

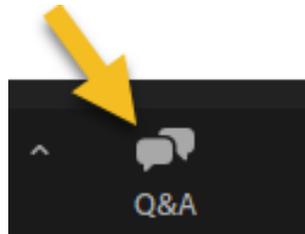
# Clearer Futures: Identifying Eye Care Needs in School-Age Children

**March 19, 2026**

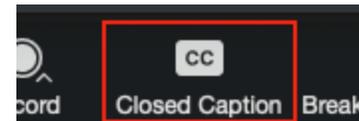
**2:00 – 3:00 PM ET**

# REMINDERS

- All attendees are in listen-only mode.
- To ask a question during the session, use the “Q&A” icon that appears on the bottom of your Zoom control panel.



- To turn on closed captioning, click on the “CC” button.



- Please complete evaluation poll questions at the end of the presentation.

# Today's Presenters



**Donna Fishman**  
Director  
National Center for  
Children's Vision and  
Eye Health  
Prevent Blindness



**Luke Ertle, MPH**  
Program Director  
Association of  
Clinicians for the  
Underserved



**Dannielle Dobbins, M.Ed.**  
Director  
School-Based Health Alliance



**Harper Byers, BA**  
Coordinator  
School-Based Health  
Alliance



# Today's Presenters



**Sara Bode, MD**  
PCP and Medical Director  
Nationwide Children's Hospital



**Dr. Angel Barajas**  
Assistant Professor  
Western University



## Our Initiatives

For more than 20 years, the School-Based Health Alliance has been at the forefront of efforts to advance child and adolescent health. Our collaboration with national, state, and local partner organizations has yielded a multitude of resources, learning collaboratives, and initiatives that have helped to establish and enhance school-based health care as a critical component of community health.

### OUR WORK

## We are continually making An impact

Through our initiatives, we have been able to empower school-based health providers with the knowledge, tools, and resources necessary to respond effectively to the unique health needs of children and adolescents. By building their capacity and promoting best practices, we have not only improved the quality of care provided but also helped to establish a strong foundation for future generations.

Our work has had a profound impact on the development of school-based health care and the broader community. By investing in this critical area of healthcare, we have been able to help promote the well-being of children and adolescents and create a healthier, more prosperous future for all.

Learn More About Our  
Work at  
<https://www.sbh4all.org/>



# Prevent Blindness

**Our mission is to prevent blindness and preserve sight.**

**The National Center for Children's Vision and Eye Health**  
**Our mission is to improve children's vision through strong partnerships, sound science, and targeted public policy.**

- Public and professional education
- Advocacy
- Certified vision screening training
- Community and patient engagement programs



# Learning Objectives

## Participants will be able to...

- Describe common vision and eye health conditions in children and explain how these conditions may affect learning, development, and overall well-being.
- Recognize key signs and risk factors that should prompt further vision evaluation or screening.
- Identify effective follow-up practices to support timely access to appropriate eye care services and ensure continuity of care.

# Children's Vision Development, Early Concerns and Collaboration

Dr. Angel Barajas OD NREMT

Assistant Professor at Western University College of Optometry

Pomona, California



# Why Vision Matters in Childhood

- Vision supports learning and development
  - Vision affects reading, attention, and classroom engagement
- Many vision issues are NOT obvious
  - Children often don't describe vision problems clearly
- Early identification improves outcomes

# Vision Development

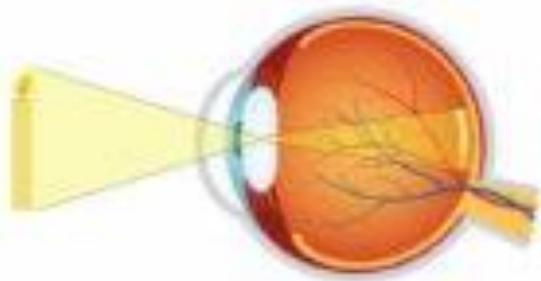
- Vision develops over time
  - Vision is learned and refined throughout childhood
- Clear visual inputs supports normal development
  - Blurred or inconsistent input can interfere with the child's growth
- Missed concerns can affect learning
  - Think about your student that cannot sit still to read, maybe there is more to their story than attention

# Common Vision Conditions in Children

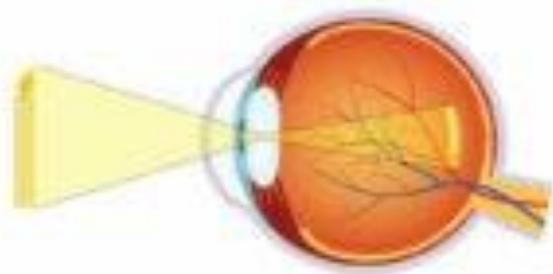
- Refractive Error (near or distance blur)
  - Myopia, Hyperopia and Astigmatism
- Eye Alignment issues
  - Strabismus (colloquially known as “Lazy Eye”)
- Focusing or eye teaming difficulties
  - Accommodation Insufficiency, Convergence Insufficiency, True “Lazy Eye”= Amblyopia

They may even appear as academic or attention concerns

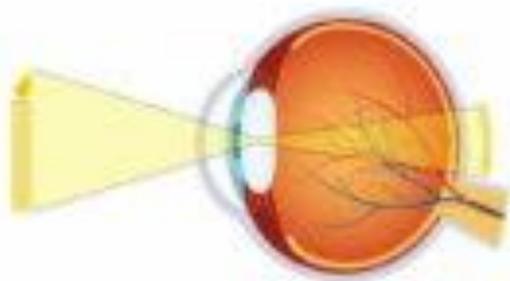
## VISION DISORDERS



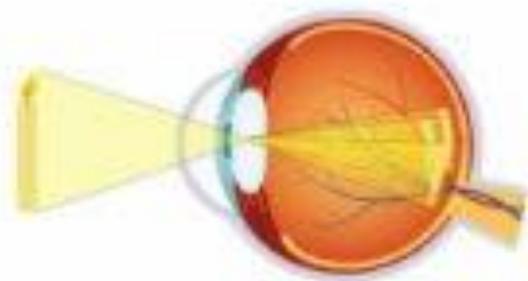
Normal vision



Myopia



Hyperopia



Astigmatism



Normal vision



Myopia



Astigmatism



Hyperopia

# STRABISMUS

Normal eyes



Esotropia



Exotropia



Hypertropia

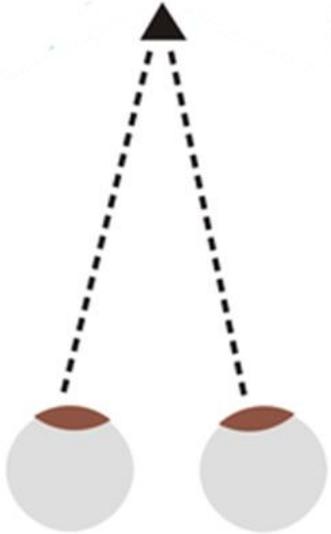


Hypotropia



## Once upon a Time

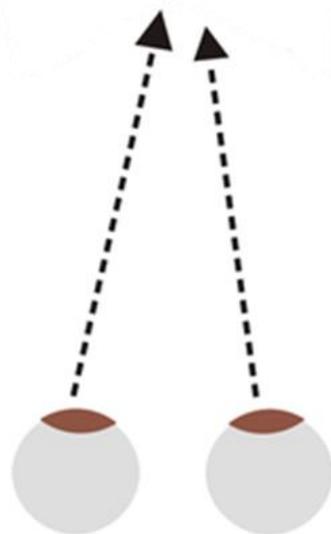
roots, a peculiar mode of inflecting, together with a resemblance in the inflections, and a similarity of syntax or construction. Of the old Persian language the known roots are, almost without exception, kindred forms to roots already familiar to the philologist through the Sanscrit, or the Zend, or both; while many are of that more general type of which we have spoken—forms common to all, or most of the varieties of the Indo-European stock. To instance in a few very frequently recurring words—"father" is in old Persian (as in



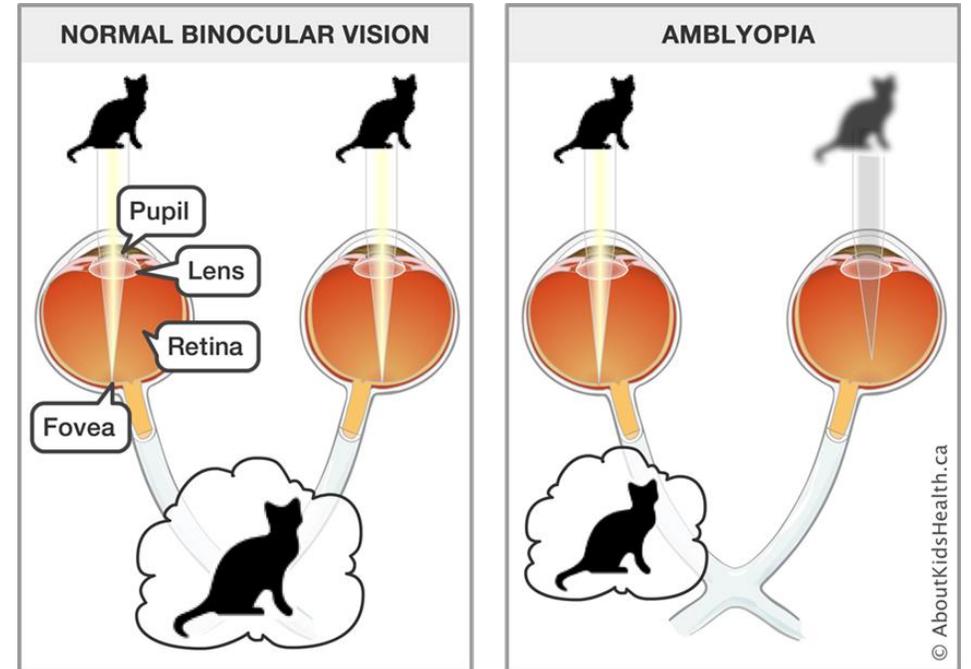
Good eye teaming skills will allow clear and singular vision for reading.

## Once upon a Time

roots, a peculiar mode of inflecting, together with a resemblance in the inflections, and a similarity of syntax or construction. Of the old Persian language the known roots are, almost without exception, kindred forms to roots already familiar to the philologist through the Sanscrit, or the Zend, or both; while many are of that more general type of which we have spoken—forms common to all, or most of the varieties of the Indo-European stock. To instance in a few very frequently recurring words—"father" is in old Persian (as in



When one eye does not turn in exactly at the same point, the words may "move", blur and split to double.



## Convergence Insufficiency

# Signs Children May Have Vision Problems

- Squinting or closing one eye
- Head tilting or eye rubbing
- Trouble concentrating or headaches

Signs may be noticed by families, teachers, or school staff



Look out: Concerns can exist even if a child passes a screening

# Myopia in Children

- Nearsightedness is increasingly common
- Often develops during school years
  - Children may sit closer or squint to see clearly
- Can progress over time



LETTER ▶ [Beyoglu Eye J. 2021 Dec 17;6\(4\):255–256. doi: 10.14744/bej.2021.27146](#) ↗

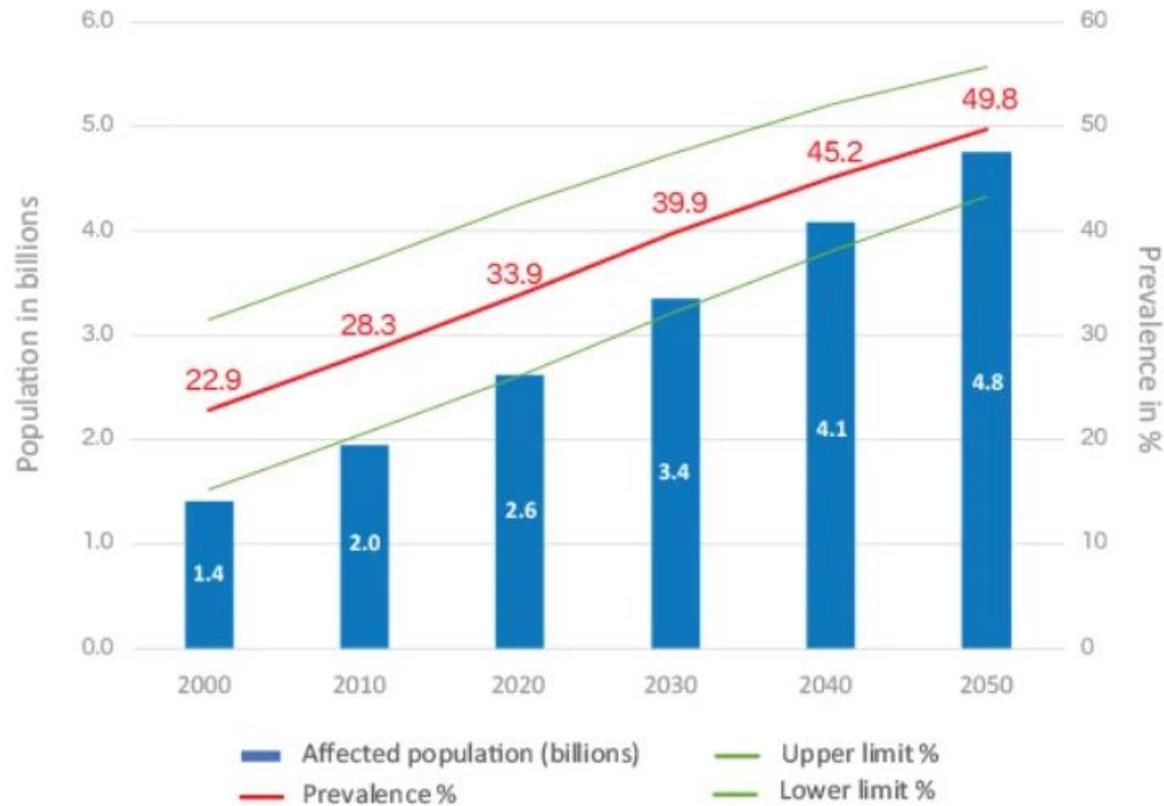
## More Than Fifty Percent of the World Population Will Be Myopic by 2050

[Ali Nouraeinejad](#)<sup>1</sup>

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# FUTURE EPIDEMIC

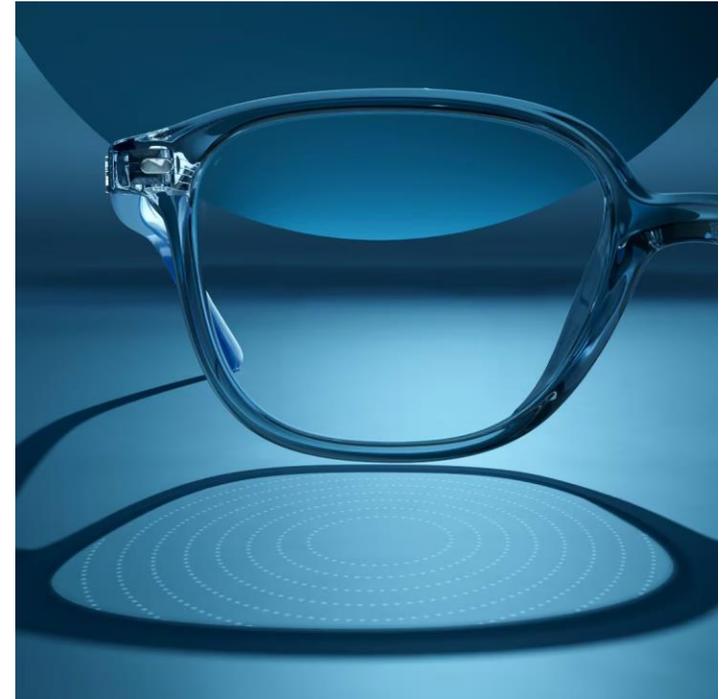


## RISING PREVALENCE OF MYOPIA: 2010 TO 2050

The recent Sydney Myopia Study found 31% of 17 year olds were myopic,<sup>16</sup> double the prevalence reported by the Blue Mountain Eye Study more than a decade ago.<sup>17</sup> But in the future, even nations which have little myopia today, will be severely affected.<sup>1</sup> And so good future planning of eye care service and delivery will be required.

# Myopia Management on the Rise

- Multiple ways to now treat Myopia early!
  - Contact Lens (2 options)
    - Daily wear vs nightly wear
  - Pharmaceuticals (nightly eye drop)
    - Careful consideration for mild light sensitivity
  - Special Glasses
    - Approved as of 2025

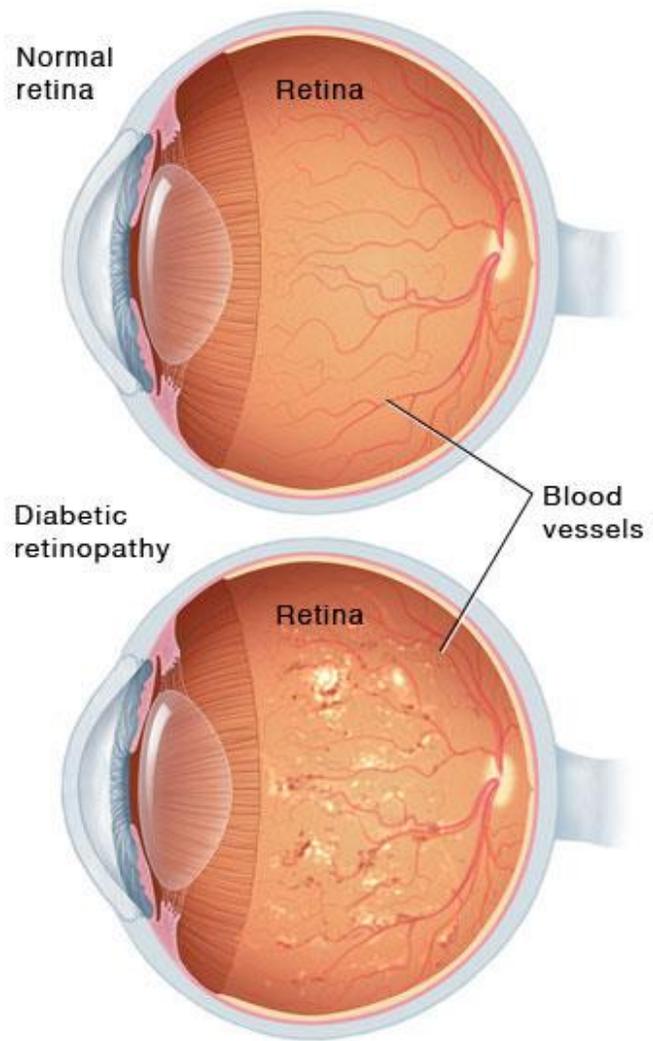


# Diabetes and Vision Changes

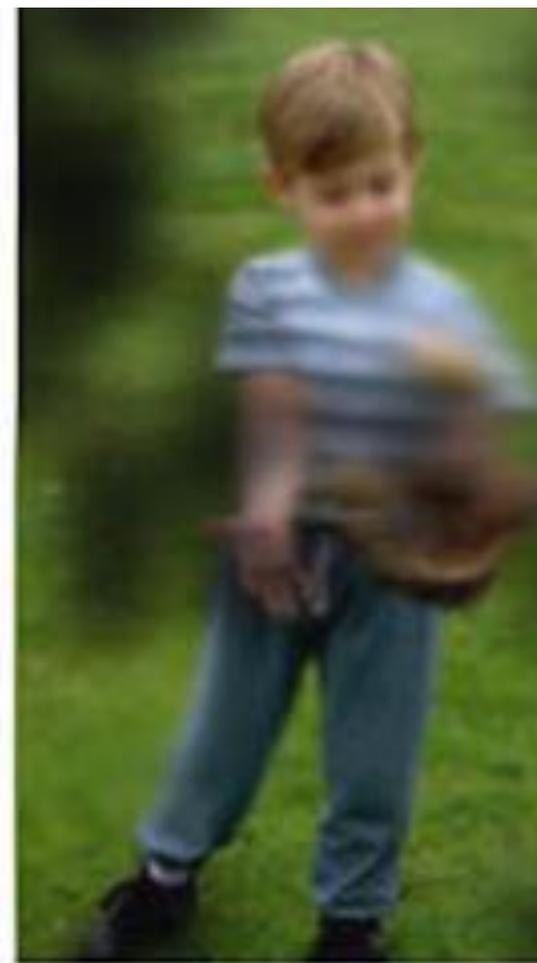
- Blood sugar changes can affect eyesight
  - Notice visual performance difference as soon as after lunch or snack time
- Vision may fluctuate
  - Child may show eye rubbing or blinking similar to dry eye
- Symptoms can be subtle and quick!
  - Dr. Bode will expand on further clinical considerations

# Diabetic Retinopathy Although Rare still a concern

- Type 2 concern >> Type 1
- “Children with Type 2 DM are 2x likely than those with Type 1 to develop Diabetic Retinopathy within 15 years of diagnosis.”
- Most concerning period for Type 1 patients developing Retinopathy is during Puberty
  - Encourage regular eye exams during this time



Normal vision



Vision with  
diabetic retinopathy

# Vision Screening and Early Detection

- Vision screening identifies possible concerns
  - Screening is a starting point, not a diagnosis
- Performing Vision Screening: follow state and local guidelines
- Helps determine who needs follow-up
  - Not all children with vision needs will fail a screening

# Role of School Nurse

- Conduct screenings per regulations
- Track screening outcomes
- Communicate concerns
- Follow up on referrals to ensure students receive eye care

Optometry knows school nurses manage high volumes, and thus your services are appreciated. It truly takes a village where everyone's observations around the student becomes vital information to help identify the trends and reoccurring concerns!

# Primary Care Considerations for Vision Care

Sara Bode, MD

Medical Director, School Health

Nationwide Children's Hospital

Professor of Pediatrics

Ohio State University College of Medicine

# Goals and Objectives

- Describe the role of the primary care provider in identifying students with vision concerns
- Outline screening recommendations during well-child care
- Learn what medical conditions are associated with visual disturbances
- Describe the role of school-based health centers (SBHC) and communication strategies for successful integration
- Case study

# Primary Care role in vision assessment

Annual visual  
assessment and  
screening

Identification of co-  
existing medical  
conditions

Referral and  
coordination to eye  
care

# AAP Guidelines



Assessment	Newborn to 6 mo	6–12 mo	1–3 y	4–5 y	6 y and older
Ocular history	x	x	x	x	x
External inspection of lids and eyes	x	x	x	x	x
Red reflex testing	x	x	x	x	x
Pupil examination	x	x	x	x	x
Ocular motility assessment	—	x	x	x	x
Instrument-based screening <sup>a</sup> when available	—	<sup>b</sup>	x	x	<sup>c</sup>
Visual acuity fixate and follow response	x <sup>f</sup>	x	x	—	—
Visual acuity age-appropriate optotype <sup>d</sup> assessment	—	—	x <sup>e</sup>	x	x

TABLE 1  
Periodicity Schedule for Visual System Assessment in Infants, Children, and Young Adults

A Current Procedural Terminology code 99174.

B The American Academy of Ophthalmology (AAO) has recommended instrument-based screening at age 6 mo. However, the rate of false-positive results is high for this age group, and the likelihood of ophthalmic intervention is low. A future AAO policy statement will likely reconcile what appears to be a discrepancy.

C Instrument-based screening at any age is suggested if unable to test visual acuity monocularly with age-appropriate optotypes.

D Current Procedural Terminology code 99173.

E Visual acuity screening may be attempted in cooperative 3-y-old children.

F Development of fixating on and following a target should occur by 6 months of age; children who do not meet this milestone should be referred.

# Medical Conditions with vision impairment in kids



## **Congenital Conditions**

Albinism, congenital cataracts, optic nerve underdevelopment, etc.



## **Eye injuries**

Corneal abrasion, foreign body



## **Systemic Diseases**

Diabetes, high blood pressure, autoimmune disorders

These conditions alert primary care providers to ensure annual vision exams (in addition to screenings) and a systemic review



## **Retinal Diseases**

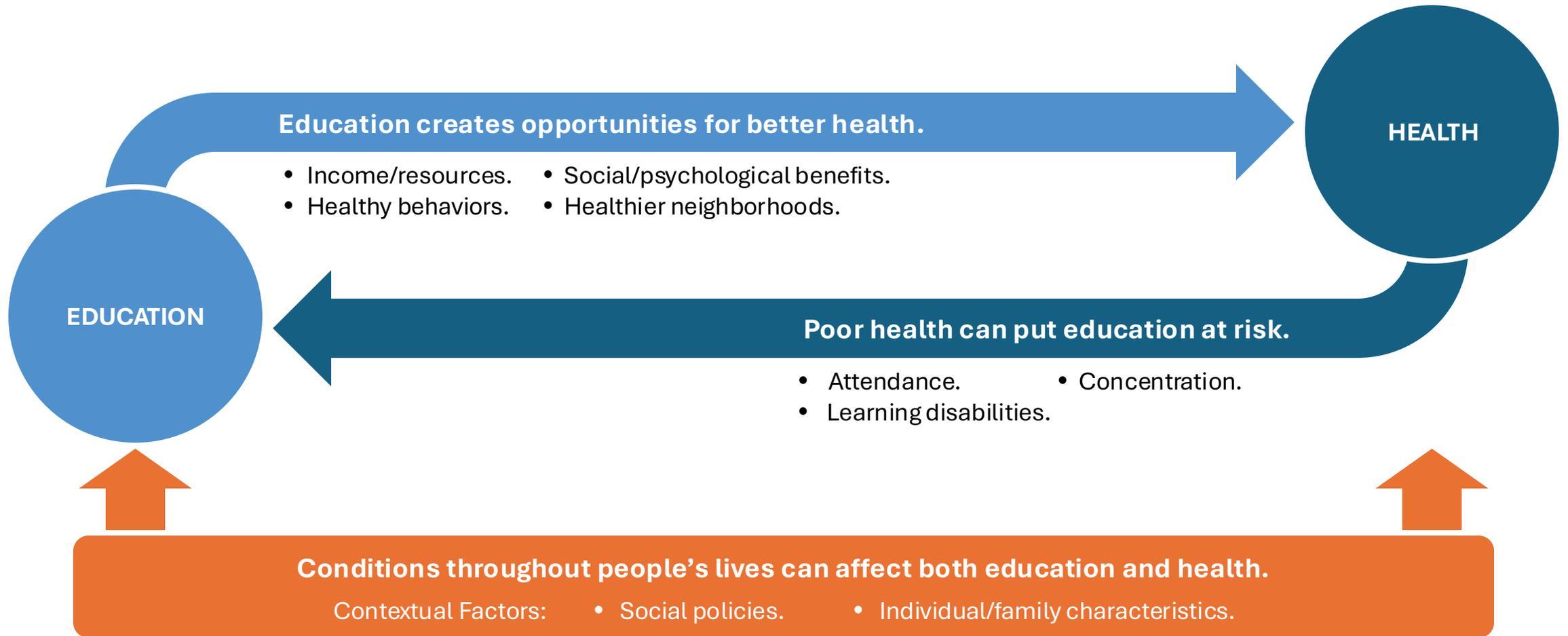
Retinopathy of prematurity



## **CVI (Cerebral/Cortical Visual Impairment)**

Brain based visual impairment

# Relationship between Health and Education

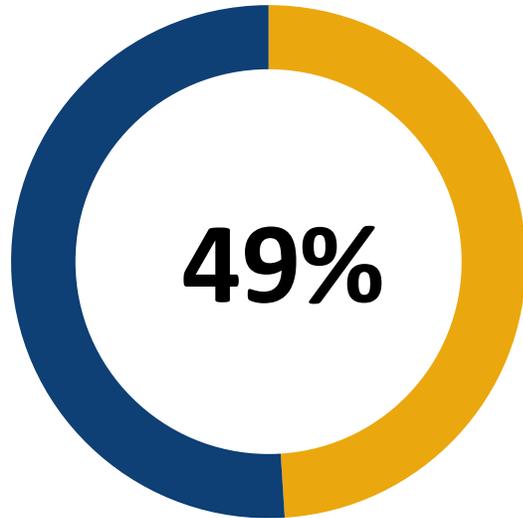


**Graphic adapted from:**

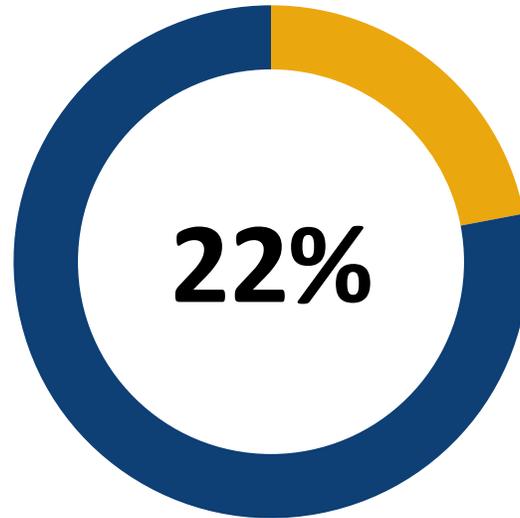
Virginia Commonwealth University. (2015, Feb. 13). *Why Education Matters to Health: Exploring the Causes*.

Center on Society and Health. <https://bit.ly/3LEuLlo>

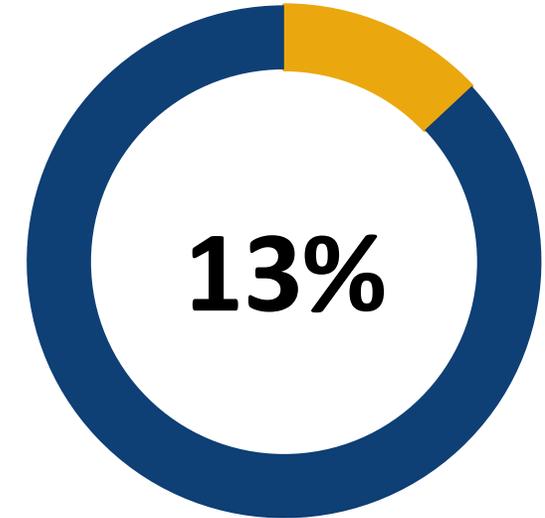
# School-Age Health Status in Ohio



Had a medical home to provide a usual source of care.



Did not have a place to go or consult when they were sick.



Reported being depressed or having anxiety.

**Source:**

Ohio School-Based Health Alliance. (2023). *School-based health care in Ohio: A closer look at school-based health centers (SBHCs)*.

# School-Age Health Status in Ohio

Only 19.58% of students who failed a school vision screening followed up with an eye doctor.



48% of students screened at school had a history of tooth decay.

20% had untreated cavities.



## Sources:

--Ohio Department of Health (n.d.). *Children's Vision Program 2019-2021 Annual Report*. <https://bit.ly/ODH-Vision>.

--Ohio Department of Health (2022, January 7). *Oral Health Survey of Ohio's Schoolchildren*. <https://bit.ly/ODH-Oral-Health>.

# Bridging the Gap

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## Access to Care



- Vision care.
- Uncontrolled asthma.
- Lacking recent well-child care.
- Vaccine exclusion.
- Overuse of the emergency room.
- Chronic absenteeism.
- Noncompliance with treatment plans.



# Partnerships for Student Success

## **SCHOOL NURSING**

Direct Nursing Services.

Triage.

Medication Administration.

Health Care Education.

Emergency Plans.

Training School Staff.

**Health Assessments**

**including vision screening.**

School Health Environment.

Health Policies and Programs.



## **SCHOOL-BASED HEALTH**

Well-Child Care Physicals.

Primary Care Mental Health.

Laboratory Services.

Sick Visits.

Immunizations.

Teen Health.

Chronic Disease Treatment.

**Referrals for Specialty Care.**

# How may vision concerns present in schools?

- School Nurse: screening, visits for recurring headaches
- Teachers: may notice behavior concerns, vision concerns
- Coaches: athletic performance
- Counselor: frustration with learning and academic performance can lead to emotional distress
- Solution?
  - Open door policy
  - Good communication
  - Involve your school-based health provider

# Case Study

- 8-year-old male presents to the SBHC with concerns for inattention, poor academic performance, and failed vision screen
- Teacher: frustrated in class, fidgety, leaving seat, declining academics
- Parent: history of hyperactivity in previous years, academic concerns worsening, difficulty with task completion at home, trouble sleeping, complains of headaches in afternoons frequently
- Coach: noticed lack of focus and poor coordination with baseball that seemed to be worsening
- School Nurse: passed vision screens in kindergarten and 1<sup>st</sup> grade, failed most recent screen with 20/80 left eye, 20/20 right eye

# Case Study cont'd

- Referral made to eye clinic
  - Further evaluation leads to diagnosis of optic nerve hypoplasia, strabismus, and amblyopia
  - Treatment includes eye patching, glasses, ongoing care
- SBHC follow up
  - Improvement in attention to schoolwork in class, no avoidant behaviors, still with concerns for focus, fidgeting, task completion, academic concerns remain
  - Headaches resolved with glasses use
  - ADHD evaluation completed, diagnosis of ADHD Combined type, treatment began with medication management and 504 plan with classroom accommodations for both vision and ADHD
- Results: improved academics, behavior, social skills, and overall family dynamics.

# Collaboration beyond Screening

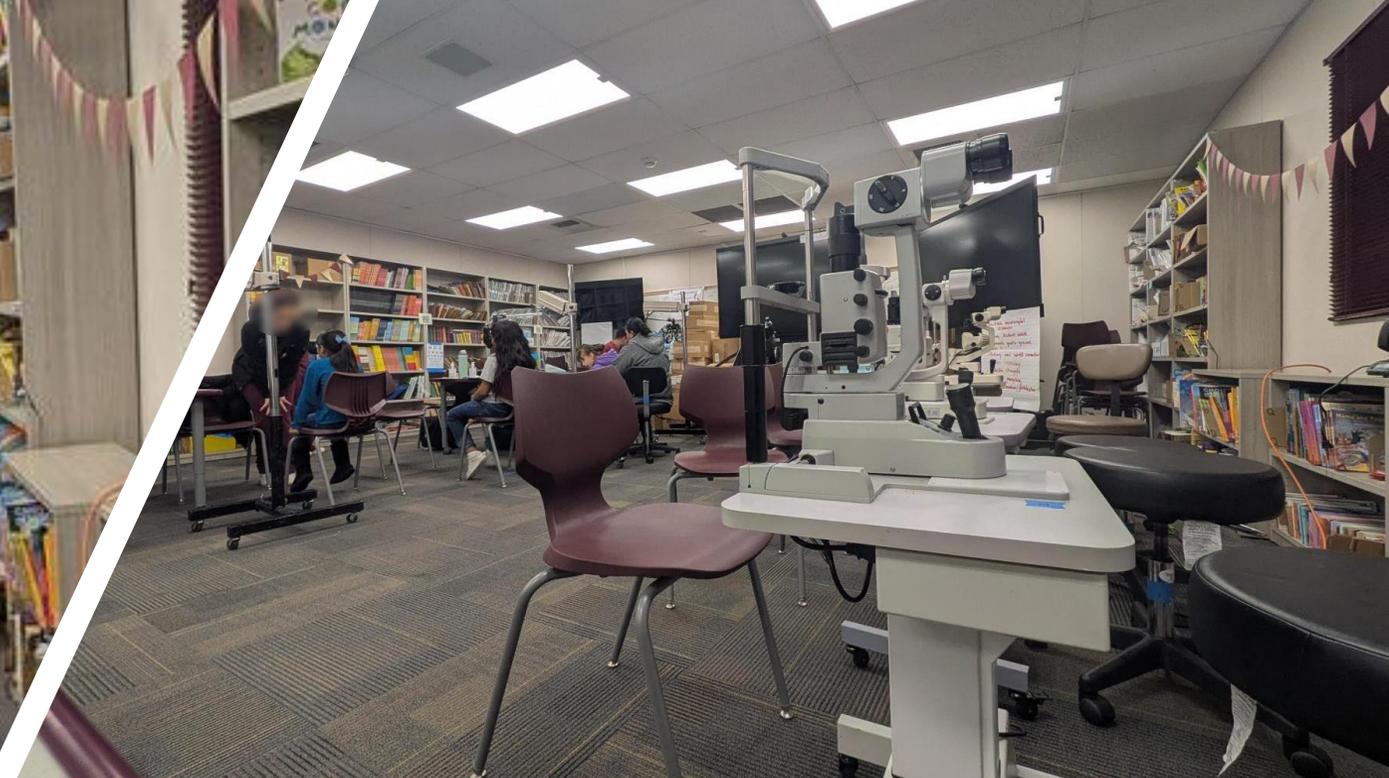
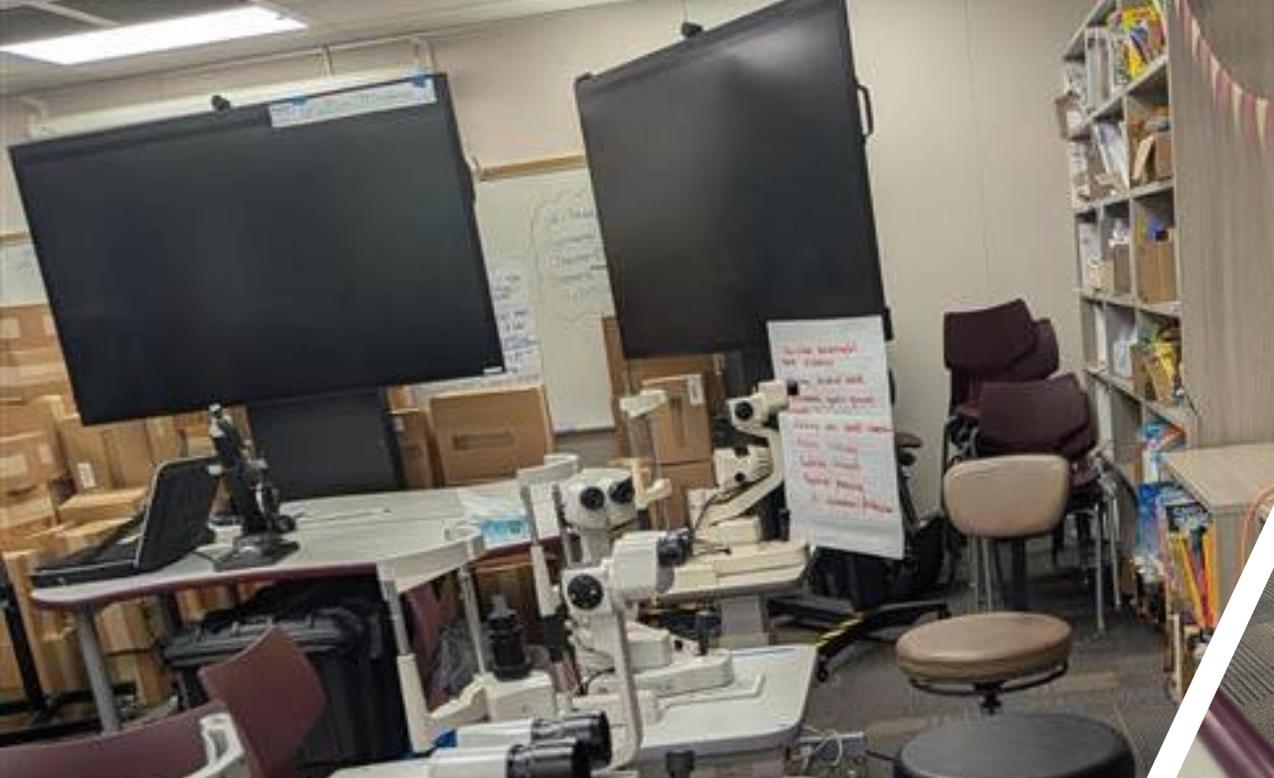
- Remember screening results are not the full picture
- Additional concerns may come from those who observe behaviors more than a provider:
  - Teachers
  - Families
  - School-based health center teams

Observation and communication matter

# Working Together: School Nurses & Eye Care Providers

What if there was a better merger to ensure a tighter closing of the loop?

Western University in conjunction with the San Bernardino Unified School District has created on-site school eye exam visits.



# Working Together: School Nurses & Eye Care Providers

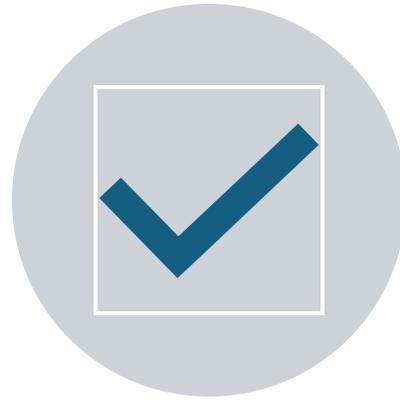
Our goals:

- Stronger interprofessional communication and collaboration to help ensure children receive needed care
- Shared Follow-up as school nurse makes the observation and Optometry provides the care
- Closing the loop: Glasses are ordered and returned to the school along with a letter of findings give on the same day to nurses to return to families. Referrals are facilitated if ever needed.

# Final Key Takeaways



VISION DEVELOPS OVER  
TIME

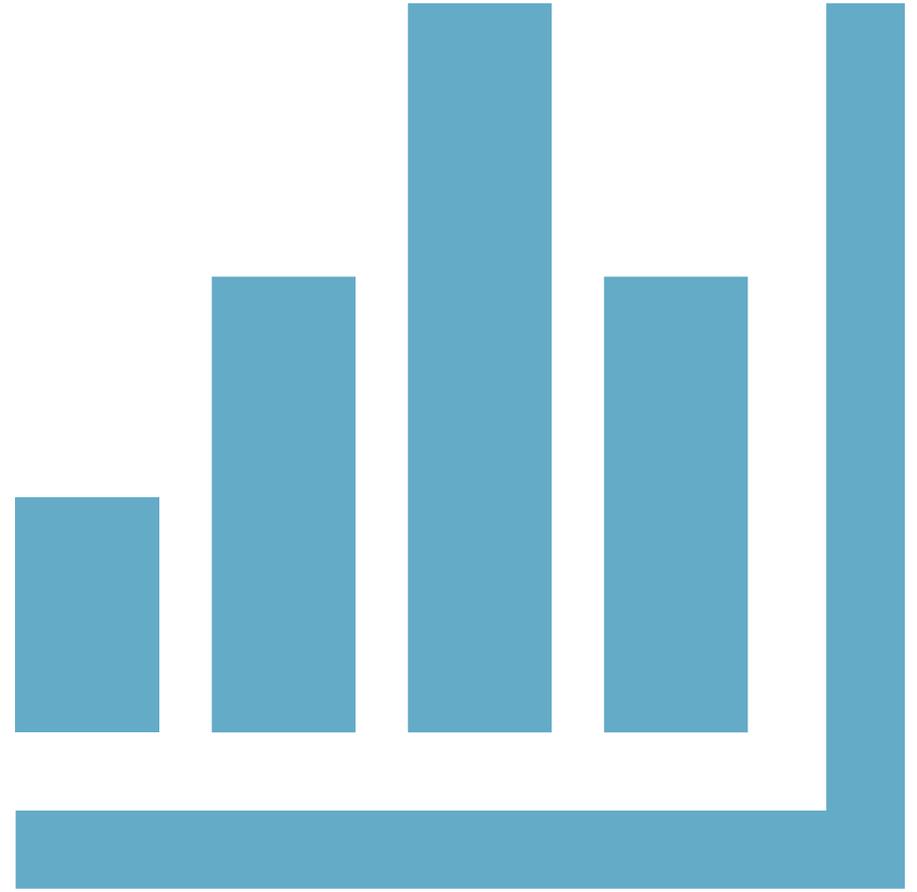


EARLY CONCERNS  
MATTER



COLLABORATION  
IMPROVES OUTCOMES

# Please complete our Zoom poll



# Upcoming Event



## Upcoming Webinar A Shared Vision: Building Community Partnerships for School-Based Eye Care Programs

Join the School-Based Health Alliance for a webinar focused on strengthening systems and partnerships that expand children's vision services in schools and communities. Participants will explore effective models for integrating vision screening, referral, and follow-up care into school health programs.

### Date & Time

April 23, 2026,  
3-4 p.m. ET



[bit.ly/4kw02xp](https://bit.ly/4kw02xp)





**2026**

## **National School-Based Health Care Conference**



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June 23-25, 2026

American University Washington  
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**Building Healthy Futures  
for Every Child**

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