The Public Health Laboratory System Database (PHLSD)

Bonnie Rubin
Associate Director, State Hygienic Laboratory at
the University of Iowa
PHLSD Background

- A need for a tool to gather and organize information
- LEI-Data subcommittee and contractor created a database
- Modeled after the CDC Infectious Diseases Laboratory Database
- A tool for each PHL to manage and control their own capacity data
- Several months of meetings, calls and beta testing
Purpose

- PHL to manage personnel, CLIA requirements, test and instrument information
- Information to meet APHL survey and CDC data requests
- Create a nationwide test service directory
Features

- Exportable Data
- Customized Reports
- Data Summaries
- Aggregated Data Access
Reports

- Run reports and queries:
  - CLIA personnel and tests
  - Tests by test type, method, volume
  - Equipment type
- Each PHL will update and maintain own database
Implementation

- Database built in Access software
  - PHL need to have Access 2007 or higher
  - Microsoft Windows Vista 7 or 8
- Database distributed via SharePoint
- Request to complete database and send to APHL
- Ability to continuously update your database
- Annual nationwide summary
- Merge data into the SRC
Support

- Instructions for use
- Training videos
- FAQs
- APHL staff support
- APHL data release policy
PHLSD

5 Data Tabs

- Main Data
- Personnel Data
- Regulatory Data
- Testing Data
  - Clinical and Environmental
- Equipment Data

Reports

- CLIA personnel and tests
- Tests by test type, method, volume
- Equipment type
Main Data Tab

### Testing Data Entry Form

<table>
<thead>
<tr>
<th>Name of Laboratory</th>
<th>State Hygienic Laboratory at the University of Iowa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lab Classification</td>
<td>Environmental, State</td>
</tr>
<tr>
<td>Record Last Edit Date</td>
<td>5/14/2014 2:48:18 PM</td>
</tr>
<tr>
<td>Record Last Edited by</td>
<td>deborah.kim</td>
</tr>
</tbody>
</table>

#### Updates & Certificates

- **Person Responsible for Updates**: Smith, Joe
- **CLIA #**: 

#### Leadership Structure

- **Last Name**: Smith, **First Name**: Joe
- **Phone**: (222) 222-1111
- **Email**: smith.joe@yahoo.com
- **Position**: Director Laboratory

#### Regulatory & Quality Systems

- **What regulatory programs is your laboratory subject to and what other accreditation programs does your laboratory participate in?**
  - AIHA
  - APHIS
  - CAP
  - CMS
  - EPA
  - ISO15189
  - NIST/NVLAP
  - Select Agent
  - Tier 1
  - USDA
  - A2LA
  - ASCLD
  - CLIA
  - ELLAP
  - FDA
  - ISO17025
  - PHAB
  - SFT
  - TNI
  - Other

- **Quality Manager(s)**: Smith, Jane
- **Phone**: (222) 111-2222
- **Email**: smith.jane@yahoo.com

#### Location Data

- **Street Address**: 1234 Somewhere in IA
- **City**: Iowa City
- **State**: IA
- **Zip**: 11111

- **Complete Mailing Address**: 

- **Number of BSL 3 Labs**: 3
- **Training Lab**: Yes
- **# Training Seats**: 20
Personnel Data Tab

### Table 1
<table>
<thead>
<tr>
<th>Staff</th>
<th>FTE</th>
<th># of Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory staff (bench &amp; supervisory)</td>
<td>50.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Laboratory support staff (admin &amp; clerical, not IT)</td>
<td>5.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Laboratory IT staff</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Filled Staff TOTALS</strong></td>
<td>55.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

### Table 2
<table>
<thead>
<tr>
<th>Staff</th>
<th>FTE</th>
<th># of Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory staff (bench &amp; supervisory)</td>
<td>1.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Support staff for laboratory (admin &amp; clerical, not IT)</td>
<td>2.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Laboratory IT staff</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Vacant Staff TOTALS</strong></td>
<td>3.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

### Table 3
<table>
<thead>
<tr>
<th>Highest Degree Attained</th>
<th># of Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctoral</td>
<td>0.00</td>
</tr>
<tr>
<td>Master’s</td>
<td>0.00</td>
</tr>
<tr>
<td>Bachelor’s</td>
<td>0.00</td>
</tr>
<tr>
<td>Associate’s</td>
<td>0.00</td>
</tr>
<tr>
<td>High School Diploma</td>
<td>0.00</td>
</tr>
<tr>
<td>Fellow/Intern/Extern</td>
<td>0.00</td>
</tr>
<tr>
<td>Other</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Education TOTALS</strong></td>
<td>0.00</td>
</tr>
</tbody>
</table>
Regulatory Data Tab
Testing Data Tab

This section allows you to append multiple tests to your "Testing Performed" list. You may choose to filter by Test or Method first. Please fill in data fields 1-8. In field 4 you must select the items you would like pasted. Select the applicable additional details for the specific methods in field 5. Once you have completed your entry click the "Populate" button to append those tests to the "Testing Performed" section. After populating, additional modifications can be made to the data fields under the "Testing Performed" section (particularly Details and 12 Month Test Volume).
Equipment Data Tab
Feedback

“"I wish I had this tool during last year’s hepatitis outbreak so I could easily know who to contact for assistance. A national test database would allow us to view methods and equipment utilized by other public health laboratories across the nation. This feature will be quite beneficial in surge events as contact information will also be included in the database.”

-Dr. Christine Bean, Laboratory Director, New Hampshire Division of Public Health Services, Department of Health and Human Services
Feedback

• “It was critical that Iowa could use the APHL Survey Resource Center (SRC) to find other state laboratories that could provide surge testing services for parasitology. The PHLSD management database will be an even greater improvement by allowing us to immediately identify states that provide the specific microscopy tests for Cyclospora and their testing capacity.”

-Bonnie Rubin, Assoc. Director for Administrative Service, State Hygienic Laboratory at the University of Iowa
Helpful Hints

• Download it on a shared drive
• Check the clinical and environmental tests your laboratory conducts against the Excel list from the database
• Allow several people to complete sections of the database
• Cut and paste information from LIMS to database
Next Steps

- **Immediate steps**
  - Webinar
  - Mentoring
  - Pre-populating test data fields

- **Future steps**
  - QC data
  - Create and distribute national test service directory
  - Link test list to LOINC/SNOMED codes