

Changes to Newborn Screening Lab Results for Disorders Detected through Tandem Mass Spectrometry
Effective December 7, 2015

This change applies to newborn/infant bloodspot collection kits received by the lab after Friday, December 4th. For mailers and reports related to specimens received prior to this date, the old cutoffs and reference ranges apply (see attachment).

The Arizona newborn screening laboratory is now equipped with newer, more sensitive mass spectrometers to screen for serious **metabolic** conditions that if untreated, can lead to life-threatening complications. The new equipment will improve detection of the 20 metabolic disorders that are screened by mass spectrometry including amino acid, organic acid, and fatty acid oxidation disorders such as PKU, Methylmalonic Acidemia, and Carnitine Uptake Deficiency (disorder list attached).

The Newborn Screening Results will reflect the changes in instrumentation and assays. For example, succinylacetone will now be used to detect Tyrosinemia type I. Age-related cut-offs can now be introduced. **Be on the lookout for cut-off and marker changes (sample attached) on or after December 7, 2015.**

Note: It is uncommon to use alcohol swabs that contain *benzocaine* (a topical anesthetic), but if your facility uses them on newborns, **discontinue their use** as benzocaine and phenylalanine (a biochemical marker for phenylketonuria, or PKU) have the same molecular mass and interfere with the assay.

Please contact Dr. Kostas Petritis at Kostas.petritis@azdhs.gov or Sonal Bhakta at sonal.bhakta@azdhs.gov with any questions.