Underweight (Infants and Children)

| Definition/ cut-off value | Birth to 2 years: Less than or equal to 5\textsuperscript{th} percentile weight-for-length.\textsuperscript{*}  
|                          | 2-5 years: Less than or equal to 5\textsuperscript{th} percentile Body Mass Index (BMI)-for-age\textsuperscript{*}.  
|                           | *Based on National Center for Health Statistics/Centers for Disease Control and Prevention age/sex specific growth charts (2000).  

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<tr>
<th>Participant category and priority level</th>
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<td>Infants</td>
<td>I</td>
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<td>Children</td>
<td>III</td>
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| Justification | The Centers for Disease Control and Prevention (CDC) uses the 5\textsuperscript{th} percentile as the cut-off to define underweight in its Pediatric Nutrition Surveillance System. However, CDC does not have a position regarding the cut-off percentile, which should be used to determine underweight as a nutritional risk in WIC.  
|               | A survey of articles and texts addressing weight for length or stature cut-off percentiles reveals that: a) many children less than the 5\textsuperscript{th} percentile are in need of nutritional intervention, and b) many authors also view a child at Less than or equal to the 10\textsuperscript{th} percentile as at nutritional risk and in need of preventive nutritional intervention, or at least further evaluation (1).  
|               | Weight-for-length/stature describes body proportionality and is sensitive to acute undernutrition, but can also reflect long-term status (2). Physical growth delay is used as a proxy for the deleterious effects undernutrition can have on immune function, organ development, hormonal function and brain development (3). Participation in WIC has been associated with improved growth in both weight and height in children (4).  

| Clarifications/ Guidelines | Because NCHS/CDC age/sex specific growth charts are used to record the weight and length/stature measurements of healthy, full-term infants, this risk code MAY NOT be used for premature infants. However, because many premature infants show “catch-up growth” by two years of age, this risk code may be used for infants born premature beginning when they are two years of age; use BMI-for-age.  

Clarifications/ Guidelines

If the measurements cannot be plotted on a specific percentile line, but it is obvious that the measurements would plot below the 5th percentile line, the CA should use professional judgment when assigning this risk code. The CA should provide documentation to explain why the risk code was assigned.

References


