

GROWTH ASSESSMENTS

The Department of Children and Youth Services (CYS) has adopted a policy to use the Body Mass Index (BMI) as the assessment tool in growth assessment. Children's body fat composition changes as they grow and develop. Also, boys and girls differ in their body fat as they mature. This is why BMI for children, also referred to as BMI -for-age, is gender and age specific.

The Department is requiring two growth assessments. Height and weights must be obtained on all children at the beginning of the program year and updated in February or March. The beginning of the year values may be recorded from the child's enrollment physical provided the physical examination is not greater than two months old. For children lacking an enrollment physical, height and weights should be assessed on site. The second height and weight measurement is taken on site. Guidelines is taking accurate measurement is described below.

For late enrollees, heights and weights must be recorded upon enrollment and updated 4 to 5 months upon entry into the program. The schedule for updating growth assessment on late enrollees is as follows:

<u>ENROLLED</u>	<u>UPDATE HEIGHT/WEIGHT</u>
October	February/March
November	March/April
December	April/May
January	May/June
February/March	July/August

A. MEASURING STATURE (HEIGHT)

Equipment: A yardstick or non stretchable tape measure, attached to a wall. (Do not use the moveable rod attached to the scale because it has a tendency to drop down.).

Procedure:

Remove child foot and head wear. Clean disposable paper should be used for the child to stand on.

Position child on the floor with heels slightly apart. Knees and back as straight as possible, heels, buttocks, upper part of back, and back of head touching the wall.

Bring a head board to the crown of the head.

Read the stature accurately and record the exact measurement immediately.

Repeat the procedure to validate accuracy of the first measurement. If the measurements vary by more than 1/4 of an inch, do the procedure again.

B. MEASURING WEIGHT

Equipment: A scale (do not use bathroom scale). Check periodically at least twice yearly for accuracy.

PROCEDURE:

Children should wear lightweight day time clothing (remove sweaters and jackets) and should be weighed without shoes.

Zero the balance beam scale by placing the beam weights at zero and moving the adjustable weight until the beam is in zero balance.

Position the child on the scale facing the weights with feet centered on the platform. The child's arms should be hanging loosely at his/her side.

To read the balance beam: Move the weight on the main beam away from the zero position until the indicator shows that too much weight had been added, then move the weight back toward the zero position until the excessive amount of weight has been removed. Move the weights from the fractional beam back and forth until the indicator is centered.

Read the weights and record the exact measurements immediately. Repeat the procedure to validate accuracy of the first measurement. If the measurement varies by more than $\frac{1}{2}$ pound, do the procedure a third time.

NOTE: When assessing height and weights you may convert metric measurements (centimeters/kilograms) to inches and pounds, respectively.

Use these conversions

1 centimeter (cm) = 0.4 inch

1 kilogram (kg) = 2.2 pounds

Use and Interpretation of the Growth Charts

1. Obtain accurate weights and measures as explained above.
2. Select the growth chart to use based on the age and gender of the child being weighed.
3. Use the charts listed below when assessing boys and girls from 0 to 24 months old. These charts are listed in COPA at the bottom of the growth assessment screen.
 - Length-for-age
 - Weight-for-age
 - Weight-for-length
 - Head circumference-for-age

Use the chart listed below when assessing **boys and girls aged 2 to 20 years**. This chart is in COPA at the bottom of the growth assessment screen.

BMI-for-age
Stature-for-age

4. Determine BMI

COPA will calculate BMI using weight and stature measurements. It will determine the status of the child as overweight, at risk for overweight, or underweight. The chart is used to compare a child's weight relative to stature with other children of the same age and gender.

5. Print growth chart

To print growth chart, select the applicable growth chart at the bottom of the growth assessment screen. The new screen shows a graph indicating the weight status of the child. Print the graph and place the hard copy on the child's health folder.

6. Interpret the plot measurements

The curved lines on the growth chart show selected percentiles that indicate the rank of the child's measurements. For example, when the dot is plotted on the 95th percentile line for BMI-for-Age, it means that only 5 of 100 children (5%) of the same age and gender in the reference population have a higher BMI-for-Age. COPA interpret the plotted measurements based on the percentile ranking and the percentile cutoff corresponding to the nutrition indicator shown on the table below. **If the percentile rank indicates a nutrition related health concern. Additional monitoring and assessment are recommended.**

Anthropometric Index	Percentile Cut-off Value	Nutritional Status Indicator
BMI-for-Age	Greater than or equal to 95th percentile	Overweight
BMI-for-Age	Greater than or equal to 85th percentile and less than 95th percentile	At Risk of Overweight
BMI-for-Age	Less than 5th percentile	Underweight
Length/Stature-for- Age	Less than 5th percentile	Short Stature
Head Circumference (under 2 years of age)	Less than 5th and greater than 95th percentile	Developmental for-age problem

SCREENING AND FOLLOW UP

Nutritional Status Indicator	Action to Take	Follow-up Needed
<p>Overweight BMI above the 95th percentile</p> <p>At Risk of Overweight BMI above 85th percentile</p>	<p>Provide parent/guardian result of assessment. Provide parent/guardian letter, health care provider letter and overweight action plan to be given to provider for completion. Refer to WIC Program for counseling. Provide and discuss handout on weight management and other handouts on overweight. Refer to nutritionist and medical provider.</p>	<p>Follow up with family for the completed action plan from the health care provider. Provide a copy to the family and the teacher for implementation as needed. Keep a copy of the action plan in the child health record. Weigh child periodically (every 3-4 months) until the problem is resolved.</p>
<p>Underweight BMI below the 5th percentile</p>	<p>Refer to WIC Program for counseling. Provide handout “Food Guide Pyramid for Young Children.” Refer to underweight action plan and medical provider</p>	<p>Weigh child periodically (every 3-4 months) until the problem is resolved.</p>
<p>Short Stature Height for age below the 5th percentile</p>	<p>Refer to WIC Program for counseling. Provide handout “Food Guide Pyramid for Young Children”. Refer to medical provider.</p>	<p>Measure stature for age (every 3-4 months) until the problem is resolved. Keep copy of health care provider recommendation in the health folder.</p>
<p>Head Circumference (0-2 years old) Less than 5th and greater than 95th percentile Developmental for-age problem</p>	<p>Refer to medical provider.</p>	<p>Follow up result from provider and implement doctor’s orders. Keep copy of health care provider recommendation in the health folder.</p>

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