Seizures occurring at the time of a stroke/TIA or in the ensuing 24 hours may be treated as provoked for licensing purposes in the absence of any previous seizure history or previous cerebral pathology.	TIA Must not drive for at least 3 months following a TIA. Stroke Must not drive for at least 3 months following a stroke. Further driving requires annual medical review: May drive after at least 3 months and subject to at least annual review taking into account: • the nature of the driving task (e.g. petrol tanker v light van). • information provided by an appropriate consultant regarding the level of impairment of any of the following: visuospatial perception, insight, judgement, attention, reaction time, memory, sensation, muscle power, coordination, vision (including visual fields) and the likely impact on driving ability. • the results of a practical driver assessment if required. • the risk of recurrence. • if intra-cerebral haemorrhage, that the risk of seizure is 2% or less per annum, as judged by competent specialist.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Acute Encephalitic Illnesses Including Limbic Encephalitis associated with seizures.	 If no seizure(s), may resume driving when clinical recovery is complete. (The Driver must notify NDLS only if there is significant residual disability). If associated with seizures during acute febrile illness, no driving for 6 months from the date of seizure(s). Driver must notify NDLS. If associated with any seizure(s) early or late during or after convalescence, will be required to meet current epilepsy standards. 	 As for Group 1 provided no residual disabling symptoms, and clinical recovery is complete as assessed by a neurologist. (The Driver must notify NDLS only if there is significant residual disability). If associated with seizures during acute febrile illness must stop driving and Driver must notify NDLS. Encephalitis – there have been no further seizures for at least 12 months without use of antiepileptic medication assessment by neurologist required. If associated with any seizure(s) early or late during or after convalescence, must stop driving, Driver must notify NDLS and meet current epilepsy standards before driving resumes. See Appendix to this Chapter for full standards.
Transient Global Amnesia	Provided epilepsy, any sequelae from head injury and other causes of altered awareness have been excluded, no restriction on driving. NDLS need not be notified.	A single confirmed episode does not require cessation of driving. If two or more episodes occur, driving should cease and <i>Driver must notify NDLS</i> . Consultant assessment required to exclude all other causes of acute transient memory loss.

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Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Arachnoid Cysts Asymptomatic and untreated.	No restriction.	No restriction.
Craniotomy and/or Endoscopic Treatment.	6 months off driving. Driver must notify NDLS.	Can drive 2 years after treatment, provided that there is no debarring residual impairment likely to affect driving safety. Driver must notify NDLS.
Colloid Cysts Asymptomatic and untreated.	No restriction.	No restriction unless prescribed prophylactic medication for seizures when there should be individual assessment. Driver must notify NDLS.
Craniotomy and/or Endoscopic Treatment.	6 months off driving. Driver must notify NDLS.	Can drive 2 years after treatment, provided that there is no debarring residual impairment likely to affect driving safety. Driver must notify NDLS.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Pituitary Tumour	Provided no visual field defect. If visual field loss:- See section: Visual Disorders Chapter 7.	Provided no visual field defect If visual field loss:- See section: Visual Disorders Chapter 7.
Craniotomy	6 months off driving. Driver must notify NDLS.	2 years off driving. Driver must notify NDLS.
Transphenoidal surgery/ other treatment (E.g. Drugs, Radiotherapy) or Untreated	Drive on recovery.	Can drive when there is no debarring residual impairment likely to affect driving safety.
Benign Supratentorial Tumour E.g. WHO Grade 1 Meningiomas		
Treatment by Craniotomy	6 months off driving when there is no debarring residual impairment likely to affect safe driving. Driver must notify NDLS. Epilepsy standards apply if relevant history of seizure(s).	Not fit to drive. In the absence of any seizures, a short period licence can be considered 5 years after surgery, with evidence of complete removal. If tumour is associated with seizures, 10 years freedom from seizures without antiepileptic drugs following surgery and consultant assessment is required. Driver must notify NDLS.
Treatment with Stereotactic Radiosurgery	4 weeks off driving; thereafter can drive when there is no debarring residual impairment likely to affect driving safety. Driver must notify NDLS. Epilepsy standards apply if relevant history of seizure(s).	3 years after the completion of the primary treatment of the tumour the driver can be considered fit to drive, provided that there is evidence on imaging of stability. If tumour association with seizure(s), 10 years' freedom from seizures without antiepileptic drugs following surgery and consultant assessment is required. Driver must notify NDLS.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Treatment with Fractionated Radiotherapy	Can drive on completion of treatment, provided that there is no debarring residual impairment likely to affect safe driving. Epilepsy standards apply if relevant history of seizure(s).	3 years after the completion of the primary treatment of the tumour the driver can be considered fit to drive, provided that there is evidence on imaging of stability. If tumour association with seizure(s), 10 years' freedom from seizures without antiepileptic drugs following surgery and consultant assessment is required. Driver must notify NDLS.
WHO Grade II Meningiomas treated by Craniotomy and/or Radiosurgery and/or Radiotherapy	Requires 1 year off driving, dating from the completion of treatment; thereafter can drive when there is no debarring residual impairment likely to affect driving safety. Driver must notify NDLS. Epilepsy standards apply if relevant history of seizure(s).	Not fit to drive. Driver must notify NDLS. In the absence of any seizures, return to driving can considered 5 years after surgery, with evidence of complete removal. If tumour is associated with seizure(s), 10 years freedom from seizures without antiepileptic drugs following surgery is required. Consultant assessment may be required.
Asymptomatic, incidental meningiomas: Untreated	Continue driving.	Requires cessation of driving until two scans 12 months apart showing no growth. If growth, consultant assessment with 1 year short period licence and review. Driver must notify NDLS.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Benign Infratentorial Tumours E.g. Meningioma with surgery by craniotomy with or without radiotherapy.	Drive on recovery.	As for Group 1 provided that there is no debarring residual impairment likely to affect driving safety.
Acoustic Neuroma/Schwannoma	Need not notify NDLS unless sudden and disabling vestibular symptoms.	Need not notify NDLS unless accompanied by disabling vestibular symptoms and/or the condition is bilateral.
Malignant Tumours (including metastatic deposits) and Gliomas Supratentorial Gliomas Grades I and II	1 year off driving, from time of completion of the primary treatment; thereafter can drive when there is no debarring residual impairment likely to affect driving safety. Driver must notify NDLS.	Not fit to drive. (Pineocytoma, Grade I, can be considered on an individual basis 2 years post primary treatment if satisfactory MRI). Driver must notify NDLS.
WHO Grade III Meningioma	2 years off driving from time of completion of primary treatment; thereafter can drive when there is no debarring residual impairment likely to affect driving safety. Driver must notify NDLS.	Not fit to drive. (Pineocytoma, Grade I, can be considered on an individual basis 2 years post primary treatment if satisfactory MRI). Driver must notify NDLS.
Gliomas Grade III and IV and Metastatic Deposit(s).	At least 2 years off driving from time of completion of primary treatment; thereafter can drive when there is no debarring residual impairment likely to affect driving safety. **Driver must notify NDLS.**	Not fit to drive. Driver must notify NDLS.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Solitary Metastatic Deposit	If totally excised, can be considered for recommending 1 year licence after completion of primary treatment if free from recurrence and no evidence of secondary spread elsewhere in the body; thereafter can drive when there is no debarring residual impairment likely to affect driving safety. Driver must notify NDLS.	Not fit to drive. Driver must notify NDLS.
Infratentorial Tumours Gliomas Grade I	As for benign tumours: i.e. drive on recovery.	Individual assessment.
Gliomas Grade II, III & IV	As for Supratentorial tumour.	Not fit to drive. Driver must notify NDLS.
Medulloblastoma or Low Grade Ependymoma	If totally excised, can be considered for 1 year licence after primary treatment, if free from recurrence.	If entirely infratentorial, may be considered for driving when disease-free for 5 years after treatment.
High Grade Ependymomas, Other Primary Malignant Brain Tumours and Primary CNS Lymphomas	Normally, a period of 2 years off driving is required following treatment. Driver must notify NDLS.	Not fit to drive. Driver must notify NDLS.
Metastatic deposits	Can be considered for driving on a 1 year licence after completion of primary treatment if otherwise well. Driver must notify NDLS.	May drive 5 years from the date of completion of the primary treatment if asymptomatic and subject to annual consultant review. Driver must notify NDLS.
Malignant Intracranial Tumours in children who survive to adult life without recurrence	Normally, till 70 licence is issued/maintained.	Individual assessment: see above as for "Benign Supratentorial Tumour".

When a low grade glioma is an incidental finding and asymptomatic, the case may be considered on an individual basis for Group 1. See Appendix at end of this chapter for epilepsy standards.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Traumatic brain injury	Usually requires 6-12 months off driving depending on features such as seizures, post-traumatic amnesia, dural tear, haematoma and contusions. There will need to have been a satisfactory clinical recovery and in particular no visual field defect, or cognitive or behavioural impairment likely to affect driving safety. Due consideration should be given to rehabilitation, specialist on-road assessment and adaptations which may help to adapt to, or overcome, relevant cognitive and physical impairment. Driver must notify NDLS.	Not fit to drive if the person has had head injury producing significant impairment of any of the following: visuospatial perception, insight, judgement, attention, reaction time, memory, sensation, muscle power, coordination, vision (including visual fields). May be able to return to driving when the risk of seizure has fallen to no greater than 2% per annum, and with no debarring residual impairment likely to affect driving safety. Periodic review is not required if the condition is static.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Spontaneous Acute Subdural Haematoma (Treated by Craniotomy)	6 months off driving if no significant residual disability. If significant residual disability, due consideration should be given to rehabilitation, specialist on-road assessment and adaptations which may help to adapt to, or overcome, relevant cognitive and physical impairment. Driver must notify NDLS.	At least 6 months off driving, with an individual assessment by consultant as to fitness to return to driving. Driver must notify NDLS.
Chronic Subdural (Treated surgically)	Resume driving on recovery if no significant residual disability. If significant residual disability, due consideration should be given to rehabilitation, specialist on-road assessment and adaptations which may help to adapt to, overcome, relevant cognitive and physical impairment. Driver must notify NDLS.	6 months –1 year off driving, with an individual assessment by consultant as to fitness to return to driving. Driver must notify NDLS.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Subarachnoid Haemorrhage 1. No cause found	Provided comprehensive cerebral angiography normal, may resume driving following recovery if no significant residual disability. If significant residual disability, due consideration should be given to rehabilitation, specialist on-road assessment and adaptations which may help to adapt to, or overcome, relevant cognitive and physical impairment. Driver must notify NDLS. Continued on next page	Provided comprehensive cerebral angiography normal, 6 months off driving and may regain licence if no debarring residual impairment likely to affect driving safety. Driver must notify NDLS. Continued on next page

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Subarachnoid Haemorrhage

2A. Intracranial Aneurysm

N.B. If any other procedure is undertaken e.g. V.P. shunt, craniotomy for a haematoma etc. then the standards for that procedure shall apply.

		Modified Rankin Scale (mRS)	
	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement (DDL
Craniotomy Non Middle Cerebral Artery Aneurysm	Drive on clinical recovery	mRS < 2 at 2 months 12 months off driving.	mRS 2 or > at 2 months 24 months off driving, there should be no residual impairment likely to affect driving.
Craniotomy Middle Cerebral Artery Aneurysm	Drive on clinical recovery	mRS < 2 at 2 months 24 months off driving.	mRS 2 or > at 2 months. Refusal or Revocation. See* below.
Endovascular Treatment Non Middle Cerebral Artery Aneurysm	Drive on clinical recovery	mRS < 2 at 2 months 6 months off driving	mRS 2 or > at 2 months 24 months off driving, there should be no residual impairment likely to affect driving.
Endovascular Treatment Middle Cerebral Artery Aneurysm	Drive on clinical recovery	mRS < 2 at 2 months 24 months off driving.	mRS 2 or > at 2 months Refusal or Revocation. See* below.

^{*}Consultant assessment required, seizure risk should be 2% per annum or less and there should be no residual impairment likely to affect driving.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Subarachnoid Haemorrhage	6 months off driving.	Not fit to drive.
2B. No Treatment i.e. Aneurysm responsible for SAH but no intervention.		
Subarachnoid Haemorrhage 2C. Truly Incidental Findings of Intracranial Aneurysm (aneurysm has not been responsible for subarachnoid haemorrhage)	Drive on clinical recovery.	To be acceptable for licensing, anterior circulation aneurysms (excluding cavernous carotid) must be < 13mm in diameter. Posterior circulation aneurysms must be < 7mm diameter.
No Treatment		
Surgery Craniotomy	Drive on clinical recovery.	1 year off driving.
Endovascular Treatment	Drive on clinical recovery.	Cease driving until clinical recovery unless there are complications from the procedure as determined by treating consultant.
		N.B. The above is independent of the standard for ruptured aneurysm in section 2A.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL		
Arteriovenous Malformation	Arteriovenous Malformation			
N.B. If any other procedure is under that procedure shall apply.	taken e.g. V.P. shunt, craniotomy for a	haematoma etc. then the standards for		
Arteriovenous Malformation Suprato Intracerebral Haemorrhage due to S				
A. Craniotomy	6 months off driving; can drive thereafter when there is no debarring residual impairment likely to affect driving. If significant residual disability, due consideration should be given to rehabilitation, specialist on-road assessment and adaptations which may help to adapt to, or overcome, relevant cognitive and physical impairment. Driver must notify NDLS.	Requires cessation of driving until lesion is completely removed or ablated and 10 years seizure-free from last definitive treatment. There must be no debarring residual impairment likely to affect driving. Driver must notify NDLS.		
B. Other treatment (embolisation or stereotactic radiotherapy)	4 weeks off driving; can drive thereafter when there is no debarring residual impairment likely to affect driving.	Requires cessation of driving until lesion is completely removed or ablated and 10 years seizure-free from last definitive treatment. There must be no debarring residual impairment likely to affect driving. Driver must notify NDLS.		
C. No treatment	4 weeks off driving; can drive thereafter when there is no debarring residual impairment likely to affect driving.	Not fit to drive. Driver must notify NDLS.		

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL	
Incidental finding of a supratentorial AVM (no history of intracranial bleed)			
A. No treatment	No restriction.	Not fit to drive. Driver must notify NDLS.	
B. Surgical or other treatment	See above: as for AVM with Intracranial Haemorrhage.	Not fit to drive until lesion is completely removed or ablated and 10 years seizure-free from last definitive treatment. There must be no debarring residual impairment likely to affect driving. **Driver must notify NDLS.**	
Infratentorial AVMs Intracranial ha	aemorrhage due to AVM:		
A. Treated by Craniotomy	Can drive when there is no debarring residual impairment likely to affect driving.	Not fit to drive until confirmation of complete obliteration with no debarring residual impairment likely to affect driving. **Driver must notify NDLS.**	
B. Embolisation/Stereotactic Radiotherapy	Can drive when there is no debarring residual impairment likely to affect driving.	Not fit to drive until confirmation of complete obliteration with no debarring residual impairment likely to affect driving. Driver must notify NDLS.	
C. No treatment	Can drive when there is no debarring residual impairment likely to affect driving.	Not fit to drive. Driver must notify NDLS.	

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Incidental finding of an infratentori	al AVM	
A. No treatment	No restriction.	Not fit to drive.
		Driver must notify NDLS.
B. Surgical or other treatment	Can drive when there is no debarring residual impairment likely to affect driving.	Not fit to drive until confirmation of complete obliteration with no debarring residual impairment likely to affect driving. Driver must notify NDLS.
Dural AV Fistula	Continued driving subject to individual assessment.	Driving may continue subject to individual assessment by appropriate consultant. Driver must notify NDLS.
Cavernous Malformation Supratentorial		
A. Incidental, no surgical treatment	No restriction.	No restriction subject to individual assessment by appropriate consultant.
B. Seizure, no surgical treatment	Epilepsy standards apply if history of seizure(s).	Epilepsy standards apply if history of seizure(s).
C. Haemorrhage and/or focal neurological deficit, no surgical treatment	Can drive when there is no debarring residual impairment likely to affect driving. Epilepsy standards apply if history of seizure(s).	Not fit to drive. Driver must notify NDLS.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
D. Treated by Surgical Excision (Craniotomy)	Can drive when there is no debarring residual impairment likely to affect driving. If significant residual disability, due consideration should be given to rehabilitation, specialist on-road assessment and adaptations which may help to adapt to, or overcome, relevant cognitive and physical impairment. Driver must notify NDLS. Epilepsy standards apply if history of seizure(s).	Not fit to drive until 10 years post-obliteration of the lesion and epilepsy standards apply. Driver must notify NDLS.
E. Treated by radiosurgery		
(I). Incidental	No restriction.	Not fit to drive. Driver must notify NDLS.
(II). Symptomatic	Can drive when there is no debarring residual impairment likely to affect driving. Epilepsy standards apply if history of seizure(s).	Not fit to drive. Driver must notify NDLS.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Infratentorial		
A. Incidental	No restriction.	Can drive subject to specialist assessment by appropriate consultant. Driver must notify NDLS.
B. With focal Neurological Deficit or Haemorrhage whether treated surgically or not	Can drive when there is no debarring residual impairment likely to affect driving. Epilepsy standards apply if history of seizure(s).	Can drive when there is no debarring residual impairment likely to affect driving. Epilepsy standards apply if history of seizure(s). Driver must notify NDLS.

N.B. Multiple Cavernoma: no firm evidence of ↑ morbidity. Size is not an issue

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Intracerebral Abscess/ Subdural Empyema	One year off driving. Driver must notify NDLS.	Not fit to drive. Very high prospective risk of seizure(s). May consider licensing if 10 years seizure-free from treatment. **Driver must notify NDLS.**
Hydrocephalus	If uncomplicated, can be recommended for continued driving.	Can be issued with a licence if uncomplicated and no associated neurological problems.
Intraventricular Shunt or Extraventricular Drain Insertion or revision of upper end of ventricular shunt or extra- ventricular drain	6 months off driving. Can be recommended for continued driving thereafter when there is no debarring residual impairment likely to affect driving safety. **Driver must notify NDLS.**	Minimum 6 months off and then licensing shall be dependent upon the individual assessment of the underlying condition. Driver must notify NDLS.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Neuroendoscopic procedures E.g. III rd ventriculostomy	6 months off driving. Can be recommended for continued driving thereafter when there is no debarring residual impairment likely to affect safe driving. Driver must notify NDLS.	Minimum 6 months off and then licensing shall be dependent upon the individual assessment of the underlying condition. Driver must notify NDLS.
Intracranial Pressure Monitoring Device Inserted by Burr hole surgery	The prospective risk from the underlying condition must be considered.	The prospective risk from the underlying condition must be considered.
Implanted Electrodes Deep brain stimulation for movement disorder or pain	If no complications from surgery and seizure, can drive when there is no debarring residual impairment likely to affect driving safety. Driver must notify NDLS.	If no complications from surgery, seizure free and underlying condition non-progressive, can drive when there is no debarring residual impairment likely to affect driving safety. **Driver must notify NDLS.**
Implanted Motor Cortex stimulator for pain relief	If aetiology of pain is non-cerebral e.g. trigeminal neuralgia, 6 months off driving. If the aetiology is cerebral e.g. stroke, 12 months off driving. Can then drive when there is no debarring residual impairment likely to affect driving safety.	Not fit to drive. Driver must notify NDLS.

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Appendix — Chapter 2

Epilepsy standards for Group 1 and 2

Group 1

This means that:

- 1. A person who has suffered an epileptic attack whilst **awake** must refrain from driving for at least **one** year from the date of the attack: driving cannot resume until the driver has had no further seizures while awake for a 12-month period.
- 2. A person who has experienced seizures exclusively while asleep may be considered for a one year licence despite continuing seizures only during sleep, and subject to at least annual review, taking into account information provided by the treating doctor (with appropriate expertise and due consultation as required) as to whether the following criteria are met:
 - There have been no previous seizures while awake; and
 - The first sleep-only seizure was at least 12 months ago; and
 - The person follows medical advice, including adherence to medication if prescribed. or
 - There have been previous seizures while awake but not in the preceding one year; and
 - Sleep-only seizures have been occurring for at least one year; and
 - The person follows medical advice, including adherence to medication if prescribed.

and in both cases

- So far as practicable, the person complies with advised treatment and check-ups for epilepsy, AND
 - II. The driving of a vehicle by such a person should not be likely to cause danger to the public.

A specific exception to these are seizures a judged by the treating consultant neurologist as not impairing consciousness or driving ability at any time. An annual licence may be granted by the National Driver Licence Service (NDLS) subject to at least annual review, taking into account information provided by the treating consultant as to whether the following criteria are met:

- · Seizures not impairing consciousness or driving ability at any time have been present for at least one year; and
- There have been no seizures of other type for at least one year; and
- The person follows medical advice, including adherence to medication if prescribed.

Group 2

This means that:

During the period of 10 years immediately preceding the date when the licence is granted the applicant/licence holder should:

- 1) be free from any epileptic attack
- have not taken medication to treat epilepsy
- 3) not otherwise be a source of danger whilst driving.

In addition, someone with a structural intracranial lesion who has an increased risk of seizures will not be able to drive vehicles of this group until the risk of a seizure has fallen to no greater than 2% per annum, which permits compliance with the standards.

Guidance for clinicians advising patients to cease driving in the case of break-through seizures in those with established epilepsy for Group 1 Drivers:

In the event of a seizure, the driver must be advised not to drive unless they are able to meet the conditions of the asleep concessions. The patient must be advised to notify the NDLS. In exceptional cases (e.g. seizure secondary to prescribing error), a consultant may advise a return after a shorter period.

Guidance for withdrawal of antiepileptic medication being withdrawn on specific medical advice for Group 1 Drivers:

(N.B. This advice only relates to treatment for epilepsy)

From a medico-legal point of view, the risk of further epileptic seizures occurring during this therapeutic procedure should be noted. If an epileptic seizure does occur, the patient will need to satisfy driving licence standards before resuming driving and will need to be counselled accordingly. The current epilepsy standards require a period of at least one year free of any manifestation of epileptic seizure or attacks whilst awake from the date of the last attack; special consideration is given where attacks have occurred only whilst asleep.

It is clearly recognised that withdrawal of antiepileptic medication is associated with a risk of seizure recurrence. A number of studies have shown this, including the randomised study of antiepilepsy drug withdrawal in patients in remission, conducted by the UK Medical Research Council Anti-epileptic Drug Withdrawal Study Group in the UK¹⁷. This study shows a 30% risk of seizure in the first year of withdrawal ofmedication compared with those who continued on treatment.

Patients undergoing withdrawal of antiepilepsy medications should be warned of the risk they run, both of needing to cease driving and also of having a seizure which could result in a road traffic accident. Patients should be advised not to drive from commencement of the period of withdrawal and thereafter for a period of 6 months after cessation of treatment. A person remains as much at risk of seizure associated with drug withdrawal during the period of withdrawal as in the 6 months after withdrawal.

^{17.} Bonnett LJ, Shukralla A, Tudur-Smith C, Williamson PR, Marson AG. Seizure recurrence after antiepileptic drug withdrawal and the implications for driving: further results from the MRC Antiepileptic Drug Withdrawal Study and a systematic review. J Neurol Neurosurg Psychiatry. 2011 Dec;82(12):1328-33.

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This advice may not be appropriate in every case. One specific example is withdrawal of antiepileptic medication when there is a well-established history of seizures only while asleep. In such cases, any restriction in driving is best determined by the consultant concerned, after considering the history. It is up to the driver to comply with such advice.

It is important to remember that the epilepsy standards are still relevant even if epileptic seizures occur after medication is omitted, for example on admission to hospital for any condition.

Provoked seizures

Provoked or acute symptomatic seizures may be dealt with on an individual basis if there is no previous seizure history. Seizures associated with alcohol or drug misuse, sleep deprivation or a structural abnormality is not considered provoked for licensing purposes. Similarly, reports of seizures as a side-effect of prescribed medication do not automatically imply that such events should be considered as provoked. For seizure(s) with alcohol or illicit drugs, please see Chapter 6 in these Guidelines.

Doctors may wish to advise patients that the period of time likely to be recommended off driving will be influenced inter alia by:

- A. Whether it is clear that the seizure had been provoked by a stimulus which does not convey any risk of recurrence and does not represent an unmasking of an underlying liability;
- B. Whether the stimulus had been successfully/appropriately treated or is unlikely to occur at the wheel.

In the absence of any previous seizure history or previous cerebral pathology, the following seizures may also be treated as provoked:

- Eclamptic seizures.
- Convulsive syncope.
- Seizure in first week following a head injury (see head injury section) at the time of a Stroke/TIA or within the ensuing 24 hours.
- During intracranial surgery or in the ensuing 24 hours.

Chapter 3

Cardiovascular disorders¹⁸

A licence holder or applicant must meet the standards for cardiovascular disorders outlined below, and if there is reason to doubt that these are met, the applicant or licence holder should undergo a more detailed examination by a consultant cardiologist — see Appendix to this chapter.

Group 2 standards are minimum standards and do not preclude employers setting higher standards in terms of the demands of the driving tasks encountered in the course of employment.

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Angina	Driving must cease when symptoms occur at rest, with emotion, or at the wheel.	Refusal or revocation with continuing symptoms (treated and/or untreated).
	Driving may recommence when satisfactory symptom control is achieved. NDLS need not be notified.	 Driving may recommence thereafter provided: Free from angina for at least 4 weeks. The exercise or other functional test requirements can be met. There is no other disqualifying condition. Driver must notify NDLS.

^{18.} Helpful recent reviews include: Sorajja D, Shen WK. Driving guidelines and restrictions in patients with ahistory of cardiac arrhythmias, syncope, or implantable devices. Curr Treat Options Cardiovasc Med. 2010 Oct;12(5):443-56.

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Acute Coronary Syndromes (ACS) defined as: 1. Unstable angina (symptoms at rest with ECG changes). 2. Non STEMI with at least two of the following criteria: • Symptoms at rest • Raised serum Troponin • ECG changes 3. STEMI symptoms with ST elevation on ECG.	If successfully treated by coronary angioplasty, driving may recommence after 1 week provided: • No other URGENT revascularisation is planned. (URGENT refers to within 4 weeks from acute event). • Left Ventricular Ejection Fraction (LVEF) is at least 35% prior to hospital discharge. • There is no other disqualifying condition. If not successfully treated by coronary angioplasty, driving may recommence after 4 weeks provided: • There is no other disqualifying condition.	All Acute Coronary Syndromes disqualify the licence holder from driving for at least 4 weeks. Driving may recommence thereafter provided: The exercise or other functional test requirements can be met. There is no other disqualifying condition. Driver must notify NDLS.

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Percutaneous Coronary Intervention	Driving must cease for at least 2 days.	Driving must cease for at least 4 weeks.
(Angioplasty ± stent) Elective	Driving may recommence thereafter provided there is no other disqualifying condition. NDLS need not be notified.	 Driving may recommence thereafter provided: The exercise or other functional test requirements can be met. There is no other disqualifying condition. Driver must notify NDLS.
Cardiac Surgery CABG including valve or replacement or repair	Driving must cease for at least 4 weeks. Driving may recommence thereafter provided there is no other disqualifying condition. NDLS need not be notified.	 Disqualifies from driving for at least 3 months. Driving may recommence thereafter provided: There is no evidence of significant impairment of left ventricular function i.e. LVEF is ≥ 35%. The exercise or other functional test requirements can be met 3 months or more post operatively. There is no other disqualifying condition. Driver must notify NDLS.

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Arrhythmia Sinoatrial disease Significant atrio-ventricular conduction defect Atrial flutter/fibrillation Narrow or broad complex tachycardia (See also following Sections - Pacemakers are considered separately). N.B. Transient Arrhythmias occurring during acute coronary syndromes do not require assessment under this section.	Driving must cease if the arrhythmia has caused or is likely to cause incapacity. Driving may be permitted when underlying cause has been identified and controlled for at least 4 weeks. NDLS need not be notified unless there are distracting/disabling symptoms.	 Not fit to drive if the arrhythmia has caused or is likely to cause incapacity. Driving may be permitted when: The arrhythmia is controlled for at least 3 months. The LVEF is ≥ 35%. There is no other disqualifying condition. NDLS need not be notified unless there are distracting/disabling symptoms.
Successful Catheter Ablation	Driving must cease for at least 2 days. Driving may be permitted thereafter provided there is no other disqualifying condition. NDLS need not be notified.	Following successful catheter ablation for an arrhythmia that has caused or would likely have caused incapacity, driving should cease for 6 weeks. Driving may recommence thereafter provided there is no other disqualifying condition. When the arrhythmia has not caused nor would likely have caused incapacity, driving may recommence after 1 week provided there is no other disqualifying condition.
Pacemaker Implant Includes box change	Driving must cease for at least 1 week. Driving may be permitted thereafter provided there is no other disqualifying condition.	Disqualifies from driving for 4 weeks. Driving may be permitted thereafter provided there is no other disqualifying condition.

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Unpaced Congenital Complete Heart Block	May drive if asymptomatic.	Not fit to drive whether symptomatic or asymptomatic.
Implantable Cardioverter Defibrillator (ICD) Implanted for ventricular arrhythmia associated with incapacity	Patients with ICDs implanted for sustained ventricular arrhythmias should not drive for: 1. A period of 6 months after the first implant. 2. A further 6 months after any shock therapy and/or symptomatic antitachycardia pacing (see 3A below). 3A. A period of 2 years if any therapy following device implantation has been accompanied by incapacity (whether caused by the device or arrhythmia), except as in 3B and 3C. 3B. If therapy was delivered due to an inappropriate cause, i.e. a trial fibrillation or programming issues, then fit to drive 4 weeks after this has been completely controlled to the satisfaction of the cardiologist. NDLS need not be notified. Continued on next page	Not fit to drive. Driver must notify NDLS.

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Implantable Cardioverter Defibrillator (ICD) Implanted for ventricular arrhythmia associated with incapacity Continued from previous page	3C. If the incapacitating shock was appropriate (i.e. for sustained VT or VF) and steps have been taken to prevent recurrence, (e.g., introduction of antiarrhythmic drugs or ablation procedure) fit to drive after 6 months in the absence of	
	further symptomatic therapy. For 2 and 3A/3C, if the patient has been re-licensed prior to the	
	 event, <i>Driver must notify NDLS</i>. 4. A period of 4 weeks off driving must occur following any revision of the electrodes or alteration of antiarrhythmic drug treatment. 	
	5. A period of 1 week off driving is required after a defibrillator box change.	
	Return to driving requires that:	
	The device is subject to regular review with interrogation.	
	2. There is no other disqualifying condition.	

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Implantable Cardioverter Defibrillator (ICD) Implanted for sustained ventricular arrhythmia which did not cause incapacity	If the patient presents with a non-disqualifying cardiac event, i.e. haemodynamically stable non-incapacitating sustained ventricular tachycardia, the patient can drive 4 weeks after ICD implantation providing all of the following conditions are met: • LVEF is ≥ 35%. • No fast VT induced on electrophysiological study (RR < 250 msec). • Any induced VT could be paceterminated by the ICD twice, without acceleration, during the post implantation study. NDLS need not be notified. Should the ICD subsequently deliver ATP and/or shock therapy (except during normal clinical testing) then the licensing criteria on the previous page applies and <i>Driver must notify NDLS</i> .	Not fit to drive. Driver must notify NDLS.

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Prophylactic ICD Implant	Asymptomatic individuals with high risk of significant arrhythmia. Driving should cease for 4 weeks. NDLS need not be notified. Should the ICD subsequently deliver ATP and/or shock therapy (except during normal clinical testing) then the licensing criteria on previous page for ICD applies and Driver must notify NDLS.	Not fit to drive. Driver must notify NDLS.
Ascending/Descending Thoracic and Abdominal Aortic Aneurysm	Driver must notify NDLS of any aneurysm of 6cm in diameter, despite treatment. Licensing will be permitted subject to annual review. Driving may continue after satisfactory medical (blood pressure control) or surgical treatment, without evidence of further enlargement. There should be no other disqualifying condition. An aortic diameter of 6.5cm or more not fit to drive.	Not fit to drive if the aortic diameter is > 5.5cm. Driving may continue after satisfactory medical or surgical treatment, unless other disqualifying condition. N.B. The exercise or other functional test requirements will apply to abdominal aortic aneurysm. Driver must notify NDLS if aortic diameter is > 5.5cm.

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Chronic Aortic Dissection	Driving may continue after satisfactory medical (blood pressure control) or surgical treatment, unless other disqualifying condition. NDLS need not be notified.	 Driving may be permitted when ALL of the following criteria can be met: The maximum transverse diameter of the aorta, including false lumen/thrombosed segment, does not exceed 5.5cm. There is complete thrombosis of the false lumen. The BP is well controlled*. * NOTE "well controlled" refers to clinical, standard.
Hypertension	Driving may continue unless treatment causes unacceptable side effects. NDLS need not be notified.	Not fit to drive if resting BP consistently 180 mm Hg systolic or more and/or 100 mm Hg diastolic or more. Driving may be permitted when controlled provided that treatment does not cause side effects which may interfere with driving.

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Hypertrophic Cardiomyopathy (H.C.M.) (See also arrhythmia, pacemaker and ICD sections)	Driving may continue provided no other disqualifying condition. NDLS need not be notified.	Not fit to drive if symptomatic. Driving may only be permitted when at least three of the following criteria are met: • There is no family history in a first degree relative of sudden premature death from presumed HCM. • The cardiologist can confirm that the HCM is not anatomically severe. The maximum wall thickness does not exceed 3cm. • There is no serious abnormality of heart rhythm demonstrated; e.g. ventricular tachy-arrhythmia excluding isolated ventricular pre excitation beats. • There is at least a 25mm Hg increase in systolic blood pressure during exercise testing - (exercise testing to be repeated every 3 years). See Appendix to this Chapter for full details. Driver must notify NDLS.
Dilated Cardiomyopathy (See also arrhythmia, pacemaker, I.C.D. and heart failure sections etc.)	Driving may continue provided no other disqualifying condition. NDLS need not be notified.	Not fit to drive if symptomatic. Driving may be permitted provided that there is no other disqualifying condition. NDLS need not be notified.

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Cardiac Resynchronisation Therapy (CRT) CRT-P	Driving may continue provided there are no symptoms that may distract the driver's attention. NDLS need not be notified. Driving must cease for at least 1 week following implantation. Driving may continue provided there are no symptoms relevant to driving. There is no other disqualifying condition.	Disqualifies from driving if symptomatic. Driving may be permitted provided: • The LVEF is ≥ 35%. • There is no other disqualifying condition. Exercise or other functional testing may be required depending on the likely cause for the heart failure. Disqualifies from driving for 4 weeks. Following Implantation. Driving may be permitted provided: • The heart failure requirements are met. • There is no other disqualifying condition.
CRT-D	Driving may be permitted provided the ICD requirements are met. There is no other disqualifying condition.	Not fit to Drive. Driver must notify NDLS.

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Congenital Heart Disease	Driving may continue provided there is no other disqualifying condition.	Disqualifies from driving when complex or severe disorder(s) is (are) present.
	Following a first licence application or identification of such a condition, consultant assessment may be required before a licence is (re)issued. Certain conditions will require licence review every 1, 3 years, in this instance <i>Driver must notify NDLS</i> .	Following a first licence application or identification of such a condition, consultant cardiologist assessment may be required before a licence is (re)issued. Those with minor disease and others who have had successful repair of defects or relief of valvular problems, fistulae etc. may be licensed provided there is no other disqualifying condition. Certain conditions will require licence review every 1, 3 years, in this instance <i>Driver must notify NDLS</i> .
Syncope N.B. Cough Syncope see Chapter 9	See section entitled "Loss of Consciousness" Chapter 2.	See section entitled "Loss of Consciousness" Chapter 2.
ECG Abnormality Suspected myocardial infarction	Driving may continue unless other disqualifying condition. NDLS need not be notified.	 Driving may be permitted provided: There is no other disqualifying condition. The exercise or other functional test requirements can be met.

Appendix — Chapter 3

Group 1 and 2 entitlements

Medication

If drug treatment for any cardiovascular condition is required, any patient experiencing an adverse effect which is likely to affect driver performance is not fit to drive.

Group 2 entitlements only

LICENCE DURATION

An applicant or driver who has, after cardiac assessment, (usually for ischaemic or untreated heart valve disease) been permitted to hold either a Group 2 licence will usually be issued with a short term licence (maximum duration 3 years) renewable on receipt of satisfactory D501 Medical Report.

Exercise testing

Exercise evaluation shall be performed on a treadmill. Drivers should be able to achieve 90% of age predicted heart rate of standard Bruce protocol or equivalent safely, without antianginal* medication for 48 hours and should remain free from signs of cardiovascular dysfunction, viz. angina pectoris, syncope, hypotension, sustained ventricular tachycardia, and/ or electrocardiographic ST segment shift which accredited medical opinion interprets as being indicative of myocardial ischaemia (usually > 2mm horizontal or down-sloping) during exercise or the recovery period. In the presence of established coronary heart disease, exercise evaluation shall be required at regular intervals not to exceed 3 years.

*Antianginal medication refers to the use of nitrates, beta-blockers, calcium channel blockers, nicorandil, ivabradine and ranolazine prescribed for antianginal purposes or for other reasons e.g. cardio-protection.

N.B. When any of the above drugs are being prescribed purely for the control of hypertension or an arrhythmiathen discontinuation prior to exercise testing is not required.

Should atrial fibrillation develop de novo during exercise testing, provided the individual meets all the NDLS exercise tolerance test criteria, the individual will be required to undergo an echocardiogram and meet the licensing criteria, just as any individual with a pre-existing atrial fibrillation.

Chest pain of uncertain cause

Exercise testing should be carried out as above. Those with a locomotor disability who cannot comply will require either a gated myocardial perfusion scan, stress echo study and/or specialised cardiological opinion.

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Stress Myocardial Perfusion Scan/Stress Echocardiography

The licensing standard requires that:

- 1. The LVEF is $\geq 35\%$
- 2A) No more than 10% of the myocardium is affected by reversible ischaemic change on myocardial perfusion imaging. or
- 2B) No more than one segment is affected by reversible ischaemic change on stress echocardiography.

N.B. Full details of NDLS protocol requirements for such tests can be obtained on request.

Coronary Angiography

The functional implication of coronary heart disease is considered to be more predictive for licensing purposes than the anatomical findings. For this reason the exercise tolerance test and where necessary, myocardial perfusion imaging or stress echocardiography are the investigations of relevance for licensing purposes and it is the normal requirement that the standard of one or other of these must be met. Angiography is therefore not commissioned for (re-) licensing purposes. When there remains conflict between the outcome of a functional test and the results of recent angiography, such cases can be considered on an individual basis. However, (re-) licensing will not normally be considered unless the coronary arteries are **unobstructed or the stenosis is not flow limiting and the LVEF** is ≥ 35%.

'Predictive' refers to the risk of an infarct within 1 year. Grafts are considered as 'Coronary Arteries'.

ETT and Hypertrophic Cardiomyopathy

For the purpose of assessment of hypertrophic cardiomyopathy (HCM) cases, an exercise test falling short of exercise target above would be acceptable provided:

- 1. 90% of age-predicted heart rate.
- 2. There is no obvious cardiac cause for stopping the test prematurely.
- 3 There is at least a 25mm Hg rise in systolic blood pressure during exercise testing.
- 4 Meets all other requirements as mentioned in HCM section.

Chapter 4

Diabetes Mellitus¹⁹



Failure to meet these standards or the presence of any progressive neurological disorder requires the applicant or licence holder to inform the NDLS unless stated otherwise in the text. Group 2 standards are minimum standards and do not preclude employers setting higher standards in terms of the demands of the driving tasks encountered in the course of employment.

Diabetes Mellitus	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Insulin-Treated See Appendix to this chapter for advice to drivers.	 Has appropriate awareness of hypoglycaemia at appropriate glucose level. Must not have had more than one episode of severe hypoglycaemia requiring the assistance of another person in the preceding twelve months. There must be appropriate blood glucose monitoring. Must not be regarded as a likely source of danger to the public while driving. The visual standards for acuity and visual field must be met. Must not have impaired awareness of hypoglycaemia is defined as, 'an inability to detect the onset of hypoglycaemia because of a total absence of warning symptoms'. If meets the medical standard a 1 or 3 year licence may be issued. 	 May apply for any Group 2 licence. Must satisfy the following criteria: No episode of hypoglycaemia requiring the assistance of another person has occurred in the preceding 12 months. Has appropriate awareness of hypoglycaemia at appropriate glucose level. Impaired awareness of hypoglycaemia is defined as, 'an inability to detect the onset of hypoglycaemia because of a total absence of warning symptoms'. Regularly monitors blood glucose at least twice daily and at times relevant to driving using a glucose meter with a memory function to measure and record blood glucose levels. At the annual examination by a consultant endocrinologist, 3 months of blood glucose readings must be available. Must demonstrate an understanding of the risks of hypoglycaemia. There are no other debarring complications of diabetes such as a visual field defect. If meets the medical standards a 1 year licence may be issued. The treating endocrinologist is not obliged to provide a medical report on fitness to drive: in this case, the patient should be advised to seek a separate consultant endocrinologist for a medical report on fitness to drive.
	Driver must notify NDLS.	Driver must notify NDLS.

^{19.} Helpful recent reviews include: American Diabetes Association, Lorber D, Anderson J, Arent S, Cox DJ, Frier BM, Greene MA, Griffin J Jr, Gross G, Hathaway K, Hirsch I, Kohrman DB, Marrero DG, Songer TJ, Yatvin AL. Diabetes and driving. Diabetes Care. 2014 Jan;37 Suppl 1:S97-103.

Diabetes Mellitus	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Temporary Insulin Treatment E.g. Post-Myocardial Infarction, participants in Oral/Inhaled Insulin Trials.	Provided they are under medical supervision, has appropriate awareness of hypoglycaemia at appropriate glucose level and have not been advised by their doctor that they are at risk of disabling hypoglycaemia, need not notify NDLS. If experiencing disabling hypoglycaemia, <i>Driver must notify NDLS</i> . Notify NDLS if treatment continues for more than 3 months or for more than 3 months after delivery for gestational diabetes.	 May apply for any Group 2 licence. Must satisfy the following criteria No episode of hypoglycaemia requiring the assistance of another person has occurred in the preceding 12 months. Has appropriate awareness of hypoglycaemia at appropriate glucose level. Impaired awareness of hypoglycaemia is defined as, 'an inability to detect the onset of hypoglycaemia because of a total absence of warning symptoms'. Regularly monitors blood glucose at least twice daily and at times relevant to driving using a glucose meter with a memory function to measure and record blood glucose levels. At the annual examination by a consultant endocrinologist, 3 months of blood glucose readings must be available. Must demonstrate an understanding of the risks of hypoglycaemia. There are no other debarring complications of diabetes such as a visual field defect. If meets the medical standards a 1 year licence may be issued. The treating endocrinologist is not obliged to provide a medical report on fitness to drive: in this case, the patient should be advised to seek a separate consultant endocrinologist for a medical report on fitness to drive. Driver must notify NDLS.

Diabetes Mellitus	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Managed by tablets which carry a risk of Inducing Hypoglycaemia. This includes Sulphonylureas and Glinides. See Appendix to this chapter for advice to drivers.	Must not have had more than one episode of hypoglycaemia requiring the assistance of another person within the preceding 12 months. It may be appropriate to monitor blood glucose regularly and driver should monitor blood glucose at times relevant to driving to enable the detection of hypoglycaemia. Has appropriate awareness of hypoglycaemia at appropriate glucose level. Must be under regular medical review. If however there has been a hypoglycaemic event in the preceding 12 months, <i>Driver must notify NDLS</i> .	 No episode of hypoglycaemia requiring the assistance of another person has occurred in the preceding 12 months. Has appropriate awareness of hypoglycaemia at appropriate glucose level. Must show adequate control of condition by regularly monitoring blood glucose at least twice daily and at times relevant to driving. Must demonstrate an understanding of the risks of hypoglycaemia. There are no other debarring complications of diabetes such as a visual field defect.
		If meets the medical standards a 1 year licence may be issued. The treating endocrinologist is not obliged to provide a medical report on fitness to drive: in this case, the patient should be advised to seek a separate consultant endocrinologist for a medical report on fitness to drive. Driver must notify NDLS.
Providing your diabetes is managed only by: • tablets other than those mentioned above or by • non-insulin injectable medication See Appendix to this chapter for advice to drivers.	Need not notify NDLS unless develop associated conditions which are relevant to driving. E.g. Diabetic eye problems affecting visual acuity or visual field or if insulin required.	Need not notify the NDLS unless they develop relevant disabilities e.g. diabetic eye problems affecting visual acuity or visual fields, in which case not fit to drive or or short period licence. Drivers are advised to monitor their blood glucose regularly and at times relevant to driving. They must be under regular medical review.

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Diabetes Mellitus	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Managed by diet alone	Need not notify NDLS unless development of associated conditions which are relevant to driving e.g. diabetic eye problems affecting visual acuity or visual field or if insulin required.	Need not notify NDLS unless development of relevant disabilities e.g. diabetic eye problems affecting visual acuity or visual field or if insulin required.
Impaired awareness of Hypoglycaemia	If confirmed, driving must stop. Fit to drive provided reports show awareness of hypoglycaemia has been regained, confirmed by consultant/GP report.	Not fit to drive. Driver must notify NDLS.
Eyesight Complications (affecting visual acuity or fields)	See section: Visual Disorders Chapter 7.	See previous page for insulin treated and See section: Visual Disorders Chapter 7
Renal Disorders	See section: Renal Disorders Chapter 8.	See section: Renal Disorders Chapter 8.
Limb Disability E.g. Peripheral Neuropathy	See section: Drivers with disabilities Chapter 10.	See section: Disabled Drivers Chapter 10.

Appendix — Chapter 4

The advice of *Sláinte agus Tiomáint* is made within the context of best available medical evidence, best current international practice, and EU and Irish law. They represent a <u>minimum</u> level of advice, and it is for others, for example, employers or directors of emergency services, to decide whether or how those recommendations should be interpreted for their own areas of interest, in the knowledge of their specific circumstances. The following sections represent how this is translated in terms of guidance to drivers with diabetes mellitus.

4.1 A Guide for Drivers with Insulin Treated Diabetes or Oral Medications with Potential for Hypoglycaemia (such as sulfonylureas and glinides) who wish to apply for Group 2 Licences (trucks and buses with or without trailer) entitlements.

Qualifying Conditions which must be met:

- No episode of hypoglycaemia requiring the assistance of another person has occurred in the preceding 12 months.
- Must have appropriate awareness of hypoglycaemia at appropriate glucose level.
- · Must demonstrate an understanding of the risks of hypoglycaemia.
- · Will not be able to apply until their condition has been stable for a period of at least one month.
- Must regularly monitor their condition by checking their blood glucose levels at least twice daily and at times relevant
 to driving. A glucose meter with a memory function to measure and record blood glucose levels must be used.
- At the annual examination by a consultant endocrinologist, 3 months of blood glucose readings must be available.
- Must have no other condition which would render them a danger when driving Group 2 vehicles.
- They will be required to comply with the directions of doctors(s) treating the diabetes and to report immediately
 to the NDLS any significant change in their condition.

4.2 Information for Drivers with Diabetes Treated by Other Non-Insulin Medication, Diet or Both (For Group 1 and Group 2 Drivers)

Drivers do not need to tell the NDLS if their diabetes is treated by tablets (other than sulfonylureas and glinides, they should check with their doctor if uncertain), diet or both and that they are free of the complications listed below.

Some people with diabetes develop associated problems that may affect their driving.

Hypoglycaemia (low blood sugar)

Hypoglycaemia (also known as a hypo) is the medical term for a low blood glucose (sugar) level.

Severe hypoglycaemia means the assistance of another person is required. The risk of hypoglycaemia is the main danger to driving safety and can occur with diabetes treated with insulin or tablets or both. This may endanger your own life as well as that of other road users. Many of the accidents caused by hypoglycaemia are because drivers carry on driving even though they get warning symptoms of hypoglycaemia. If you get warning symptoms of hypoglycaemia while driving you must stop as soon as safely possible – **do not ignore the warning symptoms**.

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Early symptoms of Hypoglycaemia include

Sweating, shakiness or trembling, feeling hungry, fast pulse or palpitations, anxiety, tingling lips. If you do not treat this it may result in more severe symptoms such as:

Slurred speech, difficulty concentrating, confusion, disorderly or irrational behaviour, which may be mistaken for drunkenness. If left untreated, this may lead to loss of consciousness.

What you need to tell us about

You must tell us if any of the following applies:

- · You have suffered more than one episode of severe hypoglycaemia within the last 12 months. You must also tell us if you or your medical team feel you are at high risk of developing severe hypoglycaemia. For Group 2 drivers (bus/ lorry), one episode of severe hypoglycaemia must be reported immediately.
- You have developed an impaired awareness of hypoglycaemia (difficulty in recognising the warning symptoms of low blood sugar).
- You suffer severe hypoglycaemia while driving.
- You need treatment with insulin.
- You don't meet the vision standards set out in these Guidelines (See Chapter 7 for eyesight standards).
- You develop any problems with the circulation or sensation in your legs or feet which make it necessary for you to drive certain types of vehicles only, for example automatic vehicles or vehicles with a hand-operated accelerator or brake. This must be shown on your driving licence.
- An existing medical condition gets worse or you develop any other condition that may affect your driving safely. In the interests of road safety, you must be sure that you can safely control a vehicle at all times.
- If your doctor, specialist or optician tells you to report your condition to us.

4.3 A Guide to Insulin Treated Diabetes and Driving

Drivers who have any form of diabetes treated with any insulin preparation must inform the NDLS.

Hypoglycaemia

Hypoglycaemia (also known as a hypo) is the medical term for a low blood glucose (sugar) level. Severe hypoglycaemia means that the assistance of another person is required. The risk of hypoglycaemia is the main danger to driving safety and this risk increases the longer you are on insulin treatment. This may endanger your own life as well as that of other road users. Many of the accidents caused by hypoglycaemia are because drivers carry on driving even though they get warning symptoms of hypoglycaemia. If you get warning symptoms of hypoglycaemia whilst driving, you must always stop as soon as safely possible – **do not ignore the warning symptoms.**

Early Symtoms of Hypoglcaemia include:

Sweating, shakiness or trembling, feeling hungry, fast pulse or palpitations, anxiety, tingling lips. If you do not treat this it may result in more severe symptoms such as:

Slurred speech, difficulty concentrating, confusion, disorderly or irrational behaviour, which may be mistaken for drunkenness. If left untreated this may lead to loss of consciousness.

Drivers with insulin treated diabetes are advised to take the following precautions:

- You must always carry your glucose meter and blood glucose strips with you. You must check your blood glucose before the first journey and every two hours whilst you are driving.
- In each case if your blood glucose is 5.0mmol/l or less, take a snack. If it is less than 4.0mmol/l or you feel hypoglycaemic, do not drive.
- If hypoglycaemia develops while driving, stop the vehicle as soon as possible.
- You must switch off the engine, remove the keys from the ignition and move from the driver's seat.
- You must not start driving until 45 minutes after blood glucose has returned to normal. It takes up to 45 minutes for the brain to recover fully.
- Always keep an emergency supply of fast-acting carbohydrate such as glucose tablets or sweets within easy reach in the vehicle.
- You should carry personal identification to show that you have diabetes in case of injury in a road traffic accident.
- Particular care should be taken during changes of insulin regimens, changes of lifestyle, exercise, travel and pregnancy.
- You must take regular meals, snacks and rest periods on long journeys. Always avoid alcohol.

• See Chapter 7 for eyesight standards

Limb Problems

Limb problems/amputations are unlikely to prevent driving. They may be overcome by driving certain types of vehicles e.g. automatics or one with hand controls.

You must inform NDLS if:

- You suffer more than one episode of severe hypoglycaemia (needing the assistance of another person) within the last 12 months. For Group 2 drivers (bus/lorry) one episode of severe hypoglycaemia must be reported immediately. You must also tell us if you or your medical team feels you are at high risk of developing hypoglycaemia.
- You develop impaired awareness of hypoglycaemia (difficulty in recognising the warning symptoms of low blood sugar).
- You suffer severe hypoglycaemia while driving.
- · An existing medical condition gets worse or you develop any other condition that may affect you driving safely.

Road Safety Authority

Chapter 5

Psychiatric disorders

Group 2 standards are minimum standards and do not preclude employers setting higher standards in terms of the demands of the driving tasks encountered in the course of employment.

Psychiatric Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Anxiety or depression (Without significant memory or concentration problems, agitation, behavioural disturbance or suicidal thoughts).	NDLS need not be notified and driving may continue. (See note about medication in Appendix at end of this Chapter). Driver must notify NDLS if medical advice is to cease driving for 6 months or longer.	Very minor short-lived illnesses need not be notified to NDLS. (See note about medication in Appendix at end of this Chapter). Driver must notify NDLS if medical advice is to cease driving for 6 months or longer.
More severe anxiety states or depressive illnesses (With significant memory or concentration problems, agitation, behavioural disturbance or suicidal thoughts). N.B. For cases which also involve persistent misuse of or dependence on alcohol/drugs,	Driving should cease pending the outcome of medical enquiry. A period of stability depending upon the circumstances will be required before driving can be resumed. Particularly dangerous are those who may attempt suicide at the wheel. Driver must notify NDLS if medical advice is to cease driving for 6 months or longer.	Driving should cease pending assessement by a consultant psychiatrist as being well and stable for a substantial period. Medication must not cause side effects which would interfere with alertness or concentration. Driving is usually permitted if the anxiety or depression is long-standing, but is controlled on doses of psychotropic medication which do not impair driving function.
please refer to the appropriate section of the alcohol/drugs chapter (Chapter 6). Where psychiatric illness has been associated with substance misuse, continuing misuse is not acceptable for licensing.	unving for a months or tonger.	N.B. It is the illness rather than the medication, which is of prime importance, but see notes on medication. Driver must notify NDLS if medical advice is to cease driving for 6 months or longer.

Psychiatric Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Acute Psychotic disorders of any type N.B. For cases, which also involve persistent misuse of or dependence on alcohol/drugs, please refer to the appropriate section of the alcohol/drugs chapter (Chapter 6). Where psychiatric illness has been associated with substance misuse, continuing misuse is not acceptable for licensing.	Driving must cease during the acute illness. Return to driving can be considered when all of the following conditions can be satisfied: A. Has remained well and stable with an awareness of fitness to drive (i.e. to have experienced a good level of functional recovery with insight into their illness and including engagement with the medical services) before driving can be resumed. B. Is not suffering from adverse effects of medication which would impair driving. In line with good practice, attempts should be made to achieve the minimum effective antipsychotic dose; tolerability should be optimal and not associated with any deficits (e.g. in alertness, concentration and motor performance) that might impair driving ability. Driver must notify NDLS if medical advice is to cease driving for 6 months or longer.	Driving must cease pending the outcome of medical assessment. It is a requirement that the person is assessed by a consultant psychiatrist. Return to driving can be considered when all of the following conditions can be satisfied: A. Has remained well and stable with an awareness of fitness to drive (i.e. to have experienced a good level of functional recovery with insight into their illness and including engagement with the medical services) before driving can be resumed. B. Is not suffering from adverse effects of medication which would impair driving. In line with good practice, attempts should be made to achieve the minimum effective antipsychotic dose; tolerability should be optimal and not associated with any deficits (e.g. in alertness, concentration and motor performance) that might impair driving ability. Driver must notify NDLS if medical advice is to cease driving for 6 months or longer.

Psychiatric Disorders Group 1 Entitlement ODL **Group 2 Entitlement ODL** car, motorcycle and tractor Hypomania/Mania **Driving must cease** during the **Driving must cease** pending the acute illness. Return to driving outcome of medical assessment. N.B. For cases, which also can be considered when all of It is a requirement that the involve persistent misuse of or the following conditions can be person is assessed by a consultant dependence on alcohol/drugs, satisfied: psychiatrist. Return to driving can be please refer to the appropriate considered when all of the following section of Chapter 6. Where A. Has remained well and conditions can be satisfied: psychiatric illness has been stable with an awareness of associated with substance fitness to drive (i.e. to have A. Has remained well and stable experienced a good level with an awareness of fitness to misuse, continuing misuse is not acceptable for licensing. of functional recovery with drive (i.e. to have experienced a insight into their illness and good level of functional recovery including engagement with with insight into their illness and the medical services) before including engagement with the driving can be resumed. medical services) before driving can be resumed. B. Is not suffering from adverse B. Is not suffering from adverse effects of medication which would impair driving. In effects of medication which would impair driving. In line line with good practice, attempts should be made with good practice, attempts should be made to achieve the to achieve the minimum effective antipsychotic minimum effective antipsychotic dose; tolerability should be dose; tolerability should be optimal and not associated with optimal and not associated with any deficits (e.g. in any deficits (e.g. in alertness, concentration and motor alertness, concentration and performance) that might impair motor performance) that driving ability. might impair driving ability. Driver must notify NDLS if Driver must notify NDLS if medical medical advice is to cease advice is to cease driving for 6 months or longer. driving for 6 months or longer. Repeated changes of mood: Hypomania or mania are particularly dangerous to driving when there are repeated changes of mood. In such cases a specialist opinion from a consultant psychiatrist is advised.

Psychiatric Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Chronic Schizophrenia and other Chronic Psychoses N.B. For cases, which also involve persistent misuse of or dependence on alcohol/drugs, please refer to the appropriate section of Chapter 6. Where psychiatric illness has been associated with substance misuse, continuing misuse is not acceptable for licensing.	Return to driving can be considered when all of the following conditions can be satisfied: A. Has remained well and stable with an awareness of fitness to drive (i.e. to have experienced a good level of functional recovery with insight into their illness and including engagement with the medical services) before driving can be resumed. B. Is not suffering from adverse effects of medication which would impair driving. In line with good practice, attempts should be made to achieve the minimum effective antipsychotic dose; tolerability should be optimal and not associated with any deficits (e.g. in alertness, concentration and motor performance) that might impair driving ability. Continued on next page	Driving must cease pending the outcome of medical assessment. It is a requirement that the person is assessed by a consultant psychiatrist. Return to driving can be considered when all of the following conditions can be satisfied: A. Has remained well and stable with an awareness of fitness to drive (i.e. to have experienced a good level of functional recovery with insight into their illness and including engagement with the medical services) before driving can be resumed. B. Is not suffering from adverse effects of medication which would impair driving. In line with good practice, attempts should be made to achieve the minimum effective antipsychotic dose; tolerability should be optimal and not associated with any deficits (e.g. in alertness, concentration and motor performance) that might impair driving ability. Continued on next page

Psychiatric Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Chronic Schizophrenia and other Chronic Psychoses Continued from previous page	Continuing symptoms: Even with limited insight, these do not necessarily preclude licensing. Symptoms should be unlikely to cause significant concentration problems, memory impairment or distraction whilst driving. Particularly dangerous, are those drivers whose psychotic symptoms relate to other road users. Driver must notify NDLS if medical advice is to cease driving for 6 months or longer. Due consideration should be given to specialist on-road assessment if doubt remains	Driver must notify NDLS if medical advice is to cease driving for 6 months or longer.
Developmental disorders	about fitness to drive. A diagnosis of any of these	It is normally a requirement that the
Includes Asperger's Syndrome, autism, severe communication disorders and Attention Deficit Hyperactivity Disorder.	conditions is not in itself a bar to licensing. Factors such as impulsivity, lack of awareness of the impact of own behaviours on self or others need to be considered.	person is assessed by a consultant psychiatrist. Continuing minor symptomatology may be compatible with licensing. Cases will be considered on an individual basis.

Psychiatric Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Mild Cognitive Impairment (MCI)	Where there is no objective impairment of function MCI does not need to be notified to NDLS. Where there is objective impairment of function or specific treatment is required then MCI will not be the cause and doctor should clarify the cause and apply the relevant section of <i>Sláinte agus Tiomáint</i> . Given that a significant proportion of people with MCI progress to dementia over time, yearly review of diagnostic status is recommended.	If MCI is suspected a specialist opinion is required and at least yearly review. Where there is no objective impairment of function MCI does not need to be notified to NDLS. Where there is objective impairment of function or specific treatment is required then MCI will not be the cause and doctor (it is normally a requirement that the person is assessed by a consultant psychiatrist, geriatrician or neurologist) should clarify the cause and apply the relevant section of <i>Sláinte agus Tiomáint</i> .

Psychiatric Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Dementia or any Organic Brain Syndrome	It can be difficult to assess driving ability in those with dementia. Those who have poor short-term memory, disorientation, lack of insight and judgement are almost certainly not fit to drive. The variable presentations and rates of progression are acknowledged. Disorders of attention will also cause impairment. A decision regarding fitness to drive is usually based on consultant medical assessment, further assessment by occupational therapy and/or neuropsychology, with a low threshold for an onroad driving assessment. In early dementia when sufficient skills are retained and progression is slow, a licence may be issued subject to annual review or sooner if a significant medical or functional decline is noted. A formal driving assessment is generally an integral part of assessment and review. Driver must notify NDLS. See Section: 2.3.1 Chapter 1.	Not fit to Drive. Driver must notify NDLS. See Section: 2.3.1 Chapter 1.

Psychiatric Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Learning disability Severely below average general intellectual functioning accompanied by significant limitations in adaptive functioning in at least two of the following areas: communication, self-care, home-living, social/interpersonal skills, use of community resources, self-direction, functional academic skills, work, leisure, health and safety.	Severe learning disability is not compatible with driving and the licence application must be refused. In milder forms, provided there are no other relevant problems, it may be possible to hold a licence.	Moderate and severe learning disability is not compatible with driving and the licence application must be refused. Minor degrees of learning disability when the condition is stable with no medical or psychiatric complications may be compatible with the holding of a licence.
Behaviour disorders Includes post head injury syndrome and Non-Epileptic Seizure Disorder.	If seriously disturbed e.g. violent behaviour or alcohol abuse and likely to be a source of danger at the wheel, driving must cease. After medical assessment confirms that behavioural disturbances have been satisfactorily controlled, driving can resume. Driver must notify NDLS if medical advice is to cease driving for 6 months or longer.	Not compatible with driving and the licence application must be refused if associated with serious behaviour disturbance likely to make the individual be a source of danger at the wheel. If assessment by consultant psychiatric confirms enduring stability, then return to driving can be considered. Driver must notify NDLS if medical advice is to cease driving for 6 months or longer.
Personality disorders	If likely to be a source of danger at the wheel cessation of driving is required or the application refused. Licensing may be permitted providing medical enquiry confirms that any behaviour disturbance is not related to driving or not likely to adversely affect driving or road safety. Driver must notify NDLS if medical advice is to cease driving for 6 months or longer.	Cessation of driving is required or refusal of application if associated with serious behaviour disturbance likely to make the individual be a source of danger at the wheel. In such cases licensing can be considered if assessment by consultant psychiatrist confirms stability. Driver must notify NDLS if medical advice is to cease driving for 6 months or longer.

Road Safety Authority

Appendix — Chapter 5

Psychiatric notes

Important Notes

Other psychiatric conditions, which do not fit neatly into the aforementioned classification, will need to be reported to the National Driver Licence Service (NDLS) if causing or felt likely to cause symptoms affecting driving safety. These would include for example any impairment of consciousness or awareness, any increased liability to distraction or symptoms affecting the safe operation of vehicle controls. The patient should be advised to declare both the condition and symptoms of concern.

It is the relationship of symptoms to driving that is of importance.

- Directive (91/439/EEC) as amended by Directive 2009/112/113/EC requires member states to set minimum medical standards of fitness to drive and sets out the requirements for mental health in broad terms.
- These Directives make a clear distinction between the standards needed for Group 1 (car and motorcycles) and Group 2 (lorries and buses) licences. The standards for the latter being more stringent due to the size of vehicle and the greater time spent at the wheel during the course of the occupation.
- Severe mental disorder for the purposes of these Guidelines is defined as including mental illness, arrested or
 incomplete development of the mind, psychopathic disorder or severe impairment of intelligence or social functioning.
 The standards must reflect, not only the need for an improvement in the mental state, but also a period of stability,
 such that the risk of relapse can be assessed should the driver fail to recognise any deterioration, this is especially
 pertinent in the assessment of Group 2 licence.
- Misuse of or dependence on alcohol or drugs will require the standards in this chapter to be considered in conjunction with those of Chapter 6 of this publication.

Medication

- Any person who drives, attempts to drive or is in charge of a vehicle in a public place whilst under the influence of an intoxicant (including a drug or drugs) to such an extent as to be incapable of having proper control of the vehicle is liable to prosecution, as set out in the Road Traffic Acts.
- All drugs acting on the central nervous system can impair alertness, concentration and driving performance. This is particularly so at initiation of treatment, or soon after and when dosage is being increased. Driving must cease if adversely affected until the patient is unimpaired.
- The older tricyclic antidepressants can have pronounced anticholinergic and antihistaminic effects, which may impair driving. The more modern antidepressants may have fewer adverse effects. These considerations need to be taken into account when planning the treatment of a patient who is a professional driver.
- Antipsychotic drugs, including the depot preparations, can cause motor or extrapyramidal effects as well as sedation
 or poor concentration, which may, either alone or in combination, be sufficient to impair driving. Careful clinical
 assessment is required.
- The epileptogenic potential of psychotropic medication should be considered particularly when patients are professional drivers
- Benzodiazepines are the most likely psychotropic medication to impair driving performance, particularly the long acting compounds. **Alcohol will potentiate the effects.**
- Doctors and pharmacists have a duty of care to advise drivers of the potential dangers of adverse effects from medication and interactions with other substances, especially alcohol.
- Drivers with psychiatric illnesses are often safer when well and on regular psychotropic medication than when they are ill. Inadequate treatment or irregular compliance may render a driver impaired by both the illness and medication.

Confidentiality

See Part A, Introduction Chapter 1, Section 2.3.1

Drug and alcohol misuse and dependence

The presence of any of the conditions listed below requires the applicant or licence holder to inform the National Driver Licence Service (NDLS) unless stated otherwise in the text. Group 2 standards are minimum standards and do not preclude employers setting higher standards in terms of the demands of the driving tasks encountered in the course of employment.

Alcohol Problems	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Alcohol misuse There is no single definition which embraces all the variables in this condition but the following is offered as a guide: "A state which, because of consumption of alcohol, causes disturbance of behaviour, related disease or other consequences, likely to cause the patient, his/ her family or society harm now, or in the future, and which may or may not be associated with dependence". Reference to ICD10 F10.1 is relevant.	Persistent alcohol misuse, confirmed by medical enquiry with or without evidence of otherwise unexplained abnormal blood biomarkers, requires cessation from driving until a minimum 3 month period of controlled drinking or abstinence has been attained, with normalisation of biomarkers, if relevant. Patient to seek advice from medical or other sources during the period off the road. Driver must notify NDLS.	Persistent alcohol misuse, confirmed by medical enquiry with or without evidence of otherwise unexplained abnormal blood biomarkers, requires cessation from driving until a minimum 1 year period of abstinence or controlled drinking has been attained, with normalisation of biomarkers, if relevant. Patient to seek advice from medical or other sources during the period off the road. Driver must notify NDLS.

Alcohol Problems	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Alcohol dependence "A cluster of behavioural,	Alcohol dependence, confirmed by medical enquiry, requires cessation from driving until	Group 2 licence will not be granted where there is a history of alcohol dependence within the past 3 years .
cognitive and physiological phenomena that develop after • repeated alcohol use and	a 6 month period free from alcohol has been attained with normalisation of biomarkers, if	Driver must notify NDLS.
which include a strong desire to take alcohol,	relevant.	Return to Driving Will require satisfactory medical
 difficulties in controlling its use, 	Driver must notify NDLS.	assessment from own doctor(s) and management of blood biomarkers
 persistence in its use despite harmful consequences, with 	Return to Driving Will require satisfactory medical assessment from own	if relevant. Consultant support/ referral may be necessary.
evidence of increased tolerance and sometimes a physical withdrawal state."	doctor(s) and management of blood biomarkers if relevant. Consultant support/referral may be necessary.	See also under "Alcohol related seizures".
Indicators may include a history of withdrawal symptoms, of tolerance, of detoxification(s) and/or alcohol related fits.	See also under "Alcohol related seizures".	

Alcohol Problems	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Alcohol related seizures Seizures associated with alcohol are not considered provoked for licensing purposes.	Following a solitary alcohol- related seizure, cessation from driving for a minimum 6 month period from the date of the event. Should however the seizure have occurred on a background of alcohol, the standards for such conditions will need to be satisfied before a new application can be considered. Where more than one seizure has occurred, the epilepsy standards will apply (See Appendix to Neurology Chapter 2 for full details). Return to driving should only occur after an appropriate period free from persistent alcohol misuse and/or dependence. Independent medical assessment with management of blood biomarkers if relevant and consultant reports will normally be necessary. Driver must notify NDLS.	Following a solitary alcohol-related seizure, a cessation from driving for a minimum 5 year period from the date of the event. Return to driving thereafter requires: No underlying cerebral structural abnormality. Off antiepileptic medication for at least 5 years. Maintained abstinence from alcohol if previously dependent. Review by an addiction specialist and neurological opinion. Where more than one seizure has occurred or there is an underlying cerebral structural abnormality, the Group 2 epilepsy standards apply. (See Appendix to Neurology Chapter for full details). Driver must notify NDLS.
Alcohol related disorders E.g. Hepatic cirrhosis with neuro-psychiatric impairment, psychosis.	Driving should cease until there is satisfactory recovery and is able to satisfy all other relevant medical standards. Driver must notify NDLS.	Driving should cease. Driver must notify NDLS.

Drug Misuse and Dependence Reference to ICD10 F10.1-F10.7 inclusive is relevant	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Cannabis The non-prescribed use of this drug and/or the use of supratherapeutic dosage constitutes misuse/ dependence for licensing purposes. The prescribed use of medicinal cannabis at therapeutic doses (MIMS/BNF/PIL), without evidence of impairment, does not amount to misuse/ dependence for licensing purposes (although clinically dependence may exist). See also Chapter 1, s3.9.2 The effects of specific medicine classes	Persistent use of or dependence on these substances, confirmed by medical enquiry, requires cessation from driving until a minimum 3 month period free of such use has been attained. Independent medical assessment and drug screen may be required. There should be no evidence of continuing use of illicit substances. Driver must notify NDLS.	Persistent use of or dependence on these substances, confirmed by medical enquiry, requires cessation from driving until a minimum 1 year period free of such use has been attained. Specialist medical assessment and drug screen may be required. There should be no evidence of continuing use of illicit substances. Driver must notify NDLS.
Cocaine, Amphetamines, Methamphetamine Ecstasy, ketamine & other psychoactive substances, including LSD and hallucinogens, psychoactive substances (Head shop products).	Persistent use of or dependence on these substances, confirmed by medical enquiry, requires cessation from driving until a minimum 6 month period free of such use has been attained. Independent medical assessment and drug screen may be required. There should be no evidence of continuing use of illicit substances.	Persistent use of or dependence on these substances, confirmed by medical enquiry, requires cessation from driving until a minimum 1 year period free of such use has been attained. Specialist medical assessment and drug screen may be required. There should be no evidence of continuing use of illicit substances.

Driver must notify NDLS.

Driver must notify NDLS.

Drug Misuse and Dependence Reference to ICD10 F10.1-F10.7 inclusive is relevant	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Heroin, Methadone* and other opiates including Codeine The prescribed use of these drugs at therapeutic doses (MIMS/BNF), without evidence of impairment, does not amount to misuse/dependence for licensing purposes (although clinically dependence may exist).	Persistent use of, or dependence on these substances, confirmed by medical enquiry, requires cessation from driving until a minimum 6 month period free of such use has been attained. Independent medical assessment and drug screen may be required. There should be no evidence of continuing illicit use of such substances. *Applicants or drivers who are complying fully and are stable on a supervised oral methadone substitution programme may continue to drive, subject to favourable assessment and annual medical review. Applicants or drivers on an oral buprenorphine programme may be considered applying the same criteria. There should be no evidence of continuing illicit use of such substances.	Persistent use of, or dependence on these substances, confirmed by medical enquiry requires cessation from driving until a minimum 3 year period free of such use has been attained. Specialist medical assessment and drug screen will normally be required. *Applicants or drivers complying fully with a consultant supervised oral methadone maintenance programme may be considered for an annual review licence once a minimum 3 year period of stability on the maintenance programme has been established, with favourable random drug tests and assessment. There should be no evidence of continuing illicit use of such substances and no evidence of disorders of cognition, attention or insight.
		Driver must notify NDLS.

Driver must notify NDLS.

Drug Misuse and Dependence Reference to ICD10 F10.1-F10.7 inclusive is relevant	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
The non-prescribed use of these drugs and/or the use of supratherapeutic dosage, whether in a substance withdrawal/maintenance programme or otherwise, constitutes misuse/dependence for licensing purposes. The prescribed use of these drugs at therapeutic doses (MIMS/BNF), without evidence of impairment, does not amount to misuse/dependence for licensing purposes (although clinically dependence may exist).	Persistent misuse of, or dependence on these substances, confirmed by medical enquiry, requires driving cessation until a minimum 6 month period free of such use has been attained. Independent medical assessment and drug screen may be required. In addition favourable consultant or specialist report may be required. Driver must notify NDLS.	Persistent misuse of, or dependence on these substances, confirmed by medical enquiry, requires driving cessation until a minimum 3 year period free of such use has been attained. Specialist medical assessment and drug screen may be required. **Driver must notify NDLS.**

Drug Misuse and Dependence Reference to ICD10 F10.1-F10.7 inclusive is relevant	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Seizure(s) associated with drug misuse/dependence Seizures associated with drug misuse/dependence are not considered provoked for licensing purposes.	Following a solitary seizure associated with drug misuse or dependence, driving must cease for a minimum 6 month period from the date of the event. Should however, the seizure have occurred on a background of substance misuse or dependence, the standards for such conditions will also need to be satisfied before return to driving. Where more than one seizure has occurred, the epilepsy standards will apply (See Appendix Neurology Chapter 2 for full details). Medical enquiry will be required before driving to confirm appropriate period free from persistent drug misuse and/ or dependence. Independent medical assessment with urine analysis and consultant reports will normally be necessary. Driver must notify NDLS.	Following a solitary seizure associated with drug misuse or dependence, driving must cease for a minimum 5 year period from the date of the event. Return to driving thereafter requires: No underlying cerebral structural abnormality. Off antiepileptic medication for at least 5 years. Maintained abstinence from drugs if previously dependent. Review by an addiction specialist and neurological opinion. Where more than one seizure has occurred, the epilepsy standards will apply (See Appendix Neurology Chapter 2 for full details). Driver must notify NDLS.

N.B. A person who has resumed driving following persistent drug misuse or dependence must be advised as part of their after-care that if their condition recurs they should cease driving and notify the NDLS.

Road Safety Authority

Chapter 7

Visual disorders



A licence holder or applicant must meet the standards for visual acuity and fields (assessed by a confrontation visual field test in the first instance) as outlined below, and if there is reason to doubt that these are adequate, the applicant or licence holder should undergo a more detailed examination by a specialist (an ophthalmologist or orthoptist or other medical practitioner with a special interest in defects of eyesight or optometrist) - see Appendix to this chapter, Item A, elements which should be assessed in more detailed assessment.

Group 2 standards are minimum standards and do not preclude employers setting higher standards in terms of the demands of the driving tasks encountered in the course of employment.

Bioptic telescope devices are not accepted for driving by the NDLS.

Visual Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Acuity	Must have binocular visual acuity, with corrective lens as necessary, of at least 0.5 decimal (6/12 on a Snellen chart). If the patient has an illness likely to cause progressive loss of visual acuity the NDLS must be notified and on the advice of a competent medical authority, a 1 or 3 year licence may be appropriate.	Drivers must have a visual acuity, using corrective lenses if necessary, of at least 6/7.5 (0.8 decimal) in the better eye and at least 6/60 Snellen (decimal 0.1) in the other eye. Where glasses are worn to meet the minimum standards, they should have a corrective power ≤ +8 dioptres. It is also necessary for all drivers of Group 2 vehicles to be able to meet the prescribed and relevant Group 1 visual acuity requirements.
Cataract Includes severe bilateral cataracts, failed bilateral cataract extractions and post cataract surgery where these are affecting the eyesight.	Must be able to meet the acuity and visual field requirements, and more detailed specialist examination (see Appendix to this chapter, Item A) is indicated if there is concern that these are not adequately met.	Must be able to meet the above prescribed acuity requirement. In the presence of cataract, glare may affect acuity and visual field requirements, and more detailed specialist examination (see Appendix to this chapter, Item A) is indicated if there is concern that these are not adequately met.

Visual Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Monocular vision (Includes the use of one eye only for driving)	Complete loss of vision in one eye (i.e. if there is any light perception, driver is not considered monocular). Must notify NDLS but may drive when clinically advised by a competent medical authority that driver has adapted to the disability and the prescribed eyesight standard in the remaining eye can be satisfied and there is a normal monocular visual field in the remaining eye, i.e. there is no area of defect which is caused by pathology. Driver must notify NDLS if medical advice is to cease driving for 6 months or longer.	Complete loss of vision in one eye or corrected acuity of less than 6/60 (0.1 decimal) applicants may not hold a Group 2 licence. Driver must notify NDLS if medical advice is to cease driving.

Visual Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Visual field defects Disorders such as severe bilateral glaucoma, severe bilateral retinopathy, retinitis pigmentosa and other disorders producing significant field defect including partial or complete homonymous hemianopia/ quadrantanopia or complete bitemporal hemianopia.	Driving must cease unless confirmed that the horizontal visual field is at least 120 degrees, the extension is at least 50 degrees left and right and 20 degrees up and down. No defects should be present within a radius of the central 20 degrees. If the patient has an illness likely to cause progressive loss of visual field, NDLS must be notified and on advice by a competent medical authority, a 1 or 3 year licence may be appropriate. See item B of Appendix at end of this chapter for guidance on more detailed assessment of visual fields. See item C of Appendix at end of this chapter for consideration as an exceptional case if not meeting these standards.	The horizontal visual field should be at least 160 degrees, the extension should be at least 70 degrees left and right and 30 degrees up and down. No defects should be present within a radius of the central 30 degrees. It is recommended that formal perimetry is undertaken for Group 2 drivers.

Visual Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Diplopia	Cease driving on detection. Resume driving on confirmation to the NDLS that the diplopia is controlled by glasses (with or without a prism) or by a patch which the licence holder undertakes to wear while driving. (If patching, note requirements above for monocularity). Exceptionally a stable uncorrected diplopia of appropriate duration (for example, 6 months or more)	Cease driving on detection. Cease driving if permanent intractable diplopia. Patching is not acceptable.
	may be compatible with driving if there is support from a competent medical authority indicating satisfactory functional adaptation. For treated decompensated phoria, driving can resume without informing the NDLS.	
Night blindness	Acuity and field standards must be met. Cases should be considered on an individual basis by an appropriately qualified medical authority.	Group 2 acuity and field standards must be met and cases will then be considered on an individual basis.
Colour blindness	Need not notify NDLS. Driving may continue with no restriction on licence.	Need not notify NDLS. Driving may continue with no restriction on licence.

Road Safety Authority

Appendix — Chapter 7

Visual notes

VISION REQUIREMENTS FOR HOLDING OF GROUP 1 LICENCE ENTITLEMENT

A) Elements which should be assessed in a more detailed assessment

Visual acuity, field of vision, twilight vision, glare and contrast sensitivity, diplopia and other visual functions that can compromise driving safety with no elevated risk: adjudication determined by clinical judgement.

B) Guidance on formal field of vision testing

The minimum field of vision for driving safety is defined as "a field of at least 120° on the horizontal, measured using a target equivalent to the white Goldmann III4e settings. In addition, there should be no significant defect in the binocular field which encroaches within 20° of fixation above or below the horizontal meridian".

This means that homonymous or bitemporal defects which come close to fixation, whether hemianopic or quadrantanopic, are not normally accepted as safe for driving.

If a visual field assessment is necessary to determine fitness to drive, a number of tests are possible: in the UK and Australia, for example, a binocular Esterman field is recommended. Monocular full field charts may also be requested in specific conditions. Exceptionally, Goldmann perimetry, carried out to strict criteria, will be considered. For an Esterman binocular chart to be considered reliable for licensing, the false positive score must be no more than 20%. When assessing monocular charts and Goldmann perimetry, fixation accuracy will also be considered.

Defect affecting central area ONLY

Pending the outcome of current research, the following are generally regarded as acceptable central loss as measured by the Esterman field method:

- Scattered single missed points.
- A single cluster of up to 3 adjoining points.

The following are generally regarded as unacceptable (i.e. 'significant') central loss as measured by the Esterman field method:

- A cluster of 4 or more adjoining points that is either wholly **or partly** within the central 20 degree area.
- Loss consisting of both a single cluster of 3 adjoining missed points up to and including 20 degrees from fixation, and any additional separate missed point(s) within the central 20 degree area.
- Any central loss that is an extension of a hemianopia or quadrantanopia of size greater than 3 missed points.

Defect affecting the peripheral areas - width assessment

The following will be disregarded when assessing the width of field:

- A cluster of up to 3 adjoining missed points, unattached to any other area of defect, lying on or across the horizontal
- · A vertical defect of only single point width but of any length, unattached to any other area of defect, which touches or cuts through the horizontal meridian.

C) Exceptional cases which can be considered for Group 1 drivers only

Drivers who have previously held full driving entitlement, removed because of a field defect which does not satisfy the standard, may be eligible to be considered as exceptional cases on an individual basis by a medical eye doctor, subject to strict criteria:

- The defect must have been present for at least 12 months.
- The defect must have been caused by an isolated event or a non-progressive condition.
- There must be no other condition or pathology present which is regarded as progressive and likely to be affecting the visual fields.
- The applicant has sight in both eyes.
- There is no uncontrolled diplopia.
- There is no other impairment of visual function, including glare sensitivity, contrast sensitivity or impairment of twilight vision.

In order to meet the requirements of European law, to provide a driving licence certificate for 1, 3 or 10 years the NDLS will, in addition, require:

- Clinical assessment of full satisfactory functional adaptation.
- A satisfactory practical driving assessment, carried out by an appropriately qualified driving assessor, must subsequently be completed.

Note:

- An individual who is monocular cannot be considered under exceptional case criteria.
- · D501 (Medical Report) or D502 (Eyesight Report) are only accepted by the NDLS if printed and signed as double-sided documents.

Renal disorders

Group 2 standards are minimum standards and do not preclude employers setting higher standards in terms of the demands of the driving tasks encountered in the course of employment.

Renal Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Chronic Renal Failure +CAPD (Continuous ambulatory peritoneal dialysis) Haemodialysis	No restriction on holding a 10 year licence, or if over 60 a licence that expires at age 70 unless subject to severe electrolyte disturbance or significant symptoms, e.g. sudden disabling attacks of dizziness or fainting or impaired psychomotor or cognitive function when driving should cease until the symptoms are controlled. Hemodialysis patients should not travel distances more than 1—2 days driving time from their home without making arrangements for dialysis at another centre. They should not drive for at least 24 hours after missing a dialysis treatment, and resume driving when dialysis resumed and condition stabilised. Driver must notify the NDLS.	Drivers with these disabilities will be assessed individually by their treating specialist (consultant nephrologist) against the criteria as shown in the Group 1 entitlement. Driver must notify the NDLS.
All other Renal Disorders	Need not notify NDLS unless associated with a relevant disability.	Need not notify NDLS unless associated with significant symptoms or a relevant disability.

Respiratory and sleep disorders



Group 2 standards are minimum standards and do not preclude employers setting higher standards in terms of the demands of the driving tasks encountered in the course of employment.

Respiratory and Sleep Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Including moderate or severe Obstructive Sleep Apnoea Syndrome causing excessive daytime/awake time sleepiness (while driving). A moderate obstructive sleep apnoea syndrome corresponds to a number of apnoeas and hypopnoeas per hour (Apnoea- Hypopnoea Index) between 15 and 29 and a severe obstructive sleep apnoea syndrome corresponds to an Apnoea- Hypopnoea Index of 30 or more, both associated with excessive daytime sleepiness Refer to Chapter 2 Neurology re Narcolepsy	Driving must cease until satisfactory control of symptoms has been attained with ongoing compliance with treatment, confirmed by medical opinion. Periodic Medical review, 1-3 year licence may be granted. Driver must notify NDLS.	Driving must cease until satisfactory control of symptoms has been attained, with ongoing compliance with treatment, confirmed by specialist medical opinion. Regular, normally annual, licensing review required. Driver must notify NDLS.
Primary/Central Hypersomnias Including Narcoleptic syndromes	See Chapter 2 Neurology.	See Chapter 2 Neurology.
Respiratory Disorders Including asthma, COPD (Chronic Obstructive Pulmonary Disease) and Cough Syncope.	NDLS need not be notified unless attacks are associated with disabling dizziness, fainting or loss of consciousness.	NDLS need not be notified unless attacks are associated with disabling dizziness, fainting or loss of consciousness.
Carcinoma of Lung	NDLS need not be notified unless cerebral secondaries are present. (See Chapter 2 for Malignant Brain Tumour).	Those drivers with non small cell lung cancer classified as T1NoMo can be considered on an individual basis. In other cases, driving must cease until 2 years has elapsed from the time of definitive treatment. Fit to drive providing treatment satisfactory and no brain scan evidence of intracranial metastases.

Miscellaneous Conditions

Group 2 standards are minimum standards and do not preclude employers setting higher standards in terms of the demands of the driving tasks encountered in the course of employment.

Miscellaneous Conditions	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Deafness (Profound)	Need not notify NDLS.	Of paramount importance is the proven ability to be able to communicate in the event of an emergency by speech or by using a device e.g. a MINICOM. If unable to do so likely to be unfit to drive. Driver must notify NDLS.
Brain Tumours	Please refer to the appropriate section of Chapter 2.	Please refer to the appropriate section of Chapter 2.
All Cancers not already covered in earlier sections	For all tumours, fitness to drive depends upon: • The prospective risk of a seizure: NDLS does not need to be notified unless there are cerebral metastases or significant complications of relevance (see subsequent bullet points for guidance). • Specific limb impairment, e.g. from bone primary or secondary cancer. • General state of health. Advanced malignancies causing symptoms such as general weakness or cachexia to such an extent that driving would be comprised.	For all tumours, fitness to drive depends upon: The prospective risk of a seizure: Specific attention is paid to the risk of cerebral metastasis. Specific limb impairment, e.g. from bone primary or secondary cancer. General state of health. Advanced malignancies causing symptoms such as general weakness or cachexia to such an extent that driving would be comprised. For Group 2 entitlement (ODL), specific attention is paid to the risk of cerebral metastasis. For eye cancers, the vision requirements must be met as well as the above.

Miscellaneous Conditions	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
AIDS Syndrome	Driving may continue providing medical enquiries confirm no relevant associated disability (e.g. neurological or vision disorders) likely to affect driving. 1 or 3 year licence with medical review. Need not notify NDLS.	Cases will be assessed on an individual basis by the supervising consultant. Need not notify NDLS.
HIV Positive	Need not notify NDLS.	Need not notify NDLS.
	See Section 3.5: Multiple Conditions.	See Section 3.5: Multiple Conditions.
Age (Older Drivers)	Age is no bar to the holding of a licence and physical frailty is not per se a bar to the holding of a licence. See Section 3.5 on multiple morbidity, and relevant specific section for relevant diseases which are more common later in life, such as stroke and dementia. See Chapter 1: Table 4.	Age is no bar to the holding of a licence and physical frailty is not per se a bar to the holding of a licence. See Section 3.5 on multiple morbidity, and relevant specific section for relevant diseases which are more common later in life, such as stroke and dementia. See Chapter 1: Table 4.
Hypoglycaemia From any cause other than the treatment of diabetes	If suffering episodes of severe hypoglycaemia should cease driving while liable to these episodes. Examples would include after bariatric surgery or in association with eating disorders.	If suffering episodes of severe hypoglycaemia should cease driving while liable to these episodes. Examples would include after bariatric surgery or in association with eating disorders.

Road Safety Authority

Drivers with disabilities

Group 1 Car and Motorcycles

Driving is possible in both static and progressive or relapsing disorders but vehicle modification may be needed.

- 1. Permanent Limb Disabilities/Spinal Disabilities. e.g. amputation, hemiplegia/cerebral palsy, ankylosing spondylitis, severe arthritis, especially with pain.
- 2. Chronic Neurological Disorders:

e.g. multiple sclerosis, parkinson's disease, motor neurone disease, peripheral neuropathy.

Sophisticated vehicle adaptation is now possible and varies from automatic transmission to joy sticks and infra red controls for people with severe disabilities.

The NDLS requires notification of which, if any, of the controls required to be modified. The driving licence will then be coded to reflect the modifications.

Group 2 Entitlement ODL truck and bus (with or without trailer)

Some disabilities may be compatible with the driving of large vehicles if mild and non-progressive. Individual assessment will be required.

The National Programme Office for Traffic Medicine is reviewing the current situation of assessments of driving and adaptation of vehicles in Ireland.

Useful resources

Location	Available
RSA and NDLS web resources and email www.rsa.ie/ie medicalfitness@rsa.ie and	 D501 Medical Report D502 Eyesight Report Patient Advisory Form RSA Medical Pages – RSA only Road safety statistics – RSA only
www.ndls.ie	
NPOTM web resources at www.rcpi.ie/trafficmedicine	 Certificate in Traffic Medicine (14 CPD) Online and one day workshop Links to other international Guidelines Free Online Moodle CPD tool on Guidelines (3CPD) Traffic Medicine Ezine Upcoming Education Events Traffic Medicine Research

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Patient Advisory Form



Dear	
Following your assessment today, /, I am advising you that you need to contact your National Driver Service to let them know that you have a condition which may impact on your fitness to drive: I am also advising that:	Licence
And recommend a further specialist opinion Yes No	
The philosophy of the NDLS is an enabling one, aiming to maximise mobility of drivers to the greatest extent possible. He it is important to ensure that an appropriate balance is found between mobility and safety and the NDLS is likely to requ	owever,
provide a medical report clarifying your medical fitness to drive once you have notified them. The conditions that require to your NDLS are outlined in the declaration made by you when you applied for, or renewed, your driving licence (see be	·
also in the official RSA guidelines for medical fitness to drive, <i>Sláinte agus Tiomáint</i> . You should also clarify with your inswhether or not this condition needs to be reported to them as well. A record of	urer as to
this notification will be held in your medical file here. Yours sincerely	

Medical conditions requiring declaration at application for and renewal of driving licence

- Diabetes treated by insulin and or sulphonylurea tablets (doctor to advise whether patient is on these or not) no need to tell us if managed by other tablets and or diet
- 2. Epilepsy
- 3. Stroke or TIAs with any associated symptoms lasting longer than one month
- 4. Fits or blackouts
- 5. Any type of brain surgery, brain abscess or severe head injury involving in-patient treatment or brain tumour or spinal injury or spinal tumour
- 6. An implanted cardiac pacemaker
- 7. An implanted cardiac defibrillator (ICD)
- 8. Repeated attacks of sudden disabling dizziness
- Any other chronic neurological condition such as multiple sclerosis, motor neurone disease, Parkinson disease and Huntington's disease
- 10. A serious problem with memory or periods of confusion.
- 11. Persistent alcohol misuse or dependency

- 12. Persistent drug misuse or dependency
- 13. Serious psychiatric illness or mental health problems
- 15. Sleep Apnoea Syndrome
- 16. Narcolepsy
- 17. Any condition affecting the drivers peripheral vision
- 18. Total loss of sight in one eye
- 19. Any condition affecting both eyes, or the remaining eye if driver only has one eye (Not including colour blindness or short or long sight)
- 20. A serious hearing deficiency
- 21. Any persisting problem with arm(s) or leg(s) which needs driving to be restricted to certain types of vehicle or those with adapted controls
- 22. Is the driver's vehicle adapted because of a physical disability to enable you to drive
- 23. Severe learning disability

The above list is not exhaustive

Please note if you are the holder of an EU licence from a country other than Ireland, or hold a licence from a recognised country for licence exchange purposes, you should contact the NDLS to arrange for a licence exchange and medical report.

Sláinte agus Tiomáint

Medical Fitness To Drive Guidelines

(Group 1 and Group 2 Drivers)

(4th Ed) March 2015, replaces previous editions and the document **Medical Aspects of Driver licensing:** A Guide for Medical Practitioners 2010.

Summary of Amendments

Edition April 2014 v March 2015

SUMMARY OF AMENDMENTS 2014 Edition

Changes throughout document (Group 1 Drivers) Edition Feb 2013 v April 2014

Location in Text	Original text	Replacement or additional text
Throughout document	Safe driving - changed	Driving safety and or elevate risk of impairment while driving

Chapter 1 Introduction

Location in Text	Original text	Replacement or additional text
Table of Contents:	Changed	As per table of contents
Legal Disclaimer ii	While in general, a limited number of sections relating to diabetes, epilepsy and vision, have the force of law, by virtue of the confirmation of the 2009 Directive into regulations 12	A limited number of sections relating to diabetes, epilepsy vision and neurology disease and obstructive sleep apnoea syndrome as set by 2009/113/EC and 2014/85/EU Directives (amending Directive 2006/126/EC) have the force of law implemented by regulations 12 and 20 of the Road Traffic (Licensing of Drivers) Regulations 2006
1 .0 Acknowledgements	Some changes in Working Group member representation	As per acknowledgements
Chapter 1	Additional footnotes and changes to original footnotes	Footnotes – see all

Location in Text	Original text	Replacement or additional text
1.1 Traffic medicine and the compilation of the guidelines	Additional Text	The determination of the guidelines, and their annual review. is based on a number of factors, including likelihood of crash relating to factors associated with each illness, the importance of personal transport, fit with the practice and working of the Irish health services, European Union legislation and interdisciplinary perspectives. The perspective of both drivers and patients is incorporated through their review of the material processed through the Working Group: the incorporation of such perspectives is a topic which is not covered in the research literature on medical fitness to drive but thus far has been consensual in the development and review of the Irish guidelines. In addition, and consistent with good practice in guideline preparation, external review of the guidelines is undertaken by an international expert in the field. Finally, the NPOTM also reviews the utility and applicability of the guidelines with end users. The NPOTM is joint-funded by the Road Safety Authority and RCPI, the preparation and review process of these guidelines is editorially independent from both bodies.
1 .1 Traffic medicine and the compilation of the guidelines	Additional Text	to diabetes, epilepsy vision ,neurological diseases and obstructive sleep apnoea syndrome, have the force of law, by virtue of the confirmation of the 2009 Directive and 2014 Directives into regulations 12 and 20 of the Road Traffic (Licensing of Drivers) Regulations 2006, Statutory Instruments Number 537 of 2006, as amended by the Road Traffic (Licensing of Drivers) (Amendment) (No.) Regulations 2010, Statutory Instruments Number 544 of 2010.These will be marked with an EU Symbol in the Guidelines.

Location in Text	Original text	Replacement or additional text
2.3 Roles and responsibilities of health Professionals	Additional Text	Underlying the professional obligation to manage risk and fitness to drive, there is also a professional and moral obligation to recognise and support mobility through appropriate diagnosis, treatment and support, as the consequences of driving cessation can lead to serious health, mobility and quality of life concerns as well.
2.3 Roles and responsibilities of health Professionals	Additional Text	In the case of an incident illness which may affect driving ability, it is the responsibility of the healthcare professional attending the patient for the relevant care episode to advise the patient on medical fitness to drive.
2 .3 .3 Adverse patient reaction towards the health professional	Patient hostility toward the health Professional	Adverse patient reaction towards the health professional
2.4.1 Documentation	Additional Text	To aid the documentation of the assessment process, a Patient Advisory Form is available on the RSA and NDLS website
3.1 Considerations for Group 2 licensing	Additional text added to below In such cases, level of medical standard applied.	Note: In such cases, level of medical standard applied, as determined by the relevant occupational health service.
3 .2 Requirements of the driving task	Additional Text	The information is operated on by many cognitive and behavioural processes including short and long-term memory and judgement, which leads to decisions being made about driving
Table 2 Environment factors affecting driving performance	Addition text/bullet point	The driver's insight, self-regulation of health and driving, and prudence

Location in Text	Original text	Replacement or additional text
3.6 Multiple conditions and age related change	Additional Text	This may require careful consideration and specialist referral: options include specialist medical referral, occupational therapy assessment, and an on-road assessmentClinical assessment: The key considerations are: • Cognition (including attention, concentration, presence of hallucinations and delusions, insight, judgement, memory, problemsolving skills, thought processing and visuospatial skills). • Motor function (including joint movements, strength and co-ordination) • Sensory (in particular visual acuity and visual fields but also cutaneous, muscle and joint sensation).
3 .9 .1 General guidance for prescription medicine and driving	Text bold for emphasis	and once the driver is stabilised on the treatment

Location in Text	Original text	Replacement or additional text
3.9.2 The effects of specific medicine classes Medicinal cannabis	Additional text	For the following psychoactive medications, the driver should be advised about concerns over sedation while initiating and changing treatment, and that driving should cease if such signs are noted: resumption should only recommence when such sedating side-effecthave ceased.
		Medicinal cannabis The Health Products Regulatory Authority (successor to the Irish Medicines Board) authorised, in July 2014, by issue of a product license, an approved human medicine containing the active ingredients of cannabis which may be prescribed as treatment for symptom improvement in adult patients with moderate to severe spasticity due to multiple sclerosis (MS). The therapeutic indication is for patients with MS who have not responded adequately to other anti-spasticity medication and who demonstrate clinically significant improvement in spasticity related symptoms during an initial trial of therapy. Medicinal cannabis may impair judgment and performance of skilled tasks. Research however suggests that patients adapted to their medicinal dose generally, but not always, maintain their driving ability (Freidel, M., et al. "Drug resistant MS spasticity treatment with Sativex" add-on and driving ability." Acta Neurologica Scandinavica (2014).). Patients should be advised about potential effects of the medication on their driving and also advised to self-monitor accordingly for any indications of impairment of driving particularly when they first start to take the medication and until they are established on a stable daily dose.

Location in Text	Original text	Replacement or additional text
5 .0 Useful resources Moved from Chapt 1 to Chapt 10 Drivers with disabilities	Changes to text to reflect information available on both the RSA and NDLS website	RSA web resources: at Licenced Drivers – Medical conditions www .rsa .ie/ merged NDLS info notating any difference

Chapter 2 Neurological disorders

Location in Text	Original text	Replacement or additional text
Chronic Neurological Disorders	Additional Text	Some of these conditions may also impact on cognition, perception and affect.
Subarachnoid Haemorrhage Surgery Craniotomy Endovascular Treatment	on clinical recovery on clinical recovery on clinical recovery	if no residual disability if no residual disability if no residual disability
Chapter 2	Additional footnote	Footnote 16
Appendix Chapter 2	Additional footnote	Footnote 17

Chapter 3 Cardiovascular disorder

Location in Text	Original text	Replacement or additional text
Implantable Cardioverter Defibrillator (ICD)	LVEF is > 35%	LVEF is ≥ 35%

Chapter 4 Diabetes Mellitus

Location in Text	Original text	Replacement or additional text
Chapter 4	Additional Footnote	Footnote 19
Insulin Treated Group 1	Must not have had more than one episode of hypoglycaemia requiring the assistance of another person in the preceding twelve months.	Must not have had more than one episode of severe hypoglycaemia requiring the assistance of another person in the preceding twelve months. Driver must notify NDLS
Appendix – Chapter 4	4 .2 Information for Drivers with Diabetes Treated by Other Non-Insulin Medication, Diet or Both	4 .2 Information for Drivers with Diabetes Treated by Other Non-Insulin Medication, Diet or Both (For Group 1 and Group 2 Drivers)

Chapter 5 Psychiatric Disorders

Location in Text	Original text	Replacement or additional text
Psychiatry Chapter Mild Cognitive Impairment (MCI) Group 1	Additional Text	Given that a significant proportion of people with MCI progress to dementia over time, yearly review of diagnostic status is recommended.

Chapter 6 Drug and alcohol misuse and dependence

Location in Text	Original text	Replacement or additional text
Cannabis	Additional text far left column description	The non-prescribed use of this drug and/ or the use of supra- therapeutic dosage constitutes misuse/ dependence for licensing purposes. The prescribed use of medicinal cannabis at therapeutic doses (MIMS/BNF/PIL), without evidence of impairment, does not amount to misuse/dependence for licensing purposes (although clinically dependence may exist).

Chapter 7 Visual Disorders

Location in Text	Original text	Replacement or additional text	
Chapter 7 – Visual disorders	Additional text	Bioptic telescope devices are not accepted for driving by the NDLS.	
Appendix Exceptional cases	Change in text re assessment of exceptional cases	medical eye doctor, subject to strict criteria:	
Appendix Exceptional cases			

Chapter 8 Renal Disorders

No Amendments

Chapter 9 Respiratory and sleep disorders

Location in Text	Original text	Replacement or additional text
Respiratory and Sleep Disorders-	Additional text added	Including moderate or severe Obstructive Sleep Apnoea Syndrome causing excessive daytime/awake time sleepiness (while driving).
Respiratory and Sleep Disorders	Additional text – Group 1	Driving must cease until satisfactory control of symptoms has been attained with ongoing compliance with treatment, confirmed by medical opinion. Periodic Medical review, 1-3 year licence may be granted Driver must notify NDLS.
Respiratory and Sleep Disorders-	Change in text – Group 2	compliance with treatment, confirmed by-consultant specialist medical opinion

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Chapter 10 Miscellaneous Conditions and Drivers with disabilities

Location in Text	Original text	Replacement or additional text
Miscellaneous Conditions and Drivers with disabilities	Miscellaneous Conditions and Disabled Drivers	Drivers with disabilities

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Páirc Ghnó Ghleann na Muaidhe, Cnoc an tSabhaircín, Bóthar Bhaile Átha Cliath, Béal an Átha, Co. Mhaigh Eo. Moy Valley Business Park, Primrose Hill, Dublin Road, Ballina, Co. Mayo.

locall: 1890 50 60 80 fax: (096) 25 252 email: medicalfitness@rsa.ie website: www.rsa.ie