

**Newborn Screening by Tandem
Mass Spectrometry (MS/MS):
State Experiences and
Considerations with Derivatized
and Non-Derivatized Methods**



Objectives

1. Give an historical overview of mass spectrometry in newborn screening, and review the performance characteristics of derivatized and non-derivatized methods.
2. Review NSQAP method performance data for selected analytes, and discuss the changes in NSQAP procedures related to the use of non-derivatized methods.



Objectives

3. Discuss the factors that should be considered in making the decision whether to switch to a non-derivatized method through case studies of two states that switched and two states that have not.



Agenda

1. The Historical and Present Day Basis for Derivatization in the MS/MS Analysis of DBS in Newborn Screening

Donald H. Chace, PhD, MSFS, FACB

2. Assuring the Quality of MS/MS Dried Blood Spot Newborn Screening Testing

Victor De Jesus, PhD, CDC

3. Newborn Screening by Tandem Mass Spectrometry in Texas

Patricia R. Hunt



Agenda

4. Newborn Screening by Tandem Mass Spectrometry in California

Fred Lorey, PhD

5. Evaluation of the Neobase Non-Derivatized Kit in the Missouri Newborn Screening Laboratory

Patrick Hopkins

6. MS/MS Screening: To “D” or Not to “D”, That is the Question

Mike Glass and Bill Hoffman



Acknowledgement

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Public Health Committee

