

## Visual Impairment and Access to Eye Care: Results from the 2008 Indiana BRFSS

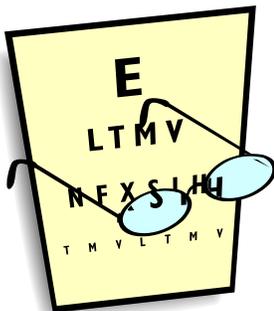
It is estimated that half of visual impairment and blindness can be prevented through early diagnosis and timely treatment. While cost-effective treatment and eye preservation interventions are available, the number of potentially blinding eye diseases continues to escalate. [CDC Vision Health Initiative] According to the Centers for Disease Control and Prevention, nationally:

- 14 million individuals aged 12 years and older have a visual impairment, and more than 80% could be improved to good vision with refractive correction.
- Vision disability is one of the top 10 disabilities among adults aged 18 years and older.
- Vision loss causes a substantial social and economic toll for millions of people, and includes significant suffering, disability, loss of productivity, and diminished quality of life.

Many health conditions and behaviors are not reportable; hence, prevalence data must be obtained from another source. The Behavioral Risk Factor Surveillance System (BRFSS) survey is an annual random digit-dial telephone survey of adults aged 18 years and older.

The BRFSS survey is conducted through a cooperative agreement with the Centers for Disease Control and Prevention, and all states and the District of Columbia participate. The BRFSS relies on self-reported data. This type of survey has certain limitations that should be understood when interpreting the data. Many times, respondents have the tendency to underreport behaviors that may be considered socially unacceptable (e.g., smoking, driving after drinking alcohol). Conversely, respondents may over report behaviors that are desirable (e.g., physical activity, seatbelt use).

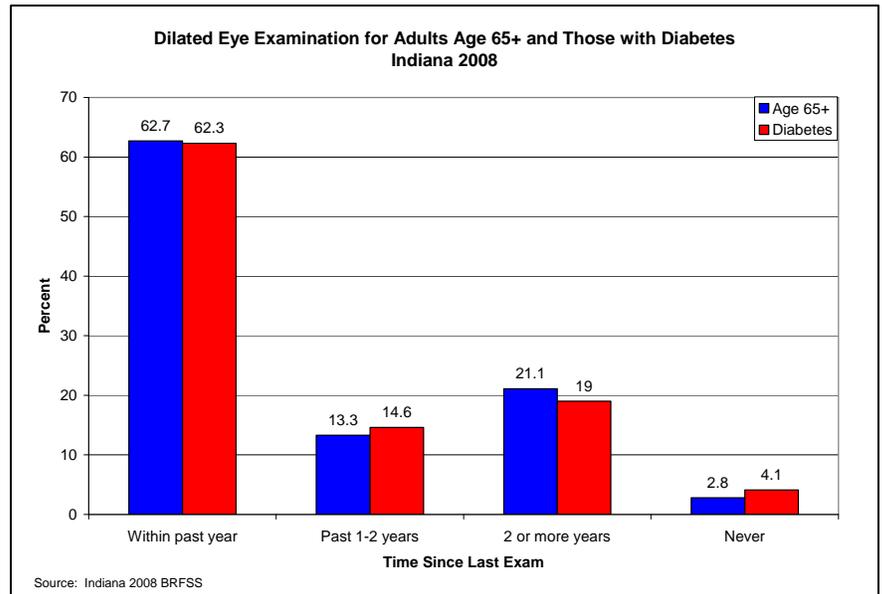
Information for this newsletter was obtained from the Visual Impairment and Access to Eye Care module in 2008. Respondents aged 40 years and older were asked about their vision, including difficulty seeing, eye conditions, and preventive care. The differences reported below are statistically significant ( $p < 0.05$ ) unless otherwise noted.



Overall, 83.6% of respondents reported having no difficulty recognizing a friend across the street, while 63.6% reported having no difficulty reading print (e.g., newspaper, magazine, and numbers on telephone). Those with diabetes were more likely than those without diabetes to report difficulties in recognizing a friend across the street (17.8% vs. 12.7%, respectively). Similar results were found for those who had ever been told they had a stroke compared to those without a stroke. Respondents with household income less than \$15,000 (7.1%) were more likely than those with incomes of \$50-\$74,999 (1.3%) and \$75,000 (1.2%) or more to report extreme difficulty reading print.

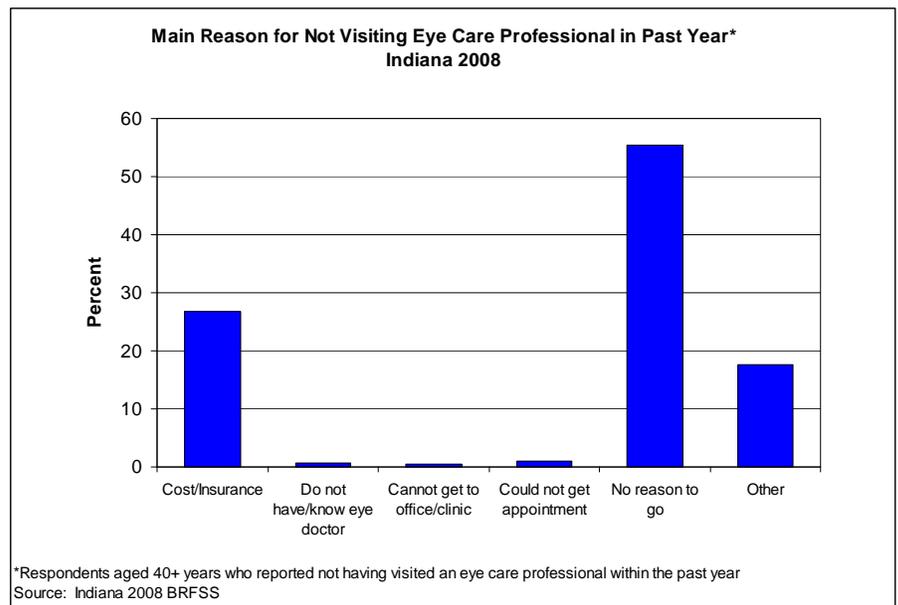
Since many eye problems are initially asymptomatic, regular eye examinations can help delay or limit the progression of vision loss and eye diseases. Approximately 60% of respondents reported having their eyes examined by a doctor or eye care provider within the past year, 18.5% had an examination between one and two years ago, 21.1% had an examination two or more years ago, and 1% reported never having an examination. An eye examination in which the pupils were dilated is recommended for those aged 65 years and older and those with diabetes. Results for these two groups are shown in Figure 1.

Figure 1



For respondents not reporting an eye examination within the past year, over half of the respondents reported they had no reason to go or had not thought of it, while 26.8% reported cost/insurance as a barrier, and 18.9% reported other reasons. (see Figure 2). According to the CDC, the lack of concern regarding the need for preventive eye care remains a major public health concern. Males were more likely than females to report they had no reason to go or had not thought about it (64.0% vs. 47.1%, respectively). Females were almost twice as likely than males to report cost/insurance as the reason they had not had an eye care visit in the past year (35.0% vs. 18.4%, respectively). Respondents with household income less than \$15,000 were more likely than those with household income of \$25,000 or more to report cost/insurance as a barrier. Respondents aged 65 years and older were less likely than younger respondents to report cost/insurance as the reason for not having visited an eye care professional in the past year.

Figure 2

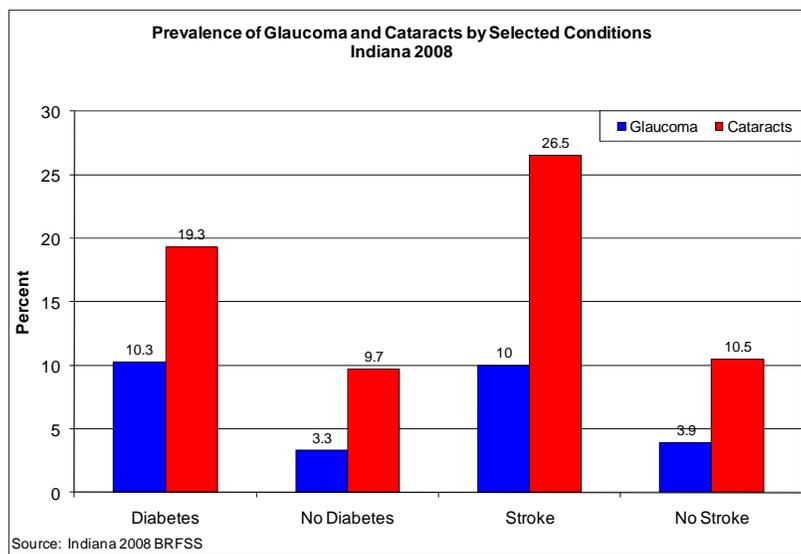


Overall, 57.4% of respondents reported having some kind of health insurance coverage for eye care. Respondents aged 65+ (45.0%) were less likely to report having coverage for eye care than those aged 40-44 (61.9%), 45-54 (64.7%) and 55-64 (59.3%). The percentage of respondents without health insurance coverage for eye care decreased as education and income levels increased. There were no differences by sex or race.



Respondents were also asked if they had been told they had cataracts, glaucoma or age-related macular degeneration. Cataracts were the most commonly reported of the three conditions (11.3%) followed by age-related macular degeneration and glaucoma (4.4% and 4.2%, respectively). Almost 12% (11.6%) of respondents reported they had cataracts, but they had been removed. The percent of respondents reporting cataracts increased from 0.8% in the 40-44 age group to 26.1% in the 65 years and older age group. Respondents with household incomes of less than \$15,000 (7.5%) or \$15,000-\$24,999 (7.2%) were more likely than those with household incomes of \$50,000-\$74,999 (2.3%) or greater than \$75,000 (2.5%) to report having age-related macular degeneration. Similar results were found for respondents with glaucoma.

Figure 3



Respondents with diabetes or ever having had a stroke were more likely than those without those conditions to report cataracts and glaucoma as shown in Figure 3. No differences were found with age-related macular degeneration. Twenty percent of adults with diabetes reported that their doctor had told them that diabetes had affected their eyes or that they had retinopathy.

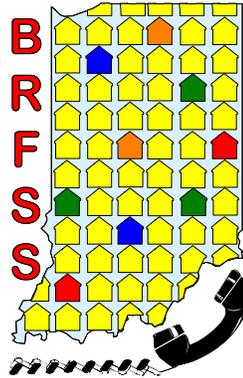
The prevalence of age-related eye diseases is expected to double over the next 30 years. To address this growing concern, CDC, through its Vision Health Initiative (VHI), is developing a coordinated national public health framework to promote vision health and quality of life for all populations and preventing and controlling eye diseases, eye injury and vision loss resulting in disability. For additional information on the VHI, please refer to their website at: <http://www.cdc.gov/visionhealth/index.htm>.



The Diabetes Prevention and Control Program's mission is to reduce the burden of diabetes in Indiana through data surveillance, health communications, health systems development, and development and implementation of community interventions and programs. The Diabetes Prevention and Control Program is a population-based, public health program that serves as the center for the overall state diabetes system. This system includes public, private, and voluntary groups and organizations that contribute to the health and well-being of communities and the delivery of diabetes-related public health services within Indiana. For more information contact: [www.diabetes.in.gov](http://www.diabetes.in.gov) or send an e-mail to [diabetes@isdh.in.gov](mailto:diabetes@isdh.in.gov).



Epidemiology Resource Center  
 Data Analysis  
 2 North Meridian Street, 3-D  
 Indianapolis, IN 46204  
 Phone: 317.233.7416  
 Fax: 317.233.7378  
 E-mail: data-analysis@isdh.IN.gov



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<i>Assistant Commissioner</i> James F. Howell, DVM, MPH, DACVPM	<i>Design/Layout</i> Kristy Holzhausen
<i>Data Provider</i> Centers for Disease Control and Prevention	<i>Surveys</i> Clearwater Research, Inc.

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