10.3.3 Blood – collection from a neonate

10.3.3 BLOOD – COLLECTION FROM A NEONATE

**AIM**
- To ensure blood collection from a neonate is performed appropriately
- To ensure the sample is labelled correctly

**KEY POINTS**
1. The Phlebotomy Team is available on Page Number 3258 and 3259 for collection of blood specimens of difficult bleeds between 1400 and 1500 weekdays.
2. Collection of blood specimens takes place Monday to Friday, Round 1 between 0800 and 1000, and Round 2 between 1030 and 1200.
3. Improperly or inappropriately labelled specimens will not be processed by the laboratory, nor will they be returned.
4. Printed baby addressograph labels may be used to label specimens except Transfusion Medicine samples.
5. All Transfusion Medicine samples must be handwritten and initialled.
6. Mothers should be advised of comfort measures, sucking related interventions, use of sucrose available for neonates undergoing blood collection. With maternal consent these measures should be implemented.
7. Venepuncture for neonatal blood collection when done by a trained practitioner causes less pain than a heel lance, therefore at KEMH if a large amount of blood is to be collected (e.g. Newborn Screening test and additional blood tests) then venepuncture should be considered.

**SAFETY POINTS FOR COLLECTION OF BLOOD SPECIMENS**

Full details regarding safe collecting procedures must be followed and are available from:
- Pathology Guidelines
- Blood Transfusion Medicine guidelines

- Work with only one neonate at a time.
- The request form must be completed and signed by the Medical Officer. Do not proceed with specimen collection if any discrepancies are noted on the request form. Contact the medical officer to complete request form or re-issue.
- The neonate must have their own identity band prior to collection of blood (except cord blood).
- Label the sample at the bedside immediately after collection.
• Baby specimens must be labelled with **THREE** points of identification:
  - baby UMRN and
  - baby last name and
  - baby first name if this is registered in TOPAS (if no first name, DOB must be used – see KEMH pathology guideline re twins)
  - date and time of collection **plus the initial of collector**
• Sign the “collection details” on the request form.
• Place the label horizontally. Ensure that if a pre printed label is used, that there is a gap at the back of the tub, and that the label does not extend past the end of the tube.
• Enclose the sample and form into a biohazard bag and sent to the laboratory.

**HINTS TO REDUCE CLOTTING PROBLEMS WHEN COLLECTING A BLOOD SPECIMEN**
• Never shake or tap the blood tube
• Gentle swirling of the blood tube during collection
• Ensure gentle inversion of the tube once the lid is applied

**PAIN MANAGEMENT**

Sucking–related interventions have been shown to be an effective treatment for pain reactivity and immediate pain-related regulation. Rocking / holding the term neonate has also been shown to useful for immediate pain-related regulation. Breastfeeding should be initiated to alleviate procedural pain, and alternatively sucrose/glucose is also as effective for reducing pain. While the use of sucrose is safe and effective further research is required to determine the most effective dosage.

Mothers should be advised of optional practices to manage pain for the neonate prior blood collection:
• oral sucrose
• non-nutritive suckling
• breastfeeding where feasible
• rocking / hold the neonate

**SUCROSE DOSAGE FOR THE TERM NEONATE**

See [NCCU Clinical Guidelines ‘Oral Sucrose for Procedural Pain Relief’](#) for full guideline and exclusion to use.

The dosage should be administered two minutes prior to the procedure with the neonate in ‘feeding position’. The dose is given on the anterior part of the tongue, and offer a pacifier, with mother’s consent. The effect lasts approximately 5 minutes.

**Dosage for a term neonate**

Sucrose 25% solution – administer up to 0.5 – 1.0mL (give in 0.25mL aliquot).

**Note:** the total dose in 24 hours should not exceed 3 mL if the neonate’s weight is >1500gms.

Document the amount given, including the total over a 24 hour period.

**REFERENCES**