



# **ANTHROPOMETRIC MEASUREMENT TRAINING**

Michigan WIC



**WIC WANTS KIDS TO  
THRIVE 'TIL 5!**



# Anthropometric Measurement Training

## ATTACHMENTS

### FOLDER

Agenda

PowerPoint

Anthro Manual

### Handouts

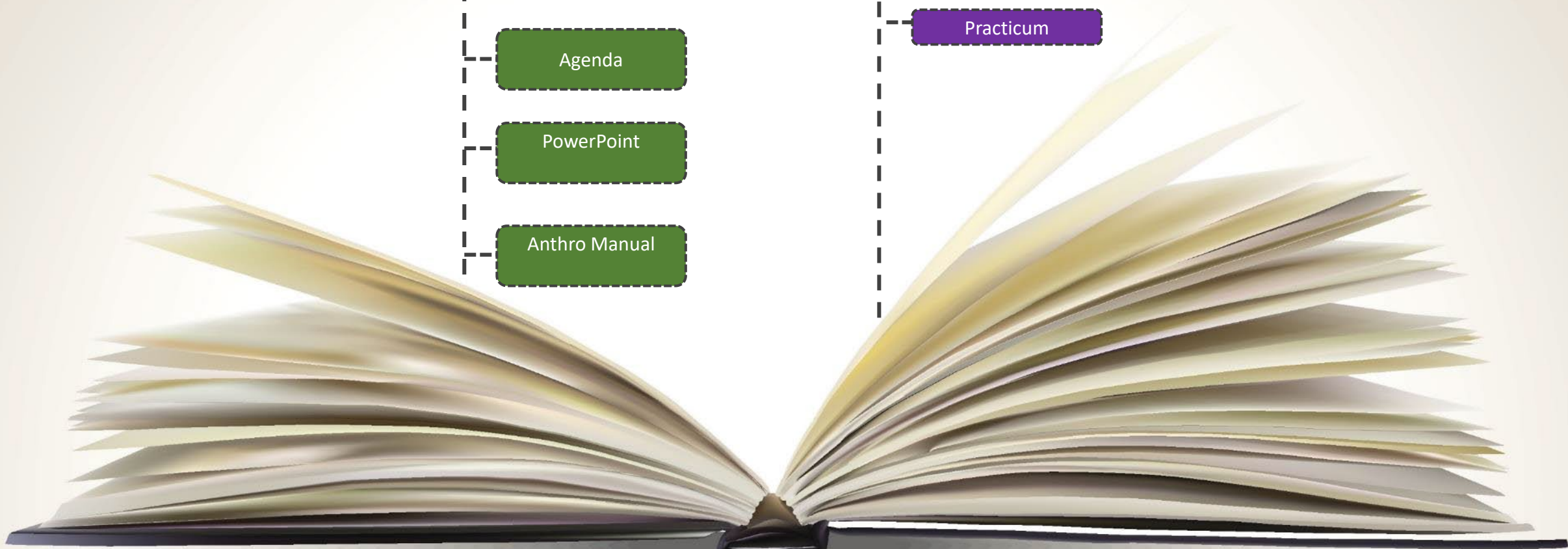
Recording Forms

Data Entry

Converting to  
MIWIC format

Skills Checklist

Practicum



# What is the collection of Anthropometric measurements?

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Measurements of height (length or stature) and weight are indicators of one's nutrient and food energy intake; this can impact health and well-being.

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These measurements are a key tool to assess a client's growth and development, particularly in young children.

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For infants and children, body measurements plotted on growth charts can provide a clue to whether a child's growth is normal or delayed and how a child's weight compares to growth of other children based on standardized growth charts

# What is the collection of Anthropometric measurements Continued

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By examining a child's weight and height over time, a picture of the child's growth pattern emerges.

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For adults, comparing height and weight indicates weight for height proportion, normal, under or overweight using the Body Mass Index (BMI).

# Anthropometric Training

*Why do we need Anthropometric training?*

- ✓ Person Off Street?
- ✓ 15 Minutes?



# CONFIDENCE

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**Practice measurement techniques and consider procedures**

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**Know how to read the measurement equipment**

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**Converting measurements into MI-WIC format.**

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**Entering measurements in MI-WIC.**

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**Maintenance of equipment.**

# Anthropometric Training

What questions do you have?

What do you want to make sure we cover?

Do you have tips for performing the measurements with infants or children?

# ANTHROPOMETRIC RESOURCES

## **Anthropometric Manual and Appendices**

[WIC Staff \(michigan.gov\)](#) > Manuals, Policies, Guidance, Regulations > [WIC Anthropometric Manual](#) > [Anthropometric Manual Appendices](#)

## **Skills Checklist**

[WIC Staff \(michigan.gov\)](#) > Staff>Training>WIC Competency Checklists>

[Michigan WICAnthro Competency Checklist, Infants and C1](#)

[Michigan WIC Anthro Competency Checklist, C2-4 and Adult](#)

# Accurate Body Measurements

1

## CLUES

Health and Nutritional Well-being

2

## GROWTH

Normal or Delayed

3

## WEIGHT

Normal, Overweight or Underweight

4

## PREGNANCY/POSTPARTUM

Weight Gain or Loss

5

## DETERMINATION OF RISK FACTORS

For Care Plan Development



# Anthropometric Training

## *Key Point #1*

The major focus of Anthropometric Training is to learn procedures and techniques that will result in...

**Consistent Measurement Techniques**

**Improved Accuracy**

**Reduced Errors Over Time**

| USDA Risk Code        | USDA Title   | USDA Last Revised | Michigan Risk Code | Michigan Title  | Category             |
|-----------------------|--|-------------------|--------------------|---|----------------------|
| <b>Anthropometric</b> |  |                   |                    |   |                      |
| 101                   | Underweight (Women)  | 07/2009           | 101.01             | Prepregnancy Underweight  | PG                   |
|                       |  |                   | 102.01             | Postpartum Underweight  | BE, BP,              |
| 103                   | Underweight or At Risk of Underweight (Infants and Children)     | 05/2011           | 103.01+            | High-Risk Underweight   | IBE, IBP, C1-C4      |
|                       |  |                   | 103.02             | At-Risk of Underweight  | IBE, IBP, IF, C1-C4  |
| 111                   | Overweight (Women)   | 07/2009           | 111.01             | Prepregnancy Overweight   | PG                   |
|                       |  |                   | 112.01             | Postpartum Overweight   | BE, BP, NPP          |
| 113                   | Obese  | 05/2011           | 113.01+            | Obese   | C2-C4                |
| 114                   | Overweight or At Risk of Overweight (Infants and Children)       | 05/2011           | 114.01             | Overweight or At-Risk of Overweight                                   | IBE, IBP, IFF, C1-C4 |
| 115                   | High Weight-for-Length (Infants and Children <24 Months of Age)  | 05/2011           | 115.01             | High Weight-for-Length  | IBE, IBP, IFF, C1    |
| 121                   | Short Stature or At Risk of Short Stature (Infants and Children) | 05/2011           | 121.01             | Short Stature   | IBE, IBP, IFF, C1-C4 |
|                       |  |                   | 121.02             | At Risk for Short Stature   | IBE, IBP, IFF, C1-C4 |
| 131                   | Low Maternal Weight Gain   | 06/2018           | 131.01+            | Low Maternal Weight Gain  | PG                   |
| 133                   | High Maternal Weight Gain  | 06/2010           | 133.01             | High Maternal Weight Gain   | PG, BE, BP, NPP      |
| 134                   | Failure to Thrive  | 12/2020           | 134.01+            | Failure to Thrive   | IBE, IBP, IFF, C1-C4 |
| 135                   | Slow/Faltering Growth Pattern                                    | 06/2016           | 135.01+            | Slow/Faltering Growth Pattern   | IBE, IBP, IFF        |
| 141                   | Low Birth Weight and Very Low Birth Weight                       | 04/2004           | 141.01+            | Low Birth Weight and Very Low Birth Weight and Under 24 Months of Age | IBE, IBP, IFF, C1    |
| 142                   | Preterm or Early Term Delivery                                   | 05/2017           | 142.01+            | Preterm Delivery  | IBE, IBP, IFF, C1    |
|                       |  |                   | 142.02             | Early Term Delivery   | IBE, IBP, IFF, C1    |
| 151                   | Small for Gestational Age  | 04/2004           | 151.01+            | Small for Gestational Age and Under 24 Months of Age                  | IBE, IBP, IFF, C1    |

# Anthro Data & WIC: Risk Assignments



| USDA Risk Code | USDA Title                | USDA Last Revised | Michigan Risk Code | Michigan Title            | Category      |
|----------------|---------------------------|-------------------|--------------------|---------------------------|---------------|
| 152            | Low Head Circumference    | 05/2011           | 152.01             | Low Head Circumference    | IBE, IBP, IFF |
| 153            | Large for Gestational Age | 04/2004           | 153.01+            | Large for Gestational Age | IBE, IFF, C1  |

## Michigan WIC Nutrition Education Plan

Appointment Date: 07/25/2024

# Anthro Data & WIC: NE Plan

### Nutrition Goals Discussed:

- : My goal is to eat/offer 3 meals and 2-3 snacks a day in my-size portions.
- : My goal is to consider what I need to do to promote oral health for my family.
- : My goal is to consider what I need to do to promote oral health for my family.
- : My goal is to consider what I need to do to promote oral health for my family.

### Next Planned Nutrition Education Method:

- : Individual
- : Individual
- : Individual

### Weight, Height/Length and Hemoglobin:

- 1 : 141 lbs 0 oz, 5 ft 0 in on 07/25/2024
- 1 : 27 lbs 3 oz, 2 ft 11 in on 07/25/2024 and Hemoglobin level of 13.2 on 07/25/2024
- 1 : 19 lbs 10 oz, 2 ft 2 in on 07/25/2024

**Remember these important messages for you or your family and friends:**

**Avoid alcohol and dangerous substances while pregnant or parenting!**

**Cook together. Eat together. Make mealtime a family time.**

**Be active together as a family.**

**They take their lead from you. Limit screen time to less than 2 hours per day.**

**Breastfeeding is best, for you and your family!**

The purpose of the WIC program is to provide nutrition education and tips for a healthy diet, supplemental foods, referrals and breastfeeding support.

## Anthro Data & WIC: Indicator

### Indicator

**Increase 1st Trimester Entry**

**Increase Percent with Ideal Prenatal Weight Gain**

**Decrease Percent Low Birthweight Infants\***

**Decrease Prevalence of Low Hemoglobin (<5 yrs)**

**Increase BF Initiation**

**Increase 6 mo BF Duration**

**Decrease Prevalence of Childhood Obesity (2-5 yrs)**

Infant/Child Height/Weight **1** Growth Chart **2** Imms/Bloodwork **3**

**Active Record**

Cat: C1 (male)

ID: 302 236 960

DOB:

Age: 1 yrs, 1 mos

Cert: 03/12/25 - 03/16/26

Status: Terminated

**Scheduling Tasks**

**Guided Script**

- Family Information
- Client Information
- Cert Action
- Lab**
- Health
- Nutrition History
- Breastfeeding
- Certification
- Summary
- Education

English(SAE) Metric

**Anthropometric Data**

| Date*      | Age      | Height |       |                          |                          | Weight |     |                          |                          | Head Circum |       |                          |                          | BMI | BMI/Age | Wt/Age | Ht/Age | Wt/Ln | HC/Age | Created By | Modified By | Comments |
|------------|----------|--------|-------|--------------------------|--------------------------|--------|-----|--------------------------|--------------------------|-------------|-------|--------------------------|--------------------------|-----|---------|--------|--------|-------|--------|------------|-------------|----------|
|            |          | in*    | 1/16* | Unk                      | ?                        | lbs*   | oz* | Unk                      | ?                        | in*         | 1/16* | Unk                      | ?                        |     |         |        |        |       |        |            |             |          |
| 07/15/2025 | 5 m, 0 w | 26     | 8     | <input type="checkbox"/> | <input type="checkbox"/> | 14     | 4   | <input type="checkbox"/> | <input type="checkbox"/> | 16          | 12    | <input type="checkbox"/> | <input type="checkbox"/> | N/A | N/A     | 9.69   | 76.75  | 0.87  | 51.6   |            |             |          |
| 03/12/2025 | 3 w, 4 d | 22     | 0     | <input type="checkbox"/> | <input type="checkbox"/> | 9      | 4   | <input type="checkbox"/> | <input type="checkbox"/> | 14          | 8     | <input type="checkbox"/> | <input type="checkbox"/> | N/A | N/A     | 47.17  | 83.86  | 5.37  | 49.09  |            |             |          |

Add Remove

Preterm Infant

Completed Weeks of Gestation:

Birth Weight\*:  lbs  oz  Unknown

Weight Change:  lbs

Height Change:

**Lab Screen**

# Infant/Child Height Weight

**MI-WIC**  
Michigan's Management Information for WIC

**Active Record**

Cat: C1 (female)  
ID: 302 258 302  
DOB: [REDACTED]  
Age: 1 yrs, 4 mos  
Cert: 06/21/25 - 12/20/25  
Status: Terminated

Scheduling Tasks

Guided Script

- Family Information
- Client Information
- Cert Action
- Lab
- Health
- Nutrition History
- Breastfeeding
- Mid-Certification
- Nutr & Hlth Summary
- Nutrition Education
- Referrals
- Food Prescription
- Issue Benefits
- Schedule Appt
- Print Documents

Client Care

Exit

Fri 3/20/2026 ?

File Scheduler Certification Benefits Miscellaneous Reports Help Messages

Infant/Child Height/Weight
Growth Chart
Imms/Bloodwork

English(SAE)  Metric

**Anthropometric Data**

| Date*      | Age      | Height |       |                          |                          | Weight |     |                          |                          | Head Circum |       |                          |                          | BMI | BMI/Age | Wt/Age | Ht/Age | Wt/Ln | HC/Age | Created By | Modified By | Comments |
|------------|----------|--------|-------|--------------------------|--------------------------|--------|-----|--------------------------|--------------------------|-------------|-------|--------------------------|--------------------------|-----|---------|--------|--------|-------|--------|------------|-------------|----------|
|            |          | in*    | 1/16* | Unk                      | ?                        | lbs*   | oz* | Unk                      | ?                        | in*         | 1/16* | Unk                      | ?                        |     |         |        |        |       |        |            |             |          |
| 06/21/2025 | 7 m, 0 w | 29     | 3     | <input type="checkbox"/> | <input type="checkbox"/> | 18     | 3   | <input type="checkbox"/> | <input type="checkbox"/> | 18          | 8     | <input type="checkbox"/> | <input type="checkbox"/> | N/A | N/A     | 71.58  | 99.78  | 16.76 | 99.9   | BRADYK2    |             |          |

Preterm Infant

Completed Weeks of Gestation:

Time Interval:

Mother's Height:  ft  in

Father's Height:  ft  in

Birth Weight\*:  lbs  oz

Weight Change:

Height Change:

Mother's Weight:  lb

Father's Weight:  lb

Unknown

# Growth Chart: WHO (up to 24 months old)

Information for VNC

Active Record

Cat: IBE (male)

ID: 302 249 855

DOB: [REDACTED]

Age: 1 yrs, 0 mos

Cert: 05/12/25 - 03/03/26

Status: Terminated

Scheduling Tasks

Guided Script

- Family Information
- Client Information
- Cert Action
- Lab
- Health
- Nutrition History
- Breastfeeding
- Mid-Certification
- Nutr & Hlth Summary
- Nutrition Education
- Referrals
- Food Prescription
- Issue Benefits
- Schedule Appt
- Print Documents

Client Care

Exit

Infant/Child Height/Weight

Growth Chart

Imms/Bloodwork

World Health Organization

Boys Weight for Age - Birth to Less than 24 Months Weight

VENKI S1TEST

KG|LB

Age(Completed months)

97.7 95 90 75 50 25 10 5 2.3

Wt/Age

Ht/Age

HC/Age

WT/Length

Prev. Graph

Print

Cancel

Next

\* Indicates No Risk assigned  
+ Indicates Risk assigned.

Active Record

Cat: C1 (male)  
ID: [REDACTED]  
DOB: [REDACTED]  
Age: 1 yrs, 9 mos  
Cert: 01/10/17 - 01/08/18  
Status: Certified

- Scheduling Tasks
- Guided Script
- Client Care
- Logoff

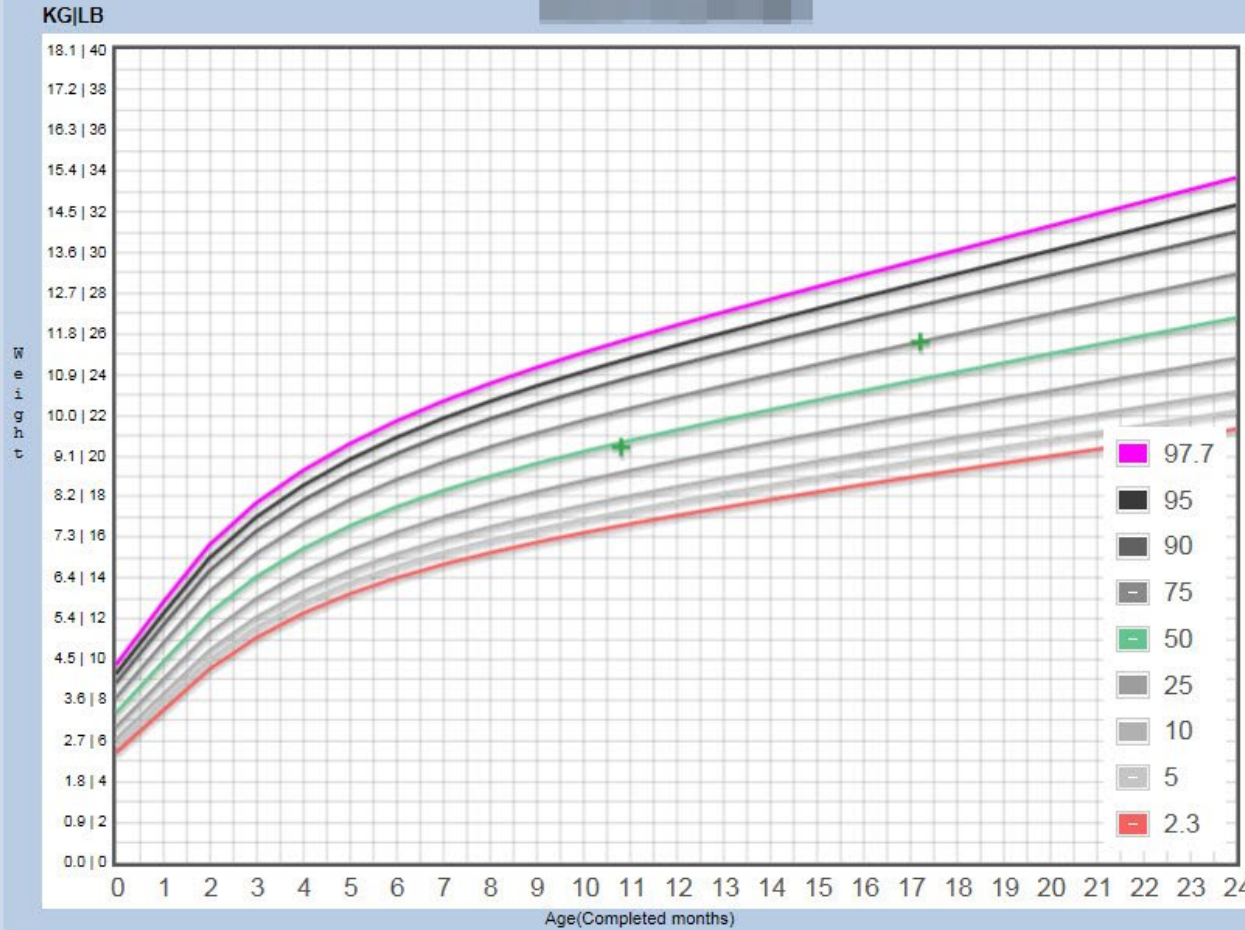
Infant/Child Height/Weight

Growth Chart

Imms/Bloodwork

World Health Organization

Boys Weight for Age - Birth to Less than 24 Months



- Wt/Age
- Ht/Age
- HC/Age
- WT/Length

Prev. Graph

- Print
- Cancel
- Next

\* Indicates No Risk assigned  
+ Indicates Risk assigned.

# WHO Charts

# Growth Chart: CDC Growth Chart

MI-WIC Michigan's Management Information for WIC

Active Record

Cat: C2 (male) ID: 302 249 854 DOB: Age: 2 yrs, 0 mos Cert: 05/12/25 - 05/11/26 Status: Certified

Scheduling Tasks

Guided Script

- Family Information
- Client Information
- Cert Action
- Lab
- Health
- Nutrition History
- Breastfeeding
- Mid-Certification
- Nutr & Hlth Summary
- Nutrition Education
- Referrals
- Food Prescription
- Issue Benefits
- Schedule Appt
- Print Documents

Client Care

Exit

File Scheduler Certification Benefits Miscellaneous Reports Help Messages

Infant/Child Height/Weight Growth Chart Imms/Bloodwork

Centers for Disease Control and Prevention

Boys Weight for Age 2 to 5 Years Weight

RAM S1TEST

| Age (Years) | 95th Percentile (Lb) | 90th Percentile (Lb) | 75th Percentile (Lb) | 50th Percentile (Lb) | 25th Percentile (Lb) | 10th Percentile (Lb) | 5th Percentile (Lb) |
|-------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------|
| 2.0         | 13.6                 | 12.5                 | 11.3                 | 10.2                 | 9.1                  | 8.0                  | 7.0                 |
| 2.5         | 15.9                 | 14.8                 | 13.6                 | 12.5                 | 11.3                 | 10.2                 | 9.1                 |
| 3.0         | 18.1                 | 17.0                 | 15.9                 | 14.8                 | 13.6                 | 12.5                 | 11.3                |
| 3.5         | 20.4                 | 19.3                 | 18.1                 | 17.0                 | 15.9                 | 14.8                 | 13.6                |
| 4.0         | 22.7                 | 21.6                 | 20.4                 | 19.3                 | 18.1                 | 17.0                 | 15.9                |
| 4.5         | 24.9                 | 23.8                 | 22.7                 | 21.6                 | 20.4                 | 19.3                 | 18.1                |
| 5.0         | 27.2                 | 26.1                 | 24.9                 | 23.8                 | 22.7                 | 21.6                 | 20.4                |

Wt/Age  
Ht/Age  
BMI/AGE  
HC/Age(Prev)

Prev. Graph

Print

Cancel

Next

\* Indicates No Risk assigned  
+ Indicates Risk assigned.



# CDC Growth Charts

*2-5 Years (Boys & Girls)*

Graphs for plotting:

Stature-for-age

Weight-for-age

BMI-for-age

Doc: 8/1/20

Age: 4 yrs, 11 mos

Cert: 01/31/20 - 08/12/20

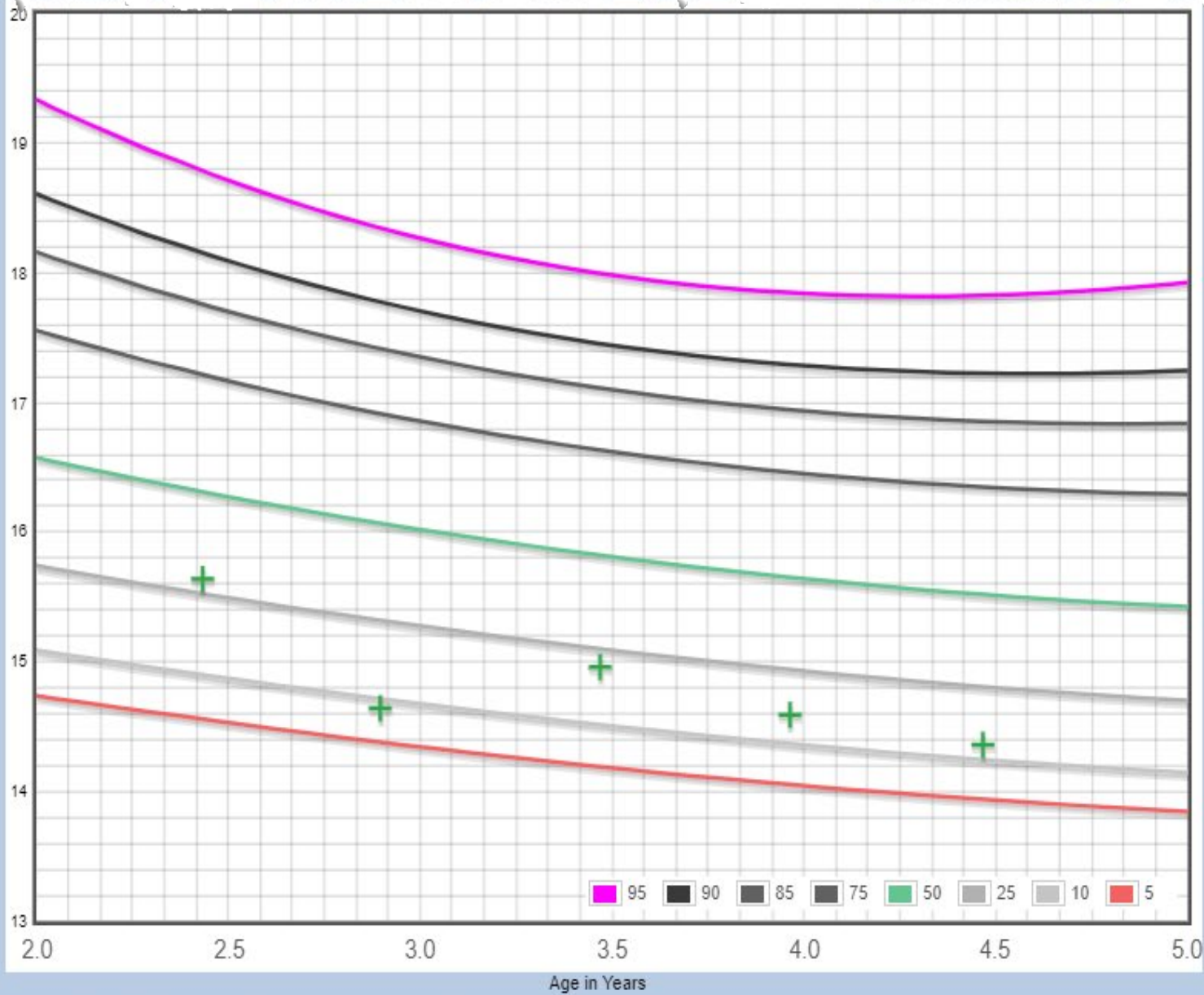
Status: Certified

Scheduling Tasks

Guided Script

Client Care

Logoff



BMI/AGE

HC/Age(Prev)

Prev. Graph

Print

Cancel

Next

\* Indicates No Risk assigned  
+ Indicates Risk assigned.

**Active Record**

Cat: PG (female)

ID: [REDACTED]

DOB: [REDACTED]

Age: [REDACTED]

Cert: 02/04/26 - 11/04/26

Status: Certified

- Scheduling Tasks
- Guided Script
  - Family Information
  - Client Information
  - Cert Action
  - Lab
  - Health
  - Nutrition History
  - Breastfeeding
  - Mid-Certification
  - Nutr & Hlth Summary
  - Nutrition Education
  - Referrals
  - Food Prescription
  - Issue Benefits
  - Schedule Appt
  - Print Documents
- Client Care
- Exit

**Height/Weight** Imms/Bloodwork

English(SAE)  Metric

**Anthropometric Data**

|  | Date*      | Height |       |                          | Weight |     |                          | Weeks | PG Wt Gain | Weight Gain/Loss | Cat | Dur | Pre-PG BMI | Current BMI | Created By | Modified By | Comments |
|--|------------|--------|-------|--------------------------|--------|-----|--------------------------|-------|------------|------------------|-----|-----|------------|-------------|------------|-------------|----------|
|  |            | in*    | 1/16* | Unk                      | lbs*   | oz* | Unk                      |       |            |                  |     |     |            |             |            |             |          |
|  | 02/04/2026 | 67     | 0     | <input type="checkbox"/> | 214    | 4   | <input type="checkbox"/> | 6     | -2.75      | -2.75            | PG  |     | 33.99      | 33.56       | KAYEP1039  |             |          |

Add Remove

**What was your weight just before you became pregnant with this baby?\***  lbs  Unknown

**How much weight did you gain during this pregnancy?:**  lbs  Unknown

**Weight at Delivery:**  lbs

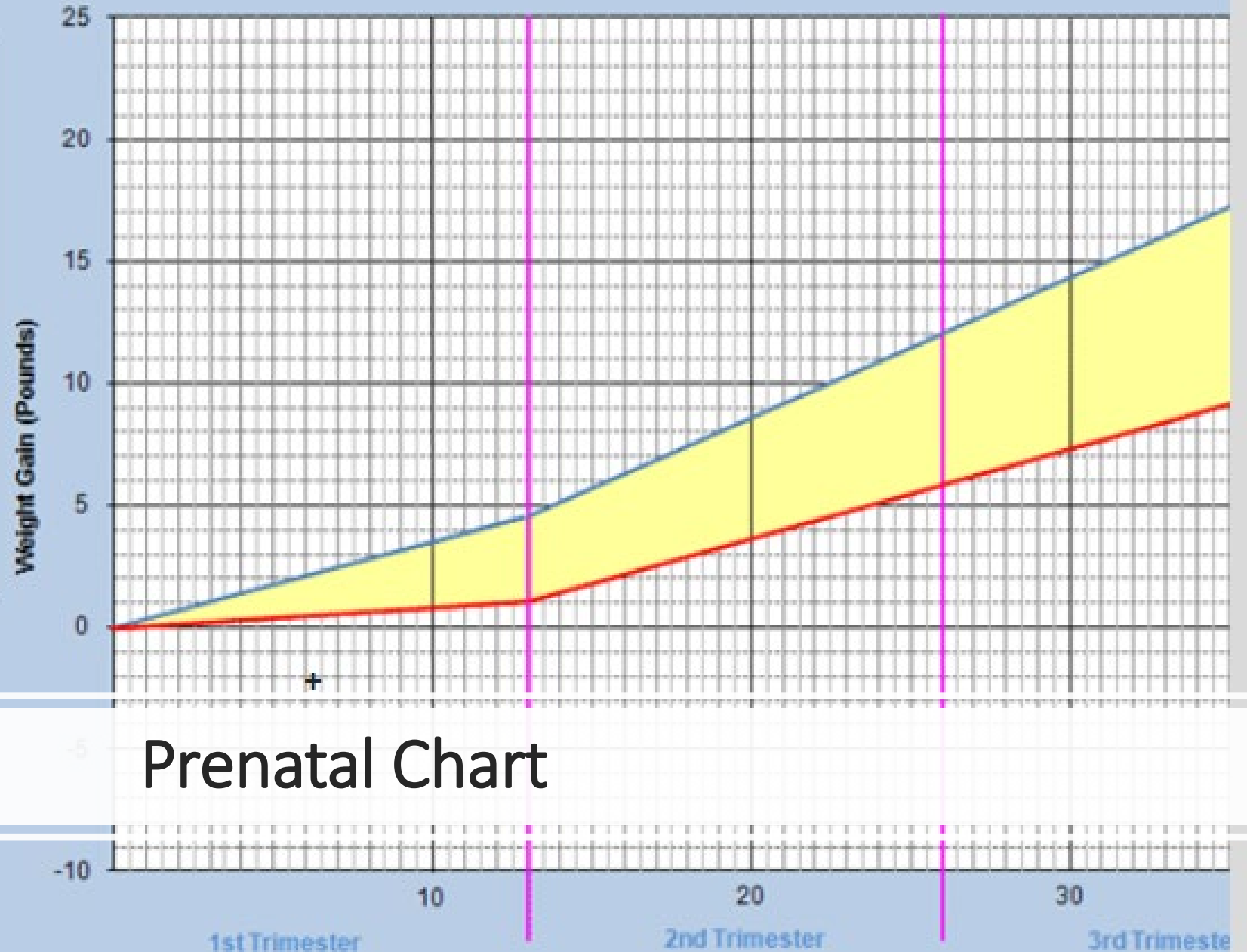
# Height/Weight: PG

**Prenatal Chart**

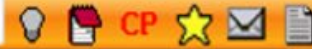
Save
Cancel
Next

## Prenatal Weight Gain Category D: BMI > 30

| Name<br>[REDACTED]                 |            |                            |               |
|------------------------------------|------------|----------------------------|---------------|
| Height<br>67 In                    |            | Pre-Pregnancy BMI<br>33.99 |               |
| Pre-Pregnancy Weight<br>[REDACTED] |            | EDD<br>[REDACTED]          |               |
| Date                               | Weight     | Wt Change                  | Wks Gestation |
| [REDACTED]                         | [REDACTED] | -2.75 lbs                  | 6             |
|                                    |            |                            |               |
|                                    |            |                            |               |
|                                    |            |                            |               |
|                                    |            |                            |               |
|                                    |            |                            |               |
|                                    |            |                            |               |



Prenatal Chart



Active Record



Scheduling Tasks

Guided Script

Client Care

Logoff

Imms/Bloodwork

Height/Weight

Anthropometric Data

English(SAE)  Metric

| Date*     | Height |       |                          | Weight |     |                          | Weeks | PG Wt Change | Weight Gain/Loss | BMI   | Comments  |
|-----------|--------|-------|--------------------------|--------|-----|--------------------------|-------|--------------|------------------|-------|-----------|
|           | in*    | 1/16* | Unk                      | lbs*   | oz* | Unk                      |       |              |                  |       |           |
| 5/29/2012 | 66     | 0     | <input type="checkbox"/> | 200    | 0   | <input type="checkbox"/> | 20    | 15           | -22.5            | 29.86 |           |
| 4/12/2011 | 66     | 0     | <input type="checkbox"/> | 222    | 8   | <input type="checkbox"/> |       |              | 19.5             | 35.91 |           |
| 9/21/2010 | 65     | 12    | <input type="checkbox"/> | 203    | 0   | <input type="checkbox"/> | 13    |              | 8.5              | 32.04 |           |
| 1/4/2010  | 65     | 12    | <input type="checkbox"/> | 194    | 8   | <input type="checkbox"/> |       |              | 0                | 31.63 | bp=126/70 |

Add

Remove

What was your weight just before you became pregnant with this baby?\*

185 lbs

Unknown

How much weight did you gain during this pregnancy?:

lbs

Unknown

Weight at Delivery:

lbs

# Height/Weight: NPP, BE, or BP

**MI-WIC**  
Michigan's Management Information for WIC

**Active Record**

Cat: BE (female)  
ID: 302 249 856  
DOB: [REDACTED]  
Age: 25 yrs, 8 mos  
Cert: 05/12/25 - 05/11/26  
Status: Certified

**Scheduling Tasks**

**Guided Script**

- Family Information
- Client Information
- Cert Action
- Lab**
- Health
- Nutrition History
- Breastfeeding
- Mid-Certification
- Nutr & Hlth Summary
- Nutrition Education
- Referrals
- Food Prescription
- Issue Benefits
- Schedule Appt
- Print Documents

**Client Care**

Exit

Height/Weight
Imms/Bloodwork

English(SAE)  Metric

**Anthropometric Data**

| Date*      | Height |       |                          | Weight |     |                          | Weeks | PG Wt Gain | Weight Gain/Loss | Cat | Dur | Pre-PG BMI | Current BMI | Created By | Modified By | Comments |
|------------|--------|-------|--------------------------|--------|-----|--------------------------|-------|------------|------------------|-----|-----|------------|-------------|------------|-------------|----------|
|            | in*    | 1/16* | Unk                      | lbs*   | oz* | Unk                      |       |            |                  |     |     |            |             |            |             |          |
| 05/12/2025 | 65     | 12    | <input type="checkbox"/> | 176    | 7   | <input type="checkbox"/> |       | 34         | 31.44            | BE  | <6  | 23.58      | 28.69       | KODURB     |             |          |

Add
Remove

What was your weight just before you became pregnant with this baby?\*:  lbs  Unknown

How much weight did you gain during this pregnancy?\*:  lbs  Unknown

Weight at Delivery:  lbs

# What measurements when?



## **Infants (Birth to 12 Months)\***

*Length, Weight, and Head Circumference at certification and mid-cert evaluation (IEVAL)*



## **Children (12 to 24 Months)\***

*Length, weight, and head circumference at Certification, mid-cert evaluation (CEVAL) and recertification*

*\*Use Head circumference tape, Infant scale, Recumbent (lying down) Length Board Cont...*

# What measurements when?



## **Children: 2 to 5 Years**

*Stature and weight at certification, mid-cert evaluation (CEVAL) & recertification*

- ✓ *Use either adult digital or beam balance scale and Stadiometer (Standing)*
- ✓ *If child must be measured recumbently (laying down), record measurement, check “?” box, make entry in ‘Comments’. Measurement will plot as red asterisk but risk code will not be assigned*

# What measurements when?



## **Women**

*Stature and weight at certification  
and recertification, W-Evals*

- ✓ *Use either adult digital or beam balance scale and Stadiometer (Standing)*

**Active Record**

Cat: IFF (male)

ID: 3(

DOB: 1

Age: 3 wks, 3 days

Cert: 12/06/23 - 11/12/24

Status: Certified

- Scheduling Tasks
- Guided Script
- Family Information
- Client Information
- Cert Action
- Lab
- Health
- Nutrition History
- Breastfeeding
- Mid-Certification
- Nutr & Hlth Summary
- Nutrition Education
- Referrals
- Food Prescription
- Issue Benefits
- Schedule Appt
- Print Documents
- Client Care
- Exit

Infant/Child Height/Weight Growth Chart Imms/Bloodwork

English(SAE)  Metric

**Anthropometric Data**

|  | Date*      | Age      | Height |       |                          |                          | Weight |     |                          |                          | Head Circum |       |                                     |                          | BMI | BMI/Age | Wt/Age | Ht/ |
|--|------------|----------|--------|-------|--------------------------|--------------------------|--------|-----|--------------------------|--------------------------|-------------|-------|-------------------------------------|--------------------------|-----|---------|--------|-----|
|  |            |          | in*    | 1/16* | Unk                      | ?                        | lbs*   | oz* | Unk                      | ?                        | in*         | 1/16* | Unk                                 | ?                        |     |         |        |     |
|  | 12/06/2023 | 3 w, 2 d | 19     | 8     | <input type="checkbox"/> | <input type="checkbox"/> | 6      | 6   | <input type="checkbox"/> | <input type="checkbox"/> |             |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> | N/A | N/A     | 0.59   |     |

Preterm Infant

Completed Weeks of Gestation:

Time Interval:

Birth Weight\*:  lbs  oz  Unknown

Weight Change:

Height Change:

Mother's Height:  ft  in  Mother's Weight:  lb

Father's Height:  ft  in Father's Weight:  lb

# Converting Metric to English

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If measurements are reported in a combination of English and Metric values, follow these steps:

- Select the Metric button
- Check “Unk” for English data
- Enter the Metric data and **save**
- Select the English button
- The metric data should now be in English
- Uncheck the “Unk”, enter the English data
- Click **Save** button

MI-WIC will provide a plot on the sex- and age-appropriate growth charts or prenatal weight gain grid.

# Unk or ?

MI-WIC Management Information Michigan WIC

Active Record  
scripting1, ibp

Cat: C1 (female)  
ID: 300 872 189  
DOB: 10/15/2016  
Age: 1 yrs, 7 mos  
Cert: 01/11/18 - 01/10/19  
Status: Certified

Scheduling Tasks  
Guided Script  
Client Care  
Logoff

File Scheduler Certification Benefits Miscellaneous Reports Help Messages Mon 6/4/2018

---scripting1, ibp (C1) \* 300 872 1

Infant/Child Height/Weight Growth Chart Imms/Bloodwork

English(SAE) Metric

Anthropometric Data

| Date*     | Age      | in* | 1/16* | Weight |     | Head Circum |   |   | BMI | BMI/ Age | Wt/ Age | Ht/ Age |
|-----------|----------|-----|-------|--------|-----|-------------|---|---|-----|----------|---------|---------|
|           |          |     |       | lbs*   | oz* | Unk         | ? | ? |     |          |         |         |
| 6/4/2018  | 1 y, 7 m |     |       | 26     | 0   |             |   |   |     |          | 94.84   |         |
| 1/11/2018 | 1 y, 2 m | 31  |       | 23     | 0   |             |   |   | N/A | N/A      | 94.52   | 99.72   |
| 11/5/2016 | 3 w, 0 d | 16  | 8     | 17     | 0   |             |   |   | N/A | N/A      | 0.00    | 0.00    |

Add Remove

Preterm Infant Birth Weight\*: 7 lbs 7 oz  Unknown

Completed Weeks of Gestation: 20 Weight Change: 6 lbs

Time Interval: 1 y, 2 m Height Change: 14 in 8 sixteenths



Infant/Child Height/Weight

Growth Chart

Imms/Bloodwork

English(SAE) Metric

Anthropometric Data

| Head Circum |       |                          |                          |     |         |        |        |       |        |            |             |              |
|-------------|-------|--------------------------|--------------------------|-----|---------|--------|--------|-------|--------|------------|-------------|--------------|
| in*         | 1/16* | Unk                      | ?                        | BMI | BMI/Age | Wt/Age | Ht/Age | Wt/Ln | HC/Age | Created By | Modified By | Comments     |
| 14          | 0     | <input type="checkbox"/> | <input type="checkbox"/> | N/A | N/A     | 82.86  | 94.17  | 35.86 | 92.21  |            |             | Per Comments |



Add Remove

Birth Weight\* [ ] [ ] [ ]

**Active Record**  
scripting1, ibp

Cat: C1 (female)  
 ID: 300 872 189  
 DOB: 10/15/2016  
 Age: 1 yrs, 7 mos  
 Cert: 01/11/18 - 01/10/19  
 Status: Certified

**MI-WIC**  
Management Information  
Michigan WIC

**Active Record**  
scripting1, ibp

Cat: C1 (female)  
 ID: 300 872 189  
 DOB: 10/15/2016  
 Age: 1 yrs, 7 mos  
 Cert: 01/11/18 - 01/10/19  
 Status: Certified

- Scheduling Tasks
- Guided Script
- Client Care
- Logoff

- Scheduling Tasks
- Guided Script
- Client Care
- Logoff

File Scheduler Certification Benefits Miscellaneous Reports Help Messages Mon 6/4/2018  
 ---scripting1, ibp (C1) \* 300 872 1

Infant/Child Height/Weight Growth Chart Imms/Bloodwork

Notes Zoom - Internet Explorer

Characters Remaining: 1943

Unable to measure length, mom held baby to obtain weight.

OK Cancel

125%

| Wt/ Ln | HC/ Age | Comments       |
|--------|---------|----------------|
|        |         | Unable to m... |
| 74.04  | 84.76   |                |
| 0.00   |         |                |

oz  Unknown

Save Cancel Next

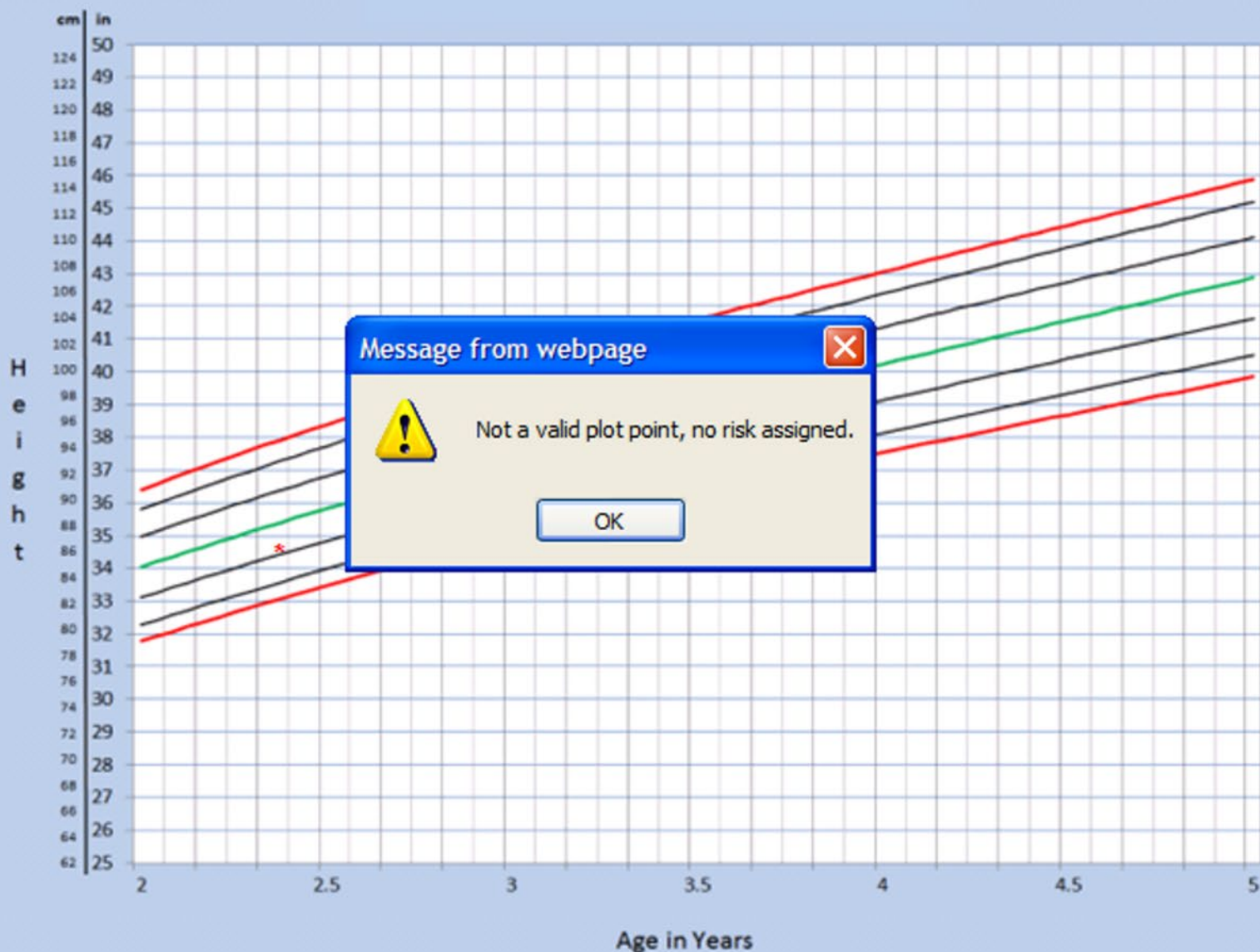
mms/Bloodwork

English(SAE)  Metric

| BMI | BMI/ Age | Wt/ Age | Ht Ag |
|-----|----------|---------|-------|
|     |          | 94.84   |       |
| N/A | N/A      | 94.52   | 99.   |
| N/A | N/A      | 0.00    | 0.    |

oz  Unknown

Centers for  
Disease  
Control and Prevention



- Wt/Age
- Ht/Age
- BMI/AGE
- HC/Age(Prev)

Prev. Graph

WHO

Print

Cancel

Next

\* Indicates No Risk assigned  
+ Indicates Risk assigned.

# Use of Referral Data

- All measurements must be dated no more than 60 days from date of measurement; less than 30 days preferred for infants.
- Weight for Infants and children thru 23 months must be to the nearest ounce. Weight for children and women within 1/4lb.
- Head circumference to the nearest 1/16<sup>th</sup> but can be to the nearest 1/8<sup>th</sup> inch; length/height to the nearest 1/8<sup>th</sup> inch.
- Women-measurements reflect the current certification, not more than 60 days old and dated.
- Enter the date the measurement was taken , not the current date and then the source in Comments





# Anthropometric Training

## *Key Point #2*

**Check** 'UNK' if a measurement is not known and *enter a comment*

**Check** '?' if measurement could not be taken according to procedure and *enter a comment*

**Referral Measurement Data-** *enter a comment* for source

**Active Record**  
scripting1, ibp

Cat: C1 (female)  
ID: 300 872 189  
DOB: 10/15/2016  
Age: 1 yrs, 7 mos  
Cert: 01/11/18 - 01/10/19  
Status: Certified

- Scheduling Tasks
- Guided Script
- Client Care
- Logoff

Infant/Child Height/Weight

Growth Chart

Imms/Bloodwork

English(SAE)  Metric

Anthropometric Data

| Date*     | Age      | Height |       |                                     |                          | Weight |     |                          |                                     | Head Circum |       |                                     |                          | BMI | BMI/ Age | Wt/ Age | Ht/ Age |
|-----------|----------|--------|-------|-------------------------------------|--------------------------|--------|-----|--------------------------|-------------------------------------|-------------|-------|-------------------------------------|--------------------------|-----|----------|---------|---------|
|           |          | in*    | 1/16* | Unk                                 | ?                        | lbs*   | oz* | Unk                      | ?                                   | in*         | 1/16* | Unk                                 | ?                        |     |          |         |         |
| 6/4/2018  | 1 y, 7 m |        |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 26     | 0   | <input type="checkbox"/> | <input checked="" type="checkbox"/> |             |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |     |          | 94.84   |         |
| 1/11/2018 | 1 y, 2 m | 31     | 0     | <input type="checkbox"/>            | <input type="checkbox"/> | 23     | 0   | <input type="checkbox"/> | <input type="checkbox"/>            | 18          | 0     | <input type="checkbox"/>            | <input type="checkbox"/> | N/A | N/A      | 94.52   | 99.72   |
| 11/5/2016 | 3 w, 0 d | 16     | 8     | <input type="checkbox"/>            | <input type="checkbox"/> | 17     | 0   | <input type="checkbox"/> | <input type="checkbox"/>            | 12          | 0     | <input type="checkbox"/>            | <input type="checkbox"/> | N/A | N/A      | 0.00    | 0.00    |

Preterm Infant

Birth Weight\*:  lbs  oz  Unknown

Completed Weeks of Gestation:

Weight Change:  lbs

Time Interval:

Height Change:

# Entering Weeks Gestation



Before saving Anthropometric Measurement for the Cert visit, enter Weeks Gestation.

Weeks Gestation must be recorded in weeks of completed gestation (ie, 39 weeks, 6 days recorded as 39 weeks gestation).



Agencies must have consistent method of determining weeks gestation (Anthropometric Measurement Procedures Manual).

Accurate Weeks Gestation is essential – determines way growth percentiles are calculated. Cannot be changed in MI-WIC after day of entry!





# Anthropometric Training

## *Key Point #3*

Weeks of Gestation **must** be entered accurately for MI-WIC to correctly calculate growth chart percentiles.

WIC Policy: Clinics must have consistent procedure for determining Gestation Age.

# WHO (Boys & Girls) Growth Charts

- \* Longitudinal study
- \* Studied Breastfed infants in 6 countries around the world
- \* Families followed study protocol for the duration of the study
- \* Data collected provided the information needed to construct new growth grids
- \* Breastfed infants grow differently than formula-fed infants.



# Very Low Birth Weight VLBW (Boys & Girls)

Infants that were born < 1500 grams (VLBW) may also be assessed for growth using the IHDP VLBW charts in addition to the CDC growth charts. The VLBW charts are optional for educational purposes.

Same Plotting Graphs as  
Birth < 24 Months:

Length-for-age

Head Circumference-for-age

Weight-for-age

Weight-for-length

**Gestation-Adjusted Age**  
(GAA) is bottom axis on 3  
charts plotted for age.

**Chart may be printed**

**Active Record**

Cat: C1 (male)   
 ID: 30   
 DOB: 3/2   
 Age: 1 yrs, 2 mos  
 Cert: 04/10/18 - 04/09/19  
 Status: Certified

Scheduling Tasks

Guided Script

Client Care

Logoff

Infant/Child Height/Weight

Growth Chart

Imms/Bloodwork

English(SAE)  Metric

**Anthropometric Data**

| Date*     | Age      | Height |       |                          |                          | Weight |     |                          |                          | Head Circum |       |                          |                          | BMI | BMI/ Age | Wt/ Age | Ht/ Age |
|-----------|----------|--------|-------|--------------------------|--------------------------|--------|-----|--------------------------|--------------------------|-------------|-------|--------------------------|--------------------------|-----|----------|---------|---------|
|           |          | in*    | 1/16* | Unk                      | ?                        | lbs*   | oz* | Unk                      | ?                        | in*         | 1/16* | Unk                      | ?                        |     |          |         |         |
| 4/10/2018 | 1 y, 0 m | 29     | 6     | <input type="checkbox"/> | <input type="checkbox"/> | 23     | 0   | <input type="checkbox"/> | <input type="checkbox"/> | 18          | 12    | <input type="checkbox"/> | <input type="checkbox"/> | N/A | N/A      | 90.24   | 78.8    |
| 9/29/2017 | 6 m, 0 w | 24     | 8     | <input type="checkbox"/> | <input type="checkbox"/> | 14     | 14  | <input type="checkbox"/> | <input type="checkbox"/> | 16          | 14    | <input type="checkbox"/> | <input type="checkbox"/> | N/A | N/A      | 59.10   | 50.9    |
| 6/1/2017  | 2 m, 0 w | 18     | 0     | <input type="checkbox"/> | <input type="checkbox"/> | 6      | 4   | <input type="checkbox"/> | <input type="checkbox"/> | 12          | 8     | <input type="checkbox"/> | <input type="checkbox"/> | N/A | N/A      | 0.00    | 0.0     |

Add

Remove

Preterm Infant

Birth Weight\*:  lbs  oz  Unknown

Completed Weeks of Gestation:

Weight Change:

Time Interval:

Height Change:

Save

Cancel

Next



Infant/Child Height/Weight

Growth Chart

Imms/Bloodwork

English(SAE)  Metric

Anthropometric Data

| Age      | Height |       |                          |                          | Weight |     |                          |                          | Head Circum |       |                          |                          | BMI | BMI/Age | Wt/Age | Ht/Age | Wt/Ln |
|----------|--------|-------|--------------------------|--------------------------|--------|-----|--------------------------|--------------------------|-------------|-------|--------------------------|--------------------------|-----|---------|--------|--------|-------|
|          | in*    | 1/16* | Unk                      | ?                        | lbs*   | oz* | Unk                      | ?                        | in*         | 1/16* | Unk                      | ?                        |     |         |        |        |       |
| 1 w, 0 d | 18     | 2     | <input type="checkbox"/> | <input type="checkbox"/> | 4      | 14  | <input type="checkbox"/> | <input type="checkbox"/> | 12          | 8     | <input type="checkbox"/> | <input type="checkbox"/> | N/A | N/A     | 0      | 0      | 0     |



Preterm Infant

Completed Weeks of Gestation:

Time Interval:

Birth Weight\*:  lbs  oz  Unknown

Weight Change:

Height Change:

Mother's Height:  ft  in

Father's Height:  ft  in

Mother's Weight:  lb

Father's Weight:  lb

File Scheduler Certification Benefits Miscellaneous Reports Help Messages

Infant Growth Charts - Google Chrome

miwic-prod.state.mi.us/MIWICP/Clinic/WebForms/Intake/MedicalGraphDialogNew.aspx?fiFAlYRQYXJ...

World Health Organization

KG | LB

18.1 | 40  
17.2 | 38  
16.3 | 36  
15.4 | 34  
14.5 | 32  
13.6 | 30  
12.7 | 28  
11.8 | 26  
10.9 | 24  
10.0 | 22  
9.1 | 20  
8.2 | 18  
7.3 | 16  
6.4 | 14  
5.4 | 12  
4.5 | 10  
3.6 | 8  
2.7 | 6  
1.8 | 4  
0.9 | 2  
0.0 | 0

0 1 2 3 4

KG

18  
17  
16  
15  
14  
13  
12  
11  
10  
9  
8  
7  
6  
5  
4  
3  
2  
1  
0

Weight  
Weight(kg)

2 4 6 8 10 12 14 16 18 20 22 24 26 28 30 32 34 36 38

Gestation - Adjusted Age (mo)

95 75 50 25 5

No risks assigned from VLBW charts.

VLBW Chart

Print Cancel

Imms/Bloodwork

Wt/Age

Ht/Age

HC/Age

WT/Length

Prev. Graph VLBW

Print

Cancel

Next

\* Indicates No Risk assigned  
+ Indicates Risk assigned.

# Gestational Age Adjustment

If an infant is born at 32 weeks,  
subtract that number from 40

**40 weeks – 32 = 8 Weeks**

Gestational –adjusted age is 4  
months when the chronological  
age is 6 months





Active Record

Cat: C3 (female)

ID:

DOB:

Age: 3 yrs, 3 mos

Cert: 06/18/24 - 06/17/25

Status: Certified

Scheduling Tasks

Guided Script

Family Information

Client Information

Cert Action

Lab

Health

Nutrition History

Breastfeeding

Mid-Certification

Nutr & Hlth Summary

Nutrition Education

Referrals

Food Prescription

Issue Benefits

Schedule Appt

Print Documents

Infant/Child Height/Weight

Growth Chart

Imms/Bloodwork

English(SAE) Metric

Anthropometric Data

|  | Date*      | Age      | Height |       |                                     |                          | Weight |     |                                     |                          | Head Circum |      |                                     |                          | BMI   | BMI/Age | Wt/Age | Ht/Age |
|--|------------|----------|--------|-------|-------------------------------------|--------------------------|--------|-----|-------------------------------------|--------------------------|-------------|------|-------------------------------------|--------------------------|-------|---------|--------|--------|
|  |            |          | in*    | 1/16* | Unk                                 | ?                        | lbs*   | oz* | Unk                                 | ?                        | in          | 1/16 | Unk                                 | ?                        |       |         |        |        |
|  | 06/18/2024 | 3 y, 0 m | 36     | 4     | <input type="checkbox"/>            | <input type="checkbox"/> | 36     | 0   | <input type="checkbox"/>            | <input type="checkbox"/> |             |      |                                     |                          | 19.26 | 98.27   | 89.25  | 30.3   |
|  | 01/04/2024 | 2 y, 6 m | 35     | 8     | <input type="checkbox"/>            | <input type="checkbox"/> | 33     | 0   | <input type="checkbox"/>            | <input type="checkbox"/> | 19          | 8    | <input type="checkbox"/>            | <input type="checkbox"/> | 18.41 | 94.17   | 86.62  | 45.4   |
|  | 06/22/2023 | 2 y, 0 m | 32     | 8     | <input type="checkbox"/>            | <input type="checkbox"/> | 29     | 8   | <input type="checkbox"/>            | <input type="checkbox"/> | 18          | 8    | <input type="checkbox"/>            | <input type="checkbox"/> | 19.64 | 97.24   | 82.52  | 24.2   |
|  | 12/22/2022 | 1 y, 6 m | 31     | 0     | <input type="checkbox"/>            | <input type="checkbox"/> | 26     | 0   | <input type="checkbox"/>            | <input type="checkbox"/> |             |      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | N/A   | N/A     | 90.08  | 36.4   |
|  | 06/23/2022 | 1 y, 0 m |        |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |        |     | <input checked="" type="checkbox"/> | <input type="checkbox"/> |             |      | <input checked="" type="checkbox"/> | <input type="checkbox"/> |       |         |        |        |
|  | 11/04/2021 | 4 m, 3 w | 24     | 8     | <input type="checkbox"/>            | <input type="checkbox"/> | 12     | 15  | <input type="checkbox"/>            | <input type="checkbox"/> |             |      | <input checked="" type="checkbox"/> | <input type="checkbox"/> | N/A   | N/A     | 35.89  | 72.4   |
|  | 06/29/2021 | 2 w, 6 d |        |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |        |     | <input checked="" type="checkbox"/> | <input type="checkbox"/> |             |      | <input checked="" type="checkbox"/> | <input type="checkbox"/> |       |         |        |        |

Add

Remove

Preterm Infant

Birth Weight\*: 4 lbs 10 oz

Unknown

Completed Weeks of Gestation: 34

Weight Change: 3 lbs

Time Interval: 5 m, 2 w

Height Change: 0 in 12 sixteenth

Mother's Height:  ft  in



Mother's Weight:  lb

Father's Height:  ft  in

Father's Weight:  lb



# Anthropometric Training

## *Key Point #4*

The measurements of infants born less than or equal to 1500 grams (3 lbs. 5 oz.) are plotted on the VLBW chart in MI-WIC. This chart uses metric values only.

The VLBW chart does not assign risks but does give parents an idea of how well their child is growing in relation to other VLBW babies



# Anthropometric Training

## *Key Point #5*

Adjustments for Preterm are made in MI-WIC through 23 months of age

Measurements in MI-WIC are not adjusted for preterm after 24 months of age.

The WHO Birth <24 Month and VLBW charts (if < 1500 grams) are the default growth charts.

Measurements of any child over the chronological age of 2 are plotted on the 2-5 year old chart.



# Measurements

---

Taking Measurements

---

Confirming Measurements

---

Converting Measurements into a MI-WIC Format

---

Knowing when to round

---

Last Step: MI-WIC Data Entry

# Anthropometric Training

## *Six Steps to Accurate Measures*

**1** Measure  
Correctly

**2** Say Measurement  
Out Loud

**3** Record  
Exactly as  
on device

**4** Carefully Confirm  
Measurement

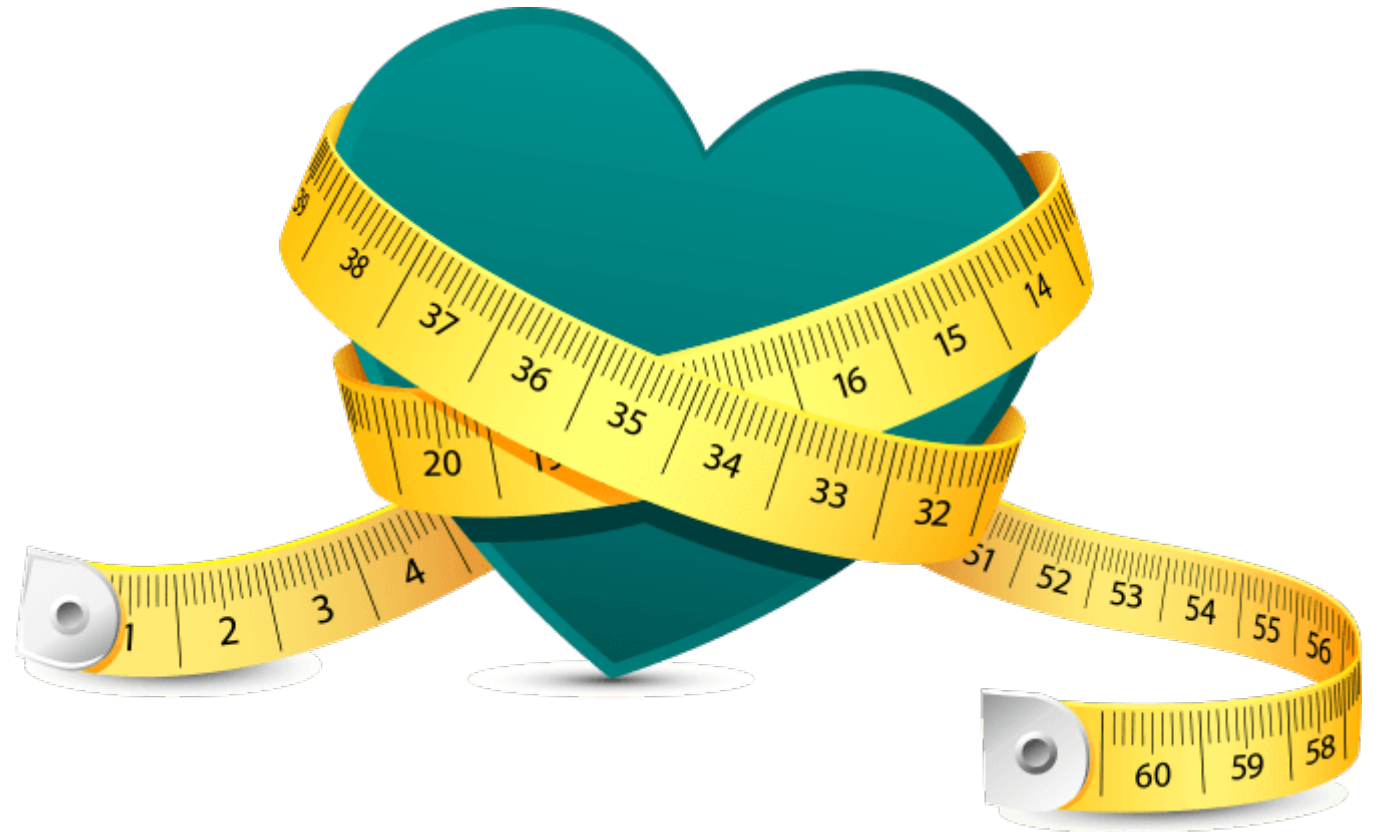
**5** Convert/Round  
Correctly  
For MI-WIC

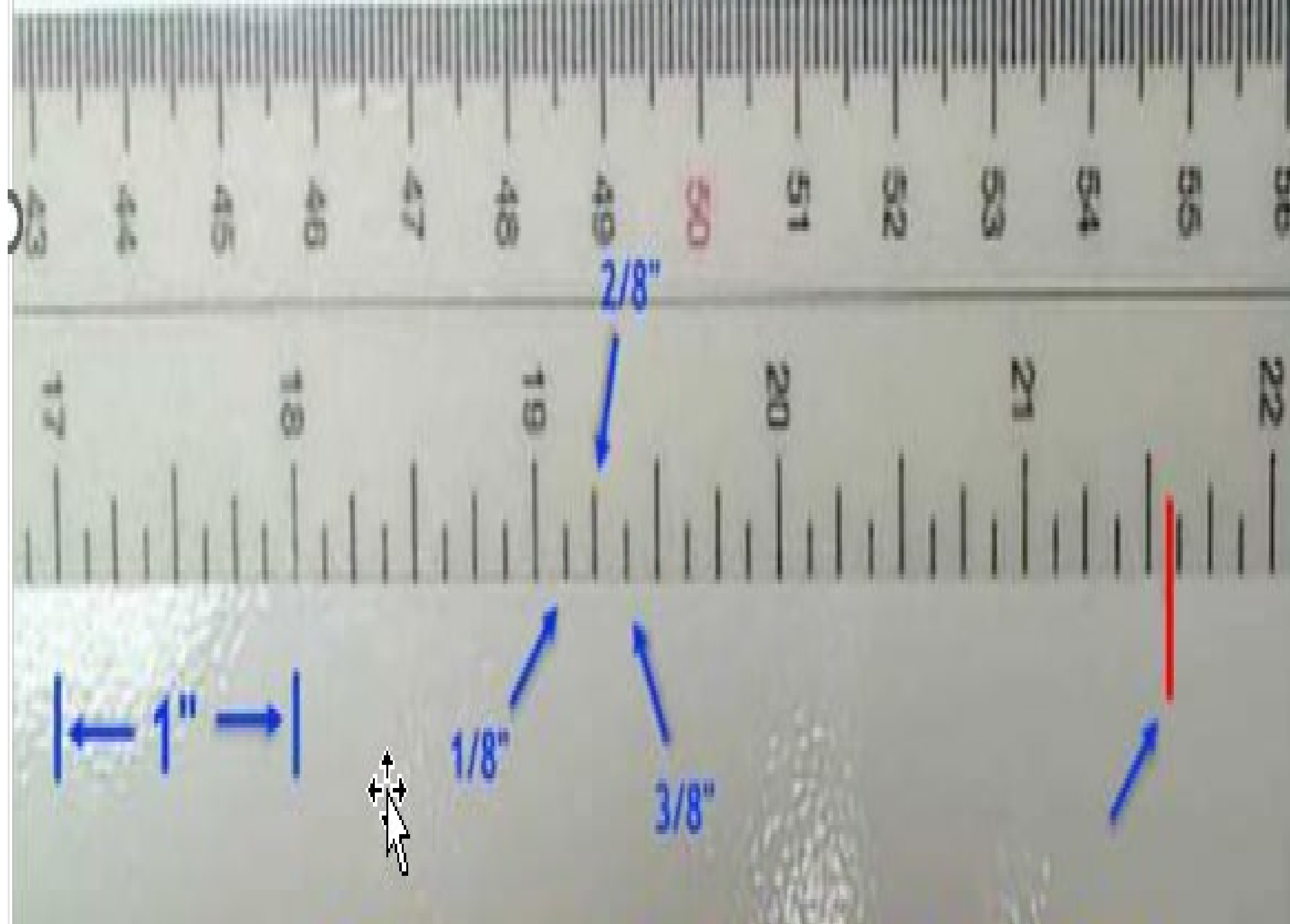
**6** Enter Correctly  
In MI-WIC



# 1 Measure Correctly

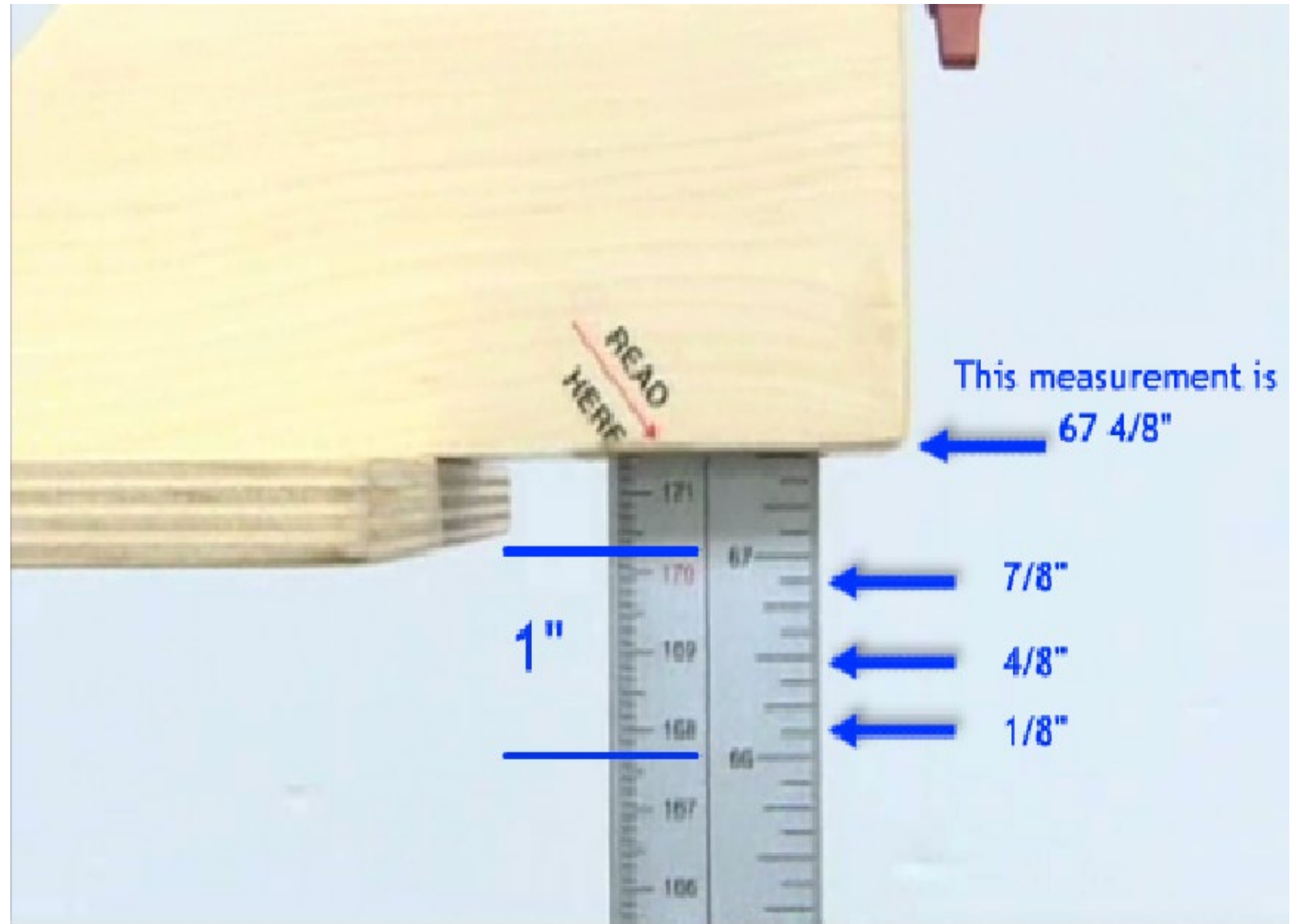
---





# 2

- Say the Measurement Out Loud



3

- Record Exactly as on device



# Recording form sample

## Anthro Recording Form

Anthropometric measurements for a WIC Family No \_\_\_\_\_

| HEIGHT (Length or stature) |              |        |               |        |                   |        |              |      |  |
|----------------------------|--------------|--------|---------------|--------|-------------------|--------|--------------|------|--|
| Name                       | First height |        | Second height |        | Confirming Height |        | MI-WIC Entry |      |  |
|                            | in           | Units* | in            | Units* | in                | Units* | in           | 1/16 |  |
| WIC INFANT PETER           |              |        |               |        |                   |        |              |      |  |
| WIC CHILD ALICE            |              |        |               |        |                   |        |              |      |  |
| WIC CHILD TOM              |              |        |               |        |                   |        |              |      |  |
| WIC PG WOMAN MARY          |              |        |               |        |                   |        |              |      |  |

## WEIGHT



# Anthropometric Training

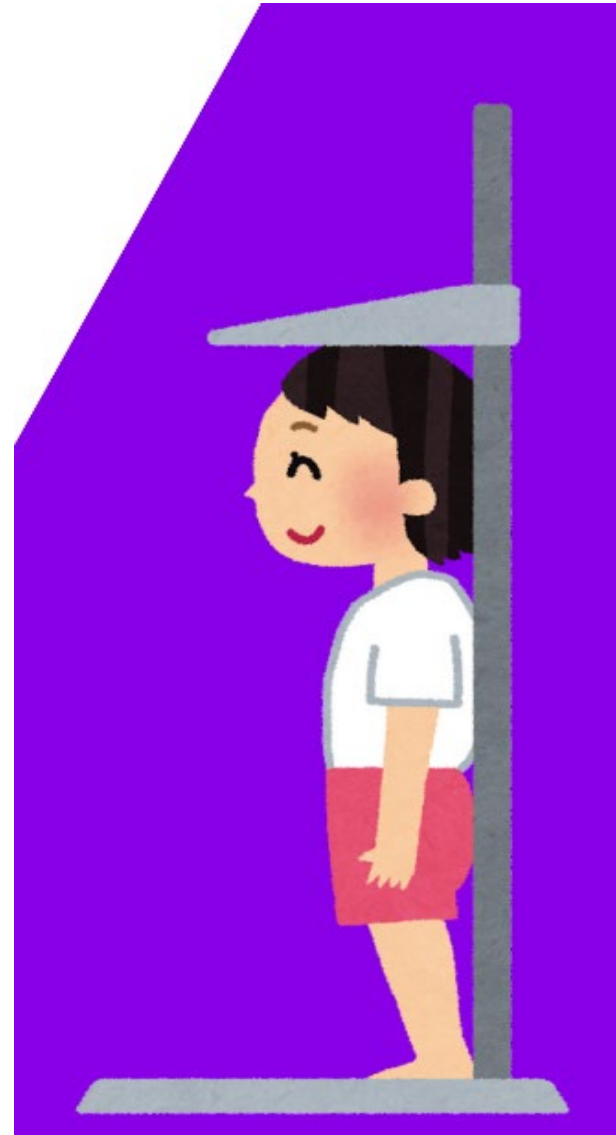
*Key Point #6*

**Measurement values must be recorded in the units of the measurement device**

**Do not transpose or round numbers before recording them**  
**EXACTLY** as they are read from the instrument

4

Carefully Confirm  
the Measurement



# What is a Confirming Measurement

*2 Consecutive Measurements within the following parameters:*



## **Recumbent Length**

2/16<sup>th</sup> or 1/8<sup>th</sup> inch or less



## **Stature**

2/16<sup>th</sup> or 1/8<sup>th</sup> inch or less



## **Infant Weight**

1 ounce or less



## **Child or Adult Weight**

¼ pound or 2 tenths (.2) pound less

# 5 Convert/Round Correctly For MI-WIC

Infant/Child Height/Weight      Growth Chart      Imms/Bloodwork

English(SAE)   Metric

Anthropometric Data

|  | Date*      | Age      | Height |       |                                     |                          | Weight |     |                                     |                          | Head Circum |       |                                     |                          | BMI | BMI/Age | Wt/Age |
|--|------------|----------|--------|-------|-------------------------------------|--------------------------|--------|-----|-------------------------------------|--------------------------|-------------|-------|-------------------------------------|--------------------------|-----|---------|--------|
|  |            |          | in*    | 1/16* | Unk                                 | ?                        | lbs*   | oz* | Unk                                 | ?                        | in*         | 1/16* | Unk                                 | ?                        |     |         |        |
|  | 06/07/2024 | 1 y, 7 m |        |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |        |     | <input checked="" type="checkbox"/> | <input type="checkbox"/> |             |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |     |         |        |
|  | 12/08/2023 | 1 y, 1 m |        |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |        |     | <input checked="" type="checkbox"/> | <input type="checkbox"/> |             |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |     |         |        |
|  | 06/05/2023 | 6 m, 4 w |        |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 17     | 6   | <input type="checkbox"/>            | <input type="checkbox"/> |             |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |     |         | 61.31  |
|  | 12/21/2022 | 1 m, 2 w | 22     | 0     | <input type="checkbox"/>            | <input type="checkbox"/> | 9      | 11  | <input type="checkbox"/>            | <input type="checkbox"/> | 14          | 8     | <input type="checkbox"/>            | <input type="checkbox"/> | N/A | N/A     | 34.06  |

# Converting Measurements into MI-WIC Units

MI-WIC asks for whole inch numbers and fraction of inches in sixteenths

- Convert fractions to 1/16" for data entry

Infant/Child Height/Weight      Growth Chart      Imms/Bloodwork

English(SAE)    Metric

Anthropometric Data

|  | Date*      | Age      | Height |       |                                     |                          | Weight |     |                                     |                          | Head Circum |       |                                     |                          | BMI | BMI/Age | Wt/Age | Ht/ |
|--|------------|----------|--------|-------|-------------------------------------|--------------------------|--------|-----|-------------------------------------|--------------------------|-------------|-------|-------------------------------------|--------------------------|-----|---------|--------|-----|
|  |            |          | in*    | 1/16* | Unk                                 | ?                        | bs*    | oz* | Unk                                 | ?                        | in*         | 1/16* | Unk                                 | ?                        |     |         |        |     |
|  | 06/07/2024 | 1 y, 7 m |        |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |        |     | <input checked="" type="checkbox"/> | <input type="checkbox"/> |             |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |     |         |        |     |
|  | 12/08/2023 | 1 y, 1 m |        |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |        |     | <input checked="" type="checkbox"/> | <input type="checkbox"/> |             |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |     |         |        |     |
|  | 06/05/2023 | 6 m, 4 w |        |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 17     | 6   | <input type="checkbox"/>            | <input type="checkbox"/> |             |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |     |         | 61.31  |     |
|  | 12/21/2022 | 1 m, 2 w | 22     | 0     | <input type="checkbox"/>            | <input type="checkbox"/> | 9      | 11  | <input type="checkbox"/>            | <input type="checkbox"/> | 14          | 8     | <input type="checkbox"/>            | <input type="checkbox"/> | N/A | N/A     | 34.06  |     |

# Converting Measurements

*Length/Head circumference/Height Into MI-WIC Units*

If height (or length or head circumference) measurement is a value other than  $1/16^{\text{th}}$ , you must convert it into MI-WIC units

**Enter the value from the instrument on the recording form**

**Convert the fraction of an inch into  $1/16^{\text{th}}$  on the form**

**Enter the  $1/16^{\text{th}}$  conversion on the Anthro Data Entry screen**

**For example,  $\frac{1}{2}$  inch is how many 16ths?**

| Measurement | Measurement Reduced/same as* | Measurement Reduced/same as* | Measurement Reduced/same as* | Entered in MIWIC as |
|-------------|------------------------------|------------------------------|------------------------------|---------------------|
|             |                              |                              | 1/16"                        | 1                   |
|             |                              | 1/8"                         | 2/16"                        | 2                   |
|             |                              |                              | 3/16"                        | 3                   |
|             | 1/4"                         | 2/8"                         | 4/16"                        | 4                   |
|             |                              |                              | 5/16"                        | 5                   |
|             |                              | 3/8"                         | 6/16"                        | 6                   |
|             |                              |                              | 7/16"                        | 7                   |
| 1/2"        | 2/4"                         | 4/8"                         | 8/16"                        | 8                   |
|             |                              |                              | 9/16"                        | 9                   |
|             |                              | 5/8"                         | 10/16"                       | 10                  |
|             |                              |                              | 11/16"                       | 11                  |
|             | 3/4"                         | 6/8"                         | 12/16"                       | 12                  |
|             |                              |                              | 13/16"                       | 13                  |
|             |                              | 7/8"                         | 14/16"                       | 14                  |
|             |                              |                              | 15/16"                       | 15                  |



# Another way to look at converting fractions

Infant/Child Height/Weight      Growth Chart      Imms/Bloodwork

English(SAE)    Metric

**Anthropometric Data**

|  | Date*      | Age      | Height |       |                                     |                          | Weight |     |                                     |                          | Head Circum |       |                                     |                          | BMI | BMI/Age | Wt/Age | Ht/ |
|--|------------|----------|--------|-------|-------------------------------------|--------------------------|--------|-----|-------------------------------------|--------------------------|-------------|-------|-------------------------------------|--------------------------|-----|---------|--------|-----|
|  |            |          | in*    | 1/16* | Unk                                 | ?                        | lbs*   | oz* | Unk                                 | ?                        | in*         | 1/16* | Unk                                 | ?                        |     |         |        |     |
|  | 06/07/2024 | 1 y, 7 m |        |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |        |     | <input checked="" type="checkbox"/> | <input type="checkbox"/> |             |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |     |         |        |     |
|  | 12/08/2023 | 1 y, 1 m |        |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |        |     | <input checked="" type="checkbox"/> | <input type="checkbox"/> |             |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |     |         |        |     |
|  | 06/05/2023 | 6 m, 4 w |        |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> | 17     | 6   | <input type="checkbox"/>            | <input type="checkbox"/> |             |       | <input checked="" type="checkbox"/> | <input type="checkbox"/> |     |         | 61.31  |     |
|  | 12/21/2022 | 1 m, 2 w | 22     | 0     | <input type="checkbox"/>            | <input type="checkbox"/> | 9      | 11  | <input type="checkbox"/>            | <input type="checkbox"/> | 14          | 8     | <input type="checkbox"/>            | <input type="checkbox"/> | N/A | N/A     | 34.06  |     |

# Converting Measurements into MI-WIC units

## C2-Adult Weights: Special Decimal Feature

If your adult scale measures in decimals for fractions of pounds, do you know about the cool MI-WIC tab feature?



Special decimal feature!

**Enter pounds**, then decimal up to two digits, click tab and MI-WIC converts the decimal to ounces! (C2 through adult)

# MI-WIC Converts Weights into MI-WIC Units Digital Scales (C2-Adult)

**.2 Pound** equivalent to **03 ounces**

**.4 Pound** equivalent to **06 ounces**

**.6 Pound** equivalent to **10 ounces**

**.8 Pound** equivalent to **13 ounces**

Enter pounds with decimal, click 'Tab' and MI-WIC will convert decimal to ounces



**DO NOT USE 'TAB' With infant C1 that measure fraction of an ounce**

# Rounding (Infant Scale)

*The sensitivity of infant scales is to the nearest ounce*



Doran DS4100



Some scales are more sensitive and display to the nearest tenth ounce, e.g., 19lbs 2.8 oz

Some scales round to the nearest ounce for you

If your scale reads to the tenth ounce, you must do the rounding

# Doran DS4100

**Rounding .ounces on Infant  
scales**

**5**

**Convert/Round Correctly  
For MI-WIC**



If the last digit is less than  $\frac{1}{2}$  fractional or .5 digital, round down

If the last digit is greater than  $\frac{1}{2}$  fractional or .5 digital, round up

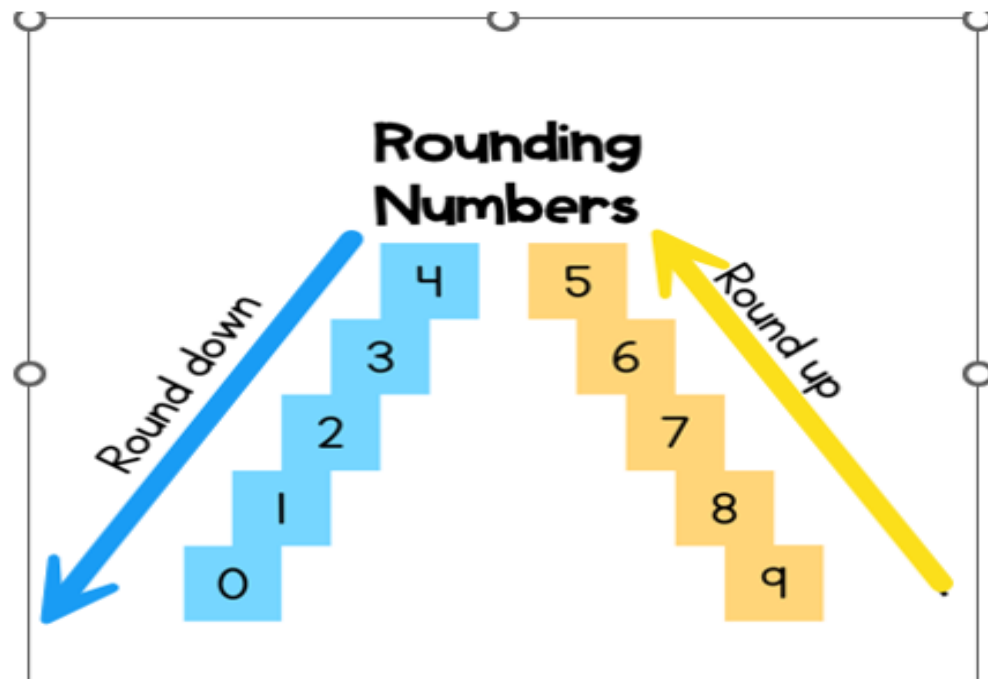
14 lbs 2  $\frac{1}{4}$  oz  
27 lbs 7  $\frac{5}{8}$  oz  
7 lbs 7.6 oz  
6 lbs 9.2 oz



## Rounding (Infant Scale)

## ROUNDING FRACTION OF AN OUNCE EXAMPLE

|              |              |                   |
|--------------|--------------|-------------------|
| 8 lb. 9.9 oz | ROUND UP ↑   | Enter 8 lb. 10 oz |
| 8 lb. 9.8 oz | ROUND UP ↑   | Enter 8 lb. 10 oz |
| 8 lb. 9.7 oz | ROUND UP ↑   | Enter 8 lb. 10 oz |
| 8 lb. 9.6 oz | ROUND UP ↑   | Enter 8 lb. 10 oz |
| 8 lb. 9.5 oz | ROUND UP ↑   | Enter 8 lb. 10 oz |
| 8 lb. 9.4 oz | ROUND DOWN ↓ | Enter 8 lb. 9 oz  |
| 8 lb. 9.3 oz | ROUND DOWN ↓ | Enter 8 lb. 9 oz  |
| 8 lb. 9.2 oz | ROUND DOWN ↓ | Enter 8 lb. 9 oz  |
| 8 lb. 9.1 oz | ROUND DOWN ↓ | Enter 8 lb. 9 oz  |



## CONVERT TENTHS OF POUNDS TO OUNCES

| Convert Tenths of a Pounds to Ounces |   |        |
|--------------------------------------|---|--------|
| Decimal Pound                        | ⇒ | Ounces |
| .1                                   | = | 2      |
| .2                                   | = | 3      |
| .3                                   | = | 5      |
| .4                                   | = | 6      |
| .5                                   | = | 8      |
| .6                                   | = | 10     |
| .7                                   | = | 11     |
| .8                                   | = | 13     |
| .9                                   | = | 14     |

# Converting Weight Values



Record the  
actual  
measurement  
value on  
recording form



Write in  
pounds,  
ounces and  
fractions or  
decimal on  
recording form  
exactly as read  
on equipment

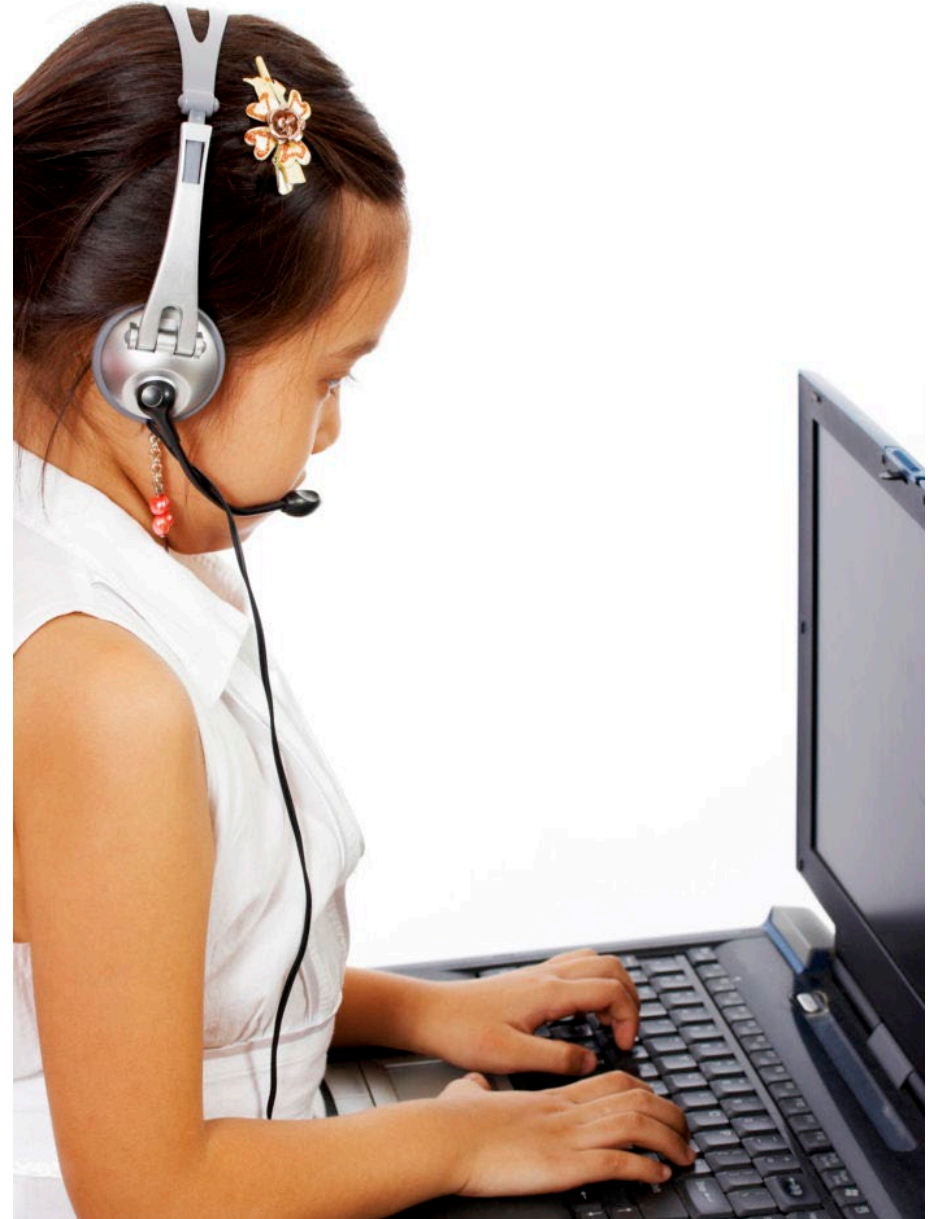


Enter actual  
pound, ounce  
and ounce  
fraction or  
tenth of an  
ounce



Round ounce  
fraction to  
nearest ounce  
in MI-WIC

# 6 Enter Correctly In MI-WIC



# Recording Linear Measurement Values

*Stature, Recumbent Length & Head Circumference  
on the recording form.*

Write values in inches and fractions on recording form exactly as indicated by measuring device

Determine Confirming Measurement

Next step: Convert into MI-WIC format



# Worksheet #1

*Practice recording and converting exercises*



Enter Confirming Measure  
in third column

Convert into MI-WIC units  
and enter in fourth column

# Worksheet Anthro Recording Form

**Anthropometric measurements for a WIC Family No \_\_\_\_\_**

| HEIGHT (Length or stature) |              |           |                    |           |                   |        |              |      |
|----------------------------|--------------|-----------|--------------------|-----------|-------------------|--------|--------------|------|
| Name                       | First height |           | Consecutive Height |           | Confirming Height |        | MI-WIC Entry |      |
|                            | in           | Units*    | in                 | Units*    | in                | Units* | in           | 1/16 |
| WIC INFANT #1              | 24           | 3/8 in.   | 24                 | 2/8 in.   |                   |        |              |      |
| WIC CHILD #2               | 39           | 12/16 in. | 39                 | 13/16 in. |                   |        |              |      |
| WIC PG WOMAN #3            | 65           | 4/8 in.   | 65                 | 3/8 in.   |                   |        |              |      |
| WIC CHUCKIE                | 20           | 5/8 in.   | 20                 | 3/4 in.   |                   |        |              |      |

| WEIGHT          |              |           |                    |          |                   |        |              |    |
|-----------------|--------------|-----------|--------------------|----------|-------------------|--------|--------------|----|
| Name            | First Weight |           | Consecutive Weight |          | Confirming Weight |        | MI-WIC Entry |    |
|                 | lbs          | Units*    | lbs                | Units*   | lbs               | Units* | lbs          | oz |
| WIC INFANT #1   | 20           | 5-1/8 oz. | 20                 | 5-3/8oz. |                   |        |              |    |
| WIC CHILD #2    | 52           | .8 lbs    | 52                 | .6 lbs   |                   |        |              |    |
| WIC PG WOMAN #3 | 155          | 0 lbs.    | 155                | .2 lbs   |                   |        |              |    |

# Recording Measurement Values - Examples

**Weight of 27 pounds 15-3/4 ounces:**

Record as 27 15-3/4 on Measurement Sheet & 28 lbs 0 oz. in MI-WIC.

**Length of 36-2/8 inches:**

Record as 36-2/8 on Measurement Sheet & 36 inches 4 (1/16) in MI-WIC.

**Weight of 22.8 pounds:**

Record as 22.8 on Measurement Sheet & 22 lbs 13 oz. in MI-WIC.

**Stature of 4 feet 7-5/8 inches:**

Record as 55-5/8 on Measurement Sheet & 55 inches 10 (1/16) in MI-WIC.

**Weight of 108.6 pounds:**

Record as 108.6 on Measurement Sheet & 108.6 lbs in MI-WIC, then TAB. 108lbs10oz

# Anthropometric Training

## *Six Steps to Accurate Measures*

**1** Measure  
Correctly

**2** Say Measurement  
Out Loud

**3** Record  
Exactly as  
on device

**4** Carefully Confirm  
Measurement

**5** Convert/Round  
Correctly  
For MI-WIC

**6** Enter Correctly  
In MI-WIC

# Measuring technique and procedure overview





# Anthropometric Training

## *Key Point #7*

Infant Scale must be zero-balanced with a paper sheet and dry diaper (medium size for balance-beam scales).

Note: a balance beam scale can be zero-balanced with a sheet and diaper once daily.

**A digital scale MUST BE ZERO-BALANCED for every weight taken, unless scale has re-weigh function**



# Anthropometric Training

## *Key Point #8*

**When using a digital scale**, a zero balance must be done every time you weigh.  
For infants, put the sheet and dry diaper on the scale, zero balance,  
then remove the dry diaper to weigh the child.



# Anthropometric Training

## *Key Point #9*

Align client according to procedures for the client's category and measurement

Infants and C-1: Head Circumference

Infants and C-1: Recumbent

C-2 Through Adult: Stature



# Anthropometric Training

## *Key Point #10*

**Confirming measurements** are necessary for accuracy

**Numerous errors**, such as, transposing numbers, equipment failures or improper techniques can be caught by confirming measurements.

---

SCALES,  
INFANTOMETERS,  
STADIOMETERS,  
INSERTION TAPES



# SCALE MAINTENANCE

- Inspected Annually
- Adult Sensitivity = 1/4 lbs or 3.2 oz.
- Pediatric sensitivity = 1 oz.
- Secure before moving scales
- Accurate at 10 and 100 lbs.



## Cleaning Measurement Equipment

---

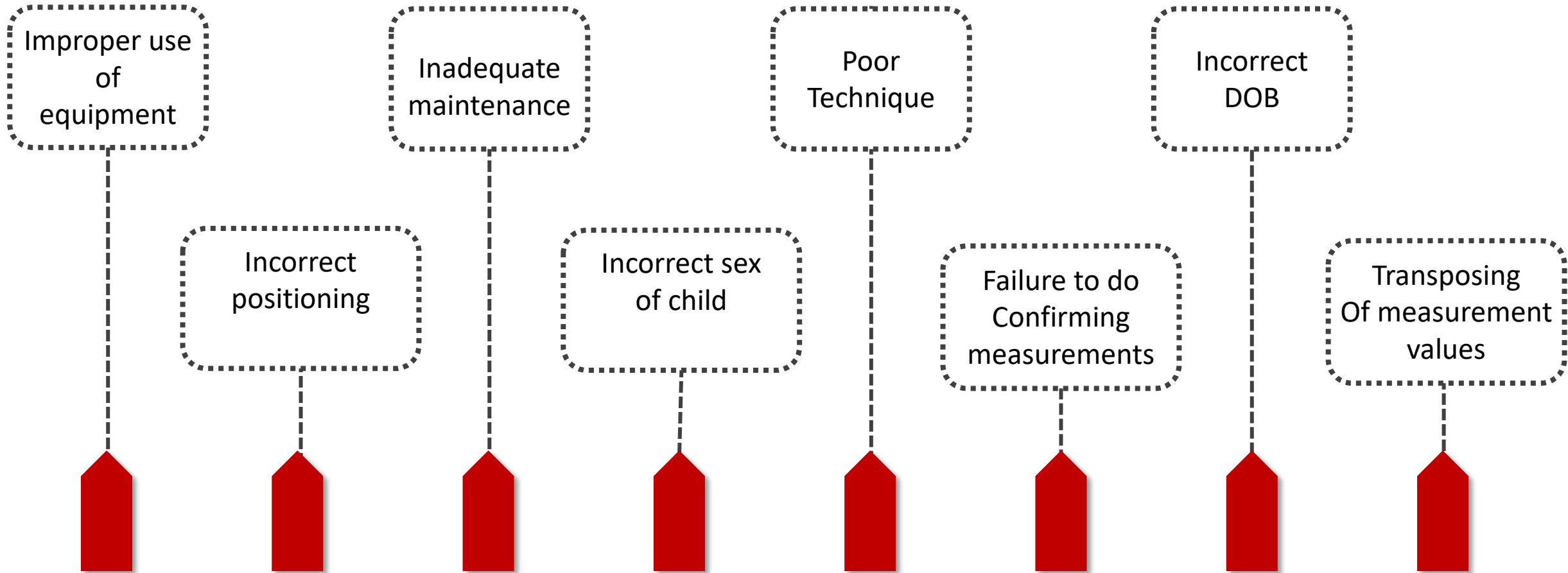
Cleaned regularly with cleansing solution

---

If child soils equipment, should be disinfected with antiseptic immediately

---

# Common Measurement Errors



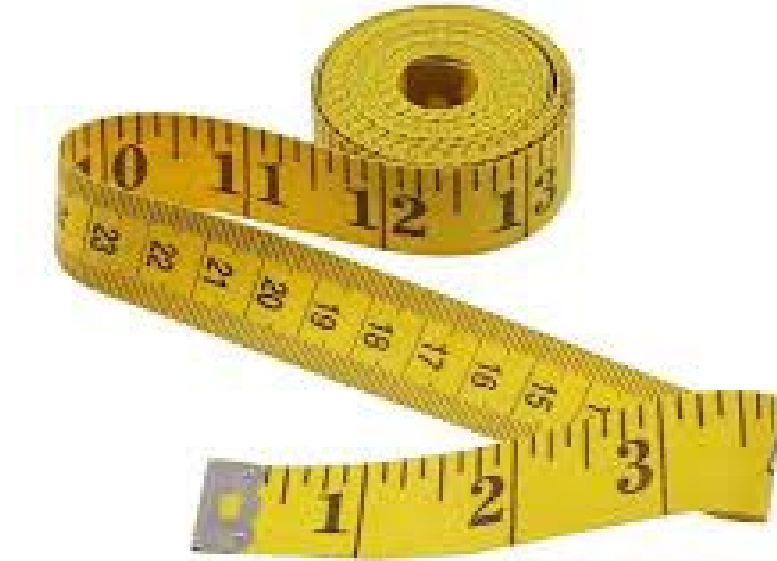
# Common Measurement Errors

## *Impact of Improper Measurement Errors*

Inaccurate information  
about child's growth



Misrepresentation of  
the nutritional status  
of the population  
being screened



Example of stature  
board attached to wall  
1 ½ inch too high – all  
children measured  
shorter than they are



# Anthropometric Training

## *Key Point #11*

**To help prevent errors,** say every measurement out loud and write it down immediately.



# Anthropometric Training

## *Key Point #12*

All measurement devices should be validated with an independent measurement. For example, the stature tape or stature board should be confirmed with a good quality carpenter's measuring tape or calibration rod. Scales are required to be calibrated at least annually.

# LET'S REVIEW KEY POINTS

---





# **Anthropometric Training**

*Review of Key Points*



# Anthropometric Training

## *Key Point #1*

The major focus of Anthropometric Training is to learn procedures and techniques that will result in...

**Consistent Measurement Techniques**

**Improved Accuracy**

**Reduced Errors Over Time**



# Anthropometric Training

## *Key Point #2*

**Check** 'UNK' if a measurement is not known and *enter a comment*

**Check** '?' if measurement could not be taken according to procedure and *enter a comment*

**Referral Measurement Data-** *enter a comment* for source



# Anthropometric Training

## *Key Point #3*

Weeks of Gestation **must** be entered accurately for MI-WIC to correctly calculate growth chart percentiles.

WIC Policy: Clinics must have consistent procedure for determining Gestation Age.



# Anthropometric Training

## *Key Point #4*

The measurements of infants born less than or equal to 1500 grams (3 lbs. 5 oz.) are plotted on the VLBW chart in MI-WIC. This chart uses metric values only.

The VLBW chart does not assign risks but does give parents an idea of how well their child is growing in relation to other VLBW babies



# Anthropometric Training

## *Key Point #5*

Adjustments for Preterm are made in MI-WIC through 23 months of age

Measurements in MI-WIC are not adjusted for preterm after 24 months of age.

The WHO Birth <24 Month and VLBW charts (if < 1500 grams) are the default growth charts.

Measurements of any child over the chronological age of 2 are plotted on the 2-5 year old chart.



# Anthropometric Training

*Key Point #6*

**Measurement values must be recorded in the units of the measurement device**

**Do not transpose or round numbers before recording them**  
**EXACTLY** as they are read from the instrument



# Anthropometric Training

## *Key Point #7*

Infant Scale must be zero-balanced with a paper sheet and dry diaper (medium size for balance-beam scales).

Note: a balance beam scale can be zero-balanced with a sheet and diaper once daily.

**A digital scale MUST BE ZERO-BALANCED for every weight taken, unless scale has re-weigh function**



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C-2 Through Adult: Stature



# Anthropometric Training

## *Key Point #10*

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**Numerous errors**, such as, transposing numbers, equipment failures or improper techniques can be caught by confirming measurements.



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## *Key Point #11*

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# Anthropometric Training

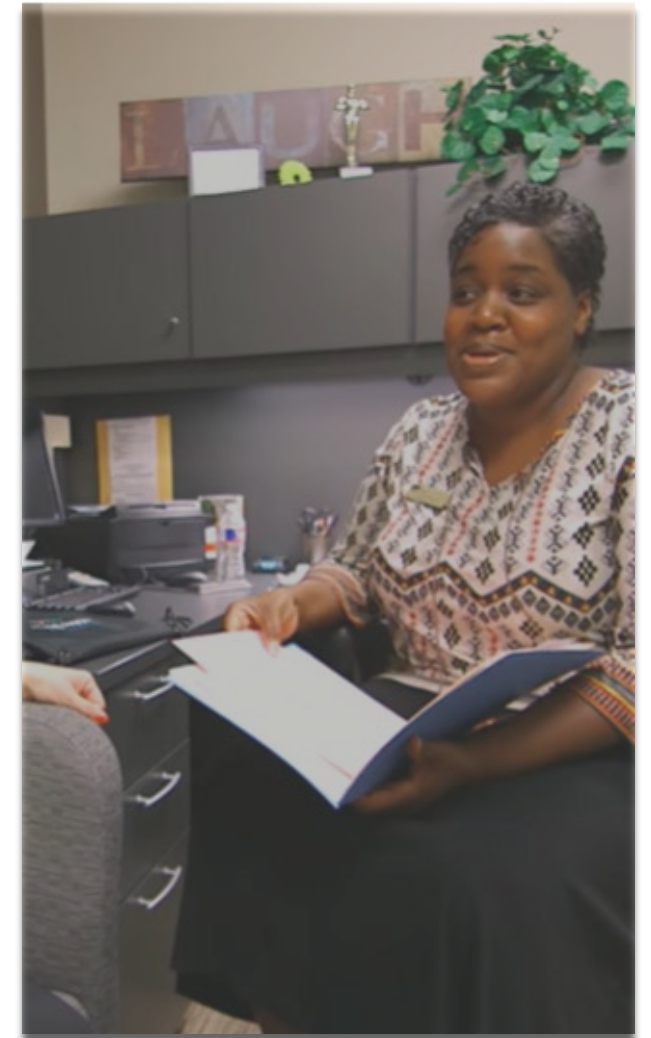
## *Key Point #12*

All measurement devices should be validated with an independent measurement. For example, the stature tape or stature board should be confirmed with a good quality carpenter's measuring tape or calibration rod.



WHATEVER YOU DO  
TODAY, DO IT WITH  
THE CONFIDENCE  
OF A 4 YEAR OLD  
WEARING A CAPE

A big thank you to Perspective Enterprises for demonstrating the measuring equipment





# MICHIGAN WIC

## Anthropometrics Training

Thank you for your attention

Please complete evaluations

Add this training to your Staff Training in MI-WIC

Have a great day!