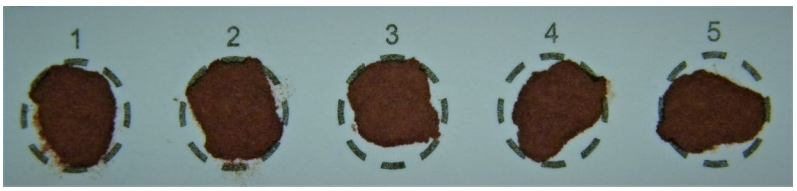
SPOT*focus*

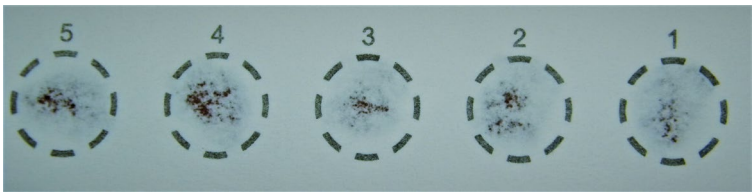
Newborn Screening Quality Improvement Hints

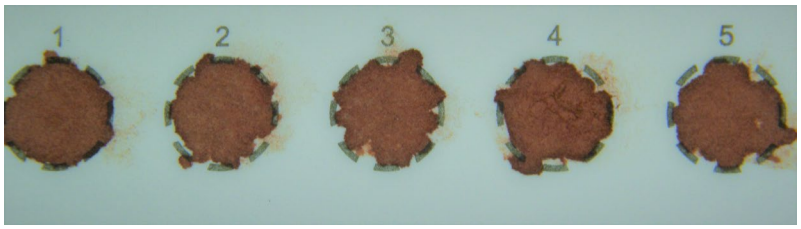
One reason for unsatisfactory newborn screening specimens is

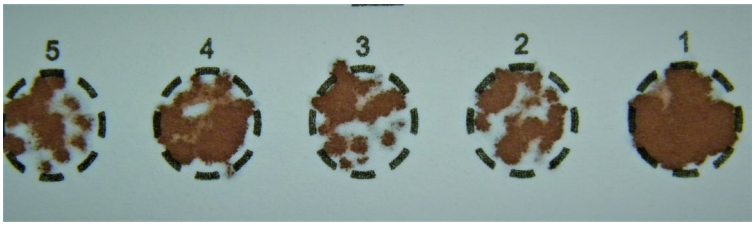
INCOMPLETE SATURATION

Front ***Back***









****These examples show both sides of the same filter paper.***

In 2020, over 2,100 newborn screening specimens were rejected because the blood did not properly soak through the filter paper. All of these specimens required a recollection and caused critical delays to testing.

TIPS TO ENSURE A COMPLETELY SATURATED SPECIMEN

- Use the proper sized heel lancet (<2.0 mm length).*
- Lightly touch the filter paper with a large drop of blood while watching it **soak through completely** from the opposite side.
- Ensure that each circle is completely filled, one at a time.
- Avoid reapplying blood to filter paper circle. This often causes the blood to cake or clot.
- Store Newborn Screening kits and collected specimens away from sunlight.

**Guideline has changed per CLSI NBS01-ED7:2021 Dried Blood Spot Specimen Collection for Newborn Screening, 7th Edition*

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Why is a specimen with incomplete saturation rejected?

The filter paper is designed to hold a specific amount of blood. Incomplete saturation will have too little blood for proper testing. An insufficient amount of blood may cause test results to be inaccurate; therefore, these specimens will be unsatisfactory for testing.

Other Helpful Resources

- **Newborn screening collection video:**
  https://clsi.org/nbs01-gate/

- **DSHS Newborn Screening Laboratory Contact:**
  Email: *NewbornScreeningLab@dshs.state.tx.us*
  or call *1-888-963-7111 ext. 7333*