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.

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**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 
  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)