



Educating Older Americans About **Their** **Aging Eyes**



National Eye Institute



National Eye Health
Education Program
NEHEP

*A program of the National
Institutes of Health*

Educating Older Americans About Their Aging Eyes



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Director

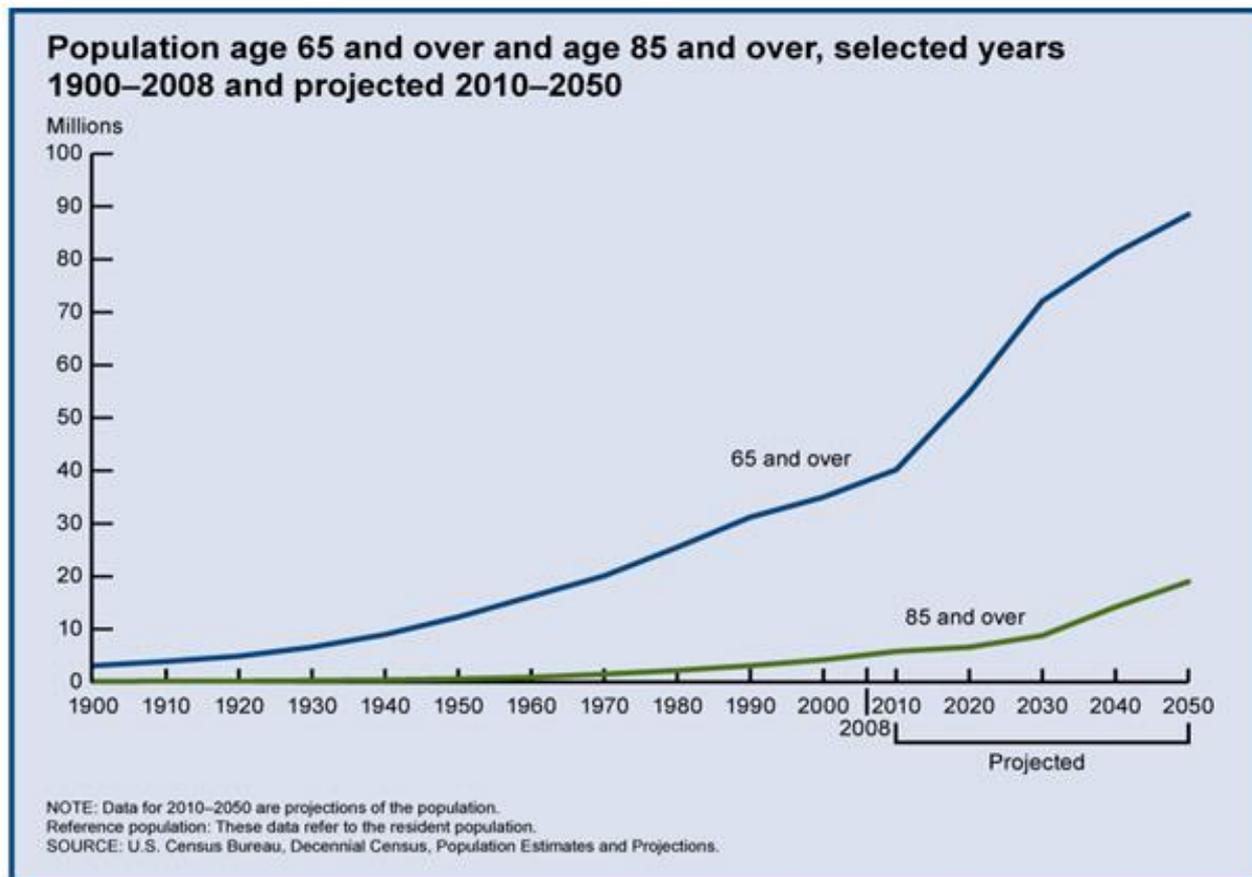
National Eye Health Education Program
National Eye Institute
National Institutes of Health

Educating Older Americans About Their Aging Eyes

- Learn about vision loss.
- Educate older adults.
- Help spread the word.



Aging in the United States



Eye Diseases and Conditions Prevalence and Projections

	2010 Estimates	2030 Projections	2050 Projections
Age-Related Macular Degeneration	2,100,000	3,700,000	5,400,000
Cataract	24,400,000	38,700,000	50,200,000
Diabetic Retinopathy	7,700,000	11,300,000	14,600,000
Glaucoma	2,700,000	4,200,000	6,300,000
Low Vision	2,900,000	5,000,000	8,900,000

Source: *Vision Problems in the U.S.* report and searchable database,
www.nei.nih.gov/eyedata

Common Vision Problems With Age

- Vision loss and blindness are not a normal part of aging.
- Some vision changes are common:
 - Losing focus
 - Noticing declining sensitivity
 - Needing more light



Many Vision Changes Can Be Corrected

- Vision changes can often be corrected with:
 - Contact lenses
 - Glasses
 - Improved lighting
- People can age without experiencing changes in their vision.



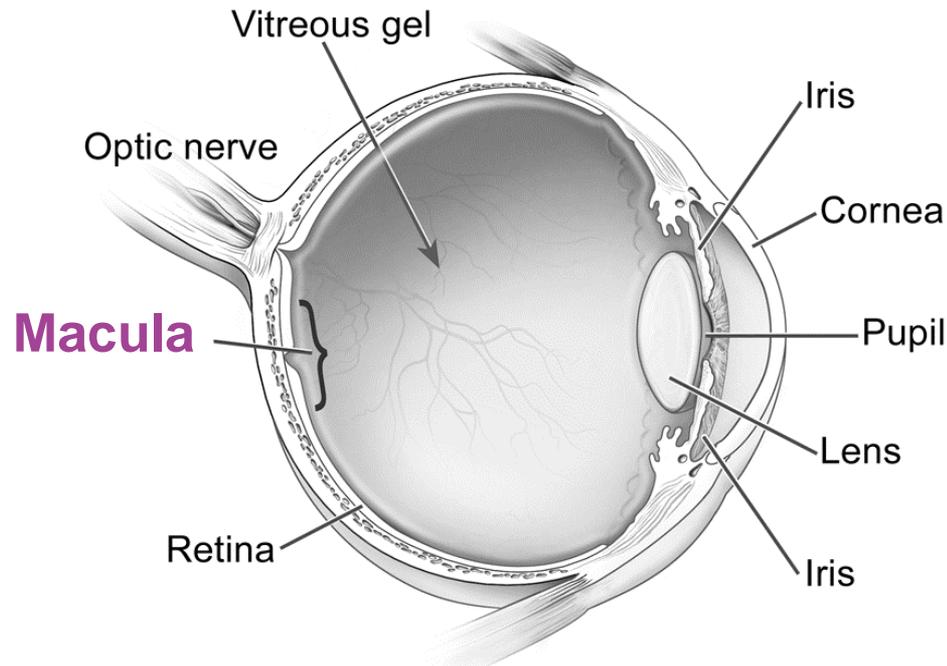
Age-Related Eye Diseases and Conditions

- As people get older, these are the common eye diseases and conditions they could face:
 - Age-related macular degeneration
 - Cataract
 - Diabetic retinopathy
 - Glaucoma
 - Dry eye
 - Low vision



Age-Related Macular Degeneration

Damages the macula, which is needed for sharp, detailed central vision



Age-Related Macular Degeneration



Normal vision



Same scene viewed by a person with advanced age-related macular degeneration

Age-Related Macular Degeneration

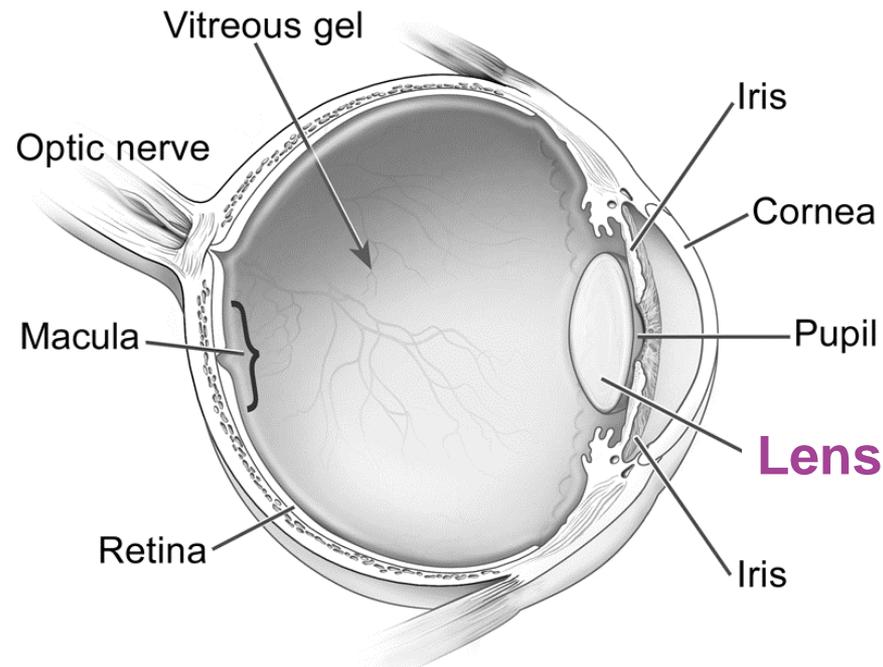
- **Risk factors:**
 - Age, smoking, family history, obesity, race
- **Symptoms:**
 - No pain
 - Blurred vision
 - Drusen (only visible to an eye care professional)

Age-Related Macular Degeneration

- **Treatment options:**
 - Age-Related Eye Disease Study (AREDS) special vitamins/minerals supplement formulation
 - Eye injections
 - Laser surgery

Cataract

Clouding of the eye's lens that causes loss of vision



Cataract



Normal vision



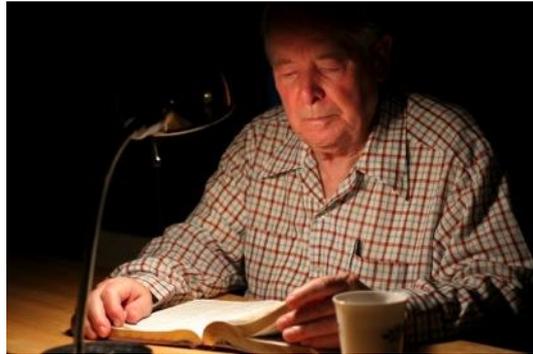
Same scene viewed by
a person with a cataract

Cataract

- **Risk factors:**
 - Age
 - Diabetes, smoking, and exposure to sunlight
- **Symptoms:**
 - Cloudy or blurred vision
 - Colors that appear less vivid as they once did
 - Glare
 - Poor night vision

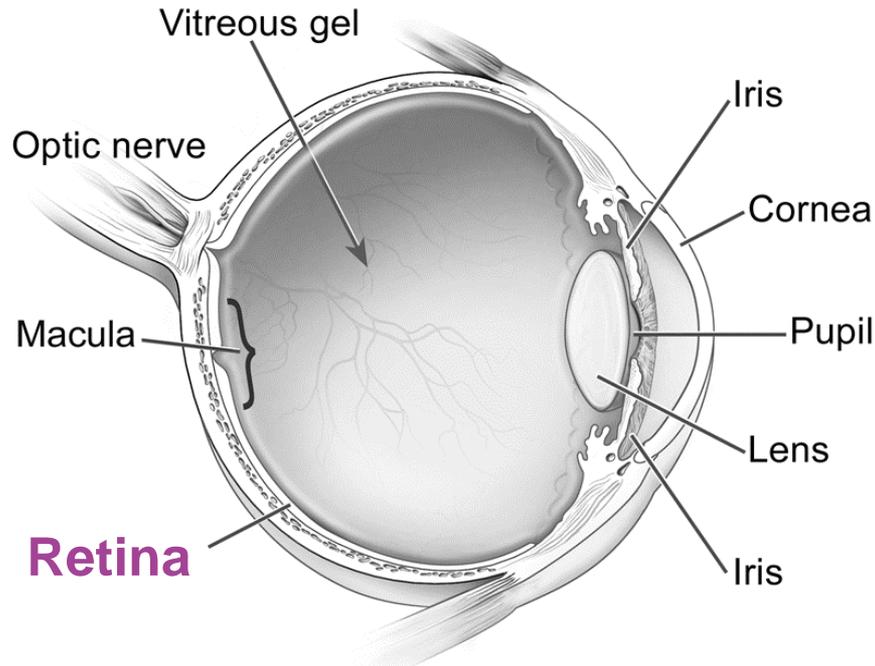
Cataract

- **Treatment options:**
 - Glasses
 - Better lighting
 - Surgery



Diabetic Eye Disease

Group of eye problems associated with diabetes, including diabetic retinopathy, glaucoma, and cataract



Diabetic Eye Disease



Normal vision



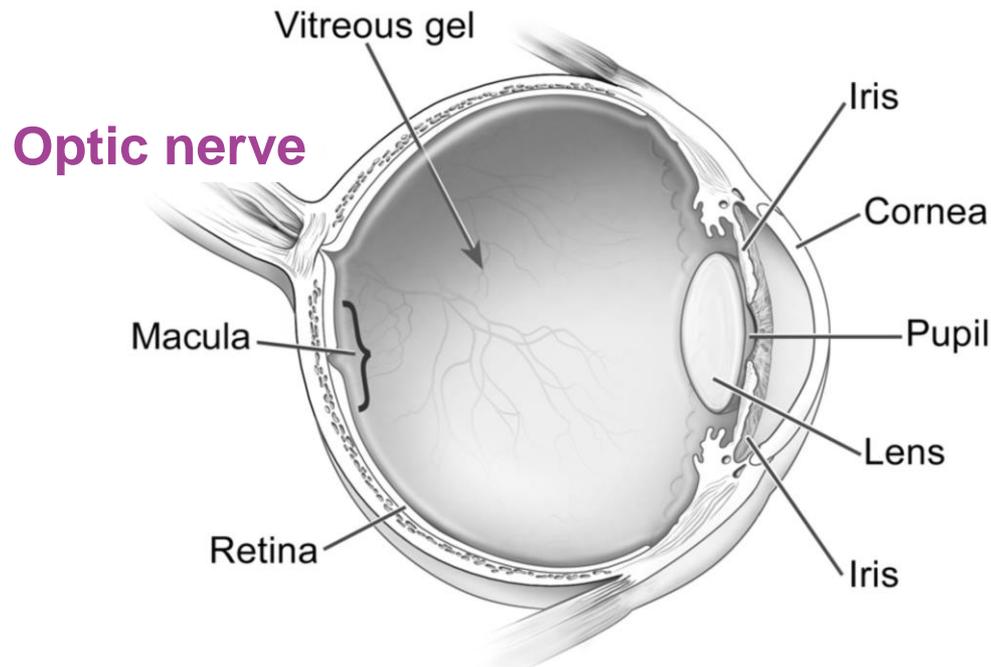
Same scene viewed by a person with advanced diabetic retinopathy

Diabetic Eye Disease

- **Symptoms:**
 - No early warning signs or symptoms
- **Treatment options:**
 - Laser treatment
 - Injections
 - Early detection and timely treatment can reduce the risk of severe vision loss by 95 percent.

Glaucoma

Group of eye diseases that damages the optic nerve of the eye



Glaucoma



Normal vision



Same scene viewed by
a person with advanced glaucoma

Glaucoma

- **Risk factors:**
 - Age, race, and family history
 - African Americans over age 40
 - Everyone over age 60, especially Hispanics/Latinos
 - People with a family history of glaucoma
 - People with diabetes

Glaucoma

- **Symptoms:**
 - No early warning signs or symptoms
 - No pain
 - Loss of side vision
- **Treatment options:**
 - Medications, usually eye drops
 - Laser or conventional surgery

Dry Eye

Occurs when the eye does not produce tears properly or when tears evaporate too quickly

Common symptoms:

- Episodes of excess tears following dry periods
- Feeling of sand or grit
- Blurred vision
- Pain and redness
- Stringy discharge from the eye
- Stinging or burning of the eye
- Sensitivity to light



Dry Eye

- **People at higher risk:**
 - Dry eye can occur at any age.
 - Women experience dry eye more often than men.
 - Dry eye can occur as a side effect of certain medications.
 - Can also result from focusing on a computer screen for long periods of time.

Dry Eye

- **Treatment options:**
 - Using artificial tears, prescription eye drops, gels, gel inserts, and ointments
 - Wearing glasses or sunglasses
 - Getting punctal or tear duct plugs



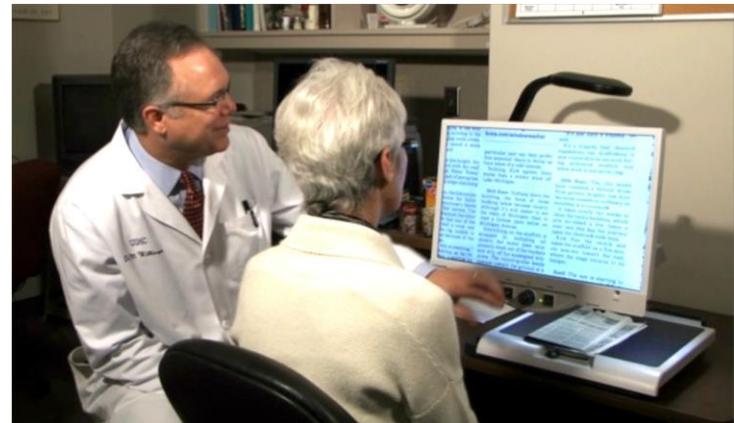
Low Vision

A visual impairment that cannot be corrected by regular glasses, contact lenses, medication, or surgery that interferes with the ability to perform everyday activities



Low Vision

- **People at higher risk:**
 - People with eye disease
 - People who develop vision loss after eye injuries or from birth defects
- **Treatment options:**
 - Vision rehabilitation



Educating Older Adults About Vision Loss

- Existing knowledge about eye health and disease
- Key eye health messages to communicate to older adults
- Ways to prevent vision loss



Survey Question

- What percentage of older adults are aware that glaucoma has no early symptoms?
 - 90 percent
 - 65 percent
 - 35 percent
 - 10 percent

Survey Question

- What percentage of older adults are aware that age-related macular degeneration runs in families?
 - 90 percent
 - 65 percent
 - 35 percent
 - 10 percent

What Do Older Adults Know About Vision Loss?

Most older Americans (65+) have heard of different eye diseases but don't know a lot about how they affect the eyes.

- 96% heard of glaucoma; only 10% knew it has no early symptoms
- 70% heard of AMD; 57% knew you can have it and not know it; 35% knew it runs in families
- 65% heard of diabetic eye disease; 58% knew vision loss can be prevented; only 8% knew it had no early symptoms
- 16% had heard of low vision
- 71% said loss of eyesight would have the greatest impact on their daily life compared to loss of memory, hearing, speech, or a limb

What Do Older Adults Know About Vision Loss?

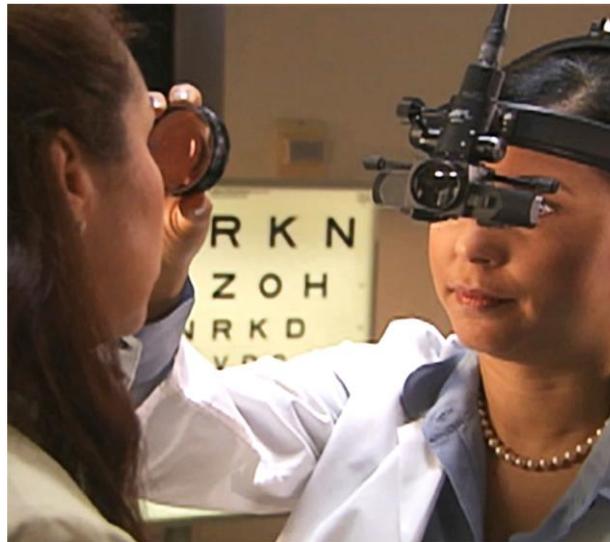
- Most older adults have limited knowledge of age-related eye disease, and think it is a natural part of aging.
- They fear the loss of vision will mean loss of independence.
- The barriers they face include:
 - Not wanting their pupils dilated
 - Absence of health insurance
 - Lack of awareness



Ways to Prevent Vision Loss

Step #1

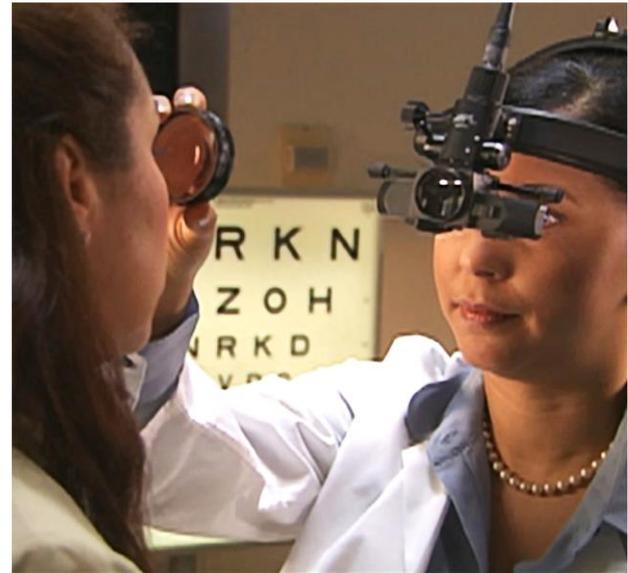
- Visit an eye care professional for a comprehensive dilated eye exam.



Comprehensive Dilated Eye Exam

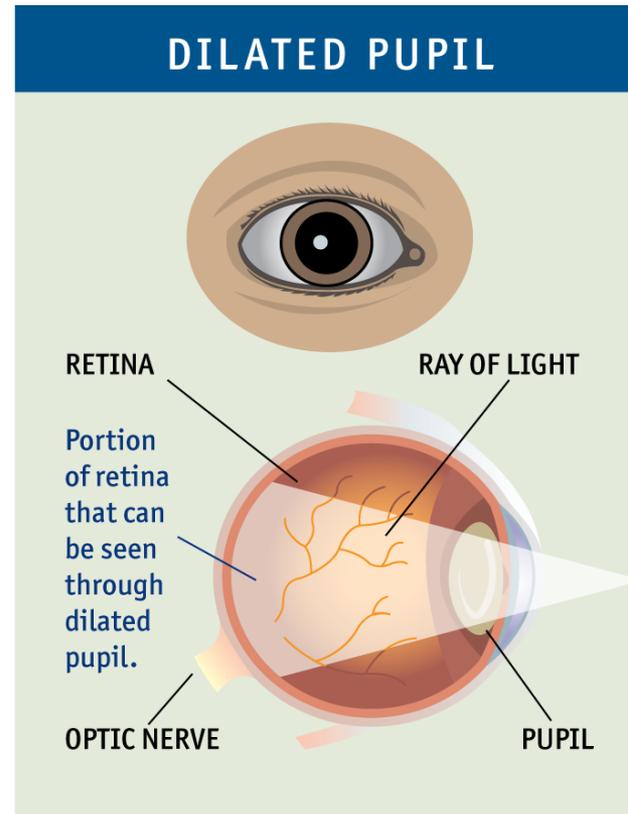
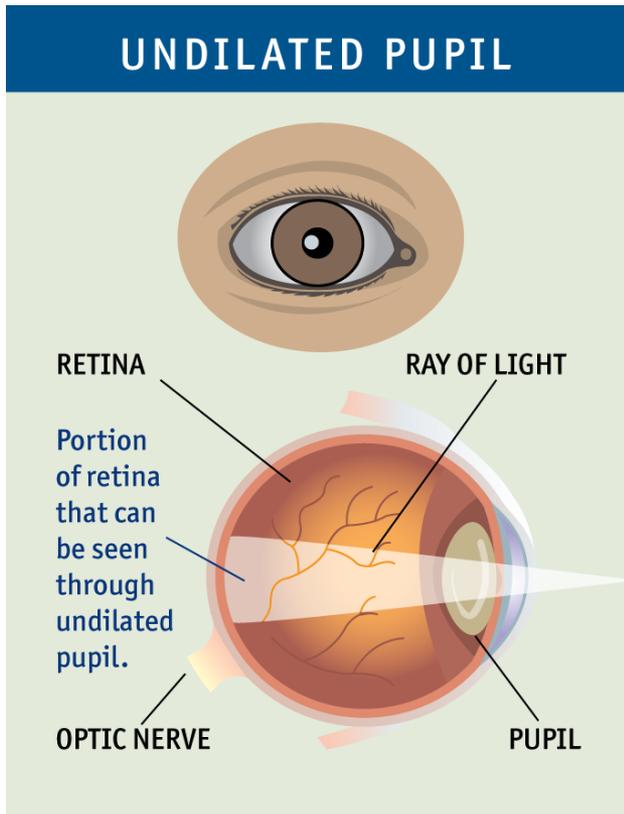


An eye care professional puts dilating drops in a patient's eye



The eyes are examined for any signs of damage or disease.

The Dilated Eye



Ways to Prevent Vision Loss

Step #2

- Eat a healthy, balanced diet.



Ways to Prevent Vision Loss

Step #3

- Maintain a healthy weight.



Ways to Prevent Vision Loss

Step #4

- Don't smoke.



Ways to Prevent Vision Loss

Step #5

- Keep diabetes under control.



Ways to Prevent Vision Loss

Step #6

- Wear sunglasses and a brimmed hat outdoors.



Ways to Prevent Vision Loss

Step #7

- Wear protective eyewear.



Ways to Prevent Vision Loss

Step #8

- Know your family's eye health history.



Helping Spread the Word About Vision Loss

- NEHEP is dedicated to preventing vision loss and promoting vision rehabilitation through public and professional education programs.
- Health and community professionals play a vital role in raising awareness.
- The NEHEP Vision and Aging Program has a variety of resources.



Resources That Help You Spread The Word

- NEHEP Vision and Aging Program website
- *See Well for a Lifetime Toolkit*
- Infographics
- Drop-in article
- Social media resources
- Medicare benefit card
- Age-related Eye Diseases Web page
- *Living With Low Vision* booklet and DVD



Resources That Help You Spread The Word

Home » Education » NEHEP » NEHEP Programs » Vision and Aging



NEHEP Programs

Vision and Aging

This program provides health professionals with tools and guidance for educating older adults about eye health, eye diseases and conditions, and the importance of comprehensive dilated eye examinations.

Key Target Audiences: Adults age 50 and older.

Key Program Messages:

- Everyone aged 50 and older should have a comprehensive dilated eye exam.
- Eye diseases have no early warning signs or symptoms.
- Early detection and treatment may prevent vision loss or blindness.

Outreach Opportunities

- Health Observances
- Community Activities
- Educational Materials

Other Resources:

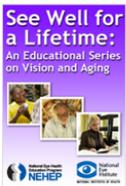
- About NEHEP
- NEHEP Programs
 - [Diabetic Eye Disease](#)
 - [Glaucoma](#)
 - [Low Vision](#)
 - [Olo.com.su.vision](#)
 - Vision and Aging
 - [What is the Toolkit?](#)
 - [How to Use the Toolkit](#)
 - [Outreach Opportunities](#)
 - [Medicare Benefit](#)
 - [Resources and Materials](#)
- NEHEP Partnership
- Outlook Newsletter
- Related Research
- Working with the Media
- Webinars
- Infographics

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See Well for a Lifetime Program: An Educational Series on Vision and Aging

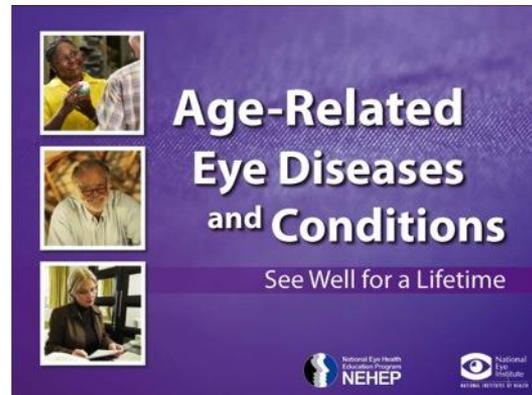
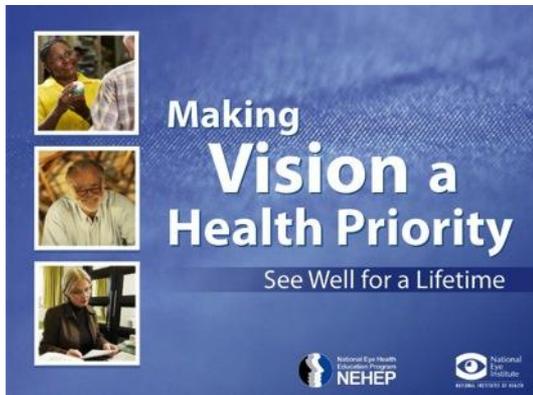
The *See Well for a Lifetime* program is a new educational series designed to help educate older adults about eye health. The core educational piece of this program is the *See Well for a Lifetime Toolkit*, which was developed for professionals who work with older adults. The Toolkit conveys science-based, easy-to-understand information about eye health, common vision changes associated with aging, age-related eye diseases and conditions, and the importance of comprehensive dilated eye exams. The Toolkit comprises three modules that can be used for individual educational sessions or that can build on each other as a series. [Learn about the Toolkit and download related materials.](#)



- **NEHEP Vision and Aging Program website**
 - Designed for professionals who work with older adults
 - **www.nei.nih.gov/nehep/programs/visionandaging**

Resources That Help You Spread The Word

- ***See Well for a Lifetime Toolkit***
 - For health and community professionals who work with older adults
 - <https://www.nei.nih.gov/nehep/programs/visionandaging/whatis>



Resources That Help You Spread The Word

AGING & EYE HEALTH

40+ MILLION AMERICANS AGE 65+
2010 2030
88+ MILLION

4+ MILLION AMERICANS AGE 40+ WHO ARE VISUALLY IMPAIRED
2010 2030
7+ MILLION

Vision loss and blindness ARE NOT a normal part of aging.

But as people age, they are at higher risk for age-related macular degeneration, cataract, diabetic eye disease, and glaucoma. These diseases often have no early warning signs, but can be detected early.

Adults 50+ should visit an eye care professional for a comprehensive dilated eye exam.

Drops are placed in the eyes to dilate, or widen, the pupils so that they can be examined for signs of disease.

Medicare helps to pay for comprehensive dilated eye exams for people with diabetes and those at higher risk for glaucoma. People with Medicare who are eligible include:

- African Americans age 50 or older
- Hispanic/Latinos age 65 or older

Ageing and Your Eyes

What vision changes are normal with age?

- needing glasses to see up close.
- having trouble adjusting to glare.
- having difficulty seeing apart some colors.
- needing more light to see best.

Are vision loss and blindness a normal part of aging?

No! But as you age, you are at higher risk for developing age-related eye disease and conditions:

Age-related macular degeneration (AMD) Damage to the inside of the eye.	Cataract Clouding of the lens of the eye.	Diabetic retinopathy Damage to blood vessels in the retina.
Glaucoma Damage to the optic nerve.	Dry eye Eyes do not make enough tears.	Low vision Difficulty seeing, near, mid, or far.

Are there warning signs?

Many eye diseases have no early warning signs but can be detected through a comprehensive dilated eye exam.

UNDILATED PUPIL Part line of yellow. If it can be seen through undilated pupil. CORNEAL REFLECT	DILATED PUPIL Part line of red. If it can be seen through dilated pupil. CORNEAL REFLECT
--------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------

What can I do to protect my sight?

- Have regular dilated eye exams.
- Know your family's eye health history, be particularly active.
- Get a diet rich in fish and green leafy veggies.
- Control your diabetes if you have it.
- Stop smoking.
- Wear sunglasses and a brimmed hat outside.
- Wear protective eyewear when working around your house or playing sports.

What if I've already lost vision?

Help is available. Talk with your eye care professional about vision rehabilitation.

Where can I learn more about vision and aging?

Visit www.nei.nih.gov/agingeyes

• Infographics

- Use in newsletter articles or on websites and social media pages
- www.nei.nih.gov/nehep

Resources That Help You Spread The Word

See well for a lifetime:
**TAKE CARE
OF YOUR EYES
AS YOU AGE**



Aging is a process that provides us with many opportunities to reinvent ourselves, from major transformations such as becoming a grandparent or going back to school to simple lifestyle changes like starting a new exercise program. Don't miss out on any of these opportunities; take stock of your eye health to make sure you are seeing your best and that your eyes are healthy.

While some changes to vision are normal with aging, people are at higher risk for vision loss from eye diseases and conditions as they age. Many eye diseases have no early warning signs or symptoms, but they can be detected early with regular comprehensive dilated eye exams.

A comprehensive dilated eye exam is different from the basic eye exam or screening you have to get new glasses or contacts. Your eye care professional will place drops in your eyes to dilate, or widen, the pupil. Then, he or she will use a special magnifying glass to examine the inside of your eye for early signs of—

- Age-related macular degeneration, which gradually destroys the macula (the part of the eye that provides sharp, central vision)
- Cataract, a clouding of the lens in the eye
- Diabetic retinopathy, a complication of diabetes that damages blood vessels in the retina (the light-sensitive tissue at the back of the eye)
- Glaucoma, a group of diseases that can cause fluid and pressure to build up in the eye and damage the optic nerve

Don't wait until you notice problems with your vision. Call your eye care professional today to make an appointment for a comprehensive dilated eye exam. Early diagnosis and treatment are the best ways to prevent vision loss. And if you have been diagnosed with an eye disease or condition, work with your eye care professional to learn about your treatment or rehabilitation options. Improve your knowledge of eye health to ensure a healthy foundation for change.

Visit www.nei.nih.gov/agingeye for more information.



National Eye Institute
A program of the National Institutes of Health

■ Drop-in article

■ Use on websites, blogs, newsletters, or other.

■ www.nei.nih.gov/ham

Resources That Help You Spread The Word



- **Social Media Resources**
 - Ready-to-post Facebook and Twitter messages
 - Vision and Aging board on Pinterest
 - Eye disease videos on YouTube
- **www.nei.nih.gov/nehep**

Resources That Help You Spread The Word



- **Medicare Benefit Card**
- Promotes the glaucoma and diabetic eye disease benefit under Medicare
- Will help pay for comprehensive dilated eye exams for:
 - African Americans age 50 or older
 - Hispanics/Latinos age 65 or older
 - People with a family history of glaucoma
 - People with diabetes
- <https://www.nei.nih.gov/nehep/programs/visionandaging/medicare>
- **Financial Assistance:** www.nei.nih.gov/healthyeyes/financialaid.asp

Financial Assistance for Eye Care

Many state and national programs provide financial assistance to people in need of eye care and corrective eyewear. You may want to contact the following organizations if you need help covering the cost of an eye exam and glasses or contact lenses.

EyeCare America—EyeCare America provides access to eye care for the medically underserved and those at increased risk for eye disease through a corps of 7,000 volunteer ophthalmologists dedicated to serving their communities. Founded in 1985, EyeCare America is the public service program of the Foundation of the American Academy of Ophthalmology. For more information, contact the EyeCare Program helpline toll-free at 1-800-222-EYES (3937), 24 hours a day, 7 days a week, or visit <http://www.eyecareamerica.org>.

eye care America
The Foundation of the American Academy of Ophthalmology

Lions Clubs International Foundation—Lions Clubs International is a service organization whose local club members are all volunteers. A local Lions club in or near your community may sponsor a program that may help you buy corrective eyewear or obtain eye health care. To find a Lions club near you, access the Club Locator at <http://www.lionsclubs.org/EN/find-a-club.php>.

Lions Clubs International

VISION USA—Volunteers In Service In Our Nation (VISION USA) provides basic eye health and vision services, free of charge, to low-income, uninsured individuals and their families. Participating optometrists of the American Optometric Association have been donating their services to VISION USA since 1991. For more information, visit <http://www.aoa.org/visionusa.xml>, or call 1-800-766-4466, 7:00 a.m. to 7:00 p.m., CST, Monday through Friday.

The AOA Foundation VISION USA
Volunteers In Service In Our Nation

In addition to the programs above, you may also want to contact a social worker at a local hospital or other community agency. Social workers often are knowledgeable about community resources that can help people facing financial and medical problems.

For more information, please visit <http://www.nei.nih.gov/healthyeyes/financialaid.asp>.

Resources That Help You Spread The Word

Home » Healthy Eyes » The Aging Eye

Information for *Healthy Vision*

Glaucoma **Diabetic Eye Disease** **Low Vision** **Healthy Eyes**

When you take good care of your eyes, you take good care of yourself.

RELATED TOPICS

- How we see
- Common vision problems
- Age-Related Eye Diseases
- Eye health tips
- Podcasts
- Text Messages
- Glossary of vision related terms
- Healthy Eyes Bulletin (PDF*)
- For professionals
- Spanish

RESOURCES

- What is a comprehensive dilated eye exam?
- Find an eyecare professional
- Talking to your doctor
- Financial aid for eye care

Send Free E-Cards

How to use the Listen function.

Cómo utilizar la función de Escuchar.

Age-Related Eye Diseases

Age-related eye diseases and conditions

Since your 40s, you probably noticed that your vision is changing. Perhaps you need glasses to see up close or you have more trouble adjusting to glare or distinguishing some colors. These changes are a normal part of aging. These changes alone cannot stop you from enjoying an active lifestyle or stop you from maintaining your independence. In fact, you can live an active life well into your golden years without ever experiencing severe vision loss. But as you age, you are at higher risk of developing age-related eye diseases and conditions. These include: age-related macular degeneration, cataract, diabetic eye disease, glaucoma, low vision and dry eye.



Get a comprehensive dilated eye exam.

Everyone age 50 or older should visit an eye care professional for a comprehensive dilated eye exam. Many eye diseases have no early warning signs or symptoms, but a dilated exam can detect eye diseases in their early stages before vision loss occurs. Early detection and treatment can help you save your sight. Even if you aren't experiencing any vision problems, visit your eye care professional for a dilated eye exam. He or she will tell you how often you need to have one depending on your specific risk factors.

Common Age-related Eye Diseases and Conditions:

Age-related Macular Degeneration (AMD)

AMD is a disease associated with aging that gradually destroys sharp, central vision. Central vision is needed for seeing objects clearly and for common daily tasks such as reading and driving. Learn more about AMD.



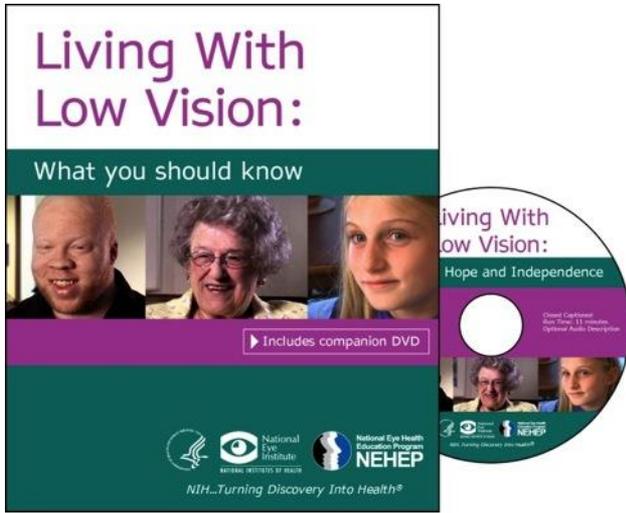
Cataract

A cataract is a clouding of the lens in the eye. Vision with cataract can appear cloudy or blurry, colors may seem faded and you may notice a lot of glare. Learn more about Cataract.



- **Age-Related Eye Diseases Web page**
 - Designed to educate older adults about eye health
 - **www.nei.nih.gov/agingeye**

Resources That Help You Spread The Word



- ***Living With Low Vision* booklet and DVD**
 - Designed for people with vision loss and their friend, family, and caregivers
 - **www.nei.nih.gov/lowvision**

Resources That Help You Spread The Word

- **Outlook**

- Provides updates on NEHEP eye health education research, activities, and resources
- **www.nei.nih.gov/nehep/newsletter**

The screenshot shows the 'Outlook' newsletter header for Winter 2014. It includes navigation links for NEI Home, NEHEP Home, and Catalog. The main content is a list of articles under the heading 'In This Issue:'. On the right side, there are social media and utility links such as 'Contact Us', 'Printer Friendly', and 'Follow NEHEP'. Below these is an 'Educational Resource Spotlight' for a 'Low Vision Infographic' featuring an illustration of an elderly man with glasses. At the bottom right, there is a section for 'Order NEI Materials' with a disclaimer about reprinting.

Outlook National Eye Health Education Program NEHEP

Winter 2014 NEI Home | NEHEP Home | Catalog

In This Issue:

- [Letter From the Chair of the NEHEP Planning Committee](#)
- [Raise Awareness of Low Vision with NEHEP Resources](#)
- [Low Vision: What to Do When "There's Nothing More That Can be Done."](#)
- [NEI and NEHEP Have Gone Social](#)
- [Use the National Eye Institute Website to Serve Yourself!](#)
- [Free Learning Module and Tip Sheet Available from ASORN](#)
- [Prevent Blindness Provides New Online Resource for Information on Vision Insurance](#)
- [Falls Prevention Awareness Day a Huge Success](#)
- [Featured Organization: VisionServe Alliance](#)
- [On the Road With NEHEP](#)
- [Let Us Know What You Think About Outlook](#)

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Educational Resource Spotlight: Low Vision Infographic

[Order NEI Materials](#)

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Additional Resources



- YouTube: **/NEINIH**
- Facebook: **/NationalEyeHealthEducationProgram**
- NEHEP Twitter: **@NEHEP**
- NEI Twitter: **@NatEyeInstitute**
- Pinterest: **/neinih**
- NEHEP website: **www.nei.nih.gov/nehep**

Questions



Please Share Your Activities

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www.nei.nih.gov/nehep

thank you!