

Country	WHO Region	WHO EPI region	Year of study	Study type	location of study	Age	Blindness definition	Blindness prevalence	Low Vision definition	Low Vision prevalence	Main causes of blindness	%	Bibliography
Australia	WPR	WPR A	1980	PBS	central, western Australia: Aboriginal population	all ages	≤6/60	1.4	NA	NA	Cataract Corneal disease Trachoma Trauma		Taylor H R. Prevalence and causes of blindness in Australian aborigines. <i>Med J Aust</i> 1980;1:71-76.
Australia	WPR	WPR A	1990	PBS	Anangu Pitjantjatjara and Yalata zone, South Australia. Aboriginal population	all ages	<3/60	1.3	NA	NA	Trachoma Cataract others	45 40 15	Stocks N P, Newland H, Hiller J. The epidemiology of blindness and trachoma in the Anangu Pitjantjatjara of South Australia. <i>Med J Aust</i> 1994;160:751-756.
Australia	WPR	WPR A	1990	PBS	South Australia	50+	<3/60	0.66	<6/18 ≥3/60	0.85	ARMD Cataract Optic atrophy Vascular retinopathy others	50 27 14 7 2	Newland H S, Hiller J E, Casson R J, Obermeyer S. Prevalence and causes of blindness in the South Australian population aged 50 and over. <i>Ophthalmic Epidemiol</i> 1996;3:97-107.
Australia	WPR	WPR A	1992	PBS	Adelaide metropolitan area	70+	<6/60	1.2	<6/18 ≥6/60	9.3	NA		Casson R, Giles L, Newland H S. Prevalence of blindness and visual impairment in an elderly population. <i>Aust N Z J Ophthalmol</i> 1996;24:239-243.
Australia	WPR	WPR A	1992-1994	PBS	New South Wales, urban. Blue Mountains Eye Study	49+	<3/60	0.27	NA	NA	ARMD Cataract		Attebo K, Mitchell P, Smith W. Visual acuity and the causes of visual loss in Australia. The Blue Mountains Eye Study. <i>Ophthalmology</i> 1996;103:357-364.
Australia	WPR	WPR A	1996	PBS	Melbourne, urban. Melbourne VIP	40+	<3/60	0.12	<6/18 >3/60	0.6	NA		Taylor H R, Livingston P M, Stanislavsky Y L, McCarty C A. Visual impairment in Australia: distance visual acuity, near vision, and visual field findings of the Melbourne Visual Impairment Project. <i>Am J Ophthalmol</i> 1997;123:328-337.
Australia	WPR	WPR A	1996	PBS	Victoria, urban and rural	40+	<3/60	0.156	<6/18 ≥3/60	0.473	ARMD Glaucoma		Van Newkirk M R, Weih L, McCarty C A, Taylor H R. Cause-specific prevalence of bilateral visual impairment in Victoria, Australia. <i>Ophthalmology</i> 2001;108:960-967.
Australia	WPR	WPR A	1999-2000	PBS	New South Wales, urban. Blue Mountains Eye Study, repeated after 5 years	49+	<20/200	0.3	NA	NA	AMD other retinal diseases cataract + surgical complications	50 40 10	Foran S, Wang J J, Mitchell P. Causes of visual impairment in two older population cross-sections: the Blue Mountain Eye Study. <i>Ophthalmic Epidemiol</i> 2003;10:215-225.
Bangladesh	SEAR	SEAR D	2001	PBS	whole country	30+	<3/60**	1.5	<6/18 ≥3/60**	8.4	Cataract Uncorrected aphakia Macular degeneration others	80 6 3 11	Dineen B P, Bourne R R, Ali S M, Huq D M, Johnson G J. Prevalence and causes of blindness and visual impairment in Bangladeshi adults: results of the National Blindness and Low Vision Survey of Bangladesh. <i>Br J Ophthalmol</i> 2003;78:820-828.
Barbados	AMR	AMR B	1992	PBS	Three ethnic groups: black 93%, mixed 4%, white 3%	40+	<3/60	1.7	<6/18 ≥3/60	5.7	Cataract Glaucoma Retinal/choroidal dis Optic atrophy Macular diseases others	28 28 15 11 5 13	Hyman L, Wu S Y, Connell A M S, Schachar A, Nemesure B, Hennis A, Leske M C. Prevalence and causes of visual impairment in The Barbados Eye Study. <i>Ophthalmology</i> 2001;108:1751-1756.
Benin	AFR	AFR D	1990	PBS	whole country	all ages	<3/60	0.6	<6/18 ≥3/60	2.5	Cataract Glaucoma Corneal scarring Optic atrophy others	54 15 11 7 13	Négrel A D, Avognon Z, Mnassian D C, Babagbeto M, Oussa G, Bassabi S. Blindness in Benin. <i>Med Trop</i> 1997;55 (4PT 2):409-414.
Bolivia	AMR	AMR D	1985	estimate	NA	all ages	<6/60	0.2-1	NA	NA	Cataract Corneal Scarring Glaucoma Trauma		World Health Organization. Report of the sixth meeting of the WHO PAG on the prevention of blindness. WHO/PBL/85.10. 1985.
Bulgaria	EUR	EUR B	1993	PBS	Sofia District, urban and rural	40+	<3/60	0.5	<6/18 ≥3/60	0.83	Cataract Macular degeneration Glaucoma Optic atrophy Diabetic retinopathy others	20 20 10 7 23	Vassileva P, Gieser S, Vitale S, Cholakova T, Katz J, West S. Blindness and visual impairment in Western Bulgaria. <i>Ophthalmic Epidemiol</i> 1996;3:143-149.
Cambodia	WPR	WPR B	2002	PBS	Kampong Cham	50+	<3/60	6	<6/18 ≥3/60	19	Cataract Corneal opacities Glaucoma Post. segment others note: values for <3/60**	81 4 3 6	Sub-Committee for the Prevention of Blindness, Cambodia. Results of rapid assessment of cataract surgical services. Cambodia: Battambang, Kampong Cham, Kampot. 2002.
Cambodia	WPR	WPR B	2002	PBS	Battambang	50+	<3/60	4.7	<6/18 ≥3/60	10.5	Cataract Corneal opacities Post. segment Trachoma others note: values for <3/60**	81 8 5 2 4	Sub-Committee for the Prevention of Blindness, Cambodia. Results of rapid assessment of cataract surgical services. Cambodia: Battambang, Kampong Cham, Kampot. 2002.

Cambodia	WPR	WPR B	2002	PBS	Kampot	50+	<3/60	4.25	<6/18 ≥3/60	11.7	Cataract Post. segment Corneal opacities others note: values for <3/60**	86 5 4	Sub-Committee for the Prevention of Blindness, Cambodia. Results of rapid assessment of cataract surgical services. Cambodia: Battambang, Kampong Cham, Kampot. 2002.
Cameroon	AFR	AFR D	1992	PBS	Extreme North Province, largest in Cameroon, isolated rural	6+	<3/60	1.2	<6/60 ≥ 3/60	2.4	Cataract Glaucoma Refractive error Trachoma Maculopathy Vitamin A deficiency others ***values for VA <3/30	55 12 10 7 4 3 9 ***	Wilson M R, Mansour M, Ross-Degnan D, Moukouri E, Fobi G, Alemayehu W, Martone J F, Casey R, Bazargan M. Prevalence and causes of low vision and blindness in the Extreme North Province of Cameroon. West Africa Ophthalmic Epidemiol 1996;3:23-33.
Cameroon	AFR	AFR D	1992	PBS	Central Province: Mbam (forest area)	5+	<3/60	1.2	<6/18 ≥3/60	4	Cataract Corneal scarring others	85 8 7	Migliani R, Louis J P, Auduge A, Trebuq A, Gelas H. Evaluation of visual impairment and blindness in Cameroon. A survey in a forest area. Cahiers Sante 1993;3:17-23.
Cape Verde	AFR	AFR D	1998	PBS	eight out of the nine islands in Cape Verde	all ages	<3/60	0.76	<6/18 ≥3/60	1.81	Cataract Glaucoma Corneal opacities Diabetic retinopathy Optic atrophy others	58 15 8 8 4 7	Monteiro M d L S, Inocencio F, Shemann J-F. Enquete Nationale sur la prevalence et les causes des deficiences visuelles. Cap-Vert 1998. Ministere de la Sante Division d'Epidemiologie et de Recherche.
Central African Republic	AFR	AFR E	1994	PBS	Bossanga district, most populated region in the country, endemic for onchocerciasis	all ages	<3/60	2.2	<6/18 ≥3/60	3	Onchocerciasis Cataract Trachoma Glaucoma Optic atrophy others	73 16 4.5 2 1.5 3	Schwartz E C, Huss R, Hopkins A, Dadjim B, Madjitoloum P, Hénault C, Klaus V. Blindness and visual impairment in a region endemic for onchocerciasis in the Central African Republic. Br J Ophthalmol 1997;81:443-447.
Chad	AFR	AFR D	1985	PBS	whole country	all ages	<3/60	2.3	NA	NA	Cataract Trachoma Glaucoma Corneal scarring	48 23 15 14	Resnikoff S et al. National Programme for the prevention of blindness, Ministry of Health, Ndjamena. 1985.
Chile	AMR	AMR B	1987	register	whole country	all ages	<6/60	0.6	NA	NA	Glaucoma Myopia Retinitis pigmentosa Diabetes Macular degeneration Cataract		Arch Chil Ophthalmol 1987;44:9-12.
Chile	AMR	AMR B	1988	PBS	San Vicente de Tagua-Tagua, rural	60+	<6/60	4	NA	NA	Cataract Glaucoma Retinal diseases		Vicencio Tapia C, Verdaguer Tarradella J, Lama Z G, Holuigue B J. Ocular study in San Vicente de Tagua-Tagua. Arch Chil Ophthalmol 1989;42:103-107.
Chile	AMR	AMR B	1998	PBS	La Florida, south of Santiago	5-15	≤20/200	0.15	NA	NA	NA		Maul E, Barroso S, Munoz S R, Sperduto R D, Ellwein L B. Refractive error study in children: results from La Florida, Chile. Am J Ophthalmol 2000;129:445-454.
China	WPR	WPR B	1987	PBS	29 provinces	all ages	<3/60	0.4	NA	NA	Cataract Refractive errors Corneal opacities Chorioretinal Glaucoma Hereditary others	52 14 7 7 6 4 10	Zhang Shi-yuan, Zou Liu-he, Gao Yong-qing, Di Ya, Wang Xian-dong. National epidemiological survey of blindness and low vision in China. Chinese Med J 1992;105:603-608.
China	WPR	WPR B	1983	PBS	Anhui Province	all ages	<3/60	0.7	NA	NA	Cataract Corneal opacities Trachoma others/undetermined	36 20 9 35	Prevention of blindness (China). WHO Weekly Epidemiol Record 1985; 60(48):369-371.
China	WPR	WPR B	1984	PBS	Beijing (suburban area)	all ages	<3/60	0.5	NA	NA	Corneal opacities Trachoma Cataract Glaucoma others/undetermined	30 26 16 10 18	Blindness surveys in 12 provinces of China. Eye Research Institute Of Shanghai Medical University. 1989.
China	WPR	WPR B	1989	PBS	Chongqing	all ages	<3/60	0.45	<6/18 >3/60	0.7	Cataract Infectious keratitis Corneal turbidity Glaucoma Trachoma		Zhou Y F. An epidemiological survey of blindness and low vision in Chongqing. Chung Hua Yen Ko Tsa Chih 1989;25:296-299.
China	WPR	WPR B	1996	PBS	Doumen County, Guangdong Province	45+	<3/60	1.61	<6/18 >3/60	3.2	Cataract Corneal opacities undetermined	45 17 38	Zhu S, Xu J, Yu Q, Liu Q. The etiology of vision impairment in target population. Yan Ke Xue Bao 1996;12:118-120.

China	WPR	WPR B	1997	PBS	Doumen County, Guangdong Province	50+	<3/60	2.34	NA	NA	Cataract Refractive error Uncorrected aphakia Corneal scars/opacities Retinal abnormalities	60 n/a n/a n/a n/a	Li S, Xu J, He M, Wu K, Munoz S R, Ellwein L B. A survey of blindness and Cataract surgery in Doumen County, China. <i>Ophthalmology</i> 1999;106:1602-1608.
China	WPR	WPR B	1982	PBD	Fujian Province	all ages	<3/60	0.2	NA	NA	Cataract Phthisis bulbi Keratitis Glaucoma others/undetermined	35 11 8 6 4 0	Prevention of blindness (China). <i>WHO Weekly Epidemiol Record</i> 1985; 60(48):369-371.
China	WPR	WPR B	1984	PBS	Guangdong Province	all ages	<3/60	0.4	NA	NA	Cataract Corneal opacities Glaucoma Trachoma others/undetermined	57 12 7 4 20	Prevention of blindness (China). <i>WHO Weekly Epidemiol Record</i> 1985; 60(48):369-371.
China	WPR	WPR B	1984	PBS	Guangxi Province	all ages	<3/60	0.5	NA	NA	Cataract Phthisis bulbi Corneal opacities others/undetermined	37 17 16 30	Prevention of blindness (China). <i>WHO Weekly Epidemiol Record</i> 1985; 60(48):369-371.
China	WPR	WPR B	1986	PBS	Guizhou Province	all ages	<3/60	0.5	NA	NA	NA		Blindness surveys in 12 provinces of China. <i>Eye Research Institute Of Shanghai Medical University</i> . 1989.
China	WPR	WPR B	1987	PBS	Hebei province	all ages	<3/60	0.37	<6/18 ≥3/60	0.57	Cataract Trachoma Corneal disease Glaucoma		Song X J. An epidemiological survey of blindness and low vision in Hebei Province. <i>Chung Hua Yen Ko Tsa Chih</i> 1992;28:105-107.
China	WPR	WPR B	1984	PBS	Heilongjiang Province	all ages	<3/60	0.2	NA	NA	Cataract Glaucoma Corneal opacities Trachoma Hereditary others	39 22 15 12 11 1	Prevention of blindness (China). <i>WHO Weekly Epidemiol Record</i> 1985; 60(48):369-371.
China	WPR	WPR B	1983	PBS	Hunan Province	all ages	<3/60	0.3	NA	NA	Trachoma Cataract others/undetermined	21 20 59	Prevention of blindness (China). <i>WHO Weekly Epidemiol Record</i> 1985; 60(48):369-371.
China	WPR	WPR B	1984	PBS	Jiangsu Province	all ages	<3/60	0.4	NA	NA	Cataract others/undetermined	24 76	Blindness surveys in 12 provinces of China. <i>Eye Research Institute Of Shanghai Medical University</i> . 1989.
China	WPR	WPR B	1984	PBS	Jilin Province	all ages	<3/60	0.2	NA	NA	Cataract Glaucoma Corneal opacities Trachoma others/undetermined	27 22 21 12 18	Blindness surveys in 12 provinces of China. <i>Eye Research Institute Of Shanghai Medical University</i> . 1989.
China	WPR	WPR B	1990	PBS	Kaipin County, Guangdong Province	all ages	<3/60	0.2	NA	NA	Cataract undetermined	64 36	Xu J J, Yu Q. An epidemiological survey and treatment of blindness in Kaipin County of Guangdong Province. <i>Chung Hua Yen Ko Tsa Chih</i> 1992; 28:265-266.
China	WPR	WPR B	1983	PBS	Neimenggu Province	all ages	<3/60	0.3	NA	NA	Cataract Corneal opacities Trachoma others/undetermined	30 19 6 45	Blindness surveys in 12 provinces of China. <i>Eye Research Institute Of Shanghai Medical University</i> . 1989.
China	WPR	WPR B	1986	PBS	Ningxia Province	all ages	<3/60	0.2	NA	NA	Corneal opacities Cataract Glaucoma Trachoma others/undetermined	22 21 8 7 42	Blindness surveys in 12 provinces of China. <i>Eye Research Institute Of Shanghai Medical University</i> . 1989.
China	WPR	WPR B	1987	PBS	Shandong Province	all ages	<3/60	0.3	NA	NA	Cataract Corneal opacities Glaucoma others	67 18 14 1	Blindness surveys in 12 provinces of China. <i>Eye Research Institute Of Shanghai Medical University</i> . 1989.
China	WPR	WPR B	1985	PBS	Shanghai City (urban)	all ages	<3/60	0.4	NA	NA	NA		Blindness surveys in 12 provinces of China. <i>Eye Research Institute Of Shanghai Medical University</i> . 1989.
China	WPR	WPR B	1986	PBS	Shanxi Province (Huo, Xia, Chanze, Houam)	all ages	<3/60	0.3	<6/18 ≥3/60	0.5	Cataract Glaucoma Corneal opacities others/undetermined	48 13 8 31	Blindness prevalence surveys in Shanxi Province and Shunyi County, China. <i>WHO document WPRO/ICP/PBD/001</i> . 1990.
China	WPR	WPR B	1987	PBS	Shanxi Province	all ages	<3/60	0.5	NA	NA	Cataract Corneal opacities Glaucoma Trachoma others/undetermined	26 22 8 7 37	Blindness surveys in 12 provinces of China. <i>Eye Research Institute Of Shanghai Medical University</i> . 1989.
China	WPR	WPR B	1985	PBS	Shunyi County	all ages	<3/60	0.6	NA	NA	Cataract Corneal opacities Glaucoma others/undetermined	36 34 6 24	Blindness prevalence surveys in Shanxi Province and Shunyi County, China. <i>WHO document WPRO/ICP/PBD/001</i> . 1990.

China	WPR	WPR B	1996	PBS	Shunyi County	50+	<3/60	1.7	NA	NA	Cataract Refractive error Uncorrected aphakia Retinal abnormalities Corneal scarring	46 n/a n/a n/a n/a	Zhao J, Jia L, Sui R, Ellwein L B. Prevalence of blindness and cataract surgery in Shunyi County, China. <i>Am J Ophthalmol</i> 1998;126:506-514.
China	WPR	WPR B	1986	PBS	Sichuan province	all ages	<3/60	0.4	NA	NA	Cataract Trachoma Corneal opacities Glaucoma others/undetermined	41 18 12 6 23	Blindness surveys in 12 provinces of China. Eye Research Institute Of Shanghai Medical University. 1989.
China	WPR	WPR B	1983	PBS	Tianjin City (urban)	all ages	<3/60	0.3	NA	NA	Cataract Corneal opacities Trachoma Glaucoma others/undetermined	39 9 9 7 23	Prevention of blindness (China). <i>WHO Weekly Epidemiol Record</i> 1985; 60(48):369-371.
China	WPR	WPR B	2000	PBS	Tibet, 3 of 7 prefectures, Lokha, Lingzhr, Nakchu, representative of its three main environmental regions	all ages	<6/60**	1.39	<6/24 ≥6/60**	10.9	Cataract Macular Degeneration Corneal Opacity Refractive error Uncorrected aphakia Glaucoma Globe and others note: values for <6/60**	50.7 12.7 9.7 4.8 4.7 2.5 11.9	Dunzhu S, Wang FS, Courtright P, Liu L, Tenzing C, Noertjojo K, Wilkie A, Santangelo M, Bassett KL. Blindness and eye diseases in Tibet: findings from a randomized, population based survey. <i>Br J Ophthalmol</i> 2003;87:1443-1448.
China, Taiwan	WPR	WPR B	1999-2000	PBS	Shihpai in the Peitou district of Taipei	65+	<3/60	0.59	<6/18 ≥3/60	2.94	AMD Glaucoma Diabetic retinopathy other retinal or choroidal diseases	25 12.5 12.5 37.5	Hsu W-M, Cheng C-Y, Liu J-H, Tsai S-Y, Chou P. Prevalence and causes of visual impairment in an elderly Chinese population in Taiwan. <i>The Shihpai Eye Study. Ophthalmology</i> 2004;111:62-69.
China	WPR	WPR B	1987	PBS	Xinhui County, Guangdong Province	all ages	<3/60	0.24	NA	NA	Cataract undetermined	47 53	Mao W, Xu J et al. Survey and treatment of the blind in Xinhui, Guangdong, China. <i>Yan Ke Xue Bao</i> 1992; 8:147-151.
China	WPR	WPR B	1986	PBS	Yunnan Province	all ages	<3/60	0.6	NA	NA	Cataract Trachoma Corneal opacities Glaucoma others/undetermined	41 18 12 6 23	Blindness surveys in 12 provinces of China. Eye Research Institute Of Shanghai Medical University. 1989.
China	WPR	WPR B	1984	estimate	Zhengding County	all ages	<3/60	0.5	NA	NA	Cataract Corneal opacities Glaucoma Trachoma others/undetermined	30 19 10 6 35	Blindness surveys in 12 provinces of China. Eye Research Institute Of Shanghai Medical University. 1989.
China	WPR	WPR B	1998	PBS	Hong Kong, Shatin	60+	<3/60	0.46	NA	NA	Cataract Macular Degeneration Glaucoma Retinal abnormalities Globe absent/pthisis Corneal opacities others	36 21 7 7 7 6 16	Michon J J, Lau J, Chan W S, Ellwein L B. Prevalence of vision impairment, blindness, and cataract surgery in the Hong Kong elderly. <i>Br J Ophthalmol</i> 2002;86:133-139.
China	WPR	WPR B	1990	PBS	Yian County, Heilongjiang	all ages	<3/60	0.12	NA	NA	Glaucoma Cataract Congenital disases		Yu Z H, Wei Z X. A 5 year surveillance of blindness in Yilong Commune, Yian County. <i>Chung Hua Yen Ko Tsa Chih</i> 1993;29:49-51.
China	WPR	WPR B	2000	PBS	Tibet, Linzhou County, Lasa, 44 villages	40+	<3/60	2.3	NA	NA	Cataract		Hou B, De J, Wu H, Gesang D, Bu P, Qiangba S, Tao H, Da W, Du A, Luo B, Qin X, Gao M. Prevalence of blindness among adults aged 40 years or above in Linzhou county of Lasa. <i>Chung Hua Yen Ko Tsa Chih</i> 2002;38:589-593.
Congo	AFR	AFR E	1988	PBS	rural (3150) and urban (3035)	all ages	<3/60	0.3	<6/18 ≥3/60	2.1	Cataract Glaucoma Retinopathy Iridocyclitis	81 9 5 5	Négrel A-D, Massebo-Yako B, Botaka E, Minassian D C, Coady-Zitsamele R. Prevalence et causes de la cécite au Congo. <i>Bull World Health Organ</i> 1990;68:237-243.
Democratic Republic of the Congo	AFR	AFR E	1998	PBS	Lusambo, forest-savanna area hyperendemic for onchocerciasis	10+	<3/60	0.5	<6/18 ≥3/60	5.7	Cataract Glaucoma oncho related	50 25 25	Kayembe D L, Kasonga D L, Kayembe P K, Mwanza J-C K, Boussinesq M. Profile of eye lesions and visual loss: a cross-sectional study in Lusambo, a forest-savanna area hyperendemic for onchocerciasis in the Democratic Republic of Congo. <i>Trop Med Int Health</i> 2003;8:83-89.
Denmark	EUR	EUR A	1988	PBS	Copenhagen	60-80	<3/60	0.53	NA	NA	ARMO Glaucoma Retinitis pigmentosa	40 40 20	Buch H, Vinding T, La Cour M, Nielsen N V. The prevalence and causes of bilateral and unilateral blindness in an elderly urban Danish population. <i>The Copenhagen City Eye Study. Acta Ophthalmol Scand</i> 2001;79:441-449.
Dominican Republic	AMR	AMR B	1996	PBS	NA	all ages	<20/200	0.45	NA	NA	Cataract undetermined	49 51	Morales E, Angeles M, Battle J et al. Primera encuesta de diabetes y ceguera en la Republica Dominicana. Santo Domingo, Editora de Colores, 1997.

Egypt	EMR	EMRD		PBS	Menofiya governorate, Nile Delta, rural	50+	<3/60 **	7.9	<6/24 ≥3/60**	38.2	Cataract/uncorrected aphakia Corneal opacities others note: values for <6/60**	64 30.2 5.8	Fouad D, Mousa A, Courtright P. Sociodemographic characteristics associated with blindness in a Nile Delta governorate of Egypt. <i>Br J Ophthalmol</i> 2004;88:614-618.
Equatorial Guinea	AFR	AFR D	1999	PBS	Bioko Island, population 62,000	all ages	<3/60	3.2	<6/60	6.8	Cataract Macular affection Optic atrophy Glaucoma others	50 20 13 11 6	Moser C L, Martin-Baranera M, Vega F, Draper V, Gutierrez J, Mas J. Survey of blindness and visual impairment in Bioko, Equatorial Guinea. <i>Br J Ophthalmol</i> 2002;86:257-260.
Ethiopia	AFR	AFR E	1981	PBS	Awraja province, rural areas	all ages	<3/60	0.9	NA	NA	Cataract Trachoma Glaucoma	45 45 10	Cerulli I, Cedrone C, Culasso F, Cruciani F, Tria M. Preliminary epidemiological study on the causes of blindness in one region of Ethiopia. <i>Rev Int Trach Path Ocul Trop Subtrop Sante Publique</i> 1981;68:116-129.
Ethiopia	AFR	AFR E	1982	PBS	7 provinces, rural areas	all ages	<3/60	1.3	NA	NA	NA		Cerulli I, Cedrone C, Assefa C, Scuderi G L. Assessment of visual status of the population in seven regions of Ethiopia. <i>Rev Int Trach Path Ocul Trop Subtrop Sante Publique</i> 1984;71:127-135.
Ethiopia	AFR	AFR E	1989	PBS	South-West (Hamar tribe)	10+	<3/60	1.9	NA	NA	Cataract Corneal scarring others	47 26 27	Courtright P, Klungsoyr P, Lewallen S, Henriksen T H. The epidemiology of blindness and visual loss in Hamar tribesmen of Ethiopia. <i>Trop Geogr Med</i> 1993;45:168-170.
Ethiopia	AFR	AFR E	1990	PBS	Shoa Region, central Ethiopia (rural)	all ages	<3/60	1.1	NA	NA	NA		Tekle-Haimanot R, Abebe M, Gebre-Maniam A, Forsgren L, Hejbel J, Holmgren G, Ekstedt J. Community-based study of neurological disorders in rural central Ethiopia. <i>Neuroepidemiology</i> 1990;9:263-277. Alemayehu W, Tekle-Haimanot R, Forsgren L, Ekstedt J. Causes of visual impairment in central Ethiopia. <i>Ethiop Med J</i> 1995;33:163-174.
Ethiopia	AFR	AFR E	1995	PBS	Jimma Zone (south-western)	all ages	<3/60	0.85	<6/18 ≥3/60	1.7	Cataract Trachoma Glaucoma Aphakia Phthisis bulbi others	48 20 9 5 5 13	Zerhun N, Mabey D. Blindness and low vision in Jimma Zone, Ethiopia: results of a population-based survey. <i>Ophthalmic Epidemiol</i> 1997;4:19-26.
Ethiopia	AFR	AFR E		PBS	Gurage Zone, central Ethiopia, endemic for trachoma	40+	<3/60**	7.9	<6/24 ≥3/60**	12.1	Cataract Trachoma Refractive Errors Glaucoma Uncorrected Aphakia others note: values for <3/60**	50.4 19.5 3.5 7.7 3.3 15.5	Melese M, Alemayehu W, Bayu S, Girma T, Haileseilasie T, Khandekar R, Worku A, Courtright P. Low vision and blindness in adults in Gurage Zone, central Ethiopia. <i>Br J Ophthalmol</i> 2003;87:677-680.
Finland	EUR	EUR A	1989	PBS	Kuopio, central-eastern Finland	65+	≤0.3	1.9	<6/18 ≥3/60	10.1	Cataract ARMD Glaucoma		Rouhiainen H, Terasvirta M. Kuopio Eye Survey. <i>Acta Ophthalmol (Copenh)</i> 1990;68:554-558.
Finland	EUR	EUR A	1992	PBS	Oulu County	70+	<3/60	1.9	<6/18 ≥3/60	10.1	ARMD Cataract with ARMD Glaucoma Only cataract Diabetic retinopathy others note: for blindness and low vision together	39 18 12 11 5 15	Hirvela H, Laatikainen L. Visual acuity in a population aged 70 years or older: prevalence and causes of visual impairment. <i>Acta Ophthalmol Scand</i> 1995;73:99-104.
France	EUR	EUR A	1985	PBS	Department of Bouches du Rhone and City of Marseilles	all ages	<3/60	0.2	NA	NA	Retinopathies Myopia Trauma Cataract Glaucoma Optic neuropathies		Organisation pour la Prevention de la Cecite, Institut de Medicine Tropicale du Service de Sante des Armees. Enquete epidemiologique sur les handicaps visuels dans le Departement des Bouches-du-Rhone. 1985.
Gambia	AFR	AFR D	1986	PBS	whole country	all ages	<3/60	0.7	<6/18 ≥3/60	1.4	Cataract Trachoma Corneal scarring Phthisis bulbi others	55 17 11 9 8	Faal H, Minassian D, Sowa S et al. National survey of blindness and low vision in the Gambia. <i>Br J Ophthalmol</i> 1989;73:82-87.
Gambia	AFR	AFR D	1996	PBS	whole country	5+	<3/60	0.42	<6/18 ≥3/60	1.6	Cataract Aphakia Trachoma Other corneal Glaucoma Refract. error and others	45 13 5 16 9 11	Faal H, Minassian D C, Dolin P J, Abdinisak A M, Ajewole J, Johnson G J. Evaluation of a national eye care programme: re-survey after 10 years. <i>Br J Ophthalmol</i> 2000;84:948-951.

Germany	EUR	EUR A	1996	register	Hessia	all ages	<1/50	0.014	NA	NA	ARMD Diabetic retinopathy Glaucoma Tapetoretinal degen. Optic nerve atrophy Myopia others	35 15 13 7 6 5 19	Graf M, Halbach E, Kaufman H. Causes of blindness in Hestia in 1996. <i>Klin Monatsbl Augenheilkd</i> 1999;215:50-55.
Ghana	AFR	AFR D	1991	PBS	Wenchi District, rural areas.	30+	<3/60	1.7	<6/18 ≥3/60	2	Cataract Onchocerciasis Corneal opacities Refractive errors Phthisis bulbi Optic atrophy Vascular retinopathy	63 13 8 4 4 4 4	Moll A C, van der Linden A J, Hogeweg M, Schader W E, Hermans J, de Keizer R J. Prevalence of blindness and low vision of people over 30 years in the Wenchi district, Ghana, in relation to eye care programmes. <i>Br J Ophthalmol</i> 1994;78:275-279.
Greenland (Denmark)	EUR	EUR A	1996	census	whole territory	all ages	≤6/60	0.5	NA	NA	AMD Glaucoma Keratopathies Uveitis Cataract others	56 14 8 5 5 12	Rosenberg T. Prevalence and causes of blindness in Greenland. <i>Arctic Med Res</i> 1987;46:13-17.
Guinea	AFR	AFR D	2001	estimate	NA	all ages	<3/60	1.4	<6/18 ≥3/60	4	Cataract Childhood blindness others (trachoma>onchocerciasis>glaucoma)	50 2 48	Republique de Guinee Plan national de lutte contre la cécité. Onchocerciasis Control Program 1975-1984. UNPB 50. 2001.
Iceland	EUR	EUR A	1996	PBS	Reykjavik	50+	≤6/60	0.76	NA	NA	NA		Gudmundsdottir E, Jonasson F, Jonsson V, Stefansson E, Sasaki H, Sasaki K, Iceland-Japan Co-working Study Groups. "With the rule" astigmatism is not the rule in the elderly. <i>Reykjavik Eye Study. Acta Ophthalmol Scand</i> 2000;78:642-646.
India	SEAR	SEAR D	1981	PBS	whole country	all ages	<3/60	0.5	NA	NA	Cataract Trachoma Nutritional blindness Trauma Glaucoma others/undetermined	55 20 2 1 1 21	National Sample Survey Organization, New Delhi. Ministry of Health and Family Welfare. 1981.
India	SEAR	SEAR D	1984-9	PBS	whole country	all ages	<3/60	0.7	NA	NA	Cataract Refractive errors Corneal opacities Glaucoma Trachoma others	81 7 3 2 - 7	WHO - National Programme for the Control of Blindness, Ministry of Health. Survey of blindness, India. 1989.
India	SEAR	SEAR D	1997	PBS	Ahmedabad District, Gujarat, urban area	50+	<3/60	2.9	NA	NA	Cataract	41	Limburg H, Asavada A, Muzumdar G, Khan M Y, Vaidyanathan K, Trivedi R, Bhatt D. Rapid assessment of cataract blindness in an urban district in Gujarat. <i>Indian J Ophthalmol</i> 1999;47:135-141.
India	SEAR	SEAR D	1989	PBS	Andhra Pradesh State	all ages	<3/60	0.7	NA	NA	Cataract Refractive errors Glaucoma Corneal opacities others	84 4 3 2 7	WHO - National Programme for the Control of Blindness, Ministry of Health. Survey of blindness, India. 1989.
India	SEAR	SEAR D	1996-2000	PBS	Andhra Pradesh, Hyderabad City and 3 rural areas	all ages	<6/60** <3/60**	1.84 1.34	NA	NA	Cataract Refractive error Retinal diseases Glaucoma Corneal diseases Optic atrophy Amblyopia others	45 11 13 9 9 4 4 5	Dandona L, Dandona R, Srinivas M, Giridhar P, Vilas K, Prasad M N, John R K, McCarty C, Rao G N. Blindness in the Indian State of Andhra Pradesh. <i>Invest Ophthalmol Vis Sci</i> 2001;42:908-916.
India	SEAR	SEAR D	2001	PBS	Andhra Pradesh, Mahabubnagar, rural district	7-15	≤20/200	0.13	≤20/80 ≥20/160	0.15	Retinal disorders Corneal opacities Congenital anomaly Amblyopia		Dandona R, Dandona L, Srinivas M, Sahare P, Narsaiah S, Munoz S R, Pokharel G P, Ellwein L B. Refractive error in children in a rural population in India. <i>Invest Ophthalmol Vis Sci</i> 2002;43:623-631.
India	SEAR	SEAR D	1989	PBS	Assam State	all ages	<3/60	0.7	NA	NA	Cataract Refractive errors Glaucoma Corneal opacities others	77 9 2 1 11	WHO - National Programme for the Control of Blindness, Ministry of Health. Survey of blindness, India. 1989.
India	SEAR	SEAR D	1999	PBS	Bharatpur District, Rajasthan, rural area	50+	<3/60	5.1	<6/18 ≥3/60	11.2	Cataract Refractive error including aphakia others	67 -- 18 15	Murthy G V S, Gupta S K, Ellwein L B, Munoz S R, Bachani D, Dada V K A. A population based eye survey of older adults in a rural district of Rajasthan. I. Central vision impairment, blindness and cataract surgery. <i>Ophthalmology</i> 2001;108:679-685.

India	SEAR	SEAR D	1989	PBS	Bihar State	all ages	<3/60	0.6	NA	NA	Cataract Refractive errors Corneal opacities Glaucoma others	88 4 2 2 4	WHO - National Programme for the Control of Blindness, Ministry of Health. Survey of blindness, India. 1989.
India	SEAR	SEAR D	1989	PBS	Dehli (urban)	all ages	<3/60	0.2	NA	NA	Cataract Refractive errors Corneal opacities Trachoma Glaucoma others	58 25 4 3 2 8	WHO - National Programme for the Control of Blindness, Ministry of Health. Survey of blindness, India. 1989.
India	SEAR	SEAR D	1989	PBS	Gujarat State	all ages	<3/60	0.6	NA	NA	Cataract Refractive errors Corneal opacities Glaucoma Trachoma others	73 11 5 2 1 8	WHO - National Programme for the Control of Blindness, Ministry of Health. Survey of blindness, India. 1989.
India	SEAR	SEAR D	1998	PBS	Gujarat State, 18 districts, excluded Ahmedabad	50+	<6/60**	7.98	NA	NA	Cataract	54	State Ophthalmic Cell Commissionerate of Health, Medical Services and Medical Education, Government of Gujarat. Rapid assessment of cataract blindness in Districts of Gujarat 1998. Gandhinagar, India.
India	SEAR	SEAR D	1989	PBS	Haryana State	all ages	<3/60	0.7	NA	NA	Cataract Corneal opacities Glaucoma Refractive error others	79 5 4 4 8	WHO - National Programme for the Control of Blindness, Ministry of Health. Survey of blindness, India. 1989.
India	SEAR	SEAR D	1989	PBS	Himachal Pradesh State	all ages	<3/60	0.4	NA	NA	Cataract Refractive errors Trachoma Corneal opacities Glaucoma others	62 13 6 4 2 13	WHO - National Programme for the Control of Blindness, Ministry of Health. Survey of blindness, India. 1989.
India	SEAR	SEAR D	1997	PBS	Hyderabad City (urban)	30+	<6/60<3/60**	3.08 2.23	NA	NA	Cataract Retinal disease Corneal disease Glaucoma Optic atrophy others note: for <3/60	34 22 20 15 6 3	Dandona L, Dandona R, Naduvilath T J, McCarty C, Nanda A, Srinavas M, Mandal P, Rao G N. Is current eye-care-policy focus almost exclusively on cataract adequate to deal with blindness in India? Lancet 1998;351:1312-1316.
India	SEAR	SEAR D	1989	PBS	Karnataka	all ages	<3/60	0.6	NA	NA	Cataract Refractive errors Corneal opacities Glaucoma others	84 5 4 3 4	WHO - National Programme for the Control of Blindness, Ministry of Health. Survey of blindness, India. 1989.
India	SEAR	SEAR D	1995	PBS	Karnataka, 19 rural districts	50+	<3/60	6.85	NA	NA	Cataract undetermined	71 29	Limburg H et al. Rapid assessment for cataract blindness in persons of 50 years and older. A district level survey conducted in all districts of Karnataka in 1995. Report Danish Assistance to the National Programme for Control of Blindness, New Delhi, India. 1997. Limburg H, Kumar R, Indrayan A, Sundaram K R. Rapid assessment of prevalence of cataract blindness at district level. Int J Epidemiol 1997;26:1049-1054. 1997.
India	SEAR	SEAR D	1989	PBS	Kerala State	all ages	<3/60	0.6	NA	NA	Cataract Refractive errors Corneal opacities others	72 21 2 5	WHO - National Programme for the Control of Blindness, Ministry of Health. Survey of blindness, India. 1989.
India	SEAR	SEAR D	1989	PBS	Madhya Pradesh	all ages	<3/60	1	NA	NA	Cataract Corneal opacities Glaucoma Refractive error others	77 5 4 4 10	WHO - National Programme for the Control of Blindness, Ministry of Health. Survey of blindness, India. 1989.
India	SEAR	SEAR D	1989	PBS	Maharashtra Pradesh State	all ages	<3/60	0.8	NA	NA	Cataract Refractive errors Corneal opacities Glaucoma others	75 8 6 4 7	WHO - National Programme for the Control of Blindness, Ministry of Health. Survey of blindness, India. 1989.
India	SEAR	SEAR D	2001	PBS	New Delhi, Triokpuri	5-15	≤20/200 ≥20/160	0.05	≤20/80 ≥20/160	0.22	Congenital anomalies		Murthy G V S, Gupta S K, Ellwein L B, Munoz S R, Pokharel G P, Sanga L, Bachani D. Refractive error in children in an urban population in New Delhi. Invest Ophthalmol Vis Sci 2002;43:623-631.
India	SEAR	SEAR D	1989	PBS	Punjab State	all ages	<3/60	0.2	NA	NA	Cataract Refractive errors Corneal opacities others	79 9 8 4	WHO - National Programme for the Control of Blindness, Ministry of Health. Survey of blindness, India. 1989.

India	SEAR	SEAR D	1989	PBS	Tamil Nadu State	all ages	<3/60	0.5	NA	NA	Cataract Refractive errors Corneal opacities Glaucoma others	88 7 1 1 3	WHO - National Programme for the Control of Blindness, Ministry of Health. Survey of blindness, India. 1989.
India	SEAR	SEAR D	1999	PBS	Sivaganga district, Tamil Nadu	50+	<3/60	2.0	<6/18 ≥3/60	3.9	Cataract Refractive error	69.5 43.5 14.8 11.1	Thulasiraj R D, Rahamathulla R, Saraswati A, Selvaraj S, Ellwein L B. The Sivaganga Eye Survey: I. Blindness and cataract surgery. <i>Ophthalmic Epidemiol</i> 2002;9:1-14.
India	SEAR	SEAR D	2000	PBS	Tirunelveli, Tamil Nadu	50+	<3/60	3.0	<6/18 ≥3/60	10.1	Cataract Refractive error ARMD Surgical complications		Nirmalan P K, Thulasiraj R D, Maneksha V, Rahmattullah R, Ramakrishnan R, Padmavathi A, Munoz S R, Ellwein L B. A population-based eye survey of older adults in Tirunelveli district of south India: blindness, cataract surgery and visual outcomes. <i>Br J Ophthalmol</i> 2002;86:505-512.
India	SEAR	SEAR D	1989	PBS	Uttar Pradesh State	all ages	<3/60	0.7	NA	NA	Cataract Refractive error Corneal opacities Glaucoma others	84 7 3 1 5	WHO - National Programme for the Control of Blindness, Ministry of Health. Survey of blindness, India. 1989.
India	SEAR	SEAR D	1998	PBS	7 states: Uttar Pradesh, Rajasthan, Madhya Pradesh, Maharastra, Orissa, Andhra Pradesh, Tamil Nadu	50+	<3/60**	5.3	NA	NA	Cataract Aphakia/pseudo aphakia		Bachani D, Murthy G V, Gupta K S. Rapid assessment of cataract blindness in India. <i>Indian J Public Health</i> 2000;44:82-89.
India	SEAR	SEAR D	1999-2001	PBS	15 districts in 15 states	50+	<3/60	3.4	<6/18 ≥3/60	10.3	Cataract Refractive error Glaucoma Posterior segment Surgical complication Corneal opacities others note: values for <3/60 **	62.15 7.9 5.9 1.5 1.2 6.6 6.6	National Programme for Control of Blindness, Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India. National Survey on Blindness and visual outcomes after cataract surgery. New Delhi. 2002. VenkataG, Murthy S, Gupta SK, Bachani D, Jose R, John N. Current estimates of blindness in India. <i>Br J Ophthalmol</i> 2005;89:257-260.
Indonesia	SEAR	SEAR B	1993-96	PBS	8 provinces, rural and urban	all ages	≤3/60**	1.5	<6/18 >3/60**	2.9	Cataract Glaucoma Refractive error Retinal disease Corneal disease others	52 13 9 9 6 11	Sirlan F, Suwento R. Results of the survey on the health of the vision and hearing sense organs 1993-1996. Department of Health Republic of Indonesia. Jakarta, Indonesia. 1998.
Indonesia	SEAR	SEAR B	2002	PBS	Riau Province, Sumatra, 5 rural villages and 1 province town	21+	≤3/60**	2.2	<6/18 >3/60**	5.8	Cataract AMD undetermined	62.5 12.5 25	Saw S-M, Husain R, Gazzard GM, Koh D, Widjaja D, Tan DTH. Causes of low vision and blindness in rural Indonesia. <i>Br J Ophthalmol</i> 2003;87:1075-1078.
Iran (Islamic Republic of)	EMR	EMRB	2002	PBS	Tehran, urban	all ages	≤3/60	0.28	<6/18 ≥3/60	1.11	Cataract Macular degeneration Amblyopia Corneal opacity Vascular retinopathy Glaucoma Optic atrophy Keratoconus others note: values for <6/18	36 20 10.7 6.7 4 2.7 2.7 2.7 14.7	Fatouhi A, Hashemi H, Mohammad K, Jalali KH. The prevalence and causes of visual impairment in Tehran: the Tehran Eye Study. <i>Br J Ophthalmol</i> 2004;88:740-745.
Ireland	EUR	EUR A	1990	PBS	County Rascommon	50+	<3/60	0.5	<6/18 ≥3/60	2	Glaucoma	25	Coffey M, Reidy A, Wormald R, Wu Xing Xian, Wright L, Courtney P. Prevalence of glaucoma in the west of Ireland. <i>Br J Ophthalmol</i> 1993;77:17-21.
Ireland	EUR	EUR A	1996	register	NA	16+	<6/60	0.2	NA	NA	ARMD Glaucoma Cataract Myopia Retinitis pigmentosa others	16 16 11 7 7 43	Munier A, Gunning T, Kenny D, O'Keefe M. Causes of blindness in the adult population of the Republic of Ireland. <i>Br J Ophthalmol</i> 1998;82:630-633.
Israel	EUR	EUR A	1998	register	NA	all ages	<1/60	0.27	NA	NA	Glaucoma AMD Diabetic retinopathy		Hod Y, Corcia Y, Yassur Y, Geyer O. Causes of blindness in Israel. <i>Harefuah</i> 2000;138:276-278, 342.
Israel	EUR	EUR A	2000	register	NA	all ages	<1/60	0.29	NA	NA	AMD Glaucoma Diabetic retinopathy		Avissar R, Bahar I, Weinberger D. Causes of blindness in the year 2000 in Israel. <i>Harefuah</i> 2003;142:94-96, 160.



Israel	EUR	EUR A	1999	register	NA	all ages	≤3/60	0.31	NA	NA	AMD Glaucoma Diabetic retinopathy Cataract Myopic Maculopathy Optic atrophy Retinal detachment Retinitis pigmentosa Vitreous hemorrhage Corneal diseases others	14 13.5 11 10.5 9.5 8.4 6.3 6.1 5.9 5.4 12.5	Farber MD. National Registry for the blind in Israel: estimation of prevalence and incidence rates and causes of blindness. <i>Ophthalmic Epidemiol</i> 2003;10:267-277.
Italy	EUR	EUR A	1984-9	register	whole country records north, centre, south/island	all ages	<3/60	0.14	NA	NA	Retinal disease Cataract Optic nerve Glaucoma Corneal opacities others	31 21 10 7 5 25	Nicolosi A, Marighi P E, Rizzardi P, Osella A, Mgior S. Prevalence and causes of visual impairment in Italy. <i>Int J Epidemiol</i> 1994;23:359-364.
Italy	EUR	EUR A	1988	PBS	Island of Ponza, Lazio region, central Italy	40+	<3/60	0.5	<6/18 ≥3/60	1	Cataract ARMD Glaucoma Amblyopia Myopia others	40 15 10 7 4 24	Cedrone C, Zapelloni A, Cesareo M, Trematerra M, Corsi A, Cerulli L. Prevalenza delle minorazioni visive e loro cause in popolazioni definite dei comuni di Ponza e Priverno. <i>Minerva Oftalmologica</i> 1997;39:67-71.
Italy	EUR	EUR A	1988	PBS	Priverno, Lazio region, central Italy	45+	<3/60	0.2	<6/18 ≥3/60	0.3	Cataract Amblyopia Corneal disease Optic atrophy Optic neuropathy Diabetic retinopathy ARMD others	19 15 11 8 4 4 4 31	Cedrone C, Zapelloni A, Cesareo M, Trematerra M, Corsi A, Cerulli L. Prevalenza delle minorazioni visive e loro cause in popolazioni definite dei comuni di Ponza e Priverno. <i>Minerva Oftalmologica</i> 1997;39:67-71.
Italy	EUR	EUR A	1994	PBS	Casteldaccia, Sicily, southern Italy	40+	<3/60	0.47	<6/18 ≥3/60	1.22	Cataract Amblyopia		Ponte F, Giuffre' G, Giammanco R. Prevalence and causes of blindness and low vision in the Casteldaccia Eye Study. <i>Graefes Arch Clin Exp Ophthalmol</i> 1994;32:469-472.
Kenya	AFR	AFR E	1981	PBS	series of 8 R eye surveys (rural)	all ages	<3/60	0.7	<6/18 ≥3/60	2.5	Cataract Trachoma Glaucoma Macular lesions Refractive error others	36 19 9 7 4 25	Whitfield R, Schwab L, Ross-Degnan D, Steinkuller P, Swartwood J. Blindness and eye disease in Kenya: ocular status survey results from the Kenya Rural Blindness Prevention Project. <i>Br J Ophthalmol</i> 1990;74:333-340.
Kenya	AFR	AFR E	1990	PBS	North-West (Turkana tribe), semiarid area	all ages	<3/60	1.1	NA	NA	Cataract Xerophthalmia Trachoma others	40 30 20 10	Loewenthal R, Pe'er J. A prevalence survey of ophthalmic diseases among the Turkana tribe in north-west Kenya. <i>Br J Ophthalmol</i> 1990;4:84-88.
Lebanon	EMR	EMR B	1995	PBS	NA	all ages	<3/60	0.6	<6/18 ≥3/60	3.9	Cataract Refractive error Corneal opacities (non-trachomatous) Optic atrophy Trauma others	41 13 7.5 7.5 5 26	Mansour A M, Kassak K, Chaya M, Hourani T, Sibai A, Alameddine M N. National survey of blindness and low vision in Lebanon. <i>Br J Ophthalmol</i> 1997;81:905-906.
Malaysia	WPR	WPR B	1996	PBS	whole country, all ethnic groups	all ages	<3/60**	0.29	<6/18 ≥3/60**	2.44	Cataract Retinal disease Refractive error Corneal disease Glaucoma others	39 25 4 3 2 27	Zainal M, Ismail S M, Ropilah A R, Elias H, Arumugam G, Alias D, Fathilah J, Lim T O, Ding L M, Goh P P. Prevalence of blindness and low vision in Malaysian population: results from the National Eye Survey 1996. <i>Br J Ophthalmol</i> 2002;86:951-956.
Malawi	AFR	AFR E	1983	PBS	Southern Lower Shire river Valley	6+ <6	<3/60	1.3 0.11	<6/18 ≥3/60	2	Cataract Corneal scarring others	40 30 30	Chirambo M C, Trielsch J M, West K P Jr, Katz J, Tizazu T, Schwab L, Johnson G J, Swartwood J, Taylor H R, Sommer A. Blindness and visual impairment in Southern Malawi. <i>Bull World Health Organ</i> 1986;64:567-572.
Malawi	AFR	AFR E	1998	PBS	Nkhoma, 31 villages	40+	<3/60	3.72	NA	NA	Cataract Glaucoma Corneal scarring Retinal diseases others	62 - -	Eloff J, Foster A. Cataract surgical coverage: results of a population-based survey at Nkhoma, Malawi. <i>Ophthalmic Epidemiol</i> 2000;7: 219-221.
Malawi	AFR	AFR E	1999	PBS	Chikwawa District, mostly rural	50+	<6/60**	5.39	NA	NA	Cataract Uncorrected aphakia Corneal opacity Globe other	61.5 4.6 9.2 4.6 20	Courtright P, Hoehsman A, Metcalfe N, Chirambo M, Noertjojo K, Barrows J, Katz J, f or the Chikwawa Survey Team. Changes in blindness prevalence over 16 years in Malawi: reduced prevalence but increased number of blind. <i>Br J Ophthalmol</i> 2003;87:1079-1082.

Mali	AFR	AFR D	1985	PBS	Rural areas: Région de Kayes	all ages	<3/60	1.3	<6/18 ≥3/60	3.6	Cataract Trachoma Corneal scarring Glaucoma others	33 28 16 10 13	Yatassaye M. Evaluation de la prevalence et de l'etologie des handicaps visuels dans la premiere region du Mali (Kayes). Dissertation Ecole Nationale de Medicine et de Pharmacie du Mali. 1986.
Mali	AFR	AFR D	1985	PBS	Rural areas: Région de Mopti-Sahel	all ages	<3/60	1	<6/18 ≥3/60	2.5	Trachoma Ocular infections Cataract Glaucoma Couching others	34 20 15 9 3 19	Bore O. Les handicaps visuels en zone rurale sahelienne (Mopti): prevalence et etologie. Dissertation Ecole Nationale de Medicine et de Pharmacie du Mali. 1986.
Mali	AFR	AFR D	1988	PBS	Delta du Niger, rural, 5th Region	all ages	<3/60	1.23	<6/18 ≥3/60	1.24	Cataract Trachoma others	49 11 40	Castan R, Banou A, Bado M. Prevalence et etologie des handicaps visuels dans la zone du delta interieur du fleuve Niger - V Region - Mali. Institute d'Ophthalmologie Tropicale de l'Afrique Bamako Mali. 1988.
Mali	AFR	AFR D	1990	PBS	Segou greater region	all ages	<3/60	1.7	<6/18 ≥3/60	1.7	Cataract Trachoma Glaucoma others	69 12 8 11	Kortlang C, Koster J C A, Coulibaly S, Dubbeldam R P. Prevalence of blindness and visual impairment in the region of Segou, Mali. A baseline survey for a primary eye care programme. Trop Med Int Health 1996;1:314-319.
Mali	AFR	AFR D	1991	PBS	Baroueli (Région de Ségou)	all ages	<3/60	1.5	<6/18 ≥3/60	1.3	*** included in Segou R		Kortlang C, Koster J C A, Coulibaly S, Dubbeldam R P. Prevalence of blindness and visual impairment in the region of Segou, Mali. A baseline survey for a primary eye care programme. Trop Med Int Health 1996;1:314-319.
Mali	AFR	AFR D	1991	PBS	Niono (Région de Ségou)	all ages	<3/60	1.7	<6/18 ≥3/60	2.2	*** included in Segou R		Kortlang C, Koster J C A, Coulibaly S, Dubbeldam R P. Prevalence of blindness and visual impairment in the region of Segou, Mali. A baseline survey for a primary eye care programme. Trop Med Int Health 1996;1:314-319.
Mali	AFR	AFR D	1991	PBS	Ségou (urban and rural)	all ages	<3/60	2.4	<6/18 ≥3/60	1.9	*** included in Segou R		Kortlang C, Koster J C A, Coulibaly S, Dubbeldam R P. Prevalence of blindness and visual impairment in the region of Segou, Mali. A baseline survey for a primary eye care programme. Trop Med Int Health 1996;1:314-319.
Mali	AFR	AFR D	1992	PBS	Sikasso (urban and rural)	all ages	<3/60	1.3	<6/18 ≥3/60	2.9	Cataract others/undetermined	52 48	Guindo A I. Cartes epidemiologiques d'ophtalmologie du Mali a partir des Enquetes 1980-1993. Survey by Diakite A G and Resnikoff S Dissertation Ecole Nationale de Medicine et de Pharmacie du Mali. 1993.
Mali	AFR	AFR D	1994	PBS	Mopti region	40 +	<3/60	5.54	NA	NA	Cataract Trichiasis Luxation du cristallin Panophtalmie Corneal opacities others	60 14 10 8 4 4	Scheman J F. Etude sur les aveugles et malvoyants dans la region de Mopti (Mali). Dissertation Universite Pierre et Marie Curies (Paris V) Institut Sante et Developpement. 1995.
Mongolia	WPR	WPR B	1992	PBS	3 strata: Gobi desert, mountains, steppe	40+	<3/60	1.5	<6/18 ≥3/60	8.1	Cataract Glaucoma Keratopathy others	36 35 7 22	Baasanhu J, Johnson G J, Burendei G, Minassian D C. Prevalence and causes of blindness and visual impairment in Mongolia. A survey of populations aged 40 years and older. Bull World Health Organ 1994;72:771-776.
Mongolia	WPR	WPR B	1995	PBS	Hovsgol, northern Mongolia	40+	<3/60	1.2	NA	NA	Glaucoma Degenerative myopia Cataract or aphakia ARMD others	34 17 17 8 24	Foster P J, Baasanhu J, Alsbirk P H, Munkhbayar D, Uranchimeg D, Johnson G J. Glaucoma in Mongolia. Arch Ophthalmol 1996;114:1235-1241.
Morocco	EMR	EMR D	1992	PBS	whole country	all ages	<3/60	0.8	<6/18 ≥3/60	2.3	Cataract Glaucoma Corneal scarring Aphakia Post. segment disorders others	46 14 10 9 9 12	Chami-Khazraji Y, Akalay O, Négrel A-D. Prevalence et causes de la cécité et de la baisse de vision au Royaume du Maroc. Royaume du Maroc Ministère de la sante publique et Organisation Mondiale de la Sante. Report. 1993.
Myanmar	SEAR	SEAR D	2001	PBS	Sagaing district	50+	<3/60	8.39	<6/18 ≥3/60	16.15	Cataract Glaucoma Trachoma complications Other corneal diseases others	71 10 9 7 3	Limburg H, Maung N, Khin Aye Soe, May Cho Cho Aye. Study report on Rapid assessment of cataract surgical services in Sagaing District, Union of Myanmar. Ministry of Health, Department of Health, Trachoma Control and Prevention of Blindness Programme. 2001.
Myanmar	SEAR	SEAR D	2001	PBS	Shwebo distric rural community	50+	<3/60	4.05	<6/18 ≥3/60	6.8	Cataract Glaucoma Corneal diseases Uncorrected aphakia Trachoma complications others	72 11 6 5 1 5	Limburg H, Maung N, Khin Aye Soe, Thuzar Han. Study report on rapid assessment of cataract surgical services in Shwebo District, Union of Myanmar. Ministry of Health, Department of Health, Trachoma Control and Prevention of Blindness Programme. 2001.
Myanmar	SEAR	SEAR D	2001	PBS	Monywa district	50+	<3/60	7.23	<6/18 ≥3/60	13.44	Cataract Glaucoma Trachoma complications Other corneal diseases others	69 16 4 4 7	Limburg H, Maung N, Khin Aye Soe, Khin Nyein Lin. Study report on the rapid assessment of cataract surgical services in Monywa District, Union of Myanmar. Ministry of Health, Department of Health, Trachoma Control and Prevention of Blindness Programme. 2001.

Myanmar	SEAR	SEAR D	2001	PBS	Taungoo district	50+	<3/60	5.56	<6/18 ≥3/60	12.75	Cataract Refractive error Glaucoma others	81 10 5 4	Limburg H, Maung N, Khin Aye Soe, Win Mar Oo. Study report on rapid assessment of cataract surgical services in Taungoo District, Union of Myanmar. Ministry of Health, Department of Health, Trachoma Control and Prevention of Blindness Programme. 2001.
Myanmar	SEAR	SEAR D	2001	PBS	Hinthada Township	50+	<3/60	8.83	<6/18 ≥3/60	14.36	Cataract Refractive error Glaucoma Post. segment others	78 9 5 3 5	Limburg H, Maung N, Khin Aye Soe, Mynt Than Win. Study report on rapid assessment of cataract surgical services in Hinthada Township, Union of Myanmar. Ministry of Health, Department of Health, Trachoma Control and Prevention of Blindness Programme. 2001.
Nepal	SEAR	SEAR D	1980	PBS	whole country	all ages	<3/60	0.8	<6/18 ≥3/60	1.8	Cataract Iatrogenic sequelae Retinal disease Glaucoma Trachoma Nutritional blindness	67 5 3 3 2 1	Brilliant L B, Pokhrel G P, Grasset N C, Lepkowski J M, Kolstad A, Hawks W, Pararajasegaram R, Brilliant G E, Gilbert S, Shrestha S R. Epidemiology of blindness in Nepal. Bull World Health Organ 1985;63:375-386.
Nepal	SEAR	SEAR D	1995	PBS	Lumbini Zone and Bheri Zone, western Nepal	45+	<3/60	2.5	NA	NA	Cataract Uncorrected aphakia Trachoma Corneal scar Refractive error	78	Pokharel G P, Regmi G, Shrestha S K, Negrel A D, Ellwein L B. Prevalence of blindness and cataract surgery in Nepal. Br J Ophthalmol 1998;82:600-605.
Nepal	SEAR	SEAR D	1998	PBS	Mechi Zone, eastern Nepal	5-15	≤20/200	0.15	NA	NA	NA		Pokharel G P, Negrel A D, Munoz S R, Ellwein L B. Refractive error study in children: result from Mechi Zone, Nepal. Am J Ophthalmol 2000;129:436-444.
Netherlands	EUR	EUR A	1993	PBS	Rotterdam, urban	55+	<3/60	0.47	<6/18 ≥3/60	1.4	ARMD Glaucoma Cataract Optic Neuropathy Myopic degeneration		Klaver C C W, Wolfs R C W, Vingerling J R, Hofman A, de Jong P T V M. Age-specific prevalence and causes of blindness and visual impairment in an older population. The Rotterdam study. Arch Ophthalmol 1998;116:653-658.
Niger	AFR	AFR D	1990	PBS	whole country	all ages	<3/60	1.15	NA	NA	Cataract Corneal scarring Glaucoma Phthisis others	35 25 22 7 11	Saley Z. Epidemiologie de la cecite au Niger. Dissertation Universite de Niamey-Republique du Niger. 1990.
Nigeria	AFR	AFR D	1989	PBS	northern, Kaduna. Mesoendemic savannah onchocercal communities	5+	<3/60	3.1	<6/18 ≥3/60	1.7	Onchocerciasis Optic atrophy Glaucoma Cataract others	43 11 11 6 29	Abiose A, Murdoch I, Babalola O, Cousens S, Liman I, Oryema J, Evans J, Gregory W, Jones B. Distribution and aetiology of blindness and visual impairment in mesoendemic onchocercal communities, Kaduna State, Nigeria. Kaduna Collaboration for Research on Onchocerciasis. Br J Ophthalmol 1994;78:8-13.
Nigeria	AFR	AFR D	1991	PBS	Osun State, rural Akinlalu-Ashipa Ward	all ages	<3/60	0.9	NA	NA	Cataract Onchocerciasis Glaucoma Optic atrophy Corneal scar/Phthi. bulbi others	48 15 11 7 7 12	Adeoye A. Survey of blindness in rural communities of south-western Nigeria. Trop Med Int Health 1996;1:672-676.
Nigeria	AFR	AFR D	1992	PBS	Anambra State	50+	<3/60	1	<6/18 ≥3/60	1.1	Cataract Glaucoma Phthisis bulbi Macular degeneration	70 18 6 6	Ezepele U F. Magnitude and causes of blindness and low vision in Anambra State of Nigeria (results of 1992 point prevalence survey). Public Health 1997;111:305-309.
Nigeria	AFR	AFR D	1995	PBS	Ifedapo LGA, rural south-western	all ages	<3/60	0.15	<6/18 ≥3/60	0.56	NA		Fafowora O F, Ajibode H A, Fadamiro C O, Ajawole A A, Ogundipe O O, Osuntokun O O. Ocular morbidity survey in an ophthalmically underserved rural area of Nigeria. Afr J Med Med Sci 1998;27:35-38.
Nigeria	AFR	AFR D	1995	PBS	Dambatta, Kano State	all ages	<3/60	1.14	<6/18 ≥3/60	2.05	Cataract Trachoma Glaucoma Corneal opacity others	54 17 15 7 7	Abdu L. Prevalence and causes of blindness and low vision in Dambatta local government area, Kano State, Nigeria. Niger J Med 2002;11:108-12.
Nigeria	AFR	AFR D	1995	PBS	Anambra State, rural areas	18-49	<3/60	1.2	<6/18 ≥3/60	1.7	Glaucoma Cataract congenital others	67 33	Rabiu M M. Cataract blindness and barriers to uptake of cataract surgery in a rural community of northern Nigeria. Br J Ophthalmol 2001;85:776-780.
Nigeria	AFR	AFR D	1999	PBS	Katsina State	40+	<3/60 **	8.2	<6/18 **	6.9	Cataract Corneal opacities Post-intervention compl. Glaucoma Uncorrected aphakia others	44 16 12 6 1 21	Rabiu M M, Abiose A. Magnitude of trachoma and barriers to uptake of lid surgery in a rural community of northern Nigeria. Ophthalmic Epidemiol 2001;8: 181-190.
Nigeria	AFR	AFR D	1999	PBS	Kaita (LGA) Katsina state	all ages	<3/60**	1.5	<6/18 ≥3/60**	5	Corneal opacities undetermined	20 80	

Oman	EMR	EMR B	1997	PBS	whole country (except Al Wousta region)	all ages	<3/60	1.1	NA	NA	Cataract Trach. corneal opacities Glaucoma Non-trach. corneal op. Phthisis/disorg./absent globe Optic atrophy others	31 24 11 8 9 - 5 12	Khandekar R, Mohammed A J, Négrel A-D, Al Riyami A. The prevalence and causes of blindness in the Sultanate of Oman: the Oman Eye Study (OES). <i>Br J Ophthalmol</i> 2002;86:957-962.
Pakistan	EMR	EMR D	1990	PBS	North West Frontier Province	all ages	<3/60	1	<6/18 >3/60	2.5	Cataract Trachoma Aphakia Corneal opacities others	74 9 8 8 5	Khan M A. Results and recommendations of a population-based survey of prevalence of blindness and its causes in North-West Frontier Province, Pakistan. Department of Community Ophthalmology, Lady Reading Hospital. Peshawar, Pakistan. 1990.
Pakistan	EMR	EMR D	1990	PBS	Sindh Province	all ages	<3/60	1.1	<6/18 >3/60	4.2	Cataract Corneal opacity Refractive errors Glaucoma others	74 12 7 3 5	Memon M S. Prevalence and causes of blindness in Pakistan. <i>J Pakistan Med Ass</i> 1992;42 (8).
Pakistan	EMR	EMR D	2001	PBS	Chakwal, North Punjab	50+	<3/60	3.22	<6/18 >3/60**	22.2	Cataract Post. segment Trachoma/ corn op. Glaucoma Uncorrected aphakia others note: values for <3/60**	59 9 12 6 6 8	Haider S, Hussain A, Limburg H. Cataract blindness in Chakwal District, Pakistan. Result of a survey. <i>Ophthalmic Epidemiol</i> 2003;10:249-258.
Paraguay	AMR	AMR B	2002	PBS	whole country	50+	<3/60**	3.14	<6/18 ≥3/60**	10.74	Cataract	64	Duerksen R, Limburg H, Carron JE, Foster A. Cataract blindness in Paraguay-results of a national survey. <i>Ophthalmic Epidemiol</i> 2003;10:349-357. Rapid Assessment of Cataract Surgical Services: Paraguay. PAHO-WHO. 2002.
Peru	AMR	AMR D	1983	PBS	Puno, rural area, southern	all ages	<3/60	1	NA	NA	NA		Survey: Hellen Keller International. Survey: Puno, Peru. 1983.
Philippines	WPR	WPR B	1995	PBS	76 provinces and 17 municipalities in Metropolitan Manila	all ages	<3/60**	0.7	<6/18 ≥3/60**	2.37	Cataract Glaucoma Uncorrected aphakia Optic atrophy Refractive error others	77 9 4 3 2 5	Oliver Santos E et al. Second National survey of blindness. Philippines, 1995. <i>Philippine J Ophthalmol</i> 2000;25 (2 supplement).
Russian Federation	EUR	EUR C	1987	PBS	Gorny-Altai, Republic of Altai, 23 villages	all ages	<3/60	0.4	<6/18 ≥3/60	1.2	NA		Kolbasko A V. Prevalence of eye diseases in the native population of Gorny-Altai. Thesis. Helmholtz Institute of Ophthalmology. Moscow. 1988.
Russian Federation	EUR	EUR C	1999	register	whole country	all ages	<3/60	0.09	<6/18 ≥3/60	0.19	Glaucoma Degenerative myopia Optic nerve atrophy Diabetic retinopathy		Libman E S, Shahova E V. Blindness and disability resulting from disorders of the vision organs in Russia: situation and trend. In: Current issues in eye care services. Proceedings of the conference held at the occasion of the 100 th anniversary of the Helmholtz Institute of Ophthalmology. Dec. 5-7 2000:209-214. Helmholtz Institute of Ophthalmology. Moscow. 2000.
Saudi Arabia	EMR	EMR B	1984	PBS	whole country	all ages	<3/60	1.5	<6/18 ≥3/60	7.8	Cataract Trachoma Corneal ulcers Refractive errors Iatrogenic complications Glaucoma others	55 10 9 9 5 3 9	Tabarra K F, Ross-Degnan D. Blindness in Saudi Arabia. <i>J Am Med Assoc</i> 1986;255:3378-3384.
Saudi Arabia	EMR	EMR B	1990	PBS	Eastern Province (1.3 million pop)	all ages	<3/60	1.5	<6/18 ≥3/60	10.1	Cataract Refractive errors Trachoma Glaucoma Corneal scarring Trauma others	38 16 9 9 8 3 17	Survey of eye disease and visual loss in the Eastern Province Kingdom of Saudi Arabia. Report from the Research Department, King Khaled Eye Specialist Hospital, Riyadh. 1990.
Saudi Arabia	EMR	EMR B	1993	PBS	South-Western Province: Bisha region (91,000 population)	all ages	<3/60	0.7	NA	NA	Cataract Iatrogenic complications Phthisis bulbi Glaucoma Retinal dystrophies others	53 21 11 5 5 5	al-Faran M F, al-Rajhi A A, al-Omar O M, al-Ghamdi S A, Jabak M. Prevalence and causes of visual impairment and blindness in the South Western Region of Saudi Arabia. <i>Int Ophthalmol</i> 1993;17:161-165.
Senegal	AFR	AFR D	1994	PBS	Ziguinchor, rural area	5+	<3/60	0.7	<3/10 ≥3/60	2	Cataract Corneal opacities others	65 28 7	Auduge A, Boullin D, Sarr L C. Prevalence et causes de la cécité e de la baisse de vision en zone rurale dans la région de Ziguinchor au Sénégal. Report. 1994.

Sierra Leone	AFR	AFR D	1992	PBS	Tabé river valley, oncho hyperendemic	all ages	<3/60	1.3	<6/18 ≥3/60	4.3	Onchocerciasis Cataract Corneal opacities Glaucoma others	48 19 14 9 10	Whitworth J A G, Gilbert C E, Mabey D M, Morgan D, Foster A. Visual loss in an onchocerciasis endemic community in Sierra Leone. <i>Br J Ophthalmol</i> 1993;77:30-32.
Sierra Leone	AFR	AFR D	1992	PBS	Kono district, Eastern Province, forest	all ages	<3/60	1.6	NA	NA	Onchocerciasis Corneal opacities Anterior uveitis Cataract Optic atrophy Phthisis bulbi	57 16 13 9 3 2	Gbakima A A, Barbe R F. Onchocerca volvulus infection in Sierra Leone: relation between prevalence, intensity of infection and ocular problems in a "forest" region. <i>Acta Leidensia</i> 1992;60:47-59.
South Africa	AFR	AFR E	1985	PBS	Transvaal Province (Northern): Gazankulu District	all ages	<3/60	0.6	NA	NA	Cataract Trachoma Aphakia Glaucoma others	55 10 9 6 20	Bucher P J M, Jisselmuide C B. Prevalence and causes of blindness in the Northern Transvaal. <i>Br J Ophthalmol</i> 1988;72:721-726.
South Africa	AFR	AFR E	1990	PBS	Northern KwaZulu: Ingwavuma district	all ages	<3/60	1	<6/18 ≥3/60	1.4	Cataract Glaucoma and others Aphakia	59 19 10	Cook C D, Knight S E, Crofton-Briggs I. Prevalence and causes of low vision and blindness in northern KwaZulu. <i>S Afr Med J</i> 1993;83: 590-593.
South Africa	AFR	AFR E	1992	PBS	Mamre, Western Cape,	40+	<3/60	1.4	NA	NA	Glaucoma Cataract others	58 28 22	Salmon J F, Marmoud A, Ivey A, Swanevelde S A, Hoffman M. The prevalence of primary angle closure glaucoma and open angle glaucoma in Mamre, Western Cape, South Africa. <i>Arch Ophthalmol</i> 1993;111:1263-1269.
South Africa	AFR	AFR E	1993	PBS	Ingwavuma, Northern KwaZulu	all ages	<3/60	0.96	NA	NA	Cataract Glaucoma Aphakia	59 21 20	Cook C D, Stulting A A. Prevalence and incidence of blindness due to age-related cataract in the rural areas of South Africa. <i>S Afr Med J</i> 1995;85:26-27.
South Africa	AFR	AFR E	1999	PBS	Hlabisa district, rural, Northern KwaZulu-Natal	40+	<3/60	3.2	NA	NA	Cataract Glaucoma others	54 22 24	Rotchford A P, Johnson G J. Glaucoma in Zulul. A population-based cross-sectional survey in a rural district in South Africa. <i>Arch Ophthalmol</i> 2002;120: 471-478.
Sri Lanka	SEAR	SEAR B	1982	PBS	whole country	all ages	<3/60	0.3	NA	NA	Cataract Phthisis bulbi Refractive errors Corneal opacities Glaucoma Optic atrophy others	65 15 7 4 4 3 2	WHO (SEARO). Incidence of blindness in Sri Lanka. 1982
Sudan	EMR	EMR D	1989	estimate	several provinces surveyed	all ages	<3/60	0.4-0.9	NA	NA	NA	NA	Johnson J. WHO assignment report. <i>Prevention of Blindness. Sudan.</i> 1989.
Sudan	EMR	EMR D	1993	estimate	NA	all ages	<3/60	1.25-1.5	NA	NA	Cataract Glaucoma Trachoma Onchocerciasis Vitamin A deficiency others	65 15 5 5 2 8	Babiker H L. Mission report to Sudan. 1993.
Sudan	EMR	EMR D	1998	PBS	Khartoum State, 17 urban/rural clusters at random	all ages	<3/60	1.1	NA	NA	Cataract Glaucoma Trachoma Measles	76 14 8 2	Haroun S. Prevalence and causes of blindness in Khartoum State. Thesis for MOSMMD University of Khartoum, Sudan. 2000. Abusin S. Prevalence and causes of blindness in the Sudan: a review of published and unpublished data. Thesis for MBBS University of Khartoum, Sudan. 2002.
Sudan	EMR	EMR D	1998	PBS	Al-Ginena province,	all ages	<3/60	3.2	NA	NA	Cataract Trachoma Trauma Glaucoma others	43 28 11 9 9	Mohamedain M A. Prevalence survey of trachoma and its complications in Al-ginena province. Thesis for MOSMMD University of Khartoum Sudan. 2000.
Sudan	EMR	EMR D	1999	PBS	River Nile State	all ages	<3/60	2.74	<6/18 ≥3/60	13.7	Cataract Glaucoma Corneal dystrophy Trachom. corneal op. others	47 39 7 4 3	elfatih E M Prevalence and causes of blindness in River Nile State. Thesis for MOSMMD University of Khartoum, Sudan. 1999.
Sudan	EMR	EMR D	1999	PBS	Es-salam Camp (50,000 displaced persons)	all ages	<3/60	1.32	<6/18 ≥3/60	2.17	Cataract Corneal opacities Glaucoma others	41 29 12 18	Kamal Hashim Prevalence and causes of blindness in a displaced community, a population based study in Es-salam camp, Omdurman, Sudan. Thesis for MOSMMD University of Khartoum, Sudan. 1999.
Sudan	EMR	EMR D	2001	PBS	Es-salam camp (50,000 displaced persons)	all ages	<3/60	1.3	NA	NA	Onchocerciasis Cataract Glaucoma	67 25 8	Issam Siddiq Onchocerciasis, prevalence and ocular manifestations at Es-salam camp, Omdurman. Thesis for MOSMMD University of Khartoum, Sudan. 2001.
Thailand	SEAR	SEAR B	1983	PBS	whole country, 21 provinces	all ages	<3/60	1.1	NA	NA	Cataract Undetermined Refractive errors Corneal diseases Glaucoma Optic atrophy	57 26 4 3 2 2	Thai blindness national survey 1983. Methodology and results. 1983.

Thailand	SEAR	SEAR B	1994	PBS	18 provinces, 52 districts	all ages	<3/60	0.31	<6/18 ≥3/60	0.8	Cataract 75 Corneal diseases 5 Glaucoma 3.5 Post. segment/ARMD 3 Diabetic retinopathy 2 Refractive errors 1.5 Childhood blindness 0.25 others 9.75	Thai blindness National Survey. 1994.
Togo	AFR	AFR D	1983	PBS	maritime (Tsevie)	all ages	<3/60	0.6	<6/18 ≥3/60	2.1	Cataract 70 Glaucoma 8 Corneal scarring 7 Onchocerciasis 5 others 10	Balo K, Nègre! D-A. Causes of blindness in Togo. <i>J Francois Ophthalmol</i> 1989;12:291-295.
Togo	AFR	AFR D	1984	PBS	savane (Dapango)	all ages	<3/60	1.1	<6/18 ≥3/60	1.9	Cataract 45 Corneal scarring 22 Glaucoma 7 Trachoma 6 Onchocerciasis 4 others 16	Balo K, Nègre! D-A. Causes of blindness in Togo. <i>J Francois Ophthalmol</i> 1989;12:291-295.
Togo	AFR	AFR D	1985	PBS	central (Sokode)	all ages	<3/60	0.9	<6/18 ≥3/60	1.8	Cataract 61 Corneal scarring 17 Onchocerciasis 9 Glaucoma 8 Trachoma 4 others 1	Balo K, Nègre! D-A. Causes of blindness in Togo. <i>J Francois Ophthalmol</i> 1989;12:291-295.
Togo	AFR	AFR D	1986	PBS	rural areas (Kara)	all ages	<3/60	0.7	3/10	1.8	Cataract 39 Onchocerciasis 29 Corneal scarring 15 Trachoma 11 Glaucoma 4 others 2	Schemann J-F, Minassian D, Nègre! D. Prevalence et causes de cécité dans la région de Kara au Togo. <i>Cahiers Sante</i> 1993;3:24-30.
Togo	AFR	AFR D	1998	PBS	southern Togo, rural mountain area	5+	<3/60	2.47	<6/18 ≥3/60	1.15	Cataract 65 Glaucoma 15 Corneal opacities 9 others 11	Balo PK, Wabagira J, Banla M, Kuaovi R K. Specific causes of blindness and vision impairment in a rural area of Southern Togo. <i>J Francois Ophthalmol</i> 2000;23:459-464.
Tonga	WPR	WPR B	1991	PBS	NA	20+	<3/60	0.56	<6/18 ≥3/60	1.8	Cataract 68 Corneal opacities 16 Phtisis bulbi 11 Diabetic retinopathy 5	Newland H S, Woodward A J, Taumoepeau L A, Karunaratne N S, Duguid I G M. Epidemiology of blindness and visual impairment in the Kingdom of Tonga. <i>Br J Ophthalmol</i> 1994; 78:344-348.
Tunisia	EMR	EMR B	1993	PBS	whole country	all ages	<3/60	0.8	<6/18 ≥3/60	2	Cataract 66 Aphakia 6 Glaucoma 6 others 22	Ayed S, Nègre! A-D, Nabli M, Jebri A M, Siddhom J. Prevalence et causes de la cécité en République Tunisienne. <i>Cahiers Sante</i> 1998;8:275-282.
Turkey	EUR	EUR B	1989	PBS	Diyarbakir Province and Mardin Province, south-east Turkey urban and rural	all ages	<3/60	0.4	<6/18 ≥3/60	1.5	Cataract 38 Aphakia 12 Corneal opacities 12 Glaucoma 12 Phtisis 6 Trachoma 3 others 17	Nègre! A-D, Minassian D C, Sayek F. Blindness and low vision in South-East Turkey. <i>Ophthalmic Epidemiol</i> 1996;3:127-134.
Turkmenistan	EUR	EUR B	2001	PBS	several areas	50+	<3/60	1.32	<6/18 ≥3/60	19	Cataract 54 Glaucoma 25 Post. segment 7 Phtisis 5 Trachoma corn. Op. 5 others 4	Amansakhatov S, Volokhovskaya Z P, Afanasyeva A N, Limburg H. Cataract blindness in Turkmenistan: results of a national survey. <i>Br J Ophthalmol</i> 2002;86:1207-1210.
Uganda	AFR	AFR E	1995	PBS	Masaka district, rural south-west	12+	<3/60	0.49	<6/18 ≥3/60	1.78	Cataract 71 Glaucoma 21 others 8	Kamali A, Whitworth J A G, Ruberantwari A, Mulwany F, Acakara M, Dolin P, Johnson G. Causes and prevalence of non-vision impairing ocular conditions among a rural adult population in SW Uganda. <i>Ophthalmic Epidemiol</i> 1999;6:41-48.
Uganda	AFR	AFR E	2002	PBS	15 villages, rural south-west	13+	<3/60	0.4	<6/18 ≥3/60	1.6	Glaucoma	Mbulaiteye S M, Reeves B C, Karabalinde A, Ruberantwari A, Mulwany F, Whitworth J A, Johnson G J. Evaluation of E-optotypes as a screening test and the prevalence and causes of visual loss in a rural population in SW Uganda. <i>Ophthalmic Epidemiol</i> 2002;9:251-262.
United Kingdom	EUR	EUR A	1982	registry	whole country	16+	<3/60	0.2	NA	NA	ARMO 37 Glaucoma 13 Cataract 9 Diabetic retinopathy 8 Refractive errors 5 Optic neuropathies 5 others 23	Her Majesty's Stationery Office. "Causes of blindness and partial sight among adults in 1976/77 and in 1980/81, England" Department of Health and Social Security. 1982.
United Kingdom	EUR	EUR A	1982	PBS	Melton Mowbray, County of Leicestershire	75+	≤6/60	3.8	<6/18>6/60	22	ARMO Cataract Glaucoma	Gibson J M, Lavery J R, Rosenthal A R. Blindness and partial sight in an elderly population. <i>Br J Ophthalmol</i> 1986;70:700-705.

United Kingdom	EUR	EUR A	1991	registry	whole country	16+	<6/24	0.7	NA	NA	NA	Bruce I, McKennell A, Walker E. Blind and partially sighted adults in Britain: the Royal National Institute for the Blind Survey. Vol. 1, HMSO London. 1991.	
United Kingdom	EUR	EUR A	1992	PBS	inner London	65+	<3/60	1	<6/18 ≥3/60	7.7	Cataract Aging maculopathy Optic atrophy note: values for low vision	75 13 13	Wormald R P L, Wright L A, Courtney P, Beaumont B, Haines A P. Visual problems in the elderly population and implications for services. Br Med J 1992;304:1226-1229.
United Kingdom	EUR	EUR A	1995-98	PBS	53 general practices in England, Scotland and Wales	75+	<3/60**	2.1	<6/18 ≥3/60**	10.3	NA	Evans J R, Fletcher A E, Wormald R P L, Siu-Woon Ng E, Stirling S, Smeeth L, Breeze E, Bulpitt C J, Nunes M, Jones D, Tulloch A. Prevalence of visual impairment in people aged 75 years and older in Britain: results from the MRC trial of assessment and management of older people in the community. Br J Ophthalmol 2002;86:795-800.	
United Republic of Tanzania	AFR	AFR E	1984	PBS	Kongwa, rural areas, 5 villages	all ages	<3/60	1.6	NA	NA	NA	Helen Keller International. Tanzania Kongwa survey. Causes and prevalence of blindness in five villages. June-July 1984. Report. 1984.	
United Republic of Tanzania	AFR	AFR E	1985	PBS	Tukuyu Valley, rural areas endemic for onchocerciasis	all ages	<3/60	0.8	NA	NA	Infections Cataract Glaucoma	Pedersen E M, Kolstrup N. The epidemiology of onchocerciasis in the Tukuyu Valley, South West Tanzania. Trop Med Parasit 1986;37:35-38.	
United Republic of Tanzania	AFR	AFR E	1986	PBS	Dodoma region (central)	7+	<3/60	1.26	<6/18 ≥3/60	1	Corneal opacities Cataract Glaucoma Retinal disorders Uveitis others	43 22 17 4 4 10	Rapoza P A, West S K, Katala S J, Taylor H R. Prevalence and causes of vision loss in central Tanzania. Int Ophthalmol 1991;15:123-129.
United Republic of Tanzania	AFR	AFR E	1996	PBS	Kongwa district, rural	40+	<3/60	1.3	NA	NA	Cataract Glaucoma undetermined	Buhrmann R R, Quigley H A, Barron Y, West S K, Oliva M S, Mmbaga B B O. Prevalence of glaucoma in a rural East African population. Invest Ophthalmol 2000;41:40-48. Congdon N, West S K, Buhrmann R R, Kouzis A, Munoz B, Mkocho H. Prevalence of the different types of age related cataract in an African population. Invest Ophthalmol Vis Sci 2001;42:2478-2482.	
United States of America	AMR	AMR A	1988	PBS	Mud Creek Valley, Kentucky: rural	40+	<3/60	0.4	<6/18 ≥3/60	2.2	Cataract Trauma Amblyopia Macular degeneration	Dana M R, Tielsch J M, Enger C, Joyce E, Santoli J M, Taylor H R. Visual impairment in a rural Appalachian community. Prevalence and causes. J Am Med Assoc 1990;264:2400-2405.	
United States of America	AMR	AMR A	1988	PBS	Baltimore (MD) white and black urban population	40+	<3/60	0.5 W 0.9 B	<6/18 ≥3/60	1.3 W 1.9 B	NA	Tielsch J M, Sommer A, Witt K, Katz J, Royall R M. Blindness and visual impairment in an American urban population. The Baltimore Eye Survey. Arch Ophthalmol 1990;108:286-290.	
United States of America	AMR	AMR A	1988	PBS	Beaver Dam, Wisconsin	43-54 75+	≤20/200	0.1 2	NA	NA	NA	Klein R, Klein B E, Linton K L, De Mets D L. The Beaver Dam Eye Study: visual acuity. Ophthalmology 1991;98:1310-1315.	
United States of America	AMR	AMR A	1992	PBS	East Boston (MA), Iowa and Washington Counties (IA), New Heaven (CT)	71+	≤20/200**	4.6	NA	NA	NA	Salive M E, Guralnik J, Christen W, Glynn R J, Colsher P, Ostfeld A M. Functional blindness and visual impairment in older adults from three communities. Ophthalmology 1992;99:1840-1847.	
United States of America	AMR	AMR A	2000	PBS	Salisbury (MD), metropolitan area, white and black population	65-84	<3/60	0.2 W 0.8 B	<6/18 ≥3/60	1.6 W 3.3 B	ARMED Optic atrophy Glaucoma Diabetic retinopathy Retinal diseases Trauma Cataract note: causes for <20/200	43 14 9 9 9 9 9 5	Rubin G S, West S K, Munoz B, Bandeen-Roche K, Zeger S, Schein O, Fried L P. A comprehensive assessment of visual impairment in a population of older Americans. The SEE Study, Salisbury Eye Evaluation Project. Invest Ophthalmol Vis Sci 1997;38:557-568. Munoz B, West S K, Rubin G S, Schein O D, Quigley H A, Bressler S B, Bandeen-Roche K, SEE Study Team. Causes of blindness and visual impairment in a population of older Americans. The Salisbury Eye Evaluation Study. Arch Ophthalmol 2000;118:819-825.
United States of America	AMR	AMR A	1997-99	PBS	Mexican-Americans living in Pima and Santa Cruz counties, southern Arizona	40+	≤20/200	0.29	NA	NA	NA	Munoz B, West S K, Rodriguez J, Sanchez R, Broman AT, Snyder R, Klein R. Blindness, visual impairment and the problem of uncorrected refractive error in a Mexican-American population: Proyecto VER. Invest Ophthalmol Vis Sci 2002;43:608-614.	
United States of America	AMR	AMR A	2002	estimate	estimates by state and race, male female	40+	≤20/200	0.84	NA	NA	NA	Friedman D S, Congdon N, Kempen J, Tielsch J M. Vision problems in the U.S. National Eye Institute. Prevent Blindness America. 2002.	
Vanuatu	WPR	WPR B	1989	PBS	NA	6+	<3/60	0.4	<6/18 ≥3/60	1.3	Cataract Macular degeneration Uveitis	85 8 7	Newland H S, Harris M F, Walland M, McKnight D, Galbraith J E K, Iwasaki W, Momomura K. Epidemiology of blindness and visual impairment in Vanuatu. Bull World Health Organ 1992;70:369-372.
Viet Nam	WPR	WPR B	2001	PBS	4 regions North VN (Hatay delta Red river, Haiphong city, Phuto mountain, Nghean north-central)	50+	<3/60	4.34	<6/18 ≥3/60	14.52	Cataract Post. segment Glaucoma Trachoma corn op. others	66 14 5 5 10	Ton Thi Kim Thanh, Nguyen Chi Dzung, Pham Ngoc Dong, Vuong Van Quy, Resnikoff S. Results of rapid assessment of cataract surgical services in Viet Nam. Viet Nam National Institute of Ophthalmology, Hanoi. 2002.
Viet Nam	WPR	WPR B	2001	PBS	Bindinh, South VN	50+	<3/60	7.3	<6/18 ≥3/60	23.47	Cataract Refractive error Post. segment Glaucoma others	78 7 5 3 7	Ton Thi Kim Thanh, Nguyen Chi Dzung, Pham Ngoc Dong, Vuong Van Quy, Resnikoff S. Results of rapid assessment of cataract surgical services in Viet Nam. Viet Nam National Institute of Ophthalmology, Hanoi. 2002.

<b>Viet Nam</b>	WPR	WPR B	2001	PBS	Tien Giang, South VN	50+	<3/60	4.7	<6/18 ≥3/60	19.95	<b>Cataract</b> 76 Post. Segment 12 Glaucoma 5 Phthisis 2 others 5	<i>Ton Thi Kim Thanh, Nguyen Chi Dzung, Pham Ngoc Dong, Vuong Van Quy, Resnikoff S. Results of rapid assessment of cataract surgical services in Viet Nam. Viet Nam National Institute of Ophthalmology, Hanoi. 2002.</i>
<b>Viet Nam</b>	WPR	WPR B	2001	PBS	The South (both areas merged)	50+	<3/60	6.06	<6/18 ≥3/60	21.72	<b>Cataract</b> 75 Post. segment 9 Glaucoma 7 Corneal opacities 2 others 7	<i>Ton Thi Kim Thanh, Nguyen Chi Dzung, Pham Ngoc Dong, Vuong Van Quy, Resnikoff S. Results of rapid assessment of cataract surgical services in Viet Nam. Viet Nam National Institute of Ophthalmology, Hanoi. 2002.</i>