



JOSHUA HELLMANN
FOUNDATION
FOR ORPHAN DISEASE

Joshua Hellmann Foundation Newborn Metabolic
Screening Program

**Supplementary notes for blood spot
collection**

Centre of Inborn Errors of Metabolism
The Chinese University of Hong Kong

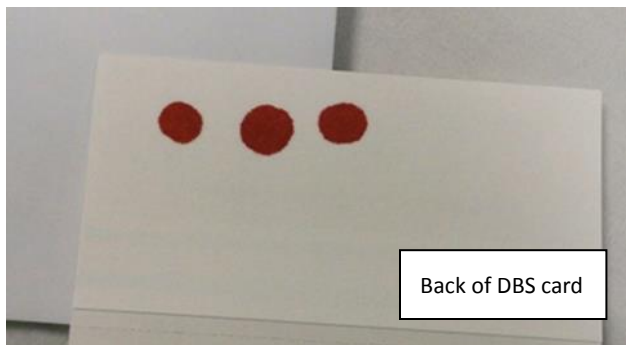
Quality and precautions of dried blood spot sampling for newborn metabolic screening

Examples of good quality blood spot sampling

1. One big drop of blood per circle in one single application, no overlapping of blood spots.



2. Ensure sufficient amount of blood - each blood drop should totally penetrate the card.

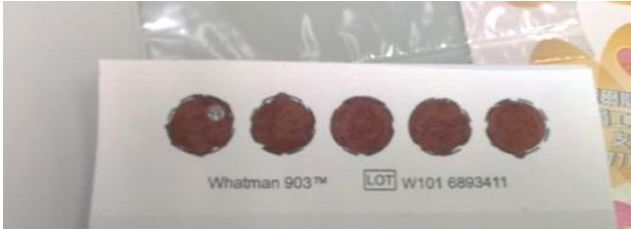


3. Keep the card in horizontal position and allow it to dry completely.



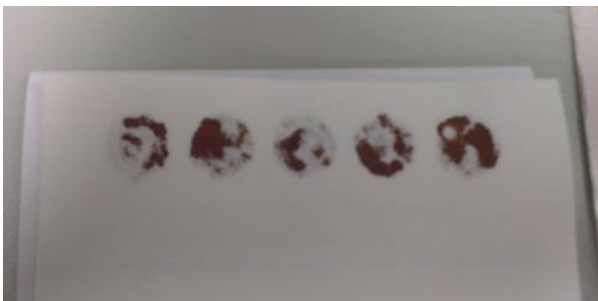
Examples of fair quality blood spot sampling

1. Layering of blood drops, blood card centers were soaked and damaged.



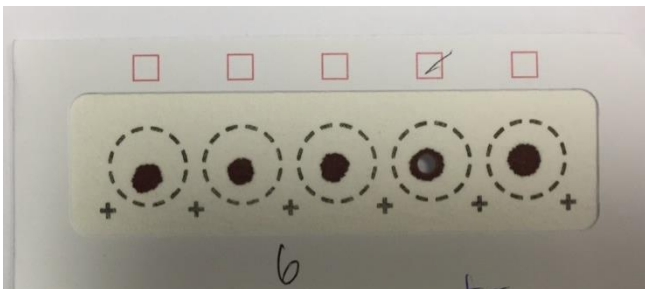
- Advise NOT to use capillary tube to transfer blood to the card .
- This will result in layering of blood spots and also damage the fiber of the filter paper leading to artefactual results.

2. Incomplete penetration of blood spots.



Repeated blood transfer may fill up the circle at the front but may not have full penetration.

3. Too small diameter of blood spots



Too small blood spots will result in difficult puncture of blood disc for analysis. This will also result in artefactually low results.

Points to note:

1. If DBS cards cannot be delivered to the laboratory on the day of collection, store them in a cool dry place at room temperature for no more than four days.
2. Transport each collection card in a separate envelope. DO NOT use plastic bag.