# Sample Quality for Newborn Screening

Simple Spot Check – Excerpt from Blood Collection on Filter Paper for Newborn Screening Programs; Approved Standard—Fifth Edition (LA4-A5)

## VALID SPECIMEN

Allow a sufficient quantity of blood to soak through to completely fill the preprinted circle on the filter paper. Fill all required circles with blood. Do not layer successive drops of blood or apply blood more than once in the same collection circle. Avoid touching or smearing spots.

## INVALID SPECIMEN | POSSIBLE CAUSES
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1) Specimen quantity insufficient for testing. | • Removing filter paper before blood has completely filled circle or before blood has soaked through to second side.  
• Applying blood to filter paper with a capillary tube.  
• Allowing filter paper to come into contact with gloved or ungloved hands or substances such as hand lotion or powder, either before or after blood specimen collection.
2) Specimen appears scratched or abraded. | • Applying blood with a capillary tube or other device.
3) Specimen not dry before mailing. | • Mailing specimen before drying for a minimum of three hours.
4) Specimen appears supersaturated. | • Applying excess blood to filter paper, usually with a device.  
• Applying blood to both sides of filter paper.
5) Specimen appears diluted, discolored, or contaminated. | • Squeezing or "milking" of area surrounding the puncture site.  
• Allowing filter paper to come into contact with gloved or ungloved hands or substances such as alcohol, formula, antiseptic solutions, water, hand lotion, or powder, etc., either before or after blood specimen collection.  
• Exposing blood spots to direct heat.
6) Specimen exhibits serum rings. | • Not allowing alcohol at the puncture site to air dry before making skin puncture.  
• Allowing filter paper to come into contact with alcohol, hand lotion, etc.  
• Squeezing area surrounding puncture site excessively.  
• Drying specimen improperly.  
• Applying blood to filter paper with a capillary tube.
7) Specimen appears clotted or layered. | • Touching the same circle on the filter paper to blood drop several times.  
• Filling circle on both sides of filter paper.
8) No blood. | • Failure to obtain blood specimen.

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