

## Anthropometric Guidance

### Three Components of Accurate Measuring:

**1) Standardized Technique<sup>1</sup>**

**2) Accurate & Calibrated Equipment<sup>2</sup>**

**3) Trained Measurers**

### Tips in preparing to collect anthropometric data:

- Hair ornaments, buns, braids, etc. must be removed to obtain an accurate measurement.
- Respect the participant's privacy: where measurements are taken, when removing clothing/donning gowns, describing the process and interpreting numbers.
- Remove clothes down to diaper (clean/dry) for infants less than/equal to one year of age, and heavy clothing/shoes for women and children.
- Return the scale to zero after each measurement.
- When two measurement values do not fall within the range listed in the table below, the participant should be re-positioned and measured a 3<sup>rd</sup> time. The average of the two closest measurements should be recorded.

Recumbent Length	Standing Height/Stature	Weight
<b>Infants &amp; Children: &lt; 24 months old</b>	<b>Women &amp; Children: ≥ 24 months (able to stand without assistance)</b>	<b>Women, Infants, Children</b>
<b>Equipment to Use:</b> Length board with fixed headpiece and moveable foot piece.	<b>Equipment to Use:</b> A calibrated vertical stadiometer with a right-angle, fixed headpiece. <ul style="list-style-type: none"> <li>• Balance beam scales should not be used to collect height; newer models with the combination stadiometer &amp; digital scale are designed for accuracy of both height &amp; weight</li> </ul>	<b>Equipment to Use:</b> Quality beam balance or electronic scale for older children & adults. For infants/toddlers not able to stand, a quality beam balance or electronic scale with a tray large enough to safely support.
<b>Position:</b> Lying on their back, with two measurers: <ul style="list-style-type: none"> <li>• Child's head should be centered, touching the top of the length board.</li> <li>• Parent/caregiver should help to steady the infant/child's head.</li> <li>• Lying straight and flat, eyes looking straight up.</li> <li>• Ensure <i>both legs</i> are fully extended with feet flat against the foot piece when viewing measurement.</li> </ul>	<b>Position:</b> Standing <ul style="list-style-type: none"> <li>• with heels, buttocks, shoulders and head touching a flat, upright surface</li> </ul>	<b>Position:</b> Sitting or standing on the center of the scale tray or platform.
<b>Measure to the nearest:</b> 0.1 cm or 1/8 inch. <b>Reposition</b> and re-measure, if necessary. <b>Measurements</b> should agree to 1 cm or ¼ inch. <b>Record</b> measurement.	<b>Measure to the nearest:</b> 0.1 cm or 1/8 inch <b>Reposition</b> and re-measure if necessary. <b>Measurements</b> should agree within 1 cm or ¼ inch. <b>Record</b> measurement.	<b>Measure to the nearest:</b> 0.03 kg or 1 oz. <b>Reposition</b> and re-measure, if necessary. <b>Measurements</b> should agree within 0.1 kg or 1/4 lb. <b>Record</b> measurement. <ul style="list-style-type: none"> <li>• Active/distressed child                             <ul style="list-style-type: none"> <li>○ Weigh parent/caregiver reset scale to zero.</li> <li>○ Weigh parent/caregiver and child together.</li> <li>○ Subtract parent/caregiver's weight.</li> </ul> </li> </ul>

<sup>1</sup> CDC Guidelines should be utilized when collecting and interpreting measurements, the following links provide additional guidance: <https://bit.ly/31PzihD> and <https://bit.ly/2QonDm7>

<sup>2</sup> There are many sources of quality, medical-grade, reliable equipment- information below is intended only as a guide and is not an endorsement of specific products, services or manufacturers:

- Scale distributors: Tanita, Detecto, Seca, Perspective Enterprises
- Length Board and Stadiometer distributors: Perspective Enterprises, Measurement Concepts
- Test or Calibration Weights: Perspective Enterprises