FINAL REPORT

Texas
Texas Public Health Laboratory System Assessment
http://www.dshs.state.tx.us/tphlsa/

April 5, 2007

Prepared by:
Texas Public Health Laboratory System Assessment Steering Committee
# TABLE OF CONTENTS

- **EXECUTIVE SUMMARY** 03
- **INTRODUCTION** 05
- **BACKGROUND** 05
- **ASSESSMENT PROCESS** 11
- **SUMMARY, RESULTS AND ANALYSIS** 13
- **DISCUSSION AND NEXT STEPS** 15
- **ASSESSMENT SCORES AND COMMENTS** 16

**APPENDIX A:** CHART OF OVERALL SCORES FOR EACH ESSENTIAL FUNCTIONS 46

**APPENDIX B:** CONFERENCE AGENDA 47

**APPENDIX C:** STEERING COMMITTEE 49

**APPENDIX D:** ASSESSMENT CONFERENCE SUMMARY OF EVALUATION 50
EXECUTIVE SUMMARY

Texas held its first laboratory system assessment called the **Texas Public Health Laboratory System Assessment (TPHLSA)** on February 26 & 27, 2007. The assessment was a field test of the national instrument that was designed to:

- Create collaboration among public health laboratory partners throughout the state;
- Identify the public health laboratory “system” in Texas; and
- Determine its strength.

A steering committee, consisting of system partners, was charged with the implementation of TPHLSA. This report lays the foundation for a laboratory system improvement plan to be developed and implemented based on the strengths and weaknesses identified through this assessment.

This instrument is based on the work of the **National Public Health Performance Standards Program (NPHPSP)**, the **Association of Public Health Laboratories (APHL)**, and their partners. It incorporates the 10 Essential Public Health Services and the 11 Core State Public Health Laboratory Functions. The State Public Health Laboratory System (SPH Laboratory System) assessment was established to help users answer questions such as, “What are the components, activities, competencies, and capacities of our state public health laboratory system?” and “How well are the Essential Services (ES) and the Essential Public Health Laboratory Functions being provided?” The results gathered provide an understanding of how the Texas public health laboratories and the systems within which they are functioning are performing. This information will help policymakers make better and more effective policy and resource decisions that will help improve the Texas’ public health as a whole.

This assessment was conducted in a public meeting over a one and a half day. It included participants identified by the steering committee and consisted of public health laboratory experts and partners from across the state. Fifty-eight individuals representing organizations that play a key role in the provision of laboratory services participated in the conference. Participants indicated that this was a worthy endeavor and see value in examining their role and future within the public health system. Key indicators identified as strengths are as follows:

- The SPH Laboratory System provides information to support monitoring of congenital, inherited, and metabolic diseases of public health significance (ES # 1.2.3);
- The SPH Laboratory complies with and exceeds all applicable regulations (ES # 6.2.2);
- The SPH Laboratory and other appropriate government agencies collaborate to fulfill their enforcement function (ES # 6.3.2);
- Position requirements for all laboratory position categories within state and local public health laboratories are identified (ES # 8.1.1);
- The SPH Laboratory System has tools to assess competencies of the workforce (ES # 8.1.2); and
- The SPH Laboratory System identifies staff development needs (ES # 8.2.1).
Key indicators identified as having only minimal (below 25%) or no activity are as follows:

- The SPH Laboratory System partners collaborate to strengthen surveillance systems (ES # 1.1.3);
- The SPH Laboratory System generates reliable information about chronic diseases of public health significance (ES # 1.2.4);
- The SPH Laboratory System maintains an environment that attracts and retains exceptional staff (ES # 8.3.1);
- The SPH Laboratory System addresses workforce shortage issues (ES # 8.3.2);
- The SPH Laboratory System mission, purpose, and range of services are evaluated on a regular basis (ES # 9.1.1);
- The range of technologies in use by the SPH Laboratory System are periodically surveyed and evaluated, with objective reports shared across the SPH Laboratory System (ES # 9.1.2);
- The effectiveness of personal and population-based laboratory services provided throughout the state are regularly determined (ES # 9.2.1);
- The quality of personal and population-based laboratory services provided throughout the state are regularly determined (ES # 9.2.2); and
- The level and utility of collaboration among members of the SPH Laboratory System is measured and shared (ES # 9.3.1).

The conference served as an important tool to improve the public health system by inviting a broad group of stakeholders together to reflect about their roles as system partners. Participants identified the following steps to be taken to improve the laboratory system.

- The system must be better defined. This should be accomplished with system partners and stakeholders.
- Additional meetings of system partners should be held beginning with a strategic planning forum for the public health laboratory system. The focus of this forum should be to establish a system improvement plan. The plan should consist of the following components.
  1. Establish a vision and mission for the SPH Laboratory System.
  2. Identify and prioritize goals for improvement of the SPH Laboratory System by:
     - Developing system plans and policies;
     - Establishing collaborative networks;
     - Creating a secure, accountable and compatible information network;
     - Conducting ongoing evaluation and analysis of the system to allow opportunities for improvement and to identify gaps;
     - Improving the quality and education of the workforce; and
     - Building an infrastructure for research and development of new and better systems.
  3. Develop implementation strategies.
INTRODUCTION

On February 26 & 27, 2007 Texas held its first laboratory system assessment called the TPHLSA. The purpose of the assessment was to identify the public health laboratory “system” in Texas and to determine its strength. The assessment was a collaboration among public health laboratory partners throughout the state. This process began after Dr. Susan Neill, Director of the DSHS Laboratory, volunteered to participate as a test site for the APHL field test of the State Public Health Laboratory System (SPH Laboratory System) Performance Measurement instrument. Dr. Neill then invited representatives from organizations in Texas that conduct and support public health laboratory activities. These representatives became the steering committee charged with the implementation of TPHLSA, Texas’ first state public health laboratory system assessment based on the National Public Health Performance Standards.

This report will lay a foundation for a laboratory system improvement plan to be developed and implemented based on the strengths and weaknesses identified in this assessment.

BACKGROUND

This instrument is based on the work of the NPHPSP and their partners. The NPHPSP was established in 2002 to identify and measure the components, activities, competencies and capacities of state and local public health systems and local public health governance.

The SPH Laboratory System Performance Measurement Program was established to help users to answer questions such as, “What are the components, activities, competencies, and capacities of our state public health laboratory system?” and “How well are the Essential Services and the Essential Public Health Laboratory Functions being provided?” The dialogue that occurs in answering these will identify strengths and weaknesses; this information can be used to improve and better coordinate public health laboratory activities at the state and local levels. Additionally, the results gathered will provide an understanding of how state public health laboratories and the systems within which they are functioning are performing. This information will help policymakers make better and more effective policy and resource decisions that will help improve the nation’s public health as a whole.

The SPH Laboratory System Performance Measurement Program is intended to improve the quality of public health laboratory practice and the performance of public health laboratory systems by:

- Providing performance standards for public health laboratory systems and encouraging their widespread use;
- Engaging and leveraging state laboratory system partnerships to build a stronger foundation for public health preparedness;
- Promoting continuous quality improvement of public health laboratory systems; and
- Strengthening the science base for public health practice improvement.
The SPH Laboratory System Performance Measurement Program is a collaborative effort of two national partners:
- Centers for Disease Control and Prevention (CDC), Public Health Practice Program Office, Division of Laboratory Systems (PHPPO/DLS); and
- Association of Public Health Laboratories (APHL).

Texas joined the project in its field-testing phase of the SPH Laboratory System Performance Measurement Program instrument. The results from this assessment will help to improve its public health laboratory systems as well as provide valuable input on this instrument.

The SPH Laboratory System Performance Measurement Program instrument is designed to:

- Improve communication and collaboration, by bringing partners to the same table.
- Educate participants about the system that performs public health laboratory testing, and the interconnectedness of activities, which can lead to a higher appreciation and awareness of the many activities related to improving the public’s health.
- Strengthen the diverse network of partners within state and local public health systems, which can lead to more cohesion among partners, better coordination of activities and resources, and less duplication of services.
- Identify strengths and weaknesses that can be addressed in quality improvement efforts.
- Better articulate of resources needed to improve the SPH Laboratory System.
- Identify resources to operationalize state public health laboratory system improvements.
- Provide a benchmark for public health laboratory system practice improvements, by setting a “gold standard” to which public health systems can aspire.
There are four concepts that have helped frame the Public Health Laboratory System Performance Standards into their current format:

1. The standards are designed around the 10 Essential Public Health Services. The use of the Essential Services assures that the standards cover the gamut of public health action needed at state and community levels. They also incorporate all of the Eleven Public Health Laboratory Core Functions.
2. The standards focus on the overall state public health laboratory system, rather than a single organization. A state public health laboratory system includes all public, private, and voluntary entities that contribute to public health laboratory activities within a given state. This ensures that the contributions of all entities are recognized in assessing the provision of essential public health services.
3. The standards describe an optimal level of performance rather than provide minimum expectations. This ensures that the standards can be used for continuous quality improvement.
4. The standards are intended to support a process of quality improvement. System partners should use the assessment process and the performance standards results as a guide for learning about public health laboratory activities throughout the system and determining how to make improvements.

Each of these concepts is more fully described below.

**The 10 Essential Public Health Services**

The Essential Public Health Services provide the fundamental framework for the NPHPSP instruments by describing the public health activities that should be undertaken in all states and communities. The Essential Public Health Services were first set forth in a statement called *Public Health in America* and were developed by the Core Public Health Functions Steering Committee in 1994 (convened by Department of Health and Human Services). The statement identifies the essential functions of public health. They are as follows:

1. Monitor health status to identify community health problems.
2. Diagnose and investigate health problems and health hazards in the community.
3. Inform, educate, and empower people about health issues.
4. Mobilize community partnerships to identify and solve health problems.
5. Develop policies and plans that support individual and community health efforts.
6. Enforce laws and regulations that protect health and ensure safety.
7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable.
8. Assure a competent public health and personal health care workforce.
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health services.
10. Research for new insights and innovative solutions to health problems.
The 11 Core Functions of State Public Health Laboratories

A Task Force assembled by APHL, in collaboration with and with support from CDC's Public Health Practice Program Office, Division of Laboratory Systems (PHPPO/DLS), developed a set of core functions of state public health laboratories. The term core function is defined as “a role assumed by the laboratory that underlies the laboratory’s ability to support public health.” They describe the broader functions and elements that are necessary to ensure the laboratory capability to execute the core functions. APHL adopted the core functions at its 2000 Annual Meeting as the consensus position of the association.

According to the report, all State Public Health Laboratories should be capable of performing:

1. Disease prevention, control, and surveillance
2. Integrated data management
3. Reference and specialized testing
4. Environmental health and protection
5. Food safety
6. Laboratory improvement and regulation
7. Policy development
8. Emergency response
9. Public health-related research
10. Training and education
11. Partnerships and communication

A Focus on the Public Health Laboratory System

The SPH Laboratory System consists of all the participants in public health testing, including those who initiate testing and those who ultimately use the test results. The SPH Laboratory System should assure that:

1. Public health threats are detected and that response is timely;
2. All stakeholders are appropriately informed of potential threats;
3. Reportable conditions are monitored in a comprehensive state-wide system;
4. Specimens and isolates for public health testing are sufficient to provide comprehensive public health surveillance and response; and
5. When referred to reference laboratories, testing is timely, accurate and provides the scientific basis for treatment. The concepts of a SPH Laboratory System are embodied in the APHL Core Functions.

---

1 Core Functions and Capabilities of State Public Health Laboratories: A Report of the Association of Public Health Laboratories (CDC 20sep02)
The SPH Laboratory has a leadership role in:

- Developing and maintaining active collaboration and communication among stakeholders to assure comprehensive, accurate, timely testing services. Stakeholders include, but are not limited to, epidemiology professionals, first responders, environmental health professionals in water, food and air surveillance activities;
- Routinely monitoring clinical laboratories performing public health testing on reportable infectious diseases to assure submission of accurate, timely results using national testing guidelines and processes; and
- Maintaining an integrated informational system that includes all stakeholders.

**Optimal Level of Performance**

Frequently, performance standards are based on a minimum set of expectations. However, these types of standards may not stimulate organizations to strive for higher levels of achievement.

It is for this reason that the SPH Laboratory System Performance Measurement Program instrument describes an optimal level of performance and capacity to which all state public health laboratory systems should aspire. Optimal standards provide every public health laboratory system – whether more or less sophisticated – with benchmarks by which the system can be judged. In comparing the current status to optimal benchmarks, systems are able to identify strengths and areas for improvement. Additionally, optimal standards provide a level of expectation that can be used to advocate for new resources or needed improvements in order to better serve the population within a public health system.

A nationally developed set of optimal performance standards, framed in the essential public health services, will provide the following:

- A means for strengthening relationships with public health, commercial, and other laboratories and partners that comprise the broader laboratory system;
- A framework for continual improvement of public health laboratory systems;
- A concrete way to educate system partners and elected officials about the laboratory system;
- A practical tool to help identify areas in need of advocacy and increased resources;
- A means to help formalize the National Laboratory System around the country, with potential inclusion of veterinary, agricultural, and environmental laboratories; and
- Support for the planned process for accreditation of state public health laboratories.
Quality Improvement

The SPH Laboratory System Performance Measurement Program is intended to promote and stimulate quality improvement. As a result of the assessment process, the responding laboratory system should identify strengths and weaknesses within the state public health laboratory system. This information can pinpoint areas that need improvement. If the results of the assessment process are merely filed away or sit idle on a shelf, much of the hard work that is devoted to completing the instrument will be wasted. System improvement plans must be developed and implemented.
ASSESSMENT PROCESS

This assessment was conducted in a public meeting over a one and a half day period. It included participants identified by the steering committee and consisted of public health laboratory experts and partners from across the state. Following a plenary session designed to introduce the assessment process to stakeholders, the participants conducted their first assessment as a whole group and were then divided into three groups for the remainder of the Essential Services (ES). The breakouts are as follows:

- **Whole group** - ES# 7 Linking people;
- **Group #1** - ES# 9 Evaluation, ES# 1 Monitor, and ES# 10 Research;
- **Group #2** - ES# 2 Diagnose, ES# 5 Plan/policy development, and ES# 6 Enforce; and
- **Group #3** - ES# 3 Inform/educate, ES# 8 Workforce, and ES# 4 Mobilize.

Fifty-eight individuals representing organizations that play a key role in the provision of laboratory services participated in the conference. Three categories of organizations were identified to participate in the conference:

- Core governmental organizations;
- Other governmental organizations; and
- Non-governmental organizations.

During the first day of the conference, participants learned about the purpose and process of the TPHLSA through presentation and panel discussions with Dr. Susan Neill (DSHS, Laboratory Director), Vanessa White (APHL), and Mike Messinger (DSHS, Center for Program Coordination).
Participants assigned a value to each model standard using the following scale:

<table>
<thead>
<tr>
<th>No Activity</th>
<th>None of the members of the SPH Laboratory System perform any activity in this area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>Greater than 75% of the activity described within the question is met within the state public laboratory health system</td>
</tr>
<tr>
<td>Yes Partially</td>
<td>Greater than 50%, but no more than 75% of the activity described within the question is met within the state public health laboratory system</td>
</tr>
<tr>
<td>No Partially</td>
<td>Greater than 25%, but no more than 50% of the activity described within the question is met within the state public health laboratory system</td>
</tr>
<tr>
<td>No</td>
<td>No more than 25% of the activity described within the question is met within the state public health laboratory system</td>
</tr>
<tr>
<td>Does not Apply</td>
<td>Activities included in the key idea and referenced in the questions are not relevant to the SPH Laboratory System.</td>
</tr>
</tbody>
</table>
SUMMARY, RESULTS AND ANALYSIS

TPHLSA Performance

Collectively, the essential functions of the TPHLSA were assessed as (see chart in Appendix A):
• “Yes Partially” for four of the 10 essential functions;
• “No Partially” for four of the 10 essential functions;
• “No” for one of the 10 essential functions;
• “No Activity” for one of the 10 essential functions;

Collectively, the key indicators of the TPHLSA were assessed as:
• “Yes” for six of the 48 key indicators;
• “Yes Partially” for 12 of the 48 key indicators;
• “No Partially” for 10 of the 48 key indicators;
• “No” for nine of the 48 key indicators;
• “No Activity” for six of the 48 key indicators; and
• “Does Not Apply” for five of the 48 key indicators.

TPHLSA performance was rated highest (Yes) for:

• The SPH Laboratory System provides information to support monitoring of congenital, inherited, and metabolic diseases of public health significance (ES # 1.2.3);
• The SPH Laboratory complies with and exceeds all applicable regulations (ES # 6.2.2);
• The SPH Laboratory and other appropriate government agencies collaborate to fulfill their enforcement function (ES # 6.3.2);
• Position requirements for all laboratory position categories within state and local public health laboratories are identified (ES # 8.1.1);
• The SPH Laboratory System has tools to assess competencies of the workforce (ES # 8.1.2); and
• The SPH Laboratory System identifies staff development needs (ES # 8.2.1).
SPHS performance was rated **lowest** (No) for:

- The SPH Laboratory System partners collaborate to strengthen surveillance systems (ES # 1.1.3);
- The SPH Laboratory System generates reliable information about chronic diseases of public health significance (ES # 1.2.4);
- The SPH Laboratory System maintains an environment that attracts and retains exceptional staff (ES # 8.3.1);
- The SPH Laboratory System addresses workforce shortage issues (ES # 8.3.2);
- The SPH Laboratory System mission, purpose, and range of services are evaluated on a regular basis (ES # 9.1.1);
- The range of technologies in use by the SPH Laboratory System is periodically surveyed and evaluated, with objective reports shared across the SPH Laboratory System (ES # 9.1.2);
- The effectiveness of personal and population-based laboratory services provided throughout the state is regularly determined (ES # 9.2.1);
- The quality of personal and population-based laboratory services provided throughout the state is regularly determined (ES # 9.2.2);
- The level and utility of collaboration among members of the SPH Laboratory System is measured and shared (ES # 9.3.1).
DISCUSSION AND NEXT STEPS

A limitation of the TPHLSA conference was that some major stakeholders were not able to attend. A better representation of hospital officials, physicians, environmental staff, laboratory suppliers and elected officials would have made for a more comprehensive assessment. With this in mind, most participants felt that the conference provided an opportunity for exchanging information, sharing expert opinion, and networking among important system partner organizations.

The system’s collective performance was judged to be less than optimal on most of the model standards contained in the assessment instrument. It is noteworthy that the assessment instrument used by participants was a field test version that has not yet been validated, and this may have affected the results. Furthermore, judgments about system performance ultimately reflect the qualitative and quantitative perceptions of those who participated in the assessment process. Verification of these perceptions are beyond the scope of this undertaking. When conference participants identified gaps in model standard performance it was unclear whether this should be attributed to the status of the system or to the participants’ level of awareness about the system. Despite this ambiguity, performance gaps identified during the assessment conference provide a starting point for future efforts to improve system functioning.

In addition, the conference itself served as an important tool to improve the public health system by inviting a broad group of stakeholders together and have them reflect about their roles as system partners.

Next Steps

Participants identified the following steps to be taken to improve the laboratory system.

- The system must be defined. Comprehending the public health laboratory system proved to be the most difficult aspect for participants. It was generally agreed that defining the system would be an ongoing task for all partners and stakeholders involved.
- Additional meetings of system partners should be held beginning with a strategic planning forum for the public health laboratory system. The focus of this forum should be to establish a system improvement plan. The plan should consist of the following components.
  1. Establish a vision and mission for the SPH Laboratory System.
  2. Identify and prioritize goals for improvement of the SPH Laboratory System by:
     - Developing system plans and policies;
     - Establishing collaborative networks;
     - Creating a secure, accountable and compatible information network;
     - Conducting on going evaluation and analysis of the system to allow opportunities for improvement and to identify gaps;
     - Improving the quality and education of the workforce; and
     - Building an infrastructure for research and development of new and better systems.
  3. Develop implementation strategies.
ASSESSMENT SCORES AND COMMENTS

Essential Service #1: **Monitor** health status to identify community health problems

Evaluation:

<table>
<thead>
<tr>
<th>Essential Service #1: Monitor Health Status</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No Activity</strong></td>
<td>No</td>
<td>No Partially</td>
<td>Yes Partially</td>
<td>Yes</td>
<td>Does not Apply</td>
<td></td>
</tr>
<tr>
<td>1.1.1: The SPH Laboratory System identifies sentinel health events and trends through interoperable laboratory information systems</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1.2: The SPH Laboratory System participates in national surveillance systems for state and national linkage</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1.3: SPH Laboratory System partners collaborate to strengthen surveillance systems</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.1: The SPH Laboratory System has a comprehensive system to gather data, organisms and samples to support evaluating community and environmental health</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.2: The SPH Laboratory System identifies and detects infectious diseases and contributes to a statewide surveillance system</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.3: The SPH Laboratory System provides information to support monitoring of congenital, inherited, and metabolic diseases of public health significance</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.4: The SPH Laboratory System generates reliable information about chronic diseases of public health significance</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.2.5: SPH Laboratory System has a secure, accountable and integrated information management system for data storage, analysis, retrieval, reporting and exchange</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Key Indicator 1.1.1 Comments

- Reportable disease information is reported, but results are never shared back with providers
- CDC’s Morbidity and Mortality Weekly Report (MMWR) system is one mechanism for communication
- Are vet, food and other specialty labs reporting?
- There is active surveillance happening at hospitals
- Most sentinel events are captured by in-hospital reporting processes

Key Indicator 1.1.2 Comments

- Lab partner with organizations to report up
- There is a lack of shared information across the system
- Things that are not under federal regulation may fall through the cracks

Key Indicator 1.1.3 Comments

- Policies are developed, but are probably not consistent across the system
- There is little knowledge of the Public Health Informatics Institute
- Surveillance systems are not state-of-the-art, but must be maintained according to federal mandate
- Little surveillance of disease (emphasis is on capturing mortality data)
- There is little to no collaboration across the system

Key Indicator 1.2.1 Comments

- What are brownfields?
- Reporting systems do exist
- Response efforts are well-coordinated
- There is a difference between comprehensive and integrated systems
- Environmental testing is done at the state level
Key Indicator 1.2.2 Comments

- For this Key Indicator, there are problems with dispersion
- Not all pathogens are reported
- There are varying degrees of reporting
- There is a lack of reporting enforcement
- What is real-time? Current turn-around is about one week
- Information is not entered into systems in a timely manner

Key Indicator 1.2.3 Comments

- Case managers follow up on every case to provide referrals
- Rural and frontier communities have trouble accessing services
- Questions were raised regarding the extensiveness of follow-up (are we sure they seek treatment?)
- Access to specialists can be limited
- Complete assurance is impossible

Key Indicator 1.2.4 Comments

- Private labs are unsure of the breadth and scope of testing
- System partners are unclear on DSHS programs
- There is no aggregate surveillance
- Systems need to be more user-friendly
- Good data on heart disease, etc. is not available
- Chronic disease information is not available
- Reliability of information is questionable (an example is information on death certificates – incorrect causes of death recorded)

Key Indicator 1.2.5 Comments

- A system does exist, but it is not highly integrated or comprehensive
- CDC’s system is not working properly
- The state lab system is very old
- There is inconsistency in lab testing menus
- LIMS do not communicate
- Labs do supply testing reports, so some information is available
- There is a lack of security
Next Steps for Essential Service #1

1.1.1 Provide web-based direct reporting for practitioners
   Establish annual meetings to translate data into useful public health information
   Improve data viewing methods

1.1.2 Provide information back to practitioners

1.1.3 Get more information on Public Health Informatics Institute
   Gather stakeholders and provide feedback to CDC on their systems
   Hold regular interdisciplinary user meetings

1.2.1 Education of what is occurring at the state level
   Communicate across partners and disciplines

1.2.2 Explore funding options
   Expand storage capabilities

1.2.3 Access to care issues must be addressed

1.2.4 Establish reliable indicators
   Define the lab’s contribution

1.2.5 Gather requirements
   Synchronize University and state public health lab systems
   Assess the availability of information

Field Test Evaluation Notes of Essential Services #1
• Need consistency in the use of “Model Standards”
• Eliminate checklists (are disconnected from the Key Indicators)
• Complete assurance is impossible to attain
• There is a distinction between comprehensive and integrated
Essential Service #2: **Diagnose** and investigate health problems and health hazards in the community

**Evaluation:**

<table>
<thead>
<tr>
<th>Essential Service #2: Diagnose and investigate health problems</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Activity</td>
<td>No</td>
<td>No Partially</td>
<td>Yes Partially</td>
<td>Yes</td>
<td>Does not Apply</td>
<td></td>
</tr>
<tr>
<td>2.1.1: The SPH Laboratory System assures provision of services at the highest level of quality to assist in the diagnosis and investigation of all health problems and hazards</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2.1: SPH Laboratory System members are actively involved in networks that collaborate in the epidemiological investigation of and response to natural and man-made disasters</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.3.1: The SPH Laboratory System has the ability to respond rapidly to medical and public health emergencies</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Key Indicator 2.1.1 Comments**

- Currently have to dig around to find a lab that can do a specific service. We need a central repository/database of services different labs perform that we can check. A clearinghouse with this information available on an Internet site is preferable, where experts and consumers can find the resources they need.
- Barrier between sharing equipment between city and county staff.
- Need to keep up to date on equipment to get best results.
  - Issue for all
  - If grants are available for equipment, may be able to update equipment
  - If have to go to the Legislature for funding to update equipment, it’s a challenge
- Accreditation figures into this
- Issues: After 5, specialized testing is a challenge
Key Indicator 2.2.1 Comments

- There is a difference in day-to-day and disasters.
  - Public Health labs do have a network. Private labs can join, but have to join to be a part of it.
  - Day-to-day, PH lab network is good. During the disasters, it fell apart.
- This issue isn’t labs alone. It’s labs, Public Health nurses, and epidemiologists.
- Because of litigations issues, private labs CAN’T discuss issues. They are precluded from revealing potential public health risks.
- Local physicians and hospitals don’t always communicate issues as needed. This can be because the Infection Control staff is part-time or spread too thin.
- Communicable disease reporting is hard for small labs. They have to report to many entities and have to run the reports on ALL testing they did for a time period.

Key Indicator 2.3.1 Comments

- DSHS has varying degrees of readiness.
  - Bio-terrorism – have trained staff and stockpiles
  - Pan Flu – have plans in place, not stockpiles
  - Environmental – working with EPA on eLRN network – expanding to drinking water
- It doesn’t seem that the system partners understand what would happen in an emergency
- Often private labs report incidents to law enforcement and not the state. State sometimes finds out months after the incidents.
- Most environmental testing is done in private labs
  - Have network of large labs
  - Confident of their ability to handle surge
- Surge capacity needs to be added into the exercises
- Though we plan for emergencies, we don’t have the ability to meet the plans needs. What happens isn’t usually exactly what was planned for, so have to ad-hoc the plan as it develops.
- We have set up agreements with other states labs to assist with tests during emergencies. For instance, we are still handling Louisiana’s TB cases.
- What happens if the vendor source is knocked out?
Essential Service #3: Inform, **educate**, and empower people about health issues

**Evaluation:**

<table>
<thead>
<tr>
<th>Essential Service #3: Inform, educate, and empower</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Activity</td>
<td>No</td>
<td>No Partially</td>
<td>Yes Partially</td>
<td>Yes</td>
<td>Does not Apply</td>
</tr>
<tr>
<td>3.1.1: The SPH Laboratory System has an identified system of outreach and communication to inform about relevant health issues</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2.1: The SPH Laboratory System creates and delivers targeted laboratory information to appropriate health partners</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2.2: SPH Laboratory System creates and delivers targeted laboratory information to appropriate non-health partners</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3.1: Education and relationship building opportunities are employed to mobilize community partners</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Key Indicator 3.1.1 Comments**

- Do the partners include all “eggs”?
  - Define partners
  - Relay of information among partners
- Health Alert Network – disperse information
- Laboratory Response Network (LRN) – monthly conference calls and meetings two times per year; website
- CDC conference calls – nation-wide
- DSHS Lab – appointments to talk with people (private labs, etc.)
  - Crisis-driven mostly
  - Messages on reports
  - Newsletter/website
  - “Report card”
- Communication with public and consumers
o Notify field offices – relay to consumer
  o Media

- Professional trade organizations
  o Conferences/conventions (lab representatives)
  o National meetings
  o Communication w/manufacturers

- Local lab – trainer outreach

- Houston Area Hospitals Emergency Management Collaborative (HAHEMC) meetings

- LCRA (fish, water) – only 2 labs for drinking water
  o Sporadic communication
  o Fish Advisory Board – limited communication

- Media may not share information to prevent panic
- Public doesn’t always know where to go for information or help

- Referrals between labs
- Partnerships w/labs and public – trickle down
- Public not aware of lab functions
  o Need to work to reach out and communicate
  o Academia

- Confusion internally between partners
- Communication within smaller entities needed to flow outward within system

**Key Indicator 3.2.1 Comments**

- Define social marketing – information marketing, not competitive
- Labs target results to partners
  o Ex: newborn screening
- Some providers unaware of where to go/what to do
- National Provider Identifier (NPI)
  o System in place
  o Some gaps
- Staff at labs well-informed about issues
Key Indicator 3.2.2 Comments

- Define non-health partners – media, university, schools, legislators
- System in place: several layers to go through
  - Some external constraints
  - Political
- Gap in utilization of lab system for public
- 211 service
- “Positive” information shared easier, “negative” information involves more chains of command
- General public doesn’t “see” lab work until it’s negative
- Health Fairs at hospitals – labs don’t have as many opportunities
- System is set up to restrict (necessary)
  - Important to limit some information from media
  - Work reactively with media, not proactively

Key Indicator 3.3.1 Comments

- Newborn screening: educated providers and public in multiple modes of communication, worked w/partners
- Cholesterol screening
- Evaluations from consumers
- City/local does good job (ex. mobile immunization)
- Community clinics have brochures: Is this the job of labs (to create brochures, etc…)?
- Programs served by labs are promoted (program driven?)
- If programs aren’t communicating – labs take initiative
- Students visit labs to tour/learn
- Labs should be proactive to teach
- Nursing students education (reactive, not proactive)
- Free testing
- Effectiveness – “report card”
- Relationship building with university for workforce development
- Build relationships with hospitals (or people served)
- Emergency preparedness; lots of information sharing among partners
Next Steps for Essential Service #3

- Inform/educate legislators
- Encouragement from management/upper level for staff to be active/proactive to educate and do outreach activities
- Encourage time for staff development/education (flexibility)
- Harness communication
  - Central link/location for communication
  - DSHS – post information on web, links for information
  - Model LRN Alert System
  - Listserves – Model APHL
  - Other sources (non-technology) such as mailers and a central informational phone system
  - More testing and promotion of the 211 system
- Simplify “system” – too big, undefined. Once defined, then educate and inform

Field Test Evaluation Notes of Essential Services #3

Indicator 3.3, 3.3.1 – This section is confusing. Lots of topics are covered in one question. Some points of discussion do not apply to the question being asked. There seems to be some overlap with workforce development issues.
Essential Service #4: **Mobilize community partnerships to identify and solve health problems**

**Evaluation:**

<table>
<thead>
<tr>
<th>Essential Service #4: Mobilize community partnerships</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>4.1.1:</strong> Partners in the SPH Laboratory System develop and maintain positive relationships with each other and with other key organizations</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4.2.1:</strong> The SPH Laboratory System communication plan is fully integrated with partners’ and collaborators’ communication plans</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4.2.2:</strong> The SPH Laboratory System communicates effectively in a regular, timely, and accurate way to support collaboration</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4.3.1:</strong> The SPH Laboratory System works together to share existing resources and/or to identify new resources (e.g. funding, personnel, tools) to assist in identifying and solving health issues</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Key Indicator 4.1.1 Comments**

- Pan flu: partnering well
- Food: partner well during outbreaks, etc.
- DSHS internally – good collaboration
- 11 Lab Essential Functions – shared vision among laboratory system
- New technology – collaboration good
- Scientific knowledge – data sharing
- DSHS website – statistics (student use)
- LRN good example
• Evaluation – if we don’t hear negative, we assume everything is fine
  o Surveys in some areas
• System not defined – how to identify constituents to maintain relationships? Need to define roles and responsibilities
• Some areas not interested in partnering, even when there is an overlap of duties/functions
• MOUs:
  o Lab and CDC
  o Labs w/USPS
  o Educational facilities
  o Community college – surge capacity

Key Indicator 4.2.1 Comments

• Most partners have individual communication plans
• No downward communication
• Know who to call w/issues, but no proactive communication
• Public health not integrated w/environmental health – segregated
• There is no “system” communication plan, unless crisis (EOC - hurricane exercises, natural disasters, bio-terrorism)
• Homeland security grant money to plan
• Gap with regions and counties (or unnecessary layers of communication)

Key Indicator 4.2.2 Comments

• DSHS bi-annual meetings w/local health labs provide information (includes partners, including EPA)
• 24/7 communication?
  o Emergency contact lists
  o Driven by homeland security
  o CDC drills
• Evaluated
  o Quarterly reports
• Information shared by news releases (media)
• Smaller, out-lying areas not communicated with
Key Indicator 4.3.1 Comments

- Rely on DSHS – the state shares
- Share supplies
- Share equipment when down
- Share personnel
- Sometimes share between states
- New Resources:
  - Caps (ex: FTEs)
  - Grants
- Sharing specimens
- Sharing is a necessity
- Sharing of tools: procedures, policies, etc…

Next Steps for Essential Service #4

- Identify partners within system (define system)
- Share contact information and SMEs
- Identify resources to contribute/share
- Identify liaisons
Essential Service #5: Develop policies and plans that support individual and community health efforts

Evaluation:

<table>
<thead>
<tr>
<th>Essential Service #5: Develop policies and plans</th>
<th>0 No Activity</th>
<th>1 No</th>
<th>2 No Partially</th>
<th>3 Yes Partially</th>
<th>4 Yes</th>
<th>9 Does not Apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.1.1: The SPH Laboratory and system partners contribute their expertise and resources to inform and influence policy</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.1.2: Policies and plans are informed by science and data</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2.1: The SPH Laboratory System obtains input from diverse partners and constituencies to develop new policies and plans and modify existing ones</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.2.2: SPH Laboratory System issues are represented in state-level plans and policies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.3.1: Plans and policies are widely disseminated to inform members of the SPH Laboratory System, other stakeholders and the public</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.3.2: SPH Laboratory System plans and policies are routinely evaluated and updated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key Indicator 5.1.1 Comments

- Staff work with locals and partners to collaborate and provide information on policies
- State provides factual information to the Legislature on proposed laws
- Money flow can cause political issues
- All entities have control of internal policies
- We do a lot of these activities, but not sure how well
- Used to have more influence on policy
Key Indicator 5.1.2 Comments

- A lot of data is collected by the Federal Government, but not sure it is sent back down
- Data may be there, but is it mined? Time may be a factor in this.
- Local politics affects reporting from local areas, therefore it isn’t getting to the state to get to CDC
- There has been a tremendous effort to marry science and policy

Key Indicator 5.2.1 Comments

- Not all partners have had input in policy development
- Private partners should be included in policy decisions
- This is bigger than just tests. For example, billing is part of this
- City drinking water lab doesn’t feel part of the system. There is a lack of information flow.
- There is little “lab” policy, per se. It is a piece included in the program policy
- Contract out a lot of testing, and the billing is very difficult. Program policy needs private lab input to get a broad perspective.
- The private sector can have influence on policy/laws
- State level organization ineffective in Texas. No Texas lab association.
- Would have voted higher if it said “to affect and implement” rather than develop.
- Agriculture has good collaboration with the State on this.

Key Indicator 5.2.2 Comments

- The lab plan is a part of the DSHS plan, not a separate plan
- Answers to points for discussion vary greatly, so it’s hard to answer overall:
  - Does the SPH Laboratory System work with State, municipal/local officials to prioritize efforts to address pressing health needs of the community? Low
  - Are SPH Laboratory System issues, including public health emergency response, integrated into plans for public health programs? High
- Regional plans are built off of the State plan, and some locals plans are built off of the regional plans
- Most non-DSHS attendees haven’t seen the State Plan
- Is there a statewide plan on workforce issues? Should there be?
- Major issue: Coding and billing are very complicated
Key Indicator 5.3.1 Comments

- We do well within the DSHS system
- HEB uses sales, returns, and polls to get feedback
- The city uses plans, surveys and public service announcements
- Stakeholders are invited to participate in the rule-making process at DSHS, not sure if input from stakeholders is invited soon enough
- CMS level requests input at this point, State doesn’t really. Some State rules don’t work because there is a piece missing. They need stakeholder input on that.

Key Indicator 5.3.2 Comments

- The environment for lab policy is unique as it is in with program policy
- There is no system for coordinating system policy

Next Steps for Essential Service #5

- Broaden APHL membership
- Reports should come straight to the state, then come back down to the local area to prevent this
Essential Service #6: **Enforce** laws and regulations that protect health and ensure safety

Evaluation:

<table>
<thead>
<tr>
<th>Essential Service #6: Enforce laws and regulations</th>
<th>0 No Activity</th>
<th>1 No</th>
<th>2 No Partially</th>
<th>3 Yes Partially</th>
<th>4 Yes</th>
<th>9 Does not Apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.1.1: The SPH Laboratory System regularly and periodically reviews and recommends revisions of federal and State laws and regulations pertaining to laboratory practice</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2.1: The SPH Laboratory System has non-regulatory systems in place to encourage or promote compliance by all laboratories in the system with all applicable State and federal regulations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.2.2: The SPH Laboratory complies with and exceeds all applicable regulations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.3.1: The SPH Laboratory System has the appropriate resources to fulfill its enforcement function for laws and regulations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.3.2: SPH Laboratory and other appropriate government agencies collaborate to fulfill their enforcement function</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key Indicator 6.1.1 Comments

- The review may be individual, not collaborative
- Associations notify members of changes, though sometimes AFTER the changes have taken affect
- Some monitor regulator’s sites (Occupational Safety and Health Administration [OSHA], Centers for Medicaid and Medicare Services [CMS], etc.) to see changes
- The regulations on shipping change so often, some carriers now refuse to ship some things
- Reporting requirements change often, can’t keep up with the changes
Key Indicator 6.2.1 Comments

- This could be a code of ethics, model of compliance, technical assistance, communication
- APHL helps connect you with the correct laboratory
- There is a need for technical assistance to become compliant
- All of the system needs model compliance officer and training
- We promote compliance within, but not necessarily throughout the system
- The Texas Commission on Environmental Quality (TCEQ) is providing free training on the transition from state certification to the new certification system

Key Indicator 6.2.2 Comments

- Is the SPH Lab accredited by an external organization where available and appropriate? Yes
- Do SPH Lab compliance programs include comprehensive certification elements to ensure active and continuous enrollment and participation in regulated proficiency testing programs? Yes
- Does the SPH Lab conduct annual internal audits? Yes
- Does the SPH Lab comply with or exceed all applicable regulations? Yes
- Provide copies of certificates when needed
- It would be nice to have accreditation on the web site

Key Indicator 6.3.1 Comments

- Does the lab have enforcement capability?
  - Internally only
  - Externally, regulatory does the enforcement
- The only State enforcement is milk and shellfish
- The Environmental Protection Agency (EPA) has the ability to shut down a lab if they do something illegal
- If they changed the wording from fulfill to support, it would work better and be applicable

Key Indicator 6.3.2 Comments

- The only State enforcement is milk and shellfish
- SPH Lab does collaborate with regulatory for enforcement
- Enforcement for newborn screening? DSHS has no way to match births with newborn screening
Essential Service #7: **Link** people to needed personal health services and assure the provision of healthcare when otherwise unavailable

**Evaluation:**

<table>
<thead>
<tr>
<th>Essential Service #7: Linking people</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Activity</td>
<td>No</td>
<td>No Partially</td>
<td>Yes Partially</td>
<td>Yes</td>
<td>Does not Apply</td>
<td></td>
</tr>
<tr>
<td>7.1.1: The SPH Laboratory System identifies laboratory service needs and collaborates to fill gaps</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key Indicator 7.1.1 Comments

- No clear transportation system (timeliness a key factor) in rural and frontier communities
- Focused testing in public health laboratories
- Need partnership between private and public health laboratories
- Partners needed
  - Legislators
  - Other laboratories
  - Physicians
  - Clinics
  - Consumers
- Depending on perspective in the system
- Capacity issues (surge) in a major outbreak are unknown (staffing and equipment)
- Veterinary laboratories
  - 12 laboratories around the country
  - 7 smaller laboratories around the state
- Data integration
- Are state mandates being met?
- Surge capacity practicality
- Determining authority
- Indigent lab testing/care group
- Multiple destination/transportation requirements of specimens (courier services)
• How are we communicating (daily/weekly/monthly)?
• Need to create a single system to communicate on reportable diseases
• Locals and regions (health departments) need to be able to answer questions instead of referring requests to the State Lab
• Medical and lab records need to be electronic. Use VA and military as a model
• Some communities do not have internet access
• Centralized data warehouse (at the State?)
• We need to get the biggest bang for the buck on solutions (prioritize)
• Need unique identifiers that do not use the SSN
• Define the system
• Does a/the system even exist?
• Texas is a local control public health state (this presents issues in creating a system)
• How can we get all folks in the system involved?
• Need to educate partners about their role in the system (e.g. veterinary students)
• PulseNet (CDC) is used for food born illness outbreaks

Field Test Evaluation Notes of Essential Services #7

Rename “Checklists” to “examples”
Essential Service #8: Assure a competent public health and personal health care workforce

Evaluation:

<table>
<thead>
<tr>
<th>Essential Service #8: Ensure a competent workforce</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No Activity</td>
<td>No</td>
<td>No Partially</td>
<td>Yes Partially</td>
<td>Yes</td>
<td>Does not Apply</td>
</tr>
<tr>
<td>8.1.1: Position requirements for all laboratory position categories within state and local public health laboratories are identified</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.1.2: The SPH Laboratory System has tools to assess competencies of the workforce</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.2.1: The SPH Laboratory System identifies staff development needs</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.2.2: The SPH Laboratory System assures that resources for staff development are available for laboratorians</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.3.1: The SPH Laboratory System maintains an environment that attracts and retains exceptional staff</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.3.2: The SPH Laboratory System addresses workforce shortage issues</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key Indicator 8.1.1 Comments

- DSHS lab – clear descriptions, annual competencies
- Certifications clear
- Local (i.e. doctor’s offices) gray area
- Environmental side: certifications required

Key Indicator 8.1.2 Comments

- Requirement for labs - for “system” – don’t know
- Regulations – but may be interpreted loosely - competency assessments
• Assume there are competencies in place for other “eggs” in system
• Equipment not up to par in public health versus private - system to validate equipment

Key Indicator 8.2.1 Comments

• Personnel files – standard of the industry, same tools with local
  o Annual evaluations
  o Documentation
  o Testing
  o Training
• Performance management
• Competencies help identify deficiencies

Key Indicator 8.2.2 Comments

• Collaborate w/academia – great partners to increase workforce in public health
  o Public Health Conference – every 3 years
  o Public Health Internship Program
  o Federal programs
• Texas system is innovative in collaborating w/academia
• San Antonio – career day in labs/tour labs
• Lubbock – tour labs
• Clinical lab science training program
• Competency training for staff
• DSHS has training coordinator within lab
• Never enough money or time for training - programs within programs to support efforts
• Leadership/management classes – no money or time
• Some areas no longer have training at all
• Travel caps for conferences/meetings

Key Indicator 8.3.1 Comments

• Money big issue – doesn’t pay well – problems with attracting and retaining
• Dedicated staff stay for personal satisfaction, not money
• Changing jobs within the system and outside the system; how to retain within the lab system?
• Gain experience then move on elsewhere
• Need career ladders for tech/entry positions; incentive is to leave, not stay

Key Indicator 8.3.2 Comments

• Recruitment efforts – job fairs, etc.
• Creative advertising – appeal to demographics, nationalities, diversity
• How to address shortage issues
• Use of technology – websites
• Use of partners to advertise jobs

Next Steps for Essential Service #8

• Raise salaries
• Educate general public on what labs do
• Educate elected officials (legislators, judges, mayors, city councils) – ask for more money
• Start educating earlier (junior high)
• Target younger generation (more altruistic)
• Proactive outreach to public
• Work w/educators – incorporate into curriculum
• Have the National Laboratory Training Network (NLTN) develop resources for teachers
• Education should be interdisciplinary
Essential Service #9: **Evaluate** effectiveness, accessibility, and quality of personal and population-based services

**Evaluation:**

<table>
<thead>
<tr>
<th>Essential Service #9: Evaluate effectiveness</th>
<th>0 No Activity</th>
<th>1 No</th>
<th>2 No Partially</th>
<th>3 Yes Partially</th>
<th>4 Yes</th>
<th>9 Does not Apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.1.1: The SPH Laboratory System mission, purpose, and range of services are evaluated on a regular basis</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.1.2: The range of technologies in use by the SPH Laboratory System is periodically surveyed and evaluated, with objective reports shared across the SPH Laboratory System</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.2.1: The effectiveness of personal and population-based laboratory services provided throughout the state is regularly determined</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.2.2: The quality of personal and population-based laboratory services provided throughout the state is regularly determined</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.3.1: The level and utility of collaboration among members of the SPH Laboratory System is measured and shared</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Key Indicator 9.1.1 Comments**

- Accreditation entities require that clinical labs review their scope of services annually
- While individual labs may evaluate themselves, the system as a whole does not coordinate their evaluation activities or share their results
- There are pieces of the system, such as Prevention and Preparedness activities where evaluations are well-coordinated because it is required by the federal government
- When evaluating the system overall, it is important that each sector retains its responsibilities
Key Indicator 9.1.2 Comments

- Information about technology is shared across formal and informal networks
- There are regular meetings between certain parts of the system (for example, bi-annual meetings with state and city-county health departments) to discuss technology
- Changes need to be better communicated to other partners
- Communication is not happening on a system-wide basis

Key Indicator 9.2.1 Comments

- The group is unsure as to whether or not we are currently meeting the needs of our population (examples: uninsured, those that cannot afford care, etc.)
- The group was unclear as to whether or not data is used to drive policy-making
- Newborn Screening is a start, but this is one isolated part of the system

Key Indicator 9.2.2 Comments

- Quality of labs is not evaluated from a state-wide perspective
- Individual and local level labs are experiencing a shift in focus that emphasizes the importance of customer service
- Clinical labs do customer service surveys and use the information to develop policy, but the results are not shared across the system

Key Indicator 9.3.1 Comments

- The federal government is driving some efforts to collaborate
- Regions must retain some independence to address local issues (for example: bi-national or bordering state issues)
- State programs will have to drive efforts to collaborate
- As with all of Essential Service #9, evaluation activities are not system-wide

Next Steps for Essential Service #9

- 9.1.1
  - The system needs a convener (perhaps a body of representatives from various parts and levels of the system)
  - Clearly define the system
  - Communicate the system concept
• 9.1.2
  o Develop a survey instrument
  o Identify groups and networks of lab system partners

• 9.2.1
  o Create a standardized tool for assessment
  o Identify the role of the epidemiologists

• 9.2.2
  o Create a model customer service survey
  o Distribute survey to labs
  o Collect results of the surveys (this will be a problem for clinical labs)
  o Pilot the program

• 9.3.1
  o Identify partners/collaborators
  o Create a mechanism to communicate
  o Draft roles and responsibilities
  o Develop a measurement instrument
  o Share the results

Field Test Evaluation Notes of Essential Services #9

• The phrase “state public health lab system” implies the state lab itself, not system as a whole
• Copies of the tool and glossary should be provided to all participants
Essential Service #10: Research for insights and innovative solutions to health problems

Evaluation:

<table>
<thead>
<tr>
<th>Essential Service #10: Evaluate effectiveness</th>
<th>0 No Activity</th>
<th>1 No</th>
<th>2 No Partially</th>
<th>3 Yes Partially</th>
<th>4 Yes</th>
<th>9 Does not apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.1.1: The SPH Laboratory System has adequate capacity to plan research and improvement activities</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.1.2: The SPH Laboratory System collaborates to finance research activities</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.1.3: Research and improvement initiatives are clearly defined and support broad public health goals</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.2.1: The SPH Laboratory System research efforts draw on diverse perspectives and expertise to stimulate innovative thinking</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.2.2: The SPH Laboratory System research is evaluated to foster improvement and innovation</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.2.3: The SPH Laboratory System disseminates research outcomes, best practices, and recognition of research activities</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key Indicator 10.1.1 Comments

- Some parts of the system are starting to collaborate with the research community
- There is no collaborative efforts across the system
- There is a need to establish a partnership with Infectious Disease professionals
- Research labs do plan for upcoming projects and studies
- DSHS has an established internship program with higher education institutes
Key Indicator 10.1.2 Comments

- Academia is making progress in this area
- At the state-level, grant writers are mentored
- This Key Indicator focuses on the collaborative effort, which is not quite there yet for Texas

Key Indicator 10.1.3 Comments

- These Key Indicators build on one another, so if you do not have the core activities established, it is impossible to meet additional Key Indicators

Key Indicator 10.1.4 Comments

- These Key Indicators build on one another, so if you do not have the core activities established, it is impossible to meet additional Key Indicators

Next Steps for Essential Service #10

- Clarify the definition of research
- Foster development of research partnerships
Overall

Parking Lot Items for Group

- State needs a courier system to transport specimens
- There are market and competition issues
- Results timelines versus quarantines
- Financial issues for patients
- Adult/Elderly population is not as well funded as the child population
- Define the system
- There is a need for system-wide communication
- There needs to be a system convener
- Difficulties with a “Home Rule” state, such as Texas
- Lack of local access to the national system (NIDS)

Top Discussion Topics for Essential Public Health Services

1. Not all partners have had input in policy development
2. Currently have to dig around to find a lab that can do a specific service. We need a central repository/database of services different labs perform that we can check. A clearinghouse with this information available on an Internet site is preferable, where experts and consumers can find the resource they need.
3. The system partners don’t understand what should happen in an emergency
4. Data may be there, but is it mined?
## Appendix A: CHART OF OVERALL SCORES FOR EACH ESSENTIAL FUNCTION

<table>
<thead>
<tr>
<th>* Overall Score for Each Essential Function (ES)</th>
<th>Yes</th>
<th>Yes Partially</th>
<th>No Partially</th>
<th>No</th>
<th>No Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>ES #1: Monitor health status to identify community health problems</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES #2: Diagnose and investigate health problems and health hazards in the community</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES #3: Inform, educate, and empower people about health issues</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES #4: Mobilize community partnerships to identify and solve health problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES #5: Develop policies and plans that support individual and community health efforts</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES #6: Enforce laws and regulations that protect health and ensure safety</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#7: Link people to needed personal health services and assure the provision of healthcare when otherwise unavailable</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#8: Assure a competent public health and personal health care workforce</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#9: Evaluate effectiveness, accessibility, and quality of personal and population-based services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>#10: Research for insights and innovative solutions to health problems</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

* Note: This is only a summary score for each essential service; it does not include key indicator scores.
Appendix B: CONFERENCE AGENDA

Texas Public Health Laboratory Systems Assessment (TPHLSA) Conference
February 26 & 27, 2007
AGENDA

The Commons Building (J.J. “Jake” Pickle Research Campus) Austin, TX (click here for directions)
10100 Burnet Road, Austin, TX 78758, Austin, TX 78759

Monday, February 26, 2007

12:00pm-1:00pm Conference registration, (Room – Atrium)

1:00pm-3:00pm Opening Presentations (Room - Big Tex, 1.102)

  Welcome,
  Dr. Susan Neill & Mike Messinger
  Assessment Purpose and Process
  Vanessa White, Association of Public Health Laboratories (APHL)

3:00pm-5:00pm Plenary: Essential Service (ES) #7 – Linking people (Room - Big Tex, 1.102)

Tuesday, February 27, 2007

8:00am-10:00am 1st Group Assessments

  Group #1, ES #9 – Evaluation (Room - Big Tex, 1.102)
  Group #2, ES #2 – Diagnosis (Room - Stadium, 1.138)
  Group #3, ES #3 – Inform/Educate (Room – Mustang, 1.162)

10:00am-10:15am Break
10:15am-12:00pm  
**2nd Group Assessments**
- Group #1, ES #1 – Assessment (Room - Big Tex, 1.102)
- Group #2, ES #5 – Plan/Policy Development (Room - Stadium, 1.138)
- Group #3, ES #8 – Workforce (Room - Mustang, 1.162)

12:00pm-1:00pm  
Lunch (Lobby)

1:00pm-3:00pm  
**3rd Group Assessments**
- Group #1, ES #10 – Research (Room - Big Tex, 1.102)
- Group #2, ES #6 – Enforce (Room – Stadium, 1.138)
- Group #3, ES #4 – Mobilize (Room - Mustang, 1.162)

3:00pm-4:30pm  
Plenary: Group Reports and Next Steps (Room - Big Tex, 1.102)
## Appendix C: TPHLSA STEERING COMMITTEE MEMBERS

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Organization</th>
<th>E-mail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Susan Neill</td>
<td>Laboratory Director</td>
<td>DSHS - Laboratory</td>
<td><a href="mailto:Susan.Neill@dshs.state.tx.us">Susan.Neill@dshs.state.tx.us</a></td>
</tr>
<tr>
<td>Marty Herrin</td>
<td>Hazardous Materials Response Chief</td>
<td>Williamson County Office of Emergency Management</td>
<td><a href="mailto:mherrin@wilco.org">mherrin@wilco.org</a></td>
</tr>
<tr>
<td>Shonnie Pinno</td>
<td>Microbiology Team Leader</td>
<td>Seton Hospital</td>
<td><a href="mailto:spinno@seton.org">spinno@seton.org</a></td>
</tr>
<tr>
<td>Santos Urra</td>
<td>Lab Director</td>
<td>City of Austin Water Utility</td>
<td><a href="mailto:santos.urra@ci.austin.tx.us">santos.urra@ci.austin.tx.us</a></td>
</tr>
<tr>
<td>Linda Gaul</td>
<td>Epidemiologist III</td>
<td>DSHS- Infectious Control Unit</td>
<td><a href="mailto:linda.gaul@dshs.state.tx.us">linda.gaul@dshs.state.tx.us</a></td>
</tr>
<tr>
<td>Dan Sowards</td>
<td>Director I</td>
<td>DSHS - Env Cnsmer Safety Sct, Division for Regulatory</td>
<td><a href="mailto:dan.sowards@dshs.state.tx.us">dan.sowards@dshs.state.tx.us</a></td>
</tr>
<tr>
<td>Joan Aalbers</td>
<td>Title V Program, RN, APRN-BC</td>
<td>DSHS-Preventive and Primary Care Unit</td>
<td><a href="mailto:joan.aalbers@dshs.state.tx.us">joan.aalbers@dshs.state.tx.us</a></td>
</tr>
<tr>
<td>Rita Broad</td>
<td>Laboratory Manager</td>
<td>Clinical Pathology Laboratories</td>
<td>r <a href="mailto:broad@cpllabs.com">broad@cpllabs.com</a></td>
</tr>
<tr>
<td>Walter Reichert</td>
<td></td>
<td>Natus Medical, Inc</td>
<td><a href="mailto:wreichert@neometrics.com">wreichert@neometrics.com</a></td>
</tr>
<tr>
<td>Mirsa Douglass</td>
<td></td>
<td>DSHS - Laboratory</td>
<td><a href="mailto:Mirsa.Douglass@dshs.state.tx.us">Mirsa.Douglass@dshs.state.tx.us</a></td>
</tr>
<tr>
<td>Julienne Sugarek</td>
<td>Business and Process Improvement Director</td>
<td>DSHS - Center for Program Coordination</td>
<td><a href="mailto:Julienne.Sugarek@dshs.state.tx.us">Julienne.Sugarek@dshs.state.tx.us</a></td>
</tr>
<tr>
<td>Mike Gilliam</td>
<td>Program Specialist VII</td>
<td>DSHS - Center for Program Coordination</td>
<td><a href="mailto:Mike.Gilliam@dshs.state.tx.us">Mike.Gilliam@dshs.state.tx.us</a></td>
</tr>
<tr>
<td>Mike Messinger</td>
<td>Program Specialist VI</td>
<td>DSHS - Center for Program Coordination</td>
<td><a href="mailto:Mike.Messinger@dshs.state.tx.us">Mike.Messinger@dshs.state.tx.us</a></td>
</tr>
</tbody>
</table>
Appendix D: SUMMARY OF PARTICIPANT EVALUATIONS

State Public Health Laboratory System Assessment

PARTICIPANT EVALUATION FORM

We appreciate your feedback and take your suggestions seriously. Thank you!

Please rate your responses on a 5 point scale by placing an "x" in the applicable cell. Add comments at the conclusion of each section.

Utility of Meeting:

<table>
<thead>
<tr>
<th>Poor</th>
<th>Good</th>
<th>Superb</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>1</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>1</td>
<td>7</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>18</td>
<td>12</td>
</tr>
<tr>
<td>1</td>
<td>9</td>
<td>18</td>
</tr>
</tbody>
</table>

Meeting Arrangements:

<table>
<thead>
<tr>
<th>Poor</th>
<th>Good</th>
<th>Superb</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>8</td>
<td>14</td>
</tr>
<tr>
<td>6</td>
<td>10</td>
<td>11</td>
</tr>
</tbody>
</table>

Flow of Meeting:

<table>
<thead>
<tr>
<th>Poor</th>
<th>Good</th>
<th>Superb</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>0</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>19</td>
</tr>
</tbody>
</table>

Stated objectives of meeting were met
Dialogue was useful
I support the efforts being made
Next steps are clear
Meeting was a good use of my time

Advance notice of the meeting
Meeting Room Accommodations
Advance materials for meeting were useful
Advance materials were received with time to review

Started on time
Clear objectives for meeting
Agenda followed or appropriately amended
Facilitation was effective
The "right" people were at the meeting
What worked?

• Discussions (small groups and round table), dialogue, information sharing
• Facilitators
• Participation of those present & idea sharing
• Good mix of people
• Networking opportunities
• APHL representative helpful
• Process, format of meeting

What could be improved?

• More partners invited and present (diversity...i.e. physicians, university professors, customers that order lab services or interface with labs, environmental, H2O, air quality, and veterinarian labs)
• More advance notice of assessment with start/ end times stated clearly several weeks in advance
• Clearer objectives & clearer agenda
• Provide hard-copy and electronic copy of instrument and glossary
• No defined system - define the system better
• Wording of some of the assessment questions should be changed to clarify intent and make them universal to all lab systems
• Some standards on the instrument had sub-categories that needed to be split out of the group; others were too broad
Would you participate in this process again?

Yes  No
34  3

Do you see this as a helpful tool and process?

Yes  No
36  1

Thank you, any other comments are welcome.

- Lunch/registration fee was very high for a bagged lunch and snacks - more water needed, more variety needed on food options
- Cover more topics on first day, less on second day
- Might be useful to re-stage this assessment due to lack of definitions and lack of varying partners
- Not promoted as a pilot project in which only 9 states are participating