SEE into the Future: The Impact of Vision Loss in Ohio

Ohio’s Aging Eye Public Private Partnership
A statewide collaboration preparing for the growth of aging eye challenges in Ohio

2013 Report to the Governor and General Assembly
A Message from our Co-Chairs

You’ve heard the phrase, “a gift of sight.” Vision truly is that: a gift. Vision helps us maintain independence and remain vital members of our communities.

But many older Ohioans are at risk of losing this valuable gift. According to two recent studies*, both the prevalence and economic impact of vision problems in Ohio have increased significantly. An estimated 3.6 million Ohioans have vision problems. The estimated financial impact due to vision problems, refractive error, visual impairment and blindness is $5.4 billion annually!

With this growth in age-related eye diseases and vision loss comes an increasingly significant personal concern for older Ohioans, their families and the public health system. If appropriate preventive steps are not taken, costs will skyrocket as our population ages and life expectancy increases. The number of Ohio residents with impaired vision, including blindness, could double in the next three decades.

Ohio’s Aging Eye Public Private Partnership (AEPPPP) presents this report to highlight the need for an organized and integrated approach to increasing our preventive efforts, including increased education and access to proper vision care and vision research.

The AEPPPP was formed in 2003 to prepare for the growth of aging eye challenges in Ohio. It is a volunteer-driven statewide collaboration that addresses issues relating to vision care public policy, vision care services, public and professional awareness and vision research that affects the quality of life for Ohio’s elders now and in the future. Our efforts are supported by an executive resolution by Governor John Kasich.

We offer our services and resources to government leaders, public health professionals, health care providers, business and community leaders and consumers as we work to curtail the growth of vision problems in Ohio.

SEEING the Growth of Vision Loss in Ohio


- 88,546 people age 50 and older have age-related macular degeneration, **a 25 percent increase**
- 991,628 people age 40 and older have cataracts, **a 13 percent increase**
- 105,889 people age 40 and older have open-angle glaucoma, **a 15 percent increase**
- 284,631 people age 40 and older have diabetic retinopathy, **a 31 percent increase**

The number of Ohio residents with impaired vision, including blindness, could double in the next three decades with the growth of the aging population.

Factors that Impact the Growth of Vision Loss:

- The lack of regular professional eye exams impacts vision loss because many eye diseases, like glaucoma, have no symptoms.
- Poor health habits and chronic disease increase the incidence of eye disease.
- Diabetes, smoking, high blood pressure and eye injuries increase the likelihood of vision problems.
- The obesity epidemic impacts the likelihood of type 2 diabetes, which increases the incidence of diabetic eye disease.
- Poor health literacy can decrease the ability to follow up on necessary care for eye diseases.

Ohio

- The population of people with vision impairment and age-related eye diseases is large and growing rapidly.
- People with vision impairment are more likely to have poorer health and multiple chronic health conditions.
- Risk is associated with advanced age, racial/ethnic groups, women and those with the least resources.

All this gets played out in the lives of real people—people who want continued independence, social participation, and quality of life.

- Unemployment and the lack of affordable health care benefits, or understanding of those benefits, affect access to vision care and the ability to detect and treat eye diseases early.
- Vision problems disproportionately affect certain racial and ethnic groups: Blacks are four times more likely to have glaucoma than whites, and whites are more likely to develop age-related macular degeneration (AMD).

Ohioans Affected by Vision Problems

<table>
<thead>
<tr>
<th>Population (estimates based on 2010 Census data)</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyperopia: Age 40+</td>
<td>584,826</td>
<td>232,161</td>
<td>352,665</td>
<td>540,782</td>
<td>29,951</td>
<td>5,640</td>
<td>8,452</td>
</tr>
<tr>
<td>Myopia: Age 40+</td>
<td>1,397,664</td>
<td>634,056</td>
<td>763,608</td>
<td>1,275,293</td>
<td>80,441</td>
<td>16,380</td>
<td>25,551</td>
</tr>
<tr>
<td>Age-related Macular Degeneration: Age 50+</td>
<td>88,546</td>
<td>30,247</td>
<td>58,299</td>
<td>83,796</td>
<td>3,642</td>
<td>445</td>
<td>663</td>
</tr>
<tr>
<td>Cataract: Age 40+</td>
<td>991,628</td>
<td>387,294</td>
<td>604,334</td>
<td>887,941</td>
<td>78,512</td>
<td>10,204</td>
<td>14,970</td>
</tr>
<tr>
<td>Diabetic Retinopathy: Age 40+</td>
<td>284,631</td>
<td>133,145</td>
<td>151,486</td>
<td>240,584</td>
<td>31,323</td>
<td>7,147</td>
<td>5,578</td>
</tr>
<tr>
<td>Glaucoma: Age 40+</td>
<td>105,889</td>
<td>40,611</td>
<td>65,278</td>
<td>81,716</td>
<td>20,419</td>
<td>1,295</td>
<td>2,459</td>
</tr>
<tr>
<td>Visual Impairment: Age 40+</td>
<td>116,320</td>
<td>41,592</td>
<td>74,727</td>
<td>105,422</td>
<td>7,878</td>
<td>1,450</td>
<td>1,570</td>
</tr>
<tr>
<td>Blindness (est. cases): Age 40+</td>
<td>53,999</td>
<td>17,911</td>
<td>36,088</td>
<td>47,500</td>
<td>5,707</td>
<td>228</td>
<td>564</td>
</tr>
<tr>
<td>Total Cases</td>
<td>3,623,503</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2013 Report to the Governor and General Assembly
- 3 -

**Total Impact to the State of Ohio:**

- **Medical** $2,530,535,784
- **Productivity Loss** $1,884,544,211
- **Long-term Care** $787,954,058
- **Other Direct** $67,128,642
- **Other Indirect** $137,837,479
- **Total Impact** $5,408,000,175
Impacting the Future: Ohio’s Aging Eye
Public Private Partnership

Policy and Program Recommendations

The following recommendations were developed by Ohio’s Aging Eye Public Private Partnership. They serve as guidelines for the partnership in initiating or responding to public policy or programming initiatives.

1. Appoint an individual or a coordinating position for aging vision in the next biennial budget within the Ohio Department of Health-Prevention Division to coordinate vision preservation and educational activities across Ohio.

2. Support ongoing use of the Optional Vision Module of the Behavioral Risk Factor Surveillance System developed by the Centers for Disease Control and Prevention in cooperation with the Ohio Department of Health to provide outcome data on which to base statewide public health vision programming.

3. Maintain optional preventive vision care services for adults in the state Medicaid budget.

4. Encourage the Ohio Association of Community Health Centers and its partners to provide technical assistance and support to Ohio’s Federally Qualified Health Centers that focus on adult vision loss and provide training and technical assistance to Health Center professionals to implement adult vision assessment in a general wellness exam and emphasize the urgency of professional vision care for patients with diabetes.

5. Support measures that increase vision screening practices among providers of primary health care in the medical home and other sites.


7. Establish adult vision screenings as an essential benefit to the Medicare annual exam.

8. Develop a state tax incentive for the donors of in-kind professional services (such as comprehensive eye exams and eye surgeries) that benefit vulnerable populations in need of care.

9. Support health insurance coverage for basic vision care, vision education and for vision rehabilitation services.

10. Support vision-related summits that enhance awareness and encourage research collaborations and expansion.

Seeing the Future of Falls Prevention

Vision is one of three systems that help our bodies maintain balance (along with the inner ear and body awareness). If any of these systems grow weaker or fail with age, an individual will become more dependent on the other two. If two of these systems become impaired, the individual’s risk of falls and fall-related injuries increases significantly.

Falls are the number one cause of injuries leading to emergency room visits, hospitalization and deaths for Ohioans age 65 and older. One in three older adults will fall this year. Maintaining good vision health through the prevention and early detection of age-related eye diseases is recognized world-wide as one of the most effective strategies to reduce the risk of falls in older adults.

The Aging Eye Public Private Partnership supports the work of the STEADY U Ohio initiative. Conceived by Governor John Kasich and led by the Ohio Department of Aging, STEADY U engages state agencies and Ohio business partners to strengthen existing falls prevention activities, identify opportunities and educate all Ohioans that falling is not a normal part of aging and most falls can be prevented.

STEADY U encourages all older Ohioans to have their vision checked annually - including tests for age-related eye diseases - as well as update their eyeglasses and use them as directed.

STEADY U Ohio partners include Prevent Blindness Ohio, the Ohio Optometric Association, the Ohio Association of Area Agencies on Aging and the Ohio Osteopathic Association. Resources for individuals, care providers, businesses and more are available online at www.steadyu.ohio.gov.

Preserve your vision by avoiding smoking, wearing appropriate eye protection, getting regular dilated eye exams, wearing sunglasses with UV protection, staying active and eating a healthy diet.
Common Causes of Visual Impairment and Blindness

Hyperopia, also known as farsightedness, is a common type of refractive error where distant objects may be seen more clearly than objects that are near. Hyperopia can be successfully treated with corrective eyewear.

Myopia, also known as nearsightedness, is a common type of refractive error where close objects appear clearly, but distant objects appear blurry. Myopia can be successfully treated with corrective eyewear.

Age-related macular degeneration (AMD) is a disease that gradually destroys sharp, central vision. Risk factors include: race (more common in white populations), smoking, obesity, gender (women are more likely to have AMD), and family history. Treatments include medications injected into the back of the eye, laser treatments and vitamins. Treatments can stop or slow the progression of the disease. There is no cure.

Cataract is a clouding of the eye’s lens that can be successfully treated surgically by removal of the lens and replacement with an intraocular lens. Vision with cataract can appear cloudy or blurry, colors may seem faded, and you may notice a lot of glare and have decreased night or low-light vision. Cataract is more common after age 55.

Diabetic retinopathy is a complication of diabetes that results from damage to the blood vessels inside the eye’s retina. Patches of vision loss, cloudy vision, glare sensitivity and decreased night or low light sensitivity is associated with diabetic retinopathy. The risks of diabetic retinopathy are reduced through disease management and regular, professional eye exams. Treatments that can slow progression include: drug therapy, laser treatments, and vitrectomy. There is no cure.

Glaucoma causes the loss of peripheral or side vision. Once vision is lost, it cannot be restored. Remaining vision usually can be saved with treatments including medicines, laser trabeculoplasty, conventional surgery or a combination of any of these. Glaucoma is more common after age 40, among blacks and in people with diabetes.

“Vision is such an important sense whether you want to see a comet or stars with your bare eyes, connect with the planets and the cosmos (our own Milky Way galaxy or cluster of galaxies) or see your family and friends right in front of you. It is amazing what your eyes are capable of!”

- Rafat R. Ansari, Co-Chair Ohio’s Aging Eye Public Private Partnership
SEEING the Partnership in Action
Ohio’s Aging Eye Public Private Partnership (AEPPP) educates constituents of its member organizations about the importance of vision care, and advocates for programs and policies that help prevent the growth of vision loss. On March 24, 2011, Governor John Kasich signed an Executive Resolution recognizing Ohio’s Aging Eye Public Private Partnership. The resolution encouraged all Ohioans to join with public and private entities in understanding the importance of vision care.

- AEPPP co-chair, Rafat Ansari, presented the work of the AEPPP on a panel at Prevent Blindness America’s national summit, “Focus on Eye Health,” held June 18 in Washington, DC.
- Vision Research Fellowship Awards were presented to Jillian Chong from The Ohio State University and Gina Wilson, from Kent State University and Northeast Ohio Medical University to support their glaucoma-related research. They presented their research at a scientific forum Nov. 19.
- Dr. Linda Greff from the Cincinnati Eye Institute spoke about overcoming career challenges for women in science.
- The Ohio Senior Health Insurance Information Program (OSHIIP) of the Ohio Department of Insurance provided vision care resources to elders at the program’s “Welcome to Medicare” events.
- Prevent Blindness Ohio provided adult vision screening services and training for volunteers throughout the state.
- The Ohio Department of Aging, Ohio Department of Health and Opportunities for Ohioans with Disabilities provided evidence-based healthy lifestyle programs that provide health benefits and promote disease prevention. Programs include: Healthy U chronic disease self-management program, Healthy-U: Diabetes and Healthy IDEAS, a depression self-management program.
- The Ohio Department of Aging launched STEADY U Ohio, a comprehensive falls prevention initiative, in September 2013. www.steadyu.ohio.gov
- Members of the AEPPP participate in the Ohio Injury Prevention Partnership’s Ohio Older Adult Falls Prevention Coalition led by the Ohio Department of Health.
- The Ohio Association of Gerontology and Education is conducting research regarding falls.
- Prevent Blindness Ohio published letters regarding vision and falls in the Toledo Blade and Columbus Dispatch in recognition of Falls Prevention Week.

In 2013, AEPPP member organizations collaborated to raise awareness and incorporate information about eye health and vision loss prevention into their missions.

- Information regarding “The Aging Eye in Ohio” was shared with legislators and their staff at a legislative breakfast on Feb. 27.
- On April 24, Case Western Reserve University/University Hospitals, the AEPPP and Prevent Blindness Ohio hosted “The Aging Eye: Today’s Treatment-Tomorrow’s Hope.” More than 140 people attended the conference, which was an official “Year of Vitality” event in Cleveland in conjunction with the 2013 National Senior Games.

In 2013, 19.6 percent of Ohioans age 40-plus say that it has been over two years since their last dilated eye exam. 50 percent of all vision loss could be avoided through early detection and treatment. - Behavioral Risk Factor Surveillance System 2012

19.6 percent of Ohioans age 40-plus say that it has been over two years since their last dilated eye exam. 50 percent of all vision loss could be avoided through early detection and treatment. - Behavioral Risk Factor Surveillance System 2012

19.6 percent of Ohioans age 40-plus say that it has been over two years since their last dilated eye exam. 50 percent of all vision loss could be avoided through early detection and treatment. - Behavioral Risk Factor Surveillance System 2012

Falls Prevention
Ohioans age 65+ who have an age-related eye disease are 50 percent more likely to experience a fall than persons of the same age without an eye disease. AEPPP partners collaborated to spread the word about the importance of maintaining healthy vision to prevent falls.
Vision Problems in the U.S.: Prevalence of Adult Vision Impairment and Eye Disease in America

This report and database provide estimates of the prevalence of sight-threatening eye diseases in Americans age 40 and older. The estimates in this report use published prevalence rates and 2010 U.S. Census data. These estimates reflect the growth and changing racial, ethnic and age composition of the United States population.

Clinical Studies in Eye Disease

Increased investment in vision research is critical to curb the growth of vision loss. There are numerous clinical studies underway studying the causes and treatments for a variety of eye diseases. Find the latest list of clinical trials recruiting patients at www.clinicaltrials.gov.

Insuring Your Eyes

Insurance can be a confusing topic, but this is especially true when it comes to eye health. Insurance for eye health care can come from various sources: It may be employer-sponsored medical or vision insurance, individually purchased medical or vision insurance, Medicare, Medicaid or other public or private programs. To learn more, download “Insuring Your Eye Health in Ohio” from: ohio.preventblindness.org/insuring-your-eyes

Website

ohio.preventblindness.org/ohios-aging-eye-public-private-partnership

Learn more about the AEPPP, its goals and membership. Access studies, fact sheets and other resources on the leading causes of vision loss among adult Ohioans as well as information regarding AEPPP-sponsored activities.
Financial Supporters

The work of Ohio’s Aging Eye Public Private Partnership is supported entirely by donated funds, products and services from member organizations, and contributions from private sources. Prevent Blindness serves as the fiscal agent for the partnership. Support for educational materials, advocacy, printing, supplies and meeting expenses have been provided by the following organizations:

Case Western Reserve University Department of Ophthalmology and Visual Sciences and University Hospitals Eye Institute
Ohio Department of Aging
Ohio Department of Health-Ohio Diabetes Prevention and Control Program
Ohio Optometric Association
Opportunities for Ohioans with Disabilities, Bureau of Services for the Visually Impaired
Prevent Blindness America
Prevent Blindness Ohio
The Columbus Foundation

The Vision Research Fellowship Program is supported by a grant from the Sarah E. Slack Prevention of Blindness Fund, Muskingum County Community Foundation.

Sources
Ohio Department of Health and the 2012 Behavioral Risk Factor Surveillance System (CDC)
2012 Fifth Edition of Vision Problems in the U.S., Prevent Blindness America and the National Eye Institute, Wittenborn, John S. & Rein, David B.
“Cost of Vision Problems: The Economic Burden of Vision Loss and Eye Disorders in the United States,” NORC at the University of Chicago

Fellowship recipient, **Jillian Chong**, from The Ohio State University College of Medicine is investigating the physical changes in the cornea when using prostaglandin analog eyes drops for glaucoma for clinical care.

Fellowship recipient, **Gina Wilson**, from Kent State and Northeast Ohio Medical University. Her research is providing better understanding of the progression of glaucoma to help develop early interventions.

The Aging Eye: Today’s Treatment –Tomorrow’s Hope

Front Row L-R: Darcy Downie. Prevent Blindness Ohio (PBO); Dr. Jonathan Lass, Case Western Reserve University (CWRU); Dr. Rafat Ansari, NASA Glenn Research Center; Sherry Williams, PBO; Dr. Shawn Wilker, CWRU; Marcus J. Molea, Ohio Department of Aging.

Second Row: Dr. Andrew Hartwick, The Ohio State University (OSU); Dr. Heithem El-Hodiri, The Research Institute at Nationwide Children’s Hospital; Dr. Ram Nagaraj, CWRU; Dr. Deborah M. Grzybowski, OSU; Dr. Pankaj Gupta, CWRU; Ellen Papidimoulis, Louis Stokes Cleveland VA Medical Center; Laura Schwartz, PBO; Dr. Suber S. Huang, CWRU; Nancy Vitale, CWRU; Jonathan Volpe, CWRU

Ohio’s Aging Eye Public Private Partnership
c/o Prevent Blindness Ohio
1500 West Third Avenue, Suite 200, Columbus, OH 43212
1-800-301-2020 (toll-free) ● 1-614-464-2020 (office)
1-614-481-9670 (fax)
ohio.preventblindness.org/ohios-aging-eye-public-private-partnership