



# Washington State Newborn Screening Program

## Key: Unsatisfactory Specimen Descriptions

January 1, 2017 - December 31, 2017



Some specimens are considered unsatisfactory due to the quality of specimen collection or handling. These specimens are tested for extreme values but another specimen must be obtained to complete screening. The need to obtain a repeat specimen could delay diagnosis and treatment of an affected infant.

Unsatisfactory Specimen Errors		
Error	Description	
<b>Layered or Supersaturated</b>	Blood was layered, clotted or supersaturated. Caused by: <ul style="list-style-type: none"> <li>• Repeated application of blood to the same filter paper circle</li> <li>• Blood applied to both sides of the filter paper</li> <li>• Blood clotting in a capillary tube</li> <li>• Application of too much blood</li> </ul>	
<b>Incompletely Saturated</b>	Blood did not completely soak through the filter paper or not enough blood on the filter paper. Caused by: <ul style="list-style-type: none"> <li>• Filter paper circles not fully saturated or not completely filled</li> <li>• Application of small blood spots</li> <li>• Blood applied to both sides of the filter paper</li> </ul>	
<b>Contaminated</b>	Blood was diluted, discolored, contaminated or exhibited serum rings. Caused by: <ul style="list-style-type: none"> <li>• Alcohol not completely drying before skin puncture</li> <li>• Puncture site squeezed or 'milked' to expel blood</li> <li>• Improper drying of specimen</li> <li>• Exposure to high temperatures</li> <li>• Filter paper contact with gloved or ungloved hands, or by substances such as alcohol, feeding or antiseptic solutions, hand lotion or powder</li> </ul>	
<b>Specimen Too Old</b>	Specimen was delayed in transit and is too old for testing due to deterioration of the dried blood spots. <ul style="list-style-type: none"> <li>• Specimens received more than 14 days after collection are too old for hemoglobin and galactosemia testing</li> <li>• Specimens received more than 30 days after collection are too old for all tests</li> </ul>	
<b>Abraded</b>	Specimen surface was scratched, dented, or abraded. Caused by: <ul style="list-style-type: none"> <li>• Improper application of blood with capillary tube or other device</li> </ul>	
<b>Partial Unsuitable</b>	Validation of the preliminary screening results was not possible due to the unsuitability of the residual blood. Caused by: <ul style="list-style-type: none"> <li>• Partial abrasion, contamination, damage, or oversaturation of residual blood</li> <li>• Insufficient quantity of blood</li> </ul>	
<b>Other Unsuitables</b>	<b>Ambiguous Degradation</b>	Hemoglobin screening results indicate degradation or chemical modification of hemoglobins present causing assay interference.
	<b>Damaged Specimen</b>	Specimen was damaged during transport and blood sample may be torn or contaminated by rain and/or other substances.
	<b>Old Collection Card</b>	Specimen was submitted on a collection card past its expiration date. Cards expire three years after their manufacture date.
	<b>Received in Plastic</b>	Specimen was received in a sealed plastic bag and may be damaged by heat exposure and moisture accumulation.
	<b>No Blood</b>	Specimen card received with no blood on filter paper nor valid refusal signature.