



Founded in 1908, PREVENT BLINDNESS AMERICA is the nation's leading volunteer eye health and safety organization dedicated to fighting blindness and saving sight. Focused on promoting a continuum of vision care, PREVENT BLINDNESS AMERICA touches the lives of millions of people each year through public and professional education, community and patient service programs and research.

These services are made possible through the generous support of the American public. Together with a network of affiliates, divisions and chapters, it is committed to eliminating preventable blindness in America.



The National Eye Institute (NEI), a component of the National Institutes of Health (NIH), supports and conducts research aimed at improving the prevention, treatment, and rehabilitation of diseases that affect the eye and vision. The NIH, a Federal government agency, is part of the U.S. Department of Health and Human Services. Research is conducted on the NIH campus in Bethesda, Maryland, and at universities, medical schools, hospitals, and other institutions throughout the United States and abroad.

Methods and Sources

In 2001, a consensus meeting was convened by the National Eye Institute at which many of the world's leading ophthalmic epidemiologists created standard case definitions for the eye conditions included in this report. Data was obtained from a review of the major epidemiological studies with the cooperation of their authors (see Table of Sources below).

The number of individuals with each disease and the total number at risk were provided in five year age increments by race and sex for the adult population from each of the studies. These age, race and sex-specific prevalence rates were then combined using a meta-analysis technique for reducing the overall variance of the pooled rate. Appropriate logistic regression models were fit to the age, race and sex-specific pooled prevalence rates. These models were applied to the state level U.S. Census 2000 populations for each year of age to arrive at the number of individuals with disease by race and sex for each state. The state level prevalence rates were then derived by dividing the number of individuals with disease in each state by the total population in each state. To estimate the prevalence of disease in the "other" race category, the age and sex-specific rates for Whites, Blacks, and Hispanics were averaged, and then logistic regression models were developed based on these averages.

While the methods used in this report are similar to those used in previous editions of *Vision Problems in the U.S.*, there are minor differences. Changes in statistical techniques and significantly broader source data have resulted in the most accurate estimates PREVENT BLINDNESS AMERICA has ever produced. For these reasons, however, direct comparisons between current and previous estimates are inappropriate.

Obtaining an actual count of the number of cases of eye disease in America would be virtually impossible. While these estimates do not represent exact measurements, they provide the best available information on the scope of the most serious threats to good vision for American adults in the 21st century.

Table of Sources

Study	Location	Eye Condition					
		B/VI	R/E	AMD	Cataract	D/R	Glaucoma
Baltimore Eye Survey	Baltimore, MD	B W	B W	B W			B W
Barbados Eye Study	Barbados, West Indies			B	B	B	
Beaver Dam Eye Study	Beaver Dam, WI	W	W	W	W	W	W
Blue Mountains Eye Study	Blue Mountains, Australia	W		W	W	W	W
Kongwa Eye Survey	Kongwa, Tanzania						B
Proyecto Ver	Tucson, AZ	H	H			H	H
Rotterdam Study	Rotterdam, Netherlands	W	W	W			W
Salisbury Eye Evaluation Project	Salisbury, MD	B W		B W	B W		
San Antonio Heart Study	San Antonio, TX					H W	
San Luis Valley Diabetes Study	San Luis Valley, CO					H W	
Visual Impairment Project	Melbourne, Australia	W		W	W	W	W
Wisconsin Epidemiologic Study of Diabetic Retinopathy	Madison, WI					W	

Primary prevalence rate source for: B = Blacks, W = Whites, H = Hispanics
 B/VI = blindness and vision impairment, R/E = refractive errors, AMD = age-related macular degeneration,
 D/R = diabetic retinopathy