

Vision Screening Guidelines For Schools 2018

The University of the State of New York
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Foreword

Vision Screening Guidelines for Schools provides schools with a framework for establishing the vision screening program required under New York State Education Law section 905 and the regulations promulgated there under, specifically 8 NYCRR Part 136.3 These regulations were amended in 2017 effective July 1, 2018. These guidelines will assist schools with understanding the purpose of vision screening in schools and developing an effective vision screening program including planning, implementation, and follow-up procedures. This document is intended for use by administrators and school health personnel. Every attempt has been made to ensure that the information and resources contained in this document reflect best practice in the field of school nursing. School districts should review these guidelines with their counsel, as necessary to incorporate the guidance with district policy. This document is not intended as a mandate and is to be used for guidance purposes only.

Purpose of a School Vision Screening Program

The purpose of a vision screening program is to identify students with potential vision impairment that will require further follow- up evaluation by a health care provider. Identifying students with possible vision impairment which may affect their intellectual, emotional, and/or social development is necessary to provide the necessary assistance and accommodations to ensure the student is able to reach their potential.

Legislative and Regulatory Background

Education Law §902 requires school districts to employ a duly licensed qualified physician, or a nurse practitioner to perform the duties of the director of school health services.

New York State Education Law §905(1) requires public schools outside of New York City, to conduct screening examinations of vision, hearing, and scoliosis of all students at such times and as defined in the regulations of the commissioner, and at any time deemed necessary.

Commissioner's Regulation §136.3 (e)(1)(ii) requires a vision screening to be conducted in school if the results of a vision screening are not provided to the school on the student's health certificate (the physical exam completed by a private health care provider) within six months of a student's admission to the school and in grades Pre-K or Kindergarten, 1, 3, 5, 7 and 11, and at any other time deemed necessary. The vision screening shall include but is not limited to, distance acuity, and near vision, except within six months of admission to the school, the student will also be screened for color perception.

In New York City (NYC) public schools follow the <u>NYC Chancellor's Regulations</u> A-701 for the type of tests to be performed along with what grade levels they are required in.

Pursuant to Commissioner's Regulation §136.3(2)(f), vision screening is not required where a student or the parent or person in parental relation to such student objects thereto on the grounds that such examinations conflict with their genuine and sincere religious beliefs. A written and signed statement from the student, parent or person in parental relation to the student that they hold such beliefs must be submitted to the principal or the principal's designee in which case the principal or principal's designee may require supporting documents.

Planning the Screening Program

Vision screening in school is to be conducted by the district's director of school health services, commonly referred to as the medical director. The medical director may delegate this duty to the school nurse or other appropriate licensed health professional, such as the school nurse, LPN, or medical director. If the medical director chooses to delegate this duty, he/she must ensure the licensed health professional he/she delegates to is trained in screening procedures. Additionally, the delegation should be in writing, with specific parameters of screening results or observations that are to be brought to the medical director's attention.

Commissioner's regulation §136.3 requires licensed school health professionals to screen for color perception, distance acuity, and near vision. Hyperopia screening is recommended- see page 9 for details.

Who Should be Screened

Students in grades PreK or K, 1, 3, 5, 7, and 11 as well as newly enrolled students within six months of admission to the school who did not have a vision screening noted on their health certificate or health appraisal must be screened. School health personnel should develop systems to track which students will need screening completed at school when filing health certificates in the student's cumulative health record.

A teacher may also refer a student for vision screening if they feel the student may be having difficulties based on their observations. When a student is scheduled for screening based on referral, teacher observations of visual behavior should be gathered and reviewed as warranted.

Who Should Not be Screened

Students who meet one or more of the following are not required to be screened in school:

- 1. Students who have documentation of the appropriate vision screening on their health certificate from a private health care provider;
- 2. Students who provide written evidence of having been diagnosed by an appropriate licensed health professional with a complete vision loss or as legally blind₁:
- Students enrolled in regular or special education who are unable to respond, for any reason. Parents/guardians of such students should be referred to their health

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¹ Statutory(legal) blindness is defined in the Federal Social Security Administration Law as central visual acuity of 20/200 or less in the better eye with the use of correcting lens. An eye which has a limitation in the field of vision so that the widest diameter of the visual field subtends an angle no greater than 20 degrees is considered to have a central visual acuity of 20/200 or less (20 CFR §404.151).

- care provider for a vision evaluation; and
- 4. Students who have an approved religious exemption from school administration for vision screening. A written copy of the approved exemption should be filed in the student's cumulative health record (8 NYCRR §136.3(2)(f).

Education and Communication

A few days or weeks before the screening exams are to be conducted, school health personnel should instruct students on what the screening is, what it entails, and when it will be conducted. Very young students should be shown the equipment and eye charts.

Written information on the upcoming vision screening should be posted on the school website, in a newsletter, or in a written notice provided to parents/guardians. This should inform parents/guardians that a screening is performed when the information is not included on the physical exam form submitted to the school, or the physical examination was completed at school. Information should include when screenings will be completed along with the types of vision screening that will be involved:

- Distance acuity- Sharpness of clearness of vision looking at objects at a distance
- Near vision- sharpness of clearness of vision looking at objects close up
- Color perception (color vision)- the ability to distinguish colors
- Hyperopia (optional test)- abnormal vision in which the rays of light are focused behind the retina, so that distant objects are seen more clearly than near ones

Equipment and Location

It is important that the vision screening equipment is used by trained health professionals, and electronic equipment is calibrated in accordance with manufacturer instructions, functioning properly, and used in an acceptable environment to get accurate results.

School health personnel will need to ensure that they have the necessary equipment to conduct a vision screening. Recommended equipment includes but is not limited to:

• Eye Chart ²— The Snellen charts are preferred, but other charts may be used depending on the student's age and level of maturity. An alternative to the Snellen acuity chart for young students would be the use of the HOTV chart, the Lea chart, tumbling C's or E's, or the Allen picture chart. (These charts are listed in order of decreasing accuracy, i.e. the Snellen chart should be used instead of the Allen

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² The preferred, and more accurate method to test visual acuity uses eye charts. Digital vision screeners typically only test refraction errors. There are some on the market that state they do test visual acuity. Digital eye screeners are best used in students aged 5 and younger.

- chart if the student is able to recognize all the letters on the Snellen chart. A chart for distance acuity and a chart for near vision acuity is necessary.
- Occluder Disposable occlusive patches (which can be as simple as, a piece of 2-inch paper tape- use new piece for each student) or occluder glasses are preferred. Spoons, paddles, tissue paper, hands, or cups are not good occluders.
- Disinfecting wipes- to clean occlude between students if using a reusable type.
- **Pointer** the examiner's finger, a stick, or a laser pointer may be used to attract the student's attention to the letter or symbol on the eye chart.
- Pseudoisochromatic plates or other similar color perception test -used to check color vision. Please note- the colors printed on paper will fade with time. Plates on paper will need to be replaced approximately every seven years.
- Paint brush or cotton swabs- used by younger children for color perception screening.
- Glasses with + 2.25 diopter lens and 1.75 diopter lens- used for hyperopia screening.

Attention should be given to the room selection in which to screen. It is important to consider lighting; bright sunlight should be filtered and behind the student. Since students are easily distracted, it is advisable to select a room or area that is quiet and free from interruptions. The room needs to include appropriate space to set up screening components. If possible, a waiting area should be included for those students awaiting screening. Ideally, the site selected should not have multiple uses so as not to distract the student during screening at any time before completion. This is not always possible in a school health office and cooperation of the building administration in supporting the health office staff during screening procedures is essential to a smooth process.

Setting Up the Screening Area

- 1. For measuring distance acuity, place a 20-foot eye chart (preferably Snellen) on light-colored, uncluttered wall with 20/40 line of chart at the eye level of the student to be screened. Ensure normal lighting on the chart and avoid undue glare.
- 2. Measure 20 feet from the chart to where the student will sit or stand and place a piece of tape (or other marker) on floor to mark the student's place. Maintain an unobstructed floor space between the tape and the eye chart. If a 10-foot eye chart is used, measure 10 feet from the chart to where the student will sit or stand and mark with tape.
- 3. Arrange table and chairs for screening and recording. Keep out of line of the distance acuity eye chart and 10 or 20 feet floor mark.

Conducting the Screening

Students should be screened individually and separately for both privacy reasons-FERPA does not permit other students to be aware of the results of another students screening, and to ensure the student is not distracted. Any students waiting to be screened should be at a separate location to avoid any additional noise or distractions for the student who is being screened.

If student wears glasses or contact lenses, screen with glasses or contact lenses in place; or if student has glasses or contact lenses and is not wearing them, screening should be scheduled for another day with glasses or contact lenses. It is **optional** to test vision both with and without lenses.

Prescreening Steps

Instructions to students should be simple and clear. Students should be told they may not be able to see everything. Students should understand that they must tell you when they cannot see the letters or symbols. The word "test" implies the "need to pass," Using the term "vision screening" may help to prevent students from attempting to guess when they are unable to see the letters or symbols.

The examiner should use the most reliable chart that the student is capable of consistently recognizing.) Sensitivity to individual student needs along with use of appropriate screening procedures, orientation, familiar personnel, and establishing rapport with the student will assist in the success of screening activities. Check to be sure the student understands how to respond to the figures on the displayed chart. Check to see if the student can describe the letters or symbols before the screening. It may be helpful in some cases to take student up close to chart for orientation before the screening to see if they understand what they are being asked to identify.

Distance Acuity Screening Procedure

- Test right (R) eye first; then left (L) eye. Cover student's left eye with occluder without pressing tightly. Be sure that the student cannot see around the occluder. Advise the student not to squint, tilt head, or close occluded eye.
- Have the student read the letters or symbols on the chart from top to bottom moving across the line from left to right. Use pointer to point from below to each letter student is to read. The examiner should not block out or cover the other letters or symbols on the same line.
- 3. If the student reads the first line correctly, proceed to the next smaller line. Continue presenting each smaller line of letters through the 20/20 line as long as the student can identify one more than half of the letter/symbols on that line. To pass a line, the student must be able to correctly identify one more than half the letters on the line.

- 4. If the student fails to read a line, repeat the line in the reverse order. If the line is failed twice, identify the visual acuity as the next higher line read correctly. Visual acuity is recorded in the form of a fraction. The figure above the line represents the distance from the chart; the figure below the line indicates the smallest line read successfully.
 - **For example:** if the student fails on the 20/30-foot line, record the visual acuity as 20/40 noting the eye tested: \mathbf{R} (or O.D.) indicates the right eye, and \mathbf{L} (or O.S.) indicates the left eye.
- 5. Repeat steps one through three with the right eye occluded and record the results for the left eye as instructed in step four.

Failure criteria:

- ✓ Inability to read 20/30 for ages 6-18;
- √ 20/40 for ages 4 & 5;
- ✓ and 20/50 for age 3; or
- ✓ A two-line or greater difference between the two eyes (e.g., right eye 20/20, left eye 20/40.)

If the student fails the screening, he/she should re-screened another day. If the student initially failed using a mechanical vision tester, the re-screening should be done with a conventional eye chart if age appropriate on the same day if possible.

<u>Hyperopia Screening Procedure (Optional)</u>

In students aged 3 to approximately 8 years old the normal amount of farsightedness is higher than an older student. As the student grows, farsightedness decreases (the eye becomes longer with growth) and most of the older students will easily pass the test. A 2.25 convex lens power is appropriate to test ages 5 through 8 years; and a 1.75 convex lens should be used to test students over 8 years of age.

Either +2.25 convex or +1.75 lenses are placed over the student's eyes and the student is asked to read the eye chart in the distance. If the student has a low amount of farsightedness the lens will be too strong and his/her vision will be blurry. If the student has a high amount of farsightedness the lens will be too weak for his/her eye and he/she will see clearly through the diopter lenses.

- 1. Have the student remain at the appropriate marked 10 or 20-foot line (depending on the chart used) and ask the student to put on glasses with +2.25 diopter lenses or +1.75 diopter lenses depending on the student's age. Students who wear corrective lenses for close visual correction should not wear those lenses when screening. All other students should have their corrective lenses on when screened. After the student has worn the glasses for one minute, ask the student to read the 20/20 line of the Snellen chart. Note any squinting. If using a mechanical vision tester, follow the manufacturer's instructions.
- 2. Students pass the screening if they are unable to read through the diopter lenses the letters/symbols at the 20/20 line.

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Failure criteria:

✓ The ability to read a 20/20 line through +2.25 diopter lenses for ages 3-8, or +1.75 diopter lenses for students older than age 8.

If the student fails the first screening, re-screen using the same procedure.

Near Vision Acuity Screening Procedure

- 1. Have the student sit at a table or desk with adequate lighting. Hold the Snellen Chart for near vision (or other appropriate eye chart if the student cannot accurately recognize letters) at a distance (generally 13-16 inches) per the manufacturer's directions.
- 2. Test right (R) eye first; then left (L) eye. Cover student's left eye with occluder without pressing tightly. Be sure that the student cannot see around the occluder. Advise the student not to squint, tilt head, or close occluded eye.
- Ask the student to read the smallest line he/she can see. Have the student read
 the letters or symbols from left to right. Identify the smallest line read correctly,
 record as near visual acuity for the right eye, noting any facial or postural
 behaviors.
- 4. Repeat step two and three with right eye occluded and record the results as near visual acuity for the left eye.

Failure criteria:

- ✓ Less than the best acuity achieved on the distance test.
- ✓ More than a two-line difference between eyes.

If the student fails the screening, he/she should re-screened another day. If the student initially failed using a mechanical vision tester, the re-screening should be done with a conventional eye chart if age appropriate on the same day if possible.

Color Perception Screening Procedure

Review with the student the screening materials and how to respond, either by verbalizing what they see or tracing what they see.

- 1. Have the student sit at a table or desk with adequate lighting. Use the Pseudoisochromatic plates or other color perception test per the manufacturer's directions.
- Have the student keep both eyes open, and test both eyes together.

3. Show the student how to use a soft, dry paint brush or cotton swab to trace the symbols on the color plate if he/she is unable to verbalize symbols.

Failure criteria:

✓ Follow the manufacturer's instructions for what constitutes failure of the screening.

Documentation

Pursuant to Rules of the Board of Regents, Part 29 §29.2(3), licensed health professionals must maintain a record for each patient which accurately reflects the evaluation and treatment of the patient. Documentation in the individual student's CHR should include the date the screening was completed, the observations made by the health professional, any related statements by the student, special circumstances related to the examination, and any communication with the provider and/or parent/guardian. The documentation must be completed and signed by the health professional conducting the exam pursuant to Commissioner's Regulations §136.3(e)(2).

The results of the screening are recorded on the student's cumulative health record (CHR) and signed by the health professional who completed the screening. The records of individual student screenings recorded in the cumulative health record are to be kept as long as the minimum retention period, which is until the student reaches age 27. See records retention requirements NYSED Records Retention Schedule for School Health Records.

Notification

Commissioner's Regulations require that the results of all vision screenings must be provided to the parent/guardian in writing. To avoid unnecessarily alarming the student, or potential loss of the notice -the written notification should be mailed and not sent home with the student. Such notification should be in the parent's/guardian's primary language and must state the results of the screening and refer the parent to follow up with their health care provider. This notification should also include an evaluation form for the parent/guardian to take to the appointment with the eye health professional, and then return the completed evaluation form to school. A sample form is available at New York Center for School Health- Screening Guidelines and Resources. The information on the form provides an opportunity for the provider to order any needed accommodations in school. The completed form should be filed in the student's CHR.

Best practice is to precede the written notification with a telephone call to the parent/guardian of students who failed any part of the screening to explain their child's screening results, the need for a follow up examination by an eye health professional (ophthalmologist or optometrist), and the importance of the parent/guardian providing the school with information on the results and recommendations of evaluation by an eye health professional.

Please Note: School vision screenings are not diagnostic and should not state that a student has a vision deficit, but instead should state that findings indicate a possible issue that requires a more thorough evaluation by a healthcare provider.

Schools should develop a system to follow up on referrals to ensure they track that the parent/guardian has followed through on the referral. If the parent/guardian has not followed up on the referral, school personnel should explore the reason(s) why and provide assistance and/or resources. Schools should develop procedures for documenting all communication, along with efforts undertaken by school personnel to assist the parent/guardian in finding low cost or free health care and/or health insurance options as necessary.

School Considerations

Signs and Symptoms of Vision Impairment

For students who are unable to complete the vision screening and/or to identify students who may need a screening in a year they normally would not receive one, school personnel should know the signs and symptoms of potential vision impairment and to notify school health personnel.

In accordance with the Commissioner's Regulation (8 NYCRR §136.3 [a] [4]), it is a general duty of the trustees and boards of education to maintain a program of education relating to the health of students. This program of education may include information regarding the signs and symptoms of vision deficits.

Indicators include:

Behavior:

- Holds work too close or too far, or brings work to close proximity with their eyes
- Bends close to floor or work surface to find small objects
- Asks for special seating
- Thrusts head forward to see distant objects
- · Holds body tense when reading or looking at distant objects
- Frowns when reading
- Attempts to brush away a blur
- Rubs eyes frequently
- Frequent blinking when reading
- Covers one eye
- Squints
- Strabismus, which is any misalignment of the eyes
- Tilts head consistently to one side
- Appears to view material with their peripheral vision
- Difficulty following movement of others/objects

Complaints:

- Eyes are sensitive to light
- Eyes or eyelids burn or itch
- Images appear as blurred or doubled
- Letters and lines run together
- Words seem to jump
- Frequent headaches
- Doesn't tolerate glasses; dislikes glasses

Appearance:

- Lids are crusted, red-rimmed, or swollen; sties occur frequently
- Eyes water or appear bloodshot
- Eyes appear misaligned

Other sources of information which may indicate potential vision problems:

- Birth history
- Previous eye examinations, wearing corrective lenses, under care of eye care professional
- Medication
- Surgery
- Family history

Information on Vision Impairment for School Personnel

The following information on vision deficit correction and suggestions to address various levels of vision deficits are provided below. In addition, consideration should always be given as to whether a referral should be made for an initial evaluation with the Committee on Special Education (CSE) or 504 team to determine if the student qualifies as a student with a disability.

If a student has lenses or reduced vision with lenses, school health personnel should do the following:

- School health personnel can assist the student in adjusting to the need for corrective lenses if newly prescribed and/or other therapeutic interventions such as patching, or eye drops.
- > Engage in direct student counseling regarding eye health and safety.
- ➤ Teach the student the importance of keeping his/her lenses clean and properly adjusted. Demonstrate how to do this as needed. Encourage the student to follow the eye care professional's recommendations regarding the wearing of protective eyewear for activities at school with a risk of eye injury. This may include, assisting the student in obtaining appropriate eyewear by providing information on how to obtain them at low or no cost, and explaining to school staff the importance of the student wearing the eyewear at school.

If the student has a known vision impairment that might affect school performance, such as a non-correctable vision loss the following should be considered:

- Review any professional eye exam reports provided to the school for information to determine if any adjustments or accommodations need to be made to the student's education program. (Including participation in physical education, intramurals, and interscholastic sports.)
- Provide accommodations as necessary such as but not limited to:

- ✓ Seat student near the screen or board at a distance comfortable to the student, but within a group of students. Do not isolate student;
- ✓ Verbalize while writing on the board;
- ✓ Provide a copy of notes and assignments in large font as necessary, or provide student a notetaker;
- ✓ Allow students to change their seats as needed for light;
- ✓ Avoid glares on working surfaces;
- ✓ Good contrast and white space between lines of print offer the best viewing comfort for lengthy reading assignments. Avoid using red or orange print;
- ✓ A student with a vision impairment will frequently be a slower reader and his/her eyes will tire faster. Break tests or assignments into chunks;
- ✓ Allow student to take oral tests only if he/she desires. All visually impaired persons are not auditory performers;
- ✓ Refer student to a Teacher of the Visually Impaired and/or Orientation & Mobility Specialist; and
- ✓ Provide adapted PE if necessary. See <u>Adapted PE Part I</u> and Adapted PE-Resources.

Resources

American Association of Pediatric Ophthalmology and Strabismus

American Optometric Association- Children's Vision

Centers for Disease Control and Prevention- Healthy Vision

National Association of School Nurses- Vision Health

National Center for Children's Vision and Eye Health

New York State Center for School Health

New York State Education Department- School Health Services

New York State Ophthalmological Society

New York State Optometric Association/