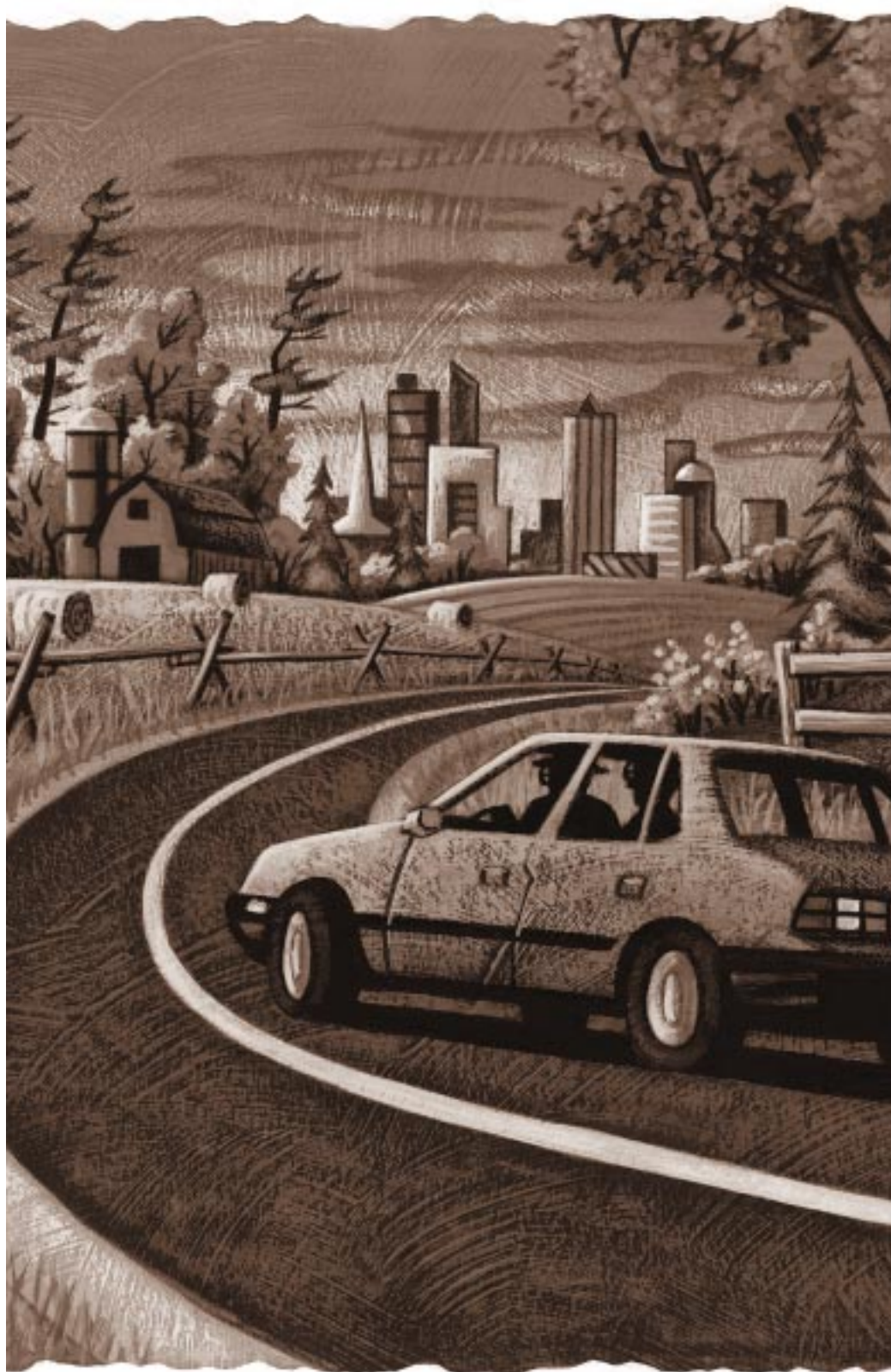


Seniors behind the wheel

by *Irwin Bess*

Being able to live independently is important to all adults, but it is an issue of particular concern to seniors. Research has shown that the single greatest fear of most older people is that of becoming dependent. Although independence can take many different shapes and forms, for the 3.4 million Canadians aged 65 or over, it often means having a car and being able to drive. A comfortable, convenient means of transportation, driving allows seniors to visit family and friends, attend appointments, and participate in recreational and volunteer activities. This reliance on a car for an active lifestyle is particularly true for those living in small towns and rural areas, where little or no public transit or special-needs transportation may be available.

In 1996, about one-half of seniors living in private households (1.7 million) were driving a car, mini-van or light truck. And as the large baby-boom generation ages, the number of older drivers will increase over the next few decades. Using data from several Statistics Canada surveys, this article examines various facets of car use among seniors and highlights



differences between those living in urban and rural areas.

Rural and small town seniors rely more heavily on their cars

Getting around poses different challenges in small towns or the country than in large cities. First, while residents of large cities have access to different forms of public and private transportation, seniors in small towns and rural areas tend to have far fewer transit options. Second, people in small towns and rural areas generally live farther from family, friends, physicians and grocery stores than residents of large urban centres. According to the 1996 General Social Survey (GSS), nearly 20% of rural seniors lived more than a 30-minute walk from the nearest grocery or convenience store, compared with only 5% of their urban counterparts. It comes as no surprise, then, that rural seniors are more likely to drive than seniors in urban centres. In 1996, some 60% of rural and small town seniors were drivers compared with 46% of those living in large cities.

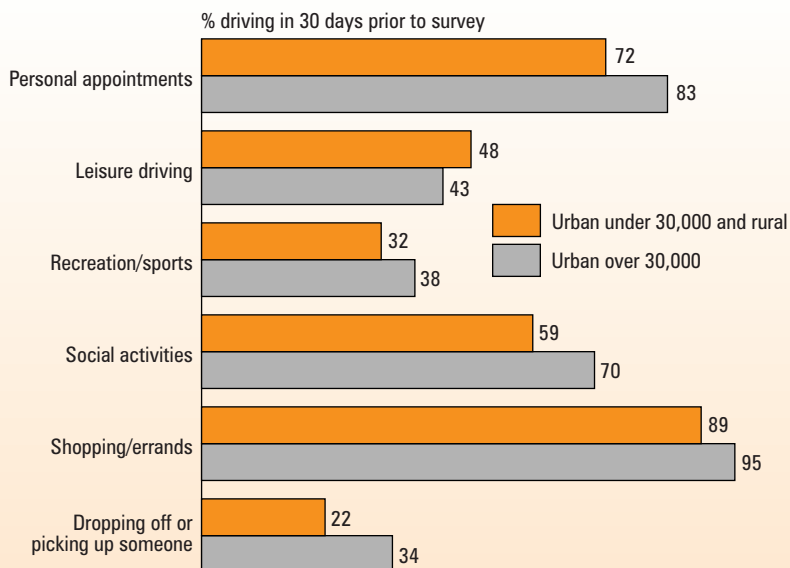
Regardless of whether they were rural or urban residents, the majority of drivers aged 65 and over drove only a few times a week. Furthermore, most of the distances travelled were comparatively short. Most often, seniors used their car for shopping, personal appointments such as visiting physicians, and family or social get-togethers. Relatively few older drivers used the car for long-distance trips or to pick up and drop off other people.

Operating a car is more expensive in rural areas

Owning and operating a private vehicle can be a costly proposition, particularly at a time in life when people tend to live on fixed incomes. In 1996, rural households headed by persons aged 65 and over spent approximately \$4,800, or 17% of their total budget, on the purchase and operation of a car or



Seniors use their car most often for shopping and personal appointments



Source: Statistics Canada, National Private Vehicle Use Survey, 1996.



What you should know about this study

Most of the data in this article come from the National Private Vehicle Use Survey. Compiled by Statistics Canada, for Natural Resources Canada, this survey was conducted between January and September 1996. The exclusion of respondents during the three months between October and December may result in slightly biased estimates of vehicle use due to the nature of winter driving patterns. The sample includes individuals 15 years or older living in 2,013 private households in Canada's 10 provinces.

Other data come from the 1996-97 National Population Health Survey (NPHS), designed to collect information on the health of Canadians. The survey sample included over 13,000 Canadians aged 65 years and over in residential households in all provinces and territories. Populations on Indian Reserves, Canadian Forces Bases and some remote areas of Quebec and Ontario were excluded. Respondents were asked about their health conditions, use of health services, risk factors and socioeconomic status.

Large towns or cities: urban areas with populations over 30,000 people.

Small towns: urban areas with populations under 30,000 people.

Rural areas: regions with populations less than 1,000 people (or less than 400 persons per square kilometre).

Valid provincial driver's license: excludes persons with a learning permit or suspended license and those who have let their license expire.

truck. In contrast, seniors in large urban areas spent a substantial \$2,000 less, about \$2,800, which amounted to only 9% of their budget. When it comes to financing a vehicle, rural seniors, with their typically lower incomes, are in a difficult situation. Yet it is this group whose need for a car — because of fewer transportation

alternatives and greater distances — is the highest.

Senior men more likely to drive than senior women

Regardless of area of residence or marital status, senior men are far more likely to drive than senior women. Results of the 1996 National Private

Vehicle Use Survey (NAPVUS) indicate that in the majority (55%) of households where the husband held a valid license, he was the exclusive driver of the family car. Whether or not the wife was licensed made little difference — the husband still did the bulk of the driving.

In small towns and rural areas, 77% of husbands had driven the household vehicle during the 30 days prior to the survey, compared with only 36% of wives; in large urban areas, 65% of husbands and 37% of wives had done so. Although the differences between the sexes were not as pronounced among unmarried seniors, their driving patterns were similar to those of their married counterparts: men were much more likely to sit behind the wheel.

When older women do drive, whether in large cities or in small towns and rural areas, it is mostly over very short distances: 65% of married senior women who drove the family car travelled an average of only 15 kilometres per day. In contrast, only 42% of older married men tended to drive such short distances. Among unmarried seniors, the differences were less pronounced, with 38% of women and 35% of men driving 15 kilometres or less per day.

Older women's lack of driving experience may have far-reaching consequences, particularly since they tend to outlive their husbands. Once alone, they may find that unless they drive, they must either significantly curtail their activities or rely on others for help with transportation. Either way, their ability to lead an independent life might be limited.

Age-related health limitations may affect driving performance

Most conditions that may eventually affect driving — for example, reduced vision, hearing problems, and impaired mobility arising from arthritis or rheumatism — begin at around age 55.¹ While at first these changes are

CST Rural and small town seniors were most likely to be drivers...

| | Rural area | Urban area | | |
|---|------------|--------------|-------------------|--------------|
| | | Under 30,000 | 30,000 to 500,000 | Over 500,000 |
| % of seniors who hold licenses ¹ | 72 | 62 | 63 | 52 |
| % of seniors who are drivers ² | 59 | 60 | 54 | 46 |

...but the majority used their car only a few times a week

| Total senior drivers ('000) | 316 | 241 | 490 | 699 |
|-----------------------------|-----|-----|-----|-----|
| | % | | | |
| Every day | 27 | 34 | 39 | 35 |
| A few times a week | 64 | 61 | 57 | 57 |
| Less than once a week | 10 | 5 | 4 | 7 |

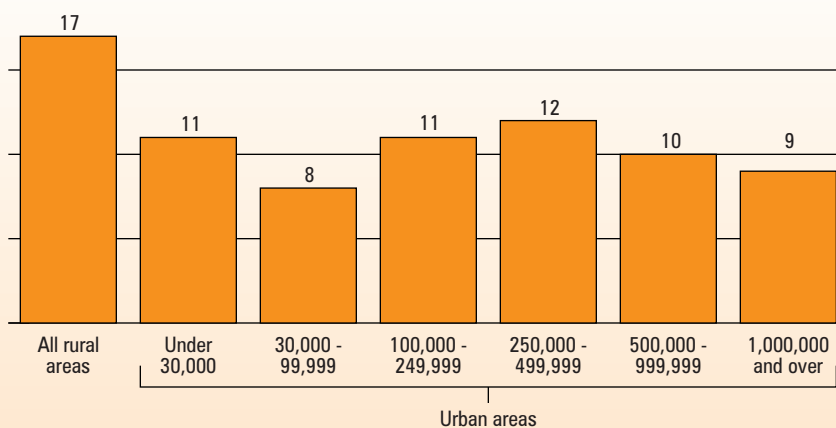
1. In households with at least one working vehicle.

2. Reported vehicle use during 30 days prior to survey.

Source: Statistics Canada, National Private Vehicle Use Survey, 1996.

CST Rural seniors spent more on their car than other seniors

% of seniors' total budget



Source: Statistics Canada, Family Expenditure Survey, 1996.

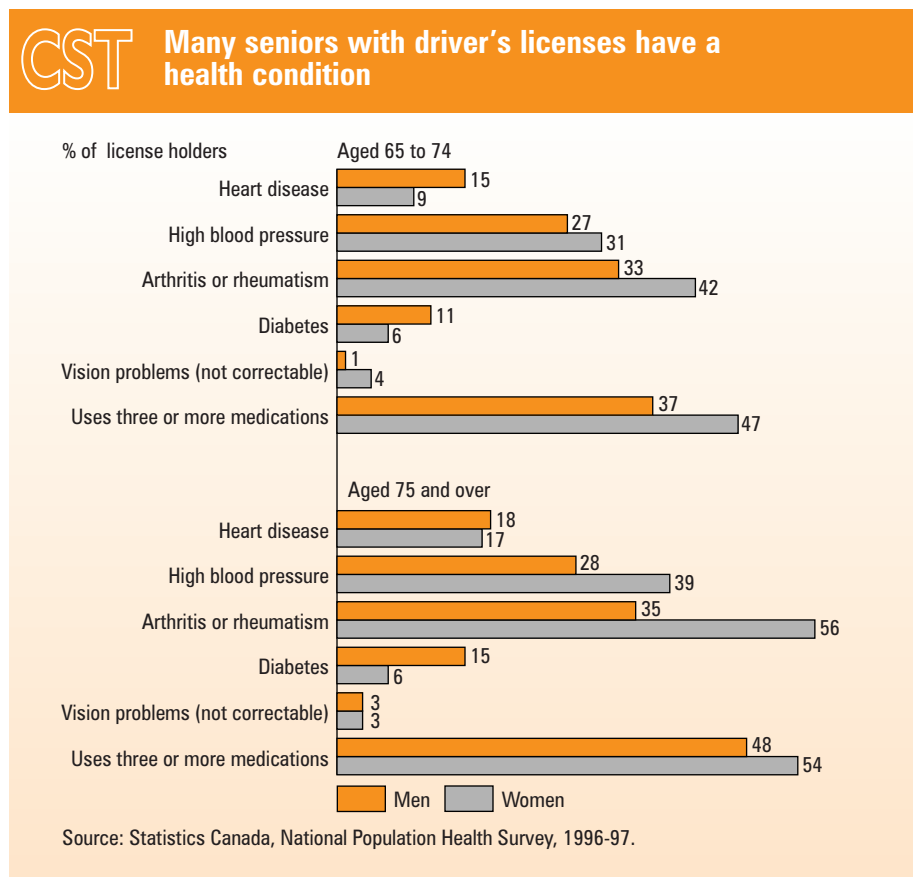
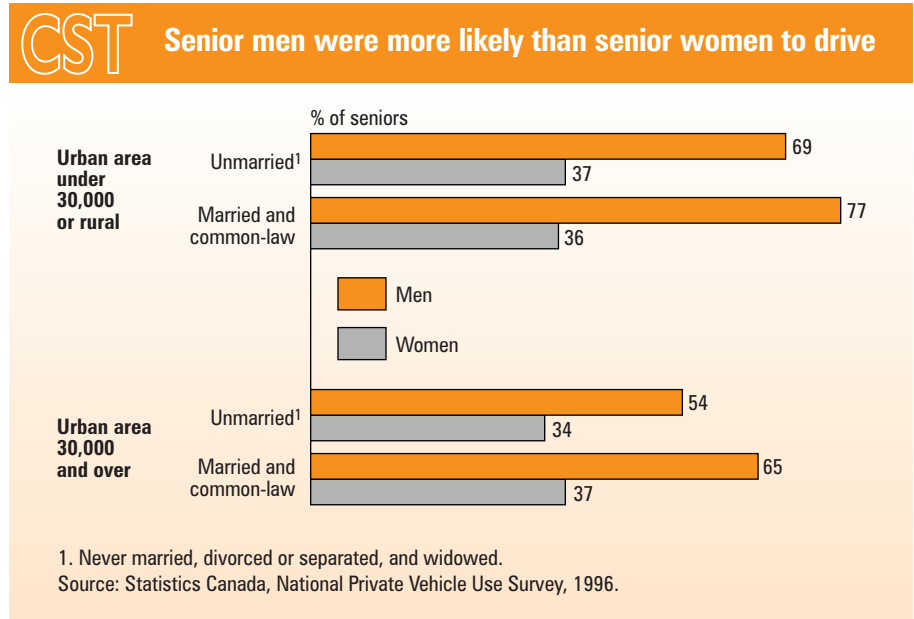
often minor, they tend to become more pronounced as people age. According to the 1996-97 National Population Health Survey (NPHS), about 16% of men and women between the ages of 65 and 69 experienced physical pain that was severe enough to restrict some of their activities and potentially affect their ability to drive safely. In addition, the prevalence of dementia (of which Alzheimer's disease is the most common) increases sharply with age, starting at around 65 years. Characterized by progressive loss of cognitive function, in particular memory, dementia has also been linked with increased risk of collisions.²

As seniors age, multiple medical conditions, along with the simultaneous use of several prescription medications, tend to become more common. These factors can also interfere with driving, perhaps resulting in slowing reaction time by that fraction of a second needed to avoid an accident. NPHS results indicate that among those licensed to drive, 48% of men and 54% of women over age 75 had taken at least three different medications in the two days prior to the survey.³ As well, 56% of women and 35% of men in this age group suffered

from chronic arthritis or rheumatism, conditions that could make maneuvers such as those required to make sharp turns or merge with heavy traffic particularly difficult.

Studies have found that older drivers tend to compensate for

age-related health limitations by driving shorter distances and avoiding night driving, busy highways and downtown areas. Taking special measures may be particularly important on inter-city and rural routes, where speed limits exceed 60km/hour and a



1. Transportation Research Board. 1988. *Transportation in an Aging Society: Improving Mobility and Safety of Older Persons*. Vol.1. Washington: National Research Council. See also Wilkins, K. and E. Park. 1996. "Chronic conditions, physical limitations and dependency among seniors living in the community," *Health Reports* (Statistics Canada Catalogue 82-003) 8, 3: 7-14.

2. Fitten, L., C. Wilkinson, R. Little, M. Burns, N. Pachana, J. Mervis, R. Malmgren, D. Siembieda and S. Ganzell. 1995. "Alzheimer and vascular dementias and driving: A prospective road and laboratory study," *The Journal of the American Medical Association* 273, 17: 1360-1365.

3. Although the NPHS does not distinguish between licensed drivers and those who are licensed but do not drive, it can offer insights into the health of seniors who have valid driver's licenses.

high-speed collision is likely to result in severe injuries or death.⁴ In addition to being faster, 60km/hour roads tend to be situated outside urban areas where poorer visibility, sparse lighting, and reduced traction during winter demand a high degree of concentration and first-rate performance.

The health and accident profile of seniors has resulted in discussion about the relationship between aging and safe driving, and the necessity of monitoring change. According to one view, seniors should drive only as long as they maintain essential driving

skills — proven through periodic testing — and meet certain medical requirements. With this in mind, a number of provinces have instituted mandatory medical examinations for senior drivers; others rely on discretionary written, road or other tests when recommended by police, physicians, families or the public.⁵

On the other hand, there is concern that such measures may discourage seniors with appropriate skills and abilities from driving, and increase their dependence on others. For experienced older drivers, who

may have safely operated a vehicle for many years, having to take a road test can be a stressful and traumatic experience. Moreover, losing their license may deprive them of the mobility necessary for living active, independent lives. Research has found that seniors who give up driving may be reluctant to ask for help with transportation; as a result, they often experience periods of inactivity, feelings of loneliness or loss of control. These negative experiences can, in turn, be detrimental to their general health and well-being.⁶

CST Older driver fatalities and injuries

Although seniors tend to drive outside rush-hour periods, during daylight hours and under conditions of clear visibility, they remain vulnerable to collisions resulting in fatalities or major injuries. While older drivers are involved in fewer collisions than drivers aged 16 to 24, this may be because seniors drive less. An Ontario study found that on the basis of kilometres driven, older drivers actually get into approximately the same number of accidents as their 16- to 24-year-old counterparts.¹ And seniors who are involved in an accident are more likely to die from their injuries or take longer to recover. Although in 1996 seniors represented 11% of the population, they accounted for 18% of all fatalities and 6% of injuries occurring on Canadian roadways (including not only drivers, but also passengers and pedestrians).

The prevalence of men among senior drivers increases their exposure to fatal collisions and injuries, particularly on high-speed roads. According to Transport Canada, senior men driving on highways or rural roads with speed limits in excess of 60 km/hr accounted for about 57% of all older driver fatalities in 1996.

| Posted speed of road | Driver fatalities | | Driver injuries | |
|----------------------|-------------------|-----------|-----------------|--------------|
| | Men | Women | Men | Women |
| Over 60 km/hr | 136 | 33 | 1,847 | 778 |
| Under 60 km/hr | 56 | 14 | 3,449 | 2,326 |
| <i>Total</i> | <i>192</i> | <i>47</i> | <i>5,296</i> | <i>3,104</i> |

Note: Table only includes drivers aged 65 and over.
Source: Transport Canada, Custom Tabulation, 1996.

1. Tasca, L. 1998. *An Overview of Senior Driver Collision Risk*. Ontario Ministry of Transportation, Road Safety Program Office: Toronto.

Summary

The car is an important part of many seniors' lives, particularly in small towns and rural areas. Driving allows seniors to engage in social, cultural and recreational activities as well as to perform routine tasks such as grocery shopping or keeping a dentist's or doctor's appointment. In the absence of a car, or the ability to drive, seniors may lose their independence and, in some cases, their identity as active members of society.

Unfortunately, some seniors may find that, as time goes by, driving becomes more difficult. This is an especially important consideration for older married women, who may rely on their husbands to do most or all of

4. In 1996, about three-quarters of fatalities involving drivers age 65 and over occurred on these types of roads. Transport Canada. 1996. Custom tabulations.

5. Seniors may also have the option of taking refresher training such as the "55 Alive Mature Driving Program," which is designed to ensure that older drivers realize their limitations and compensate for age-related changes in physical condition. Training includes road safety and collision prevention measures.

6. Yassuda, M., J. Wilson and O. Mering. 1997. "Driving cessation: The perspective of senior drivers," *Educational Gerontology: An International Journal* 23, 6: 525-538.

| Province | Mandatory medical exam | Mandatory driver's test(s) | Discretionary requirements |
|-----------------------|---|--|--|
| Newfoundland | Yes – at ages 75, 80 and every 2 years thereafter. | No | Physician or police may request road test. |
| Prince Edward Island | No | No | Physicians, family members and general public may request medical, vision and/or road tests if senior involved in collision, multiple violations, or operating a vehicle in an unsafe manner. |
| Nova Scotia | No | No | Family members, police and insurance personnel may recommend medical, vision, written and/or road tests. |
| New Brunswick | No | No | Physicians, family members or police may recommend medical, vision and/or road test. |
| Quebec | Yes – at ages 75, 80 and every 2 years thereafter. | No | Same as New Brunswick. |
| Ontario | Yes – at age 80 and every 2 years thereafter. | Yes – knowledge test and traffic safety workshop at age 80 and every 2 years thereafter. | Road test is required for seniors over 70 years if involved in a collision in which at fault. Road test may be required after vision and knowledge tests or if recommended by physician, police or driver assessment counsellor. |
| Manitoba | No | No | Physicians or police may request medical, vision, written, oral and/or a reduced version of the road test. Failure to pass requires completion of a full-length road test. |
| Saskatchewan | No | No | Same as New Brunswick and Quebec. |
| Alberta | Yes – at ages 75, 80 and every 2 years thereafter. | No | Physicians or police may recommend medical, vision and/or road tests which may result in driving restrictions. |
| British Columbia | Yes – every 2 years if first license obtained after age 74; at age 80 for all drivers and every 2 years thereafter. | No | Family members, physicians or police may report drivers they feel warrant investigation. A driver may be asked to complete a medical, vision and/or road test. |
| Northwest Territories | Yes – at ages 75, 80 and every 2 years thereafter. | No | Same as British Columbia. |
| Yukon | Yes – at ages 70, 80 and every year thereafter. | No | Same as New Brunswick, Quebec and Saskatchewan. |

Source: Provincial licensing agencies, March 1999.

the driving. Even though women are likely to outlive their husbands, men hold the only valid license in many husband-wife households. In the event of losing their partner in old age, women who have never or rarely

driven may have to begin to do so at that time or depend on others for help. However, given the increasing number of younger women driving, this situation may not persist in the future.