



Standard Operating Procedure

SOP No: HALI-HB -001

Version: 1

Effective Date:

Title: HAEMOGLOBIN CONCENTRATION ASSESSMENT

- 1.0 PURPOSE / INTRODUCTION:** To describe the method for operating the HemoCue device and correctly obtaining haemoglobin readings from finger-prick blood samples.
- 2.0 SCOPE / RESPONSIBILITY:** This SOP is applicable to all Laboratory technologists, Clinical officers, Nurses and field workers working in HALI Project, KEMRI/Wellcome Trust Research Programme.
- 3.0 SPECIMEN:** Capillary blood drawn directly from a finger prick or heel
- 4.0 EQUIPMENT / MATERIALS/ REAGENTS (for each school):**

Item	No.	Item	No.
1 Hemocue machine	1	9 Paper towels	1 pkt
2 Hemocue curvettes	70	10 Rubbish bins	1
3 Hemocue cleaners	1	11 Refuse bags	2
4 Lancets	70	12 Soap	1
5 Cotton wool	100 gms	13 Pens	2
6 Gloves	1 box	14 Shorthand notebook	1
7 Methylated spirit	1/2 litre	15 Spare batteries	4
8 Sharps box	1	16 Data collection form	2

5.0 METHODOLOGY:

5.1 PREPARATION OF THE PATIENT

- 5.1.1 Ensure the patient is relaxed.
- 5.1.2 Explain to the patient or guardian what you intend to do for them before any sample collection and where applicable get consent.

5.2 COLLECTION OF BLOOD SAMPLE

- 5.2.1 Clean the finger with cotton swab soaked in spirit or 70 % methylated spirit. Ensure that blood taken is free from grease, perspiration, or dirt that may be on the skin.
- 5.2.2 Dry the finger with dry cotton gauze.
- 5.2.3 Puncture the ball of the finger with a sterile lancet. **DO NOT REUSE LANCETS!!!**
- 5.2.4 Wipe out the first drop of blood and apply gentle pressure on the finger to release a free flowing drop of blood.
- 5.2.5 Collect blood drop in microcuvette in one continuous process.
- 5.2.6 Wipe off excess blood on the outside of the microcuvette.
- 5.2.7 Check there are no bubbles in the microcuvette. Small bubbles at the edge can be ignored.

5.3 RECORDING HAEMOGLOBIN CONCENTRATION

- 5.3.1 Place in the cuvette holder and push the tray close.
- 5.3.2 After 15-60 seconds the reading will be displayed. Record this on child information sheet.
- 5.3.3 **Note:** The haemoglobin reading should be recorded on the child information form in **g/L**.
- 5.3.4 Open cuvette holder and discard the microcuvette.