

# Blindness and Eye Disease in Cambodia

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## Abstract

*Purpose:* To assess the prevalence and etiology of blindness and low vision and to assess the prevalence of common eye diseases in central Cambodia. *Methods:* In this cross-sectional, population-based study, 6,558 residents of Kandal Province, Cambodia were registered, and 5,803 (88.5%) were interviewed and examined. This house-to-house survey was conducted by a team consisting of a senior ophthalmologist, a Cambodian eye doctor, and eight Cambodian eyecare workers. *Results:* The prevalence of bilateral blindness (visual acuity  $<3/60$ ) is 1.1% (95% confidence interval [CI], 0.9-1.4), and an additional 4.4% (95% CI, 3.9-5.0) have low vision (visual acuity  $<6/18$ ,  $\geq 3/60$  in the better eye). The major causes of bilateral blindness are cataract (67.4%), phthisis (6.1%), uncorrected refractive error (6.1%), corneal scar (5.3%), uncorrected aphakia (3.0%), trachoma corneal scar (3.0%), optic atrophy (3.0%), and others (6.1%). The major causes of low vision are uncorrected refractive error (49.8%) and cataract (42.7%). The prevalence of unilateral blindness is 1.2% (95% CI, 0.9-1.4), often caused by cataract, corneal scar, or phthisis. Trauma due to landmine explosions and war-related injuries was frequently the underlying etiology in subjects with phthisis, corneal scarring, or other pathology. *Conclusions:* The prevalence of blindness and low vision in Cambodia is relatively high compared to other developing countries. Most of the causes of blindness and low vision are treatable or preventable. Landmines and other war-related injuries are an important cause of ocular injury. These results will assist in developing a national plan for the prevention of blindness in Cambodia.

**Keywords:** Blindness; Cambodia; survey; Low vision