



# Health Screening Mini-Session

## Scoliosis Screening

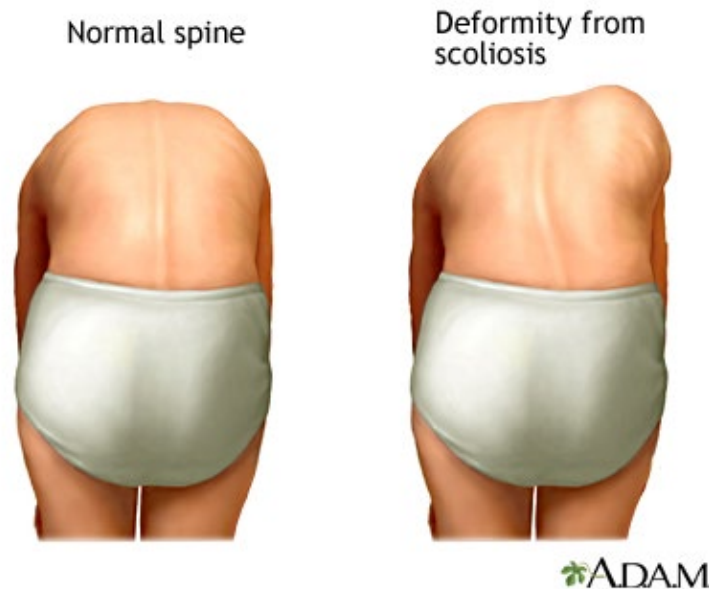
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# Outline

- Background & Epidemiology
- Guidelines for Scoliosis Screening in the clinical setting
- CSH Health Screening Guidelines - Scoliosis Screening
- Potential Benefits and Limitations of School-Based Scoliosis Screening
- Discussion

# Background

- Scoliosis is an abnormal curvature of the spine
- Most common form: idiopathic; present in ~3% of children under age 16
- Majority of children do not experience progression in the curvature and most people with idiopathic scoliosis do not require treatment
- Scoliosis can have an impact on the physical and psychosocial health of affected children and may be the initial presenting sign of an underlying condition



<https://www.srs.org/about-srs/news-and-announcements/position-statement---screening-for-the-early-detection-for-idiopathic-scoliosis-in-adolescents>

<https://medlineplus.gov/ency/article/001241.htm>

# Screening for Idiopathic Scoliosis in Adolescents in the Clinical Setting

## Position Statement - Screening for the Early Detection for Idiopathic Scoliosis in Adolescents SRS/POSNA/AAOS /AAP Position Statement

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9/2/2015 v2

**The Scoliosis Research Society (SRS), American Academy of Orthopedic Surgeons (AAOS), Pediatric Orthopedic Society of North America (POSNA) and American Academy of Pediatrics (AAP) believe that there has been additional useful research in the early detection and management of adolescent idiopathic scoliosis (AIS) since the review performed by the United States Preventive Services Task Force (USPSTF) in 2004. This information should be available for use by patients, treating health care providers, and policy makers in assessing the relative risks and benefits of the early identification and management of AIS.**

The AAOS, SRS, POSNA, and AAP believe that there are documented benefits of earlier detection and non-surgical management of AIS, earlier identification of severe deformities that are surgically treated, and of incorporating screening of children for AIS by knowledgeable health care providers as a part of their care.

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# Screening for Idiopathic Scoliosis in Adolescents in the Clinical Setting: Task Force Recommendations

- Screening examinations for spine deformity should be part of the medical home preventative services visit for females at age 10 and 12 years, and males once at age 13 or 14 years.
- Effective screening programs must have well trained screening personnel who can utilize forward bending tests and scoliometer measurements to correctly identify and appropriately refer individuals for further investigation

# CSH Health Screening Guidelines - Scoliosis Screening Recommendations

- Screen all 5th grade girls, 7th grade girls, and 8th grade boys for scoliosis once a year (Screening girls in only 6th grade is a reasonable alternative)
- Train staff (including PE teachers, clinic personnel, and volunteers) and utilize specific LEA protocols
- Partner with a local orthopedic doctor, osteopathy doctor or other trained professional to provide specific training for school staff and/or volunteers
- Conduct a second screening of those who appear to deviate from normal by someone other than the original screener
- During the screening, examine the student's unclothed back.
  - Female students can be screened wearing just a bra above the waist (preferred) or can wear a bathing suit under their clothes for the day of screening.
  - The student will be asked to stand straight, and then bend forward while the examiner looks from the front, the back, and the side.
  - The screener looks for obvious curves, rib humps, uneven shoulders, waist, or hips.

# CSH Health Screening Guidelines - Scoliosis Screening

## Additional Tips for Setting up a Successful Scoliosis Screening Program

1. Offer training for volunteers and new staff and a refresher for experienced screeners shortly before the screening date.
2. Schedule the screening so that there are no conflicts with testing, field trips, etc. and when secondary screeners will be available if possible.
3. Send letters/permission forms home one to two weeks before the screening is scheduled.
4. Have teachers collect and save the “Do Not Screen” letters.
5. Prepare students the day before screening, discussing the procedure that will be followed.
6. Remind female students the day before to wear bras or bathing suits under clothes.
7. Have 2 screeners present.
8. It is strongly recommended that girls be examined by females.
9. Students or teachers should complete the personal information on the screening forms and the student should bring the completed form to the screening.
10. Manage the screening area so that the student’s privacy is maintained.
11. The setting chosen for screening should be checked for good lighting; the floor should be free of uneven areas; and the temperature of the room should be comfortable for students who will be undressing.
12. Screen with the student’s entire back exposed.
13. Volunteers can be used to control “traffic,” call classes down, get students to secondary screeners, etc.

# CSH Health Screening Guidelines - Scoliosis Screening

## Scoliosis Medical Screening Form for School Records

Date of Screening: \_\_\_\_\_

Scoliosis Screening Findings: \_\_\_ Within Normal Limits \_\_\_ Referred (indicate findings below)

L	R	L	R
	Shoulder blade more prominent than other		High Shoulder blade
	Obvious curve of spine in upper back		Rib hump
	Obvious curve of spine in lower back		High shoulder
	Obvious curve of spine in area of rib cage		Hip higher than other side
	Waist to arm space greater		Other:

\_\_\_ Rounded back \_\_\_ Uneven on best test by \_\_\_ degrees

Screener's name (print): \_\_\_\_\_

Check one: \_\_\_ Volunteer \_\_\_ Teacher \_\_\_ Clinic Asst. \_\_\_ School Nurse  
 \_\_\_ Health Dept. Employee \_\_\_ Other (Specify) \_\_\_\_\_

Comments from screener:  
 \_\_\_\_\_  
 \_\_\_\_\_

**Scoliosis Screening Form** Grade (circle): 6 7 8 Other: \_\_\_\_\_

Primary screening date: \_\_\_/\_\_\_/\_\_\_ Homeroom: \_\_\_\_\_

Student's last name: \_\_\_\_\_ First name: \_\_\_\_\_ M.I.: \_\_\_\_\_

Date of birth: \_\_\_/\_\_\_/\_\_\_ Race/ethnicity: \_\_\_\_\_  Female  Male

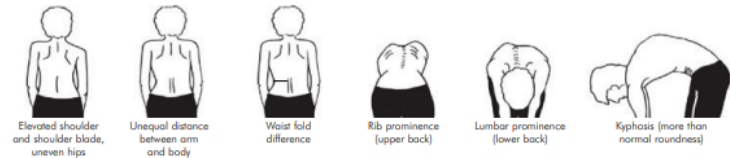
Name of parent/guardian: \_\_\_\_\_

Address: \_\_\_\_\_ Apt. #: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phones: Home ( \_\_\_ ) \_\_\_ - \_\_\_ - \_\_\_ Work ( \_\_\_ ) \_\_\_ - \_\_\_ - \_\_\_ Cell ( \_\_\_ ) \_\_\_ - \_\_\_ - \_\_\_

Name of school: \_\_\_\_\_ District: \_\_\_\_\_



	Primary screener		Secondary screener	
	Left	Right	Left	Right
<b>Front</b>				
Shoulder elevated				
Unequal distance arm to body				
Uneven hips				
Rib prominence				
Lumbar prominence				
<b>Back</b>				
Shoulder elevated				
Shoulder blade elevation/prominence				
Waist fold difference				
Unequal distance arm to body				
Rib prominence				
Lumbar prominence				
<b>Side</b>				
Kyphosis—more than normal roundness	Yes	No	Yes	No

Negative \_\_\_\_\_ Refer for second screening \_\_\_\_\_

Screener's name (print) \_\_\_\_\_

Check one:  School nurse  Teacher  Volunteer

Clinic assistant  Other: \_\_\_\_\_

Screener notes: \_\_\_\_\_

Secondary screening date: \_\_\_/\_\_\_/\_\_\_

Negative \_\_\_\_\_ Referred \_\_\_\_\_

Screener's name (print) \_\_\_\_\_

Check one:  School nurse  Health professional

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

Screener notes: \_\_\_\_\_



# Potential Benefits and Limitations of School-Based Scoliosis Screening

## Potential Benefits:

- Screening can identify children who require further evaluation
- Screening can identify children with limited access to medical care

## Potential Limitations:

- False positive screening may lead to unnecessary referrals, anxiety for families, x-rays, and treatment
- Increased cost to schools and healthcare system

# Thank you!

Please reach out with any questions!

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