

# Section 1

## Introduction

### 1.1 Changes to the guide

The Canadian Medical Association (CMA) has prepared this guide to help physicians determine whether their patients are medically fit to drive a motor vehicle safely. This 7th edition is designed to serve as a handy office resource and user-friendly tool for physicians. Existing sections on various medical conditions have been updated extensively and new sections — such as “driving cessation” and “functional assessment” — have been added. The medico-legal section has been revised with a focus on reporting, and a new appendix from the Canadian Medical Protective Association (Appendix A) has been included.

Each section now includes an “alert box” highlighting key information in the section. This is to help physicians who may have to make immediate decisions about a patient’s fitness to drive, often in a clinical situation not directly related to driving. The book’s index and subheadings have been designed to help physicians quickly find the discussion of relevant medical conditions as they assess their patients. The appendices contain tools for evaluating alcohol (Appendix B and C) and dementia illnesses (Appendix D) as well as contact names and numbers for the provincial and territorial ministries of transportation (Appendix E).

Also new to the guide are sections on assessing medical fitness for railway and aviation workers. These sections include a summary of the regulatory framework governing railway workers and pilots, along with a discussion of functional assessment for different categories of workers with reference to comparable classes of driver’s licences and the identification of standards that are specific or unique to these industries. These sections include contact information for reporting potentially unfit railway workers and pilots. Maritime workers are not included, as currently there are no federally mandated medical fitness standards for these workers.

### 1.2 Functional assessment

Since the 6th edition of this guide was published, a landmark legal ruling\* identified the right of Canadian drivers to have their licence eligibility determined based on an individ-

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\*British Columbia (Superintendent of Motor Vehicles) v. British Columbia (Council of Human Rights), [1999] 3 S.C.R. 868. Available at [scc.lexum.umontreal.ca/en/1999/1999rcs3-868/1999rcs3-868.html](http://scc.lexum.umontreal.ca/en/1999/1999rcs3-868/1999rcs3-868.html) (accessed 24 Aug. 2006).

ual functional assessment, rather than exclusively on a diagnosis, with a corresponding responsibility for licensing authorities to accommodate drivers wherever possible within safe limits. This can often be achieved with appropriate licence conditions or restrictions or vehicle modifications, which may be based on a physician's recommendation. Physicians should be aware of the need to review their patients' medical fitness to drive based on an assessment of their overall functional capacity, including their ability to accommodate to medical and physical deficits. Physicians should also consider the impact of multiple medical conditions, as well as aging or other circumstances, on their patients' overall functional capacity and fitness to drive.

Many drivers have chronic medical conditions that have the potential to impair their fitness to drive. For these drivers, the level of knowledge of and insight into their medical condition, along with their ability to self-manage the condition, compliance with physician-prescribed treatment and ability to modify their driving activities to accommodate their condition should form a basis for physician assessment of their fitness to drive.

This edition has a new section (section 4, Driving cessation) that addresses these issues.

Physicians may refer their patients for an assessment of their fitness to drive. Driver assessment is multifactorial and may include a road test with a driver examiner. A road test alone may be indicated in some circumstances to assess individual capability to adapt to a physical or medical disability, but it is not the same as a functional driver assessment. Physicians can locate a driver assessment centre by contacting the provincial or territorial ministry of transportation in their jurisdiction (see Appendix E).

### **1.3 Medical standards for fitness to drive**

Many of the recommendations in this guide are the same as the standards found in such documents as the Canadian Council of Motor Transport Administrators' (CCMTA) Medical Standards for Drivers (formerly called the National Safety Code). The CCMTA publication was developed in meetings of the medical consultants from each province and territory who are responsible for advising the motor vehicle licensing authorities on medical matters and safety in driving. These medical standards are revised annually by the Medical Advisory Committee of the CCMTA, and the majority are adopted by the provincial and territorial motor vehicle licensing departments. This achieves a uniformity of standards across Canada with the result that a driver licensed in one province or territory is considered licensed in all other provinces and territories.

To minimize impediments to commercial drivers who must cross the Canada–United States border, an agreement has been reached whereby each country recognizes the medical standards of the other. The only exceptions concern insulin-treated diabetes, epilepsy and hearing deficits. Canadian commercial drivers with these conditions cannot cross the border

to the United States with their commercial vehicle. Private drivers and commercial drivers who are driving a private vehicle are not affected by this measure.

## **1.4 Methods**

To produce this edition, the CMA undertook an evidence-based review of medical standards under the leadership of a Scientific Editorial Board, comprising 5 member physicians and an editor-in-chief with a range of relevant practice and advisory experience pertaining to driver fitness and safety. Starting with the 2000 6th edition, the editorial board produced a draft for this new edition. Some sections were written or edited by selected physicians with expertise in the clinical field, while others reflect consensus documents from specialty societies (notably the Canadian Cardiovascular Society and the Canadian Ophthalmological Society). The draft was widely circulated to medical and non-medical organizations, provincial driving authorities and selected experts. All comments were considered by the Scientific Editorial Board.

Although there is still comparatively little scientific evidence available to assess the degree of impairment to driving that results from most medical disabilities, the evidence is increasing. The Scientific Editorial Board was aided in the preparation of this guide by a review of recent scientific reports for each section.\* In addition, a “risk of harm” formula (Appendix F) is introduced to support the Canadian Cardiovascular Society recommendations on fitness to drive (section 13). However, the recommendations remain mainly empirical and reflect the fact that the driving standards are based on the consensus opinion of an expert panel supported by a careful review of the pertinent research, examination of international and national standards and consensus, as well as the collected experience of a number of specialists in the area. They are intended to impose no more than common sense restrictions on drivers with medical disabilities. This guide is not a collection of hard-and-fast rules; nor does it have the force of law.

## **1.5 The physician’s role**

Every physician who examines a patient to determine fitness to drive must always consider both the interest of the patient and the welfare of the community exposed to the patient’s driving. In the course of the examination, the physician should not only look for physical disabilities but also endeavour to assess the patient’s mental and emotional fitness to drive safely. A single major impairment or multiple minor functional defects may make it unsafe

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\*Interested readers are referred to a study undertaken by Monash University Accident Research Centre, the most complete and detailed review of the evidence supporting medical standards for drivers at the time of writing of this guide. See Charlton JL, Koppel S, O’Hare M, et al. *Influence of chronic illness on crash involvement of motor vehicle drivers*. Victoria, Australia: Monash University Accident Research Centre; 2004. Available at: [www.monash.edu.au/muarc/reports/muarc213.html](http://www.monash.edu.au/muarc/reports/muarc213.html) (accessed 23 Aug 2006).

for the person to drive. Likewise, physicians should be aware of their responsibility or legislated requirement to report patients with medical conditions that make it unsafe for them to drive, according to the jurisdiction in which they practise. The physician should also be aware of the circumstances in which patients will likely function. For example, the extreme demands related to operating police and emergency vehicles suggest that drivers of these vehicles should be cautioned that even relatively minor functional defects may make it unsafe for them to drive.

## **1.6 Public health**

Motor vehicle crashes kill about 3000 people in Canada each year and injure another 250 000. By contrast, the number of deaths attributable to SARS in 2003 was 44 and the number of deaths from West Nile Virus in 2005 was 24.

Most motor vehicle crashes involve people between the ages of 15 and 55 years. Crashes are a leading cause of death and disability in these age groups. Major contributing factors to crashes in younger people are alcohol, speeding and poor judgement, including driving inappropriately for weather and road conditions and failure to use safety equipment. Also, when driving exposure is taken into account, drivers over the age of 75 have much higher than average crash rates. In older people, the primary reason for crashes is the development of medical conditions that affect fitness to drive. Private drivers increasingly share the roads with commercial drivers and almost half of the crashes that occur involve at least one commercial vehicle.

Anything that physicians can do to encourage safe driving by their patients has a positive public health impact. Questions regarding drinking and driving and seat belt use should be considered to be at least as important as questions regarding smoking behaviour. The prevention of motor vehicle crashes has at least as great an impact on population health as trauma programs that treat crash victims. The health of commercial drivers is also an important consideration given their long hours on the road and their vulnerability to metabolic disease, fatigue and stimulant use. It is imperative that physicians understand the increased risks associated with obstructive sleep apnea, cardiovascular diseases, addictions and other conditions that may reduce driver fitness.

## **1.7 Levels of medical fitness required by the motor vehicle licensing authorities**

The motor vehicle licensing authorities have the power to issue and suspend licences. Legislation in the provincial and territorial jurisdictions stipulates that these authorities can require licensed drivers to be examined for their fitness to drive. "Fitness" is considered to mean fitness in the medical sense. The provincial motor vehicle licensing authorities have the final responsibility for determining licence eligibility, and fitness to drive is a major determi-

nant of eligibility. The recommendations of the CMA outlined in this guide are meant to assist physicians in determining whether a person is medically fit and to identify conditions that will likely disqualify a person from holding a licence.

The classification of drivers' licences does not take into account the context of driving activities, nor do licensing authorities regulate driving activity. However, the amount driven and the environment in which driving takes place are important predictors of risk. This guide refers to "private" and "commercial" drivers with varying recommended standards of fitness. Drivers of vehicles for which a Class 5 licence is applicable may be considered to be commercial drivers based on the amount driven. Physicians should assess their patients for fitness to drive in the context in which they will be driving and advise them accordingly.

The motor vehicle licensing authorities require a higher level of fitness of commercial drivers who operate passenger-carrying vehicles, trucks and emergency vehicles. These drivers spend many more hours at the wheel, often under far more adverse driving conditions, than private vehicle drivers. Commercial drivers are usually unable to select their hours of work and cannot readily abandon their passengers or cargo should they become unwell while on duty. Commercial drivers may also be called on to undertake heavy physical work, such as loading or unloading their vehicles, realigning shifted loads and putting on and removing chains. In addition, should the commercial driver suffer a collision, the consequences are much more likely to be serious, particularly when the driver is carrying passengers or dangerous cargo. People operating emergency vehicles are frequently required to drive under considerable stress because of the nature of their work. Inclement weather, when driving conditions are less than ideal, is often a factor. This group should also be expected to meet higher medical standards than private drivers.

Physicians should be aware that the medical standards of fitness and criteria for licensure for drivers of motor vehicles are not necessarily the same as those for pilots and railway workers. Medical conditions that are not of concern with respect to driving may be considered disabling for pilots or railway workers. The physical demands of the activity and the ability to stop if unwell vary between the various modes of transport leading to different assessments of the risk created by medical conditions.

## **1.8 Driver's medical examination report**

If, after completing a driver's medical examination, a physician is undecided about a patient's fitness to drive, the physician should consider arranging for a consultation with an appropriate specialist. A copy of the specialist's report should accompany the medical form when it is returned to the motor vehicle licensing authority. Alternatively, physicians may consider referring a patient to a driver assessment centre if a functional assessment is beyond the scope of the examining physician.

A medical examination is mandatory for some classes of licences. The licensing authority may base a final decision regarding a driver's licence eligibility on the examining physician's opinion. Where no opinion is given or where the information in the report differs significantly from previous reports submitted by other physicians or conflicts with statements made by the driver, the motor vehicle licensing authority will often ask its own medical consultants for a recommendation.

### 1.9 Payment for medical and laboratory examinations

In some jurisdictions, patients are responsible for paying for all medical reports and laboratory examinations carried out for the purpose of obtaining or retaining a driver's licence, even though these examinations or tests may have been requested by the motor vehicle licensing authority. In other provinces, examinations for some drivers, such as seniors, are insured services or it is the responsibility of the employers of the drivers to cover such costs.

### 1.10 Classes of drivers' licences and vehicles

Drivers' licences are divided into classes according to the types of motor vehicles the holder is permitted to drive. **The classifications can vary across jurisdictions, and graduated licensing systems have been instituted in some jurisdictions. In this guide, therefore, licences and vehicles are classified generically, and readers should refer to the provincial or territorial classification when necessary** (see Appendix E for contact information).



**Class 1:** Permits the operation of a motor vehicle of any type or size, with or without passengers, and a trailer of any size.



**Class 2:** Permits the operation of a motor vehicle of any type or size, with or without passengers. A Class 2 licence does not permit the holder to pull a semi-trailer.



**Class 3:** Permits the operation of a motor vehicle of any size. A Class 3 licence does not permit the holder to carry passengers or to pull a semi-trailer.



**Class 4:** Permits the operation of a taxicab, a bus carrying no more than 24 passengers and emergency response vehicles, such as ambulances, fire trucks and police cars.



**Class 5:** Permits the operation of any motor vehicle or small truck (a towed vehicle cannot exceed 4600 kg). A Class 5 licence does not permit the holder to drive an ambulance, a taxicab or a bus or to pull a semi-trailer.



**Class 6:** Permits the operation of a motorcycle, motor scooter or minibike only. All other classes must be endorsed to include Class 6 before the holder may operate a motorcycle, motor scooter or minibike.

### **1.11 Contact us**

Physicians who have comments and suggestions about the guide's recommendations are invited to contact the Canadian Medical Association, 1867 Alta Vista Drive, Ottawa ON K1G 3Y6, by email at: [cmamsc@cma.ca](mailto:cmamsc@cma.ca).