



# Blindness and vision impairment

11 October 2018

---

## Key facts

- Globally, it is estimated that approximately 1.3 billion people live with some form of vision impairment.
  - With regards to distance vision, 188.5 million people have mild vision impairment, 217 million have moderate to severe vision impairment, and 36 million people are blind (1).
  - With regards to near vision, 826 million people live with a near vision impairment (2).
  - Globally, the leading causes of vision impairment are uncorrected refractive errors and cataracts.
  - Approximately 80% of all vision impairment globally is considered avoidable.
  - The majority of people with vision impairment are over the age of 50 years.
- 

## Definitions

The International Classification of Diseases 11 (2018) classifies vision impairment into two groups, distance and near presenting vision impairment.

Distance vision impairment:

- Mild – presenting visual acuity worse than 6/12
- Moderate – presenting visual acuity worse than 6/18
- Severe – presenting visual acuity worse than 6/60
- Blindness – presenting visual acuity worse than 3/60

Near vision impairment:

- **Presenting near visual acuity worse than N6 or M.08 with existing correction..**

A person's experience of vision impairment varies depending upon many different factors. This includes for example, the availability of prevention and treatment interventions, access to vision rehabilitation (including assistive products such as glasses or white canes), and whether the person experiences problems with inaccessible buildings, transport and information.

## Prevalence

Globally, it is estimated that approximately 1.3 billion people live with some form of distance or near vision impairment.

With regards to distance vision, 188.5 million have mild vision impairment, 217 million have moderate to severe vision impairment, and 36 million people are blind (1). With regards to near vision, 826 million people live with a near vision impairment (2).

Population growth and ageing will increase the risk that more people acquire vision impairment.

## Causes

Globally, the leading causes of vision impairment are:

- **uncorrected refractive errors**
- **cataract**
- **age-related macular degeneration**
- **glaucoma**
- **diabetic retinopathy**
- **corneal opacity**
- **trachoma.**

There is some variation in the causes across countries. For example, the proportion of vision impairment attributable to cataract is higher in low- and middle-income countries than high-income countries. In high income countries, diseases such as diabetic retinopathy, glaucoma and age-related macular degeneration are more common.

Among children, the causes of vision impairment varies considerably across countries. For example, in low-income countries congenital cataract is a leading cause, whereas in high income countries it is more likely to be retinopathy of prematurity.

# Strategies to address vision impairment

Approximately 80% of vision impairment globally is considered avoidable. There are effective interventions available to prevent and treat eye diseases. For example, uncorrected refractive error can be corrected with glasses while cataract surgery can restore vision. Vision rehabilitation is also effective in improving functioning for people with an irreversible vision impairment.

## WHO response

WHO's work is guided by the publication *Universal eye health: a global action plan 2014-2019*, which was agreed to by a resolution at the World Health Assembly in 2013.

- [Universal eye health: a global action plan 2014-2019](#)

Over the last few years, WHO has developed and implemented several tools to support countries to assess the provision of eye care services:

- Eye care services assessment tool
- Tool for assessment of diabetes and diabetic retinopathy
- Tool for assessment of rehabilitation services and systems

WHO is also developing a *World report on vision*. The report will offer recommendations, including a number focused on ensuring comprehensive and integrated eye care in countries. It is expected the report will help to shape the global agenda on vision, including assisting Member States to reduce the burden of eye diseases, improve the lives of people with vision impairment and achieve the Sustainable Development Goals.

---

## References

1) Bourne RRA, Flaxman SR, Braithwaite T, Cicinelli MV, Das A, Jonas JB, et al.; Vision Loss Expert Group. [Magnitude, temporal trends, and projections of the global prevalence of blindness and distance and near vision impairment: a systematic review and meta-analysis](#). *Lancet Glob Health*. 2017 Sep;5(9):e888–97.

2) Fricke, TR, Tahhan N, Resnikoff S, Papas E, Burnett A, Suit MH, Naduvilath T, Naidoo K, Global Prevalence of Presbyopia and Vision Impairment from Uncorrected Presbyopia: Systematic Review, Meta-analysis, and Modelling, *Ophthalmology*. 2018 May 9