

TRAINING MATERIAL

POSTURAL SCREENING PROGRAM

MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH



**MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH
BUREAU OF FAMILY AND COMMUNITY HEALTH
SCHOOL HEALTH UNIT
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1. INTRODUCTION

A curve in the spine has been known throughout history as "hunch-back", "round-back", "swayback", or simply "bad posture". In the past, these conditions often went unrecognized or were already severe when detected. They often went untreated. Signs of a lateral curvature (scoliosis) occur in about 10% of the population although only about 2% develop a condition which would require medical treatment. Girls require treatment about 8 times more often than boys. A front to back curvature (Kyphosis) is not as prevalent as scoliosis, but it affects boys slightly more often than girls.

The first mild signs of curvature often begin to appear in early adolescence, though they frequently go unnoticed. A curvature almost always develops without pain, and in young people who are in otherwise good health. Adolescents sometimes do not see physicians regularly and are typically private about their bodies. The young person gets no signal that something is wrong. In many cases where there are early signs of curvature, however, the curvature does not become more severe. But it is impossible to distinguish, at an early stage, which curves will - and which will not - develop into a serious deformity. In many children, careful monitoring of the child's growth and perhaps special exercises for flexibility will be all that is needed. If the curve does begin to progress (typically during the adolescent's period of rapid growth), further development of the curve can often be arrested by the wearing of a back brace. If it is used before bone growth is complete.

Severe curvatures, left untreated, can cause physical deformity, arthritic symptoms, heart and lung disorders, and other medical problems. If the condition becomes severe, the only treatment is spinal surgery. In recent years spinal screening programs have provided the opportunity for early detection, regular monitoring, and reduction in the need for surgical remedies. The Massachusetts Department of Public Health, has promoted postural screening in schools since 1971. A change in the regulations in April, 1980 requires all school systems in the Commonwealth of Massachusetts to begin providing postural screening in grades 5 - 9. These grades cover the years in which adolescents experience most rapid growth, and in which signs of curvature most often appear.

This program is intended as a supplement to the young person's primary health care. Its purpose, like other screening programs conducted in the schools, is not to provide medical diagnosis, but rather to detect possible early signs of spinal problems which should have further medical evaluation.

If early signs are detected, the family will be encouraged to seek further attention from their family physician. The role of the school health team is to arrange and implement screening sessions, to keep records of those who participated in the program, to urge those parents whose children have a positive finding to seek further medical evaluation and to provide information about assistance for those who request it.

The Massachusetts Department of Public Health, through its Regional Health Offices, provides schools with consultation and materials to assist in implementing the Postural Screening Program. The purpose of the manual is to provide a guide and materials for conducting a Postural Screening Program within the school and to provide instructional materials that will address attitudinal issues and supply actual information for students, parents, and the community.

2. PREPARATION

2.1 OVERVIEW

The program will run most efficiently when one person within the school coordinates all the activities related to the Screening Program. This involves coordinating:

- A) The use of materials, equipment, and space
- B) The education and cooperation of other staff
- C) Student screening
- D) The use of instructional materials
- E) Access to materials for interested community members
- F) Record keeping

These responsibilities may be shared by different individuals, e.g. school nurse, P.E. Instructor, classroom teacher, health educator. For instance, we recommend that the physical education instructor do the initial screening, that the school nurse conduct the follow-up screening, and that the classroom teacher or health educator use any instructional materials. Individuals who do the screening should receive prior training offered through the Department of Public Health.

2.2 CHECKLIST AND TIMETABLE OF ACTIVITIES

TIME PERIOD 1 (Preparation)

1. Read the "**Questions and Answers on Postural Screening**" section of this manual.
2. Consult with other school staff regarding the program, roles.
3. Arrange screening times, space, materials.
4. Schedule times for initial contacts with class.
5. Preview video-tape and schedule equipment time for use.
6. Review instructional materials and schedule time for use.
7. Prepare or duplicate copies of materials:
 - A) Brochure
 - B) Initial Letter to Parents
 - C) Follow-up Letter to Parents
 - D) Letter to Physician
 - E) Postural Screening Worksheet

TIME PERIOD 2 (Educational Program)

1. Inform community members of availability of materials.
2. Meet with classes, giving basic information.
3. Distribute brochure, initial letter to parents.
4. Show video-tape "**Growing Straighter and Stronger**".

TIME PERIOD 3 (Screening)

1. Screen students and record results.
2. Perform second screening as necessary.

TIME PERIOD 4 (Follow-up)

1. Phone or write parents of child with positive finding.
2. Send follow-up letter to same parents.
3. Send letter to physician of parents choice.
4. Submit "Postural Screening Final Report" form to DPH
Boston Office. One form per school system.

2.3 INSTRUCTIONS

1. Read "Questions and Answers on Postural Screening".
(See page 22).
2. Consult with other school staff regarding the program, roles.
The Coordinator should arrange a date for in-service when physical education instructors, administrators, school physicians or nurses, and classroom teachers can attend. The purposes of the program should be explained, and the responsibilities of each should be outlined and coordinated.
3. Arrange screening times, space, and materials.
Enough space will be needed for the screener to move around the student for front, back, and side views. Privacy for the student is also important. A separate adjoining space to change clothes might be useful. Usually locker rooms or P.E. offices are used in primary screening. The second screening is usually done in the nurse's office. Good lighting and level floors are necessary. A tape mark on the floor is helpful in showing students where to stand. Some schools may provide halter tops for girls, which is a good idea if the style permits a good view of the back. Some home economic or sewing classes might make up halter tops, or a private organization in the community might be asked to purchase low cost disposable supplies. The time necessary for screening varies. With some practice and experience, one minute per student or less is all that is required. People screening for the first time may need 2 - 3 minutes per student. A schedule for screening

should be prepared and coordinated with the various classroom teachers. A "**Postural Screening Worksheet**" should be prepared with each student's name listed.

4. Schedule time for initial session with class.

A convenient time for the classroom teacher should be arranged. The initial session should be done by one of the screeners and should cover basic information about the Program, what and where it will take place, and what to wear. It may be coordinated with use of some of the instructional material.

5. Preview video-tape and schedule equipment for showing.

The Massachusetts Department of Public Health recommends a videotape produced by the National Scoliosis Foundation entitled "**Growing Straighter and Stronger**".

It should be shown sometime before the screening. Individual teachers should use their judgement in when to use the video-tape. A combined large classroom presentation is recommended. This allows for greater student/teacher interaction before and after the showing.

6. Prepare or duplicate copies of materials.

a) Brochure

The brochure published by the Department of Public Health should be distributed to students to take home prior screening. Make sure there are enough copies for each student to be screened and additional copies for school staff or members of the community who may wish to know more about the program. A copy can be found on pages 16 and 17 in this document.

b) Letters

Sample copies of letters to parents and physicians can be found in the **Sample Materials and Resources** Section of this manual. They can be reproduced on your letterhead, specific information added and then duplicated in quantity.

1. Initial letters to parents

The "initial Letter to Parents" should be sent home with the student when the brochure is distributed.

2. Follow-up letter to parent

This letter will be sent to parents only in cases of positive finding.

This letter will be needed only by approximately one-tenth of the students screened.

3. Letter to physician

This letter with specific findings information will be sent to the family's physician after the family has determined who will do a further medical examination their child.

c) Postural Screening Worksheet

(Make one or two for each class)

3. THE EDUCATIONAL PROGRAM

3.1 OVERVIEW

The educational program is intended to inform students, parents and the general public about the Postural Screening Program. It is intended to supply factual information about the program and spinal problems, as well as addressing attitudinal issues.

The National Scoliosis Foundation (781) 341-6333 can supply materials to assist in the educational process. The purpose of any educational material is to encourage family acceptance and support of the program. Any classroom lessons should be directed more toward attitudinal questions and medical knowledge. A classroom video-tape distributed by the National Scoliosis Foundation has a mix of factual and attitudinal objectives. The initial contact with the class should be done by someone who is knowledgeable in medical areas and who can inform the class about the specifics of screening.

3.2 THE COMMUNITY

In many school districts, there may be community interest in the Postural Screening Program. The coordinator of the program may wish to publicize the availability of the video-tape program and the brochures and explain in greater detail the nature and purpose of the program. The coordinator should ask the school physician to inform the medical community that the Postural Screening Program is beginning. This will allow physicians in the community to be prepared to respond to referred cases.

3.3 INITIAL SESSION WITH THE CLASS

The initial session with the class should be made by one of the screeners. The session should include the following information:

- a) When, where, and how the screening will be done
- b) What you will be looking for
- c) Special clothes that need to be worn
- d) Short discussion of postural problems, Scoliosis/Kyphosis/Lordosis
- e) Review questions and answers (see attachment)
- f) Distribution of "initial Letter to Parents" and brochure

It may be done in conjunction with the showing of the video-tape. The person making the initial contact with the class should seek to convey a positive attitude toward the program, its preventive nature, and toward the student's own self-interest in having a screening.

4. THE SCREENING

4.1 PRACTICAL SUGGESTIONS

Preparation

1. If possible, the screening area should be located in a place which will accommodate a steady flow of traffic with separate doors for entrance and exit. There should be enough space to allow the screener to move freely around the student for front, back and side views.
2. If possible, arrange to have screener and students of the same sex.
3. It is recommended that boys and girls be screened separately.
4. Remind students what you are looking for.
5. Speak positively about "Postural Screening" rather than "scoliosis" or "kyphosis".
6. Place a piece of tape on the floor to indicate where you want the student to stand.
7. Students should be checked with their backs bare. Boys should strip to the waist; girls should wear two-piece bathing suits or shorts and a halter.
8. In order to save time, have some students getting dressed while you screen others.
9. Record the name of each student in the class on the "**Postural Screening Worksheet**" including those who are not being screened. If for any reason a student is not screened, note the reason next to his/her name.
10. Record all positive findings on the "**Postural Screening Worksheet**".
11. Arrange another time to screen those students who because of absence missed the original screening session.

4.2 POSTURAL SCREENING REVIEW (PROCEDURE)

Position I

Student stands facing the examiner. He/she should stand erect but relaxed, feet close together with weight evenly distributed, knees straight, arms at side, eyes straight ahead.

Observe the following:

- A. Is one shoulder higher than the other?
- B. Is the waistline the same on both sides or is there a larger space between the arm and flank on the one side?
- C. Are hips level and symmetrical or is one side high or more prominent?

Position II

In order to view the entire back, student's back is toward the examiner. Long hair should either be pinned up or be evenly separated and brought forward in front of each shoulder.

Observe the following:

- A. Does the head lean to one side?
- B. Is one shoulder higher than the other?
- C. Is one shoulder blade more prominent than the other?
- D. Is there a spinal curvature?
- E. Is the waistline the same on both sides or is the arm-to-body space uneven?

Position III

Student stands erect with his side toward examiner.

Observe the following:

- A. Is there an accentuated roundness in the upper back?
- B. Is there an accentuated arching in the lower back?

Position IV

Student bends forward until his back is parallel to the floor. The feet are together, knees straight, the palms of the hands are together and the head is down. Examine from the front and back view.

Observe the following:

- Is there a rib hump on one side?

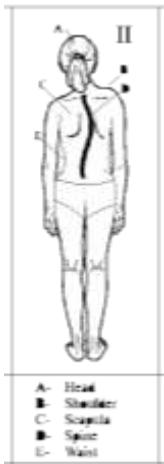
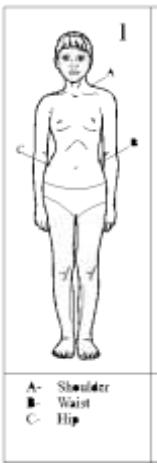
Position V

Student bends forward in position IV. View from the side

Observe the following:

- Is there an exaggerated Midline hump?

POSTURAL SCREENING REVIEW



REFER IF ANY 2 OUT OF 3 PRESENT

A. Shoulder

Is one shoulder higher than the other?

B. Waist

Is the waistline the same on both sides or is there a larger space between the arm and flank on one side?

C. Hip

Are the hips level and symmetrical or is one side higher and more prominent?

REFER IF ANY 3 OUT OF 5 PRESENT

A. Head

Does the head line up over the crease in the buttocks or does it lean to one side?

B. Shoulder

Is one shoulder higher than the other?

C. Scapula

Is the wing on one shoulder blade higher or more prominent than the other?

D. Spine

Does there appear to be a curve when you observe the spine?

E. Waist

Is the waistline the same on both sides or is there a larger space between the arm and flank on one side?

REFER IF EITHER PRESENT

A. Roundback

Is there an exaggerated roundness in the upper back?

B. Sway Back

Is there an exaggerated arch in the lower back?

REFER IF PRESENT

Chest Cage Hump

Are both sides of the back symmetrical or is the chest cage prominent or bulging on one side?

REFER IF PRESENT

Spine Hump

Is there an accentuated midline hump?

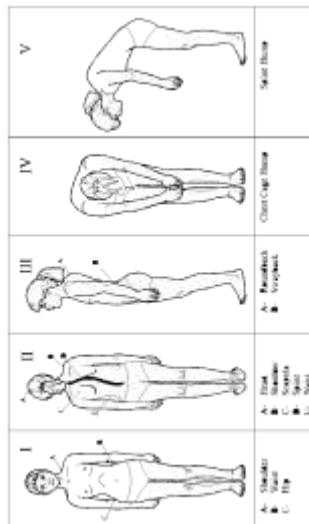
4.3 FILLING OUT THE POSTURAL SCREENING WORKSHEET

It is important that the screener include as much information as possible about his/her findings for easy reference in the rescreening. *The worksheet presented in this manual has the same content as the Postural Screening Worksheet available in previous years. Only the graphic diagrams were improved for greater clarity.*

The pictures on the Postural Screening Worksheet represent the positions in which the student is viewed by the screener. The front, back, and side views each have several areas of focus. Each area has a letter designation. Use these letters on the worksheet to represent your positive findings. Indicate whether positive findings are on the student's left or right side. Positive findings in views IV and V should be indicated by a check mark.

This worksheet is intended as a tool to assist you in the process of screening. The diagrams are those presented on the "Postural Screening Review" form described above. Some suggestions for the "Postural Screening Worksheet" include:

- 1) Record students by sex then list alphabetically. This helps in tallying results for your end of year reporting.
- 2) Xerox multiple copies of this form and retain for future use in your school system.
- 3) Completed forms could be sent and maintained by the Health Services Coordinator/Supervisor within your system. The Massachusetts Department of Public Health requests only the summary statistical report and should not receive this form in the mail.



4.4 FOLLOW-UP

1. Absentees

Students who were not screened because of absence should be screened at another time.

2. Exclusions

Any student who was excluded from screening for any other reason should have his/her reason for exclusion documented.

3. Screening

a) If there is no positive finding in the initial screening of a student, his/her parents will not be contacted.

b) A separate session should be scheduled for rescreening of all students with positive findings. It is recommended that the original worksheet be used at the rescreening. If initial positive findings are not confirmed, the parents will not be contacted. If a positive finding is confirmed by the person who rescreens, the following steps should be taken:

1. Contact Family

The nurse should first attempt to contact the family by phone (if phone contact is not possible, by letter) to explain that medical follow-up is being recommended as a precaution. Parents should be assured that many findings will be of no consequence, but medical observation might be necessary to determine that the signs are not getting worse. Families will be advised to bring their sons or daughters to their primary care physicians (family physician, pediatrician or internist). If families do not have a primary care physician and use emergency rooms for primary care, they should be encouraged to establish contact with a primary care physician.

2. Send "Follow-up Letter to Parents".

3. Obtain from family their choice of physician.

4. Send "Letter to Physician". The nurse will make every effort to ensure that medical follow-up takes place.

4. Referrals: National Scoliosis Foundation: Referral Services (781) 341-6333

a) The school screening coordinator or designee should maintain a record of referred students whose physician reports that there's nothing wrong but about whom there is continuing concern on the part of the screeners. These students should be tracked in the following way:

1. They ought to be seen by the school physician who can be in communication with the student's own physician.

2. If the student's physician continues to feel that no further action is indicated, the student should be rescreened in three to six months by the school screener.
 3. If the screener's concerns persist, the family ought to be contacted again and a second opinion encouraged.
- b) The school nurse and physical educator should both be informed about students whose physicians have prescribed braces. The school nurse may need to supervise skin care. In most cases students who wear braces will be encouraged to participate in a wide range of physical education activities but the physical educator will need to be informed about each physician's recommendations

4.5 RECORD KEEPING AND FINAL REPORT

DIRECTIONS FOR COMPLETING POSTURAL SCREENING FINAL REPORT

Read the bottom of the form for basic instructions for completion. Please check that the totals conform with the following:

COLUMNS 1 + 2 = Total of grade enrollment.

COLUMN 3 = Number of children screened by physical educator and referred to the nurse for re-screening.

COLUMN 4 = Children with questionable findings not referred to physician but remain under observation of the school nurse.

COLUMN 5 = Number of children referred to family physician by school nurse.

The sum of COLUMNS 6 + 7 + 8 + 9 + 14 = COLUMN 5.

The sum of COLUMNS 10 + 11 + 12 + 13 + 14 = COLUMN 5.

COLUMN 9 (OTHER) includes children who are under the observation of a physician as a result of screening but who are not yet diagnosed. This category may also include diagnoses such as leg length discrepancies, etc.

Please complete one form for each School System and mail to:

**MDPH/BFCH
School Health Unit
250 Washington Street 5th Floor
Boston, MA 02108-4619**

The Massachusetts Department of Public Health requests compliance by July 15 of the current school year.

V. POSTURAL SCREENING FINAL REPORT

SCHOOL: _____ YEAR OF REPORT: _____
 SCHOOL SYSTEM: _____

GRADE M-MALE, F-FEMALE	SCREENING RESULTS 1 2 3 4 5	RESULTS OF PHYSICIAN'S EXAMINATION																											
		DIAGNOSIS			RECOMMENDED TREATMENT								COMMENTS																
TOTAL NUMBER SCREENED		NUMBER UNDER TREATMENT PRIOR TO SCREENING		NUMBER REFERRED FOR RESCREENING		NUMBER QUESTIONABLE NOT REFERRED TO M.D.		NUMBER REFERRED TO M.D. FINDINGS REFERRED TO M.D.		SCOLIOSIS		KYPHOSIS		NORMAL		OTHER		OBSERVATION		BRACING		SURGERY		NONE/UNKNOWN		FOLLOW UP		INCOMPLETE	
5M																													
5F																													
6M																													
6F																													
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DIRECTIONS:

A single report for the entire school system is preferred, however, a separate report for each school may be sent if you wish.

1. SCREENING RESULTS:

- record numbers in each column for appropriate grade and sex of children
- column 4 is for those children with questionable findings at this screening who have not been referred to a physician

2. RESULTS OF PHYSICIAN'S EXAMINATION

- This section should report the results of medical findings on children referred from this year's screening.
- column 13 indicates those children who were diagnosed by a physician but the treatment recommended for them is unknown to you.

3. FOLLOW-UP INCOMPLETE

- column 14 indicates those children who were referred but for whom either no report has been received from their physician or whose physician has not completed the follow-up.

5. SAMPLE MATERIALS AND RESOURCES

5.1 Copy of Brochure (Two Page Informational Brochure)

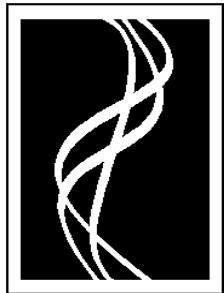
5.2 Sample Letters

5.21 Initial Letter to Parents

5.22 Follow-up Letter to Parents

5.23 Letter to Physician

5.3 Questions and Answers on Postural Screening



POSTURAL SCREENING PROGRAM

This screening is similar to other school health checks such as vision and hearing testing. It is done either by the physical education teacher or the school nurse and is free.

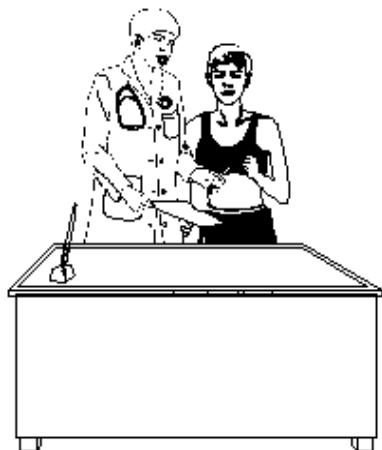
Why do the screening?

9 out of 10 young people have completely normal spines.

And in most others, a curve in the spine is usually mild and does not get worse—though it should be watched.

Those curves that do get worse may result in medical problems, pain, and obvious physical deformity if not treated.

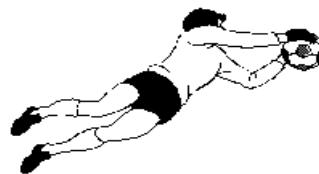
The best prevention is a postural screening once a year between the ages of 10-14. A curve is most likely to appear during this time of rapid growth. Finding it



early is important for the best treatment.

"CURVATURE-OF-THE SPINE"

What is it?



- ➲ A curve in the spine from front to back is called KYPHOSIS or ROUNDBACK.
- ➲ A side-to-side curve, called SCOLIOSIS, is the type which most often needs treatment.

What causes it?

- ➲ In most cases the cause is unknown. It cannot be prevented.
- ➲ Sometimes it runs in families.
- ➲ Girls need treatment more often than boys.
- ➲ It is not contagious.

Can you feel it?

- ➲ No, not in the early stages.
- ➲ It is even difficult to see in the early stages unless you know exactly what to look for.

⌚ pain and arthritic symptoms

How is it treated?

⌚ **Most people with a mild curve will only need medical observation.**

⌚ If the curve grows worse, a back brace is worn until bone growth stops. This does not limit most activities. Special exercise may also be included.

⌚ In extreme cases, spinal surgery is performed.

What if it is not treated?

It is possible that medical problems will occur later in life which can include:

⌚ obvious physical deformity



⌚ heart and lung disorders.

How is the screening done?

⌚ A simple 30 second observation of the back: first standing, then bending forward.

⌚ Screeners look for any unevenness of shoulders, hips, or one side of the back.

⌚ Shirts are removed for better viewing. Boys and girls are screened separately. Girls should wear a two-piece bathing suit or a halter top and shorts.

Where is the screening done?

⌚ Usually in the privacy of the school nurse's office or small physical education room. The Postural Screening Program is conducted in Massachusetts schools in grades 5-9. It serves to assist in the early detection of spinal problems. The school does not provide treatment, but can direct those who should have further attention to appropriate medical help.

POSTURAL SCREENING PROGRAM



One out of every ten young people ages 10-14 will develop some "curvature-of-the-spine"... **But most will not need treatment. Getting checked early can** help avoid a serious problem.

A School Health Service of the Massachusetts Department of Public Health

5.21 INITIAL LETTER TO PARENTS

SAMPLE

SCHOOL SYSTEM LETTERHEAD

Dear Parent or Guardian,

The _____ School will be doing an annual Postural Screening on
_____.

The purpose of this is to find early signs of possible spinal problems in children in grades 5-9. It is not a diagnostic service but a program to identify young people who should have further medical evaluation.

If your child has any unusual findings, you will be notified and asked to take the child to a physician as a precaution. The majority of students exhibit no findings. If nothing unusual is found, we will not be contacting you again until the screening next year.

Female children are asked to bring a TWO-PIECE SWIMSUIT OR HALTER TOP AND SHORTS to school the day of the screening. This type of clothing permits more accurate observation of the back.

If you have any questions, please contact me at _____.

Sincerely,

(School Physician/Nurse)

5.22 FOLLOW-UP LETTER TO PARENTS

SAMPLE

SCHOOL SYSTEM LETTERHEAD

RE: Child's Name:

Date:

Birth Date:

Grade:

Dear Parents,

Your child, _____, recently participated in the Postural Screening program which is recommending that he/she be seen by a physician. This program is not a diagnostic service, but does provide screening for postural problems, some of which may need medical attention. Therefore, it is recommended that your child be seen by your family physician, pediatrician, or orthopedist. The *National Scoliosis Foundation* is also available to assist you and/or your family doctor or pediatrician in referral to a private orthopedic specialist for an examination. The *National Scoliosis Foundation* provides referral and information services free of charge and is located at 5 Cabot Place, Stoughton, MA 02072. They may be reached by telephone at (781) 341-6333 or by FAX at (781) 341-8333.

We would be pleased to work out these details with you for the specialty examination before arrangements are made with the doctor. Please notify me at _____ regarding how you plan to follow this recommendation.

Sincerely,

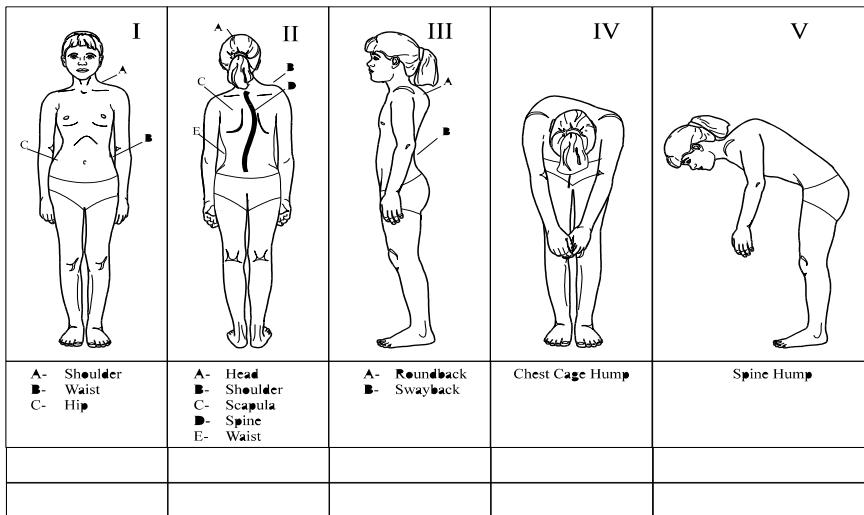
(School Nurse/Physician)

RE: Name of Child:
School:

Date:
Grade:

Dear Physician:

The above named child participated in the Postural Screening Program on



_____ and demonstrated the following positive signs:

We would appreciate your review of the findings and recommendation for the management of this child in school. Please return the bottom half of this page to the School Physician/Nurse detailing your findings and recommendations. Thank you.

Sincerely,

School Physician/Nurse

TO BE FILLED IN BY PHYSICIAN

Name of Child:

School:

Grade: Birth Date: Date:

I have observed the following after examination of this patient. I recommend the following:

Revised: March 26, 2019

Physician's Signature/ Date

5.3 QUESTIONS AND ANSWERS ON POSTURAL SCREENING

1. Q. Why should postural screening be done in the schools? Why annually?

A. Unfortunately, not all children have medical checkups regularly, and when they do, they are not usually checked for early signs of scoliosis or kyphosis. The physical educators and school nurses see these children routinely and are knowledgeable about the musculo-skeletal system as well as growth and development. Screening must be done annually in grades 5 through 9 because young people in this age range are in a growth spurt, and mature at different rates. Minor signs can become major problems quickly with the rapid growth in this age range.

2. Q. What percentage of the population has scoliosis or kyphosis?

A. About 3.5% of the population has a curve that requires treatment. A higher percentage of the population has some degree of curve, but not enough to warrant treatment.

3. Q. How can physical educators and school nurses insure effective postural screening programs in their schools?

A. In a new screening program the most efficient way to get an accurate screening with a good correlation of clinical results is to have help with this test. It is invaluable to have someone who is experienced in screening and has helped with other screening programs present at a first screening in a new area or with new personnel. This experienced person aids in establishing criteria of normal versus abnormal.

4. Q. What is the role of the school physician in the postural screening program?

A. The school physician can make it known to his/her colleagues that the school is carrying out a postural screening program and can prepare them to receive referrals. The school physician may also participate in rescreening before referrals are made.

5. Q. Why is it important to keep statistics about the postural screening program?

A. Statistics are very important because with the large number of children that can be screened in school programs, we can determine the true incidence of scoliosis and kyphosis at each age. In addition, we can determine what impact early detection has on preventing progressive spinal deformity and reducing the need for surgical intervention.

6. Q. What is the difference between scoliosis and kyphosis?

A. *Scoliosis* is a lateral curvature of the spine whereas *Kyphosis* is a front to back curvature. In scoliosis the hump is off to the side whereas with kyphosis it is in the midline of the back. Early signs of scoliosis occur with the same frequency in girls and boys. However the scoliosis that goes on to require treatment affects girls more often than boys. Kyphosis occurs more often in boys than in girls. The cause of most scoliosis and kyphosis is unknown.

7. Q. Are scoliosis and kyphosis painful?

A. Not when they are developing, however, if untreated, severe cases do lead to severe pain in later years.

8. Q. Can poor posture cause some curvatures?

A. Poor posture does not cause scoliosis or kyphosis or affect the progress of the curves.

9. Q. Is there any way to prevent scoliosis and kyphosis from occurring?

A. The best way to prevent these curves from becoming severe problems is early detection and prompt treatment. Treatment may include observation and exercises for mild curves, bracing and exercises for moderate curves, and surgery for severe curves. The goal is to obtain treatment when curves are minor and whenever possible prevent them from becoming severe.

10. Q. Can exercise prevent mild scoliosis from getting worse?

A. The factors that determine the progression of these curves are unknown. There is no evidence that an exercise program alone will modify the progression of curves. Exercises may be used to keep the back supple. Those wearing braces usually perform exercises to keep the curve flexible, thus enabling the brace to be more effective.

11. Q. What is the Department of Public Health's policy regarding utilization of Chiropractic services?

A. The Massachusetts Department of Public Health is responsible for setting up the guidelines and protocols for the Postural Screening program conducted in the Commonwealth's public school systems. These protocols include an initial screening by physical education teachers. Children exhibiting positive signs are then referred to and re-screened by the school nurse. The school nurse then refers all children with positive signs to the child's family physician or pediatrician for diagnosis, treatment and, if necessary, referral to a specialist. Chiropractic assistance in the school postural screening program or referral to a Chiropractor for diagnosis or treatment, are not part of the established protocols.

12. Q. What is the Department of Public Health's recommendation on gender issues in the screening process?

A. The Department of Public Health recommends that if possible, arrange to have screener and students of the same sex. Recommendations also include the use of two or more trained personnel whenever possible.

13. Q. Are there any Postural screening student teaching aides?

A. Yes. The Massachusetts Department of Public Health recommends the video "**Growing Straighter and Stronger**" developed by the National Scoliosis Foundation Inc. School systems are encouraged to purchase their own video by contacting the "National Scoliosis Foundation Inc.", at the following address::

National Scoliosis Foundation Inc.
5 Cabot Place
Stoughton, MA. 02072
Telephone (781) 341- 6333 FAX Number (781) 341- 8333

14. Q. Can children with kyphosis and scoliosis participate in sporting activities?

A. With physician knowledge and approval, children may participate in sporting activities. Some restrictions may apply for contact sports. Contact the family physician or pediatrician for specific details.

15. Q. Can Registered Nurses obtain CEU's for attending this training?

A. The School Health Institute will provide 3.0 contact hours for registered nurses (R.N.) that attend its Postural Screening program

16. Q. Can parents refuse to have their children screened?

A. The Massachusetts Department of Public Health recognizes the parental right to refuse screening services offered through a comprehensive school health program. Postural screening is a mandated program. The statute (M.G.L. c71, s57) states that "...Any child shall be exempt on religious grounds from these examinations upon written request of parent or guardian on condition that the laws and regulations relating to communicable diseases shall not be violated." If a parent refuses to allow the school to posturally screen their child for reasons other than on religious grounds as stated in the statute, it is recommended that the parent provide the school nurse (R.N.) with written documentation that their child has been posturally screened by the family physician. The documentation should include the date of the screening, the findings and the signature of the physician. In the rare event that a parent refuses to provide documentation on a postural screen from their family physician, the school nurse (R.N.) should maintain a written record of the attempts made to inform parents of the importance of having this postural screening completed for their child.