

Height and Weight Screening Tip Sheet

Resource

Accuracy is important in obtaining all pediatric size measurements because these measurements will be used as the basis of clinical assessment. Accurate and reliable physical measures are used to:

- monitor the growth of an individual child
- detect growth abnormalities
- monitor nutritional status
- track the effects of medical or nutritional intervention

If growth is not proceeding as expected for an individual of a given age based on the size measures, then referral for additional evaluation may be necessary to address the concern.

Child Scale Specifications

- high quality beam balance or electronic digital
- weighs in 0.1 kg (100 gm) or 1/4 lb increments
- weight can be 'locked' in
- stable weighing platform
- can be easily 'zeroed'
- can be calibrated
- has no stature device attached (bar that can measure height on a standing scale)
- has no wheels on scale

Child Stadiometer Specifications

Stadiometers must be stable, calibrated and dedicated to the purpose. This requires:

- a vertical board with an attached English or metric rule
- an easily moveable horizontal headboard that can be brought into contact with the most superior part of the head
- firm mounting on a stable wall
- a wide and stable platform or firm uncarpeted floor as the base for children to stand on
- easily read, stable tape or digital readout in 0.1 mm or 1/8 inch increments
- calibrating line of the stadiometer that measures the correct distance from the floor using a metal measuring stick or tape

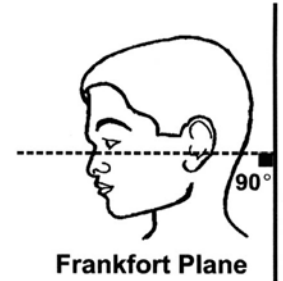
Measuring the Height of a Child

1. Have the child stand with her back directly in front of the measuring board. Have her back up slowly towards the board. As soon as any part of the body (buttocks, shoulder blades, and/or heels) touches the surface board/wall, have the child stand in that spot.
2. Find the child's natural stance with knees and feet. The stance will be either knees together and feet apart, or knees apart and feet together, or knees together and feet together. NOTE: Some people may have their thighs touch first before their knees touch, and that is acceptable.
3. Find the MID-AXILLARY LINE on the child. (This imaginary line runs from mid-shoulder to the heels.) It should be perpendicular, or at a right angle, to the floor. If necessary, position the child's body so that the mid-axillary line is correctly positioned. The child's arms should be at his/her side. The heels and/or head may or may not touch the wall or board.



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4. Position the child's head using the FRANKFORT PLANE. (This imaginary line runs from the middle of the ear to under the eye.) It should be parallel to the floor.
5. Place the headpiece flat against the wall or board and touching the crown of the head at a right angle.
6. Hold the headpiece steady and read the measurement at eye level. Read the measurement to the nearest 1/4 inch. (If the measurement falls between 1/8 inch increments, round up.)
7. Repeat the process until you get two measurements that are the same.
8. Record the measurement on the growth chart.



Common Errors

- use of improper equipment
- improper mounting of equipment
- footwear, heavy outer clothing, hat, and hair barrettes not removed
- both feet not flat on floor
- measurement not read at eye level
- improper position of the stance, mid-axillary line, or the Frankfort plane.

Measuring the Weight of a Child

1. Make sure the scale is balanced at zero weight.
2. Have the child step onto the center of the scale platform with feet slightly apart for better balance.
3. Move the main beam weight to the right until the balance indicator begins to tip down, then move it back to the left until the main beam weight rests in one of the grooves. The balance indicator will point to the top of the movement range.
4. Move the fractional weight to the right until the balance indicator is centered.
5. Read the measurement to the nearest ounce or (¼ lb with a digital scale). Add the weight indicated on the fractional beam to that indicated on the main beam.
6. Record the measurement on the growth chart.

Common Errors

- use of improper equipment
- scale not properly balanced
- footwear and heavy outer clothing not removed
- child not properly centered on scale platform
- child holding on to scale, caretaker, or some other object
- child not remaining still on scale
- weights not positioned at zero before taking measurements

Adapted from "Growth Assessment: Weighing and Measuring WIC Participants Self-Paced Training Guide" Training and Technical Assistance Division Bureau of Nutrition Services Texas Department of Health, July 2003.