

The Older Driver

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Driving provides older people freedom, independence, and key social interactions with their community that many people take for granted in their youth. But the privilege of driving is based on the ability to safely operate a motor vehicle. Drivers aged 70 and over have an increased motor vehicle crash risk per miles driven in comparison to middle-aged drivers. Those that drive infrequently are at greatest risk. Thus, impaired function due to age-related disorders should be viewed as a flashing yellow traffic signal—a warning that driving privileges should be reassessed.

Many factors can diminish the driving performance of older adults. Among these factors are age-related changes in reaction time and visual, cognitive, and/or muscle disorders that become more common with age. Drugs are commonly used to treat disorders in older people, and some classes of drugs can be sedating and impair driving performance. Some of these factors can be managed and modified.

Did You Know...

- Older people are more likely to have a motor vehicle crash (MVC) when making a left turn than other age groups.

Crash Rates and Traffic Violations

On average, older drivers have fewer actual crashes per year than do younger drivers. However, because they drive fewer miles than middle-age drivers, older drivers average more crashes per mile driven. Crash rates begin to increase after about age 70, and they increase more rapidly after age 80. For every mile driven, older drivers have higher rates of traffic violations, crashes, and fatalities than do all other age groups over age 25. It should be noted that older people are driving farther distances than previous generations, and this trend is expected to continue.

Failure to yield right-of-way (often because they "looked but did not see") is one of the more common traffic violations committed by older drivers. Also, older drivers have more difficulty merging into traffic and may have problems at intersections, particularly when making left turns. These difficulties have been attributed to

- Difficulty evaluating several pieces of information simultaneously (multitasking)
- Difficulty judging the speed of oncoming cars or objects
- Reduction in field of view

Yet, older drivers are often more careful than younger drivers. Many older drivers who do not have

medical conditions that impair thinking and judgment (for example, dementia) begin to limit their driving to improve safety. They tend to avoid driving at twilight and at night, during rush hour, or during inclement weather. Moreover, alcohol is much less likely to be a factor in crashes involving older drivers. Older drivers are also less likely to have crashes while driving on curved roads or at high speeds. For older drivers, crashes are less likely to involve a single vehicle. Multiple vehicles are more likely to be involved. Interestingly, crash rate tends to go down with the number of passengers that are in the vehicle for drivers over age 70.

Crashes involving older drivers are more likely to result in serious injuries and fatalities. The increased vulnerability to injury of older drivers is not well understood but may be due to physical fragility and the presence of one or more medical disorders such as osteoporosis or heart disease. Additionally, older drivers may operate a vehicle that is less crashworthy. Although the number of older adults who have died in motor vehicle crashes has also decreased, older adults are increasingly involved in fatal crashes compared to other age groups because the aging population is increasing in size.

Reasons for Impaired Driving

Driving involves the precise execution of simultaneous tasks (such as braking and steering). These tasks require several attributes, including the following:

- A clear mind
- Good judgment, planning, and decision-making abilities
- Coordination
- Adequate strength
- Good range of motion in the upper body (upper trunk, shoulders, and neck)
- Sensation in legs and feet
- Good vision and hearing

Deficits in any of these attributes can greatly affect driving performance. Such deficits can result from several causes. Virtually all these attributes are impaired to some degree as people age and become worse with the presence of medical illnesses.

Aging

Aging itself usually results in a gradual and subtle decline in strength, coordination, reaction time, ability to concentrate, vision, and hearing. Older people may have less stamina and become fatigued more quickly, especially in situations that require concentration. Older people are less able to focus on more than one task at a time. However, most changes attributed to aging are modest and are often not the main reason for driving safety issues.

Medical conditions

Disorders that are more common among older people can be especially troublesome for older drivers. For example, the blood sugar level of drivers with diabetes may rise too high or drop too low. Such changes can interfere with clear thinking, attention, mental focus, vision, and sensation in the feet. Older drivers with dementia (including Alzheimer disease) can have poor judgment, impaired memory,

Older adults with dementia (including Alzheimer disease) can have poor judgment, impaired memory, and slower reaction time, which is a dangerous mix when driving. Even when dementia is in its early stages, drivers may become more easily lost or more confused in congested traffic or when unexpected events occur on the road.

Strokes or so-called ministrokes (transient ischemic attacks, or TIAs) can slow reaction time, cause muscle weakness, impair vision, and reduce coordination.

Seizures can abruptly cause people to become unaware of their surroundings or even lose consciousness.

A recent heart attack may increase the risk of fainting or light-headedness.

Arthritis causes joint pain and stiffness, limiting range of motion and possibly interfering with the ability to operate a car's controls. For example, pain and stiffness in the knees or hips may affect the ability to press the brake pedal or accelerator. Arthritis can make turning the head (as is necessary when turning or reversing a car) painful and difficult.

Glaucoma and macular degeneration are eye disorders that lead to problems when driving at twilight or at night. Glaucoma can also narrow the field of vision so that cars and other objects alongside the driver are difficult to see. Cataracts, which occur almost exclusively among older people, can cause glare from oncoming headlights or street lamps.

Sleep disorders, most notably obstructive sleep apnea, can cause drowsiness that leads to a crash.

Therapeutic drugs

Many of the most widely used drugs that age have undesirable side effects. Side effects can include dizziness, blurred vision, and drowsiness. To help patients and professionals around the world, the Manuals is launching content translated into Ukrainian to help those in need.

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Side effects occur. Drugs that may interfere with driving include the following.

- Antiseizure drugs
- Antiemetic drugs (used to manage nausea)
- Antihistamines
- Antipsychotics
- Benzodiazepines, or other antianxiety drugs
- Drugs used to treat glaucoma
- Drugs used to treat Parkinson disease
- Muscle relaxants
- Opioids
- Sleep aids
- Some sedating antidepressants

(See also the U.S. Food and Drug Administration's Some Medicines and Driving Don't Mix.)

Many recreational drugs, including alcohol and marijuana, also can impair driving.

Situations

Stress, particularly when driving in unfamiliar areas or in heavy traffic, may contribute to driving difficulty. Fatigue and distraction also decrease driving ability. Using a cell phone or texting while driving increase

crash risk. Although all drivers should avoid these distractions, older adults are especially vulnerable because of age-related changes or a decline in attention and multitasking abilities. Advanced crash prevention technologies, such as lane departure warnings and blind-spot indicators (see [MyCarDoesWhat.org](#) for [today's car safety features](#)), are now available in many cars.

[Falls in older adults](#) have been associated with an increased risk of motor vehicle crashes because avoiding falls and avoiding crashes both require coordination of cognition with visual and motor systems, all of which may be decreased in older drivers. Thus, interventions that reduce fall risk, such as physical activity, balance training, and reducing the use of sedating drugs, may have a role in improving both ambulation and driving safety.

For some older adults, the only deficit in driving ability is simply a lack of recent driving experience. It is common for one person in a relationship to do more of the driving than the other. When the main driver in a relationship dies, the other person may be unprepared to resume driving safely. Older people in a relationship should share driving activities because infrequent drivers are at high risk of stopping driving altogether (also known as driving retirement).

Ways of Compensating

Many drivers begin to self-regulate their driving as they age. For example, older drivers may self-regulate their driving by eliminating long highway trips, driving less at night, avoiding confusing intersections, and not engaging in risky driving behaviors (for example, speeding, tailgating, and drinking and driving). There

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For example, because stamina decreases with aging, older drivers may wish to drive shorter distances and take frequent breaks. They can avoid freeways and areas where traffic is congested or known to be dangerous. They can avoid driving at night or at twilight, when glare problems are most likely. They can avoid rush hour traffic and bad weather and try to avoid unprotected left turns. They may prefer to drive only familiar routes and locations.

Avoiding distractions while driving

Avoiding distractions—an important consideration for all drivers—is essential for older drivers. Cell phones are an important safety feature for drivers who become stranded when a car unexpectedly needs repair. However, cell phone use (even hands-free models) while driving is strongly discouraged. States have different laws regarding cell phone use while driving, and in some states it is illegal. Similarly, making adjustments to the stereo or another onboard system (such as navigation, climate control, or seat position), eating or drinking, smoking, reading digital or paper maps, and even engaging in conversation with other passengers can be distracting and can impair driving performance. People should minimize distractions of all types while driving.

Using technology

Newer technology may assist older drivers. Parking aids, which use cameras or infrared systems to help with backing up, parking, and other maneuvers, are especially helpful for people who have difficulty looking over their shoulders. Other systems that are helpful to older drivers include cruise control, antilock brakes, and electronic stability devices that improve traction and steering. Advanced vision systems for night driving include curve lighting (lighting directed around a curve) and automatic dimming

of headlights (high beams convert to low beams when there is oncoming traffic). Some cars offer blind-spot monitors, lane departure and collision warning systems, backup cameras, and rearview mirrors that automatically dim when hit by blinding headlights, thus reducing glare. Car manufacturers are experimenting with infrared night vision technology to enhance night driving.

Car manufacturers are also redesigning handles and knobs to make them easier to operate for people who have arthritis. Other car design features, such as lower door thresholds, low-back supports, extended visors, and adjustable seats and steering wheels, are available to all drivers but may be particularly helpful for older drivers. Self-driving cars are being experimented with across the nation and will likely become available in future years.

When crashes or other urgent situations occur, some emergency systems can automatically call and direct rescue teams to the car's location. A Global Positioning System (GPS) may help older drivers locate destinations. Many older drivers have smart phones, which can have apps installed free of charge so that families can track their location using GPS technology if they become lost. Additionally, GPS technology is available to monitor many types of driving behavior (routes taken and speed while driving) via the internet if families desire. Further innovations are anticipated in the future.

As more and more technologies become available, it will become important to recognize that older adults may need more individual time spent on training in the use of the newer technologies. Technologies should be individualized to provide what is most helpful for each person. (See MyCarDoesWhat.org for [today's car safety features](#).)

Taking driver refresher courses

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Association (AAA)—offer such programs to help older drivers adjust to the challenges of driving during old age. In addition, taking such programs may lower insurance rates in some states. AAA offers [RoadWise Driver](#), a senior defensive driving program focused on helping seniors adjust to various age-related changes that impact driving ability, and AARP offers [a course on refreshing driving skills](#).

Older drivers may also benefit from programs designed to ensure that their vehicle fits them correctly. For example, they can be evaluated to ensure that they have the right distance from their steering wheel and the right seat height for viewing traffic. Adjusting mirrors properly can help drivers compensate for blind spots. AAA's [CarFit](#) program is available virtually and at various in-person events across the country and provides useful information about how a person's vehicle can be best "fit" to improve safety.

Seeking medical care

Adopting healthy lifestyle behaviors and obtaining good medical care can help older drivers avoid driving difficulties. There are many reasons to stay fit in older age—including retaining driving ability. Older people should regularly see a doctor to be evaluated for problems with vision, memory and thinking, and muscle strength that could impair their ability to drive.

Treatment of some disorders may improve driving performance. For example, cataract removal can be beneficial. Treatment of arthritis with drugs and physical therapy can improve flexibility and mobility. Good control of diabetes can prevent swings in the blood sugar level. Treatment of sleep apnea can reduce daytime sleepiness. Older drivers should review their drugs with a doctor or pharmacist to make sure that driving performance will not be compromised by side effects.

Many states have laws that prohibit people from driving for a specified time after certain disorders are diagnosed. This waiting period (moratorium) provides time for the disorder to be stabilized with treatment. For example, some states require a 3- to 6-month moratorium before driving after a seizure,

stroke, or transient ischemic attack. Older drivers with any medical condition that could impact driving ability should follow doctors' recommendations regarding waiting periods or driving modifications.

A Driving Decision

At some point, most older drivers (especially those with significant medical impairment) face the decision of whether it is safe to continue to drive. A decline in the abilities required for safe driving may make driving dangerous. Not being able to drive may mean a loss of freedom and independence. It is very important to help an older adult who needs to stop driving find acceptable ways to get to important daily or weekly activities. Many of the same factors that raise concerns about driving safety can also affect an older adult's ability to use public transportation.

Sometimes the family doctor or a family member realizes that it is time for an older driver to "give up the car keys." Dealing with this issue is always difficult, but ignoring it can bring even greater misery. There are some practical steps that may help older drivers feel more comfortable about stopping driving:

- Involve the driver in the decision to limit or stop driving.
- Help find other ways to get around.
- Investigate driving and delivery services.
- Keep the older adult active and work to ensure the person has rides to activities.

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- The Hartford: [At the Crossroads: Family Conversations About Alzheimer's Disease, Dementia & Driving](#)
- AARP: [We Need to Talk](#)
- National Highway Traffic Safety Administration (NHTSA): [Understanding Older Drivers](#)
- Alzheimer's Association: [Having the conversation](#)

Most older drivers, sometimes with advice from family members or their doctors, can determine when to stop driving. However, some drivers, for example many people with dementia, lack insight into their driving ability and continue to drive even after a doctor has recommended they stop. One approach in this situation is to suggest that the older driver be tested by a driving rehabilitation specialist or the state agency that oversees or regulates licensure.

If doctors are concerned about an older driver, they often refer the driver to a driving rehabilitation specialist. These specialists are often occupational therapists who provide comprehensive driving evaluations and rehabilitation for drivers with medical problems. They are often located at hospitals or in universities, but some have private clinics. They are able to evaluate drivers for safety, provide vehicle modification or adaptive equipment, and give mobility counseling or advice on alternative methods of transportation. The American Occupational Therapy Association's [web site](#) has information on finding driving rehabilitation services.

After the driver is seen by a driving rehabilitation specialist and has implemented recommended changes, doctors may request the driver be retested by the state licensing agency. A retest also can be requested by the driver or by an immediate family member. It can include vision testing and written and on-road testing.

Different states' regulations regarding licensing vary. For example, in some states drivers must retake an

on-road test with the state licensing authority to maintain a license. State regulations requiring doctors to report drivers with certain medical conditions and/or safety concerns also vary. In a few states, doctors are required to report any driver believed to be unsafe. Other states have ways for family members to confidentially report an older driver in the family for driving concerns. It is important for people to contact their own state licensing department (such as the Department of Motor Vehicles) for regulations specific to their state. Laws regulating the possession and renewal of a driver's license by older drivers also vary from country to country.

Warning Signs of Unsafe Driving

Older drivers and their family members may want to consider the following factors as they determine whether it is still safe to continue driving:

- Do they get lost while driving, forget the destination while driving, or return home late from a routine drive?
- Do friends or family members worry about their driving or have stopped accepting rides?
- Have they had more near-misses lately?
- Do they have difficulty seeing other vehicles and reading and reacting to road signs?
- Does traffic congestion, a busy intersection, or making left turns make them anxious?

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- Is driving stressful or tiring for them, or do they become angry or confused while driving?
- Is the glare from oncoming headlights or street lamps bothersome?
- Do they have trouble turning the steering wheel, pushing foot pedals, looking over their shoulder when backing up, avoiding curbs, staying in the lane, or parking?
- Do they sometimes confuse the gas and the brake pedals?
- Have they had accidents in which they were at fault in the past year, or have they been stopped by the police because of their driving?
- Have they fallen in the last 1 to 2 years?
- Do they make slow or poor decisions when driving?
- Do they sometimes forget to use mirrors or signals or to check for oncoming traffic?

Older drivers and their family members who are concerned about any of these issues may want to talk with their doctor or consult a driving rehabilitation specialist about ways to improve driving safety.

More Information

The following are some English-language resources that may be useful. Please note that THE MANUAL is not responsible for the content of these resources.

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American Automotive Association (AAA): [Senior Driver Safety and Mobility](#): A resource providing information about driving self-assessments, available car safety features, and licensing laws for older people

AAA: [CarFit](#): A resource providing information about how a personal vehicle can be best “fit” to improve safety

AAA: [RoadWise Driver](#): A senior defensive driving program focused on helping seniors adjust to various age-related changes that impact driving ability

AAA: [Evaluate Your Driving Ability](#): A resource providing information about driving assessments, how people can do an assessment themselves or where to find a professional driving assessment

American Association of Retired Persons (AARP): [Driver Safety Program](#): A resource providing information about driving assessments and driving refresher courses

AARP: [We Need to Talk](#): A resource for family members and caregivers of older drivers about how to approach them to consider limiting or stopping driving

Alzheimer's Association: [Dementia and Driving](#): A resource that helps people with dementia plan how to eventually stop driving

[MyCarDoesWhat.org](#): A resource that helps people learn what car safety features their personal vehicle patients and professionals around the world, the Manuals is launching content translated into Ukrainian to help those in need. ✕

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USAging: [Transportation](#): A resource providing transportation options to people who no longer drive

National Highway Traffic Safety Administration: [Understanding Older Drivers](#): A resource for family members and caregivers of older drivers about how to talk to them about driving behaviors and how to approach them to consider limiting or stopping driving

The Hartford: [At the Crossroads: Family Conversations About Alzheimer's Disease, Dementia & Driving](#): A resource for older people, family members, and caregivers about how and when to help an older driver stop driving

[Eldercare Locator](#): A resource providing services to older adults and their families

U.S. Food and Drug Administration (FDA): [Some Medicines and Driving Don't Mix](#)

