Chapter 8

Screening Considerations in the School Setting

- Health Screenings  
- Vision Screening  
- Hearing Screening  
- Dental and Health Screening  
- Height and Weight Screening  
- Scoliosis Screening
Health Screenings

Students who are hearing and seeing well, and have no dental pain, are more successful in the classroom; they have better attendance, test scores and graduation rates. During the school-age years, lifelong health habits are being established, and primary interventions at this time to screen for and prevent obesity can have the most benefit. Identifying children with scoliosis is also important as this condition may need observation as a child continues to grow. Often it is necessary for the school to assess these areas through screenings.

The information provided in this chapter is to be used in conjunction with the current manuals and guidelines available from the Georgia State Department of Education (DOE) and the Georgia Division of Public Health.

Certificate of Vision, Hearing, Dental and Nutrition Screening – Form 3300

Georgia law requires that every student entering a Georgia public school for the first time, regardless of age, have a Certificate of Vision, Hearing, Dental and Nutrition Screening - Form 3300 on file. The purpose of the form is to alert parents of problems their children may have in these areas.

Parents must comply with this rule. The screenings reported on the form must have been conducted within one year prior to the time that the child is admitted for the first time to a public school. Any child admitted to a public school without a certificate must provide one to the school within three months following admission. When a child transfers to another school within Georgia, the Certificate and any related follow-up documentation must be forwarded to the new school.

A local health department may accept written records of screenings performed by private practitioners in a state other than Georgia, provided the screenings were conducted within one year prior to the time that the child is admitted for the first time to a Georgia public school. In such a case, the Health Department shall sign and issue a Certificate based upon the received information.

An authorized screener, qualified to conduct the particular tests, must sign each section of the Form 3300. Signature indicates that all rules and regulations for examination and screenings have been followed as well as the recommended screening procedures found in these guidelines. Each section of the form lists who is authorized to sign that particular section.

Refer to additional information on form 3300 in Chapter 1.

Additional Screening Considerations

Some schools require annual mass hearing and vision screenings of certain grades or the entire school. These screenings at schools can be organized and completed by school nurses with the help of volunteers. Screeners should be adequately trained in appropriate screening procedures and follow recommended criteria for referral. Oversight should ensure that screeners are competent. Training should be documented to show that screeners possess the skills necessary to perform screening procedures.

School nurses are among those who possess the necessary skills for the development and implementation of school hearing and vision screening programs at the local level. School screening programs may involve screening an individual student or large numbers of students in a routine health screening.

To facilitate development, implementation and evaluation of a successful screening program, the following points should be considered:

- Number of students to be screened
- Minimizing academic interruption
- Availability of trained screening personnel
- Size of groups of students to be screened
- Selection of screening location within schools
- Community resources available for follow-up
• Frequency of routine screening.

In addition to routine or mass screenings, a screening may also be performed when a child:

• Enters a new school system
• Repeats a grade
• Is being evaluated as part of the Student Support Team (SST) process and per local school district policy
• Is being evaluated for Special Education or required under IDEA (Individuals with Disabilities Education Act) regulations
• Displays symptoms or difficulties with hearing, speech, language or learning which are of concern to parent, guardian, healthcare provider, teacher or other school staff
• Experiences head trauma with loss of consciousness
• Receives exposure to potentially damaging noise levels
• Takes medications that can cause hearing loss
• Begins Driver's Education training.

Parent permission is not required for mass school screening. However, it is suggested that parents be notified of upcoming screenings via school letter, newsletter, school marquee or other communication strategies. Permission is required for screening of individual students who are being screened as part of a special education or Student Support Team (SST) evaluation or because of specific concerns noted by school staff.

Children with Special Healthcare Needs

Some children have difficulty performing the required tasks necessary for screening. Screening children with physical, emotional, cognitive or developmental delays may require extra planning and preparation. Screening personnel may benefit from the assistance of the child's parent, teacher or paraprofessional.

It is important for screeners to be familiar with ways of proper approach or management techniques needed in order to obtain reliable and valid results.

Some children may be uncomfortable in new and unfamiliar situations. Parents and teachers can incorporate practice sessions to familiarize the child with the process. It may be helpful for some children to observe other children during the screening process. If you are unable to gain cooperation during this initial screening, plan to screen another time.

Other children may be unable to understand or follow directions. They may forget the response they were taught during the demonstration period, or they may respond inappropriately. It is preferable to work with such children on an individual basis. Remember, praise and positive reinforcement work well for all children.

Below are additional considerations for screening children with special healthcare needs:

• Does the screening location accommodate children in wheelchairs, walkers and other assistive devices?
• How does the screening accommodate the needs of the technology-dependent child?
• Can the child move his arms?
• Is the environment conducive to the type of screening being given, i.e., quiet room with no extraneous noise for hearing screening?

Sample Special Education Forms – Georgia Department of Education

doe.k12.ga.us/Curriculum-Instruction-and-Assessment/Special-Education-Services/Pages/Sample-Special-Education-Forms.aspx
Referral Considerations

Children who do not pass the initial screening should be re-screened. A temporary illness, lack of understanding, fatigue, apprehension, allergies, etc., may cause initial failure. For a school-based screening program, re-screen in two to three weeks. For office and clinical settings, re-screen in six to eight weeks before making a referral.

Referral can be described as the process by which individuals or agencies ensure that action is taken to meet identified problems. The referral process helps match parents/guardians with health professionals and should include the following considerations:

- In a school setting, when a child does not pass the second screening, referral letters should be mailed to the parent or guardian within two weeks. Assess the need for financial assistance with the referral.
- Families should be encouraged to seek professional examination in determining the extent and the need for further care. Where necessary, the health professional should assist the family to access the appropriate professionals in the healthcare system. It is important to identify the individual(s) responsible for ensuring follow-up as appropriate.
- If after approximately four weeks the results of an examination have not been received, mail follow-up letters.
- Documentation of professional examination and any recommended treatment should be communicated to school personnel within three calendar months of the screening date. School nurses should update the school health record and communicate recommendations made during professional examination to teachers and other school personnel involved with the child.
- If families are noncompliant with follow-up, make referrals to the school counselor, school social worker or school principal. If the school personnel are unable to get response from the family, consider a DFACS referral for medical neglect.

When the examination results have been obtained, note the following points:

- Correction is necessary, or if the child has any special needs or concerns.
- Child has been referred for further medical, surgical, hearing or vision evaluations.
- The child requires medication, especially during school hours.
- The child must be referred to Special Education or receive further medical care.

Parents and guardians should communicate findings and recommendations to the child's school. It is in the best interest of the child for the faculty and staff to make any necessary accommodations the child may need, whether or not the child is eligible for Special Education:

- Assist families with breaking down barriers to accessing the medical care their child needs. Keep in contact with parent to ensure the child receives the care he needs.
- PeachCare for Kids is a low cost medical insurance for uninsured children who are eligible, and should be recommended for those in need of financial assistance. Parents, healthcare providers, school nurses and other school personnel can assist families in making an application online at peachcare.org. Call 1-877-GA PEACH for an application. If the child is not eligible for PeachCare, he may be eligible for Medicaid. Access to a computer with the Internet and some basic financial information is all that is needed. The Internet is available free of charge at public libraries. See also Chapter 11 for additional information on PeachCare for Kids.

Resources

Georgia Department of Public Health – Form 3300 Online Training for the School Nurse
dph.georgia.gov/form-3300-school-nurse-trainings
Georgia Department of Public Health

Form 3300

Certificate of Vision, Hearing, Dental, and Nutrition Screening

FILE THIS FORM WITH THE SCHOOL WHEN YOUR CHILD IS FIRST ENROLLED IN A GEORGIA PUBLIC SCHOOL

SCREENER CONTACT INFORMATION IS REQUIRED

Parent/ Guardian Name: __________________________ first ______ middle ______ last ______

Parent/ Guardian Contact Information:

Daytime phone number: ________________________

Evening phone number: ________________________

Cell phone number: ____________________________

Child’s Name: __________________________ first ______ middle ______ last ______

Date of Birth: ______ / ______ / ______

Gender: ☐ Male ☐ Female

Child’s Home Address: __________________________ street city state zip code county

VISION

☐ Unable to screen (explain why below)

☐ Uses corrective lenses

☐ Worn for testing

☐ Passed (20/30 in each eye for age 6 and above, 20/40 in each eye for below age 6)

☐ Needs further evaluation

☐ Under professional care (explain below)

Screening completed by:

☐ Physician

☐ Local Health Department

☐ Optometrist

☐ “Prevent Blindness Georgia” employee

☐ School Registered Nurse

Screener’s Signature Date

I certify that this child has received the above screening.

Contact Information:

HEARING

☐ Unable to screen (explain why below)

☐ Uses hearing aid / assistive device

☐ Passed at 500, 1000, 2000, and 4000 Hz with audiometer at 20 or 25 dB

☐ Needs further evaluation

☐ Under professional care (explain below)

Screening completed by:

☐ Physician

☐ Local Health Department

☐ Audiologist

☐ Speech-Language Pathologist

☐ School Registered Nurse

Screener’s Signature Date

I certify that this child has received the above screening.

Contact Information:

DENTAL

☐ Unable to screen (explain why below)

☐ Normal appearance

☐ Needs further evaluation

☐ Emergency problem observed

☐ Under professional care (explain below)

Screening completed by:

☐ Physician

☐ Dentist

☐ Local Health Department Registered Nurse

☐ Registered Dental Hygienist

☐ School Registered Nurse

Screener’s Signature Date

I certify that this child has received the above screening.

Contact Information:

NUTRITION

☐ Unable to screen (explain why below)

☐ Normal appearance

☐ Needs further evaluation

☐ Under professional care (explain below)

Screening completed by:

☐ Physician

☐ Local Health Department

☐ Registered Dietician

☐ School Registered Nurse

Screener’s Signature Date

I certify that this child has received the above screening.

Contact Information:

FOR SCHOOL SYSTEM ONLY

Follow up for further evaluation

1st attempt 2nd attempt Actions reported (if any)

Vision

Hearing

Screeners’ Comments:

Sample
<table>
<thead>
<tr>
<th>Dental</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition</td>
<td></td>
</tr>
</tbody>
</table>

Student support services initiated on:
Georgia Department of Public Health Form 3300
Certificate of Vision, Hearing, Dental, and Nutrition Screening

Who is required to file this Form 3300? The parent or guardian of a child who is being admitted for the first time to a public school in Georgia must file a completed Form 3300 with the school when the child is enrolled.

What is the purpose of Form 3300? Form 3300 is intended to make sure that every child in Georgia is screened for possible problems with their vision, hearing, teeth and nutrition. The earlier these problems are detected, the earlier parents can seek professional help for the child.

What screenings are required? Four different screenings are required: vision, hearing, dental, and nutrition. All four screenings must be conducted and reported on the form before it can be filed with the school.

Who can conduct the screenings? Your child’s doctor is authorized to conduct all four screenings, as is your local health department. In addition, the vision screening can be conducted by a Georgia licensed optometrist, an employee of Prevent Blindness Georgia trained to conduct vision screening, or a school registered nurse; the hearing screening can be conducted by a Georgia licensed speech-language pathologist or audiologist, or a school registered nurse; the dental screening can be conducted by a Georgia licensed dentist, dental hygienist, or a school registered nurse; and the nutrition screening can be conducted by a Georgia licensed dietician or a school registered nurse. It is not necessary that the same person conduct all four screenings.

What does “BMI” and “BMI%” mean? “BMI” means “body mass index.” BMI is a way to describe how much a child weighs in relation to height. “BMI percentile” is a way to compare the child’s body mass index to the body mass index of a healthy child. If the child’s BMI is less than 5% or more than 84% of what is appropriate for his or her age and height, then the child should be taken to a doctor or dietician for a more detailed evaluation. For more information, visit the Centers for Disease Control and Prevention website on child and teen BMI at:
http://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/about_childrens_bmi.html

What should a parent do if the “needs further evaluation” box is checked? “Needs further evaluation” means that the child may have a problem. If the “needs further evaluation” box is checked, then the parent should take the child to a professional for a more detailed evaluation. Your doctor or local health department may be able to help, or recommend someone who can help.

What if a Form 3300 was previously filed for the child at another school? It is only necessary to file the Form 3300 once. If the Form 3300 is filed at the child’s first school, and the child later transfers to another school, then the original school is required to forward the Form 3300 to the new school.
Vision Screening

Children who do not see well do not learn at their optimum level. Young children may have, or be at risk for, amblyopia or lazy eye blindness and may literally lose vision in one eye if the problem is not diagnosed and treated by age six. For other children, vision changes may begin in third, fourth, fifth and sixth grade during growth spurts. It is important to identify these children and make sure parents are aware that their child needs a visit to the eye doctor and/or glasses. Many times a problem comes as a complete surprise to both child and parent. Careful follow-up for those identified children by the nurse can ensure that needed medical care is obtained with referrals (for assistance) if necessary.

When a child does not pass the second screening, send a referral letter home to the parent or guardian within one week. Contact the parent within one week to confirm receipt of the referral letter, discuss concerns and encourage follow-up. A sample referral letter is located at the end of this section.

If a child is unable to participate in routine vision screening procedures, or the results are inconclusive, refer the child to an eye care professional.

Parents should check insurance requirements to see if a referral is needed to see an ophthalmologist or optometrist.

For the most current and comprehensive updates on vision recommendations in Georgia and resources for school nurses, please visit the Prevent Blindness Georgia website at georgia.preventblindness.org/childrens-vision-screening-training-certification-supplies

This link will also carry you to the document “Our Vision for Children's Vision: A National Call to Action for the Advancement of Children's Vision and Eye Health,” which provides great resources such as “Common Children's Vision and Eye Problems” and “Eye Safety Tips.”

Vision Screening Training

On the following pages, you will find the “Vision Screening Training for Georgia’s School Nurses,” a training course provided by Prevent Blindness Georgia. Prevent Blindness was established in 1965 as an affiliate of Prevent Blindness America, the nation’s leading volunteer eye health and safety organization. With a focus on promoting a continuum of vision care, Prevent Blindness Georgia touches the lives of thousands of people each year through vision screening, vision screening training, public education and vision services for people in need.

The training document which follows includes:

• Importance of vision screening
• Signs and symptoms of vision problems
• Guidelines for specific tests and tools to screen various age groups
• Instructions for setting up screening area and conducting screenings on all age groups
• Interpreting screening results
• Recommendations for periodicity of screening
• Follow-up on children who fail the screening
• List of resources for information about eye health and vision problems, and for assistance for students.

You may also call Jenny Pomeroy at 404-266-3334 or Laurie Irby at 404-266-1548.
Vision Screening Training for Georgia’s School Nurses

July 2015

Vision Screening Training for Georgia’s School Nurses

- Guidelines as of July 2015
- Includes recommendations published by Expert Panel of National Center for Children’s Vision and Eye Health in January 2015 for vision screening children 36 to <72 months
- Incorporates revised information regarding screening of school-aged children (6+)
- Begin incorporating changes and purchasing new tools as existing tools need to be replaced
- Check www.pbga.org for new guidelines

Vision Screening Training for Georgia’s School Nurses

- Following presentation is arranged with general information at the beginning and end
- Each screening test is a stand-alone section in between so you can easily skip sections you do not need
- Guidelines are provided for all age ranges

Course Objectives

- Understand importance of vision screening
- Recognize signs of vision problems
- Conduct individual or mass vision screening in a school setting
- Understand which children to rescreen
- Interpret screening results for referral
- Follow-up on children who fail the screening

Why screen children’s vision?

- Vision problems are leading handicap of childhood
  - One in twenty preschool children has a vision problem
  - One in four school-age children has a vision problem
- Children are not always aware of problems
- 80% of what a child learns is visual
- Vision problems can lead to loss of sight, learning difficulties or delayed development

Training Provided by Prevent Blindness Georgia

Mission: prevent blindness and preserve sight through vision screening, training to vision screen, and public education.
Screening vs. Examination

**Screening**
- Identifies need for eye exam
- Identifies problems early
- Provides eye health education opportunity
- Results in referral to eye care professional

**Examination**
- Examines subject for eye disorders/diseases
- Diagnoses problems
- Prescribes treatment
- Can be completed only by ophthalmologist or optometrist

*Screening is not, and does replace, an eye exam*

Screening Components

- Observation of problems (ABC’s)
- Distance visual acuity test
- Color vision testing (age 6, one time)
- Near visual acuity, as needed, for Special Ed evaluations ONLY
- Report to parents and follow-up

Nature of Sight

- Vision is learned, from birth through age 7-8, as brain receives normal visual experiences from each eye
- If brain receives two confusing or unequal images, it may suppress vision from one eye by about age four resulting in vision loss if not treated by about age six
- Brain merges images from the two eyes, via the optic nerves, to enable depth perception

Common Eye Problems: Refractive Error

**Defect in optics of eye resulting in lack of precise focus of light rays on retina causing blurred image**
- Nearsightedness (Myopia) – near vision clear but distant vision blurry
- Farsightedness (Hyperopia) – distant vision clear but near objects blur
- Astigmatism - light rays scatter due to uneven surface of lens or shape of eyeball

Common Eye Problems: Strabismus

- Eyes that are misaligned or not straight
  - Affects one or both eyes
  - Constant, intermittent, or alternates eyes
  - Affects about 3-5% of U.S. children
  - Results in permanent vision loss, if left untreated
Common Eye Problems: Strabismus

- Causes of strabismus
  - Faulty muscle attachment
  - Birth injury
  - Heredity
  - Illness
  - Excessive farsightedness/need for glasses
- Treatment is glasses or surgery depending on cause

Common Eye Problems: Amblyopia

Reduced vision in an eye that has not received adequate use during early childhood

- Affects 1-3% of general population
- Permanent vision loss occurs if not treated early
- Caused by significant, uncorrected refractive error, strabismus, or vision deprivation (caused by ptosis, cataract or cyst)
- Treatment may be glasses, surgery and/or patching/eye drops/contact lens

Common Eye Problems: Amblyopia

Reduced vision in an eye that has not had adequate use during childhood

Implementing Vision Screening in a School Setting

- Identify and train screeners
- Obtain recommended screening tools and identify suitable screening location
- Create documentation forms
- Create parent notification letters that are culturally appropriate & in parents’ native language(s)
- Define procedures for screening untestable children and for re-screening
- Establish follow-up system

Implementing Vision Screening in a School Setting

- Develop list of:
  - local eye doctors who will see children
  - voucher programs for those who need financial aid
- Educate parents about importance of good vision health and follow up eye exams and about children who need eye exam because of certain medical conditions that put them at greater risk
- Inform teacher(s) about recommended treatment plan so teacher can enforce it
- Evaluate program regularly

Screening Tools for Mass Screenings

<table>
<thead>
<tr>
<th>Age</th>
<th>Prior to 7/15/15</th>
<th>7/15/15</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 through 5</td>
<td>Lea Symbols® 10’ chart</td>
<td>VIP 5’ test</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EyeCheck (4-5 yrs) 5’ test</td>
</tr>
<tr>
<td></td>
<td></td>
<td>MASS/VAT 10’ test</td>
</tr>
<tr>
<td>6 and older</td>
<td>HOTV 10’ chart</td>
<td>Sloan Letters 10’ chart</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lea Numbers® 10’ chart</td>
</tr>
</tbody>
</table>

Color Vision Test
**Additional Screening Tool for Special Ed/RTI Evaluations Only**

- Near Visual Acuity Tests

<table>
<thead>
<tr>
<th>Age</th>
<th>Prior to 7/15/15</th>
<th>7/15/15</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 6</td>
<td>Lea Symbols® Near Card</td>
<td>Not recommended</td>
</tr>
<tr>
<td>6 and older</td>
<td>Lea Symbols® Near Card</td>
<td>Sloan Letters Near Card Lea Numbers® Near Card</td>
</tr>
</tbody>
</table>

**Recommended Occluders 7/15/15**

- Best practice
  - Eye patch
- 2" hypoallergenic surgical tape
- Acceptable practice
  - Specially designed occluder glasses
- Unacceptable
  - Hand
  - Paper cup
  - Paper occluder or tissue
  - Cover paddle or “Mardi Gras” mask (except for children 10 and older)

**General Screening Supplies Checklist**

- Documentation forms
- Pens
- Screening instructions
- Pointer
- Measuring tape
- Clipboard
- Masking tape
- Tissues
- Disinfectant wipes
- Happy Feet
- Occluders
- Cotton swabs

**Minimize cross-contamination**

- Follow precautions for infection control
- Disinfect your hands *before* each child
- Clean frames of occluder glasses before each child
- Defer screening sick children

**Space Requirements**

- Quiet area free from distractions
- Uncluttered, non-patterned wall
- At least 12 feet of space free from obstructions for 10 foot distance acuity test, 7 feet for 5 foot test
- Normal lighting without shadows or glare on visual acuity test card or chart

**Screening Procedure**

- Confirm child’s age to determine particular acuity tool, criteria and other tests to conduct
- Determine whether child wears prescription glasses or contact lenses and note whether they are being worn
- Note any symptoms or concerns reported by teacher
- Note any known vision problems or family history of vision problems
Screening Procedure

- Observe for signs & symptoms of vision problems
- Complete distance acuity screening
- Screen for color deficiency, if needed
- Complete near acuity for Special Ed evaluation
- Re-screen, as necessary, within 2 - 3 weeks
- Make referrals to eye care professional as appropriate
- Follow-up on referrals

ABC’s of Detection

Types of referable signs that nurse may observe or parents/teachers may have noted:

- Appearance of child’s eyes
- Behavior and body language
- Complaints by child

ABC’s of Detection

Appearance Signs

- Eyes cross or turn out or drift
- Eyes are reddened or continually watery
- Eyelids are red, encrusted or swollen
- Eyelid droops
- Sty or infection on eyelid
- Eyes are different sizes
- Eyes are in constant motion
- One or both eyes look cloudy
- Pupil is white
- Eye appears to be injured (red, bloodshot, blackened, bruised, swollen, cut/scratched)

NOTE – Postpone screening if child has conjunctivitis

Behavior Signs

- Becomes rigid while viewing distant objects
- Tilts head to one side most of the time
- Squints or frowns when trying to focus
- Blinks excessively or rarely blinks
- Thrusts head forward or backward while looking at distant objects
- Closes or covers one eye when doing near work
- Rubs eyes excessively
- Is unusually awkward, clumsy or uncoordinated
- Brings objects close to eyes

ABC’s of Detection

More Behavior Signs

- Moves head close to desk or screen when reading
- Sits close to TV
- Has poor eye-hand coordination
- Uses finger to keep place while reading
- Has short attention span
- Reverses letters and words
- Is irritable or restless during sustained near work or visual concentration

ABC’s of Detection

Complaint Signs

- Headaches, nausea or dizziness
- Letters blur or lines run together or jump
- Eyes itch, burn or ache
- Vision blurred after close work
- Cannot see well or cannot see board
- Sees double
- Sensitivity to light
Two Approaches to Vision Screening

- Monocular measure of recognition visual acuity
  - Child tells you what he/she can see on card/chart
  - Smallest optotypes (shapes) child can see indicate clarity of vision
- Instrument-based screen
  - Auto-refraction or photoscreening
  - Identifies risk factors for amblyopia but does not measure acuity

Visual Acuity

Quantifiable measure of ability to identify black symbols on white background at standardized distance. Indicates clarity of vision

\[
\begin{align*}
20 & = \text{Distance from child to chart} \\
60 & = \text{Distance at which normal eye reads the line}
\end{align*}
\]

Child with 20/60 vision sees as if three times farther from chart than a child with normal vision

Distance Visual Acuity Screening Ages 3 through 5

- Test should meet national and international chart design guidelines
- Recommended optotypes (shapes):
  - Lea Symbols®
  - HOTV letters

Distance Visual Acuity Ages 3 through 5

- Recommended distance and format
  - Single isolated optotypes with four flanking “crowding bars” at 5 feet
  - Single line of optotypes with crowding bars on all four sides at 10 feet

Distance Visual Acuity Ages 3 through 5 Tests available as of 7/15/15

- Vision in Preschoolers (VIP) - 5 foot test
- EyeCheck – 5 foot test for 4 and 5 year olds
  - Development of pages for 3 year olds in progress
- Massachusetts Visual Acuity Test (MASS VAT) – 10 feet test

Distance Visual Acuity Ages 3 through 5 Unacceptable Tests (7/15/15)

- If you are still using one of charts below, replace it with one of “acceptable” tools on previous slide as soon as possible to insure accuracy of screening results
  - Snellen
  - Landolt C
  - Tumbling E
  - Allen Preschool Vision Test
  - Kindergarten Eye Chart
  - Lighthouse Chart
Distance Visual Acuity Tests
Ages 3 through 5 (as of 7/15/15)

- Continue using 10’ Lea Symbols® chart until you need to replace or purchase additional screening tools
- Switch to “acceptable” tool at that time:
  - VIP
  - EyeCheck (for 4 and 5 year olds only as of 7/15/15)
  - MASSVAT

Setup of Screening Area
Lea Symbols® 10’ Distance Chart

- Following instructions are for setup and testing using Lea Symbols® 10’
- As you purchase new “acceptable” tools, follow manufacturers’ directions for set up and testing
- Critical line (passing acuity) is same for all tests:
  - 20/50 for 3 year olds
  - 20/40 for 4-5 year olds

Setup of Screening Area
Lea Symbols® 10’ Distance Chart

- Place chart on uncluttered, well-lighted wall
- Hang with 20/40 line 42 inches from floor
- Place heels of Happy Feet 10 feet from chart and centered in front of chart
- Place chair, pointer, pen, clipboard and documentation forms by chart
- Place occluders, key card and trash basket by Happy Feet

Procedures for Screening
Lea Symbols® 10’ Distance Chart

- Screen with prescription glasses on
- Stand child on Happy Feet with child’s heels (or back of head if in wheelchair) lined up with heels of Happy Feet
- Practice, with both eyes open, pointing to each shape on top line of chart
- Hold pointer vertically, directly below symbol to be named, leaving white space between the pointer and symbol
- Positively reinforce each response

Procedures for Screening
Lea Symbols® 10’ Distance Chart

- Ask helper to cover child’s left eye (adult should occlude for young children)
- Screen right eye starting on end of 20/80 line, down outside edge of chart to pass line, then across pass line
- Pass line is 20/50 for age 3; 20/40 for ages 4&5
- Child must read more than half of symbols to pass line
- Proceed down chart in zigzag fashion to the smallest line child can read
- Acuity is lowest line successfully completed
- Record acuity of right eye
- Watch for proper occlusion
- Cover right eye and repeat procedure, starting from opposite end of 20/80 line
- Record acuity of left eye
- Record observations
## Interpreting Results

### Lea Symbols® Distance Vision Chart

<table>
<thead>
<tr>
<th>Age</th>
<th>Passing/Critical Line</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 years old</td>
<td>20/50</td>
</tr>
<tr>
<td>4 - 5 years old</td>
<td>20/40</td>
</tr>
</tbody>
</table>

## Standard for Passing

### Lea Symbols® Distance Vision Chart

<table>
<thead>
<tr>
<th>Age</th>
<th>Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 years old</td>
<td>Acuity 20/50 or better in both eyes with no two-line difference</td>
</tr>
<tr>
<td>4 - 5 years old</td>
<td>Acuity 20/40 or better in both eyes with no two-line difference</td>
</tr>
</tbody>
</table>

## Standard for Re-screening/Referral

### Lea Symbols® Distance Vision Chart

<table>
<thead>
<tr>
<th>Age</th>
<th>Re-screen then refer</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 year old</td>
<td>Acuity 20/60 or worse in one or both eyes OR 20/50 or better in both eyes with two-line difference</td>
</tr>
<tr>
<td>4 - 5 years old</td>
<td>Acuity 20/50 or worse in one or both eyes OR 20/40 or better in both eyes with two-line difference</td>
</tr>
</tbody>
</table>

### Notes:
- Two-line difference exists when child sees at least two lines better with one eye than the other.
- Examples:
  - 20/50 and 20/30 - 20/40 and 20/20
  - 20/50 and 20/25 - 20/40 and 20/16
  - 20/50 and 20/20 - 20/30 and 20/20
  - 20/50 and 20/16 - 20/30 and 20/16
  - 20/40 and 20/25 - 20/25 and 20/16
- Note: some charts have 20/32 line instead of 20/30

## Screening Machines

- Titmus and Optec screening machines are inappropriate for 3 - 5 year olds
- Not the preferred method for screening older children
- Does not allow for observation of signs which indicate vision problems
Screening Machines

- Screening devices may be helpful when screening kindergartners, especially 3 year olds
- Four acceptable devices:
  - Retinomax
  - SureSight
  - plusoptiX
  - SPOT
- Do not use manufacturers’ preset criteria. Consult with eye care professional to determine best settings to meet goals of your screening program

Distance Visual Acuity Screening 6 years and older (7/15/15)

- Recommended tests as of 7/15/15:
  - Sloan Letters 10’ Chart and Lea Numbers ® 10’ Chart
  - Currently available charts
    - Sloan Letters proportionally spaced 9’ x 14’ 10 foot distance chart
    - Sloan Letters folding chart
    - Lea Numbers® proportionally-spaced 13-line 10 foot distance chart
    - Lea Numbers® folding 15-line, 10 foot distance chart
    - Avoid charts that are described as linear or wide-spaced

HOTV 10’ Distance Acuity Chart
Ages 6 and over

- Continue using this chart until you need to replace or buy additional charts
- Purchase recommended chart (previous slide) at that time

Snellen 10’ Distance Acuity Chart
Ages 6 and over

- This chart considered “unacceptable”
- Discontinue its use soon as practical to insure accuracy of screening results

Setup of Screening Area 10’ Distance Acuity Chart

- Following instructions apply to screening school-age (6 years+) using a 10’ distance chart, regardless of specific chart used
- Place chart on uncluttered, well-lighted wall
- Hang with 20/32 line at average eye level of children being screened
- Place a strip of masking tape on floor 10 feet from chart and centered in front of chart
- Place pointer, pen and documentation forms close to chart
- Place occluders, key card and trash basket by tape mark on floor
### Standard for Re-screening/Referral 10' Distance Acuity Chart

<table>
<thead>
<tr>
<th>Age</th>
<th>Re-screen then refer</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 - 9 years old</td>
<td>Acuity 20/40 or worse in one or both eyes <strong>OR</strong> 20/32 or better in both eyes with two-line difference</td>
</tr>
<tr>
<td>10 years and older</td>
<td>Acuity 20/40 or worse in one or both eyes</td>
</tr>
</tbody>
</table>

- Two-line difference: 6 - 9 year old sees two or more lines better with one eye than the other
- Always re-screen before referring
- Re-screen within two to three weeks
- Not all charts have two or more lines below 20/32 so it may not be possible to identify two-line difference

### Screening Machines

- Not the preferred method for screening older children
- Does not allow for observation of signs which indicate vision problems
- Use Sloan Letters or Lea Numbers® slides
- Use same pass/fail criteria as with chart
- Sit facing the child to observe proper occlusion

### Stereopsis Screening Pre-K through 3rd Grade

- No longer recommended (7/15/15)
- Does not necessarily increase rate of detection of strabismus more than acuity testing alone

### Color Vision Testing

**Age 6 and older, one time before age 10**

- Purpose: to identify any discrepancy in the ability to recognize differences in color
- Acceptable tests
  - Color Vision Testing Made Easy
  - Ishihara Color Plates
  - Hardy-Rand-Ritter (HRR)

### Setup of Screening Area Color Vision Testing

- Use fluorescent or natural light
- Do not touch, or let child touch, color plates
- Screen child with prescription glasses on
Procedures for Screening Color Vision Testing Made Easy

- Measure 30 inches from child’s eyes to color book
- Hold color book perpendicular to the child’s line of sight
- Instruct young or special needs child to outline circles on Demo Card and Cards 1 – 9 with paint brush or cotton swab
- Instruct older children to name each shape on the Demo card and Cards 1 – 9

Interpreting Results Color Vision Testing Made Easy

- Initial screening
  - Pass if 8 out of 9 cards correctly identified
  - Refer if 7 or fewer cards identified correctly
- Rescreening
  - Pass if 9 out of 9 cards correctly identified in retest
  - Fail if fewer than 9 cards correctly identified in retest

Standards for Referral Color Vision Testing

- Color vision deficiency cannot be corrected
- Refer to eye doctor for identification of specific color deficiency only, not treatment
- Parents and teachers should be informed so they can make accommodations for color vision deficiencies
- Note failure of color vision test on EED, but do not "refer for further examination” if this is only test child fails

Near Vision Testing For Special Education Evaluations Only

- Prevent Blindness does not recommend near vision screening for young children (results are unreliable as children can accommodate at near distances for short periods of time even with poor near vision)
- Pass result may not be valid; fail result is valid
- Special needs children have more vision problems than the general population so eye exam is preferable
- However, to meet State of Georgia convention, near vision test card may be used for special education evaluations

Lea Symbols® Near Vision Card For Special Education Evaluations Only

- Prevent Blindness does not recommend near vision screening for young children (results are unreliable as children can accommodate at near distances for short periods of time even with poor near vision)
- Pass result may not be valid; fail result is valid
- Special needs children have more vision problems than the general population so eye exam is preferable
- However, to meet State of Georgia convention, near vision test card may be used for special education evaluations
Near Vision Testing
For Special Education Evaluations Only

- Lea Symbols Near Card for testing at 16” was previously suggested tool
- Recommended tests as of 7/15/15
  - Sloan Letters Near Card
  - Lea Numbers® Near Card
- Following instructions are for Lea Symbols® Near Card. Procedures for Sloan Letters and Lea Numbers® Near Cards should be similar but review manufacturer’s instructions for test you purchase

Setup of Screening Area
Lea Symbols® Near Vision Card

- Gather tools and supplies:
  - Lea Symbols® Near Vision Card with Measuring Cord and key cards
  - Occluder glasses or disposable eye patches
  - Antiseptic wipes if using occluder glasses
- Place two chairs close together, facing each other
- Screen child with glasses, if reading glasses
- Ask child to hold knob at end of cord by one eye to establish correct testing distance.

Setup of Screening Area
Lea Symbols® Near Vision Card

- Practice on top line with both eyes open using center section of chart then conduct monocular test
- Screen right eye first: cover left eye with occluder glasses or patch
- Hold test card with one hand and use other to move cover card down the chart
- Cover most of top line of right section with cover card

Procedures for Screening
Lea Symbols® Near Vision Card

- Ask child to name first symbol on line below
- Continue moving down edge of chart
- When child hesitates or misses a symbol, go up one line, then ask child to read across line
- Continue moving down chart and across lines
- Acuity is smallest line on which child reads 3 out of 5 shapes correctly

Procedures for Screening
Lea Symbols® Near Vision Card

- Record result for right eye
- Screen left eye: cover right eye with occluder glasses or patch and repeat procedure using lower left section of card
- Record result of left eye
- Conduct binocular test only if required by your school district
- Correct screening distance is crucial for accurate results

Interpreting Results
Near Vision Screening (all test cards)

<table>
<thead>
<tr>
<th>Age</th>
<th>Passing/Critical Line</th>
<th>Stereopsis</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 - 5 years</td>
<td>20/40</td>
<td>Random Dot E</td>
</tr>
<tr>
<td>6 years and older</td>
<td>20/32</td>
<td></td>
</tr>
</tbody>
</table>

GSHRM Chapter 8 Page 20
Standard for Passing Near Vision Screening

<table>
<thead>
<tr>
<th>Age</th>
<th>Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 - 5 years old</td>
<td>Acuity 20/40 or better in each eye and both eyes together</td>
</tr>
<tr>
<td>6 years and older</td>
<td>Acuity 20/32 or better in each eye and both eyes together</td>
</tr>
</tbody>
</table>

Standard for Re-Screening/Referral Near Vision Screening

<table>
<thead>
<tr>
<th>Age</th>
<th>Re-Screen then refer</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 - 5 years old</td>
<td>Acuity 20/50 or worse in either eye or with both eyes</td>
</tr>
<tr>
<td>6 years and older</td>
<td>Acuity 20/40 or worse in either eye or with both eyes</td>
</tr>
</tbody>
</table>

Standard for Re-screening Near Vision Screening

- Re-screen before referring
- Re-screen within at least 2-3 weeks

Re-screening and Referral

- Re-screen if child fails any test
- Re-screen only on test(s) failed
- Refer for any test failed except color vision
- Parents/teachers should be notified of color vision deficiency; there is no treatment but eye doctor can identify particular colors child has difficulty distinguishing
- You may refer based on observation alone

Follow-Up

- Why screen any children unless they see eye doctor for diagnoses of their vision problems and receive required treatment?
- Develop systematic follow-up plan for maximum success
- Identify resources and systematic way to communicate with parents in way that is sensitive to parent’s literacy, culture and language

Vision Screening Guidelines Prior to 7/15/15

<table>
<thead>
<tr>
<th>Screening Instrument</th>
<th>Ages 3-5</th>
<th>Ages 6-9</th>
<th>Ages 10-18</th>
<th>Screening Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lea Symbols 10’ Chart</td>
<td>X</td>
<td></td>
<td></td>
<td>Peak and Kindergarten</td>
</tr>
<tr>
<td>HOTV or Broken 10’ Chart</td>
<td>X  X  X</td>
<td></td>
<td></td>
<td>HOTV appropriate for children unable to read the English alphabet</td>
</tr>
<tr>
<td>Stereopsis Random Dot E</td>
<td>X  X  X  X</td>
<td></td>
<td></td>
<td>Children ages 4 to 8 (up to third grade)</td>
</tr>
<tr>
<td>Color Vision Test</td>
<td>X  X</td>
<td></td>
<td></td>
<td>Test is done once at age for vision</td>
</tr>
<tr>
<td>Lea Symbols Near Card</td>
<td>X  X  X</td>
<td></td>
<td></td>
<td>Only re-recommended for Special Ed evaluations</td>
</tr>
<tr>
<td>Vision Testers w/Slides</td>
<td>X  X</td>
<td></td>
<td></td>
<td>Inappropriate for 3-5 year olds</td>
</tr>
</tbody>
</table>
Vision Screening Guidelines
7/15/15

<table>
<thead>
<tr>
<th>Screening Instrument</th>
<th>Ages 3-5</th>
<th>Ages 6-9</th>
<th>Ages 10-18</th>
<th>Screening Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIP 5 Test</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MASSVAT 10 Test</td>
<td></td>
<td></td>
<td></td>
<td>Pre-K and Kindergarten</td>
</tr>
<tr>
<td>Sloan Letter Chart or Lea Numbers® Chart 10’</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Use pre-k test for children unable to read English alphabet or read numbers</td>
</tr>
<tr>
<td>Stereopsis Random Dot E</td>
<td></td>
<td></td>
<td></td>
<td>Not recommended</td>
</tr>
<tr>
<td>Color Vision Test</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Test is done one time at age 6 or older</td>
</tr>
<tr>
<td>Sloan Letters or Lea Numbers® Near Card</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Only as needed for Special Ed evaluations</td>
</tr>
<tr>
<td>Vision Testers w/Slides</td>
<td>X</td>
<td>X</td>
<td></td>
<td>Inappropriate for 3-5 year olds</td>
</tr>
</tbody>
</table>

Recommended periodicity for mass screenings
- Every year pre-k through 1st grade
- Every other year 3rd grade through 9th grade

Need screening tools?
- Go to [www.schoolhealth.com/preventblindness](http://www.schoolhealth.com/preventblindness)
- Tools Currently Recommended (October 2012)
  - Lea/HOTV Distance Vision 10 foot chart – PB24
  - Random Dot E Stereotest – 52305
  - Color Vision Testing Made Easy – 11115
- For Special Ed evaluations only
  - Lea Symbols Near Vision Card – 52151

Need help?
- Contact Prevent Blindness Georgia at [www.pbga.org](http://www.pbga.org)
- Call 404-266-2020, 404-266-1548, 1-800-477-4448
  - Answers to vision screening questions
  - Vision screening training
  - Free pre-k vision screening
  - VSP Sight for Student vouchers for students who qualify
  - One Sight vouchers for students who qualify
  - $25 Medicaid/PeachCare replacement glasses
  - Information about eye problems and diseases
Overview of School-Based Vision Screening Programs

The goal of a school-based vision screening program is to identify children who cannot see well enough to learn at their optimum level. In preschoolers, we are looking for children who have, or who are at risk of developing amblyopia, a condition which needs to be identified and treated early to minimize permanent vision loss. In school-aged children, we hope to identify children with as yet undiagnosed amblyopia or other early childhood vision disorders that may still respond to treatment. We are also looking for other vision changes that may begin in third, fourth or fifth grade during growth spurts. It is important to identify these children and make sure parents are aware that their child needs to visit an eye doctor for a comprehensive eye exam. Many times a problem comes as a complete surprise to both child and parent. Careful follow-up by the school nurse of children who failed a screening can ensure that needed medical care is obtained and referrals (for assistance) are provided if necessary.

When a child does not pass the second screening, send a referral letter home to the parent or guardian within one week. Contact the parent within one week to confirm receipt of the referral letter, discuss concerns and encourage follow-up. A sample referral letter is located at the end of this section.

If a child is unable to participate in routine vision screening procedures, or the results are inconclusive, refer the child to an eye care professional.

Parents should check insurance requirements to see if a referral is needed to see an ophthalmologist or optometrist.

A school-based vision screening program should include the following components:

1. Education and support for parents of children who fail vision screening in ways that are culturally and linguistically appropriate. Materials should emphasize the importance of good vision for their child, the importance of an eye exam if the child failed screening, and the increased risk of vision problems for specified high-risk populations.
2. A follow-up system to track whether a follow-up exam has occurred.
3. Assistance to help parents overcome barriers to follow-up such as education about health care benefits, a list of local eye doctors who will see children, and information about voucher programs that provide assistance with eye exams and/or glasses.
4. Notification to classroom teacher about nature of children’s problems, appropriate treatment and educational accommodations they may need.
5. Screenings conducted only by individuals who have completed training and use of screening tools that are valid, reliable, and age-appropriate.
6. Procedures for handling untestable children and children who are at high risk for vision disorders because of other medical conditions.
7. Regular program evaluation that compares screening results to eye exam results, examines and addresses variations in referral rates among screeners, and monitors for adherence to procedures.

New Recommendations for Vision Screening

In January, 2015, three papers written by the National Expert Panel of the National Center for Children’s Vision and Eye Health (NCCVEH) were published in *Optometry and Vision Science* (http://journals.lww.com/optvissci/toc/publishahead). One of the papers focused specifically on vision screening of children ages three through five (36 months up to less than 72 months.) While most screenings conducted by school nurses are on older children, some school nurses screen lottery-funded pre-k students housed in their schools as well as kindergarteners who have not yet turned six. The new recommendations apply to those younger students. However, much of the information contained in the paper applies to screening school-aged children. Consequently, we have revised screening guidelines for older children as well. Note that these new guidelines include changes to screening instruments and occluders. While your school district may not be able to purchase new supplies and retrain all of your staff immediately, you should begin moving toward the new guidelines where possible and as you need to replace or purchase additional equipment.
## Recommendations for Vision Screening Children Ages 36 Months to less than 72 Months*

### Distance Visual Acuity Testing

<table>
<thead>
<tr>
<th></th>
<th>Best Practice</th>
<th>Acceptable Practice**</th>
<th>Unacceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chart/Optotype</strong></td>
<td>Single Lea Symbol® or HOTV letter surrounded by four flanking bars</td>
<td>A line of 4 or 5 Lea Symbols® or HOTV letters surrounded by rectangular crowding bar (box)</td>
<td>Snellen, Allen figures, Tumbling E, Landolt C (broken wheel), Lighthouse, Kindergarten Eye chart. See Below.</td>
</tr>
<tr>
<td><strong>Test Distance</strong></td>
<td>5 feet</td>
<td>10 feet</td>
<td>20 feet&lt;br&gt;Any distance &lt; 5 feet</td>
</tr>
<tr>
<td><strong>Passing Monocular Acuity</strong></td>
<td>20/50 for 3 three year olds&lt;br&gt;20/40 for 4 year olds&lt;br&gt;Child must name or match 3 or 4 of 4 optotypes</td>
<td>20/50 for 3 three year olds&lt;br&gt;20/40 for 4 year olds&lt;br&gt;Child must name or match more than half of optotypes</td>
<td>Binocular testing</td>
</tr>
<tr>
<td><strong>Illumination</strong></td>
<td>Lighted cabinet or computer screen with 80 cd/m@ minimum luminance (suggested not required), lamp if necessary, no glare on test cards or screen</td>
<td>Same as best practice</td>
<td>Glare on test cards or computer screen</td>
</tr>
<tr>
<td><strong>Testing aid</strong></td>
<td>Lap card with optotypes for matching</td>
<td>Lap card with optotypes for matching</td>
<td></td>
</tr>
<tr>
<td><strong>Occlusion</strong></td>
<td>Adhesive patch or 2&quot; opaque paper tape</td>
<td>Specially designed occluder glasses with opaque or frosted lenses</td>
<td>Hand, tissue, paper cup, cover paddle</td>
</tr>
<tr>
<td><strong>Currently available product (7/20/15)</strong>*</td>
<td>VIP Screener single surrounded optotypes (EyeCheck for 4-5 year olds only. Should be available for 3's by August, 2015)</td>
<td>MassVAT single surrounded lines</td>
<td>Any of optotypes listed above. See next page for more details. Near vision machine with slides that simulates near distance.</td>
</tr>
</tbody>
</table>

*January 2015 issue of *Optometry and Vision Science* can be viewed for free online at [http://journals.lww.com/optvissci/toc/publishahead](http://journals.lww.com/optvissci/toc/publishahead).

** Acceptable practices are acceptable. The only difference between "best" and "acceptable" practices is that there have been more studies to support the use of items deemed best.

*** Available at [www.schoolhealth.com/preventblindness](http://www.schoolhealth.com/preventblindness)
Unacceptable Optotypes/Charts

Young children may not know letters or may not have developed left-right directionality discrimination required by some of these charts. Some of the pictures are too easily recognized (acuity may be over-estimated) while others are culturally biased or outdated making them unrecognizable to some children. These charts also do not meet national and international chart design guidelines in terms of number of optotypes per acuity, spacing between optotypes, spacing between lines and decreasing size progression of optotypes for each acuity.

Instrument-Based Screening (Autorefraction and Photoscreening)

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Best Practice</th>
<th>Acceptable Practice**</th>
<th>Unacceptable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument</td>
<td>Retinomax</td>
<td>plusoptiX****</td>
<td>MTI Photoscreener</td>
</tr>
<tr>
<td></td>
<td>SureSight</td>
<td>SPOT (added to list after paper published)</td>
<td>Power Refractor II</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>iScreen</td>
</tr>
</tbody>
</table>

Stereoacuity Screening – No Longer Recommended Unless Required by School

<table>
<thead>
<tr>
<th>Test</th>
<th>PASS (or Stereo Smile II test), if used</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Random Dot E not recommended</td>
</tr>
</tbody>
</table>

** Acceptable practices are acceptable. The only difference between “best” and “acceptable” practices is that there have been more studies to support the use of items deemed best.

**** Optimum refractive error referral criteria have yet to be determined. (Factory settings result in low sensitivity and specificity outcomes. Consult with pediatric eye care professional regarding best cutoffs.)
Vision Screening School-Aged Children (6 and older)

Distance Visual Acuity

| Chart/optotypes | Sloan Letters or LEA NUMBERS® chart that meets national and international chart design:  
|                 | - Sloan Letters-proportionally-spaced 9"x14" 10 foot distance chart or  
|                 | - Sloan Letters folding chart  
|                 | - LEA NUMBERS® proportionally-spaced 13-line chart, 10’ distance or LEA  
|                 | NUMBERS® or folding 15-line chart, 10’ distance |

Chart should be proportionally spaced. Avoid charts that are linear or wide-spaced

For students who cannot name numbers or letters because of language, development or shyness, use one of tools with lap card mentioned above for preschoolers.

Test distance

| 10 feet |

Lighted cabinet OR Normal room light, lamp or other light if needed with no glare or shadows on front of tests

Occluders

Adhesive patches, 2-inch surgical tape or frosted/opaque occluder glasses.  
For children 10+, “Mardi Gras mask” and paddle occluder are acceptable  
Paper fish, tissues, cups, hands should not be used.

Passing monocular acuity

20/32  
No two-line difference for students 6 and older.  
Must correctly ID more than half of optotypes on each line to pass.

Computer-Based Testing

EyeSpy2020 acceptable

Visual acuity machine such as Titmus, Optec, Keystone View  
Insufficient data exists to support their use. Inability to observe child’s face and eyes during test is a concern, especially for younger children. If used for older children, use Sloan Letters or LEA NUMBERS® slides

Stereoacuity Screening – No Longer Recommended Unless Required by School

Test

PASS (or Stereo Smile II test), if used  
Random Dot E not recommended

Near Visual Acuity for Special Ed Evaluations Only

| Test population | Individual students as required for Special Ed evaluations only  
|                 | NOT recommended for mass screenings. |

| Test | Sloan Letters Near Card at 16” distance  
|      | Lea Numbers® Near Card at 16” distance  
|      | Plus-lens NOT recommended |

| Passing monocular acuity | 20/32 with no two-line difference, even in passing range |

Color Vision

| Frequency | Once at age 6 (later only if not previously done) |

| Test | Color Vision Testing Made Easy  
|      | Ishihara Color Plates  
<p>|      | Hardy-Rand-Ritter (HRR) |</p>
<table>
<thead>
<tr>
<th>Screening Tool</th>
<th>Ages 3-5</th>
<th>Ages 6-9</th>
<th>Ages 10-18</th>
<th>Screening Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIP 5' Test</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EyeCheck 5' Test (currently for ages 4-5 only)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MASSVAT 10' Test</td>
<td></td>
<td>x</td>
<td></td>
<td>Pre-K and Kindergarten</td>
</tr>
<tr>
<td>Sloan Letters or Lea Numbers® 10' Chart</td>
<td></td>
<td>x</td>
<td>x</td>
<td>Use pre-k test above for children unable to read English alphabet or numbers</td>
</tr>
<tr>
<td>Color Vision Test</td>
<td></td>
<td>x</td>
<td>x</td>
<td>Test is done one time at age 6. Later if not previously done.</td>
</tr>
<tr>
<td>Sloan Letters Near Card</td>
<td></td>
<td>x</td>
<td>x</td>
<td>For Special Ed evaluations only, NOT mass screenings. Not recommended for ages 3-5.</td>
</tr>
<tr>
<td>Lea Numbers® Near Card</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vision Testers w/Slides</td>
<td></td>
<td></td>
<td>x</td>
<td>Inappropriate for ages 3-5 and younger elementary. If used for older students, use Sloan Letters or Lea Numbers® slides with same criteria as chart.</td>
</tr>
<tr>
<td>Instruments</td>
<td></td>
<td></td>
<td>x</td>
<td>Recommended for ages 3-5 only</td>
</tr>
<tr>
<td>SureSight</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retinomax</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>plusoptiX</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPOT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### ABC’s of Eye and Vision Problems
Refer Child to Eye Doctor if You Have Concerns About the Following

<table>
<thead>
<tr>
<th>Appearance of Child’s Eyes</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Eyes cross or turn out or drift</td>
</tr>
<tr>
<td>- Eyes are reddened or watery</td>
</tr>
<tr>
<td>- Eyelids are red, encrusted or swollen</td>
</tr>
<tr>
<td>- Eyelid droops</td>
</tr>
<tr>
<td>- Sty or conjunctivitis</td>
</tr>
<tr>
<td>- Pupils are different size</td>
</tr>
<tr>
<td>- Eyes are in constant motion</td>
</tr>
<tr>
<td>- One or both eyes look cloudy</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Behavior and Body Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Becomes rigid while viewing distant objects</td>
</tr>
<tr>
<td>- Tilts head to one side to look at objects</td>
</tr>
<tr>
<td>- Blinks excessively or rarely blinks</td>
</tr>
<tr>
<td>- Thrusts head while looking at distant objects</td>
</tr>
<tr>
<td>- Closes or covers one eye frequently</td>
</tr>
<tr>
<td>- Rubs eyes excessively</td>
</tr>
<tr>
<td>- Is unusually awkward</td>
</tr>
<tr>
<td>- Squints or frowns when looking at close objects</td>
</tr>
<tr>
<td>- Moves head close to desk/screen when reading</td>
</tr>
<tr>
<td>- Brings objects close to eyes</td>
</tr>
<tr>
<td>- Has short attention span</td>
</tr>
<tr>
<td>- Reverses letters and words</td>
</tr>
<tr>
<td>- Is abnormally sensitive to light</td>
</tr>
<tr>
<td>- Has poor eye-hand coordination</td>
</tr>
<tr>
<td>- Uses finger to keep place while reading</td>
</tr>
<tr>
<td>- Is irritable or restless during sustained near work or visual concentration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Complaints from Child</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Headaches, nausea or dizziness</td>
</tr>
<tr>
<td>- Letters blur or lines run together or jump</td>
</tr>
<tr>
<td>- Eyes itch, burn or ache</td>
</tr>
<tr>
<td>- Vision blurred after close work</td>
</tr>
<tr>
<td>- Cannot see well or cannot see board</td>
</tr>
<tr>
<td>- Sees double</td>
</tr>
</tbody>
</table>

Parents and teachers may observe behaviors or hear complaints that are not evident during a screening.
Signs and Symptoms of Vision Problems

Use the ABC's of Detection (on the previous page) to increase awareness for potential signs and symptoms of vision problems by:

- Distributing to teachers
- Making a flyer for office waiting rooms
- Making a flyer for use during open house school registration
- Inserting it in a school newsletter for parents
- Decorating a bulletin board outside the health room at school
- Distributing to parents during preschool and kindergarten registration
- Including on private practitioner sites
- Including on school sites.

Children’s Vision Georgia

Children’s Vision Georgia is a group of children’s vision stakeholders from more than 45 state agencies, nonprofits and professional societies. It was organized by the National Center for Children’s Vision and Eye Health under the Maternal and Child Health Bureau. Children’s Vision Georgia developed recommendations for the National Center and were implemented as national recommendations when they were released in early 2013.

The National Center for Children’s Vision and Eye Health is developing recommendations for:

- National guidelines for vision screening methods for young children
- Core performance measures
- Database for capturing vision screening results.

Children’s Vision Georgia is developing recommendations for:

- Implementing national guidelines in Georgia
- Periodicity of vision screening for children in Georgia’s public schools
- Revising legislation and policies for the Ear, Eye and Dental Form 3300 required for school entry, including clarification on who can sign the 3300 form
- Implementing a plan for effective follow-up for children who fail school entry screenings
- Tools for vision screening children who are being considered for entry into special education programs
- Vision screening methods for young children up to three years old
- Creating a database for mass screening and individual screening results for children.

For more information, please visit pbga.org.
Resources
Focus on Eye Health: A National Summit – Vision Problems in the U.S. (June 20, 2012)
youtube.com/watch?v=EG24URBeAPQ&feature=plcp

Georgia Optometric Association
goaeyes.com/imislive/GOA

Georgia Society of Ophthalmology
ga-eyemds.org/displaycommon.cfm?an=1&subarticlenbr=37

National Center for Children's Vision and Eye Health
nationalcenter.preventblindness.org

Our Vision for Children's Vision: A National Call to Action for the Advancement of Children's Vision and Eye Health
georgia.preventblindness.org/prevent-blindness-america-public-health-documents

Prevent Blindness Georgia™
Answers to vision screening questions, vision screening training, free Pre-K vision screening, VSP Sight for Student vouchers, One Sight vouchers for glasses, $25 Medicaid/PeachCare replacement glasses for parents who can’t afford replacements, information about eye problems and diseases.
404-266-2020, 404-266-1548
pbga.org

School Health (catalogue for vision screening tools)
schoolhealth.com/preventblindness

Sight for Students™
This program ensures proper follow-up diagnosis and prescription glasses for eligible students who have failed the vision screening. Visit the Community Partners page for information on partnering with NASN members to help low income children obtain free vision care.
sightforstudents.org

Vision Preservation and the National Prevention Strategy – A Call to Action
documents.preventblindness.org/publichealth/nps_doc3.pdf
Parent/Guardian Notice of Vision Screening Referral

Date________________    School________________

To the Parent/Guardian of____________________________________________:_

Your child did not pass the vision screening which was recently completed at school. It is recommended that he/she have an eye examination to see if there is a vision problem, which might need professional attention.

You may take your child, at your own expense, to a private eyecare specialist. **If you have Medicaid or Peachcare, it will pay for one eye exam and one pair of eyeglasses per year.** Please take the attached green medical report with you and give it to the eye specialist to complete. The form should be returned to your child’s school.

Contact your School Nurse/Health Care Worker at your child’s school or the School Social Worker to discuss other options or if you have questions.

Thank you for your cooperation.

Sincerely,
Hearing Screening

Children who do not hear well do not learn at their optimum level. Hearing screening programs screen children for two types of hearing loss—sensorineural hearing loss and conductive hearing loss. Sensory hearing loss may be present at birth or acquired later as a result of illness or injury. Conductive hearing loss is usually from a medical issue, i.e. chronic ear infections.

Most children with severe to profound hearing loss are identified and fit with amplification before they reach school age. However, some children may reach school age without a severe hearing loss being diagnosed and treated. Some children have hearing sensitivity in the borderline normal, mild hearing loss range. Even this “mild” degree of hearing loss can impact communication and learning and may be a contributing factor in the inability to sustain appropriate attention levels. One in every five children has a hearing loss (conductive, sensorineural or mixed) in one or both ears. Children with mild to moderate or unilateral hearing loss are often overlooked or misdiagnosed. Hearing screening programs are often the first to identify these hearing problems.

A licensed audiologist, speech-language pathologist, nurse or physician should provide oversight to the administration of hearing screenings by unlicensed personnel. In the school setting, certified speech-language pathologists may provide oversight.

For children unable to participate in a hearing screening using conditioned play audiometry or sweep audiometry, a referral to an audiologist or physician is indicated. Check to see if your school district employs an audiologist. Generally, a referral from a primary care provider will be required to schedule an appointment with an audiologist in private practice.

Parents should check insurance requirements to see if a referral is needed to see an audiologist.

For hearing referrals, parents may contact the school audiologist in school districts with an audiology program for a hearing evaluation. In an office setting, or local health department, it may be helpful to remind families to return for a re-screen. After making a referral, follow up with the care provider and make sure to request documentation of screening results, outcome of medical examination, referrals to specialist and any ongoing care.

If a child does not pass the second screening, referral letters should be mailed to the parent or guardian within one week. Contact parents within a week to confirm receipt of the letters. A sample referral letter is located at the end of this section.

Children who are followed by an Ear, Nose and Throat physician or audiologist need not participate in a screening program. In place of screening, follow up with parents/guardians to ensure the child continues to receive professional care. Recommend referral and provide follow-up for those children who have not had a professional examination in the last year. Examinations and evaluations should be at least annual or as recommended by their provider. Document date of last audiological evaluation, provider and current recommendations for amplification. Referral and follow-up is indicated for hearing-impaired children without an evaluation within the last year.

In the Missouri Guidelines for Hearing Screening document at the link below, there are some sample forms that can be used. health.mo.gov/living/families/schoolhealth/pdf/HearingScreeningGuidelines.pdf

Visual inspection of the outer ear should be done prior to screening with the audiometer. Do not screen if any of the following are noted. Refer the child to a physician if there are:

**Structural defects of the ear, such as:**
- Abnormal positioning of the ear
- Malformed ear
- Absence of ear
- Extremely narrow ear canal
- Ear pits or tags
- Lobes reddened or infected from piercings
- Swelling around the ear
- Ear pain both internally and externally

**Ear canal abnormalities, such as:**
- Ear drainage
- Odor
- Foreign object
- Swelling

**Signs and Symptoms of Hearing Problems**

**Physical/Medical Symptoms**
- Frequent earaches/ear infections
- Ear drainage
- Problems with equilibrium (balance)
- Complaints of “noise” (ringing, buzzing, hissing) in ears.

**Speech, Language and Voice Symptoms**
- Omission of certain sounds in speech
- Mispronouncing common words
- Other speech defects (including language delay)
- Voice lacks intonation pattern
- Confuses words that sound alike
- Habitually speaks too loudly or too softly.
Behavioral Reaction in the Classroom

- Requests repetition of words
- Turns one side of head (better ear) toward speaker
- Watches speaker’s lips
- Shows strain in taking notes
- Unusual mistakes in taking direction or instructions
- More than normal use of gestures to make wants known
- Frequent mistakes in following verbal directions
- Appears unaware when spoken to, if not watching the speaker
- Inappropriate/irrelevant answers to questions
- Seems more aware of movement than sound
- Frequently watches others before beginning a task and has a tendency to imitate actions of others.

Other signs that may be indicative of impaired hearing

- Child may appear more intelligent than his work indicates (underachieving)
- Withdrawal
- Irritability
- Temper tantrums
- Low self-esteem.
Hearing Resources

Georgia Department of Public Health – Guidelines for Hearing Screening by Audiometer Training Manual

Childhood Hearing Screening Guidelines – American Academy of Audiology (September 2011)

Georgia Academy of Audiology
GeorgiaAudiology.org

Georgia Hearing Screening Requirements for Newborns and School-aged Children – American Speech-Language-Hearing Association
asha.org/Advocacy/state/info/GA/Georgia-Hearing-Screening-Requirements/

Georgia’s Resource Guide for Families of Children with Hearing Loss

Georgia Speech-Language-Hearing Association
gsha.org

Guidelines for Hearing Screening – Missouri Division of Community Health (see sample letters in Appendices)
health.mo.gov/living/families/schoolhealth/pdf/HearingScreeningGuidelines.pdf

Early Hearing Detection and Intervention Georgia Resources for Parents and Professionals
gachd.org/programs-services/child-health-services/universal_newborn_hearing_scre

Vision and Hearing Resources

Children First
dph.georgia.gov/children-first

Georgia Lions Lighthouse Foundation
lionslighthouse.org

Georgia Sensory Assistance Project – Services to Youth and Children with Deadblindness
gsap.coe.uga.edu
State Schools/Programs Managed by the Georgia Department of Education

The three state schools below specialize in providing quality, comprehensive educational and vocational programs for students with hearing or vision impairments, including students with multiple disabilities. The schools are resource centers on blindness and deafness and offer training and technical assistance to parents, public school programs, community groups and other agencies.

- Atlanta Area School for the Deaf (AASD) – Clarkston, Georgia (day school)
  aasdweb.com
- Georgia Academy for the Blind (GAB) – Macon, Georgia (residential)
  gabmacon.org
- Georgia School for the Deaf (GSD) – Cave Spring, Georgia (residential)
  gsdweb.org
- Georgia PINES (Parent Infant Network for Educational Services)
  gapines.info
Parent/Guardian Notice of 
Hearing Screening Referral

Date________________    School________________

To the Parent/Guardian of_____________________________________________

Your child did not pass the hearing screening which was recently completed at school. It is recommended that he/she have a complete hearing test to see if there is a hearing problem, which might need medical attention.

You may take your child, at your own expense, to a private ear specialist who has a licensed audiologist on staff. Please take the attached pink medical report with you and give it to the audiologist to complete and return it to your child’s school.

Thank you for your cooperation. Please call if you have questions.

Sincerely,
Dental Health and Screening

The below information was approved by the Georgia Department of Public Health for submission into the 2016 Georgia School Health Resource Manual. The information was adapted for formatting purposes.

Oral Health Facts

Oral health is an essential and integral component of health throughout life. Poor oral health and untreated infections can have a significant impact on the quality of life for school-aged children. The National Institutes of Dental and Craniofacial Research and the National Education Association cite research showing American children miss 52 million hours of school each year due to oral health problems.

The July 2011 Institute of Medicine (IOM) report, *Improving Access to Oral Health Care for Vulnerable and Underserved Populations*, states that millions of Americans are not receiving dental care because of “persistent and systemic” barriers that disproportionately affect children, seniors, minorities and other vulnerable populations. The IOM report demonstrated the costs of early childhood caries (ECC) in the following figure.
Improving Access To Oral Healthcare

A Note on Data Sources

The following sections document the oral health status and access to care for various populations. Data was drawn from published studies that rely on a number of data sources, including the National Health and Nutrition Examination Survey (NHANES), the National Health Interview Survey, the Medical Expenditure Panel Survey (MEPS), and smaller-scale surveys. While the magnitude of disparities in oral health and access to care may differ among the various sources, similar conclusions can be drawn from them about disparities in oral health status and access to care. Other researchers have noted similar trends in the past (Macek et al., 2002). Therefore, the committee felt comfortable using a variety of data sources, both national and smaller scale. The committee did not have the ability

Improving Access to Oral Health Care for Vulnerable and Underserved Populations

Advancing Oral Health in America
Evidence-based studies indicate oral health prevention is cost-effective and saves children from pain and lost days of school. Good oral health is an essential component of overall health and should be integrated into school health services. Most children and young adults spend a majority of their time in school; therefore school nurses can play an important role in promoting oral health. School nurses serve as a significant source of information and participate in prevention programs such as providing dental health education, intervening in dental emergencies, and advocating for the provision of well-balanced nutritious meals.

The goal of the school oral health program is to prevent oral disease and injury. The program should enable every child to maintain his or her own oral health. Dental health education, combined with referral treatment programs, has been shown to be effective in improving oral health. In addition, the school nurse can serve as an advocate for safe practices in all school settings (physical education, team sports, etc.) to prevent dental injuries. In addition, it is important to educate about the transmission of bacteria that cause tooth decay. Minimizing saliva-sharing activities between children limits bacterial transmission. Examples include avoiding the sharing of utensils, food and drinks, lipstick and chapstick.

Dental disease is a significant preventable debilitating disease. Nationally, oral disease affects approximately 98 percent of the entire U.S. population at some point in their lives. Health examination surveys conducted by the National Center for Health Statistics found the most significant problems detected by an examination of children in the U.S. were dental problems in all age groups. Access to dental care is limited for a significant part of the population with 50 percent of Americans failing to receive any dental care each year, according to the IOM report. Dental disease still occurs in well over half the children in Georgia. Preventable oral disease is more common in children from underserved groups and in disabled children.

**Risk factors for dental decay**

**Tooth location**
Decay most frequently occurs in the back teeth (molars and premolars). These teeth have lots of grooves, pits and crannies that are great for grinding food—but they can also collect food particles. As a result, they’re harder to keep clean than the smoother and more accessible front teeth. Between hard-to-reach back teeth, plaque can build and bacteria can thrive, producing the acid that destroys tooth enamel.

**Certain foods and drinks**
Some foods and drinks are more likely than others to cause decay. Foods that cling to the teeth for a long time—such as milk, ice cream, honey, table sugar, soda, raisins and other dried fruit, cake, cookies, hard candy, breath mints, dry cereal and chips—are more likely to cause decay than are foods that are easily washed away by saliva.

**Frequent snacking or sipping**
When one steadily snacks or sips sodas, it gives mouth bacteria more fuel to produce acids that attack the teeth and wear them down.

**Inadequate brushing**
If one does not clean one’s teeth soon after eating and drinking, plaque forms quickly and the first stages of decay can begin.

**Not getting enough fluoride**
Fluoride is a naturally occurring mineral that helps avoid cavities — and can even reverse the earliest stages of tooth damage—by helping teeth repair themselves. Because of its benefits for teeth, fluoride is now added to many public water supplies. It’s also a common ingredient in toothpaste and mouth rinses. If children drink bottled or filtered water that doesn’t contain fluoride, they may miss out on its protective benefits. On the other hand, some bottled water may contain added fluoride. If drinking water and tooth care products also contain fluoride, it’s possible that babies and children could get too much. Talk to one’s dentist—and a child’s dentist—about the total amount of fluoride one may be getting from your local water supply and other sources.
Younger or older age
In the United States, cavities are the most common chronic disease among children and teenagers. Older adults are also at higher risk as more people keep their teeth as they age. Over time, teeth can wear down and gums may recede, making teeth more vulnerable to root decay. Tooth roots are naturally covered with a coating called cementum, but cementum is quickly lost when the root surface is exposed. The underlying dentin is softer than enamel and more susceptible to decay. Older adults also may use more medications that can reduce saliva flow, increasing the risk of tooth decay.

Dry mouth
Dry mouth is caused by a lack of saliva, which helps prevent tooth decay by washing away food and plaque from your teeth. Substances found in saliva also help counter the acid produced by decay-producing bacteria and can even help repair early tooth decay.

Worn fillings or dental devices
Over the years, dental fillings can weaken, begin to break down, or develop rough edges. These developments can allow plaque to build up more easily and make it harder to remove. Fillings and dental devices can also leak or stop fitting well, allowing decay to begin underneath them.

Eating disorders
Anorexia and bulimia can lead to significant tooth erosion and cavities. Stomach acid from repeated purging (vomiting) washes over the teeth and begins dissolving the enamel. In addition, people with eating disorders may sip soda or other acidic drinks throughout the day, which also helps create a continual acid bath over the teeth. Eating disorders can also interfere with saliva production.

Heartburn
Gastroesophageal reflux disease (GERD), acid reflux and heartburn can cause stomach acid to flow into the mouth, wearing away the teeth enamel. If a dentist notices enamel loss and doesn’t think this loss is caused by grinding teeth, a physician should be consulted to see if gastric reflux is the cause. Untreated reflux can cause significant tooth damage that is costly to correct.

Certain cancer treatments
Having radiation to the head or neck can increase cavity risk by reducing saliva production, which prevents cavity-producing bacteria from being washed away. Certain chemotherapy drugs also tend to cause dry mouth.
Legal Responsibility of Schools

A dental or oral screening survey is a collection of visual information of the pathology present in groups of people that help identify the needs of a population, from which their “treatment” services can then be planned. Measurement of oral health status and changes in status over time require the screening of samples of the population, and more than one screener usually participates. Standardization of the screeners on the basis of defined criteria reduces the human nature of bias, which exists in part as a result of clinical education and experience. It is the means by which we can help ensure the results of the oral screening are valid (correctly categorizes persons into disease/no disease categories) and reliable (criteria have been applied consistently). Screening in an accurate, consistent way will help in the accurate assessment of a population while still providing a valuable referral to the person for oral conditions requiring follow-up. However, the oral screening is not a substitute for a comprehensive diagnostic oral examination and/or x-rays.

Screening for dental defects should be part of the total health screening as stated as part of “Rules and Regulations for Eye, Ear and Dental Examination of Children Entering Public Schools,” i.e., kindergarten and first grade. A high percentage of kindergarten and first grade children are in need of dental care, and each child referred for further dental care will require a dentist's diagnosis of his or her dental problems. Screening guidelines are presented later in this chapter.

Georgia law (Chapter 290-5-31-02) states:

(a) Every child being admitted initially to a public school operating in this State shall furnish to the school authorities a Certificate of Eye, Ear and Dental Examination signed by a private practitioner or qualified representative of a local department of health on forms provided by the Department of Human Resources and approved by the Department of Education.

(b) To be valid, the eye, ear and dental examination must have been received within the one-year period prior to enrollment in school or the child must be eligible for Certificates of Eye, Ear and Dental Examinations because of some physical disability as provided for in Paragraph 290-5-31.06.

(c) Any child admitted to school without a certificate shall present a Certificate of Eye, Ear and Dental Examinations within four months following entrance of school.

"...... a qualified representative of a local department of health......" is interpreted by the Georgia Department of Public Health to include registered nurses (RNs), who are public health and school nurses; public health dental hygienists; and dentists and physicians, either private or public, providing dental screening. That these designated screeners are not all licensed dentists, in the Department's opinion, in no way violates the Dental Practice Act of Georgia and is not to be construed as the practice of dentistry. The Georgia Board of Dentistry has agreed with this interpretation. Dental hygienists in private practice may provide dental screening for health departments and health fairs as long as no fees are exchanged and an appropriate written notice explaining the screening does not take the place of an examination and is given to the person, parent or guardian. (HB 223: 2001). The Board has stated dental assistants, licensed practical nurses (LPNs) or other health professionals may not perform dental screenings.

Screening for dental defects should be part of total health screening, and the personnel should be those involved with the overall responsibility for health defects. Screening for dental disease should require relatively little time. A set routine should be followed so as not to omit necessary aspects of the screening process. If one defect is found, the screening procedure should be terminated and the child referred to the family dentist or to the local health department dentist where available. The law does not require care be provided before a screening certificate can be issued.

Dental Development & Tooth Eruption

mouthhealthy.org/~media/MouthHealthy/Files/Kids_Section/ADAPrimaryToothDev_Eng.ashx
mouthhealthy.org/~media/MouthHealthy/Files/Kids_Section/ADAPermanentTeethDev_Eng.ashx
Dental Development (Tooth Eruption)

**PRIMARY TEETH**

<table>
<thead>
<tr>
<th>Upper Teeth</th>
<th>Erupt</th>
<th>Shed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central incisor</td>
<td>8-12 mos.</td>
<td>6-7 yrs.</td>
</tr>
<tr>
<td>Lateral incisor</td>
<td>9-13 mos.</td>
<td>7-8 yrs.</td>
</tr>
<tr>
<td>Canine (cuspid)</td>
<td>16-22 mos.</td>
<td>10-12 yrs.</td>
</tr>
<tr>
<td>First molar</td>
<td>13-19 mos.</td>
<td>9-11 yrs.</td>
</tr>
<tr>
<td>Second molar</td>
<td>25-33 mos.</td>
<td>10-12 yrs.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lower Teeth</th>
<th>Erupt</th>
<th>Shed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second molar</td>
<td>23-31 mos.</td>
<td>10-12 yrs.</td>
</tr>
<tr>
<td>First molar</td>
<td>14-18 mos.</td>
<td>9-11 yrs.</td>
</tr>
<tr>
<td>Canine (cuspid)</td>
<td>17-23 mos.</td>
<td>9-12 yrs.</td>
</tr>
<tr>
<td>Lateral incisor</td>
<td>10-16 mos.</td>
<td>7-8 yrs.</td>
</tr>
<tr>
<td>Central incisor</td>
<td>6-10 mos.</td>
<td>6-7 yrs.</td>
</tr>
</tbody>
</table>

**Upper Teeth**

<table>
<thead>
<tr>
<th>Erupt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central incisor</td>
</tr>
<tr>
<td>Lateral incisor</td>
</tr>
<tr>
<td>Canine (cuspid)</td>
</tr>
<tr>
<td>First premolar (first bicuspid)</td>
</tr>
<tr>
<td>Second premolar (second bicuspid)</td>
</tr>
<tr>
<td>First molar</td>
</tr>
<tr>
<td>Second molar</td>
</tr>
<tr>
<td>Third molar (wisdom tooth)</td>
</tr>
</tbody>
</table>

**Lower Teeth**

<table>
<thead>
<tr>
<th>Erupt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Third molar (wisdom tooth)</td>
</tr>
<tr>
<td>Second molar</td>
</tr>
<tr>
<td>First molar</td>
</tr>
<tr>
<td>Second premolar (second bicuspid)</td>
</tr>
<tr>
<td>First premolar (first bicuspid)</td>
</tr>
<tr>
<td>Canine (cuspid)</td>
</tr>
<tr>
<td>Lateral incisor</td>
</tr>
<tr>
<td>Central incisor</td>
</tr>
</tbody>
</table>
PERMANENT TEETH NUMBERING AND MOUNTING CHART

Please note: When you look at the tooth chart, you are looking into a person’s mouth with the jaws open. You are facing the person, so their upper right jaw will be on the left of this image.

1. 3rd Molar (wisdom tooth)
2. 2nd Molar (12-yr molar)
3. 1st Molar (6-yr molar)
4. 2nd Bicuspid (2nd premolar)
5. 1st Bicuspid (1st premolar)
6. Cuspid (canine/eye tooth)
7. Lateral incisor
8. Central incisor
9. Central incisor
10. Lateral incisor
11. Cuspid (canine/eye tooth)
12. 1st Bicuspid (1st premolar)
13. 2nd Bicuspid (2nd premolar)
14. 1st Molar (6-yr molar)
15. 2nd Molar (12-yr molar)
16. 3rd Molar (wisdom tooth)
17. 3rd Molar (wisdom tooth)
18. 2nd Molar (12-yr molar)
19. 1st Molar (6-yr molar)
20. 2nd Bicuspid (2nd premolar)
21. 1st Bicuspid (1st premolar)
22. Cuspid (canine/eye tooth)
23. Lateral incisor
24. Central incisor
25. Central incisor
26. Lateral incisor
27. Cuspid (canine/eye tooth)
28. 1st Bicuspid (1st premolar)
29. 2nd Bicuspid (2nd premolar)
30. 1st Molar (6-yr molar)
31. 2nd Molar (12-yr molar)
32. 3rd Molar (wisdom tooth)
Most Common Dental Problems in Children

The most common dental problems children experience are dental caries, periodontal disease and malocclusion. Most of these problems are preventable. Early diagnosis and prompt treatment can eliminate pain, infection and progressive oral diseases.

Dental Caries

Dental caries, or tooth decay, is the destruction of tooth structure from acid produced by bacteria found in dental plaque. Oral bacteria, food particles, skin cells and other oral debris combine to form a sticky substance called plaque. Plaque will accumulate on the tooth surface if not removed through proper oral hygiene. The bacteria found in plaque feed on sugars found in carbohydrates and produce acid. This acid dissolves the minerals in teeth and initiates the decay process.

In 2011, one in two (52 percent) of third grade children in Georgia had caries experience, and one in five (19 percent) had untreated dental decay. In 2006, 40 percent of non-Hispanic and 51 percent of Hispanic Georgia Head Start Children surveyed had caries experience and 27 percent had untreated decay.

There are four types of dental caries (tooth decay)―pit and fissure, smooth surface, root caries and Early Childhood Caries (baby bottle tooth decay). However, 88 percent of dental decay in Georgia is of the pit and fissure type. Plaque accumulates in the pits and grooves of the tooth, and if not treated, it dissolves the enamel and continues to work into the dentin of the tooth. Pit and fissure caries are almost wholly preventable by the use of dental sealants. Other preventive measures include plaque control, education, fluoride varnish application, community water fluoridation and dietary control through nutrition education.

Periodontal Disease

Two types of periodontal disease include periodontitis and gingivitis.

Warning signs for periodontal disease include:
• Gums bleed when brushed
• Gums are red, swollen, tender
• Gums pulled away from teeth
• Pus formation between teeth and gums
• Permanent teeth are loose/ displaced
• Change(s) in the way teeth come together
• Halitosis (bad breath).

Gingivitis is reversible through plaque control. Preventive measures for periodontal disease include plaque control, good and consistent dental hygiene habits such as flossing of teeth and good brushing, prompt professional dental care including replacement of ill-fitting crowns and fillings, halting the use of smokeless tobacco and prevention of grinding of teeth. Hormonal changes during puberty or pregnancy can also contribute to gingivitis, but can be controlled with appropriate plaque control.

Malocclusion

Malocclusion is an abnormality in the teeth or jaw position preventing the upper and lower teeth from biting together properly. Heredity and environmental factors such as tooth size, small jaw, incorrect alignment, premature loss of baby teeth, swallowing abnormalities, thumb and finger sucking and other habitual behaviors can cause malocclusion. Preventive measures include early screening for habitual behaviors, good oral hygiene, regular professional care to prevent premature loss of baby teeth and preventive orthodontic appliances.
Oral Cancer
Georgia has one of the highest overall mortality rates from oral cancer in the United States, and more Georgians die of oral cancer than all types of uterine cancer. School nurses can play a vital role in health education regarding the causes and warning signs of oral cancer.

Risk factors include:
• Age >46 to 65 years usually associated with tobacco use and alcohol use.
• Younger patients - HPV virus.

Sites for oral cancer include the lips, gums, cheeks, throats, mouth floor and hard or soft palate. Most frequently, symptoms of oral cancer are irritations in the mouth that persist over time. These irritations do not respond to treatment. Preventive measures include health education and cessation programs for the main causes of oral cancer, tobacco and alcohol as well as HPV vaccination.

Oral/Dental Screening
Accomplishing the preventive health screening service takes time. It is important to begin with a comprehensive review of the medical/dental history and to indicate any changes. As always, you will need to utilize standard precautions (gloves, mask, protective eyewear, etc.) when exposed to bodily fluids.

History
• Has pain or discomfort been present in or around the oral cavity?
• When was the last dental visit?
• What was the reason for the last dental visit (emergency or routine)?

Visual
Visual inspection is performed with adequate lighting (penlight, flashlight or window light) and using a tongue blade. Dental personnel may use a mouth mirror, or use instruments furnished by the examiner.
• General external appearance of the face, especially the lower one-third of the face (normal or swollen)
• Soft tissue evaluation
  – Lips
  – Oral mucous membrane including cheeks and tongue
  – Dorsum of the tongue, frenulum (freedom of movement or restricted
  – Gingiva
• Oral hygiene evaluation (debris)
• Teeth
  – Caries (dental decay)
  – Missing teeth (premature loss)
  – Malocclusion: crowding, crossbite, openbite, protrusion and retraction
• Habits – finger-sucking, thumb-sucking, lip-sucking, lip-biting, swallowing, tongue-thrusting
Dental Classifications

For confidentiality, place the Dental Notice to Parent in an envelope. If there is a question, round in favor of the patient referral—Green to Yellow, Yellow to Red.

When examined, each patient should be assigned to a dental class whose criteria are:

- **Pass GREEN**
  Normal Appearance, No Apparent Need
  - No apparent dental care is needed at this time. Continue routine dental visits.
  - Non-urgent preventive care needed (e.g., cleaning, dental sealants, severe malocclusion).

- **Fail YELLOW**
  Needs Further Professional Attention (dentist examination, non-urgent care needed)
  - Early dental care needed due to dental cavities, gum problems.
  - Dental visit within three months.
  - Treat as Emergency with observed problem. ***

- **Fail RED**
  - Immediate dental care needed due to toothache / infection.
  - Dental treatment now.

*** Emergency failures (such as observed emergent problem or RED dental class criteria) require services to control bleeding, relieve pain, eliminate acute infection; operative procedures which are required to prevent pulpal death and the imminent loss of teeth; treatment of injuries to the teeth or supporting structures (e.g. bone or soft tissues contiguous to the teeth); and palliative therapy for pericoronitis associated with impacted teeth.

STOP!!! RED-EMERGENCY: See a dentist immediately.

PeachCare for Kids, please call toll-free 877-GA-PEACH (877-427-3224).

Dental First Aid For Children

For information on dental first aid for children, refer to Chapter 2.

Tobacco Use

Tobacco use is harmful. Often it is deadly. Helping students stay tobacco-free is one of the most important health services that a school nurse can provide.

According to the CDC, every day, approximately 4,000 American youth aged 12-17 try their first cigarette, and an estimated 1,140 young people become daily cigarette smokers. In 2013, 12.8 percent of Georgia high schools students reported current cigarette use and 14 percent reported current cigar use. In addition, 6.1 percent of high school students reported current smokeless tobacco, with white males reporting the highest (e.g., chewing tobacco, snuff or dip) use.
According to the CDC, the following Health Effects of Tobacco Use by Young People are outlined:

- Cigarette smoking by young people leads to immediate and serious health problems including respiratory and non-respiratory effects, addiction to nicotine, and the associated risk of other drug use.
- Smoking at an early age increases the risk of lung cancer. For most smoking-related cancers, the risk rises as the individual continues to smoke.
- Cigarette smoking causes heart disease, stroke, chronic lung disease and cancers of the lung, mouth, pharynx, esophagus and bladder.
- Use of smokeless tobacco causes cancers of the mouth, pharynx and esophagus; gum recession; and an increased risk for heart disease and stroke.
- Smoking cigars increases the risk of oral, laryngeal, esophageal and lung cancers.

2013 National Youth Risk Behavior Survey Data for U.S. High School Students

CIGARETTE USE
- 41 percent have ever tried cigarette smoking.
- 16 percent smoked cigarettes on at least one day during the 30 days before the survey.
- 6 percent smoked cigarettes on 20 or more days during the 30 days before the survey.
- 4 percent smoked cigarettes on school property during the 30 days before the survey.
- 52 percent did not try to quit smoking cigarettes.

OTHER TOBACCO USE
- 9 percent used chewing tobacco, snuff or dip on at least one day during the 30 days before the survey.
- 13 percent smoked cigars, cigarillos or little cigars on at least one day during the 30 days before the survey.

ANY TOBACCO USE
- 22 percent smoked cigarettes; smoked cigars, cigarillos or little cigars; or used chewing tobacco, snuff or dip on at least one day during the 30 days before the survey.

Cigarettes

HEALTH EFFECTS
- Kill more Americans each year than alcohol, cocaine, crack, heroin, homicide, suicide, car accidents and AIDS combined.
- Causes cancer (mouth, throat, lung and others), emphysema, high blood pressure, heart disease, premature birth and low birth weight babies.

SIGNS OF USE
- Yellow stained teeth
- Bad breath
- Stained fingernails
- Coughing
- Smelly clothes.
Spit Tobacco (chewing tobacco and snuff)

HEALTH EFFECTS
• Causes cancers of the mouth and throat, cardiovascular problems, increased heart rate, receding gums, bad breath, dental cavities and stained teeth.
• Highly addictive.
• Half of all spit tobacco users develop oral lesions (sores) within six months of starting use.

SIGNS OF USE
• Worn out circle (from snuff can) in back of pants
• Stained teeth
• Sores in mouth
• Flecks of tobacco in mouth
• Bad breath
• White patches and lumps.

What A Nurse Can Do - Institute the Four A’s (Ask, Advise, Assist, Arrange)
The best advice for students is NEVER to start using tobacco.

• Ask all students if they use tobacco.
  – If the answer if no, commend them and emphasize how important it is for their healthy development into adulthood
  – If the answer is yes, then do the following:
• Advise the student to stop by discussing the risks, the health impacts and the benefits of quitting; provide the student with tips for quitting;
• Assist the student by providing support and follow-up, especially to those attempting to quit;
• Arrange follow-up services for habitual users by referral to their healthcare provider.

Call 800-4-CANCER for educational materials and information or contact your local health department for additional information.
Tobacco Resources
American Lung Association
lungusa.org

Child and Teen Tobacco Use – American Cancer Society
cancer.org/Cancer/CancerCauses/TobaccoCancer/ChildandTeenTobaccoUse/index

Georgia Tobacco Quit Line: 1-877-270-STOP
dph.georgia.gov/ready-quit

Healthy Use: Tobacco Use and the Health of Young People
cdc.gov/HealthyYouth/tobacco

Preventing Tobacco Use among Youth and Young Adults: A Report of the Surgeon General, 2012
surgeongeneral.gov/library/reports/preventing-youth-tobacco-use/index.html
cdc.gov/tobacco/data_statistics/sgr/2012/consumer_booklet/pdfs/consumer.pdf

Smoking Health Hazards – PBS Kids
pbskids.org/itsmylife/body/smoking/article2.html

Tobacco Use and Academic Achievement – CDC
cdc.gov/HealthyYouth/health_and_academics/pdf/tobacco_use.pdf

Tobacco Use and Georgia Students – CDC
cdc.gov/tobacco/data_statistics/state_data/state_highlights/2010/states/georgia/index.htm

Tobacco Use and United States Students
cdc.gov/healthyschools/tobacco/pdf/us_tobacco_combo.pdf

Youth Tobacco Cessation Collaborative
youthtobaccocessation.org

Resources
American Dental Hygienists’ Association
adha.org/kidstuff/index.html

American Dental Association
ada.org

Colgate Oral Pharmaceuticals
colgateprofessional.com
Complete information on the Third Grade Survey 2010

Oral Health Impact on Learning

Oral Health Prevention Education Resources
dph.georgia.gov/oral-health

Parents’ Guide
dph.georgia.gov/sites/dph.georgia.gov/files/related_files/site_page/ParentsGuidetotheGOHPP.pdf

School-Based Services

National Maternal and Child Health Oral Health Resource Center (MCH)
mchoralhealth.org

Proctor and Gamble
dentalcare.com/en-us/home.aspx
**Georgia Oral Health Program (GOHP)**

**What is the purpose of the program?** To prevent oral disease among Georgians

**What does the program do?**
- Public health dental hygienists and dentists provide preventive dental health services to children in school-based programs, including fluoride rinses and varnish, dental sealants, dental health education and screenings.
- Provides clinical dental services to children and adults who do not have access to a private provider or a community health center with a dentist.
- Provides training to public health nutritionists in promoting prevention of early childhood caries (baby bottle tooth decay), and train Public Health and School nurses oral disease, injuries, and screening.
- Promotes the use of fluoridated water through education about the benefits of fluoridation, and provides monitoring and surveillance of community water fluoridation programs.

**How many people are helped by the program?**
95.8% of Georgians using public water systems are now receiving optimally fluoridated water (about 9 million people). In FY2008, 190,839 children received dental prevention and treatment services provided by health department dental clinics and program visits to schools and other child-care facilities in the 18 health districts.

**Why is the program important?**
The U.S. Surgeon General reports that dental decay is the most common chronic disease of childhood, and that 51 million hours of school/year are lost due to dental disease. Children from low-income families are 12-times more likely to miss school because of dental problems than their wealthier classmates. The GOHP provides Georgia’s low-income children with access to oral health prevention and treatment services through school-based programs and public health centers. Preventive dental services reduce serious and costly dental problems. Every dollar invested in preventive dental care saves as much as $147 in future expenses (California Dental Association).

**Who is eligible?**
- Children in Head Start and children in schools where more than 50% of the students are eligible for the Free and Reduced Lunch Program are eligible for our school-based prevention programs.
- Children up to 285% of the federal poverty level are eligible for clinical services such as dental sealants and dental treatment services on a sliding-fee scale.
- Pregnant women receiving Medicaid. Studies indicate that women receiving dental care before or during their pregnancy had an almost 50% lower risk of giving birth to a premature or low-birth weight child.
- Georgia citizens who use community water systems.

**Where are services located?**
Georgia Oral Health Prevention Programs (GOHPP) are located in all of the 18 health districts. Georgia’s low-income children receive prevention and treatment services through the use of portable dental equipment (1-2 in each health district) or mobile dental trailers and vans (14 mobiles in 11 health districts). Optimally fluoridated water is available to Georgia’s population served by community water systems statewide.

**Outcome Measures**
- Increase the number of Georgians served by fluoridated community water systems with optimal levels of fluoride.
- Increase the proportion of eligible low-income elementary school children who receive protective sealants on the biting (chewing) surfaces of permanent molar teeth.
- Increase the proportion of low-income elementary school children who are free of active oral disease and oral disease-related pain.
- Increase the number of high-risk elementary school children receiving OH screenings and fluoride varnish starting at age 6 months.
- Increase the number of pregnant women receiving dental services.

**Contact:** Carol Smith, RDH, MSHA (404) 463-4449  
E-mail: csmith2@dhr.state.ga.us  
http://health.state.ga.us/programs/oral/
Height and Weight Screening

Setting for Screening
Each student should be weighed and measured with consideration for privacy. The screener or another adult volunteer should record measurements without commenting on them. Tell the student, “Thanks, you can get off the scale now.” If the student comments negatively on his/her body, it is appropriate to say, “Kids’ bodies come in all sizes and shapes. If you have questions or if other kids are teasing you, let’s talk about it, and see how we can help.” Screening does not involve making a medical diagnosis. Labeling a student as “overweight” or “too thin” after one screening measurement is inappropriate. The child’s healthcare provider will gather additional medical information necessary before making a diagnosis.

Equipment Needed
- platform scale (balance beam or digital)—calibrate regularly using a known weight
- stadiometer: standing height board, with a moveable headpiece attached to a wall of a room with a level floor
- BMI charts for age and sex, available from the CDC Web site:
  - cdc.gov/nchs/data/nhanes/growthcharts/set1clinical/cj41l023.pdf (boys)
  - cdc.gov/nchs/data/nhanes/growthcharts/set1clinical/cj41l024.pdf (girls)
- calculator with formula, online calculator or other BMI measurement tool
- data recording forms.

Measuring Weight
- Have the child remove outer clothing and shoes.
- Place the scale in the “zero” position before the child steps on.
- Ask the child to stand still with both feet in the center of the platform. Consider standing the child with his back to the scale.
- Record the measurement immediately to the nearest 1/4 pound or 100 grams.
- Have the child step off the scale.

Sources for Errors:
- Use of bathroom scales
- Not checking zero balance
- Not recording values immediately
- Scale placed on carpet
- Feet not in middle of scale
- Misreading measurements.

Measuring Height
- Use a standard height board or stadiometer with a movable headpiece and either a permanent surface to stand on or the entire device is mounted on the wall of a room with a level floor.
- Have the child remove outer clothing, shoes and hats, as well as remove hair accessories that would interfere with the measurement. If this is not possible, make sure to determine where the crown of the head is for the measurement.
- Direct the child to stand erect with shoulders level, hands at sides, legs together and feet flat with heels together. The child’s body should contact the stadiometer at the head, upper back, buttocks and heels.
• Ask the child to move his chin up or down to align his head into the Frankfort plane. This is an imaginary line between the lower edge of the eye socket and the tragus of the ear (notch above the fleshy cartilage which partly extends over the opening of the ear). This line should be viewed from the side of the child’s head at the child’s eye level, and should be parallel to the horizontal headpiece and perpendicular to the vertical backpiece. The back of the head may no longer make contact with the board.

• Ask the child to breathe in and hold his position. Lower the headpiece until it firmly touches the crown of the head and is perpendicular to the vertical. Recheck the child’s body alignment.

• Record height to the nearest 1/8th inch or 0.1 centimeter.

The information above was adapted from the University of California Berkeley, “Guidelines for Collecting Height and Weight on Children and Adolescents in School Settings” brochure, 2000; cwh.berkeley.edu/sites/greeneventsguide.org.cwh/files/primary_pdfs/bw_weighing_0.pdf.

To Find the BMI Percentile

1. BMI = weight in pounds ÷ height in inches ÷ height in inches x 703.

2. There is an online BMI Percentile Calculator for Child and Teen at nccd.cdc.gov/dnpabmi/Calculator.aspx.

3. Other apparatuses are available such as:
   - BMI wheel from Trowbridge and Associates – bmiwheel.com.nerdydata.com
   - BMI slide rule calculator.

4. Once the actual BMI has been calculated, the number can be plotted on one of the CDC BMI Percentile charts for boys and girls. These are included on the next two pages.

Resources

CDC Body Mass Index

cdc.gov/nccdphp/dnpa/healthyweight/assessing/bmi/index.htm

The following resources are included in this section:

1. Height and Weight Screening Form
# Height and Weight Screening Form

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<thead>
<tr>
<th>Name</th>
<th>DOB</th>
<th>Wt</th>
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<th>BMI</th>
<th>BMI %ile</th>
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<th>O/U</th>
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</tbody>
</table>

AR = At Risk of Overweight (≥85th-94th %ile)  O = Overweight (≥95th %ile)  U = Underweight (<5th %ile)

BMI formula: (Weight in pounds/height in inches/ height in inches) times 703 = BMI
Scoliosis Screening

Scoliosis is a physical condition characterized by a lateral deviation of the spine away from the midline of the body. Its cause is unknown in most cases. The amount of curvature is measured in degrees after an x-ray and can vary from mild to severe. Eighty-five percent of idiopathic scoliosis develops in the middle school age group, when rapid growth is occurring. Both girls and boys may be affected, but girls' curves tend to progress five times more frequently.

Treatment ranges from observation by a pediatric orthopedic physician to bracing to corrective surgery in severe cases. After scoliosis is identified or suspected, follow-up is essential to measure the degree of curvature and determine treatment options. Kyphosis, exaggerated roundness and lordosis, or swayback, may occur independently or in conjunction with scoliosis.

Screening for scoliosis is recommended annually during the middle school years, and Georgia mandates screening for a minimum of two grades between the age group of 10 through 15 years, with presumed or passive parental consent (i.e., parent must sign to decline permission to screen). Every student in the designated grade will be screened, unless parents refuse by signing and returning a form that will be sent home.

Screening consists of examining the student's unclothed back. Female students can be screened wearing just a bra above the waist (preferred) or can wear a bathing suit under their clothes for the day of screening. The student will be asked to stand straight and then bend forward while the examiner looks from the front, the back and the side. The screener looks for obvious curves, rib humps or uneven shoulders, waist or hips. Specially-trained PE teachers, clinic personnel or volunteers can complete or assist school nurses with primary screening. Female examiners are preferable for female students. See The Five Step Screening Process.

Students with questionable findings upon initial screenings by volunteers require secondary screenings by the public health authority or other consultants for secondary screening. Referrals can be done easily on the same day, if secondary screeners are available. If signs of scoliosis are confirmed on the secondary screening, notify the parents in writing.

Offer assistance when access to healthcare is a barrier for the family. The child's primary healthcare provider can complete a further examination or refer the child to a specialist. In some areas of the state, parents may set up a tertiary screening exam through a state-funded program if available or through Children's Healthcare of Atlanta Scoliosis Screening clinics (404-785-7553). Additional information for parents, children, teens and healthcare professionals is available at choa.org/Childrens-Hospital-Services/Orthopaedics/Programs-Services/Scoliosis-Screening.

Tips for Setting up a Successful Scoliosis Screening

- Training for volunteers and new staff, as well as a refresher for experienced screeners, should be done shortly before the screening date.
- A video and training manual, updated in 2011, is available from Children’s Healthcare of Atlanta by calling 404-785-7553. An annual conference for healthcare professionals on scoliosis screening is provided by Children’s.
- Schedule the screening so that it does not conflict with testing, field trips, etc.
- Schedule when secondary screeners can be available if possible.
- Send letters/permission forms home one to two weeks before the screening is scheduled. It may be helpful to put information in the school newsletter or on the school website.
- Have teachers collect and save the “Do Not Screen” letters.
- Prepare students the day before screening, discussing the procedure that will be followed. A video for students “A Student's
Guide to Scoliosis Screening” is available from Children’s Healthcare of Atlanta at 404-785-7553. It also can be viewed online at choa.org/scoliosis.

- Remind female students the day before to wear bras or bathing suits under clothes.
- Students or teachers should complete the personal information on the screening forms, and the student should bring the completed form to the screening.
- Many middle schools schedule screenings during PE or exploratory periods on one day, and reschedule lunch periods if necessary to complete screenings.
- It is very important to manage the screening area so that the student’s privacy is maintained—utilizing boys’ and girls’ locker rooms, shower areas, screens, etc. This practice will make screening go more smoothly and quickly.
- The setting chosen for screening should be checked for good lighting, the floor should be free of uneven areas, and the temperature of the room should be comfortable for students who will be undressing.
- It is important to screen with the student’s entire back exposed (no T-shirts around the neck; bra is OK). An adequate exam cannot be done otherwise.
- Volunteers will be helpful to control “traffic,” call classes down, get students to secondary screeners, etc.

The following resources are included in this section:

1. Sample Parent Newsletter
2. Scoliosis Screening Form
3. Scoliosis Screening Letter (English and Spanish)
4. Five Steps Scoliosis Screening Process for Volunteers
Information for middle school parent newsletter regarding scoliosis screening

SAMPLE

Stay ahead of the curve

During the teenage years, a condition called scoliosis may develop. About 2 percent to 3 percent of children will develop this condition. Scoliosis is a sideways bending of the spine that can be overlooked until it has become very noticeable. When this happens, medical treatment may be required. That is why it is important to have your child checked for scoliosis.

The school will be providing a screening examination as required by state law (20-2-772) to check for this condition. The screening is simple and easy. The children are screened privately by a trained scoliosis screener. You will receive additional information by (email or mail) about scoliosis and how and when the screening will be conducted.
**Scoliosis Screening Form**  
Grade (circle): 6 7 8 Other: ___

Primary screening date: ____/____/____  Homeroom: _______________________________

Student’s last name: ___________________________  First name: ___________________________  M.I.: _____

Date of birth: ____/____/____  Race/ethnicity: _____________________  Female  Male

Name of parent/guardian: __________________________________________________________________________________

Address: __________________________________________________________________________________________ Apt. #: ___________

City: ___________________________________________  State: ____________________  Zip: ______________

Phones: Home ( _____ ) _______–_________  Work ( _____ ) _______–_________  Cell ( _____ ) _______–_________

Name of school: ___________________________________________  District: __________________________

<table>
<thead>
<tr>
<th>Front</th>
<th>Primary screener</th>
<th>Secondary screener</th>
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<tbody>
<tr>
<td></td>
<td>Left</td>
<td>Right</td>
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<tr>
<td>Shoulder elevated</td>
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<td></td>
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<tr>
<td>Unequal distance arm to body</td>
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<td></td>
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<tr>
<td>Uneven hips</td>
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<td>Rib prominence</td>
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<td>Lumbar prominence</td>
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<td>Back</td>
<td>Shoulder elevated</td>
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<tr>
<td>Shoulder blade elevation/prominence</td>
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<tr>
<td>Waist fold difference</td>
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<tr>
<td>Unequal distance arm to body</td>
<td></td>
<td></td>
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<tr>
<td>Rib prominence</td>
<td></td>
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<tr>
<td>Lumbar prominence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Side</td>
<td>Kyphosis—more than normal roundness</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Negative _______ Refer for second screening _________

Screener’s name (print) ___________________________

Check one:  ☐ School nurse  ☐ Teacher  ☐ Volunteer

☐ Clinic assistant  ☐ Other: ___________________________

Screener notes:

Secondary screening date: ____/____/____

Negative _______ Referred _________

Screener’s name (print) ___________________________

Check one:  ☐ School nurse  ☐ Health professional

☐ Other: ___________________________

Screener notes:
Date: ___________________

Dear parent/guardian:

In the next few weeks, ________________________ School will conduct a scoliosis screening program to identify students with suspected curvature of the spine. It is known that two children out of every 100 may have scoliosis. If this condition is detected early and appropriately treated, progressive spine deformity can usually be prevented.

The procedure for screening is a simple test in which the screener (nurse, trained PE teacher or trained parent volunteer) looks at the child’s back in the standing position and while bending forward. Boys and girls are screened separately. Girls should wear a bra or bathing suit under their clothes on the day of screening.

If your child has a suspected curvature, you will be notified and asked to take your child to your family physician, a tertiary screening clinic or an orthopedic doctor for further evaluation. If you do not want your child to be screened, please complete the requested information below and return it to school.

Sincerely,

Principal

________________________________________________________________

I DO NOT WANT MY CHILD TO BE SCREENED FOR SCOLIOSIS.

PRINT NAME OF CHILD

PRINT NAME OF PARENT/GUARDIAN

SIGNATURE OF PARENT/GUARDIAN

DATE: _____________________________

SCHOOL:

TEACHER:

________________________________________________________________

MY CHILD IS CURRENTLY UNDER CARE/OBSERVATION FOR SPINAL PROBLEMS. I UNDERSTAND THAT MY CHILD WILL NOT BE RESCREENED.

PRINT NAME OF CHILD

PRINT NAME OF PARENT/GUARDIAN

SIGNATURE OF PARENT/GUARDIAN

DATE: _____________________________

SCHOOL:

TEACHER:
Scoliosis Screening Letter (Spanish)

Fecha (Date) ___________________

Estimado Padre/Madre o Apoderado/Guardián Legal (Dear parent/guardian):

En las próximas semanas la escuela (School) ___________________________ va a conducir una evaluación de la escoliosis para identificar a aquellos estudiantes que puedan tener curvaturas en la espina dorsal. Se sabe que de cada 100 niños, 2 pueden tener la escoliosis. Si esta condición se detecta a tiempo y si se trata apropiadamente, usualmente se puede prevenir la deformidad progresiva de la espina dorsal.

La evaluación que se realiza es un examen simple en el cual la persona que evalúa al niño o niña (la enfermera, maestro de educación física o padre voluntario) observa la espalda del niño/a cuando está parado/a y cuando se inclina hacia adelante. Los niños y las niñas son separados para hacerles la evaluación. Las niñas deben ponerse un sostén o vestido de baño bajo su ropa el día de la evaluación.

Si se sospecha que su niño tiene una curvatura, se le notificará y se le pedirá que lleve a su niño a su doctor de cabecera o a un doctor ortopédico para que lo evalúen más detenidamente. Si usted no quiere que se le haga esta evaluación al niño, por favor llene la información que se le pide abajo y devuelva este formulario a la escuela.

Atentamente,

Rector (Principal)

NO QUIERO QUE SE LE HAGA LA EVALUACIÓN DE LA ESCOLIOSIS A MI NIÑO O NIÑA
(I DO NOT WANT MY CHILD TO BE SCREENED FOR SCOLIOSIS.)

NOMBRE DEL ESTUDIANTE (NAME OF STUDENT)

IMPRIMA EL NOMBRE DEL PADRE/MADRE O APODERADO/GUARDIÁN LEGAL
(PRINT NAME OF PARENT/GUARDIAN NIÑA)

FIRMA DEL PADRE/MADRE O APODERADO/GUARDIÁN LEGAL
(SIGNATURE OF PARENT/GUARDIAN)

FECHA (DATE): ___________________

ESCUELA (SCHOOL):

MAESTRO (TEACHER):

MI NIÑO/NIÑA ESTÁ RECIBIENDO CUIDADO O SE LE ESTÁ OBSERVANDO EN EL MOMENTO DEBIDO A SUS PROBLEMAS EN LA ESPINA DORSAL. ENTIENDO QUE NO SE LE VA A HACER LA EVALUACIÓN A MI NIÑO/NIÑA DE NUEVO.
(MY CHILD IS CURRENTLY UNDER CARE/OBSERVATION FOR SPINAL PROBLEMS. I UNDERSTAND THAT MY CHILD WILL NOT BE RESCREENED).

NOMBRE DEL ESTUDIANTE (NAME OF STUDENT)

IMPRIMA EL NOMBRE DEL PADRE/MADRE O APODERADO/GUARDIÁN LEGAL
(PRINT NAME OF PARENT/GUARDIAN)

FIRMA DEL PADRE/MADRE O APODERADO/GUARDIÁN LEGAL
(SIGNATURE OF PARENT/GUARDIAN)

FECHA (DATE): ___________________

ESCUELA (SCHOOL):

MAESTRO (TEACHER):
Five-step scoliosis screening process for volunteers

First position: Front, standing position
Instructions to the child:
- Face the screener. Put your feet together with equal weight on both legs.
- Breathe in. Let it out and relax your shoulders. Let your arms hang naturally at their sides.

Look for (See Fig. 1):
- Uneven shoulders (Is one shoulder higher?)
- Arm hanging out farther from body on one side
- Hip that appears higher on one side

Second position: Front, bending forward (Adams forward bend test)
Instructions to the child (See Fig. 2):
- Put your palms together with arms out straight.
- Put your chin on your chest and roll down until your hands touch your feet.

Note: Encourage the child to continue to roll down as far as possible until his back is parallel to the floor. Have the child repeat the Adams forward bend test if he rolls down too quickly or if he rolls down to one side or the other. (The child’s hands should be pointing at the big toes.)

Look for (See Fig. 3):
- Upper rib prominence on one side
- Lower rib prominence on one side
- Lower back (lumbar) prominence on one side

Third position: Back, standing position
Instructions to the child:
- Turn around, (child’s back is now to screener), put your feet together with equal weight on both legs.
- Breathe in. Let it out and relax your shoulders. Let your arms hang naturally at their sides.

Look for (See Fig. 4):
- Uneven shoulders (Is one shoulder higher?)
- Shoulder blade (scapula) more prominent than other or one higher
- Arm hanging out farther from body on one side
- Waist fold deeper on one side

Fourth position: Back, bending away (Adams forward bend test)
Instructions to the child:
- Put your palms together with arms out straight.
- Put your chin on your chest and roll down until your hands touch your feet.

Note: Encourage the child to continue to roll down as far as possible until his back is parallel to the floor. Have the child repeat the Adams forward bend test if he rolls down too quickly or if he rolls down to one side or the other. (The child’s hands should be pointing at the big toes.)

Look for (See Fig. 5):
- Upper rib prominence on one side
- Lower rib prominence on one side
- Lower back (lumbar) prominence on one side

Fifth position: Side, in a bending position (Adams forward bend test)
Instruction to the child:
- Turn to the side. Put your feet together with equal weight on both legs.
- Put your palms together with arms out straight.
- Put your chin on your chest and roll down until your hands touch your feet.

Look for (See Fig. 6):
- Normal “C” shaped curve or more than normal roundness (kyphosis)

Note: Encourage the child to continue to roll down as far as possible until his back is parallel to the floor. Have the child repeat the Adams forward bend test if he rolls down too quickly or if he rolls down to one side or the other. (The child’s hands should be pointing at the big toes.)