

# Falls and Vision Loss Part 2

Prepared by Bernard A. Steinman, M.S.



- May experience more difficulty maintaining balance;
- May over-correct or have trouble taking corrective action after a stumble;
- May exercise less, and consequently lose strength and balance;
- May venture outdoors less often resulting in reduced absorption of Vitamin D, which is important for the maintenance of healthy bones.

## Making Life Safer for Older Adults with Visual Impairments

- Fortunately, many of the factors that place visually impaired older adults at risk for falling can be addressed through modifications to individual behavior and to the home environment.
- Proper maintenance of diseases that affect the eyes (e.g. glaucoma, and diabetes) can help to preserve residual vision. Similarly, removal of cataracts has been shown to reduce the likelihood of falling. Regular checkups, by older people in general, can help to detect vision problems early.
- Regular adherence to approved exercise programs (low adherence may result in greater likelihood of falling). Even modest exercise has been shown to improve muscle tone and balance among elderly participants.
- Home safety assessment and modifications
  - Fix cracks in pavement and sidewalks.
  - Mark abrupt edges (e.g., steps and stairs) with bright high-contrast tape, so that they are visible.
  - Adjust lighting so that it is sufficient to see, but not too bright, such that it causes glare.
  - Remove or repair uneven surfaces (for example, those caused by protruding tree roots).
  - Keep walkways clear of clutter.
  - Put bells on pet collars.



# Falls and Vision Loss Part 2

Prepared by Bernard A. Steinman, M.S.

- Poor visual acuity— Cataracts and other age-associated eye diseases may reduce the clarity and detail of a visual image. Similarly, natural age-related changes to the eyes (presbyopia), including the increased difficulty of focusing the eye's lens on objects, can reduce the ability to discern fine details in the environment.
- Increased sensitivity to glare— Age-related changes in the eye make older people more sensitive to glare. Bright indoor lighting, and sunlight, may make it difficult for older people to see, and to avoid objects that are in their paths.

## Vision-Related Environmental Factors

- Pavement cracks/misalignments— Older adults with vision impairments may not see cracks in sidewalks and pavement that could cause them to trip.
- Steps/stairs—Due to problems with depth perception and balance, steps and narrow stairs may be especially hazardous to some older people with visual impairments.
- Low contrast obstacles/clutter— Objects that blend into the background are more likely to cause trips and stumbles among visually impaired elders.
- Low contrast edges— In some cases, changes in lighting on the edge of a surface may indicate a step downward/upward. When vision loss reduces the ability to detect edge contrasts, the risk of falling increases.
- Inappropriate glasses/multifocal glasses— Older adults who have outdated prescriptions or glasses with multifocal lenses are at increased risk for falling.

## General Effects of Visual Impairment

As a result of risk factors associated with visual impairments among the elderly, the incidence of falling may increase because visually impaired elders...

- May fail to see environmental hazards (e.g., curbs, overhead obstacles, clutter, pets);

