State of Utah
School Vision Screening Guidelines

Utah Department of Health
Utah Division of Services for the Blind and Visually Impaired
2013
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Online version of Vision Screening Guidelines can be found at:

http://choosehealth.utah.gov/providers/school-nurse/screenings.php

http://www.utahschoolnurses.org/

Effective August 2013
A Message from the State Superintendent of Public Education

The Utah State Office of Education (USOE) applaud and support the efforts of the Utah Department of Health (UDOH) and the Utah State Division of Services for the Blind and Visually Impaired (DSBVI) for their collaboration in the development of Guidelines for Vision Screening in Utah schools.

It is well documented that a child’s ability to see greatly impacts his or her ability to learn. A vision screening program plays a vital role in the early identification of visual problems that may negatively affect a child’s academic success. Vision screening is an important component of school health services and a cost-effective means to identify students who may have a vision disturbance.

Our school nurses administer Vision Screening programs at the district level. Having state guidelines will promote consistency and standardization of school vision screenings. When a student is identified as having a possible visual disturbance, the student is properly referred to an eye care specialist for diagnosis and treatment. In addition, school nurses assist low-income children in obtaining free vision care.

In preparing these guidelines, many knowledgeable professionals with experience implementing vision screening programs assisted, I wish to thank them for their tremendous efforts.

Martell Menlove, Ph.D.
State Superintendent of Public Instruction
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Introduction

Utah State Law recommends vision screening as a necessary and worthwhile undertaking in helping to identify children who may require further evaluation of their eyesight. Utah schools have a responsibility to identify health issues that may impact a student’s academic success. A child’s ability to see greatly impacts her or his ability to learn. A school vision screening program is a cost effective approach that plays a vital role in the early identification of serious vision problems that might negatively affect the physical, intellectual, social, and emotional development of the individual student.

The Utah Department of Health (UDOH) and the Division of Services for the Blind and Visually Impaired (DSBVI) have an interest in ensuring that vision screening of children is accomplished in a reliable, valid, and consistent manner. These guidelines were developed with the advice and contributions of the UDOH Vision Screening Guidelines Task Force to assist school nurses in implementing a successful and evidence based vision screening program.

Vision screening, when overseen by a school nurse and performed by properly trained individuals, leads to early identification and appropriate medical referral for diagnosis and treatment of visual disturbances. The child’s eye is continually developing and is most susceptible to vision correction during the first 7 to 8 years of life (Eliot, 2007). Children often do not identify a vision deficiency themselves; therefore, school vision screening may become the first identifier of a potential vision problem that without correction may lead to permanent vision loss or impairment.

Although vision screening is crucial in identifying children with visual problems, it is important for parents to understand that it is not a substitute for a complete eye exam and vision evaluation by an eye care professional.
Utah Vision Screening Law

(1) As used in this section, "division" means the Division of Services for the Blind and Visually Impaired, State Office of Education.
(2) A child under eight years of age entering school for the first time in this state must present the following to the school:
   (a) a certificate signed by a licensed physician, optometrist, or other licensed health professional approved by the Division, stating that the child has received vision screening to determine the presence of amblyopia or other visual defects; or
   (b) a written statement signed by at least one parent or legal guardian of the child that the screening violates the personal beliefs of the parent or legal guardian.
(3) (a) The Division:
   (i) shall provide vision screening report forms to a person approved by the division to conduct a free vision screening for children aged 3-1/2 to eight; and
   (ii) may work with health care professionals, teachers, and vision screeners to develop protocols that may be used by a parent, teacher, or vision screener to help identify a child who may have conditions that are not detected in a vision screening, such as problems with eye focusing, eye tracking, visual perceptual skills, visual motor integration, and convergence insufficiency; and
   (iii) shall, once protocols are established under Subsection (3)(a)(ii), develop language regarding the vision problems identified in Subsection (3)(a)(ii) to be included in the notice required by Subsection (3)(b).
   (b) The report forms shall include the following information for a parent or guardian: "Vision screening is not a substitute for a complete eye exam and vision evaluation by an eye doctor."
(4) A school district may conduct free vision screening clinics for children aged 3-1/2 to eight.
(5) (a) The division shall maintain a central register of children, aged 3-1/2 to eight, who fail vision screening and who are referred for follow-up treatment.
   (b) The register described in Subsection (5)(a) shall include the name of the child, age or birthdate, address, cause for referral, and follow-up results.
   (c) A school district shall report referral follow-up results for children aged 3-1/2 to eight to the division.
(6) (a) The division shall coordinate and supervise the training of a person who serves as a vision screener for a free vision screening clinic for children aged 3-1/2 to eight.
   (b) A volunteer vision screener providing services under Subsection (6)(a) is not liable for any civil damages as a result of acts or omissions related to the vision screening unless the acts or omissions were willful or grossly negligent.
(7) (a) Except as provided in Subsection (7)(b), a licensed health professional providing vision care to private patients may not participate as a screener in a free vision screening program provided by a school district.
   (b) A school district may:
      (i) allow a licensed health professional who provides vision care to private patients to participate as a screener in a free vision screening program for a child nine
years of age or older;

(ii) establish guidelines to administer a free vision screening program described in Subsection (7)(b)(i); and

(iii) establish penalties for a violation of the requirements of Subsection (7)(c).

(c) A licensed health professional or other person who participates as a screener in a free vision screening program described in Subsection (7)(b):

(i) may not market, advertise, or promote the licensed health professional's business in connection with providing the free screening at the school; and

(ii) shall provide the child's results of the free vision screening on a form produced by the school or school district, which:

(A) may not include contact information other than the name of the licensed health professional; and

(B) shall include a statement: "Vision screening is not a substitute for a complete eye exam and vision evaluation by an eye doctor."

(d) A school district may provide information to a parent or guardian of the availability of follow-up vision services for a student.

(8) The Department of Health shall:

(a) by rule, set standards and procedures for vision screening required by this chapter, which shall include a process for notifying the parent or guardian of a child who fails a vision screening or is identified as needing follow-up care; and

(b) provide the division with copies of rules, standards, instructions, and test charts necessary for conducting vision screening.

(9) The division shall supervise screening, referral, and follow-up required by this chapter.

Amended by Chapter 132, 2011 General Session
Utah Vision Screening Rule

R384. Health, Disease Control and Prevention, Health Promotion.

R384-201. School-Based Vision Screening for Students in Public Schools.

R384-201-1. Authority.

(1) This rule is authorized by section 53A-11-203.

(2) The Department of Health is authorized under the rule to set standards and
procedures for vision screening required by this chapter, which shall include a process
for notifying the parent or guardian of a child who fails a vision screening or is identified
as needing follow-up care; and provide the Division with copies of rules, standards,
instructions, and recommendation for test charts necessary for conducting vision
screening.


(1) Division -- Division of Services for the Blind and Visually Impaired, State
Office of Education.

(2) Eye care professional -- Ophthalmologist or optometrist.

(3) LEA -- Local education agency.

(4) Photoscreening -- Automated screening technique that facilitates vision
screening in children, especially those who are difficult to screen (infants, toddlers, and
children with developmental delays). It screens for a range of eye problems including
most refractive errors, alignment errors, opacities (such as cataracts), and other visible
eye abnormalities.

(5) Screening certificate -- Written documentation of vision screening or
comprehensive eye examination by a licensed physician, or eye care professional that
have been given within one year of entering a public school are acceptable.

(6) Sure Sight -- A vision screening auto-refractor that identifies
nearsightedness, farsightedness, astigmatism and the difference between eyes.

(7) Significant visual impairment -- A visual impairment severe enough to
interfere with learning. The term is the designation required for a child to receive
services from district vision specialist or Utah Schools for the Deaf and Blind (USDB).

(8) Screener -- Pediatricians, family practitioners, nurses, or trained medical staff
can perform vision screening at regular well child office visits. In addition, school
volunteers and groups are trained to support vision screening programs for children. A licensed health professional providing vision care to private patients may participate as a screener in a school vision screening program for a child nine years of age or older.

(9) USDB -- Utah Schools for the Deaf and Blind

(10) UDOH -- Utah Department of Health

(11) Vision Screening: School Vision Screening programs are an efficient and cost-effective method for identifying children with significant visual impairment so that a referral can be made to an appropriate eye care professional for further evaluation and treatment. School Vision Screenings must use devices and procedures approved by the Division and UDOH. The procedures for conducting screening may include age or grade levels to be screened, tests to be used, criteria for referral, and documentation of findings.

R384-201-3. Purpose.

The purpose of school based vision screening is to set standards and procedures for vision screening for students in public schools. This is necessary to detect vision difficulties in school-age children in public schools so that follow-up for potential concerns may be done by the child’s parent or guardian. Vision screening is not a substitute for a complete eye exam and vision evaluation by an eye care professional.

R384-201-4. Students Eligible for Free Screening.

The following students in an LEA may receive free vision screenings to include: distance visual acuity and other age appropriate tests that may detect visual problems upon request.

(1) Students entering pre-kindergarten, kindergarten and any student age eight and under entering school for the first time in Utah;

(2) Vision screening may be conducted for all school-age children in grades pre-kindergarten through 12. The UDOH and the Division recommend screening students every other year after pre-kindergarten and kindergarten screenings, to include grades 1, 3, 5, 7, and 9 or 10 and annually for students with hearing impairment and any student referred by school personnel, parent or self to rule out vision as a reason for learning problems;

(3) Tenth grade students may be screened as part of their driver’s education class; and
(4) Students who are currently receiving services from the Utah Schools for the Deaf and Blind (USDB) or LEA vision staff who have a diagnosed significant visual impairment will be exempt from screening.

R384-201-5. Required Screening.

Required screening for students identified with disabilities in an LEA are as follows:

(1) Vision issues have to be ruled out as reasons for learning problems before Specific Learning Disability can be used as eligibility criteria; and

(2) Every three years, a student must be reevaluated for eligibility for special education in all areas of suspected disability, including vision.

R384-201-6. Proof of Screening.

A certificate or health form from a licensed physician, nurse practitioner, or eye care professional documenting a visual screening or examination given within one year of entering a public school is acceptable for school entry. All children age eight and under entering a public school for the first time without proof of screening mentioned above may be screened during that school year by a trained vision screener.

R384-201-7. Training of Screeners.

(1) A training session shall be provided by the LEA to all volunteer vision screeners prior to the start of annual vision screenings.

(2) Trainings in compliance with Division materials should be provided by the LEA.

(3) The Department of Health, in collaboration with the Division, shall provide Train the Trainer vision screening training materials.

(4) Training vision screening materials will be shared with groups that provide free vision screening services in Utah schools.

R384-201-8. Screening.

(1) Screenings are to be performed following criteria developed by the UDOH in collaboration with the Division.
(2) It is recommended that vision screenings are done early in the school session to provide time in that school year for adequate referral and follow-up to be done.

(3) Parents/legal guardian of a child have the right not to participate in vision screening due to personal beliefs. All parents must be notified of scheduled vision screenings by the public school to provide an opportunity to opt out of screening for their child utilizing the vision screening exemption form, available at the public school, to document a personally held belief.

(4) A public school staff member should be present at all times during vision screenings performed by any volunteer(s), including those done by an eye care professional. If the school nurse is not present, the school nurse should be available for consultation and re-screening.

(5) Screenings are to be done using material and procedures approved by the UDOH in collaboration with the Division. Standards and procedures are based on guidance of the American Academy of Pediatrics, the American Academy of Ophthalmology and the National School Nurse Association.

(6) An eye care professional providing vision care to private patients may participate as a screener in a free vision screening program for students nine years of age or older.

   (a) An eye care professional screener may not market, advertise, or promote their business in conjunction with the free screening at a public school.

   (b) The eye care professional will provide results of the vision screening to the public school in a format (paper or electronic) as required by the Division.

(7) Any group that provides free vision screening services in the LEA will provide results of the vision screening to the public school on forms required by the Division.


All vision screening findings are to be documented in the student's permanent school record. Screening failures and follow-up results for students age eight and under, who are entering school for the first time in this state, are to also be reported to the Division by the LEA.

Reported information to the Division shall include:

(1) The LEA shall report to the division the names of students who the fail vision screening and referral follow-up results for children age 8 and under, who are entering school for the first time in this state.
(2) Follow-up information from an eye examination referral, if available, may be included with written permission obtained by the public school from the parent or guardian;

(3) Follow-up results and screening findings are to be documented in a format approved by the UDOH in collaboration with the Division;

(4) Screening results and follow-up information shall be sent to the Division on or before June 15 for all screenings performed during that school year;

(5) The Division is responsible for maintaining a state database/registry, accessible only by authorized Division staff, of students who fail vision screening and who are referred for follow-up.

(6) In the interest of family privacy, the Division shall not contact a parent or guardian for information related to follow-up referral for professional eye examination unless assistance is requested in writing by the LEA.

R384-201-10. Requirements for Referral.

(1) Children who fail initial age-appropriate school vision screening may be re-screened by a school nurse to confirm results before notification of a student’s parent or guardian of any impairment disclosed by the vision screening recommending further evaluation by an eye care professional. If the screening of a child age 9 or older was administered in the public school by an eye care professional, the school nurse does not have to rescreen.

(2) The public school shall notify in writing within 30 days from vision screening, a student’s parent or guardian of any impairment disclosed by the vision screening recommending further evaluation by an eye care professional.

(3) An LEA may provide information to a parent or guardian of availability of follow-up vision services for students.

(4) A student diagnosed by an eye care professional with a significant visual impairment shall be referred to the LEA vision consultant or teacher of the visually impaired prior to referral to the Division.


Preschool, kindergarten, and special education students who are not candidates for regular vision screening may be screened by a school nurse using a photoscreening device or another device approved by the Division or by Division staff. The Division is
available for assistance and consultation for photo screening. Prior to photo screening by the Division or other outside agencies approved by the Division, the public school shall obtain written permission from the parent or guardian.

References:


KEY: eye exams, school vision, vision evaluations

Date of Enactment or Last Substantive Amendment: July 1, 2013

Authorizing, and Implemented or Interpreted Law: 53A-11-203
Vision Basics

Our eyes receive messages from the outside world and transmit them to our brain. All images we see are the result of reflected or emitted light from the surfaces of objects that we view.

The vision process begins when light rays enter the eye through the transparent, curved cornea. The cornea directs the light through the pupil. The pupil is an opening that can be expanded or constricted by the iris to control light entering the eye. The light is then focused toward the retina by a transparent lens. An upside-down image is formed on the retina in the back of the eye.

Cells on the retina called rods and cones can sense light and color. Rods detect black and white, while cones detect colors. The cells on the retina turn the picture into electrical signals (nerve impulses) that travel along the optic nerve to the brain. The images from both eyes are combined and are “seen” by the brain as right-side up.

Some parts of the eye are protective. The eyelids, cornea, and sclera all protect the eye from injury. The sclera is the outer “white part” of the eye. The outer wall is tough and gives protection to the delicate inner structures. Below is an illustration of the major eye structures. Defects in any part of the eye may cause visual deficits.

Illustrations Courtesy: National Eye Institute, National Institutes of Health (NEI/NIH).
Common Vision Problems

The goal of screening is to detect commonplace or possible visual anomalies and refer for examination and treatment. This section outlines and describes some of these anomalies.

Refractive Errors
In a normal eye the image is focused on the retina. Refractive errors are caused by a defect in the shape of the cornea or the shape of the eye that causes the image to focus in front of or behind the retina. All refractive errors may occur in one eye and not in the other or in both eyes equally or in differing degrees in each eye. The result is blurred vision for near and/or distant objects. The following are common refractive errors:

**Myopia - Nearsightedness**
Myopia is the most common vision problem seen in children. Myopic eyes are too long from the front to the back. The images of distant objects are focused in the front of the retina and appear blurred. This is commonly known as nearsightedness because near things are seen more clearly than distant objects.

**Hyperopia - Farsightedness**
Hyperopia is the result of an eyeball that is shorter than normal from the front to the back. The image of near objects is focused behind the retina resulting in blurred near vision. It is commonly called farsightedness because distant images are seen more clearly.

**Astigmatism**
Astigmatism is caused by an uneven surface of the eye that prevents light rays from falling on a single point on the retina. The normal cornea is round like a basketball while the astigmatic cornea is irregular and elliptical, like a football.
Strabismus - Crossed Eyes

Strabismus is a misalignment of the eyes that prevents them from looking at the same object together. One eye may be directed inward, outward, or rarely, up or down in relation to the other eye. The condition can be alternating or intermittent in either or both eyes. Strabismus usually occurs in early childhood because of improper development of the muscles that align the eyes. When one eye turns while the other sees straight, a double image is sent to the brain. Strabismus is one of the primary causes of amblyopia. Loss of vision in the affected eye may be avoided if it is treated early.

![Images of Esotropia, Exotropia, and Hypertropia]

Amblyopia - Lazy Eye

Amblyopia occurs when the eyes are not working together and the brain cannot fuse the images from each eye into one clear image. If the images from each eye are very different, vision in one eye will be suppressed to avoid double vision. Normal vision will not develop in that eye. Screening for amblyopia should be done preferably by age 8, but the earlier, the better. If amblyopia is not detected before the age of 9, the child may have permanent vision loss in the affected eye. Treatment can be very successful if started before the age of 6. Therefore early detection and compliance with treatment is critical in preventing permanent vision loss.

![Illustrations of Normal Vision, Amblyopia, and One Weak Eye]

Amblyopia may be caused by several conditions. Most often it is the result of unequal refractive error or strabismus. Differences between the information received in each eye and sent to the brain occur if there is:

- A large visual acuity difference or a marked difference in the refractive error between the right and left eyes
- A muscle imbalance (strabismus)
- A combination of the above

Illustrations Courtesy: National Eye Institute, National Institutes of Health (NEI/NIH).
Health issues of the eyes such as cataracts and drooping eyelids may also cause amblyopia. This is due to the difference in image quality between the eyes that these conditions present. In these cases, the brain suppresses the image of poorer quality, causing a permanent vision loss in the affected eye unless detected and treated early in childhood while the vision system is still developing. Rarely does amblyopia fully respond to treatment after age 9, but for some disorders (dense cataracts) the period of visual plasticity is much shorter and treatment needs to be instituted at a much earlier age (sometimes even infancy).

**Color Deficiency**

Children with color deficiency have difficulty identifying certain colors. Color deficiencies are a result of a defect in special cells on the retina called cones. This defect is more common in boys than girls. There is no correction for color deficiency defects. A child who is colorblind can be reasonably accommodated under section 504 of the Americans with Disabilities Act.
Observation of Visual Problems

Most symptoms of vision problems are behavioral in nature and may be confused with symptoms of ADD/ADHD or Autism. The following symptoms are most likely to be observed in the classroom by the teacher or teacher’s aide. Vision problems should be addressed quickly so the student can perform at his/her best. Early intervention is of utmost importance.

Behaviors
- Head turns as student reads across page
- Uses finger as marker to keep place
- Omits small words, letters, or numbers
- Writes up- or down-hill
- Rereads or skips lines unknowingly
- Blinks to read blackboard or clear eyes after close work
- Rubs eyes or blinks during or after reading
- Squints, closes, or covers one eye
- Writes crookedly, poorly spaced, or cannot stay on lines
- No interest in activities revolving critical seeing
- Mistakes/confuses similar words or letters
- Short attention span, especially while reading
- Thrusts head forward or backward while looking at blackboard
- Avoids reading
- Excessive stumbling, awkwardness, or daydreaming
- Holds printed materials close or in odd position
- Difficulty changing focus from distance to near and back
- Restless while working at the desk
- Reverses words or letters
- Frequent signs of frustration or tension during close work
- Unusual fatigue after completing a visual task
- Can respond orally, but not in writing

Academic Performance
- Slow reading or word by word reading
- Slow writing
- Omits or repeats words, letters or phrases
- Fatigue with reading
- Poor comprehension or comprehension drops with time
- Reads words aloud or lip reads
- Writes slowly
- Skips lines
- Loses place or uses finger for orientation
- Difficulty copying from blackboard or book
- Poor recall of visually presented material
Appearance of eyes
- Eyes turn in or out
- Crusty or red eyelids
- Different size pupils or eye
- Swelling of eyelids
- Watering or bloodshot eyes
- Drooping lids

Posture
- Holds head too close to desk or book
- Turns head to use one eye
- Tilts head or moves head frequently while reading
- Poor sitting posture & position while reading

Complaints/Questions
- Eyes hurt or headache when reading
- Blurred vision – can you clear it?
- Letters and lines run together
- Words move or jump about while reading
- Double vision
- Eyes feel hot and itchy
- Can’t see the blackboard
- Eyes get tired after reading for a few minutes
The Screening Process

Although Utah law does not mandate vision screening, the UDOH Vision Screening Guidelines Task Force highly recommends districts develop a distance vision screening program. This section provides guidelines for the recommended charts, recommended grades to be screened, procedure for distance screening, and the referral criteria. In addition, this section provides guidance for notification, referral and follow-up for any vision screening performed.

Recommended Charts for Distance and Near Vision Acuity Testing

The following charts ARE recommended due to their standardized and culturally unbiased optotypes:

- LEA Symbols or HOTV for younger children or preliterate students.
- HOTV, Sloan Letter or Number Charts for older students.

The following charts are NOT recommended due to their non-standardized and culturally biased optotypes:

- Allen figures
- Hand
- Light House
- Blackbird
- Tumbling E
- Snellen

Note: The 10 foot chart is preferred since it reduces the potential for distraction between the examiner and the student.
**Recommended Grades**

The UDOH and the DSBVI recommend screening students for distance visual acuity for pre-kindergarten, kindergarten, and grades 1, 3, 5, 7, and 9 or 10. Tenth grade students may be screened as part of their driver’s education class. Students referred by a parent or school personnel should also be screened. In addition students with hearing impairment should be screened annually. It is also suggested that new students be screened if they fall within the recommended grades above.

**Planning for Vision Screening**

**Scheduling**

At the beginning of the school year or during the previous year when the new school year calendar is available, meet with a school administrator to discuss vision screening planning. Include the following discussion points:

1. Determine grade levels and number of students to be screened.
2. Schedule dates on the school calendar for vision screening, volunteer training, classroom visits for student orientation, and follow-up screening for absentees (within 30 days of initial screening). It is recommended that vision screenings be done early in the school session to provide time in that school year for adequate referral and follow-up to be done.
3. Reserve an appropriate room for vision screening. Consider equipment to be used, number of desired vision lanes, lighting, and potential distractions.
4. Reserve an appropriate room for vision screener training; consider using reserved vision screening room, 1-2 hours prior to actual vision screening.
5. Discuss teacher notification, class lists, and concerns about privacy and confidentiality related to the Family Educational Rights and Privacy Act (FERPA) and/ the Health Insurance Portability and Accountability Act (HIPAA).
6. Review your school and district policies regarding these regulations and plan to set up your screening room accordingly.
7. Discuss parent/legal guardian notification of vision screening, in writing, following school/district policies.
8. Discuss working through the PTA to recruit volunteers and provide host services to volunteers on screening day.

**Parent/Guardian Notification**

All parents must be notified of scheduled vision screenings by the public school to provide an opportunity to opt out of screening for their child utilizing the vision screening exemption form, available at the public school, to document a personally held belief.
Notification of scheduled vision screenings and rescreening dates may be disseminated to parents/legal guardians through parent handbooks, school newsletters, computer generated messages, and other means of communication as per your school or district policy. Include in your message: types of screening tools that may be used; use of trained volunteers; and rescheduling capability if the student has difficulty or is absent during the first screening. Explain that if a child has difficulty meeting the criteria during a second screening, parent/legal guardians will be notified with a referral to an eye care professional. Opt out instruction should be included in the notification of screening. (See sample of parent notification and opt out form in appendix.)

**Student Orientation**
Younger students and those being screened for the first time may benefit greatly when given an explanation of the purpose of screening and a demonstration of screening procedures. Arrange with the classroom teacher to perform an orientation or go in person to address toes on line, covering each eye (no peeking), and identifying optotypes. Explain to the students that a vision screening is not a test and that they may not be able to see everything. They must tell the examiner when they cannot see the letters or symbols and to avoid guessing. Provide an opportunity for practice. This can be done as a class group or individually. Establishing rapport with students can help lead to a successful screening event.

**Training Screening Volunteers**
As required by Utah law R384-201-7, vision screeners will be trained by LEA prior to the start of annual screenings. Trainings shall be provided in compliance with training materials developed by the Division in collaboration with the UDOH.
Procedure for Distance Vision Acuity Testing

All schools are encouraged to screen for distance acuity. Screening for distance acuity in schools is done primarily to identify myopia. Myopia is the most common of the refractive errors in which light rays from an incoming visual image converge before they reach the retina. Generally, myopia begins in middle childhood and tends to steadily increase until it levels off in the mid-teen years. For this reason it is important to screen for distance acuity in elementary and middle school.

Equipment

1. Charts: Lea Symbols or HOTV for younger children or preliterate students. HOTV, Sloan Letter or Number Charts for older students.
2. Masking tape, blue tape or footprints.
3. Occluders (paper patch or small paper cup)
4. Pencils for recording
5. Pointer
6. Window card (optional)
7. Wastepaper basket
8. Tape measure
Vision Screening Procedure (cont.)

1. Select a room for testing that is well lit and does not have a glare on the chart.
2. Place the chart on the wall with masking tape. Hang the chart so the 20/30 line is at the child’s eye level.
3. Measure 10 or 20 feet, whichever is appropriate for your chart, from the mounted chart and place footprints or tape to mark the spot for the student to stand. If using footprints, make sure that the toes of the footprints are at 10 (or 20) feet.
4. Provide a clean occluder for each child. This is to be discarded in a wastepaper basket after use.
5. Ask the child to position toes on the line.
6. Have the child cover the left eye with an occluder. Screen the right eye, then reverse the process and screen the left eye and document results. Be consistent in testing the right eye first to avoid recording errors.
   a. Child should keep both eyes open and not press the cover card against the eye, but rest it against the nose.
   b. No part of the eye that is being covered should show behind the cover.
   c. Do not allow the child to lean the head or torso forward.
   d. Do not allow the child to turn face or tilt head during testing, (peeking may easily occur).
7. If a child wears glasses, screen with the glasses on. Place the occluder over the glasses, not underneath them.
8. Mass screening
   a. On the chart, expose the critical passing line for the specific age group (see explanation next section). The child must identify more than half of the optotypes to pass this line. If the child can read this line easily, he/she passes the test. Record the pass or fail results.
   b. If the child is unable to read the critical line, refer to the school nurse for rescreening.
   c. In a mass screening, if the child does not pass the critical line there may be no need to continue screening if a rescreening will be conducted by the school nurse. The rescreening will determine the line the child passes. This will allow the mass screenings to flow faster and more smoothly.
9. School nurse rescreening
   a. On the chart, expose the critical passing line for the specific age group the child must identify more than half of the optotypes to pass a line. If the child cannot read the critical line, continue moving up the chart until the child can pass a line.
   b. Record the results. Vision acuity is recorded as a fraction. The numerator is always 20. If using the 10-foot chart, convert to the 20-foot equivalent. The denominator represents the line the child passes. Therefore, if the child read the symbols on the 30-foot line, record the vision as 20/30.
Tips
- It may be helpful to have the child read the largest line with both eyes before proceeding to the critical line. This allows the child to experience success and provides for practice.
- Eye charts should be appropriate to the age and skill of the child.
- Window cards may be used to isolate one line, however do not isolate only one optotype.
- When testing distance visual acuity, have the student wear his/her glasses or contacts unless the glasses are for reading or near work only.
- Offer encouragement and praise to build confidence.
- To enhance performance of young or cognitively impaired children, point to optotypes on the chart. You may also allow children to match the optotypes on a chart to a handheld card.

**Recommended Referral Criteria for Distance Vision Acuity**

Critical lines
- Pre-Kindergarten and Kindergarten – 20/40 line
- Grades 1 and above – 20/30 line

<table>
<thead>
<tr>
<th>Grades pre-kindergarten and kindergarten</th>
<th>Refer if the child does not pass the 20/40 line.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades 1 through 12</td>
<td>Refer if the child does not pass the 20/30 line.</td>
</tr>
</tbody>
</table>

- A child passes a line if he/she can correctly identify more than half of the optotypes on the line.
- Ideally, students should be rescreened within one month of the original screening date.
- When using technology, such as a photoscreener, or computer-based screening methods the correct pass/fail criteria will be set by the machine and there is no need to rescreen the student.

**Notification, Referral and Follow-Up**

Notification
Parents and guardians should be notified in writing of abnormal screening results within 30 days of vision screening or rescreening if one is performed. It is also recommended that the classroom teacher be notified if a student fails the vision screening. (See appendix for sample referral form.)
Referral

Referrals should be made if the child’s screening results indicate a need for a professional eye exam. Failure of vision screening is not the only reason a student may need to be referred (see under Observation of Visual Problems). When screening findings are inconclusive and your professional judgment indicates that the student would benefit from seeing an eye care professional the student should be referred. In addition, if a parent or teacher has a legitimate concern based on observation of behaviors suggesting a visual problem, even with a normal vision screening the student should be referred for further evaluation. All children who are unable to perform a vision test and are currently not under the care of an eye care specialist should also be referred.

Follow-up

The ultimate goal of screening is to identify children with visual problems and to assist the families in obtaining further evaluation. Whatever can be done to achieve the goal of a professional eye examination should be done. One way to promote success in achieving this goal is to make a follow-up phone call to the parent or guardian after the notification/referral letter is sent. Further follow-up with parents may be necessary to assure the student is seen by an eye care professional.
Alternative Screenings

This section provides information on alternative screenings that may be warranted in special circumstances. These screenings are not recommended for mass screenings but may be beneficial on an individual basis.

Near Vision Acuity Testing
Near vision is an important function of the human eye. Adequate near vision depends on both accommodation and convergence, which combine to produce a clear image, typically 12 to 24 inches from the eye. Testing near vision in schools is directed toward the identification of hyperopia, particularly severe, or “high” hyperopia.

Testing with a plus lens with strength of at least plus 2.00 diopter is recommended for testing near vision acuity. Plus lenses refract light when placed in front of the eye. Plus lenses may be mounted (1) in a holder or frame which is held before the eye, (2) in a frame that is a common pair of glasses, or (3) in a frame that may be inserted in a stereoscope or vision-testing machine. In the absence of plus lenses, near vision may be tested using near vision cards.

Grades: As requested by parent or school personnel

Procedure for Testing Near Vision with a Plus Lens

Equipment: Sloan distance chart, occlude, and plus 2.00 diopter lens

Near vision may be assessed using plus lenses with a wall-mounted or portable illuminated distance acuity chart. It may seem counterintuitive to assess near vision using a distance chart, but this is the way it is done, in part, because some accommodation is also needed for good distance vision.

1. Place distance vision acuity chart at eye level. If using a wall chart, place in a well-lit area, avoiding places where the chart will be in shadows.
2. Measure the exact distance from the wall where the chart is mounted or placed. Typically the distance will be 10 or 20 feet, depending on the chart used. Mark the floor so the child will know where to stand.
3. Direct the child’s attention to the age appropriate critical line of the chart. Have the child cover the eye not being tested. Ask the child to read the optotypes on the critical line while looking through the plus lens. If the child is unable to discern the optotypes, he or she may hesitate or indicate the images are blurry. The inability to read the optotypes on the critical line while viewing through a plus lens is a PASS.
4. If a child is able to read some, most, or all of the optotypes on the critical line on the chart with one or the other eye while looking through the plus lens, this is a FAIL. A retest is recommended in two weeks. Failure in one eye or both in the retest constitutes a referral.

Tips:
If a child wears glasses or contact lenses to correct for a distance vision problem, testing the child with the glasses/contacts on will produce a better result.

Procedure for Testing Near Vision with Cards

Equipment: Near vision cards with LEA symbols or Sloan letters and occluder

1. Mount the card on a wall or other flat vertical surface at eye level. Make sure that the card is well lit, and that it is free from shadows.
2. Measure the exact distance from the acuity card to where the student will be positioned. A distance of 13-16 inches is recommended. Mark the floor so the child will know where to stand.
3. Don’t allow the child to lean the torso forward or tilt the head forward. Have the child occlude the eye not being tested.
4. Direct the child’s eye to the 20/70 line on the card/chart and move down the card to successively smaller optotypes. The card may be noted as a distance chart with 20/20, or it may be noted in inches or centimeters. If noted in inches, begin with the 14/27 line of the card or the equivalent of 20/70. Proceed to the other eye and repeat the process.
5. Ask the child to read or name the letter or symbol on each line as directed. Pass/Fail criteria are manufacturer specific so follow the manufacturer’s instructions.
6. A retest is recommended in two weeks. Failure in one eye or both constitutes a referral.

Tips:
If a child is already wearing glasses or contact lenses, attempt to determine the reason for the correction. If the glasses are for reading, test the child with and without glasses in order to obtain a baseline. If the glasses are to correct for a distance vision problem, testing the child with his/her glasses on will produce a better result.
Recommended Referral Criteria for Near Vision Acuity:

<table>
<thead>
<tr>
<th>Plus Lenses</th>
<th>A referral is made when a child successfully reads most or all of the optotypes on the 20/30 line of the chart with one or the other eye, while looking at the chart through the plus lens.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Near Acuity Cards</td>
<td>Near acuity cards differ as to what constitutes a <strong>PASS</strong>. Follow manufacturer’s instructions. If in doubt retest using a plus lens prior to referral.</td>
</tr>
</tbody>
</table>

**Testing for Accommodation**

The Near Point of Convergence (NPC) test examines the convergence reflex and is nearly always combined with the Pupil Size Test. The Pupil Size Test observes the size of the pupils when the child gazes at distant and near focal objects, respectively.

**Grades:** As requested by parent or school personnel.

**Equipment:** No special equipment required.

**Procedure for Testing Accommodation Using the NPC Test**

1. Direct the child’s attention to your finger or a near object placed about 18 inches in front of the child’s eyes.
2. Move the focal object, or your finger, in toward the child’s face to a distance about 3 inches from the child’s eyes, or to the tip of the child’s nose, and observe the eye movement. It is recommended that you perform the NPC five times in a row to test stamina.
3. A normal response is a movement of both eyes, nasally, with convergence of the two axes of the eyes. An inability of the eyes to converge may be related to limited accommodation, a problem with the extra ocular muscles, or a frank neurological ocular or systemic condition. Referral to an ophthalmologist is recommended. No retesting is required.
4. If the child is wearing glasses for near vision, test the child with and without his/her glasses. If the child wears glasses for distance vision, remove the glasses during testing.
Procedure for Testing Accommodation Using Pupil Size Test

1. Choose a near focal object, like the examiner’s finger, and a distance focal object.
2. Have the child sit or stand in front of you. A very young child may sit on a parent’s lap. The child should be about 2 feet or less from the examiner.
3. Direct the child’s eyes to the distance focal object and observe the pupil size.
4. Direct the child’s attention to your finger or a near object placed about 18 inches in front of the child’s eyes. Move the focal object, or your finger, in toward the child’s face to a distance about 3 inches from the child’s eyes and once again, observe the pupil size.
5. A normal response is a change in the pupil size from dilated to constricted as the accommodative reflex is engaged. No pupillary constriction connotes poor accommodation, and a referral is made, accompanied by results of a screening with a plus lens.
6. If the child is wearing glasses for near vision, test the child with and without glasses. If the child wears glasses for distance vision, remove the glasses during testing.

Color Vision Testing

Color vision is the perception of the full spectrum of white light and is a function of the cones in the fovea and macula. The fovea and the macula are responsible for clarity of an image, perception of detail, and capturing form. The cones are responsible for color sensitivity and allow the perception of color. A color disorder is a condition of the eye in which there is a deficiency, absence, or unresponsiveness of photochemical receptors in the cones, or an alteration in the structure or function of the cones unrelated to color receptors.

Identification of a childhood color disorder is important information to share with teachers and parents, especially in the child’s early years. So much of preschool and primary grades’ curricula are color-driven. Reading readiness develops and builds on a variety of cognitive skills from matching to recognition and recall, much of which is presented or enhanced through the use of color.

Grades

As requested by parent or school personnel. Color vision screening once in a child’s school life is sufficient and need not be repeated unless special circumstances indicate otherwise.

Equipment

Pseudoisochromatic plates and a cotton-tipped applicator.
For younger children you may prefer to use “Color Vision Testing Made Easy”; pseudoisochromatic plates especially designed for younger age groups.
Procedure for Testing Using Standard Pseudoisochromatic Plates
1. Place the plates on a table with the book closed. Seat the child comfortably at the table and sit down next to the child. Provide the child a clean, cotton-tipped applicator and instruct the child not to touch the cotton.
2. Direct the child’s attention to the practice plate(s) and explain and demonstrate what you would like the child to do.
3. Begin with the first plate and ask the child to trace the shape, form, or object, using the cotton-tipped applicator. Instruct the child not to touch or trace the image with his/her fingers. If numbers are part of the test, the child may call out the number. There is no timing with this test, so a bit more time with a given plate is not a concern.
4. A Pass is the ability to discern the images presented within a reasonable length of time.
5. Note the plates that the child is able or unable to see, and make an interpretation of the nature of the color disorder, if possible, based on the manufacturer’s directions.
6. Notify the teacher and family of the results.

1. Place the plates on a table with the book closed. Seat the child comfortably at the table, and sit down across the table opposite from the child.
2. The test begins with a practice plate. Explain that you will be showing him/her various pictures and that you want him/her to name the pictures on each plate. Be sure the child knows the words necessary to respond.
3. Flash each plate to the child from a distance of about 30 inches and keep each plate up for no more than three seconds. Position the plates so they are comfortable to see and at eye level.
4. Using the manufacturer’s guidelines, make an assessment of the presence or absence of a color problem and the nature of the disorder, if the plates facilitate this.

Tips
• Color disorders are overwhelmingly a male problem. The prevalence of color disorders among females is very low.
• Be alert to the possibility of misdiagnosing a color problem in a very young child, or a child who is an ESL (English as a second language) student.
Screening Students with Special Needs

Some groups of students may not be able to complete a vision screening using the recommended charts due to age, immaturity, or physical/cognitive challenges. These students will need the use of alternative vision screening methods. Photo vision screening is the predominant vision screening method used for these populations of students.

Photo vision screeners are available for loan from the Division for pre-Kindergarten, Kindergarten, Head Start and Special Needs students. Newer technology may be used as it becomes available and approved by the Division.

School districts may choose to use other vision screening instruments at their discretion and expense. These instruments include chart software, other photo vision screeners, and the McDowell Vision Screening Kit (a behavioral/observation based tool).

The Division is available to assist with screening special needs students. If the Division or other outside agencies approved by the Division assist with photoscreening students, the public school should obtain written permission from the parent or guardian, unless the school nurse is available during the screening.

Screening Tips

1. If you screen children with LEA Symbols, familiarize children with the symbols prior to vision screening day. For example, introduce the LEA Symbols 3-D Puzzle in circle time or for play at the manipulatives table.
2. Say you are going to play a game. Do not say, “I am going to test your eyes.” This could frighten the child.
3. Naming optotypes is a fast way of testing but requires a linguistic ability that we are not measuring. If you use naming, let the child choose the names for the optotypes. Accept the name the child suggests. It is in error to suggest abstract names such as circle and square because they are not concepts familiar to young children and may frighten the child so that answering stops. Matching is the best way of measuring recognition. If you are screening children with disabilities or very young children and the child has a difficulty with pointing or eye movements, see information on “Special Use of the Puzzle Board” at http://lea-test.fi/en/vistests/instruct/lea3dpuz/lea3dpuz.html.
4. If a child will not name the optotypes and your eye chart includes response panels and individual flash cards, ask the child to play a matching game by pointing to the symbol on the response panel that matches the symbol on your chart. Another option is to place the individual flash cards on the floor in front of the child and ask the child to step on the symbol that matches the symbol on your eye chart.
5. Refrain from giving young children responsibility for their own occlusion. Children are likely to peek, especially if one eye has amblyopia or blurred vision. Occluder
glasses will increase testability in children who do not want to participate in vision screening.

6. If a child strongly resists occluding one eye and does NOT resist occluding the other eye, the first eye may be preferred for vision and the second eye may have amblyopia. Try screening first with the second eye and then return to the first eye. If the child still resists, refer for a comprehensive, confirmatory eye exam.

7. If you must direct a child’s attention to optotypes, briefly use your finger or a pen to point above or below each symbol, but not directly on the symbol. Refrain from displaying one optotype at a time. Both can interfere with screening and result in an overestimation or underestimation of visual acuity.

8. For untestable children, rescreen or refer for a comprehensive eye exam. Research from the Vision in Preschoolers Study suggests that untestable children are more likely to have vision disorders than children who passed vision screening. If you rescreen, the American Academy of Pediatrics suggests 4 to 6 months for children aged 3. Rescreen in 1 month for children aged 4 and older.
State Reports

In addition to filing a vision screening report in each student's individual record, Utah state law requires schools to report vision screening referrals (failures) for all children ages 8 and under each school year, regardless if they were entered in a prior year. These reports must be completed on-line by April 30 of each year using the on-line reporting tool Q90. This tool will help collect annual data for funding that provides instruments for future vision screenings. This database is simple to use and allows the school nurse or representative to report findings in a quick and easy manner. Initial referral information may be added immediately after rescreening. Provider findings on individual students may be entered at a later date by using the edit button for the identified student. Student information may also be entered in its entirety prior to April 30 after receiving provider reports. The Division will provide training on data entry so that the reporting data are entered correctly. Contact the Division at 801-323-4343 to access the training and to receive a username and passcode.

Be prepared to provide the following information:

Your name: Last, First
Your Title: (school nurse/administrator/other)
Your work e-mail contact information
Your Phone number + AREA CODE
Your Fax number + AREA CODE
List of each District and Name of the school for which you will be entering vision referral data for students aged 8 and under.

Step-by-step directions on how to use Q90:

Access website
https://www.olderblind.com/
Enter username
passcode
Click on

To add new information click on

Create Screening

To revise or update entry, click on title with appropriate date

Enter Information
Title: School Name plus current school year i.e. Alta 2012-13
Student Enrollment and Number screened per grade level:
(The primary purpose of the online Q90 is to provide a variety of data points for statistical information on the percentage of eye problems in Utah students per grade level under the age of 9.)

Clarification
Location: School Address
Number of volunteers: please report total number of volunteers and staff providing vision screenings including yourself
Names of Volunteers: not required. Please assure that volunteers are trained according to guidelines.
Official Thank You cards are available through the Division.

Click:
Enter information only for students that are referred (failed) after rescreening vision. No need to rescreen failures if using a photo screener.

To add student information click on "Add Student Screening".

It is best to use the calendar to enter dates correctly. Enter student’s name, birthday, gender, grade level, parents name, address, city, state, and ZIP.

Visual Acuity: enter Pass (P) or fail (F) for each eye. R (or O.D.) indicates the right eye, and L (or O.S.) indicates the left eye. Provide yes or no in the “Acuity Over 20/70” drop down box, if known. Provide yes or no for screened with glasses. Select from drop down the reason for no acuity if unable to obtain. Provide yes or no if photo screening is needed. (If photo screening is used, provide photo screening information: photo screened date and by whom.)

Use initial observation to record date of rescreening and findings; struggling, squinting, peaking. Provide follow up information from the eye care professional or parent. If adding follow-up information at a later date: click edit next to the students name and fill out the follow up reason and follow up observation.

Be sure to click on save. For questions call the Division at 801-323-4343.
**Vision Resources**

**EyeCare America Children’s EyeCare Program** is a public service foundation of the American Academy of Ophthalmology (AAO). They provide comprehensive eye exams and care for children. They also provide education for parents and primary care providers about the importance of early childhood (newborn through 36 months) eye care. Telephone: 1-877-887-6327. [http://eyecareamerica.org](http://eyecareamerica.org).

**Eye Care For Kids** is a non-profit organization the helps provide eye exams and eyeglasses for low income children who meet eligibility criteria. [www.eyecare4kids.org](http://www.eyecare4kids.org)

**Friends for Sight** is a non-profit agency that provides eye exams and glasses for low income children who meet eligibility criteria. [www.friendsforsight.org](http://www.friendsforsight.org)

**InfantSEE®** is a public health program designed to ensure early detection of eye conditions in babies. Member optometrists provide a comprehensive eye and vision assessment for infants within the first year of life regardless of a family’s income or access to insurance coverage. Telephone: 1-888-396-3937. [http://www.infantsee.org](http://www.infantsee.org).

**Lion’s Club** is a non-profit organization that provides financial assistance for eye care for children who meet eligibility criteria. [www.lionsclubs.org](http://www.lionsclubs.org)

**Moran Eye Center** provides eye exams for patients who qualify based on income status through the University of Utah Billing office. Telephone: 801-587-6303 or 1-800-862-4937; email: billing@healthcare.utah.edu

**New Eyes for the Needy** provides vouchers for the purchase of new prescription eyeglasses. [http://www.new-eyesforthe-needy.org](http://www.new-eyesforthe-needy.org)

**Sight for Students** is a Vision Service Plan (VSP) program that provides free eye exams and glasses to low income and uninsured children 18 years and younger who meet eligibility criteria. **School nurses, who are members of National Association of School Nurses (NASN), can receive free vision vouchers for students in need.** Telephone: 1-888-290-4964. [http://www.sightforstudents.org](http://www.sightforstudents.org).
Utah Division of Services for the Blind and Visually Impaired can provide school nurses with a list of State-approved outside agencies that can assist with vision screening.
Telephone: 801-323-4343

Vision Utah is a foundation created for Utah School Nurses by the Utah Optometric Association. Individual doctors may participate by providing vouchers for a free eye exam and eyeglasses to students who meet eligibility criteria. To locate doctors in your area visit [http://www.utaheyedoc.org](http://www.utaheyedoc.org) then call to see if they participate in Vision Utah.

Zenni Optical an economical way for parents to order glasses on line with Rx and PD (pupil distance) information.
[http://www.zennioptical.com](http://www.zennioptical.com)

Local businesses such as Walmart, Target, Shopko, LensCrafters, and private practices often donate services for eye exams and eyeglasses. It is best to check with the local vendors in your area for needed services.
Glossary

A
Accommodation -- The ability of the eye to allow an individual to focus clearly on objects at near range.

Amblyopia or Lazy eye -- The loss or lack of development of central vision. It is not related to any eye health problem, and it usually cannot be corrected with eyeglasses or contact lenses. It can be the result of a failure to use both eyes together. Lazy eye is often associated with cross-eyes, or a large difference in the degree of near or farsightedness between two eyes. It generally develops before age 6.

Astigmatism -- A condition which causes blurred vision. It is caused by either the irregular shape of the cornea, which is the clear front cover of the eye, or sometimes the curvature of the lens inside the eye.

Auto refractor -- A small, portable, light weight vision assessment system capable of detecting refractive errors. This portable auto refractor is a miniature version of refractors used at the eye care professionals' offices.

B
Blepharitis -- An inflammation, that can be acute or chronic, of the eyelash follicles and the meibomian eyelid glands.

C
Cataract -- A cloudy or opaque area in the lens of the eye that is normally clear. It can interfere with normal vision, depending on the size and location. Cataracts develop primarily in people over 55 years of age, but they can occasionally occur in infants and young children. Cataracts usually develop in both eyes, but one may be worse than the other.

Color vision -- A perception of all specters of white light from the responsiveness of the cones in the fovea and macula, which contain photochemical receptors which are sensitive to red, green, or light blue.

Color vision deficiency (color blindness) -- The inability to distinguish certain shades of color. In rare cases, it can be more severe and they cannot see colors at all.

Conjunctivitis -- An inflammation of the conjunctiva which is a thin, transparent layer that lines the inner eyelid and covers the white part of the eye. There are three main
types of conjunctivitis: infectious, allergic, and chemical. The infectious type is commonly called, "pink-eye" which is caused by a contagious virus or bacteria.

**Convergence/convergence reflex** -- The movement of both eyes goes inward toward each other, usually to focus on an object near at hand.

**Convergent strabismus (also called esotropia)** -- A type of strabismus in which the movements of one or both eyes go inward or nasally.

**Cornea** -- The front part of the eye that is transparent and covers the iris, pupil, and anterior chamber and provides most of an eye’s optical power.

**Corneal abrasion** -- When the cornea has been scraped or has a tear and visual acuity is temporarily reduces, may cause photophobia, and result in considerable pain.

**Critical line** -- The line age appropriate at which a student passes vision screening recommended vision screening

**D**

**Diopter** -- A unit of measure to designate the refractive power of the lens, which is given a plus or minus value on the refractive error.

**Distance vision** -- The ability of the eye to see images clearly at a distance (usually a great distance).

**Divergent strabismus** -- A type of strabismus, in which one or both eyes will deviate outward, or away from the nose.

**Double vision** -- The perception of two images, one by each fovea, when the eyes are intentionally crossed or may be from miss alignment from an imbalance of the extra ocular muscles.

**E**

**Eye Care Professional** -- Refers to a professional eye doctor such as an Optometrist or an Ophthalmologist who specializes in treating vision abnormalities.

**F**

**Farsightedness** -- (See hyperopia).
**G**

**Glaucoma** -- A group of eye diseases that damage the optic nerve as seen by elevated intraocular pressure. The optic nerve carries information from the eye to the brain, when damaged can cause loss of vision.

**H**

**Hyperopia (farsightedness)** -- The inability of the eye to focus on objects close up. This happens because the eye is too short or the cornea is too flat, so the image focuses at a point behind the retina.

**L**

**Lazy eye (see Amblyopia)**

**Legal blindness** – Best corrected visual acuity of 20/200 or less in the better eye; or a peripheral field in the better eye of 20 degrees or less.

**M**

**Myopia (see Nearsightedness)** -- A vision condition in which the cornea has too much curvature so the light entering your eye does not focus correctly. When near objects are seen clearly, but distant objects do not come focus properly.

**N**

**Nearsightedness (see Myopia)**

**Nystagmus** -- A condition where the eyes make uncontrolled, repetitive movements, which often results in reduced vision. These movements can occur up and down, side to side, or in circular motion patterns. Therefore, both eyes are unable make a steady hold on the objects in view.

**O**

**Ophthalmologist** -- One who specializes in medical and surgical diagnosis, whom treats defects and diseases of the eye, prescribes drugs, eyeglasses, contact lenses and optical aids.

**Optic nerve** -- The largest sensory nerve of the eye, which carries visual impulses for sight from the retina to the brain.

**Optician** -- A professional who makes and adjusts lenses, fits them into frames and adjusts the frames to the wearer.
**Optometrist** -- A Doctor of Optometry (OD) who specializes in the diagnosis and treatment of functional vision problems, prescribes corrective lenses or visual therapy and examines eyes for disease.

**Optotypes** -- Letters or symbols on a vision screening chart which are placed before the examinee’s eyes and used to discern visual functioning.

**Orthoptics** -- A type of exercise that is a non-medical, non-surgical treatment of lazy eye to strengthen extra ocular muscles of the eye. This method of treatment is to correct faulty coordination affecting ocular alignment.

**P**

**Patching** -- A type of treatment for amblyopia in which the patient’s preferred eye would be covered, to improve vision in the other eye.

**Peripheral vision** -- The ability to perceive presence, motion or color of objects to the side.

**Photorefractive imager** -- Type of new technology in school vision screening that uses a camera to take a photograph of the corneal light reflex, bilaterally. Also, termed refractometer or photorefractor.

**Photophobia** -- A discomfort or abnormal sensitivity to light. Excessive tearing may be a symptom, which could be caused by inflammation of the iris and cornea.

**Phoria** -- A latent alignment disorder of one eye to deviate up, down, left or right.

**Pink eye (see Conjunctivitis)**

**Ptosis** -- A condition in which there is a drooping of the upper eyelid.

**R**

**Refraction** -- A test to determine an eye’s refractive error and correction of lenses to be prescribed.

**Rescreening** -- A follow-up or second screen performed before referral when findings are suspicious or inconclusive.

**S**

**Screening** – A simple and quick testing procedures used identify children with visual impairment or eye conditions that are likely to lead to visual impairment so that a referral can be made to an appropriate eye care professional for further evaluation and treatment.
Stereopsis -- Binocular depth perception or three-dimensional when both eyes are in alignment and perceive the same image clearly.

Strabismus -- An eye misalignment caused by extraocular muscle imbalance.

Sty -- Eye infection, which involves the gland in the margin of the eyelid.

Suppression -- A condition in which the image from one eye is ignored by the brain and the two eyes see disparate images. This can lead to amblyopia.

V

Visual acuity -- Assessment of the eye’s ability to distinguish detail, as an object is placed farther away or as it becomes smaller in size.

Visual impairment -- A term used by eye care professionals when a child or adult whose best-corrected central vision is less than 20/40 but better than 20/200.
References


*Guidelines for School Vision Screening Programs*. St. Louis, Mo.: American Optometric Association, 1992


Proctor, S.E. (2005). *To see or not to see: Screening the vision of children in school*. Castle Rock, CO

Appendix
Dear Parent(s) or Guardian:

Your child, if in grades pre-K, K, 1,3,5,7,9 or 10, may be given a vision screening during this school year. Before screening is conducted, state law requires parents be informed that vision screening is not a substitute for an eye examination by an eye care specialist.

Vision screening may take place at any point during the school year. Every attempt is made to have student vision screening completed within 60 days from the start of the school year. Several methods for vision screening are state approved and available for student screening. Any of the following methods may be used to screen your child: Distance vision charts, photo screening, or computerized programs. School screenings are coordinated by the school nurse who may use trained parent volunteers and school staff to assist, or may request state-approved vision screening assistance from the Lions Sight Foundation, Friends for Sight, or the Utah Division of Services for the Blind and Visually Impaired.

You will receive a referral letter if your child fails the screening. However, even if your child passed, it is important that your child see an eye care specialist once a year. School vision screening does not evaluate eye health and cannot uncover important vision problems or prescribe treatment. Vision referral information, on children age 8 and under, will be reported to the Utah State Division for the Blind and Visually Impaired as stated in Utah Law 53A-11-203.

Because academic learning is 80% visual, and visual problems are best detected and treated early, a comprehensive eye and vision examination is recommended. Healthy eyes and good vision are essential for success in school.

Please provide the school with written notification if you do not want your child to participate in the screening program.

If you have questions or would like to volunteer to assist with vision screenings, please contact (school nurse or volunteer coordinator) at (contact information).

Sincerely,

Principal
SAMPLE VISION SCREENING OPT-OUT FORM
VISION SCREENING EXEMPTION FORM

To: School Nurse

Due to a personally held belief, I do not wish for my child to have a vision screening during this school year until further notice. I understand that I may change my mind at any time and will do so in writing.

My child’s name is:______________________________________________________

School:________________________Grade:_____Teacher:______________________

Signature: ______________________________________________________ Date________

Printed name:_______________________________________________________

I am the child’s _______parent _____ guardian
SAMPLE 1 CLASSROOM LIST FOR VISION SCREENING
Fill in student’s names alphabetically or by hand or electronically in advance

School or Organization_________________________  District________  County_________
Teacher________________________________________  Grade_________  Date___________

<table>
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<tr>
<th>Student’s Name</th>
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<th>Comments</th>
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<td>Do not need to rescreen if using a photo screener</td>
<td>Pass(P)</td>
<td>Referred (R) - send to school nurse for rescreen</td>
<td>Glasses or contacts</td>
<td>wears glasses, peeks, squints, struggles, uncooperative</td>
<td>Re-screen Information by school nurse</td>
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SAMPLE VISION REFERRAL FORM
(Enter Name) SCHOOL DISTRICT

Student: ___________________________ Date: ___________________________
School: ___________________________ Grade: ______ Teacher ___________________________

Dear Parent or Guardian:

Our school district routinely performs vision screenings to identify students who have vision problems or might be at risk for vision problems. A student’s ability to see well is vital for learning, so it’s important to identify any barriers to learning that can be corrected.

Your child’s vision screening indicated some visual difficulties. These results suggest that your child should have a complete professional eye exam.

Date of Initial Screening ___________
Results
Right Eye: ___________________________
Left Eye: ___________________________

Date of Rescreening ___________
Results
Right Eye: ___________________________
Left Eye: ___________________________

Comments: _______________________________________________________________________

Please take this form to the eye specialist and return it to the school when completed. If you do not have insurance and need financial assistance in obtaining an eye exam and/or glasses for your child, please contact your school nurse to see if you qualify for our eye care program.

School Nurse: ___________________________ Phone: ___________________________

EYE SPECIALIST REPORT

Date: ___________________________

ACUITY RESULTS:
Right Eye: ___________________________
Left Eye: ___________________________

Were glasses prescribed?
YES ☐ NO ☐

Summary of vision problems and/or diagnosis: ________________________________________
________________________________________________________________________________
________________________________________________________________________________

Eye Care Specialist Name: ___________________________
Eye Care Specialist Phone: ___________________________

Eye Care Specialist Signature: ___________________________ Date: __________
#VISION SCREENING REPORTING TOOL FOR REFERRED PK, K, KINDERGARTEN, 1st, 2nd & 3rd Grades

Save for your records. If unable to enter data into the Q-90, please send this report to Division of Services for the Blind & Visually Impaired, Attention: Q-90 report, 250 N 1950 W #B, SLC, UT 84116.

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<tr>
<th>District: ______________</th>
<th>School Name: ___________________________</th>
<th>Address: ___________________________________________</th>
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<tr>
<td>Reporting Person: _______</td>
<td>Title: ___________________________ Page _______ of _______ □ initial report □ additional report</td>
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<td># of trained volunteers used during screening process __________________</td>
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##Total # of students enrolled per grade

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##Total # of students screened per grade

- Referred Student’s Name
  - DOB
  - Sex
  - Grade
  - Date of rescreening or photo screening
  - RE
  - LE
  - Acuity over 20/70 □ yes □ no
  - With glasses or contacts □ yes □ no
  - Photo screening needed □ yes □ no
  - Photo Screened by: ___________________________

- Parent’s Name
  - Mailing Address (City/ZIP)
  - Initial Observation:

- Information from referral report or parent comment: (Amblyopia, Astigmatism, Cross-eyed, Glasses Prescribed, Moved, No Follow-up, Other, Over Referred, Parent Refused, Pathology, Strabismus, Treatment Pending, Within Normal Limits)

##Referred Student’s Name

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- Photo Screened by: ___________________________

- Parent’s Name
  - Mailing Address (City/ZIP)
  - Initial Observation:

- Information from referral report or parent comment: (Amblyopia, Astigmatism, Cross-eyed, Glasses Prescribed, Moved, No Follow-up, Other, Over Referred, Parent Refused, Pathology, Strabismus, Treatment Pending, Within Normal Limits)
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Information from referral report or parent comment: (Amblyopia, Astigmatism, Cross-eyed, Glasses Prescribed, Moved, No Follow-up, Other, Over Referred, Parent Refused, Pathology, Strabismus, Treatment Pending, Within Normal Limits)

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Information from referral report or parent comment: (Amblyopia, Astigmatism, Cross-eyed, Glasses Prescribed, Moved, No Follow-up, Other, Over Referred, Parent Refused, Pathology, Strabismus, Treatment Pending, Within Normal Limits)
Use heavy card stock
Remove rectangle
Toes on line