Prevent Blindness®

Our Vision Is Vision®

5th Annual

FOCUS ON EYE HEALTH NATIONAL SUMMIT

VISION TO ACTION: Collaborating Around a National Strategy

Wednesday, July 13, 2016

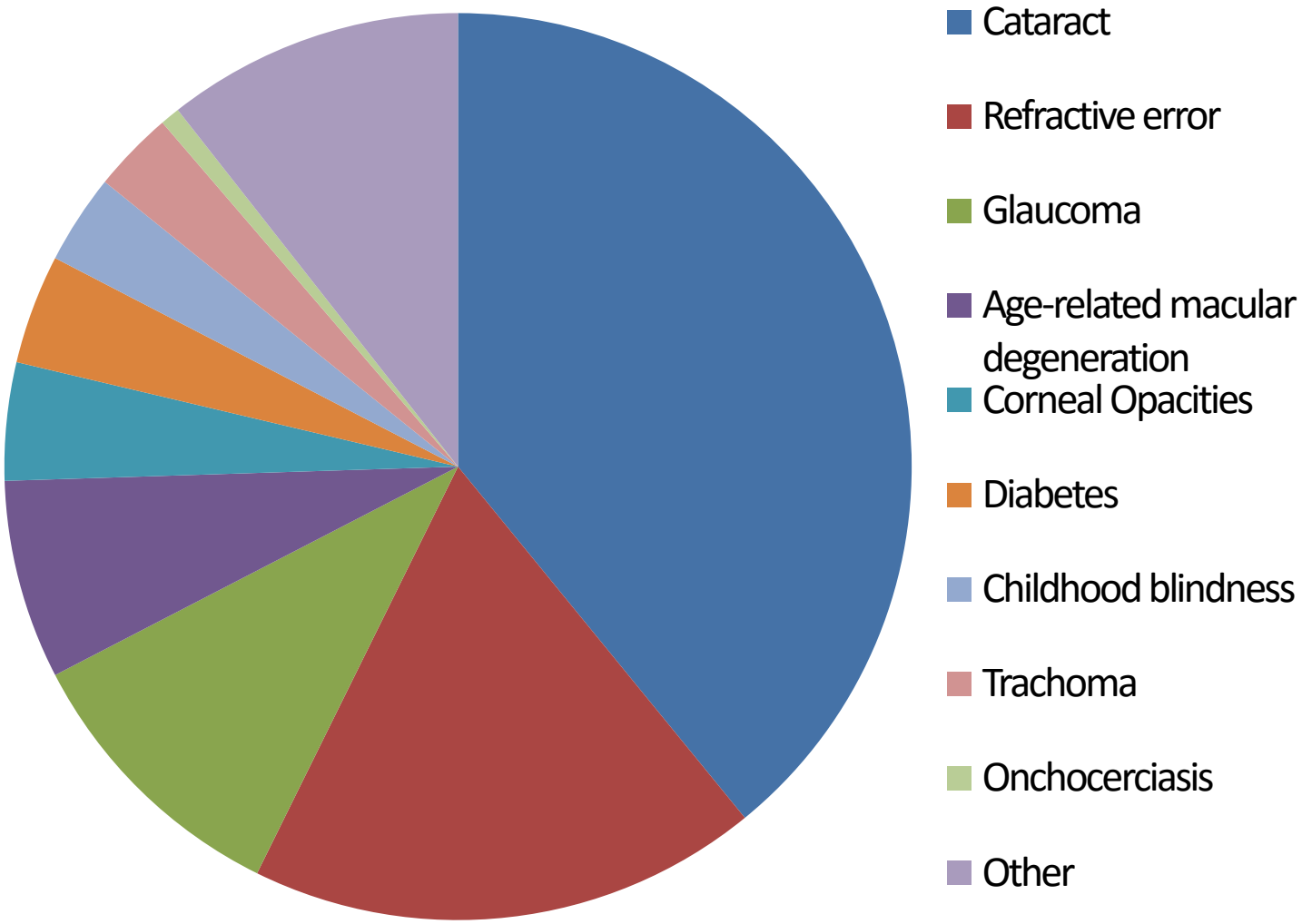
National Press Club | Washington, DC

Prevent Blindness®
Our Vision Is Vision®

Preventing Vision Loss

Kelly W. Muir, MD, MHSc
Durham VA and Duke Eye Center

Causes of Blindness Worldwide

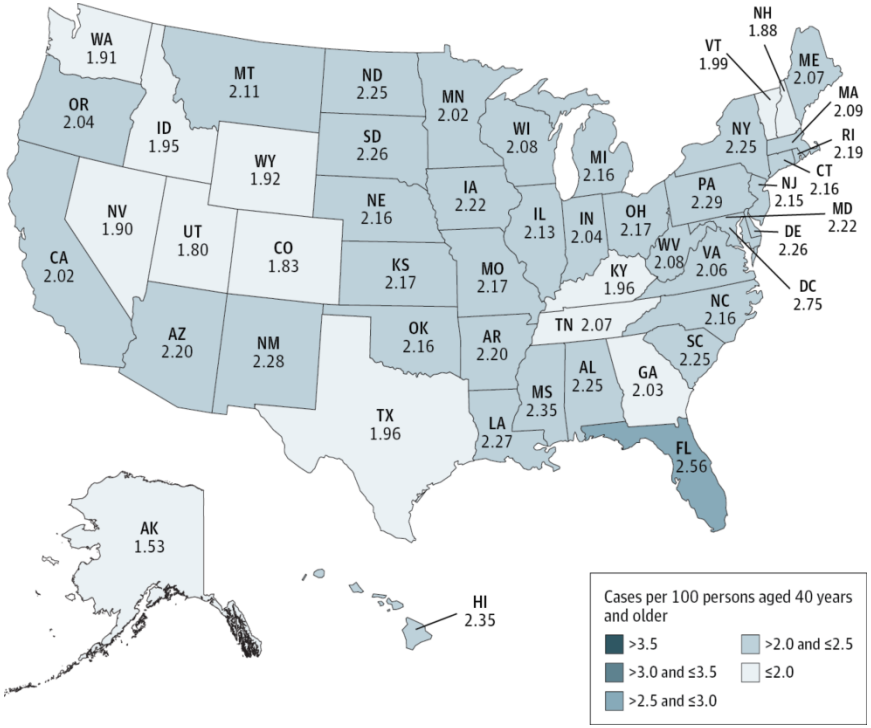


WHO, Global Health Bulletin, 2004

The JAMA Network

From: **Visual Impairment and Blindness in Adults in the United States: Demographic and Geographic Variations From 2015 to 2050**

Varma et al. JAMA Ophthalmol. Published online May 19, 2016. doi:10.1001/jamaophthalmol.2016.1284



Per Capita Prevalence of Visual Impairment in the United States in 2015

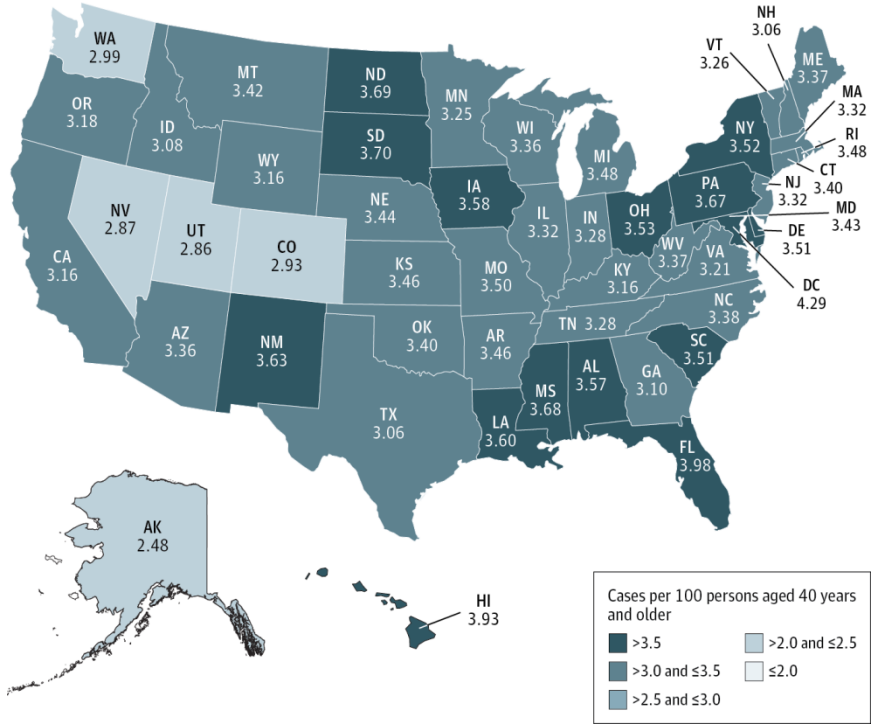


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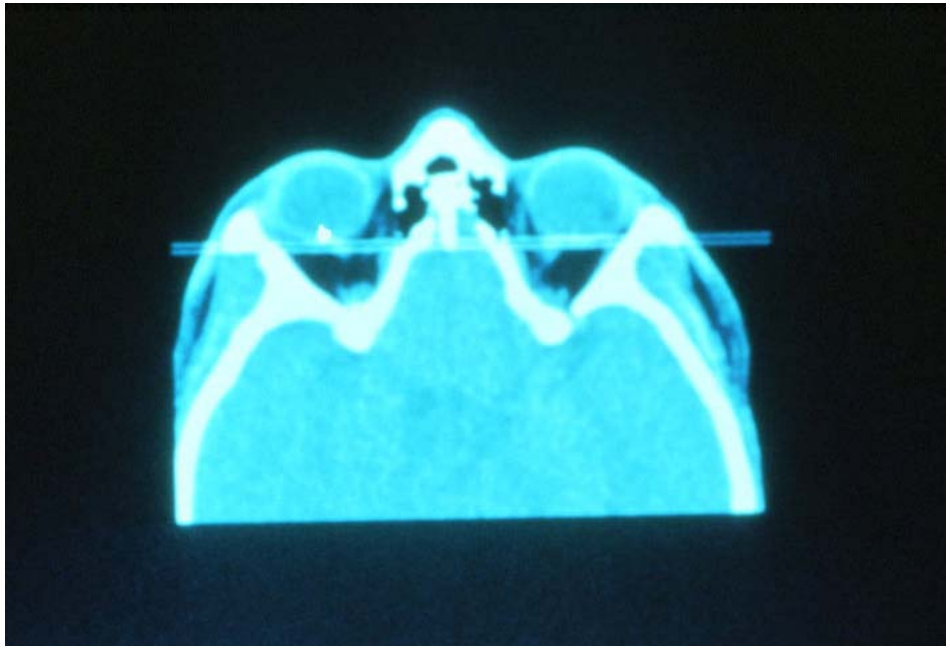
Table. Projected Number of Persons With Visual Impairment and Blindness in the United States, Stratified by Age Group, From 2015 to 2050 (in Millions)[a]

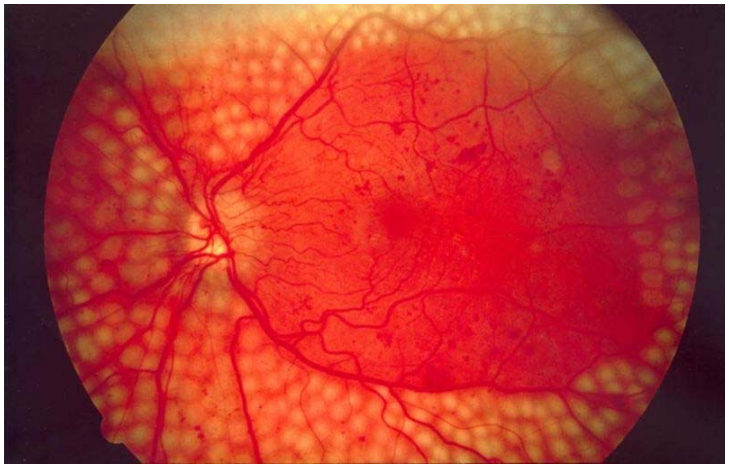
Group	2015	2020	2025	2030	2035	2040	2045	2050
Visual Impairment								
Age group, y								
40-49	0.13	0.13	0.14	0.15	0.16	0.17	0.16	0.16
50-59	0.17	0.17	0.16	0.16	0.17	0.19	0.20	0.21
60-69	0.52	0.59	0.63	0.62	0.60	0.61	0.65	0.70
70-79	0.78	0.99	1.21	1.37	1.47	1.44	1.41	1.43
≥80	1.61	1.77	2.10	2.67	3.26	3.85	4.27	4.44
Total	3.22	3.67	4.24	4.97	5.67	6.26	6.69	6.95
Women/men	1.33	1.32	1.32	1.31	1.30	1.30	1.30	1.30
Blindness								
Age group, y								
40-49	0.11	0.11	0.11	0.12	0.13	0.13	0.13	0.13
50-59	0.15	0.14	0.13	0.13	0.13	0.14	0.15	0.15
60-69	0.16	0.19	0.20	0.20	0.19	0.20	0.21	0.23
70-79	0.17	0.21	0.26	0.30	0.32	0.32	0.31	0.32
≥80	0.43	0.47	0.55	0.70	0.86	1.02	1.14	1.18
Total	1.02	1.12	1.26	1.45	1.64	1.82	1.94	2.01
Women/men	1.07	1.06	1.06	1.08	1.10	1.11	1.11	1.09

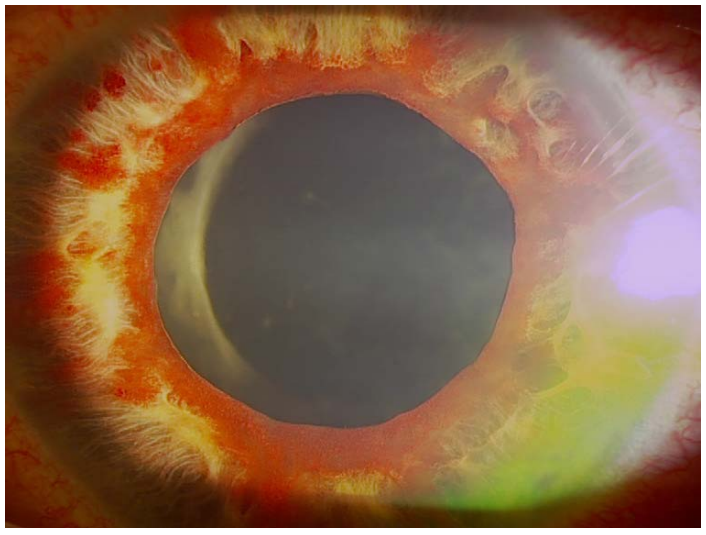
[a] The criterion for visual impairment was visual acuity less than 20/40 but better than 20/200 based on the visual acuity in the best-corrected, better-seeing eye. The criterion for blindness was visual acuity of 20/200 or less based on visual acuity in the best-corrected, better-seeing eye.

Projected Number of Persons With Visual Impairment and Blindness in the United States, Stratified by Age Group, From 2015 to 2050 (in Millions)[a]

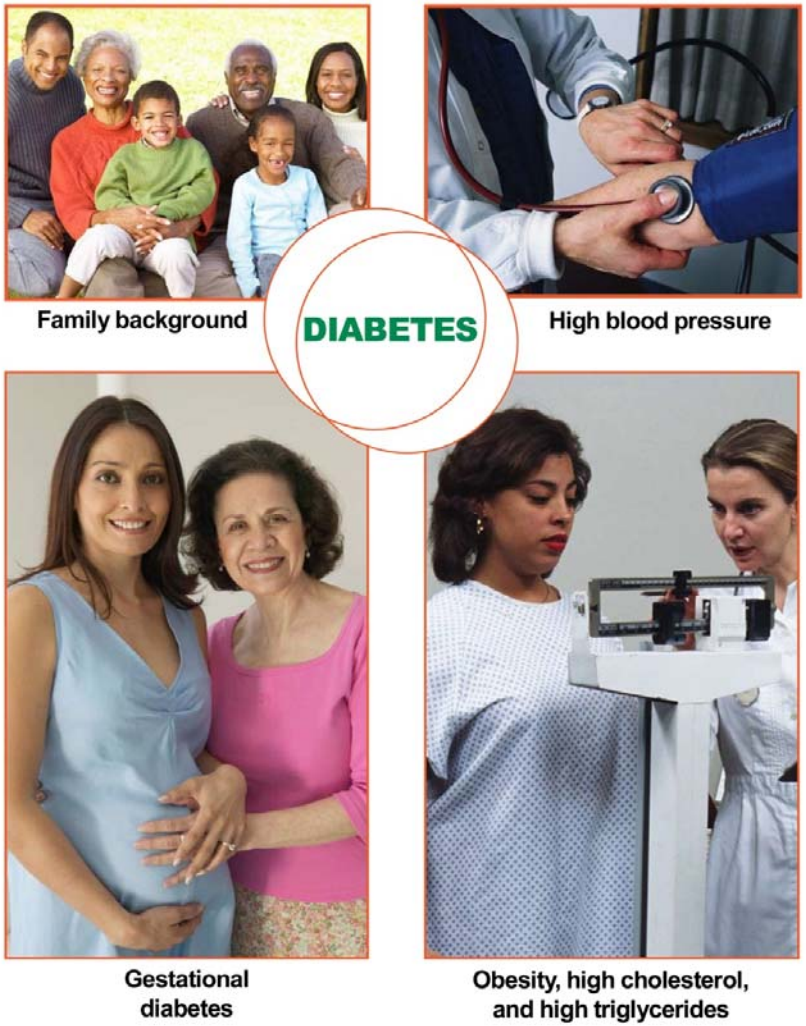
Ocular trauma





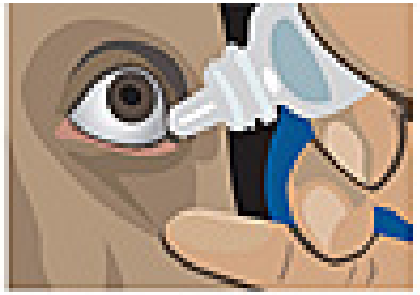


Preventing diabetic eye disease starts with preventing diabetes



National Eye Health Education Program
NEHEP

PROTECT YOUR VISION FROM DIABETES



Have a dilated eye exam every year, and follow these steps to keep your health on TRACK.

T

Take your medications as prescribed by your doctor.

R

Reach and maintain a healthy weight.

A

Add more physical activity to your daily routine.

C

Control your ABC's—A1C, blood pressure, and cholesterol levels.

K

Kick the smoking habit.

NIH National Eye Institute

NEHEP National Eye Health Education Program
A program of the National Institutes of Health

www.nei.nih.gov/diabetes

When diabetic retinopathy is detected early, treatment is 95% effective in preventing severe vision loss.

National Eye Health Education Program
NEHEP

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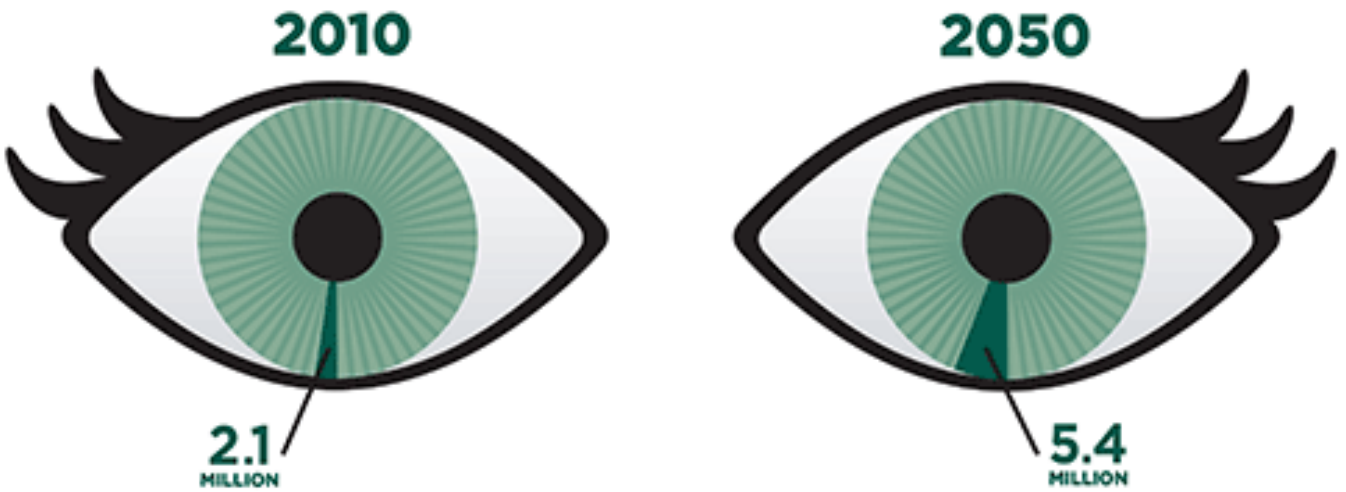
Age-related macular degeneration (AMD) is the most common cause of blindness in Americans aged 65+

Age-Related Macular Degeneration: NEI Looks Ahead

Between 2010 and 2050, the estimated number of people with AMD will more than double from 2.1 million to 5.4 million.



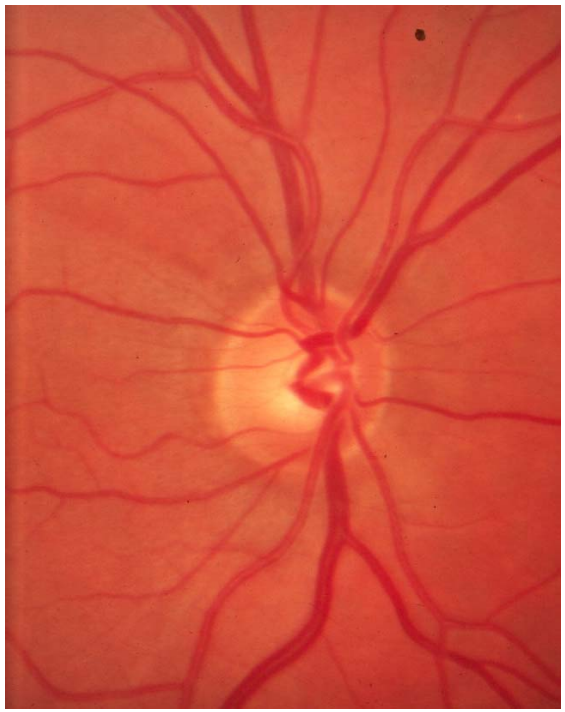
For more information on eye disease, visit **nei.nih.gov/health**.

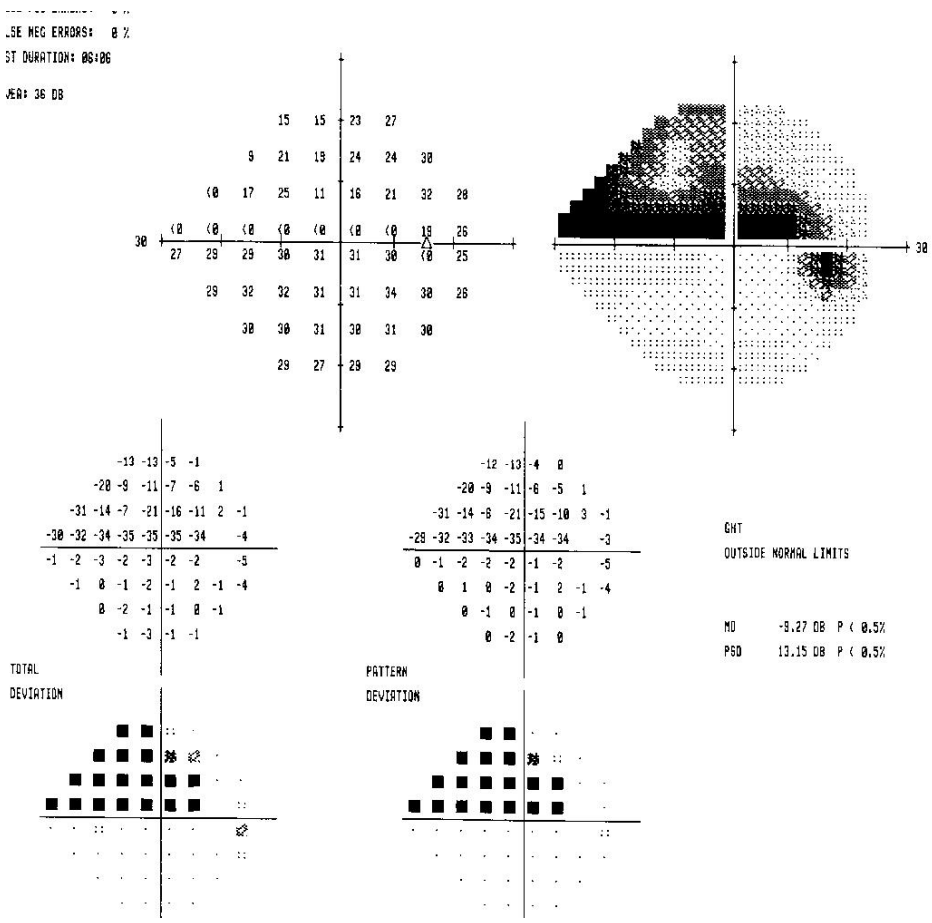
Each eye represents a total of 80 million people, the estimated number of Americans who will be 65 and older in 2050, the population most affected by common eye diseases.

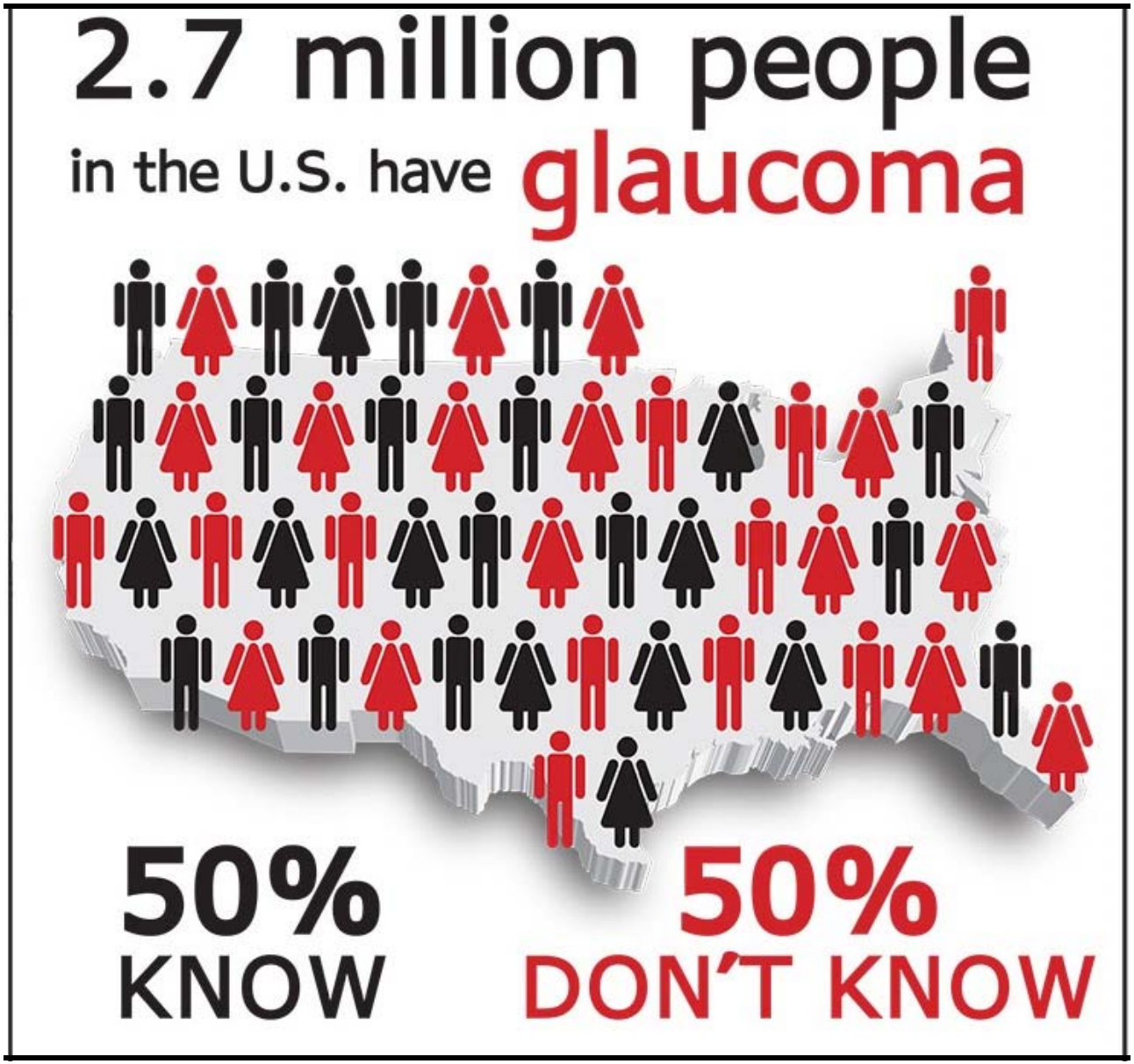
Besides aging,
smoking is the biggest
risk factor for developing

AMD.

NIH
National Eye Institute




.SE MEG ERRORS: 0 %
ST DURATION: 06:06
JEW: 36 DB
30
30
TOTAL
DEVIATION
PATTERN
DEVIATION
GHT
OUTSIDE NORMAL LIMITS
MD -9.27 DB P < 0.5%
PSD 13.15 DB P < 0.5%



National Eye Health Education Program
NEHEP

By 2030,

4.2 million people

in the U.S. will have glaucoma

National Eye Health Education Program
NEHEP

Who's at higher risk?

African Americans **40+**

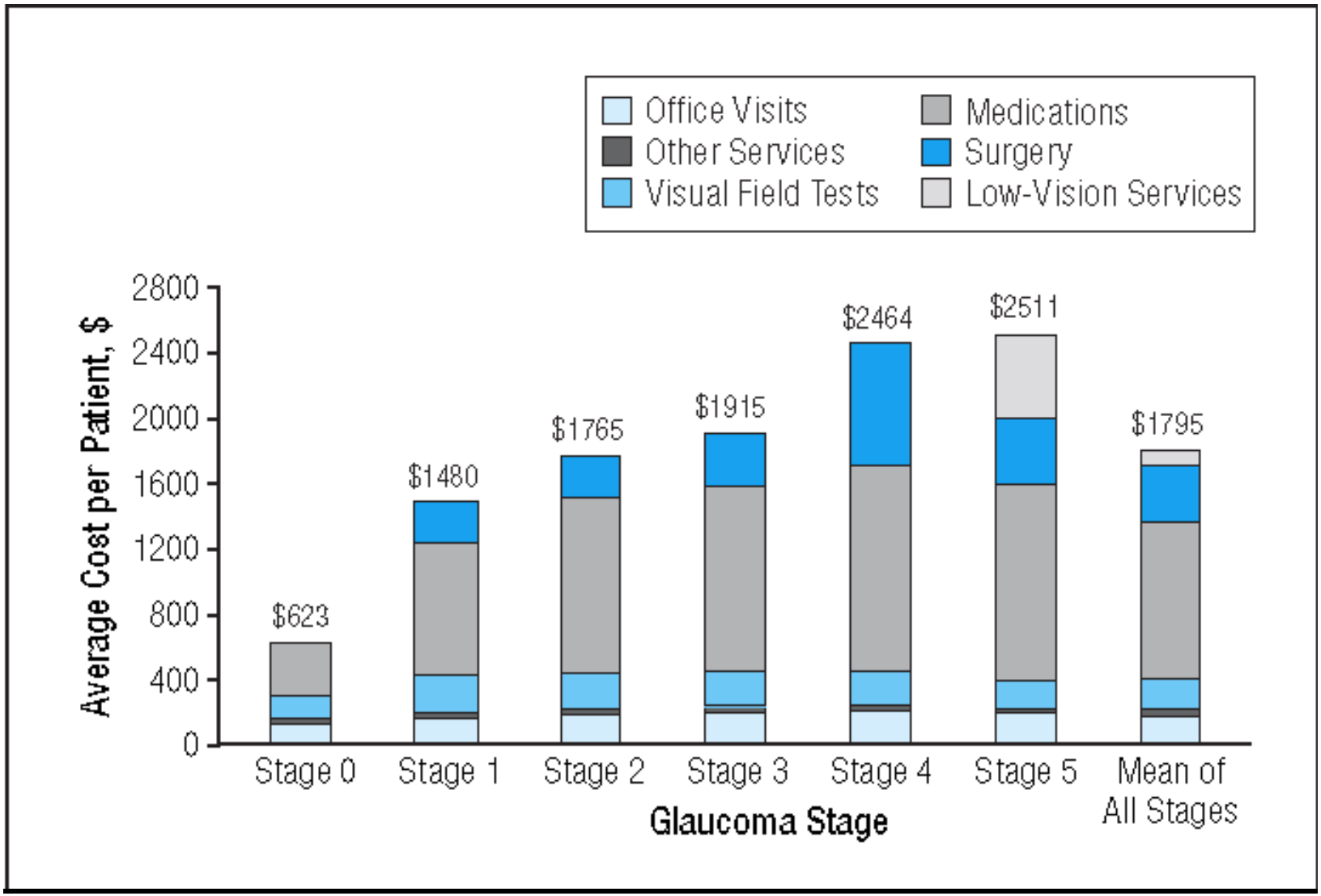
Everyone **60+**

especially **Mexican Americans**

with a

Family history of glaucoma

National Eye Health Education Program
NEHEP



Lee et al, 2006, Archives

NEI

Prevent Blindness®
Our Vision Is Vision®

Preventing vision loss

Evidence-based strategies for preventing eye disease include:

- Wearing safety glasses
- Avoiding smoking
- Keeping a healthy diet

……but many eye diseases are not symptomatic in the early stages and regular comprehensive eye exams with a skilled provider are crucial to early detection and treatment.

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