

# *Spinal Screening Program*

## SCHOOL SPINAL SCREENING GUIDELINES

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Texas Department of State Health Services



# SPINAL SCREENING MANUAL

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## INTRODUCTION

School-based spinal screening is designed to identify adolescents with abnormal spinal curves and refer them for appropriate follow-up by their primary care physician (PCP). Screening can detect scoliosis at an early stage, when the curve is mild and may go unnoticed. Most curves can be treated without surgery if detected before becoming too severe. Therefore, early detection is key to controlling spinal deformities.

The Texas Department of State Health Services (DSHS) Spinal Screening Program is authorized by Texas Health and Safety Code, Chapter 37. The Texas Legislature established the program to detect abnormal spinal curvature in students and requires that the program adopt the rules as mandated by the statute. The rules include spinal screening by school nurses and other trained adults for students entering grades 6 and 9 unless the children were screened the previous year, in 5th or 8th. The rules are located in the Texas Administrative Code, Title 25, Health Services, Chapter 37, Maternal and Infant Health Services, Subchapter G, Spinal Screening Program.

Chapter 37 of the Texas Health and Safety Code also calls for DSHS to cooperate with the Texas Education Agency in establishing the spinal screening program and in adopting the program rules.

DSHS is responsible for providing a certification training program for spinal screening. Careful training and understanding of spinal screening is essential for the program's success.

The goal of this manual is to train qualified individuals to become certified school spinal screeners. This manual covers the following topics:

- Establishing a screening program.
- Requirements to become a spinal screener.
- When to screen students.
- Which physical signs may indicate a spinal problem.
- Whom to screen.
- How to prepare for and conduct a spinal screening.
- Requirements to become a spinal screening instructor.
- Recording results and making referrals.

Thank you for taking the time to become a certified spinal screener. Catching the spinal problems of adolescents early and helping connect them to appropriate medical care could help prevent serious health problems later in their life.

## SCREENING SCHEDULE AND REQUIREMENTS

### SCREENING SCHEDULE

Ideally, spinal screening should be conducted annually during the growth period of adolescence, ages 10-14, to detect spinal concerns early. All children entering grades 6 and 9, unless screened the previous year in 5th or 8th, who are attending public or private school must be screened for abnormal spinal curvature before the end of the school year.

WHO MUST BE SCREENED	WHEN SCREENING MUST BE DONE
Children entering 6th and 9th grades.*	Before the end of the school year.
New students or late enrollees who do not have a record of having received their spinal screening at their previous school.**	If the screening has already taken place for that school year, students must be screened individually by the end of the school year.**
Students entering the district who are past the grades of the screening requirement, but who, according to school records, have never been screened.**	Schools may offer a student enrolling in grades 10, 11, or 12 the opportunity for spinal screening if the student has no record of having been screened previously.

\*Unless the children were screened the previous year, in 5th or 8th.

\*\*If a student is enrolled within 60 days of the date the school is closing for summer, the spinal screening must be conducted within 120 days of the beginning of the following school year.

### EXCEPTIONS AND EXEMPTIONS

A student may be exempt from screening if:

- The student is already actively under medical care by an appropriately licensed professional for one or more of the spinal problems for which spinal screening is performed. To claim this exception, the student must submit signed and dated documentation from the licensed professional to the school. The documentation must state that the student is under active, ongoing medical care for specific spinal problems.
- A student's parent or legal guardian executes an affidavit stating that spinal screening will be conducted by an individual other than the screener used by the school. The school may admit the student on a provisional basis for up to 60 days. The 60-day time period is from November 30 to January 30 of each school year. The school may deny admission until the screening record of the student is provided.



*Ideally, spinal screening should be conducted annually during the growth of adolescence, ages 10-14, to detect spinal concerns early.*

- The screening conflicts with the tenets and practices of a recognized church or religious denomination of which the individual is a member. The parent or legal guardian must submit to the school an affidavit in lieu of the screening record stating the conflict. The affidavit must be submitted on or before the date spinal screening is scheduled.

## STUDENTS WITH SPECIAL CIRCUMSTANCES

If, because of a physical condition, a student cannot stand in the manner necessary for the forward bend test, do not attempt to screen that student. The school should contact and inform the student's parent or legal guardian that the child is at the age at which he or she should receive the state-mandated spinal screening. (More information on students with special circumstances will be discussed on page 15.)

### DEFINITION:

**Forward bend test:** With the palms of both hands touching, the student bends forward until the back is horizontal. The forward bend test is used to check for uneven contours (humps on one side of the spine) and any curve in the spine.



## ESTABLISHING A SCREENING PROGRAM

### WHAT IS SPINAL SCREENING?

Spinal screening is a brief test to detect any abnormal curvature of the spine.

**Screening answers only one question: does the person show possible problems that indicate the need for further assessment?** Spinal screening is a quick and cost-effective way to identify those who may need a more detailed evaluation by a primary care provider.

DSHS is required to:

- Train and certify individuals to conduct spinal screenings.
- Train instructors who, in turn, conduct screening training sessions statewide.
- Collect, compile, and analyze the aggregate screening data that schools submit.
- Monitor outcomes of spinal screening.
- Conduct quality control visits to schools to monitor the quality of spinal screening activities.
- Provide technical assistance to schools about spinal screening activities.
- Coordinate the screening program with other screening programs conducted by DSHS.
- Provide educational and other materials to assist in local screening activities.

### WHO MAY CONDUCT SPINAL SCREENINGS?

The following licensed health professionals may conduct spinal screening without prior certification if their course of study included physical assessment:

- Physicians (MD/DO)
- Nurse Practitioners
- Physician Assistants
- Registered Nurses
- Chiropractors
- Physical Therapists



*Spinal screening is a brief test to detect any abnormal curvature of the spine.*

Certified screeners who meet all of the following criteria may conduct spinal screenings:

- Are trained and certified according to the program rules.
- Have a high school diploma or GED.
- Are trained directly by DSHS or by an instructor who has been trained and authorized by DSHS.
- Have passed the post-training test.

#### **TIME FRAME FOR CERTIFIED SCREENERS**

- Screening certification allows a screener to conduct spinal screening for a period of five years.
- Certification may be renewed by attending a DSHS-approved refresher training course offered by DSHS or by an instructor authorized by DSHS.
- Refresher training courses must be completed during the fifth year of certification from the date the preceding certificate was issued.
- The five-year cycle begins again once a refresher training course is successfully completed.
- If certification is not renewed within the required time period, the individual must attend and pass the basic certification training course.

#### **WHO MAY BECOME A SPINAL SCREENING INSTRUCTOR?**

Occasionally DSHS identifies the need for additional Spinal Screening instructors. Before taking the instructor certification course, individuals must meet the following qualifications:

- Have a current valid department screening certificate, and have experience performing screenings.
- Have experience conducting trainings to groups of adults.
- Be a physician (MD/DO), physician assistant, chiropractor, nurse practitioner, registered nurse, or physical therapist with applicable Texas license, and be current and in good standing under Texas law.

#### **NOTE**

The DSHS instructor certification course authorizes individuals to conduct spinal screening courses and issue screening certificates for five years. Authorization to conduct trainings is valid until December 31 of the fifth year from the date certification was issued. Certified instructors must update their instructor status with DSHS by submitting an updated instructor application within the required time period. It is the responsibility of the instructor to request an application from DSHS.



Authorized instructors must use training materials obtained from DSHS. In addition, all proposed screening training sessions must be approved by DSHS at least 15 working days prior to the training session. The instructor must provide all information sought by DSHS by the deadlines given, including participant rosters and evaluations. Instructors in good standing may also teach screening refresher courses.

## SCHOOL SCREENING PROGRAM'S RESPONSIBILITIES

SCREENER RESPONSIBILITIES	SCHOOL RESPONSIBILITIES
<ul style="list-style-type: none"> <li>• Coordinate with school administration.</li> </ul>	<ul style="list-style-type: none"> <li>• Verify screeners are state certified.</li> </ul>
<ul style="list-style-type: none"> <li>• Determine screening date and site in coordination with school administration.</li> </ul>	<ul style="list-style-type: none"> <li>• Conduct an in-service educational program for school system resource personnel, administrators, school nurses, physical educators, and parents.</li> <li>• Discuss the legal requirements for spinal screening, scope of the health issues, and rationale for and technique of screening.</li> <li>• Discuss which students are exempt and methodology for screening, including how follow-up of positive cases and referrals will be carried out. Although the law requires screening in grades 6 and 9 (unless the children were screened the previous year, in 5th or 8th), exact ages and patterns of screening will vary depending on the grade structure of schools and screener availability.</li> <li>• The chief administrator of each school is responsible for ensuring that each student admitted to the school complies with applicable spinal screening requirements or submits an affidavit of exemption.</li> </ul>
<ul style="list-style-type: none"> <li>• Arrange and perform screening.</li> </ul>	<ul style="list-style-type: none"> <li>• Complete follow-up and referral activities.</li> </ul>
<ul style="list-style-type: none"> <li>• Obtain necessary forms (most forms you will need are included in Appendix A).</li> </ul>	<ul style="list-style-type: none"> <li>• Submit annual aggregate report online.</li> </ul>
<ul style="list-style-type: none"> <li>• Document results.</li> </ul>	

## A SCHOOL'S RESPONSIBILITY IN SPINAL SCREENING

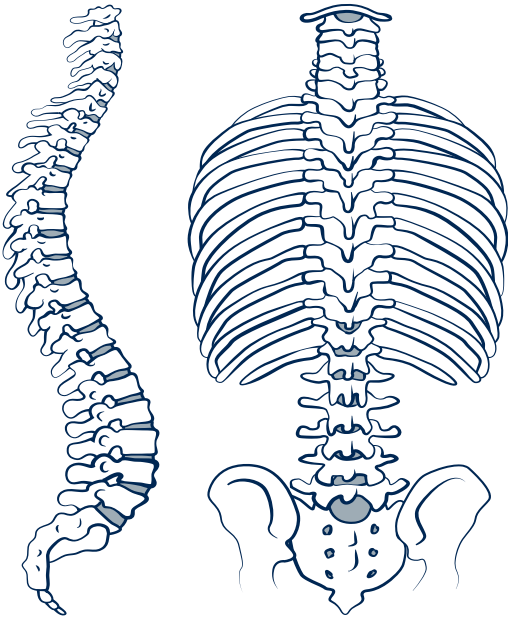
*(See also School Spinal Screening Flowchart, Appendix C, page 54.)*

The Administrator responsible for the school's/district's spinal screening program must coordinate screening activities with teachers, parents, nurses, and screeners. If screeners are not on school staff, it is important that they coordinate with school staff to ensure that all components of the spinal screening program are carried out.

# THE SPINE: AN OVERVIEW

## THE NORMAL SPINE

The spinal column is made up of 33 vertebrae, or bony segments. These are aligned vertically on top of one another and supported by muscles and ligaments (*Figure 1*). Discs between each vertebra serve as pads. The spinal column provides stability, adds mobility to the torso, and protects the delicate nerves of the spinal cord.



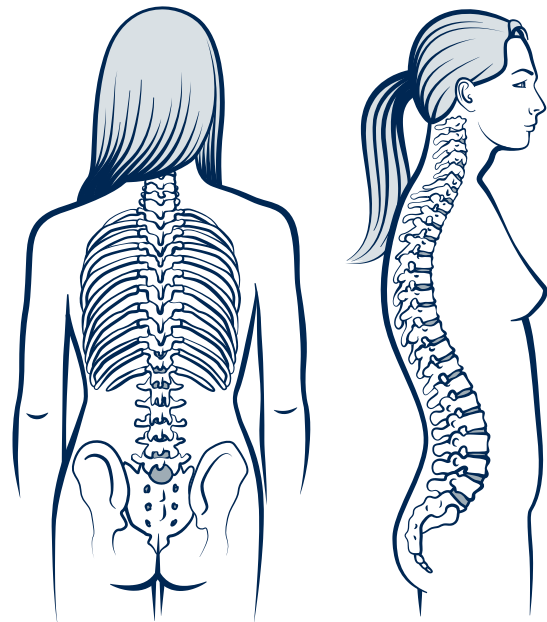
*Figure 1*

From behind, the spine appears straight, the shoulders are even, hips are level, and the distance between the arms and the body is equal (*Figure 2*).

From the side, the natural curves of the shoulder and lower back can be seen. The shoulder blades protrude the same amount on each side, creating a symmetrical appearance on each side of the spine.

The spine is divided into four main areas:

1. Cervical area (neck)
2. Thoracic area (chest)
3. Lumbar area (small of the back)
4. Sacral area (lower portion of the spine)



*Figure 2*

## ABNORMAL SPINAL CURVATURE

Spinal screening is designed to detect two major types of spinal deformities:

1. Scoliosis
2. Kyphosis (*covered in detail on page 10*).

### DEFINITIONS:

**Scoliosis:** An abnormal lateral curvature of the spine of 10 degrees or more.

**Structural Scoliosis:** A type of scoliosis characterized by a curvature of the spine with rotation, or spinal twisting. Usually considered irreversible.

**Functional (Nonstructural) Scoliosis:** A type of scoliosis characterized by a structurally normal spine that appears curved due to one or more underlying conditions, such as a difference in leg length. This type of scoliosis is generally temporary as long as the underlying condition is treated.

## SCOLIOSIS

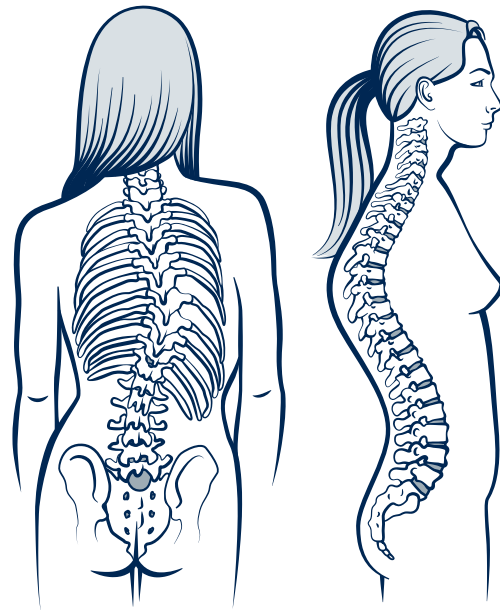
The rotation of scoliosis in the spinal column creates a side-to-side, “C”-shaped single curve or “S”-shaped double curve, when viewed from behind (*Figure 3*). Some cases worsen with time and can result in serious problems such as abnormal appearance in posture, increasing back pain as one ages, and in the worst cases, interference with heart and lung function.

Scoliosis can be divided into two categories.

1. Structural
2. Functional

### STRUCTURAL SCOLIOSIS

These curves are the result of changes in the alignment in the vertebrae that are fixed. Structural curves can be distinguished from functional curves by their associated spinal twisting, or rotation. This twisting results in prominence on one side of the rib cage, best seen when the student bends forward.



*Figure 3: Scoliosis*

## FUNCTIONAL SCOLIOSIS

Functional scoliosis causes no permanent changes in the shape or structure of the spine. The most common cause of functional scoliosis is a difference in the length of a student's legs that makes the child stand unevenly, due to a tilt in the pelvis. Other causes of functional scoliosis include muscle spasms or pain.

## INCIDENCE OF SCOLIOSIS

Although a family history of scoliosis may increase the likelihood of scoliosis, 85 percent of all cases of structural scoliosis have no known cause and are referred to as idiopathic scoliosis. Idiopathic scoliosis occurs in 2 to 3 percent of the adolescent population, usually affecting young people between the ages of 10 to 16.

Typically, girls begin their adolescent growth spurt and reach skeletal maturity earlier than boys. Scoliosis onset is usually earlier in girls than in boys—generally, ages 10 to 14 for girls and 12 to 16 for boys.

### DEFINITIONS:

**Idiopathic Scoliosis:** Refers to scoliosis with no known cause. It occurs in 2 to 3 percent of the adolescent population.

The risk of curve progression is higher in those with a substantial amount of growth ahead of them. For example, an immature, premenstrual girl has a higher risk of curve progression than an adolescent female who has already begun menses or an adolescent boy who has developed signs of maturation such as axillary hair.

Idiopathic scoliosis can go unnoticed in a young person for quite some time. Signs to watch for include (*see Figure 4*):

- One shoulder higher than the other.
- One shoulder blade higher or more prominent than the other.
- One hip higher than the other.
- Space between arms and body greater on one side.
- Leaning to one side.
- Head not centered directly above the pelvis.

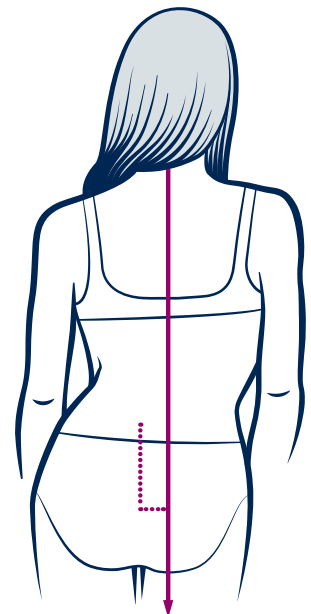


Figure 4: Idiopathic Scoliosis

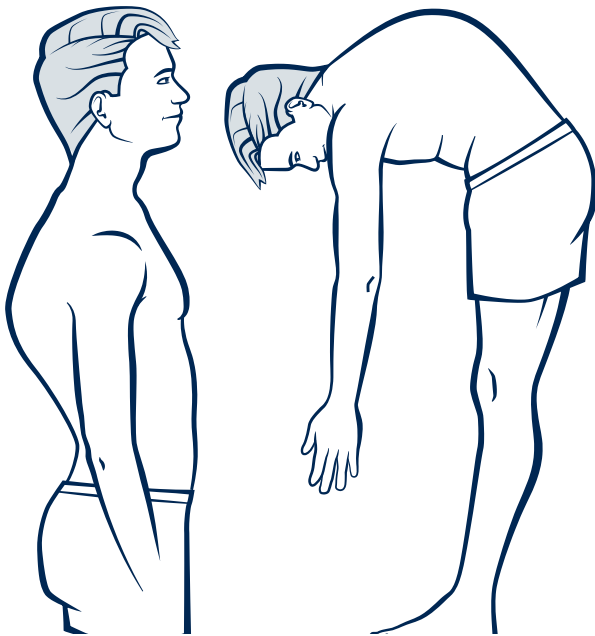
## KYPHOSIS

Kyphosis, or roundback, is described as an excessive curvature of the thoracic spine when viewed from the side (*see Figure 5*).

A small percentage of young people have a fixed, structural type of curve called Scheuermann's kyphosis, involving vertebrae that are actually wedged. The cause for this type of deformity is unknown. Bracing or surgery may be recommended for the still-developing adolescent with Scheuermann's kyphosis. This type of kyphosis is less common in adolescents, but occasionally will be identified during school spinal screening.

### DEFINITIONS:

**Kyphosis:** An excessive curvature of the thoracic spine when viewed from the side. Also called "roundback."



*Figure 5: Kyphosis*

## MANAGEMENT OPTIONS (THE THREE Os)

### MANAGEMENT OPTIONS FOR SPINAL DEFORMITIES CONSIST OF THE THREE Os:

1. Observation
2. Orthosis
3. Operation

#### OBSERVATION

Routine rescreening or observation by the physician is a form of treatment for mild curves. Once the school program refers a student to the physician because of a positive finding of curvature, the physician may need to follow the adolescent and monitor for any increase in the curve. Based on the amount of curve and the child's growth pattern, the physician will decide if and when to add treatment. This observation period consists of rescreening regularly throughout the rapid growth years of adolescence until the spine is mature. It is important to note that more than 90 percent of students with scoliosis require no treatment other than observation.

#### ORTHOSIS (BRACE)

Recent studies have shown that bracing can prevent the progression of a spinal curve in a growing adolescent. A 2010 study emphasized the importance of identifying students who have mild curves that are progressing.<sup>1</sup> For a student with scoliosis, preventing the curve from progressing can eliminate the need for spinal surgery. While the orthosis can prevent worsening of the spinal curve, it cannot correct the curve that already exists.

Bracing is generally recommended for curves of 20 to 40 degrees and for progression of existing curves in adolescents with growth remaining. Use of an orthosis, often called a spinal brace, can prevent progression of the curve. The orthosis supports and puts pressure on the spine to prevent more curvature from forming during active spinal growth. The main factor in achieving a higher rate of success is how many hours in the day the brace is worn (Katz, Weinstein). This is a good reason to encourage students to wear their orthosis as prescribed by their doctor.

<sup>1</sup> Katz DE, et al. *J Bone Joint Surg Am.* 2010;92:1343 and Weinstein SL, et al. *N Engl J Med.* 2013 Oct 17;369(16):1512.



*Routine rescreening or observation by the physician is a form of treatment for mild curves.*



Figure 6: TLSO Low Profile Orthosis

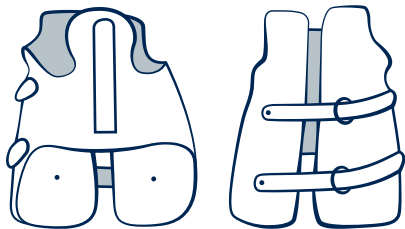


Figure 7: Back view of TLSO Low Profile Orthosis (Courtesy of Texas Scottish Rite Hospital for Children).

Various spinal orthoses are available, with the most common being a Thoracolumbo Sacral Orthosis (TLSO). The TLSO (Figures 6 & 7) is named by the areas it is designed to stabilize: the thoracic, lumbar, and sacral parts of the spine. It is cosmetically acceptable as it can be covered well by clothing.

Wearing a brace is not an easy treatment for an adolescent. Even covered by clothing, it is hot, hard, and can make the student feel self-conscious. Getting into a daily routine of wearing the brace while participating in activities helps with compliance, which is key to successful treatment. Even though bracing can be a difficult adjustment for an adolescent, studies show this to be a short-term problem for a student with a supportive environment.

### OPERATION: SPINAL FUSION AND INSTRUMENTATION

For those students with a worsening spinal deformity, surgery can reduce a portion of the curve and prevent it from increasing in the future. Usually surgery is reserved for adolescents and pre-adolescents who already have a curve of 45 to 50 degrees or more. The most common surgical procedure is a posterior spinal fusion with instrumentation and bone graft (Figure 9). This type of surgery involves attaching rods to the spinal column to help straighten it. The bone graft between the

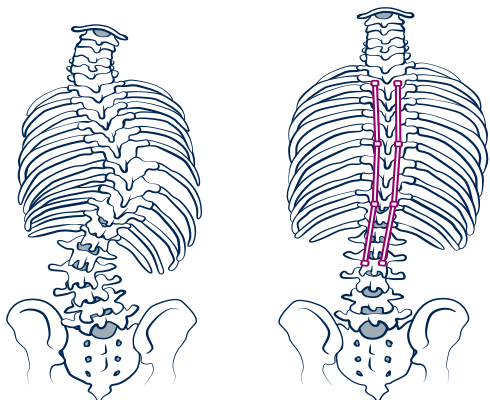


Figure 8: Spine with double major curve prior to surgery.

Figure 9: Spinal fusion with instrumentation. Note significant correction of curve.

affected vertebrae encourages fusion, or healing, of the bone to prevent further progression of the curve. Instrumentation refers to the various rods, screws, hooks or wires that are used to hold the spine in the corrected position while the bone fusion occurs. The instrumentation is rarely removed.

Following surgery, the fused section is no longer flexible. This does not seem to cause a problem unless there are a substantial number of vertebrae that need to be fused. The average hospital stay is about four to five days, and the student can usually return to school in approximately four weeks. During the first year after surgery, some limits will be placed on strenuous physical activity. After this healing phase, the surgeon will usually release the student for all activities, including some competitive, low-contact sports. Sometimes the physician feels it is necessary to exempt the child from competitive contact sports and gymnastics.

## PREPARING TO CONDUCT SPINAL SCREENINGS

Fully preparing for a school spinal screening will be well worth the effort. Having the proper environment and supplies ready will help ensure that your screenings produce reliable results each time.

With an assistant, an experienced screener should be able to screen 20 to 30 students per hour. Below is a brief checklist to prepare for spinal screening.

### BEFORE SCREENING

- Send prescreening letter to parents and legal guardians (found in Appendix A, page 33).
- Conduct student orientation.
- Remind students of recommended appropriate clothing to wear on the day of the screening (one day prior to screening).
- Prepare a screening location—a private room with a table.
- Obtain student roster from school.

### SCREENING SUPPLIES CHECKLIST

- Masking tape to mark floor
- Pencil
- Student roster
- Forms for recording results (*Make copies of the School Spinal Screening Worksheet found on page 37 in the Appendix.*)
- Scoliosis Inclinator (*optional*)
- Appropriate garments for boys and girls (*See “Recommendations” on next page.*)

### PREPARATION FOR SCREENING

Conduct orientation sessions for each class of students to be screened. The DSHS Audiovisual Library lends educational videos for children that explain the importance of spinal screening and allay any fears they may have (see Resources, Appendix C, page 56 for titles and ordering info). If screener is not school staff, coordinate with the school.

1. Send out a prescreening letter to parents and guardians (see Sample Prescreening Letter in Appendix A, page 33). If screener is not school staff, coordinate this step with the school.
2. Obtain a list from the school of students who are exempt from screening. Students whose parents or guardians have submitted an Affidavit of Religious Exemption (Appendix A, page 35) are excused from screening. Appropriate personnel should be notified privately about these students.



*On the day before the screening, remind students of the screening's purpose.*

3. Make a note of which students are being screened by their physician. Parents or guardians may choose to have the screening conducted by a physician instead of the school. In this case, parents and guardians must provide signed results of a forward bend test from a physician's office by the end of the school year during which the student is scheduled for screening, or by the beginning of the following school year if the exam is obtained during the summer holiday. The Parent Notification and Referral form (Appendix A, page 38) is useful for parents and guardians for this purpose.
4. Determine how many volunteers you will need. You may choose to have one or more volunteer assistants participate in the screening process for security/liability concerns. Assistants can help with preparation and management. Note that volunteer assistants must be individuals who have completed high school. It is the responsibility of the screener to determine how a volunteer assistant will be used during the screening process, consistent with all state and federal confidentiality requirements. Ensure volunteer assistants understand the importance of privacy.
5. Determine the amount of time needed to conduct the screenings and develop a schedule. If necessary, coordinate this schedule with the teachers who need to release their students from class on screening days.
6. Secure a private room where students may be screened individually. A room adjacent to the physical education dressing room is often ideal for screening.
7. Have a roster of students available using the School Spinal Screening Worksheet (Appendix A, page 37) or a similar form.

## RECOMMENDATIONS

- On the day before the screening, remind students of the screening's purpose.
- DSHS recommends reminding boys and girls to wear or bring shorts, and reminding girls to wear a two-piece swimsuit top, a halter top, or sports bra.
- Speak positively, and refer to this activity as "spinal screening" rather than "screening for scoliosis and kyphosis."
- It can be helpful to have some extra sports bras and gym shorts on hand for students who do not dress appropriately for spinal screening. Students should be provided a private space to change clothes.

The school nurse and physical education instructor should be aware of students who are wearing back braces. In most cases, students who wear braces are encouraged to participate in a wide range of physical education activities, but the child's health-care provider's recommendations will need to be followed.

### **STUDENTS WITH SPECIAL CIRCUMSTANCES**

If a physical condition prevents a student from standing in the manner necessary for the forward bend test, do not attempt to screen that student. The school should contact the student's parents or guardian and inform them that the child is at the age to receive state-mandated spinal screening.

The school should ask the parents or legal guardian to request a medically appropriate spinal screening from the student's primary physician at his or her next checkup, and request the results of this screening for the school's records and the DSHS Spinal Screening Report (see Appendix A, page 40). It may be helpful to provide the Parent Notification and Referral form to the parents for this purpose (Appendix A, page 38). On the Spinal Screening Report, indicate this student as a referral. Once the parent or guardian returns the results of a physician's exam, enter the data into the diagnosis/treatment section as appropriate.

### **STUDENTS UNDER PRIOR TREATMENT**

If it has been verified that a student is receiving ongoing treatment for scoliosis, kyphosis, or other spinal abnormality, it is not necessary to screen that student. Record this student in the "Under Treatment Do Not Screen" column of the Spinal Screening Report. Do not record the student's diagnosis or treatment on the form. That data is only for students who have received a parent notification and referral from the school. If unable to verify that a student is under treatment for a spinal abnormality, include the student in the school spinal screening.



*If a physical condition prevents a student from standing in the manner necessary for the forward bend test, do not attempt to screen that student.*

## SPINAL SCREENING PROCEDURES

The goal of the school screening process is to identify students who need to be referred to a primary care provider before an abnormal curve becomes severe. The screening process identifies students who have findings on physical examinations that suggest a spinal curve.

A student who shows physical signs that may indicate scoliosis is referred to a primary care provider who completes an extensive examination and may take x-rays to confirm whether the student has an abnormal spinal curve. At that point, the provider can provide recommendations for treatment. Today, mild and moderate curves can be successfully managed with a brace, and thus avoid the need for surgery.

### SCREENING PROCEDURE

#### SCREENING TIPS

- To save time, arrange for some students to wait near the screening area for their turn. These students should not be in a location where they can see peers being screened. An aide or volunteer may assist in maintaining the flow of students.
- Record the name of each student in the class on the Spinal Screening Worksheet or use a classroom roster. Record all positive findings next to the student's name on the worksheet. If a student does not receive the screening, note the reason next to his or her name.
- Arrange to rescreen students with positive or abnormal findings within two weeks of the initial screening. Screen those students who missed the initial screening at that time as well.

### STEP 1: EXPLAIN SCREENING PURPOSE.

Introduce yourself and explain the purpose and importance of the screening. Students may hesitate to be screened. The more they understand about the process, the more comfortable they will be.

#### NOTE

Some students find the screening process upsetting. It is strongly recommended that these students be allowed to visit with the counselor, school nurse, or other trusted staff person privately, or be allowed to call their parent or guardian. Often these students will calm down and be able to participate in screening. If not, add the student's name to the list of those needing to be rescheduled for spinal screening.

## **STEP 2: PROVIDE APPROPRIATE SCREENING GARMENTS (IF NECESSARY).**

It is recommended that students remove their shirt or blouse so that you can see their spine. Typically, students can be screened well in regular clothing provided that the fabric is thin, such as t-shirt fabric. Girls may also be screened wearing a bathing suit top, sports bra, or other appropriate clothing. Shorts also allow better visualization of the waist, hips, and legs. The screener or school should be prepared to provide appropriate clothing to or reschedule screenings of students who are not appropriately dressed for the screening.

## **STEP 3: ASK STUDENTS TO STAND ON THE MARK.**

You may conduct the screening from a seated or standing position. Place a mark on the floor with tape to show the student where to stand. A distance of five to eight feet between the examiner and student is recommended. Have a table nearby to use for writing down information, and provide a place for students to place shirts and jackets. Good lighting will help the screening.

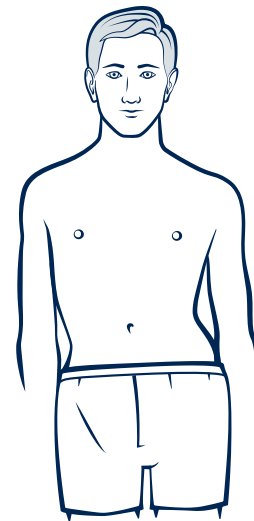
Ask the student to stand erect with feet slightly apart, knees straight, and arms hanging loosely at his or her sides while facing the examiner. Important things to keep in mind as you are screening:

- The student should face forward throughout the exam positions. Turning the head can cause a change in findings.
- Long hair should be moved forward to allow full view of the student's back.

## **STEP 4: VIEW FRONT STANDING.**

With the student facing front in the standing position (*Figure 10*), check for the following signs of a possible abnormal spinal curvature:

- One shoulder higher than the other.
- Larger space from arm to the side of the body (compare both sides).
- Uneven waist creases.
- Uneven hip levels.



*Figure 10*

## **STEP 5: VIEW FRONT FORWARD BEND.**

Next, ask the student to stand erect with feet slightly apart and knees straight. With the palms of both hands touching, the student bends forward until the back is horizontal (*Figure 11*). This is known as the forward bend test. Examine the student in this position to check for:

- Uneven contours, humps on one side.
- Any curve in the spine.



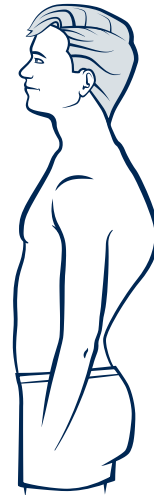
*Figure 11*



### STEP 6: VIEW SIDE STANDING.

View the student from the side in the standing position (*Figure 12*) and check for:

- Exaggerated roundness in the upper back.
- Exaggerated arch in the lower back.

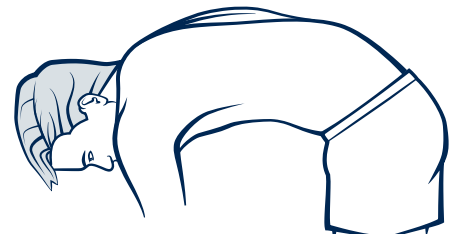


*Figure 12*

### STEP 7: VIEW SIDE FORWARD BEND.

Next, view the student from the side in the forward bend position (*Figure 13*), checking for:

- Uneven contours, humps on one side.
- Flexibility: can the student bend forward and touch upper shins or feet?

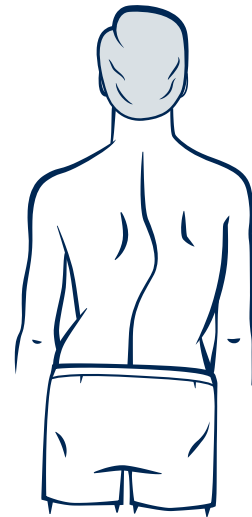


*Figure 13*

### STEP 8: VIEW BACK WHILE STANDING.

View the student from the back in the standing position (*Figure 14*) and note any of the following:

- Head not centered directly above crease in buttocks.
- One shoulder blade higher than the other.
- One shoulder blade wing is higher or stands out more than the other.
- Uneven waist creases.
- Curved spine.
- Uneven hip levels.
- Larger space from arm to the side of body (comparing both sides).



*Figure 14*



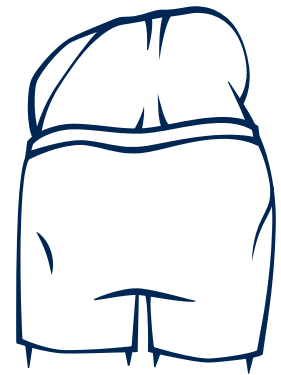
## NOTE

If hips appear uneven but no other abnormalities are apparent, consider the possibility of unequal leg length and visualize alignment of knee creases, if possible.

### STEP 9: VIEW BACK FORWARD BEND.

View the student from the back in the forward bending position (*Figure 15*) to check for:

- Uneven contours, humps on one side.
- Any curve in the spine.



*Figure 15*

## IMPORTANT

Students with any positive findings should be rescreened within two weeks of the initial screening.

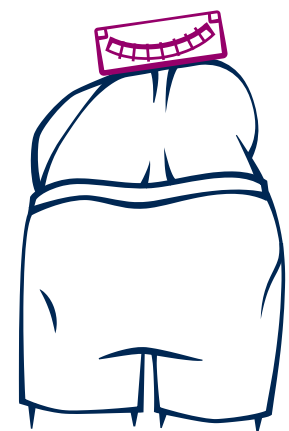
### USING A SCOLIOSIS INCLINOMETER (OPTIONAL)

The scoliometer is a brand of inclinometer that is similar to a carpenter's level and designed to measure the degree of spinal rotation. The purpose is to measure the degree of rotation to identify whether a student needs to be referred to a physician for evaluation. If a scoliometer is used for spinal screening, a rescreen would be conducted for reading results of 5 or 6 degrees. A follow-up rescreen should be conducted in six months to one year to determine if the abnormal curvature is increasing. This tool is particularly helpful when a student has positive physical findings from the forward bend test.

As with any tool, correct use is important to ensure the results are accurate and consistent. To use the scoliometer:

Place the scoliometer gently across the student's back at the point where a hump or unevenness is most prominent. (*Figure 16*).

- The number "0" should be directly over the top ridge of the spine.
- Do not press down on the device because that can distort the reading.



*Figure 16*

## NOTE

- Use of the scoliometer (optional) to rescreen will help in determining which students need referral. If possible, ask another certified screener to rescreen with you for reassurance that your screening is accurate.
- If a student has a reading of 5 or 6 degrees, DSHS recommends rescreening that student in six months to one year to determine if the curve is increasing.
- Refer those students whose spinal curve on the inclinometer is 7 degrees or more.

### **ABSENTEES**

Students who were not screened due to absence should be scheduled for screening as soon as possible. Ideally, these make-up screenings can be carried out during the rescreening of students found to have positive findings at the initial screening. The second screening for those students should be conducted approximately two weeks after the initial screening.

### **EXCLUSIONS**

If students were excluded from screening for any other reason, have their reason documented and included in their school health record.

### **RESCREENING STUDENTS WITH POSITIVE FINDINGS**

Use the make-up screening session to rescreen all students with positive findings at the initial screening. The original worksheet may be used at the rescreening. If initial positive findings are not confirmed, parents or guardians need not be contacted. If a positive finding is confirmed by the person who rescreens, the school should contact the parent, guardian, or managing conservator as specified in the following section.

## RECORDING RESULTS AND MAKING REFERRALS

A student found to have a possible abnormal spinal curve at both the initial spinal screening and the rescreening should be referred to a physician. While spinal screeners can identify physical findings that may suggest spinal curves, they cannot diagnose the reason for the finding or its significance. The physician will evaluate whether there is truly a spinal deformity. A complete medical history and physical examination involves re-evaluating the findings noted during the school screening. The screener should document the results of the screening on the School Spinal Screening Worksheet (Appendix A, page 37).

### IMPORTANT

All children who have undergone a spinal screening must have a record of this screening in their school file. Schools may use either the School Spinal Screening Worksheet found in Appendix A of this manual (page 37), or their own form that includes the same information.

If there are concerns about a student's screening results, the screener is encouraged to work with another screener to review the findings.

Novice screeners are encouraged to work with an experienced screener to gain expertise. A scoliosis inclinometer may be particularly helpful for rescreening to measure the spinal curve and deciding on the need for referral. All students with positive findings must be rescreened prior to referral.

### NOTE

The screening process is sensitive enough that some students will be referred even though they do not have a spinal problem or do not require treatment beyond observation.

### FOLLOW-UP LETTER

When a student requires a referral to a primary care provider, Texas law requires that screening programs send a letter to the child's parents or guardian explaining that a spinal screen indicates he or she might have a spinal problem. See Appendix A, page 38 for the Parent Notification and Referral form. This form contains spaces to record the results of the screening and includes instructions to the parents, guardian, or managing conservator to obtain a professional medical examination for their child by the child's primary care physician.

As a courtesy, telephone the parents or guardian to explain that a professional medical evaluation is recommended as a precaution. Provide reassurance that many spinal findings are of no consequence, but professional observation may be needed to determine that signs of curvature are not worsening. Inform parents or guardians that they will receive written notification of the spinal screening findings in the form of a Parent Notification and Referral form, which they should take with them to the medical exam.

**NOTE**

If the screener is not school staff, the school must notify the parent or guardian of abnormal results.

**LATE EXAM RESULTS**

The back of the Spinal Screening Report shows a smaller table entitled Late Exam Results. This table is provided for school districts to record and submit the results of any student spinal screening referrals that were returned after the submittal of the previous year's report to DSHS. If no late results are available, this table may be left blank.

## RECORDKEEPING AND REPORTING REQUIREMENTS

All schools must submit annual reporting of Vision, Hearing, and Spinal Screening (VHSS) results on the Child Health Reporting System, found online at <http://chrstx.dshs.state.tx.us/CHRS/login.aspx>. For best results, use Internet Explorer to view this website. Each school is assigned a Facility ID number and FIN Code. For Facility ID Number and FIN Code Information, call DSHS's Vision, Hearing, and Spinal Screening office at 512-776-7420 Monday through Friday from 8 a.m. to 5 p.m. Central Time or toll-free at 800-252-8023, ext. 7420. You may also notify your regional contact. To find out your regional contact, go to [www.dshs.state.tx.us/vhs](http://www.dshs.state.tx.us/vhs) and click on "Regional Coordinators."

### SPINAL SCREENING REPORT (FORM M-51)

The Spinal Screening Report (Appendix A, page 40) enables DSHS to collect data about the outcomes of school spinal screenings and referrals. To obtain accurate data, it is important that the Spinal Screening Report be as complete and accurate as possible. Record on the student's health record the date and results of the spinal screening as well as the results of any referral to a health-care provider.

The User Account tutorial in the top right-hand corner of the DSHS Child Health Reporting System website listed above, <http://chrstx.dshs.state.tx.us/CHRS/login.aspx>, 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 submitting your report, verify each section to confirm it is correct, because you will not be able to edit after submitting the information.

The time period to enter data is January 15 to June 30.

For information or questions about completing the Annual Reports online, please call the Vision, Hearing, and Spinal Screening Program at DSHS at 512-776-7420 Monday through Friday from 8 a.m. to 5 p.m. Central Time or toll-free at 800-252-8023, ext. 7420.



*Before submitting your report, verify each section to confirm it is correct, because you will not be able to edit after submitting the information.*

## USING THE ONLINE CHILD HEALTH REPORTING SYSTEM

### STEP 1

Log in at <http://chrstx.dshs.state.tx.us/CHRS/login.aspx>.

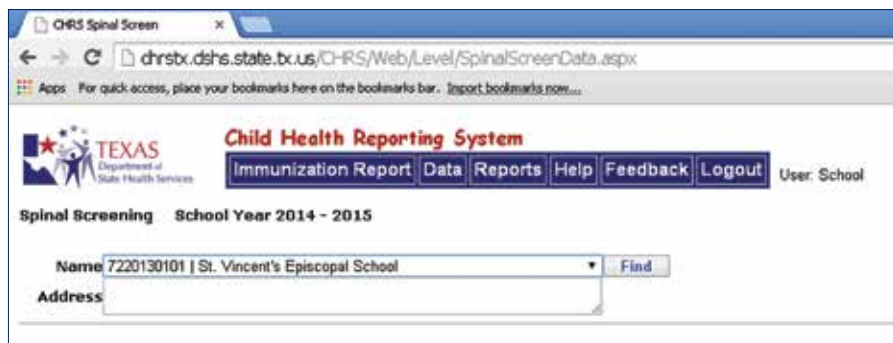
### STEP 2

Move your cursor over the **Data** tab and click **Spinal Screen** to begin.



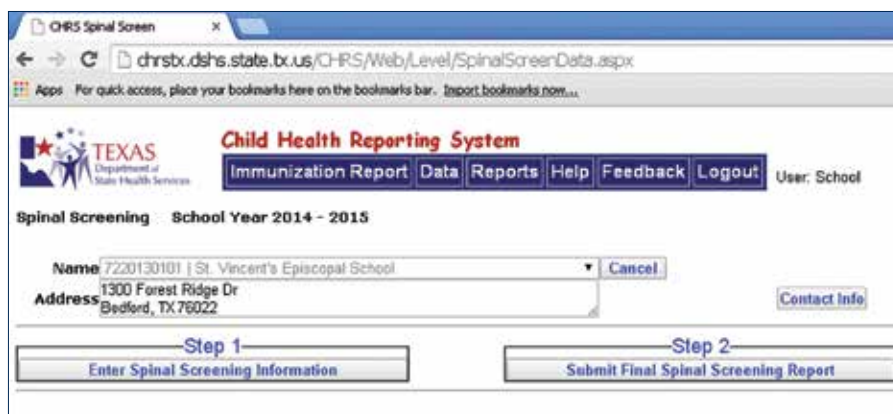
### STEP 3

Click **Find**.



### STEP 4

Click **Contact Info** to view/update contact information, or click **Enter Spinal Screening Information**.



## STEP 5

Click **Edit** to enter spinal screening information for a grade. After clicking **Edit**:

- 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.
- The Edit button will change to **Save**.

Grades	Under Prior Treatment (Do not screen) (A)	Screened (B)	Rescreened (C)	Referred (D)	Physician Diagnosis				Results of Referrals Only				Treatment Plan				Late Exam Results				Grades				
					Normal (E)	Scoliosis (F)	Kyphosis (G)	Other (H)	Observation Only (I)	Orthosis Bracing (J)	Operation Surgery (K)	Other (L)	Unavailable (M)	Normal (N)	Scoliosis (O)	Kyphosis (P)	Other (Q)	Observation (R)	Bracing (S)	Surgery (T)		Other (U)			
5F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5F	
5M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5M
6F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6F
6M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6M
7F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7F
7M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7M
8F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8F
8M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8M
9F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9F
9M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9M
10F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10F
10M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10M
11F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11F
11M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11M
12F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12F
12M	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12M
Totals	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Totals

## STEP 6

Enter data in some of the cells now and click **Save** to record your entries. If data is valid, entries will save.

As data is entered, totals are computed and displayed in the last row.

Click **Edit Spinal Screening Information** to change or add to your spinal screening data.

- You may click **Save Spinal Screening Information** at any time during data entry if you want to return later to make changes or enter additional data.

If you click **Submit Final Spinal Screening Information**, you will not be able to modify or add to your data entries.



**STEP 7:**

Click **Submit Final Spinal Screening Report**. You are warned that you will not be able to modify your data.

Click **Cancel** if you are not ready to complete the data entry process.

The screenshot displays the Texas Child Health Reporting System interface for Spinal Screening. A warning dialog box is open, stating: "The page at chrsb.dshs.state.tx.us says: YOU WILL NOT BE ABLE TO MODIFY YOUR DATA AFTER SUBMITTING YOUR FINAL REPORT! Are you sure you want to continue? Click OK to submit report to DSHS. Click Cancel to stop." Below the dialog, the user's school information is visible: Name: 7220100101 | St. Vincent's Episcopal School, Address: 2300 Forest Ridge Dr, Houston, TX 77022. The interface is divided into two steps: Step 1 (Save Spinal Screening Information) and Step 2 (Submit Final Spinal Screening Report). Below this is a large data table with the following columns: Under-Prior Treatment (Did not screen), Physician Diagnosis (Screened, Rescreened, Referred, Normal, Scoliosis, Kyphosis, Other), Results of Referrals Only (Observation Only, Orthosis Bracing, Operation Surgery, Other Unavoidable), Diagnosis (Normal, Scoliosis, Kyphosis, Other), and Treatment (Observation, Bracing, Surgery, Other). The table lists data for grades 5F through 12M, with a final 'Totals' row showing counts for each category.

Grades	Under-Prior Treatment (A)	Physician Diagnosis				Results of Referrals Only				Diagnosis				Treatment									
		Screened (B)	Rescreened (C)	Referred (D)	Normal (E)	Scoliosis (F)	Kyphosis (G)	Other (H)	Observation Only (I)	Orthosis Bracing (J)	Operation Surgery (K)	Other Unavoidable (L)	Normal (M)	Scoliosis	Kyphosis	Other	Observation	Bracing	Surgery	Other			
5F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
6F	0	5	5	5	1	2	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
7F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10F	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12F	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	0	27	7	7	1	4	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0

Click **OK** to submit your report to DSHS. You will receive a message acknowledging receipt of the data.

**STEP 8:**

To view the report, click **View Spinal Screening Information**.

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## GLOSSARY

**Abnormal spinal curvature:** An anatomic, structural deviation from the normal spine curve, such as scoliosis and kyphosis.

**Cervical spine:** Neck portion of the spine.

**Forward bend test:** With the palms of both hands touching, the student bends forward until the back is horizontal. The forward bend test is used to check for uneven contours (humps on one side of the spine) and any curve in the spine.

**Functional (Nonstructural) Scoliosis:** A type of scoliosis characterized by a structurally normal spine that appears curved due to one or more underlying conditions, such as a difference in leg length. This type of scoliosis is generally temporary as long as the underlying condition is treated.

**Idiopathic Scoliosis:** Refers to scoliosis with no known cause. Occurs in 2 to 3 percent of the adolescent population.

**Kyphosis:** An excessive curvature of the thoracic spine when viewed from the side. Also called “roundback”.

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

**Lumbar spine:** Portion of the spine in the small of the back.

**Milwaukee brace:** An appliance used to treat abnormal spinal curvature.

**Orthosis:** The clinical term for brace.

**Sacrum:** Lowest portion of the spine below the lumbar area.

**Scheuermann’s disease:** Abnormally increased roundness of the upper back as viewed from the side; kyphosis; hunchback or round back.

**Scoliometer:** A brand of inclinometer used for measuring the clinical deformity of patients with scoliosis.

**Scoliosis:** An abnormal lateral curvature of the spine of 10 degrees or more.

**Spinal instrumentation:** A surgical procedure for the correction of abnormal spinal curvature by insertion of rods and hooks to hold the spine in a corrected position.

**Structural Scoliosis:** A type of scoliosis characterized by a curvature of the spine with rotation, or spinal twisting. Usually considered irreversible.

**Screening:** A test or procedure to determine the need for a professional diagnostic examination.

**Spinal fusion:** Joining together of spinal segments so that they function as one.

**Thoracic spine:** The chest part of the spine.

**TLSO (Thoracic Lombosacral Orthosis):** A orthosis designed to support and bend these parts of the spine.



## APPENDIX A

### FORMS FOR SCHOOL SPINAL SCREENING





## SAMPLE PRE-SCREENING LETTER TO PARENTS

Dear Parent/Guardian:

Our school will do spinal screenings on \_\_\_\_\_.

State law says that schools must screen students for spinal problems in 6th and 9th grade if the child was not screened in 5th or 8th grade. Trained screeners will check your child for signs of spinal problems like scoliosis.

Catching a spinal problem early can make the treatment much easier. Not treating spinal problems can lead to serious health problems.

The screening is simple. Screeners will look at your child's back while he or she stands and bends forward.

### Important Recommendations:

- Students should bring shorts to school for the exam.
- Girls should wear a thin t-shirt or a sports bra or a two-piece swimsuit top underneath their shirt on exam day.
- If girls are wearing a sports bra or a two-piece swimsuit top underneath their shirt, it is recommended they remove their shirt for the screening.
- Boys and girls will be screened separately and one at a time.

The school will send you a letter if your child does not pass the screening. The letter will tell you how to follow up with a doctor.

This screening is not a medical exam. Your child still needs to see a doctor for checkups.

If you do not wish to have your child screened for religious reasons, you must submit an exemption to the school no later than \_\_\_\_\_.

Thank you for your cooperation.

Sincerely,

\_\_\_\_\_.

## CARTA DE MUESTRA PARA LOS PADRES ANTES DE LA EVALUACIÓN

Estimado padre de familia o tutor:

Nuestra escuela llevará a cabo revisiones de la columna vertebral el \_\_\_\_\_.

La ley estatal establece que, si no se hizo la revisión a un menor en el 5.º u 8.º grados, las escuelas deben examinar a los estudiantes en los grados 6.º y 9.º para detectar posibles problemas de la columna vertebral. Examinadores capacitados revisarán a su hijo en busca de problemas de la columna vertebral, como la escoliosis.

Detectar un problema de la columna vertebral a tiempo puede hacer que el tratamiento sea mucho más fácil. Dejar un problema de la columna vertebral sin tratar puede dar lugar a graves problemas de salud.

La revisión es muy simple. Los examinadores observarán la espalda de su hijo o hija al estar de pie y doblar el cuerpo hacia adelante.

### Recomendaciones importantes:

- Los estudiantes deben llevar pantalones cortos a la escuela el día del examen.
- Las chicas deben llevar una camiseta delgada o un sostén deportivo o la parte de arriba de un traje de baño de dos piezas debajo de la blusa el día de la revisión.
- Si las chicas llevan un sostén deportivo o la parte de arriba de un traje de baño de dos piezas debajo de la blusa, se recomienda que se quiten la blusa para la revisión.
- Los chicos y las chicas serán examinados de manera separada, y uno a la vez.

Si su hijo no pasa la revisión, la escuela le enviará una carta. Esta carta le dirá cómo dar seguimiento al caso con un doctor.

Esta revisión no es un examen médico. Su hijo aún necesita ver a un doctor para que le haga más revisiones.

Si usted no desea que se le haga la revisión a su hijo por razones de tipo religioso, debe enviar a la escuela una solicitud de exención a más tardar el \_\_\_\_\_.

Muchas gracias por su cooperación.

Atentamente,

\_\_\_\_\_.

## AFFIDAVIT OF RELIGIOUS EXEMPTION

I, \_\_\_\_\_, understand that Texas law requires all  
*(Parent or Guardian)*  
public and private schools to screen children in grades 6 and 9 for spinal problems before the end of  
the school year.

I ask that \_\_\_\_\_ not be screened because it is against our  
*(Name of Student)*  
religious beliefs.

\_\_\_\_\_  
*(Parent or Guardian)*

## DECLARACIÓN JURADA DE EXENCIÓN RELIGIOSA

Yo, \_\_\_\_\_, comprendo que las leyes de Texas requieren que  
*(padre, madre o tutor)*

todas las escuelas públicas y privadas evalúen a los niños en 6to y 9no grado por problemas de la columna vertebral antes de que se acabe el año escolar.

Solicito que \_\_\_\_\_ no sea evaluado(a) porque va en contra de nuestras  
*(nombre del estudiante)*

creencias religiosas.

\_\_\_\_\_  
*(padre, madre o tutor)*

# SCHOOL SPINAL SCREENING WORKSHEET

SCHOOL/DISTRICT:								ABNORMALITY DETECTED	CURRENTLY UNDER TREATMENT	RESCREENED	RESCREEN CONFIRMED FINDINGS	SCOLIOMETER READINGS (OPTIONAL)	FAMILY CONTACTED	REFERRED FOR EXAMINATION	DIAGNOSIS & TREATMENT REPORT RECEIVED	ADDITIONAL FOLLOW-UP REQUIRED
		STUDENT NAME	M/F	1	2	3	4									

**FILLING OUT THE SCHOOL SPINAL SCREENING WORKSHEET:**

This form is to assist with re-screening and follow-up by providing a place to indicate and reference your initial findings. This form allows you to note the student's position in which a possible abnormality was found, and section(s) of the body indicating that abnormality. Each of the screening positions has a corresponding numbered column. Sections of the body and some of the conditions you may find have corresponding letters. In the appropriate column, place letters to indicate the sections of the body showing a possible abnormality. For example, if one shoulder appears higher than the other when viewing a student in position 1, place a "B" in column 1 under that student's name.

## SPINAL SCREENING PROGRAM PARENT NOTIFICATION AND REFERRAL

STUDENT: \_\_\_\_\_ BIRTH DATE: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

SCHOOL: \_\_\_\_\_ SCHOOL TELEPHONE: \_\_\_\_\_

Dear Parent/Guardian:

Recently our school screened your child for spinal problems.

Your child's screening shows that he or she has signs of a possible spinal problem. It is important for you to have your child's spine checked by a doctor.

Catching a spinal problem early can make the treatment much easier. Not treating spinal problems can lead to serious health problems.

Please take your child to the doctor as soon as possible. Bring this form with you when you go and ask the doctor to fill it out.

After your child sees a doctor, please return this form to school. Please let us know if you have questions or cannot pay for a doctor.

Thank you for your cooperation: \_\_\_\_\_

### SCHOOL SCREENING FINDINGS:

**L R**

- High shoulder
- Shoulder blade stands out more than the other
- Obvious curve of the spine in area of rib cage

**L R**

- Rib hump
- Obvious curve of spine in lower back
- Hip higher than the other side

Round back

Other: \_\_\_\_\_

School Screener's Name & Title: \_\_\_\_\_ Date: \_\_\_\_\_

### PROFESSIONAL EXAMINATION REPORT:

Diagnosis: \_\_\_\_\_

Recommendations:

- No Treatment     Treatment:     Observation
- Brace
- Surgery
- Other (please describe): \_\_\_\_\_
- Referral (please describe): \_\_\_\_\_

Activity Limitation (if any, please describe): \_\_\_\_\_

Additional Comments: \_\_\_\_\_

Return Appointment:     No     Yes - Return Date: \_\_\_\_\_

\_\_\_\_\_  
Doctor's signature or hand stamp

\_\_\_\_\_  
Date

Doctor's Mailing Address/Phone: \_\_\_\_\_

### For school use:

This form completed and received by school (name/date): \_\_\_\_\_

This form not returned to school (reason): \_\_\_\_\_

## PROGRAMA PARA EXAMEN DE LA COLUMNA VERTEBRAL NOTIFICACIÓN A LOS PADRES Y RECOMENDACIÓN CON ESPECIALISTA

ESTUDIANTE: \_\_\_\_\_ FECHA DE NACIMIENTO: \_\_\_\_\_

DIRECCIÓN: \_\_\_\_\_

ESCUELA: \_\_\_\_\_ TELÉFONO DE LA ESCUELA: \_\_\_\_\_

Estimado padre/madre/tutor:

Nuestra escuela evaluó recientemente la columna vertebral de su niño o niña.

La evaluación mostró signos de un posible problema en la columna vertebral. Es importante que un médico examine la columna vertebral de su niño(a).

Detectar de manera temprana los problemas de la columna vertebral hace que sea mucho más fácil tratarlos. No tratar los problemas de la columna puede conducir a problemas de salud graves.

Por favor lleve a su niño(a) al médico lo más pronto posible. Lleve este formulario a la consulta y pídale al médico que lo llene.

Después de que el médico vea a su niño(a), por favor entregue este formulario nuevamente a la escuela. Por favor avísenos si tiene alguna pregunta o si no puede pagar la consulta de un médico.

Muchas gracias por su cooperación. \_\_\_\_\_

### RESULTADOS DEL EXAMEN

<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Izq.</td> <td style="width: 50%;">Der.</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	Izq.	Der.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">Izq.</td> <td style="width: 50%;">Der.</td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>	Izq.	Der.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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<input type="checkbox"/>	<input type="checkbox"/>																		

Espalda encorvada (round back)

Otro: \_\_\_\_\_

Nombre y cargo de la persona que examinó en la escuela: \_\_\_\_\_ Fecha: \_\_\_\_\_

### PROFESSIONAL EXAMINATION REPORT:      Diagnosis: \_\_\_\_\_

Recommendations:

- |                                       |                                     |  |
|---------------------------------------|-------------------------------------|--|
| <input type="checkbox"/> No Treatment | <input type="checkbox"/> Treatment: | <input type="checkbox"/> Observation                       |
|                                       |                                     | <input type="checkbox"/> Brace                             |
|                                       |                                     | <input type="checkbox"/> Surgery                           |
|                                       |                                     | <input type="checkbox"/> Other (please describe): _____    |
|                                       |                                     | <input type="checkbox"/> Referral (please describe): _____ |

Activity Limitation (if any, please describe): \_\_\_\_\_

Additional Comments: \_\_\_\_\_

Return Appointment:     No             Yes - Return Date: \_\_\_\_\_

\_\_\_\_\_  
Doctor's signature or hand stamp

\_\_\_\_\_  
Date

Doctor's Mailing Address/Phone: \_\_\_\_\_

#### For school use:

This form completed and received by school (name/date): \_\_\_\_\_

This form not returned to school (reason): \_\_\_\_\_

TEXAS DEPARTMENT OF STATE HEALTH SERVICES  
**SPINAL SCREENING REPORT (FORM M-51)**

NUMBER \_\_\_\_\_ (10-DIGIT PEIMS/TEA IS NUMBER)

NAME OF SCHOOL DISTRICT OR SCHOOL \_\_\_\_\_

CITY \_\_\_\_\_ COUNTY \_\_\_\_\_

CONTACT (name/title/phone) \_\_\_\_\_

STUDENT SPINAL SCREENING				
GRADE	UNDER TREATMENT DO NOT SCREEN	SCREENED	RESCREENED	REFERRED
5F				
5M				
6F				
6M				
7F				
7M				
8F				
8M				
9F				
9M				
10F				
10M				
11F				
11M				
12F				
12M				
	A	B	C	D

RESULTS OF REFERRALS ONLY								
PHYSICIAN DIAGNOSIS				TREATMENT PLAN				
NORMAL	SCOLIOSIS	KYPHOSIS	OTHER	OBSERVATION ONLY	ORTHOSIS BRACING	OPERATION/SURGERY	OTHER	RESULTS UNAVAILABLE
E	F	G	H	I	J	K	L	M

Chief Administrator's Name

Title

Date

For questions about completing this form, contact the DSHS Spinal Screening Program at 1-800-252-8023, ext. 7420.



## **INSTRUCTIONS FOR THE SPINAL SCREENING REPORT (FORM M-51)**

School districts, private school systems, and charter schools: use this form to report cumulative totals of the spinal screenings conducted at each of your campuses.

Individual public/private school campuses within a district/system: this form is useful for reporting campus totals to the main office. The main office enters cumulative totals of all campuses onto one form and submits it online to DSHS.

### **STUDENT SPINAL SCREENING (COLUMNS A - D)**

Grade: Enter numbers under the respective students' grade (5-12) and sex (F or M).

(A) Under prior treatment: Enter number of students who have already received professional treatment for a spinal abnormality. Do not screen these students and do not enter their diagnosis or treatment on the report form.

(B) Students screened: Enter number of students screened.

(C) Rescreened: Enter number of students who received a second screening as result of a possible abnormal finding during the initial screening.

(D) Referred: Enter number of rescreened students above whose parents were given a spinal screening parent notification and referral for a professional examination.

### **RESULTS OF REFERRALS ONLY (COLUMNS E - M)**

This section is for recording the results of the professional exams of those students referred. Do not enter your assessment of the condition. If results are not available, indicate that in Column M.

### **PHYSICIAN DIAGNOSIS (COLUMNS E - H)**

(E) Normal: Number of students determined by their physician to have normal curvature.

(F) Scoliosis: Number of students who received a diagnosis of scoliosis from their physician.

(G) Kyphosis: Number of students who received a diagnosis of kyphosis from their physician.

(H) Other: Number of students who received a diagnosis for a condition not listed above.

### **TREATMENT PLAN (COLUMNS I - M)**

Mark only one treatment for each student. If a student receives multiple treatments, mark only the treatment that appears furthest to right on this form's treatment columns.

(I) Observation only: Enter number of students to be observed only at this time.

(J) Bracing: Enter number of students for whom a brace has been prescribed.

(K) Surgery: Enter number of students for whom surgery has been indicated.

(L) Other: Enter number of students receiving a treatment not indicated above.

(M) Results unavailable: Enter number of referred students for whom professional exam results are unavailable. Results should be submitted next year on the LATE EXAM RESULTS table.

**DOUBLE CHECK YOUR MATH:** Sum of Columns E, F, G, H, and M should equal the sum of Column D. Make sure you did not enter diagnosis/treatment for students under prior treatment (Column A).

**CHIEF ADMINISTRATOR'S NAME:** The completed form should be submitted to the Texas Department of State Health Services.

### **LATE EXAM RESULTS**

Use this table to record the results of referrals (if any) that were made in the last school year, but returned too late to be included on last year's spinal screening report form.

## APPENDIX B

### FORMS FOR SPINAL SCREENING CERTIFICATION WORKSHOPS



# **SPINAL SCREENING CERTIFICATION: FREQUENTLY ASKED QUESTIONS**

## **CAN I BECOME CERTIFIED TO CONDUCT SPINAL SCREENINGS?**

To become a certified screener, you must:

- Be trained and certified according to the program rules.
- Have a high school diploma or GED.
- Be trained directly by DSHS or by an instructor who has been trained and authorized by DSHS.
- Have passed the post-training test.

## **HOW LONG WILL MY CERTIFICATION LAST?**

Screening certification allows a screener to conduct spinal screening for a period of five years. Certification may be renewed by attending a DSHS-approved refresher training course, offered by DSHS or by an instructor authorized by DSHS. Refresher training courses must be completed during the fifth year of certification from the date the preceding certificate was issued. The five-year cycle begins again once a refresher-training course is successfully completed. If certification is not renewed within the required time, the individual must attend and pass the basic certification-training course.

## **CAN I BECOME A SPINAL SCREENING INSTRUCTOR?**

Occasionally DSHS identifies the need for additional Spinal Screening instructors. Before taking the instructor certification course, individuals must meet the following qualifications:

- (1) Have a current valid department screening certificate, and have experience performing screenings.
- (2) Have experience conducting trainings to groups of adults; and
- (3) Be a physician (MD/DO), physician assistant, chiropractor, nurse practitioner, registered nurse, or physical therapist with applicable Texas license, and be current and in good standing under Texas law.

Instructors must use training materials obtained from DSHS. In addition, all proposed screening training sessions must be approved by DSHS at least 15 working days prior to the training session. Instructors must provide all information sought by DSHS by the deadlines given, including participant rosters and evaluations. Instructors in good standing may also teach screening refresher courses.

Texas Department of State Health Services (DSHS) instructor training courses authorize individuals to conduct spinal screening courses and issue screening certificates for five years. Department authorization for instructors to conduct trainings is valid until December 31 of the fifth year from the date certification was issued. Certified instructors must update their instructor status with DSHS by submitting an updated instructor application within the required time. It is the responsibility of the instructor to request an application from DSHS.

For more information about becoming a certified spinal screener, visit <http://www.dshs.state.tx.us/spinal/default.shtm> or **call 512-776-7420 (toll-free at 800-252-8023, ext. 7420 ) Monday through Friday from 8 a.m. to 5 p.m. Central Time.**

# SPINAL SCREENING CERTIFICATION WORKSHOP AGENDA (SAMPLE)

## INTRODUCTION

Spinal Screening Workshop Pre-Test

Spinal Screening Program Requirements

Causes, Consequences, and Management of Abnormal Spinal Curvature

## BREAK

Forward Bend Test—Discussion and Demonstration Practicum

Organizing the Spinal Screening Program

Spinal Screening Certification Workshop Post-Test

Evaluation of Workshop

## OBJECTIVES OF SPINAL SCREENING WORKSHOP AGENDA

At the conclusion of the workshop, participants will be able to:

1. Discuss the responsibilities of schools in the area of spinal screening.
2. Define abnormal spinal curvature.
3. Describe the population at risk for developing abnormal spinal curvature.
4. List the causes, consequences, and management of abnormal spinal curvature.
5. Perform the forward bend test according to DSHS guidelines.
6. Describe the mechanisms for referral and follow-up for students with abnormal spinal curvatures.

## SPINAL SCREENING WORKSHOP PRE-TEST

Name: \_\_\_\_\_

In front of each statement, place a T for True or an F for False.

- \_\_\_\_\_ 1. Boys and girls have an equal chance of developing scoliosis, but curves that progress occur mostly in girls.
- \_\_\_\_\_ 2. Most cases of scoliosis are usually detected during early adolescence.
- \_\_\_\_\_ 3. Kyphosis is an exaggerated arch or roundness of the spine during early adolescence.
- \_\_\_\_\_ 4. One problem with scoliosis is that no one can predict for sure which curves will progress, so it requires monitoring to see if it is getting worse.
- \_\_\_\_\_ 5. A brace to treat a spinal problem is usually worn day and night for best results.
- \_\_\_\_\_ 6. Scoliosis is a side-to-side curve of the spine.
- \_\_\_\_\_ 7. Kyphosis is often mistaken for poor posture.
- \_\_\_\_\_ 8. Diseases with well-known causes are known as “idiopathic.”
- \_\_\_\_\_ 9. Although scoliosis may be present in 2 to 3 percent of the adolescent population, the number of cases requiring bracing or surgery is very small.
- \_\_\_\_\_ 10. The state law requiring spinal screening is optional.
- \_\_\_\_\_ 11. Screener certification is valid indefinitely.
- \_\_\_\_\_ 12. Tracking referrals to assure that a proper diagnosis is made when abnormalities are suspected is part of an effective screening program.
- \_\_\_\_\_ 13. Children who were not screened because of absence may wait until the following year to be screened.
- \_\_\_\_\_ 14. The recommended test for the detection of spinal deformity is known as the forward bend test.
- \_\_\_\_\_ 15. All children adapt easily to the use of the brace.
- \_\_\_\_\_ 16. According to Texas law, a parent may choose to take his or her child to a doctor for a professional evaluation in lieu of screening.
- \_\_\_\_\_ 17. There are resources for an orthopedic evaluation if the family has no money.
- \_\_\_\_\_ 18. A referral is considered complete when the outcome of the student’s professional examination (referral results) has been recorded in the student’s school health record.

END OF PRE-TEST

## PRACTICUM CHECKLIST

### SCREENER:

- \_\_\_\_\_ 1. Greets student
- \_\_\_\_\_ 2. Gives clear instructions for Position 1
  - a. Checks for shoulder height
  - b. Checks for unequal space between arms and flanks
  - c. Checks for uneven hips
- \_\_\_\_\_ 3. Gives clear instructions for Position 2
  - a. Checks for chest cage hump
  - b. Checks for lumbar hump
- \_\_\_\_\_ 4. Gives clear instructions for Position 3
  - a. Checks for exaggerated roundness in upper back
  - b. Checks for exaggerated arch in lower back
- \_\_\_\_\_ 5. Gives clear instructions for Position 4  
Checks for exaggerated roundness on upper back or between lower rib cage and small of the back
- \_\_\_\_\_ 6. Gives clear instructions for Position 5
  - a. Checks head alignment
  - b. Checks shoulder height
  - c. Checks for asymmetry of shoulder blades (one stands out more or is higher than the other)
  - d. Checks for spine curve
  - e. Checks for unequal spaces between arm and flanks on either side of body
- \_\_\_\_\_ 7. Gives clear instructions for Position 6
  - a. Checks for chest cage hump
  - b. Checks for lumbar hump

Screener's Name: \_\_\_\_\_ Date: \_\_\_\_\_

Evaluator: \_\_\_\_\_

## SPINAL SCREENING PROGRAM

### SPINAL SCREENING CERTIFICATION WORKSHOP POST-TEST

#### FOR QUESTIONS 1-9:

Circle "T" for true statements or "F" for false statements.

- |  |   |   |
|--|---|---|
| 1. The goal of spinal screening in the school is to identify spinal curves early and refer to prevent progression.   | T | F |
| 2. Carrying a heavy load such as books on one side can cause idiopathic scoliosis.   | T | F |
| 3. To get the best results from a spinal orthosis (brace), the student needs to wear it 16 hours a day.  | T | F |
| 4. If positive findings are present after the first spinal screening, the next step is to notify the parents.  | T | F |
| 5. An appearance of a curve means you have identified scoliosis.   | T | F |
| 6. According to Texas Administrative Code (25 TAC §37.148) screening for abnormal spinal curvature must be performed on children entering grades 6th and 9th unless the children were screened the previous year, in 5th or 8th. | T | F |
| 7. A child who is home ill on screening day should be rescheduled for screening within two weeks of the missed screening.  | T | F |
| 8. Serious progression of a spinal curve is most likely to occur during the rapid growth spurt of adolescence.   | T | F |
| 9. If a family has no financial resources for an orthopedic evaluation, no referral can be made or treatment received.   | T | F |

Name: \_\_\_\_\_



**FOR QUESTIONS 10 – 20:**

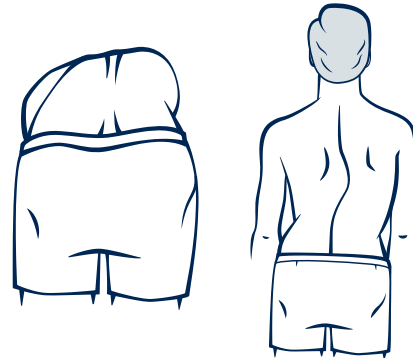
*Match each statement with the correct response. Circle R for Rescreen/Refer or N for Normal Finding.*

- R    N    10. One shoulder higher than the other
- R    N    11. Head centers directly above pelvis
- R    N    12. One shoulder blade higher or more prominent than the other
- R    N    13. Equal space between the arms and the body on both sides
- R    N    14. One hip higher than the other
- R    N    15. Space between the arms and the body is greater on one side than the other
- R    N    16. Excessive roundness of the thoracic spine seen in the side view
- R    N    17. Upper body appears to lean to one side even when the student stands up straight
- R    N    18. Head is not centered directly above pelvis

19. The drawing to the right illustrates a student who you would

R – Rescreen/Refer

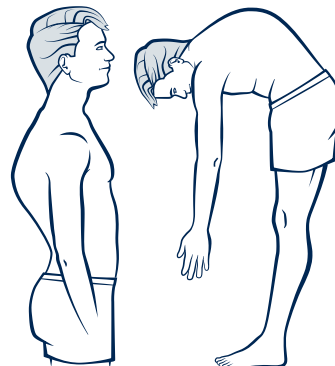
N – Consider Normal



20. The drawing to the right illustrates a student who you would

R – Rescreen/Refer

N – Consider Normal



Post-Test Page 2 of 3

**QUESTIONS 21 – 25:**

*Circle the correct answer for each question. There is only one correct answer per question.*

21. What is the most important factor in the treatment of spinal problems?

- a. Bracing only
- b. Surgery and a brace
- c. Surgery following exercise
- d. Early detection

22. When screening, the student will be viewed both standing and bending over

- a. From the front and back
- b. From the back only
- c. From the side and back
- d. From the front, side, and back

23. When is a referral considered complete?

- a. When the family is notified to see a physician
- b. When the child is evaluated by the physician
- c. When the physician decides to start treatment
- d. When the physician's evaluation is recorded on the child's health record

24. How can the screener help students who have been diagnosed with a spinal deformity?

- a. Tell them they should never participate in any sports
- b. Encourage them to follow their treatment plan
- c. Tell them surgery is always needed
- d. Encourage them to see you monthly for rescreening

25. What is the cause of idiopathic scoliosis?

- a. Participating in heavy contact sports
- b. Slouching while watching television
- c. Carrying a heavy book bag over one shoulder
- d. The actual cause is unknown

END OF POST-TEST

## SPINAL SCREENING CERTIFICATION WORKSHOP

### POST-TEST ANSWER SHEET

Name: \_\_\_\_\_

- |     |   |   |     |   |   |   |   |
|-----|---|---|-----|---|---|---|---|
| 1.  | T | F | 21. | a | b | c | d |
| 2.  | T | F | 22. | a | b | c | d |
| 3.  | T | F | 23. | a | b | c | d |
| 4.  | T | F | 24. | a | b | c | d |
| 5.  | T | F | 25. | a | b | c | d |
| 6.  | T | F |     |   |   |   |   |
| 7.  | T | F |     |   |   |   |   |
| 8.  | T | F |     |   |   |   |   |
| 9.  | T | F |     |   |   |   |   |
| 10. | R | N |     |   |   |   |   |
| 11. | R | N |     |   |   |   |   |
| 12. | R | N |     |   |   |   |   |
| 13. | R | N |     |   |   |   |   |
| 14. | R | N |     |   |   |   |   |
| 15. | R | N |     |   |   |   |   |
| 16. | R | N |     |   |   |   |   |
| 17. | R | N |     |   |   |   |   |
| 18. | R | N |     |   |   |   |   |
| 19. | R | N |     |   |   |   |   |
| 20. | R | N |     |   |   |   |   |

#### SCORING KEY

Each question = 4 points / 100 points possible

-1 = 96

-2 = 92

-3 = 88

-4 = 84

-5 = 80

-6 = 76

-7 = 72

-8 or more: additional review and training needed  
before certification, or repeat workshop

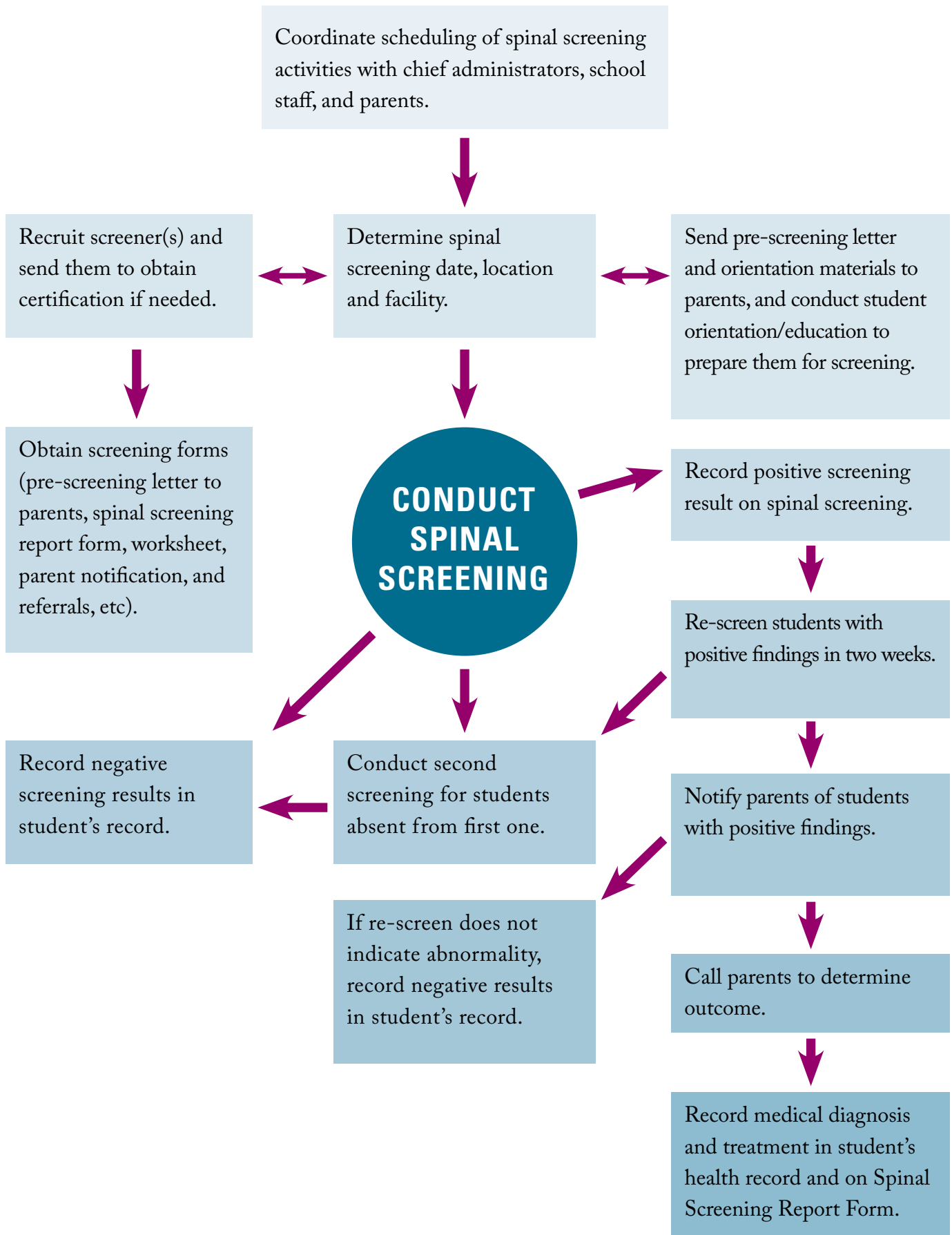


## APPENDIX C

### ADDITIONAL MATERIALS AND RESOURCES



# SCHOOL SPINAL SCREENING FLOWCHART



# SPINAL SCREENING WORKSHOP EVALUATION

DATE: \_\_\_\_\_ LOCATION: \_\_\_\_\_

TRAINER: \_\_\_\_\_

Your Professional Affiliation: MD\_\_\_\_ DO\_\_\_\_ DC\_\_\_\_ RN\_\_\_\_ LVN\_\_\_\_

Aide\_\_\_\_ Volunteer\_\_\_\_

Other (specify): \_\_\_\_\_

For each item below, please circle the number that reflects your evaluation: POOR, FAIR, AVERAGE, GOOD, or EXCELLENT. If an item is not applicable, write "NA" next to that entry.

## TOPIC AND TRAINER(S):

1. Introductory presentations or remarks
2. Overall quality of instruction
3. Overall quality of curriculum content
4. Relevance of concepts and their applicability to do job responsibilities
5. Trainer(s)' ability to relate theory to practice
6. Opportunities for participant interaction
7. Appropriateness of workshop format (i.e. length of sessions, etc.)
8. Stated objectives met

## ENVIRONMENT AND EQUIPMENT

1. Materials, handouts, etc.
2. Visual aids, illustrations
3. Workshop facilities  
(Room, equipment, breaks, etc.)
4. Provisions for comfort of participants
5. Practicum procedures
6. Written tests

**COMMENTS:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## INSTRUCTIONAL MEDIA

### RESOURCES

Videos to assist trainers and master trainers in conducting workshops:

- Taking the Mystery Out of Spinal Deformities (1990; 15 minutes; order #7424)

Videos for schools to show students/parents/personnel:

- Scoliosis (1998; 12 minutes; order #6904)
- Taking the Scare Out of Scoliosis (1998; 4 minutes; order #7408)
- Understanding Scoliosis (1998; 8 minutes; order #6700)
- Scoliosis Screening Exam (2014; 4 minutes; order #DV-0939)

To order videos/slides, contact: **1 (888) 963-7111, ext. 7260**

Visit our online Library Catalog at [texashealthlibrary.com](http://texashealthlibrary.com).

### GENERAL SPINAL SCREENING INFORMATION ON-LINE

American Academy of Orthopaedic Surgeons - [aaos.org](http://aaos.org)

National Scoliosis Foundation - [scoliosis.org](http://scoliosis.org)

Scoliosis Research Society - [srs.org](http://srs.org)

Shriners Hospitals for Children - Houston - [shrinershq.org](http://shrinershq.org)

Department of State Health Services - [dshs.state.tx.us/spinal](http://dshs.state.tx.us/spinal)

Texas Scottish Rite Hospital for Children - [tsrhc.org](http://tsrhc.org)

### FINANCIAL ASSISTANCE FOR MEDICAL CARE FOR CHILDREN

CHIP/Children's Medicaid: **1-(800)-647-6558/chipmedicaid.org**

For other questions regarding school spinal screening contact:

Division of Family and Community Health Services

Health Screening Group

1100 West 49th Street

Austin, TX 78756

**1-800-252-8023 (toll-free) ext. 7420**

[dshs.state.tx.us/spinal](http://dshs.state.tx.us/spinal)



# SPINAL SCREENING PROGRAM RULES

Texas Administrative Code  
Title 25. Health Services

Part 1. Department of State Health Services

Chapter 37. Maternal and Infant Health Services

Subchapter G. Spinal Screening Program. (Effective 01/12/15)

§37.141. Purpose.

The purpose of this subchapter is to implement Texas Health and Safety Code, Chapter 37, concerning the detection of abnormal spinal curvature in children.

§37.142. Definitions.

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

- (1) Abnormal spinal curvature--An anatomic, structural deviation from the normal spinal curve, such as scoliosis or kyphosis.
- (2) American Academy of Orthopaedic Surgeons (AAOS)--A nationally-recognized professional body which develops musculoskeletal health guidelines as part of the organization's research and quality goals.
- (3) Certification--The process by which the Department of State Health Services (department) trains individuals to conduct spinal screening as well as to then provide training screening procedures.
- (4) Department--The Department of State Health Services.
- (5) Forward-bend test--A screening procedure to determine whether a child may have an abnormal spinal curvature.
- (6) Licensed professional--An individual who is appropriately licensed under state law, including physicians, chiropractors, physical therapists, and registered nurses, and has completed a course of study in physical assessment.
- (7) Professional examination--A diagnostic evaluation performed by an appropriately licensed professional whose expertise addresses the diagnostic needs of the individual identified as having a possible abnormal spinal curvature. A professional examination is one that is performed according to the requirements of this subchapter and of Texas Health and Safety Code, Chapter 37.
- (8) School--An educational institution, public or private, that admits children who are five through twenty-one years of age, which includes an individual school campus.
- (9) Scoliosis inclinometer--An instrument for measuring the clinical deformity of patients with scoliosis. The brand name "Scoliometer" is sometimes used interchangeably.
- (10) Screening--A test or battery of tests for rapidly determining the need for a professional examination.

§37.143. Spinal Screening Procedures.

(a) Spinal screening is required, for all children in grades six and nine who attend public and private schools, to detect abnormal spinal curvature. Spinal 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 for screening set by the AAOS currently found at <http://www.aaos.org/news/bulletin/nov07/clinical5.asp>, as they apply to allowable method of screening and age of screening, with the following exceptions.

- (1) The use of a scoliosis inclinometer is optional for spinal screening.
  - (2) If a scoliosis inclinometer is used for spinal screening, a rescreen should be conducted for reading results of 5 to 7 degrees. The rescreen should be conducted within two weeks of the initial screening. A follow-up rescreen should be conducted in six months to one year to determine if the abnormal curvature is increasing.
  - (3) When using a scoliosis inclinometer, results of 7 degrees or more shall be documented as “abnormal findings.”
  - (4) If a scoliosis inclinometer is not used for spinal screening, a rescreen should be conducted for abnormal findings. The rescreen should be conducted within two weeks of the initial screening. Abnormal findings detected during the rescreen shall be documented in the child’s spinal screening record. The school’s chief administrator shall inform the child’s parent, managing conservator, or guardian, as specified in §37.144(a) of this title (relating to School Requirements; Department Activities).
  - (5) In accordance with Health and Safety Code, Chapter 37 requirements, children will be screened in grades six and nine instead of the AAOS guidelines.
- (b) A person who is not a licensed professional, as that term is defined in this subchapter, who conducts spinal screening must be trained and certified as described in §37.146(a) of this title (relating to Standards and Requirements for Screening Certification and Instructor Training).
  - (c) 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 spinal problems for which screening is performed under this section. In order to claim this exception, the individual under the scenarios described in 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 school. 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 spinal problems as referenced in this subsection.

§37.144. School Requirements; Department Activities.

- (a) The chief administrator of each school is responsible for the school maintaining a copy of the screening results and the mailing of a copy of the report to the parent, managing conservator, or guardian of the individual screened if an abnormal spinal curvature is suspected, based on §37.143(a) of this title (relating to Spinal Screening Procedures).
- (b) The chief administrator of each school shall ensure that each individual admitted to the school complies with the screening requirements of this subchapter, according to the following schedule:
  - (1) All children enrolled in a public or private school in grades six and nine shall be screened for abnormal spinal curvature before the end of the school year. The screening requirements may also be met by a professional examination as defined in §37.142 of this title (relating to Definitions).
  - (2) The screening requirements for children entering grades six and nine may be met if the child has been screened for abnormal spinal curvature during the previous year.
  - (3) If a child is enrolled within 60 days of the date a school closes for the summer, the child’s spinal screening must be conducted within 120 days of the beginning of the following school year.
  - (4) Schools may offer a student enrolling in grades ten, eleven, or twelve the opportunity for spinal screening if the student has no record of having been screened previously.
- (c) A child’s parent, managing conservator, or legal guardian, or the individual under the scenarios described in Texas Family Code, §32.003, may execute an affidavit stating that a person, other than the individual secured by the school to conduct screenings at the school, shall conduct the screening as soon as is feasible. The school 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 school. The 60-day time period is from November 30 to January 30 of each school year.

(d) A school 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 in Texas Family Code, §32.003, submits to the school, on or before the date spinal screening is scheduled, an affidavit in lieu of the screening record(s) stating that the spinal screening conflicts with the tenets and practices of a church or religious denomination of which the affiant is an adherent or member.

(e) Only individuals who have completed high school may serve as volunteer assistants during spinal 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.

#### §37.145. 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 school (and those other than licensed professionals conducting screenings outside of the school) 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 and age or birthdate of the child. The documentation required under this subsection must also be signed and dated by the person who conducted the screening. For the purposes of this subchapter, electronic signatures and dates are also acceptable.

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

(3) Individuals must submit documentation to the department related to certifications and refresher courses, as specified in §37.146 of this title (relating to Standards and Requirements for Screening Certification and Instructor Training).

(b) Schools must comply with the following recordkeeping and reporting requirements:

(1) Each school shall maintain spinal screening records under this section onsite for at least two years.

(2) A school must maintain screening records regarding any individual claiming the exemptions found in §37.143(c) of this title (relating to Spinal Screening Procedures).

(3) Spinal screening records are transferable between schools if written consent of the individual or, if the individual is a minor, their parent, managing conservator, or legal guardian is obtained.

(4) 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 school and inspect records maintained relating to spinal screening.

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

(A) grade screened;

(B) number screened under prior treatment;

(C) total number screened;

(D) total number rescreened;

(E) total number abnormal findings;

- (F) number abnormal findings diagnosed by a physician as “normal;”
- (G) number abnormal findings diagnosed with scoliosis by a physician;
- (H) number abnormal findings diagnosed with kyphosis by a physician;
- (I) number abnormal findings diagnosed with another type of abnormal curvature by a physician;
- (J) number receiving a physician’s treatment plan of observation;
- (K) number receiving a physician’s treatment plan of orthosis bracing;
- (L) number receiving a physician’s treatment plan of surgery;
- (M) number receiving a physician’s treatment plan not indicated in subparagraphs (J) - (L) of this paragraph; and
- (N) number for whom a physician’s treatment plan was unavailable.

(c) All correspondence shall be submitted to the department under this subchapter, with the following contact information (unless otherwise specified): Vision, Hearing and Spinal Screening Program, Mail Code 1978, Department of State Health Services, P.O. Box 149347, Austin, Texas 78714-9347.

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

(a) Individuals who conduct spinal screening must be certified under this section unless the screening is conducted by a licensed professional. There are two options for obtaining this certification:

- (1) a certificate issued directly by the department; or
- (2) a certificate issued by an instructor who has been trained and authorized by the department to issue certificates.

(b) The department offers certification courses, and issues certificates to those who successfully complete them. To be eligible to take the department’s certification course, you 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.

(c) The department trains instructors who themselves give screener certification courses, as described in this section. The eligibility requirement to attend such a course is the same as is described in subsection (b) of this section. 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 subsection (b) of this section.

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

(1) Individuals who receive a certificate are authorized to conduct spinal 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) Screening certification under this section allows the individual to screen children for abnormal spinal curvature (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 (3) of this subsection.

(3) 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).

(4) 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.

(5) The affected individual has 20 days after receiving the notice, referenced in paragraph (4) 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 §37.145(c) 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.

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

(e) Individuals who successfully complete a department instructor training course 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. Individuals wishing to take the instructor course must first meet the following qualifications:

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

(2) be physicians, chiropractors, physical therapists, or registered nurses, and must have the applicable Texas license, current and in good standing under Texas law.

(f) Department authorization for instructors to conduct trainings is valid until December 31st of the fifth year from the date certification was issued. The individual must successfully update their instructor status with the department by submitting an updated instructor application within 30 days of December 31st of the fifth year from the date the preceding certificate was issued. It is the responsibility of the individual to request an instructor application from the department. The department will issue a renewed certification following the receipt of a complete instructor application. Failure to comply with these requirements, by the deadline given, means that the individual must then attend the initial instructor training course. The department will notify spinal screening instructors of new or updated education required by the department and where it is available.

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

(h) 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.

(i) Instructors in good standing under this section may teach screening refresher courses as described in subsection (d)(3) of this section. Such refresher courses are subject to the same requirements under this section as those pertaining to initial screening courses.

(j) When a department-authorized instructor issues a certificate of spinal screening, the instructor has 14 days to submit the participant rosters and evaluations to the department. These original documents should be submitted to the program at the address found in §37.145(c) of this title. The instructor should maintain a copy.

(k) 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.

(l) The affected individual has 20 days after receiving the notice, referenced in subsection (k) of this section, 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 §37.145(c)

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.

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

§37.147. Responsibilities of Parent, Managing Conservator, or Guardian.

When spinal screening indicates possible abnormal spinal curvature, the child's parent, managing conservator, or guardian is responsible for securing the services of a qualified licensed professional to perform a professional examination to diagnose the problem.

§37.148. Nondiscrimination Statement.

No person shall be excluded from participation, be denied benefits, or be otherwise subjected to discrimination in the department's Spinal Screening Program on the grounds of race, color, national origin, sex, religion, disability, or age.



Vision, Hearing, and Spinal Screening

Department of State Health Services

1100 West 49th Street

Austin, Texas 78756

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(512) 776-7420

<http://www.dshs.state.tx.us/spinal>

Spinal Screening Manual