



**Community and Public Health Environmental Initiative
Health Screening Protocols for Early Head Start, Head Start,
and Family Support Centers**

- 1) **Goal:** To integrate health and wellness into high quality early childcare and education programs.
- 2) **Objectives:**
 - Screen infants and children for height (or length), weight, BMI (24 months or older), head circumference (infants 12 months or younger), and blood pressure (36 months or older).
 - Suggest referrals or re-test when necessary; provide explanation/education to families.
- 3) **Rationale:**
 - According to the Early Head Start National Resource Center (EHS NRC) the “purpose of screening is to identify infants and toddlers who should be referred for evaluation for possible developmental, health, or sensory concerns (EHS, 2008).” Screening for height, weight, BMI, head circumference and blood pressure are all within the scope of practice for nurses and nursing students. Measuring height and weight in infants and toddlers and height, weight and BMI in preschoolers can identify issues with growth and development and nutritional intake.
 - During the first year of life, head circumference is an important indicator of brain health, as the bones of the skull fuse together and the brain develops rapidly. Head circumference can alert providers if a child’s head is growing faster or slower than normal, indicating conditions such as water on the brain (hydrocephalus) or a very small head size (called microcephaly). Finally, the CDC recommends measuring children’s blood pressure starting at age three (2020). Hypertension can cause changes to the blood vessels in children. Helping children maintain a healthy weight, stay physically active, and eat nutritious foods are all ways to help them avoid both cardiovascular diseases later in life and maintain a healthy weight and BMI.
- 4) **Logistics:**
 - Schedule screening for height, weight, BMI, head circumference, and blood pressure with the center director.
 - Obtain consent forms from parents if the center has not obtained them previously.
 - Review health screening guidelines with BSN, RN-to-BSN and/or CNL students.
 - Have students demonstrate competency in measurement techniques before performing screening tasks independently.
 - Organize screening by class (infants, toddlers, preschoolers). The center director or staff will notify parents about screening.

- Obtain a list of students and their DOB for each class (infants, toddlers, preschoolers) that will be screened (see spreadsheet provided for screening).
- Conduct screening as a pair, working with one infant/child at a time, recording information on the spreadsheet as you go along.
- When all children have been screened, provide the results recorded on the spreadsheet to the center director so staff can enter data into the system. Many data systems are able to generate a growth chart for each child, including all height and weight measures currently in the system.
- Prepare an individual report for the parent(s) of each child (see screening report form) and attach individual growth chart. Make one copy for the parent(s) and one for the center.
- Meet with parent(s) to review the results; both student and parent must sign each form. The clinical instructor should also sign.
- Place a signed copy of the individual report and individual growth chart in the child's health record.
- Keep a copy of the spreadsheet with recorded results to track follow-up activities and for your program's records.

5) Guidelines for Measurement of Height:

- Equipment needed:
 - Roll of white paper ("exam paper")
 - Measuring tape
 - Height chart
 - Ruler or thin hard book (to measure top of head)
 - Pencil
 - Reward stickers
 - Documentation form (spreadsheet)
- Preparation:
 - Identify best place to measure toddlers
 - Tape the height chart on the wall - check accuracy with measuring tape
- Infants: (length)
 - Remove any shoes
 - Lay infant on exam paper
 - Have other adult hold infant's head in place
 - Mark line of head
 - Extend infant's leg (one at a time) and mark on paper at heel
 - Measure length on exam paper and document on spreadsheet to nearest 1/8" or 0.1 cm
 - Replace shoes, reassure and return child to classroom
 - Dispose of paper

- Toddlers: (height)
 - Help child remove shoes and any heavy clothing
 - Have child stand with heels together, buttocks, and shoulders touching the wall
 - Head should be in midline
 - Make sure child is looking forward with line of vision parallel to the floor
 - Hold flat edge above head
 - Mark height on chart and document to nearest 1/8" or 0.1 cm
 - Praise child and offer reward sticker



Figure 1: CDC

6) Guidelines for Measurement of Weight

- Equipment needed:
 - Adult scale
 - Documentation form (spreadsheet)
- Preparation:
 - Place scale on hard, uncarpeted surface
 - Wash hands
- Infants:
 - “Zero” scale
 - Remove infant’s shoes and heavy clothing
 - Adult steps on scale and records weight
 - Adult steps off scale, picks up child and holds child in arms
 - Adult steps back onto scale with child and records weight (lbs or kgs)
 - Subtract adult weight from total weight while holding child to obtain child’s current weight
- Toddlers:
 - “Zero” scale
 - Remove shoes and heavy clothing
 - Have child stand on scale. Record weight
 - Praise child and offer reward sticker
 - Wash hands



7) Guidelines for Measurement of Head Circumference (Infants Only)

- Equipment needed:
 - Paper measuring tape
 - Roll of white exam paper
 - Documentation form (spreadsheet)
 - Chart available at CDC [Growth Charts - Data Table of Infant Head Circumference-for-age Charts \(cdc.gov\)](https://www.cdc.gov/growthcharts/html_charts/hcageinf.htm) or www.cdc.gov/growthcharts/html_charts/hcageinf.htm

- Preparation:
 - Lay white exam paper onto changing table
 - Wash hands
- Infants 12 months or younger (American Academy of Pediatrics (AAP)):
 - Lay infant on clean exam paper on changing table
 - Hold infant's head still, using another adult if necessary
 - Measure (in nearest tenth of a cm) at head's greatest circumference, slightly above eyebrows and pinna of ears and around occipital prominence at back of the head
 - Keep tape flat, being careful not to twist tape
 - Take off tape and measure again to confirm
 - Record findings in inches or cm on spreadsheet
 - Praise child and offer comfort as needed
 - Wash your hands

Measurement of head circumference



ADAM.

Figure 2: U.S. National Library of Medicine

8) Guidelines for Measurement of BMI (24 months or older)

- Equipment needed:
 - Computer access to CDC BMI calculator (accounts for age & gender) (<https://nccd.cdc.gov/dnpabmi/Calculator.aspx>)

OR

- Use any calculator and input one of the following the equations:

Metric Method

$$\text{BMI} = \frac{\text{weight in kilograms}}{\text{height in meters}^2}$$

U.S. Method

$$\text{BMI} = \frac{\text{weight in pounds} \times 703}{\text{height in inches}^2}$$

How to calculate in →cm and lbs → kg

- Inches x 2.54 = centimeters
- Pounds / 2.2 = kilograms
- Preparation:
 - Collect height, weight, age, and gender of child
- Procedure:
 - Enter the above information into the CDC's on-line calculator or perform manual calculation

- Obtain BMI from calculator
- Document on spreadsheet
- **CDC BMI calculator:**
https://www.cdc.gov/healthyweight/assessing/bmi/childrens_bmi/tool_for_schools.html

9) Guidelines for Measurement of Blood Pressure (Children 36 months and older)

- Equipment needed:
 - Sphygmomanometer
 - Pediatric blood pressure cuff
 - Stethoscope
 - Chair
- Preparation:
 - Find quiet area to perform blood pressure check
 - Wash hands
 - Make sure child is calm before taking measurement
- Procedure:
 - Have another adult hold the child comfortably on his/her lap
 - Place the pediatric cuff around the child's arm. The cuff should encircle 80% to 100% of the arm circumference. The length should be two-thirds of the arm
 - The child should have measurements taken while sitting with the arm at heart level
 - Once the cuff is inflated, decrease pressure no faster than 3 mmHg/second
 - Two measurements should be taken 3 to 5 minutes apart
 - Document both results on the spreadsheet



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