

## Unsatisfactory Specimen: Clotted Sample

### Background:

- Clotted specimens can occur when too much blood is applied to the filter paper, resulting in uneven blood volume, or when blood is applied multiple times to the same circle.
- Clotting may cause test results to be inaccurate. A repeat specimen will be required. This can lead to critical delays in identifying serious health issues for the infant.

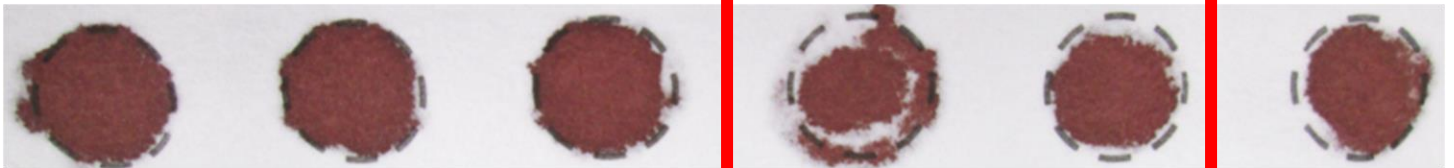
### Tips to Avoid Clotted Samples:

- Use proper lancet size (standardized device making 1mm deep by 2.5 mm long incision) and wipe away first drop of blood.
- Avoid putting too much blood on the filter paper or applying additional layers to the blood sample.
- Avoid using capillary tubes for specimen collection. If medically necessary to use capillary tube, avoid devices containing heparin or EDTA.
- Allow a large blood drop to form on the heel and lightly touch the drop to the filter paper. Allow the drop to soak through and completely fill the circle.

### Clotted Images:



Front of card: Clotting occurred on 4<sup>th</sup> and 5<sup>th</sup> spot



Back of card: Clotting did not allow blood to soak through to back of card on circles 4 & 5

### Satisfactory Specimen Image:



Both the front and back of the specimen card should look like the image above. Note the circles are filled and the even saturation of a single blood drop applied to each circle.

For additional information about specimen collection, please visit [MDHHS - Newborn Screening - Resources for Hospitals and Health Professionals \(michigan.gov\)](https://www.michigan.gov/mdhhs) or contact the NBS Nurse Consultant at 517-335-1966.