

Prevention of Blindness and Visual Impairment

Priority eye diseases

[Share](#)[Print](#)

Childhood blindness

Definition

Childhood blindness refers to a group of diseases and conditions occurring in childhood or early adolescence, which, if left untreated, result in blindness or severe visual impairment that are likely to be untreatable later in life. The major causes of blindness in children vary widely from region to region, being largely determined by socioeconomic development, and the availability of primary health care and eye care services. In high-income countries, lesions of the optic nerve and higher visual pathways predominate as the cause of blindness, while corneal scarring from measles, vitamin A deficiency, the use of harmful traditional eye remedies, ophthalmia neonatorum, and rubella cataract are the major causes in low-income countries. Retinopathy of prematurity is an important cause in middle-income countries. Other significant causes in all countries are congenital abnormalities, such as cataract, glaucoma, and hereditary retinal dystrophies.

Magnitude

According to Gilbert and Foster, the prevalence of blindness in children varies according to socioeconomic development and under-5 mortality rates. In low-income countries with high under-5 mortality rates, the prevalence may be as high as 1.5 per 1000 children, while in high-income countries with low under-5 mortality rates, the prevalence is around 0.3 per 1000 children. Using this correlation to estimate the prevalence of blindness in children, the number of blind children in the world is approximately 1.4 million. Approximately three-quarters of the world's blind children live in the poorest regions of Africa and Asia.

Prevention and treatment

Prevention and treatment of childhood blindness is disease specific. For Vitamin A deficiency, at a cost of only 5 US cents a dose, vitamin A supplements reduce child mortality by up to 34% in areas where Vitamin A deficiency is a public health problem. As vitamin A deficiency manifests often during an outbreak of measles, properly planned and implemented national vaccination programmes against measles has reduced the prevalence of eye complications. In middle-income countries, retinopathy of prematurity (ROP) is among the leading causes of blindness, the incidence of which can be reduced through availability and affordability of screening and curative services. Early treatment of cataract and glaucoma can be beneficial, while low vision devices are helpful in children with residual vision.

Priority eye diseases

1. [Main causes of visual impairment](#)
2. [Cataract](#)
3. [Onchocerciasis \(river blindness\)](#)
4. [Childhood blindness](#)
5. [Refractive errors and low vision](#)
6. [Diabetic retinopathy](#)
7. [Glaucoma](#)
8. [Age-related macular degeneration](#)
9. [Corneal opacities](#)
10. [Genetic eye diseases](#)

Children in Americas



[Download the picture](#)
jpg, 314kb

The Global Childhood Blindness Programme

The Lions Clubs International Foundation, through their "SightFirst" Initiative is one of the major partners with WHO in addressing the causes of childhood blindness. Because of its extensive social and emotional burdens, prevention of childhood blindness is generally high on the agenda. The causes of childhood blindness, amenable to prevention and treatment, receive attention, not only because there are interventions available to handle these conditions, but also devastating consequences if not addressed.

[Childhood Blindness Project](#)