Acknowledgements
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INTRODUCTION

It is the position of the National Association of School Nurses (NASN) that the registered professional school nurse has the knowledge and expertise to promote the prevention of overweight and obesity and address the needs of overweight and obese youth in schools as well as those students with other abnormal growth patterns. The school nurse collaborates with students, families, school personnel, and health care providers to promote healthy weight and identify youth who may be at risk for health problems. The school nurse can refer and follow up with students who may need to see a health care provider. The school nurse is also a key member of a school wellness team as they educate and advocate for changes in school and district policies that promote a healthy lifestyle for all students.1, 2

Growth measurements correlate directly to nutritional status and can indicate whether a child’s health and well-being are at risk. Deviations from normal growth patterns such as abnormal growth in stature or poor weight gain could indicate a variety of medical conditions. These include malnutrition, chronic illness psychosocial deviation, hormonal disorders, or syndromes. Growth that deviates above the norm (e.g., increased BMI) can also indicate medical problems with adverse consequences.3 Early recognition and treatment are essential for both physical health and school success.2

Childhood obesity is the predominant public health threat facing Alaska today. Too many of our children and youth are overweight or obese. They do not get enough physical activity. They drink too many sugary beverages. And they are suffering the consequences.

One out of three Alaskan children are overweight or obese.4 Obese children today suffer from serious conditions that used to occur only in adulthood, including diabetes, high blood pressure and high cholesterol. They are at increased risk for fatty liver disease, joint problems, asthma and sleep apnea.5, 6 Overweight and obese children and adolescents have an increased risk of being overweight or obese as adults. Childhood obesity is also associated with greater risk for psychological problems, social stigmatization, discrimination and poor academic performance.4 Health scientists project that, due to obesity, today’s children may be the first generation to have a shorter life expectancy than their parents.7

BACKGROUND

In 2011, the State of Alaska Division of Public Health published Measuring Height/Weight and Calculating BMI: Guidelines for Schools to provide school staff with the necessary information and tools to successfully and accurately collect heights and weights and calculate BMI for the purpose of surveillance and/or screening.

Surveillance programs assess the weight status of the school population to identify the percentage of students who are potentially at risk for weight-related health problems. Surveillance data can be used to create awareness among school and health personnel, community members and policy makers of the extent of the problem as well as measure the effectiveness of school policies, programs and practices aimed to improve school health.
Screening and referral programs assess the weight status of the individual students to identify those at risk and provide parents with information to help them take appropriate action. Because screening and referral programs go beyond obtaining measurements and compiling data, this document is offered as a model standard and protocol for identifying students and providing referrals for those who may be at risk and encouraging discussions between families and health care providers about their child’s growth and development.

Before a school or school district decides to adopt a growth screening or surveillance program, an assessment of the practices, policies and available resources that promote physical activity and healthy nutrition should be completed. A checklist for this assessment is offered in this document.

References:


CHECKLIST: Pre-Adoption of School Growth (Height/Weight) Screening or Surveillance Program

**Instructions:** Before adopting a growth screening or surveillance policy, school district administration and school health services are encouraged to consider the following items. This checklist will help districts identify the pertinent steps and issues in implementing a school-based student growth screening or surveillance program. It is not necessary to check-off each bullet, but the more steps completed and issues addressed, the greater the possibility of successful implementation.

<table>
<thead>
<tr>
<th>School District Administration and School Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Approval and support from leadership, including School District Medical Director and/or advisor, if applicable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Health Policies, Practices and Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>The district has the following policies, practices and programs. Note: the CDC School Health Index is a recommended tool for assessing these policies and practices.</td>
</tr>
<tr>
<td>□ District Wellness Policy</td>
</tr>
<tr>
<td>□ Safe, supportive environment for students of all body types</td>
</tr>
<tr>
<td>□ anti-bullying policies and programs</td>
</tr>
<tr>
<td>□ curricula fostering acceptance of healthy weight</td>
</tr>
<tr>
<td>□ professional development in related topics and resources in place for staff</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>School Wellness Team/School Health Council and Parental/Student Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ The school district/schools actively maintain school wellness teams.</td>
</tr>
<tr>
<td>□ The school district/schools include parents and students on school wellness teams.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Community Linkages</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ The school district/schools/school nurses have identified and shared with students and families existing local community-based healthy eating, physical activity and obesity prevention efforts.</td>
</tr>
<tr>
<td>□ Local health care providers and public health nurses are included in community linkages and will be notified initially of the growth screening and referral program and standards.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classroom Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ School district health curriculum includes topics of healthy eating and physical activity behaviors. PE curriculum teaches skills for a lifetime of fitness.</td>
</tr>
<tr>
<td>□ Health and PE instruction provided by appropriately trained school staff.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Student Growth (Height/Weight) Screening or Surveillance Practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ A standard (policy) and procedure for student collection of height and weights is current.</td>
</tr>
<tr>
<td>□ The standard includes parent/guardian pre-screening notification procedure and parental consent or ability to opt-out.</td>
</tr>
<tr>
<td>□ School staff is notified of screening or surveillance program and its purpose.</td>
</tr>
<tr>
<td>□ The standard contains the use and maintenance of up-to-date, accurate equipment.</td>
</tr>
<tr>
<td>□ The standard includes conditions for confidentiality and privacy when conducting height/weight measurements.</td>
</tr>
<tr>
<td><strong>If screening and referral program:</strong></td>
</tr>
<tr>
<td>□ The standard includes a means of communicating with local healthcare providers, prior to screening, the intent to provide referrals and encourage family dialogue with their healthcare provider.</td>
</tr>
<tr>
<td>□ The standard includes a confidential mechanism for providing all parents with their child’s results and, as indicated, referrals for those students meeting referral criteria.</td>
</tr>
<tr>
<td>□ Staff who oversees the screening program are qualified, such as a school nurse or public health nurse.</td>
</tr>
<tr>
<td>□ Training is offered to school staff conducting the screenings which includes current screening practices, techniques, communication, confidentiality measures, equipment, referral provision, and resource identification.</td>
</tr>
<tr>
<td>□ Data collection procedures are in place.</td>
</tr>
<tr>
<td>□ Screening results are not be used to evaluate student or teacher performance.</td>
</tr>
<tr>
<td>□ A system is in place for regular evaluation of the screening and referral program, its intended outcomes and any unintended consequences.</td>
</tr>
</tbody>
</table>

**STANDARD/PROCEDURE FOR GROWTH SCREENING and REFERRAL (SAMPLE)**
A. Statement of standard
   ___[name of district]_____________
   School District supports screening and surveillance for growth abnormalities that may impact student attendance and learning, school wellness policies, and the overall health of the student population and community. The district supports sharing of growth screening results and related educational and referral information with parents.

B. Purpose
   To detect growth and development deviations that may indicate health risks, chronic or other concern, and may impact overall, life-long health and wellness. More specifically to:
   • Identify students at risk for nutritional or health-related problems
   • Identify students at risk for eating disorders
   • Identify students who are underweight, overweight, or obese
   • Encourage discussions between families and health care providers about their child’s growth and development
   • Promote healthy eating and physical activity in the school environment

C. Determinant/need for the standard
   ___[name of district]_____________
   School District Health Services bases the growth screening and referral standard on best practice determinants from the following sources:
   • Alaska State Law Sec. 14.30.070. Physical examination required
   • State of Alaska Measuring Height/Weight and Calculating BMI: Guidelines for Schools School district policy (if any)
   • Centers for Disease Control and Prevention (CDC)
   • National Association of School Nurses (NASN)
   • American Academy of Pediatrics
   • American Public Health Association
   • American Heart Association
   • Institute of Medicine
   • Past practice (if any)

D. Standard
   1. Periodic evaluation of each student’s growth pattern shall be documented through the measurement and assessment of height and weight. BMI values\(^1\) will be calculated and percentiles

\(^1\) BMI = (weight in kilograms) divided by (height in meters X height in meters)
determined by plotting on appropriate growth charts or computerized means. Growth charts that plot weight and stature for age and gender will be utilized when a student appears to be outside the chronological ‘norms.’

- Students must be weighed and measured in a setting that provides for privacy and confidentiality. No other students should be present or within sight or hearing of the student being screened.
- Students’ height/weight/BMI screening results are recorded in the student health record, remain strictly confidential and not be discussed with anyone other than the student and his/her parent or guardian.

2. Growth screening intervals are:
   - Annually for Pre-K through 12th grade
   - New-to-the-district students
   - Per teacher or parent concern
   - More frequent screening may be warranted on an individually established schedule for those students who display irregular growth patterns or who show extreme measurements on either side of the accepted height and weight/BMI graph curves (0-5% and 85-100%).

3. Personnel able to conduct screening include:
   - School nurse
   - Staff and/or volunteers trained by the school nurse

4. Parents, administrators/school staff and appropriate community members (e.g., health care providers) will be notified of upcoming growth screenings. Parents will be given the opportunity to opt out of growth screening for their child.

5. Parents/guardians will be notified of screening results in a meaningful, confidential format. Privacy of information will be ensured when selecting a method to communicate results.

6. Referral to a health care provider for students with screening results outside of established norms will be made.

7. Educational materials and information will be provided to the parent, and student when appropriate.

8. Referral follow-up will take place in a timely manner.

9. Scales and stadiometers will be checked for accuracy (calibrated) at least annually.

E. Procedure

1. Equipment
   - Properly calibrated, high quality balance beam or electronic digital scale
   - Portable or wall-mounted stadiometer
   - Calibration weights and length rods
• **BMI for age and gender percentile growth charts.** Use of a computer based system is recommended for consistent and correct calculations. A child and teen BMI calculator and Excel spreadsheet for calculating BMI is available from the CDC.
  http://www.cdc.gov/healthyweight/assessing/bmi/

• **CDC weight-for-age or CDC statute-for-age growth charts**
  http://www.cdc.gov/growthcharts/

2. Communicate upcoming growth screening plans to building administrator, school staff, parents, local health care providers and other appropriate community members using any of the following measures:
   • Meetings
   • School newsletters
   • Student handbooks
   • School and/or district websites
   • Contained in registration information
   • Specific letters sent via mail or email (see Appendices A, B, C for sample letters; alternately, for parent pre-notification of all health screenings, see Appendix L)

3. Provide parents with an opportunity to opt out of growth screening for their child. Opt-out procedures can be outlined for parents using any of the above communication methods. See Appendix D for a sample Opt-Out form. [district/school process for tracking Opt-Out forms here]

4. Train personnel assisting with the growth screening process on proper technique, appropriate communication and confidentiality. Provide confidentiality agreement found in Appendix E.

5. Screen students with the following instructions for measuring weight
   - Set the scale at zero reading.
   - Have the student remove shoes, heavy outer clothing (jacket, vest, sweater, hat), and empty pockets (cell phones, iPods) to extent possible.
   - Have the student step on the scale platform, facing away from the scale read out, with both feet on the platform, and remain still with arms hanging naturally at side and looking forward.
   - Read the weight value to the nearest ¼ pound or 0.1 (1/10) kilogram.
   - Have the student step off the scale and take a second measurement, repeating the steps above (measurements should agree within 0.1 kilogram or ¼ pound; if not, re-measure until this standard is met).
   - For confidentiality and to avoid stigma or harassment, do not call out weight value.
   - Record the weight value immediately on the student health record or data log.
   - If using a balance beam scale, return the weights to zero position.

6. Screen students with the following instructions for measuring height
   - Have the student remove shoes, hat, and hair ornaments /buns/braids to extent possible.
   - Have the student stand on the footplate or uncarpeted floor with back against stadiometer rule.
   - Have the student bring legs together (in contact at some point, whatever touches first).
   - Assure student’s legs are straight, arms are at sides, and shoulders are relaxed.
• Assure the back of the student’s body touches/has contact with the stadiometer at some point, preferably with heels, buttocks, upper back and head touching the measuring surface.
• Assure that the student’s body is in a straight line (mid-axillary line parallel to the stadiometer), see Figure #1.
• Assure the head is in the appropriate position (Frankfort plane) see Figure #2

Figure #1 Mid-axillary Line Figure #2 Frankfort Horizontal Plane

• Ask the student to breathe in and hold his/her breath while being measured
• Lower the headpiece until it touches the crown of the head firmly, compressing the hair
• Position yourself so that your eyes are parallel with the head piece and read the measurement to the nearest 0.1 cm or 1/8 inch, make note of the first measurement
• Move the headboard away, check the posture, and re-measure the student
• Measurements should agree within 1 cm or ¼ inch, re-measure and select the average of the two measures that agree the most
• Immediately record the results in the student health record or data log

7. Calculate BMI using one of the following methods: [district process here, if applicable]
   • BMI calculation computer software
   • BMI Table, found online at the [CDC website](http://cdc.gov/nccdphp/dnpa/healthyweight/assessing/bmi/00binaries/bmi-tables.pdf)
   • [BMI Percentile Calculator for Child and Teen](http://apps.nccd.cdc.gov/dnpabmi/)
• The Children’s BMI Chart for Schools:
   - This Excel spreadsheet can be used by school, child care, and other professionals who
     want to compute Body Mass Index (BMI)-for-age for a group of up to 2000 children,
     such as for a school classroom or grade.
• Electronic health records [if program available]

8. Plot BMI values on appropriate CDC BMI-for-age and gender growth charts to obtain a percentile
   score using electronic health records, computer software or, if unable to access computer
   programs, manually. [note district process here, if applicable] Appropriate growth charts can be
   found on the CDC website: http://www.cdc.gov/growthcharts/cdc_charts.htm. After graphing a set
   of measurements, check to see if they are consistent with those from previous measurements, if
   possible. A significant percentile change should be rechecked for errors in measuring, recording, or
   graphing.

9. Interpret the BMI-for-age percentile score using electronic health records, computer software or
   the following table to classify the student’s BMI percentile score for interpretation.

   **BMI Classification for Children 2-20 Years Old**

<table>
<thead>
<tr>
<th>BMI for Age Percentiles</th>
<th>Weight Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;5th</td>
<td>Underweight</td>
</tr>
<tr>
<td>5th to &lt;85th</td>
<td>Healthy Weight</td>
</tr>
<tr>
<td>85th to &lt;95th</td>
<td>Overweight</td>
</tr>
<tr>
<td>≥95th</td>
<td>Obese</td>
</tr>
</tbody>
</table>

10. Plot student height or weight on appropriate CDC stature-for-age or weight-for-age growth chart if
    measurements are suspected to be outside the chronological ‘norm’ or deviating from the
    student’s previous height or weight curve. Ensure the measurements are accurate, make sense,
    and are appropriately plotted.

11. Report all individual screening results to parents or guardians. A sample growth screening
    notification letter is found in Appendix F. Alternately, the sample form in Appendix M may be used
    to give all health screening results to parents. Utilize one of the following methods to distribute
    the results (DO NOT SEND HOME WITH STUDENT):

    • Mailings (NOTE: send via email only if the district has a secured means of transferring
      Personal Health Information [PHI])
    • Provide results to parents at parent/teacher conferences, Open Houses or other school events
    • Available for parent pick-up in the school health office after an identified date

    [An alternate method for reporting screening results to parents might include parent access to
     their child’s password protected web-based health screening information, if available; note district
     protocols here]
12. Provide referral information to parents. A sample growth screening referral letter for the health care provider is found in Appendix G. This may be attached to parent notification letter (Appendix F or M). It may also be appropriate to attach the student’s growth chart(s) or review it with parents.

Refer students for further evaluation by a health care provider who:
- Have a BMI >95th percentile
- Have a BMI 85th to 94th percentile, if they have any of the following:
  - a family history of diabetes
  - elevated blood pressure (see Appendix J for blood pressure values requiring further evaluation; NOTE: The BP chart in Appendix J is based on the 5th percentile of height by gender. If the BP reading is > 90th percentile on the chart in Appendix J, utilize the National Heart, Lung, and Blood Institute chart to further evaluate the student’s blood pressure reading in order to determine referral. http://www.nhlbi.nih.gov/guidelines/hypertension/child_tbl.pdf. Follow the instructions in the Fourth Report on Diagnosis, Evaluation, and Treatment of High Blood Pressure in Children and Adolescents, http://www.nhlbi.nih.gov/health/prof/heart/hbp/hbp_ped.htm
  - evidence of acanthosis nigricans (see Appendix K for acanthosis nigricans reference)
  - are concerned about their weight
- Have a BMI <5th percentile or a recent unexplained decrease in BMI
- Any student with no growth progress or a large shift in percentiles on the CDC stature or weight-for-age growth charts
  - Students who decline in stature percentiles or present with short stature (<5%) may need to be referred for further evaluation (i.e., for endocrinopathies, pubertal delay, boney dysplasias, or syndromes. Pubertal delays may be genetic/familial or be due to an underlying medical condition. (Tanski, Garfunkel, 2010)
  - Students with a drop in weight percentiles by more than one large percentile line or who present with extreme underweight warrant further investigation (i.e. for malabsorption, renal disease, cardiac disorders, neurologic and pulmonary disorders, food or feeding abnormalities, family or environmental difficulties and chronic infections). (Tanski, Garfunkel, 2010)

13. Referral follow-up will include:
- Resources for families, staff and students (recommended resources are found in a parent handout in Appendix H)
- Verification that parent/guardian received referral information and educational materials
- Opportunity for parent/guardian to ask questions, receive further support, and request more information
- Request for school based interventions suggested by health care provider, if any

14. As indicated by district participation, collaborate with the Division of Public Health for population based surveillance and monitoring. [note district process here]
15. Calibrate scales and stadiometers according to the following instructions [note specific district process here]:

Weight - Scales
- Use known weights (a set of standard weights purchased from a sports store) on the scale or a professional service to check accuracy
- Send the scale for professional calibration if the standard weight and the scale weight are off by \( \frac{3}{4} \) pound or more. For a digital scale, change the batteries and if it is still off after checking again with the standard weights, send scales for professional calibration and/or check the owner manual for scale instructions
- 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 at least annually

Height – Stadiometers
Check the stadiometer regularly to be sure the base is stable and measures are accurate.
- Length rods, a standard measuring test rod, should be used to verify accuracy at least annually
- Portable stadiometers should be checked more frequently
- If a discrepancy is found in accuracy, contact the manufacturer for advice

16. Further resources for the school nurse may be found in Appendix I.
Appendices

Pre-screening notifications:
- **Appendix A** SAMPLE Pre-Growth Screening Notification to School Staff
- **Appendix B** SAMPLE Pre-Growth Screening Notice to Parents and Guardians
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Optional forms to use for general health screening information:
- **Appendix L** SAMPLE Pre-General Health Screening Notification Letter to Parents and Guardians
- **Appendix M** SAMPLE General Health Screening Results for Parents and Guardians
Dear Faculty and Staff:

Our school/district has initiated a growth screening program. Growth screening is an important clinical tool in assessing the health and development of a child. The screening includes measurement of height and weight which are used to calculate the Body Mass Index (BMI).

The screenings will be conducted on [insert dates] in [insert locations]. Parents will be asked to notify me if they do not want their child to participate in this screening and will be asked to sign an “Opt Out” form. Following the screening, all parents will receive their child’s results. They will be mailed or directly communicated in writing to the parents or guardians. The communication is offered to encourage discussion with their child’s health care provider regarding healthy lifestyles and physical activity. The results of the growth screening are kept confidential in the student’s individual school health records and will not be shared with anyone but the parent.

People come in many different sizes and shapes for many different reasons. Students may react in a variety of ways to the results of the growth screening in school. Staff members can help by being aware of the sensitivity of this screening and being objective and open about student concerns regarding height and/or weight in your responses.

Please contact me if you have any questions about this screening program or if you would like to be a part of our school’s efforts to create a healthier environment for all. Together we can make a real difference in the health and wellness of our students!

Thank you for your time and consideration.

Sincerely,

School Nurse [you may also consider having the principal co-sign the letter]
Dear Parent or Guardian:

In the [insert name of school or district] we know how important good health is to learning. We want our students to be healthy and have every advantage to achieve their potential. Our children’s future health is at risk because of childhood obesity, poor nutrition and lack of physical activity. In our district, we address children’s health and wellness with a comprehensive approach that includes health screenings such as our Growth Screening Program.

The purpose of the Growth Screening Program is threefold.

- To provide information about your child’s growth pattern
- To encourage you to share this information with your health care provider
- To allow the district to evaluate the effects of changes made in schools in order to create a healthier environment [insert list of district/school initiatives such as providing healthier foods and encouraging students to be physically active]

Growth screening consists of height and weight measurements. These are used to calculate each child’s Body Mass Index (BMI) percentile. BMI measures a child’s “weight for height for age.” The BMI can be a useful tool to identify possible health risks.

PLEASE NOTE: Height, weight, and BMI measurements do not tell the whole story about a child’s health. Factors other than height and weight can influence your child’s growth pattern such as family history or medical conditions. Your child’s health care provider is in the best position to evaluate your child’s health and can explain the results of the screening. The health care provider can also talk with you about further steps you can take to encourage healthy eating and physical activity.

The school nurse will supervise your child’s screening, ensuring each child’s privacy is respected at all times. The results of your child’s height, weight, and BMI are private and strictly confidential — they will be kept in your child’s school health record and given to you directly by [state what form of direct communication will be used].

This year, the growth screening will take place in [insert month of screening]. Please feel free to call me at [insert phone number] with any questions you may have about growth screening or if you would like to opt your child out of the screening. For additional information about BMI for children and teens visit the Centers for Disease Control and Prevention website: http://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/about_childrens_bmi.html.

Sincerely,

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

Letter adapted from Massachusetts Department of Public Health
Dear [Health Care Provider]:

The health and wellness of our children is a school district priority. With the current research about obesity, we are aware of the effect on academics and our students’ present and future health. We want to actively reduce health risks by focusing on healthy lifestyles, encouraging healthy nutrition and providing families with information. One role in prevention is obtaining BMI and health information to promote healthy weight in all children. [insert district YRBS or DPH Student Weight Status results here, if available]

Our district’s Growth Screening Program provides annual assessment of height, weight, and BMI. With yearly measurements, we are better able to assess for deviations from the child’s normal growth pattern which may indicate the need for medical follow up. Results are communicated confidentially with parents and guardians, and we strongly recommend to parents that these results are shared and discussed with the child’s primary health care provider. Results are also be used to guide school district policies and programs for a healthier school environment.

If you have any questions concerning the Growth Screening Program at [insert school name] School, please contact [insert school nurse name], the school nurse at [insert phone number].

We know that collaboration among schools, parents and health care providers can have a positive effect on the health of children and look forward to working with you in this endeavor. Thank you for your efforts to improve the health of Alaska’s children.

Sincerely,

School Nurse [you may also consider having the principal co-sign the letter]
Dear Parent/Guardian,

Growth screening involves measuring height and weight to calculate Body Mass Index (BMI) and determine growth pattern deviations. The purpose of the Growth Screening Program is to give you information about your child’s growth status. This information also helps [insert name of school or school district] address a comprehensive approach to the health and wellness. [insert list of initiatives such as providing healthier foods and encouraging students to be physically active].

Alaska Statute Article 02. Section 14.30.127 mandates that school districts provide student hearing and vision screenings for identification of possible unknown or unrecognized diseases or health impairments that may affect a student’s education. While vision and hearing screenings are required, growth screenings are recommended by the Alaska Division of Public Health as another tool to evaluate the health of each child. Results are confidential. The growth screenings will take place in a private setting, supervised by the school nurse. Once completed, parents will be notified in writing of screening results by the school.

If you want your child to participate in the free growth screening offered by our school, you do not have to complete this form. If you do not want your child to receive growth screening services at school, please complete the form and return it to the school office.

To opt out of this screening, please complete and return this form to the school by [what date].

Student: ___________________________ Date of Birth: ___________________________

School: ___________________________ Grade: ___________________________

_______________________________ ___________________________

Parent/Guardian Signature Date

If you have any questions, please contact [name and contact information for school nurse, district nursing coordinator, and/or school principal]
CONFIDENTIALITY AGREEMENT

As a school staff/volunteer assisting with health screenings, the confidential nature of information concerning students must be respected. Confidentiality is the obligation not to disclose willingly any information obtained in confidence. In schools, student privacy and confidentiality is maintained in all written and verbal communications, in accordance with the federal Family Educational Rights and Privacy Act (FERPA) regulations.

Basic principles include:

• Respect for an individual’s right to privacy;
• Respect for human relationships in which personal information is shared;
• Appreciation of the importance of confidentiality to both individuals and society; and
• Expectation that those who pledge to safeguard confidential information will do so.

Therefore, as a school staff or volunteer assisting with health screenings, I agree to:

1. Not share any screening data (height/weight, vision, hearing, etc.) beyond the authorized personnel (school nurse).
2. Not leave reports, student service records, computer files or log books where unauthorized people can have access to them. Take care that individual student screening records are kept in a secure location.
3. Guard against sharing confidential information with authorized personnel in halls, classrooms, staff rooms or other public places where persons who do not need to know can overhear it.
4. Provide privacy for each individual student’s screening. Allow no other students to enter the screening area. Do not verbally call out screening results. Clear previous screening results from equipment before allowing the next student’s entry for screening, e.g., zero the scale between students.
5. Consult with the school nurse if in doubt regarding sharing of confidential information.

Print Name _______________________________ School ___________________
Signed _________________________________ Date ____________________
Dear Parent or Guardian:

(Student Name)_______________ was recently weighed and measured as part of our school’s growth screening program. A Body Mass Index (BMI)-for-Age percentile was also calculated. The purpose of the Growth Screening Program is to give you information about your child’s growth status. The results are strictly confidential and will not be discussed with anyone other than you.

Your child’s measurements were:  Weight ______________ Height______________ BMI% ___________

The Centers for Disease Control and Prevention (CDC) guidelines for interpreting BMI percentiles in children state that:

- Below the fifth percentile a child may be underweight.
- Between the 5th and 85th percentiles a child is considered in the healthy weight range.
- Between the 86th and 95th percentiles a child may be overweight.
- Above the 95th percentile a child may be obese.

PLEASE NOTE: Height and Weight screening does not tell the whole story about your child’s health status. Many factors other than height and weight can influence your child’s growth pattern such as family history and medical conditions.

The best person to evaluate your child’s growth pattern is your child’s regular health care provider. We recommend that you talk with your child’s health care provider to identify ways to ensure your child’s optimal health. Ask your provider for advice about good nutrition and physical activity and more ways to keep your child healthy and physically active. The following is recommended for all children:

- 5 – Five servings of fruits and vegetables per day
- 2 – Less than 2 hours screen time per day
- 1 – One hour of physical activity per day
- 0 – Zero soda or sugared sweetened beverages per day.

More information is available from the CDC:
http://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/about_childrens_bmi.html

If you do not have health insurance or access to health care, please contact me for information about possible medical services. If you have any questions, please call ________________, School Nurse
(Phone) / (email)

Letter adapted from Massachusetts Department of Public Health
Dear Health Care Provider (or “Physician” or name of physician):

This letter is to notify you that your patient, [insert student name], was assessed during [insert school name] School’s Growth Screening Program.

The results were: Ht____ Wt_____ BMI Percentile ____ Other Concerns __________________

We welcome your feedback and any recommendations you may have to assist in planning for this child’s school program. If you have any questions concerning the Growth Screening Program at [insert school name] School, please contact [insert principal name], the school principal at [insert principal’s phone] or [insert school nurse name], the school nurse at [insert nurse’s phone].

Thank you for your efforts to keep your patients and our students healthy.

Sincerely,
School Nurse

---

HEALTH CARE PROVIDER: Please complete and return to [insert school nurse, school & address]

I have checked (child’s name) ________________________________ on (date) _______________

with the following findings:

Ht____ Wt_____ BMI: ________ Percentile: ________

School-based recommendations:
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

Signature/Title: ______________________________________ Date: __________________

Parent authorization for release of information

I, the parent/guardian of the above named child, authorize the exchange of information between my child’s health care provider and my child’s school/school nurse. I understand this form will be faxed to the school nurse so she/he may assist with the above recommendations.

Parent/guardian signature__________________________________________________Date_______________

FAX Form to: Return to school nurse

| From: | School Nurse | Health Care Provider |
| School Address | Address |
| Phone | Phone |
| Email Address | Email Address |
| FAX | FAX |

Letter adapted from Massachusetts Department of Public Health
Appendix H  Sample Resource Handout for Parents

Growth Resources for Parents

About BMI and Growth

About BMI for Children and Teens
http://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/about_childrens_bmi.html

Your Child’s Growth – includes information about normal growth, BMI, growth charts, healthy eating, keeping portions under control, encouraging a healthy body image

About Physical Activity
Healthy Weight – it’s not a diet, it’s a lifestyle!
http://www.cdc.gov/healthyweight/physical_activity/index.html
   Tips for Parents – Ideas to Help Children Maintain a Healthy Weight

Let’s Move! America’s Move to Raise a Healthier Generation of Kids http://www.letsmove.gov/
   Presidential Active Lifestyle Award (PALA+) Challenge
   https://www.presidentschallenge.org/challenge/active/index.shtml

   Parents Take Action – 5 Simple Steps to Success http://www.letsmove.gov/parents

Healthy Futures Challenge http://dhss.alaska.gov/dph/PlayEveryDay/Pages/challenge.aspx
   Get Out and Play Every day Campaign http://dhss.alaska.gov/dph/PlayEveryDay/Pages/default.aspx

How much physical activity do children need?
http://www.cdc.gov/physicalactivity/everyone/guidelines/children.html

About Nutrition
Healthy Eating for a Healthy Weight http://www.cdc.gov/healthyweight/healthy_eating/index.html

USDA Choose MyPlate  http://www.chooosemyplate.gov/
   Eating on a Budget - The 3 P’s (Plan Prepare Purchase)

   Smart Shopping Tips  http://www.chooosemyplate.gov/food-groups/downloads/TenTips/DGTipsheet9SmartShopping.pdf

   Sample Menus  http://www.chooosemyplate.gov/healthy-eating-tips/sample-menus-recipes.html

5 A Day The Alaskan Way
http://dhss.alaska.gov/sites/takeheart/SiteCollectionDocuments/ESA_AK_5aDay.pdf

Alaska Traditional Food Resources  http://dhss.alaska.gov/sites/takeheart/Documents/TraditionalFoods.pdf
Other Resources

5-2-1-0 Be A Healthy Hero – resources suggestions for eating healthy and getting active

National Eating Disorders Association website includes general information about eating disorders, contributing factors and prevention, treatment basics and a parent toolkit with further materials.
http://www.nationaleatingdisorders.org/learn

Alaska Obesity Facts: No. 1 Children’s Health Issue

Weigh In, Talking to Your Children About Weight + Health – a publication from the Alliance for a Healthier Generation offers likely situations and suggestions for how to respond to questions about overweight and obesity in a factual, practical and caring manner. The information is specifically created for parents with children who are 7-11 years old. www.stopobesityalliance.org/ebook/weighin.
Appendix I  Growth Resources for School Nurses

Action for Healthy Kids - http://www.actionforhealthykids.org/

Alliance for A Healthier Generation - https://www.healthiergeneration.org/

Alaska Division of Public Health –


- Student Height/Weight Surveillance/Screening archived webinar
  http://anthc.adobeconnect.com/p3bundbielk/

American Academy of Pediatrics


Arkansas Center for Health Improvement


Centers for Disease Control and Prevention (CDC)

- Growth Charts - http://www.cdc.gov/growthcharts/

- Use and Interpretation of the WHO and CDC Growth Charts for Children from Birth to 20 Years in the United States - http://www.cdc.gov/nccdphp/dnpa/growthcharts/resources/growthchart.pdf


• **Adverse Childhood Experiences (ACE) Study** - http://www.cdc.gov/ace/index.htm


**Fuel Up to Play 60** - http://www.fueluptoplay60.com/


**National Association of School Nurses**


- **Childhood Obesity** - http://www.nasn.org/ToolsResources/ChildhoodObesity

- **School Nurse Childhood Obesity Toolkit (SCOT)** - http://www.nasn.org/ContinuingEducation/LiveContinuingEducationPrograms/SchoolNurseChildhoodObesityToolkit

  - Childhood Overweight and Obesity: Overview
  - Height/Weight and BMI Screening, Resources and Interventions
  - Acanthosis Nigricans – School Nurse Educational Program

**National Eating Disorders Association** - http://www.nationaleatingdisorders.org/

**National Education Association**

- **Breakfast in the Classroom Toolkit** - http://www.neahin.org/educator-resources/breakfast-in-the-classroom.html

- **Bag the Junk: Improving Competitive Food Policy to Create Healthier, Smarter School Environments** - http://www.neahin.org/bagthejunk/

**National Heart, Lung, and Blood Institute**

• We Can! - Ways to Enhance Children’s Activity and Nutrition - 


Safe Routes to Schools (SRTS) Alaska - http://www.dot.state.ak.us/stwdplng/saferoutes/

Stop Bullying.gov - http://www.stopbullying.gov/
# Blood Pressure Values Requiring Further Evaluation, According to Age and Gender

<table>
<thead>
<tr>
<th>Age, y</th>
<th>Blood Pressure, mm Hg</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Systolic</td>
<td>Diastolic</td>
</tr>
<tr>
<td>3</td>
<td>100</td>
<td>59</td>
<td>100</td>
</tr>
<tr>
<td>4</td>
<td>102</td>
<td>62</td>
<td>101</td>
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<td>5</td>
<td>104</td>
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<td>103</td>
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<td>6</td>
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<td>15</td>
<td>120</td>
<td>76</td>
<td>120</td>
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<tr>
<td>16</td>
<td>120</td>
<td>78</td>
<td>120</td>
</tr>
<tr>
<td>17</td>
<td>120</td>
<td>80</td>
<td>120</td>
</tr>
<tr>
<td>≥18</td>
<td>120</td>
<td>80</td>
<td>120</td>
</tr>
</tbody>
</table>

These values represent the lower limits for abnormal blood pressure ranges, according to age and gender. Any blood pressure readings equal to or greater than these values represent blood pressures in the prehypertensive, stage 1 hypertensive, or stage 2 hypertensive range and should be further evaluated by a physician.

## References:


[http://www.pediatrics.org/cgi/content/full/123/6/e972](http://www.pediatrics.org/cgi/content/full/123/6/e972)
Appendix K  Acanthosis Nigricans Reference for School Nurses

What it is
Acanthosis nigricans is characterized by a darkening (pigmentation change) and/or thickening (textural change) of the skin, often found to appear on the nape of the neck but may also appear in other areas including the axilla, knuckles, groin and skin folds.

What it means
Chronic high levels of blood insulin stimulates the skin cell to produce the classic darkening and thickening. Clinically, acanthosis nigricans is a marker for insulin resistance among individuals who are overweight or obese. Screening students who are overweight or obese may identify a subset who may have metabolic changes that are associated with the risk for diabetes, cardiovascular disease and metabolic syndrome.

Acanthosis nigricans as a screening tool
Acanthosis nigricans is not intended to be diagnostic; rather the school nurse may use it as a screening tool to identify students who require further assessment by a health care provider. Referral and early intervention by a pediatrician/health care provider is the best way to identify impending health risks and initiate changes to lifestyle habits to help mitigate future health risk. NOTE: rarely, acanthosis nigricans may also be present among normal weight individuals which may be indicative of an internal malignancy and requires immediate evaluation by a health care provider.

Acanthosis nigricans screening tips for school nurses
1. Provide adequate lighting.
2. Provide privacy.
3. Bend neck forward.
4. Pull the hair up toward the neckline.
5. Look for color differences in the crevices of the skin.
6. Feel for textural changes.
7. Follow up suspicious lesions by cleaning the neck (soap & water or alcohol swab). Commonly acanthosis nigricans is mistaken for a “dirty neck.”

Referral process for acanthosis nigricans
1. Screen in conjunction with height, weight and BMI identification.

2. Screen the overweight or obese child or adolescent with acanthosis nigricans for blood pressure elevation. Elevated blood pressure at or above the 90th percentile should be retested the same day. Confirm the finding on a subsequent day for those with blood pressures at or above the 95th percentile. NOTE: The BP chart in Appendix J is based on the 5th percentile of height by gender. If the BP reading is > 90th percentile on the chart in Appendix J, utilize the National Heart, Lung, and Blood Institute chart to further evaluate the student’s blood pressure reading in order to determine referral.

3. Notify the parents/guardian of screening results.

4. Recommend referral for further evaluation by a pediatrician/health care provider if acanthosis nigricans identified. Fasting blood glucose test, fasting lipid profile, tests for liver functions may be warranted.

Further resources
Center for Healthy Weight and Nutrition http://www.nationwidechildrens.org/center-for-healthy-weight-nutrition

National Association of School Nurses http://www.nasn.org/ToolsResources/ChildhoodObesity
   Includes online continuing education modules:
   o Childhood Overweight and Obesity: Overview
   o Height/weight and BMI Screening, Resources and Interventions
   o Acanthosis Nigricans – School Nurse Educational Program

Acanthosis Nigricans Screenings/The ANTES Project http://www.utpa.edu/dept/tmbhco/tmbhco/antes.htm

School Health Screening Information

To: Parent(s)/Guardian(s)

Health screenings will be administered _____________________ to all preschool and students in grades ________________________________as required by school district policy.

Why is health screening at school important?
The purpose of school health screenings is to detect any health concerns that might interfere with a child’s education. If a child has poor, uncorrected vision or hearing, it makes it harder for them to succeed in school, sports, social situations, and in life. In addition, children with healthy growth patterns are at an increased risk for a variety of health problems. In [name of school or district], we address our children’s health and wellness with a comprehensive approach that includes health screenings and [insert list of initiatives].

Health screenings will consist of one or more of the following:

- **Vision Screening**
  1. Distance visual acuity - ability to see objects far away
  2. Binocular vision - how well your child’s eyes work together
  3. Photoscreening - ability to see far away, up close, and how well the eyes work together
  4. Color vision - ability to see colors
  5. Near visual acuity - ability to see objects up close

- **Hearing Screening**
  1. Hearing acuity – use of an audiometer to determine the clarity or clearness of hearing, a measure of how well a person hears
  2. Tympanometry – use of a machine to measure how easily the eardrum vibrates to detect fluid or pressure problems
  3. Otoscopic examination – use of an instrument to examine the ear canal and eardrum to observe for abnormalities or infection

- **Growth Screening**
  1. Measurement of height and weight to calculate an individual’s Body Mass Index, or BMI, which is used to show a person’s “weight for height for age” percentile; these measurements are also used to screen for deviations from normal growth patterns
  2. Screening for risks of developing diseases such as type 2 diabetes, cardiovascular disease, metabolic syndrome which consists of a visual inspection of the neck.

- **Blood pressure screening**
  1. A measure of the pressure of the blood on the walls of the blood vessels

How will the results be shared?

- If there are no health concerns following screening, health screening outcomes will be made available to parents/guardians during parent teacher conferences or communicated with parents/guardians in another manner during the school year.

- If health concerns are apparent during screening (one or more health screenings are not within expected limits), your school nurse will contact you to share and discuss the results which may include recommendations for further evaluation by a health care provider when necessary.

Health screenings are not a substitute for a complete examination by health care provider such as family practitioner, pediatrician, eye care specialist or audiologist. If you have any questions about the school health screening program please call your school nurse.

______________________________________
School Nurse [contact information]
Appendix M  SAMPLE General Health Screening Results for Parents and Guardians

Health Screening Report to Parents
Child’s Name__________________________________________  Date________________

Health screenings were administered to all preschool and students in
grades___________________________as required by school district policy. These screenings are
performed to detect any health concerns that might interfere with a child’s education.

Your child had the following health screening(s) performed (check all that pertain):

<table>
<thead>
<tr>
<th>Screening</th>
<th>Results</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision screening</td>
<td>Right /20 Left ___/20</td>
<td></td>
</tr>
<tr>
<td>Hearing screening</td>
<td>Right _____ Left ____</td>
<td></td>
</tr>
<tr>
<td>Growth screening</td>
<td>Height ____ Weight ____ BMI% ____</td>
<td></td>
</tr>
<tr>
<td>Blood pressure screening</td>
<td>Right Arm _____ Left Arm _____</td>
<td></td>
</tr>
</tbody>
</table>

Health screenings are not a substitute for a complete examination by health care provider such as family
practitioner, pediatrician, eye care specialist or audiologist. If any screening results indicate need for
additional follow up, you will be contacted by the school nurse. We further encourage you to share all
screening results with your child’s health care provider. If you have any questions about the school
health screening program please call your school nurse.

Please direct any questions to your school nurse at ________________________________.

*NOTE: use the comment section to note whether screening results are within normal limits or a referral for
further evaluation is attached.
BILL WALKER, GOVERNOR
STATE OF ALASKA

VALERIE DAVIDSON, COMMISSIONER
DEPARTMENT OF HEALTH & SOCIAL SERVICES

JAY C. BUTLER, MD
CHIEF MEDICAL OFFICER, DEPARTMENT OF HEALTH & SOCIAL SERVICES
DIRECTOR, DIVISION OF PUBLIC HEALTH

STEPHANIE BIRCH, RN, MPH, MSN, FNP
SECTION CHIEF, SECTION OF WOMEN’S, CHILDREN’S, & FAMILY HEALTH