Newborn Screening Quality Improvement Hints

The Top Reason for Unsatisfactory Newborn Screening Specimens:
BLOOD WAS CAKED, CLOTTED, OR LAYERED ONTO THE FILTER PAPER

Examples of specimens that were deemed unsatisfactory due to a “layered” appearance

In 2015, over 4600 newborn screening specimens were rejected because the blood was caked, clotted, or layered onto the filter paper. All of these specimens required a redraw and caused critical delays to testing.

Need tips on how to avoid this type of rejection?
Read on next page!
Why is a caked, clotted, or layered specimen rejected?

The filter paper is specially designed to hold a specific amount of blood. Caked, clotted and layered blood specimens have too much blood which will cause falsely elevated results.

**TIPS TO AVOID A CAKED, CLOTTED, OR LAYERED SPECIMEN**

- Complete one circle at a time. DO NOT go back and apply additional blood to an incompletely filled circle. This will cause caking or clotting.
- Do not apply blood to both sides of filter paper.
- Use the proper size lancet (<2.0mm length). A finger lancet is **not** recommended.
- Wipe away the first drop of blood.
- Allow large blood drop to form then lightly touch to the filter paper while watching it soak through to ensure that the circle is completely filled.
- The order in which the spots are filled does not matter.
- 3 good quality circles are better than 5 poor quality circles.
- Avoid using capillary tubes for specimen collection. Capillary use will often cause clotting or other unsatisfactory qualities.

**Other Helpful Resources**

1. General newborn screening specimen collection questions:
   [http://www.dshs.state.tx.us/lab/nbs_collect_reqs.shtm](http://www.dshs.state.tx.us/lab/nbs_collect_reqs.shtm)

2. Special circumstances in newborn screening collection:
   [http://www.dshs.state.tx.us/lab/nbsSpecialC.shtm](http://www.dshs.state.tx.us/lab/nbsSpecialC.shtm)

3. Healthcare Provider Resources:
   [http://www.dshs.state.tx.us/lab/nbsHCRRes.shtm](http://www.dshs.state.tx.us/lab/nbsHCRRes.shtm)

4. DSHS Newborn Screening Laboratory Contact:
   Email [NewbornScreeningLab@dshs.state.tx.us](mailto:NewbornScreeningLab@dshs.state.tx.us) or call 1-888-963-7111 ext. 7585

5. Monthly Newborn Screening Facility Report Cards
   To access your facility’s report card, you must be a registered user of the Texas Newborn Screening Web Application (Neometrics). If you are not already a registered user, you can sign up by completing the required forms, here:
   [http://www.dshs.state.tx.us/lab/nbsRDSforms.shtm](http://www.dshs.state.tx.us/lab/nbsRDSforms.shtm)