



## Skills Needed for Driving Safely and Why

The foundation of safe driving is the driver. The following is a basic description of the skills and abilities a driver needs before getting in the drivers seat. This applies to people of all ages.

### PHYSICAL Skills and Abilities

Driving requires physical strength. It takes a lot of muscle work to:

- ✓ hold the body upright to use and control the steering wheel
- ✓ maintain sitting balance
- ✓ control the head, neck, arms and legs, feet and hands
- ✓ to operate a vehicle
- ✓ to get into and out of the car

Physical and mental stamina and muscle flexibility are needed to:

- ✓ sit and drive
- ✓ focus constantly on the task of driving
- ✓ twist and turn (to see motorists or pedestrians coming from the far right and far left
- ✓ move the head and neck side to side, up and down, back and forth

Good joint range of motion and coordination are needed to:

- ✓ hold, control and turn the wheel
- ✓ reach and manipulate knobs/buttons/controls
- ✓ use turn signals and wipers
- ✓ adjust mirrors
- ✓ quickly move the foot from the accelerator to the brake

A combination of muscle strength, coordination, muscle flexibility and joint range of motion all work together to make it possible to respond and react rapidly when the brain demands an immediate response.

**THINGS TO KNOW:** Any one weakness in any of the areas noted above can reduce emergency reaction time! More than one weakness or severe weaknesses in any one area could be enough reason to stop driving, modify driving, or consult with an occupational therapist or certified driving rehabilitation specialist.

Such trained specialists can help to identify available assistive devices that can be used to compensate for permanent losses. They can also develop rehabilitation programs designed to improve the skills needed to prolong safe driving time.

For more information:

<http://www.safeaging.com/learningcenter/lc-driversafety.htm>

<http://www1.aota.org/olderdriver/evaluate.html>

<http://www1.aota.org/olderdriver/changes.html>

## SENSORY SKILLS

Good distance vision is needed to:

- ✓ check for intersections, highway changes, signs
- ✓ determine distances needed for merging into lanes, making turns, lane changing
- ✓ look at highway and even weather conditions
- ✓ look for other approaching cars
- ✓ observe and scan far ahead for potential safety threats or hazards
- ✓ observe road conditions
- ✓ watch for pedestrians

Close vision is needed to:

- ✓ closeness of other cars, pedestrians, walkways
- ✓ distinguish curbs, ramps, roadways, etc.
- ✓ distinguish details
- ✓ read road signs, maps, inside car features
- ✓ see a moving object (like a person stepping off a curb)

Hearing is used to detect:

- ✓ closeness of approaching cars (by the sound of tires and engines)
- ✓ inside car sounds for "empty gas tank" or "check oil".
- ✓ odd engine sounds suggesting maintenance problems
- ✓ outside sounds of life: such as children playing, distracted pedestrians
- ✓ outside warning sounds such as car horns, trains, ambulances, sirens, screams
- ✓ threatening weather conditions, etc.

Touch: The awareness of touch is needed to gauge how hard to tap the brakes or press the accelerator. It is also important to be aware of gripping the steering wheel.

**THINGS TO KNOW:** 90 per cent of the information used for driving comes through the eyes. Any loss in vision increases driving risk. If eye glasses are required for driving, be sure to wear them. The best way to protect your vision and to prolong driving safety is to have annual eye examinations.

## **MENTAL ABILITIES:**

The brain is "Central Control". It directs the body to do everything when driving. Driving requires a clear and alert mind. It can not be muddied up by alcohol, medications or disease processes affecting thinking abilities. In a nutshell, to drive, the driver must have the following mental abilities:

- ✓ quickly and correctly choose the best options in constantly changing situations
- ✓ quickly and correctly react to prevent or reduce accidents or injuries
- ✓ quickly make the best decisions given the set of circumstances
- ✓ quickly recall and apply driving rules and regulations at all times

There is no doubt, that with aging, physical and visual changes do happen. Mental changes may or may not occur. But whenever any physical, sensory, or mental skill changes, driving is affected!

**THINGS TO KNOW:** Always avoid alcohol when driving. It slows down the body's ability to quickly respond. This is especially dangerous in an emergency, but it is really dangerous at all times when driving. Drivers who drink and drive take longer to start and stop for signs, lights, pedestrians, obstacles, other hazards. They take longer to slow down for traffic. Many medications can have the same effect. Always check for medication side effects before driving.