



A higher age for compulsory medical testing?

As seniors are full of vitality these days, it was recently proposed in Dutch parliament to raise the age for the compulsory medical examination to establish fitness to drive. In her reaction the minister of Infrastructure and the Environment promised to ask SWOV's advice about the effect on road safety if the age for the medical examination for the driving licence for motorcycles and passenger cars were to be raised from 70 to 75.

Drivers aged 70 and older who want to renew their driving licence must take a medical examination to establish their fitness to drive. Based on the advice of the medical examiner the Dutch Driving Test Organisation CBR decides on renewal of the driving licence and can request further examination by a medical specialist and/or a driving assessment. In response to the proposal in Dutch Parliament and a promise made by the Dutch minister of Infrastructure and the Environment, SWOV investigated whether raising the age for medical testing from 70 to 75 would have road safety consequences.

Risks

The risk for older drivers of being involved in a serious crash increases steadily between the ages of 70 and 75. This is partly due to increasing vulnerability which is the reason that crashes

result in serious or fatal injury more frequently, and is partly caused by a lessening fitness to drive with increasing years. The reduced fitness to drive is a consequence of illnesses and disorders that increase the crash rate. The decrease of road safety is determined by the relative risk of a disorder (the extent to which the crash rate increases) and how often the disorder occurs among older drivers (the prevalence). Disorders with a fairly high relative risk and a rather high prevalence among older drivers are dementia, strokes, heart failure, diabetes, reduced useful field of view and glare sensitivity. Useful field of view and glare sensitivity are not tested by the medical examiner. Visual acuity, however, is tested thoroughly, although a moderate reduction of visual acuity barely leads to an increased crash rate. Brain disorders and cognitive disorders, on the other hand, generally have a rather high relative risk.

Few seniors declared unfit

Dutch Driving Test Organisation CBR data indicates that only few seniors are declared unfit permanently. If this is the case, it is mainly due to a stroke, dementia or a progressive chronic eye condition like cataract. Most drivers pass the examination or are prescribed an aid; often spectacles. Although few drivers are declared unfit, the number of licence holders shows a strong decline after the age of 65. Many drivers do not renew their licence and do not bother about taking the medical examination.

Consequences

As so few people fail the medical examination, declaring drivers unfit to drive at a later age as a result of raising the minimum age will have no major road safety consequences. Aids being prescribed at a later age will have slightly more unfavourable road safety effects, as so many drivers are prescribed an aid as a result of the medical examination. The overall estimate about the effect of raising the age for compulsory testing within the present system amounts to a single extra fatality and a few more serious road injuries per year.

Abolishing age-related testing

Research in several European countries did not indicate that road safety is better in countries with an age-related compulsory medical examination of older drivers than it is in countries without such compulsory testing. Therefore, SWOV would rather be in favour of abolishing the age-related medical examination than of raising the age for compulsory testing; the condition being that the medical practitioner (general practitioner or specialist) is given a responsibility when a person is suspected to be unfit to drive. As is the case in Sweden, it

should be compulsory for medical practitioners to report these suspicions, also if the patient is younger than 70. The follow-up examination by a specialist and the driving test, however, must be maintained, as should the rehabilitation approach: supporting older drivers in such a way that they can continue to participate in traffic safely. In addition, further professionalization of the entire process of medical examinations needs to be continued based on scientific research into valid, reliable, and practically useful examination methods.

The SWOV report that has been published on this subject:

Road safety effects of raising the minimum age from 70 to 75 for the medical examination for driving licences A and B. W. Vlakveld & R. Davidse (2011). R-2011-6. SWOV, Leidschendam