New Board Member

COL Brent Bracewell
Board Member Introduction

Robert S. Harshman, M.D.
Legal Aspects

- OCGA 31-12-6 & 31-12-7
  - Requires that every live-born infant in Georgia be screened
  - Hospitals collect specimen prior to discharge
  - Specimen sent to GPHL
  - Analyzed for 28 disorders
    - Hearing screening performed in hospital
Specimen

- Dried blood spot specimen
- Filter paper attached to form for collecting demographic information
  - FDA-licensed Medical Collection Device
- Overnight delivery from hospital to GPHL
FY2011 NBS Workload

- Specimens - 148,963
- Examinations - 6,859,281
- QC - 219,566
Pre-Analytical:

• Laboratory Services & Supply
  • NBS specimens received throughout the day
  • The “Outfit Room” distributes blood collection forms and preaddressed mailers to major hospitals quarterly, others upon request.
  • Orders and/or receives more than $3.6 million of laboratory supplies annually for NBS.
Pre-Analytical (Continued):

• Central Accessioning
  – Specimens are received, stamped with date received, verified for acceptability and prepared for data entry and laboratory testing.
    • Dried blood spot specimens are delivered to NBS testing laboratory
    • Data forms are separated and sent to Data Entry Unit to be entered the same day if received prior to cutoff time.
Pre-Analytical (Continued):

• Data Entry
  – Demographic Information is entered into the Laboratory Information Management System (LIMS)
    • Same day if received by cutoff time.
    • Next day if received after cutoff.
    • Forms are filed and stored, arranged for easy retrieval when necessary.
Disorders

• Endocrine
  - Congenital Hypothyroidism
  - Congenital Adrenal Hyperplasia (CAH)

• Hematological
  - Sickle Cell Disease
  - Sickle Cell / C Disease
  - Sickle Cell / β-Thalassemia

• Cystic Fibrosis

• Metabolic
  - Galactosemia
  - Biotinidase Deficiency
  - Amino Acidopathies (6)
  - Organic Acidemias (9)
  - Fatty Acid β-Oxidation Defects (5)
Post-Analytical:

• Reports & Records
  – Laboratory Result Reports: provided to hospital and health care provider
  – Customer Service
    • Duplicate Reports
    • Records Research

• Reports Available via Web Portal
Follow-up of Presumptive Positives

- Endocrine, CF, Metabolic
  - Emory Dept of Human Genetics
- Hematological
  - DPH Newborn Screening Program
  - Georgia Health Sciences University
  - Sickle Cell Foundation
- Criticals - Same-Day Phone and Fax
Incidences

- CH = 1:4000
- CAH = 1:20,000
- Hb SS = 1:1800
  - AA = 1:400
- Hb SC = 1:25,000
- Hb S/β Thal = 1:50,000
- CF = 1:5000
- Galactosemia = 1:50,000
- Biotinidase = 1:60,000
- Amino Acidopathies = 1:10,000
- Organic Acidemias = 1:10,000
- Fatty Acid Oxidation = 1:15,000
2011 Confirmed Case Summary

- Endocrine Disorders: 46
- Cystic Fibrosis: 14
- Metabolic: 23
- Amino Acidopathies: 5
- Organic Acidemias: 5
- Fatty Acid Oxidation Disorders: 9

**Total = 102 (1:1324)**

⇒ Theoretical = 1:1250
New Disorders

- HRSA advisory committee makes recommendations

- Current Recommendations
  - Severe Combined Immune Deficiency (SCID)
  - Congenital Cyanotic Heart Defect (CCHD)
    - Non-laboratory screening by pulse oximetry
Data Entry/Reports & Records Staff
Newborn Screening Lab Staff
District Perspective on Accreditation

Lawton C. Davis, M.D.
James C. Howgate II, MPH
Resolution on Accreditation
Board of Public Health Meeting

Next Meeting: July 10, 2012, 1:00 PM

To be added to the notification list, send an e-mail to Bob Shaw – rmshaw@dhr.state.ga.us