Prevalence of vision loss
Population: 417 million

<table>
<thead>
<tr>
<th>Age Group</th>
<th>1990</th>
<th>2020</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children and adolescents (0-19)</td>
<td>2.7 million</td>
<td>8.6 million</td>
<td>60.9 million</td>
</tr>
<tr>
<td>Adults (20-49)</td>
<td>20.3 million</td>
<td>27.0 million</td>
<td>33.4 million</td>
</tr>
<tr>
<td>Older adults (50 and over)</td>
<td>35.3 million</td>
<td>45.1 million</td>
<td>52.4 million</td>
</tr>
</tbody>
</table>

Categories of vision loss

- **Blindness**
  - Female: 0.9M
  - Male: 0.6M
  - Total: 1.4M

- **Moderate to severe**
  - Female: 11.4M
  - Male: 6.6M
  - Total: 18.0M

- **Mild**
  - Female: 5.7M
  - Male: 3.9M
  - Total: 9.5M

- **Near**
  - Female: 27.2M
  - Male: 16.1M
  - Total: 43.2M

Top five causes of blindness and moderate to severe vision loss

- Uncorrected refractive error: 9.7M
- Cataract: 3.5M
- Glaucoma: 0.4M
- Age-related macular degeneration: 0.3M
- Diabetic retinopathy: 0.2M

The number of people with vision loss is growing

- 1990: 55.5 million
- 2020: 72.2 million
- 2050: 85.8 million

Eye care service indicators

- Countries: 29
- Cataract surgeries: 818,655 annually

National eye health
- No. countries reporting: 2
- Committees: 2
- Plans: 1

Human resources
- Ophthalmologists: 33,805
- Optometrists: 5,465
- Allied ophthalmic personnel: 1,960

Data
- No. countries reporting: Prevalence surveys: 9
- Service assessments: 0

For further information and definitions visit [https://www.iaph.org/learn/vision-atlas](https://www.iaph.org/learn/vision-atlas)

Data from VLEG/GBD 2020 model, via the IAPB Vision Atlas
Prevalence of vision loss
Population: 1,085 million

Categories of vision loss
- **Blindness**: 3.0M
  - 1.7M Female
  - 1.3M Male
- **Moderate to severe**: 31.1M
  - 17.4M Female
  - 13.6M Male
- **Mild**: 27.6M
  - 15.9M Female
  - 11.7M Male
- **Near**: 12.2M
  - 6.8M Female
  - 5.4M Male

Top five causes of blindness and moderate to severe vision loss
- Uncorrected refractive error: 17.2M
- Cataract: 8.7M
- Glaucoma: 1.4M
- Age-related macular degeneration: 1.3M
- Diabetic retinopathy: 0.6M

Prevalence of vision loss compared to other GBD Super Regions
- This region: 6.8%
- Global average: 14%

The number of people with vision loss is growing
- 1990: 49.6 million
- 2000: 73.9 million
- 2050: 113.3 million

Eye care service indicators
- Countries: 36
- Cataract surgeries: 6,032,094 annually

National eye health
- No. countries reporting: 20
- Coordinators: 3
- Committees: 5
- Plans: 3

Human resources
- 81,080 ophthalmologists
- 129,118 optometrists
- 64,537 allied ophthalmic personnel

Data
- No. countries reporting: 20
- Prevalence surveys: 20
- Service assessments: 2

For further information and definitions visit [https://www.iapb.org/learn/vision-atlas](https://www.iapb.org/learn/vision-atlas)

The Vision Atlas is a free knowledge resource for eye health thanks to the support from Allergan an AbbVie company, Bayer, Seva Foundation, Sightsavers, CBM and The Fred Hollows Foundation.
Prevalence of vision loss
Population: 585 million

Categories of vision loss
- **Blindness**: 3.7M (2M Female, 1.7M Male)
- **Moderate to severe vision loss**: 24.5M (13.5M Female, 10.9M Male)
- **Mild**: 21.5M (11.6M Female, 9.7M Male)
- **Near**: 27.9M (15.3M Female, 12.6M Male)

Top five causes of blindness and moderate to severe vision loss
- Uncorrected refractive error: 14.9M
- Cataract: 5.8M
- Glaucoma: 0.8M
- Diabetic retinopathy: 0.7M
- Age-related macular degeneration: 0.4M

Prevalence of vision loss compared to other GBD Super Regions
- **Latin America and Caribbean Region**: 12.9%
- **Global average**: 14%

The number of people with vision loss is growing
- **1990**: 36.5 million
- **2020**: 77.5 million
- **2050**: 140 million

Eye care service indicators
- **Countries**: 33
- **Cataract surgeries**: 1,206,853 annually

National eye health
- No. countries reporting: 22
- Committees: 18
- Plans: 9

Data
- No. countries reporting: 18
- Prevalence surveys: 18
- Service assessments: 4

Human resources
- 27,754 ophthalmologists
- 20,142 optometrists
- 8,259 allied ophthalmic personnel

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Data from VLEG/GBD 2020 model, via the IAPB Vision Atlas

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North Africa and Middle East
GBD Super Region snapshot

Prevalence of vision loss
Population: 621 million

Vision loss by age

- Children and adolescents (0-19): 8.6 million
- Adults (20-49): 12.7 million
- Older adults (50 and over): 32.6 million

Prevalence of vision loss compared to other GBD Super Regions

Top five causes of blindness and moderate to severe vision loss
- Uncorrected refractive error: 13.0M
- Cataract: 6.2M
- Glaucoma: 0.8M
- Age-related macular degeneration: 0.7M
- Diabetic retinopathy: 0.5M

The number of people with vision loss is growing
- 1990: 26.6 million
- 2020: 53.8 million
- 2050: 116.1 million

Eye care service indicators
- Countries: 21
- Cataract surgeries: 491,706 annually

National eye health
- No. countries reporting: 13
- Committees: 7
- Plans: 12

Human resources
- Ophthalmologists: 21,236
- Optometrists: 9,527
- Allied ophthalmic personnel: 30,505

Data
- No. countries reporting: 15
- Prevalence surveys: 15
- Service assessments: 6

For further information and definitions visit https://www.iapb.org/learn/vision-atlas
Data from VLEG/GBD 2020 model, via the IAPB Vision Atlas

Image: Julia Gunther  Image: Jalal Bonyani  Image: Asghar Khamseh

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**South Asia**

**GBD Super Region snapshot**

**Prevalence of vision loss**
Population: **1,795 million**

- **Children and adolescents (0-19)**: 22.5 million
- **Adults (20-49)**: 78.0 million
- **Older adults (50 and over)**: 234.6 million

**Categories of vision loss**

<table>
<thead>
<tr>
<th>Category</th>
<th>Blindness</th>
<th>Moderate to severe</th>
<th>Mild</th>
<th>Near</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Numbers</strong></td>
<td>11.9M</td>
<td>96.2M</td>
<td>60.1M</td>
<td>166.8M</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>6.4M Female</td>
<td>5.6M Male</td>
<td>32.0M Female</td>
<td>28.3M Male</td>
</tr>
<tr>
<td></td>
<td>51.4M Female</td>
<td>44.9M Male</td>
<td>88.5M Female</td>
<td>78.3M Male</td>
</tr>
</tbody>
</table>

**Top five causes of blindness and moderate to severe vision loss**

- Uncorrected refractive error: 55.4M
- Cataract: 35.1M
- Glaucoma: 1.5M
- Age-related macular degeneration: 1.5M
- Diabetic retinopathy: 0.6M

**Vision loss by age**

- **Children and adolescents (0-19)**: 22.5 million
- **Adults (20-49)**: 78.0 million
- **Older adults (50 and over)**: 234.6 million

**Prevalence of vision loss compared to other GBD Super Regions**

- Global average: 14%
- This region: 18.2%
- 17.3%
- 17.5%

**The number of people with vision loss is growing**

- **1990**: 162.8 million
- **2020**: 335.1 million
- **2050**: 518.0 million

**Eye care service indicators**

- **Countries**: 5
- **Cataract surgeries**: 500,000 annually
- **National eye health**
  - No. countries reporting: 5
  - Coordinators: 5
  - Committees: 4
  - Plans: 5
- **Human resources**
  - 26,248 ophthalmologists
  - 11,038 optometrists
  - 44,589 allied ophthalmic personnel
- **Data**
  - No. countries reporting: 5
  - Prevalence surveys: 5
  - Service assessments: 4

For further information and definitions visit [https://www.iapb.org/learn/vision-atlas](https://www.iapb.org/learn/vision-atlas)

Data from VLEG/GBD 2020 model, via the IAPB Vision Atlas

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Prevalence of vision loss
Population: 2,186 million

Categories of vision loss

Blindness
- 15.1M
  - 8.6M Female
  - 6.5M Male

Moderate to severe
- 83.1M
  - 46.8M Female
  - 36.2M Male

Mild
- 91.0M
  - 50.9M Female
  - 40.2M Male

Near
- 193.5M
  - 106.8M Female
  - 86.7M Male

Top five causes of blindness and moderate to severe vision loss

Uncorrected refractive error
- 41.1M

Cataract
- 34.5M

Age-related macular degeneration
- 3.3M

Glaucoma
- 1.9M

Diabetic retinopathy
- 1.5M

The number of people with vision loss is growing

<table>
<thead>
<tr>
<th>Year</th>
<th>1990</th>
<th>2020</th>
<th>2050</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blindness</td>
<td>101.9M</td>
<td>213.1M</td>
<td>297.9M</td>
</tr>
<tr>
<td>Moderate to severe vision loss</td>
<td>84.1M</td>
<td>169.5M</td>
<td>221.1M</td>
</tr>
</tbody>
</table>

Eye care service indicators

Countries: 34
Cataract surgeries: 449,429 annually

For further information and definitions visit [https://www.iapb.org/learn/vision-atlas](https://www.iapb.org/learn/vision-atlas)

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Prevalence of vision loss
Population: 1,092 million

Categories of vision loss

- **Blindness**
  - Uncorrected refractive error: 9.9M
  - Cataract: 6.7M
  - Glaucoma: 0.9M
  - Age-related macular degeneration: 0.6M
  - Diabetic retinopathy: 0.2M

- **Moderate to severe**
  - 51.5M

- **Near**
  - 53.7M

Top five causes of blindness and moderate to severe vision loss:
- Uncorrected refractive error: 9.9M
- Cataract: 6.7M
- Glaucoma: 0.9M
- Age-related macular degeneration: 0.6M
- Diabetic retinopathy: 0.2M

Prevalence of vision loss compared to other GBD Super Regions

- **Global average**: 14%
- **This region**: 9.9%
- **Sub-Saharan Africa**: 17.5%
- **110.7M people live with vision loss**

The number of people with vision loss is growing

- **1990**
  - 27.3 million
  - Male: 14.4 million
  - Female: 12.9 million

- **2020**
  - 60.6 million
  - Male: 30.9 million
  - Female: 29.7 million

- **2050**
  - 148.6 million
  - Male: 76.7 million
  - Female: 71.9 million

Eye care service indicators

- **Countries**: 46
- **Cataract surgeries**: 429,168 annually

National eye health
- No. countries reporting: 39
- Coordinators: 19
- Committees: 24

Human resources
- 2,199 ophthalmologists
- 9,299 optometrists
- 8,031 allied ophthalmic personnel

Data
- No. countries reporting: 29
- Prevalence surveys: 29
- Service assessments: 11