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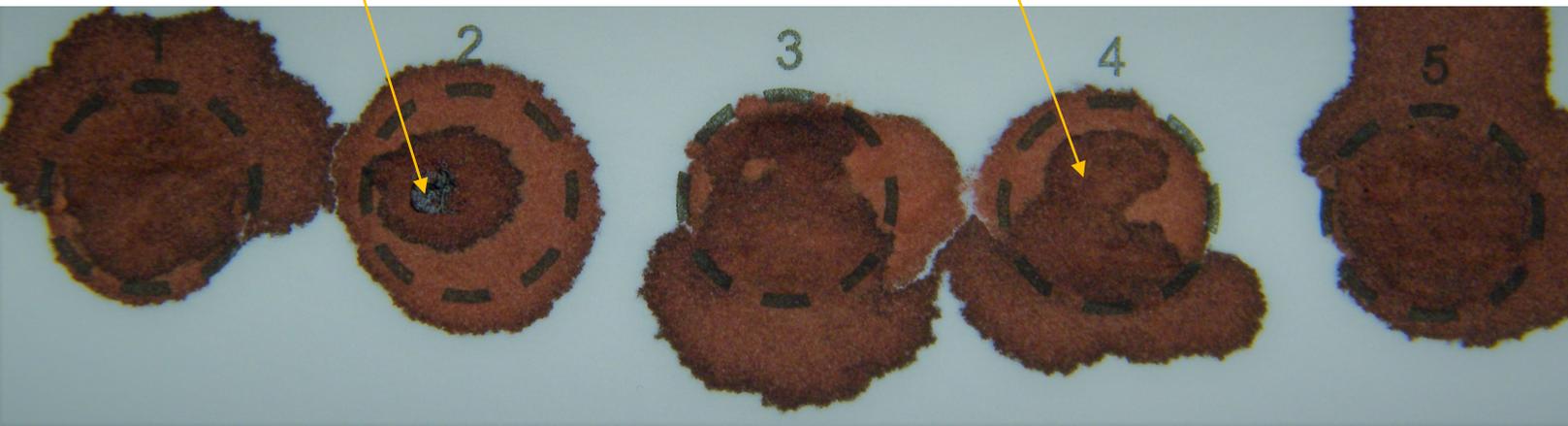
Newborn Screening Quality Improvement Hints

One reason for unsatisfactory newborn screening specimens is

BLOOD WAS CAKED, CLOTTED, OR LAYERED ONTO THE FILTER PAPER

Example of clotting

Example of layering



In 2020, over 1,651 newborn screening specimens were rejected because the blood was caked, clotted, or layered onto the filter paper. All of these specimens required a recollection and caused critical delays to testing.

TIPS TO AVOID A CAKED, CLOTTED, OR LAYERED SPECIMEN

- Use the proper sized heel lancet (<2.0 mm length).*
- Wipe away the first drop of blood.
- To make sure a circle is completely filled, allow a large drop of blood to form.
- Lightly touch the filter paper with a large drop of blood while watching it **soak through completely** from the opposite side.
- Apply blood to only one side of filter paper and complete one circle at a time.
- Avoid reapplying blood to filter paper circle. This often causes the blood to cake, clot, or layer.
- Avoid using capillary tubes for specimen collection. Using capillary tubes will often cause clotting or other unsatisfactory qualities.

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



Why is caked, clotted, or layered specimen rejected?

The filter paper is designed to hold a specific amount of blood. Caked, clotted, and layered blood specimens have too much blood. Specimens that have too much blood can cause falsely elevated results; 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



Newborn screening collection video:

<https://www.youtube.com/watch?v=vxshWngJ114>



Healthcare provider resources:

dshs.texas.gov/lab/nbsHCRes.shtm



DSHS Newborn Screening Laboratory Contact:

Email: 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/laboratory-services/remote-data-systems.shtm

