

Driving Vision: Part I *A lingering fear of senior citizens*

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Summary: Adequate vision to maintain a driver's license is something most senior citizens begin to consider and even fear as the years pass. Though it may sound to some like an undue cause of concern during aging, there are many direct and intangible reasons why we should appreciate and respect these feelings in an aging person. This discussion will address the personal issues and considerations associated with the risk of inadequate vision to maintain a driver's license.

In our recent column on the development of cataracts (9/2/02), we discussed the risk of maturing individuals losing their driver's license due to reduced vision. Cataracts are only one eye condition (the most common) among a number that create this risk with aging. We will be discussing all of these conditions in future columns, but we thought it might be worthwhile to precede those columns with a discussion about the actual risk of senior citizens losing their driver's license because of reduced vision. The reason for the early discussion of this topic is because it represents one of the greatest lingering fears to senior citizens.

For people not in harm's way of reducing vision, the fear of driving vision may appear less than other risks the aging process presents. Certainly, some senior citizens measure the risk as minimal on a comparative scale. But in general, surveys indicate a large majority of the aging population weigh the loss of their driving privileges due to *inadequate minimum best correctable vision* as one of the most undesirable and feared risks of aging.

The term "*inadequate minimum best correctable vision*" is important in this discussion because this is the level defined by state law that eye doctors must measure to determine a senior citizen's ability to continue to operate a motor vehicle. Generally, the concept includes the state's determination of what the minimal acceptable level a person's central (straight ahead) or peripheral (side) vision should be with their best corrected vision, that is when using eyeglasses or contact lenses under defined conditions. Those conditions, also dictated by state laws, may vary to include restrictions on day and night driving, types of roadways, driving distances, and speeds traveled.

Most states base restrictions for routine driving tasks only on visual acuity (central or straight ahead vision) and visual fields (peripheral or side vision). Limitations related to color defects and depth perception are usually only applied in special licensing and occupational categories such as truck drivers, police officers and firefighters.

The loss of legally defined minimum best correctable vision, however, is most often perceived by a senior citizen as not sufficient enough a loss or limitation to prohibit them from their vital need to operate a motor vehicle. Indeed, the senior citizen who has driven for many years measures the right and privilege of driving as one of their most important and valued day-to-day activities.

The reasons for valuing a basic task like driving with such importance varies with individuals, but certainly has many common denominators among all senior citizens. The very basic nature of driving oneself causes it to intimately effect many of life's routine activities, functions and tasks. Without driving, these tasks are lost or substantially and negatively impacted. That loss is recognized and genuinely feared by an aging person in jeopardy of losing their right to drive.

Beyond the activities lost with the loss of driving privileges, many less tangible, but sometimes more painful losses are also at stake. To the aging person, driving represents a significant measure of the independence and freedom they have enjoyed throughout most of their life. Losing that lifelong gift is reasonable cause for fear and concern. After years of freedom no one wants to feel dependent, even on

loved ones or caretakers, especially when the dependent person does not themselves feel a sense of incapacitation or limitation.

Driving also represents self-determinable social integration or separation. When we want to visit someone, we usually don't want to rely on someone else to transport us. Indeed, we may want to visit personally to enjoy or share private moments and we may decide to leave or stay at a different time than first planned.

Conversely, our desire might be for total privacy where driving can take us to a special place to be alone. Such an ability, indeed a personal right, is certainly recognized as important by a person of any age. The senior citizen, like anyone who has enjoyed such a human right, fears its loss.

The major causes of *inadequate minimum best correctable vision* among senior citizens can be categorized as irreversible, correctable or preventable. Part II of our discussion on driving vision, "Risks, Repairs and Prevention" will provide a brief description of each category. This will give our First Coast senior citizens a better understanding of what they may need to fear, but more so, what **they do not need to fear** regarding their best correctable vision and driving privileges.

Driving Vision: Part II "Uncorrectables, Correctables, and Prevention"

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Summary: During the aging process, there are numerous conditions that can affect driving vision. A few, unfortunately, are uncorrectable and can lead to loss of driving privileges based on state laws. Most, however, are correctable and even preventable through periodic eye examinations and proper eye and general health care. This discussion identifies the specific uncorrectable, correctable and preventable conditions related to driving vision for senior citizens.

There are a numerous conditions beyond the typical changes in your vision and eye glass lens correction with aging that can jeopardize your ability to drive and maintain a driver's license. As we mentioned last week, some of these conditions are preventable; some are correctable; and unfortunately, some are neither preventable nor correctable. In future columns we will discuss each of these conditions in some depth so that you can better understand them. In this column, however, we will identify the most relevant and common possibilities and we will categorize them into uncorrectables, correctables and preventables.

Uncorrectable conditions that jeopardize driving vision

There is one principal uncorrectable vision abnormality associated with aging called "age related macular degeneration" or ARMD. This condition can reduce minimum best correctable vision (vision with glasses) well below minimum driving standards. Currently, it can neither be corrected nor prevented. However, we say "currently" because extensive research is being done on this serious eye problem which is considered the third leading cause of blindness.

Degeneration is a process which occurs in varying degrees throughout our bodies during aging. When such degeneration occurs in tissues critical to vision like the macula of the retina, it can adversely affect vision in an irreversible way, uncorrectable by eyeglasses, surgery or medicine. We will talk about this unpleasant, yet important to understand problem in our next column.

There are other less common (fortunately) uncorrectable conditions that can reduce minimum best correctable vision below minimum driving standards. Most of them are associated with systemic diseases that affect the eye, particularly diabetes. Again, we will discuss this risk in depth in an upcoming column.

Correctable conditions that jeopardize driving vision

Certainly, the most common cause of reduced vision, sometimes believed or feared by a senior citizen to be *inadequate minimum best correctable vision* is merely an insufficient or improper spectacle lens correction. In reality, many, many times this reduced but correctable vision is actually quite adequate or even good vision which is simply "inadequately" corrected!

This common cause of reduced vision is correctable to acceptable driving standards with a comprehensive examination by your eye doctor. The value of such regularly scheduled eye examinations for senior citizens cannot be overemphasized. This simple examination process and a new pair of glasses, if needed can correct the vast majority of vision problems which can jeopardize driving privileges in the aging patient.

Another very common, correctable condition relative to driving vision which a comprehensive eye examination will identify is the presence of the cataracts which we discussed in recent columns. During the development of a cataract, correctable vision can be reduced significantly below minimum driving standards even with the most accurate and maximum lens powered prescription lenses. This will result in inadequate minimum best correctable vision. Fortunately, as we described previously, this common, cataract condition is now completely correctable with a precise and safe surgical procedure and a lens implant. Preventable conditions that can jeopardize driving vision.

The single most common, preventable cause of *inadequate minimum best correctable vision* correctable vision for driving in an aging person beyond cataracts is undiagnosed glaucoma. This is a relatively common condition effecting as much as 10% of the aging population and generally thought to be caused by an increased pressure inside the eye. We are actually learning a great deal more about the causes of glaucoma which we will cover in depth in upcoming columns. But for this discussion, it's important to understand that glaucoma does not attack vision the way the other problems we've mentioned do. Instead of losing your central vision (things you're looking directly at), your peripheral (side) vision insidiously (slowly and progressively) deteriorates and eventually, if this loss is not controlled, it can eventually lead to loss of central vision as well.

Glaucoma is called "the sneak thief of sight" because it is not associated with pain nor early visual symptoms as conditions effecting central vision produce. Unfortunately, many people who do not have regular eye examinations suffer irreversible loss of vision from glaucoma, sometimes below minimum driving standards. But early diagnosis of glaucoma could prevent such vision losses through the simple use of eye drops and sometimes, surgery. Once again, this is strong reason for regular examinations with your eye doctor.

Another cause of preventable loss of minimum best correctable vision for driving may be less obvious to senior citizens, but is of greatest importance. The aging process leaves the heart and blood vessels at increased risk of damage due to improper diet, medical disorders like diabetes, arteriosclerosis, high blood pressure (hypertension) and other risk factors like excess weight, smoking, stress, etc. The blood vessels of the retina (the sensitive nerve tissue inside the eye), like all vessels in the body, are vulnerable to adverse changes. Damage to retinal vessels, however, usually produce loss of visual function, mostly central vision. Good health habits and proper medical care can reduce or prevent negative effects to retinal blood vessels and thus, will help to preserve minimum best correctable vision.

Franklin Delano Roosevelt told us many years ago, "The only thing to fear is fear itself." For the aging patient, regarding *minimum best correctable vision* for driving, "the only thing to fear is neglect." Regularly scheduled eye examinations to help prevent and correct problems early and overall good health habits and diet will usually preserve many extra years, if not indefinitely, an *adequate minimum best correctable vision* for driving and for a long and happy life.