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# Mandated Screening Workshop Handbook

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*Provided by*

**Massachusetts Department of Public Health (MDPH)**

**School Health Institute for Education and Leadership Development (SHIELD)**  
Boston University School of Public Health

**Continuing Nursing Education Provider Unit**  
Boston University School of Medicine





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## Mandated Screening Training Packet

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**Important note:** The materials in this packet summarize the key information School Nurses need to plan and conduct their mandated health screenings of school-aged children in Massachusetts. It is intended to be used as a quick reference *only*. Massachusetts School Nurses are responsible for knowing the detailed statutes, regulations and guidelines for all health screenings; the links are listed below. For complete information on screening regulations and guidelines see the MDPH School Health Screening site at <http://www.mass.gov/eohhs/gov/departments/dph/programs/community-health/primarycare-healthaccess/school-health/school-health-screening.html>

### **105 CMR 200 Physical Examination of School Children:**

<http://www.mass.gov/eohhs/docs/dph/regs/105cmr200.pdf>

### **Massachusetts General Laws (MGL) c71, s57 (Statute):**

<https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXII/Chapter71/Section57>

### **BMI Screening Guidelines:**

<http://www.mass.gov/eohhs/docs/dph/com-health/school/bmi-screening-guidelines-for-schools.pdf>

### **Postural Screening Manual:**

<http://www.mass.gov/eohhs/docs/dph/com-health/school/psmanual04.pdf>

### **Vision Screening Protocol:**

<http://www.mass.gov/eohhs/docs/dph/com-health/school/vision-letter.pdf>

### **Pre-School Screening Protocol:**

<http://www.mass.gov/eohhs/docs/dph/com-health/school/preschool-vision-protocols.pdf>

**School Health Manual – View Health Assessment- Chapter 5** (includes hearing screening details):

<http://files.hria.org/files/SH3001.pdf>

## Vision, Hearing, Height, Weight, BMI, and Postural Screening Guidelines

	Vision			Hearing	Ht, Wt, BMI	Postural
	Distance Acuity	Near Acuity	Stereopsis	Pure Tones		
	Monocular R and L	Binocular	Binocular			
KG*	X	N/A	X	X		
1st	X	X	X	X	X	
2nd	X	X	X	X		
3rd	X	X	X	X		
4th	X	X			X	
5th	X	X				X
6th	?	?		?		X
7th	?	?		?	X	X
8th	?	?		?		X
9th	?	?		?		X
10th	?	?		?	X	
11th	?	?		?		
12th	?	?		?		

\*KG and incoming students should have vision screened within 30 days if they present **without** a Preschool Vision Screening or complete eye exam.

Schools must also conduct vision and hearing screenings in at least one grade from grades 6th - 8th and one grade from grades 9th to 12th

Resources:

<http://www.mass.gov/eohhs/gov/departments/dph/programs/community-health/primarycare-healthaccess/school-health/school-health-screening.html>

<http://www.mass.gov/eohhs/docs/dph/regs/105cmr200.pdf>

REVISED: 11/2016 SAT

# **Body Mass Index Screening**

## **BMI Screening of Children and Adolescents in the School Setting**

### **Checklist**

- Notify students, parents or legal guardians, school staff and administrators and school physician prior to implementation of the screening program.
  - Provide educational materials on healthy eating and active living to parents and guardians. (Use the resources provided in Appendix D. Resources of these guidelines and visit [www.mass.gov/massinmotion/](http://www.mass.gov/massinmotion/) for more information).
  - Recruit and train all staff who will be involved with the screening program.
  - Review confidentiality and communication issues with screeners.
  - Make sure that appropriate equipment is available and has been properly maintained and calibrated.
  - Select and prepare appropriate space for screening. Be sure to provide a private setting (not an open space such as a gymnasium) for measurement of heights and weights. Ensure student privacy and confidentiality when recording the results of the screening
  - Use appropriate tools for documenting and calculating the results
  - Submit BMI results to MDPH using appropriate on-line data reporting tools. Locate the link in the memo found below for instructions to submit data from all public schools on an annual basis at <http://www.mass.gov/eohhs/docs/DPH/com-health/school/bmi-reporting-data-memo.pdf>
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## IV. Equipment and Tools for Proper Measurement of Height and Weight

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### A. Required Equipment



For measuring weight, use a properly calibrated balance-beam or strain-gauge floor scale (mechanical or digital) that:

- can weigh in 0.1 kilogram or ¼pound increments;
- has a stable platform;
- has the capacity to be “zeroed” after each weight is taken; and
- has the capacity to be calibrated.

For measuring height, use a stadiometer that:

- is able to read to 0.1 centimeter or 1/8 inch;
- has a large stable base; and
- has a horizontal headpiece that is at least 3 inches wide that can be brought into contact with the most superior part of the head (i.e., the crown).
- Movable headpieces which are attached to balance-beam scales are not recommended for use.



To ensure an accurate BMI calculation:

- if you use **inches** for height, please use **pounds** for weight
- if you use **centimeters** for height, please use **kilograms** for weight

### B. Maintenance and Calibration of Equipment

- Check the equipment regularly to ensure accurate measurements.
- Scales should be calibrated on a routine basis.
  - Re-calibrate if the scale has been moved to a different surface.
  - Portable digital scales, frequently moved, should be calibrated monthly.
  - For scales that are not moved or used excessively, calibrate annually by contacting the local Department of Weights and Measures (<http://www.mass.gov/ocabr/government/oca-agencies/dos-lp/>).
- Check the stadiometer regularly to be sure the base is stable and measures are accurate.

## V. Protocols for Measuring Height and Weight

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To accurately weigh and measure students, the following procedures should be followed:

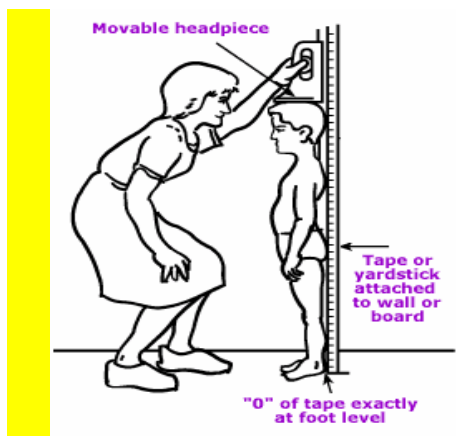
### A. Weight

- Make sure that the scale is on a firm surface, preferably an uncarpeted floor.
- Set the scale at zero reading.
- Have student remove shoes.
- Have student remove heavy outer clothing, such as sweater, jacket, vest and belts.
- Have student empty their pockets of heavy objects such as cell phones or iPods.
- Have student step on scale platform facing away from the scale, with both feet on platform, and remain still.
- Read weight value to nearest  $\frac{1}{4}$  pound or 0.1 (1/10) kilogram.
- Record weight immediately on the data form before student gets off the scale.
- If using a balance-beam scale, return weights to zero position.

### B. Height

- Have student remove shoes and hat.
- Have student remove hair ornaments, buns, and braids to extent possible (note on chart if unable to obtain an accurate measurement, don't "guesstimate" height of hair-do).
- Have student stand on footplate portion with back against stadiometer rule.
- Have student bring legs together, contact at some point (whatever touches first).
- Make sure that the knees are not bent, arms are at sides, and shoulders are relaxed.
- Make sure that the back of the student's body touches/has contact with stadiometer at some point.
- Make sure that the body is in a straight line (mid-axillary line parallel to stadiometer). Check to see if the student's head is in appropriate position. You should be able to draw a straight (perpendicular) line from the back of the board, past the ear opening and the top of the cheek bone. You can use a pencil or ruler to help check the line. This is called the Frankfort plane.

- Lower headpiece snugly to crown of head with sufficient pressure to flatten hair.
- Read value at eye level in an upward direction (from lowest to higher number).
- Measure to nearest 0.1 centimeter or 1/8 inch and record value.
- Repeat measurement, having the child line up again, and record appropriate value immediately on data form.
- Repeat measurements should agree within 0.5 (1/2) centimeter or 1/4 inch. If they do not, repeat measurement a third time.



(PA Department of Health, 2004)

### Reading Height Measurements

- Read at eye level
- Count visible lines
- If the arrow points at a line, count that line
- If the arrow points between lines, read to nearest line
- Use .5 (1/2) line as guide
- Read in upward direction (from lower to higher number)

## VI. Measuring Non-Ambulatory Students

Assessing the weight status of non-ambulatory students with special health care needs requires special consideration as children may not be able to stand up or lie flat. Alternate methods are available for measuring children requiring special accommodations.

(See Appendix B for more detailed information on measuring non-ambulatory students.)

## **APPENDIX B. Guidelines for Measuring Non-Ambulatory Students**

The following is a brief sample of guidelines when measuring non-ambulatory students with special health care needs. These guidelines were compiled by Judy Slaked, Project Director at the Brown University Institute for Community Health Promotion.

Assessing growth status of students with genetic or other medical conditions requires special consideration. In the event that it is necessary to collect height and weight information in the school setting, be sure that the screening is conducted by a health care professional such as the school nurse, occupational therapist or physical therapist. In addition, be sure that parents or legal guardians are also informed in advance of the screening.

In general, the purpose of measurements for children who may have atypical growth patterns should be for monitoring the progress of the individual child over time and not used to compare the child with others, even those who may have similar conditions. Remember that BMI is used to indicate measures of body fatness. With some conditions that involve muscle wasting and abnormal bone growth, the standard BMI reference percentile curves would not be an appropriate comparison point.

### **Possible options for assessing weight for children who cannot stand**

- Use a bucket seat scale if child is within size and weight limits for the equipment.
- Use a chair scale.
- Use a bed scale.
- Use a platform scale on which a wheelchair can be placed (subtract the weight of wheelchair).
- A caregiver may hold a child on the scale, and then the caregiver's weight is subtracted (make note of procedure used to obtain weight, due to potential for error).

### **Assessing stature and length in special situations**

#### **1. For children unable to stand but generally normal in body development and growth, their recumbent (lying down) length can be taken as follows:**

- Two people are needed.
- One person (parent or caregiver) holds crown of head against headboard.
- Check the head position – Frankfort plane (same as for standing height: head positioned so that imaginary perpendicular line can be drawn from the board surface through the middle of ear canal opening across side of face and lower bone of eye socket).
- Trunk and pelvis should be aligned straight along measuring board.
- The second person straightens the legs, holds the child's ankles together with toes pointed directly upward.
- The footboard is moved firmly against soles of **both** feet.
- The measurement made to nearest 1/8 inch or 0.1 centimeter.

- Repeat measurements until two agree within 1/4 inch or 0.5 (1/2) centimeter.

**2. For children with normal development but unable to stand, arm span can be measured. The arm span, when accurately measured, should equal stature 1:1 if growth is normal.**

- This method is appropriate for children older than age five, with involvement of the lower body only (e.g., some children with myelomeningocele or lower body paralysis).
- Arm span measurement requires two people to complete measurements.
- The child extends both arms while the anthropometer or measuring rod is held across the back, extended from the tip of one middle finger to the other (Trahms, 1997).
- Arms are held perpendicular to body.
- The anthropometer should touch the tip of the extended middle fingers of the right and left hands.
- Repeat measurements.
- This measure provides information about rate of growth (arm span to height ratio is about 1:1 with typical development).

NOTE: Arm span measurements can be plotted on the CDC charts for stature-for-age or length-for-age.



**Arm Span Measurement**

This is a photo of correct technique for arm span measurement. Note that the child's arms are perpendicular to his body and the anthropometer is touching the extended middle fingers of the right and left hands.

**3. For children unable to stand and/or have severe contractures, their sitting height can be measured.**

- Use a stadiometer and surface for sitting (typically 50 cm x 40 cm x 30 cm, which can be rotated depending on the size of child).
- Have the child sit on the base as erectly as possible.
- Buttocks should be in contact with stadiometer board, as well as the back and shoulder blades if possible, with back as straight and erect as possible.

- Legs should hang freely, with hands on thighs, and knees pointed straight ahead.
- Head should be positioned in the same manner as standing height (Frankfort plane).
- Repeat the measurement until two agree within 1/4 inch or 0.5 (1/2) centimeter.
- After taking the measurement, subtract the height of sitting surface from the reading to estimate the sitting height.
- Plot this value to indicate the individual pattern of growth, even though a percentile will not be indicated.

#### 4. Segmental lengths: Upper arm length and lower leg length

- Some children for whom stature measurements are impossible can use segmental lengths (for example, upper arm length and lower leg length) to monitor growth.
- Upper arm length is not as affected by a high spinal lesion as stature. It is recommended for children with Spina Bifida who are bedridden, wheelchair bound, or for other children unable to stand or stretch out on the length board ([Cloud, 1997](#); [Scott, 1997](#)).
- The arm is straight and positioned along the side of the body.
- The elbow is bent so that the lower arm is at a right angle (90 degrees) to the upper arm.
- Flexible metal or sturdy plastic measure tape is placed with the tip at the end point of the shoulder bone (acromial process).
- The tape is brought straight down along upper arm to tip (point) of the elbow.
- Record the measurement to nearest 1/8 inch or .1 centimeter.
- Repeat measurements should fall within 1/4 inch or .5 (1/2) centimeters.
- For children with cerebral palsy or other conditions that cause or result in [contractures](#), the lower leg length can be measured using either a steel or plastic tape measure or an anthropometer. This is a difficult measurement to take and, when taken, should be used with children ages 6-18 years old ([Cloud, 1997](#); [Scott, 1997](#); [Chumlea, Guo, Steimbaugh, 1994](#)).
- These measurements may be plotted on the CDC charts for stature-for-age or length-for-age. Even if measurements fall below the 5th percentile, they establish a growth pattern over time. Reference data exist for some segmental lengths (e.g., knee height), however they are old and do not include children with special health care needs or children who are non-ambulatory (and therefore may have different growth patterns) ([Chumlea, et al, 1994](#)).



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## **A. Sample Pre-Screening Notification Letter to Parents and Legal Guardians**

[School Letterhead]

[Date]

Dear Parent or Legal guardians:

This letter is to let you know about the Body Mass Index (BMI) Screening Program that will be happening soon at your child's school.

A Body Mass Index, or BMI, is a measure that is used to show a person's "weight for height for age." It is calculated using an individual's height and weight. Just like a blood pressure reading or an eye screening test, a BMI can be a useful tool in identifying possible health risks, but it does not provide a diagnosis.

Massachusetts schools have taken heights and weights of students each year since the 1950's. According to the state's new BMI screening regulations (which were approved in 2013), schools must now collect the heights and weights of students in grades 1, 4, 7 and 10. BMI data collected for all children in these grades will be gathered and reported to the Massachusetts Department of Public Health as a combined number. No individual student BMI results will be shared with anyone other than to you.

The school nurse will supervise your child's screening and will make sure your child's privacy is respected at all times. The results of your child's height, weight, and BMI measurements are strictly confidential – the results will be kept in your child's school health record and will not be shared with anyone without your written permission.

This year, the BMI screening will take place in [*insert month of screening*]. All children in grades 1, 4, 7 and 10 will have their height and weight measured and will have their Body Mass Index (BMI) calculated at this time. Parents and/or legal guardians can request in writing that their child not participate in the screening. This letter should be addressed to the school nurse.

Please feel free to call me at [*insert phone number*] with any questions you may have about the BMI screening. Additional information about children's wellness and fitness is available upon request or you may access the state's resources at [www.mass.gov/massinmotion/](http://www.mass.gov/massinmotion/).

Sincerely,

School Nurse [*you may also consider having the principal co-sign the letter*]

# Hearing Screening





## Pure Tone Audiometer Hearing Screening Protocol

- Plug in/turn on audiometer 10 minutes before beginning screening
- Seat child at 90 degree angle from screener and audiometer
- Put head phones on child with **Red** ear piece on **Right** ear.
- Adjust headband
- Instruct student to raise hand when he/she hears sound/beep/tone, and to put hand down when tone stops.
- Start with **Right** Ear
  - Start at **1,000 HZ** at **50 dB** Right Ear
  - Go to **30 dB** at **1,000 HZ**
  - Go to **20 dB** at **1,000 HZ**
  - Next go to **2,000 HZ** at **20 dB**
  - Then go to **4,000 HZ** at **20 dB**
- Switch to **Left** Ear
  - Start at **20 dB 4,000 HZ**
  - Go to **20 dB** at **2,000 HZ**
  - Go to **20 dB** at **1,000 HZ**
- **Test complete!**
- Note:
  - If at any frequency (Hz) level, the child does not hear the sound, increase the decibels (loudness) by 10 and repeat process until child hears tone.
  - Document this finding: right ear, 2000 Hz, 40 dB.
  - Any finding that does not reach objective of 20 dB suggests need for retesting at later date, or referral.

**Student Name:** \_\_\_\_\_ **D.O.B:** \_\_\_\_\_ **Grade:** \_\_\_\_\_

Dear Parent/Guardian:

Your child, \_\_\_\_\_, was recently given a Hearing Screening test (puretone) on (Date) \_\_\_\_\_. The results indicate the need for further evaluation and possible treatment. We recommend that you take your child to his or her physician or to an ear specialist for further evaluation.

**Initial Test Date:** \_\_\_\_\_ **Retest Date:** \_\_\_\_\_

**Results:** Outside of Normal Limits

<b>Right</b>	<b>DB</b>	<b>Left</b>	<b>DB</b>
1000 Hz:		1000 Hz:	
2000 Hz:		2000 Hz:	
4000 Hz:		4000 Hz:	

*Please give this form to your doctor at the time of your appointment and return it to your school nurse.*

*Thank you.*

\_\_\_\_\_  
**School Nurse**

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**DOCTOR'S REPORT**

**Health Care Provider:**

\_\_\_\_\_  
**Provider Phone/Address:**

\_\_\_\_\_  
**Date of Exam:** \_\_\_\_\_

**Diagnosis/Significant Findings:**

**Treatment Plan:**

None at this time \_\_\_\_\_

Observation \_\_\_\_\_

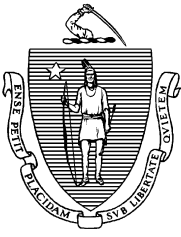
Next Scheduled Follow-up: \_\_\_\_\_

**Recommendations Pertaining to School Work:**

\_\_\_\_\_  
**Physician Signature**

\_\_\_\_\_  
**Date**

# Vision Screening



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Executive Office of Health and Human Services  
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To: School Nurses, School Physicians, Primary Care Providers and Other Interested Parties

From: Massachusetts Department of Public Health

SUBJ: Massachusetts Vision Screening Protocols

DATE: September 30, 2016

**MEMORANDUM**

The Massachusetts Department of Public Health is pleased to provide the attached vision screening protocols, preschool through grade 12, for school districts throughout the Commonwealth. The Department, working in partnership with expert representatives from the ophthalmology and optometry professions, has established these standardized vision screening protocols to update the current school screening practice. The protocols described below represent evidence-based methodology and current best practice in the field of vision screening. They are intended to facilitate the identification of children with common vision problems as early as possible, when treatment is most effective, thus supporting educational achievement.

We acknowledge there may be issues, such as the timing of the screening within your district and/or training of personnel, both of which may play a significant role in the implementation of these new protocols. We remain confident in the knowledge that all school districts are committed to conducting this important population based screening program in the best manner possible.

**Training in the New Protocols:** The Department, through its Boston University School Health Institute for Education and Leadership Development ([www.shield-bu.org](http://www.shield-bu.org)) will continue to provide additional continuing education courses for primary care providers, their office staff, and school nurses on the preschool through grade 12 protocols.

## PRESCHOOL VISION SCREENING PROTOCOLS

In 2004, the Massachusetts Legislature enacted Chapter 181 of the Acts of 2004 “*An Act Relative To Eye Examinations For Children*” which amended Massachusetts General Law, Chapter 71, and Section 57. An important requirement of the amendment is that “*Upon entering kindergarten or within 30 days of the start of the school year, the parent or guardian of each child shall present to school health personnel certification that the child within the previous 12 months has passed a vision screening conducted by personnel approved by the department of public health and trained in vision screening techniques to be developed by the department of public health in consultation with the department of education...For children who fail to pass the vision screening and for children diagnosed with neurodevelopmental delay, proof of a comprehensive eye examination performed by a licensed optometrist or ophthalmologist chosen by the child’s parent or guardian indicating any pertinent diagnosis, treatment, prognosis, recommendation and evidence of follow-up treatment, if necessary, shall be provided.*”

This applies to every child in the Commonwealth regardless of where the student is enrolled. Implementation is occurring across the Commonwealth in the offices of primary care providers and many school districts, effective this September.

## KINDERGARTEN SCREENING PROTOCOLS

Those individuals familiar with the recent preschool age initiative will be happy to know that the protocols are the same when screening any child in kindergarten:

- **Screening of children entering kindergarten who do not present a vision screening certificate:** Schools should screen any kindergarten child who does not present to school health personnel certification that they, within the previous 12 months, have passed a vision screening. It is strongly advised that no child of preschool or kindergarten age go longer than 12 months without a vision screening.
- **Linear Distance Visual Acuity Critical Line Standard:** One major change to the kindergarten protocol is the Critical Line used for testing. **The Critical Line standard is now the 20/30 line for any child from 48 months and older through Grade 12** (Pretest Binocularly/Test Performed Monocularly).
- **Ocular Alignment and Stereopsis Assessment:** The revised protocol also includes an Ocular Alignment and Stereopsis assessment using the Random Dot E for children in kindergarten. This test is done binocularly with polarized glasses on.
- **Use of Machines:** The Department is not recommending the use of machines when screening preschool and kindergarten age children.

## **GRADES 1 THROUGH 12**

Those individuals familiar with the current school vision screening protocol will notice changes that should improve the specificity/validity of the screening while reducing the time it takes to screen an individual child:

- **Linear Distance Visual Acuity Critical Line Standard:** The vision of each student in the public schools to be screened in the year of school entry, annually through grade 5 (or by age 11 in ungraded classrooms), once in grades 6 through 8 (or ages 12 through 14 in ungraded classrooms) and once in grades 9 through 12 (or ages 15 through 18 in ungraded classrooms). The Critical Line of 20/30 is now the standard threshold to be used for screening all children from age 48 months and older through Grade 12 (*Performed Monocularly*).
- **Linear Near Visual Acuity Critical Line Standard:** The vision of each student in the public schools to be screened in the year of school entry, annually through grade 5 (or by age 11 in ungraded classrooms), once in grades 6 through 8 (or ages 12 through 14 in ungraded classrooms) and once in grades 9 through 12 (or ages 15 through 18 in ungraded classrooms). The Critical Line of 20/30 is the standard threshold to be used for screening (*Performed Binocularly*).

*Please note: Those using a machine for testing linear distance and linear near visual acuity in Grades 1 through 12 should not use the PLUS LenseTest.*

- **Ocular Alignment and Stereopsis Assessment:** The revised protocol also includes an Ocular Alignment and Stereopsis assessment using the Random Dot E for children in **Grades 1 through 3**. This test is done binocularly using polarized glasses.

*Ocular Alignment and Stereopsis assessment generally should not be part of the routine vision screening protocol for children in Grades 4 through 12.*

However, the Department strongly advises that any child, whose residence was previously outside the Commonwealth prior to enrollment, should be screened using this protocol. It is also recommended that a child, who has transferred into your school district and cannot present past evidence of having completed this part of the screening, be screened in the same manner. The Department expects that over time, as this part of the protocol is implemented in Grades 1 through 3 throughout the Commonwealth, the number of children requiring this screening will be reduced.

*Please note: Machine testing for Ocular Alignment and Stereopsis Assessment is not recommended.*

## **NOTE: INSTRUMENT-BASED VISION SCREENING IS APPROVED ONLY FOR 3-5 YEAR OLDS**

The Department of Public Health has consulted with its pediatric ophthalmology/optometry consultants and with the Department of Elementary and Secondary Education as required by statute. We will allow school health programs to accept documentation from a Primary Care Provider (PCP) who conducts a vision screening for any child ages 3-5 and who uses this

technology. Also, in the absence of a PCP's written record on entry into kindergarten indicating the screening has been done; school nurses may conduct this screening on children in this age group with this technology. Vision screening documentation is required by statute for children entering kindergarten (MGL Chapter 71 Section 57).

This position is consistent with the "*American Academy of Pediatrics (AAP), Instrument-Based Pediatric Vision Screening Policy Statement*" (November 2012) (<http://pediatrics.aappublications.org/content/130/5/983.full>). PCP's can document the screening on the "*Massachusetts School Health Record – Health Care Provider's Examination*" form (<http://www.mass.gov/eohhs/docs/dph/com-health/school/health-record-form.pdf>) or issue written proof of screening results in another form. According to the AAP, Instrument-Based Pediatric Vision Screening Policy Statement (2012), these screening devices are recommended as an alternative to visual acuity screening with vision charts for this 3 through 5 year old age group.

Regardless of the type of photoscreening or autorefraction system used, it is recommended that the screener know how to use and apply the technology properly understanding the limitations of the instrument and test in relation to the children's age. It is suggested that if your school acquires one of these devices that staff are knowledgeable and trained in the use of the technology and insure privacy with any transfer of electronic data into a student health record.

**NOTE: INSTRUMENT-BASED VISION SCREENING IS NOT APPROVED FOR CHILDREN AGE 6 OR OLDER**

# Massachusetts Vision Screening Protocol

## Preschool and Kindergarten:

Evaluate Linear Distance Visual Acuity and Stereopsis

Function to be Evaluated	Specific Test	Recommended Testing Procedure	Passing Criterion
<p><b>1) LINEAR DISTANCE VISUAL ACUITY</b></p>	<p><b>MassVAT</b> (Massachusetts Visual Acuity Test) flip cards with HOTV letters or Lea symbols</p> <p>or</p> <p><b>Wall Chart</b> HOTV or Lea symbols wall chart</p>	<p><b>Test distance:</b> 10 feet</p> <p><b>Pretest:</b> <i>(Performed Binocularly)</i> Test child's ability to perform the test by having child identify or match all 4 letters or symbols when presented up close.</p> <p><b>Test procedure:</b><i>(Performed Monocularly)</i> Test child's ability to identify or match optotypes on the critical line.</p> <p><b>CRITICAL LINE:</b> <b>20/40 at 36 to 47 months</b> <b>20/30 at 48 months and older</b></p>	<p>Child must identify or match 4 out of 5 letters or symbols on the critical line with each eye tested <i>monocularly</i>, being careful to watch for peeking.</p>
<p><b>2) OCULAR ALIGNMENT and STEREOPSIS</b></p>	<p><b>Random Dot E</b></p>	<p><b>Test distance:</b> 4 feet</p> <p>All testing, including pretesting, should be done binocularly with the polarized glasses on.</p> <p><b>Pretest:</b> Test child's ability to perform the test by having the child identify the location of the 3-dimensional E correctly on 4 out of 5 presentations.</p> <p><b>Test procedure:</b> Test child's ability to identify the location of the stereo E. Five presentations should be used, varying the location in a random manner.</p>	<p>Child must locate stereo E on 4 out of 5 presentations. Done <i>binocularly</i> with the polarized glasses on.</p>



# Massachusetts Vision Screening Protocol

Grades 1 through 3: Evaluate Linear Distance/Near Visual Acuity and Stereopsis

Grades 4 through 12: Evaluate Linear Distance/Near Visual Acuity

Function to be Evaluated	Specific Test	Recommended Testing Procedure	Passing Criterion
<b>1) LINEAR DISTANCE VISUAL ACUITY</b>	<p><b>GRADES 1-3:</b> line letters, HOTV, or tumbling E's</p> <p><b>GRADES 4-12:</b> line letters. Numbers, tumbling E's or HOTV may be used if child is unsure of letters</p>	<p><b>Grades 1-12:</b> Wall chart placed at distance (10 or 20 feet) or testing machine with distance slide</p> <p><b>Test procedure:</b> All acuity tests are performed monocularly. Test child's ability to identify optotypes on the critical line.</p> <p><b>CRITICAL LINE:</b> <b>20/30 Monocular visual acuity</b></p>	<p>Child must identify 80% of the letters or symbols on the critical line with each eye tested monocularly, being careful to watch for peeking. Letters or symbols must not be presented one at a time.</p>
<b>2) LINEAR NEAR VISUAL ACUITY</b>	<p><b>GRADES 1-12:</b> line letters, HOTV, tumbling E's, or numbers</p>	<p>Near card at 14 inches or testing machine with near slide. This test is done with both eyes open.</p> <p><b>CRITICAL LINE:</b> <b>20/30 Binocular visual acuity</b></p>	<p>Child must correctly identify 80% of the letters/symbols on the critical line of the near card or the near slide in the testing machine.</p>
<b>3) OCULAR ALIGNMENT and STEREOPSIS</b>	<p><b>GRADES 1-3:</b> Random Dot E</p>	<p><b>Test distance:</b> 4 feet</p> <p>All testing, including pre-testing, should be done binocularly with the polarized glasses on.</p> <p><b>Pretest:</b> Test child's ability to perform the test by having the child identify the location of the 3-dimensional E correctly on 4 out of 5 presentations</p> <p><b>Test procedure:</b> Test child's ability to identify the location of the stereo E. Five presentations should be used, varying the location in a random manner.</p>	<p><b>Grades 1-3:</b> Child must locate stereo E on 4 out of 5 presentations</p> <p><b>Grades 4-12:</b> Binocular balance testing does not need to be done</p>

Massachusetts Vision Test School Guidelines (March 2006)  
Grades 1-3 (ages 6 years to 9 years 11 months)

**1. External Observation**

- Note any variances
- Rescreen before referral

**2. Far Vision Screening**

*Objective: Screen at 20/30 monocular distance acuity. Identify 4 out of 5 **HOTV symbols** to pass.*

- Using OPTEC 2000, turn machine on
- Far/near button out –**Far**
- Set slide location at Far **dial 1** for HOTV symbols
- **Right eye on**, left eye off
- Have child look straight in machine
- Read **white** line

**i. T H V T O**

- Right eye off, **Left eye on**
- Read line 6

**i. O T V H T**

- Identify 4 out of 5 to pass

**3. Near Vision Screening**

- Objective: Screen at 20/30 binocular near acuity, identify 4 out of 5 **HOTV Symbols** to pass
- Far/near button out –**Near**
- Set slide location at Near **dial 3** for HOTV Symbols
- Have child look down in machine
- Using **both eyes**, read **yellow** line

**i. T H V T O**

- Identify 4 out of 5 to pass

**4. Random Dot E**

*Objective: Child wearing polarized glasses is able to identify three dimensional object 4 out of 5 times.*

- Have child sit or stand
- Place polarized “magic Glasses” on child. If wearing glasses, put polarized glasses over child’s own eyewear.
- Show **sample** Random Dot E card with raised image. Let child touch picture.
- Practice using **sample** card and **blank stereo** card, at close proximity, shuffle cards behind back and show grey side of cards to child. Ask child to identify the card with the picture that stands out. Practice several times.
- Move to testing distance of 48 inches. Using **test card** and **blank stereo** card, shuffle the cards behind your back and have him identify the card with the image at 4 times in a row, or 4 out of 5 tries, to pass.
- Retest if child does not pass, before referral.

## HOW TO OBTAIN VISION SCREENING SUPPLIES\*

**For consumers** wishing to purchase the supplies required to conduct the screening, please feel free to contact the vendors listed below to compare pricing and to obtain the best value and service. Please know that the vendors listed below are not endorsed or certified but simply recognized as a supplier of the materials required to conduct the screening. The MDPH will update this list from time to time. The vendors are arranged on the list alphabetically.

**For vendors** who provide the full range of supplies and services for conducting the Preschool Vision Screening in accordance with Massachusetts statutes and regulations *who are not listed below*, please contact the Massachusetts Department of Public Health at (617) 624-6022 to be included on the list.

*The Massachusetts Department of Public Health does not endorse any particular vendor but acknowledges that the following vendors can provide the supplies needed to complete the Preschool Vision Screening.*

### SUPPLIES NEEDED TO COMPLY WITH THE 2005 GUIDELINES:

#### 1. MASS VAT DISTANCE SCREENING TEST BOOK -- RECOMMENDED

*10 FOOT DISTANCE SCREENING -- SPIRAL BOUND BOOK*

*ALSO APPROVED HOTV WALL CHART 10 FOOT AND LEA SYMBOL WALL CHART 10 FOOT*

#### 2. RANDOM DOT E KIT

##### AVAILABLE FROM:

##### *MACGILL MAIL ORDER CATALOG*

1000 N. Lombard Rd, Lombard, IL 60148

Tel-800- 323-2841 Fax-800-727-3433

Email: MacGill@MacGill.com

Website: www.macgill.com

##### *PRECISION VISION*

1725 Killkenny Court, Woodstock, IL 60098

Tel-815-975-3999 Fax-815-223-2224

Email: info@precision-vision.com

Website: www.precision-vision.com

##### *SCHOOL HEALTH CATALOG*

865 Muirfield Dr, Hanover Park, IL 60133

Tel-800-323-5465 Fax-800-235-1305

Website: www.schoolhealth.com

ORDER NO. MASSVAT 52523 LEA 52524

**SAMPLE  
School Vision Referral**

Date: \_\_\_\_\_

Dear Parent/Guardian,

School vision screening tests, recently performed at \_\_\_\_\_, indicate that your child, \_\_\_\_\_, was tested (with glasses/contacts on) and did not pass the screening.

Children's eyes can change over a period of time. Perhaps you already have had your child examined by an ophthalmologist. If so, please write a note to that effect and have the enclosed form completed by the eye specialist and return it to the school health office.

If your child has not seen an eye specialist recently, it is advisable to have an examination as soon as possible. When you go, please ask the physician to complete the enclosed form and return it to us.

It is very important that we have this report from the eye specialist to incorporate any recommendations that will assist us in helping your child do his/her best at school.

If you have any questions, please call me at: \_\_\_\_\_.

Sincerely,

\_\_\_\_\_, School Nurse

Enc.



**SAMPLE**  
**School Vision Referral**  
**Second Notice**

Date: \_\_\_\_\_

Dear Parent/Guardian,

Today I am sending you a second notice regarding a vision referral on your child \_\_\_\_\_ . The first referral was sent \_\_\_\_\_. Poor vision can significantly impede your child’s ability to succeed in school.

The Massachusetts School Vision screening program has been one of the most successful initiatives implemented by the Department of Public Health over fifty years ago. Though school testing is “screening” and not diagnostic, school district referral confirmation rates are quite high. In our district last year, \_\_\_\_% of referrals sent and returned for vision confirm a vision disturbance. Comprehensive changes to school vision screening guidelines in Massachusetts include new screening for stereopsis testing which looks at how the two eyes work together and near vision screening, in addition to testing for far vision.

If you have already had your child’s vision checked, please give me a call at \_\_\_\_\_ and let me know what the findings were. If you have already forwarded me the completed referral, let me know and I will try to rectify the situation. If your child has not seen an eye specialist since the original referral was sent, I encourage you to make an appointment and have your child’s vision checked.

I thank you for your attention to this matter and encourage you to call with any questions. Thank you for your attention to this matter.

Sincerely

\_\_\_\_\_, School Nurse

Tel: \_\_\_\_\_

Cc: \_\_\_\_\_, Principal

**School Health Office Letterhead**

**SAMPLE  
School Vision Referral  
Second Notice**

Dear Physician:

Date: \_\_\_\_\_

As you know, school children are screened for vision problems as required by Massachusetts General Law. \_\_\_\_\_ has implemented the Enhanced School Vision Guidelines developed by DPH and released in September 2005, which include far vision (preschool-grade 12, near vision (grade 1-12) and stereopsis for preschool through 3rd grade.

The child indicated below did not pass the following component(s) of the vision screening:

Screening performed	Tool used for Screening	Screening Result	Other (glasses/contacts?)
Linear Distance			
Linear Near			
Stereopsis/Ocular Alignment			
Color (performed only 'as needed')			

Parents of those children failing the screening are asked to take the child to a vision specialist for evaluation. If the child is already under care, we need updated information for the child's school health records.

In order that we may provide any educational adjustments you recommend, please complete the form below and have the parent return the form to the school health office.

Sincerely,

\_\_\_\_\_, School Nurse

Tel.: \_\_\_\_\_

**Child's name:** \_\_\_\_\_ Date of Examination: \_\_\_\_\_

School: \_\_\_\_\_ Grade: \_\_\_\_\_

Brief summary of significant findings: \_\_\_\_\_

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

Prognosis: \_\_\_\_\_ Return Visit recommended in \_\_\_\_\_ months.

I advise the following education adjustments for the child:

- None at present
- Preferential seating in classroom Front \_\_\_\_\_ Rear \_\_\_\_\_
- Glasses for full-time use in school
- Glasses for part-time use in school. Specify: \_\_\_\_\_
- Other recommendations \_\_\_\_\_

Signature: \_\_\_\_\_ Phys./Practice Name: \_\_\_\_\_

Address: \_\_\_\_\_ Telephone: \_\_\_\_\_

# Postural Screening



## **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?

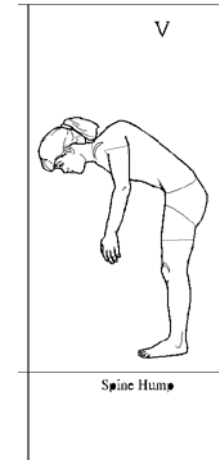
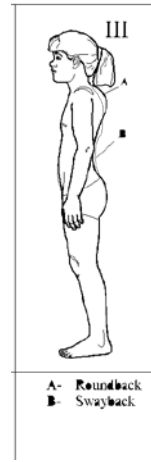
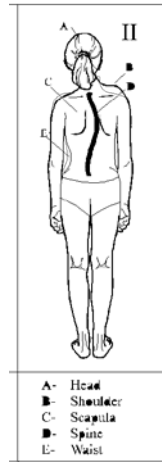
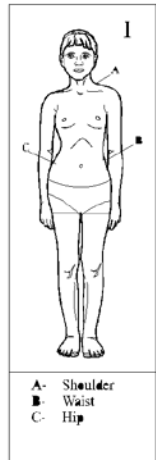
### **Position V**

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 (see page 29) 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

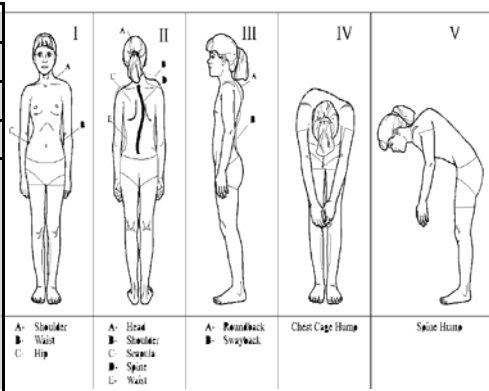
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1. Absentees  
Students who were not screened because of absence should be screened at another time.
2. Exclusions  
Any student who was excluded from screening for any other reason should have his/her reason for exclusion documented.
3. Screening
  - 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 recommendation

**POSTURAL SCREENING WORKSHEET**

School: \_\_\_\_\_  
 Address \_\_\_\_\_  
 Screener: \_\_\_\_\_ P.E. R.N.  
 Grade: \_\_\_\_\_ Class Size: \_\_\_\_\_ Date: \_\_\_\_\_

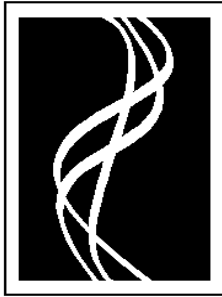


**Under Current Medical Treatment**

Y/N	Refer for Reason Date				
	Rescreening Screener:	Date:			
	Follow Up				
Y/N	Confirm Findings Y/N	Date Family Contacted	Date Referred to Physician	Physician's Diagnosis & Treatment Report Done	Needs School Follow Up

Student Name	Sex	DOB	I	II	III	IV	V	Y/N	Y/N	Confirm Findings Y/N	Date Family Contacted	Date Referred to Physician	Physician's Diagnosis & Treatment Report Done	Needs School Follow Up

From: Training Material Postural Screening Program. 1996. Massachusetts Department of Public Health. Downloaded 11/28/2016 from <http://www.mass.gov/eohhs/docs/dph/com-health/school/psmanual04.pdf>



# 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.

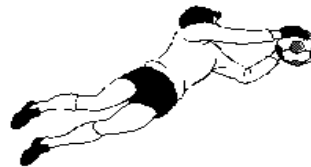
The best prevention is a postural screening once a year between the ages of 10-14. A curve is most likely to appear during this time of rapid growth. Finding it



early is important for the best treatment.

## "CURVATURE-OF-THE SPINE" What is it?

A in the from to



curve spine front 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





# SAMPLE POSTURAL SCREENING 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)

# SAMPLE POSTURAL SCREENING FOLLOW-UP LETTER TO PARENTS

SAMPLE

## SCHOOL SYSTEM LETTERHEAD

RE: Child's Name:  
Birth Date:  
Grade:

Date:

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,

\_\_\_\_\_

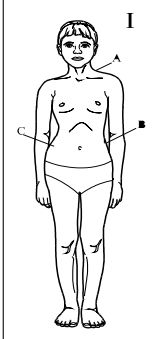
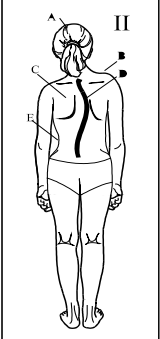
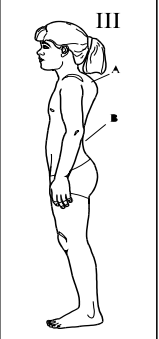
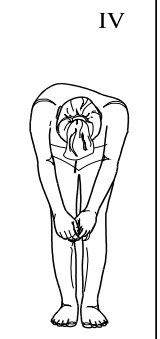

(School Nurse/Physician)

Date:

RE: Child \_\_\_\_\_ DOB \_\_\_\_/\_\_\_\_/\_\_\_\_ Grade \_\_\_\_\_

Dear Physician:

The above child participated in the Postural Screening Program on \_\_\_\_\_ and demonstrated the following positive signs:

				
A- Shoulder B- Waist C- Hip	A- Head B- Shoulder C- Scapula D- Spine E- Waist	A- Roundback B- Swayback	Chest Cage Hump	Spine Hump

Please review the findings and recommend management of this child in school and return a copy of this referral to the school at the address above detailing your findings and recommendations. Thank you.

Sincerely,

School Nurse

**TO BE COMPLETED BY PHYSICIAN**

I have reviewed the above findings from the Postural Screening conducted at \_\_\_\_\_ and recommend the following:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Physician signature

\_\_\_\_\_  
Date

# Sample Data Collection Sheets

# Vision/Hearing/Heights/Weights

Grade: \_\_\_\_\_ Teacher: \_\_\_\_\_

Recorder: \_\_\_\_\_

Signature

Title

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

	Student Name	Grade	Hearing			Vision				Comments	Ht.	Wt.	BMI %
			R	L	R E T E S T	Far		Near	Steropsis				
1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
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24													
25													
26													

P=Pass R= Refer

Child's Name	Class	Date of Initial Screen	Date of rescreen	Date Referral Sent Home	Date Referral Returned	Referral Results	Other

# **Planning and Implementation of Mandated Screening Protocols in Schools**

Dear School Nurse:

The following pages will assist you with the planning and implementation of your mandated screenings program(s). Please refer to the resources provided here, as well as in the many resources that were shared before and during the BU SHIELD Mandated Screening Training Program. Also contained in this document, are some tips and best practice guidance as you begin this very important mandated School Nursing duty. Good luck...

Shanyn

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School/District

Nurse

## What you need to know, do, and have available:

### ★ Attend a Training:

- Prior to planning the mandated screenings in your school, as the School Nurse, you are required to attend a Mass DPH sponsored training. You can then train a team of screeners at your school. Physical Education/Health teachers who assist with Postural and BMI screening must also attend the portions of the training covering those subject areas. Currently, trainings are being provided by the Boston University's School Health Institute for Education and Leadership Development Program (BU SHIELD). An up-to date list of dates, times, locations, and further information on how to register for the trainings can be found on the BU SHEILD website at [www.shield-bu.org](http://www.shield-bu.org) under "Mandated Screenings." This training is one of the four required trainings to become a MA DESE Certified School Nurse.
- The DPH sponsored mandated screening training is meant to be informational and introductory. After the training, you will use your new knowledge to plan and conduct a screening program at your school. Competency will be gradually gained as you continue to plan and conduct your screenings.

Training attended      Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

### ★ Inventory your supplies:



- After you have received training, you will have a good idea of the types of supplies you will need. You will need to familiarize yourself with your school specific screening equipment and supplies, as well as ensure that the tools you have are appropriate for use under the current state guidelines. This may mean that you need to purchase new tools or arrange for calibration of your current equipment. There are many different types of tools. Most of the most commonly used tools will have been introduced at the training but not all. For this reason, it is important for you to get to know what you have available and how to properly use and ensure proper maintenance. Outside vendors are available to calibrate screening equipment. Equipment can be ordered through all of the major school health vendors. It is critical to know what types of equipment you will need BEFORE you order it. It is easy to spend too much if you don't know what you need or purchase inappropriate equipment that is not needed. Do your homework. You can save a lot of money by knowing what you do and more importantly DON'T need. For example, you may be able to do any and all of the vision screenings with very simple wall charts and stereopsis tools (Random Dot E cards and glasses).

**Inventory of supplies done** Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

**List Vision Assessment Tools below:**

**You will need tools for assessing near acuity, distance acuity, and stereopsis.**

NOTE: Machines are not recommended for use with preschool or kindergarten students. Machines are generally also not used for stereopsis assessment. An excellent resource to use when assessing your distant vision screening eye charts can be found in the following publication: Nottingham Chaplin P. K., Bradford G. E. (2011). A historical review of distance vision screening eye charts: What to toss, what to keep, and what to replace. *NASN School Nurse*, 26(4), 221-227.

**Distant acuity tool(s) for Preschool and Kindergarten:** \_\_\_\_\_

**Distant acuity tool(s) for Grades 1 to 12** \_\_\_\_\_

**Near acuity tool(s)for Grades 1 to 12** \_\_\_\_\_

NOTE: Near acuity not done in Preschool or Kindergarten

**Stereopsis tools(s) for Preschool to Grade 3:** \_\_\_\_\_

**Vision Machine Assessment: (If available...wall charts are sufficient!)**

Indicate what type of vision machine you have: \_\_\_\_\_

Indicate which vision machine slides you have available: \_\_\_\_\_

You also must turn the machine on to check to be sure BOTH bulb are working and of equal and sufficient brightness.

Hearing Machine(s) (List number of machines, types, models):

\_\_\_\_\_ Date last serviced: \_\_\_ / \_\_\_ / \_\_\_\_\_

\_\_\_\_\_ Date last serviced: \_\_\_ / \_\_\_ / \_\_\_\_\_

\_\_\_\_\_ Date last serviced: \_\_\_ / \_\_\_ / \_\_\_\_\_

Information on how to do an assessment of your audiometer (hearing machine).

[http://www.caohc.org/updatearticles/spring99/have\\_you\\_checked\\_your\\_audiometer\\_today.php](http://www.caohc.org/updatearticles/spring99/have_you_checked_your_audiometer_today.php)

Postural Screening Tools:

(Please see MA DPH Guidelines for BMI Screening in Schools 2014 for more info)

<http://www.mass.gov/eohhs/docs/dph/com-health/school/bmi-screening-guidelines-for-schools.pdf>

Stadiometer with ability to measure to the nearest  $\frac{1}{8}$  inch or cm.

\*ensure wall mounted equipment is placed on wall at the proper height

Scale with ability to be zeroed and should be calibrated annually

Date scale last serviced/calibrated: \_\_\_ / \_\_\_ / \_\_\_\_\_

NOTE: It is not recommended to manually calculate BMI with formulas.

There are BMI calculators available at the CDC website here:

<https://nccd.cdc.gov/dnpabmi/calculator.aspx> Most electronic health records have capacity to calculate BMI for you. Public schools are required to report aggregate data to the MA DPH. This is typically done through an online survey that is sent annually by DPH.

I have identified that the following screening tools need to be purchased: \_\_\_\_\_

I have identified that the following screening tools need to be serviced: \_\_\_\_\_

I have funds for the purchase and/or maintenance of the screening tools or a plan for acquiring these funds: \_\_\_\_\_

## Plan the screening process:

### ★ Who:

#### Recruit your screening team...

Picking your team is critical to conducting a well-run screening day(s). Of course the nurses will be involved, but who else can you enlist the help of? Please be aware of confidentiality at all times when conducting screenings. Both with the team you select as well as with the process of the day in order to protect the student's' confidentiality with other staff members or amongst their peer groups. Parent volunteers can help. Most often Who will be on your team? How many screeners will you need? This depends on which screenings you are attempting to cluster together. The special education team is a good resource to help assist with vision or hearing screenings. Your speech therapist may be adept at hearing assessment and screenings. Your physical education teacher can assist with postural, height, and weight screenings and should attend a DPH mandated screening program. Parent volunteers may be able to help with logistics, escorting students to and from class, etc., as long as you are not violating confidentiality in any way. Some districts have partnered with local colleges or schools of nursing to assist with screening. It is suggested that a formal Memorandum of Agreement (MOA) is done in this case. Your school may already be partnering with these schools for teacher training and internships. Reach out to the college's Departments of Nursing.

#### My screening team members could/will be:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

#### My plan for training my screening team will be: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

★ **What:**

- Which screenings will you cluster together? Can you do all of them together if you have a large enough team? You might be able to more successfully implement screenings and get buy in from staff if you try your best to do them at a time that is less disruptive to the academic day. Some schools do screenings as part of health or PE class. Some schedule them for a time when other school wide activities are happening. Once you have developed your plan and schedule communicate it far and wide. Consider posting dates/times in the school newsletter as a reminder to all. Parent notification is required. This is often done in the annual Parent Handbook with information about the laws and regulations as well as information about opting out.

**Who will be my “go to” people for helping develop a plan to complete all mandated screenings:** \_\_\_\_\_

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★ **When:**

- Will you need more than one day? It is best to do screenings at the same time every year if possible. Maybe you start with Kindergarten (KG) in the Fall and consider developing a set annual screening calendar. This can also make it easier to fit it into the school calendar for whole school planning purposes. Don't forget to check your current school calendar and work with Administrators and other staff to make sure you're not trying to schedule health screenings during academic assessments, field trips, school wide assemblies, or other school wide events. You might consider doing different grades at different times if that works for your school. You know your communities best and probably already have an idea about what will work best for your school! Consider screening incoming KG and new students within the first 30 days if they do not have a vision screening or exam done prior to starting school. Some districts are able to do the mandated health screenings for kindergarten students in the Spring prior to school entry with the other educational kindergarten screenings. Other districts do the health screenings upon registration.

**My plan for how to begin planning dates and times for screenings will be:**

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My plan for how to assure that kindergarten students have had a **Preschool Vision Screening** or new incoming students of any grade have been screened will be: \_\_\_\_\_

\_\_\_\_\_

My plan for how to begin planning dates and times for screenings will be: \_\_\_\_\_

\_\_\_\_\_

My plan for how to complete all the mandated screenings will be: \_\_\_\_\_

\_\_\_\_\_

**★ Where:**

- Choose the space carefully. Do you have adequate space, lighting, privacy and quiet spaces available? For example, you wouldn't want to do hearing screenings near the cafeteria, gym, or band rooms. You wouldn't do vision screening in a poorly lit room. We no longer do mass height and weight screenings in the corner of the gym! Make sure you check out the spaces used for screening a few days before the schedule dates in case changes must be made, lighting needs to be fixed, or other changes need to be made. Check (and double check!) with whomever you need to about reserving specific rooms if needed.

My plan for location of screenings and room selection will be: \_\_\_\_\_

\_\_\_\_\_

**Hearing Screening Room:** \_\_\_\_\_

**Vision Screening Room:** \_\_\_\_\_

**Heights and Weights Room:** \_\_\_\_\_

**Postural Screening Room:** \_\_\_\_\_

**★ How:**

- Will you start with KG students? Will you call one group of students at a time and how many? Do your teachers know the schedule and are they prepared to send you their students? Schools with Pre-K classrooms are not mandated to conduct screenings on this populations but some choose

to do so. If you have Pre-K classrooms please note the tools used may be different than tools used for older students. You should consult with DPH or your Regional School Nurse Consultant if you need assistance with selecting tools for use with this population.

**My plan for how to begin the screenings will be:** \_\_\_\_\_

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### **Document:**

- Be sure to have student lists printed well ahead of time and that they are accurate. This will cut down on errors in spelling, incorrect students being identified for referral, etc. Sample templates for most of the screenings are provided at the BU SHIELD training. Preferred language for documenting screening results includes “pass” and “refer” (opposed to “fail”). This is a minor difference but can make a huge difference in how children see themselves. Most electronic school health databases will allow you to document (or “group process”) your screening results as a whole class with the default setting as “passing” the screening. You will need to go in later and correct the students who you are referring out for further assessment. Remember: we are not diagnosing...we are conducting screenings that may identify a need for further assessment by an outside medical provider or specialist.

### **Referral:**

- As mentioned previously, when a student does not “pass” a screening, they are “referred” for further assessment. It can be a good idea for you to call the parent/guardians of the student who you are referring for further assessment. This can also allow you to assess their knowledge of the resources available to them. Perhaps they already have a family eye doctor. Often parents will acknowledge they too have had concerns about their child’s vision/hearing/etc. Your conversation with them can reaffirm what they already may suspect. You can use district form letters that you personalize for each student indicating which screening you are referring out for. Many template form letters are available. As with other features, most electronic school health software programs allow you to print out student specific referral letters based on the data you have input into the system saving a great deal of time. Be sure to keep copies of the referral paperwork. You can use these to track the families who you will need to follow up with later. This can also assist you with what many consider one of the most important parts of the screening process...the follow up!

## Follow up:

- Both general and student specific follow up should be planned. General follow up may include school wide communications to parents prior referral letters will be coming home. You should also let parents know what the school expectations are for when parents should provide any findings from the outside providers, as well as how a problem with vision and/or hearing may impact learning, behavior, or social interactions.
- Student specific follow up **MUST** be done and should be tracked. Follow up is often a critical missing piece that may cause significant delay in identification and treatment of suspected or probable concerns that will likely be impacting learning unless addressed with proper treatment. School nurses often cite a lack of time or resources for proper follow up. We can and must do better, not only for the academic progress of the student, but also for their social and emotional well-being. New research suggests that many students who may be suffering from low vision conditions may be struggling with behavioral concerns and be misdiagnosed with conditions such as ADHD. It is suggested that some of these children who have been misdiagnosed are even given medication to treat a problem they do not have.
- If you are finding it difficult to properly follow up, please discuss this with your school's administration and advocate for assistance with this important piece of the mandated screening process. Carefully think about what your follow up plan will be. You might consider creating a timeline of when you want to have screenings completed, a target date or time frame for notifying parents, etc. Don't let too much time pass between when the screenings are complete to when you notify parents.

**My Plan for both general and student specific Follow Up will**

**be:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**I know who my local outside referral resources are or have a plan for helping families locate these services.** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Other things to know before you start:**

★ **Practice makes perfect!** Go back and play with your tools, machines, and equipment! Have fun...

★ **You may need to gather other supplies...**clipboards, pencils, tape measures or pre-measured strings, cleaning wipes, eye occluders, picture of footprints to indicate where to stand or tape to mark floor, chairs, tables, privacy screens, children’s books, educational handouts, box for storage of all supplies, etc.

**I might also need:** \_\_\_\_\_

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★ **Confidentiality:** You may need to review with screeners to be sure they understand the laws around confidentiality in schools and FERPA. Think about how you will ensure privacy throughout your screening process. This includes before, during, and after the screenings. Do you have adequate private spaces? Could you set up temporary spaces with privacy screens? Many districts review the laws related to privacy and FERPA and have outside screeners or teachers sign a “Confidentiality Statement” to indicate this has been reviewed, will be complied with, and the consequences for non-compliance.

**My plan for protecting confidentiality will be:** \_\_\_\_\_

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★ **Child development:** Some students who “fail” may think they did something wrong or will get in trouble. Please consider how you talk with students about what this means for them in the context of their developmental stage.

★ **Parent/Guardian notification:** As per the mandate and with other school procedures, parents and guardians must be notified prior to the screenings. Although screenings are mandated, parent/guardians do have an option to “opt out.” Consider having a conversation with parent/guardian to be sure they are having these important screenings done at their primary care provider’s office or specialists. Often parents/guardians of students with known concerns, such as scoliosis, choose to opt out because they are closely followed. It is best practice to request the most recent information from their outside provider for your school records to ensure proper follow up. Don’t assume that if they have a known problem it is being followed.

**My plan for parent notification will be:** \_\_\_\_\_

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★ **Staff notification:** Things will go much smoother if you give staff plenty of notice and it may even be helpful to involve them in the process. I partnered with math teacher by providing aggregate data for a project he was doing!

**My plan for staff notification will be:** \_\_\_\_\_

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★ **Working with SPED is critical:** Massachusetts Legislature enacted Chapter 181 of the Acts of 2004 “An Act Relative To Eye Examinations For Children” which amended Massachusetts General Law, Chapter 71, and Section 57. ...For children who fail to pass the vision screening and for children diagnosed with **neurodevelopmental delay**, proof of a comprehensive eye examination performed by a licensed optometrist or ophthalmologist chosen by the child’s parent or guardian indicating any pertinent diagnosis, treatment, prognosis, recommendation and evidence of follow-up treatment, if necessary, shall be provided.”

**My plan for working with SPED will be:** \_\_\_\_\_

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★ **Student training:** This is only usually necessary in the kindergarten and 1st grade classes. It can also be helpful with student with disabilities.

★ **Students with SEL or SPED considerations:** Some student just won’t tolerate the screenings as done and may need to be schedules with you or another screener for a 1:1 session. If a child is declining to “perform” for you...could you have his/her educational assistant or para help you or do the assessment while you supervise? Also see above “**Working with SPED is critical...**”

★ **Use “cheat sheets”:** Some examples were provided in the training. Examples include the “Screening Guidelines” table or a card taped to your vision machine indicating which slides are in which positions.

★ **Optimizing your time and resources:** As school nurses we are always looking for ways to work smarter, not harder! There may be ways you can work with other team members on initiatives such as SBIRT screenings and schedule these on the same day.

## Resources:

### Training and Education

**BU SHIELD:**

Boston University

School Health Institute for Education and Leadership Development

<http://bucme.org/assets/2021/Mandated-Screening-Documents-Reference-Page-to-Post-11-15-16.pdf>

**Massachusetts Department of Public Health: School Health Unit**

<http://www.mass.gov/eohhs/gov/departments/dph/programs/community-health/primarycare-healthaccess/school-health/school-health-screening.html>

**Calibration and Repair of Screening Equipment****Hearing Machine Calibration**

New England Sales and Services

531 King Street, Unit 6

Littleton, MA 01460-1279

Contact: Dan Cominsky

Phone: (800) 776-6276

<http://www.newenlandsalesandservice.com/home/service-request/>

**School Health****Calibration, Parts, and Repair Team**

<https://www.schoolhealth.com/equipment-service/>

<https://ds5cvxtqu2rt0.cloudfront.net/media/pdf/CalibrationPartsAndRepair.pdf>

**Other Resources:****NASN's Sight for Students Program (NASN Members only):**

<https://www.nasn.org/MemberCenter/VSPSightforStudents>

**American Association for Pediatric Ophthalmology and Strabismus:**

<https://aapos.org/>

[https://aapos.org/resources/nurse\\_and\\_primary\\_care\\_ppt\\_lectures/](https://aapos.org/resources/nurse_and_primary_care_ppt_lectures/)

# Mandated Screening

## Table Top Discussion

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### **1. Careful planning is a key element to establishing a successful screening program. Discuss these questions at your table and be prepared to present key findings to the whole group:**

#### **Your screening team:**

- How many team members do you need?
- Who will you recruit and how will you use them? What considerations should you take into account?
- What will you do to ensure they are properly trained?
- Are there outside resources you can tap?
- What resources do you need to manage the data?

#### **When:**

- When will you book your screenings? How many days will be needed?
- What considerations should you take into account?
- What about re-screenings? How will you plan for these?

#### **How:**

- How will you conduct your screenings (i.e., small numbers in your office or whole school screenings) and what are the advantages or disadvantages of each approach?
- How will you engage your education team and administrators?
- How will you ensure children who have been opted out are not screened?
- How will you screen (or not) children with disabilities?
- What systems will you use to ensure all children have been screened and referrals are made and completed?

#### **Where:**

- Where will you conduct your screening? Is the space adequate to meet your needs (i.e., lighting, room to work, etc.).
- What basic elements should be in place to protect student privacy? What considerations should you take into account? What will you do if you're told you can only conduct screenings in locations that don't offer the level of privacy you think is needed?

**2. Even with careful planning, screening days often present unanticipated surprises. How would you handle these situations? Be prepared to present your findings.**

- Your team has screened the vision of about 3 classes of students. You are reviewing results and see an unusually high number of failures of the Random E test. What should you do?
- A third grader insists can't see anything on any of the vision tests; she also fails the hearing test. What should you do?
- What would you do if a 5<sup>th</sup> grader misunderstood the instructions during postural screening and stripped down to his underwear?
- How will you manage special education students who are partially able to participate in screening, but you know you can't rely on the screening results?
- The PE Teachers want to help with BMI and postural screenings and they want you to share individual student BMI data for their heart health programs. How will you manage this request?

**3. Referrals and follow-up are a critical part of your screening program, but also present a variety of challenges. How would you handle the following situations? Be prepared to report out to the whole group.**

- What systems do you need to put into place to ensure all screenings and referrals have been completed? Are there ways you can utilize EHR tools to support this process? What if you have to track using paper systems?
- A student has glasses, but the student fails his vision screen and you refer the student out. You learn, despite several communications with the parent, that the child has never been seen. You also know that the family is economically challenged. What are your options? Would you ever consider filing a 51A?
- A student passes the vision screening test in October. In December, a teacher reports that the student is having difficulty with reading and often rubs their eyes and tilts their head to the side when looking at the board. What should you do?