



Sláinte agus Tiomáint

Medical Fitness to Drive Guidelines

(Group 1 and 2 Drivers)

April 2026

A large, abstract geometric pattern composed of various colored shapes (red, teal, dark brown, and white) arranged in a grid-like fashion, covering the lower half of the page.

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This document will replace all preceding editions of Sláinte agus Tiomáint Medical Fitness to Drive Guidelines (Group 1 and 2 drivers). Further amendments, changes or editions will be made available electronically on www.rsa.ie and www.ndls.ie.

This document may be cited in part or in whole for the specific guidance of health professionals and patients. However, this document must not be reproduced in part or in whole for commercial purposes.

The most recent edition will only be made available electronically on www.rsa.ie and www.ndls.ie.

N.B. Health professionals are advised to review www.rsa.ie or www.ndls.ie regularly for updates and changes.



Sláinte agus Tiomáint

Medical Fitness to Drive Guidelines

(Group 1 and 2 Drivers)

April 2026 (Updated 21 August 2026)

National Office for Traffic Medicine (NOTM)
Trinity College Dublin / Road Safety Authority (RSA)

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 Office for Traffic Medicine* using all reasonable care and are based on expert medical opinion and relevant literature at the time of printing. The legal basis for the Guidelines in general is provided for in regulations made under the Road Traffic Acts. The Road Traffic (Licensing of Drivers) Regulations 2006 (SI 537 of 2006) is the substantive legislative instrument underpinning the Guidelines. This has been amended and will continue to be amended as European Union (EU) Directives update medical fitness rules. Medical fitness rules relating to cardiac conditions, diabetes, epilepsy, vision and obstructive sleep apnoea syndrome were developed on foot of recommendations from EU Specialist Working Groups and reflected in EU Directives 2009/113/EC, 2014/85/EU and 2016/1106/EU. Doctors should be mindful that certain specific and detailed elements of the EU Directives have force of law by virtue of being incorporated into Irish regulations, particularly relating to cardiac conditions, diabetes, vision and epilepsy. These aspects are marked with an EU Symbol in the Guidelines. Neither the Road Safety Authority nor the National Office for Traffic Medicine nor Trinity College Dublin with 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 Office for Traffic Medicine is the body that provides support and guidance to the RSA on driver fitness matters.



Foreword

The Irish medical fitness to drive guidelines Sláinte agus Tiomáint are updated regularly to reflect changes to the guidance and advice to medical professionals around driver fitness. Many medical conditions can affect driving ability, impacting both safety and individual mobility. A robust support system of high-quality guidelines and education to healthcare professionals and the public is vital for ensuring continued safe driving when possible, and guiding people towards alternative transportation when necessary. Adhering to guidelines and treatment for medical conditions improves safety and maintains mobility. The development of this framework requires broad medical expertise and constant review of medical and transport literature. Ireland has been a global leader in establishing the National Office for Traffic Medicine (NOTM) to create and update medical fitness to drive guidelines and provide related education for healthcare professionals. It also provides expertise for EU developments, like the upcoming Fourth Directive on driver licensing which has several elements relating to medical fitness to drive. The work of the NOTM supports the Department of Transport's mission to deliver an accessible, efficient, safe, and sustainable transport system and the Road Safety Authority's mission to make Irish roads safer by saving lives and preventing injuries.

Sam Waide, CEO
Road Safety Authority

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College of Psychiatry of Ireland
Coroners Society of Ireland & Forensic and
Legal Medicine & Medical Bureau for Road Safety
Department of Transport
Faculty of Occupational Medicine
Faculty of Public Health Medicine
Health and Safety Authority
Irish Association for Emergency Medicine
Irish Association of Orthoptists
Irish Association of Rehabilitation Medicine
Irish Cardiac Society
Irish College of General Practitioners
Irish College of Ophthalmologists
Irish Endocrine Society
Irish Institute of Clinical Neuroscience
Irish Institute of Trauma and Orthopaedic Surgery
Irish Society of Community & Public Health Medicine
and HSE Principal Medical Officers Group
Irish Society of Physicians in Geriatric Medicine
Irish Society of Physicians in Geriatric Medicine
Irish Thoracic Society
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Part A: General information

1. Introduction

This publication summarises Irish medical guidelines of fitness to drive. The information in these Guidelines is intended to assist doctors and other healthcare professionals in advising their patients on fitness to drive, requirements for reporting to the 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 driving licence or learner permit 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 drivers aged 75-years and older.

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. Condition specific health and driving information leaflets are available at: <https://www.ndls.ie/medical-fitness/health-and-driving-information-leaflets.html>

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 (GPs) and other specialists)
- optometrists
- occupational therapists
- psychologists
- physiotherapists
- substance misuse/dependence counsellors

These medical standards refer to Group 1 and Group 2 licence holders. The categories are outlined below. It is worth noting that Group 2 licences do not relate to the type of work being undertaken by the driver (carriage of hazardous goods is covered by different legislation) but are specific to the type of vehicle being driven in terms of weight, numbers of passengers and use of trailers, as outlined in the table.

Group 1 Categories AM, A1, A2, A, 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).

Full details of each of these licence categories is available from the NDLS website <https://www.ndls.ie/licence-categories.html>

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.

These Guidelines are part of a larger project of the National Office for Traffic Medicine (NOTM). 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 Office for Traffic Medicine (NOTM) <https://www.rsa.ie/services/licensed-drivers/medical-fitness>

Contact Details for Medical Fitness to Drive

Email: medicalfitness@rsa.ie Website: www.ndls.ie Telephone no.: 096 25000

1.1 Traffic medicine and the compilation of the guidelines

Although the first automobile fatality in the world occurred in Ireland in 1859^[1], 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)^[2]. 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 applied^[3].

These Guidelines represent a synthesis of current research and clinical practice on medical fitness to drive as interpreted by the National Office for Traffic Medicine. The contributors to the NOTM Working Group on Traffic Medicine includes virtually every medical specialty relevant to medical fitness to drive and associated disciplines e.g. psychology. Key road safety stakeholders including the RSA, An Garda Síochána, the Medical Bureau for Road Safety, the Health and Safety Authority are also represented along with advocacy groups.

The Guidelines are based on four major sources of knowledge: i) Significant articles in the peer reviewed literature^[4] ii) Position papers by scientific and advocacy organisations^[5] and in particular the systematic reviews and evidence grading from the series of systematic literature reviews conducted under the auspices of the Monash University Accident Research Centre and published in the 3rd edition of its report entitled Influence of Chronic Illness on Crash Involvement of Motor Vehicle Drivers^[6] iii) National guidelines, particularly those of the UK Driver and Vehicle Licensing Agency (DVLA), 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 2 drivers^[7], iv) the 'grey' literature including reports from the US Transportation Research Board^[8,9], UK Transport Research Laboratory^[10], EU-funded research projects e.g. DRUID^[11] and the CIECA Fit-to-Drive Working Group^[12]. These are important sources of added information from government agencies, research institutes, business and industry, including reports and policy statements, which may not be peer-reviewed and which are either protected by intellectual property rights or sufficient quality to be collected and preserved by transportation literature databases, libraries and institutional repositories but not controlled by commercial publishers. In addition, some key overview reports are used^[13] and the Directives of the European Union provide a legislative framework for some aspects, particularly vision, diabetes, epilepsy and sleep apnoea^[14].

1. Fallon, I., & O'Neill, D. (2005). The world's first automobile fatality. *Accident Analysis & Prevention*, 37(4), 601-603. <https://doi.org/https://doi.org/10.1016/j.aap.2005.02.002>.
2. International Traffic Medicine Association. "What Is Traffic Medicine?"
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. <https://www.nejm.org/doi/full/10.1056/NEJMsa1114310>
4. 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 Engl J Med*. 1991;324:22-26 <https://pubmed.ncbi.nlm.nih.gov/1984160/>
5. e.g. American Diabetes Association, A.D. Lorber, J. Anderson, S. Arent, D. J. Cox, B.M. Frier, Greene MA, Griffin JW Jr, Gross G, Hathaway K, Kohrman DB, Marrero DG, Songer TJ, Yatvin AL. Diabetes and driving. *Diabetes Care*. 2014 Jan;36 Suppl 1:S80 <https://pubmed.ncbi.nlm.nih.gov/24357217/>; 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. <https://pubmed.ncbi.nlm.nih.gov/8026421/>; 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. <https://pmc.ncbi.nlm.nih.gov/articles/PMC2860481/>
6. Charlton JL, De Stefano M, Dow J, Rapoport MJ, O'Neill D, Odell M, et al., project leads. Influence of chronic illness on crash involvement of motor vehicle drivers. 3rd ed. Report 353. Victoria, Australia: Monash University Accident Research Centre; 2021 Mar. Available: https://www.monash.edu/data/assets/pdf_file/0008/2955617/Chronic-illness-and-MVC-risk_Report-MUARC-report-no-353_JUNE2022.pdf
7. e.g. DVLA, <https://www.gov.uk/government/publications/assessing-fitness-to-drive-a-guide-for-medical-professionals>; Austroads, <https://austroads.com.au/drivers-and-vehicles/assessing-fitness-to-drive>; CMA, <https://driversguide.ca/>; AMA, <http://www.ama-assn.org/ama>; FMCSA. Lococo KH, Stutts J, Sifrit KJ, Staplin L. Medical review practices for driver licensing, Volume 3: Guidelines and processes in the United States. Washington DC: National Highway Traffic Safety Administration; 2017. Report No.: DOT HS 812 402. <https://rosap.nhtl.bts.gov/view/dot/2094>
8. Dobbs, B. 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. <https://rosap.nhtl.bts.gov/view/dot/1902>
9. TRB's Conference Proceedings 27 - Transportation in an Aging Society: A Decade of Experience. Washington DC, Transportation Research Board, 2004 https://onlinepubs.trb.org/onlinepubs/conf/reports/cp_27.pdf
10. Tunbridge, R. J., Keigan, M., James, F. J. The incidence of drugs and alcohol in road accident fatalities. Transport Research Laboratory, Crowthorne, 2001. <https://trid.trb.org/View/1161389>
11. European Monitoring Centre for Drugs and Drug Addiction. Driving under the influence of Drugs, Alcohol and Medicines in Europe: Findings from the DRUID-D Project. EU Publications Office, Luxembourg. <https://www.euda.europa.eu/publications/thematic-papers/druid-en>
12. Englund, L., O'Neill, D. J., Pisarek, W., Ryan, M., & Wagner, T. CIECA Report on Medical Fitness to Drive, 2020, CIECA Brussels. <https://www.cieca.eu/sites/default/files/members-area/TopicalGroups/Fit-to-Drive/CIECA%20FTD%20SG%202%20Medical%20Fitness%20to%20Drive%20Final%20Report%202020%20FINAL.pdf>

Part A: General information

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 Sub-heading term “Automobile” AND “Driving” AND/OR “Medical” AND/OR “Fitness” in the MedLine, Science Direct, Web of Science and Cochrane databases, with allocation of the key results to the various sections of the guide. The full results of the literature review underpinning the updates to the 2026 guidelines can be accessed on the NOTM website using this link: <https://www.rsa.ie/services/licensed-drivers/medical-fitness>. 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 (Cardiology, Diabetes, Neurology, Psychiatry, Rehabilitation, Substance Abuse and Vision) and also by the whole Working Group.

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, importance of personal transport and mobility particularly as the Irish population ages, as well as the driver’s functional abilities including their capacity to compensate and the need for rehabilitation. For suddenly disabling conditions the risk of recurrence should be no greater than 20% per annum for group 1 and no greater than 2% per annum for Group 2. The guidelines also keep pace with the practices and working of the Irish health services, European Union legislation and increasing emphasis on interdisciplinary perspectives.

The perspective of patients as drivers 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^[15], external review of the guidelines is undertaken by an international expert in the field: to date, this has included physicians, psychologists and traffic safety professionals with relevant expertise. Finally, the NOTM also reviews the utility and applicability of the guidelines with end users^[16], through participation in the Traffic Medicine Working Group and via ongoing research using surveys, focus groups etc. The NOTM is funded by the Road Safety Authority and administered by the Centre for Innovative Human Systems (CIHS) in Trinity College Dublin (TCD): the preparation and review process of these guidelines is editorially independent of both bodies and is based on expert medical advice and peer reviewed evidence based literature with no conflicts of interest notified or identified.

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 the DVLA’s “At a Glance” Guide to the current Medical Standards of Fitness to Drive, and some of the specialist contributors to the Irish 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 domains 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 Office for Traffic Medicine nor the Centre for Innovative Human Systems accept any 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.

13. 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 Marshall, SC. (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. <https://www.toi.no/getfile.php/135780-1176216112/Publikasjoner/T%C3%98I%20rapporter/2003/690-2003/690-2003-el.pdf> https://www.monash.edu/_data/assets/pdf_file/0008/216386/Influence-of-chronic-illness-on-crash-involvement-of-motor-vehicle-drivers-2nd-edition.pdf <https://pubmed.ncbi.nlm.nih.gov/18696384/>
14. Directive 80/1263/EEC; Directive (91/439/EEC); Directive 2006/126; Directive 2009/113/EC; Directive 2014/85/EU, Directive 2016/1106/EU.
15. Rapoport MJ, Weegar K, Kadulina Y, Bédard M, Carr D, Charlton J, Dow J, Gillespie I, Hawley C, Koppel S, Molnar F, Murie-Fernandez M, Naglie G, O’Neill D, McCullagh S, Shortt S, Simpson C, Tuokko H, Vrkljan B, Marshall S. An international study of the quality of national-level guidelines on driving with medical illness. QJM. 2015 Nov; 108(11):859-69. <https://pubmed.ncbi.nlm.nih.gov/25660605/>
16. 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. 2015; 16(6):593-8. <https://pubmed.ncbi.nlm.nih.gov/25357143/>

2.0 Roles and responsibilities of drivers, health professionals and the National Driver Licence Service (NDLS)

Drivers, health professionals and the National Driver Licence Service all have roles and responsibilities in terms of medical fitness to drive and these are set out below and are summarised in Table 1 on page 8.

2.1 Roles and responsibilities of drivers

A driver should advise the NDLS of any long-term or permanent injury or illness that may elevate risk of impairment while driving.

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 Driving Licence Application form (D401), when the listed medical conditions are present, the NDLS stipulates that a medical examination is required to confirm a driver's fitness to hold a driving 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 have a responsibility to report to the NDLS when they become aware of a health condition that may affect their ability to drive safely. To make an application to update their medical details on their driver record, where required, a driver can apply in person at an NDLS centre. If the driver does not already have the notation code 101 on their driving licence, they may be able to make their application online provided they have a public services card and a verified MyGovID account. The NDLS cannot accept notifications of medical conditions by email or post.

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 provider¹⁷. 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.

2.2 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 unsafe 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 unsafe 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.

The driving licence medical report form (D501) https://www.ndls.ie/images/Documents/Forms/171315_NDLS_Medical_Form_JAN_2022_WEB_HR.pdf allows for a number of driving licence restrictions and adaptations to be indicated by medical professionals and these are summarised in the box on the next page.

17. see <https://www.rte.ie/news/courts/2018/0511/962795-david-byrne-dangerous-driving/>

Restrictions which may be indicated on the driving licence medical report form (D501)^[17]

- Needs driving to be restricted to certain types of vehicle.
- Needs vehicle adaptation(s) fitted to the vehicle.
- Limited to day-time driving (one hour after sunrise and one hour before sunset).
- Limited to journeys within a radius of 30km from place of residence.
- Limited to a speed not greater than 80km/h.

For full details of these restrictions, please visit the NDLS website:
<https://www.ndls.ie/medical-fitness.html>

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. Hence, the healthcare professional should inform any person who reports witnessing dangerous driving that they should report it themselves immediately to the Gardaí. 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.

Witnesses to dangerous driving can use the online reporting form at: <https://www.garda.ie/en/trafficwatchreport/>

Alternatively, members of the public with any concerns in relation to drivers who may represent a danger to themselves or the public can call to any garda station and report it.

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 and reduction in transport mobility are associated with serious health, mobility and quality of life concerns as well^[18, 19].

2.3 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 the driving licence medical report form (D501). Where a health professional decides a person is not fit to drive then they can submit a driving licence medical report to confirm that to the RSA. Email medicalfitness@rsa.ie 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.

See for further details: Email: medicalfitness@rsa.ie Website: <http://www.ndls.ie> Telephone: 096 25000

18. O'Byrne, C., Naughton, A., & O'Neill, D. (2015). Is driver licensing restriction for age-related medical conditions an effective mechanism to improve driver safety without unduly impairing mobility? *European Geriatric Medicine*, 6(6), 541-544. doi:<https://doi.org/10.1016/j.eurger.2015.08.008>

19. Oxley, J., & Whelan, M. (2008). It cannot be all about safety: the benefits of prolonged mobility. *Traffic injury prevention*, 9(4), 367-378. • <https://pubmed.ncbi.nlm.nih.gov/18696394/>

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^[20] 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 An Garda Síochána in situations where the driver is:

- Unable or unwilling to appreciate the impact of their condition which is impacting on their fitness to drive; and is
- 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.

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 An Garda Síochána and or 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.

Medical reports for the NDLS

Other than the scenarios outlined above on non-compliant drivers, most drivers will present to a doctor for a medical report : i) if they report a relevant medical condition on their driving licence application or renewal request or to update their medical details following a new medical diagnosis, ii) for over-75s medical certification, iii) for Group 2 licence application or renewal, or iv) at the request of the NDLS, the situation is under the usual standards with respect to confidentiality.

The driver must present in person and not online for a medical consultation to have an NDLS driving licence medical report form (in the prescribed format) completed for the purposes of a driving licence application. Certification of medical fitness to drive should only be performed by doctors on the specialist register of the Irish Medical Council and those directly supervised by them, e.g. trainees and non-consultant hospital doctors. The medical report form must also be signed by the applicant in the presence of the certifying registered medical practitioner. 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. Reports are only accepted by NDLS if printed and signed as double-sided documents

20. Irish Medical Council Guide to Professional Conduct & Ethics 9th Edition (2024). Available from <https://www.medicalcouncil.ie/news-and-publications/publications/guide-to-professional-conduct-and-ethics-for-registered-medical-practitioners-2024.pdf>

Part A: General information

Privacy legislation

All health professionals and the NDLS should be aware of data protection e.g. the Data Protection Act 2018^[21] and the General Data Protection Legislation^[22], 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^[23] and the Alzheimer Society of Ireland^[24].

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.

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 assessment 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 Medical Report based on their assessment of the overall health of the driver, as well as incorporating the specialist opinion.

The D501 Medical Report is the form in general use for all medical conditions: the D502 Eyesight Report is used at first 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.

21. Irish Data Protection Act, (2018). <http://www.irishstatutebook.ie/eli/2018/act/7/enacted/en/print#sec1>

22. European Parliament and Council of European Union. (2016). Regulation (EU) 2016/679. Retrieved 29 January 2021 from <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679>

23. The Hartford Centre for Mature Market Excellence. "At the crossroads: Family Conversations About Alzheimer's Disease, Dementia and Driving." https://ewcstatic.thehartford.com/thehartford/the_hartford/files/CMME/cmme-crossroads.pdf

24. Alzheimer's Society of Ireland. "Driving and Dementia." https://alzheimer.ie/wp-content/uploads/2018/11/Driving-and-dementia_FactSheet_web.pdf

Table 1: Summary roles and responsibilities of drivers, health professionals and the National Driver Licence Service

Driver

- Irish and EU legislation requires that a driver should advise their driver licensing authority of any long-term or permanent injury or illness that may affect their safe driving ability. 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^[25], and developing a condition which could elevate risk of impairment while driving, the driver should contact the NDLS to arrange for an exchange of their licence.
- take any prescribed medication and manage your condition(s)
- stop driving if any of the medications you are taking for your condition have any side effects that affect your ability to drive – for example drowsiness
- tell the National Driver Licence Service (NDLS) and your insurance provider of any long-term or permanent injury or illness that may affect your ability to drive safely
- comply with the requirements of your licence as appropriate, including periodic medical reviews
- get professional advice on your medical fitness to drive if you develop a medical condition during the term of your licence
- To respond truthfully to questions from the health professional regarding their health status and the likely impact on their driving ability.
- If, following consultation with your GP, your medical condition is one that must be notified to the NDLS, you will need to have a medical report form completed and make an application for a change of personal (medical) details. This can be done by applying online or booking an appointment at any NDLS centre.

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 adaptations and/or 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 An Garda Síochána 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 or comply with restrictions or adaptations.

National Driver Licence Service (NDLS)

- To make all decisions regarding the licensing of drivers. The NDLS will consider reports provided by health professionals.
- 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 consider reports of third parties, general public and healthcare workers regarding concerns of public safety relating to medical fitness to drive.

25. From 1 January 2021 UK/Ni driving licences are not valid in the Republic of Ireland and unless they are just visiting, drivers who hold these licences are required to exchange them for an Irish driving licence. Visitors to Ireland from any state outside of the EU/EEA are permitted to drive for up to one year on their existing licence provided it is current and valid. However, on taking up 'normal residence' in the Republic of Ireland drivers must either exchange their driving licence or apply for an Irish driving licence.

Part A: General information

2.4.1 Documentation

Clear documentation of the assessment results and communication with the driver and NDLS is important, as well as maintenance of a record of decisions and advice given to the driver. The 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 <https://www.ndls.ie/medical-reports.html> and <http://www.rsa.ie/RSA/Licensed-Drivers/Safe-driving/Medical-Issues/>. Where there is any doubt about how to complete the D501 Medical Report or D502 Eyesight Report forms, please review the guide on the websites through the links provided above.

To aid the documentation of the assessment process, a discretionary but useful Driver Advisory Form is available on the NDLS website (https://www.ndls.ie/images/Documents/Forms/Patient_Advisory_Form_PDF.pdf). This form provides written information that can be given to the patient and where used 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^[26-28]. Indeed, for many conditions, remediation and rehabilitation may improve driver comfort and safety^[29].

The following pages in Part A of this publication 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. An index of the conditions that are addressed in these guidelines can be found on pages 106 - 110.

Note on fitness to drive tractors/farm vehicles.

The Group 1 licence category includes category W covering tractors used in agriculture and forestry. The task of driving a tractor either on the road, on the farm or in forestry is complex in terms of the skills required for controlling the vehicle and managing challenging driving environments. For these reasons, it is especially important that tractor drivers monitor and manage their health, to adhere to prescribed medication and consult their doctor if they notice any changes in their medical condition. Some due consideration should be given to the complexity of the driving task if it involves large trailers or farm equipment, or large vehicles such as combine harvesters.

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 equals 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. The risk of crashing for Group 1 drivers is lower because they spend less time on the roads than Group 2 drivers.

In order to minimise crash risk due to long-term injuries or illnesses and taking into account the increased risk for Group 2 drivers, medical standards for Group 2 drivers are more stringent than those applied to Group 1 drivers. 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:

26. Oxley, J., and M. Whelan. "It Cannot Be All About Safety: The Benefits of Prolonged Mobility." *Traffic Inj Prev* 9, no. 4 (Aug 2008): 367-78. https://www.researchgate.net/publication/23164978_It_Cannot_Be_All_about_Safety_The_Benefits_of_Prolonged_Mobility

27. Musselwhite, C., Holland, C., & Walker, I. "The Role of Transport and Mobility in the Health of Older People." *Journal of Transport & Health* 2, no. 1 (3// 2015): 1-4. https://publications.aston.ac.uk/id/eprint/25428/1/Role_of_transport_and_mobility_in_the_health_of_older_people.pdf

28. O'Neill D. Transport, driving and ageing. *Reviews in Clinical Gerontology*. 2015 May;25(2):147-58. https://www.researchgate.net/publication/281528220_Transport_driving_and_ageing

29. Unsworth, C. A., & Baker, A. "Driver Rehabilitation: A Systematic Review of the Types and Effectiveness of Interventions Used by Occupational Therapists to Improve on-Road Fitness-to-Drive." *Accident Analysis & Prevention* 71 (2014/10/01/ 2014): 106-14. <https://colab.ws/articles/10.1016%2Fj.aap.2014.04.017>

Part A: General information

- 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.
- 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 1-3 years for a Group 1 licence, for example, for drivers with an implanted cardiac defibrillator.

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 scope 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 a maximum period of 5 years.

Group 2 standards are minimum standards and do not preclude employers from 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, auditory and haptic 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 coordinated via a complex process involving behaviour, strategic and tactical abilities and personality^[30] and adaptive strategies are important in maintaining the normal parameters of driving safety in the face of illness and disability as well as changing circumstances in traffic^[31]. 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.

30. Fuller R. Towards a general theory of driver behaviour. *Accid Anal Prev* 2005;37(3):461-72. <https://doi.org/10.1016/j.aap.2004.11.003>

31. 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. <https://doi.org/10.1080/15389580801895194>

Table 2: 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 light conditions.
- Vehicle and equipment characteristics, for example, type of vehicle, braking performance, maintenance and driver assistance modalities in the driver's vehicle.
- Personal requirements, trip purpose, destination, appointments, time pressures etc. Passengers and their potential to distract the driver.
- In-car technology/devices 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 driver 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, discharge of Implantable Cardioverter Devices (ICDs)...
- Physical constraints
i.e., Parkinsonism, hemiplegia, vision, amputation...
- Impairment of self-regulation
i.e., imprudence, psychiatric illness, cognitive impairment...

A driver may present with symptoms relevant to these pathways due to conditions such as:

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

Part A: General information

Some of these conditions can affect driving ability temporarily in the here-and-now, some may affect driving ability at some time in the future and some may be complicated by the presence of multiple conditions. Treatments for medical conditions (including drug treatments and others) can also affect driving ability, positively or negatively.

Clinicians should also bear in mind the pervasive negative impact that alcohol and substance abuse have on individuals' ability to drive safely and where possible engage with this in clinical settings, including Emergency Departments.^[32]

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 driver'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.

Multiple conditions may have a synergistic effect, and this is discussed later in section 3.6. 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, sleep apnoea assessment or on-road assessment), 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. This interim decision may be assisted by a number of elements, including enquiry as to any change in driving ability, new crashes or erratic behaviour from the patient and an informant such as a family member, an assessment of the prudence of the driver in terms of following medical advice, and scrutiny of the relevant advice for the most salient medical condition relevant to driving. If in doubt, driving should cease until the further assessment has been completed. A list of individuals and organisations that provide on-road driving assessments is available from the NOTM website; <https://www.tcd.ie/cihs/notm/>. 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 and liability to prosecution for a range of offences.

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 and their management.

A copy of our leaflet 'Emergency Department (ED): returning to drive after injury' is provided on the NDLS website <https://www.ndls.ie/medical-fitness/health-and-driving-information-leaflets.html>

32. Baird J, Yang E, Strezsak V, Mello MJ. Examining motor vehicle crash involvement and readiness to change on drinking and driving behaviors among injured emergency department patients. *Traffic injury prevention*. 2017;18(5):463-9. <https://pmc.ncbi.nlm.nih.gov/articles/PMC6168940/>

Table 3: Example of temporary conditions and their management

Condition and impact on driving	Management guidelines
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.	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 drivers 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 short-acting anaesthetic drugs, the driver 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 procedure.^[33-34]	The non-driving period post-surgery should be determined by the treating health professionals.
Pregnancy Under normal circumstances pregnancy should not be considered either a medical condition or a barrier to driving. However, conditions that may be associated with some pregnancies should be considered when advising drivers. These include: ■ Fainting or light-headedness. Hyperemesis gravidarum. ■ Hypertension of pregnancy. Gestational diabetes. ■ Post caesarean section.	A caution regarding driving may be required depending on the severity of symptoms and the expected effects of medication. Seatbelts should continue to be worn, with advice on correct fitting.
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 short- term eye condition or an eye treatment should be advised not to drive for an appropriate period. Clinics where patients routinely receive mydriatics should prospectively advise on driving precautions. In the elective setting, such as in screening for diabetic retinopathy, the level of risk that might be accepted should be lower than for emergency cases, and it is appropriate that patients should be advised in writing ahead of their appointment not to drive to the assessment, and either use public transport, taxi, or arrange for another person to bring them to and from the appointment^[35].

33. Dalury DF, Chapman DM. Right TKR Patients Treated with Enhanced Pain and Rehabilitation Protocols Can Drive at 2 Weeks. J Knee Surg. 2019;32(6):550-3. <https://pubmed.ncbi.nlm.nih.gov/29925104/>

34. McDonald EL, Pedowitz DI, Shakked RJ, Fuchs DJ, Winters BS, Daniel JN, et al. When is it Safe to Drive After Total Ankle Arthroplasty? Clin Orthop Relat Res. 2020;478(1):8-15. <https://pubmed.ncbi.nlm.nih.gov/31425279/>

35. Working Group on Traffic Medicine, National Office for Traffic Medicine. . "Temporary Mydriasis and Driving." (2016). https://www.eyedoctors.ie/medium/files/Mydriasis_Article_websitecopy-e.pdf

Part A: General information

Condition and impact on driving	Management guidelines
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 Deep Vein Thrombosis (DVT) should be determined by the treating health professionals.
If you have an injury, you should not drive if a) driving would hinder recovery of the injury; b) If you are protecting a body part with 'immobilisation' – for example, a splint, a plaster cast or heavy bandage – or if you cannot bend or move the joint or limb normally; c) if you have any numbness or loss of sensation in your arms or legs, your ability to use the vehicle controls safely and effectively could be impaired – for example, missing the brake pedal, losing your grip on the gear stick, and so on; d) If you have a 'soft tissue' injury – for example, damage to muscles, tendons and so on – it may become stiff and uncomfortable and may affect your driving ability	Consult with your doctor if you have concerns - for example, if you have (or suspect you have) a fracture, wait until you get advice at your fracture clinic or ED follow-up appointment before you drive. Our Emergency Department leaflet on self-assessment for driving after injury may also be helpful and a copy of this can be found here: https://www.ndls.ie/medical-fitness/health-and-driving-information-leaflets.html

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.

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, no formal communication with the NDLS is required. After a diagnosis is firmly established and the relevant guidance advised, 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. Where appropriate, health professionals now have the option of recommending restricted driving options (see Section 2.3 for details).

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 a synergistic 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 substance abuse disorders.
- Ageing-related changes in motor, cognitive and sensory abilities together with degenerative disease.
- Fatigue related to cancer and neurological conditions.

Part A: General information

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 visual area that the driver can scan 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 older drivers in general have an admirable safety record^[36]. 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 age^[37]. Age-related physical and mental changes vary greatly between individuals but will eventually affect the ability to drive safely. For instance, limitations in function, such as Activities of Daily Living (i.e. personal care) and Instrumental Activities of Daily Living (i.e. cooking, managing appliances) should be a red flag for assessment of fitness to drive. 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.

Clinical assessment:

The key considerations are:

- Behaviour including risk-taking, and prudence.
- 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 synergistic 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 (OT) 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.

36. O'Neill D. Transport, driving and ageing. *Reviews in Clinical Gerontology* 2015;25(2):147-158. <https://www.cambridge.org/core/journals/reviews-in-clinical-gerontology/article/abs/transport-driving-and-ageing/E4D7C7C0E0059326A538DF2DB6E182C3#>

37. 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. [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(12\)60240-2/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(12)60240-2/fulltext)

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On-road driving assessment:

An on-road assessment may also be helpful.

The National Office for Traffic Medicine is currently working to develop guidelines for competencies and training for on-road assessment based on the outline from CIECA reports on assessing medical fitness to drive <https://www.cieca.eu/sites/default/files/members-area/TopicalGroups/Fit-to-Drive/CIECA%20FTD%20SG%20%20Medical%20Fitness%20to%20Drive%20Final%20Report%202020%20FINAL.pdf> and <https://www.cieca.eu/sites/default/files/members-area/TopicalGroups/Fit-to-Drive/2021-03-03/CIECA%20FTD%20SG1%20DM%20Disabled%20Driver%20Assessment%20Final%20Report%202021%20FINAL.pdf>. In the interim there a number of agencies and providers of on-road driving assessment outlined in a NOTM document published in 2020 – On-Road Driving Assessor Information, available at: <https://www.tcd.ie/cihs/notm/>. Please note however, the NOTM cannot as yet endorse any particular provider of on-road assessments. Clinicians whose practice is likely to involve a significant number of on-road assessments should ideally develop a linkage with a specific provider or providers so as to allow for ready exchange of information and audit as indicated.

On-road driving assessment may be conducted by the on-road driving assessor in isolation, or may involve an OT as well in some cases if indicated. Options that may be indicated by such an assessment include vehicle adaptations or a course of driver lessons.

Where a person's doctor has requested that they undertake an on-road driving assessment and their most recent driving licence has expired by less than ten years, they should contact the Road Safety Authority to apply for a temporary learner permit to facilitate the assessment. For further information, please see <https://www.ndls.ie/medical-fitness.html> or email medicalfitness@rsa.ie

Where a person's doctor recommends an assessment and the person has not held a driving licence then an off road driving assessment should be recommended to the driver.

The final decision on medical certification rests with the referring doctor, who should make a synthesis based on all of the assessments: clinical, off-road and on-road assessments, as occasionally the clinical evidence (i.e., an informant history of a consistent pattern of dangerous driving) may over-rule a single successful on-road assessment.

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 recognised 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.

The driver licence Medical Report form (D501) makes it possible to recommend a restricted licence in terms of daylight driving only, driving within a specific distance from home, etc., and this may be a useful aid in maintaining safe driving.^[38]

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.

38. O'Byrne, C., A. Naughton, and D. O'Neill. "Is driver licensing restriction for age-related medical conditions an effective mechanism to improve driver safety without unduly impairing mobility?" *European Geriatric Medicine* 2015;6(6):541-544. <https://colab.ws/articles/10.1016%2Fj.eurger.2015.08.008>

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It is, therefore, recommended that the driver be advised appropriately where a progressive condition is diagnosed that may result in future restrictions on driving: appropriate follow-up and regular review of advice on driving should be included in care planning. 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, a specialist nurse and other members of the multidisciplinary team 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 Rehabilitation

Rehabilitation for driving

The presence of a significant acquired disability, such as arising from stroke, traumatic brain injury or multiple sclerosis, should not mean automatic exclusion from driving. Rather an enabling approach should be taken to help a person explore their goal of driving. This is usually carried out with a specialist physician in rehabilitation, geriatric medicine or neurology in association with a multi-disciplinary team including physiotherapy, occupational therapy, speech therapy, psychology and social work, and liaising with an on-road driving assessor. Other specialist input may be required, including psychiatry and neurology for specific aspects such as advice on risk of developing epilepsy after traumatic brain injury.

The rehabilitation approach to driving assessment with a person with disability differs from the standard driving test in that it takes an enabling approach and where indicated, works with a person over time to help them achieve safe driving capacity.

A person may be safe to drive from a cognitive and perceptual perspective but have motor weakness which impacts their ability to get in and out of the vehicle and operate it. Rehabilitation will focus on goals such as learning how to transfer into and out of the vehicle, stowing a wheelchair and identifying helpful vehicle adaptations (for example hand controls) and gaining experience in their use.

Where cognitive, communication, perceptual impairment or behavioural change is present but the person is considered to have some potential then a rehabilitation team will try to help that person improve. This may entail office-based training (for instance attention training, visuomotor coordination, building self-awareness), driving coaching (driving with a trained assessor with Advanced Driving Instructor qualification) giving feedback over a number of sessions) and training in the use of prescribed vehicle adaptations (e.g. hand controls).

After rehabilitation input a person may be assessed as being safe to drive so long as they abide by certain conditions such as adaptations and restrictions. For example, they may not be permitted to drive in the dark or drive on motorways.

In some conditions a person's ability may fluctuate across the day around a baseline (for example people with Multiple Sclerosis can experience fatigue). In such cases the person will be counselled on how to recognise and manage this fluctuation. Management strategies could include self-monitoring, planning a journey with breaks and avoiding busy traffic times.

Sometimes it can be misunderstood that because a driving assessment was successfully completed in the past then this stands indefinitely going forward. Some conditions can progress or recur and further rehabilitation input may be required.

Many medications can impact driving safety. The rehabilitation process may entail reducing or stopping medication which impacts alertness or starting/increasing medication to address depression or an attention disorder.

As noted in Section 2.0 of Part A of these guidelines, the responsibility of the patient is to answer truthfully to questions that form a part of their assessment, to adhere to medical advice, prescribed medical treatments and advice on driving restrictions, as well as complying with regular reviews where indicated. There is a responsibility on the patient to seek help where they have noticed a worsening of their ability and to stop driving should there be risk until this is addressed with their doctor.

Helping someone come to terms with not being able to return to driving

In some instances, it will not be possible for a person to return to driving. For some people a negative outcome may cause significant distress which can endure for years. A number of measures may help in supporting a person come to terms with this loss:

- 1) Listening and explaining on a repeated basis (this may need to continue for years).
- 2) Exploring the architecture/landscape of belief and rationalisations around the topic. Some people may view driving as a human right, that it is fine to drive on quiet roads, that it is fine to drive if someone is in the car with them, that it is fine to drive as there are many who take drugs and drink and that it is unfair to stop them from driving, that not being allowed to drive is discriminating against them because they have a disability etc. Unless these beliefs or rationalisations are addressed then change may not occur at all or it may only be transient.
- 3) Explaining the medical instruction to family members can make a difference as family may be supporting the return to drive ambition (though they may not say this to the clinician). The stakes may be very high for the family – not driving may mean loss of income and all that goes with this. It can also be the case that some patients are more open to listening to family members than the clinician (though the converse can also occur).
- 4) Offering a re-evaluation at a reasonable time interval. For example, agreeing to re-check a visual field in 9 months to see if improvement has occurred (even if improvement is unlikely) can help someone in their immediate distress. The passage of time with an agreed check-in plan can help someone in their journey of emotional healing.
- 5) Being (sensitively) clear and consistent in communication. It may help to give information in writing or in audio-recording. It is important to make sure the patient understands what is meant by ‘medical advice’. The word ‘advice’ in lay language means something that is optional to take on board. For someone whose first language is not English an interpreter may be required. Where communication impairment is present involvement of a Speech and Language therapist may be needed.
- 6) Check what the patient (and where appropriate, their family) has understood and ask them to say back what they understand you have said to them. Some people will not understand what has been said. Some people will forget in the stress of an appointment. When someone states back what is said to them it allows checking of understanding, supports remembering and gives a relational witnessing opportunity to the instruction.
- 7) Ensuring consistency and good communication between healthcare professionals is essential.
- 8) Helping people find solutions to challenges that arise because of not being able to drive. Examples include training in the use of public transport, training in use of technology (e.g. pursuing an interest in yoga through online classes) and provision of alternative transport options (in some instances use of a power chair or scooter may be possible though driving may not be through use of slower speed settings and training). It is worth noting that a free public transport card is available to those certified as medically unfit to drive for at least 12 months: <https://www.gov.ie/en/service/9bba61-free-travel-scheme/?referrer=https://www.gov.ie/freetravel/#free-travel-for-those-medically-certified-as-unfit-to-drive-for-at-least-12-months>
- 9) Supporting family members as seeing a loved one distressed may be hard to witness and on occasion they may have anger directed at them. A family member may on an ongoing basis need to prevent a person from driving. Fracturing of relationships can occur and this could have an knock on impact on health and viability of the home situation.
- 10) Vocational rehabilitation if not driving means the need to change work role or education plans.
- 11) Access to benefits such as disability benefit, ‘blue badge’, visual disability supports and tax relief for getting an accessible vehicle that a family member can drive to transport the service user.
- 12) Access to home support such as a personal assistant can enable someone get out and about and make a big difference to them and their family (the risk of isolation can be high especially if someone is living in a rural location or large housing estate bereft of resources).

The experience for healthcare professionals

Communicating bad news in relation to driving can be hard to do. Healthcare professionals will care about people under their care and be aware of the implications of not driving. At times patients and their families may be angry. In some instances, significant pressure can be brought to bear on clinicians. It is important to acknowledge this challenge associated with this work because it can be emotionally hard on the healthcare professional and apprehension about raising the topic may lead to avoidance of addressing driving concerns with patients and their families

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For further information on CIECA standards for Disabled Driver Assessment:

<https://www.cieca.eu/sites/default/files/members-area/TopicalGroups/Fit-to-Drive/2021-03-03/CIECA%20FTD%20SG1%20DM%20Disabled%20Driver%20Assessment%20Final%20Report%202021%20FINAL.pdf>

3.10 Medications and driving

For the purposes of these Guidelines, prescription medicines are defined 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 health carer (including pharmacist) advice.

Any medication that acts on the central nervous system has the potential to adversely affect driving skills. Conversely, it is recognised that many medications, such as medications for attention-deficit and hyperactivity disorder^[39], antiparkinsonian medications, anti-inflammatory agents and antidepressants, may actually make driving safer and more comfortable and due compliance is an important aspect of Medical Fitness to Drive (MFTD) in such cases^[40].

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 levels of cannabis, cocaine or heroin, or when impaired by other drugs. Current research highlights the compounding effects of combining drugs and drugs and alcohol on a person’s capacity to drive safely^[41]. 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.

3.10.1 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 stringent.

39. O’Byrne, C., A. Naughton, and D. O’Neill. “Is driver licensing restriction for age-related medical conditions an effective mechanism to improve driver safety without unduly impairing mobility?” *European Geriatric Medicine* 2015;6(6):541-544. <https://colab.ws/articles/10.1016%2Fj.eurger.2015.08.008>

40. Barkley RA, Cox D. A review of driving risks and impairments associated with attention-deficit/hyperactivity disorder and the effects of stimulant medication on driving performance. *J Safety Res.* 2007;38(1):113-28. <https://pubmed.ncbi.nlm.nih.gov/17303170/>

41. Edvardsen HE, Tverborgvik T, Frost J, Rogde S, Morild I, Waal H, et al. Differences in combinations and concentrations of drugs of abuse in fatal intoxication and driving under the influence cases. *Forensic science international.* 2017;281:127-33. <https://pubmed.ncbi.nlm.nih.gov/29128652/>

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- 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, both increases and decreases.
- The cumulative effects of medications.
- The presence of other medical conditions that may combine to adversely affect driving ability. The potential for non-compliance with the instructions provided with the prescription.
- Other factors that may exacerbate risks, such as known history of alcohol or drug misuse.

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 Health Products Regulatory Authority website: www.hpra.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.

3.10.2 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. Helpful background information can be obtained from the deliberations of the EU-FP6 funded project “Driving under the Influence of Drugs, Alcohol and Medicines” (DRUID)^[42-43].

Benzodiazepines

Benzodiazepines, particularly long-acting benzodiazepines, increase the risk of a crash. In many of these studies^[44], benzodiazepines were used without prescription, at supra-therapeutic doses, or in combination with other impairing and/or illicit 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. Particular caution should be exercised with Group 2 drivers and benzodiazepines^[45], avoiding benzodiazepines^[46] to the greatest extent possible, and if any doubt persists about their impact on driving, a second opinion from a psychiatrist or occupational physician should be sought.

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.

42. Rudisill TM, Zhu M, Kelley GA, Pilkerton C, Rudisill BR. Medication use and the risk of motor vehicle collisions among licensed drivers: A systematic review. *Accid. Anal. Prev.* 2016 Nov;96:255-70. <https://pubmed.ncbi.nlm.nih.gov/27569655/>

43. Gómez-Talegón T, Fierro I, Carmen Del Río M., Javier Álvarez F. (2011). Classification of medicinal drugs and driving: Co-ordination and synthesis report. Deliverable 4.4.1 DRUID. https://www.researchgate.net/publication/266968528_Classification_of_medicinal_drugs_and_driving_Co-ordination_and_synthesis_report_D441

44. Dassanayake T, Michie P, Carter G, Jones Effects of benzodiazepines, antidepressants and opioids on driving: a systematic review and meta-analysis of epidemiological and experimental evidence. *Drug Saf.* 2011;34(2):125-56. <https://doi.org/10.2165/11539050-000000000-00000>

45. Federal Motor Carrier Safety Administration. <https://www.fmcsa.dot.gov/sitehttps://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/Medical-Expert-Panel-Psychiatric-Psychiatric-MEP-Panel-Opin.pdf>

46. Van der Sluiszen N, Vermeeren A, Verster JC, van de Loo A, van Dijken JH, Veldstra JL, et al. Driving performance and neurocognitive skills of long-term users of benzodiazepine anxiolytics and hypnotics. *Hum Psychopharmacol.* 2019;34(6):e2715. <https://onlinelibrary.wiley.com/doi/10.1002/hup.2715>

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Opioids

There is little direct evidence that opioid analgesics such as hydromorphone, morphine or oxycodone have direct adverse effects on driving behaviour^[47]. It should be noted however, that only a tiny number of studies examining on-road driving behaviour have been conducted to date. 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 myotic 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 called Sativex which contains the active ingredients delta-9-tetrahydrocannabinol (THC) and cannabidiol (CBD) 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, to maintain their driving ability^[48]. 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.

Drivers who wish to continue driving while prescribed medicinal cannabis require a certificate which has been signed by their doctor. The form is available from the NDLS website <https://www.ndls.ie/images/Documents/Forms/RTA-2010-Medical-Exemption-Certificate.pdf>. Drivers should carry this certificate at all times when driving.

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 for the Guidelines in general is provided for in regulations made under the Road Traffic Acts. The Road Traffic (Licensing of Drivers) Regulations 2006 (SI 537 of 2006) is the substantive legislative instrument underpinning the Guidelines. This has been amended and will continue to be amended as EU Directives update medical fitness rules. National Driver Licence Service or NDLS, is the name given to the dedicated service which receives applications for learner permits and driving licences, see Table 4 on the next page.

47. 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- of opioids on driving and cognitive/psychomotor performance. Clin J Pain. 2012 Jul;28(6):542-55. <https://pubmed.ncbi.nlm.nih.gov/22673489/>

48. Freidel, M, Tiel-Wilck, K., Schreiber, H., Precht, A., Essner, U. & Lang, M. Drug-resistant MS spasticity treatment with Sativex (®) add-on and driving ability. Acta Neurol Scand. 2015 Jan;131(1):9-16. <https://pubmed.ncbi.nlm.nih.gov/25208898/>

Table 4: Legal considerations for licensing

■ **Licensing processes after receiving medical fitness to drive advice**

Driving licences are issued or maintained by the NDLS on the basis that the driver had not been advised to cease driving by a doctor or healthcare professional as part of a clinical assessment. Thus, due care and attention should be given to the advice contained in these Guidelines^[49]. Should a driver be advised to cease driving by a doctor or healthcare professional on the basis of this clinical assessment, he/she should inform the NDLS. 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**

Group 1 Licences are normally issued for a 10 year period subject to expiry at age 75 years, unless restricted to a shorter duration for medical reasons. Group 2 licences are issued for a maximum of 5 years up to the age of 75, unless restricted to a shorter duration for medical reasons. There is no upper limit but from age 75 renewal is necessary every 3 years, or every year if medical assessment so indicates. All licence applications from age 75 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 75, unless restricted to a shorter duration for medical reasons, and thereafter for one or three years depending on medical assessment at each renewal.

■ **Garda/Army driver licensing**

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

■ **Taxi drivers**

The provision of 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.

49. Beran, RG, Devereux, JA. Road Not Taken: lessons to be learned from Queen v. Gillett. Intern Med J 2007 May;37(5):336-9. <https://onlinelibrary.wiley.com/doi/10.1111/j.1445-5994.2007.01349.x>

Appendix – Chapter 1

Pathways in Medical Fitness to Driver Certification

Three main pathways are used in determining Medical Fitness to Drive and these are illustrated on pages 24, 25, 26 and 27.

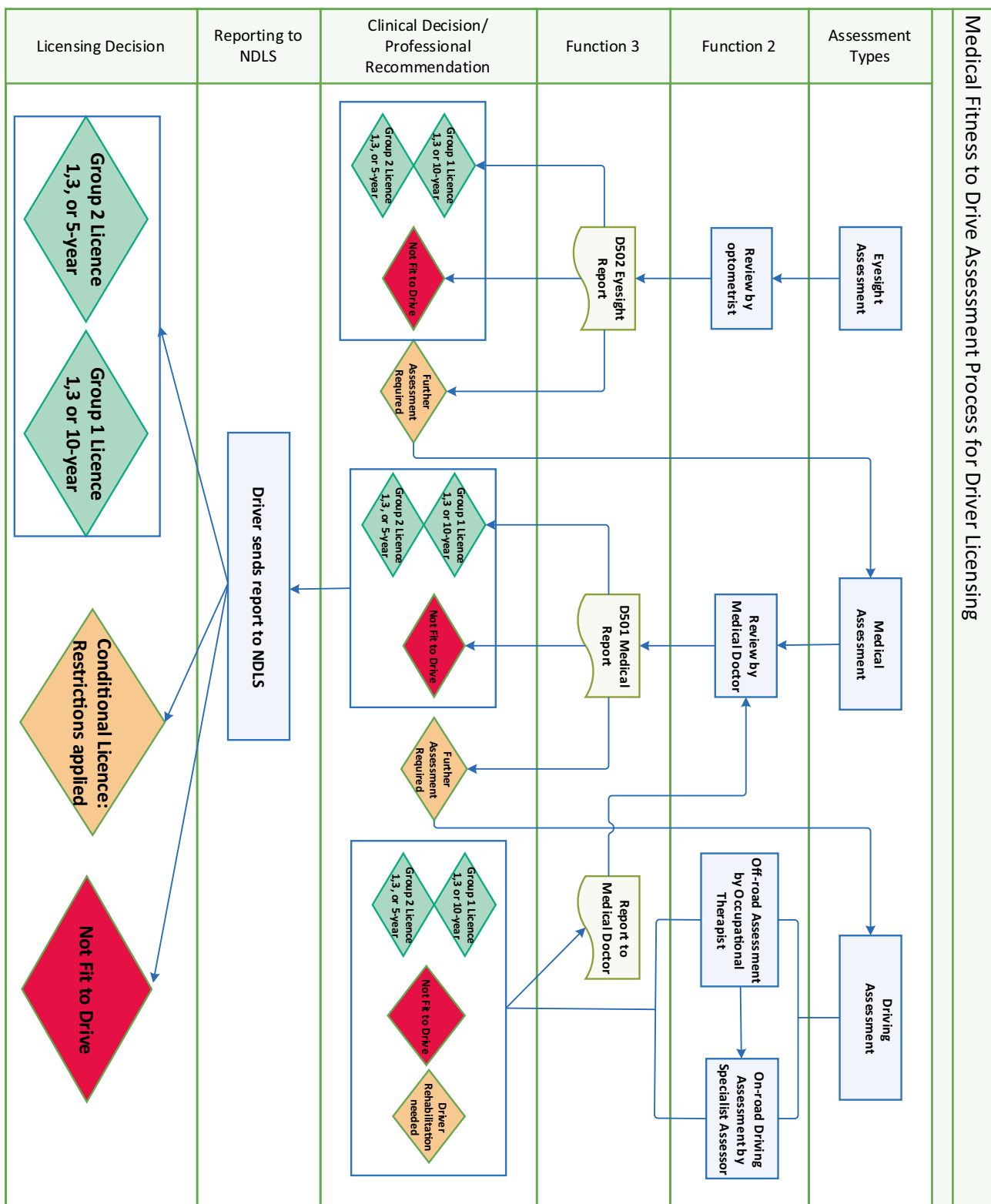
Pathway 1 outlines the process for determining visual acuity and this can be done by a medical doctor and/or optometrist, leading to the completion of the eyesight report form (D502).

Pathway 2 outlines the process for determining MFTD where the decision can be made by the medical doctor in isolation leading to the completion of the medical report form (D501).

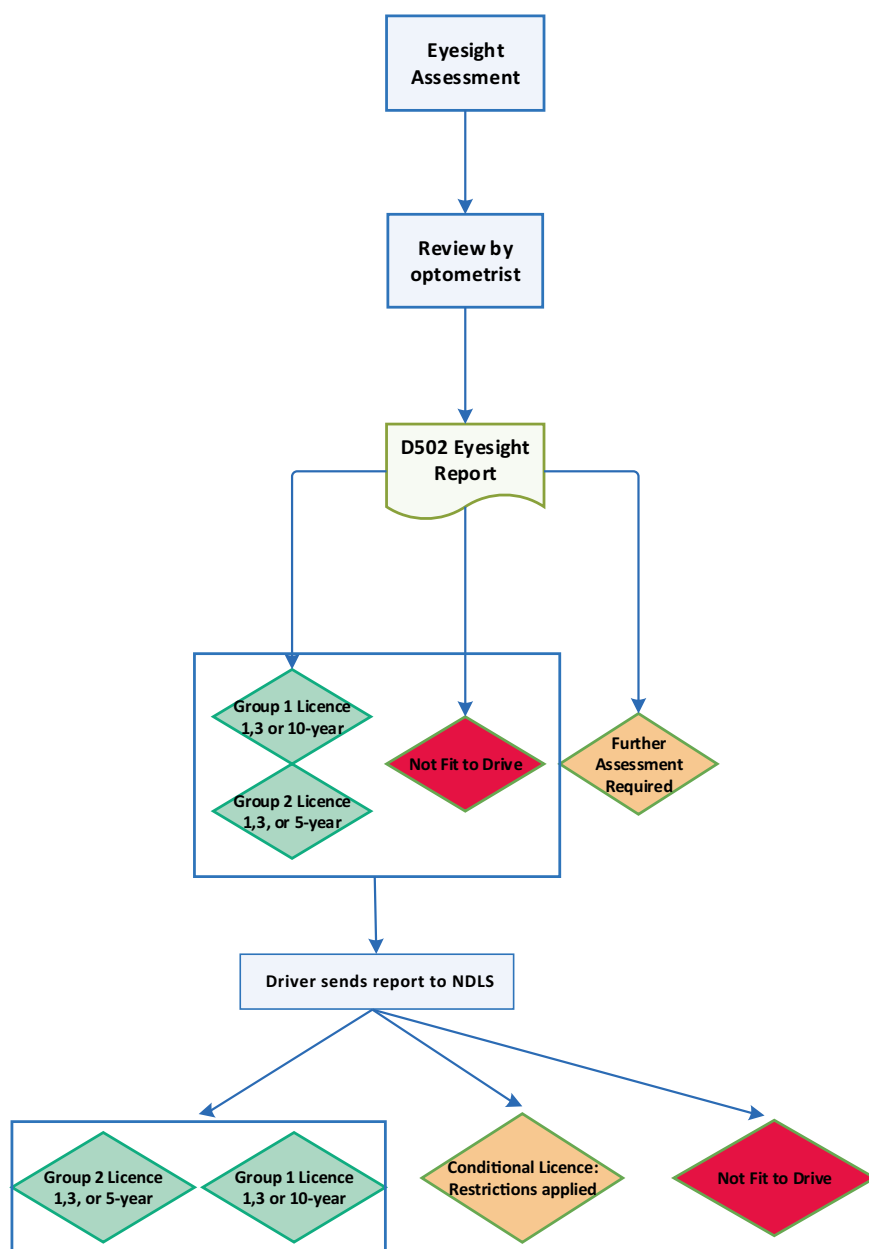
Pathway 3 outlines the process for assessing driver fitness using off-road and/or on-road driving assessments. Assessors complete reports that are sent to the referring medical doctor who uses these to make the determination about fitness to drive.

It is anticipated that in the vast majority of cases the MFTD recommendation can be made to the NDLS by the medical doctor in isolation without the need for involvement of the other possible stakeholders as per Pathway 1.

The diagram on the next page outlines these three pathways and their interconnectedness. Regardless of whichever assessment pathway is executed, the medical doctor is the only stakeholder eligible to sign the medical report (D501 form).



When is a D502 Eyesight Report Form Complete by a doctor or optometrist?



Pathway 1 Eyesight Assessment

1.Clinical Assessment:

When applying for a learner permit/driving licence, an applicant must have their eyesight tested by a Medical Practitioner/ Optometrist.

2. Report

They will complete the relevant section(s) in the Driving Licence Eyesight Report Form (D502), indicating whether or not the applicant meets the prescribed standards set out in the Sláinte agus Tiomáint Medical Fitness to Drive Guidelines.

3.Clinical Decision/ Recommendation

Where the standards are met the doctor or optometrist makes the recommendation on licence duration for a Group 1 driver for a period of 1, 3 or 10 years or for a Group 2 driver for 1, 3 or 5 years.

The Medical Practitioner/ Optometrist can also refer an applicant for further testing.

- In cases where the driver's vision has improved, whereby they no longer need to wear corrective lenses a D502 Eyesight Report Form is required at licence renewal.

4.Submitting the report to the NDLS

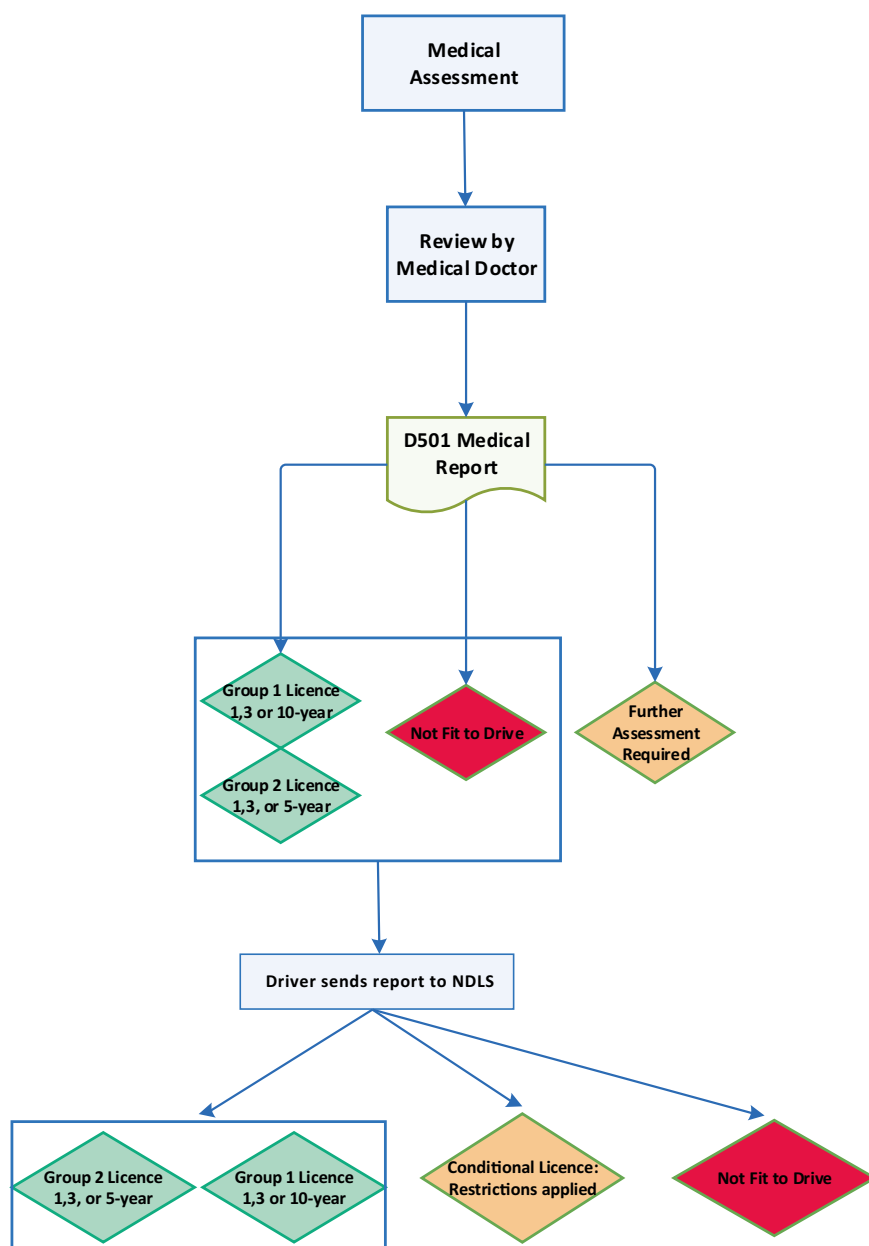
All completed D502 Eyesight Report Forms must be forwarded to NDLS by the driver.

5.Licensing Decision

The final decision on licensing is made then by the NDLS.

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When is a D501 Medical Report Form completed by a doctor?



Pathway 2 Medical Assessment

When applying for or renewing a driving licence, an applicant must complete a Driving Licence Application Form (D401).

1. Clinical Assessment:

If the applicant declares that they have any of the medical conditions listed in Part 5 of the D401 form they need to be assessed by their doctor.

2. Report

The medical doctor completes the D501 Medical Report Form.

3. Clinical Decision/ Recommendation

- If there is no indication that any other specialised assessment is needed the doctor progresses with licensing recommendation(s), otherwise the doctor can refer the driver for a driving assessment.
- In cases where the driver is considered medically fit to drive the doctor makes the recommendation on licence duration for a Group 1 driver for a period of 1, 3 or 10 years or for a Group 2 driver for 1, 3 or 5 years.
- In the case where the medical recommendation is that the driver is not fit to drive, in addition to the D501 Medical Report Form, it is recommended that the doctor also complete the **Patient Advisory Form** and give a copy to the driver while retaining a copy for the medical file.

4. Submitting the report to the NDLS

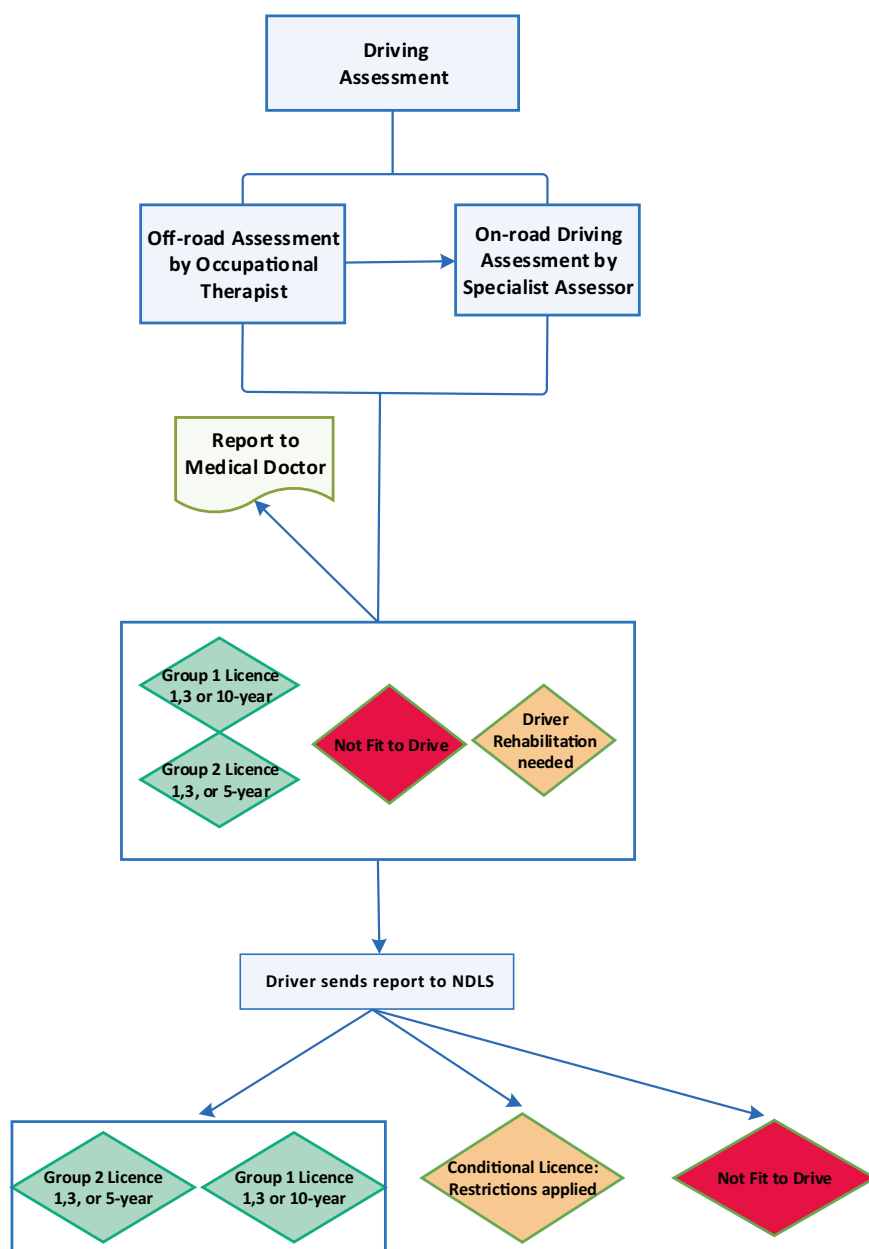
The completed D501 Medical Report Form should be given to the driver to forward to the NDLS.

5. Licensing Decision

The final decision on licensing is made then by the NDLS.

Part A: General information

When will a doctor refer for Specialised Assessment to determine MFTD?



Pathway 3 Driving Assessment

If the medical doctor is not in a position to make a recommendation on MFTD based on the medical examination alone, a referral may be made for specialised driver assessment. In such cases the medical doctor should make a referral for off-road assessment, an on-road driving assessment, or both.

1a. Off-road Assessment:

An off-road assessment consists of various screening tests that aim to detect any deficits with an individual's physical and/or mental capacity and are typically conducted by an Occupational Therapist (OT).

1b. On-road Assessment:

An on-road assessment allows an individual to demonstrate that they are capable of executing the operational, tactical and strategic tasks involved in driving a car safely. These assessments are typically conducted by specialist On-road Driving Assessors (ORDAs).

2. Report

The outcome of an off-road and on-road driving assessments must be reported back to the referring medical doctor.

2a. The outcome of the OT off-road assessment might be:

- On-road assessment required
– liaise with ORDA (if OT not already an ORDA).
- No deficit detected, report back to referring medical doctor.
- Driver not fit to drive (currently).
- Driver rehabilitation is recommended*.

continued overleaf

Part A: General information

2b. The outcome of the on-road assessment might be:

- Fit to drive unrestricted
- Fit to drive with recommendations (short-term licence, etc).
- Car adaptation(s) to assist driving are recommended.
- Driver Rehabilitation recommended.
- Not fit to drive.
- Input from one of the other stakeholders is required.

*(Driver Rehabilitation may include a combination of: Off-road rehabilitation, On-road rehabilitation (suitable vehicle may be recommended), both Off-road and On-road rehabilitation.)

3. Clinical Decision/ Recommendation

- If there is no indication that any other specialised assessment is needed the doctor progresses with licensing recommendation(s)
- In cases where the driver is considered medically fit to drive the doctor makes the recommendation on licence duration for a Group 1 driver for a period of 1, 3 or 10 years or for a Group 2 driver for 1, 3 or 5 years.
- In the case where the medical recommendation is that the driver is not fit to drive, in addition to the D501 Medical Report Form, it is recommended that the doctor also complete the **Patient Advisory Form** and give a copy to the driver while retaining a copy for the medical file.

4. Submitting the report to the NDLS

The completed D501 Medical Report Form should be given to the driver to forward to the NDLS.

5. Licensing Decision

The final decision on licensing is made then by the NDLS.

Part B: Medical fitness to drive

Chapter 2 Neurological disorders



Regulations governing driving with Neurological disorders are covered in EU Directive 2006/126/EC (Annex III) and revised in EU Directive 2009/126/EU.

Group 1 and Group 2 standards for an Ordinary Driving Licence (ODL) are set out below.

Group 2 standards are minimum standards and do not preclude employers from 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^[50-55] 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* Not permitted to drive following diagnosis. Standards require a driver to remain seizure-free for 1 year for a 1-year licence to be issued and to remain seizure-free, with medication as indicated, with further 1-year licences if continuing seizure-free for 5 years with annual review: following this a longer duration licence may be issued by the NDLS if continuing seizure-free and if there is no other relevant medical condition. Driver should notify NDLS.	The epilepsy standards apply* Not permitted to drive following diagnosis. Standards require a driver to remain seizure-free for 10 years since the last attack without antiepileptic medication. Permitted to drive subsequently provided the driver is: ■ Without anti-epileptic medication for the required period of seizure freedom. ■ Has completed an appropriate medical follow-up. ■ After extensive neurological investigation, has no relevant cerebral pathology established and there is no epileptiform activity on the electroencephalogram (EEG). Driver should notify NDLS.

*See Appendix at end of this chapter for epilepsy standards.

Recent reviews include:

50. Tomson T, Beghi E, Sundqvist A, Johannessen SI. Medical risks in epilepsy: a review with focus on physical injuries, mortality, traffic accidents and their prevention. *Epilepsy Research*. 2004;60(1):1-16. <https://doi.org/10.1016/j.eplepsyres.2004.05.004>
51. EU Working Group on Epilepsy and Driving. Epilepsy and driving in Europe. Brussels: EU Commission; 2005. https://road-safety.transport.ec.europa.eu/system/files/2021-07/epilepsy_and_driving_in_europe_final_report_v2_en.pdf
52. Devlin A, Odell M, Charlton J, Koppel S. Epilepsy and driving: current status of research. *Epilepsy Res*. 2012;102(3):135-52. https://www.researchgate.net/publication/378700576_Epilepsy_and_driving_Impact_on_the_patient_and_the_society
53. Classen S, Crizzle AM, Winter SM, Silver W, Eisenschenk S. Evidence-based review on epilepsy and driving. *Epilepsy & behavior : E&B*. 2012;23(2):103-12. <https://doi.org/10.1016/j.yebeh.2011.11.015>
54. 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. *Journal of neurology, neurosurgery, and psychiatry*. 2011;82(12):1328-33. <https://jnnp.bmj.com/content/82/12/1328>
55. 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(3):696 - 705. <https://onlinelibrary.wiley.com/doi/10.1111/j.1528-1157.1994.tb02495.x>

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 should 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 should notify NDLS.
First unprovoked seizure	Not permitted to drive initially. Permitted to drive subsequently 6 months 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 should notify NDLS.	Not permitted to drive initially. Permitted to drive subsequently, 5 years from the date of the seizure, provided 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 should 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.		

*See Appendix at end of this chapter for epilepsy standards.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Withdrawal of antiepileptic medication and driving	See Appendix at end of this chapter for epilepsy standards.	Standards require a driver to remain seizure-free for 10 years since the last attack without antiepileptic medication before being permitted to drive. See Appendix at end of this chapter for epilepsy standards.
Seizures associated with transcranial magnetic stimulation (TMS)	Single-pulse TMS - a seizure occurring during or after single-pulse TMS administration is considered to be an unprovoked seizure. The seizure regulations will apply. Repetitive TMS (rTMS) - a seizure occurring during or within 5 minutes of cessation of rTMS is considered to be a provoked seizure. Such seizures do not necessitate driving cessation. See Appendix at end of this chapter for epilepsy standards.	Single-pulse TMS - a seizure occurring during or after single-pulse TMS administration is considered to be an unprovoked seizure. The seizure regulations will apply. Repetitive TMS (rTMS) - a seizure occurring during or within 5 minutes of cessation of rTMS is considered to be a provoked seizure. Such seizures do not necessitate driving cessation See Appendix at end of this chapter for epilepsy standards.
Provoked seizures (a seizure which has a recognisable causative factor that is avoidable, apart from alcohol or illicit drug misuse)	See Appendix at end of this chapter for epilepsy standards.	Provoked epileptic seizure: the applicant who has had a provoked epileptic seizure because of a recognisable provoking factor that is unlikely to recur at the wheel can be declared fit to drive on an individual basis, subject to neurological opinion. An EEG and an appropriate neurological assessment should be performed after the acute episode. See Appendix at end of this chapter for epilepsy standards.
Psychogenic non-epileptic seizures (PNES)	Patients need to be diagnosed by a neurologist. If there is a dual diagnosis (comorbid epilepsy), the regulations for epilepsy should be invoked unless specialist opinion determines that the current events are PNES and they have not had an epileptic seizure for >12 months.	Patients need to be diagnosed by a neurologist. If there is a dual diagnosis (comorbid epilepsy), then the epilepsy guidelines apply: the driver should be off anti-epileptic medication and seizure-free for ten years before assessment by a consultant neurologist for fitness to drive with PNES should take place.

continued on next page

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Psychogenic non-epileptic seizures (PNES) (continued)	If they fulfil any of the below factors they should be 3 months event free prior to driving unless specialist review feels there is a compelling reason that they do not pose a risk while driving, i.e. events only happen at night and this pattern has been maintained for >12 months. 1. Loss of awareness/responsiveness with their psychogenic seizures. 2. History of PNES-related injuries. 3. No auras or warnings or otherwise predictable psychogenic seizures. 4. If PNES semiology suggests that ability to drive would be impaired during a psychogenic seizure.	For isolated PNES, if they fulfil any of the below factors they should be 3 months event free prior to driving. 1. Loss of awareness/responsiveness with their psychogenic seizures. 2. History of PNES-related injuries. 3. No auras or warnings or otherwise predictable psychogenic seizures. 4. If PNES semiology suggests that ability to drive would be impaired during a psychogenic seizure.

*See Appendix at end of this chapter for epilepsy standards.

Loss of consciousness/loss of or altered awareness^[56-59]

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.

56. Peeters S, Hoek A, Molink S, Huff J. Syncope: Risk stratification and clinical decision making. *Emerg Med Pract.* 2014;16(4):1-122. <https://pubmed.ncbi.nlm.nih.gov/25105200/>

57. Shen W-K, Sheldon RS, Benditt DG, Cohen MI, Forman DE, Goldberger ZD, et al. 2017 ACC/AHA/HRS Guideline for the Evaluation and Management of Patients With Syncope: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines, and the Heart Rhythm Society. *Journal of the American College of Cardiology.* 2017. <https://doi.org/10.1161/CIR.0000000000000499>

58. Williamson A, Muir S. Loss of consciousness, collapse and associated driving restrictions: a retrospective case note review - an important reminder regarding driving restrictions. *Scottish medical journal.* 2017;62(2):43-7. <https://doi.org/10.1177/0036933017694779>

59. Chee JN, Simpson C, Sheldon RS, Dorian P, Dow J, Guzman J, Raj SR, Sandhu RK, Thiruganasambandamoorthy V, Green MS, Krahn AD, Plonka S, Rapoport MJ. A Systematic Review of the Risk of Motor Vehicle Collision in Patients With Syncope. *Can J Cardiol.* 2020 Feb 14:S0828-282X(20)30173-2. [https://onlinecjc.ca/article/S0828-282X\(20\)30173-2/abstract](https://onlinecjc.ca/article/S0828-282X(20)30173-2/abstract)

Part B: Medical fitness to drive

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 provocation factors with associated prodromal symptoms and which are unlikely to occur whilst sitting or lying. Benign in nature. If recurrent, will need to check the “3 Ps” apply on each occasion (provocation/prodrome/postural). (If not see Number 6 below).	Permitted to drive. Driver needn't notify NDLS.	Permitted to drive. Driver needn't notify NDLS. 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.	Permitted to drive. Driver needn't notify NDLS.	Not permitted to drive initially. Permitted to drive 3 months after the event provided there has been no further recurrence. Driver should notify NDLS. N.B. Cough Syncope see Chapter 9
3. Solitary loss of consciousness/ loss of or altered awareness likely to be cardiovascular in 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. **For Pacemakers see Chapter 3	Not permitted to drive for 6 months if no cause identified. Permitted to drive 3 months after the event provided the cause has been identified and treated satisfactorily. Driver should notify NDLS if cause not identified.	Not permitted to drive for 12 months if no cause identified. Permitted to drive 3 months after the event provided the cause has been identified and treated satisfactorily. Driver should notify NDLS if cause not identified.

*See Appendix at end of this chapter for epilepsy standards.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
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 behaviour. - Headache post attack.	Not permitted to drive for 6 months 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 should notify NDLS.	Not permitted to drive for 5 years 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 should notify NDLS.
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.	Not permitted to drive for 6 months. Permitted to drive subsequently provided there is no further recurrence. Driver should notify NDLS.	Not permitted to drive for 1 year. Permitted to drive subsequently provided there is no further recurrence. Driver should notify NDLS.
6. Two or more episodes of loss of consciousness/loss of or altered awareness without reliable prodromal symptoms.	Not permitted to drive for 12 months or until the risk has been reduced to < 20% per annum. Driver should notify NDLS.	Not permitted to drive for 12 months or until the risk has been reduced to < 2% per annum. Driver should notify NDLS.

*See Appendix at end of this chapter for epilepsy standards.

Part B: Medical fitness to drive

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Primary/Central Hypersomnias^[60] Including Narcoleptic syndromes and cataplexy	Not permitted to drive initially. Permitted to drive subsequently provided a period of between 3 and 6 months satisfactory control of symptoms with appropriate treatment has elapsed. If not requiring treatment, relicensing may be considered after satisfactory objective assessment of maintained wakefulness, e.g. the Osler test. Driver should notify NDLS if driving cessation is going to be 6 months or greater.	Not permitted to drive initially. Permitted to drive subsequently, subject to consultant assessment and a satisfactory objective assessment of maintained wakefulness e.g. the Osler test Driver should notify NDLS if driving cessation is going to be 6 months or greater.

Chronic Neurological Disorders

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Multiple sclerosis^[61-63], motor neurone disease, myopathy etc., which may affect vehicle control because of impairment of sensation, perception, co-ordination and muscle power. See also section: Drivers with Disabilities, Chapter 10.	Permitted to drive providing medical assessment confirms that driving performance is not impaired. 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, sensory and physical impairment. Driver should notify NDLS.	Not permitted to drive if condition is progressive or disabling. Permitted to drive provided driving would not be impaired and condition stable, subject to satisfactory consultant assessment and annual review. Driver should notify NDLS.

*See Appendix at end of this chapter for epilepsy standards.

60. Tippin, J., & Dyken, M. E. (2017). Driving Safety and Fitness to Drive in Sleep Disorders. Continuum (Minneapolis), 23(4), Sleep Neurology), 1156-1161. <https://pubmed.ncbi.nlm.nih.gov/28777182/>

61. Devos H, Ranchet M, Backus D, Abisamra M, Anschutz J, Allison Jr CD, et al. Determinants of On-Road Driving in Multiple Sclerosis. Archives of Physical Medicine and Rehabilitation. 2017;98(7):1332-8.e2. <https://pubmed.ncbi.nlm.nih.gov/27840131/>

62. Devos H, Brijs T, Alders G, Wets G, Feys P. Driving performance in persons with mild to moderate symptoms of multiple sclerosis. Disability and rehabilitation. 2013;35(16):1387-93. <https://pubmed.ncbi.nlm.nih.gov/23682634/>

63. Classen S, Krasniuk S, Morrow SA, Alvarez L, Monahan M, Danter T, et al. Visual Correlates of Fitness to Drive in Adults With Multiple Sclerosis. OTJR : occupation, participation and health. 2017: <https://pubmed.ncbi.nlm.nih.gov/28766462/>

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Parkinson's disease and other forms of Parkinsonism^[64-69]	Permitted to drive provided the condition does not impair safe driving e.g. there is no clinically significant variability in motor function. Due consideration should be given to medication review (with due attention to tendency to drowsiness/ sleepiness), compliance, insight, on/ off periods, 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 should notify NDLS.	Not permitted to drive if condition is disabling and/or there is clinically significant variability in motor function. Permitted to drive provided driving would not be impaired, subject to individual assessment by a consultant. Licence may be issued subject to annual review. Driver should notify NDLS.

Dizziness

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	Not permitted to drive on diagnosis. Permitted to drive subsequently provided satisfactory control of symptoms achieved. If remains asymptomatic, a 10 year licence or if over 65-years-old, a licence expiring at age 75 can be issued. From age 75, a 1 or 3 year licence can be issued, subject to medical report. Driver must notify NDLS.	Not permitted to drive on diagnosis. Not permitted to drive on diagnosis. May be permitted to drive subsequently, having taken into consideration the underlying diagnosis and treatment, and if recurrence is unlikely. If the underlying diagnosis is likely to cause recurrence, the patient must be asymptomatic and completely controlled for 1 year from an episode before reapplying for their licence. If the treating doctor is not sure of the likelihood of causing recurrence, a second opinion should be sought from another specialist. Driver must notify NDLS.

64. Klimkeit EI, Bradshaw JL, Charlton J, Stolwyk R, Georgiou-Karistianis N. Driving ability in Parkinson's disease: current status of research. *Neurosci Biobehav Rev.* 2009 Mar;33(3):223-31. <https://www.sciencedirect.com/science/article/abs/pii/S0149763408001267?via%3Dihub>. Epub 2008 Aug 13. PMID: 18775450.

65. Jitkriksadikul O, Bhidayasiri R. Physicians' role in the determination of fitness to drive in patients with Parkinson's disease: systematic review of the assessment tools and a call for national guidelines. *Journal of clinical movement disorders.* 2016;3:14. <https://clinicalmovementdisorders.biomedcentral.com/articles/10.1186/s40734-016-0043-x>

66. Devos H, Ranchet M, Emmanuel Akinwuntan A, Uc EY. Establishing an evidence-base framework for driving rehabilitation in Parkinson's disease: A systematic review of on-road driving studies. *NeuroRehabilitation.* 2015;37(1):35-52. <https://journals.sagepub.com/doi/full/10.3233/NRE-151239>

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Stroke/TIA [70-75]	Transient ischaemic attack (TIA) Not permitted to drive for 1 week. Driver needn't notify NDLS. Stroke Not permitted to drive for 4 weeks. Permitted to drive after this period provided the clinical recovery is satisfactory. Driver does not 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.	Transient ischaemic attack (TIA) Not permitted to drive for at least 3 months. Driver should notify NDLS. Stroke Not permitted to drive for at least 3 months. Permitted to 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 and/or inattention, 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. Driver should notify NDLS.

67. Carrozzino D, Bech P, Patierno C, Onofrij M, Morberg BM, Thomas A, et al. Somatization in Parkinson's Disease: A systematic review. Progress in Neuro-Psychopharmacology and Biological Psychiatry. 2017;78:18-26. <https://www.sciencedirect.com/science/article/abs/pii/S0278584617301161?via%3Dihub>
68. Moller JC, Stiasny K, Cassel W, Peter JH, Kruger HP, Oertel WH. "Sleep attacks" in Parkinson patients. A side effect of nonergoline dopamine agonists or a class effect of dopamine agonists? Der Nervenarzt. 2000;71(8):670-6. <https://pubmed.ncbi.nlm.nih.gov/10996919/>
69. Classen S, Holmes J. Executive functions and driving in people with Parkinson's disease. Movement disorders : official journal of the Movement Disorder Society. 2013;28(14):1909-11. <https://movementdisorders.onlinelibrary.wiley.com/doi/10.1002/mds.25727>
70. Stapleton, T., Connolly, D., & O'Neill, D. (2015). Factors Influencing the Clinical Stratification of Suitability to Drive after Stroke: A Qualitative Study. Occup Ther Health Care, 29(3), 253-271. <https://www.tandfonline.com/doi/full/10.3109/07380577.2015.1036192>
71. Hird, M. A., Vesely, K. A., Christie, L. E., Alves, M. A., Pongmoragot, J., Saposnik, G., & Schweizer, T. A. (2015). Is it safe to drive after acute mild stroke? A preliminary report. Journal of the Neurological Sciences, 354(1), 46-50. <https://pubmed.ncbi.nlm.nih.gov/26004673/>
72. Devos, H., Akinwuntan, A. E., Nieuwboer, A., Truijten, S., Tant, M., & De Weerd, W. (2011). Screening for fitness to drive after stroke: a systematic review and meta-analysis. Neurology, 76(8), 747-756. <https://www.neurology.org/doi/10.1212/WNL.0b013e31820d6300>
73. Devos, H., Tant, M., & Akinwuntan, A. E. (2014). On-road driving impairments and associated cognitive deficits after stroke. Cerebrovasc Dis, 38(3), 226-232. <https://karger.com/ced/article-abstract/38/3/226/77102/On-Road-Driving-Impairments-and-Associated?redirectedFrom=fulltext>
74. Ranchet, M., Akinwuntan, A. E., Tant, M., Salch, A., Neal, E., & Devos, H. (2016). Fitness-to-drive agreements after stroke: medical versus practical recommendations. Eur J Neurol, 23(9), 1408-1414. <https://onlinelibrary.wiley.com/doi/abs/10.1111/ene.13050>
75. Rapoport MJ, Plonka SC, Finestone H, et al. A systematic review of the risk of motor vehicle collision after stroke or transient ischemic attack. Topics in stroke rehabilitation. 2019;26(3):226-235. <https://doi.org/10.1080/10749357.2018.1558634>

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Mild Cognitive Impairment (MCI) or Dementia or any Organic Brain Syndrome	See Chapter 5, Psychiatric disorders.	See Chapter 5, Psychiatric disorders.
Acute Encephalitic Illnesses Including Limbic Encephalitis associated with seizures.	1. Permitted to drive provided no seizure(s), when clinical recovery is complete. The Driver should notify NDLS only if there is significant residual disability. 2. If associated with seizures during acute febrile illness, not permitted to drive for 6 months from the date of seizure(s). Driver should notify NDLS. 3. If associated with any seizure(s) early or late during or after convalescence, permitted to drive provided the current epilepsy standards have been met. Driver should notify NDLS. See Appendix to this Chapter for full epilepsy standards.	1. Permitted to drive provided no residual disabling symptoms, and clinical recovery is complete as assessed by a neurologist. The Driver should notify NDLS only if there is significant residual disability. 2. If associated with seizures during acute febrile illness not permitted to drive and Driver should notify NDLS. a) Encephalitis – there have been no further seizures for at least 12 months without use of antiepileptic medication assessment by neurologist required. 3. If associated with any seizure(s) early or late during or after convalescence, not permitted to drive, driver should notify NDLS, and meet current epilepsy standards before driving resumes. See Appendix to this Chapter for full standards.
Transient Global Amnesia	Permitted to drive provided epilepsy, any sequelae from head injury and other causes of altered awareness have been excluded. Driver needn't notify NDLS.	A single confirmed episode does not require cessation of driving. Not permitted to drive if two or more episodes occur. Driver should notify NDLS Consultant assessment required to exclude all other causes of acute transient memory loss.
Menière's disease ^[76]	Should not drive with symptoms	Should not drive with symptoms

*See Appendix at end of this chapter for epilepsy standards.

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Part B: Medical fitness to drive

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Arachnoid Cysts Asymptomatic and untreated.	Driver needn't notify NDLS.	Permitted to drive.
Colloid Cysts Asymptomatic and untreated.	Permitted to drive. Driver needn't notify NDLS.	Permitted to drive unless prescribed prophylactic medication for seizures when there should be individual assessment. Driver should notify NDLS.
Colloid Cysts Craniotomy and/or Endoscopic Treatment.	Not permitted to drive for 6 months after the treatment. Permitted to drive thereafter, provided that there is no debarring residual impairment likely to affect driving safety.	Not permitted to drive for 2 years after the treatment. Permitted to drive thereafter, provided that there is no debarring residual impairment likely to affect driving safety. Driver should notify NDLS.
Pituitary Tumour No need for treatment, or treated by transsphenoidal surgery or drugs or radiotherapy	Permitted to drive provided no visual field defect. If visual field loss. See section: Visual Disorders Chapter 7. Driver needn't notify NDLS.	Permitted to drive provided no visual field defect. If visual field loss. See section: Visual Disorders Chapter 7. Driver needn't notify NDLS.
Pituitary Tumour Treated by Craniotomy	Not permitted to drive for 6 months. Permitted to drive thereafter, provided no visual field defect. If visual field loss. See section: Visual Disorders Chapter 7. Driver should notify NDLS.	Not permitted to drive for 2 years. Driver should notify NDLS. Permitted to drive thereafter, provided no visual field defect. If visual field loss. See section: Visual Disorders Chapter 7. Driver should notify NDLS.

*See Appendix at end of this chapter for epilepsy standards.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Benign Supratentorial Tumour E.g. WHO Grade 1 Meningiomas	Not permitted to drive for 6 months.	Not permitted to drive.
Treatment by Craniotomy	Permitted to drive thereafter provided there is no debarring residual impairment likely to affect safe driving. Driver should notify NDLS. Epilepsy standards apply if relevant history of seizure(s).	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 should notify NDLS.
Treatment with Stereotactic Radiosurgery	Not permitted to drive for 4 weeks. Permitted to drive thereafter provided there is no debarring residual impairment likely to affect driving safety. Driver should notify NDLS. Epilepsy standards apply if relevant history of seizure(s).	Not permitted to drive for 3 years after the completion of the primary treatment of the tumour. Permitted to drive thereafter 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 should notify NDLS.
Treatment with Fractionated Radiotherapy	Permitted to 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). Driver should notify NDLS.	Not permitted to drive for 3 years after the completion of the primary treatment of the tumour. Permitted to drive thereafter, 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 should notify NDLS.

*See Appendix at end of this chapter for epilepsy standards.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
WHO Grade II Meningiomas treated by Craniotomy and/or Radiosurgery and/or Radiotherapy	Not permitted to drive for 1 year, dating from the completion of treatment. Permitted to drive thereafter provided there is no debarring residual impairment likely to affect driving safety. Driver should notify NDLS. Epilepsy standards apply if relevant history of seizure(s).	Not permitted to drive. Driver should notify NDLS. In the absence of any seizures, return to driving can be 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	Permitted to drive. Driver needn't notify NDLS.	Not permitted to drive until two scans 12 months apart showing no growth. If growth, consultant assessment with 1 year short period licence and review. Driver should notify NDLS.
Benign Infratentorial Tumours E.g. Meningioma with surgery by craniotomy with or without radiotherapy.	Permitted to drive on recovery from treatment. Driver needn't notify NDLS.	Permitted to drive on recovery provided there is no debarring residual impairment likely to affect driving safety. Driver needn't notify NDLS.
Acoustic Neuroma/Schwannoma	Permitted to drive. Driver needn't notify NDLS unless accompanied by disabling vestibular symptoms.	Permitted to drive. Driver needn't notify NDLS unless accompanied by disabling vestibular symptoms and/or the condition is bilateral.

*See Appendix at end of this chapter for epilepsy standards.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Malignant Tumours (including metastatic deposits) and Gliomas Supratentorial Gliomas Grades I and II	Not permitted to drive for 1 year from time of completion of the primary treatment. Permitted to drive thereafter, provided there is no debarring residual impairment likely to affect driving safety. For drivers with supratentorial metastatic brain disease who have received or are receiving immunotherapy or other molecular targeted treatment, relicensing may be considered one year after completion of primary treatment (or one year after commencement of the targeted therapy if no other primary treatment for the intracranial disease has been given) if there is clinical and imaging evidence of disease stability or improvement, with no deterioration both intracranially and elsewhere in the body. If these criteria cannot be met driving must cease for 2 years. This standard can be applied both to isolated metastasis and to a driver with multiple brain metastases. Driver should notify NDLS.	Not permitted to drive. Pineocytoma, Grade I: Permission to drive can be considered on an individual basis 2 years post primary treatment if satisfactory MRI. Driver should notify NDLS.
WHO Grade III Meningioma	Not permitted to drive for 2 years from time of completion of primary treatment. Permitted to drive thereafter, provided there is no debarring residual impairment likely to affect driving safety. Driver should notify NDLS.	Not permitted to drive. Pineocytoma, Grade I: Permission to drive can be considered on an individual basis 2 years post primary treatment if satisfactory MRI. Driver should notify NDLS.

*See Appendix at end of this chapter for epilepsy standards.

Part B: Medical fitness to drive

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Gliomas Grade III and IV	Not permitted to drive for 2 years from time of completion of primary treatment. Permitted to drive thereafter, provided there is no debarring residual impairment likely to affect driving safety. Driver should notify NDLS.	Not permitted to drive. Driver should notify NDLS.
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 permitted to drive provided there is no debarring residual impairment likely to affect driving safety. Driver should notify NDLS.	Not permitted to drive. Driver should notify NDLS.
Infratentorial Tumours Gliomas Grade I	As for benign tumours: i.e. permitted to drive on recovery.	Permission to drive subject to individual assessment
Gliomas Grade II, III & IV	As for Supratentorial tumour. Driver should notify NDLS.	Not permitted to drive. Driver should notify NDLS.
Medulloblastoma or Low Grade Ependymoma	Not permitted to drive. If totally excised, can be considered for 1 year licence after primary treatment, if free from recurrence. Driver should notify NDLS.	Not permitted to drive. If entirely infratentorial, may be considered for driving when disease- free for 5 years after treatment. Driver should notify NDLS.
High Grade Ependymomas, Other Primary Malignant Brain Tumours and Primary CNS Lymphomas	Not permitted to drive. Can be considered for relicensing 2 years following treatment. Driver should notify NDLS.	Not permitted to drive. Driver should notify NDLS.

*See Appendix at end of this chapter for epilepsy standards.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Metastatic deposits	Not permitted to drive. Can be considered for driving on a 1 year licence after completion of primary treatment if otherwise well. Driver should notify NDLS.	Not permitted to drive. Can be considered for a licence 5 years from the date of completion of the primary treatment if asymptomatic and subject to annual consultant review. Driver should notify NDLS.
Malignant Intracranial Tumours in children who survive to adult life without recurrence	Permitted to drive.	Permitted to drive subject to individual assessment: see above as for “Benign Supratentorial Tumour”.
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 should notify NDLS.	Not permitted 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 permitted to drive provided 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. Driver should notify NDLS.
Spontaneous Acute Subdural Haematoma (Treated by Craniotomy)	Not permitted to drive for 6 months. Permitted to drive thereafter, provided there is 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 should notify NDLS.	Not permitted to drive for 6 months. Thereafter, licensing will be contingent on an individual assessment by a consultant as to fitness to return to driving. Driver should notify NDLS.

*See Appendix at end of this chapter for epilepsy standards.

Subdural haematoma

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Chronic Subdural Haematoma (Treated surgically)	Permitted to drive on recovery provided there is 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 should notify NDLS.	Not permitted to drive for 6 months –1 year. Thereafter, licensing is contingent on an individual assessment by a consultant as to fitness to return to driving. Driver should notify NDLS.

Subarachnoid Haemorrhage

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Subarachnoid Haemorrhage 1. No cause found	Permitted to drive provided comprehensive cerebral angiography normal, 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 should notify NDLS.	Not permitted to drive for 6 months. Permitted to drive thereafter provided comprehensive cerebral angiography normal, and there is no debarring residual impairment likely to affect driving safety. Driver should notify NDLS.

*See Appendix at end of this chapter for epilepsy standards.

Subarachnoid Haemorrhage

2A. Associated with 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)	
Neurological Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL	
Craniotomy Non Middle Cerebral Artery Aneurysm	Permitted to drive on clinical recovery.	mRS < 2 at 2 months; not permitted to drive for 12 months. Permitted to drive thereafter provided there is no residual impairment likely to affect driving.	mRS 2 or > at 2 months; not permitted to drive for 24 months. Permitted to drive thereafter provided there is no residual impairment likely to affect driving.
Craniotomy Middle Cerebral Artery Aneurysm	Permitted to drive on clinical recovery.	mRS < 2 at 2 months; not permitted to drive for 24 months. Permitted to drive thereafter provided there is no residual impairment likely to affect driving.	mRS 2 or > at 2 months; Not permitted to drive. See below*.
Endovascular Treatment Non Middle Cerebral Artery Aneurysm	Permitted to drive on clinical recovery.	mRS < 2 at 2 months; not permitted to drive for 6 months. Permitted to drive thereafter provided there is no residual impairment likely to affect driving.	mRS 2 or > at 2 months; not permitted to drive for 24 months. Permitted to drive thereafter provided there is no residual impairment likely to affect driving.
Endovascular Treatment Middle Cerebral Artery Aneurysm	Permitted to drive on clinical recovery.	mRS < 2 at 2 months; not permitted to drive for 24 months.	mRS 2 or > at 2 months; not permitted to drive. 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.

Part B: Medical fitness to drive

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Subarachnoid Haemorrhage 2B. No Treatment i.e. Aneurysm responsible for SAH but no intervention.	Not permitted to drive for 6 months. Driver should notify NDLS.	Not permitted to drive. Driver should notify NDLS.
Subarachnoid Haemorrhage 2C. Truly Incidental Findings of Intracranial Aneurysm (aneurysm has not been responsible for subarachnoid haemorrhage). No Treatment	Permitted to drive on clinical recovery.	Permitted to drive provided anterior circulation aneurysms (excluding cavernous carotid) are < 13mm in diameter. Posterior circulation aneurysms must be < 7mm diameter.
Surgery Craniotomy	Permitted to drive on clinical recovery.	Not permitted to drive for 1 year. Driver should notify NDLS.
Endovascular Treatment	Permitted to drive on clinical recovery.	Not permitted to drive until clinical recovery. Permitted to drive thereafter 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.
Arteriovenous Malformation 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.		
Arteriovenous Malformation Supratentorial AVMS Intracerebral Haemorrhage due to Supratentorial AVM		
A. Craniotomy	Not permitted to drive for 6 months. Permitted to drive thereafter, provided 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 should notify NDLS.	Not permitted to drive until the lesion is completely removed or ablated and the patient is 10 years seizure-free from last definitive treatment. Permitted to drive thereafter provided there is no debarring residual impairment likely to affect driving Driver should notify NDLS.

*See Appendix at end of this chapter for epilepsy standards.

Part B: Medical fitness to drive

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
B. Other treatment (embolisation or stereotactic radiotherapy)	Not permitted to drive for 4 weeks. Permitted to drive thereafter, provided there is no debarring residual impairment likely to affect driving. Driver needn't notify NDLS.	Not permitted to drive until the lesion is completely removed or ablated and the patient is 10 years seizure-free from last definitive treatment. Permitted to drive thereafter provided there is no debarring residual impairment likely to affect driving. Driver should notify NDLS.
C. No treatment	Not permitted to drive for 4 weeks. Permitted to drive thereafter provided there is no debarring residual impairment likely to affect driving. Driver needn't notify NDLS.	Not permitted to drive. Driver should notify NDLS.
Incidental finding of a supratentorial AVM (no history of intracranial bleed)		
A. No treatment	Permitted to drive.	Not permitted to drive. Driver should notify NDLS.
B. Surgical or other treatment	See above: as for AVM with Intracranial Haemorrhage.	Not permitted to drive until the lesion is completely removed or ablated and the patient is 10 years seizure-free from last definitive treatment. Permitted to drive thereafter provided there is no debarring residual impairment likely to affect driving Driver should notify NDLS.
Infratentorial AVMs Intracranial haemorrhage due to AVM:		
A. Treated by Craniotomy	Permitted to drive provided there is no debarring residual impairment likely to affect driving. Driver needn't notify NDLS.	Not permitted to drive until confirmation of complete obliteration with no debarring residual impairment likely to affect driving. Driver should notify NDLS.

*See Appendix at end of this chapter for epilepsy standards.

Part B: Medical fitness to drive

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
B. Embolisation/Stereotactic Radiotherapy	Permitted to drive provided there is no debarring residual impairment likely to affect driving. Driver needn't notify NDLS.	Not permitted to drive until confirmation of complete obliteration with no debarring residual impairment likely to affect driving. Driver should notify NDLS.
C. No treatment	Permitted to drive provided there is no debarring residual impairment likely to affect driving. Driver needn't notify NDLS.	Not permitted to drive. Driver should notify NDLS.
Incidental finding of an infratentorial AVM		
A. No treatment	Permitted to drive.	Not permitted to drive. Driver should notify NDLS.
B. Surgical or other treatment	Permitted to drive provided there is no debarring residual impairment likely to affect driving. Driver needn't notify NDLS.	Not permitted to drive until confirmation of complete obliteration with no debarring residual impairment likely to affect driving. Driver should notify NDLS.
Dural AV Fistula	Permitted to drive , subject to individual assessment by appropriate consultant. Driver should notify NDLS.	Permitted to drive , subject to individual assessment by appropriate consultant. Driver should notify NDLS.
Cavernous Malformation Supratentorial		
A. Incidental, no surgical treatment	Permitted to drive. Driver needn't notify NDLS.	Permitted to drive , subject to individual assessment by appropriate consultant. Driver needn't notify NDLS.
B. Seizure, no surgical treatment	Epilepsy standards apply if history of seizure(s).	Epilepsy standards apply if history of seizure(s).

*See Appendix at end of this chapter for epilepsy standards.

Part B: Medical fitness to drive

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
C. Haemorrhage and/or focal neurological deficit, no surgical treatment	Permitted to drive provided there is no debarring residual impairment likely to affect driving. Epilepsy standards apply if history of seizure(s). Driver should notify NDLS.	Not permitted to drive. Driver should notify NDLS.
D. Treated by Surgical Excision (Craniotomy)	Permitted to drive provided 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. Epilepsy standards apply if there is a history of seizure(s). Driver should notify NDLS.	Not permitted to drive for 10 years post-obliteration of the lesion. Epilepsy standards apply if there is a history of seizure(s). Driver should notify NDLS.
E. Treated by radiosurgery		
(I). Incidental	Permitted to drive.	Not permitted to drive. Driver should notify NDLS.
(II). Symptomatic	Permitted to drive provided there is no debarring residual impairment likely to affect driving. Epilepsy standards apply if history of seizure(s).	Not permitted to drive. Driver should notify NDLS.
Infratentorial cavernous malformation		
A. Incidental	Permitted to drive. Driver needn't notify NDLS.	Permitted to drive. Driver needn't notify NDLS.

*See Appendix at end of this chapter for epilepsy standards.

Part B: Medical fitness to drive

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
B. With focal Neurological Deficit or Haemorrhage whether treated surgically or not	Permitted to drive provided there is no debarring residual impairment likely to affect driving. Epilepsy standards apply if history of seizure(s). Driver should notify NDLS.	Permitted to drive provided there is no debarring residual impairment likely to affect driving. Epilepsy standards apply if history of seizure(s). Driver should notify NDLS.
Intracerebral Abscess/ Subdural Empyema	Not permitted to drive for 1 year. Driver should notify NDLS.	Not permitted to drive. Very high prospective risk of seizure(s). May consider licensing if 10 years seizure- free from treatment. Driver should notify NDLS.

N.B. Multiple Cavernoma: no firm evidence of increased morbidity. Size is not an issue. See Appendix at end of this chapter for epilepsy standards.

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Hydrocephalus	Permitted to drive provided the condition is uncomplicated and there are no associated neurological problems. Driver needn't notify NDLS.	Permitted to drive provided the condition is uncomplicated and there are no associated neurological problems. Driver should notify NDLS.
Intraventricular Shunt or Extraventricular Drain Insertion or revision of upper end of ventricular shunt or extra- ventricular drain	Not permitted to drive for 6 months. Permitted to drive thereafter provided there is no debarring residual impairment likely to affect driving safety. Driver should notify NDLS.	Not permitted to drive for 6 months. Thereafter, licensing shall be dependent upon the individual assessment of the underlying condition. Driver should notify NDLS.

*See Appendix at end of this chapter for epilepsy standards.

Part B: Medical fitness to drive

Neurological Disorders	Group 1 - Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Neuroendoscopic procedures E.g. IIIrd ventriculostomy	Not permitted to drive for 6 months. Permitted to drive thereafter, provided there is no debarring residual impairment likely to affect driving safety. <i>Driver should notify NDLS.</i>	Not permitted to drive for 6 months. Thereafter, licensing shall be dependent upon the individual assessment of the underlying condition. <i>Driver should notify NDLS.</i>
Intracranial Pressure Monitoring Device Inserted by Burr hole surgery	Permitted to drive. However, the prospective risk from the underlying condition must be considered. <i>Driver needn't notify NDLS.</i>	The prospective risk from the underlying condition must be considered. <i>Driver should notify NDLS.</i>
Implanted Electrodes Deep brain stimulation for movement disorder or pain	Not permitted to drive until there is clinical confirmation of recovery. Permitted to drive thereafter provided: ■ there are no complications from surgery ■ the patient is seizure-free ■ there is no debarring residual impairment likely to affect safe driving. <i>Driver needn't notify NDLS.</i>	Not permitted to drive until there is clinical confirmation of recovery. Permitted to drive thereafter provided: ■ there are no complications from surgery ■ the patient is seizure-free ■ there is no debarring residual impairment likely to affect safe driving. <i>Driver should notify NDLS.</i>
Implanted Motor Cortex stimulator for pain relief	Not permitted to drive for 6 months if aetiology of pain is non- cerebral e.g. trigeminal neuralgia. Not permitted to drive for 12 months if the aetiology is cerebral e.g. stroke. Permitted to drive thereafter provided there is no debarring residual impairment likely to affect driving safety. <i>Driver should notify NDLS.</i>	Not permitted to drive. <i>Driver should notify NDLS.</i>

*See Appendix at end of this chapter for epilepsy standards.

Appendix – Chapter 2

Epilepsy standards for Group 1 and 2

Group 1

The following special considerations apply under the epilepsy standards for drivers of cars, motorcycles and tractors.

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 during this period. This includes being free of minor seizures and epilepsy signs (e.g. limb jerking, auras and absences). Episodes not involving loss of consciousness are included.
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 with a consultant neurologist) 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

3. I. 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 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 as judged 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

Drivers of busses and lorries must satisfy all the following conditions under the epilepsy regulations:

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 **AND**
2. have not taken medication to treat epilepsy **AND**
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 driver 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 medically-guided 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 driver 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 UK^[77]. This study shows a 30% risk of seizure in the first year of withdrawal of medication compared with those who continued on treatment.

Patients who are drivers and who are undergoing withdrawal or reduction 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.

There is a difference between reducing the number of antiepileptic medications to a lesser number and the complete withdrawal of antiepileptic medications. Neurologist opinion is required for Group 1 drivers as to whether the risk of seizure within the next year is >20%, and a number of clinical factors may help the specialist in this decision.

The highest risk of seizure is for complete cessation of antiepileptic medications, and driving should cease during the period of withdrawal and for at least 3 months thereafter, or a longer period as considered appropriate by the neurologist.

If there is a withdrawal-associated seizure, driving should cease for at least 3 months once previously effective therapy is reinstated.

For reduction of numbers of medications from a greater to a lesser number, clinical judgment should be exercised by a neurologist on an individual basis.

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.

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 are 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.

77. Bonnett, L. J., A. Shukralla, C. Tudur-Smith, P. R. Williamson, and A. G. Marson. "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* 82, no. 12 (Dec 2011): 1328-33. <https://jnnp.bmj.com/content/82/12/1328>

Part B: Medical fitness to drive

Doctors may wish to advise drivers 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;

AND

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.
- Seizures occurring within 5 minutes of cessation of repetitive trans-cranial magnetic stimulation (rTMS).

The D501 Medical Report includes a provision for the assessing doctor to signal that any driver he/she considers fit to drive less than 12 months after a seizure that this is because the seizure was a) a first seizure, b) a provoked seizure, c) seizure exclusively while asleep, and d) seizure not affecting consciousness of driving ability, e) seizure related to withdrawal or reduction of antiepileptic medication, as adjudicated by a consultant neurologist.

See Leaflets for:

- **Epilepsy, Seizures and Driving**
- **Stroke, Transient Ischaemic Attack (TIA) And Driving**

at: <https://www.ndls.ie/medical-fitness/health-and-driving-information-leaflets.html>

Chapter 3

Cardiovascular disorders^[78-79]



Cardiovascular conditions or diseases can lead to a sudden impairment of the cerebral functions that constitutes a danger to road safety. These conditions represent grounds for establishing temporary or permanent restrictions to driving (EU Directive 2016/1106)^[79]. 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. For details see the 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. Group 1 and Group 2 standards for an Ordinary Driving Licence (ODL) are set out below.

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Angina	Not permitted to drive when symptoms occur at rest, with emotion, or at the wheel. Driver should notify NDLS. Permitted to drive provided satisfactory symptom control is achieved. ■ The condition has been effectively treated ■ Competent medical authorisation has been obtained ■ Where appropriate, regular medical assessment is conducted Driver needn't notify NDLS.	Not permitted to drive with continuing symptoms (treated and/or untreated). Permitted to drive provided; Free from angina for at least 4 weeks. The exercise or other functional test requirements can be met. ■ The condition has been effectively treated ■ Competent medical authorization has been obtained ■ Where appropriate, regular medical assessment is conducted ■ There is no other disqualifying condition. Driver should notify NDLS.

See Appendix at end of this chapter

78. Helpful recent reviews include: Sorajja D, Shen WK. Driving guidelines and restrictions in patients with a history of cardiac arrhythmias, syncope, or implantable devices. *Curr Treat Options Cardiovasc Med*. 2010 Oct;12(5):443-56 <https://link.springer.com/article/10.1007/s11936-010-0088-3>

79. Directive 2016/1106/EU. Brussels: EU Commission 2016. <https://publications.europa.eu/en/publication-detail/-/publication/dd8a0e11-44cf-11e6-9c64-01aa75ed71a1/language-en>

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Acute Coronary Syndromes (ACS) defined as: - Unstable angina (symptoms at rest with ECG changes). - Non STEMI with at least two of the following criteria: - Symptoms at rest - Raised serum Troponin - ECG changes - STEMI symptoms with ST elevation on ECG.	If successfully treated by coronary angioplasty, driver permitted to drive 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, permitted to drive after 4 weeks provided: - The condition has been effectively treated - Competent medical authorization has been obtained - Where appropriate, regular medical assessment is conducted - There is no other disqualifying condition. Driver needn't notify NDLS.	All Acute Coronary Syndromes disqualify the licence holder from driving for at least 4 weeks. Permitted to drive thereafter provided: - The exercise or other functional test requirements can be met. - The condition has been effectively treated - Competent medical authorization has been obtained - Where appropriate, regular medical assessment is conducted - There is no other disqualifying condition. Driver should notify NDLS.

See Appendix at end of this chapter

Part B: Medical fitness to drive

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Cardiac Surgery including Coronary Artery Bypass Graph (CABG), valve replacement or repair (surgical), including any significant peri-operative cognitive decline	Not permitted to drive for at least 4 weeks. Permitted to drive thereafter provided; ■ The condition has been effectively treated ■ Competent medical authorization has been obtained ■ Where appropriate, regular medical assessment is conducted ■ There is no other disqualifying condition. Driver needn't notify NDLS	Not permitted to drive for at least 3 months. Permitted to drive thereafter provided: ■ The condition has been effectively treated ■ There is no evidence of significant impairment of left ventricular function i.e. LVEF is $\geq 35\%$. ■ The exercise or other functional test requirements can be met months or more post operatively. ■ Competent medical authorization has been obtained ■ There is no other disqualifying condition. Driver should notify NDLS.
Percutaneous valve replacement or repair, percutaneous device closure of patent foramen ovale, atrial or ventricular septal defects, left atrial appendage occlusions	Must not drive for 2 weeks. Driving may resume only after this period if there is no other disqualifying condition. Driver needn't notify NDLS.	Not permitted to drive for at least 3 months. Permitted to drive thereafter provided: ■ The condition has been effectively treated ■ There is no evidence of significant impairment of left ventricular function i.e. LVEF is $\geq 35\%$. ■ The exercise or other functional test requirements can be met months or more post operatively. ■ Competent medical authorization has been obtained ■ There is no other disqualifying condition. Driver should notify NDLS.

See Appendix at end of this chapter

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.	Not permitted to drive if the arrhythmia has caused or is likely to cause incapacity. Permitted to drive provided; ■ The condition has been effectively treated i.e. the underlying cause has been identified and controlled for at least 4 weeks. ■ Competent medical authorization has been obtained ■ Where appropriate, regular medical assessment is conducted ■ There is no other disqualifying condition. NDLS need not be notified unless there are distracting/disabling symptoms.	Not permitted to drive if the arrhythmia has caused or is likely to cause incapacity. Permitted to drive provided; ■ The condition has been effectively treated i.e. the underlying cause has been identified and controlled for at least 3 months ■ The LVEF is $\geq 35\%$. ■ Competent medical authorization has been obtained ■ Where appropriate, regular medical assessment is conducted ■ There is no other disqualifying condition. NDLS need not be notified unless there are distracting/disabling symptoms.
Long QT syndrome with syncope, Torsade des Pointes and QTc > 500 ms	Permitted to drive provided; ■ The condition has been effectively treated i.e. the underlying cause has been identified and controlled for at least 4 weeks. ■ Competent medical authorization has been obtained ■ Where appropriate, regular medical assessment is conducted ■ There is no other disqualifying condition.	Not permitted to drive. Driver should notify NDLS.

See Appendix at end of this chapter

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Brugada syndrome with syncope or aborted sudden cardiac death	Permitted to drive provided; ■ The condition has been effectively treated i.e. the underlying cause has been identified and controlled for at least 4 weeks. ■ Competent medical authorization by a consultant cardiologist with expertise in inherited cardiac conditions has been obtained ■ Where appropriate, regular medical assessment is conducted ■ There is no other disqualifying condition related to issues such as hypoxic brain injury	Not permitted to drive. Driver should notify NDLS.
Successful Catheter Ablation excluding when performed for ventricular arrhythmias	Not permitted to drive for at least 2 days. Permitted to drive thereafter provided there is no other disqualifying condition. Driver needn't notify NDLS.	Not permitted to drive for 6 weeks following successful catheter ablation for an arrhythmia that has caused or would likely have caused incapacity. Permitted to drive thereafter provided there is no other disqualifying condition. When the arrhythmia has not caused nor would likely have caused incapacity, driving permitted after 1 week provided there is no other disqualifying condition.
Pacemaker Implant Includes box change	Not permitted to drive for at least 1 week. Permitted to drive thereafter provided there is no other disqualifying condition and there are regular device checks whether in person or via remote monitoring. Driver needn't notify NDLS.	Not permitted to drive for 4 weeks. Permitted to drive thereafter provided: ■ The condition has been effectively treated ■ Competent medical authorization has been obtained ■ Regular device checks whether in person or via remote monitoring ■ Where appropriate, regular medical assessment is conducted ■ There is no other disqualifying condition. Driver should notify NDLS.

See Appendix at end of this chapter

Part B: Medical fitness to drive

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Unpaced Congenital Complete Heart Block	Not permitted to drive if symptomatic. Driver should notify NDLS. Permitted to drive if asymptomatic. Driver needn't notify NDLS.	Not permitted to drive whether symptomatic or asymptomatic Driver should notify NDLS.
Implantable Cardioverter Defibrillator (ICD) Implanted for ventricular arrhythmia associated with incapacity	Drivers with ICDs implanted for sustained ventricular arrhythmias are not permitted to 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. atrial fibrillation or programming issues, then permitted to drive 4 weeks after this has been completely controlled to the satisfaction of the cardiologist. Driver needn't notify NDLS. Continued on next page	Not permitted to drive. Driver should notify NDLS.

See Appendix at end of this chapter

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 anti-arrhythmic drugs or ablation procedure) permitted to drive after 6 months in the absence of further symptomatic therapy. For 2 and 3A/3C, if the driver has been re-licensed prior to the event. Driver should notify NDLS. 4. Not permitted to drive for 4 weeks following any revision of the electrodes or alteration of anti-arrhythmic drug treatment. 5. Not permitted to drive for 1 week after a defibrillator box change. Return to driving requires that: 1. The device is subject to regular review with interrogation. 2. There is no other disqualifying condition.	

See Appendix at end of this chapter

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 driver presents with a non-disqualifying cardiac event, i.e. haemodynamically stable non-incapacitating sustained ventricular tachycardia, the patient is permitted to drive 4 weeks after ICD implantation providing all of the following conditions are met: ■ LVEF is $\geq 35\%$. ■ No fast VT induced on electrophysiological study (RR < 250 msec). ■ Any induced VT could be pace-terminated by the ICD twice, without acceleration, during the post implantation study. Driver needn't notify NDLS. Should the ICD subsequently deliver ATP and/or shock therapy (except during normal clinical testing) then the licensing criteria on the previous page applies. Driver should notify NDLS.	Not permitted to drive. Driver should notify NDLS.
Prophylactic ICD Implant	Asymptomatic individuals with high risk of significant arrhythmia are not permitted to drive for 4 weeks from implantation. Driver needn't notify NDLS. 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. Driver should notify NDLS.	Not permitted to drive. Driver should notify NDLS.

See Appendix at end of this chapter

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Ascending/Descending Thoracic and Abdominal Aortic Aneurysm	Not permitted to drive where the aortic diameter is 6.5cm or more. Driver should notify NDLS. Permitted to drive subject to annual review with any aneurysm of 6cm in diameter, despite treatment. Permitted to drive after satisfactory medical (blood pressure control) or surgical treatment, without evidence of further enlargement. There should be no other disqualifying condition. Driver should notify NDLS.	Not permitted to drive where the aortic diameter is > 5.5cm. Permitted to drive 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 should notify NDLS.
Chronic Aortic Dissection	Permitted to drive following satisfactory medical (blood pressure well-controlled) or surgical treatment, unless other disqualifying condition. Driver needn't notify NDLS.	Permitted to drive provided 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 AND ■ there is complete thrombosis of the false lumen AND ■ the BP is well controlled*. * NOTE "well controlled" refers to clinical standard.
Hypertension	Permitted to drive unless treatment causes unacceptable side effects. Driver needn't notify NDLS.	Not permitted to drive if resting BP consistently 180 mm Hg systolic or more and/or 100 mm Hg diastolic or more. Permitted to drive when controlled provided that treatment does not cause side effects which may interfere with driving.

See Appendix at end of this chapter

Part B: Medical fitness to drive

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Dilated Cardiomyopathy (See also arrhythmia, pacemaker, I.C.D. and heart failure sections etc.)	Permitted to drive provided no other disqualifying condition. Driver needn't notify NDLS.	Not permitted to drive if symptomatic. Permitted to drive provided that there is no other disqualifying condition. Driver needn't notify NDLS.
Hypertrophic Cardiomyopathy (H.C.M.) (See also arrhythmia, pacemaker and ICD sections)	Permitted to drive provided no other disqualifying condition. If there is a history of syncope, the standards for syncope need to be met in addition. Driver needn't notify NDLS.	Not permitted to drive if symptomatic. Permitted to drive provided 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). - If there is a history of syncope, the standards for syncope need to be met in addition. Driver should notify NDLS. See Appendix to this Chapter for full details.

See Appendix at end of this chapter

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Heart Failure	Not permitted to drive if NYHA Grade IV heart failure. Permitted to drive with NYHA Grades I, II or III provided there are no symptoms that may distract the driver's attention.	Not permitted to drive if symptomatic, or NYHA Grade III or IV. Permitted to drive with NYHA Grade I or II provided: ■ The LVEF is $\geq 35\%$. ■ There is no other disqualifying condition. Exercise or other functional testing may be required depending on the likely cause for the heart failure. Driver should notify NDLS.
Valvular heart disease with aortic regurgitation, aortic stenosis, mitral regurgitation or mitral stenosis	Not permitted to drive if functional ability is estimated to be NYHA IV or if there have been syncopal episodes.	Not permitted to drive if NYHA III or IV or with ejection fraction (EF) below 35%, mitral stenosis and severe pulmonary hypertension or with severe echocardiographic aortic stenosis or aortic stenosis causing syncope, except for completely asymptomatic severe aortic stenosis if the exercise tolerance test requirements are fulfilled. Driver should notify NDLS.
Cardiac Resynchronisation Therapy (CRT) CRT-P	Not permitted to drive for at least 1 week following implantation. Permitted to drive thereafter provided: ■ There are no symptoms relevant to driving. ■ There is no other disqualifying condition.	Not permitted to drive for 4 weeks following implantation. Permitted to drive thereafter provided; ■ The heart failure requirements are met. ■ There is no other disqualifying condition. Driver should notify NDLS.

See Appendix at end of this chapter

Part B: Medical fitness to drive

Cardiovascular Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Cardiac Assist Devices	Permitted to drive provided: ■ The condition has been effectively treated ■ Competent medical authorization has been obtained ■ Where appropriate, regular medical assessment is conducted ■ There is no other disqualifying condition.	Not permitted to drive. Driver should notify NDLS.
CRT-D	Permitted to drive provided the ICD requirements are met and there is no other disqualifying condition.	Not permitted to drive. Driver should notify NDLS.
Congenital Heart Disease	Permitted to drive provided there is no other disqualifying condition. 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. Driver should notify NDLS if symptomatic.	Not permitted to drive when complex or severe disorder(s) is (are) present. 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. Driver should notify NDLS.
Syncope N.B. Cough Syncope see Chapter 9	Cough Syncope see Chapter 9	Cough Syncope see Chapter 9
ECG Abnormality Suspected myocardial infarction	Permitted to drive unless other disqualifying condition. Driver needn't notify NDLS.	Permitted to drive provided: ■ There is no other disqualifying condition. ■ The exercise or other functional test requirements can be met.

See Appendix at end of this chapter

Appendix – Chapter 3 Cardiovascular disorders

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 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 arrhythmia then 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.

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.

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 $\geq 35\%$.

‘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.

See leaflet for Cardiac Conditions and Driving at:

<https://www.ndls.ie/medical-fitness/health-and-driving-information-leaflets.html>

Chapter 4

Diabetes mellitus^[80-86]



Diabetes mellitus is a disease which may affect eligibility to hold a driving licence and increase the risk of road traffic crashes. An applicant or driver with diabetes treated with medication which carries a risk of inducing hypoglycaemia shall demonstrate an understanding of the risk of hypoglycaemia and adequate control of the condition^[79].

Driving licences shall not be issued to, or renewed for, applicants or drivers who have recurrent severe hypoglycaemia, unless supported by the opinion of a specialist physician registered on the specialist register for Endocrinology & Diabetes Mellitus of the Medical Council and regular medical assessment. For such recurrent severe hypoglycaemias during waking hours a licence shall not be issued or renewed until at least 3 months after the most recent episode: driving licences may be issued or renewed in such exceptional cases, provided that it is duly justified by an opinion of a specialist physician registered on the specialist register for Endocrinology & Diabetes Mellitus of the Medical Council and subject to regular medical assessment, ensuring that the person is still capable of driving the vehicle safely taking into account the effects of the medical condition.

Failure to meet the following 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 1 and Group 2 standards for an Ordinary Driving Licence (ODL) are set out below.

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.

Helpful recent reviews include:

80. Kagan A, Hashemi G, Korner-Bitensky N. Diabetes Fitness to Drive: A Systematic Review of the Evidence with a Focus on Older Drivers. Canadian Journal of Diabetes. 2010;34(3):233-42. [https://www.canadianjournalofdiabetes.com/article/S1499-2671\(10\)43012-9/abstract](https://www.canadianjournalofdiabetes.com/article/S1499-2671(10)43012-9/abstract)
81. EU Working Group on Diabetes and Driving. Diabetes and driving. Diabetes and Driving in Europe (2005). https://road-safety.transport.ec.europa.eu/system/files/2021-07/diabetes_and_driving_in_europe_final_1_en.pdf
82. Houlden RL, Berard L, Cheng A, Kenshole AB, Silverberg J, Woo VC, et al. Diabetes and driving: 2015 Canadian Diabetes Association updated recommendations for private and commercial drivers. Can J Diabetes. 2015;39(5):347-53. [https://www.canadianjournalofdiabetes.com/article/S1499-2671\(15\)00567-5/abstract](https://www.canadianjournalofdiabetes.com/article/S1499-2671(15)00567-5/abstract)
83. Hansotia P, Broste SK. The Effect of Epilepsy or Diabetes Mellitus on the Risk of Automobile Accidents. New England Journal of Medicine. 1991;324(1):22-6. <https://www.nejm.org/doi/full/10.1056/NEJM199101033240105>
84. American Diabetes Association. Diabetes and driving. Diabetes care. 2014;37 (supplement):S97-S103. <https://doi.org/10.2337/dc14-S097>
85. EU Directive 2016/1106. Brussels: EU Commission 2016. <https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A32016L1106>
86. Garden, G. L., Hine, J. L., Mitchell, S. J., Hutchison, E. J., Gaffney, T. P., Hofmann, V., . . . Russell-Jones, D. L. (2020). An Evaluation of the Safety of Pilots With Insulin-Treated Diabetes in Europe Flying Commercial and Noncommercial Aircraft. Diabetes Care, dc200277. <https://diabetesjournals.org/care/article/43/12/2923/30964/An-Evaluation-of-the-Safety-of-Pilots-With-Insulin>

Diabetes Mellitus	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Insulin-Treated	Permitted to drive provided ALL the following criteria are satisfied: 1. Must have had not more than 1 episode of hypoglycaemia requiring the assistance of another person in the preceding 12 months AND 2. Must have appropriate awareness of hypoglycaemia at appropriate glucose level* AND 3. Must demonstrate an understanding of the risks of hypoglycaemia AND 4. Must monitor blood glucose at times relevant to driving to enable the detection of hypoglycaemia AND 5. Must be under regular medical review AND 6. There are no other debarring complications of diabetes such as visual field defect, polyneuropathy, amputation AND 7. Must not be regarded as a likely source of danger to the public while driving. If the above medical standards are met, a 1 – 3 year licence may be issued**. In the case of new onset of insulin-treated diabetes between driving licence renewals, driver does not need to inform NDLS if less than 3 years remaining on current licencing; if more than 3 years remaining on licence, should inform NDLS.	Permitted to drive provided ALL the following criteria are satisfied: 1. Must have NO episode of hypoglycaemia requiring the assistance of another person in the preceding 12 months AND 2. Must have appropriate awareness of hypoglycaemia at appropriate glucose level* AND 3. Must demonstrate an understanding of the risks of hypoglycaemia AND 4. Must show adequate control of condition by regularly monitoring blood glucose i.e. 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 blood glucose readings must be available. AND 5. Must be under regular medical review AND 6. There are no other debarring complications of diabetes such as visual field defect, polyneuropathy, amputation. Driver should notify NDLS. If the above medical standards are met, a 1-year licence may be issued**.

* Impaired awareness of hypoglycaemia is defined as ‘an inability to detect the onset of hypoglycaemia because of a total absence of warning symptoms’.

** Note: The treating endocrinologist is not obliged to provide a medical report on fitness to drive: in this case, the driver should be advised to seek a separate consultant endocrinologist for a medical report on fitness to drive.

Part B: Medical fitness to drive

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.	Permitted to drive provided the following criteria are satisfied: 1. Must have appropriate awareness of hypoglycaemia at appropriate glucose level* 2. Must be under medical supervision 3. Must not have been advised by their doctor that they are at risk of disabling hypoglycaemia. Driver needn't notify NDLS. However; Driver should notify NDLS. 1. If experiencing disabling hypoglycaemia 2. If treatment continues for more than 3 months or for more than 3 months after delivery for gestational diabetes	As per Insulin Treated Diabetes
Managed by tablets which carry a risk of inducing hypoglycaemia. This includes Sulphonylureas and Glinides.	As per Insulin Treated Diabetes	As per Insulin Treated Diabetes

Part B: Medical fitness to drive

Diabetes Mellitus	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Managed only by: ■ Tablets other than those mentioned above - OR by: ■ Non-insulin injectable medication	Permitted to drive. Driver needn't notify NDLS unless: ■ Diabetic eye problems occur, affecting visual acuity or visual field.	Permitted to drive provided the following criteria are satisfied: ■ Must be under regular medical review ■ Drivers are advised to monitor their blood glucose regularly and at times relevant to driving Driver needn't notify NDLS unless: ■ Diabetic eye problems occur, affecting visual acuity or visual field.
Managed by diet alone	Permitted to drive. Drivers need not notify NDLS unless: Diabetic eye problems occur, affecting visual acuity or visual field.	Permitted to drive. Drivers need not notify NDLS unless: ■ Diabetic eye problems occur, affecting visual acuity or visual field.
Impaired awareness of Hypoglycaemia	Not permitted to drive if impaired awareness is confirmed. Permitted to drive thereafter provided the driver's consultant/ GP provides a report confirming that awareness of hypoglycaemia has been regained.	Not permitted to drive. Driver should notify NDLS.

Diabetes Mellitus	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Interstitial glucose monitoring systems ^[87]	These devices are more widely known as real-time continuous glucose monitoring systems (RT-CGM). The reliance on alarms on these glucose monitoring devices are not accepted as a substitute for adequate symptomatic or physiological awareness of hypoglycaemia experienced by the driver. Should a driver become reliant on these alarms to advise them that they are hypoglycaemic they must stop driving and should notify NDLS. These systems may be used for monitoring glucose at times relevant to driving Group 1 vehicles. Users of these systems must carry finger prick capillary glucose testing equipment for driving purposes as there are times when a confirmatory finger prick blood glucose level is required. If using an interstitial fluid continuous glucose monitoring system (RT-CGM), the blood glucose level must be confirmed with a finger prick blood glucose reading in the following circumstances: ■ when the glucose level is 4.0 mmol/L or below ■ when symptoms of hypoglycaemia are being experienced ■ when the glucose monitoring system gives a reading that is not consistent with the symptoms being experienced (for example, symptoms of hypoglycaemia and the system reading does not indicate this)	There is a legal requirement for Group 2 drivers to monitor their blood glucose for the purpose of Group 2 driving. There is also a legal requirement for Group 2 drivers to produce past data of blood glucose results for medical licensing reviews. RT-CGM interstitial fluid glucose monitoring systems are not acceptable means of compliance for the purposes of Group 2 driving and licensing. Group 2 drivers who use these devices must continue to monitor capillary blood glucose levels with the regularity defined in the appropriate section of this guidance.

87. Rayman G, Kröger J, Bolinder J. Could FreeStyle Libre™ sensor glucose data support decisions for safe driving? *Diabetic Medicine*. 2018;35(4):491-494. <https://onlinelibrary.wiley.com/doi/10.1111/dme.13515>

Part B: Medical fitness to drive

Diabetes Mellitus	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
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: Driving with Disabilities Chapter 10.	See section: Driving with Disabilities Chapter 10.

See Leaflet for Diabetes and Driving at:

<https://www.ndls.ie/medical-fitness/health-and-driving-information-leaflets.html>

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. Group 1 and Group 2 standards for an Ordinary Driving Licence (ODL) are set out below.

Psychiatric Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Anxiety or depression^[88] (Without significant memory or concentration problems, agitation, behavioural disturbance or suicidal thoughts).	Permitted to drive. Driver needn't notify NDLS. Driver should notify NDLS if medical advice is to cease driving for 6 months or longer.	Permitted to drive in very minor, short-lived illnesses. Driver needn't notify NDLS. Driver should 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, please refer to the appropriate section of Chapter 6 Alcohol/ Drugs misuse and dependence Where psychiatric illness has been associated with substance misuse, continuing misuse is not acceptable for licensing.	Not permitted to drive 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 ^[88] . 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. N.B. It is the illness rather than the medication, which is of prime importance, but see notes on medication. Driver should notify NDLS if medical advice is to cease driving for 6 months or longer.	Not permitted to drive pending assessment by a consultant psychiatrist as being well and stable for a substantial period. Particularly dangerous are those who may attempt suicide at the wheel ^[89] . 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. N.B. It is the illness rather than the medication, which is of prime importance, but see notes on medication. Driver should notify NDLS if medical advice is to cease driving for 6 months or longer.

*See note about medication in Appendix at end of this Chapter.

88. Van der Sluiszen, N., Wingen, M., Vermeeren, A., Vinckenbosch, F., Jongen, S., & Ramaekers, J. G. (2017). Driving Performance of Depressed Patients who are Untreated or Receive Long-Term Antidepressant (SSRI/SNRI) Treatment. *Pharmacopsychiatry*, 50(5), 182-188. <https://www.thieme-connect.de/products/ejournals/abstract/10.1055/s-0043-111600>

89. Pridmore S, Varbanov S, Sale I. Suicide and murder-suicide involving automobiles. *Australasian psychiatry : bulletin of Royal Australian and New Zealand College of Psychiatrists*. 2017;25(1):32-4. <https://journals.sagepub.com/doi/10.1177/1039856216658830>

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 Chapter 6 Alcohol/ Drugs misuse and dependence Where psychiatric illness has been associated with substance misuse, continuing misuse is not acceptable for licensing.	Not permitted to drive 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 should notify NDLS if medical advice is to cease driving for 6 months or longer.	Not permitted to drive 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 should notify NDLS if medical advice is to cease driving for 6 months or longer.

See Appendix at end of this Chapter.

Psychiatric Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Hypomania/Mania N.B. For cases which also involve persistent misuse of or dependence on alcohol/drugs, please refer to the appropriate section of Chapter 6 Alcohol/ Drugs misuse and dependence Where psychiatric illness has been associated with substance misuse, continuing misuse is not acceptable for licensing.	Not permitted to drive during the acute illness. Permitted to drive thereafter provided 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 should notify NDLS if medical advice is to cease 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.	Not permitted to drive pending the outcome of medical assessment. It is a requirement that the person is assessed by a consultant psychiatrist. Permitted to drive thereafter provided 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 should notify NDLS if medical advice is to cease driving for 6 months or longer.

See Appendix at end of this Chapter.

Psychiatric Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Relapsing/remitting Schizophrenia and 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 Alcohol/ Drugs misuse and dependence Where psychiatric illness has been associated with substance misuse, continuing misuse is not acceptable for licensing.	Not permitted to drive during the acute illness. Permitted to drive thereafter provided 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 anti-psychotic 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	Not permitted to drive during the acute illness. Permitted to drive thereafter provided 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 anti- psychotic 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 should notify NDLS.

See Appendix at end of this Chapter.

Psychiatric Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Relapsing/remitting Schizophrenia and 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. Due consideration should be given to specialist on-road assessment if doubt remains about fitness to drive. Driver should notify NDLS if medical advice is to cease driving for 6 months or longer.	
Developmental disorders Includes Asperger's Syndrome, autism spectrum disorders and severe communication disorders	May be permitted to drive. A diagnosis of any of these conditions is not in itself a bar to licensing. Factors such as impulsivity, lack of awareness of the impact of own behaviours on self, severe communication difficulty, perceptual dysfunction, reasoning and interpretation or others need to be considered. Driver should notify NDLS.	May be permitted to drive. It is normally a requirement that the person is assessed by a consultant psychiatrist. Continuing minor symptomatology may be compatible with licensing. Cases will be considered on an individual basis. Driver should notify NDLS.

See Appendix at end of this Chapter.

Psychiatric Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Attention deficit hyperactivity disorder (ADHD) ^[90-93]	May be permitted to drive. Factors such as impulsivity, lack of awareness of the impact of own behaviours on self or others need to be considered. Compliance with medication is associated with reduced crash risk in ADHD. Particular attention should be given to counselling on avoiding alcohol and drugs, as these substantially increase the risk of crashes with ADHD.^[94]	May be permitted to drive. It is normally a requirement that the person is assessed by a consultant psychiatrist. Continuing minor symptomatology may be compatible with licensing. Cases will be considered on an individual basis. Compliance with medication is associated with reduced crash risk in ADHD. Particular attention should be given to counselling on avoiding alcohol and drugs, as these substantially increase the risk of crashes with ADHD.^[94]

See Appendix at end of this Chapter.

90. Vaa T. ADHD and relative risk of accidents in road traffic: A meta-analysis. *Accident Analysis & Prevention*. 2014;62:415-25. <https://www.sciencedirect.com/science/article/abs/pii/S0001457513004004>
91. Jerome L, Segal A, Habinski L. What we know about ADHD and driving risk: a literature review, meta-analysis and critique. *Journal of the Canadian Academy of Child and Adolescent Psychiatry = Journal de l'Academie canadienne de psychiatrie de l'enfant et de l'adolescent*. 2006;15(3):105-25. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2277254/>
92. Barkley RA, Cox D. A review of driving risks and impairments associated with attention-deficit/hyperactivity disorder and the effects of stimulant medication on driving performance. *Journal of safety research*. 2007;38(1):113-28. <https://www.sciencedirect.com/science/article/abs/pii/S0022437507000060?via%3Dihub>
93. Fuermaier ABM, Tucha L, Evans BL, Koerts J, de Waard D, Brookhuis K, et al. Driving and attention deficit hyperactivity disorder. *Journal of Neural Transmission*. 2017;124(Suppl 1):55-67. <https://link.springer.com/article/10.1007/s00702-015-1465-6>
94. Curry AE, Yerys BE, Metzger KB, Carey ME, Power TJ. Traffic Crashes, Violations, and Suspensions Among Young Drivers With ADHD. *Pediatrics*. 2019;143(6). <https://doi.org/10.1542/peds.2018-2305>

Psychiatric Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Mild Cognitive Impairment (MCI)	Permitted to drive provided there is no objective impairment of social or occupational function. Driver needn't notify NDLS. Where there is objective impairment of function or specific treatment is required then MCI will not be the cause and a doctor should clarify the cause and apply the relevant section of Sláinte agus Tiomáint. Given that a significant proportion of people with MCI progress to dementia over time, at least yearly review of diagnostic status is recommended to monitor for transition to dementia^[95-99].	May be permitted to drive. If MCI is suspected a specialist opinion is required and at least yearly review. Where there is no objective impairment of function a 1 year licence may be issued. Driver needn't notify NDLS. Where there is objective impairment of function or specific treatment is required then MCI will not be the cause and a 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 Sláinte agus Tiomáint. Given that a significant proportion of people with MCI progress to dementia over time, at least yearly review of diagnostic status is recommended to monitor for transition to dementia^[95-99].

See Appendix at end of this Chapter.

95. Pavlou D, Papadimitriou E, Antoniou C, Papantoniou P, Yannis G, Golias J, et al. Comparative assessment of the behaviour of drivers with Mild Cognitive Impairment or Alzheimer's disease in different road and traffic conditions. *Transportation Research Part F: Traffic Psychology and Behaviour*. 2017;47:122-31. <https://doi.org/10.1016/j.trf.2017.04.019>
96. Rapoport MJ, Chee JN, Carr DB, Molnar F, Naglie G, Dow J, Marottoli R, Mitchell S, Tant M, Herrmann N, Lanctôt KL, Taylor JP, Donaghy PC, Classen S, O'Neill D. An International Approach to Enhancing a National Guideline on Driving and Dementia. *Curr Psychiatry Rep*. 2018 Mar 12;20(3):16. <https://link.springer.com/article/10.1007/s11920-018-0879-x>
97. Devlin A, McGillivray JA. Self-regulation of older drivers with cognitive impairment: a systematic review. *Australasian journal on ageing*. 2014;33(2):74-80. <https://onlinelibrary.wiley.com/doi/10.1111/ajag.12061>
98. National Highway Traffic Safety Administration. Clinician's Guide to Assessing and Counselling Older Drivers, 3rd Edition An Update of the Physician's Guide to Assessing and Counseling Older Drivers 2016. <https://www.nhtsa.gov/sites/nhtsa.gov/files/812228cliniciansguidetoollderdrivers.pdf>
99. British Geriatric Society. Driving with Dementia or Mild Cognitive Impairment: Consensus Guidelines for Clinicians. 2018. <https://www.bgs.org.uk/resources/driving-with-dementia-or-mild-cognitive-impairment-consensus-guidelines-for-clinicians>

Part B: Medical fitness to drive

Psychiatric Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Dementia or any Organic Brain Syndrome ^[100-108]	May be permitted to drive. However, 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 on-road driving assessment^[97]. Continued on next page	Not permitted to Drive. Driver should notify NDLS. See Section: 2.3.1 Chapter 1.

See Appendix at end of this Chapter.

A useful overview, albeit tailored to the UK DVLA system, is provided by the 2018 UK Consensus Guidelines available at: [Driving With Dementia or Mild Cognitive Impairment: Consensus Guidelines for Clinicians](#). Useful reviews include;

100. Pavlou D, Papadimitriou E, Antoniou C, Papantoniou P, Yannis G, Golias J, et al. Comparative assessment of the behaviour of drivers with Mild Cognitive Impairment or Alzheimer's disease in different road and traffic conditions. *Transportation Research Part F: Traffic Psychology and Behaviour*. 2017;47:122-31. <https://doi.org/10.1016/j.trf.2017.04.019>
101. Molnar FJ, Patel A, Marshall SC, Man-Son-Hing M, Wilson KG. Systematic review of the optimal frequency of follow-up in persons with mild dementia who continue to drive. *Alzheimer disease and associated disorders*. 2006;20(4):295-7. https://journals.lww.com/alzheimerjournal/abstract/2006/10000/systematic_review_of_the_optimal_frequency_of.19.aspx
102. Martin AJ, Marottoli R, O'Neill D. Driving assessment for maintaining mobility and safety in drivers with dementia. *The Cochrane database of systematic reviews*. 2013(8):Cd006222. <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD006222.pub3/full>
103. Chee JN, Rapoport MJ, Molnar F, Herrmann N, O'Neill D, Marottoli R, et al. Update on the Risk of Motor Vehicle Collision or Driving Impairment with Dementia: a Collaborative International Systematic Review and Meta-Analysis. *The American Journal of Geriatric Psychiatry*. 2017. <https://doi.org/10.1016/j.jagp.2017.05.007>
104. Bennett JM, Chekaluk E, Batchelor J. Cognitive Tests and Determining Fitness to Drive in Dementia: A Systematic Review. *Journal of the American Geriatrics Society*. 2016;64(9):1904-17. <https://agsjournals.onlinelibrary.wiley.com/doi/10.1111/jgs.14180>
105. Chee J, Herrmann N, Vrkljan B, Hawley CA, Gillespie IA, Koppel S, et al. Dementia and Driving: An international approach to knowledge synthesis. *TRB 96th Annual Meeting*; Washington, DC. 2017.
106. Fraade-Blanc LA, Hansen RN, Chan KCG, Sears JM, Thompson HJ, Crane PK, Ebel BE. Diagnosed dementia and the risk of motor vehicle crash among older drivers. *Accident Analysis & Prevention*. 2018 Apr;113:47-53.
107. 105 Alzheimer's Society of Ireland. Driving and dementia 2016. https://alzheimer.ie/wp-content/uploads/2018/11/Driving-and-dementia_FactSheet_web.pdf
108. Rappoport M, Chee J, Carr D, Molnar F, Naglie G, Dow J, et al. An international approach to enhancing a national guideline on driving and dementia. *Current psychiatry reports*. 2018;20(16). <https://link.springer.com/article/10.1007/s11920-018-0879-x>

Psychiatric Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Dementia or any Organic Brain Syndrome Continued from previous page	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 recommended as an integral part of assessment and review but the overall decision rests with the treating doctor (see section 3.6). It is unlikely that safe driving can be maintained in the presence of moderate dementia (e.g. the additional presence of basic activity of daily living (BADL) impairments such as problems in dressing, washing, grooming) and is to be strongly discouraged. If the patient desires to drive, they should be formally assessed and monitored very carefully. People with dementia with progressive loss of two or more Instrumental Activities of Daily Living (IADL, such as cooking, managing finance, managing heating or TV remote controls) due to cognition (but no BADL loss) are at higher risk of driving impairment. Patients with dementia who are deemed fit to continue driving should be re-evaluated every 6 to 12 months or sooner, if indicated, with a low threshold for on-road driving assessment. As with many progressively disabling diseases that lead to driving cessation, conversation regarding eventual retirement from driving should be held as early as possible Driver should notify NDLS. See Section: 2.3.1 Chapter 1.	

See Appendix at end of this Chapter.

Part B: Medical fitness to drive

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.	Permitted to drive provided the disability is mild, and there are no other relevant problems. Not permitted to drive where the learning disability is severe. Driver should notify NDLS.	Permitted to drive provided; - There are minor degrees of learning disability - When the condition is stable with no medical or psychiatric complications Not permitted to drive where the learning disability is moderate or severe. Driver should notify NDLS.
Behaviour disorders Includes post-head injury syndrome and non-epileptic seizure disorder.	Not permitted to drive if seriously disturbed e.g. violent behaviour or alcohol abuse and likely to be a source of danger at the wheel. Permitted to drive thereafter provided medical assessment confirms that behavioural disturbances have been satisfactorily controlled. Driver should notify NDLS if medical advice is to cease driving for 6 months or longer.	Not permitted to drive if seriously disturbed e.g. violent behaviour or alcohol abuse and likely to be a source of danger at the wheel. Permitted to drive thereafter provided assessment by consultant psychiatrist confirms enduring stability. Driver should notify NDLS if medical advice is to cease driving for 6 months or longer.
Personality disorders	Not permitted to drive if likely to be a source of danger at the wheel. 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 should notify NDLS if medical advice is to cease driving for 6 months or longer.	Not permitted to drive 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 should notify NDLS if medical advice is to cease driving for 6 months or longer.

See Appendix at end of this Chapter.

Appendix – Chapter 5

Psychiatric notes

Important Notes

Other psychiatric conditions, which do not fit neatly into the aforementioned classification, **should 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 driver 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 2006/126/EC as amended by Directive 2009/113/EC and Directive 2016/1106/EU 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 motorcycle) and Group 2 (lorries and busses) 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, vigilance, 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 also a 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 drivers 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.

Chapter 6

Alcohol and other substance abuse and dependence ^[109-110]

Part 1: 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. Alcohol and substance use disorders should be approached in terms of diagnosis, treatment, rehabilitation and monitoring, with due reference to the periods of driving cessation pending abstinence/control.

Group 1 and Group 2 standards for an Ordinary Driving Licence (ODL) are set out below.

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^[109]” Reference to ICD10F10.1^[110] and DSM-5-TR is relevant. Clinicians should consider binge-drinking as an important aspect of alcohol misuse in terms of traffic safety, and should be vigilant for its presence, due advice on driving cessation, and directing patient towards treatment options.	Persistent alcohol misuse, confirmed by medical enquiry with or without evidence of otherwise unexplained abnormal blood biomarkers: Not permitted to drive until a minimum 3 month period of controlled drinking or abstinence has been attained, with normalisation of biomarkers, if relevant. Driver must seek advice from medical or other sources during the period off the road. Driver should notify NDLS.	Persistent alcohol misuse, confirmed by medical enquiry with or without evidence of otherwise unexplained abnormal blood biomarkers: Not permitted to drive until a minimum 1 year period of abstinence or controlled drinking has been attained, with normalisation of biomarkers, if relevant. Driver must seek advice from medical or other sources during the period off the road. Driver should notify NDLS.

109. Substance Misuse Disorders (see American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR). <https://www.psychiatry.org/psychiatrists/practice/dsm>)

110. World Health Organisation. International statistical classification of diseases and related health problems (ICD-11). <https://www.who.int/standards/classifications/classification-of-diseases>

Alcohol Problems	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Alcohol dependence^[111] “A cluster of behavioural, cognitive and physiological phenomena that develop after ■ repeated alcohol use and which include a strong desire to take alcohol, difficulties in controlling its use, persistence in its use despite harmful consequences, with evidence of increased tolerance and sometimes a physical withdrawal state.” Indicators may include a history of withdrawal symptoms, of tolerance, of detoxification(s) and/or alcohol related fits. Reference to ICD10F10.2^[112] and DSM-5-TR is relevant.	Alcohol dependence, confirmed by medical enquiry: Not permitted to drive until a 6 month period free from alcohol has been attained with normalisation of biomarkers, if relevant. Driver should notify NDLS Return to Driving Will require satisfactory medical assessment from own doctor(s) and management of blood biomarkers if relevant. Consultant support/referral may be necessary. See also under “Alcohol related seizures”.	Alcohol dependence, confirmed by medical enquiry: Not permitted to drive: Group 2 licence will not be granted where there is a history of alcohol dependence within the past 3 years. Driver should notify NDLS. Return to Driving Will require satisfactory medical assessment from own doctor(s) and management of blood biomarkers if relevant. Consultant support/referral may be necessary. See also under “Alcohol related seizures”.

111. Ogden EJD, Verster JC, Hayley AC, et al. When should the driver with a history of substance misuse be allowed to return to the wheel? A review of the substance misuse section of the Australian national guidelines. Internal medicine journal. 2018;48(8):908-915. <https://onlinelibrary.wiley.com/doi/10.1111/imj.13975>

112. See also <https://research.ncl.ac.uk/driving-and-dementia/consensusguidelinesforclinicians/Final%20Guideline.pdf>

Part B: Medical fitness to drive

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: Not permitted to drive for a minimum 6 month period from the date of the event. Driver should notify NDLS. Since these seizures occur against a background of alcohol, the standards for such conditions need to be satisfied before a new application can be considered. 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 opinion will normally be necessary. Where more than one seizure has occurred, the epilepsy standards will apply (See Appendix to Neurology Chapter 2 for full details). Driver should notify NDLS.	Following a solitary alcohol-related seizure, Not permitted to drive for a minimum 5 year period from the date of the event. Driver should notify NDLS. 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 a doctor on the specialist register for General Practice of Psychiatry, who has expertise and experience in the area of substance use disorders. 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 2 for full details). Driver should notify NDLS.
Alcohol related disorders E.g. Hepatic cirrhosis with neuro-psychiatric impairment, psychosis.	Not permitted to drive until there is satisfactory recovery and all other relevant medical standards have been satisfied. Driver should notify NDLS.	Not permitted to drive. Driver should notify NDLS.

See leaflet for Alcohol and Driving at:

<https://www.ndls.ie/medical-fitness/health-and-driving-information-leaflets.html>

Chapter 6

Alcohol and other substance abuse and dependence

Part 2: Drugs misuse and dependence^[113-118]

The non-prescribed use of the drugs listed in this section and/or the use of supra- therapeutic dosage constitutes misuse/ dependence for licensing purposes.

The requirements below apply in the context of single-substance misuse or dependence. Multiple substance misuse – including with alcohol misuse or dependence – are not compatible with fitness to drive or licensing consideration for both Group 1 and Group 2 drivers. Group 1 and Group 2 standards for an Ordinary Driving Licence (ODL) are set out below.

Drug Misuse and Dependence Reference to ICD10 F11 – F19 inclusive and DSN-5 is relevant	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Cannabis 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)*: Just as there are legal limits for alcohol when driving, there are also (as of April 2017) legal limits for cannabis, cocaine and heroin.	Persistent use of or dependence on these substances, confirmed by medical enquiry: Not permitted to drive 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 should notify NDLS.	Persistent use of or dependence on these substances, confirmed by medical enquiry: Not permitted to drive until a minimum 1 year period free of such use has been attained. Specialist medical assessment (including accredited Level 2 trained GP) and drug screen may be required. There should be no evidence of continuing use of illicit substances. Driver should notify NDLS.

*See also Chapter 1, S3.9.2 - The effects of specific medicine classes.

Useful reviews on drug use and driving include;

113. Watson T, Mann R. International approaches to driving under the influence of cannabis: A review of evidence on impact. *Drugs and Alcohol Dependence*. 2016;169(2016):148-55. <https://www.sciencedirect.com/science/article/abs/pii/S037687161630967X>
114. Verster JC, Veldhuijzen DS, Patat A, Olivier B, Volkerts ER. Hypnotics and driving safety: meta-analyses of randomized controlled trials applying the on-the-road driving test. *Current drug safety*. 2006;1(1):63-71. <https://pubmed.ncbi.nlm.nih.gov/18690916/>
115. van der Sluiszen N, Vermeeren A, Jongen S, Vinckenbosch F, Ramaekers JG. Influence of Long-Term Benzodiazepine use on Neurocognitive Skills Related to Driving Performance in Patient Populations: A Review. *Pharmacopsychiatry*. 2017. <https://www.thieme-connect.de/products/ejournals/abstract/10.1055/s-0043-112755>
116. Strand MC, Arnestad M, Fjeld B, Morland J. Acute Impairing Effects of Morphine Related to Driving: A Systematic Review of Experimental Studies to Define Blood Morphine Concentrations Related to Impairment in Opioid Naive Subjects. *Traffic injury prevention*. 2017;0. <https://doi.org/10.1080/15389588.2017.1326595>
117. Rudisill TM, Zhu M, Kelley GA, Pilkerton C, Rudisill BR. Medication use and the risk of motor vehicle collisions among licensed drivers: A systematic review. *Accident Analysis & Prevention*. 2016;96:255-70. <https://www.sciencedirect.com/science/article/abs/pii/S0001457516302792?via%3Dihub>
118. Dassanayake T, Michie P, Carter G, Jones A. Effects of benzodiazepines, antidepressants and opioids on driving: a systematic review and meta-analysis of epidemiological and experimental evidence. *Drug safety: an international journal of medical toxicology and drug experience*. 2011;34(2):125-56. <https://doi.org/10.2165/11539050-000000000-00000>

Drug Misuse and Dependence Reference to ICD10 F11 – F19 inclusive and DSN-5 is relevant	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Cocaine, Amphetamines, Methamphetamine Ecstasy, ketamine & other psychoactive substances, including LSD and hallucinogens, psychoactive substances (Head shop products): just as there are legal limits for alcohol when driving, there are also (as of April 2017) legal limits for cannabis, cocaine and heroin.	Persistent use of or dependence on these substances, confirmed by medical enquiry: Not permitted to drive 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. Driver should notify NDLS.	Persistent use of or dependence on these substances, confirmed by medical enquiry: Not permitted to drive until a minimum 1 year period free of such use has been attained. Specialist medical assessment (including accredited Level 2 trained GP) and drug screen may be required. There should be no evidence of continuing use of illicit substances. Driver should notify NDLS.
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): just as there are legal limits for alcohol when driving, there are also (as of April 2017) legal limits for cannabis, cocaine and heroin.	Persistent use of, or dependence on these substances, confirmed by medical enquiry: Not permitted to drive 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. Driver should notify NDLS.	Persistent use of, or dependence on these substances, confirmed by medical enquiry: Not permitted to drive until a minimum 3 year period free of such use has been attained. Specialist medical assessment (including accredited Level 2 trained GP) 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 should notify NDLS.

*See also Chapter 1, S3.9.2 - The effects of specific medicine classes.

Drug Misuse and Dependence Reference to ICD10 F11 – F19 inclusive and DSN-5 is relevant	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Benzodiazepines The non-prescribed use of these drugs and/or the use of supra-therapeutic 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: Not permitted to drive 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 should notify NDLS.	Persistent misuse of, or dependence on these substances, confirmed by medical enquiry: Not permitted to drive until a minimum 3 year period free of such use has been attained. Specialist medical assessment (including accredited Level 2 trained GP) and drug screen may be required. Driver should notify NDLS.

*See also Chapter 1, S3.9.2 - The effects of specific medicine classes.

Drug Misuse and Dependence Reference to ICD10 F11 – F19 inclusive and DSN-5 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.	Not permitted to drive for a minimum 6 month period from the date of the event following a solitary seizure associated with drug misuse or dependence. 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 should notify NDLS.	Not permitted to drive for a minimum 5 year period from the date of the event following a solitary seizure associated with drug misuse or dependence. Permitted to drive thereafter provided the following requirements have been satisfied: ■ No underlying cerebral structural abnormality. ■ Off antiepileptic medication for at least 5 years. ■ Maintained abstinence from drugs if previously dependent. ■ Review by a doctor on the specialist register for General Practice of Psychiatry, who has expertise and experience in the area of substance use disorders. Where more than one seizure has occurred, the epilepsy standards will apply. (See Appendix Neurology Chapter 2 for full details). Driver should 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.

Chapter 7

Visual disorders [119-127]



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).

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. Group 1 and Group 2 standards for an Ordinary Driving Licence (ODL) are set out below.

Group 1 and Group 2 standards for Ordinary Driving Licence (ODL) are set out below.

Drivers with monocular vision cannot obtain or renew a Group 2 driving licence.

Note: 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	Permitted to drive provided the driver has binocular visual acuity, with corrective lens as necessary, of at least 6/12 (0.5 decimal) on a Snellen chart. If the driver has an illness likely to cause progressive loss of visual acuity, on the advice of a competent medical authority, a 1 or 3 year licence may be appropriate. Driver should notify NDLS.	Permitted to drive provided the driver has a visual acuity, using corrective lenses as necessary, of at least 6/7.5, Snellen (0.8 decimal) in the better eye and at least 6/60, Snellen (0.1 decimal) in the other eye. Where glasses are worn to meet the minimum standards, they should have a corrective power $\leq +8$ 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.

See Appendix to this chapter, Item A Elements which should be assessed in a more detailed assessment.

Useful reviews include:

119. European Council of Optometry and Optics Working Group on Vision. Visual standards for driving in Europe: A consensus paper. London: European Council of Optometry and Optics; 2017. <https://www.ecoo.info/wp-content/uploads/2017/01/Visual-Standards-for-Driving-in-Europe-Consensus-Paper-January-2017....pdf>
120. Owsley C, Wood JM, McGwin G, Jr. A roadmap for interpreting the literature on vision and driving. *Survey of Ophthalmology*. 2015;60(3):250-62. <https://pmc.ncbi.nlm.nih.gov/articles/PMC4404194/>
121. North RV. The relationship between the extent of visual field and driving performance--a review. *Ophthalmic & physiological optics : the journal of the British College of Ophthalmic Opticians (Optometrists)*. 1985;5(2):205-10. <https://doi.org/10.1111/j.1475-1313.1985.tb00657.x>
122. EU Eyesight Working Group. New standards for visual functions of drivers. Brussels: EU Commission; 2005. https://road-safety.transport.ec.europa.eu/system/files/2021-07/new_standards_final_version_en.pdf
123. Desapriya E, Wijeratne H, Subzwari S, Babul-Wellar S, Turcotte K, Rajabali F, et al. Vision screening of older drivers for preventing road traffic injuries and fatalities. *The Cochrane database of systematic reviews*. 2011(3):CD006252. <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD006252.pub3/full>
124. Charman WN. Vision and driving--a literature review and commentary. *Ophthalmic & physiological optics : the journal of the British College of Ophthalmic Opticians (Optometrists)*. 1997;17(5):371-91. [https://doi.org/10.1016/S0275-5408\(97\)00014-8](https://doi.org/10.1016/S0275-5408(97)00014-8)
125. Casson EJ, Racette L. Vision standards for driving in Canada and the United States. A review for the Canadian Ophthalmological Society. *Canadian Journal of Ophthalmology / Journal Canadien d'Ophtalmologie*. 2000;35(4):192-203. [https://www.canadianjournalofophthalmology.ca/article/S0008-4182\(00\)80030-7/abstract](https://www.canadianjournalofophthalmology.ca/article/S0008-4182(00)80030-7/abstract)
126. Bowers AR. Driving with homonymous visual field loss: a review of the literature. *Clinical & experimental optometry*. 2016;99(5):402-18. <https://www.tandfonline.com/doi/full/10.1111/cxo.12425>
127. Blane A. Through the Looking Glass: A Review of the Literature Investigating the Impact of Glaucoma on Crash Risk, Driving Performance, and Driver Self-Regulation in Older Drivers. *Journal of glaucoma*. 2016;25(1):113-21. https://journals.lww.com/glaucomajournal/abstract/2016/01000/through_the_looking_glass__a_review_of_the.15.aspx

Part B: Medical fitness to drive

Visual Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Blepharospasm	Can drive as long as they are regularly attending a specialised unit and compliant with regular treatment, either surgery, botox or both as deemed necessary and advised by their eye specialist.	Can drive as long as they are regularly attending a specialised unit and compliant with regular treatment, either surgery, botox or both as deemed necessary and advised by their eye specialist.
Cataract Includes severe bilateral cataracts, failed bilateral cataract extractions and post cataract surgery where these are affecting the eyesight.	Permitted to drive provided the driver is able to meet the acuity and visual field requirements, and more detailed specialist examination is indicated if there is concern that these are not adequately met. (See Appendix, Item A)	Permitted to drive provided the driver is 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 is indicated if there is concern that these are not adequately met. (See Appendix, Item A)
Monocular vision (Includes the use of one eye only for driving)	Complete loss of vision in one eye (if there is any light perception, driver is not considered monocular). Permitted to 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 should 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) in the weaker eye: Not permitted to drive. Driver should notify NDLS.

See Appendix to this chapter, Item A Elements which should be assessed in a more detailed assessment.

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.	Permitted to drive provided it is 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 driver 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. Driver should notify NDLS. See item B of the appendix to this chapter for guidance on more detailed assessment of visual fields. See item C of the appendix for consideration as an exceptional case if not meeting these standards.	Permitted to drive provided 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 if there is a history of any medical condition that may affect a driver's binocular field of vision (central and/or peripheral). Driver should notify NDLS. See item B of the appendix to this chapter for guidance on more detailed assessment of visual fields. See item C of the appendix for consideration as an exceptional case if not meeting these standards.

See Appendix to this chapter, Item A Elements which should be assessed in a more detailed assessment.

Visual Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Diplopia	Not permitted to drive on detection. Permitted to drive thereafter 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 monocularly). Exceptionally a stable uncorrected diplopia of appropriate duration (for example, 6 months or more) 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.	Not permitted to drive on detection. Driving must be discontinued if diagnosis is of permanent intractable diplopia. Patching is not acceptable. Driver should notify NDLS.
Night blindness	Permitted to drive during daylight hours provided acuity and field standards have been met. Cases should be considered on an individual basis by an appropriately qualified medical authority. Driver should notify NDLS.	Permitted to drive during daylight hours provided acuity and field standards have been met. Cases should be considered on an individual basis by an appropriately qualified medical authority. Driver should notify NDLS.
Colour blindness	Permitted to drive with no restriction on licence. Driver needn't notify NDLS.	Permitted to drive with no restriction on licence. Driver needn't notify NDLS.

See Appendix to this chapter, Item A Elements which should be assessed in a more detailed assessment.

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 meridian.
- 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**^[128]

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 an ophthalmologist, 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 for 1, 3 or 10 years the NDLS will, in addition, require:

- Clinical assessment of full satisfactory functional adaptation: as there is no current objective measure of adaptation, this should be on the basis of a decision by a consultant neurologist, stroke physician or ophthalmologist with due multidisciplinary support, and with the option of a second opinion from another consultant ophthalmologist, stroke physician or neurologist.
- A satisfactory practical driving assessment, carried out by an appropriately qualified driving assessor, must subsequently be completed.
- An individual who is functionally 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.

See leaflet for Vision and Driving at:

<https://www.ndls.ie/medical-fitness/health-and-driving-information-leaflets.html>

128. Kristalovich L, Ben Mortenson W. Visual Field Impairment and Driver Fitness: A 1-Year Review of Crashes and Traffic Violations. Am J Occup Ther. 2019;73(5):7305345010p1-p6. <https://research.aota.org/ajot/article-abstract/73/5/7305345010p1/9860/Visual-Field-Impairment-and-Driver-Fitness-A-1?redirectedFrom=fulltext>

Chapter 8

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. Group 1 and Group 2 standards for an Ordinary Driving Licence (ODL) are set out below.

Renal Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Chronic Renal Failure +CAPD (Continuous ambulatory peritoneal dialysis) Haemodialysis	Permitted to drive 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 should notify 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 should notify NDLS.
All other Renal Disorders	Driver needn't notify NDLS unless associated with a relevant disability.	Driver needn't notify NDLS unless associated with significant symptoms or a relevant disability.

Chapter 9

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. Group 1 and Group 2 standards for an Ordinary Driving Licence (ODL) are set out below.

Respiratory and Sleep Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Sleep Disorders^[129-137] 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	Not permitted to drive until satisfactory control of symptoms has been attained with ongoing compliance with treatment, confirmed by specialist medical opinion. Monitoring of treatment efficacy in Obstructive Sleep Apnoea Syndrome should include a download of the CPAP therapy to ensure adequate compliance (>4 hrs nightly) and adequate control (ideally AHI<5, although <15 is adequate for licensing purposes). Periodic Medical review, 1-3 year licence may be granted. Driver should notify NDLS.	Not permitted to drive until satisfactory control of symptoms has been attained, with ongoing compliance with treatment, confirmed by specialist medical opinion. Monitoring of treatment efficacy in Obstructive Sleep Apnoea Syndrome should include a download of the CPAP therapy to ensure adequate compliance (>4 hrs nightly) and adequate control (ideally AHI<5, although <15 is adequate for licensing purposes). Regular, normally annual, licensing review required. Driver should notify NDLS.
Primary/Central Hypersomnias Including Narcoleptic syndromes	See Chapter 2 Neurology.	See Chapter 2 Neurology.

Useful reviews include:

129. Tregear S, Reston J, Schoelles K, Phillips B. Obstructive sleep apnea and risk of motor vehicle crash: systematic review and meta-analysis. *Journal of clinical sleep medicine* : JCSM : official publication of the American Academy of Sleep Medicine. 2009;5(6):573-81. <https://pubmed.ncbi.nlm.nih.gov/20465027/>
130. Schreier DR, Banks C, Mathis J. Driving simulators in the clinical assessment of fitness to drive in sleepy individuals: A systematic review. *Sleep Medicine Reviews*. 2017. <https://www.sciencedirect.com/science/article/abs/pii/S1087079217300941?via%3Dihub>
131. Rizzo D, Libman E, Creti L, Baltzan M, Bailes S, Fichten C, et al. Determinants of Policy Decisions for Non-Commercial Drivers with OSA: An Integrative Review. *Sleep Medicine Reviews*. 2017. <https://www.sciencedirect.com/science/article/abs/pii/S1087079217300424>
132. McNicholas WT. Driving risk in obstructive sleep apnoea: Do new European regulations contribute to safer roads? Expert review of respiratory medicine. 2016;10(5):473-5. <https://www.tandfonline.com/doi/full/10.1586/17476348.2016.1159134>
133. Hashemi Nazari SS, Moradi A, Rahmani K. A systematic review of the effect of various interventions on reducing fatigue and sleepiness while driving. *Chinese Journal of Traumatology*. 2017. <https://www.sciencedirect.com/science/article/pii/S1008127517301530?via%3Dihub>
134. Tiffin J, Dyken ME. Driving Safety and Fitness to Drive in Sleep Disorders. *Continuum (Minneapolis, Minn)*. 2017;23, 4, Sleep Neurology:1156-61. <https://pubmed.ncbi.nlm.nih.gov/28777182/>
135. Strohl KP, Brown DB, Collop N, George C, Grunstein R, Han F, et al. An official American Thoracic Society Clinical Practice Guideline: sleep apnea, sleepiness, and driving risk in noncommercial drivers. An update of a 1994 Statement. *American journal of respiratory and critical care medicine*. 2013;187(11):1259-66. <https://www.atsjournals.org/doi/10.1164/rccm.201304-0726ST>
136. Hartenbaum N, Collop N, Rosen IM, Phillips B, George CF, Rowley JA, et al. Sleep apnea and commercial motor vehicle operators: statement from the joint Task Force of the American College of Chest Physicians, American College of Occupational and Environmental Medicine, and the National Sleep Foundation. *Journal of occupational and environmental medicine*. 2006;48(9 Suppl):S4-37. [https://journal.chestnet.org/article/S0012-3692\(15\)52809-2/abstract](https://journal.chestnet.org/article/S0012-3692(15)52809-2/abstract)
137. Colvin LJ, Collop NA. Commercial Motor Vehicle Driver Obstructive Sleep Apnea Screening and Treatment in the United States: An Update and Recommendation Overview. *Journal of clinical sleep medicine* : JCSM : official publication of the American Academy of Sleep Medicine. 2016;12(1):113-25. <https://jcsm.aasm.org/doi/10.5664/jcsm.5408>

Part B: Medical fitness to drive

Respiratory and Sleep Disorders	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Respiratory Disorders Including asthma, COPD (Chronic Obstructive Pulmonary Disease)	Permitted to drive unless attacks are associated with disabling dizziness, fainting or loss of consciousness. In such instances, please refer to relevant requirements under 'Transient Loss of Consciousness', 'Loss of Consciousness/Loss of or Altered awareness', in Chapter 2 and Cough Syncope below	Permitted to drive unless attacks are associated with disabling dizziness, fainting or loss of consciousness. In such instances, please refer to relevant requirements under 'Transient Loss of Consciousness', 'Loss of Consciousness/Loss of or Altered awareness', in Chapter 2 and Cough Syncope below
Cough Syncope	Must not drive for 6 months following a single episode and for 12 months following multiple episodes over 5 years. If more than one episode of cough syncope occurs within a 24 hour period, this will be counted as a single event. However, if the episodes of cough syncope are more than 24 hours apart, these are considered as multiple episodes. Driver should notify NDLS.	Must not drive for 12 months following a single episode and 5 years following multiple episodes over 5 years. If more than one episode of cough syncope occurs within a 24 hour period, this will be counted as a single event. However, if the episodes of cough syncope are more than 24 hours apart, these are considered as multiple episodes. Driver should notify NDLS.
Carcinoma of Lung	Permitted to drive unless cerebral secondaries are present. (See Chapter 2 for Malignant Brain Tumour).	Those drivers with non-small cell lung cancer classified as T1N0M0 can be considered on an individual basis. In other cases, driving must cease until 2 years has elapsed from the time of definitive treatment. Permitted to drive providing treatment satisfactory and no brain scan evidence of intracranial metastases. (See Chapter 2 for Malignant Brain Tumour). Driver should notify NDLS.

See leaflet on Obstructive Sleep Apnoea Syndrome (OSAS) and Driving at:
<https://www.ndls.ie/medical-fitness/health-and-driving-information-leaflets.html>

Chapter 10

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. Group 1 and Group 2 standards for an Ordinary Driving Licence (ODL) are set out below.

Miscellaneous Conditions	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Deafness (Profound)	Permitted to drive. Driver needn't notify NDLS.	Permitted to drive provided that the driver is assessed with respect to the task requirements. 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 is unfit to drive. Driver should notify NDLS.
All Cancers not already covered in earlier sections	For all tumours, fitness to drive depends upon: ■ 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. ■ Paraneoplastic syndromes including cognitive impairment NDLS does not need to be notified unless there are cerebral metastases or significant complications of relevance (see subsequent bullet points for guidance).	For all tumours, fitness to drive depends upon: ■ The prospective risk of a seizure. ■ 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. ■ Paraneoplastic syndromes including cognitive impairment 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.

Part B: Medical fitness to drive

Miscellaneous Conditions	Group 1 Entitlement ODL car, motorcycle and tractor	Group 2 Entitlement ODL
Acquired immunodeficiency syndrome (AIDS)	Permitted to drive provided 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. Driver needn't notify NDLS.	Cases will be assessed on an individual basis by the supervising consultant. Driver needn't notify NDLS.
HIV Positive	Permitted to drive. Driver needn't notify NDLS. See Section 3.5: Multiple Conditions.	Permitted to drive. Driver needn't notify NDLS. 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 of these Guidelines 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 of these Guidelines 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	Not permitted to drive if suffering episodes of severe hypoglycaemia. Examples would include after bariatric surgery or in association with eating disorders.	Not permitted to drive if suffering episodes of severe hypoglycaemia. Examples would include after bariatric surgery or in association with eating disorders.

See leaflet on Emergency Department (ED): getting back to driving after injury at:
<https://www.ndls.ie/medical-fitness/health-and-driving-information-leaflets.html>

Drivers with physical and sensory 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. Neurological Disorders:
e.g. multiple sclerosis, Parkinson's disease, motor neurone disease, peripheral neuropathy^[138].

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 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 www.ndls.ie	■ NDLS Medical Fitness - https://www.ndls.ie/medical-fitness.html ■ D501 Medical Report - https://www.ndls.ie/images/Documents/Forms/171315_NDLS_Medical_Form_JAN_2022_WEB_HR.pdf ■ D502 Eyesight Report - https://www.ndls.ie/images/Documents/Forms/170735_NDLS_Eyesight_Report_JUNE_2021_GH_WEB_HR.pdf ■ Driver Advisory Form - https://www.ndls.ie/images/Documents/Forms/Patient_Advisory_Form_PDF.pdf ■ Road safety statistics - https://www.rsa.ie/road-safety/statistics
RSA medical fitness to drive web resources and email https://www.rsa.ie/services/licensed-drivers/medical-fitness medicalfitness@rsa.ie NDLS medical fitness web resources https://www.ndls.ie/medical-fitness.html	

138. Hanewinkel R, Drenthen J, van Oijen M, Hofman A, van Doorn PA, Ikram MA. Prevalence of polyneuropathy in the general middle-aged and elderly population. *Neurology*. 2016;87(18):1892-8. <https://doi.org/10.1212/WNL.0000000000003293>

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Driver Advisory Form



This is a discretionary form. Doctors may prefer to use other notation methods for the patient file.

Dear _____

Following your assessment today, ____/____/____, I am advising you that you need to contact your National Driver Licence Service to let them know that you have a condition _____ which may impact on your fitness to drive:

I am also advising that:

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. However, it is important to ensure that an appropriate balance is found between mobility and safety and the NDLS is likely to request you to provide a medical report clarifying your medical fitness to drive once you have notified them. The conditions that require reporting to your NDLS are outlined in the declaration made by you when you applied for, or renewed, your driving licence (see below) and also in the official RSA guidelines for medical fitness to drive, *Sláinte agus Tiomáint*.

You should also clarify with your insurer as to whether or not this condition needs to be reported to them as well.

A record of this notification will be held in your medical file here.

Yours sincerely _____

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

- | | |
|--|--|
| 1. 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 | 12. Persistent drug misuse or dependency |
| 2. Epilepsy | 13. Serious psychiatric illness or mental health problems |
| 3. Stroke or TIAs with any associated symptoms lasting longer than one month | 14. Parkinson's Disease |
| 4. Fits or blackouts | 15. Sleep Apnoea Syndrome |
| 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 | 16. Narcolepsy |
| 6. An implanted cardiac pacemaker | 17. Any condition affecting the drivers peripheral vision |
| 7. An implanted cardiac defibrillator (ICD) | 18. Total loss of sight in one eye |
| 8. Repeated attacks of sudden disabling dizziness | 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) |
| 9. Any other chronic neurological condition such as multiple sclerosis, motor neurone disease, Parkinson disease and Huntington's disease | 20. A serious hearing deficiency |
| 10. A serious problem with memory or periods of confusion. | 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 |
| 11. Persistent alcohol misuse or dependency | 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)

(13th Ed) April 2026 – revised August 2026

replaces all previous editions

and the document

Medical Aspects of Driver Licensing:

A Guide for Medical Practitioners 2010.

Údaras Um Shábháilteach At Bhóithre
Road Safety Authority

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 **MyRoadSafety.ie**

Your online resource to easily
and safely manage all your
driver information, services,
tests, permits and licences.

April 2026

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