

**Department of Public Health and Social Services  
Bureau of Nutrition Services-Guam WIC Program**

<b>TITLE:</b> Hematologic Test for Anemia	<b>POLICY NO.:</b> CS-05	Page 1 of 5
<b>APPROVED BY:</b>  Cydsel Victoria Toledo, MD, MHA BNS Administrator/Guam WIC Program Director <i>3/18/24</i>	<b>DATE OF ORIGINAL APPROVAL:</b> 8/16/23	
	<b>DATE REVISED/REVIEWED:</b> 3/18/24	
<b>Endorsed By:</b> Godfrey Wong, RD, Acting Public Health Nutrition Specialist Michael Gallo, Program Coordinator IV <i>3/18/24</i>		

## **PURPOSE**

To ensure accurate and thorough determination of Nutrition Risk Conditions through complete nutrition assessment and hematologic testing and established guidelines in conducting In-clinic blood testing (hemoglobin or hematocrit) for anemia.

## **POLICY**

- A. Clinical Staff shall perform a complete nutrition assessment on every WIC applicant who is categorically eligible and whose income and residence meet program guidelines.
- B. A complete assessment shall include the following:
  - a. Anthropometric measurements
  - b. Biochemical (anemia and lead screening)
  - c. Clinical/Medical Data
  - d. Diet and Nutrition
  - e. Environmental
- C. Guam WIC Program shall obtain hematologic test data for anemia from referral sources or conduct an In-clinic blood testing at the time of certification or within 90 days of the date of certification, as long as the applicant is determined to have at least one qualifying nutrition risk factor at the time of certification. (*refer to Biochemical Data Collection Chart*).
- D. Guam WIC shall have an In-clinic hematologic testing and Clinical Laboratory Improvement Amendments (CLIA) Certificate of Waiver to ensure that certain In-clinic testing standards are maintained.
  - a. Clinic staff shall be trained to collect blood samples for hematologic test for anemia.
  - b. A hematological test for anemia will be performed following the Biochemical Data Collection Chart for the participant category.
  - c. Appropriate procedures and equipment will be used when performing hemoglobin (Hgb) or hematocrit (Hct) tests in WIC clinics.
  - d. Applicants 2 years and older may have their blood test taken at the clinic via non-invasive Massimo testers.
- E. The Guam WIC program shall still utilize the Guam Department of Public Health and Social Services (DPHSS) Laboratory and Diagnostic Laboratory Services (DLS) and send participants for blood testing in certain circumstances such as;
  - a. Legal Guardian or representative is not consenting to In-clinic blood testing.

- b. Difficult for staff to obtain blood samples after several attempts.
- c. No available In-clinic hematologic testing supplies.

F. USDA Food Nutrition Services Wester Region Office shall be notified if any issues arise with blood testing supplies/procurement which leads to an extended break in in-clinic blood testing services.

G. Participants who do not have blood work data are not to be denied WIC benefits. One month of benefits shall still be issued until blood work data is obtained.

H. Participant's blood testing may be waived if there is a religious objection (e.g., Christian Scientist) or a medical reason (e.g., hemophilia, thalassemia, sickle cell anemia, sensory processing disorders) or if performing the test will cause physical harm to the participant and/or staff member.

## RESPONSIBILITIES

Program Coordinator IV	Conducts routine checks and monitors inventory of microcuvette and non-invasive Massimo sensors. Shall ensure minimum inventory stock levels are maintained and steady supply for dissemination to the clinic. Notifies WRO when blood testing supplies/procurement issues arise.
Clinic Supervisors	Monitor their supplies at the clinic level and place an order to the admin to receive more if needed.
Public Health Nutrition Specialist	Shall ensure that staff are trained and competent in In-Clinic blood testing. Shall ensure that the current CLIA waiver is maintained. Oversee the Clinic supervisors and work with the PC IV to ensure blood testing supplies are always available.

## PROCEDURES

A. Blood Work Data Collection

1. The WIC Receptionist shall obtain consent for hemoglobin screening; and have the participant or legal guardian sign the consent found in the Medical Category section of the Health and Nutrition Delivery System (HANDS).
2. WIC staff shall obtain blood work data following the Biochemical Data Collection Chart using one of the following methods as appropriate.
  - i. In-clinic blood testing using a hemoglobin analyzer – is performed by a trained clinic staff. (Refer to the Manual for detailed procedure instructions)
    - a. Establish a clean workspace to lay testing supplies by wiping the surface with disinfectant before and after testing.
    - b. Wear a new set of sanitized gloves.
    - c. Prepare the participant's fingers by rubbing fingers towards the fingertip.

- d. Clean the puncture site using an alcohol swab. Use only the middle or ring finger.  
e. Remove a cuvette from the vial and recap the vial immediately.  
f. Clean the puncture site with an alcohol swab, and allow it to air dry.  
g. Using your thumb, gently roll your thumb or lightly press the finger from the top of the knuckle toward the fingertip. This stimulates the blood flow towards the sampling point.  
h. Puncture at the side of the fingertip pad not the side of the finger. Press the lancet firmly against the fingertip before activating the lancet.  
i. While maintaining gentle pressure toward the fingertip, puncture the finger using the lancet.  
j. Discard the lancet in an approved container (sharps container).  
k. Wipe away the first 2 drops of blood before filling microcuvette.  
l. When the blood drop is large enough, fill the microcuvette in one continuous process. Ensure it is filled properly with no air bubbles  
m. Place microcuvette into the analyzer.  
n. Apply a bandage over the puncture site.  
o. View results
- ii. Utilizing Outside Laboratory
- a. Fill out the lab slip form request for Hgb and Hct.  
b. Instruct the client or legal guardian on which laboratory to go either to DLS or DPHSS laboratory at Northern Regional Health Center.
- iii. Utilizing Non-Invasive Massimo Hgb. test for age 2 yrs. and older.
- a. Each client should be sitting and at rest.  
b. Hands should be placed on a desk.  
c. Massimo device should be positioned on a flat surface at the level of the client's hand.  
d. Insert ring sensor on the left middle finger.  
e. Reading is obtained following manufacturer direction.  
f. If the Massimo tester fails to read bloodwork after two attempts, the participants' blood work may be taken on-site using HemoCue or given a lab slip to either DLS or Public Health Lab.
- iv. Referral Data Source/Blood Work provided by the Medical Provider in writing.
- a. Blood work data that was obtained within 12 months may be accepted for all categories provided that the client's category remained the same from the date the blood test was taken.

- b. If the blood test submitted indicates anemia, and has been taken more than 6 months, another blood test must be performed or requested.

**B. Blood Work Result Documentation**

1. HANDS will not accept blood data > 90 days. Therefore, to document blood test data that was taken greater than 90 days and less than 12 months, proceed to HANDS medical screen and use the pending lab code "Blood test > 90 days accepted".
2. If "Blood test >90 days accepted" is selected, HANDS will not ask for another blood test until 6 months later. Clinic staff are to check when another blood test is needed within those 6 months.
3. Document the blood test data under SOAP notes:
  - i. Objective: Write the date the blood test was taken.
4. If Blood test is waived for medical and religious reasons
  - i. Document in HANDS under the medical screen and select 3. MEDICAL CONDITION, 5. RELIGIOUS BELIEFS, or 4. SAFETY CONCERNS. Document under notes Objective why blood testing was waived.

**C. Nutrition Education**

1. NA shall provide education and refer participants based on hemoglobin value
2. For hemoglobin results below the "Anemia" cutoff value: The Nutrition Assistants (NA) provide nutrition education on food sources of iron and ways to increase iron absorption. Refer to Nutrition Assistant II for a medium-risk appointment if the value is between the anemia cutoff and "refer to nutritionist" values. (see table below)
3. For hemoglobin results in the "Nutritionist" range: Provide nutrition education on food sources of iron and ways to increase iron absorption and refer to the Nutritionist for further evaluation. All participants with confirmed very low hemoglobin values are referred for an immediate medical evaluation, either with their primary care provider or, if unavailable, at an emergency medical center.

**D. Follow-up Hemoglobin/Hematocrit Requirement**

1. Infants who had a blood test done when they were less than 12 months of age shall have a follow-up blood test 6 months from the last blood test done
2. Children 12-60 months who had a blood test done shall have a follow-up blood test every 12 months if the blood test was normal. Or at 6 months interval if the last lab test result was below standard
3. Pregnant women who had a blood test done do not need a follow-up blood test if the test result was normal. A follow-up blood test at 6 months shall be done if the last blood test result was below standard during the same pregnancy.
4. Post-partum non-breastfeeding women do not need a follow-up blood test after the initial blood test is performed.
5. Breastfeeding women do not need a follow-up blood test if the initial blood test result is normal.

6. Breastfeeding women recertified at 6-12 months postpartum who had a positive anemia screen result when tested after delivery shall have a follow-up test if the test was taken more than 6 months ago.

**ATTACHMENTS:**



