



# Your Eyes Are the Windows to Your Health.

Schedule an eye exam today.

## Fact Sheet: Refractive Errors

- More than 11 million Americans have common vision problems that can be corrected with the use of prescriptive eyewear such as glasses or contact lenses.<sup>1</sup> These conditions are known as refractive errors and they occur when the eye doesn't correctly bend, or "refract," light as it enters the eye.
- Common refractive errors include the following:
  - **Nearsightedness** (also called myopia)—A condition where objects up close appear clearly, while objects far away appear blurry. With nearsightedness, light comes to focus in front of the retina instead of on the retina.
  - **Farsightedness** (also called hyperopia)—A common type of refractive error where distant objects may be seen more clearly than objects that are near. However, people experience farsightedness differently. Some people may not notice any problems with their vision, especially when they are young. For people with significant farsightedness, vision can be blurry for objects at any distance, near or far.
  - **Astigmatism**—A condition in which the eye does not focus light evenly onto the retina, the light-sensitive tissue at the back of the eye. This can cause images to appear blurry and stretched out.
  - **Presbyopia**—An age-related condition in which the ability to focus up close becomes more difficult. As the eye ages, the lens can no longer change shape enough to allow the eye to focus close objects clearly.
- Refractive errors are one of the most common—and correctable—causes of visual impairment in the United States. According to a recent study led by the National Eye Institute (NEI), approximately half of all American adults don't have the 20/20 vision physicians consider optimal due to refractive errors.<sup>2</sup>
- Women experience refractive error more frequently than men:
  - Twenty-six percent more women aged 12 and older have uncorrected visual impairment due to refractive error compared with men aged 12 and older.
  - Fourteen percent more women aged 40 and older have refractive errors compared with men aged 40 and older.<sup>3</sup>
- In the United States, in general, people aged 40 and older are the most likely to have refractive errors.<sup>3</sup>



- People aged 12 and older, people with diabetes, Hispanics, and people who are economically disadvantaged have higher rates of visual impairment and can most benefit from corrective lenses.<sup>1</sup>
- Data from the Los Angeles Latino Eye Study (LALES) suggests that the prevalence of visual impairment and blindness is high among urban Latinos aged 40 and older, primarily of Mexican ancestry. The overall prevalence of visual impairment for this population was 3 percent, using study-specific definitions of visual impairment. The rate of impairment and blindness was higher among older and female Latinos.<sup>4</sup>
- Prescription eyeglasses and contact lenses are the most common forms of vision correction. More than 150 million Americans use corrective eyewear, spending more than \$15 billion on eyewear each year.<sup>5</sup>
- Corrective care for refractive errors amounts to an estimated \$3.8 billion to \$7.2 billion annually.<sup>6</sup>
- Refractive surgeries are becoming an increasingly popular option for reducing or eliminating refractive errors.<sup>7,8</sup>
- Sixty-six percent (66%) of adults aged 18 and older report wearing some type of eyewear, including glasses, contact lenses, both glasses and contact lenses, or reading glasses only. Among the adults who report wearing eyewear, more women (72%) report using eyewear than men (60%). Hispanics (46%) report far less use of eyewear compared with Caucasians (70%), Asians (72%), and Blacks (64%). Older adults (94% of adults aged 65 and older) significantly report using eyewear more than younger adults (42% of adults aged 18 to 39).<sup>9</sup>
- Only 42 percent of vision-impaired Americans without health insurance seek medical attention for their eye problems.<sup>10</sup>

## Citations

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- <sup>3</sup> National Health and Nutrition Examination Survey (NHANES), National Center for Health Statistics (NCHS), Centers for Disease Control and Prevention (CDC) 2002.
- <sup>4</sup> Varma R, Ying-Lai M, Klein R, Azen S; Los Angeles Latino Eye Study Group. Prevalence and risk indicators of visual impairment and blindness in Latinos. The Los Angeles Latino Eye Study. *Ophthalmology* 2004 June; 111(6): 1132–40.
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- <sup>10</sup> Zhang, X., Lee, P. P., Thompson, T. J., Sharma, S., Barker, L., Geiss, L. S., et al. (2008). Health insurance coverage and use of eye care services. *Archives of Ophthalmology*, 126(8), 1121–1126.