

Work by Alberta researchers may free MDs from awkward fitness-to-drive decisions



Features

Chroniques

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In brief

AN ALBERTA RESEARCHER HAS DEVELOPED TESTS that determine whether a senior citizen with cognitive impairment is fit to drive. The issue is important to the medical profession because these drivers sometimes cause accidents and physicians often have to decide whether they should still be allowed to get behind the wheel.

En bref

UN CHERCHEUR DE L'ALBERTA A MIS AU POINT DES TESTS permettant d'établir l'aptitude à conduire un véhicule d'une personne âgée atteinte de déficience cognitive. La question intéresse la profession médicale, car ces conducteurs sont la cause de nombreux accidents et les médecins ont souvent à décider si on doit leur permettre de prendre le volant.

Most towns have had some serious automobile accidents, but the one that shook residents of Viking, Alta., last summer was different from most: a 78-year-old woman who had driven from the West Coast to Viking, 100 km southeast of Edmonton, died after making a fatal error in judgement. After coming to a full stop before crossing a major intersection, the woman inexplicably stepped on the gas and crossed into a tractor-trailer's path. She died instantly.

No one knows if the woman was fit to drive, and her death means the point is moot. However, work by an Edmonton researcher means doctors now have another tool to help determine if elderly Canadians are competent to drive.

Professor Emeritus Allen Dobbs of the University of Alberta's Department of Psychology has designed empirical tests that licence-granting agencies can use to identify motorists whose driving ability is questionable because their mental functioning is declining.

Existing driving examinations, road tests and physical examinations can allow motorists with dangerous mental impairment to continue driving because the tests are designed for new drivers, not those suffering from dementia.

Dobbs and his colleagues, who are based at Edmonton's Glenrose Rehabilitation Hospital, wanted to change that. They worked with 3 groups:

- young, healthy drivers aged 30 to 40;
- old, healthy drivers aged 65 or older with no symptoms of dementia; and
- drivers older than 65 with some degree of cognitive impairment.

The goal was to use a road test to determine how the problems "unsafe" drivers experience are revealed in traffic conditions. Mistakes were common to members of all 3 groups. They were made "often" by the young healthy drivers, "frequently" by old healthy drivers and even more frequently by the cognitively impaired.

However, Dobbs discovered a set of errors that was unique to patients with dementia. These included going the wrong way on to a freeway, merging directly into another car's path and stopping at a green light. "We found no normal older

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or younger person ever made one of those errors during the driving evaluation," he said.

Since then he has designed tests that will screen out drivers with cognitive impairments that affect driving without putting anyone at risk during a road test. The tests measure a driver's ability to concentrate on one task, shift attention from one task to another, and concentrate on multiple tasks concurrently. Subjects are asked to complete 5 tests, including steering a computer-generated object through a series of moving objects, a task all drivers face when they cross a busy intersection. Drivers in the other 2 groups were used to define acceptable performance limits. Dobbs' group has already worked with more than 600 drivers, the largest sample of its type tested anywhere.

The research may help physicians such as Eamon Cunningham, one of Viking's general practitioners. Like many family physicians, he has been approached with requests to stop senior citizens from driving because they pose a hazard. Family members sometimes approach him and explain that "Dad drove over the cat" or "Dad ran into the oak tree."

Cunningham said a physician's decision to rule that a person is not fit to drive is usually based more on a gut instinct than empirical evidence. The task is never easy, especially for family doctors who have known the patient for years.

In some cases, Cunningham won't move to have the licence revoked; instead, he will place strict limits on where patients can drive. For instance, limiting their driving to a small town will "at least get them off the highway."

This decision can be crucial because it still leaves seniors with some independence and dignity, and helps them remain active. In fact, said Cunningham, being able to drive to the town grocery store, church or seniors' centre may "save them from the dementia of depression brought on from sitting around at home doing nothing."

Physicians have a hard time making rulings that affect a patient's right to drive because those who report unfit drivers run the risk of losing a patient and ruining what had been a good doctor-patient relationship. (Reporting unfit drivers is a "shall report" regulation in Ontario, British Columbia, Manitoba and Prince Edward Island and a "may report" rule in Alberta, Quebec, Nova Scotia and Saskatchewan. Other provinces have no regulations.)

At the moment, Dobbs is taking referrals for testing from physicians and Alberta's Transport Safety Board. He hopes existing licensing agents will one day conduct the screening tests, taking the decision out of doctors' hands and protecting their relationships with patients.

Dobbs stressed that his work is not intended to push elderly drivers off of the road but to prevent seniors who are still able to drive safely from losing their privileges if a doctor makes a bad judgement call.

He explained that a diagnosis of some form of dementia doesn't necessarily mean that a licence should be revoked. He agreed with Cunningham's assessment that determining seniors' ability to drive safely "has been a 'best guess' kind of thing."

The decision to revoke a licence has enormous personal ramifications because of its impact on mobility and independence. "In our society we have no more significant marker of confidence than that driver's licence," said Dobbs.

Many seniors self-regulate their driving by avoiding driving in rush-hour traffic, at night or during storms. Unfortunately, many people experiencing declines in mental functioning aren't even aware of their driving problems.

Cunningham agrees on the social and practical importance of mobility, especially in rural areas. For instance, some of his patients are farmers who have retired in town and enjoy driving out to survey their land, to monitor the progress of crops on land they once farmed, or to visit family and friends. He is worried that a program such as Dobbs' could be used to carry out a "witch hunt" against senior drivers.

Dobbs said decisions involving these drivers, whether they involve setting limits or giving drivers who fail the cognitive screen test a chance to complete a road test, will involve a policy decision by government.

He said his goal has simply been to tackle an issue that is going to take on increasing importance because of Canada's rapidly changing demographics. "The 85-plus group is the fastest-growing age group in North America, and we also know that more people are driving and they are driving longer into old age."

He said the numbers, and the size of the potential problem, point in only 1 direction. Today, 1 in 5 Canadian drivers is a senior citizen. "In a couple of decades," he noted, "it's going to be 1 in 3." ?