



IDAHO DEPARTMENT OF HEALTH & WELFARE
DIVISION OF PUBLIC HEALTH

Idaho WIC Training **Hematology**

Trainer



Module 1: Hematological Testing Procedures

In addition to the main activities, the trainee may be asked the following items within this module (*look for the discussion symbol in the Activities Workbook*):

- Where to locate the Hgb Collection Reference document on the WIC website under the training section.
- The HemoCues (or comparable equipment brand in your agency) cleaning and calibration requirements.
- What other staff what they do to keep children calm.
- How to assess a need to 'retest' (if the Hgb is abnormally low due to a potential error).



Activity 1

Part A: Answer the following statements as true or false. If they are false, make them true.

1. If not enough blood flows to fill capillary tubes, it is okay to “milk” or squeeze the ~~finger~~ **upper arm** to encourage the flow. **False**
2. The first drop after puncture should be wiped off with a clean tissue. **True**
3. The finger (or toe) should be wiped clean with a cotton ball wet with alcohol ~~punctured~~ **immediately. Then wipe off the alcohol with a gauze pad. False**
4. Air bubbles in the blood sample will ~~not~~ affect results. **False**
5. If a WIC client has low hemoglobin, the client ~~is certainly~~ **may not** be anemic. **False**
6. Used lancets are discarded in the ~~trash can~~ **biohazard container. False**

Part B: Answer the following questions.

1. The hemoglobin test is taken in WIC
 - a. as a standard part of certifying applicants
2. Beverly Thomas, 22 years old, is breastfeeding her newborn and is in for her six week certification visit. You read in her chart that staff had a difficult time getting enough blood

for a test at her initial certification visit. List at least two things you can do to try to obtain sufficient blood this time.

- Increase blood circulation by opening and closing hand, rubbing the hands together or under warm water. Prick the finger with the arm hanging down. Milk the upper arm.

3. List four reasons for an inaccurate hemoglobin value resulting in error.

Possible examples for an inaccurate hemoglobin result might be an error from:

- Excess squeezing
- Not wiping off alcohol
- Not getting a good finger stick
- Not wiping off first drop of blood
- Holding cuvette by the tip (contaminated)
- Not enough blood in cuvette
- Recording errors
- Referring to the incorrect hemoglobin/hematocrit table

Module 2: Understanding Values

In addition to the main activities, the trainee may be asked the following discussion items within this module:

- Where to find the altitude information for the clinic(s) they may be working in.



Activity 2

This activity requires the trainee to fill in the Hgb and Hct values for your agency. The trainer and trainee will need to reference the *Idaho WIC Policy Manual Nutrition Risk Criteria for Risk 201: Low Hematocrit/Low Hemoglobin*, under the *Hemoglobin and Hematocrit Baseline Values* tables in order to find and check corresponding answers.



Activity 3

Part A: Mark the following statements true or false. If they are false, make them true.

1. The hemoglobin or hematocrit test is ~~also~~ **not** used to detect low blood sugar. **False**
2. Iron is a part of hemoglobin, a molecule in red blood cells that carries oxygen. **True**
3. Clients with low hemoglobin (but >10) should receive nutrition education and be scheduled for a repeat test six months later. **True**
4. Clients with very low values or whose low values fail to improve should be referred to the RD
True

Part B: Write in the answer.

1. List those WIC applicants for whom a hemoglobin or hematocrit test is not performed:
 - Infants less than 9 months of age
 - Other potential exceptions may include:
 - Children 2 years and older only need one test per year if the test was within normal limits at the previous collection.
 - Breastfeeding women only require one postpartum test.
 - Exceptions (document in participant file):
 - An applicant who has a medical condition or disability which makes obtaining the test measurement at the appointment impossible.
 - An applicant who has a disability that prevents his/her presence at certification
 - An applicant who has cultural, personal, or religious beliefs that conflict with drawing blood
 - Difficult child struggling with certifier during procedure
2. When is it acceptable to use a hemoglobin or hematocrit test taken at a physician's office (instead of doing another one in the WIC office)?
 - If it has been collected less than 60 days old