Vision Screening Program

VISION SCREENING MANUAL – STUDENT

TEXAS
Health and Human
Services

Texas Department of State
Health Services

VISION SCREENING MANUAL TABLE OF CONTENTS

INTRODUCTION

As a professional working with children, you already understand the impact that impaired vision can have on their development. Vision screening programs help to determine whether a child's vision falls within the normal range, answering a single question: does the child need further assessment? Since an estimated 80 percent of learning is visual, catching a vision problem early can have a profound effect on a child's life.

While it will not detect all vision-related problems, screening is a simple, nondiagnostic procedure that tells whether a child has a possible vision problem. Screening by a properly trained individual identifies children who should be referred to their primary care provider for further examination, evaluation, and treatment.

By initiating appropriate screening programs to identify children with a vision problem, your school or medical office can connect them to the programs and services they will need to succeed. Strive to develop a program that ensures those who fail the vision screening are referred for further evaluation.

This manual covers the following topics:

- A brief introduction to the essentials of vision screening.
- Types of vision problems.
- Specific procedures used in vision screening.
- Recording and referral procedures.
- The online reporting procedure.

VISION SCREENING

DSHS recommends completing all screening by April so that follow-up on referrals can be collected for the annual report.

SCREENING SCHEDULE AND REQUIREMENTS

SCREENING SCHEDULE

The requirements for vision and hearing screening apply each year for children enrolled in any public or private preschool or school, licensed child care center, or licensed child care home.

WHO MUST BE SCREENED	WHEN SCREENING MUST BE DONE
• Children 4 years old or older, enrolled in any facility for the first time.*	Screen within 120 calendar days of enrollment.**
• Children enrolled in pre-kindergarten and kindergarten.	Screen each year within 120 days of enrollment.**
• Children enrolled in 1st, 3rd, 5th, and 7th grades.	Screen each of those grade years any time during each of those years (preferably within 120 days of admission).*

* Children who turn 4 years old after September 1 of that year are exempt from screening until the following September.

** If the child is enrolled within 60 days of the date the facility is to close for the summer, the screening may be conducted within 120 days of the beginning of the following school year.

Facilities are encouraged to screen all children younger than 4 years of age who can reliably respond to the screening tests outlined in the Department of State Health Services (DSHS) vision and hearing screening protocols.

DEFINITION:

Facility: a private or public school or preschool, licensed child care center, or child care home.

A child may be exempt from screening if the child's parent or legal guardian does the following:

- Submits a record to the facility showing that the child's vision and/or hearing has been screened during the grade year in question or during the previous year.
- Submits documentation stating that a person other than the screener used by the facility shall conduct the screening as soon as is feasible. The child may be admitted into the facility on a provisional basis for up to 60 days, or the child may be denied admission, until the screening results are provided to the facility.
- Submits a notarized affidavit stating that the screening conflicts with their religious beliefs or practices.

DSHS also **recommends** vision screenings for:

1. Students returning from an absence resulting from a communicable disease.
2. Students referred by teachers, parents, or others.
3. Children who repeat a grade and who have not been screened within the last year.

Schools may write DSHS to request permission to perform screening in alternating years after first grade.

SCREENING REQUIREMENTS

Record distance **acuity** for the right and left eyes in the 20/20 notation.

Charts approved for distance acuity screening include:

- Sloan Letter Chart.
- HOTV Chart.
  (Crowded is preferred, but plain version is acceptable.)

Optional muscle balance tests for children in third grade and younger include:

- Hirschberg corneal light reflex test.
- Cover and uncover tests.

Charts that are unacceptable for the Texas program include:

1. Picture and number charts.
2. Letter charts on which the letters have extensions (E, F, G, L, etc.).
3. Multicolored charts.
4. Charts with 20/32 line.

NOTE: For children through age 5 an automated screening device can be used.

DEFINITION:
Visual acuity: sharpness of vision that is measured and recorded using an internationally recognized two-figured indicator, such as 20/20.

RECORDING REQUIREMENTS

To collect screening information for each child, a facility may use its own screening form or duplicate one provided by DSHS (see the Appendix for the M-60 form). These forms are for internal recording purposes only. **To report results, facilities should use the online form available at http://chrstx.dshs.texas.gov.**

The following data must be recorded:

- Full name of child.
- Birth date or age of child.
- Date of the screen.
- Name of the screener (printed and signed).
- Type of screening.
- Any signs or symptoms of a visual problem.
- Whether the child was wearing corrective lenses during screening.
- Acuity for each eye at far-point (in 20/20 notation) or pass/fail if using automated screening devices.
- Results of any other screening performed.

Facilities must submit an annual aggregate report to DSHS. This is covered on page 46 of this manual. Submit annual vision screening reports to the Department of State Health Services online at http://chrstx.dshs.texas.gov between January 15 and June 30 of each year. If your facility has no children for whom you need to report vision and hearing screening results, please click "Edit Vision/Hearing Screening Information" (Step 1), leave 0s in all the result fields and click "Submit Final Vision/Hearing Screening Information." (For more about reporting procedure, see page 46 of this manual.)

Facilities are required to submit documentation of the total number of children screened with photoscreening in the annual report to DSHS. The report should include the number who failed the photoscreening.

ESTABLISHING A SCREENING PROGRAM

WHAT IS VISION SCREENING?

Vision screening is a brief test to determine whether a person's vision falls within the normal range. **Screening answers only one question: does the person show possible problems that indicate the need for further assessment?** Vision screening is a quick and cost-effective way to identify those who may have vision problems and need a more detailed evaluation by a primary care provider.

DEFINITION:

Licensed Professional: an individual whose legally defined scope of practice includes the area for which the screening is conducted, and who uses department-approved techniques or professional practice standards for the screening.

If a specialist detects a vision problem in a child, early intervention is critical. The mission of the Texas Vision and Hearing Screening program is to ensure that preschoolers and school-age children with hearing and vision problems are identified early and linked to appropriate remedial services.

When establishing a screening program, it is important for practitioners to remember to follow American Association for Pediatric Ophthalmology and Strabismus (AAPOS) guidleines.

Vision Screening Program Objectives:

1. Identification of a possible problem.
2. Referral to a primary care provider for diagnostic evaluation.
3. Educational consideration and recommendations to maximize learning potential.
4. Tracking and follow-up of all referrals for evaluation of program's effectiveness.

Vision Screener Objectives:

1. Recognize signs and symptoms associated with vision problems.
2. Select and use materials to create an appropriate screening environment.
3. Determine by the child's age (or level of cognitive functioning) which screening chart to use or whether an automated device is allowable.
4. Train the child to respond accurately to symbols on the chart.
5. Pretest to determine effectiveness of your training and appropriateness of your chart selection.

Visual acuity screening is the AAPOS gold standard

One primary reason for vision screening is it may indicate amblyopia and a referral for treatment can be initiated.

6. Demonstrate proper screening and recordkeeping procedures for distance acuity, optional Hirschberg corneal light reflex, and optional cover and uncover tests.
7. Determine pass/fail, rescreen, and referral status of a child based on established criteria for two age groups.
8. Demonstrate knowledge of appropriate follow-up procedures for children who fail the screen.
9. Demonstrate knowledge of appropriate procedures for making statistical reports to DSHS.

This manual will help you establish a screening program that meets all of the aforementioned objectives and goals. The first step for conducting a successful vision screening is to understand the anatomy of the eye and the sight process.

SIGHT DEVELOPMENT

Sight development involves the brain's ability to receive and interpret messages sent by the eye. At birth, a child's ability to see is not fully developed because the eyeball has not reached its full depth. By about 4 to 6 months of age, most children use both eyes together. Many authorities believe that when children are about 7 to 8 years old, the eye reaches optimum size for seeing easily at near and far distances and that the brain has learned to interpret the information the eye sends to it.

Understanding the development of the sight process will help you to understand the ultimate goal of good vision—**binocular vision**.

DEFINITION:

Binocular vision: the ability to use both eyes at the same time to focus on the same object and to combine the two images into a single image, giving good depth perception.

FUNCTION OF THE EYE

By looking at the anatomy of the eye, you can understand how vision works (Figure 1).

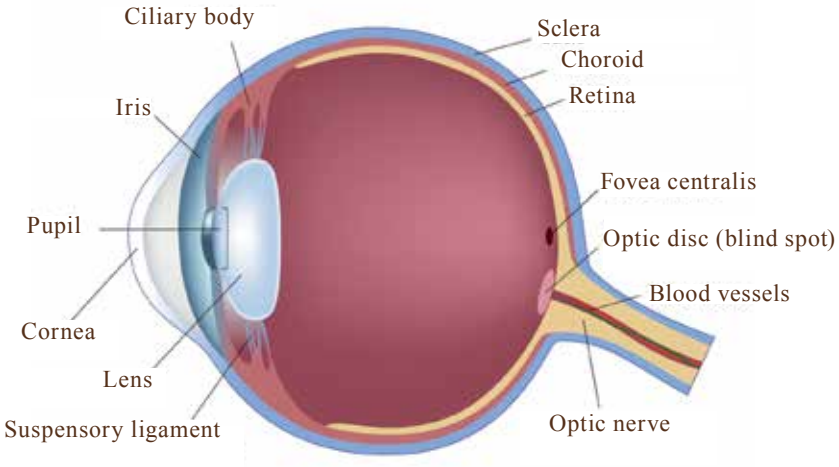


Figure 1: Horizontal section of an eyeball

Indication of physical injury to the eye will always warrant professional examination.

Light reflects from all objects and enters the eye through the cornea. It travels through the pupil, the circular, black-looking opening in the iris (the colored portion of the eye). The pupil widens (dilates) or narrows (contracts) to allow more or less light according to the brightness of the object. From the pupil, light travels through the lens—the curved, transparent, flexible capsule that separates the front of the eye from the back.

The lens operates much like a camera lens to focus light rays on the retina. To do this, the lens changes its shape through the action of ciliary muscles, known as **accommodation**. Through accommodation, the light rays come to focus at a specific point in the back of the eye, the fovea centralis. From there, the optic nerve receives information about the light and sends it to the brain for meaningful interpretation.

DEFINITION:

Accommodation: adjustment of the lens by means of the ciliary body in order to focus an image on the retina.

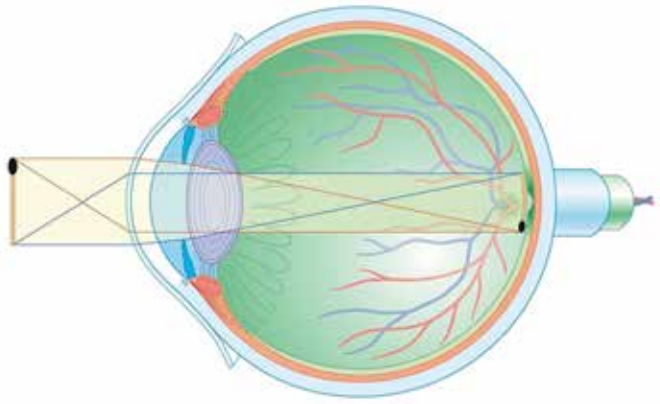


Figure 2: How an object is seen by the eyeball

FUSION

Binocular vision occurs when both eyes automatically adjust so that the image being viewed falls on the same parts of each retina (Figure 3). The two images blend and form a single image in the brain; this process is called **fusion**. When one eye deviates and the two images do not fall on the same parts of the retina, double images result (Figure 4). The brain will not tolerate double vision, or diplopia, and will turn the unwanted image off. This **suppression** can result in the development of **amblyopia**.

DEFINITION:

Suppression: when the image of an object from one eye is not perceived.

Amblyopia: a dimness of vision or reduced **visual acuity** in one eye, not usually correctable by a lens.

Visual acuity: sharpness of vision that is measured and recorded using an internationally recognized two-figured indicator, such as 20/20.

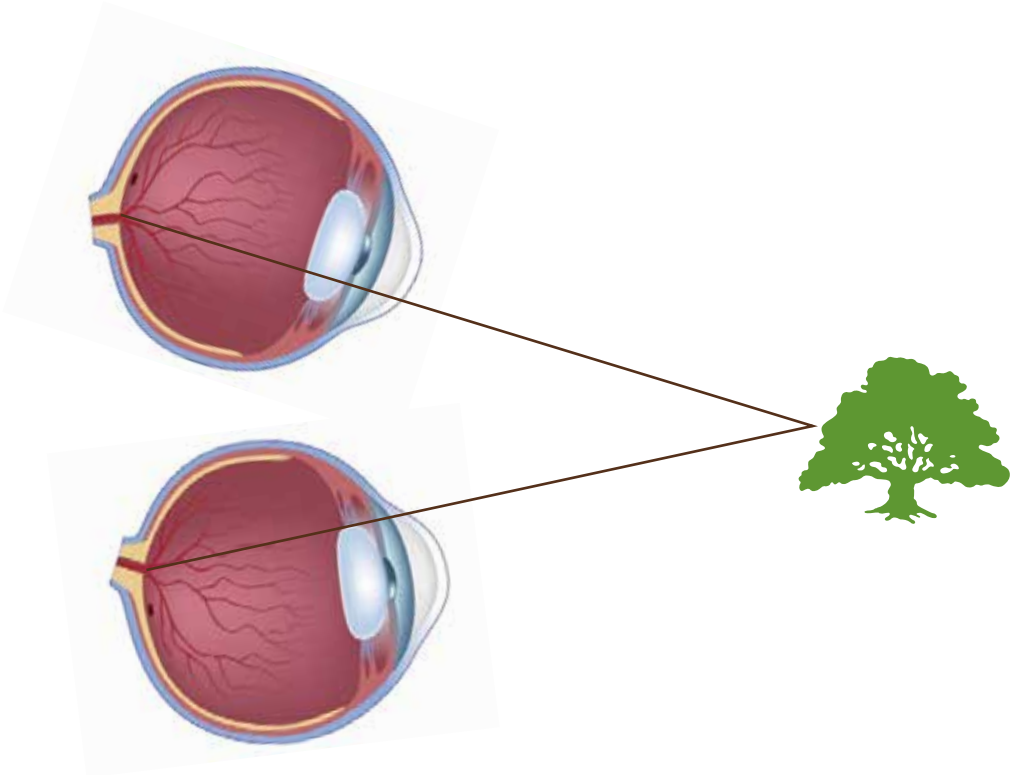


Figure 3: Image falls on corresponding parts of both retinas

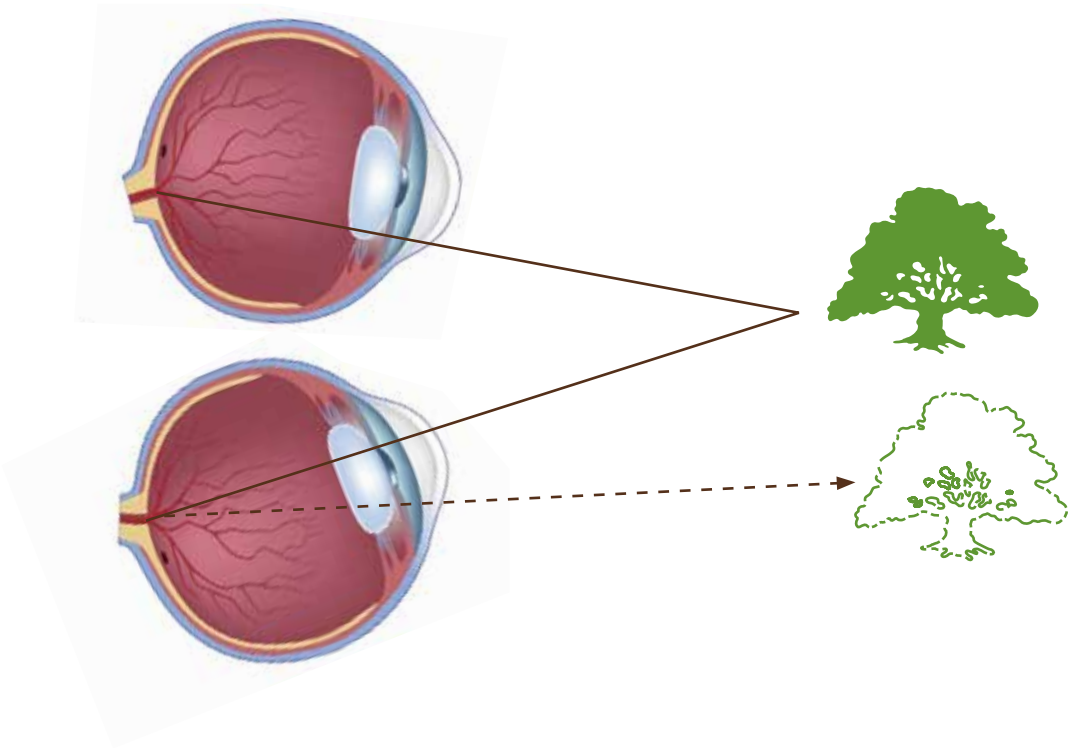


Figure 4: Double vision: one eye is turned, resulting in two separate images that cannot be fused

VISION PROBLEMS

Vision problems may begin in infancy and become more significant and apparent over time as children learn to communicate. Your understanding of the common types, causes, and symptoms of vision problems will help you to deal effectively with each child.

Even if he or she passes the screening, refer any child who exhibits signs or symptoms of a vision problem to his or her primary care provider.

TYPES OF VISION PROBLEMS

By testing for distance acuity—or how well a child sees at varying distances—you can identify several common refractive errors that lead to vision problems. Through simple, optional tests, which are highly recommended for detecting muscle imbalance, you can help identify additional vision problems such as strabismus and amblyopia.

Refractive Error

Refractive error is a condition in which light rays cannot be brought to a single focus on the retina because of problems with the cornea or lens. Examples of refractive error are:

1. Farsightedness (hyperopia).
2. Nearsightedness (myopia).
3. **Astigmatism** (unequal **refraction** within the same eye).

The following conditions result when the eyes receive and send different information to the brain:

1. A large visual acuity difference between the right and left eyes (farsightedness or nearsightedness).
2. A marked astigmatism in one eye.
3. A muscle imbalance (**strabismus**).
4. A combination of the above.

Figure 5: Strabismus

DEFINITION:

Refractive error: amount of myopia, hyperopia, or astigmatism present in the eye.

Astigmatism: a defect in curvature of the cornea or lens of the eye. As a result, a ray of light is not sharply focused on the retina but is spread irregularly.

Refraction: a) the bending of light rays through a transparent medium
b) determination of refractive errors of the eye and/or their correction by lenses (glasses or contacts).

Strabismus: when two eyes are not directed at the same point.

Farsightedness (hyperopia)

Farsightedness occurs when the eye does not focus well on nearby objects. The amount of farsightedness and the child's ability to accommodate will determine visual acuity, especially at close distances. When accommodation does not correct farsightedness, a convex or "plus" (+) lens is prescribed.

Nearsightedness (myopia)

Nearsightedness occurs when the eye does not focus well on distant objects. When the child sees a blurred image that does not improve with accommodation, the result is poor visual acuity at far distances. Nearsightedness is corrected with a concave or "minus" (-) lens.

Astigmatism

In astigmatism, the cornea or lens in an eye curves more in one area of the eye than another. The reflected image of an object focuses on different points of the retina, resulting in a blurred image and poor visual acuity. Astigmatism is corrected with a cylindrical lens.

Strabismus

Strabismus results from an observable deviation of one or both eyes. The eyes may turn in, out, up, or down, and the problem may be constant or intermittent. Esotropia is the inward turning of the eyes. Exotropia is the outward turning of the eyes.

Amblyopia

Amblyopia results when the brain and the eye do not work together properly, causing one eye to "turn off." This dimness of vision in one eye does not correct immediately with corrective lenses. Amblyopia, which can develop in infancy or at any other period in life, is the most common cause of vision impairment in children. Amblyopia may improve significantly if detected and treated early (at least before age 7). The sooner amblyopia is treated, the better the results. If amblyopia is not treated in early childhood it usually persists into adulthood.

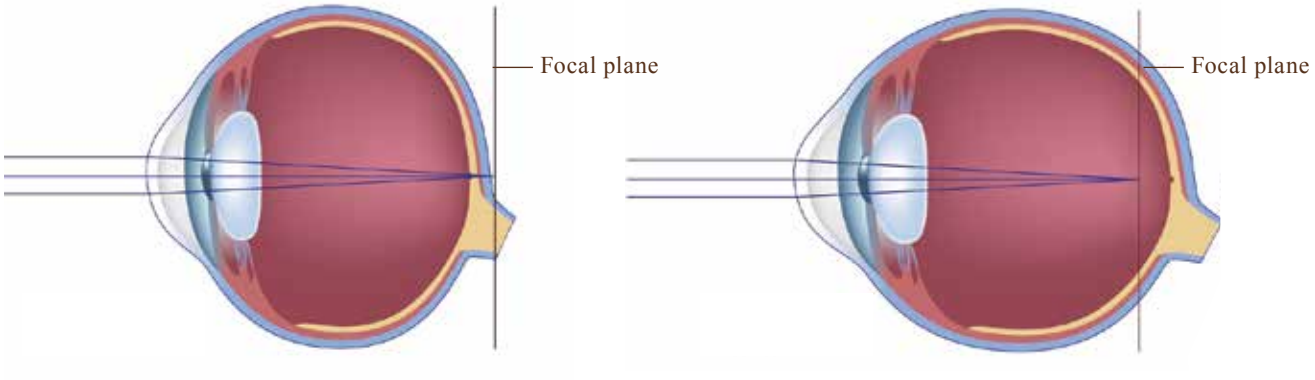


Figure 6: Hyperopia (farsightedness) on left and myopia (nearsightedness) on right

SIGNS AND SYMPTOMS OF VISION PROBLEMS

Critical observation of a child's eyes and behavior may provide valuable information about the need to refer to his or her primary care provider, regardless of the child's performance on a routine vision screening test. Ask a coworker, teacher, nurse, or other observer to confirm such signs.

Observing for signs or symptoms of vision problems is part of every vision screen. Even if the distance acuity screening test—or any other test for visual functioning—is passed, observing signs or symptoms of vision difficulty is reason to refer a child to his or her primary care provider.

During a vision screening, screeners should watch for the following signs and symptoms of a possible vision problem:

- Crossed eyes
- Red or watery eyes
- Squinting
- Covering one eye or turning head to use one eye
- Leaning in

Please see the Appendix of this manual for a reproducible form to be completed by the child's parent, guardian, classroom teacher, or vision screener who may notice a student is exhibiting signs or symptoms of a vision problem.

The two charts <u>required</u> by DSHS for basic visual acuity screening are:

The HOTV Chart

The Sloan letter Chart

Optional
*The **LEA Symbols** Chart*

VISION SCREENING CHARTS

Vision screening does not provide a full examination of the eyes, only sufficient screening to detect those children who may have a vision problem. Texas requires distance acuity screening using one of two types of AAPOS-recommended charts. Select the appropriate chart for the age and abilities of each child. For children through age 5, automated vision screening is allowable.

HOTV CHART

- Appropriate for children 4 and 5 years old, as well as for children who do not know the alphabet.
- Child must know or be taught the matching concept and how to respond 100 percent of the time to presentations of the letters "H," "O," "T," and "V."

Figure 7: HOTV Chart

SLOAN LETTER CHART

- Appropriate for children age 6 or older.
- Child accurately identifies alphabet letters.

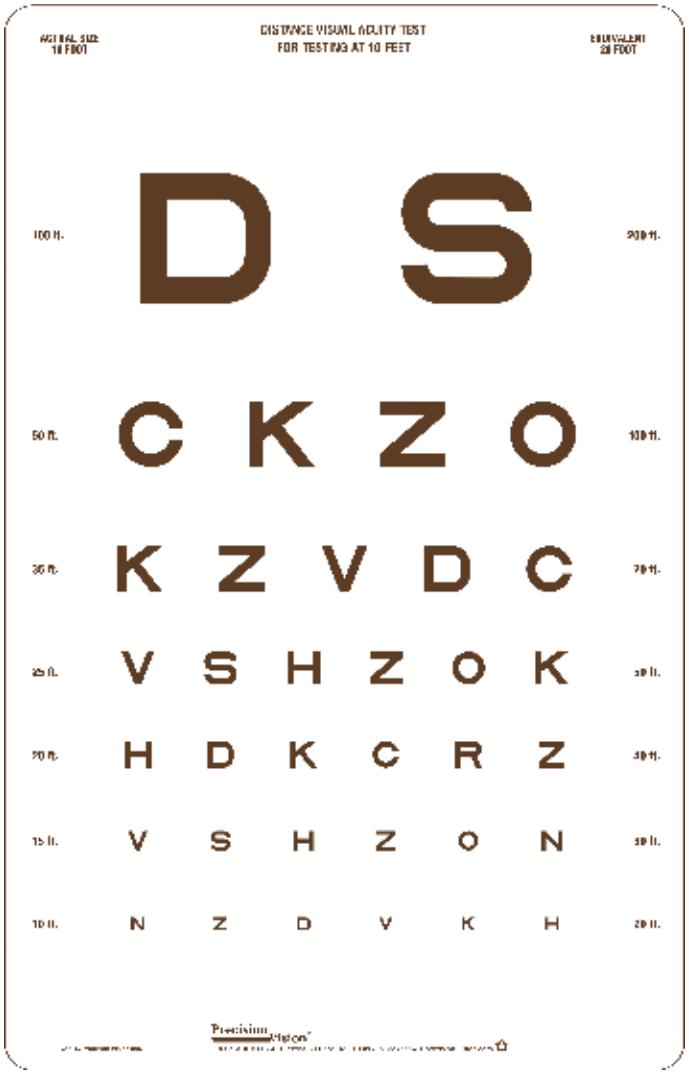


Figure 9: Sloan Letter Chart

PREPARING THE SCREENING ENVIRONMENT

Fully preparing for a vision screening will be well worth the effort. Having the proper environment and supplies ready will help ensure quality vision screening that produces reliable results each time.

When preparing the screening environment, check to make sure there are no shadows or glare on the screening chart.

SCREENING ENVIRONMENT

A screening environment should consist of:

- **A quiet area** free from disturbances and accessible for persons with disabilities.
- **A room at least 2 feet longer** than the required screening for the chart you are using. Some charts will require a screening distance of 10 or 20 feet.
- **An uncluttered, nonpatterned wall** for chart placement.
- **Normal light, without shadows or glare on the eye chart.**
  - In darker locations or on cloudy days, use supplemental lighting. For best illumination, place one or two gooseneck lamps at a 45 degree angle approximately three feet from the chart. Figures 10 and 11 on the next two pages show how to arrange the chart with and without windows in the room.
  - Self-illuminated charts already provide accurate light.

Figure 10: Chart placement and lighting using a wall without windows

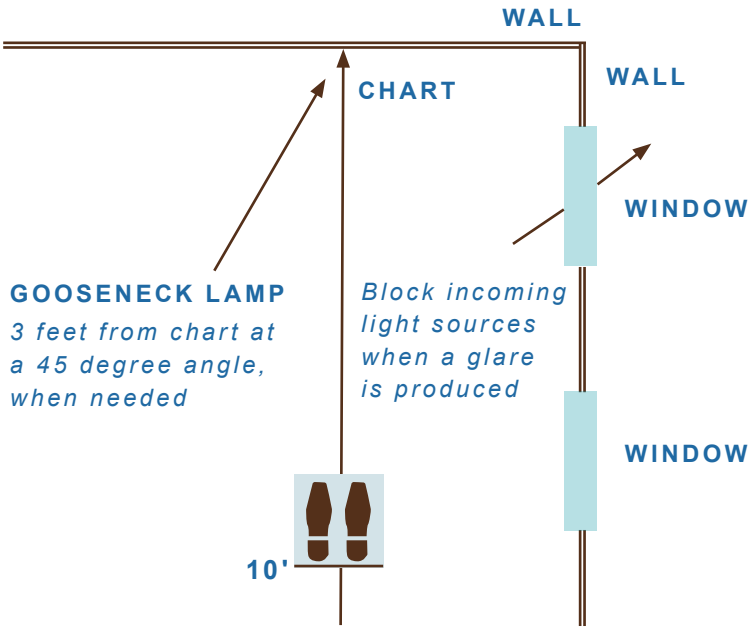
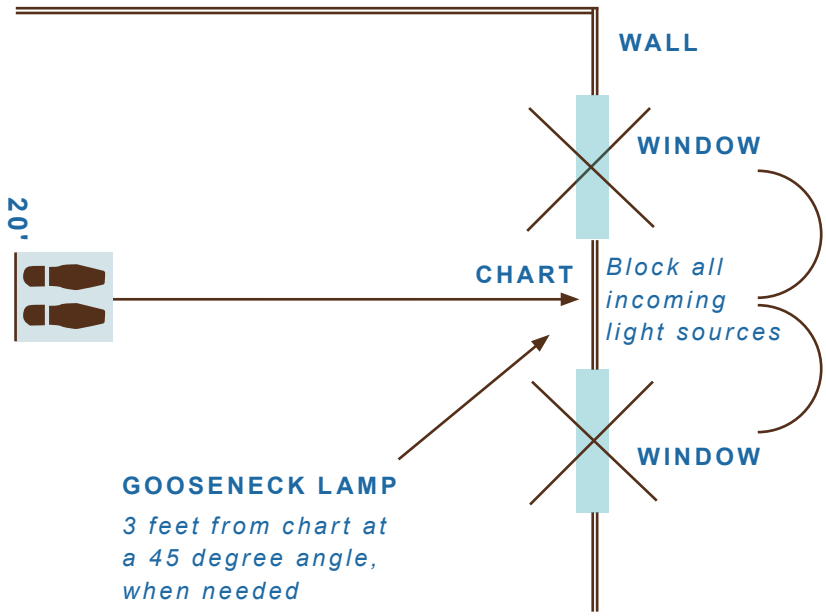


Figure 11: Chart placement and lighting using a wall with windows

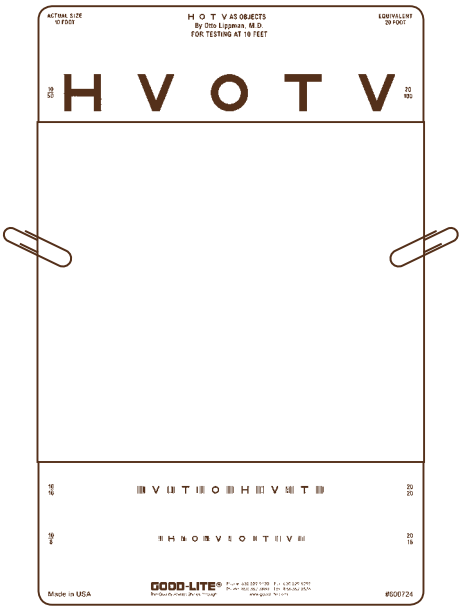


SUPPLIES

You will need the following supplies when setting up your screening environment:

- **Cover cards** (optional) to cover areas of the chart for greater ease in screening.
  - Plain, solid cards to cover lines above 20/50. (Figure 12).
  - Window cards that reveal only one line at a time (**linear screening method**) or one letter or symbol at a time (**isolated screening method**) (Figure 13).

Figure 12: Plain cover card



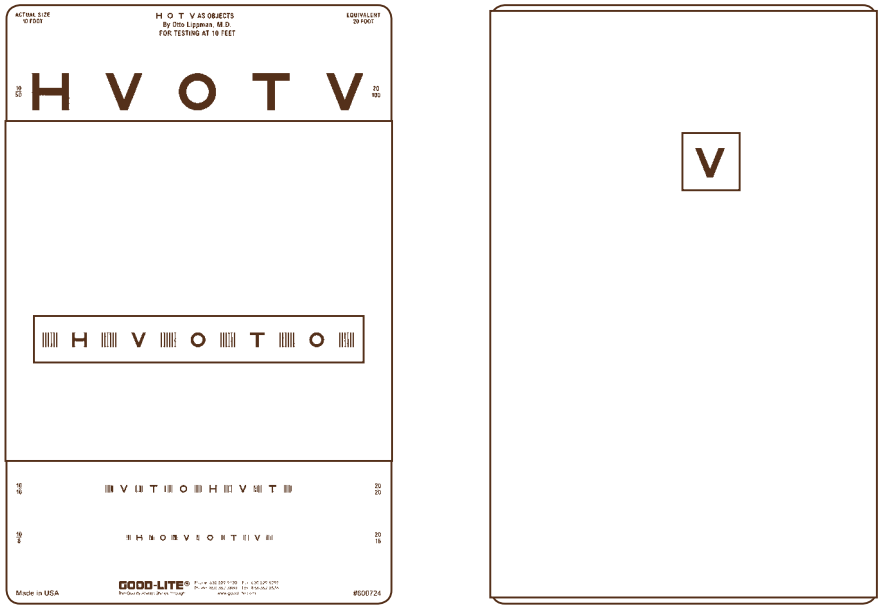


Figure 13: Linear and isolated cover cards

DEFINITION:

Linear screening method: using a window cover card over the eye chart so that the person being screened sees one line of letters or symbols at a time.

Isolated screening method: using a window cover card over the eye chart so that the person being screened sees only one letter or symbol at a time.

IMPORTANT:

The linear screening method is preferred over the isolated screening method. Use the isolated screening method only when:

- The child can do the pretest with 100 percent accuracy (see **Preparing the Child** on page 29).
- The child can do the pretest with the chart using both eyes.
- The child cannot be screened using the linear window card.

- **Steel measuring tape or heavy cord** for measuring the 20-foot or 10-foot distance needed between the chart and the child.
- **Masking tape** to mark the testing spot where the child stands, or the back of the chair if the child sits, and to secure charts to the wall.

- **Footprints** that indicate where a child should stand. Please see the Appendix of this manual for footprints that you can copy and use in your own screenings.
- **Occluders** to completely block the vision in one eye while testing the other. Examples include: 3″ x 4″ heavy paper or heavy construction paper with rounded corners, paper cups, or commercially produced paddle-like devices. (See **Screening Procedures,** Step 3 on page 33).

> **NOTE:** The child's hand should not be used as an occluder.

- **Plain brown or butcher paper** taped behind wall charts to provide an uncluttered background or to cover windows that produce a glare on the chart.
- **One or more lamps with flexible stands** (gooseneck) with 60-watt, frosted bulbs to light the chart.
- **Pointers** purchased or made from a dowel, small rod, or chopstick. Use one long enough so that the screener's body does not block the child's view of the chart. A dark, pointed end will work best.
- **Screening record forms** - The Department of State Health Services has developed a vision screening record form (the M-60 form), which may be duplicated and used for each child screened. (See the Appendix for a reproducible M-60 form.)
- **Visual acuity charts:**
  - **Sloan Letter Chart.** (available in both the 20- and 10-foot models).
  - **The HOTV Chart Set**, which includes:
    - A 9″ x 14″ chart with the HOTV symbols (10 ft. only).
    - A four-object ("H," "O," "T," and "V") response panel.
    - Four flash cards with the letters "H," "O," "T," and "V."
    - A small table for the HOTV response panel, if needed.

> **DEFINITION:**
> **Occluder:** any device used to block the vision in one eye; often a stiff piece of paper or a paddle-like instrument.

HOW TO SET UP YOUR SCREENING

Now that you have chosen an appropriate environment, you are ready to set up your screening.

STEP 1:

Assemble screener materials: screening record forms, pens, occluders, and other necessary supplies and equipment.

STEP 2:

Position the eye chart on a light-colored wall so that the 20/30 or 20/40 line, also known as the "passing line," is at the eye level of the average-sized child you will screen, approximately 36″ to 42″ for 4- to 6-year old children, while standing. Plan to adjust the position of the eye chart so that it is at a comfortable position, based on the child's height.

IMPORTANT:
The passing line is the line the child must read in order to pass the screening.

PASSING LINES
20/40 line - Children 4 and younger
20/30 line - Children 5 and older

STEP 3:

Measure the distance indicated on the chart (20 feet or 10 feet). Mark that spot with masking tape or tape footprints. If the child is standing, ask him to place his heels on the line. If the child is seated, align back of chair with this mark.

NOTE: Only screen lines that end in zero (e.g. 20/30).
The 20-foot distance is preferred; however, due to space limitations, it is permissible to use a 10-foot chart.

IMPORTANT:
For the HOTV chart, use only the 10-foot model.

A chart designed for use at a specific distance must be used at that distance, which will be indicated at the top of the chart.

STEP 4:

Position the assistants (whose roles will be discussed in the next section) at the chart location and at a table facing the child, midway between the child and the chart. Depending on the number of assistants you have, you may need to have one person positioned so that he or she can see both the child and the chart.

ROLES OF THE SCREENING TEAM

After selecting and preparing the environment, the certified screener should organize the screening team. Ideally this team has three certified vision screeners who fill the positions described below and perform the duties assigned to each. However, one certified screener may train and direct the activities of others, who may serve as screening assistants. The certified screener must remain an active member of the team. The certified screener can fill any position on the team. During mass screenings it is advisable to rotate positions.

Ideally the screening team will consist of three certified screeners.

SCREENING ROLES

Member 1:

- Assists team members in setting up the screening area.
- Greets the child and establishes friendly rapport.
- Gets the child's name for the team member who is recording/observing and the child's age for chart attendant.
- Positions the child 20 feet (or 10 feet) from the chart.
- Holds the occluder for each child for each eye. (Child does not hold occluder at any time.)
- Determines when the child responds correctly and signals to chart attendant when to display the next symbol or line on the chart.
- Signals the team recorder to record results of the visual acuity test.

Member 2:

- Assists team members in setting up the screening area.
- Stands or is seated near the chart.
- Determines practice and passing lines according to the child's age. (The beginning or practice line is the line directly above the child's passing line on the chart.)
- Uses cover cards to screen in a linear manner (or in an isolated manner, if necessary). Linear cards are preferred over isolated because showing one line of symbols on the chart at a time results in a more reliable screen.
- Points directly underneath the appropriate symbol using a pointer.
- Listens to the screener's signals to determine:
  - What line to display.
  - What symbol to display.
  - When to repeat a line (only when the child doesn't pass the beginning line).

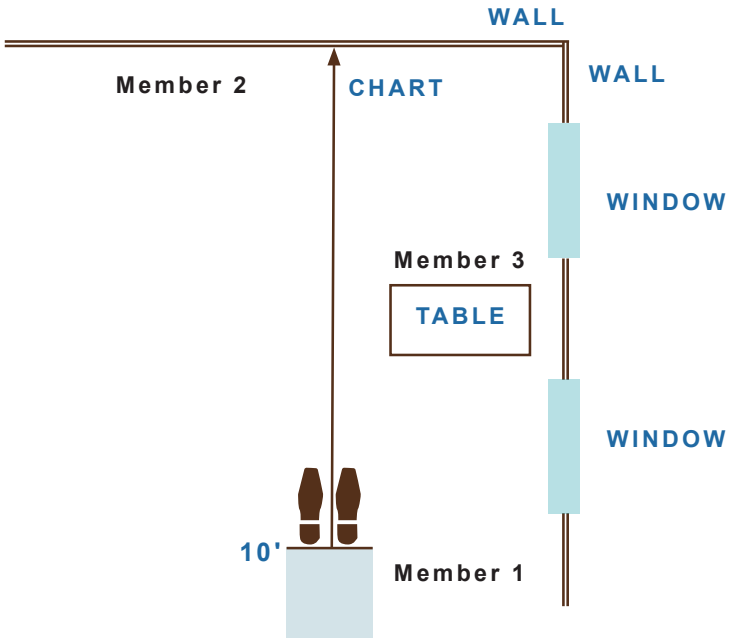
IMPORTANT:
PRACTICE OR BEGINNING LINE (ONE LINE ABOVE PASSING LINE)
20/50 line—Children 4 and younger
20/40 line—Children 5 and older

NOTE: Depending on the number of assistants you have, you may need to have one person positioned so that he or she can see both the child and the chart.

Member 3:

- Assists team members in setting up the screening area.
- Sits at a table facing the child, midway between the chart and the child.
- Records visual acuity of each child on the appropriate form.
- Records signs or physical symptoms of vision problems and helps the screener observe each child (see **Checklist for Signs and Symptoms of Vision Difficulties** in the Appendix).
- Observes behavior of the child during screening and makes sure he or she does not peek around occluder.
- Notes rescreenings and referrals on appropriate forms.

Figure 14: Member positions



PREPARING THE CHILD

The last step as you prepare to screen children for vision problems is to train them for the screening process. The following section provides instructions on training young children using different vision screening charts. This training can be done in advance in the classroom.

Children may be asked to identify the symbols on the chart with both eyes to help them transfer the screening pretest to the chart.

TRAINING FOR THE HOTV SCREENING

Instruct one child at a time as follows.

STEP 1

Show each training flash card (Figure 15), one at a time, a few feet away from the child.

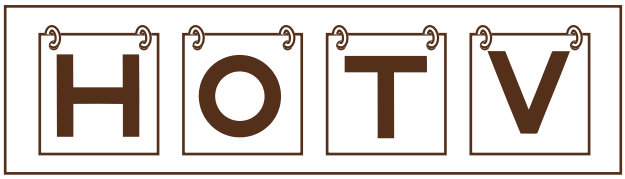


Figure 15: HOTV symbols

STEP 2

Tell the child to point to the letter on the panel that looks like the letter on the card. This may require assistance until the child understands. If giving verbal directions does not work, trace over the letter on the flash card with the child's finger. Then, using the child's finger, trace over the matching letter on the response panel.

STEP 3

Hold the flash cards one at a time at increasing distances from the child while he or she continues to match them on the response panel. Vary the order of letters to avoid establishing a pattern of response in the child.

STEP 4

Practice until the child shows he or she can stand or sit 10 feet from the chart and correctly match each letter indicated on it to those on the response panel.

STEP 5

Review the letters before the vision screening takes place. The child may need additional training before the screening to help him transfer the matching skill to the HOTV screening chart.

IMPORTANT:
Before being screened with the HOTV chart, the child must match all four letters.

NOTE: if the child cannot be trained using this technique, attempt to retrain and perform a screen as soon as possible. Very young and new students may require a month or two at the facility to become comfortable enough to test. If the child still cannot train, refer to his or her primary care provider.

TRAINING FOR THE LETTER CHART SCREENING

One at a time, have the children read the letters on the beginning line with both eyes open.

SCREENING PROCEDURES

The child should be told to keep both eyes open during screening, even though one will be covered.

You have prepared your screening environment and gathered your supplies. Members of your team understand their roles and the children have been trained to ensure a reliable and accurate screening. Now you are ready to conduct a screening.

There are two goals of a distance acuity screen:

1. Obtain distance acuity for each eye.
2. Determine whether the child passes or fails the screen.

NOTE: Ideally, there will be three team members working together to conduct the screening:

- Member 1, who should be with the child.
- Member 2, who should be positioned near the chart.
- Member 3, who should be seated at the recording table.

If designating three people to screen is not an option, then the following instructions should be adapted accordingly.

Follow these steps to conduct a vision screening.

STEP 1: LINE UP.

- Greet the child and ask the child's name and age.
- Have the child stand with back of heels at the 20-foot (or 10-foot) mark, facing the chart. If the child is seated, align the back of the chair with the mark. Experienced screeners report faster results when children stand for screening.
- Determine the beginning line based on the child's age.
- For children 4 and younger the beginning line is 20/50. For children 5 and older the beginning line is 20/40.
- Place the linear screening card, if used, on the chart to expose the entire beginning line (also known as the practice line) or a symbol on that line. Some experienced vision screeners recommend using the window card with older children to help prevent memorization of the lines.

NOTE: The "beginning line" is sometimes called the "practice line."

NOTE: The child may need additional training before the screening to help him or her transfer the training with the flash cards to the HOTV screening chart. Refer to page 29 for training instructions.

STEP 2: PRACTICE.

- Have the child read the beginning line using both eyes to ensure the child can screen successfully using the chart.
- If the child is not successful at identifying the symbols, the screener should move the child closer to the chart and have him or her attempt to read the beginning line again with both eyes.
- When the child gives correct responses, begin moving the child back to the 20-foot (or 10-foot) line.

IMPORTANT:
The child must identify the symbols on the beginning line with 100 percent accuracy.

IMPORTANT:
If the child has been prescribed glasses or contact lenses, he or she must wear them at the time of the screening. Rescreens and referrals are based on acuities with correction (glasses or contact lenses.)

STEP 3: SCREEN ONE EYE AT A TIME, RIGHT THEN LEFT.

- Place the tip of the pointer directly below each symbol to be read, refraining from touching the symbol (about 1/4 inch below each one).
- Always screen the right eye first. Cover the left eye with the occluder, telling the child to keep both eyes open. If using a paper occluder, fold it in half to create a cup to avoid touching the eye, and discard it after each child's screening. If using a nondisposable occluder, wipe it with alcohol after each child's screening. The child may not use his or her hand as an occluder.

IMPORTANT:
Peeking around the occluder results in more children passing the screen who would normally fail. This is possibly the most common screening error. **Be sure the occluder blocks all vision in the eye it covers.**

- The screener asks the child to identify the symbols when the chart attendant points to them.

IMPORTANT:
To pass a line, the child must identify **one more than half** of the symbols on the line.

- For children ages 6 and above, repeat the practice line but point out the symbols in the opposite direction from the practice session so that he or she does not memorize the symbols.
- Determine whether the child responds correctly and signal accordingly to the team member standing near the chart.
- When the child passes a line, present the symbols on the next smaller line. Proceed down the chart through the 20-foot line as long as the child can identify one more than half of the symbols on each line.

> **IMPORTANT:**
>
> The screener should always respond to the child in a positive manner. Using words such as "good" or "fine" after each response will speed up the screening, especially for very young children.

- The screener communicates the child's visual acuity score to the recorder/observer.

> **IMPORTANT:**
>
> The **visual acuity score** is always the last line that is read correctly (passed).

- The recorder/observer records the visual acuity score for the right eye as well as all signs and symptoms of possible vision disorders.
- Screen the left eye, repeating the procedures described above.
- If a child cannot identify the symbols on the practice line (20/40 or 20/50 line), move up or to the top of the chart until you find a line he or she can pass. Now move down the chart again until the child does not pass a line or until he or she indentifies the 20/20 line. (Note: This procedure may frustrate a young or visually impaired child.)

> **IMPORTANT:**
>
> The child fails the distance acuity screen if he or she cannot identify one more than half of the symbols on the passing line. For children 4 years old and younger, the 20/40 line is the passing line. If they show a two-line difference between the eyes (e.g., 20/40 in the right eye and 20/20 in the left eye), they should be referred to their primary care provider.

IMPORTANT:
Children should either have a vision screening or be asked screening questions about changes in vision upon returning to school only after specific communicable diseases that may affect the eyes.

AUTOMATED SCREENING

Automated screening is an optional method of screening that is especially useful for screening children through age 5. Screeners who intend to use automated screening devices should be trained by the manufacturer. This manual does not provide instructions for automated screening.

Important Facts about Automated Screening Devices:

- Optional alternative to screening with an eye chart.
- Not dependent on behavioral responses of children.
- Appropriate for children through age 5.
- Photoscreening is one type of automated screening that uses a special camera to screen for refractive errors and strabismus.

DEFINITION:

Photoscreening: a form of pediatric vision screening that uses a special-purpose camera to determine how well a child can see. It is an alternative to visual acuity-based screening with an eye chart for certain children, as specified in state rules. Other related terms are: autorefractor, objective screening and instrument-based screening. Photoscreening cannot determine exactly how well a child's visual acuity is developing. Important factors that affect visual acuity such as accommodative ability (focusing ability), binocular vision development, and other eye health issues are not assessed via photoscreening.

In addition to AAPOS' recommendation regarding photoscreening for children through age 5, photoscreening may be used for children with disabilities who do not respond well to other allowable screening methods. A referral for a professional examination is required if the child fails the photoscreening.

Vision screening devices do not specifically measure subjective visual acuity, required by DSHS

It is important that a screener be well-trained when using stereoacuity screening instruments. The screener must also watch the child very carefully for movement and/or visual indications of problems.

Certification Requirements:

Screeners using photoscreening for vision screening must have successfully completed instrument-specific training (including passing all associated tests) in accordance with manufacturer guidelines and must have a full understanding of the pass/fail referral criteria.

Screeners conducting photoscreening must also have a current vision screening certificate.

Documentation of the photoscreening training must be submitted to the vision screening instructor upon attendance at a certification class. The documentation must include the date and location the training was taken, and the name, affiliation, and contact information of the instructor.

The photoscreening certificate must be submitted to the department by the department-authorized instructor at the time the instructor submits the attendance sheets, evaluation, and the tear-off portion of the department's certification. The instructor is to submit the certificate(s) and the other documents within 14 days.

Prior to conducting photoscreening at a facility, screeners must submit documentation of photoscreening training and certification to the facility.

Refresher Training Requirements:

Screeners who are certified to conduct photoscreening must successfully complete instrument-specific refresher training (including passing any associated tests) every five years. The refresher training must be completed during the fifth year of certification from the date the preceding certificate was issued.

Image courtesy of PediaVision/Welch Allyn, Inc.

MUSCLE BALANCE TESTS

Muscle balance testing serves to determine whether the eyes are aligned correctly so that binocular vision is normal. When one eye does not respond adequately and cannot look directly at an object, the individual has a muscle imbalance. Binocular vision usually develops by age 6 months, which is a good age to begin checking for muscle balance.

When a muscle pair is imbalanced, the image one eye sees may differ from the image the other eye sees. Early intervention usually helps binocular vision progress to near normal. Developing binocular vision by age 3 greatly reduces the potential for amblyopia to develop.

While optional by law, the following muscle balance (fusion) tests are recommended by DSHS for children in preschool, kindergarten, first, and third grades.

- **Hirschberg Corneal Light Reflex Test**

  This is the simplest muscle balance test and is appropriate for all age levels beginning at 6 months. This inexpensive test may detect a constant muscle imbalance or misalignment of the eyes (a type of strabismus) in children as young as 6 months. By noting the position of light reflected in the pupils, the observer can detect a constant strabismus of lesser degree than when simply observing the eye's position. This subjective screen produces the most accurate referrals when screeners check the results against results of another certified vision screener.

- **Cover and Uncover Test**

  This simple muscle balance test checks for strabismus or muscle imbalance. The cover and uncover test may allow a screener to detect possible misalignment by observing the child's eyes to see whether they shift when alternately covering and uncovering the eyes. More definitive results come from the cover and uncover test, but this test requires that the screener be trained to recognize the kind of eye movement that indicates muscle imbalance.

  Like the Hirschberg corneal light reflex test, you can administer it repeatedly for confirmation of initial findings.

- **Other Fusion Tests**

  Other binocular fusion tests exist for younger children, but materials cost considerably more than materials used with the Hirschberg corneal light reflex test and the cover and uncover test.

HOW TO SCREEN FOR MUSCLE BALANCE PROBLEMS

One screener can easily perform the two recommended muscle balance tests. Because the screener's observations depend on subjective judgment, DSHS suggests repeating the test with additional screeners for more accurate identification if a child fails.

NOTE: DSHS recommends the Hirschberg corneal light reflex test and cover and uncover tests be administered to children in preschool, kindergarten, first grade, and third grade. If these screens are conducted, it is also recommended that both tests be administered since each works differently in the detection of a muscle imbalance.

HIRSCHBERG CORNEAL LIGHT REFLEX TEST

The Hirschberg corneal light reflex test detects muscle imbalance or misalignment of the eyes (a type of strabismus).

What you will need to perform this test:

- A penlight.
- A solid, interesting object for fixation (if light from penlight is not attractive enough).

Follow these steps to conduct this test.

STEP 1

Position the child so that the penlight is held 12 to 13 inches away, directly in front of the child's eyes. A good way to do this is to line your face up with the child's (features parallel with each other) and hold the penlight in front of your nose, which should be 12 to 13 inches away from the child's face. Do not hold the light at an angle or move it back and forth while looking to see where the light falls.

STEP 2

Instruct the child to look at your nose (or if a young child, move the light back and forth to make it an object of attraction and fixation and then return to a fixed position for observation).

STEP 3

Use another fixation target near the light if the child loses interest.

STEP 4

Observe the reflection of the penlight in the pupils of both eyes; it should be centered or equally centered slightly toward the nose. If this is the case, then the child passes the test.

The child fails the test if the reflection of the penlight does not appear to be centered or positioned slightly toward the nose at the same place in each pupil. If the child fails the test, rescreen immediately. If he or she fails a second time, refer to a primary care provider.

COVER AND UNCOVER TEST

The cover and uncover test checks for strabismus or muscle imbalance.

What you'll need to perform this test:

- A target object.
- A solid, interesting object for fixation (if light from penlight is not attractive enough).
- An occluder.

STEP 1

Align your eyes with the child's eyes. Seat younger children upright in an adult's lap.

STEP 2

Hold the target object 12 to 13 inches away from the child's eyes, directly in front of him or her.

STEP 3

Permit the child to **fixate** his or her eyes on the target object for two to three seconds. (Check fixation by moving the target object back and forth, watching to see whether the eyes follow.)

> **DEFINITION:**
> **Fixate:** to focus one's gaze on an object.

STEP 4

Cover the right eye with the occluder (watching the left eye for any shifting*). Leave covered two to three seconds.

STEP 5

Remove the cover (watching the right eye for any shifting*). Allow two to three seconds for both eyes to fixate on the target object again. (For young children, try manipulating or changing the target object to maintain attention.)

STEP 6

Cover the left eye with the occluder (watching the right eye for any shifting*). Leave covered for two to three seconds.

STEP 7

Remove the cover (watching the left eye for any shifting*). Allow two to three seconds for both eyes to fixate on the target object again.

STEP 8

Repeat this procedure several times to confirm observations.

STEP 9

Place the target object 10 to 20 feet away and repeat the procedure above.

*Experience will permit the screener to observe both eyes simultaneously for shifting; however, the most recently uncovered eye deserves primary consideration.

PROCEDURE

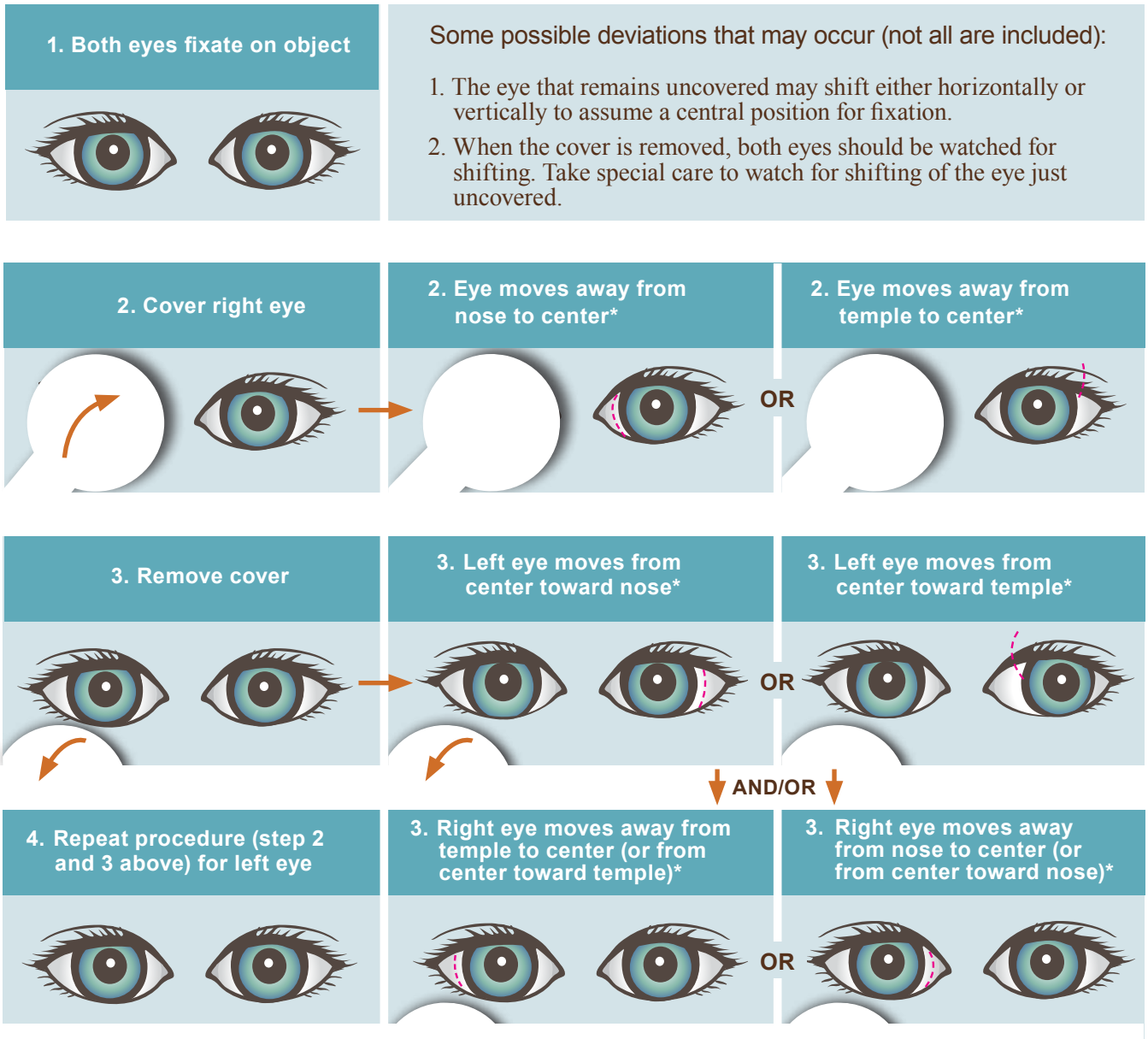


Figure 18: Cover and uncover test

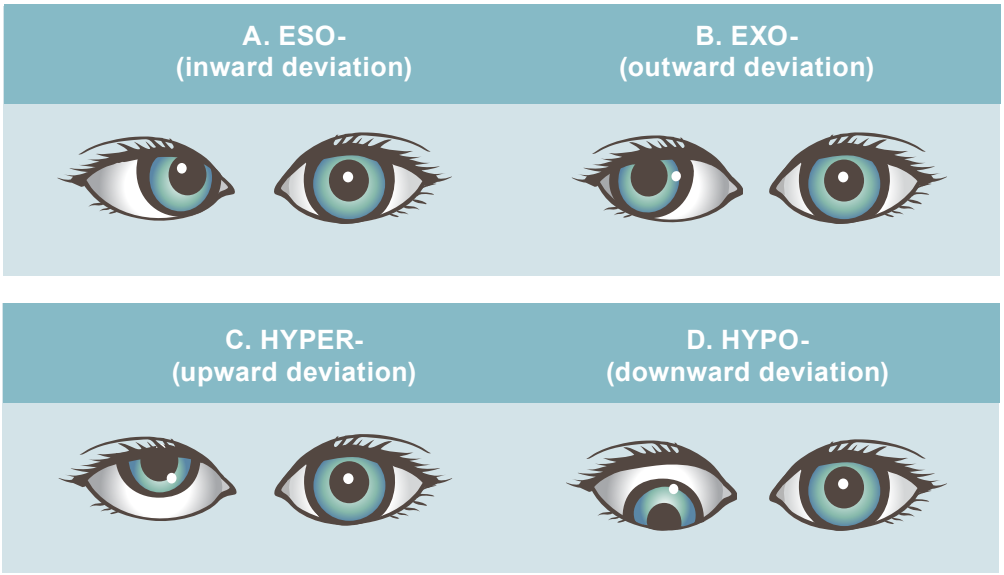


Figure 19: Different types of deviation

If neither eye shifts, the child passes the screening. If, when covering one eye, the other eye shifts to pick up fixation or the uncovered eye shifts to pick up fixation, then rescreen the child immediately. If he or she fails a second time, refer him to his primary care provider.

STEREOACUITY SCREENING

Stereoacuity testing instruments can test for the following optical characteristics:

- Near point acuity
- Far point acuity
- Phoria
- Fusion
- Stereopsis (depth perception)
- Color perception
- Lateral coordination

DEFINITION:

Phoria: A tendency for an eye to turn out of line from the other eye that is focusing; not generally recognizable unless screened.

Important facts to know about screening with stereoacuity instruments:

- Initial screening may be done with a stereoacuity instrument that has a distance acuity test.
- Screening children below the second grade with stereoacuity instruments is not recommended because

over- and under-referrals for strabismus and hyperopia in this group tend to occur more frequently than with chart screening and manual testing.

- Screen children who wear bifocals with extreme caution to assure the appropriate observation of the targets.

In addition to always observing the person being screened for signs of visual difficulty, be sure to check the following when using a stereoacuity instrument:

1. Visual targets (slides or pictures) should be appropriate for each age level being screened.
2. Visual targets, mirrors, and lenses should be clean. Visual targets should not have noticeable signs of aging such as yellowing, cracking, or other distortions.
3. Watch the child for any movement or shifting of the head.

Automated Screening

DSHS encourages any vision screening beyond the minimum standards not required, provided that:

1. The screening method is professionally recognized as valid for vision screening.
2. Individuals performing such screenings are trained by a professional knowledgeable in and experienced with the screening tool(s).

RECORDING RESULTS AND MAKING REFERRALS

Now that you have conducted the necessary vision tests, it is time to report your findings and make any necessary referrals.

PASSING CRITERIA FOR DISTANCE ACUITY SCREEN

Children ages 4 years and younger must:

- Have 20/40 acuity or better in each eye (identify one more than half of the symbols on the 20/40 line).
- Have less than a two-line difference in passing acuities between the two eyes (for example, 20/40 in the right and 20/20 in the left is failing, even though each acuity passes individually).

Children ages 5 years and older must:

- Have 20/30 acuity or better in each eye (identify one more than half of the symbols on the 20/30 line).

RESCREEN CRITERIA FOR DISTANCE ACUITY SCREEN

If the child fails the screening of either or both eyes, and there are no signs and symptoms of a vision problem, rescreen within approximately two to three weeks.

REFERRAL CRITERIA FOR ALL VISION SCREENINGS

Refer when:

1. Child **fails the second distance acuity screen**.

– or –

2. Child repeatedly **fails either of the muscle balance tests**.

– or –

3. Child **shows signs or symptoms** of a vision problem.

– or –

4. Child **fails any other professionally recognized, age-appropriate vision screen**.

RESULTS DOCUMENTATION

Results of photoscreening must be documented as "Pass/Fail." The documentation of the screening results is in lieu of visual acuity results using "20/20" format.

The child fails the distance acuity screen if he or she cannot read one more than half of the symbols on the passing line.

IMPORTANT: All children who have undergone a vision screening must have a record of this screening in their school file. This may be either a hard copy or an electronic record that includes acuity results for each eye. The exception being the use of an automated screener which should include a pass or fail result. Facilities may use either the M-60 form, which appears in the Appendix of this manual, or their own form that includes the same information.

When a child requires referral to a primary care provider, send a letter to his or her parents explaining that a vision screen indicates the child might have a vision problem (see the Appendix for the Letter of Referral for Professional Vision Examination.) This letter should tell the parent how to contact the child's preschool or school and how to report follow-up information to the school.

Include a copy of the screening results. Screeners should exercise caution in making referrals for screens other than those prescribed in this manual. Always adhere to the criteria set for professionally recommended screening methods.

COMMUNICATING WITH PARENTS

Information for the parents should include:

- The preventive purpose of the program.
- The types of screens administered to the child.
- The need for obtaining professional evaluation as soon as possible.

See Appendix pages 55 and 57 for English and Spanish Letters of Referral.

FOLLOW-UP

Follow-up is an essential element in a vision screening program. For schools, it is important to know whether the child has seen his or her primary care provider, and if so, what the findings were. Changes in the child's management may include:

1. Preferential seating in the classroom.
2. Encouragement of continuing medical care, if needed.
3. Vision correction.

Include the following information on the vision screening or health record as part of your follow-up.

- Acuities from examination.
- Disorder(s).
- Outcome or treatment indicated.
- Educational implications.
- Date of examination.
- Name and address of the primary care provider.

RECORDKEEPING AND REPORTING REQUIREMENTS OF FACILITIES

A record of vision screening should be completed and kept by the school or preschool for any child who is required to be screened.

Certain information about each child screened must be kept for at least two years, and annual reports on hearing and vision screening must be submitted online to DSHS by June 30 of each year.

Facilities must maintain screening records on each child for two years, including records of children who claimed an exemption. The records must be made available to DSHS for inspection in a timely manner upon request.

All facilities must submit annual reporting of Vision, Hearing, and Spinal* Screening (VHSS) results on the Child Health Reporting System, found online at http://chrstx.dshs.texas.gov. For best results, use Internet Explorer to view this website. Each facility is assigned a Facility ID Number and 'FIN' Code, which are used to log in to the website. For Facility ID Number and FIN Code information, call 512-776-7420 or your regional contact. To find out who your regional contact is, go to www.dshs.texas.gov/vhs and click on "Regional Coordinators."

The User Account tutorial in the top right-hand corner of the Child Health Reporting System gives instruction for creating your user account. A VHSS Data Entry tutorial gives instruction for entering your Annual Report Data online. This manual provides brief instructions for submitting reports. For more detailed information, refer to the VHSS Data Entry tutorial.

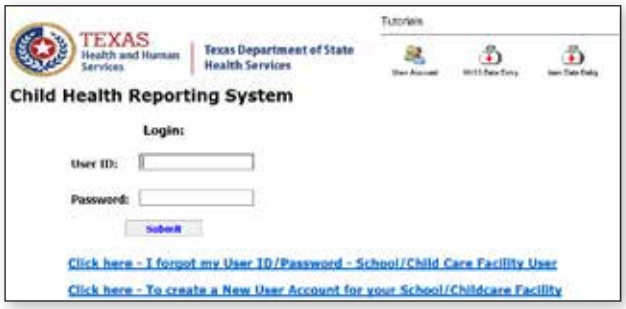
Before you submit your report, verify each section to confirm that it is correct because you will not be able to edit after you submit the information. The time period for entering your data is January 15 to June 30.

For information or questions about completing the Annual Reports online, please call the Vision and Hearing Program at DSHS at 512-776-7420.

* Childcare facilities will not submit Spinal Screening reports.

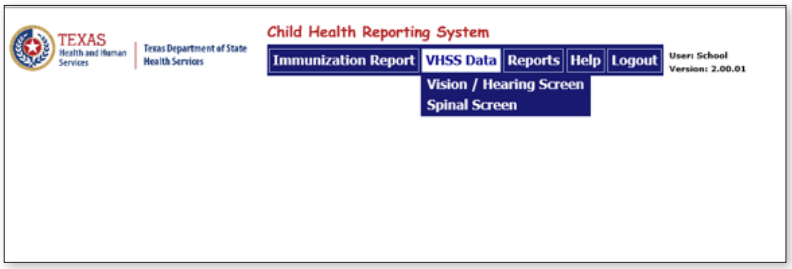
NOTE: The current rules for DSHS's Vision and Hearing Screening program are included in the Appendix of the Hearing Screening manual and are available online at http://www.dshs.texas.gov/vhs/rules.shtm.

USING THE ONLINE CHILD HEALTH REPORTING SYSTEM



STEP 1

Log in.



STEP 2

Move your cursor over the '**VHSS Data**' tab and **click 'Vision / Hearing Screen'** to begin.

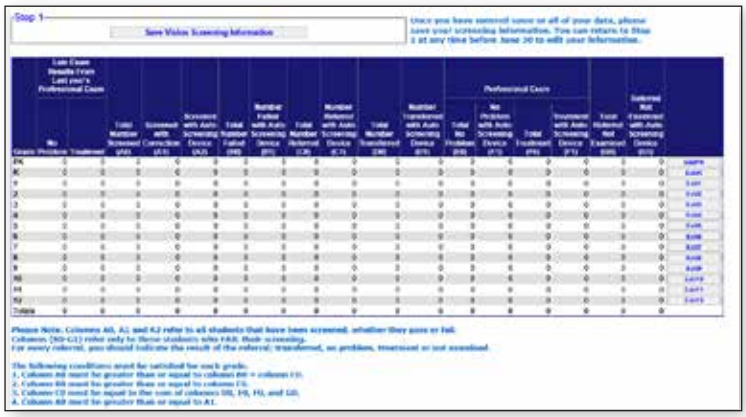
STEP 3

Click 'Hearing' or 'Vision' and then **click the 'Find'** button.

STEP 4

Click the 'Contact Info' button to view/update contact information, or **click the 'Enter Vision Screening Information' button** to begin entering vision data for your facility.

Click the 'Cancel' button to return to the previous screen or if you want to switch to Hearing Screening.



STEP 5

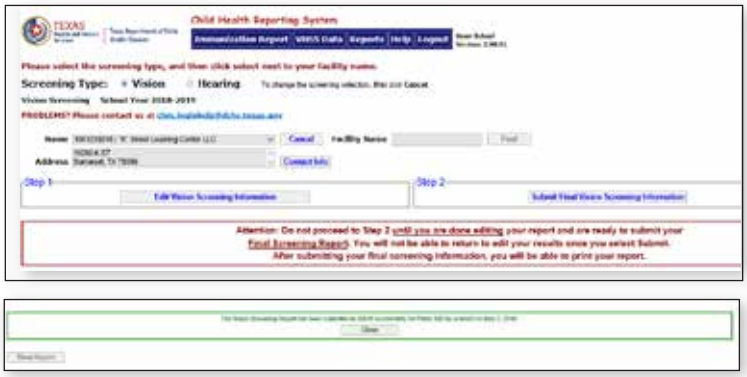
Click the 'Edit' button to enter vision screening data for that grade.

After clicking the 'Edit' button all of the data cells for that grade become editable. They are filled with 0s by default; you do not need to delete the 0s for cells that will not contain data.

Enter data in some of the cells now and **click the 'Save' button** to record your entries.

Your data entries are saved if valid; as data for other grades are entered, **totals are computed and displayed in the last row**.

You may click the **'Save Vision Screening Information'** button at any time during data entry if you want to return later to make changes or enter additional data. If you have finished entering your data, you will need to click the **'Save Vision Screening Information'** to proceed to submitting your final report



STEP 6

If you have finished editing your screening information and are ready to submit your final report, click the **'Submit Final Vision Screening Information' button**.

You will receive a message acknowledging your report has been submitted and will have the option to **click the 'show report'** button to view and print for your report.

STEP 7

If you have finished editing or submitting your Vision Screening Information and are ready to enter your Hearing Screening information, **click the 'Cancel' button** next to facility name, and **select screening type, 'Hearing'**.

If you select Hearing Screening, you will follow the same steps as with Vision.

IMPORTANT!!

- A passed vision screening is not a clean bill of health. A comprehensive visual examination is important even if a student passes their vision screening at school or at their pediatrician's office. A screening does not check for all possible vision problems.

- Follow the 20/20/20 rule: for every 20 minutes of device/screen time look 20 feet away for 20 seconds to help your eyes relax.

- Periodic exams are recommended throughout life since a person's vision and eye health can change.

According to the American Academy of Ophthalmology and the America Academy of Optometry, children are becoming more nearsighted at a younger age. This has been linked to increase in near vision demand for tablets and small devices.

GLOSSARY

Accommodation: Adjustment of the lens by means of the ciliary body in order to focus an image on the retina.

Acuity: A sharpness of vision that is measured and recorded using an internationally recognized two-figured indicator, such as 20/20.

Amblyopia: "Dimness of vision" or reduced visual acuity in one eye not usually correctable by a lens.

Astigmatism: A defect in curvature of the cornea or lens of the eye. As a result, a ray of light is not sharply focused on the retina but is spread irregularly.

Binocular Vision: The ability to use both eyes at the same time to focus on the same object and to combine the two images into a single image, giving good depth perception.

Facility: a facility is a private or public school or preschool, licensed child care center, or child care home.

Fixate: To focus one's gaze on an object.

Hyperopia (Hypermetropia): Farsightedness; a person can see distant objects more clearly than close objects.

Isolated Screening Method: Using a window cover card over the eye chart so that the person being screened sees only one letter or symbol at a time.

Licensed Professional: An individual whose legally defined scope of practice includes the area for which the screening is conducted, and who uses department-approved techniques or professional practice standards for the screening.

Linear Screening Method: Using a window cover card over the eye chart so that the person being screened sees one line of letters or symbols at a time.

Myopia: Nearsightedness; a person can see near objects clearly while distant objects appear blurred.

Occluder: Any device used to block the vision in one eye; often a stiff piece of paper or paddle-like instrument.

Ophthalmologist: A licensed physician who specializes in diagnosis and treatment of defects and diseases of the eye, performing surgery when necessary or prescribing other types of treatment, including medication, glasses, contact lenses, and optical aids.

Optometrist: A licensed specialist in vision—an O.D.—who specializes in the examination of the eyes and prescribes glasses, contact lenses, optical aids, and services for enhancement of vision.

Phoria: A tendency for an eye to turn out of line from the other eye that is focusing; not generally recognizable unless screened.

Refraction:

a. The bending of light rays through a transparent medium.
b. Determination of refractive errors of the eye and/or their correction by lenses glasses or contacts.

Refractive Error: Amount of myopia, hyperopia, or astigmatism present in an eye.

Strabismus: Two eyes are not directed at the same point.

Suppression: When the image of an object from one eye is not perceived.

Visual Acuity: The relative ability of the visual organ to resolve detail that is measured and recorded using an internationally recognized, two-figured indicator, such as 20/20.

VISION APPENDIX

TEXAS Health and Human Services | Texas Department of State Health Services

Certificate of Record for Vision Screen and/or Eye Examination

Child's Name_____Birthdate_____Age_____

DISTANCE ACUITY SCREEN

1st Screen (Date): _____	2nd Screen (Date): _____
With Correction: ☐ Yes ☐ No	With Correction: ☐ Yes ☐ No
Chart Used: ☐ Sloan Letter ☐ HOTV	**Chart Used:** ☐ Sloan Letter ☐ HOTV
Result: (R) Eye **20/** (L) Eye **20/**	**Result:** (R) Eye **20/** (L) Eye **20/**
Pass ☐ **Rescreen** ☐ **Fail/Refer** ☐	**Pass** ☐ **Fail/Refer** ☐

Comments/Observations:

AUTOMATED SCREENING DEVICE

Type of Device: ☐ Photo Screener ☐ Auto-Refractor ☐ Other

Result: ☐ PASS ☐ FAIL

HIRSCHBERG CORNEAL LIGHT REFLEX TEST

☐ Light reflection is centered or slightly toward the nose the same distance in each eye.

☐ Light reflection is not centered nor slightly toward the nose the same distance in each eye.

Result: ☐ PASS ☐ FAIL

COVER AND UNCOVER TEST

NEAR: 12 to 13 inches ☐ No Eye Movement ☐ Eye Movement

FAR: 10 to 20 feet ☐ No Eye Movement ☐ Eye Movement

Result: **Near:** ☐ PASS ☐ FAIL **Far:** ☐ PASS ☐ FAIL

REFERRAL REASON (If applicable)

☐ Distance Acuity Screen
☐ Automated Screening Device
☐ Hirschberg Corneal Light Reflex Test
☐ Cover and Uncover Test
☐ Parent/Doctor Request
☐ Unable to Screen
☐ Other:

Observable Signs or Symptoms (describe):

SCREENING CERTIFICATION

Signature of Screener:

Date:	Print Name of Screener:

ATTENTION PARENT: The Vision and Hearing Screening Program requires that every child have an eye examination or an approved vision screening test prior to or within 120 days after entry into a Texas public or private preschool or school, licensed child care center, or child care home.

The tests conducted to evaluate your child's vision are screens; they are not diagnostic. This means that if your child fails a screen, it is necessary for him or her to be evaluated by his or her primary care provider to determine whether there is a vision problem. It also means that on some occasions a vision problem may exist that the screens will not identify.

*** **WAIVER OF REFERRAL*****

My child _____ (name of child) is being seen

by an eye care specialist, _____ (doctor's name), for

the problem(s) indicated.

Parent's Signature_____Date_____

If "Waiver of Referral" is complete, it should be returned to the school.

TEXAS Health and Human Services | Texas Department of State Health Services

Certificate of Record for Vision Screen and/or Eye Examination

Child's Name_____Birthdate_____Age_____

DISTANCE ACUITY SCREEN

1st Screen (Date): _____	2nd Screen (Date): _____
With Correction: ☐ Yes ☐ No	With Correction: ☐ Yes ☐ No
Chart Used: ☐ Sloan Letter ☐ HOTV	**Chart Used:** ☐ Sloan Letter ☐ HOTV
Result: (R) Eye **20/** (L) Eye **20/**	**Result:** (R) Eye **20/** (L) Eye **20/**
Pass ☐ **Rescreen** ☐ **Fail/Refer** ☐	**Pass** ☐ **Fail/Refer** ☐

Comments/Observations:

AUTOMATED SCREENING DEVICE

Type of Device: ☐ Photo Screener ☐ Auto-Refractor ☐ Other

Result: ☐ PASS ☐ FAIL

HIRSCHBERG CORNEAL LIGHT REFLEX TEST

☐ Light reflection is centered or slightly toward the nose the same distance in each eye.

☐ Light reflection is not centered nor slightly toward the nose the same distance in each eye.

Result: ☐ PASS ☐ FAIL

COVER AND UNCOVER TEST

NEAR: 12 to 13 inches ☐ No Eye Movement ☐ Eye Movement

FAR: 10 to 20 feet ☐ No Eye Movement ☐ Eye Movement

Result: **Near:** ☐ PASS ☐ FAIL **Far:** ☐ PASS ☐ FAIL

REFERRAL REASON (If applicable)

☐ Distance Acuity Screen
☐ Automated Screening Device
☐ Hirschberg Corneal Light Reflex Test
☐ Cover and Uncover Test
☐ Parent/Doctor Request
☐ Unable to Screen
☐ Other:

Observable Signs or Symptoms (describe):

SCREENING CERTIFICATION

Signature of Screener:

Date:	Print Name of Screener:

ATTENTION PARENT: The Vision and Hearing Screening Program requires that every child have an eye examination or an approved vision screening test prior to or within 120 days after entry into a Texas public or private preschool or school, licensed child care center, or child care home.

The tests conducted to evaluate your child's vision are screens; they are not diagnostic. This means that if your child fails a screen, it is necessary for him or her to be evaluated by his or her primary care provider to determine whether there is a vision problem. It also means that on some occasions a vision problem may exist that the screens will not identify.

*** **WAIVER OF REFERRAL*****

My child _____ (name of child) is being seen

by an eye care specialist, _____ (doctor's name), for

the problem(s) indicated.

Parent's Signature_____Date_____

If "Waiver of Referral" is complete, it should be returned to the school.

LETTER OF REFERRAL
FOR A PROFESSIONAL VISION EXAMINATION

VISION REFERRAL FORM

For: _____

Dear Parent(s)/Guardian(s):

After reviewing your child's vision screening results/observational comments, there is an indication that your child may have a vision problem. We urge you to take him/her to an appropriately licensed professional for further evaluation.

When your child is examined, please ask that the following information be completed and returned to the school. Your prompt response will benefit your child.

Sincerely,

School Name: _____

Address: _____

==========

RESPONSE TO VISION REFERRAL

This child has been referred to you for further evaluation and/or treatment. Attached are the vision screening results and/or observational comments which indicate the child may have a vision problem that could affect his/her educational advancement. Please complete the following:

Date Examined: _____

Results:	**Specify:**
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Recommendation: _____

_____

_____

Comments: _____

Signature:_____ Title: _____

RETURN THIS COMPLETED FORM TO THE CHILD'S SCHOOL.

(M-46) Revised 8/2014

LETTER OF REFERRAL
FOR A PROFESSIONAL VISION EXAMINATION

VISION REFERRAL FORM

For: _____

Dear Parent(s)/Guardian(s):

After reviewing your child's vision screening results/observational comments, there is an indication that your child may have a vision problem. We urge you to take him/her to an appropriately licensed professional for further evaluation.

When your child is examined, please ask that the following information be completed and returned to the school. Your prompt response will benefit your child.

Sincerely,

School Name: _____

Address: _____

==========

RESPONSE TO VISION REFERRAL

This child has been referred to you for further evaluation and/or treatment. Attached are the vision screening results and/or observational comments which indicate the child may have a vision problem that could affect his/her educational advancement. Please complete the following:

Date Examined: _____

Results:	**Specify:**
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Recommendation: _____

_____

_____

Comments: _____

Signature:_____ Title: _____

RETURN THIS COMPLETED FORM TO THE CHILD'S SCHOOL.

(M-46) Revised 8/2014

CARTA DE DERIVACIÓN PARA PRUEBA PROFESIONAL DE LA VISTA

FORMULARIO DE DERIVACIÓN PARA LA VISTA

Para: _____

Estimado(s) padre(s) o tutor(es):

Después de haber revisado los resultados o los comentarios de observación del examen de la vista de su hijo(a), hay una indicación de que su hijo(a) quizá tenga problemas de la vista. Rogamos que usted(es) lo(a) lleve(n) a un profesional apropiadamente autorizado para una evaluación más completa.

Cuando se le haga el examen a su hijo(a), sírvase pedir que se llene por completo la siguiente información y regrésela a la escuela. Su respuesta inmediata le beneficiará a su hijo(a).

Atentamente,

Nombre de la escuela: _____

Dirección: _____

==========

RESPONSE TO VISION REFERRAL

This child has been referred to you for further evaluation and/or treatment. Attached are the vision screening results and/or observational comments which indicate the child may have a vision problem that could affect his/her educational advancement. Please complete the following:

Date Examined: _____

Results:	**Specify**
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Recommendation: _____

_____

Recommendation: _____

_____

Signature: _____ Title: _____

RETURN COMPLETED REFERRAL TO THE CHILD'S SCHOOL

(M-46) Revisado en julio de 2014

CARTA DE DERIVACIÓN PARA PRUEBA PROFESIONAL DE LA VISTA

FORMULARIO DE DERIVACIÓN PARA LA VISTA

Para: _____

Estimado(s) padre(s) o tutor(es):

Después de haber revisado los resultados o los comentarios de observación del examen de la vista de su hijo(a), hay una indicación de que su hijo(a) quizá tenga problemas de la vista. Rogamos que usted(es) lo(a) lleve(n) a un profesional apropiadamente autorizado para una evaluación más completa.

Cuando se le haga el examen a su hijo(a), sírvase pedir que se llene por completo la siguiente información y regrésela a la escuela. Su respuesta inmediata le beneficiará a su hijo(a).

Atentamente,

Nombre de la escuela: _____

Dirección: _____

==========

RESPONSE TO VISION REFERRAL

This child has been referred to you for further evaluation and/or treatment. Attached are the vision screening results and/or observational comments which indicate the child may have a vision problem that could affect his/her educational advancement. Please complete the following:

Date Examined: _____

Results:	**Specify**
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Recommendation: _____

_____

Recommendation: _____

_____

Signature: _____ Title: _____

RETURN COMPLETED REFERRAL TO THE CHILD'S SCHOOL

(M-46) Revisado en julio de 2014

Child's Name: _____

Child's Age/Birthdate: _____

Name of Person Completing Checklist: _____

CHECKLIST FOR SIGNS AND SYMPTOMS OF VISION DIFFICULTIES

Appearance of the eyes:

- ☐ Crossed—turning in or out
- ☐ Reddened
- ☐ Watering
- ☐ Encrusted eyelids
- ☐ Frequent styes

Complaints associated with using the eyes:

- ☐ Clumsiness
- ☐ Headaches
- ☐ Nausea or dizziness
- ☐ Burning or itching of eyes
- ☐ Blurred vision when looking up from close work
- ☐ Seeing objects double
- ☐ Undue sensitivity to light

Behavior indications of possible vision difficulty:

- ☐ Body rigidity while looking at distant objects at any time
- ☐ Thrusting head forward or backward while looking at distant objects
- ☐ Avoiding close work
- ☐ Short attention span
- ☐ Turning of head so as to use one eye only
- ☐ Tilting head to one side
- ☐ Placing head close to book or desk when reading or writing
- ☐ Excessive blinking
- ☐ Tending to rub eyes
- ☐ Closing or covering one eye
- ☐ Squinting

☐ Other (please explain):

_____

_____

_____

_____

_____

_____

Child's Name: _____

Child's Age/Birthdate: _____

Name of Person Completing Checklist: _____

CHECKLIST FOR SIGNS AND SYMPTOMS OF VISION DIFFICULTIES

Appearance of the eyes:

- ☐ Crossed—turning in or out
- ☐ Reddened
- ☐ Watering
- ☐ Encrusted eyelids
- ☐ Frequent styes

Complaints associated with using the eyes:

- ☐ Clumsiness
- ☐ Headaches
- ☐ Nausea or dizziness
- ☐ Burning or itching of eyes
- ☐ Blurred vision when looking up from close work
- ☐ Seeing objects double
- ☐ Undue sensitivity to light

Behavior indications of possible vision difficulty:

- ☐ Body rigidity while looking at distant objects at any time
- ☐ Thrusting head forward or backward while looking at distant objects
- ☐ Avoiding close work
- ☐ Short attention span
- ☐ Turning of head so as to use one eye only
- ☐ Tilting head to one side
- ☐ Placing head close to book or desk when reading or writing
- ☐ Excessive blinking
- ☐ Tending to rub eyes
- ☐ Closing or covering one eye
- ☐ Squinting

☐ Other (please explain):

_____

_____

_____

_____

_____

_____

DEPARTMENT OF STATE HEALTH SERVICES
VISION SCREENING

REVIEW OF VISION SCREENING WORKSHOP

1. Chapter 36 of the Texas Health and Safety Code, known as the Vision and Hearing Screening Program, requires that preschool- and school-age children entering a child care facility or school be screened for vision and hearing problems.
2. One primary reason for vision screening is it may indicate amblyopia and a referral for treatment can be initiated.
3. Vision screening program objectives are: identification of a possible problem, referral to a primary care provider for diagnostic evaluation, educational consideration and recommendations to maximize learning potential, and tracking and follow-up of all referrals for evaluation of the program's effectiveness.
4. Referral for examination by a primary care provider is indicated when there are signs and symptoms of a visual problem, regardless of vision screening results.
5. The ultimate goal of good vision is binocular vision—the ability to use both eyes at the same time to focus on the same object and to combine the two images into a single image, giving good depth perception.
6. A record of vision screening should be completed and kept by the school or preschool for any child who is required to be screened.
7. All first-time entrants into a child care facility or school in Texas must be screened for vision problems within 120 days of enrollment or by the end of the first semester. First, third, fifth, and seventh graders may be screened any time during the school year before June 30. (DSHS recommends completing all screening by April so that follow-up on referrals can be collected for the annual report.)
8. All facilities must submit annual reporting of Vision, Hearing, and Spinal Screening (VHSS) results online at http://chrstx.dshs.texas.gov
9. The outcome of the primary care provider's evaluation should be returned to the child care facility or the school.
10. Signs and symptoms of a vision problem include crossed or reddened eyes, clumsiness, headaches, nausea, dizziness, squinting, closing or covering one eye, avoiding close work, leaning in, excessive blinking, and rubbing eyes.
11. Distance acuity screens for a child's ability to see at varying distances.
12. Ideally the screening team will consist of three certified vision screeners. However, one certified screener may train and direct the activities of others to serve as screening assistants and must remain an active member of the team.
13. The two charts required by the DSHS for basic visual acuity screening are:
    a. The HOTV Crowded Version.
    b. The Sloan letter chart.

14. Before any of the two charts may be used for screening, the child must:
    - Show an understanding of how the screen works.
    - Demonstrate ability to respond accurately to sample symbols 100 percent of the time.
    - Be able to transfer the concept to the eye chart.
15. The HOTV chart should be used with those children who can match all four HOTV letters 100 percent of the time after training.
16. The letter chart should only be used with those children who can identify each letter of the alphabet 100 percent of the time after training.
17. When setting up your screening, hang the screening chart in normal light without shadows or glare.
18. The 20/30 or 20/40 (passing) line on the chart should be at the eye level of the child, whether standing or sitting for the screening.
19. The distance from the chart should always be measured in feet since acuities obtained through this program are reported in 20-foot equivalents.
20. A chart designed for use at a specific distance must be used at that distance. The distance will be indicated at the top of the chart.
21. Referrals are made on the basis of the visual acuity measured with glasses on or contact lenses inserted.
22. Children are asked to identify symbols on the chart with both eyes to help them transfer the screening pretest to the chart.
23. The child should be told to keep both eyes open during screening, even though one will be covered.
24. Allowing the child to peek around the occluder is the most common screening error.
25. Linear screening methods are preferred over isolated screening methods (e.g., showing one line of symbols on the chart at a time results in a more reliable screen than showing one symbol at a time).
26. The 20-foot chart is preferred over the 10-foot chart, unless the child is being screened with the HOTV, which must be at 10 feet.
27. Begin screening on the 20/40 or 20/50 line (the beginning line, or one line above the passing). If the child cannot identify that line, move up or to the top of the chart until you find a line he or she can pass. Now move down the chart again until the child does not pass a line or until he or she identifies the 20/20 line.
28. Visual acuity is always the last line that was read correctly (passed).
29. The child fails the distance acuity screen if he or she cannot identify one more than half the symbols on the passing line. For children 4 years of age and younger the 20/40 line is the passing line (20/40 acuity or better). If they show a two-line difference between the eyes (e.g., 20/40 in the right eye and 20/20 in the left eye), they should be referred. For children 5 years and older the 20/30 line is the passing line (20/30 acuity or better).
30. If the child fails the chart screening in either or both eyes, he or she should be rescreened within approximately two to three weeks of the first screen with one of the required screening charts. If the child shows signs or symptoms of a vision problem, then refer after he or she fails the first screen.

31. If the child passes the second screen using one of the required screening charts but shows signs of visual problems, then he or she should be referred to the primary care provider for further evaluation.
32. If the child fails the second screen in either or both eyes, refer to a primary care provider for further evaluation.
33. Muscle balance tests are optional by law, but recommended by DSHS for children in preschool, kindergarten, first, and third grades.
34. Both the Hirschberg corneal light reflex test and the cover and uncover test screen for constant muscle imbalance (strabismus).
35. In order for a child to pass the Hirschberg corneal light reflex test, the reflection of the penlight should appear to be centered in each pupil or the reflection should be slightly toward the nose, in the same place in each pupil.
36. When conducting the cover and uncover test, the screener should always allow two to three seconds after the cover is placed on one eye for the other eye to focus (fixate) on the target. When the eye is uncovered, it should be watched for two to three seconds to see whether it moves to pick up fixation.
37. If the child passes all of the DSHS-prescribed vision screens but fails any other recognized kind of vision screen (e.g., Titmus fly, Ishihara color test, tracking tests, visual field tests, etc.), refer on the basis of criteria for that particular screen.
38. When automated vision screening devices are used, care must be taken that the screener is well-trained by the manufacturer in the use of the instrument.

PRACTICUM CHECKLIST FOR DISTANCE ACUITY SCREENING

Participant: _____

Place: _____ Date: _____

Instructor: _____

Did the participant prepare properly by:

Yes **No** (Check one)

☐ ☐ 1. Checking and adapting, if necessary, the lighting in the room for proper screening?

☐ ☐ 2. Selecting the appropriate chart for the size of the room?

☐ ☐ 3. Correctly positioning tables and assistant(s) and giving clear instructions regarding responsibilities (who watches the child, who watches the chart, who records results, etc.)?

☐ ☐ 4. Assembling materials in the appropriate places for recording screening results (recording forms, pointer, occluders, etc.)?

☐ ☐ 5. Selecting the appropriate chart for the child being screened (using the pretest criteria of 100 percent accurate game responses)?

☐ ☐ 6. Placing the chart at an appropriate height?

☐ ☐ 7. Placing the chart at the proper distance and marking foot placement?

☐ ☐ 8. Properly securing window or cover cards over the chart?

Did the participant prepare the subject properly by:

☐ ☐ 1. Training the child to perform the task or "play the game" necessary for his or her screening?

☐ ☐ 2. Familiarizing the child (especially if young) with the screen and the performance of the task or the "game" by first screening both eyes at the same time?

☐ ☐ 3. Telling the child that an occluder will be used and that his or her eyes should remain open when the occluder is put up to the eye?

Did the participant exhibit proper screening techniques by:

☐ ☐ 1. Giving the assistant proper directions and/or cues before and during the screening?

☐ ☐ 2. Observing the child's gestures and expressions while screening (or if this is not feasible due to physical limitations, instructing the assistant observing the child)?

☐ ☐ 3. Placing the child's heels at the 10- or 20-foot line (if standing)?

☐ ☐ 4. Screening the child's right eye first, then the left eye?

Yes **No** (Check one)

☐ ☐ 5. Screening with glasses on?

☐ ☐ 6. Starting to screen the child at one line above the passing line (on the 20/40 or 20/50 line)?

☐ ☐ 7. Moving to the line above the beginning line if the child cannot initially identify symbols on the chart?

☐ ☐ 8. Keeping an accurate count of the number of symbols missed?

☐ ☐ 9. Demonstrating knowledge of passing criteria by properly recording the acuity for each eye and making a pass/fail determination?

☐ ☐ 10. Demonstrating knowledge of passing criteria for optional muscle balance tests: Hirschberg corneal light reflex test and cover and uncover test?

☐ ☐ 11. Demonstrating knowledge of the use of a record form by properly filling an M-60 or similar form for the child screened?

INSTRUCTOR'S SUBJECTIVE EVALUATION

In the space below, please write additional comments about the participant's overall performance.

_____

_____

_____

_____

☐ **PASS** ☐ **FAIL**

_____

Instructor's Signature

_____

Date

Department of State Health Services
Vision and Hearing Screening Program

Revised 8/2014

DEPARTMENT OF STATE HEALTH SERVICES
HEARING AND VISION SCREENING

PLEASE PRINT

Participant: _____

Number Missed: _____

Test Score: _____

☐ Pass ☐ Fail

Answer Sheet: ☐ Hearing ☐ Vision

Workshop Location: _____

Mark an "X" through the correct answer.

1.	A	B	C	D
2.	A	B	C	D
3.	A	B	C	D
4.	A	B	C	D
5.	A	B	C	D
6.	A	B	C	D
7.	A	B	C	D
8.	A	B	C	D
9.	A	B	C	D
10.	A	B	C	D
11.	A	B	C	D
12.	A	B	C	D
13.	A	B	C	D
14.	A	B	C	D
15.	A	B	C	D
16.	A	B	C	D
17.	A	B	C	D
18.	A	B	C	D
19.	A	B	C	D
20.	A	B	C	D
21.	A	B	C	D
22.	A	B	C	D
23.	A	B	C	D
24.	A	B	C	D
25.	A	B	C	D

VISION SCREENING
WORKSHOP EVALUATION

Location:_____Date:_____

Trainer: _____ Assistant(s): _____

☐ Basic ☐ Recert

Instructions: Circle only one answer for each question.

1. Did you learn anything from this workshop?
   a. I acquired substantial new knowledge.
   b. I acquired a moderate amount of new knowledge.
   c. I acquired little or no new knowledge.
   d. I acquired little or no knowledge.

2. To what extent will you apply what you learned in this workshop?
   a. I will apply it.
   b. I will apply it a little.
   c. I might apply, but first I need to learn more.
   d. I will not apply it.

3. How do you rate the presenter?
   a. Excellent
   b. Good
   c. Moderate
   d. Poor

Comments:

_____
_____
_____
_____

4. I would like to make the following suggestion(s) for improving this training session:

_____
_____
_____
_____


PLACE HEELS
ON THE LINE

Title 25. Health Services
Part 1. Department of State Health Services
Chapter 37. Maternal and Infant Health Services
Subchapter C. Vision and Hearing Screening.

§37.21. Purpose. The purpose of this subchapter is to implement Texas Health and Safety Code, Chapter 36, concerning the early identification of individuals from birth through 20 years of age who have special senses and communication disorders and who need remedial vision, hearing, speech, or language services.

§37.22. Definitions. The following words and terms, when used in this subchapter, shall have the following meanings, unless the context clearly indicates otherwise.

(1) **American Academy of Pediatrics (AAP) –** The AAP is a nationally recognized professional organization which issues recommended standards pertaining to the health and well-being of children.

(2) **American Association for Pediatric Ophthalmology and Strabismus (AAPOS) –** AAPOS is a nationally-recognized professional body which, in conjunction with the AAP, issues recommended vision screening standards. The goals of AAPOS are to advance the quality of children's eye care, support the training of pediatric ophthalmologists, support research activities in pediatric ophthalmology, and advance the care of adults with strabismus.

(3) **American National Standards Institute, Inc. (ANSI) –** The national coordinator of standards development and the United States clearinghouse for information on national and international standards.

(4) **Audiometer –** An electrical device for testing hearing, and for measuring bone and air conduction of sound.

(5) **Audiometric calibration equipment –** Electro-acoustical equipment used to calibrate audiometers and audiometric testing devices. The term includes frequency counters, voltmeters, and distortion measuring equipment used to calibrate audiometers and audiometric testing devices.

(6) **Audiometric testing device –** An electro-acoustical generator that provides acoustic energy of a calibrated output.

(7) **Biological calibration check –** The process of testing a person having a known, stable audiometric curve that does not exceed 25 decibels (dB) hearing level at any frequency between 250 and 6000 Hertz (Hz), and comparing the test results with the subject's known baseline audiogram.

(8) **Calibration –** The process of comparing an instrument or device with a standard to determine its accuracy and to make the necessary repairs or adjustments to assure that the operating characteristics are within the allowable limits established by a national standard, all in accordance with applicable legal requirements.

(9) **Certification –** The process by which the Department of State Health Services (department) trains individuals to conduct vision and/or hearing screening or provides training to instructors. The applicable certification is awarded following the successful completion of any of the course scenarios in this paragraph.

(10) **dB –** The decibel is a unit for expressing the relative intensity of sounds on a scale from zero for the average least perceptible sound to approximately 130 for the average pain level.

(11) **Exhaustive calibration –** A calibration that tests all settings for both earphones.

(12) **Extended recheck –** A screen used after the child has failed two sweep-check screens. The screener may perform an extended recheck or initiate a referral for a professional examination, as defined in this section, after the two failed sweep-check screens.

(13) **Facility –** Includes public or private preschools and schools, as defined as follows:

(A) schools, as the term is defined at Texas Health and Safety Code, §36.003(7);

(B) preschools, as the term is defined at Texas Health and Safety Code, §36.003(3);

(C) child care centers licensed by the Department of Family and Protective Services (DFPS); and

(D) child care homes licensed by DFPS.

(14) **Hz –** Hertz is a unit of frequency equal to one cycle per second.

(15) **Licensed professional –** An individual whose legally-defined scope of practice under the license includes knowledge and experience in conducting professional examinations and screenings for vision and/or hearing abnormalities in children, all consistent with this subchapter and Texas Health and Safety Code, Chapter 36. The terms "professional examination" and "screening" are as defined in this section.

(16) **Pass/Fail –** Allowable documentation of results of vision screening when photoscreening is used for vision screening, in accordance with this subchapter. The documentation of the screening results is in lieu of visual acuity results using "20/20" format.

(17) **Photoscreening –** A form of pediatric vision screening that uses a special-purpose camera to determine how well a child can see. It is an alternative under this subchapter to visual acuity-based screening with an eye chart for certain children, as specified herein. Other related terms are: autorefractor, objective screening and instrument-based screening. Photoscreening cannot determine exactly how well a child's visual acuity is developing. Important factors that affect visual acuity such as accommodative ability (focusing ability), binocular vision development, and other eye health issues are not assessed via photoscreening.

(18) **Professional examination (also referred to as examination) –** A diagnostic evaluation performed by an appropriately licensed professional or by a department-certified individual whose expertise addresses the diagnostic needs of the individual identified as having a possible special senses or communication disorder. A professional examination is one that is done according to the requirements of this subchapter and of the Texas Health and Safety Code, Chapter 36.

(19) **Program –** The department's Vision and Hearing Screening Program.

(20) **Pure-tone audiometer –** A pure-tone audiometer electronically generates pure-tones which are used as signals to test a person's hearing.

(21) **Reporting year –** A 12-month period beginning June 1 of each year and ending May 31 of the following year.

(22) **Screening –** A test or battery of tests for rapidly determining the need for a professional examination.

(23) **Screening equipment –** An instrument or device used to perform a measurement or measurements for the assessment of sensory abilities.

(24) **Sweep-check –** A quick hearing screening test using a pure-tone audiometer to determine whether a person can hear the following frequencies: 1000 Hz, 2000 Hz, and 4000 Hz at less than or equal to 25 dB.

(25) **Telebinocular instrument –** A stereoscopic instrument for screening various eye defects and measuring visual acuity.

(26) **Testing equipment –** An instrument or device used under this subchapter to perform a measurement or measurements to substantiate or verify the presence or absence of sensory impairment(s).

(27) **Tests –** Procedures under this subchapter to measure special senses and communication functions.

(28) **Visual acuity –** The relative ability of the visual organ to resolve detail that is measured and recorded using an internationally recognized, two-figured indicator, such as 20/20.

§37.23. Vision Screening.

(a) Screening is required, for individuals who attend a facility, to detect vision disorders. Vision screening conducted under this subchapter by a person who is not a licensed professional, as the term is defined in this subchapter, must be conducted following the national standards set by AAPOS currently found at http://www.aapos.org/terms/conditions/131, as revised, as they apply to age, verbal ability, ability to cooperate with screening, allowable methods of screening in different situations, and referral criteria, with the following exceptions.

(1) For children less than five years of age, refer for a professional examination when there is a difference of two lines between passing acuities in either eye.

(2) For children five years of age and older, refer for a professional examination when screening results indicate visual acuity of less than 20/30 in either eye (rather than 20/32 as listed in the AAPOS standards).

(3) In addition to AAPOS' recommendation regarding photoscreening for children 42 months to five years of age, photoscreening may be used for any individual (referenced in §37.21 of this title (relating to Purpose) with disabilities who does not respond well to other allowable screening methods. A referral to a professional examination is recommended if the individual fails the photoscreening.

(b) A person who is not a "licensed professional," as that term is defined in this subchapter, who conducts vision screening must be trained and certified as described in §37.27 of this title (relating to Standards and Requirements for Screening Certification and Instructor Training).

(c) When a screener makes a referral based on the screening results under subsection (a) of this section, that referral shall be to a licensed professional for a professional examination, and not to a specific individual.

(d) The requirements of this section do not apply when the individual is already actively under medical care by an appropriate licensed professional for one or more of the vision problems for which screening is done under this section. In order to claim this exception, the individual under the scenarios described at Texas Family Code, §32.003 or, if the individual is a minor, the individual's parent, managing conservator or legal guardian, must submit documentation from the licensed professional to the facility. The documentation must be signed and dated by the licensed professional, and must affirmatively state that the individual is under active, ongoing medical care from the licensed professional for specific vision problems as referenced in this subsection.

§37.24. Hearing Screening.

(a) Screening is required, for individuals who attend a facility, to detect hearing disorders. Hearing screening under this subchapter must be conducted using screening methods and referral criteria, and in compliance with other requirements, as follows.

(b) A person who is not a "licensed professional," as that term is defined in this subchapter, who conducts hearing screening must be trained and certified as described in §37.27 of this title (relating to Standards and Requirements for Screening Certification and Instructor Training).

(c) A pure-tone audiometer shall be used to conduct a sweep-check screen.

(d) Screening results shall be recorded for each ear at less than or equal to 25 dB for 1000 Hz, 2000 Hz, and 4000 Hz.

(e) A rescreen with another sweep-check is recommended if test results indicate failure to respond to any of the three frequencies in either ear, and it should be conducted no sooner than three weeks but not more than four weeks after the initial screening.

(f) An extended recheck may be conducted or a referral to a professional examination shall be made for all children whose test results indicate failure to respond to any of the three frequencies in either ear on the second sweep-check.

(g) If the extended recheck results in a failure to respond to any frequency in either ear at greater than 25dB, the screener must recommend that a professional examination be immediately conducted.

(h) An extended recheck shall be conducted according to the following procedures.

(1) Beginning with the right ear, present the tone at 40 dB hearing level (HL) and at 1000 Hz for two to three seconds. If no response is obtained, record "greater than 40 dB."

(2) If the child responds at 40 dB, lower the intensity to 30 dB HL and present the tone again.

(3) Lower the HL in 10 dB increments until no response is obtained, or until 20 dB is reached. If a response is obtained at 20 dB, record "20 dB."

(4) If no response is obtained, increase the HL dial in 5 dB increments until a response is obtained. Record the dB results obtained at 1000 Hz for the right ear.

(5) Repeat steps in paragraphs (1) - (4) of this subsection at 40 dB HL for 2000 Hz and 4000 Hz.

(6) Repeat steps in paragraphs (1) - (5) of this subsection for the left ear.

(i) When a screener makes a referral based on the screening results under subsection (a) of this section, that referral shall be to a licensed professional for a professional examination, and not to a specific individual.

(j) The requirements of this section do not apply when the individual is already actively under medical care by an appropriate licensed professional for one or more of the hearing problems for which screening is done under this section. In order to claim this exception, the individual under the scenarios described at Texas Family Code, §32.003 or, if the individual is a minor, the individual's parent, managing conservator or legal guardian, must submit documentation from the licensed professional to the facility. The documentation must be signed and dated by the licensed professional, and must affirmatively state that the individual is under active, ongoing medical care from the licensed professional for specific hearing problems as referenced in this subsection.

§37.25. Facility Requirements; Department Activities.

(a) The chief administrator of each facility shall ensure that each individual admitted to the facility complies with the screening requirements of this subchapter (including ensuring that any screening done is performed by a properly certified screener), according to the following schedule.

(1) Children four years of age or older, who are enrolled in any facility for the first time, must be screened for possible vision and hearing problems within 120 calendar days of enrollment. If a child is enrolled within 60 days of the date a facility closes for the Summer, the child's vision and hearing must be tested within 120 days of the beginning of the following school year.

(2) Children enrolled in pre-kindergarten and kindergarten must be screened each year within 120 days of enrollment.

(3) Children enrolled in the first, third, fifth, and seventh grades must receive vision and hearing screening in each of those grade years (can be done at any time during each of those years).

(4) Except for children enrolled in pre-kindergarten, kindergarten or first grade, a facility shall exempt any child from screening as required by paragraphs (1) - (3) of this subsection if the child's parent, managing conservator, or legal guardian, or the individual under the scenarios described at Texas Family Code, §32.003, submits a record to the facility showing that a professional examination was properly conducted during the grade year in question or during the previous year. The record must be submitted to the facility during the grade year in which the screening would otherwise be required.

(5) Children enrolled in a facility who turn four years of age after September 1 of that year are exempt from screening until the following September.

(6) Upon written request pre-approved by the department, the screening of vision and hearing performed at a facility may occur on an even-year schedule (i.e., pre-kindergarten, kindergarten, and first, second, fourth, and sixth grades instead of pre-kindergarten, kindergarten, and first, third, fifth, and seventh grades). Any department approval will include conditions so that children do not miss necessary screening during the transition.

(b) A child's parent, managing conservator, or legal guardian, or the individual under the scenarios described at Texas Family Code, §32.003, may execute an affidavit stating that a person, other than the individual secured by the facility to conduct screenings at the facility, shall conduct the screening (or that a licensed professional shall conduct an examination) as soon as is feasible. The facility may admit the child on a provisional basis for up to 60 days, or may deny admission until the screening record(s) are provided to the facility.

(c) A facility shall not require a child to be screened if the child's parent, managing conservator, or legal guardian, or the individual under the scenarios described at Texas Family Code, §32.003, submits to the facility, on or before the date vision or hearing screening is scheduled, an affidavit in lieu of the screening record(s) stating that the vision or hearing screening conflicts with the tenets and practices of a church or religious denomination of which the affiant is an adherent or member.

(d) Only individuals who have completed high school may serve as volunteer assistants during vision and/or hearing screenings. It is the responsibility of the certified screener to determine how any volunteer assistant(s) will be used during the screening process, consistent with all state and federal confidentiality requirements.

§37.26. Recordkeeping and Reporting.

(a) Individuals conducting screenings under this subchapter must comply with the following recordkeeping and reporting requirements.

(1) Individuals conducting screenings at the facility (and those other than licensed professionals conducting screenings outside of the facility) shall document in each child's screening record the

specific screening conducted, the date the screening was conducted, observations made during the screening, and the final results of the screening. The individual shall also ensure that the following are included in the documentation: the name of the child, age or birthdate of the child, and whether the child is wearing corrective lenses during the vision screening. The documentation required under this subsection must also be signed and dated by the person who conducted the screening.

(2) Individuals using photoscreening for vision screening must comply with the recordkeeping and reporting requirements detailed at §37.27(b)(2) of this title (relating to Standards and Requirements for Screening Certification and Instructor training). Additionally, prior to conducting photoscreening at a facility, the individual must submit copies of these same documents to that facility in addition to the documents which must be submitted under subsection (b)(3) of this section.

(3) Individuals using a telebinocular instrument for vision screening must comply with the recordkeeping and reporting requirements detailed at §37.27(b)(3) of this title. Additionally, prior to conducting telebinocular screening at a facility, the individual must submit copies of these same documents to that facility.

(4) Individuals conducting screenings at a facility (and those other than licensed professionals conducting screening outside of the facility) shall submit the documentation referenced in paragraph (1) of this subsection to the facility at the time of that screening.

(5) Individuals must submit documentation to the department related to certifications and refresher courses, as specified in §37.27 of this title.

(b) Facilities must comply with the following recordkeeping and reporting requirements.

(1) Each facility shall maintain vision and hearing screening records under this section onsite for at least two years.

(2) A facility must maintain screening records regarding any individual claiming the exemptions found in §37.23(d) of this title (relating to Vision Screening) and/or §37.24(j) of this title (relating to Hearing Screening) for at least two years.

(3) A facility shall maintain the records it receives from screeners under subsection (a)(2) of this section, related to the use of photoscreening for vision screening at the facility for at least two years.

(4) An individual's screening records may be transferred among facilities without the consent of the individual under the scenarios described at Texas Family Code, §32.003 or, if the individual is a minor, the minor's parent, managing conservator, or legal guardian, pursuant to Texas Health and Safety Code, §36.006(c).

(5) The recordkeeping required in this section must be made available to the department in a timely manner upon request. The department may, directly or through its authorized representative, enter a facility and inspect records maintained relating to vision and hearing screening.

(6) On or before June 30 of each year, each facility shall submit to the department a complete and accurate annual report on the vision and hearing screening status of its aggregate population screened during the reporting year. Facilities shall report in the manner specified by the department (currently found at http://chrstx.dshs.state.tx.us). Facilities are required to report on the following categories.

(A) For hearing screening--The total number screened: the number who failed; the number referred for professional examination; the number transferred out of the facility prior to the facility receiving the professional examination results; professional examination results indicating none of the disorders present which are screened for under this section; professional examination results indicating a disorder(s) which is screened for under this section; and referral for a professional examination with no indication that a professional examination was ever done.

(B) For vision screening--The total number screened; the total number screened with correction (e.g. glasses or contacts); the total number screened with photoscreening; the number who failed; the number referred for professional examination; the number transferred out of the facility prior to the facility receiving the professional examination results; professional examination results indicating none of the disorders present which are screened for under this section; professional examination results indicating a disorder(s) which is screened for under this section; and referral for a professional examination with no indication that a professional examination was ever done. The "total number screened" includes the number screened with telebinocular screening.

(c) There are additional recordkeeping requirements in §37.28(f) and (g) of this title (relating to Hearing Screening Equipment Standards and Requirements) for individuals or entities who own and/or use audiometers and audiometric screening equipment.

(d) For all submissions to the department under this subchapter, use the following contact information (unless otherwise specified): Vision, Hearing and Spinal Screening Program, Department of State Health Services, Mail Code 1978, P.O. Box 149347, Austin, Texas 78714-9347.

§37.27. Standards and Requirements for Screening Certification and Instructor Training.

(a) Individuals who conduct vision and/or hearing screening must be certified under this section unless the screening is conducted by a licensed professional. There are two options for obtaining this certification: a certificate issued directly by the department; or a certificate issued by an instructor who has been trained and authorized by the department to issue certificates. There is no cost to taking the course in either scenario.

(1) The department offers certification courses, and issues certificates to those who successfully complete them. To be eligible to take the department's certification course, an individual must be a high school graduate and sign a written statement to that effect at the beginning of the course. Individuals who successfully complete the course, including passing the associated tests, will be issued a certificate by the department.

(2) The department trains instructors who themselves give certification courses, as described in this section. The eligibility requirement to attend such a course is the same as is described at paragraph (1) of this subsection. Individuals who successfully complete the course, including passing the associated tests, will be issued a certificate signed by the authorized instructor. It will have the same validity, and is subject to the same restrictions, as a certificate issued under paragraph (1) of this subsection.

(b) Screening certificates issued under this section are subject to the following requirements.

(1) Individuals who receive a certificate are authorized to conduct vision and/or hearing screening (as applicable to the course taken, and as listed on the certificate) in accordance with this subchapter.

Certified screeners are required to comply with this subchapter, and failure to do so is grounds for the modification, suspension and/or revocation of the certification as provided in this section.

(2) Individuals using a photoscreener for vision screening must have successfully completed instrument-specific training (including passing all associated tests) in accordance with manufacturer guidelines and must have a full understanding of the pass/fail referral criteria in accordance with AAPOS standards. Individuals conducting photoscreening must also have a current screening certificate under subsection (a)(1) or (2) of this section. Documentation of the photoscreening training must be submitted to the instructor upon attendance at a certification class and include the date and location the training was taken, and the name, affiliation and contact information of the instructor. The individual must successfully complete instrument-specific refresher training (including passing any associated tests) every five years. Such refresher training must be completed during the fifth year of certification from the date the preceding certificate was issued.

(3) Individuals using a telebinocular instrument for vision screening must be familiar with the instrument in accordance with manufacturer guidelines and must have a full understanding of the pass/fail referral criteria. Individuals conducting telebinocular screening must also have a current screening certificate under subsection (a)(1) or (2) of this section.

(4) Screening certification under this section allows the individual to screen children for vision and/or hearing problems (as applicable to the course taken, and as listed on the certificate) under this subchapter for a period of five years, with renewals processed as described in paragraph (5) of this subsection.

(5) Screening certification may be renewed by attending a department-approved refresher training course (either offered directly by the department or by an instructor authorized under this section). The refresher training course must be completed during the fifth year of certification from the date the preceding certificate was issued. Once a refresher training course is successfully completed, the five-year cycle begins again. If certification is not renewed within the required time period, the individual must attend the basic certification training course (i.e., a refresher course will not be sufficient).

(6) When the department receives information from any source that indicates a screener has not been following the requirements of this subchapter, the department may modify, suspend, or revoke the certification. The department will send a notice to the affected individual as part of any such action being taken.

(7) The affected individual has 20 days after receiving the notice, referenced in this paragraph, to request a hearing on the proposed action. It is a rebuttable presumption that a notice is received five days after the date of the notice. Unless the notice letter specifies an alternative method, a request for a hearing shall be made in writing, and mailed or hand-delivered to the program at the address specified in §37.26(d) of this title (relating to Recordkeeping and Reporting). If an individual who is offered the opportunity for a hearing does not request a hearing within the prescribed time for making such a request, the individual is deemed to have waived the hearing and the action may be taken.

(8) Appeals and administrative hearings will be conducted in accordance with the department's fair hearing rules, at §§1.51 - 1.55 of this title (relating to Fair Hearing Procedures).

(c) Individuals who successfully complete a department instructor training course, including all associated testing, are authorized to conduct screening trainings and issue screening certificates to individuals who

successfully complete the screening training (including all associated testing), subject to the requirements of this section. Instructors may not charge any kind of fees for their activities under this section.

(1) Individuals wishing to take the instructor course must first meet the following qualifications:

(A) have a current, valid department screening certification, and have experience performing screenings under that certificate;

(B) have experience conducting trainings to groups of adults; and

(C) be an audiologist, speech pathologist, optometrist, ophthalmologist or a registered nurse and must have the applicable Texas license, current and in good standing under Texas law.

(2) Department authorization for instructors to conduct trainings is valid for five years from the date certification was issued. The individual must successfully complete a department-approved instructor training refresher course (including passing any associated tests) and submit documentation of successful completion to the department within 30 days of completion of the course. Such refresher training must be completed during the fifth year of certification from the date the preceding certificate was issued. Failure to comply with these requirements, by the deadline given, means that the individual must then attend the basic instructor training course (i.e., a refresher course will not be sufficient).

(3) Once authorized by the department to conduct trainings, instructors must do so using training materials obtained from the department.

(4) All proposed screening training sessions must be approved by the department at least 15 working days prior to the training session. The instructor must provide all information sought by the department, by the deadlines given.

(5) Instructors in good standing under this section may teach screening refresher courses as described in subsection (b)(5) of this section. Such refresher courses are subject to the same requirements under this section as those pertaining to initial screening courses.

(6) When a department-authorized instructor issues a certificate of vision and/or hearing screening, the instructor has 14 days to submit the attendance sheets, evaluations and the tear-off portion of the department's certification, and the photoscreening certificate, if applicable, to the department. These original documents should be submitted to the program at the address found at §37.26(d) of this title. The instructor should maintain a copy.

(7) When the department receives information from any source that indicates a screening instructor has not been following the requirements of this subchapter, the department may modify, suspend, or revoke the certification. The department will send a notice to the affected individual as part of any such action being taken.

(8) The affected individual has 20 days after receiving the notice, referenced in paragraph (7) of this subsection, to request a hearing on the proposed action. It is a rebuttable presumption that a notice is received five days after the date of the notice. Unless the notice letter specifies an alternative method, a request for a hearing shall be made in writing, and mailed or hand-delivered to the program at the address specified in §37.26(d) of this title. If an individual who is offered the opportunity for a hearing does not request a hearing within the prescribed time for making such a request, the individual is deemed to have waived the hearing and the action may be taken.

(9) Appeals and administrative hearings will be conducted in accordance with the department's fair hearing rules at §§1.51 - 1.55 of this title.

§37.28. Hearing Screening Equipment Standards and Requirements.

(a) Except as otherwise specifically provided, the sections in this subchapter apply to all persons and entities (e.g., calibration companies, facilities) who receive, possess, acquire, transfer, own, or use audiometers, audiometric testing devices, and audiometric calibration equipment, and to all audiometers used for audiometric screening and hearing threshold tests, all audiometric testing devices, and all audiometric calibration equipment used in the State of Texas.

(b) Each individual and entity using any of the equipment referenced in subsection (a) of this section must be registered with the department, in the manner prescribed by the department (see information at http://www.dshs.state.tx.us/vhs/audio.shtm). Registration information must be updated in a timely manner to keep it current.

(c) Equipment referenced in subsection (a) of this section shall meet the appropriate current ANSI standards, or the manufacturer's specifications if no ANSI standards apply, and all other applicable federal and state standard(s) and/or regulation(s) for such equipment.

(d) Individuals must be trained by or undergo training approved by the department in the proper use of this equipment, as detailed in §37.27 of this title (relating to Standards and Requirements for Screening Certification and Instructor Training).

(e) Individuals and entities who perform calibration services on the equipment referenced in subsection (a) of this section shall register with the department, and must update that registration in a timely manner to keep it current, in a manner prescribed by the department (see information at http://www.dshs.state.tx.us/vhs/audio.shtm).

(f) Only calibration firms shall perform periodic electronic calibrations and exhaustive electronic calibrations. Calibration firms shall provide notification to the owner of the audiometer being calibrated that the audiometer has been calibrated. The notification may be in the form of a decal or sticker affixed to the audiometer, or in hard copy documentation that must be maintained by the owner and be made readily available to the department or its representative upon request.

(g) Upon reasonable notice, each individual or entity using audiometric screening equipment shall make available to the department, in a timely manner, records maintained pursuant to this subchapter. Calibration forms and records for all equipment referenced in subsection (a) of this section, including monthly biological calibration data, shall be maintained for inspection by the department for three years.

(h) Registration is not required for:

(1) equipment in storage, being shipped, or being offered for sale, if the audiometer, audiometric testing devices, and audiometric calibration equipment is not being used; and

(2) equipment limited to nonhuman use.

Vision, Hearing and Spinal Screening
Department of State Health Services
Maternal and Child Health Section

Health Screening Group
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