Preventing Vision Loss

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Causes of Blindness Worldwide

- Cataract
- Refractive error
- Glaucoma
- Age-related macular degeneration
- Corneal Opacities
- Diabetes
- Childhood blindness
- Trachoma
- Onchocerciasis
- Other

WHO, Global Health Bulletin, 2004
From: Visual Impairment and Blindness in Adults in the United States: Demographic and Geographic Variations From 2015 to 2050


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

Per Capita Prevalence of Visual Impairment in the United States in 2015
### Table. Projected Number of Persons With Visual Impairment and Blindness in the United States, Stratified by Age Group, From 2015 to 2050 (in Millions)

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

*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.*
Ocular trauma
Preventing diabetic eye disease starts with preventing diabetes.
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.

www.nei.nih.gov/diabetes
When diabetic retinopathy is detected early, treatment is 95% effective in preventing severe vision loss.
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.
2.7 million people in the U.S. have **glaucoma**

50% **know**

50% **don’t know**

National Eye Health Education Program (NEHEP)
By 2030, 4.2 million people in the U.S. will have glaucoma.
Who’s at higher risk?

African Americans 40+

Everyone 60+
especially Mexican Americans

with a Family history of glaucoma
Lee et al, 2006, Archives
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.