This pamphlet is a practical guide with helpful suggestions on safe driving for older people. A discussion of the controversy surrounding older people's driving ability begins the pamphlet. Effects of aging on driving are discussed, including affects on vision, twilight and night driving, hearing, muscles and joints, and mental functions. It is noted that certain aspects of older drivers' health, such as medication use, may affect driving. Six situations in which older drivers most often make mistakes are discussed and suggestions are given to avoid errors. These include: (1) failure to yield right-of-way; (2) turning; (3) running lights; (4) improper changing of lanes; (5) improper passing; and (6) improper highway driving. Tips are given for bad weather driving, driving defensively, and long-distance driving. Pedestrian safety and seat belt safety are discussed. Continuing driving education is recommended. Safety when buying a new car and insurance for the older person are discussed. Recommendations are made to improve car and road design for older drivers and advice is given on when an older person should stop driving. (ABL)
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AS AN OLDER DRIVER, you're the subject of controversy. Motor vehicle department administrators, traffic safety experts in and out of government, senior citizens organizations, consumer watchdog associations—these and other groups are concerned with your future as a motorist, your right to continue to drive.

The debate revolves around the inevitable changes and impairments of the later years. One major viewpoint: Dulled vision, impaired hearing, and other age-related problems make some older drivers hazards to themselves and others; therefore all older drivers should submit to frequent and rigorous testing for auto license renewal, to determine who those hazardous drivers are and what action should be taken.

Proponents of this viewpoint don't all agree on the age at which the testing should begin. Some experts believe that the skills needed to drive safely begin to decline around age 55, dramatically so after 75. At any rate, some states have moved in the direction of special testing for older drivers. Maine, for example, requires drivers to go through its license renewal process, including vision testing, at ages 40, 52, and 65—with renewal testing every two years after age 65. The object: to limit or revoke the licenses of motorists who, because of physical or mental conditions, are no longer considered safe behind the wheel.
The opposing viewpoint—shared by the American Association of Retired Persons (AARP) and the Gray Panthers, among others—holds that singling out all older drivers for special testing is inherently unfair, that it constitutes age discrimination. Opponents of such testing contend that people age at vastly differing rates and that some 80-year-olds are physically and mentally “younger” than some 60-year-olds. They also say that older drivers effectively police themselves—by driving less often and generally avoiding hazardous conditions.

Some expert observers feel that older drivers should only be singled out for special testing under certain specific circumstances: when they’re involved in serious traffic violations, when they have serious accidents, or when a police officer or license examiner detects a significant problem.

Today, about 22 percent of all drivers are over age 55; by the end of the century, it is estimated, that group will represent 28 percent of all drivers. With the “graying” of American motorists, the controversy about testing is likely to escalate.

OLDER PEOPLE AND DRIVING

A factor that sometimes gets lost in the controversy is the importance of cars to older persons. If you’ve been driving a long time, you don’t need anyone to tell you that. Like many other veteran drivers, you may be emotionally attached to your car; it may feel like a part of yourself. You may need your car for some sound practical reasons. If you live in the suburbs or a rural area, for example, public transportation is probably woefully inadequate, or nonexistent; without a car, even grocery shopping may prove impossible. If you live in a city the mass transit system may not meet your daily needs. Without their cars, many persons, old or young, feel isolated. Sam Yaksich, Jr., executive director of the AAA Foundation for Traffic Safety, finds that “Older people are more dependent than ever on their automobiles.”

Experience counts

As an older driver—that is, a driver who has racked up many years’ worth of mileage—you have a lot going for you. You have loads of invaluable driving experience; you have successfully handled many difficult driving situations. You have the maturity to apply that experience to new situations, and to be a more cautious driver than many younger people. For instance, many older drivers cut down on unnec-
necessary driving. According to U.S. Department of Transportation (DOT) statistics, the average 35-year-old man drives some 17,000 miles a year. At age 65, he drives only 9,000 miles a year. When he's 75, his annual driving is down to 6,000 miles. Women also reduce their driving proportionately. Moreover, as a National Public Service Research Institute study shows, older drivers are likely to stay off the road when driving conditions are difficult or potentially hazardous—at night; in fog, rain, and snow; during rush-hour traffic.

the risks of overconfidence

Experience, however, can also lead to overconfidence. Some older drivers seem to think in these terms: "I've driven for 50 years, I've never had an accident, I have nothing more to learn about safe driving." In fact, surveys and observations of traffic safety experts reveal that many older drivers don't keep up with the latest important changes in traffic laws, don't adopt new safety measures, and aren't aware of how bodily changes adversely affect driving or how to compensate for those changes.

Consider a few statements from a self-rating test developed by the Safety Research and Education Project at Teachers College, Columbia University:

1. Intersections bother me because there is so much to watch out for from all directions.
2. I think I am slower than I used to be in reacting to dangerous driving situations.
3. My thoughts wander when I am driving.
4. Traffic situations make me angry.
5. My children and other family members or friends are concerned about my driving ability.

A “yes” to any of these points means you may be engaging in hazardous driving practices and are therefore vulnerable to accidents.

the record

What is the actual accident record of older drivers? If only the number of accidents per year is considered, the accident rate of older drivers is moderate. That is predictable: Because older people drive less often than younger people, they're bound to have fewer accidents overall. On a per-mile basis, however, drivers over age 65 have a higher accident rate than all other drivers except those 25 and younger.
Though relatively few older drivers are involved in extremely serious accidents—roll-overs, for instance—they and their passengers are nevertheless at some risk. In a two-car crash, if one driver is 65 or older, he or she is 3.5 times more likely to be killed than the younger driver. Older drivers are four times as likely as younger drivers to be injured in auto accidents. Though most accidents involving older drivers are of the fender-bender kind, even a relatively slight impact with another car or a lamppost can cause injury to driver and passenger. That’s because on impact the bones of older people break much more easily than those of younger people.

It may surprise you to learn that most older-driver accidents occur under ideal driving conditions—on clear days, straight roads, dry pavements. Most occur within 15 to 25 miles of the driver’s home. Many take place at crowded intersections controlled by signal lights. That’s understandable. Heavily trafficked intersections are often confusing and demand special alertness and extra-quick decisions. But there are too many drivers who don’t respond to those extra demands.

the demands of driving

Actually, even under fairly easy conditions driving is a demanding exercise. Like most drivers, you probably drive automatically, without much conscious thought about the process. You may not realize that driving is a highly complex activity and requires an almost constant use of your mind, your senses, your muscles. Research shows that for every mile driven, the driver makes about 20 major decisions, and those decisions have to be made instantaneously—often in less than half a second.

Let’s say you’re going to the supermarket. You ease your car out of the driveway, checking street traffic in both directions before you swing out. You’re going to make a left turn and you have the correct turn indicator on. A car approaches; you wait for it to pass before easing onto the street. Before you reach the corner a dog runs into the street; you brake for it. You slow to a stop at the stop sign at the corner, flash your right-turn signal but wait for a couple to cross the street before you make the turn. Then you wait again because you see two cars speeding toward you in the lane you want to enter.

Finally you’re able to make the turn...

You’ve been on the road for about a minute but already you’ve had to make at least half-a-dozen rapid-fire decisions. And, as James Malfetti,
director of the Safety Research and Education Project, notes, most driving decisions are far from minor. Drivers, he says, have to choose the ones "least likely to cause an accident or interfere with traffic."

HOW AGING AFFECTS DRIVING
Though many drivers are able to meet the demands of driving, physical and mental faculties do slow with age. This, in turn, has an effect on safety and skill in driving. Here are some important age-related bodily changes, how they influence driving, and what you can do:

vision
About 95 percent of the sensory input needed for driving comes through the eyes, but over time practically everybody’s vision declines. The decline begins significantly around the mid-fifties. It becomes harder to focus on objects, harder to change focus quickly from near to far or the other way around. Visual acuity (the ability to see fine detail) worsens. Peripheral vision, the ability to see things to the side without turning one’s head, also worsens. That’s important because about 98 percent of what the driver needs to see is seen first peripherally.

Older people need more light to see as clearly as before. It becomes harder to adjust to the glare from approaching headlights; harder, too, to detect cars and pedestrians under adverse conditions. Depth perception — the ability to judge distances — weakens. And with age may come eye conditions like cataracts and glaucoma, which can lead to serious reduction of sight or even blindness if not treated.

Vision changes associated with age are extensive but, fortunately, proper glasses and other adjustments can compensate for most of them. As Merrill J. Allen, O.D., of the Indiana University School of Optometry and author of Vision and Highway Safety, notes, “A younger driver needing but not wearing glasses may perform worse than an older driver properly corrected with glasses, contact lenses, or a lens implant following surgery.”

Because good vision is crucial to safe driving, the American Optometric Association offers these tips to older drivers:

- Don’t wear sunglasses or heavily tinted regular glasses for night driving. They drastically reduce the light coming into the eye.
- If you wear glasses, avoid frames with wide side pieces; they can block your side vision.
Always keep your glasses clean. Also clean your car: windshield, headlights, taillights, and mirrors. Note that atmospheric pollutants—for instance, tobacco smoke—often cause filmy deposits on the inside surfaces of windshields.

Finally, have your eyes regularly checked by an eye doctor. Are you 60 or over? Then, Dr. Allen says, a yearly examination is advisable. Cataracts can develop within a year.

twilight driving

There are actually two twilight periods: one as the sun is going down, the other as the sun is coming up. They are the hardest times of day in which to make out objects clearly or judge distances accurately. Older drivers may therefore want to avoid dawn and dusk driving. If you must drive then, be especially cautious and alert. Watch for hard-to-see pedestrians, runners, cyclists, and cars changing lanes. Turn your headlights on so you can be seen; reduce your speed a little.

night driving

Many older drivers find night driving uncomfortable—with good reason, given the way vision declines with the years. Before you start out at night, let your eyes adjust to the dark for a few minutes. Don't wear sunglasses or tinted glasses. If your eye condition requires tinted glasses, ask your eye doctor to prescribe the type that lightens in darker surroundings and darkens in sunlight. Better yet, have an untinted pair for night driving. When possible, stay on well-lit streets.

On highways with little traffic, use your bright beams as much as possible; dim them for oncoming cars. Also dim them if the car ahead is closer than a block away. Look at the right edge of the road briefly whenever the headlights of an oncoming car bother you. Have your headlights checked and adjusted if you think they aren't throwing off enough light. And use a day-night rearview mirror to reduce glare from the cars behind you.

At some point many older drivers, especially those in their 70's and older, face a crucial decision: Should they stop—or drastically reduce—night driving? Obviously, many drivers do stop. These, says Dr. Allen, are signs that night driving is becoming a serious problem:

- You have trouble walking on the street or in your yard at night—trouble you did not have earlier. Other people seem to see better at night than you do.
- You keep thinking that the windshield or your glasses are dirty, and you want to clean them—when, in fact, they are already clean.
- You have a very hard time seeing glare from the headlights of oncoming cars or the taillights of the cars ahead.
- You see halos around lights—especially street lights.

More than poor night vision may be involved. Some of these difficulties could point to glaucoma or cataracts; if you have any of these symptoms, consult an eye specialist. Because both glaucoma and cataracts sometimes occur without warning signs, it is worth repeating that regular eye checkups are an important preventive step.

hearing
If you’re 65 or over, you may have some hearing loss. Studies show that 30 percent of the over-65 population does. Generally, high-pitched sounds become less audible long before the low-pitched ones do. This can become a concern in driving because many horns and sirens are high-pitched. Train whistles, too, become more difficult to hear.
An added concern with hearing loss: You may not concentrate sharply enough. Studies show that people who are hard-of-hearing are more likely to be inattentive to their surroundings than others. If your hearing seems to be deteriorating, see your physician. Make a special effort to be keenly aware of events around you as you drive. A driver with a hearing problem should consider wearing a hearing aid; many aids are now tiny and unobtrusive.

**muscles and joints**

According to John D. States, M.D., chief of orthopedic service at the Rochester General Hospital, Rochester, New York, aging affects muscles, bones, and joints. Some degree of arthritis is common, if not inevitable. Joints lose flexibility. Muscle strength diminishes. Changes in the spine produce back pain. Drivers affected by these changes find it harder to sit for long periods without tiring or otherwise becoming uncomfortable. When arthritis produces a stiff neck, it becomes more painful to turn one’s head to see what drivers behind and on either side are doing. If you have this problem you may find yourself not looking around as much as you should for safety’s sake. In addition, even if you’re not consciously aware of it, the fatigue and discomfort brought on by muscle or joint pain are distracting; they really do lessen your awareness.

Luckily, there are ways to compensate. Power steering and power brakes make driving easier and reduce fatigue. Large, well-placed mirrors (more about them later) can make turning the head less necessary. Seat belts offer not only vital protection but also needed support. Soft seats, which add to fatigue and distress, can be made more solid with well-placed cushions. **Note:** Drivers with tender joints sometimes swing wide before making turns. This is dangerous and causes accidents. Be sure to stay in your lane when turning.

**mental functions**

“Reaction time” is one of the most important factors in safe driving. Reaction time is the time it takes for the eyes to see and the brain to process, decide what to do, and transmit the information to the proper body parts. This function slows with age, but specific safety measures can help older drivers compensate. For instance: Keep a good distance from the car ahead to allow for sudden stops; avoid rush-hour traffic; take someone along to help navigate.
Other tips: Don't be distracted by one small portion of the whole driving scene. It's easy to be diverted. One driver, intently watching a small dog cross the road, failed to notice someone pulling out of a driveway without looking. The result was a collision. The second driver was obviously careless—but the first driver might have avoided the collision if he hadn't let the dog distract him.

If possible, don't drive when you're very upset. Don't drive when you're not feeling well. Definitely don't drive when you've been drinking. All three conditions can seriously slow reaction time.

HEALTH AND THE OLDER DRIVER

Because a number of medical conditions affect driving—for example, arthritis, heart disease, and nervous disorders—it's important for older drivers to have regular medical checkups. Fortunately, even with a somewhat serious medical problem, most people can still drive safely. In fact, at a conference on the aging driver, George G. Reader, M.D., of the New York Hospital-Cornell Medical Center in New York City, presented a heartening statistic: Of those older people who do suffer from medical problems, 67 percent have conditions that don't interfere in any way with their mobility.

What if you start out on a drive feeling fine but suddenly begin to feel faint or dizzy or experience a blackout? Pull off the road as soon as you safely can. Wait until you're sure you've recovered before you resume driving. And, as soon as you can, consult a physician about the symptoms.

if you take medications

Whether over-the-counter or prescription, many drugs have side effects that adversely affect driving. Analgesics (pain-relievers) for arthritis and rheumatism may cause confusion, drowsiness, or inability to concentrate. So may tranquilizers, antihistamines for colds and allergies, antidiabetic drugs, and drugs prescribed for hypertension (high blood pressure). Antihistamines and antihypertensive medications may also cause blurred vision.

Ask your physician or pharmacist about possible side effects of any drug you take. If you take more than one, ask whether the combination produces side effects that could interfere with your driving. If there is a potential problem, learn how long to wait for the effects of the medication to wear off. Keep in mind that alcohol can increase the effects of
certain drugs to a danger point. Tranquilizers, for instance, make some people drowsy; alcohol can add to the drowsiness. So if you are taking tranquilizers be very careful about not drinking and driving.

**drinking and driving**

Alcohol is a factor in half the fatalities resulting from auto accidents, and it probably contributes significantly to many of the accidents that result in serious injuries. Though the dangers of drinking and driving have been well publicized, about 13 of every 100 drivers on the road at any given time have just been drinking. All place themselves and others at risk, for alcohol in the blood throws off judgment, slows reaction time, distorts decision making, and impairs coordination.

You don’t have to be a problem drinker to have alcohol-related driving problems. Alcohol tolerance usually changes with age: The older people are, the less alcohol they need to get the same “high” they got from a greater amount of alcohol when they were younger.

Some people are convinced that beer and wine aren’t as potent as hard liquor. They are actually, a can of beer, a glass of wine, and a shot of liquor have about the same alcohol content. And if you have drunk more than you should for safe driving, will a cup of coffee sober you up? No. Will a cold shower do it? No. A brisk walk around the block? Again, no. The only thing that will rid your body of alcohol is time. On the average, it takes about an hour for a drink to wear off.

So, if you’re out, limit your drinks to no more than one an hour or longer. Wait an hour after your last drink before driving home; ask somebody who isn’t drinking to drive you; call a taxi or, if you’re at a friend’s house, sleep over. This advice is lifesaving. Today, it’s more pertinent than ever because police in many states are tougher than they used to be on people of all ages who drink and drive.

**ON THE ROAD: PROBLEMS, SOLUTIONS**

What kinds of driving situations trouble older drivers the most? Traffic safety experts have analyzed older drivers’ errors and have found six situations in which older drivers make mistakes most often.

**failure to yield right-of-way**

Right-of-way establishes traffic priority—who has to yield to traffic and who doesn’t. It also establishes who is at fault in some collisions. Some older drivers don’t yield when they should because they are
unaware of right-of-way rules or have difficulty with peripheral vision.

**Points to remember:** Always yield to pedestrians in or near crosswalks, even if the crosswalk isn’t marked. Always yield at yield signs. Yield to approaching traffic when making left turns. Yield to pedestrians and vehicles when you’re entering the street from a driveway or an alley. Yield to emergency vehicles with flashing red lights. Yield to moving traffic when you’re leaving a parking space.

Be sure, however, to **stop** for school buses that display flashing red lights. Also stop for blind persons.

**Turning**

Left turns in particular cause problems because they demand a lot from drivers. Above all, you have to be a reasonably good judge of distance—to determine, for instance, whether oncoming traffic is far enough away to allow for a safe turn.

**Points to remember:** Always slow down and flash your left- or right-turn signal well in advance of making a turn. Before turning, check all around you for traffic, pedestrians, motorcyclists, bicyclists. Keep your wheels straight until you actually begin to make the turn so that, if rear-ended, you won’t be thrown in the path of oncoming traffic. When making a turn avoid swinging wide; stay in the same lane.

Do you feel uneasy making left turns at busy intersections? Avoid the problem: Make a series of right turns to get there.

**Running lights**

“Failure to obey signs and signals becomes a special problem at age 65 and greatly increases over age 74,” reports the National Highway Safety Administration. Running lights has become all-too-common among younger drivers, too. For old and young, it causes accidents.

**Points to remember:** Running lights—going through red lights or trying to beat them—is always dangerous as well as illegal. Many a red-light runner has thought the intersection was clear—only to collide with a car speeding through unexpectedly. Always stop at a red light. In most localities you can make a right turn on the red, but you must stop first. Don’t enter the intersection on the yellow light. Green means go, but watch for other drivers who may be careless about traffic lights. A green arrow allows you to turn in the direction of the arrow; a red arrow means you must wait for the light to turn green or for a green arrow to light up before you can make the turn.
improperly changing lanes

Wrong lane changes often occur when drivers’ timing is off as they make the change, or they neglect to signal their intent to change, or they change lanes where lane changing is illegal.

**Points to remember:** Be on the lookout for signs and road markings that specifically forbid lane changing. Whenever you’re about to change lanes, use your turn indicator to signal your intent.

Lane changing calls for awareness of what’s ahead as well as on the side to which you want to change. Use side and rearview mirrors to make sure the space you want to enter actually is clear. If it isn’t, postpone the maneuver.

Always keep in mind that your car has blind spots— areas the mirrors will not cover. The blind spot on the right is the greater one. Turn your head carefully to check the blind-spot areas.

improper passing

One driver-behavior survey showed that 21 percent of all incidents of “bad” driver behavior were associated with passing. Like lane changing, passing demands good judgment and rapid-fire decision making.

**Points to remember:** Never try to pass on hills, when nearing or on bridges and in tunnels, on curves, near railroad crossings, when a solid yellow line is in your lane, or when school bus lights are flashing. Look far enough ahead to be sure no oncoming car is approaching in the passing lane. If the passing lane is in the same direction as yours, make sure that the space you want to enter is free of cars—and that no one is accelerating into that space. After passing, but before returning to your original lane, be certain that in your rearview mirror you can see the entire front of the vehicle you have just passed.

More on those tricky, potentially dangerous blind spots: All cars, even those equipped with two side mirrors, have blind spots to the left and to the right. Larger side mirrors on both sides of the car can help minimize blind spots, but some blind area will remain about a third of the way back on both sides of your car.

To check out your car’s blind spots: Sit behind the wheel. Have someone else walk alongside and behind the car while you note where that person is not visible in the right, left, and rearview mirrors.

When changing lanes or passing, turn your head for a quick look back to make sure no vehicles are in the blind spots—but don’t take your eyes off the road ahead for more than an instant.
improper highway driving

Some older drivers are intimidated by expressways—by the number of cars, the speed at which they're driven, the skill needed to get on and off these roads. Traffic safety experts, however, consider expressways the safest roads on which to drive—safer than urban roads—when properly used. They do have considerable advantages. They give you direct routing from point to point; they're easy driving (except during rush hours); there are no stop signs, traffic signals, or intersections to worry about.

Points to remember: If possible, stay off expressways during rush hours. If you use these super-speed roads but don't want to drive fast, stick to the right-hand lane. Keep up with the traffic flow (usually around 50 mph in the slowest lane). Don't weave in and out; change lanes only when passing a slower car or following a direction sign.

When getting on an expressway, observe the ramp speed if it's posted. As you approach the acceleration lane, match your speed to that of the traffic on the expressway lane you're about to enter. At the same time, check that lane for a gap in traffic. Also check to make sure a car in another lane isn't about to wheel into your gap. (The diagram at the right illustrates the proper way to enter a freeway or highway.)

If expressway traffic is very heavy as you're getting on, try not to stop altogether. Slow down about halfway down the ramp, not at the very end, but accelerate to expressway speed before enter-
ing. What if it's a worst-case scenario and traffic is so heavy you have to stop to wait for a gap? Wait until there's a very big gap before you enter, because it takes time to accelerate to full speed.

When leaving an expressway, signal your intention to exit but don't slow down until you're in the special exit (deceleration) lane. Then slow to the speed posted on the exit ramp.

Never attempt to get back on the expressway after you've started to leave, even if you discover that you're at the wrong exit. Instead, leave, find the proper entrance ramp, reenter the expressway, proceed to the proper exit.

WHEN THE WEATHER IS BAD

The safest way to handle bad-weather driving is not to drive in it. Of course, that's not always feasible. If you must do some foul-weather driving, there are ways to make it safer.

Rain. Reduce your speed to avoid losing traction or control, something that can happen in rain even if you're only doing 35 mph. Roads become slippery as soon as rain starts because oil and dirt have accumulated. Use your lights in rainstorms—both to see and to be seen. Keep a longer distance than usual between your car and the one ahead.

Fog. Fog reduces visibility to nearly zero. If a fog closes in while you're driving, try to pull into a safe spot and wait until it lifts. The shoulder of a road may not be safe because other drivers probably won't be able to see you. Pull all the way off the road, if possible, and turn on your car's flashing emergency signal lights. If you must drive, keep your low-beam headlights on, turn on your windshield wipers, and reduce speed. Be as alert as you can; another car can loom up suddenly. Keep a greater-than-normal distance between your car and the car ahead.

Snow and ice. To minimize skidding, use approved all-weather radial tires, studded tires (where allowed), or snow tires. Clear snow and ice off all your car's windows. Reduce your normal speed. To avoid going into a spin, don't slam on the brakes when you are on ice. Instead, press the brake gently. Don't try to stop abruptly.

If you do feel yourself skidding: Take your foot slowly off the accelerator, but don't brake. Shift into neutral for extra control. Turn the steering wheel in the direction of the skid—that is, in the direction you want the front of the car to go. Thus, if you feel the rear wheels skidding to the right, turn your steering wheel to the right.
HOW TO DRIVE DEFENSIVELY

• Always be on the alert for the error another driver may commit. The best drivers, including the pros, give themselves a "safety cushion of space" whenever possible. That is, they keep some distance from the other cars in front, back, and to the sides.

• Always keep your car’s vital parts in good working order: tires, brakes, lights, battery, alternator, defrosting and defogging systems, windshield wipers especially, because they affect safety.

• Always look as far down the road as possible — two or three blocks ahead if you are traveling at 55 mph — to be prepared for the unexpected. Never tailgate, for two reasons. One, you can easily collide with the rear end of the car ahead if it stops suddenly. Two, the closer you are to the car ahead, the more your vision of what is happening down the road is blocked — and the more mud and dirt you’re apt to get on your windshield and headlights.

• Always follow the “three-second golden rule of driving” under normal driving conditions. Here is how it works: Look at the car in front of you when it passes a definite marker — a sign, lamppost, driveway, hydrant, or parked car. As the rear of that car passes the marker, begin counting seconds, starting with “one-thousand-and-one.” Stop counting after your own car reaches the same marker. Are you at least three seconds behind the car ahead? That’s a safe following distance.

• Always allow five or six seconds between your car and the one ahead when the weather is bad. When it’s raining or snowing, it takes much longer to brake to a stop. For instance: A car traveling at 40 mph may take 9 car lengths to stop on a dry concrete road — and 16 car lengths to stop on wet pavement.

LONG-DISTANCE DRIVING

Lots of older drivers enjoy taking long trips. If they’re retired, they have the leisure time to do so. But long-distance driving has a different feel to it as one grows older. Short distances seem longer. Greater distances seem very much longer than they used to. Take these changes into consideration when planning a long-distance drive.

It’s important to get a good night’s sleep before you start out. Don’t plan to drive from morning until night with few stops, even if that is how you always used to drive. Start midmorning, stop midafternoon, and make plenty of rest stops during your driving hours. Spend an extra night in a motel en route if necessary.
Try for five- to ten-minute breaks every couple of hours or less. If possible, share the driving. To fight boredom: Keep your eyes moving. Keep the car's temperature a bit on the cool side, especially in hot weather, with the air conditioner on or the vents open for fresh air.

Tight neck muscles are one tip-off to driving tension and fatigue, so if you feel tired pull over to the side of the road or get off at the next expressway exit, whichever is safest. Stretch your muscles. Walk around. Run in place. If you have a traveling companion, ask for a brief shoulder massage. Try an isometric exercise: For instance, with your fingers laced together, place your hands behind your head; push your head against your hands, but don’t let them give. Resist for the count of six; then relax. Repeat the exercise a couple of times.

Avoid heavy meals while on a long-distance drive; they make you groggy. Coffee and cola drinks containing caffeine may wake you up initially, but they produce a real letdown later on.

REMEMBER THE PEDESTRIANS

Much of the emphasis thus far has been on the driver's interaction with other drivers. But never forget about the pedestrians. As the AAA Foundation for Traffic Safety's Sam Yaksich says, “Every driver, whether young or old, is at some time also a pedestrian and should, therefore, be interested in the safety of pedestrians in traffic. Older drivers, however, have a much greater concern for pedestrian safety problems because when they themselves are on foot, they are quickly made aware of the particularly vulnerable situations older persons face in traffic.”

Every year about 8,000 pedestrians are killed and 150,000 are injured in automobile collisions involving drivers of all ages. A study of older drivers involved in pedestrian accidents showed that nearly half the drivers “were probably negligent.” All drivers should keep in mind how these particular drivers were at fault: They failed to grant the right-of-way to pedestrians crossing with a green light or to pedestrians in crosswalks without a signal; strayed from their lanes; drove too fast; drove at night without lights; struck pedestrians who were not in the street.

Be especially careful when making turns or driving through intersections where pedestrians are waiting or crossing, even if none seem close to your car. Again, pedestrians in crosswalks have the right-of-way; vehicles should stop until the pedestrians have crossed.
SEAT BELTS AND AIR BAGS—LIFESAVERS
For 35 years, Helene Finnegan, a social worker in the borough of Queens, New York, had regularly driven through the same familiar intersection. One day, she was following two cars through the green light, saw nothing unusual—and then it happened. From nowhere, or so it seemed, a vehicle came roaring through the intersection at 70 to 80 mph and struck Mrs. Finnegan's car. Although the impact was so great the car was totaled, Mrs. Finnegan was unhurt. "Without my seat belt I could have been killed on impact," she told a luncheon of the New York Coalition for Safety Belt Use on the first anniversary of New York State's mandatory seat belt law.

New York is not alone. As of the end of 1985, 17 states plus the District of Columbia had enacted seat belt laws. Depending on the state, fines for noncompliance range from $10 to $50.

Whether or not it's legally required, many people do not bother to buckle up because they resent seat belts. Excuses range from "I've never had an accident," to "The belts are uncomfortable," to "I don't drive fast." The facts, however, speak for themselves.

Auto crashes are the fourth leading cause of death—behind cancer, heart disease, and stroke. A driver or passenger who isn't buckled up can be killed on impact when the car is traveling as slow as 12 mph. While earlier models of seat belts were uncomfortable and hard to buckle, redesigning has made them easier to buckle and use. But the older seat belts are just as lifesaving as the newer models. Shoulder belts are now designed to allow freedom of movement under normal conditions but to lock automatically in a collision.

Like a lot of other people, you may be afraid that in a burning or submerged car you'd be trapped if you were wearing a seat belt. The facts are: Less than 1 percent of all injury-producing collisions involve fire or submersion. And in such situations, seat belts can keep drivers and passengers from striking the car's interior and being knocked unconscious; then they're able to release the belt and get out.

Along with lots of other people, you may also feel that you'd have a better chance of being thrown clear in a collision if you were not secured by a seat belt. The facts are: Your chances of being killed are about 25 times greater if you're thrown from a car. The New York Coalition notes that the force of a collision can fling you as far as 150 feet—about 15 car length.

Experts say that not wearing your belt doubles your chance of being
seriously hurt in a crash. Using a lap/shoulder belt combination drastically cuts your chances of being killed.

Here are some tips for comfortable and effective seat belt use:

- Keep the seat belt around the hips or pelvis, as low as possible. Some people position the belt on the abdomen, which can be dangerous to internal organs if there is a collision.
- Similarly, never "cheat" by putting the shoulder harness under your arms; this, too, can result in serious injury.
- For best protection and greatest comfort, belts should be adjusted so that they're taut but not tight. According to the U.S. Department of Transportation (DOT), the shoulder belt can have two fingers' worth of slack, but no more.
- In winter, you may want to remove your overcoat in the car; buckling up is then easier and driving more comfortable.

Air bags are another auto safety device, though not generally available yet. They are passive protection—drivers and passengers don't have to do anything; air bags are designed to blow up automatically in order to cushion the driver and front-seat passengers from the force
of an impact. Air bags can then help prevent head and neck injuries.

Air bags are not intended to replace seat belts but to provide an additional important measure of safety. A DOT order requires all auto manufacturers to equip their cars with air bags by 1990, but if state seat belt laws cover two-thirds of the U.S. population by 1989 this mandate may be dropped. Meanwhile, though, starting in 1986, some major auto makers will gradually begin making air bags available as optional equipment on certain cars.

As air bags become perfected and available, drivers may want to purchase them as optional safety equipment.

CONTINUING EDUCATION

Many people have driven for 30 to 40 years, or longer, and have lots of driving experience. That is all to the good. But it doesn't mean they have all kept up with new knowledge about safe driving. Many of them may not have looked at the driver’s manual issued by their state motor vehicle department since they got their licenses.

This is a mistake. Over time, driving laws change. Regulations change. Motor vehicle departments adopt new traffic signs or new formats for old traffic signs. Without a little study, these changes can be confusing. And when they don’t keep informed, older drivers often are unaware of steps they can take to make driving easier and safer.

Every driver has a responsibility to keep up with new traffic safety developments. Reading this pamphlet and adopting its suggestions can help. In addition, because traffic laws vary in different states, get hold of the latest edition of your state’s driver’s manual and read it carefully from cover to cover. (Motor vehicle departments issue them free.) Read it “fresh”—pretend you are a new driver and all the material is new to you. That way you won’t skim. You’ll come upon some surprises.

Also consider taking a driver training or education course. As of the end of 1985, in 16 states* and the District of Columbia there is a financial incentive for doing so. Those states require that drivers completing state-approved driver improvement courses be given a reduction in auto insurance premiums. Depending on the state, reductions range from 5 to 10 percent on the whole premium or on the liability

portion. An even more important benefit: Many people who sign on for the financial advantage later realize that they're learning a lot about safe driving—guidance they themselves can put into practice.

The AARP 55 Alive/Mature Driving program, given by volunteer instructors for the American Association of Retired Persons, is offered in many localities around the country. The fee is nominal; membership in the AARP is not required. In two four-hour sessions, the course covers physical changes related to age; traffic problems and how to overcome them; auto maintenance, and more. Time is allowed for group discussion. For information, write to AARP, Traffic and Driver Safety Program, Program Department, 1909 K Street, N.W., Washington D.C. 20049.

The National Safety Council, through its state and local safety councils, operates Defensive Driving Course programs. One course is a four-hour program; the other runs eight hours and qualifies drivers for reductions in their auto insurance premium. The programs are offered through state and local safety councils, subscribing corporations, and some insurance companies (as an incentive to policyholders), and to
the general public. For information, contact your local or state affiliate of the National Safety Council, or The National Safety Council, 444 N. Michigan Avenue, Chicago, Illinois 60611. (New York State residents may call a toll-free number: 1-800-962-3434.)

As of January 1986, various American Automobile Association (AAA) offices around the country began offering a Safe Driving for Mature Operators program. In addition to providing general driver-related material, the program will test drivers for night vision, ability to see under glare conditions, and reaction time. Other tests will be added in time. You do not have to be an AAA member to take the course. Contact your local AAA office to see if the program is being offered in your area.

SAFETY AND BUYING A NEW CAR
Naturally, you want a new car that's comfortable, safe, and easy to handle. These are some of the factors to consider:

Size of car. Small or compact cars weigh less, accelerate more slowly than larger cars, and cause occupants to sit closer to the pavement, thus reducing the area the driver can see. And, as Raymond F. Novak, a regional traffic engineer with the New York State Department of Transportation, observes, "The chance of surviving a crash in a small car is considerably less than in a larger car."

Medium-to-large cars are safer and more comfortable. For older drivers, many experts favor medium-size cars over the largest ones—because very large cars are harder to handle, take up more room on the road, present a greater risk of sideswiping other vehicles.

Before buying a car you may want to check on its crash-worthiness. The information is available, free of charge, from the Insurance Institute for Highway Safety, 600 New Hampshire Avenue, N.W., Washington, D.C. 20037.

Power brakes and power steering. Power mechanisms add to both comfort and safety. Power brakes require less direct effort in applying the brakes, while power steering provides greater maneuverability. Both cut down on fatigue.

Cruise control. This device does the work of the foot on the accelerator. Set the cruise control for a certain speed and the car will maintain that speed automatically, unless the driver switches it off or touches the brake pedal. Some drivers find cruise control useful for rips, as long as traffic isn't stop-and-go. Cruise control can re-
duce fatigue. But some safety experts aren’t in favor of the device because they feel it diminishes alertness.

Clear windshields. If possible, get a car with a clear windshield. (With some American cars, that’s only possible on a special order.) Do avoid heavily tinted windows because of the reduced light that enters, especially at night.

Seats. The harder the seat, the better. Unfortunately, cars made by American, Japanese, and French manufacturers generally have soft seat cushions and backs. As Dr. John D. States, orthopedist, points out, they don’t offer sufficient support. If your car’s back and bottom cushions are soft, additional cushions may help. Also, you should be able to tilt the back of the seat easily and smoothly. Drivers with tight leg or back muscles may find sitting easier with the seat tilted farther back.

Mirrors. The rearview mirror should be as wide as possible (to reduce the blind-spot problem) and should adjust for reduction of glare from the headlights of cars behind you at night. You may want to install larger mirrors on both sides. Some drivers install curved (convex) side mirrors because they show a wider area and help eliminate some blind spots. But such mirrors should be used very cautiously because they make objects seem farther away than they really are. DOT recommends not using a curved mirror on the driver’s side.

BUYING INSURANCE

The safer your driving, the more you’ll be able to keep your automobile insurance costs down. Years ago, drivers over 65 or so often found it hard to get regular auto insurance and were shunted to expensive assigned-risk plans. Though some companies are still reluctant to insure older drivers, that situation has eased. Still, some older drivers feel they’re treated unfairly because, as Sam Yaksich says, “They’ve driven for 50 or 60 years without any accidents, get a little older, have one accident, a fender bender, and their insurance rates go sky-high.”

For most auto insurance companies, though, the basis for a raise in rates is not the dollar value of an accident loss but the number of accidents a policyholder has. For that reason, even though their policies may require notification, some drivers do not report relatively minor accidents and losses. They prefer to absorb the repair cost themselves rather than risk a sharp premium rise. Insurance companies, however, may decline to represent policyholders who face damage
suits arising out of accidents they failed to report to the company.

As for premium rates, in 20 states rates are competitive and it pays to shop around because they can vary considerable. But shop around, too, in states where rates are fixed by the state insurance commission, checking on the skill and speed with which different companies settle claims. Ask friends for recommendations and talk with a few insurance agents. To cut down on costs you may want to consider taking higher deductibles for collision and for comprehensive coverage—the latter including fire, theft, and vandalism damage.

WHEN SHOULD YOU STOP DRIVING?

Some older drivers know when to stop driving. They feel more and more ill-at-ease or physically uncomfortable behind the wheel. Driving has become an ordeal instead of a pleasure. They keep having scary driving experiences or an increasing number of fender benders. They realize they can’t see as well as they should or react quickly enough to drive safely. They come to understand that they’re a hazard to themselves, their passengers, pedestrians, and other drivers. And so they turn in their licenses.

But some older drivers who shouldn’t be driving because of physical or mental conditions, nevertheless keep on doing so. If they stop it’s because others have taken action. Drivers lose their licenses when they no longer pass renewal exams. Drivers lose their licenses when their physicians notify state departments of motor vehicles of serious medical conditions that interfere with safe and proper driving. (Technically, in most states physicians are legally obligated to provide this kind of information. In actual practice, relatively few doctors do so—because the laws are vague, or the doctors don’t want to violate the confidential doctor-patient relationship, or they fear lawsuits.)

When drivers should stop driving for medical reasons but refuse to do so, it can make life very difficult for their families. A mate, children, and other relatives fear the driver will become involved in serious automobile accidents. They fear the driver will accidentally injure or kill someone. In time, they may urge the driver’s physician to take action. As a last resort, they personally report the driver’s condition to the local department of motor vehicles.

Some older drivers don’t want to do anything dangerous, but they still enjoy driving and aren’t sure whether they’re a danger to themselves or others. Are you in this position? If so, you should check the
warning signs that indicate driving has become a potential danger:

- You have a growing number of near-misses.
- You have a growing number of minor accidents.
- You have obvious trouble seeing pedestrians, cars, and other objects in the road.

If any of the above situations apply to you, do have a talk with your doctor about whether or not you should stop driving. The longer you delay, the greater the risk of a serious accident.

Some drivers feel a vast sense of relief once they give up their licenses—because they've made the difficult decision to stop driving and because they're free of the behind-the-wheel responsibility. For others it's a very painful experience at first, both emotionally and practically. It's certainly natural to feel a sense of loss because of the changed circumstances. It may help to think of it as a very responsible, even lifesaving, step.

Note: A driver's license is widely used for personal identification. Some drivers are afraid they will have no acceptable identification once they no longer have their licenses. All states, however, now issue a photo identification card to everyone who requests it.

FOR SAFER ROADS, CARS, AND DRIVING

Many safety experts contend that older drivers' needs have been neglected, which serves to aggravate their problems. An AAA Foundation for Traffic Safety seminar, held in 1985, concluded that every existing standard—from those for highways to those for driver training—must be reexamined to take into account "the needs and capabilities of drivers 55 and over." Among the many specific recommendations made at the seminar:

**Highways.** Highways should be designed so that they are easier to drive and can compensate for some driving lapses. Design should include easier grades, much higher levels of illumination, wide shoulders, wider edges and lane lines, better signs and signals, and fewer roadside hazards.

**Cars.** Manufacturers should improve seat belt design and promote their use more vigorously; improve car design and provide mirrors that substantially reduce blind spots; give windshield wipers wider sweep to keep the sides of windshields clear; offer head rests for every seating posi-
tion; improve seats for comfort and safety; provide antilock brake systems for all cars and light trucks. They should also develop audible electronic signal systems that would warn drivers of pedestrians in or approaching crosswalks.

Drivers. Traffic safety and driver improvement courses should be made available to all older drivers on a voluntary basis. All drivers with substandard driving records should be required to take corrective courses. All drivers, regardless of age, should be required to have periodic eye examinations that include tests for peripheral vision and depth perception.

Safety researcher James L. Malfetti observes that no longer are drivers simply content to be presented with cars and highways and told, “You cope, you operate them safely in relation to each other.” Drivers now recognize that they need help with the coping, and he urges drivers to become more actively involved in these matters.

For instance, consider joining local groups working to get better traffic signals or improved highway illumination. Contact car manufacturers and legislators to express your needs, problems, and viewpoints as an older driver. Join organizations that are actively working on behalf of older drivers, and let them, too, know what you think and want. Working for a safe driving environment is simply another aspect of being a safe driver.

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