Newborn Screening Quality Improvement Hints

One reason for unsatisfactory newborn screening specimens is

**INCOMPLETE SATURATION**

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

**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

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.
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

- General newborn screening specimen collection questions:
  [dshs.texas.gov/lab/nbs_collect_reqs.shtm](dshs.texas.gov/lab/nbs_collect_reqs.shtm)

- Newborn screening collection video:
  [https://www.youtube.com/watch?v=vxshWngJ114](https://www.youtube.com/watch?v=vxshWngJ114)

- Healthcare provider resources:
  [dshs.texas.gov/lab/nbsHCRes.shtm](dshs.texas.gov/lab/nbsHCRes.shtm)

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

- Monthly newborn screening facility report cards:
  Sign up for Texas Newborn Screening Web Application (Neometrics) to access your facility’s report card. Find the sign-up forms here:
  [dshs.texas.gov/lab/nbsRDSforms.shtm](dshs.texas.gov/lab/nbsRDSforms.shtm)