

Vision Screening Practices and Data Collection:

Results from a Survey of State School Nurse Consultants – Part 1



Background

The National Center for Children’s Vision and Eye Health (NCCVEH) at Prevent Blindness partnered with the National Association of State School Nurse Consultants (NASSNC) to conduct a survey to collect information from State School Nurse Consultants (SSNCs) on how their states collect, store, and report data on vision screening, referrals for eye care, and tracking of follow-up treatment. Currently, there is no federal requirement for surveillance of vision screening, eye care and treatment for preschool- or school-aged children. Compounding this issue is the lack of a national repository of data collected by the states. Therefore, State School Nurse Consultants and others have developed their own systems for data collection and surveillance. In 2015, the NCCVEH published “Vision and Eye Health in Children 36 to <72 Months: Proposed Data System,”ⁱ with recommendations for an integrated data system for recording vision screening and eye care follow-up outcomes in preschool-aged children. There is no current data on adoption of the recommendations. The data collected from this survey provide a better understanding of current state data systems and successes and challenges of data collection, storage, retrieval and uses. Please see [Fact Sheet #2](#) for more information on data collection and uses.

Survey Methods

Data were collected through an online survey in Survey Monkey administered in the summer and fall of 2019 to 45+ members of NASSNC and others knowledgeable about state systems. The survey consisted of 24 closed- and open-ended questions and covered such topics as vision screening regulations and practices, reporting requirements, uses of the data, challenges of current data collection systems and recommendations for improved surveillance. A total 35 SNNCs completed the survey (80% response rate) A copy of the survey tool is available upon request to the NCCVEH.

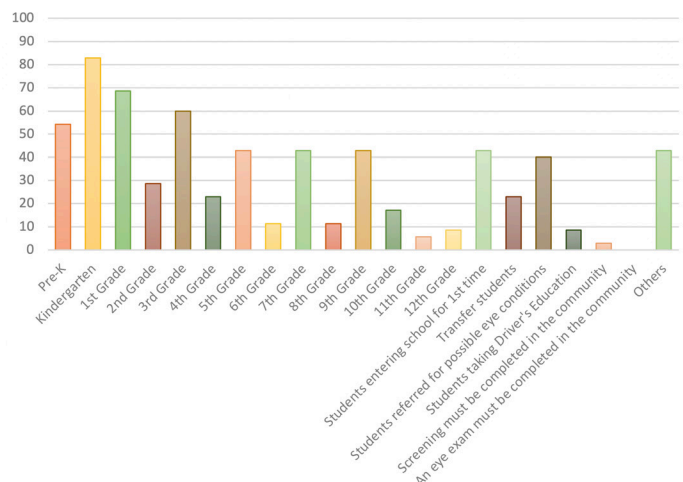
What Types of Vision Screening are being used?

Based on the *Children’s Vision and Eye Health: A Snapshot of National Issues*,ⁱⁱ 41 states (including D.C.) mandate some type of vision screening for school-age children and 26 states require vision screening for preschool-age children. Among the 35 states represented in the survey responses, almost half utilize both optotype- and instrument-based screening for preschool- and school-aged children with optotype-based screening more commonly used for both preschool and school aged children. The absence of vision screening is higher in preschool-aged children (14%) than school-aged (6%).

When do Children Receive Vision Screening?

Figure 1 shows the highest frequency of screening is for kindergarten age children – over 80% of kindergarten students receive vision screening, followed by first, third, and pre-K grades. As demonstrated, many states require screening every other year through the elementary grades.

Figure 1. The grades in which students are required or recommended to have vision screening (Percentage of states)



Source: Children’s Vision and Eye Health: A Snapshot of National Issues.

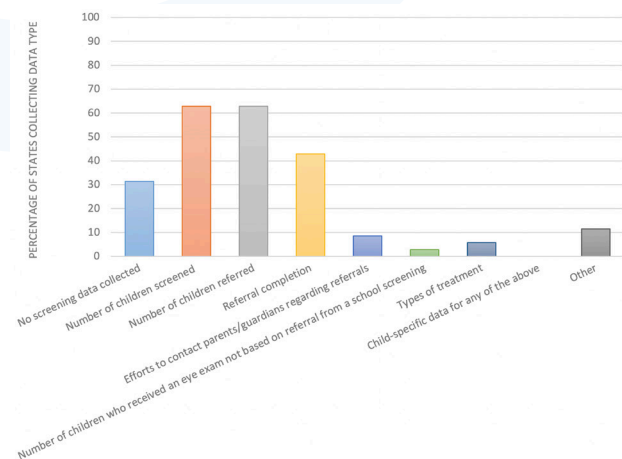
What Data are Collected on Vision Screening, Eye Exams and Treatment?

To understand the data collection systems in each state, respondents were asked how their states collect vision screening data from school districts, how often these data are collected, and what data are collected. Figure 2 shows that most states collect data annually (60%), on the aggregate level (49%), and 31% of states do not collect any data. Some respondents noted that vision screening data is collected and reported by the local public health department or by the agency who conducted the screening. One state extracts vision screening data from electronic reports completed by district nurses. Only two states reported they collect child-identifiable data. Figure 3 shows that the most common data that states collect are the number of children being screened and referred.

Figure 2. How and when data are collected

How states collect screening data from school and districts (Check all that apply)	Percentage (%)
No data collected	31
Survey with student data on the aggregate level	49
Child-identifiable electronic records	6
Other	20
How often states collect vision screening data from school nurses	
No data collected	34
Annually	60
Every 2 years	0
Other	6

Figure 3. Type of data collected by states from school district regarding vision screening



How and When Vision Screening Data are Collected and Used by State School Nurse Consultants

The utilization of vision screening data varies among the states. More than a quarter of states (28.6%) shared data with the public, while almost a third (28.6%) shared the data with other states and utilized the data for tracking of performance measures. Other ways data are utilized by Consultants include:

- Identifying students' needs and nurses' professional development
- Writing annual reports and planning for program improvements
- Sharing the data with the legislative board in the region
- Completing the school accreditation process

Summary

Overall, responses to this survey show a lack of uniformity among states regarding vision screening practices, periodicity of the screening, data collected, and use of data. Please see Fact Sheet #2 for additional data and recommendations for improved vision screening data collection.

For information on state requirements for vision screening for preschool and school-age children, please see the [Children's Vision and Eye Health: A Snapshot of Current National Issues 2nd Edition](#). Please see [fact sheet #2 \(nationalcenter.preventblindness.org/data-collection-state-school-nurse-consultants\)](#).

For more information, contact Donna Fishman, Director of the National Center for Children's Vision and Eye Health at Prevent Blindness at dfishman@preventblindness.org. This project supports NASSNC's mission to bring State School Nurse Consultants together to transform school health services.

i. E. Hartmann, et al. Vision and Eye Health in Children 36 to <72 Months: Proposed Data System. Optometry and Vision Science. 2015. Vol. 92, No. 1, pp. 24-30

ii National Center for Children's Vision and Eye Health at Prevent Blindness. 2020. Children's Vision and Eye Health: A Snapshot of Current National Issues (2nd ed.). Chicago, IL: National Center for Children's Vision and Eye Health at Prevent Blindness.