Emergency Preparedness for Newborn Screening Programs
In the New York Mid – Atlantic Consortium

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Planning Region Wide Exercises

- Idea born at May 2011 NYMAC Summit
- Make use of Data system similarities – Neometrics/Natus, StarLIMS
- Followed up with a NYMAC Table-Top Exercise in New Jersey in December 2011

Delaware – West Virginia
New York – New Jersey
Maryland – Virginia
Crosswalk Comparison

- Evaluate differences between two states DE/WV
  - One specimen (WV) vs. Two specimen state (DE)
  - Slight differences in panel. WV tests for CPT-1α, DE tests for SCID
  - MS/MS Non-derivitized PerkinElmer kit method (WV) vs. Derivitized non-kit (DE) – cut-off differences
- Differences expected and each side agreed to accept the testing state’s panel & processes.
- Planning meetings January → May.
- Exercise designed to test real-life capacity of each lab to test 100 samples from partner state in addition to their own.
EMAC Involvement – KEY COMPONENT

- EMAC = Emergency Management Assistance Consortium Interstate Mutual Aid Request for Assistance – requires a State-of-Emergency to be called in order to evoke.

- West Virginia EMAC Coordinator, Herb Lattimore, very involved on all calls and helpful getting Delaware Preparedness to participate in Exercise.

- Delaware EMAC Coordinator was not accessible. All play was notionalized through PH Preparedness.

- ReqA forms filled out both directions.
Neometrics, Division of Natus – Modified DE and WV data systems to allow for and to distinguish specimens from another state. SpecType = W

This allowed the alternate state’s Demographic entry screen to be used.

Natus populated data system with the Physician libraries from other state.

Merge rules for “W” SpecType added to system, and still remain.
West Virginia → Delaware

- West Virginia requested AID from DE using EMAC (notionalized) process on 04/09/12.
- 100 previously tested specimens with sufficient sample left to run complete panel mailed to DE. UPS delivery @ 10:00 am, well before DE samples arrived mid-day.
- DE was having several other issues at same time — A/C down, working with portable unit, drying issues on MS/MS plate.
- Staff were able to get WV testing started while waiting for DE samples, and had no issues with the surge.
- Delaware notified positives using their “call sheet” which was well received by WV.
Delaware → West Virginia

- Delaware requested AID from WV using EMAC (notionalized) process on 05/21/12.
- 100 previously tested specimens with sufficient sample left to run complete panel mailed to WV.
- Testing in WV handled same as a day after a holiday.
- Samples arrived separately from their routine workload (good).
- Panic values called & retests notification made by email.
- A CPT-1a presumptive positive sample happened to be in this set of specimens. DE does not test for, but were aware because of notification from NJ.
Most Successful Parts

- **Data system upgrades** – By using the same data system, the LIMS vendor, Natus, was able to easily add state provider libraries. Unique SpecType allowed separation from DE data. Minimal changes needed to existing system.

- **Laboratory Testing Capacity** – Because we actually tested the samples using our respective NBS panels, both sides gained the confidence to know that they could handle the surge capacity of the other state.

- **Increased Awareness** of the use of EMAC for a Newborn Screening preparedness event.
Areas for Improvement

- **#1 Delaware Concern** – Ability to use EMAC to cover this type of real-life event remains very unlikely.

- **#1 West Virginia Concern** – Difference in algorithms. IRT Algorithms very different. CPT-1a abnormal handling.

- Other Areas:
  - Improve ability to identify WV pediatricians, codes.
  - Shipping arrangements from WV → DE in real event
  - Populating state data system with digifiche image of helping-state mailer.
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