

Eye Health Statistics at a Glance

EYE DISEASES

Q: How many people in the U.S. have glaucoma?

A: Glaucoma affects more than 2.2 million Americans age 40 and older. Another two million do not know they have the disease. [Source: *Vision Problems in the U.S. report, developed by the National Eye Institute and Prevent Blindness America, 2002*]

Additional statistics for glaucoma:

- Glaucoma Research Foundation, www.glaucoma.org.
- Glaucoma per 1,000 persons, by age (1996): <http://www.cdc.gov/nchs/fastats/pdf/10200t57.pdf>
- Reports are also available by sex, race, family income, geographic region, 1996 (NCHS).

Q: How many people in the U.S. have cataracts?

A: Cataracts affect nearly 20.5 million Americans age 40 and older. By age 80, more than half of all Americans have cataracts. It is estimated that the federal government spends more than \$3.4 billion each year treating cataracts through the Medicare program. [Source: *Vision Problems in the U.S. report, developed by the National Eye Institute and Prevent Blindness America, 2002*]

Additional statistics for cataracts:

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Q: What is the cost of cataract surgery in the U.S.?

A: It is estimated to cost the federal government \$3.4 billion per year in the U.S. and is the most commonly performed ophthalmic procedure. [Source: *Investigative Ophthalmology & Visual Science, July 2001, Vol. 42, No. 8, page 1677*]

Q: How many people in the U.S. are visually impaired?

A: Among people age 40 and older, overall national rate of visual impairment (defined as having 20/40 or worse vision in the better eye even with eyeglasses) is 2.85 percent. This translates into more than 3.4 million being vision impaired. [Source: *Vision Problems in the U.S. report, developed by the National Eye Institute and Prevent Blindness America, 2002*]

A: In individuals age 12 or older, visual impairment (defined as distance visual acuity of 20/50 or worse due to uncorrected refractive error) is more than 11 million. [Source: *The National Health and Nutrition Examination Survey (NHANES), 2002, reported in JAMA, 2006;295:2158-2163*]

A: One in six Americans (17 percent), 45 years of age and older, report some form of vision impairment. One in four Americans (26 percent), 75 years of age and older, report some form of vision impairment. [Source: *The LighthoU.S.e National Survey on Vision Loss, April 1995*]

A: More than 14 million people in the U.S. and 135 million worldwide have low vision (defined as visual acuity less than 20/70 in the better eye). The numbers are expected to double by 2030, noted Gholam A. Peyman, MD, professor of ophthalmology at Tulane University School of Medicine, New Orleans. [Source: *Ophthalmology Times*, 8/1/01, page 38]

Q: How many people in the U.S. are legally blind?

A: More than one million, age 40 and older. [Source: *Vision Problems in the U.S. report*, developed by the National Eye Institute and Prevent Blindness America, 2002]

- <http://www.cdc.gov/nchs/fastats/disable.htm>
- Visual impairments per 1000 persons, by age (1996): <http://www.cdc.gov/nchs/fastats/pdf/10200t57.pdf>
- Reports are also available by sex, race, family income, geographic region, 1996 (NCHS).

Q: How many people in the U.S. have age-related macular degeneration (AMD)?

A: More than 1.6 million Americans age 50 and older have late AMD. [Source: *Vision Problems in the U.S. report*, developed by the National Eye Institute and Prevent Blindness America, 2002]

Q: Number of people in the U.S. who have diabetic retinopathy

A: Diabetic retinopathy affects more than 5.3 million Americans age 18 and older (or a little more than 2.5 percent of this population).

Q: How many people in the U.S. are color blind?

A: Nearly three million Americans are color blind. [Source: *National Center for Health Statistics (NCHS)*, 1996]

- <http://www.cdc.gov/nchs/fastats/disable.htm>
- Color blindness per 1,000 persons, by age (1996): <http://www.cdc.gov/nchs/fastats/pdf/10200t57.pdf>
- Reports are also available by sex, race, family income, geographic region, 1996 (NCHS).

Q: How many people in the U.S. have dry eye?

A: Approximately five percent of the U.S. population has been diagnosed with dry eye. [Source: *Review of Ophthalmology*, "An Inside Look at the NEI Dry Eye Meeting", p. 82, 8/01]

Q: How many people in the U.S. suffer eye injuries each year?

A: An estimated 2.5 million eye injuries each year. [Source: *The United States Eye Injury Registry*, 2005]

Q: What percentage of eye injuries happens to children (18 and younger)?

A: It is estimated that 55 percent of all eye injuries occur before age 25, and that as many as 160,000 school-age children in the United States are victims of eye injuries each year. [Source: *Archives of Ophthalmology*, "Causes of Pediatric Eye Injuries", April 1990]

A: According to the U.S. Eye Injury Registry, 58 percent of those injured were less than 30 years old. [Source: *Graefes Arch Clin Exp Ophthalmol* 2000]

A: The American Academy of Pediatrics in 1987 reported that 66 percent of all ocular injuries occur in persons 16 and younger, with the highest frequency between 9 and 11 years old. There is male to female predominance of approximately 4:1, attributed in part to boys' more frequent choices of sharp and pointed play objects. [Source: *Journal of Pediatric Health Care*, "Eye Trauma in Children: Epidemiology, Management, and Prevention", July/August 1997]

A: Sports-related pediatric ocular injuries are an unfortunate fact of life, accounting for the majority of eye injuries in children aged 5 to 14 years old. [Source: *Br J Ophthalmol* 1999 Aug; 83(8)933-6]

PREVALENCE OF REFRACTIVE ERRORS IN THE U.S.

Q: How many people in the U.S. have myopia (≥ 1.0 diopters)?

A: More than 30.5 million Americans age 40 and older

A: 25 percent for persons aged 12 to 54 years (National Health & Nutrition Examination Survey), 17.6 percent for persons aged 55 to 85 years (Framingham Study, 1973-75).

Q: How many people in the U.S. have hyperopia (≥ 3.0 diopters)?

A: Almost 12 million Americans age 40 and older

A: 31 percent of adults older than 40 have from 0.75 to 2.5 diopters of hyperopia, an additional 10 percent have from 2.5 to 4 diopters of hyperopia, four percent older than 40 have more than 4 diopters of hyperopia (Baltimore Eye Study).

Q: How many people in the U.S. have presbyopia?

A: Everyone between ages 45-50 develops presbyopia. This accounts for approximately 90 million people in the United States (as reported in the *Wall Street Journal*, March 2001).

Q: What percentage of the population is affected by astigmatism?

PERCENTAGE	ASTIGMATISM (DIOPTERS)
3.4	3.0
6.0	2.75
10.0	2.25
15.8	1.75
19.2	1.50
24.8	1.0

(Source: Mosby Year Book; Contemporary Contact Lens Practice 1991)

REFRACTIVE SURGERY STATISTICS

Q: How many refractive/LASIK surgeries are performed annually in the U.S.?

A: In 2005 there were 1.5 million refractive surgery procedures performed in the U.S. (1,425,000 LASIK, 67,500 PRK, and 7,500 LASEK). [Source: Spectrum Consulting, 2005]

Q: How many Americans need some type of corrective eyewear?

A: More than six out of 10 adults in the U.S. need some type of corrective eyewear. [Source: Vision Council of America's Consumer Barometer survey, May 2004]

Q: How many corneal transplants are performed in the U.S. annually?

A: There were 32,106 corneal transplants performed in the U.S. in 2004. 46,841 corneal grafts were supplied by U.S. eye banks. [Source: <http://www.restoresight.org/newsroom/newsroom.htm>]

Q: What is the approximate number of contact lens wearers in the U.S.?

A: 35.4 million wearers. [Source: Health Products Research Inc., cited in *Ophthalmology Management*, July 2001, page 34]

Q: What is the approximate number of ophthalmologists who dispense contact lenses in the U.S.?

A: Approximately 7,047 dispensing ophthalmologists. [Source: Health Products Research Inc, cited in *Ophthalmology Management*, July 2001, page 34]

STATISTICS ON OPHTHALMOLOGISTS

Q: How many ophthalmologists are in the U.S.?

A: 18,733 ophthalmologists in the U.S. [Source: AMA Physician Masterfile, 2005 (AMA # 312.464.5000)]

Q: How many ophthalmologists are there worldwide (excluding the U.S.)?

A: Approximately 75,000 ophthalmologists outside the U.S.. [Source: AAO Board Book, 1997]

Q: What is the average ophthalmologist income?

A: Average net income: \$260,000. [Source: Health Care Group, 2005]

Q: Where can I get more career information on ophthalmology?

A: Envision Ophthalmology [<http://www.aao.org/aao/careers/envision/index.cfm>]