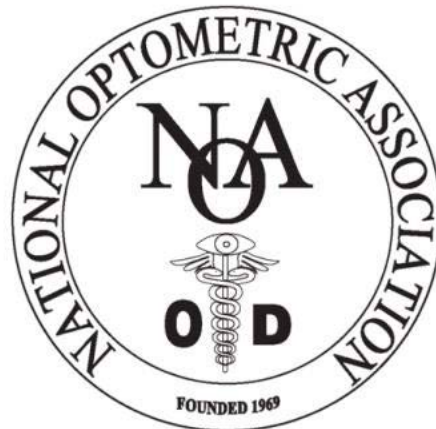


Warning Signs & Symptoms in Children's Vision

Ruth Y. Shoge, OD, MPH, FAAO
Assistant Professor, Salus University
CEO, RYS Consultants
drruth80@gmail.com





Vision Care Through The Years – Kids Edition

- When should my child see 20/20?
- When should my child have their eyes examined?
- What signs or symptoms should I be looking for?
- What are the recommendations for digital devices?
- What if my child has a concussion?



Visual Development

Visual Acuity

Birth	20/400
6 months	20/150
1 year	20/100
3 years	20/60
5 years	20/30 or better



Remember...

- Visual acuity is only ONE aspect of your child's vision
- Comprehensive eye exam
 - Clear
 - Eye teaming
 - Accommodation/focusing
 - Eye tracking
 - Healthy

When Should My Child Have An Eye Exam?

American Optometric Association Recommendations

- 6 months
 - 3 years
 - 5 years
 - Annually once in school
-
- Are online tests ok?



Infant + Toddler Visual Needs & Expectations

Birth to 2 years

- Can see up close
- Eyes are still learning to coordinate
- Good vision predates good motor coordination
 - Appropriate use of toys and lights
 - Floor/tummy time
 - Encourage crawling and creeping
 - Play games to work on
 - Hand-eye coordination
 - Visual memory
 - Fine motor skills





Infant + Toddler: Signs and Symptoms

- Excessive tearing – may indicate blocked tear ducts
- Red or crusted eyelids – may be a sign of an infection
- Constant eye turning – may indicate poor muscle control
- White pupil – may be a sign of a cataract or eye tumor
- Family history – #1 reason kids get an eye exam

A young girl with blonde hair and freckles, wearing a yellow sweater, is holding two brown eggs over her eyes. She has a playful expression and is looking directly at the camera. The background is a plain, light-colored wall.

Preschool Visual Needs and Expectations

2 years to 5 years

- Visual acuity is approaching adult levels
- Vision guides other learning experiences
- Building blocks to learn to read+write
 - Stacking building blocks
 - Rolling a ball back and forth
 - Coloring
 - Drawing
 - Legos (big ones!)

Preschool: Signs and Symptoms

- Delays in development
 - Not yet walking
 - Clumsy
 - Recognizing colors, shapes, letters
- Turning of an eye (in or out)
 - Amblyopia or “lazy eye”
 - Strabismus
- Squinting/Sitting too close to the TV
- Covering an eye
- Avoiding detailed activities
- Eye rubbing





School-Aged Visual Needs and Expectations

- Efficient and comfortable vision
 - Increased reading and homework demands
 - Print gets smaller
 - Reading comprehension
 - High emphasis on retention
 - Computer use
- Education and sports could suffer
- Vision may change frequently
- School screenings alone aren't enough
 - Most helpful if a child is near-sighted

School-Aged: Signs and Symptoms

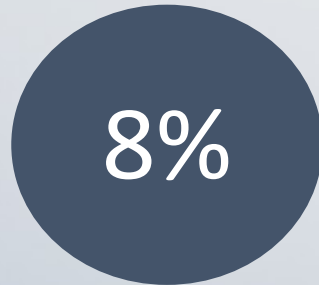
- Headaches
- Eyestrain
- Frequent eye rubbing or blinking
- Double Vision
- Covering one eye
- Head tilt or turn
- Fatigue
- Losing place when reading
- Poor performance in school
- Avoidance



Kids and Digital Devices

Computer use prevalence

1984



2000



2016





Kids and Digital Devices

Recommendations by the American Academy of Pediatrics

- Preschool
 - Under 2 years – no use except for video chatting
 - 3-5 years – limit to 1 hour per day for educational purposes
- School-Aged – consistent limits on time spent on devices

Kids and Digital Devices



- Take frequent breaks!
- Remember the 20/20/20 Rule
 - Take a break every 20 minutes
 - Look at least 20 feet away (get moving!)
 - Breaks should be at least 20 seconds
- Blue-blocking lenses?




Treatments

- Monitor
- Glasses and contacts
- Vision therapy
- Additional services

Glasses and Contacts

- Will glasses make my child's eyes worse?
- Full time
- Part time – distance or near
- Sports
- Transition to contacts



A background image of two soccer players in action. One player, wearing a white jersey with the number 10 and blue shorts, is jumping to head a soccer ball. The other player, wearing a green and black checkered jersey with 'MASSASOIT' on it and black shorts, is also jumping and reaching for the ball. They are on a green artificial turf field with bleachers and spectators in the background.

What If My Child Has A Concussion?

- 75% of concussions are considered “mild”
- Common symptoms
 - Headache
 - Dizziness/motion sensitivity
 - Light sensitivity
 - Unable to focus
 - Slow processing
 - Fatigue

Concussion in Kids

- Remove from play
 - Reduce likelihood of another concussion
 - Multiple concussions can have a cumulative effect
- See a special OD
- Treatment
 - Glasses – tinted lenses
 - Prism
 - Vision therapy
 - Rest!



Two sharpened pencils, one light blue and one dark blue, are positioned diagonally on the left side of the slide. The background is a solid yellow color.

Next Steps

- Self-reflection – did you start wearing glasses at an early age?
- Take an inventory of your child's symptoms
- Watch for the signs
- Find a child-friendly optometrist
- Practice good visual hygiene
 - Frequent breaks
 - Appropriate working distance
 - Wear glasses if prescribed
- Visit your eye doctor annually once school-aged



Thank you!

