# Advisory Committee on Heritable Disorders and Genetic Diseases in Newborns and Children

Laboratory Standards & Procedures Subcommittee

Report 9/18/2007



## Routine Second Specimen Study

- Status of State IRB Approvals
  - Retrospective study
    - 1 out of 16 states gained IRB approval
    - Note that retrospective study is category IV exempt per CDC
  - Prospective study
    - 0 out of 16 states gained IRB approval
    - Note that prospective study may not be considered Human research per CDC
  - Plan continue to work with states to gain approval
    - Important issue to consider for the Committee as we plan future multi-center studies
- Electronic data collection form
  - Almost complete and will use Delaware data to pilot



#### **DNA** Training Course

- One week course
- Emphasis on DNA testing using CF as the focus
- Laboratory and Follow-up personnel
- 4 potential sites (WI, TX, MA, NY)
- Sponsored by APHL, CDC, NNSGRC with input from CFF
- Projected start date Feb 2008



### FDA Guidances Impacting NBS

#### Devices

- Discussed guidance released 9/14/2007 ("Guidance for Industry and FDA Staff -Commercially Distributed Analyte Specific Reagents (ASRs): Frequently Asked Questions") and the potential impact on CF NBS.
- Specimen collection paper sole source issue
  - CDC to produce generic collection forms for emergency purposes

#### Drugs

No update



### Newborn Proficiency Testing

- Expanded Panel
  - 12 primary analytes
  - Not all available commercially
  - CDC lab to synthesize
- ACMG/CAP Meeting PT Challenge Packet
  - CDC changing challenges worldwide from 4 to 3
  - CDC adding 1 challenge unique to US and Canada
    - Mimic state experience weighted towards variant samples
    - Reporting will focus only on positives to facilitate data analysis
    - Data will be publicly available



# NBS For CF and a Uniform Mutation Panel

- CF Testing Implementation
  - 2004 recommendation by HHS, CDC, and CFF for NBS
  - Focus on prevention of symptoms rather than treatment
  - Estimate by 2008 90% of babies will be screened for CF
  - Implementation challenges
    - Testing algorithms vary
    - Mutation panels vary
      - Some include non-disease causing mutations



# NBS For CF and a Uniform Mutation Panel

- Recommendations
  - Uniform mutation panel
  - Include only CF causing mutations
    - Class IV and V included
    - CFF funded research to define CF causing mutations
  - Include CF causing mutations occurring in minority populations
  - Exclude CFTR polymorphisms that are not disease causing
  - CFF and CDC determine content of uniform panel
  - Include regulatory agencies and industry in efforts



- NNSGRC Survey
  - 47/51 programs answered survey
  - 34 programs report results for non mandated conditions
  - 25 programs report concerns about tyrosinemia-type 1
- Feedback from programs informative for implementation of uniform panel



#### Prevalence of CH

- Published increase in CH cases based on NNSGRC data (Harris & Pass)
- Dr. Brad Therrell convening working group to review issue
- Update at January 2008 subcommittee meeting

## Thank you!