With the aging of the population, vision loss from eye disease is becoming a major public health concern. More than 40 million people are age 65 or older, and that number is expected to grow to more than 88 million by 2050. By that same year, the number of Americans with age-related eye diseases is expected to double, and the number of people living with low vision is projected to triple.

The National Eye Health Education Program (NEHEP) is dedicated to raising awareness about vision and aging and educating older Americans about what they can do to protect their sight. But we can’t do it alone. We rely on community and health professionals, like you, to help promote the message that vision loss and blindness are not a normal part of aging. The NEHEP Vision and Aging Program includes a variety of resources that you can use to raise awareness about the importance of healthy behaviors and comprehensive dilated eye exams in protecting vision as we age.
Common Vision Problems as We Age

Some vision changes are common with the natural aging of the eye, including difficulty seeing close-up objects clearly; declining sensitivity; having trouble distinguishing colors, such as blue from black; and needing more light to see well. These changes often can be easily corrected with a new prescription for glasses or improved lighting. But it is important for older adults to know the difference between changes that are normal and those that are not.

What Are Age-Related Eye Diseases?

As people age, they are at higher risk for certain eye diseases and conditions, including age-related macular degeneration (AMD), cataract, diabetic retinopathy, glaucoma, and dry eye. Many of these diseases and conditions have no warning signs but can be detected in their early stages during a comprehensive dilated eye exam. Early detection and treatment are key to saving sight.

- AMD is the leading cause of vision loss and blindness among adults ages 50 and older. It gradually destroys the macula, which is the part of the eye that provides sharp, central vision. A variety of treatments are available to help reduce the risk of vision loss in people with this condition.

- Cataract is a clouding of the lens in the eye that causes loss of vision. Cataracts are very common in older people, and surgery is the only effective treatment. By age 80, more than half of all Americans either have cataracts or have had cataract surgery.

- Diabetic retinopathy (DR) is a complication of diabetes that damages blood vessels in the retina, which is the light-sensitive tissue at the back of the eye. Early detection, timely treatment, and appropriate follow-up care can reduce the risk of vision loss by 95 percent.

- Glaucoma is a group of diseases that can cause fluid and pressure to build up in the eye and damage the optic nerve. It first affects side, or peripheral, vision but can lead to total vision loss if left uncontrolled.

- Dry eye occurs when the eye does not produce tears properly or when tears evaporate too quickly. Left untreated, this condition can lead to pain, ulcers, or scars on the cornea, and some loss of vision. Dry eye can be treated with artificial tears, prescription eye drops, gels, gel inserts and ointments, and punctal or tear duct plugs.

What Is Low Vision?

Left untreated, many age-related eye diseases and conditions can lead to low vision. Low vision is a visual impairment that cannot be corrected with glasses, contact lenses, medication, or surgery. While vision that has been lost usually cannot be restored, people can learn to make the most of their remaining vision with vision rehabilitation.
What Are the Numbers?

Two million adults ages 40 and over have AMD, 24.4 million have cataract, 7.7 million have diabetic retinopathy, 2.7 million have glaucoma, and 3 million have low vision. These rates are expected to increase as the population of older adults grows.

<table>
<thead>
<tr>
<th>Eye Disease/Condition</th>
<th>Current Estimate</th>
<th>2030</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMD</td>
<td>2.0</td>
<td>3.7</td>
<td>5.4</td>
</tr>
<tr>
<td>Cataract</td>
<td>24.4</td>
<td>38.7</td>
<td>50.2</td>
</tr>
<tr>
<td>Diabetic retinopathy</td>
<td>7.7</td>
<td>11.0</td>
<td>14.6</td>
</tr>
<tr>
<td>Glaucoma</td>
<td>2.7</td>
<td>4.3</td>
<td>6.3</td>
</tr>
<tr>
<td>Low vision</td>
<td>3.0</td>
<td>5.0</td>
<td>8.9</td>
</tr>
</tbody>
</table>

Prevalence and Projections (in millions)

Ways to Prevent Vision Loss

Encouraging older adults to have regular comprehensive dilated eye exams (see sidebar) is the most important thing you can do to help them protect their sight. Even if they haven’t noticed any problems with their vision, it’s still important to remind them that although many age-related eye diseases don’t have any early symptoms, they can be detected and treated early before noticeable vision loss occurs. Many lifestyle factors can also play an important role in protecting vision as we age. It’s important to remind older adults to take the following actions:

- Eat a balanced diet that includes dark, leafy greens and fish high in omega-3 fatty acids.
- Maintain a healthy weight.
- Do not smoke.
- Keep diabetes under control.
- Wear sunglasses and a brimmed hat outdoors.
- Wear protective eyewear.
- Know their family’s eye health history and discuss it with their eye care professional.

Vision and Aging Resources

NEHEP has a variety of free resources to help you educate those you serve about the importance of maintaining good eye health.

- **See Well for a Lifetime Toolkit**—This toolkit provides science-based, easy-to-understand tools and resources that can be used in community settings to educate older adults about eye health and maintaining healthy vision as they age. The toolkit includes three modules that can be used for individual educational sessions or that can build on one another as a series. Each module contains a PowerPoint presentation, a speaker’s guide with detailed talking points, participant handouts, promotional announcements, and participant evaluation forms. No prior knowledge of eye health is needed to use this toolkit.
• **Infographics and infocards**—These colorful infographics and infocards can be used on websites and social media pages to promote eye health and the importance of comprehensive dilated eye exams among older adults.

• **Drop-in articles**—These articles can be placed on your blog or website, or in newsletters to inform older adults about the most common age-related eye diseases and conditions and the steps they can take to protect their sight.

• **Medicare benefit card and print public service announcements (PSAs)**—The postcard and PSAs can be used to promote the glaucoma and diabetic eye disease benefit under Medicare. Share them at health fairs and in your clinic or other community setting.

• **Age-Related Eye Diseases Web page**—This page provides older adults with one convenient source for the eye health information they need, including how to find financial aid or a local eye care professional. Available in English and Spanish.

• **Living With Low Vision booklet and DVD**—This booklet and companion DVD are designed to help people with vision loss and their friends, family, and caregivers learn about vision rehabilitation services and devices. It features several older adults who continue to lead an active and independent lifestyle despite their vision loss. Available in English and Spanish.

• **Educating Older Americans About Their Aging Eyes Webinar**—This pre-recorded webinar provides an overview of the growing prevalence of age-related eye diseases and conditions and their lack of early symptoms, the importance of comprehensive dilated eye exams, and resources available to help you educate older adults about eye health and the prevention of vision loss and blindness.

For additional information and to download these resources, visit the NEHEP Vision and Aging Program website at:

www.nei.nih.gov/nehep/programs/visionandaging