



ARE MEDICAL FITNESS TO DRIVE PROCEDURES FIT FOR PURPOSE?

PIN Flash Report 40

March 2021



European Transport Safety Council

PIN Panel

Austria (AT)	Klaus Machata, Road Safety Board (KFV)
Belgium (BE)	Stijn Daniels, VIAS institute
Bulgaria (BG)	Aleksi Kesyakov, Atanas Mitev, State-Public Consultative Commission on Road Safety
Croatia (HR)	Sanja Veić, Ministry of Interior
Czech Republic (CZ)	Jiří Ambros, Jindřich Frič, Transport Research Centre (CDV)
Cyprus (CY)	George Morfakis, Road Safety Expert Alexis Avgoustis, Ministry of Transport
Denmark (DK)	Pernille Ehlers, Danish Road Safety Council
Estonia (EE)	Maria Pashkevich, Road Administration
Finland (FI)	Esa Rätty, Finnish Crash Data Institute (OTI)
France (FR)	Malo Quancard, Manuelle Salathé, National Interministerial Road Safety Observatory
Germany (DE)	Jacqueline Lacroix, German Road Safety Council (DVR)
Greece (EL)	George Yannis, Technical University of Athens
Hungary (HU)	Gábor Pauer, Road Safety Research Centre (KTI)
Ireland (IE)	Ben Breen, Sharon Heffernan, Velma Burns, Road Safety Authority (RSA)
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Latvia (LV)	Aldis Lāma, Road Traffic Safety Directorate
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Sweden (SE)	Anna Vadeby, National Road and Transport Research Institute (VTI)
Switzerland (CH)	Yvonne Achermann, Swiss Council for Accident Prevention (BFU)
U.K. (GB)	Alex Ma, Department for Transport Mark Bell, Transport Research Laboratory (TRL)

PIN Observers

Stelios Efstathiadis, Road Safety Institute Panos Mylonas, Greece
Lucia Pennisi, Automobile Club d'Italia (ACI), Italy

PIN Steering Group

Henk Stipdonk, Netherlands Institute for Transport Policy Analysis (KiM) (PIN Co-chair)
Heather Ward, University College London (UCL), (PIN Co-chair)
Richard Allsop, ETSC Board of Directors (PIN Advisor)
Letty Aarts, Institute for Road Safety Research (SWOV)
Lars Ekman, Swedish Transport Administration
Eduard Fernández, CITA
Jacqueline Lacroix, German Road Safety Council (DVR)
Astrid Linder, National Road and Transport Research Institute (VTI)
Wiebke Matysik, Toyota Motor Europe
Guro Ranæs, Norwegian Public Roads Administration
Pete Thomas, Loughborough University
Peter Whitten, European Commission
George Yannis, Technical University of Athens
Antonio Avenoso, ETSC
Graziella Jost, ETSC
Dovilé Adminaité-Fodor, ETSC
Jenny Carson, ETSC

For more information

European Transport Safety Council
20 Avenue des Celtes
B-1040 Brussels
Tel: +32 2 230 4106
jenny.carson@etsc.eu
www.etsc.eu/pin

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Authors

Jenny Carson
Graziella Jost
Dovilé Adminaité-Fodor

PIN co-chairs

Henk Stipdonk
Heather Ward

Programme advisor

Richard Allsop

March 2021

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The PIN programme relies on panellists in the participating countries to provide data for their countries and to carry out quality assurance of the data and information provided. This forms the basis for the PIN Flash reports and other PIN publications. In addition, all PIN panellists are involved in the review process of the reports to improve the accuracy and reliability of the findings.

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ABOUT THE EUROPEAN TRANSPORT SAFETY COUNCIL (ETSC)

ETSC is a Brussels-based independent non-profit organisation dedicated to reducing the numbers of deaths and injuries in transport in Europe. Founded in 1993, ETSC provides an impartial source of expert advice on transport safety matters to the European Commission, the European Parliament, EU Member States and other countries. It maintains its independence through funding from a variety of sources including membership subscriptions, the European Commission, and public and private sector support.

ABOUT THE ROAD SAFETY PERFORMANCE INDEX PROJECT

ETSC's Road Safety Performance Index (PIN) programme was set up in 2006 as a response to the first road safety target set by the European Union to halve the number of road deaths between 2001 and 2010. In 2010, the European Union renewed its commitment to reduce the number of road deaths by 50% by 2020, compared to 2010 levels.

By comparing countries' performance, the PIN serves to identify and promote best practice and inspire the kind of political leadership needed to deliver a road transport system that is as safe as is practicable.

The PIN covers all relevant areas of road safety including infrastructure, vehicles, road user behaviour as well as road safety policymaking. Each year ETSC publishes PIN Flash reports on specific areas of road safety. A list of topics covered by the PIN programme can be found at <http://etsc.eu/projects/pin/>.

"Are Medical Fitness to Drive Procedures Fit for Purpose?" is the 40th PIN Flash report. The report covers 32 countries: the 27 Member States of the European Union together with Israel, Norway, the Republic of Serbia, Switzerland and the UK.

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EU legislation applies different medical fitness to drive conditions to different drivers. In the interest of simplicity and as Category B licences are the most numerous category, it was agreed to focus on medical fitness to drive rules applying to licence B drivers in general, i.e. car, van or minibus drivers.¹

Member States may apply stricter rules to drivers of category B when they are using the licence for professional purposes, such as taxi drivers. Rules described here apply to category B non-professional drivers.

¹ A Category B licence holder is permitted to drive motor vehicles with a maximum authorised mass not exceeding 3.5t and designed and constructed for the carriage of no more than eight passengers in addition to the driver. EU Directive 2006/126/EC on Driving Licences <https://bit.ly/3a4GgGE>

EXECUTIVE SUMMARY

This report examines the current state of play in PIN countries regarding the assessment of medical fitness to drive, with reference to the 2006 EU Directive on Driving Licences which states that driving licences shall be issued only to applicants “who meet medical standards”. The EU is currently reviewing the Directive and a revised legal proposal is expected in 2022.

This report focuses exclusively on Category B driving licences, i.e. the licence required to drive a car, small van or minibus that can carry up to eight passengers.

Studies have concluded that specific medical conditions, substance abuse, mental disorders, epilepsy and diabetes are more important factors than age when it comes to medical fitness to drive. Mandatory age-based screening of older drivers has not been shown to be effective in preventing severe collisions. It may even have a negative safety impact, as older drivers become vulnerable road users.

Medical checks performed when obtaining a licence, renewing a licence or re-licensing can be useful for identifying medical conditions which may affect fitness to drive.

Medical checks performed when obtaining a licence, renewing a licence or re-licensing can be useful for identifying medical conditions which may affect fitness to drive.

Of the PIN countries that responded to ETSC’s request for data,² the majority of them require some form of medical check when first applying for a category B driving licence, beyond the sight test described in the Driving Licence Directive. The medical test required when acquiring a licence for the first time can vary from a self-assessment form filled out and signed by the applicant, to a medical examination carried out by a General Practitioner (GP) or a medical examination carried out by a specialist doctor or centre.

The EU Driving Licence Directive sets out standards for vision and lists a number of other conditions which may impact medical fitness to drive including: poor eyesight, locomotor disability, cardiovascular diseases, diabetes, neurological diseases and obstructive sleep apnoea syndrome, epilepsy, mental disorders, alcohol issues, drugs and medicinal product dependency and kidney disorders. The Directive states that if an applicant for a driving licence has any of these conditions, they must undergo a medical examination prior to obtaining their licence.

Member States can go beyond those minimum EU standards, and a majority do.

Data on the role played by medical conditions and disorders in road collisions are lacking. Pan-European in-depth collision data could aid the development of safety policy, vehicle regulation and technological advancement. Pan-European in-depth collision investigation data would also support the identification of the areas that need immediate attention in developing collision countermeasures and support the evaluation of measures implemented in the EU. Currently only a small number of European countries systematically collect such data.

It is recommended that a standardised screening process be considered across all Member States when assessing a driver’s fitness to drive. The process should be based on international best practice and ideally, consistent across all jurisdictions.

Medical fitness to drive is a matter of judgement as well as science and the levels of training or guidance provided to those assessing medical fitness to drive in PIN countries vary. Eleven PIN countries help those assessing medical fitness to drive with a set of guidelines and seventeen PIN countries have a regulation which stipulates how fitness to drive should be assessed. A clear set of guidelines issued to those assessing medical fitness to drive is known to have a positive effect.

² Expert responses to the questionnaire are available here: www.etsc.eu/pin



From the data that ETSC was able to gather from PIN countries for this report it seems that the number of licences removed for medical fitness to drive issues other than alcohol is small when compared with licences removed for driving under the influence of alcohol. It is fair to say, however, that detection levels for this offence are much higher than for most other medical fitness to drive conditions.

Driving while under the influence of alcohol poses a serious risk to road safety: 25% of all road deaths in the EU have been estimated to be alcohol related. Diagnostic, therapeutic and rehabilitation aspects of alcohol-use disorders have been neglected in the Directive and in many guidelines. The upcoming revision of the Driving Licence Directive represents an opportunity for review.

Alcohol interlock programmes give offenders who would normally lose their driving licence a possibility to continue driving, as long as their alcohol level is below a set value. But the EU Driving Licence Directive states that 'Driving licences shall not be issued to, or renewed for, applicants or drivers who are dependent on alcohol or unable to refrain from drinking and driving'.

When the Directive was adopted in 2006 alcohol interlocks were not widespread and very few Member States had programmes. The consequence today is that a significant group of potential participants are excluded from current alcohol interlock programmes and deprived an effective health tool. Including alcohol-dependent offenders, with proper medical supervision, would increase participation and cut recidivism and driving without a valid licence.

The two most common ways of communicating the impact of a certain medicine on someone's fitness to drive are through the prescribing doctor or via a visual notice inside or on a medicine's packaging. 23 PIN countries reported that patients are informed by the prescribing doctor and a visual notice was available in 24 PIN countries. Eight PIN countries (Denmark, Finland, Hungary, Ireland, Israel, Lithuania, Spain and Sweden) reported that they have national guidelines on how a patient is informed of the impact of a prescribed medicine on their fitness to drive.

It is recommended that a standardised screening process be considered across all Member States when assessing a driver's fitness to drive. The process should be based on international best practice and ideally, consistent across all jurisdictions.

KEY RECOMMENDATIONS TO NATIONAL GOVERNMENTS

- Develop and implement evidence-based screening tools and protocols based on international best practice to help medical professionals consistently identify medical conditions which may affect fitness to drive at all ages. Review the process for declaring medical conditions at licence application, renewal and for emergent conditions between licence renewals.
- Within national medical fitness to drive guidelines and regulations, stress the role of General Practitioners (GPs) as the primary point of call for identifying those who may be at-risk in terms of their fitness to drive, initiating an assessment of a person's fitness to drive and influencing how long and under what circumstances a person continues driving. This influence can range from direct advice to the patient to discussions started by family members about a person's challenges with driving.
- Develop (if not yet done) and mandate for medical professionals evidence-based training programmes which have been shown to be effective and are accepted in particular by family doctors (GPs) in assessing a person's fitness to drive.
- As part of their initial and continuous training, inform and/or remind doctors of their duty to advise their patients on the impact of prescription medicines on driving.
- Apply the DRUID³ categorisation and labelling of medicines that affect driving ability and support information campaigns promoting awareness among medical professionals and among the general population.⁴
- Make wider use of conditional licences (Codes 61 to 69 of Directive 2006/126/EC⁵) to allow those who may be at slight risk to continue to drive under certain circumstances. In the

³ EU funded project DRUID (Driving under the Influence of Drugs, Alcohol and Medicines) <https://bit.ly/2YbVAun>

⁴ de Gier J.J. et al. (2011), Establishment of Criteria for a European Categorisation System for Medicines and Driving, Deliverable 4.2.1 of the EU funded project DRUID (Driving under the Influence of Drugs, Alcohol and Medicines), <https://bit.ly/2YbVAun>

⁵ EU Directive 2006/126/EC on Driving Licences <https://bit.ly/3a4GgGE>

context of drink-driving, apply code 69 when a driver is restricted to drive only a vehicle equipped with an alcohol interlock.

- Establish and actively mandate the use of alcohol interlocks as part of rehabilitation programmes for recidivist and high-level first time offenders. Allow drivers with alcohol dependency to participate in a rehabilitation programme and be issued with a conditional licence with mandatory use of an alcohol interlock, as long as it is combined with medical supervision.
- Develop and promote materials to assist individuals (helped where appropriate by family members) in undertaking assessment of their own fitness to drive and in making an informed decision towards reduced driving and driving cessation if needed. Provide information about conditional codes giving entitlement to drive only under certain circumstances.
- Join efforts with local and regional governments to provide alternative transport options to the private car for those who cannot continue driving.

KEY RECOMMENDATIONS TO THE EU

As part of the upcoming revision of the 2006 EU Driving Licence Directive:

- Review and update Annex III on minimum standards of physical and mental fitness, in particular on alcohol abuse and neurodevelopmental disorders.⁶
- In order to increase consistency in assessing driver's medical fitness to drive across the EU, develop an effective and transparent screening protocol based on international good practices to help medical professionals detect potential medical conditions.
- Develop and promote evidence-based guidelines for family doctors and other medical professionals involved in assessing the functional capabilities of someone suspected of being an unfit driver.

- Support Member States in developing and evaluating educational programmes for GPs that are both effective and accepted by medical practitioners.
- Organise regular meetings of the Driving Licence Committee and facilitate the exchange of good practices between traffic medicine specialists and national driver licensing agencies as the evidence base continues to develop.
- Encourage Member States to make wider use of conditional licences (Codes 61 to 69 of Directive 2006/126/EC⁷) where possible and report to the EC the scale of their use, so as to aid monitoring and improvement. In the context of drink-driving, Member States should be encouraged to apply the code 69, under which a driver is restricted to drive only a vehicle equipped with an alcohol interlock.
- Allow drivers with alcohol dependency to participate in a rehabilitation programme, and be issued with a conditional licence with mandatory use of an alcohol interlock, as long as it is combined with medical supervision.
- Support Member States in developing and promoting materials to support successful drivers' self-regulation and transition to reduced driving and driving cessation. These materials should be made freely available in all Member States, to assist individuals in undertaking assessment of their own fitness to drive.

⁶ For detailed recommendations on changes needed in relation to Annex III, see CIECA (2020), Report Medical Fitness to Drive, <https://bit.ly/2NP1LCZ>.

⁷ EU Directive 2006/126/EC on Driving Licences <https://bit.ly/3a4GgGE>

INTRODUCTION

Driving a vehicle is demanding and requires individuals to be both mentally and physically fit. The EU Driving Licence Directive states that driving licences shall be issued only to applicants “who meet medical standards”. The definition of what being mentally and physical fit to drive actually means is difficult to establish and is prone to evolve over time. The EU Directive and its related Annexes on medical fitness to drive provide a legislative framework, underpinned by expert medical advice.

It is known that a number of medical conditions may affect an individual’s fitness to drive.⁸ Annex III of the EU Directive sets minimum standards for physical and mental fitness to drive.⁹ However, of the 24 PIN country national experts who could provide data,¹⁰ 15 feel those minimum standards do not go far enough and use their national implementing legislation to extend or clarify them.

The EU Directive does not mandate initial, nor periodic medical checks for group 1 drivers.¹¹ Applicants for a moped, motorcycle, car, van or minibus driving licence are requested to pass a medical examination only if during their training “it becomes apparent” that they suffer from at least one of the medical conditions mentioned in Annex III. How and how often that fitness to drive is established before obtaining a car driving licence and throughout a driver’s life therefore varies from one country to another. Some countries (CH, CY, FI, IE, IL, LU, NL, NO, PT, RS, SI, SK, UK) require more frequent and thorough screening as drivers age. Others (BE, EE, EL, ES, HU, IT, LT, LV, PL, RO) require regular medical checks throughout a driver’s life. A last group of countries (AT, DE, DK, FR, HR, SE) do not require regular testing.

Medical conditions affecting fitness to drive as listed in Annex III of the EU Driving Licence Directive

.....

- Poor eyesight
- Locomotor disability
- Cardiovascular diseases
- Diabetes
- Neurological diseases and obstructive sleep apnoea syndrom
- Epilepsy
- Mental disorders
- Alcohol issues
- Drugs and medicinal product dependency
- Kidney disorders

Applicants suffering from one of these conditions can only be granted or renewed a driving licence after approval from a medical professional and may be subject to regular medical check-ups. According to the EU Directive, people suffering from alcohol and drug (legal or illegal) dependency should not be allowed to drive.

⁸ Charlton J et al. (2010) Influence of chronic illness on crash involvement of motor vehicle drivers, Monash University Accident Research Centre, <https://bit.ly/2YmZq3X>. A risk rating system was applied to all medical conditions of interest. Eight conditions (alcohol abuse and dependence, dementia, epilepsy, multiple sclerosis, psychiatric disorders, schizophrenia, sleep apnoea and cataracts) were found to have increased risk of crash involvement compared with their relevant control group.

⁹ Annex III of the EU Directive 2006/126 has been updated three times with Amendments 2009/113, 2014/85 and 2016/1106 to take into account technical and scientific progress.

¹⁰ Expert responses to the questionnaire are available here: www.etsc.eu/pin

¹¹ Group 1: drivers of vehicles of categories A, A1, A2, AM, B, B1 and BE. EU Directive 2006/126/EC on Driving Licences

How and by whom medical fitness to drive screening is carried out also varies considerably, as well as the relationship between the responsibilities of medical professionals and the licensing authorities.

Assessing someone's fitness to drive is a difficult task and requires striving to find the right balance between safety and mobility that is acceptable to society. Banning someone from driving can have a dramatically adverse effect on their mental wellbeing and chance to lead an active life.

The EU Driving Licence Directive therefore includes a number of conditional codes that can be included on a driving licence which permit driving under certain circumstances for those known to have some medical issues, enabling such drivers to retain some mobility. PIN Panellists have had difficulty accessing information on to what extent these codes are used. The report is therefore limited in what it is able to say about how widely they are applied. Nor is it able to say to what extent they allow drivers to continue driving when they might otherwise have been required to stop, although research indicates a positive benefit from restricted licences in terms of mobility and safety.¹² Data from a few countries indicate that drivers to whom codes relating to medical fitness to drive are applied may well be much fewer than those to whom a condition relating to wearing of spectacles or contact lenses is applied.

It is well established that alcohol has a negative impact on a person's driving skills.¹³ Diagnostic, therapeutic and rehabilitation aspects of alcohol-use disorders have been neglected in many guidelines and in the Directive. The upcoming revision of the EU Driving Licence Directive represents an opportunity for review. Included among the possible interventions to reduce alcohol-impaired driving, alcohol interlock programmes give offenders who would normally lose their driving licence a possibility to continue driving, as long as their alcohol level is below a set value. The ignition interlock device makes sure

¹² 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*. 1;6(6):541-4. <https://bit.ly/3d2p5aH>

¹³ European Commission (2018), Alcohol, <http://bit.ly/2p9PjBE>



Including alcohol-dependent offenders in alcohol interlock-based rehabilitation programmes, with proper medical supervision, would increase participation and cut both recidivism and driving without a valid licence.

that drivers can only start the engine after having completed a breath test that has indicated that their alcohol level is below a set value. Studies have repeatedly shown that the combination of alcohol interlocks and rehabilitation programmes cut reoffending rates.¹⁴

But, according to the EU Driving Licence Directive, those with alcohol and drug dependency should not be allowed to drive. When the Directive was adopted in 2006 alcohol interlocks were not widespread and very few Member States had programmes. The consequence today is that a significant group of potential participants are excluded from current alcohol interlock programmes and deprived of an efficient health tool. Including alcohol-dependent offenders, with proper medical supervision, would increase participation and cut both recidivism and driving without a valid licence.

The effects of drugs and medicines on driving skills are less well known than for alcohol. Detection mechanisms are also less well advanced, and current guidelines may also not adequately cover under-treatment and poor patient compliance. This report focuses on medicines (licit drugs) and how they affect driving. Knowledge around the use of medicines while driving is growing but ensuring both health professionals and drivers are well informed is not always easy. The EU's DRUID project proposed a categorisation system for medicines and driving.

Implementation of good practice still varies considerably between Member States, underlining the need to update the Directive and its Annexes in the light of developing knowledge and science. A 2017 study for the European Commission highlighted areas inadequately addressed in the EU Directive.¹⁵ The authors recommend to move away from age-based fitness to drive testing of all older drivers towards evidence-based screening processes for those drivers that may be unsafe. They also recommend implementing validated off-road assessment tools, clearer guidelines and education programmes for medical practitioners, materials to aid unfit drivers in deciding whether to keep driving or give up, and increased use of conditional licences.

Over and above these issues, there is undue reliance on licensing agencies rather than on healthcare professionals advising their patients with relevant medical conditions on how to maintain safe mobility, especially given that medical conditions often arise between licence renewals.¹⁶ Moreover, there is concern that medical fitness to drive is not adequately represented in undergraduate¹⁷ and postgraduate medical and healthcare professional training¹⁸ and is not well understood by the general public.¹⁹

¹⁴ ETSC (2020), Alcohol Interlocks in Europe: An Overview of Current and Forthcoming Programmes, <http://bit.ly/3pONBiQ>

¹⁵ Helman S. et al. (2017), Study for the European Commission, Driver training, testing and medical fitness, <http://bit.ly/3otLP5q>.

¹⁶ Interview with Prof. Desmond O'Neill, December 2020.

¹⁷ Hawley CA et al. (2008) Medical education on fitness to drive: a survey of all UK medical schools. *Postgrad Med J* ; 84: 635–8, <https://bit.ly/2Z1TUEb>

¹⁸ Al Azawi L et al., *J R Coll Physicians Edinb* (2020), Inclusion of medical fitness to drive in medical postgraduate training curricula; 50: 309–15, <https://bit.ly/3tIlycP>

¹⁹ Ryan M, et al. (2020), Perceptions and attitudes toward risk and personal responsibility in the context of medical fitness to drive. *Traffic Inj Prev*.21(6):365-370, <https://bit.ly/3ryZE4s>

PART I

**MEDICAL CONDITIONS
AFFECTING MEDICAL FITNESS
TO DRIVE AND THE ROLE
THEY PLAY IN ROAD SAFETY**



01

1.1 MINIMUM STANDARDS FOR MENTAL AND PHYSICAL FITNESS TO DRIVE, AS SET OUT IN THE EU DRIVING LICENCE DIRECTIVE

Minimum EU requirements for Medical Fitness to Drive are set out in Annex III of the 2006 EU Driving Licence Directive. The Annex sets out standards for vision and lists a number of other conditions which may impact medical fitness to drive including: poor eyesight, locomotor disability, cardiovascular diseases, diabetes, neurological diseases

and obstructive sleep apnoea syndrome, epilepsy, mental disorders, alcohol issues, drugs and medicinal product dependency and kidney disorders. The Directive states that if an applicant for a driving licence has any of these conditions, they must undergo a medical examination prior to obtaining their licence.

Table 1. Implementing Annex III of the Driving Licence Directive

	YES	NO
Is the list of illnesses/conditions potentially affecting MFTD wider in your country than that included in the Directive?	DE, DK, EL, ES, FI, HR, IE, LT, LU, NL, PL, RS, SE, SI, UK	AT, BE, CY, EE, FR, HU, IL, IT, LV

Member States can go beyond those minimum EU standards. Of the 24 PIN countries able to respond to this question, nine do not go beyond the requirements of the Driving Licence Directive in their national legislation, while 15 PIN countries do.

In Germany, the list also includes severe pulmonary and bronchial diseases, with severe repercussions on the cardiovascular system dynamics and disturbances of the sense of balance. In Spain, MFTD screening also considers diseases of the respiratory system, haematological diseases, metabolic and endocrine illnesses and perceptual motor fitness. In the Netherlands, the regulations regarding psychiatric conditions are more specific than in the EU Directive and cover explicitly depression, autism and attention-deficit hyperactivity disorder (ADHD).

This situation was confirmed in the 2020 CIECA Medical Fitness to Drive Report which found that EU Driving Licence Directive laws around medical fitness to drive are interpreted and implemented differently in EU countries.²⁰

1.2 WHAT ROLE DO MEDICAL CONDITIONS PLAY IN ROAD SAFETY?

Data on the role played by medical conditions and disorders in road collisions is lacking. Currently only a small number of European countries systematically collect such data.

In the absence of systematic in-depth accident investigations of a representative sample of fatal and serious collisions, it is possible that the prevalence of medical conditions is underestimated. Pan-European in-depth accident investigation data would also support the identification of the areas that need immediate attention in developing collision countermeasures and support the evaluation of measures implemented in the EU.

The EU funded project DaCoTA built a network of 22 in-depth collision investigation teams in 19 countries. The outcome was a harmonised in-depth collision investigation protocol and the creation of tools supporting the collision investigation teams on data collection.²¹

²⁰ Englund, L., O'Neill, D.J., Pisarek, W., Ryan, M., Wagner, T., on behalf of Medical Fitness to Drive Subgroup of the CIECA Topical Group on Fitness to Drive. (2020). "CIECA Medical Fitness to Drive Report", <https://www.cieca.eu/node/959>

²¹ Hill, J. et al. (2012), Final Report, Deliverable 2.5 of the EC FP7 project DaCoTA, PanEuropean In-Depth Accident Investigation Network, <https://bit.ly/3plfSO3>



FINLAND'S ACCIDENT INVESTIGATION PROCEDURES

Finland has very well developed accident investigation procedures.²² The Finnish Crash Data Institute (OTI) coordinates independent in-depth investigations of all fatal road collisions and administers the database. The OTI database includes deaths from natural causes that occur while driving and driver suicides, which is unique, as those deaths are not considered road deaths and are therefore excluded from official statistics in other EU countries. The findings from the investigation teams are published in annual reports and used for research and prevention measures.

In Finland, 16% of all fatal collisions are attributed to a driver illness.

Between 2014 and 2018, 907 fatal collisions occurred. Investigators attributed the cause of the fatal collision to be the driver illness in 16% of those collisions (141). 179 road users were involved in these collisions, of whom 169 died and 10 were slightly injured. Cardiovascular diseases are the most common risk factor in fatal collisions where disease was known to have been an immediate risk in the collision (Table 2). Of the 141 fatal collisions known to have been caused by the illness of the driver between 2014-2018, 119 were due to heart disease or hypertension; 124 (88%) of these collisions were caused by a man and the median age of the person responsible for the collision was 66 years old.

Table 2. Number of driver diseases in the 141 fatal collisions where the driver's illness was considered an immediate risk over 2014 to 2018 in Finland²³ (a driver could have more than one disease)

	Cardio-vascular disease	Mental disorders	Reduced mobility	Cerebro-vascular diseases	Epilepsy	Diabetes mellitus	Substance dependency
Number of driver diseases	119	7	18	12	8	29	19

An illness or disease may be presenting an 'immediate risk' in a collision, it may also be an influencing 'background risk' (Table 3.)

Table 3. Number of driver diseases in the 352 fatal collisions where a driver's illness was considered an influencing 'background risk' over 2014 to 2018 in Finland²⁴ (a driver could have more than one disease)

	Cardio-vascular disease	Mental disorders	Reduced mobility	Cerebro-vascular diseases	Epilepsy	Diabetes mellitus	Substance dependency
Number of driver diseases	108	162	38	24	9	34	217

Between 2014-2018, illness or disease was considered as being an influencing 'background risk' in 352 fatal collisions. Substance abuses were considered influencing 'background risks' in 217 collisions, mental disorders in 162 collisions. Heart disease or hypertension were considered to be an influencing 'background risk' in 108 of the collisions. 806 people were involved in collisions

where illness was an influencing 'background risk', of which 391 died, 73 were seriously injured, 161 were mildly injured and 181 remained uninjured. 90% of these collisions were caused by a male driver, and the median age of the driver responsible for the collision was 40 years.²⁵

²² ETSC (2018), An Overview of Road death data collection in the EU, PIN Flash Report 35, <https://bit.ly/2LNYvXG>

²³ Tables 2 and 3 are not limited to Category B licence holders. However, the proportion of other driving licence class holders is relatively small in OTI's database. One driver may have had several diseases (e.g. epilepsy and diabetes). Therefore, the sum of table values is higher than the amount of collisions or drivers.

²⁴ Drivers included in Table 2 are excluded from Table 3.

²⁵ OTI (2021) Fit to Drive Report Collisions where illness has been an immediate or background risk in a fatal motor vehicle collision in 2014-2018, (in Finnish only: Ajoterveysraportti 2021 Onnettomuudet, joissa sairaus on ollut kuolemaan johtaneen moottoriajoneuvonnettomuuden välittömänä tai taustariskinä vuosina 2014-2018). <https://www.oti.fi/> Information provided by the PIN Panellist, Esa Raty.

1.3 DATA ON NATURAL DEATHS AND SUICIDES TO BE COLLECTED SEPARATELY

According to the EU definition of a road death, driver deaths from natural causes and confirmed suicides should be excluded from national road death statistics. The scale of medically or psychologically unfit drivers is therefore unknown.²⁶ In Sweden, data on suicides in road traffic have been presented separately from overall road death data since 2010. Around 25 to 30 people (8%-10% of all road deaths) take their lives on Swedish roads each year.²⁷ PACTS estimates that an average of over 50 deaths by suicide occur on UK roads per year.²⁸

“According to the EU definition of a road death, suicides and car driver natural deaths are not included in official road death statistics. Hence, an important element of the ‘medical fitness to drive’ issue remains invisible and does not get the attention it deserves. Driver health risks should be thoroughly investigated and followed up to give a much better picture of the actual medical fitness to drive situation. If suicides are to be excluded from road deaths, they should still be reported alongside, like in Sweden. Data should then be collected at the EU level to develop preventative measures. This would be justified since these suicides are committed in road traffic and they may endanger, traumatise and incapacitate other road users.”

Kalle Parkkari, Road Safety Director, Finnish Crash Data Institute.

²⁶ ETSC (2018) PIN Flash 35, An Overview of Road Death Data Collection in the EU <https://bit.ly/2LNyVxG>

²⁷ Ibid.

²⁸ PACTS (2017), Suicides on UK Roads, Lifting the Lid, <https://bit.ly/3sWxS3A>

1.4 ETSC RECOMMENDATIONS

RECOMMENDATIONS TO NATIONAL GOVERNMENTS

- Improve understanding of the part played by impaired medical fitness to drive in collision occurrence by independent in-depth investigation for fatal and serious injury collisions, including single-vehicle collisions.
- Improve data collection on use of conditional licences to improve monitoring of take up and practice in the granting of such licences.
- When driver deaths attributed to suicides and natural causes are excluded from the road safety database, record them separately and use the data for preventive measures.

RECOMMENDATIONS TO THE EU

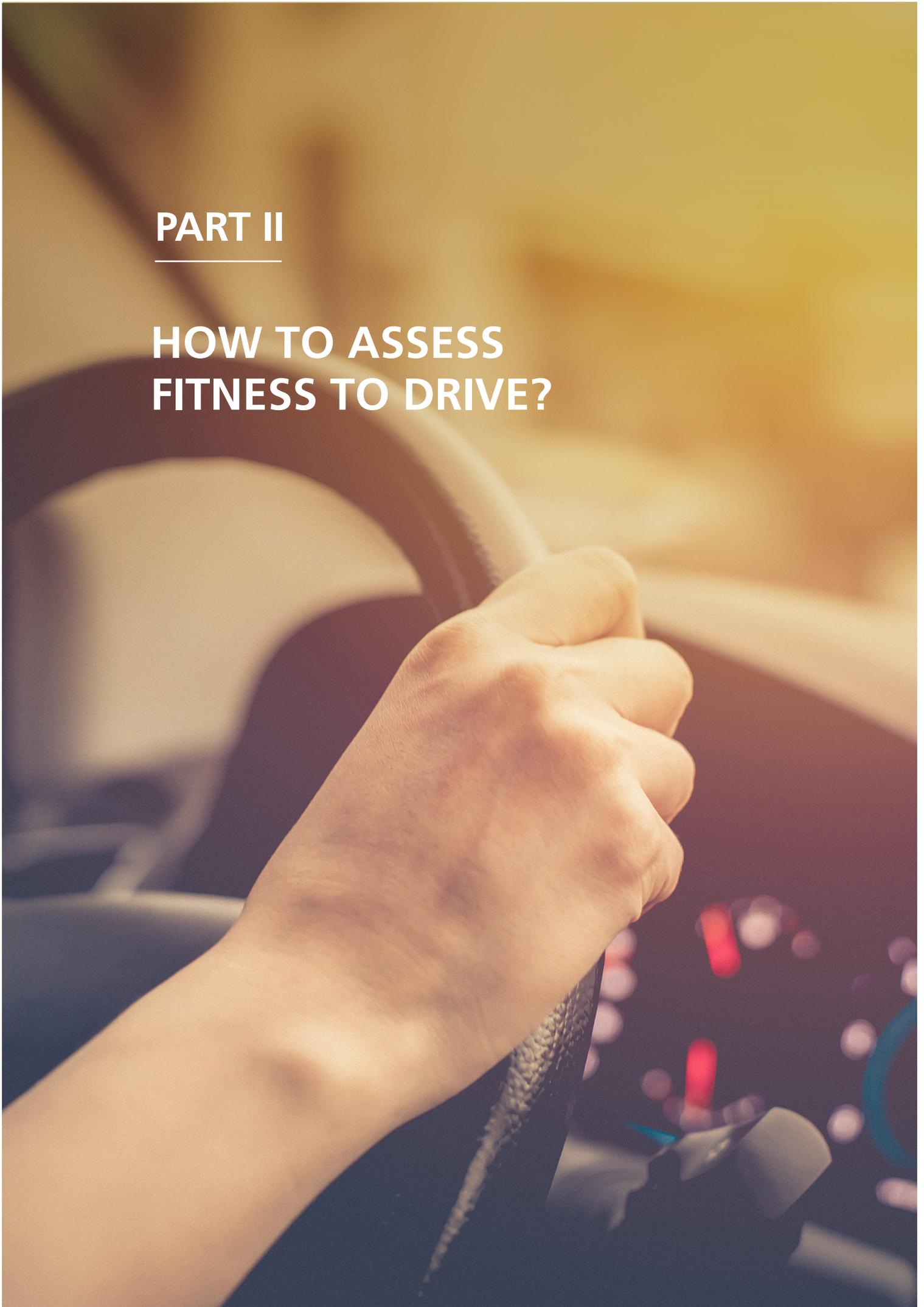
- Review and update Annex III of the EU Driving Licence Directive on minimum standards of physical and mental fitness, in particular on alcohol abuse and neurodevelopmental disorders.²⁹
- Organise regular meetings of the Driving Licence Committee and facilitate the exchange of good practices between traffic medicine specialists and national driver licensing agencies as the evidence base continues to develop.
- Improve understanding of the part played by impaired medical fitness to drive in collision occurrence by creating a pan-European in-depth collision investigation database.³⁰
- Record separately data on road deaths from suicides and natural causes and use the data for preventive measures.

²⁹ For detailed recommendations on changes needed in relation to Annex III, see CIECA (2020), Report Medical Fitness to Drive, <https://bit.ly/2NP1LCZ>.

³⁰ Building on Hill, J. et al. (2012), Final Report, Deliverable 2.5 of the EC FP7 project DaCoTA, PanEuropean In-Depth Accident Investigation Network, <https://bit.ly/3plfSO3>

PART II

HOW TO ASSESS FITNESS TO DRIVE?



02

Medical fitness to drive is a matter of judgement as well as science. The aim of medical fitness to drive testing is to achieve a balance between minimising any driving-related road safety risks for the individual and the community posed by drivers' potential permanent or long-term injury, illness or disability, while maintaining the drivers' quality of life and ability to move. Fitness to drive screening should not be discriminatory against individuals with disability. Thus the importance of establishing guidelines that are informed by sound scientific evidences.

2.1 MEDICAL FITNESS TO DRIVE TESTING ON OBTAINING A LICENCE

Medical checks performed when obtaining a licence, renewing a licence or re-licensing can be useful for identifying medical conditions which may affect fitness to drive.

The EU Directive does not mandate initial, nor periodic medical checks for group 1 drivers.³¹ Applicants for a moped, motorcycle, car, van or minibus driving licence are requested to pass a medical examination only if during their training "it becomes apparent" that they suffer from at least one of the medical conditions mentioned in Annex III. How and how often that fitness to drive is established before obtaining a car driving

licence and throughout a driver's life therefore varies between countries.

Most PIN countries require some form of medical check when first applying for a category B driving licence, beyond the eyesight test described in the Driving Licence Directive. The medical test required when acquiring a licence for the first time can vary from a self-assessment form filled out and signed by the applicant, to a medical examination carried out by a General Practitioner (GP) or a medical examination carried out by a specialist doctor or centre. Nine PIN countries ask for a self-assessment form, 12 require a medical examination by a GP/ doctor and five require a medical examination by a specialist doctor or testing centre (Table 4). Some PIN countries including Germany, Israel, Sweden and Switzerland report that they also require an obligatory eye-test with an eye doctor or optician.

In France, applicants and drivers suffering from one of the medical conditions affecting fitness to drive must submit themselves to a medical check-up by a trained doctor, approved by the local administration. If an applicant fails to submit themselves to this medical check, they face a prison sentence of up to two-years and a fine of up to 4,500 euros. Moreover, if they are responsible for a collision the costs would not be covered by the insurance.

Table 4. Whose role is it to assess medical fitness to drive on obtaining a licence?

Another physician may be involved in the eye test but this is not covered in table 4.

**with some exceptions (medical check if applicant is 65 years of age or older or physically disabled)*

Self-assessment	General Practitioner / any doctor	Specialist doctor / centre	Other
BE	AT (with additional qualifications)	ES	DE
CY	DK	PL (transport medicine or occupational medicine)	FR
CH*	EE	RO	HR (occupational health medicine specialist)
IE	EL (and specialist doctor)	RS	
IL	FI	SI (Medical specialists for work safety, traffic and sport)	
NL	HU		
NO	IT		
SE	LT		
UK	LU		
	LV (with additional training)		
	PT		
	SK		

³¹ Group 1: drivers of vehicles of categories A, A1, A2, AM, B, B1 and BE. EU Directive 2006/126/EC on driving licences.

2.2 MEDICAL FITNESS TO DRIVE TESTING AFTER OBTAINING A LICENCE

Car drivers in Belgium, Estonia, Greece, Spain, Hungary, Ireland, Italy, Lithuania, Latvia, Poland and Romania, should demonstrate they are still fit to drive each time their driving licence needs to be renewed (not age-based), even if it only consists of filling out a self-assessment form.

In contrast, Austria, Croatia, Denmark, France, Germany and Sweden do not routinely screen the general driving population once they have been granted their driving licence, even when they get older. Instead, drivers themselves are relied upon or medical professionals obliged to report conditions which may affect medical fitness to drive to the authorities. Such reporting should then trigger an initial medical fitness to drive assessment to determine whether driving is compatible with the driver's medical condition under some conditions or not. If driving is compatible, a conditional licence will be granted, usually with a limited validity to assess whether the condition worsens over time. Only those category B drivers with medical conditions declared to the authorities, have to undergo regular medical fitness to drive screening each time their driving licence needs to be renewed.

Cyprus, Finland, Ireland, Israel, Luxembourg, the Netherlands, Norway, Portugal, Serbia, Slovakia, Slovenia, Switzerland and the UK apply a mix of approaches. Licence holders have their medical fitness to drive checked on obtaining a car licence and then there are no further checks until they reach a certain age (although this may not be the case for drivers with medical conditions already known to the authorities). Many PIN countries require more frequent and thorough testing as drivers age. The most common age for age-based medical fitness to drive testing to start is 70 (Cyprus, Finland, Ireland, Israel, Slovenia and the United Kingdom). This is usually a certificate issued by a physician, based on an examination performed by a general practitioner (GP). In the UK the authorities rely on drivers' self-reports, including for eyesight.

Table 5. Medical Fitness to Drive Testing

**Except for drivers with medical conditions already known to the authorities who were issued a driving licence with shorter validity. Those drivers will have to undergo MFTD screening each time their driving licence needs to be renewed.*

Age at which mandatory medical screenings start for a car driver to continue driving					Countries requiring regular testing, not age based	Countries with no regular testing for the general driving population*
60	65	70	75	80		
					BE	AT
LU	RS	CY	CH	NO	EE	DE
PT	SK	FI	NL		EL	DK
		IE			ES	FR
		IL			HU	HR
		SI			IT	SE
		UK			LT	
					LV	
					PL	
					RO	

Fitness to drive can be affected by many things, not just old age. Mandatory age-based screening of older drivers has not been shown to be effective in preventing severe collisions.³² It may even have a negative safety impact, as older drivers become vulnerable road users (i.e. pedestrians and cyclists).³³ Other studies have concluded that specific medical conditions, substance abuse, mental disorders, epilepsy and diabetes are more important factors than age. In addition, medical screening of older drivers is associated with reduced driver licensing among older people, itself a risk factor for decline in health and premature entry into a nursing home.³⁴

Fitness to drive can be affected by many things, not just old age.

Older drivers have to deal with age-related limitations, but they are generally able to compensate for them. Ageing is accompanied by the narrowing of the visual field, poorer contrast sensitivity, increased time required to change focus, slower eye movement, problems with depth perception and slower decision making. These impairments make older people more sensitive to complex traffic situations where a number of different tasks must be performed at the same time. Furthermore, several medical disorders related to accident proneness, such as eye disorders, dementia, Parkinson's disease, stroke, cardiovascular diseases and diabetes, are more common among older adults.

To compensate for these functional limitations, many older drivers try to avoid driving at night, in bad weather, in congested areas and during peak periods.³⁵ Older people have more freedom in choosing when to travel and more often choose to drive during daytime and dry weather. They have on average a great deal of driving experience, assisting them to anticipate possible problematic situations. Also, older drivers, on average, drink and drive less often than younger adults and generally obey the traffic rules more frequently.³⁶ Older drivers are not so much a risk to others, but they are at risk themselves due to their frailty and vulnerability to personal injury in the event of a road collision.

In Germany, age-typical medical conditions can justify the withdrawal of a driving licence provided that the inability to drive a vehicle has been proven. The decision to withdraw the licence is taken by the licensing authority and they can request an expert opinion and/or medical assessment. The responsibility for the final decision, whether the licensing authority accepts the medical assessment or not, lies with the licensing authority.

2018 STUDY CONFIRMS MEDICAL SCREENING FOR DRIVERS SHOULD NOT BE AGE-BASED, BUT SHOULD TARGET SPECIFIC DISEASES

Sweden does not have compulsory medical screening for drivers above a certain age. In 2018, the Swedish Transport Agency undertook a study to find out whether Sweden should introduce medical screening for older drivers.³⁷

The research looked at whether car drivers who are 65 or older, and diagnosed with one of the medical conditions affecting driving,³⁸ are more often involved in a road collision than drivers of the same age who are not diagnosed. A sample of 13,700 drivers aged 65 and over who had been involved in a road collision was matched with a control group.

Drivers diagnosed with age-typical medical conditions, such as cardiovascular diseases and visual impairment, had a slightly increased probability of collisions. Drivers diagnosed with dementia (a condition also strongly related to age), had a lower probability of collision compared to drivers not diagnosed with dementia, but this may be explained by people with dementia driving less after they have been diagnosed. Drivers suffering from substance abuse, mental disorders (other than dementia), epilepsy and diabetes had increased probability of getting involved in a collision. These medical conditions can occur at any age.

The study concluded that Sweden does not need to introduce mandatory medical screening for older drivers. Further investigations were recommended for drivers of all ages suffering from substance abuse, mental disorders, epilepsy and diabetes.

³² OECD (2001), Ageing and Transport, Mobility needs and safety issues, <https://bit.ly/3ciqfOV> and Siren and Hausteijn (2015) <https://bit.ly/3jC8ply>

³³ Martensen, H (2017), Age-based screening of elderly drivers, European Road Safety Decision Support System, developed by the H2020 project SafetyCube. Retrieved from www.roadssafety-dss.eu on 29/10/20

³⁴ O'Neill D. (2012), More mad and more wise, in Accident, Analysis and Prevention <https://bit.ly/36YqrzB>

³⁵ ETSC (2008), 2nd PIN Annual Report, Chapter 4, Reducing older people's deaths on the roads, pages 41-53, <https://bit.ly/3omEynX>.

³⁶ European Commission (2018), Older drivers, <https://bit.ly/2MwVScM>.

³⁷ Swedish Transport Agency (2018) Relationships between diseases and the involvement of older drivers in traffic accidents (in Swedish, English summary available), <https://bit.ly/3qZOy9n>

³⁸ The Swedish Transport Agency's Regulations on Traffic Medicine list 13 medical condition categories affecting driving.

2.3 TOWARDS A STANDARDISED SCREENING PROCESS

General screening of the whole population is not justified from a cost-benefit perspective, nor in terms of effectiveness.³⁹ Yet, there is a need for an effective and transparent assessment process for those drivers for whom there is a prima facie case that they may be unsafe and require fitness to drive screening, ideally throughout a driver's life.

Current best practice for a screening process throughout a driver's life suggests the following:

1. referral by the driver themselves, a family member, a General Practitioner, other advisor or the police to a specific traffic medicine centre,
2. assessment of fitness to drive using validated off-road screening tools with acceptable sensitivity and specificity measures,
3. referral to expert medical advisory boards for final assessment by expert medical advisors, and
4. an appropriate appeal process by the individual for disputed claims.⁴⁰

Best practice models currently operate in Sweden, Canada, parts of the USA, and Australia, although the lack of a validated off-road screening tool has led to use of on-road assessments that have questionable validity and are potentially dangerous for the person performing the assessment and for the person being assessed. In any country, the first step in the screening process depends on the level of awareness and understanding of the medical aspects of fitness to drive among medical professionals and the population as well as on just what responsibilities medical professionals have to liaise with the licensing authority about an individual's medical fitness to drive.⁴¹

The focus should always be to help the person keep their licence if possible, under certain conditions where appropriate, rather than taking it away.

2.4 EVALUATING MEDICAL FITNESS TO DRIVE ASSESSMENT PRACTICES

For this report, PIN country national experts were asked whether their medical fitness to drive assessment procedures had ever undergone an evaluation to gauge their effectiveness or cost benefit. While many countries reported that guidelines for assessing medical fitness to drive by medical professionals were continually updated, few countries reported that their medical fitness to drive assessment procedure had ever undergone an evaluation.

In the Netherlands, a study was undertaken in 2011 into the possibility of increasing the age of medical screening from 70 to 75 and this resulted in the age being raised to 75 in 2014. In addition, since 2019 the Dutch Ministry of Infrastructure has been evaluating the scope for developing a system in which fitness to drive assessments no longer rely on age but rather on medical indications. Studies are currently ongoing, including a study by SWOV looking at alternatives to the current system. A decision on the introduction of any new system (should that be the conclusion) will most likely be taken in 2022. The Swiss Council for Accident Prevention is in the process of evaluating the Swiss system of compulsory medical examinations for older drivers. The results of the evaluation are expected later in 2021.

These two examples from the Netherlands and Switzerland only refer to age-based testing, just one aspect of medical fitness to drive assessment procedures.

The focus should always be to help the person keep their licence if possible, under certain conditions where appropriate, rather than taking it away.

³⁹ Helman S. et al. (2017), Study for the European Commission, Driver training, testing and medical fitness, <http://bit.ly/3otLP5q>.

⁴⁰ Ibid.

⁴¹ Ibid.

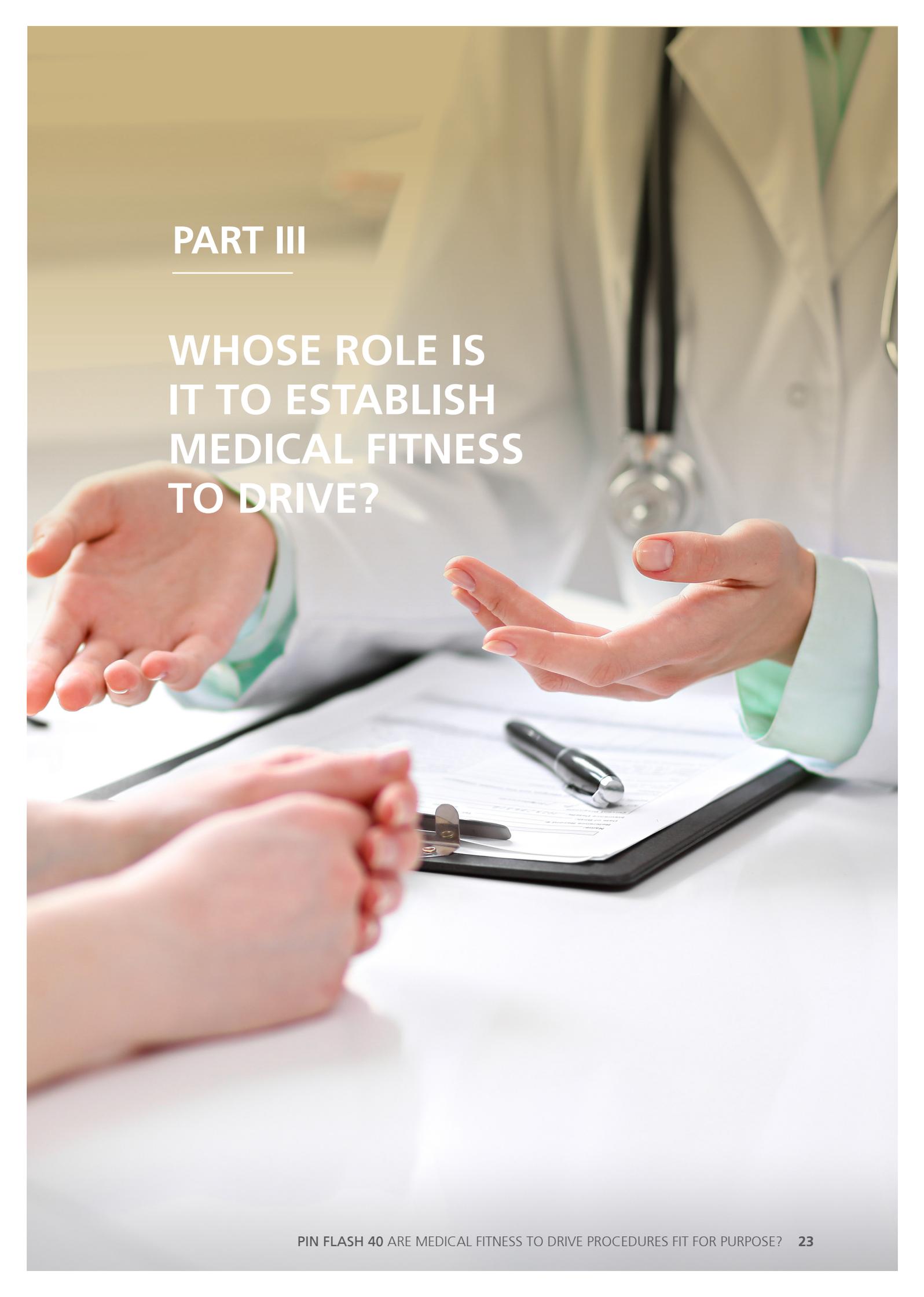
2.5 ETSC RECOMMENDATIONS

RECOMMENDATIONS TO NATIONAL GOVERNMENTS

- Consider the true road safety, health and well-being impact of stopping older drivers from driving and keep records of pedestrian falls in the road system that result in deaths and serious injuries.
- Research the most effective mechanisms to assess and manage liaison between healthcare and driver licensing systems to maximise safe mobility for those affected by conditions relevant to medical fitness to drive, having regard to the importance of doctor-patient relationships.
- Join efforts with local and regional governments to provide alternative transport options to the private car for those who cannot continue driving.

RECOMMENDATIONS TO THE EU

- Support Member States in developing and promoting materials to support successful drivers' self-regulation and transition to reduced driving and driving cessation. These materials should be made freely available in all Member States, to assist individuals in undertaking assessment of their own fitness to drive.
- Encourage Member States to keep records of pedestrian falls in the road system that result in deaths and serious injuries. Consider extending the definition of what constitutes a road collision to include pedestrian falls.
- Research the most effective mechanisms to assess and manage liaison between healthcare and driver licensing systems to maximise safe mobility for those affected by conditions relevant to medical fitness to drive, having regard to the importance of doctor-patient relationships.



PART III

**WHOSE ROLE IS
IT TO ESTABLISH
MEDICAL FITNESS
TO DRIVE?**

03

3.1 WHOSE ROLE IS IT TO ASSESS MEDICAL FITNESS TO DRIVE?

The role of medical doctors in assessing someone’s medical fitness to drive varies across the PIN countries. For the initial medical fitness to drive assessment (excluding the sight test), 17 PIN countries require a medical doctor (Table 4.). In the nine PIN countries where a self-assessment is used, medical doctors are usually only brought in if an issue arises from the responses. In Spain, medical fitness to drive tests are carried out in specialist assessment centres for all drivers on licence application and renewal. In Serbia, drivers referred from various sources for concerns over fitness to drive will be assessed in specialist assessment centres. In Croatia, medical fitness to drive assessments are carried out by an occupational health specialist. Sweden, Germany and Israel require a health care specialist only for the eye test.

SPAIN USES A DRIVER ASSESSMENT CENTRE TO ASSESS FITNESS TO DRIVE

In Spain, a medical-psychological assessment at a driver assessment centre is carried out on all drivers obtaining a driving licence for the first time as well as on all drivers renewing their licences at the mandatory intervals (every 10 years). These centres are private health centres authorised by the traffic administration to assess the psycho-physical fitness of a driver, every ten years as a general rule, and every five years for drivers over the age of 65.

The assessment procedure has two steps:

- At a basic level, where a multidisciplinary approach (medical: general practitioner, psychologist and ophthalmologist) evaluates the fitness.
- Specific protocol only when a disease that may affect driving is observed/reported.

This procedure is carried out according to national guidelines issued by the Health Ministry in 2007 in the Protocol for medical-psychological assessment for driver centres. This Protocol is currently under review.

The method by which fitness to drive is assessed does not change depending on the licensing situation in Belgium, the Netherlands and the UK (Tables 4 and 6). In Austria, whereas a GP with additional qualifications carries out the initial medical fitness to drive assessment on obtaining a licence, in re-licensing situations a specialist doctor is directly involved. In Ireland, Israel, Norway and Switzerland, whereas a self-assessment form is used on obtaining a licence, medical professionals are involved in other licensing situations. In Cyprus a doctor is involved in age-based licence renewals, but for re-licensing for those under the age of 70, the same procedure as for obtaining a licence is used (ie self-assessment). Spain is consistent in using its assessment centres for all licensing situations.

Table 6. Whose role is it to assess medical fitness to drive in other licensing situations?

**checked by national authority*

*** licence renewal not required but medical examination required at age 75*

	Self-Assessment	General Practitioner / any doctor	Specialist doctor / centre	Other
Age-based licence renewal	BE, NL*, UK	CH**, CY, FI, HU, IE, IL, LT, LU, LV, NO, PT, SK	EL, ES, IT, RO, RS, SI	HR
Other licence renewal	BE, NL*	CH, FI, HU, IE, LT, LU, LV, NO, PT, SK	CH, EL, ES, IT, PL, RO, RS, SE, SI	HR
Re-licensing	BE, CY, NL*, SE	CH, DK, FI, HU, IE, LT, LU, LV, NO, PT, SK	AT, CH, DE, EL, ES, IL, IT, PL, RO, RS, SI	HR

3.2 HOW ARE DECISIONS ON MEDICAL FITNESS TO DRIVE TAKEN?

When a health problem has been identified, the question on whether to continue driving depends not on a medical diagnosis but on the functional consequences of the illness. A given condition may indeed affect an individual's fitness to drive in different ways and to varying degrees.⁴²

The levels of training or guidance provided to those assessing medical fitness to drive in PIN countries varies. 11 PIN countries reported that they have guidelines which should be used by anyone assessing medical fitness to drive. 17 PIN countries reported that they have a regulation which stipulates how fitness to drive should be assessed. But there is often a difference between these two forms of guidance. Regulations often prescribe legal standards, for example, the list of medical conditions and disorders that affect fitness to drive and the standards that must be met i.e. levels of eyesight. In Luxembourg for example, the regulation stipulates the questionnaire which must be used for assessments. Guidelines, on the other hand, tend to build on these legal standards and provide medical practitioners with, for instance, clarifications or examples to help them make more informed decisions.

A clear set of guidelines issued to those assessing medical fitness to drive is known to have a positive effect.

A clear set of guidelines issued to those assessing medical fitness to drive is known to have a positive effect. In Belgium, Greece, Croatia, Latvia, and Slovakia, however, there are no guidelines to help those assessing medical fitness to drive. PIN experts from Belgium, Croatia and Latvia report that there have been calls for them.

MEDICAL FITNESS TO DRIVE GUIDELINES SEEM TO BRING DOWN NUMBERS OF COMPLAINTS

In Austria, the fitness to drive of licence applicants is primarily assessed by regular GPs. These GPs have to complete a 12-hour-training on traffic medicine, approved by the Austrian Medical Association and the Ministry of Transport. If a case requires further examination, the licence applicant or holder is referred to the medical officer at the local authority, who will

include the opinions of medical specialists in their assessment.

The Ministry of Transport issues Guidelines on Fitness to Drive that are binding for the authorities when assessing a driver's fitness. The Guidelines provide assistance to all those involved in the process of assessing fitness to drive: the GPs, the authorities and their medical officers, and the medical specialists. Numerous experts were included in the development of the guidelines which therefore represent a broad consensus among medical officers, medical expert associations and road safety experts.

For each area of fitness to drive – from locomotor disabilities to alcohol and drugs – the Guidelines on Fitness to Drive provide detailed criteria on how to determine whether a driver is fit or unfit to drive. They also list the medical tests and findings required for assessing each disorder. If a conditional licence is issued, the guidelines state which restrictions and licence codes should be applied. They also determine if and for how long the licence should be restricted (validity period) and the regular medical checks required during the validity period. The guidelines include forms for referral from the authority doctor to the medical specialist. These forms ensure that the expertise provided by the specialist will contain the information required for assessing fitness to drive.

Before the guidelines were first published in 2006, the Austrian Ombudsman Board regularly criticised the fact that licences were withdrawn based on inadequate medical assessments. Since the publication of the guidelines, it seems fewer complaints were reported.

In Germany, the Ministry of Transport and Digital Infrastructure has been issuing Guidelines on the Assessment of Fitness to Drive⁴³ since 1973. Experts in the individual medical fields continually update these guidelines on the basis of new research evidence and in order to ensure they are in line with developing EU legislation.

⁴² European Commission, Assessing the fitness to drive, <http://bit.ly/3psMnKp>

⁴³ https://www.bast.de/BAST_2017/DE/Verkehrssicherheit/Fachthemen/U1-BLL/BLL-Download.html?nn=1817128



Ireland is another PIN country with well-developed guidelines for those responsible for assessing medical fitness to drive. When a need for better guidance on medical fitness to drive was identified in Ireland in 2010, the Road Safety Authority (RSA) and the Royal College of Physicians of Ireland (RCPI) came together to develop a Traffic Medicine programme. The primary aim was to develop Medical Fitness to Drive guidelines that encapsulate the regulations in the EU Directive, with regular evidence-based updates. Introduced in 2014, Ireland's guidelines are supported by a traffic medicine education programme, ongoing engagement in research and pro-active communication with all stakeholders, including healthcare professionals, the public and road safety professionals. The National Office for Traffic Medicine (NOTM) was set up in 2011 and is possibly the only such centre in the world situated within a postgraduate medical college.

A study into the impact of Ireland's guidelines evaluated that 70% of Irish GPs are confident or very confident in assessing MFTD at an early stage and show a high level of awareness of the new guidelines. 86% of general practitioners (GPs) reported using the guidelines. The study concluded that case-based workshops and implementing teaching programmes were probably the most effective way of improving a medical practitioner's assessment of medical fitness to drive. There is a clear interest among GPs in further educational support and training in traffic medicine, particularly MFTD assessments.⁴⁴

Another study on the Inclusion of Medical Fitness to Drive in Medical Postgraduate training curricula noted that medical fitness to drive guidelines linked with an education programme are well received and take up is high.⁴⁵

"A key part of the success of the programme is the engagement with representatives in over 30 different healthcare disciplines as well as the Irish police, the RSA and motorist and patient representatives in a Working Group which oversees the updating of guidelines, research and other activities of the programme.

A particular strength of the programme is public outreach, with the development of a portfolio of leaflets on individual conditions relevant to driving, emphasising drivers' responsibility for maintaining their own medical fitness to drive, as well as public information stands at major public events.

The National Office for Traffic Medicine delivers an active programme, enabled through cross-disciplinary collaboration to produce evidence-based, annually updated Medical Fitness to Drive guidelines. This is supported and facilitated through research and education activities that provide knowledge, skills and increased understanding of assessing and monitoring driver fitness. Allied with an effective communication strategy the programme has been successful in engaging healthcare professionals, road safety stakeholders and the general public to promote safe mobility in Ireland".

Prof. Desmond O'Neill, National Office of Traffic Medicine, Ireland

⁴⁴ Amila Kahvedžić 1, Regina Mcfadden, Gerry Cummins, David Carr, Desmond O'Neill (2015), Impact of new guidelines and educational program on awareness of medical fitness to drive among general practitioners in Ireland <https://bit.ly/3bHi6Dn>

⁴⁵ Laith Al Awazi, Aisling O'Byrne, Lily Roche, Desmond O'Neill, Margaret Ryan (2020), Inclusion of Medical Fitness to Drive in Medical Postgraduate training curricula

3.3 WHOSE ROLE IS IT TO REPORT SOMEONE MEDICALLY UNFIT TO DRIVE?

Medical professionals assessing medical fitness to drive who do not have a legal responsibility to report patients to the authorities can find themselves walking a tightrope between patient confidentiality and a duty to protect the public.

may affect their medical fitness to drive to the authorities (Table 7). In 11 PIN countries they are. The responsibility to report ill health to the licensing authorities lies with the licence holder in 10 PIN countries.

In 16 PIN countries, medical professionals are not obliged to report patients with illnesses that

Table 7. Responsibility for Reporting Driver Ill Health
**only in some cases*
***not legally obliged but recommended*

	YES	NO
Is a driving licence holder legally bound to report ill-health to the licensing authorities?	CY, EL, ES, FR, HU, IE, IL, IT, NO, UK	AT, BE, CH, DE, DK, FI, HR, LT, LU, LV, NL, PL, PT, RO, RS, SE, SI, SK
Do professionals dealing with patients that have conditions that will affect their MFTD have to report these patients to the licensing authorities?	DE*, DK, FI, HR, HU, IL, LV, NL, NO, SE, SK,	AT, BE, CH, CY, EL, ES, FR, IE, IL, IT*, LT, LU, PL, PT, SI**, UK

In Sweden, medical professionals have a legal obligation to inform the Swedish Transport Agency (STA) if they come across a patient that has a medical condition that, according to the regulations, is not compatible with driving. The STA will then investigate the medical fitness to drive. That having been said, if the patient has a condition that can be improved, the law allows for a doctor-patient-agreement, where the patient refrains from driving until they have recovered their ability. The agreement is recommended to be used only in cases where the patient has a condition from which it is possible to recover and where that recovery is expected to take no longer than six months.

In the UK, responsibility lies with the licence holder to report ill health to the authorities and doctors are not obliged to report patients. The UK's Driver and Vehicle Licence Authority (DVLA) has produced a guide for medical professionals assessing medical fitness to drive which aims to help them in situations where a patient refuses to stop driving and there is a risk that this may cause death or serious harm to others.⁴⁶

The CIECA Report found it concerning that in only half of the countries included in their report are drivers mandated to report any medical conditions relevant to their fitness to drive, if these conditions develop between driving licence renewals.⁴⁷

National governments should consider whether legal requirements and professional ethics concerning reporting to licensing authorities in their country of concerns about a patient's medical fitness to drive reflect a satisfactory balance between the importance of doctor-patient relationships and the safety of other road users, and whether the level of awareness and understanding among medical professionals of medical fitness to drive is adequate to enable them to make judgements about this balance.

⁴⁶ DVLA (2020) Assessing fitness to drive – a guide for medical professionals, <https://bit.ly/3blQei8>

⁴⁷ Englund, L., O'Neill, D.J., Pisarek, W., Ryan, M., Wagner, T., on behalf of Medical Fitness to Drive Subgroup of the CIECA Topical Group on Fitness to Drive. 2020. CIECA Report Medical Fitness to Drive. CIECA, Brussels. <https://bit.ly/39rFiEg>

3.4 ETSC RECOMMENDATIONS

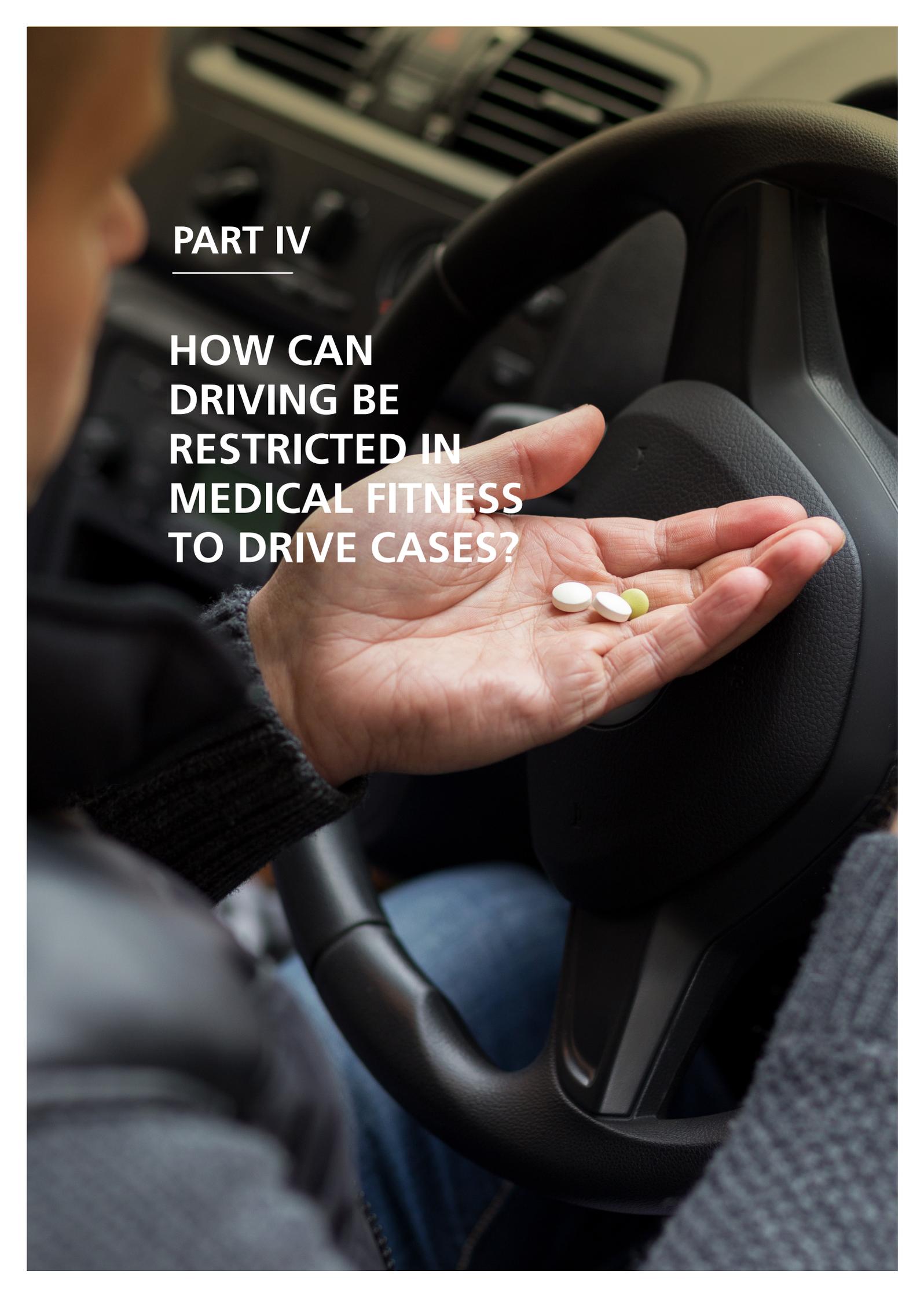
RECOMMENDATIONS TO NATIONAL GOVERNMENTS

- Develop and implement evidence-based screening tools and protocols based on international best practice to help medical professionals consistently identify medical conditions which may affect fitness to drive at all ages. Review the process for declaring medical conditions at licence application, renewal and for emergent conditions between licence renewals.
- Within national medical fitness to drive guidelines and regulations, stress the role of General Practitioners (GPs) as the primary point of call for identifying those who may be at-risk in terms of their fitness to drive, initiating an assessment of a person's fitness to drive and influencing how long and under what circumstances a person continues driving. This influence can range from direct advice to the patient to discussions started by family members about a person's challenges with driving.
- Develop (if not yet done) and mandate for medical professionals evidence-based training programmes which have been shown to be effective and are accepted in particular by family doctors (GPs) in assessing a person's fitness to drive.

RECOMMENDATIONS TO THE EU

- In order to increase consistency in assessing driver's medical fitness to drive across the EU, develop an effective and transparent screening protocol based on international good practices to help medical professionals detect potential medical conditions.
- Develop and promote evidence-based guidelines for family doctors and other medical professionals involved in assessing the functional capabilities of someone suspected of being an unfit driver.
- Support Member States in developing and evaluating educational programmes for GPs that are both effective and accepted by medical practitioners.
- Increase the attention to the inclusion of traffic medicine universally in the training of medical and healthcare professionals, as noted in previous reports for the European Commission.⁴⁸
- Research the most effective mechanisms to assess and manage liaison between healthcare and driver licensing systems to maximise safe mobility for those affected by conditions relevant to medical fitness to drive, having regard to the importance of doctor-patient relationships.

⁴⁸ Polders E. et al. (2015) Elder Safe - Risks and countermeasures for road traffic of elderly in Europe, <https://bit.ly/3qo8GAV>

A close-up photograph of a person's hand holding three pills (two white, one green) over a black steering wheel. The person is wearing a dark sweater. The background shows the car's interior, including a dashboard and air vents.

PART IV

**HOW CAN
DRIVING BE
RESTRICTED IN
MEDICAL FITNESS
TO DRIVE CASES?**

04

4.1 THE LIST OF CONDITIONAL CODES LISTED IN THE EU DRIVING LICENCE DIRECTIVE

The EU Driving Licence Directive⁴⁹ lists a number of harmonised community codes which can be included on a driving licence as a condition for driving. Among these codes are limited use codes:

61. Limited to daytime journeys (for example: one hour after sunrise and one hour before sunset)
62. Limited to journeys within a radius of ... km from holder's place of residence or only inside city/region
63. Driving without passengers
64. Limited to journeys with a speed not greater than ... km/h
65. Driving authorised solely when accompanied by a holder of a driving licence of at least the equivalent category
66. Without trailer
67. No driving on motorways
68. No alcohol
69. Restricted to driving vehicles equipped with an alcohol interlock in accordance with EN 50436. Indication of an expiry date is optional (for example '69' or '69(01.01.2016)')

Other codes allow people with disabilities to drive a vehicle that has been modified or to drive with glasses or contact lenses.

These codes can be a useful tool in the medical fitness to drive debate – whether in relation to older or impaired drivers or those with drug and alcohol dependency issues.

Only Austria and Estonia were able to provide data on the use of codes in medical fitness to drive situations. In Austria, by far the most common code to be included on a driving licence regards the wearing of glasses or contact lenses: 51,158 driving licences were issued in 2019 with the code 1.06 indicating the need to wear glasses or contact lenses. By comparison, in the same year, only 64 licences were issued with the code 61, 18 with the code 64 and 1,133 with the code 68.

Data from Estonia shows that 23,608 licences were issued in 2019 with a conditional code. Although a breakdown of the codes issued is not available, the example of Austria suggests that the majority may relate to the wearing of glasses or contact lenses.

National experts who replied to a survey as part of the International Commission for Driver Testing (CIECA) Medical Fitness to Drive Report⁵⁰ reported that the use of some restriction codes is widespread. Their research shows that the most commonly used codes are: code 61 (restrictions to daytime driving only), code 62 (limited within restricted radius), code 64 (limited to restricted speeds), and code 67 (no motorway driving).

In addition to EU codes, Germany also uses national codes. These codes have three digits and are only valid on German territory. Code 104 is directly related to medical fitness to drive and states that the driver is only allowed to drive with a valid medical certificate.

4.2 ALCOHOL INTERLOCKS AS PART OF REHABILITATION FOR DRIVERS SUFFERING FROM ALCOHOL USE DISORDERS

Studies have repeatedly shown that alcohol interlock programmes, when combined with rehabilitation programmes, cut reoffending rates both during and after the driver has been required to install the device in their vehicle.

Driving while under the influence of alcohol poses a serious risk to road safety. 25% of all road deaths in the EU have been estimated to be alcohol related.⁵¹ Diagnostic, therapeutic and rehabilitation aspects of alcohol-use disorders have been neglected in the Directive and in many guidelines. The upcoming revision of the EU Driving Licence Directive represents an opportunity for review.

⁴⁹ EU Driving Licence Directive consolidated text - <https://bit.ly/2IQDXw8>

⁵⁰ Englund, L., O'Neill, D.J., Pisarek, W., Ryan, M., Wagner, T., on behalf of Medical Fitness to Drive Subgroup of the CIECA Topical Group on Fitness to Drive. 2020. CIECA Report Medical Fitness to Drive. <https://bit.ly/3t7UFtd>

⁵¹ European Commission (2018), Alcohol, Directorate General for Transport, <http://bit.ly/2p9PjBE>

Included among the possible interventions to reduce alcohol-impaired driving, alcohol interlock programmes give offenders who would normally lose their driving licence the possibility to continue driving, as long as their blood alcohol concentration (BAC) is below a level that can be specified in the interlock device.

A study commissioned by the European Commission's DG MOVE and published in 2014 concluded that alcohol interlocks can offer an effective and cost-beneficial improvement to road safety in Europe, particularly for repeat offenders and commercial vehicles.⁵² The ignition interlock device makes sure that drivers can only start the engine after having completed a breath test that has indicated that their BAC is below a level that has been specified for them. At the same time, the device can collect information that can be used to monitor drink-driving behaviour. Studies have repeatedly shown that alcohol interlock programmes, when combined with rehabilitation programmes, cut reoffending rates both during and after the driver has been required to install the device in their vehicle.⁵³ It also reduces their temptation to drive without a licence. Austria, Belgium, Denmark, Finland, France and Sweden are among the countries that offer alcohol interlock offender programmes.⁵⁴

New minimum EU vehicle safety requirements agreed in 2019 will soon making it easier to retrofit an alcohol interlock device. Carmakers will have to make available a standardised information dataset to facilitate the installation of an interlock on all new models as from 2022 and on all new vehicles as from 2024.⁵⁵

The issue of how to deal with drivers suffering from alcohol use disorders and dependency is not addressed in a uniform way across all PIN countries. Some countries such as Austria, Belgium, Germany, Sweden and the UK do not return withdrawn licences to alcohol dependent drivers until they have demonstrated a considerable period of abstinence (usually 6 months or in Germany, up to a year). Other countries allow drivers caught drink driving to continue driving only with an alcohol interlock, whether they are dependent or not.

But Annex III of the EU Driving Licence Directive states that 'Driving licences shall not be issued to, or renewed for, applicants or drivers who are dependent on alcohol or unable to refrain from drinking and driving'.

When the Directive was adopted in 2006 alcohol interlocks were not widespread and very few Member States had programmes. The consequence today is that a significant group of potential participants are excluded from current alcohol interlock programmes and deprived an effective help in managing their use of alcohol. Including alcohol-dependent offenders, with proper medical supervision, would increase participation, cut recidivism and reduce driving without a valid licence.

In Finland, the Finnish Crash Data Institute (OTI) analysed data from in-depth investigations of fatal collisions between 2014 and 2018 and found that although 82%⁵⁶ of the drivers causing a fatal drink-driving collision had a valid driving licence, repeat drink-driving was nevertheless common. Of the drink-drivers, 38% had previous drink-driving convictions during the five years preceding the collision. Consequently, the Finnish investigation teams recommend the use of alcohol ignition interlocks in the prevention of drink-driving.

Petteri Harjuvaara from TRAFICOM explains how alcohol interlocks can be used in Finland on health grounds:

"Under the national Driving Licence Act, the medical standards of fitness to drive can also be regarded as being met if the vehicle used by the driver has an alcohol interlock device that prevents drinking and driving. The condition of using an alcohol interlock device can thus be set on the driving licence. Should the physician be unsure of the criteria for the right to drive being met, he or she may instead suggest that the driver use an alcohol interlock device on health grounds."

In Finland, 18% of drivers causing a fatal drink-driving collision had no valid driving licence

⁵² ECORYS (2014), Study on the prevention of drink-driving by the use of alcohol interlock devices <https://goo.gl/U8kBVU>

⁵³ An example among many others: <https://bit.ly/2MYgjzq>

⁵⁴ ETSC (2020), Alcohol Interlocks in Europe: An Overview of Current and Forthcoming Programmes, <http://bit.ly/3pONBIQ>

⁵⁵ Regulation (EU) 2019/2144 on type-approval requirements for motor vehicles, <https://bit.ly/2YM2U09>

⁵⁶ Drink-drivers total: n=198, 100%, n=164, 82% had a valid driving licence, n=7, 4% hadn't ever had a driving licence, n=3, 2% had expired driving licence, n=19, 10% of drivers were in a driving ban, n=5, 2% no information

4.3 DRIVING UNDER THE INFLUENCE OF MEDICATION

The EU Driving Licence Directive states that, ‘Driving licences shall not be issued to or renewed for applicants or drivers who are dependent on psychotropic substances or who are not dependent on such substances but regularly abuse them, whatever category of licence is requested’.

As part of the EU co-funded DRUID project (Driving Under the Influence of Drugs, Alcohol and Medicines), roadside surveys were conducted in 13 countries across Europe and blood or oral fluid samples were analysed from 50,000 drivers. These revealed that alcohol was present in 3.48%, illicit drugs in 1.90%, medicines in 1.3%, combinations of drugs or medicines in 0.39% and alcohol combined with drugs or medicines in 0.37%.⁵⁷

The effects of drugs and medicines on driving skills are less well known than for alcohol. Detection mechanisms are also less well advanced, and current guidelines may also not adequately cover under-treatment and poor patient compliance. In this report, we only focus on medicines (licit drugs) and how they affect driving. Knowledge around the use of medicines while driving is growing but ensuring health professionals, drivers and enforcement officials are well informed is not always easy.

The EU co-funded DRUID project sought to understand the relative risk level of being seriously injured or killed in an accident while positive for various substance groups. Their project findings can be seen in Table 8.

Table 8. DRUID Table 2: Project findings — the relative risk level of being seriously injured or killed in a collision while positive for various substance groups⁵⁸

Notes: Cannabis and amphetamines: owing to very different single-country estimates, the risk estimates must be treated with caution. Benzoyllecgonine, cocaine and illicit opioids: owing to few positive cases and controls, the risk estimates must be treated with caution.

Risk level	Relative risk	Substance
Slightly increased risk	1–3	BAC ≤0.1 g/l BAC Cannabis < 0.5 g/l
Medium increased risk	2–10	BAC between 0.1g/l and 0.5g/l Benzoyllecgonine, Cocaine, Benzodiazepine, Opioids < 0.8 g/l Illicit opioids s and z-drugs Medicinal opioids
Highly increased risk	5–30	BAC between 0.5g/l and 0.8 g/l Amphetamines < 1.2 g/l Multiple drugs
Extremely increased risk	20–200	BAC ≥ 1.2 g/l Alcohol in combination with drugs

The EU’s DRUID project also proposed a categorisation system for medicines and driving. The four categories are for the information of prescribing doctors and pharmacists. The DRUID project also proposed 3 warning levels aimed at patients (Table 9). In Spain, the DRUID categorisation system for drugs is integrated in the country’s national consensus document on drugs and driving.⁵⁹ France has adopted the DRUID 3 patient warning levels. In Germany the

system is under review and in Belgium the DRUID categorisation system for both professionals and patients was recommended by the VIAS Institute in 2019⁶⁰ but they are yet to be adopted nationally.⁶¹

⁵⁷ EMCDDA (2012) Findings from the DRUID Project <https://bit.ly/3akJoyZ>

⁵⁸ Ibid.

⁵⁹ Documento de consenso sobre medicamentos y conducción en España: información a la población general y papel de los profesionales sanitarios (in Spanish) <https://bit.ly/2MB3tHq>

⁶⁰ VIAS (2019) Press Release : L’institut Vias demande l’apposition de pictogrammes sur les médicaments en fonction de leurs effets sur la conduite (In French and Dutch) <https://bit.ly/3otEine>

⁶¹ In Ireland they were reviewed and not adopted following concerns over effectiveness and validity.

Information for physicians and pharmacists

Warning for patients
(with warning symbols and standard descriptions per country)

Table 9. DRUID Table 3. categorisation system for medicines and driving ⁶²

Note: (1) The assigned categories relate to the acute or first-time use of the medicine (at the start of treatment).

Description of categories with levels of impairment (1)	Information on how to advise patients	Warning for patients (with warning symbols and standard descriptions per country)
Category 0 Presumed to be safe or unlikely to have an effect on fitness to drive	Confirm that the medicine will be safe for driving, provided that combinations with alcohol and other psychotropic medicines are excluded	[No warning needed]
Category 1 Likely to have minor adverse effects on fitness to drive	Inform the patient that impairing side-effects may occur, especially during the first days that may have a negative influence on his or her driving ability. Advise the patient not to drive if these side-effects occur	Warning level 1: Do not drive without having read the relevant section on driving impairment in the package insert
Category 2 Likely to have a moderate adverse effect on fitness to drive	Inform the patient about the possible impairing side-effects and the negative influence on his or her driving ability. Advise the patient not to drive during the first few days of the treatment. If possible, prescribe a safer medicine, if acceptable to the patient	Warning level 2: Do not drive without the advice of a healthcare professional. Read the relevant sections on driving impairment in the package insert before consulting the physician or pharmacist
Category 3 Likely to have a severe adverse effect on fitness to drive, or presumed to be potentially dangerous	Inform the patient about the possible impairing side-effects and the negative influence on his or her driving ability. Urgently advise the patient not to drive. Consider prescribing a safer medicine, if acceptable to the patient	Warning level 3: Do not drive. After a period of treatment, seek medical advice about the conditions to start driving again

The two most common ways of communicating the impact of a medicine on someone's fitness to drive are through the prescribing doctor or via a visual or written notice inside or on a medicine's packaging. In 24 PIN countries, the information was provided either on the packaging or in the instructions inside the box. 23 PIN countries reported that patients are informed by the prescribing doctors. (Table 10).

Only 8 PIN countries (Denmark, Finland, Hungary, Ireland, Israel, Lithuania, Spain and Sweden) reported that they have national guidelines on how a patient should be informed of the impact of a prescribed medicine on their fitness to drive.

⁶² EMCDDA (2012) Findings from the DRUID Project <https://bit.ly/3akJoyZ>



Table 10. Are patients who are prescribed medication given advice on how the medication may affect their fitness to drive?

Are patients who are prescribed medication given advice on how this medication may affect their fitness to drive?	YES prescribing doctor	YES dispensing pharmacist	YES Visual/written notice on/in packet	YES advice on website	Other
AT	X		X		
CH	X	X	X	X	
CY	X	X	X		
DE	X	X	X	X	X
DK	X	X	X	X	
EL	X	X	X		
ES	X	X	X		
FI	X	X	X		
FR			X	X	
HR	X	X	X	X	X
HU	X	X	X		
IE	X		X		X
IL	X	X	X	X	X
IT	X	X	X	X	
LT	X		X		X
LU	X	X	X		
LV	X	X	X	X	
NL	X	X	X	X	
NO	X	X	X	X	X
PL	X		X		
PT			X		
RS	X	X	X		
SE	X		X	X	
SI	X	X	X	X	X
UK	X				

Denmark has strict regulations around the use of certain medicines that affect driving, for example benzodiazepines. A doctor prescribing benzodiazepines must issue a medical driving ban to the patient for a longer or shorter period of time, depending on the strength of the medicine and an individual assessment.

An increasing number of medicines are used without medical prescription. This evolution justifies the DRUID recommendations for a harmonised external warning using common pictograms on boxes of medicines inducing side effects on driving. In France, this type of warning showed positive effects as it triggered dialogue between patients and health professionals.⁶³

⁶³ ETSC (2010) PRAISE Report Fitness to drive <https://bit.ly/2WhC8vh>



In France, the National Agency for the Safety of Medicines and Health Products (ANSM), worked with pharmacology and clinical accident specialists to develop a classification of all medicines likely to impair driving ability. Their work led to the development, in 2003, of a simple tool that everyone can understand: a pictogram in three colours (yellow, orange, red), affixed to the outer packaging of the drugs concerned. The aim of the system is to deliver practical prevention messages and thus provide concrete help to patients and healthcare professionals (mainly prescribing physicians and pharmacists).

The list of medications that may affect driving and that are covered by the pictogram is updated when necessary.⁶⁴ Each pictogram only refers to the medication being taken alone and not in combination with other medications.

The three levels of pictograms are:

Level 1



Taking the drug does not usually affect driving, but patients should be informed before driving.

Level 2



Taking the medication may, in some cases, affect driving skills; do not drive without the advice of a health care professional (doctor, pharmacist).

Level 3



Do not drive during the use of the drug and seek the advice of a doctor before resuming driving afterwards.

4.4 REMOVING A DRIVING LICENCE - LICENCES MORE LIKELY TO BE REMOVED FOR DRINK-DRIVING THAN FOR OTHER MEDICAL FITNESS TO DRIVE ISSUES

From the data that we were able to gather from PIN countries for this report it seems that the number of licences removed for medical fitness to drive issues (excluding drink driving) is far fewer when compared with licences removed for driving under the influence of alcohol. It is fair to say, however, that detection levels for drink driving are much higher than for most other medical fitness to drive conditions.

In Switzerland in 2019, for example, of a total of 72,744 licences withdrawn, 4,992 (6.9%) were due to a medical reason or infirmity. By comparison, 12,281 (16.9%) licences were removed due to drink-driving.

Similarly, in Austria, in 2019, 327 driving licences were withdrawn due to lack of medical or psychological fitness to drive and 6740 licences were withdrawn due solely to other reasons. The proportion withdrawn due to lack of medical fitness was slightly higher in that year in Slovakia where 600 (7%) of a total of 8672 driving licence withdrawals or suspensions were due to a lack of medical fitness to drive.

In Sweden, in 2020, 5,176 (12%) Group 1 (cars and motorcycles) licence holders had their licence revoked due to medical reasons out of a total of 41,603 licences revoked for all reasons.

⁶⁴ AFSSAPS (2009), Médicaments et conduite automobile/Medications and car driving (in French) <https://bit.ly/3oZpEoQ>

4.5 ETSC RECOMMENDATIONS

RECOMMENDATIONS TO NATIONAL GOVERNMENTS

- Apply the DRUID⁶⁵ categorisation and labelling of medicines that affect driving ability and support information campaigns promoting awareness among medical professionals and among the general population.⁶⁶
- Make wider use of conditional licences (Codes 61 to 69 of Directive 2006/126/EC⁶⁷) to allow those who may be at slight risk to continue to drive under certain circumstances. In the context of drink-driving, apply code 69 when a driver is restricted to drive only a vehicle equipped with an alcohol interlock.
- Establish and actively mandate the use of alcohol interlocks as part of rehabilitation programmes for recidivist and high-level first time offenders. Allow drivers with alcohol dependency to participate in a rehabilitation programme and be issued with a conditional licence with mandatory use of an alcohol interlock, as long as it is combined with medical supervision.
- Develop and promote materials to assist individuals (helped where appropriate by family members) in undertaking assessment of their own fitness to drive and in making an informed decision towards reduced driving and driving cessation if needed. Provide information about conditional codes giving entitlement to drive only under certain circumstances.
- As part of their initial and continuous training, inform and/or remind doctors of their duty to advise their patients on the impact of prescription medicines on driving.

RECOMMENDATIONS TO THE EU

- Encourage Member States to make wider use of conditional licences (Codes 61 to 69 of Directive 2006/126/EC⁶⁸) where possible and report to the EC the scale of their use, so as to aid monitoring and improvement. In the context of drink-driving, Member States should be encouraged to apply the code 69 under which a driver is restricted to drive only a vehicle equipped with an alcohol interlock.
- Allow drivers with alcohol dependency to participate in a rehabilitation programme, and be issued with a conditional licence with mandatory use of an alcohol interlock, as long as it is combined with medical supervision.
- Ensure the timely adoption of the implementing legislation on facilitation of alcohol interlock installation for motor vehicles.
- Mandate the DRUID⁶⁹ categorisation and labelling of medicines that affect driving ability.⁷⁰

⁶⁵ EU funded project DRUID (Driving under the Influence of Drugs, Alcohol and Medicines) <https://bit.ly/2YbVAun>

⁶⁶ de Gier J.J. et al. (2011), Establishment of Criteria for a European Categorisation System for Medicines and Driving, Deliverable 4.2.1 of the EU funded project DRUID (Driving under the Influence of Drugs, Alcohol and Medicines), <https://bit.ly/2YbVAun>.

⁶⁷ EU Directive 2006/126/EC on Driving Licences <https://bit.ly/2JwMleE>

⁶⁸ Ibid.

⁶⁹ EU funded project DRUID (Driving under the Influence of Drugs, Alcohol and Medicines) <https://bit.ly/2YbVAun>

⁷⁰ de Gier J.J. et al. (2011), Establishment of Criteria for a European Categorisation System for Medicines and Driving, Deliverable 4.2.1. of the EU funded project DRUID (Driving under the Influence of Drugs, Alcohol and Medicines), <https://bit.ly/2YbVAun>.

ISO COUNTRY CODES

COUNTRY	ISO CODE
Austria	AT
Belgium	BE
Bulgaria	BG
Switzerland	CH
Cyprus	CY
Czech Republic	CZ
Germany	DE
Denmark	DK
Estonia	EE
Greece	EL
Spain	ES
Finland	FI
France	FR
Great Britain	GB
Croatia	HR
Hungary	HU
Ireland	IE
Israel	IL
Italy	IT
Lithuania	LT
Luxembourg	LU
Latvia	LV
Malta	MT
The Netherlands	NL
Norway	NO
Poland	PL
Portugal	PT
Romania	RO
Serbia	RS
Sweden	SE
Slovenia	SI
Slovakia	SK
The United Kingdom	UK



European Transport Safety Council

20 Avenue des Celtes
B-1040 Brussels
dovile.adminaite@etsc.eu
Tel: +32 2 230 4106
www.etsc.eu/pin
🐦 @ETSC_EU

