

Senior Eye Health Guide

Preventing Age-Related Vision Problems in Your Golden Years

Windows into your soul. Gateways to the world. Beholders of beauty. Any way you look at it, your eyes are incredibly important. Although vision loss is a normal part of aging for many adults, that doesn't mean you have to sit idly by as your world becomes blurry.

In this guide, we provide information on age-related vision problems so you can take control of your eye health and see as good as possible for as long as possible. Taking care of your vision on a daily basis and taking steps to prevent future eye problems can also save you a lot of time, money and stress in the long run. After all, an ounce of prevention is worth a pound of cure—especially when it comes to your eyes.

In the pages that follow, we cover the symptoms and treatments of the most common age-related vision problems as well as information on senior eye exams, low vision aids, senior vision insurance and more.

Age-Related Vision Problems

According to the American Optometric Association, age-related vision problems start to appear in your mid-40s. After 60, you become even more susceptible to certain types of eye problems, and the risk only increases with age. You may already be experiencing some of the early symptoms of age-related vision loss, such as increased glare, changes in color perception, difficulty reading or seeing objects up close, dryness and irritation, or the need for more light.

If you want to maintain good eye health and clear vision as you get older, the best way to start is by learning about some of the most common vision problems you may experience as you age (or are already experiencing). See your eye doctor if you notice any of the following symptoms for any of the following vision problems.

Note

Different vision problems can have similar symptoms, and the only way to be certain if you are experiencing cataracts, glaucoma or age-related macular degeneration (among other possible vision problems) is to consult with an eye doctor.

AGE-RELATED MACULAR DEGENERATION

AMD is the top cause of vision loss in U.S. adults ages 60 and older. It occurs when the central part of the retina called the macula is damaged. There are two main types of macular degeneration: dry macular degeneration, where the retina's center deteriorates, and wet macular degeneration, where leaking blood vessels grow under the retina. Dry AMD is more common, accounting for up to 90 percent of AMD cases.

Symptoms of AMD include:

- Inability to see objects clearly
- Distortion of shapes and lines
- Changes in color perception
- Dark area in the center of your vision

Risk factors that contribute to AMD include hereditary and environmental factors, smoking, diet, obesity and cardiovascular disease.

> AMD prevalence

More than two million Americans ages 50 and older have late stage AMD. According to the National Eye Institute (NEI), the risk for AMD increases with age, affecting more than 14 percent of white Americans age 80 and older in 2010 (the most recent year for which such statistics are available). The NEI also projects that by 2050, the estimated number of people with AMD is expected to more than double from 2.07 million to 5.44 million.

AMD treatment

Though loss of central vision cannot be restored, if you notice early AMD symptoms you may be able to slow the progression by making dietary changes. Lutein, zeaxanthin, vitamin C, vitamin E and zinc can help reduce your risk for dry AMD.

For those who have developed symptoms of wet AMD, early detection may enable laser treatment, or photocoagulation. This treatment seals leaking blood vessels. Medication may also be injected in the back of the eye to slow the growth of the leaky blood vessels, which can minimize vision loss.

CATARACTS

Cataracts are when a protein film begins to build over the lens of your eye, making your vision cloudier as the growth progresses and blocks more light from coming in. Processing light is the main way you visually interact with your environment. As new lens cells form they cover the protein build up, pushing it down against the old cells, blocking more and more light.

Symptoms of cataracts include:

- Sensitivity to glare and light
- Dim, cloudy or blurred vision
- Low vision at night
- Seeing a halo effect around lights
- Double vision in a single eye
- Fading or yellowing of colors

Cataracts develop due to aging or can be caused by injury to the eye lens tissue. Other eye conditions and medical conditions such as diabetes may increase risk of cataracts. In 2010 (the most recent year such statistics are available) white Americans age 40 and older had the highest prevalence rate of cataract (18 percent).

Cataracts treatment

When cataracts affect quality of life, an eye doctor may suggest cataract surgery to remove the cataracts. During cataract surgery, the clouded lens is removed and replaced with a clear artificial lens.

Are you a good candidate for cataract surgery?

Take our free self-evaluation to find out.

Take the test

DIABETIC RETINOPATHY

Diabetic retinopathy is an eye disease that affects those with diabetes. High blood sugar levels cause damage to retina blood vessels, which can swell, leak or close, causing impaired vision. The early stage of diabetic eye disease is non-proliferative diabetic retinopathy; proliferative diabetic retinopathy is the more advanced stage of the disease.

There are often no symptoms in early stages, but as the disease progresses you may notice symptoms including:

- Increased floaters
- Blurred vision
- Poor night vision
- Dark spots in vision

Diabetic retinopathy prevalence

Diabetic retinopathy is the number one cause of blindness in the U.S. for those under the age of 65 years old. Cases of diabetic retinopathy among people ages 65 or older are expected to quadruple by 2050, from 2.5 million to 9.9 million, according to the Centers for Disease Control and Prevention (CDC).

Diabetic retinopathy treatment

To prevent and treat diabetic retinopathy, eye doctors recommend blood sugar and blood pressure control, laser surgery or vitrectomy surgery. Regular dilated eye exams are recommended for those with diabetes to identify vision problems early on and prevent vision loss.

DRY EYE SYNDROME

Viewing dry eye as merely a chronic condition characterized by insufficient lubrication on the eye surface isn't enough for proper management. What causes dry eye in one patient may not result in the same dry eye symptoms in another patient. In fact, dry eye causes range from aging to antidepressant use to autoimmune disorders.

According to the <u>current definition of dry eye</u>, this condition is "a multifactorial disease of the tears and ocular surface that results in symptoms of discomfort, visual disturbance, and tear film instability with potential damage to the ocular surface. It is accompanied by increased osmolarity of the tear film and inflammation of the ocular surface."

Symptoms of dry eye include:

- Burning and/or stinging sensation in the eye
- Feeling of something foreign stuck in the eye
- Chronic itchiness and/or redness
- Discomfort with prolonged use of contact lens
- Blurred vision, particularly at the end of the day
- Increased sensitivity to light
- Excessive watering of the eyes following episodes of dryness
- Frequent sore eyes
- Fatigue or feeling of eyelid heaviness
- Eyelids that tend to stick together when you wake up

Dry eye prevalence

The Tear Film & Ocular Surface Society estimates that 3.2 million women and 1.6 million men aged 50 years and above have moderate to severe cases of dry eye in the United States.



Dry Eye treatment

There is no specific cure for dry eye and treatments that your doctor can recommend either as a standalone or in combination with each other, will depend on the underlying cause. Possible treatments for the condition include over-the-counter or prescription eye drops, an amniotic membrane, Intense Pulsed Light (IPL), punctal plugs, punctal cautery, lubricants, meibomian gland expression, warm compresses and treating the underlying causes for the disease.

REFRACTIVE ERRORS

Refractive errors occur when aging of the eye lens or an abnormal eyeball length or cornea shape prevent light from focusing directly on the retina.

There are several types of refractive errors, including:

- Astigmatism, which causes images to appear stretched out and blurry
- **Hyperopia**, also known as farsightedness, can cause blurry vision for objects at any distance
- Myopia, also known as nearsightedness
- Presbyopia, an age-related condition that impairs the ability to focus close objects clearly

Refractive errors prevalence

According to the NEI, the <u>rate of adults with</u> <u>hyperopia</u> increases with age. More than 11% of adults between the ages of 60 and 64 are affected by hyperopia, while more than 23% of those 80 and older are affected by farsightedness.

Refractive errors treatment

Eyeglasses, contact lenses and surgery are treatment options for refractive errors. As patients age, they may require stronger eyeglass or contact lens prescriptions to ensure clear vision. With refractive surgery, the shape of the cornea is permanently changed, so that eye focusing power is restored.









5

GLAUCOMA

Glaucoma is an eye disease that usually occurs when fluid accumulates in the front part of the eye, increasing pressure on the eye and damaging the optic nerve. Worldwide, it is the <u>leading cause</u> of blindness for people ages 60 and older. Early treatment for glaucoma can prevent blindness.

According to the <u>Glaucoma Research Foundation</u>, primary open-angle glaucoma typically has no early warning signs or symptoms. It can be detected during eye exams, however.

The other most common form of glaucoma, angle-closure glaucoma, may be detected by the following symptoms:

- Blurred or hazy vision
- Severe head and eye pain, which may be accompanied by nausea or vomiting
- Sudden sight loss
- Appearance of rainbow-colored circles around bright lights

Glaucoma prevalence

According to the NEI, African-Americans and Hispanic are at an <u>increased risk of glaucoma</u>, as well as those who have parents or siblings with the disease. Glaucoma risk increases with age and affects nearly 8% of adults age 80 and older.

Glaucoma treatment

To prevent severe vision loss, glaucoma may be treated with any of or a combination of the following treatments:

- Eye drops
- Medication
- Laser surgery
- Operating room surgery

Are you at an elevated risk for glaucoma?
Use our free glaucoma risk calculator to find out.

Learn more

Senior Eye Health Tips

Like all aspects of health, adopting healthy practices before issues occur is easier than treating conditions or experiencing problems like blindness. From integrating proper nutrition and exercise into daily life, to reducing digital eye strain, here are some ways to take care of your eyes as you age so you can enjoy the years ahead.

HEALTHY LIFESTYLE = HEALTHY EYES

Overall healthy habits are correlated with eye health issues. The CDC reports seniors with moderate or extreme vision loss are more likely to have conditions like diabetes, heart disease and stroke compared to those without vision loss. They're also more likely to report fair or poor health than those without vision loss. A healthy diet and exercise plan contribute to overall good health, which impacts eye health.



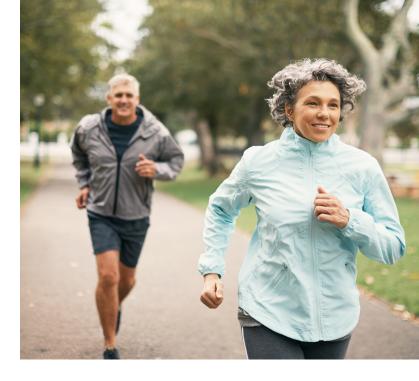
How diet affects eye health

A study published by the National Institutes of Health <u>found evidence that anti-inflammatories</u> <u>and antioxidants</u> including vitamins C and E, beta carotene, zinc, lutein, zeaxanthin and the omega-3 fatty acids may provide benefits decreasing the risk of age-related eye disease. A study led by the National Eye Institute, called the <u>Age-Related Eye Disease Study (AREDS)</u>, also found daily high doses of vitamins C and E, beta-carotene and zinc and copper—called the "AREDS formulation"—can help slow the progression to advanced AMD.

Foods rich in these eye healthy nutrients include:

- Oily fish like tuna, salmon and trout
- **Citrus fruits** like oranges, lemons and grapefruits
- Nuts and legumes like walnuts, peanuts and lentils
- Seeds like chia seeds, flax seeds and hemp seeds
- Leafy green vegetables like spinach, kale and collards
- Colorful fruits and vegetables like carrots, sweet potatoes and strawberries
- Whole grains like quinoa, brown rice and whole oats
- Eggs and beef, which should only be consumed in moderate amounts

Staying hydrated is also beneficial for optimal eye health. Dehydration can decrease eye functioning and may lead to more significant eye issues. Harvard research shows <u>older people don't</u> <u>sense thirst as easily as they age</u>, and certain medications can contribute to fluid loss.



Exercise and eye health

According to Cleveland Clinic, <u>regular exercise is</u> connected to <u>reducing risks</u> for cataracts, AMD and glaucoma. It can also reduce risk for high blood pressure and high cholesterol, as well as chronic conditions like type 2 diabetes, which can lead to diabetic retinopathy.

The American Academy of Ophthalmology (AAO) reports people who exercise regularly are less likely to develop serious eye disease. Studies have shown moderate exercise decreases glaucoma risk, and those who exercise at least three times a week are less likely to develop AMD, compared to those who don't exercise.

Optimal eye health requires good blood circulation and oxygen intake, which are both stimulated by regular exercise. The CDC recommends adults ages 65 years and older get at least 2-and-a-half hours a week of moderate-intensity aerobic exercise, like brisk walking, and two days or more of muscle-strengthening activities like yoga or lifting weights. Talk with your physician about appropriate exercises for your fitness level.



Reducing digital eye strain

The Vision Council defines <u>digital</u> <u>eye strain</u> as a collection of physical discomfort symptoms occurring after using screens for two hours or longer at a time. These symptoms include dry eyes, blurred vision, headaches and neck or shoulder pain.

Two-thirds of Americans experience digital eye strain symptoms. They can be caused by using screens including computers, televisions and smartphones. More than 30 percent of adults ages 60 and older have had prolonged screen time of two hours or more a day for more than 15 years.

There are eyewear and contact lenses available to reduce digital eye strain symptoms. Some specially designed eyewear lenses include magnification and anti-reflective and blue light-filtering capabilities.

Other ways to prevent digital eye strain include:

- Limit screen time to less than two hours at a time
- Take frequent breaks when using screens
- Sit at least two feet away from screens when using them for long periods of time
- Reduce screen glare
- Use artificial tears to prevent dry eyes

Senior Eye Exam Recommendations

Identifying eye ailments early on is the key to preventing further damage. Some conditions have no early symptoms, but your eye doctor can spot problems in the earliest stages and recommend treatments and interventions to prevent them from becoming worse.

HOW OFTEN SHOULD SENIORS GET EYE EXAMS?

The AOA recommends that adults ages 65 and older who are asymptomatic or low-risk get eye exams at least annually or as recommended.

Patients who may need eye exams more than once a year include those who are at risk, and those who:

- Have a family or personal history of eye disease
- Belong to certain ethnic and racial groups
- Have systemic health conditions with potential ocular manifestations
- Are in occupations that are highly demanding visually or have a high potential of being hazardous to the eyes
- Have functional vision in only one eye
- Wear contact lenses
- Have had eye surgery or a previous eye injury
- Have a high or progressive refractive error
- Have other eye-related health concerns or conditions

Talk with your eye doctor about all factors that may put you at a higher risk of developing age-related vision problems. Your doctor may have you come in more regularly to monitor certain symptoms and how you are responding to different treatments and interventions (such as diet and exercise).

EYE EXAM CHECKLIST

Make the most of your eye exam by coming in prepared.

Before your exam, gather the following information:

- ✓ Signs or symptoms of eye problems you have
- ✓ Dates and locations for eye injuries and surgeries you've had
- ✓ Prescribed medications and overthe-counter drugs you're taking
- General health history

You may also want to set up transportation to and from the eye doctor before your appointment. Patients with dilated pupils may be OK to drive, but some may not feel comfortable.

When the exam is over, make sure to get information about any changes that have occurred since your last eye exam. Schedule your next recommended appointment and enquire about operating hours in case you have follow-up questions you want to call about.

LOW VISION AIDS

If you have vision loss that makes daily tasks difficult and that cannot be corrected with regular glasses or medical eye care, you're experiencing low vision. This can be a result of injuries, eye disease or a combination of the two. In addition to brighter lighting in living areas, the following are some low vision aids.

Low vision digital aids and resources

There are many low vision resources available, including digital devices, specialized glasses and magnifiers. These devices allow many low vision patients to enjoy common hobbies and activities. Ask your eye doctor which would be best for your specific situation.

SENIOR VISION INSURANCE

The CDC reports nearly one-quarter of older adults who reported moderate or extreme vision loss said they didn't seek eye care because of cost or insurance. There are many senior vision insurance options available to help you get the care you need.

Vision insurance models typically provide a fixed dollar amount of services for a fee, or they provide discounts for an annual premium. AARP reports the typical annual premium for a benefits package is around \$170, compared to around \$70 for a discount vision plan. A benefits package may be more beneficial if you anticipate having higher eye care costs that aren't covered by Medicare, or you want the peace of mind that you'll be covered.

You can purchase vision insurance through a <u>Medigap</u> <u>Policy</u>, or through a provider like the <u>AARP Medicare</u> <u>Supplement Insurance Plan</u> or <u>EyeMed</u>, which offers discounts for AARP members.

Vision services covered under Medicare

Generally, Medicare does not cover eyeglasses and contact lenses, though corrective lenses required after certain types of surgery may be covered.



Senior Eye Health Guide 9

Medicare does not cover routine eye exams for glasses and contact lenses, but <u>Medicare Part B does</u> <u>cover</u> some preventive and diagnostic eye exams, including:

- Annual eye exam for diabetic retinopathy
- Glaucoma tests for at risk patients
- Certain diagnostic tests and treatments for patients with AMD

Other <u>vision services covered under Medicare</u> include costs of certain medical eye conditions requiring hospitalization or emergency care, eye prostheses and surgery to remove cataracts. Check with your doctor and on the Medicare website about any products or procedures you're considering to see if they're covered.



Senior Eye Care Resources

If this guide has inspired you to learn more about how to take care of your eye health, which is a vital part of overall health, you can visit these resources to learn more about optimal eye health for seniors.

TAKE CARE OF EYE HEALTH TODAY

Eye care helps you preserve one of your most precious senses. Optimal eye health is crucial for carrying out essential daily functions. Taking care of your vision helps you truly experience all the world has to offer, and it may even help you avoid eye problems and procedures that require surgery or medication.

Make your eye health a priority by scheduling an eye exam at least once a year or more depending on your eye doctor's recommendations. If you are concerned about your eyes or want to take proactive steps to protect your eyesight, contact a doctor at Southwestern Eye Center.



Find financial aid resources for eye care through the National Eye Institute



Get resources for independent living with vision loss through VisionAware



Learn about <u>living with low</u>
<u>vision</u> the National Eye Health
Education Program



Use the <u>Self-Help Guide to</u>
<u>Nonvisual Skills</u> to learn more about low vision rehabilitation

Senior Eye Health Guide 10