

ALABAMA STATE DEPARTMENT OF EDUCATION

ALABAMA DEPARTMENT OF PUBLIC HEALTH

ALABAMA HEALTH SERVICES

SCOLIOSIS GUIDELINES



Dr. Eric G. Mackey

State Superintendent of Education

Alabama State Department of Education

Gordon Persons Building

Montgomery, Alabama 36130-2101

REVISED JANUARY 2019

ALABAMA STATE BOARD OF EDUCATION

Governor Kay Ivey – President

Mrs. Jackie Ziegler

District 1

Mrs. Betty Peters

District 2

Mrs. Stephanie W. Bell

District 3

Dr. Yvette M. Richardson

District 4

Mrs. Ella B. Bell

District 5

Dr. Cynthia McCarty, Vice President

District 6

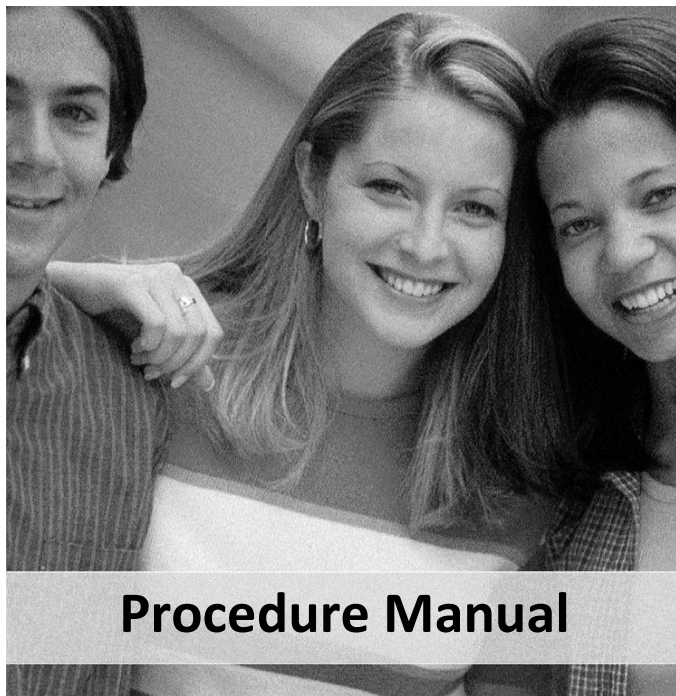
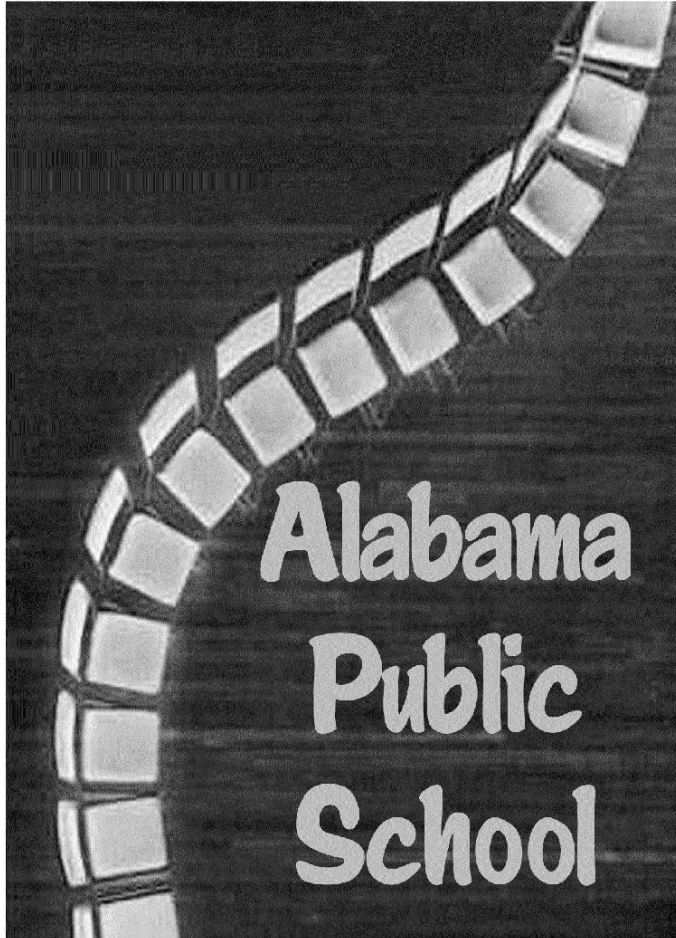
Mr. Jeff Newman, President Pro Tem

District 7

Mrs. Mary Scott Hunter

District 8

Dr. Eric G. Mackey – Secretary and Executive Officer



Procedure Manual

SPINAL SCREENING PROGRAM

TABLE OF CONTENTS

Message from State Superintendent.....	2
Purpose	3
Implementation	6
• Plan for Educational Programs	
• Selection of Screeners	
• Site Selection and Preparation	
• Preparation of Students	
Screening Responsibilities	8
Screening Procedure	9
• Recording	
• Student Explanation	
• Screening Procedures	
• Rescreening	
• Scoliometer	
Referral Procedure.....	10
• Criteria for Referral	
• Parent Notification	
Follow-Up Documentation	
Who Gets Scoliosis?	11
What is Scoliosis?	12
Screening for Scoliosis.....	13
Resources	14
Guidelines for Completing the Spinal Screening Worksheet	
Alabama Public School Spinal Screening Worksheet	
Alabama Public School Spinal Screening Program	
Summary Report for Grades 5-9	
Referral to Physician Form	
Sample Letter to Parent-Prescreening	

A Message from the Superintendent

The National Scoliosis Research Society estimates that six million Americans have scoliosis, a lateral or side-to-side curvature of the spine. While there is no cure for scoliosis, early detection of scoliosis can prevent a deformity, which may result in back pain, unsightly posture, and impairment of the body's range of motion and endurance. Untreated, the distortion of the spine can affect the function of other parts of the body, including the heart and lungs.

If schools, together with community health agencies, can help prevent permanent spinal deformity and accompanying health problems, it follows that very costly treatment and other forms of care can be avoided. Alabama public schools offer a wide variety of screening programs designed to identify correctable health problems. Ensuring optimum health to the degree possible helps children and youths attain the highest achievement level within their capabilities.

The earlier edition of this publication, *Alabama Spinal Screening Program* outlined a model scoliosis screening program to be conducted by qualified personnel under implementation of the—Senate Joint Resolution 62, adopted pursuant to Code of Alabama 1975, Section 16-29-1. The revised 2019 program is designed to ensure that students who have scoliosis are identified and referred for medical evaluation before the student has finished growing and treatment becomes more involved. This 2019 edition updates and reinforces the standards and provides current best practices for school scoliosis screening.

Purpose

The goal of this program is that children having spinal deformities be detected early and placed under medical care before serious disability and deformity occur. The program is designed to screen children at school and to teach students and their parents about spinal deformities.

Scoliosis, the medical term for lateral curvature of the spine, is a common disorder. Between 5 and 10 percent of school children have spinal curves. It is slightly more common in girls than boys and has its onset usually about ages 10 to 12. About 85 percent of curves are idiopathic (of unknown origin), although there appears to be a strong familial tendency in the idiopathic group.

In addition to scoliosis, kyphosis or “humpback,” and lordosis, sometimes referred to as “swayback,” can be seen in the same age groups to be screened. Kyphosis and lordosis are much less common than scoliosis.

Although most curvatures are of minor consequences, progressive spinal deformity may lead to crippling spine deformity and heart and lung problems; therefore, early detection and treatment are essential.

When detected early, treatment with a brace may prevent the progression of the deformity and may prevent the need for surgery. When detected late, surgery may be necessary.

Spinal deformities in the early years often go undetected because of their painless onset. Unless the condition is severe, it will not be visible to parents or others in the fully clothed child. However, early detection can be accomplished by mass screening of the critical age groups by trained personnel. Therefore, all school children in Grades 5, 6, 7, 8, and 9 (ages 11 through 14), including special education students, should be screened once a year for this potential problem.

For additional information please review the below link:

**2015 AAOS-SRS-POSNA-AAP Position Statement
Opinion Statement Number: 1122**

<https://pdfs.semanticscholar.org/ca96/8064a3ffbf6d08a1c11a06ee5f3f2a7c2583>.

1. Definitions

- a. "Public Schools" mean those schools over which the State Superintendent of Education has jurisdiction and control as referred to in Article No. 14 of the State Constitution.
- b. "Student" means a pupil enrolled in the public school system in the state.
- c. "Examination" means the screening procedure to be performed on each student as outlined in the "Alabama Public School Spinal Screening Program Procedure Manual."
- d. "Referral" means a written notification to the parent of the positive screening from the Spinal Screening Program.
- e. "Positive Screening" means the identified anatomical abnormalities for detection of spinal deformity as outlined in the "Alabama Public School Spinal Screening Program Procedure Manual."
- f. "Trained Medical Professional" means the medical physician with expertise in examination for spinal deformities.
- g. "Parent Permission" **Students must return a signed Parent permission form to be screened.**

2. Frequency of Screening

Screening will be offered once annually on all students in Grades 5, 6, 7, 8, and 9 (ages 11-14 years), including special education students, with at least an eight- to ten- month interval between each annual screening.

3. Qualifications of Screening Personnel

Screening will be conducted by school nurses, physical education instructors, other school personnel, or persons designated by school authorities who have received proper training in screening techniques for spinal deformities. One of these individuals shall be designated as Program Administrator and this person shall be responsible for the duties as outlined in the "Alabama Public School Spinal Screening Program Procedure Manual."

A health care provider who may benefit monetarily from arranging the referral process shall be excluded from referral and follow-up.

4. Screening Procedures

The screening procedures shall be consistent with the accepted standards for spinal screening procedures as outlined in the "Alabama Public School Spinal Screening Program Procedure Manual."

- Boys will be required to remove shirts and wear gym shorts so that the waistline

and hips can be observed.

- Girls will be observed in a two-piece bathing suit or a halter-top or bra and shorts.
- Body suits, one-piece bathing suits, or T-shirts are not acceptable.

It is strongly recommended that girls be examined by females. If this is not possible, it is mandatory that a female chaperone be in attendance at all times when girls are being examined.

5. Screening Results – Recording and Referral Procedures

A record of the screening results must be made of each student suspected of having a single deformity and copies of the results must be sent to the parents or legal guardians of the students. The notification shall include screening results, the significance of treating at an early stage, the services generally available for treatment after diagnosis, and a method for the school to receive follow-up information from health care providers.

Screening results and referral outcome shall be kept in the student's permanent health record.



Implementation

1. Plan for Educational Programs

- a. Public Education: If the program is to be accepted and referrals are to be acted upon, the students, parents, and general public must accept and understand the seriousness of spinal deformities. Good public awareness programs tell what the condition is, what the program is, why it is important, what will be done for whom, and when it will be done. Local media should be used where appropriate. These may include: radio, TV, newspapers, newsletters, bulletin boards, letters to parents and local medical staff, and program presentations to interested groups.
- b. Student Education: Student education should be presented at appropriate grade levels through health education. Content should include: what scoliosis, kyphosis and lordosis are; how they are detected; the importance of screening; what the screening procedures will be; what will be done for those with positive screenings; and why it is important to act on these screenings.

2. Selection of Screeners

There are two options available:

One Screening – Only one screening is necessary if performed by a school nurse.

Two Screenings – Initial screening is performed by designated teacher such as physical education teacher, health education teacher, or other specially trained individual. A school nurse will rescreen positive screenings.

NOTE: Anyone utilized as an initial screener must complete an in-service course in spinal screening.

3. Site Selection and Preparation

- a. The area selected should be warm, well-lighted, and permit screening with privacy.
- b. At the time screening is in process, the area selected should not be used for activities other than the screening activity.
- c. The screening station should be equipped with a chair and desk or table for recording. Information must be recorded as the screening progresses.

4. Preparation of Students

- a. Boys and girls should be screened separately.
- b. All students should be screened individually.
- c. Boys should strip to the waist and wear briefs or gym shorts.
- d. Girls should be requested to wear shorts and a halter or a bra. Leotards or one-piece bathing suits tend to camouflage the lower spine area; therefore, they are not acceptable.
- e. All students should remove shoes before screening.

Screening Responsibilities

Responsibilities of the Program Administrator

Each school system shall designate the Lead Nurse as the individual Program Administrator who will be responsible for the administration of the spinal screening. The Program Administrator's training and experience shall be appropriate to perform the following tasks:

1. To develop an administrative plan for conducting spinal screening in the school system in cooperation with appropriate school personnel in order to ensure that the program can be carried out efficiently with minimal amount of disruption. This shall include arrangement of appropriate scheduling for spinal screening.
2. To secure appropriate personnel to carry out the screening program and to ensure that such personnel receive proper training to conduct the necessary screening procedure.
3. To ensure that appropriate parental signed permission forms have been returned. **No Child will be screened without the parent signed permission form.**
4. To disseminate information to other school personnel, students, parents, and the public explaining the purpose of the program and to acquaint them with the criteria that might denote the need for referral for spinal screening.
5. To institute procedures to evaluate the effectiveness and accuracy of the screening program.
6. To document on the individual pupil record:
 - Consent for screening.
 - Spinal screening dates and negative results.
 - Positive screenings and that referral was made.
 - Report from physician or that reasonable attempts were made to obtain a report.

Screening Procedure

1. Recording

The class roll should be used for the initial screening roster and as documentation of consent and passed/referred. This roster should be dated and signed by the initial screener and kept on file in the school office or in the nurse's office. Complete the top section of the Spinal Screening Worksheet. List those students who have consent on file for screenings. This record should be used as the roll for rescreening and to record screening of absentees.

At the rescreening, the results should be recorded as "passed" or "referred." The Program Administrator will ensure that the data and results of the screening are recorded on the student's Cumulative Health Record.

2. Student Explanation

During the screening session, the screener should:

- a. Explain the results and significance of the screening.
- b. Answer all questions.
- c. Provide an opportunity for the students to express concerns and anxieties.
- d. Give appropriate written material to the students being screened. (Optional)

3. Screening for Scoliosis Procedure

See "Screening for Scoliosis" (page 12).

4. Rescreening

In order to avoid the possibility of unnecessary referral, all students (except as specified on page 4 under "Frequency of Screening") with positive screenings in any part of the initial screening should be rescreened at a separate session by someone other than the original screener as specified under "Qualifications of Screening Personnel (see page 4). Students should be questioned regarding family history of spinal deformities.

5. Scoliometer

Use of a Scoliometer is optional.



Referral Procedure

1. Criteria for Referral

Screenings warranting referral:

- a. Family history of spinal deformity.
- b. Four or more spots (pale brown) on the body.
- c. Any markings on the back such as hairy patches or a dimpling or fatty tumor along the vertebrae column.
- d. Unilateral atrophy of thigh or calf or any peculiar gait or pelvic tilt.
- e. Patient complaining of recurrent back pain.

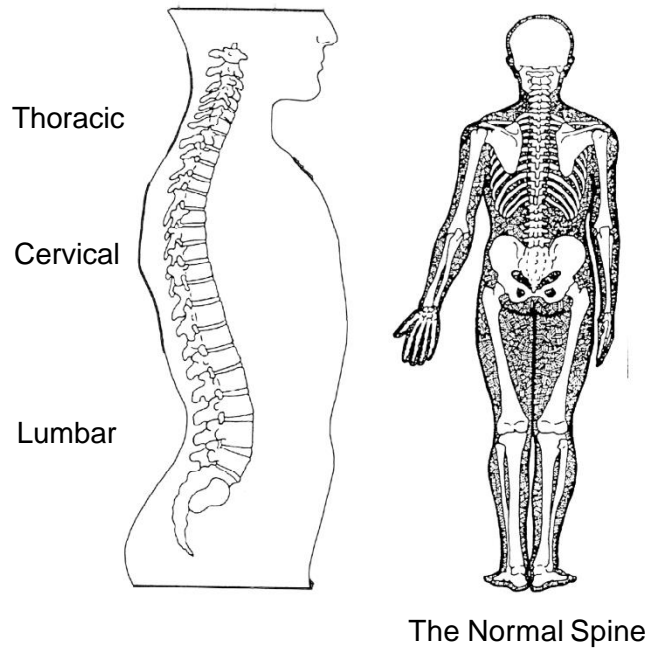
2. Parent Notification

Any child with positive screenings as identified in the criteria listed in No. 1 above should be referred for further evaluation. It should be clearly stated a positive screening does not necessarily constitute a diagnosis of spinal deformity, but does indicate the need for further evaluation by a physician with expertise in the detection and treatment of spinal deformities. Students with positive screenings on rescreening will be counseled concerning results of the screening and follow-up. Parents must be provided with a written referral form. Contact should be made with the parent, by the Program Administrator or designee to review and clarify the referral form and to emphasize the importance of diagnosis, treatment, and the return of the referral form. Provide assistance as necessary.

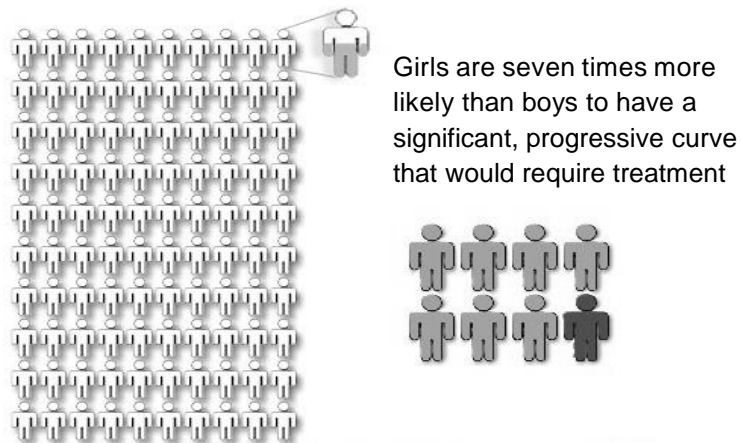
Follow-Up Documentation

The Program Administrator or designee must maintain a record of referred students. When documentation of a physician's evaluation of a student has not been received, efforts must be made to assure that the parent was notified of the screening results, realizes the importance of prompt follow-up, and has the capability of making the necessary arrangements for a further examination by a physician. This follow-up activity and the physician's screenings must be documented on available school health records.

Who Gets Scoliosis?

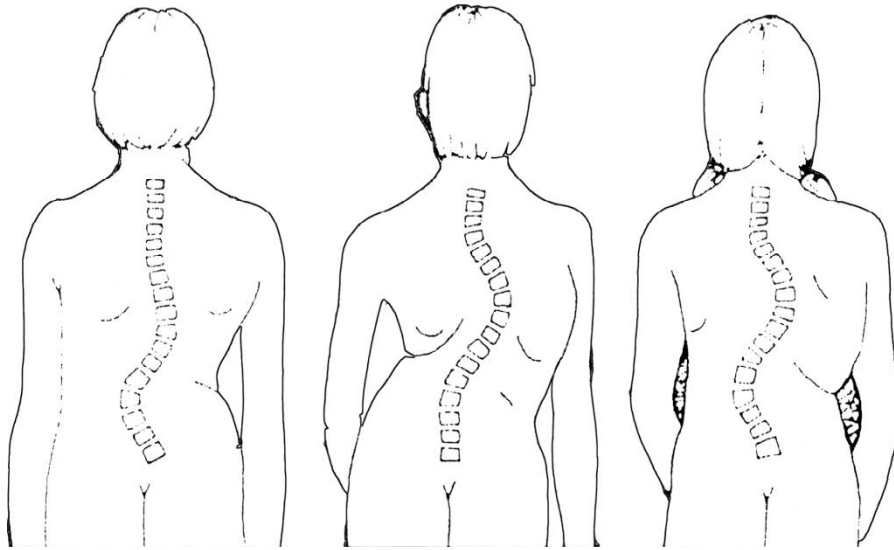


Scoliosis affects less than 1 in 100 of the general population.



What Is Scoliosis?

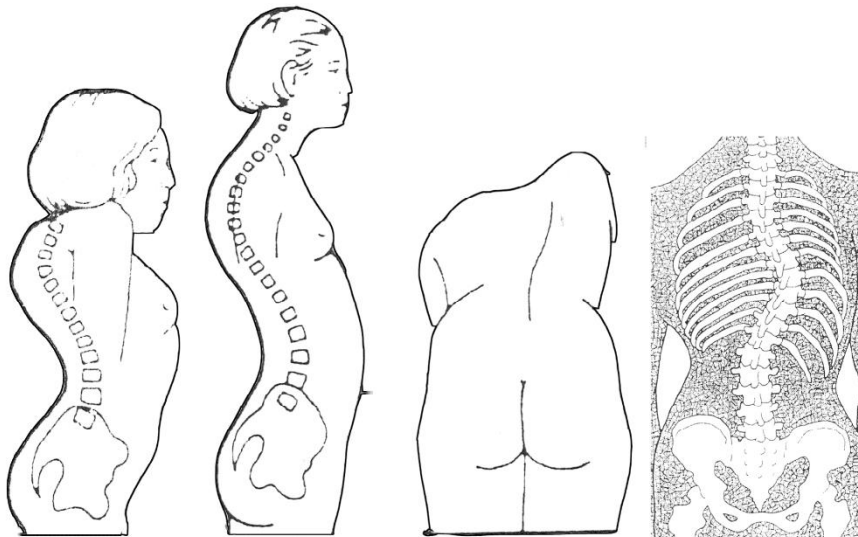
TYPICAL SCOLIOTIC CURVES



Left Lumbar Right

Thoracic

Double Major



Kyphosis (Humpback) Lordosis (Swayback)

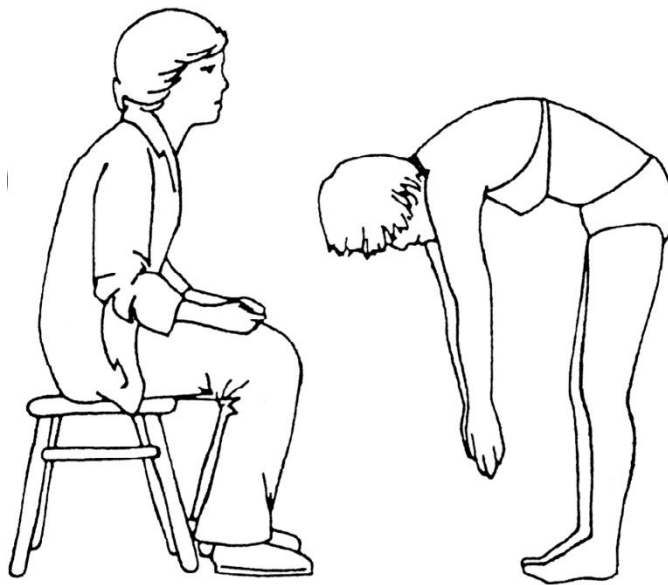
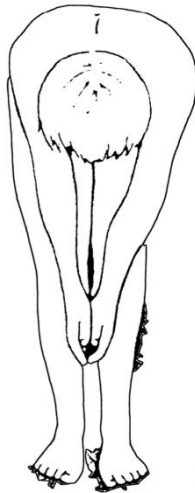
Scoliosis (Rear Views)

Screening for Scoliosis

Adam's Forward Bend Test

FORWARD BENDING POSITION FOR SCREENING

Performing the Test: Have patient bend forward as far as possible. Look for one side of the rib cage to be higher than the other next to the vertebral column. The convex side is the one with the rib hump



National Resources

National Association of School Nurses

1110 Wayne Ave
Suite 925
Silver Springs, MD 20910
www.nasn.org

National Scoliosis Foundation, Inc.

P.O. Box 547
Belmont, MA 03178
www.scoliosis.org

Scoliosis Research Society

Suite 800, 430 No. Michigan Ave.
Chicago, IL 60611
www.srs.org

The Scoliosis Associate, Inc.

One Pen Plaza
New York, NY 10001

Alabama Resources

The County Health Department Nursing Division

Children's Rehabilitation Service

www.rehab.state.al.us

University of South Alabama

ALABAMA PUBLIC SCHOOL SPINAL SCREENING PROGRAM

Summary Report for Grades 5 – 9

All Records should be maintained at the Local Education Agency

Name of School: _____ School Year: _____

School System: _____ County: _____

Name & Title of Program Administrator: _____

Name & Title of Person Completing Form: _____

Notes: _____

SCREENING				RESULTS OF REFERRAL							
INITIAL		SECOND		DIAGNOSIS				TREATMENT			
Grade & Sex M-Male F-Female	Total # of Students Screened	Number Receiving Second Screening	Number Referred for Medical Evaluations	Normal	Scoliosis (also mark in treatment section)	Other Abnormality	No Response to Referral	Observation	Bracing	Surgery	No Treatment Exercise
5M											
5F											
6M											
6F											
7M											
7F											
8M											
8F											
9M											
9F											
*SE-M											
*SE-F											
+OTHER-M											
+OTHER-F											
TOTAL-M											
TOTAL-F											
GRAND TOTAL											

*Special Education Students Ages 11-14 not included in grade tally.

+Within 11-14 age group, but not 5-9 grade level or special education.

REFERRAL TO PHYSICIAN FORM

(Use School Letterhead to Reproduce)

Dear Parent/Guardian:

Your child was screened for spinal curvature on _____ and the results are:

- | | |
|---|---|
| <input type="checkbox"/> Obvious spinal curvature | <input type="checkbox"/> Rib prominence |
| <input type="checkbox"/> Shoulder elevation | <input type="checkbox"/> Increased round back |
| <input type="checkbox"/> Shoulder blades uneven | <input type="checkbox"/> Spine hump |
| <input type="checkbox"/> Hips uneven | |

Other comments: _____

It is recommended your child have a complete evaluation by your family physician. Please take this form with you for your doctor to complete.

School Nurse

Name of Student

Birthdate

School

Grade

REPORT FROM PHYSICAL

DIAGNOSIS: ☐ Scoliosis ☐ Kyphosis ☐ Other: _____

TREATMENT: ☐ None ☐ Brace ☐ Observation ☐ Surgery ☐ Other: _____

☐ This form may be released to the school.

Print Name of Physician

Signature of Parent/Guardian

Signature of Physician

Date Signed

Date Signed

Please return the completed form to school nurse, ATTN: Spinal Screening Program Administrator.

Dear Parent:

The Alabama State Department of Education and Alabama Department of Public Health requires that school districts in Alabama offer and provide scoliosis screening for male and female students in grades 5 through 9.

Screening is performed by observing the uncovered spine, viewing the student from the back, side, and front and also from all sides with the student bending forward. If a spinal problem is suspected, the child will be rechecked at a second screening. Parents of students found to have signs of a possible spinal abnormality will be asked to see their own physicians for further evaluation.

Girls and boys will be screened separately to ensure privacy. They can wear gym clothes, bathing suits, or other clothing that may be removed easily. Screening for your child will take place within the next two weeks. If your child is currently under treatment for a spinal deformity, please let us know and your child will be exempt from the screening process.

Please complete the consent form below; indicating your wishes for screening.

Please note: forms not returned will result in student not being screened.

I **do wish** for my son/daughter to be included in the scoliosis screening.

Student Name

Parent/Guardian Signature

I **do not wish** for my son/daughter to be included in the scoliosis screening.

Student Name

Parent/Guardian Signature