

Anthropometric and Biochemical Procedures

- I. The following data and charting is required at certification, midcertification, and recertification for participants in the following categories unless otherwise stated or the participant is assigned a nutrition risk factor that requires more regular data collection and charting. For detailed procedures on how to collect anthropometric and biochemical data, please refer to the Laboratory Module.

Category and Age	Required Data	Required Charting
Infants <9 months of age	• Occipital Frontal Circumference (OFC) • Recumbent length • Weight	• OFC for age • Length for age • Weight for age • Weight for length
Infants 9 to 12 months of age	• OFC • Recumbent length • Weight • Hematological test ○ Referral data or deferral for infants 9 to < 12 months of age is preferred ○ Must be completed before they turn 13 months old • Lead test screening*	• OFC for age • Length for age • Weight for age • Weight for length • Hematological test • Lead test screening*
Children 13 to 23 months of age	• Recumbent length • Weight • Hematological test • Standard practice is to test when the participant is 12 months old to fulfill the infant test requirement, and again between 15 to 18 months old to meet federal requirements if values are normal. • If the participant is first certified when they're 13 to 18 months old, they must be tested upon certification, and again 6 months later if values are normal. • If the participant is first certified when they're 19 to 23 months old, they must be tested upon certification and do not require another hematological test before they turn 2 years old if values are normal. • Lead test screening*	• Length for age • Weight for age • Weight for length • Hematological test • Lead test screening*

Children 2 to 5 years of age	• Standing height • Weight • Hematological test • Annually if values are normal • Lead test screening*	• Height for age • Weight for age • BMI for age • Hematological test • Lead test screening*
Pregnant women	• Pre-pregnant weight • Height • Current weight • Documented every 3 months after certification • Hematological test • Only upon certification if values are normal	• Pre-pregnancy BMI • Height • Current weight • Hematological test
Breastfeeding and Postpartum Women	• Pre-pregnant weight • Total weight gain • Height • Current weight • Hematological test • Only upon certification if values are normal	• Pre-pregnant weight • Total weight gain • Height • Current weight • Hematological test

- a. Infants >9 months old and children only need to be screened for lead testing one time upon enrollment to the Utah WIC program. You do not need to screen for lead testing more than once. Refer to the Healthcare Referrals P&P for more detail.

II. Anthropometric and Biochemical Referral Data:

- a. Referral data must be accurate and reliable. Examples of acceptable data collection methods include, but are not limited to:
 - i. Data from a recent clinical visit with a healthcare provider. This data may be given from the provider to the participant or electronically sent to the local WIC clinic.
 1. Anthropometric data must be taken within 60 days of the WIC appointment to be valid.
 2. Hematological data must be taken within 90 days of the WIC appointment to be valid.
 3. The participant may show or take a screenshot of data on their patient portal, or relay the data directly from the health record.
 - ii. Data from another trusted partner who is trained in taking accurate anthropometric or biochemical measurements (i.e., health manager for Head Start during an assessment, home visiting program nurse, or public health nurse).
 - iii. A referral source with this data on file and authority to share it with WIC, such as a social worker.

- iv. The WIC referral data form. This is not the only acceptable form that can be used.
 - b. Measurements taken by the applicant themselves, the parent or caregiver, or are self-reported from memory are not allowed.
 - c. Staff must document the source of the medical data in VISION if they receive referral data.
 - i. Anthropometrics: enter referral data and select “Referral data” in the ‘Inaccurate Reason’ drop down menu.
 - ii. Bloodwork: select ‘Yes’ in Blood Work Taken box and enter referral data. Document the source of the medical data in the ‘Notes’ text box in the Blood screen in VISION.
 - d. Data collected for women must be taken at a time that is reflective of their category (i.e., you can’t use data that was taken during pregnancy to certify a woman as postpartum).
- III. Routine Maintenance of Scales and Measuring Boards.
 - a. Perform daily maintenance of scales as follows:
 - i. Scales should be placed on a hard, non-carpet surface. If the area is carpeted, place the scale on a piece of plywood or a standing base.
 - ii. Check that the scales balance at zero daily and after weighing every participant.
 - 1. Move the ounce and pound weights to zero until the arm rests in the center.
 - 2. Check digital scales between measurements to ensure zero reading.
 - 3. If scales do not balance at zero, notify supervisor for scale to be serviced.
 - iii. Clean scales every day they are in use.
 - 1. Check for wear and broken or faulty parts.
 - 2. Refer to the Laboratory staff training module for details.
 - iv. Record cleaning, repair, and replacement on the maintenance sheet for each scale.
 - b. Perform yearly maintenance of scales as follows:
 - i. Have scales inspected yearly by the Utah Department of Agriculture, Weights and Measures, Market Licensing Division. Call them at (801) 982-2260 if you don’t know the contact details for your county.
 - ii. If scales pass inspection, you will receive a Utah Department of Agriculture Seal that will be dated and placed directly on your scale.

- iii. If scales do not pass inspection, the inspector must complete a “Small and Medium Scale Inspection Report.” Make a copy and place it on the wall above the scales. Work with the Utah Department of Agriculture to remedy these issues. Make other arrangements for weighing while scales are being serviced.
 - iv. New scales should be calibrated by the manufacturer before you receive them. You may use new scales before they’re inspected by the Utah Department of Agriculture, Weights and Measures, Market Licensing Division. However, arrange to have new scales inspected by them as soon as possible.
- c. Perform daily maintenance of measuring boards as follows:
- i. Clean measuring boards with disinfectant each day they are in use.
 - ii. Check for wear and broken or faulty parts.
- d. Perform yearly maintenance of measuring boards as follows:
- i. Check all boards for accuracy by:
 - 1. Using a metal measuring tape;
 - 2. Checking for slippage on wall mounted boards; and
 - 3. Checking the right angle on head and foot boards.
 - ii. Record cleaning, repair and replacement on the maintenance sheet for each measuring board.

IV. HemoCues

- a. Routine maintenance of HemoCues.
- i. Always follow the manufacturer’s directions when cleaning and maintaining blood work machines. Perform daily maintenance of HemoCues as follows:
 - 1. Clean HemoCues every day they are in use. Follow the manufacturer’s directions.
 - 2. Record cleaning on maintenance sheet for each separate HemoCue machine.
 - 3. If necessary and depending on the type of equipment, follow the manufacturer’s instructions for calibration.
- b. Perform annual maintenance of HemoCues as follows:
- i. All records of cleaning, repair, and replacement should be recorded on the maintenance sheet for each HemoCue machine.

V. Pronto

- a. The Pronto-7 offers noninvasive and quick spot-check testing of total hemoglobin (SpHb). This technology may provide the following benefits:
- i. Staff
 - 1. Easy-to-use — Improves efficiency

2. Decreases risk of accidental needle stick and exposure to blood-borne pathogens
3. Requires no lab consumables or waste disposal
- ii. Participant
 1. Reduces painful needle sticks and time-consuming blood draws
 2. Enables immediate face-to-face counseling with clinician

b. Refer to the Laboratory Module for specific procedures.

VI. Hematological Testing (blood work).

- a. A hematological test must be performed or results obtained from a referral source at the time of initial certification or within 90 days of the date of initial certification for:
 - i. Infants (9 to 12 months old).
 1. A deferral up to 90 days is preferred to test closer to the individual's 1st birthday. However, the deferral cannot go past their 12th month of life.
 2. Any test in the 12th month (the month that they turn 1 year) counts as an infant test. (Example: A participant's 1st birthday is on July 12. The whole month of July is considered their 12th month of life. A hematological test on July 15 still counts as an infant test.)
 - ii. Children (13 months to 23 months old).
 - iii. Children (2 to 5 years old).
 - iv. Pregnant, breastfeeding or postpartum women.
- b. The hematological test may be deferred for up to 90 days from the time of certification for applicants who have at least one qualifying nutritional risk factor present at their certification appointment.
 - i. A hematological test must be performed or obtained from a referral source immediately if no qualifying nutritional risk factors are identified during the nutrition interview.
- c. Hematological tests for infants 9 to 12 months old.
 - i. Infants enrolled in the Utah WIC Program must be tested before the end of their 12th month of life.
 - ii. A hematological test is not required at the time of certification if the infant is < 9 months old at that appointment.
 - iii. Participants with hematological test results that are lower than the normal range **and** meet high-risk criteria must be tested more frequently.
- d. Hematological tests for children aged 13 to 23 months old.

- i. Standard practice is to test when the participant is 12 months old to fulfill the infant test requirement, and between 15 to 18 months old to meet federal requirements if values are normal.
 - ii. If the participant is first certified when they're 13 to 18 months old, they must be tested upon certification, and again 6 months later if values are normal.
 - iii. If the participant is first certified when they're 19 to 23 months old, they must be tested upon certification and do not require another hematological test before they turn 2 years old if values are normal.
 - iv. Participants with hematological test results that are lower than the normal range **and** meet high-risk criteria must be tested more frequently.
- e. Hematological tests for children aged 2 to 5 years old.
 - i. Children aged 2 to 5 years old who are enrolled in the Utah WIC Program must be tested at least 1 time every year (every 12 months).
 - ii. Complete another hematological test in 6 months if their hematological test result is lower than the normal range but doesn't meet high-risk criteria.
Complete another hematological test **before** 6 months if their hematological test result is lower than the normal range **and** meets high-risk criteria.
- f. Hematological tests for pregnant, breastfeeding, or postpartum women.
 - i. Pregnant, breastfeeding, or postpartum women must be tested at each certification appointment.
 - 1. Hematological testing and follow up is only required while a participant is certified.
 - ii. Complete another hematological test in 6 months if their hematological test result is lower than the normal range but doesn't meet high-risk criteria.
 - iii. Complete another hematological test **before** 6 months if their hematological test result is lower than the normal range **and** meets high-risk criteria.
- g. A note must be requested from a participant's healthcare provider if the participant has been diagnosed with sickle cell anemia or another condition that would cause their hematological test results to continuously be lower than the normal range or if a hematological test isn't medically appropriate.
 - i. The healthcare provider note must include:
 - 1. The participant's diagnosis.
 - 2. The participant's most recent hemoglobin value (if available).
 - 3. A statement indicating the participant's hematological test results will continually be lower than the normal range or that

hematological tests are not medically appropriate for the participant.

4. A statement that indicates the participant's health is being monitored regularly by a healthcare provider.
- ii. This note must be:
 1. Scanned into VISION under the participant's file.
 2. Clearly indicated on the participant's file in VISION for all WIC staff to see.
 3. Renewed each year.

VII. Laboratory safety.

- a. WIC clinics should follow their local agency or health department policy on handling body fluids.
- b. All WIC clinics must have a Clinical Laboratory Improvement Amendment (CLIA) waiver on file or meet the National Committee for Clinical Laboratory Standards requirements.
- c. For information on obtaining a CLIA waiver contact:
Health Care Financing Administration, Attention: CLIA Laboratory Inquiry
PO Box 26687
Baltimore, MD 21207-0487

VIII. Exceptions for collecting blood.

- a. The only circumstances which would preclude drawing blood are:
 - i. If an applicant's religious belief will not allow them to have their blood drawn, or
 - ii. If an applicant has a documented medical condition in which the procedure of collecting blood could cause harm to them (e.g., hemophilia, fragile bones, osteogenesis imperfecta, cancer, or a serious skin disease. Applicants who have leukemia or thalassemia are also exempt from the blood collection with medical documentation. (See section V.g. above for what is required.)
- b. In the case of one of the above medical conditions, local agencies should make every effort to obtain referral data from the applicant's health care provider. However, in accordance with USDA policy, the applicant cannot be required to obtain such data at their own expense.

- c. If an applicant refuses to have blood drawn for the hematological test and reasons are not included in the above circumstances, take the following steps:
 - i. Explain the risks of iron-deficiency anemia and the importance for screening (i.e., low energy, irritability, and compromised learning ability). Then, if the applicant still does not consent to the screening, suggest referral data from the primary care provider. Help the participant obtain this information from their primary care provider or,
 - ii. The hematological test for anemia may be delayed for up to 90 days (See V. b. above).
 - iii. If a participant continues to refuse a hematological test at the clinic or refuses to obtain this information from their primary care provider for either themselves or their infant/child, please contact the state agency.