Anthropometric and Laboratory Procedures

Category and Age	Required Data	Required Charting
Infant < 7 months of age	• Occipital Frontal Circumference (OFC) • Weight • Recumbent length	Birth to 36-month growth chart • OFC for age • Length for age • Weight for age • Weight for length
Infant 7 to 9 months of age	• OFC • Weight • Recumbent length	Birth to 36-month growth chart • OFC for age • Length for age • Weight for age • Weight for length
Infant 9 to <12 months of age	• OFC • Weight • Recumbent length • Hematological test o in clinic o referral data between 9 and < 12 months of age o can be deferred (up to 90 days) to test closer to the infant's 1st birthday	Birth to 36-month growth chart • OFC for age • Length for age • Weight for age • Weight for length • Hematological test
Child 12 to <24 months of age	• Weight • Recumbent length • Hematological test (approximately 6 months after the infant test) • Standard practice is to test in the child's 12th month of life and between 15-18 months of age. If the child is certified **after** the 12th month of life, the second hematological test should be completed 6 months later. Two hematological tests must be completed prior to the participant turning 24 months.	Birth to 36-month growth chart • Length for age • Weight for age • Weight for length • Hematological test
Child ≥24 months of age	• Weight • Standing height • Hematological test	2-5 year growth chart • Height for age • Weight for age • BMI for age • Hematological test
Pregnant woman	• Pre-pregnant weight • Current weight • Height • Hematological test	Prenatal Weight Gain Grid • Pre-pregnancy BMI • Height • Current weight every visit • Hematological test

Breastfeeding and Postpartum Woman	• Pre-pregnant weight • Total weight gain • Current weight • Height • Hematological test	• Pre-pregnant weight • Total weight gain • Current weight • Height • Hematological test

* For detailed procedures on collecting these data, please refer to the Laboratory Module.

I. Anthropometric and Laboratory Referral data:

a. The most important aspect is that the referral data is accurate and reliable. Examples of acceptable data collection methods could include, but are not limited to:
    i. Written or printed 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.
    ii. Hematological data must be taken within 90 days of the WIC appointment to be valid. The participant may show or take a screenshot of the data on their patient portal (i.e., on their phone), or relay the data directly from the health record.
    iii. Data from another trusted partner who is trained in taking accurate anthropometric or hematological measurements (i.e., a health manager for Head Start during an assessment, a home visiting program nurse, or a public health nurse).
    iv. A referral source who may have such data on file and authority to share it with WIC, such as a social worker.
    v. The WIC referral data form may be used but is not the only acceptable form that can be used.

b. Measurements taken by the applicant themselves or by the parent/caregiver, or self-reported from memory are not allowable.

c. Staff must document the source of the medical data in VISION if receiving 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 reflective of their category.

II. 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, by moving the ounce and pound weights to zero until the arm rests in the center. Check digital scales between measurements to ensure zero reading. If scales do not balance at zero, notify supervisor for scale to be serviced.
    iii. Clean scales every day they are in use. Check for wear and broken or faulty parts. 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 (801) 538-7159.
    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. Make other arrangements for weighing while scales are being serviced.
    iv. Contact the State agency, advising them of the problems with your scales. Avoid using the scales until the State agency responds regarding the need for repair, and approval or disapproval to use the equipment.

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.

III. 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.

IV. 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.

V. 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 12 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 24 months).
    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. Infants 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 24 months old.
    i. Children enrolled in the Utah WIC program must be tested between 13 to 24 months of age. It's preferred this test happens 6 months after their infant hematological test if they had one.
    ii. **Two** hematological tests must be completed before the participant is 24 months old if they were first enrolled in WIC as an infant (≤12 months old).
        1. Their infant hematological test can't fulfill both the infant hematological test requirement and the 13 to 24 month old child requirement.
        2. Standard practice is to test when the participant is in their 12 month of life and again when they're 18 months old.
    iii. A hematological test isn't needed for another year if the result of the participant's 13 to 24 month old test is within the normal range.
    iv. 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.
    v. Complete another hematological test **before** 6 months if their hematological test result is lower than the normal range **and** meets high-risk criteria.

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 indicating that 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.

h. Hematological tests must be performed according to current procedures and recommendations (refer to the Laboratory Module).

i. Time frames to collect blood work data:

Women			Infants		Children	
P	**BF**	**NBF**	**< 9 months**	**9 – 12 months**	**13 – 24 months**	**2 - 5 years**
At prenatal certification	At postpartum	At postpartum	No hematological	Hematological test performed	Approximately 6 months after	Once every 12 months

visit	certification visit	certification visit	test required	in clinic or results obtained from a referral source. Can be deferred to test closer to the infant's 1st birthday.	the infant hematological test. Standard practice is to test at 18 months.	

Women	
Pregnant (P)	At prenatal certification visit
Postpartum (BF or NBF)	At postpartum certification visit
Infants	
< 9 months	No hematological test required
9 to 12 months of age	Hematological test is: • performed in clinic • obtained from referral data
Children	
13 - 24 months	Approximately 6 months after the infant hematological test. Standard practice is to test at 18 months. *Must have 2 tests (within normal range) before age 2 years old.
2 - 5 years	Once every 12 months.

If hematological results are…	**Then…**
Normal	Follow the above schedule
Low but **do not** meet high-risk criteria	Perform hematological test every 6 months until results are within normal range.
Low and **do** meet high-risk criteria	Schedule more frequent follow-up visits.

VI. 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

VII. 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).t. 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 having 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. Offer assistance to the participant to help 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.