

## Unsatisfactory Specimen:

### Quantity Not Sufficient (QNS)

### Insufficient

#### Background:

- QNS or insufficient means the circles do not contain enough blood for the NBS lab to complete initial testing and any necessary repeat testing.
- A minimum of 11 punches are needed to complete testing. A QNS specimen has fewer than 9 satisfactory punches and an insufficient specimen has fewer than 11 punches available on the card.
- QNS and insufficient samples will require a repeat specimen to be collected. This can lead to critical delays in identifying serious health issues for the infant.

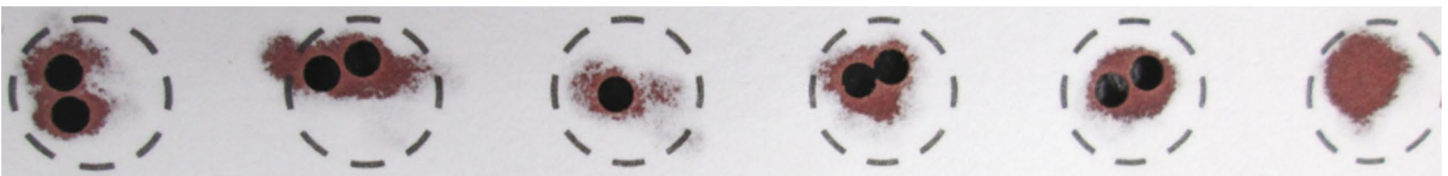
#### Tips to Avoid QNS or Insufficient Sample:

- Use proper lancet size (standardized device making 1mm deep by 2.5 mm long incision) and wipe away first drop of blood.
- Allow a large blood drop to form and lightly touch the drop to the filter paper. Allow the drop to soak through and completely fill the circle.
- Avoid applying additional blood to a circle that is not filled. This can result in a layered or clotted sample.

#### **Quantity Not Sufficient or Insufficient Images (front and back of the same card):**



Front of card: Circles not filled with blood. Only 9 of required 11 punches can be obtained for testing.



Back of card: Blood did not soak through filter paper, further restricting sample for testing.

#### **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.