



Ohio's Aging Eye  
Public Private Partnership  
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## **“Test Your Eye-Q” Questionnaire Answers and Information**

**Question 1:** With rapid advancements in medical technology, it is now possible to transplant the human eye. True or False?

**Discussion:** False. It is not possible to transplant a human eye from one person to another. At this time it is only possible to transplant the cornea of the eye from a donor into a patient. The cornea is normally a clear layer of tissue covering the front of the eye, similar to a watch crystal. Its purpose is to refract or bend light rays as they enter the eye, allowing them to focus on the retina. In cases where the cornea has become clouded as a result of disease, swelling, scarring, infection, or chemical burns, a corneal transplant (also called keratoplasty) is sometimes necessary to restore functional vision. For this procedure, the surgeon carefully removes the central corneal tissue and replaces it with a precisely shaped replica of donor tissue. (Source: St. Lukes Cataract and Laser Center)

**Question 2:** A full comprehensive eye examination can be obtained from an ophthalmologist or optometrist.

**Discussion:** True. Family Physicians should be consulted about vision concerns as a part of on-going patient care; however, licensed ophthalmologists or optometrists are specialists in eye care and are routinely utilized to provide a comprehensive eye examination.

An ophthalmologist is a physician (doctor of medicine or doctor of osteopathy) who specializes in the comprehensive care of the eyes and visual system in the prevention of eye disease and injury. The ophthalmologist has completed four or more years of college premedical education, four or more years of medical school, one year of internship, and three or more years of specialized medical and surgical training and experience in eye care. The ophthalmologist is a physician who is qualified by lengthy medical education, training and experience to diagnose, treat and manage all eye and visual system problems, and is licensed by a state regulatory board to practice medicine and surgery. The ophthalmologist is the medically trained specialist who can deliver total eye care: primary, secondary and tertiary care services (i.e., vision services, contact lenses, eye examinations, medical eye care and surgical eye care), and diagnose general diseases of the body. (Definition provided by the American Academy of Ophthalmology. For more information, contact the AAO at 415/561-8540.)

The optometrist is a health care professional trained and state licensed to provide primary eye care services. These services include comprehensive eye health and vision

examinations; diagnosis and treatment of eye diseases and vision disorders; the detection of general health problems; the prescribing of glasses, contact lenses, low vision rehabilitation, vision therapy and medications; the performing of certain surgical procedures; and the counseling of patients regarding their surgical alternatives and vision needs as related to their occupations, avocations and lifestyle. The optometrist has completed pre-professional undergraduate education in a college or university and four years of professional education at a college of optometry, leading to the doctor of optometry (O.D.) degree. Some optometrists complete a residency. (Definition provided by the American Optometric Association. For more information, contact the AOA at 314/991-4100.)

Opticians are professionals in the field of designing, finishing, fitting and dispensing of eyeglasses and contact lenses, based on an eye doctor's prescription. The optician may also dispense colored and specialty lenses for particular needs as well as low-vision aids and artificial eyes. (Definition provided by the Opticians Association of America. For more information, contact the OAA at 703/691-8355.)

**Question 3:** The four leading causes of adult vision loss are: diabetic retinopathy, cataract, glaucoma, and age-related macular degeneration. True or False?

**Discussion:** True. Age-related macular degeneration, diabetic retinopathy, glaucoma, and cataract are the leading causes of vision loss in adults, and the number of persons effected is expected to double by the year 2030, effecting more than 2.5 million Ohioans! A regimen of regular professional eye care, healthy habits, and knowledge about your vision family history and risk factors are important ways to reduce the number of Ohioans losing their sight to these 4 diseases. (Source: Vision Problems in Ohio- Prevent Blindness Ohio)

The greatest cause of vision loss in younger Americans (age 45 and under) is undetected, untreated amblyopia. Amblyopia, also known as "lazy eye," has many causes. Most often it results from either a misalignment of a child's eyes, such as crossed eyes, or a difference in image quality between the two eyes (one eye focusing better than the other.) In both cases, one eye becomes stronger, suppressing the image of the other eye. If not treated early enough, an amblyopic eye may never develop good vision and may even become functionally blind. With early diagnosis and treatment, the sight in the "lazy eye" can be restored. (Source: Prevent Blindness America)

**Question 4:** Most preventable eye injuries occur in the home, rather than in the workplace. True or False?

**Discussion:** True. Eye injuries occur more often in the home because eye safety is the responsibility of the individual, not a requirement as is true in the workplace. Businesses provide and enforce the use of eye protection by their employees. Individuals must take these safety precautions into their home and ensure that they use safety goggles when doing yard or wood work, playing sports, or using dangerous chemicals that may damage

the eyes. Each year more than 32,000 people are blinded or experience vision loss due to an eye injury. Eye injuries also increase the likelihood of cataracts and glaucoma later in life. (Source: Prevent Blindness America)

Help ensure eye safety around the home by placing proper eye safety gear near potentially dangerous tools, chemicals, or with sports equipment. Be an example to your children and help them to adopt safe habits and know what to do when an eye is injured! Remember, more than 90% of eye injuries are preventable with the use of proper eye safety equipment.

**Question 5:** Almost everyone, if they live long enough, will develop a cataract. True or False?

**Discussion:** True. A cataract is caused by chemical changes within the lens resulting in a clouding of the lens. These chemical changes are connected with the normal aging process, but other factors that may play a role include:

- Exposure to heat or long-term exposure to ultraviolet radiation (UV rays) from the sun (wear your sunglasses for UV protection!)
- Inflammation within the eye
- Hereditary influences and prenatal events
- Some medications, such as long-term steroid therapy
- Physical and chemical injury to the eye
- Eye diseases and certain systemic diseases such as diabetes
- Cigarette smoking

The most common treatment for cataract is surgical removal of the clouded lens and replacement with a synthetic intraocular lens. Other options include cataract contacts or glasses. (Source: Prevent Blindness America)

**Question 6:** A comprehensive eye exam every five to ten years is sufficient for adults over the age of 40. True or False?

**Discussion:** False. Prevent Blindness America recommends that everyone receive a comprehensive eye examination through dilated pupils regularly as recommended by your eye care professional.

In general, the recommended frequency of comprehensive eye examinations for people without symptoms or special risk factors is:

<u>Age</u>	<u>Caucasians</u>	<u>African-American/ Hispanic</u>
20-39	Every 3 - 5 years	Every 2 - 4 years
40-64	Every 2 - 4 years	Every 2 - 4 years
65 or older	Every 1 - 2 years	Every 1 - 2 years

People with special risks, such as diabetes, a previous eye trauma, surgery or a family history of glaucoma, may need to be seen more frequently.

Remember, a regimen of regular eye examinations and healthy living is the best way to ensure good sight for life! (Source: Prevent Blindness America)

**Question 7:** A vision screening is an important way to find potential problems, but it does not replace the need for a full comprehensive eye exam from an ophthalmologist or optometrist. True or False?

**Discussion:** True. A vision screening tests asymptomatic people for eye diseases and referring those who are suspect, for eye disease or refractive error, to eye care professionals. The goal of vision screening is to detect potential eye diseases early- in their most treatable stage, and also provides valuable education and resources about eye care to the public. A vision examination, on the other hand, provides patients with a clinical diagnosis of eye disorders and disease and prescribes a treatment. (Source: Prevent Blindness America)

**Question 8:** Even when faced with a blinding eye conditions, patients may be helped by the use of low vision adaptive devices that can allow them to use computers, write checks, and other daily functions. These devices can be obtained through a low vision evaluation. True or False?

**Discussion:** True. One out of every 200 persons is functionally visually impaired. Most of these individuals are not able to read regular-sized newsprint, even with glasses. These people, many of whom are elderly, have "partial sight" or "low vision." Some vision may remain, but they often have difficulty performing routine visual tasks such as reading, writing, identifying faces, watching TV or traveling.

Many tools, devices, and rehabilitative programs have been developed that restore functional abilities of individuals with vision loss, such as magnifying and telescopic lenses, closed circuit television systems, and adaptations within the home. Use of rehabilitative tools allows individuals to remain independent and fully functioning in society. A low vision exam and evaluation is the best way to decide what tools are going to help the individual. (Source: Vision Center of Central Ohio)

**Question 9:** One's ethnic background can make them more susceptible to different types of eye diseases. True or False?

**Discussion:** True. One's ethnic heritage can increase the susceptibility to certain types of eye diseases. There are three sight-threatening conditions that are highly prevalent in racial and ethnic minorities: **glaucoma, diabetic eye disease, and high blood pressure.** Increasing age is a primary risk factor for these conditions and, once age is factored out, race and ethnicity become the major risk factors that cause minority populations to be very vulnerable to health and vision problems associated with these three conditions. These conditions do not appear to cause problems until they are advanced. Routine care is the key to preventing unnecessary vision loss to these diseases.

Glaucoma is a group of eye diseases that slowly causes optic nerve damage leading to vision loss. If glaucoma is not treated, it can lead to blindness in 3-15 years depending on the number of risk factors that an individual has. Glaucoma occurs in 1 in 50 people in the U.S. People of African descent are 6-8 times (1 in 7) more likely to develop glaucoma than people of other racial or ethnic groups. In African Americans

glaucoma occurs at a younger age, is more severe, and is the #1 cause of blindness. The prevalence of glaucoma in U.S. Hispanics has been reported at 6% in individuals 41 years of age and older, and as high as 12% in those 80 years old and older. Normal tension glaucoma (glaucoma with normal eye pressure) has been reported at a higher rate in Asians. Advancing age is a major risk factor for all individuals, increasing the occurrence 4-10 times in those over 40 years of age.

Diabetes is a group of diseases where the glucose level in the blood is high because of misuse of insulin by the body. Diabetes is more common in U.S. minority populations, especially African Americans, American Indians, and Hispanics, than in other groups. Seventeen million people have diabetes in the U.S. Diabetic eye disease is the most common cause of new blindness in all adults between 20-74 years of age. Vision loss from diabetes can be prevented in over 90% of cases. An estimated 50% of diabetic eye disease cases are found too late for treatment to be very effective.

High blood pressure is a major risk factor for heart disease (#1 killer in U.S.), stroke and heart failure. About 50 million adults in the U.S. have high blood pressure, occurring at a rate of about 1 in 4 adults for those over the age of 20 years. That number is almost doubled in African American adults. Other racial and ethnic groups have rates that are similar in comparison to the general population. The blood pressure must be very high over a sustained period of time to cause vision problems, but the likelihood of having vision loss from high blood pressure is increased for people who also have diabetes. (Source: National Optometric Association)

**Question 10:** National experts have projected that over the next 30 years adult vision loss will double. True or False?

**Discussion:** True. The number of Americans at risk for age related eye diseases is increasing as the baby-boomer generation ages, and as of the year 2000 census, there were 119 million individuals in this age group. Because of the increase in age-related eye conditions found more commonly in adults age 40 and older, that includes age-related macular degeneration, glaucoma, cataract, and diabetic retinopathy, these conditions are affecting more Americans than ever before. The number of Americans with one of these conditions or vision impairment is expected to double in the next three decades.

It is essential that Americans be aware of their individual or specific risks for eye disease and take steps to preserve their gift of sight. Community planning bodies need to begin consideration of the impact from a doubling of the population classed as blind or visually impaired in order to provide necessary services; and our national leaders must appreciate the scope of this challenge so that adequate funding can be directed to research and prevention programs. (Source: Vision Problems in the U.S. Report- Prevent Blindness America)

**Question 11:** Age-related macular degeneration is the fastest growing cause of vision loss in adults over age 60. True or False?

**Discussion:** True. Age-related macular degeneration (AMD) is a disease that blurs the sharp, central vision you need for "straight-ahead" activities such as reading, sewing, and driving. AMD affects the macula, the part of the eye that allows you to see fine detail. AMD causes no pain.

In some cases, AMD advances so slowly that people notice little change in their vision. In others, the disease progresses faster and may lead to a loss of vision in both eyes. AMD is a leading cause of vision loss in Americans 60 years of age and older.

AMD can occur during middle age. The risk increases with aging. Other risk factors include:

- Smoking.
- Obesity. Research studies suggest a link between obesity and the progression of early and intermediate stage AMD to advanced AMD.
- Race. Whites are much more likely to lose vision from AMD than African Americans.
- Family history. People with a family history of AMD are at higher risk of getting the disease.
- Gender. Women appear to be at greater risk than men. (Source: National Eye Institute)

According to the Vision Problems in Ohio Report compiled by Prevent Blindness Ohio, more than 71,000 Ohioans currently have AMD. An estimated 140,000+ will be affected by the year 2030!

**Question 12:** Nearly 50% of vision loss can be prevented through early detection by a regular comprehensive professional eye exam along with a healthy lifestyle. True or False?

**Discussion:** True. Fifty percent of all vision loss can be prevented by making small changes in the way you live, ensuring good sight for a lifetime.

- Wear sunglasses if you are sensitive to bright light and anytime you are outdoors in bright sunshine.
- Improve lighting around the house.
- Wear eye safety equipment when working around the house or playing sports.
- Eat healthy foods.
- Stay active.
- Control your blood pressure, cholesterol, diabetes, or other health problems.
- Don't smoke.

Healthy habits lead to healthy eyes. Remember, growing older with good vision is the key to an active and independent lifestyle. (Source: Prevent Blindness America)



## Ohio's Aging Eye Public Private Partnership

### **ABOUT OHIO'S AGING EYE PUBLIC PRIVATE PARTNERSHIP:**

Ohio's Aging Eye Public Private Partnership (AEPPP) is a statewide collaboration formed to respond to the growth aging eye challenges in Ohio. The mission of the AEPPP, an initiative supported by the Ohio Department of Aging, is to develop a strategic plan of action to address issues relating to vision care public policy, vision care services, vision education, and vision research that impact the quality of life for Ohio's seniors now and in the future. The formation of the Partnership and its on-going work is supported by a proclamation from Ohio Governor Bob Taft.

Member organizations of the AEPPP are: Association of Philanthropic Homes for the Aging, Association of Area Agencies on Aging, Association of Ohio Health Commissioners, Council for Older Adults, KnowledgeWorks Foundation, Ohio Council for Home Care, Ohio Association of Gerontology and Education, Ohio Agencies Serving the Visually Impaired, NASA Glenn Research Center, Ohio Department of Aging, Ohio Department of Health, Ohio Department of Insurance, Representative Kathleen Chandler, Ohio Nurses Association, Ohio Ophthalmological Society, Senator Steve Stivers, Senator Randy Gardner, Ohio Rehabilitation Services Commission, Ohio Osteopathic Association, Ohio Optometric Association, Ohio Veterans Visual Impairment Services Team- VISN 10, Opticians Association of Ohio, and Prevent Blindness Ohio.

### **FOR MORE INFORMATION CONTACT:**

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*Formatted 10/8/2004*