

New Mexico Public Health Laboratory System Assessment

May 6, 2008

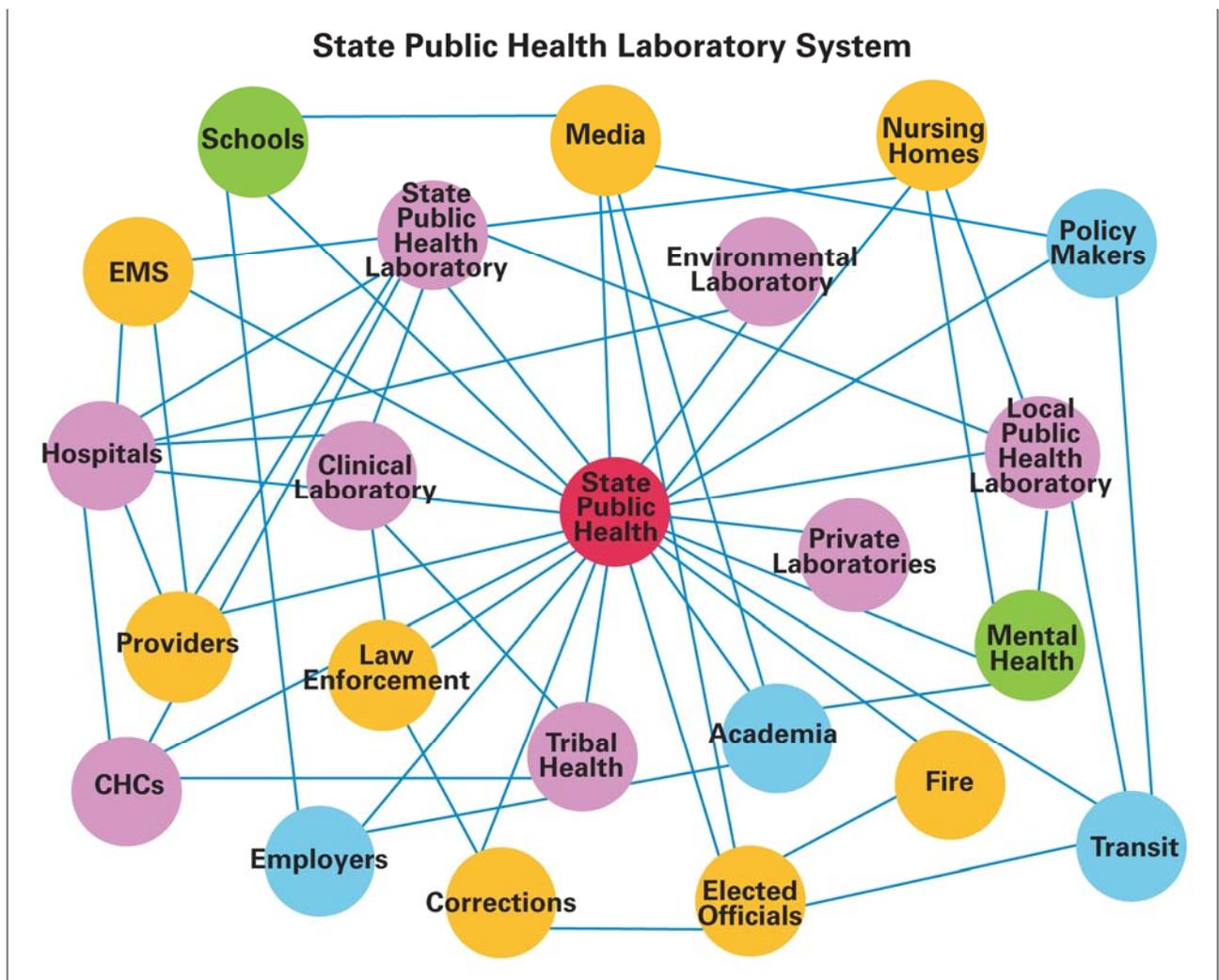


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EXECUTIVE SUMMARY

New Mexico held an assessment of the State Public Health Laboratory System on May 6, 2008. The assessment 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. The instrument incorporated the ten Essential Public Health Services and the eleven Core State Public Health Laboratory Functions.

The New Mexico State Public Health Laboratory System scored as follows:

Optimal Activity - Greater than 75% of the activity described within the question is met within the state public health laboratory system

Essential Service #2: Diagnose and Investigate Health Problems and Health Hazards in the Community

Significant Activity - Greater than 50%, but no more than 75% of the activity described within the question is met within the state public health laboratory system

Essential Service #1: Monitor Health Status to Identify Community Health Problems

Essential Service #5: Develop Policies and Plans that Support Individual and Community Health Efforts

Essential Service #6: Enforce Laws and Regulations that Protect Health and Ensure Safety

Essential Service #7: Link People to Needed Personal Health Services and Assure the Provision of Healthcare when Otherwise Unavailable

Moderate Activity - Greater than 25%, but no more than 50% of the activity described within the question is met within the state public health laboratory system

Essential Service #3: Inform, Educate, and Empower People about Health Issues

Essential Service #8: Assure a Competent Public Health and Personal Health Care Workforce

Essential Service #9: Evaluate Effectiveness, Accessibility, and Quality of Personal and Population- based Services

Minimal Activity - Greater than zero, but no more than 25% of the activity described within the question is met within the state public health laboratory system

Essential Service #4: Mobilize Community Partnerships to Identify and Solve Health Problems

Essential Service #10: Research for Insights and Innovative Solutions to Health Problems

Next Steps were compiled into three categories, including *Communication* (formal communication plan, regular stakeholder meetings, increase communication venues, laboratory potential of laboratory advisory group), *Preparedness* (continuity of operations planning, system personnel, future employees), and *Effectiveness* (metric development, system evaluation).

Overall, the stakeholders felt that this was a worthwhile process. They recommended an additional meeting before the end of the year, with the participation of key policy and decision makers in attendance.

INTRODUCTION

The Association of Public Health Laboratories (APHL), in conjunction with the Centers for Disease Control and Preventions Division of Laboratory Systems, developed the State Public Health Laboratory System Assessment using the Ten Essential Public Health Services as the measurement tools. In order to evaluate the capacity of the laboratory system, it is necessary to evaluate not only the laboratory, but the system which includes those who analyze the samples, those who use the results, and those who participate in the delivery of samples and results.

This report will describe the discussion that occurred during the New Mexico State Public Health Laboratory System Assessment that occurred on May 6, 2008.

BACKGROUND

*“A successful National Laboratory System is dependent on the creation of fully integrated and coordinated networks in every state. The goals of the National Laboratory System are to support voluntary, interdependent partnerships through public-private collaboration, for assurance of quality laboratory services and public health surveillance.”*¹ In order to achieve a successful National Laboratory System, each state must evaluate its own laboratory system. The process of bringing all parties to the table to discuss the current system will highlight current strengths and weaknesses which will lead to the development of a strategic plan to enhance the entire system. The process will also impart knowledge and understanding of the part each partner plays in the system. Ultimately, this process can be used as a tool to educate lawmakers in their policy development, resulting in improvement in the health and well-being of the citizens of New Mexico.

The State Public Health 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 expected benefits of the assessment process are as follows:

- Improving communication and collaboration, by bringing partners (public health, commercial, other laboratories and key constituencies) to the same table.
- Educating 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.
- Strengthening 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.

- Identifying strengths and weaknesses that can be addressed in quality improvement efforts.
- Creating a better articulation of resources needed to improve the SPH Laboratory System.
- Identifying resources to implement state public health laboratory system improvements.
- Providing a benchmark for public health laboratory system practice improvements, by setting a “gold standard” to which public health systems can aspire.

The following concepts were used to develop the Public Health Laboratory System Standards:

1. The standards are designed around the ten 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 improvement. System partners can 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.

The Ten Essential Services

The Essential Services were developed by the Core Public Health Functions Steering Committee (DHHS) in 1994 and published in a statement entitled Public Health in America. The Essential Services are public health activities that should be undertaken in all states and communities. These Essential Services are:

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.²

In addition, the APHL developed a set of eleven core functions of state public health laboratories. The core functions, which are described as “a role assumed the by the laboratory that underlies the laboratory’s ability to support public health” are broader functions and elements that are required to ensure the capability to execute the essential services. The core functions are:

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 communication³

Focus on the Overall State Public Health Laboratory System

The state public health laboratory system is composed not only of the Scientific Laboratory Division (SLD), but any organization that is involved with the biological, environmental, or toxicological testing, whether they request the analysis, use the results, or perform vital services. It is important to identify all organizations that are involved in this system.

SLD has a leadership role in:

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

Optimal Level of Performance

The State Public Health Laboratory System Performance Measurement Program instrument used during the assessment process describes an optimal level of performance and capacity. Optimal standards provide benchmarks which can be used to identify strengths and areas for improvement. Optimal standards also provide a level of expectation that can be used to advocate for new resources or needed improvements in order to better serve the population.

Process of Improvement

The State Public Health Laboratory System Performance Measurement Program is intended to serve as a process of improvement. The assessment process will identify the system's strengths and areas where improvement is needed. System improvement plans should be developed and implemented.

ASSESSMENT PROCESS

SLD's Deputy Director and Quality, Safety, Security, and Emergency Preparedness (QSSEP) Director coordinated the assessment process. The first step in determining who the partners were was to have each bureau list their key partners. Once that list was received and reviewed, several brainstorming sessions were used to further develop the list. Fifty-seven partner agencies (listed below) were invited to participate in the process:

DOH: Secretary, Communications, Chief Medical Officer, IT, PHD Director, Districts 1/3, 2, 4, 5, HIV Program, STD Program, Hepatitis Program, Human Resource Bureau, Epidemiology & Response Division, Office of Border Health, Office of General Council, Finance, TB Program, Division of Policy & Performance, Office of American Indian Health, Administrative Services Division,

NMED: Air Quality Bureau, Drinking Water Bureau, Surface Water Bureau, Radiation Control Bureau, Groundwater Bureau, Districts 1, 2, 3, 4, 5,

NM Department of Agriculture: Veterinary Diagnostic Services, Dairy Division

NM Department of Public Safety

NM Attorney General's Office

District Attorney's Office

DWI Czar

NM Office of Medical Investigator

Legislative Finance Officer

City of Albuquerque: Water Utility Division, Air Quality Division,

S.E.D. Laboratories

TriCore Reference Laboratories

Veteran's Affairs Hospital

Indian Health Services

Courier

Regulatory Agencies: Health Care Financing Administration, EPA, ABFT, FDA

State Senator
State Representative
Federal Bureau of Investigation
NM Emergency Managers Association,
NM Water & Wastewater Association,
NM Sheriff & Police Association
NM Rural Water Association
NM Hospital Association

The following twenty-seven individuals representing twenty-five different programs, divisions, or organizations attended:

DOH: Communications, IT, Public Health Offices, STD Program, Tuberculosis Program, Epidemiology & Response Division, Administrative Services Division, Division of Policy & Performance,
NMED: Air Quality Bureau, Drinking Water Bureau, Surface Water Bureau, Groundwater Bureau, Districts 1,
NM Department of Agriculture Dairy Division
NM Department of Public Safety
NM Attorney General's Office
District Attorney's Office
NM Office of Medical Investigator
Legislative Finance Officer
City of Albuquerque Air Quality Division,
Albuquerque Bernalillo County Water Utility Authority
S.E.D. Laboratories
Indian Health Services
Distribution Management Corp. (courier)
Federal Bureau of Investigation

They were placed in three groups that were lead by facilitators from the Department of Health (but not from SLD). Each group had two theme-takers to record notes. These theme-takers were from SLD and were allowed to discuss and answer questions. SLD's Director, Deputy Director, and QSSEP Director were present in the rooms for information only.

The groups were asked to discuss the components for each essential service and give the State Public Health Laboratory System a ranking based on the following:

No Activity	0% or absolutely no activity.
Minimal Activity	Greater than zero, but no more than 25% of the activity described within the question is met within the state public health laboratory system
Moderate Activity	Greater than 25%, but no more than 50% of the activity described within the question is met within the state public health laboratory system
Significant Activity	Greater than 50%, but no more than 75% of the activity described within the question is met within the state public health laboratory system
Optimal Activity	Greater than 75% of the activity described within the question is met within the state public health laboratory system

They were also asked to suggest “Next Steps” to help improve the system.

ASSESSMENT RESULTS

There are two types of results from this process: Scoring and Next Steps. However, the discussions that were used to deliberate the scoring and suggest the Next Steps were also recorded. They are not discussed in detail in this text, but are presented in Appendix A.

Scoring

The scoring of the Essential Services serves as a general guide for the State Public Health Laboratory System. It should be noted that the overall Essential Service scores serve as a composite of the Indicator and Key Idea scores, and as such, do not reflect the detail within the scores. An explanation and detail of the scoring process is presented in Appendix B. The compiled results are as follows:

Optimal Activity - Greater than 75% of the activity described within the question is met within the state public health laboratory system

Essential Service #2: Diagnose and Investigate Health Problems and Health Hazards in the Community

Significant Activity - Greater than 50%, but no more than 75% of the activity described within the question is met within the state public health laboratory system

Essential Service #1: Monitor Health Status to Identify Community Health Problems

Essential Service #5: Develop Policies and Plans that Support Individual and Community Health Efforts

Essential Service #6: Enforce Laws and Regulations that Protect Health and Ensure Safety

Essential Service #7: Link People to Needed Personal Health Services and Assure the Provision of Healthcare when Otherwise Unavailable

Moderate Activity - Greater than 25%, but no more than 50% of the activity described within the question is met within the state public health laboratory system

Essential Service #3: Inform, Educate, and Empower People about Health Issues

Essential Service #8: Assure a Competent Public Health and Personal Health Care Workforce

Essential Service #9: Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-based Services

Minimal Activity - Greater than zero, but no more than 25% of the activity described within the question is met within the state public health laboratory system

Essential Service #4: Mobilize Community Partnerships to Identify and Solve Health Problems

Essential Service #10: Research for Insights and Innovative Solutions to Health Problems

Next Steps

The suggested *Next Steps* were determined by the group assigned to that specific Essential Service and were developed based on the discussion on that Essential Service. Both the Discussions and the Next Steps can be found in Appendix A. For convenience, the suggested ‘Next Steps’ for each Essential Service are listed below.

Essential Service #1: Monitor Health Status to Identify Community Health Problems

1. Stakeholder meetings: more concrete collaboration, share awareness.
2. Diagnosis of issues at community level.
3. Get back to “prevention” for chronic illness.
4. “Power in Numbers” when developing LIMS.
5. Newsletter to share ideas, information, resources (DOH, Epidemiology Report).
6. Quarterly meeting to share ideas, info, etc.

Essential Service #2: Diagnose and Investigate Health Problems and Health Hazards in the Community

1. More Exercises with lab and other agencies
2. Upgrade communications to increase redundancy
3. Ensure cross-training for information technology surge capacity
4. Have multiple contingency plans (i.e. backup everything 3 levels deep).

Essential Service #3: Inform, Educate, and Empower People about Health Issues

1. SLD needs an advisory group to advocate, to procure funding and to market the Lab.
2. Designate a SLD liaison to the DOH Communications Director. This would also include creating or expanding a public education and outreach program.

Essential Service #4: Mobilize Community Partnerships to Identify and Solve Health Problems

1. Need to have regular meetings based on regions, functional areas, common interests, etc, - between SLD and stakeholders to exchange ideas, explore ways stakeholders can share resources among themselves and the systems, and give all parties a forum at which to express needs and concerns.
2. An advocacy group needs to be convened to lobby for SLD.
3. Develop a formal communication plan for the public health laboratory system.
4. Stakeholders want to contribute – there needs to be a mechanism in place to do this.

Essential Service #5: Develop Policies and Plans that Support Individual and Community Health Efforts

1. Develop a System Advisory Group
2. Begin an external laboratory newsletter that goes out to all partners
3. Develop DOH and lab liaisons. OMI has used this successfully.
4. Have a Public Relations person (such as a retired journalist who would be happy working ½ or ¼ time) who knows how to deal with, approach and hook the media.
5. Four types of stories need to be put out there:
 - a. Emergency information;
 - b. Warnings (e.g. watch your pet if you live in this region because of increased rabies/plague);
 - c. Prevention (get your influenza vaccine);
 - d. Positive events/accomplishments.
6. Get an interagency liaison at the legislative level to ensure that work between agencies isn't redundant. See 5.2.1 #2
7. Set up a policy development committee for PH System to develop/change policies in order to improve the PH system. This would also include reviewing legislative bills with an eye on the impact it will have on the PH system.
8. Look at other states to see how they deal with these issues
9. There should be a second meeting with the same people as today and with upper people in DOH and beyond. This follow-up meeting should occur within the next year, preferably before the legislative session. An early fall meeting would be useful to have an impact on the session.
10. Of course, all these require money.

Essential Service #6: Enforce Laws and Regulations that Protect Health and Ensure Safety

1. There needs to be better communication with partners about regulation changes.
2. There needs to be work on the laws/regulations that require scientists testifying in court. One suggestion is incorporating video conferencing.
3. The laboratory should be proactive in communicating needed changes to legal representatives and public defenders.
4. The laboratory needs to improve turn-around times for samples where people are in jail. The laboratory is always identified with the prosecution, which hurts the laboratory's neutral position. Laboratory data can be either exculpatory OR inculpatory.
5. The laboratory should be present at yearly public defenders' training and yearly judges' meeting of judges to explain laboratory results and the laboratory's neutrality.
6. When laws are being considered, ensure that DOH is involved.

Essential Service #7: Link People to Needed Personal Health Services and Assure the Provision of Healthcare when Otherwise Unavailable

1. Biannual survey of the stakeholders to see what the needs are and where funds are needed.
2. Meet in December to write a budget proposal and present to the legislature as a united front.
3. Stakeholders and SLD meet together to decide how the funding should be allocated. This would also include supporting each other when testifying during legislature.

4. Official protocols for communications. This would include identifying partners, identifying means of communication, protocols (sampling, preservation, hold times, testing schedule, results turn-around, etc)
5. Official protocol for sample collections (collection container, maximum hold times, turn around times, testing schedule, etc.). This would also include data reporting.
6. Implement a survey/report card evaluating various laboratory processes, including results reporting times, hold times and turn around times.
7. Evaluate the possibility of developing an advisory group for SLD.

Essential Service #8: Assure a Competent Public Health and Personal Health Care Workforce

1. The state needs to work on better pay and better management.
2. Overall training should be standardized, with a management program installed to oversee statewide training.
3. Develop a fair distribution of training opportunities. Don't always give the same 'squeaky wheel' access to all of the training.
4. Link specific training to job description and evaluations.
5. Better promotion, collaboration and outreach with local schools to support education and future employees. This would include working on formalized programs with educational institutes to attract recruits. This also includes working with elementary school to develop interests in sciences and mathematics.
6. There needs to be a formalized communications policy and a corresponding program for inter-bureau communication procedures.
7. The state should create more positive media, public service announcements, and promote media literacy.

Essential Service #9: Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-based Services

1. Consider developing objectives and implementing a metrics system to determine current capability and capacity as well as improve services and increase funding. (Definition of a metrics system is a carefully defined parameter given a numeric value). The evaluation process should include surveys of stakeholders.
2. Have a contingency plan in place to outsource or have memorandum of understandings in place in the event the laboratory is pushed beyond capacity.

Essential Service #10: Research for Insights and Innovative Solutions to Health Problems

1. Share research information.
2. Involve universities in research and discussions.
3. Define "research." Does it include trending and surveillance or is it strictly "hard" science?

DISCUSSION

While the participants agreed that the assessment process was worthwhile, it was also noted that an imitation of the process was that many of the key players were not in attendance. Many partners had either no representation, or the key decision and policy makers were not present. Another limitation of the process was that there were times that members of the group had no knowledge of the topic or what the system was doing to address that topic.

However, the process of bringing together the State Public Health Laboratory System partners highlighted the diversity of the partners and their needs. One comment received was that “while they knew what we do, they really didn’t know what we did”.

Many of the suggestions were SLD specific, and SLD will work on achieving those goals. However, in the spirit of the *Public Health Laboratory System* assessment, the following **Suggested Topics** were developed by determining common themes from the individual Essential Services ‘Next Steps’ described above.

SUGGESTED INITIATIVES

I. **Communication**

A. **Develop a formal Communication Plan to include all partners of the State Public Health Laboratory System. This would include the development of departmental/agency liaisons.**

Many of the participants indicated that while there was informal communications happening between the various partners, there did not appear to be a formalized communication process. This would be especially critical during policy development or during funding requests. One scenario given was if there was increased funding for super blitzes throughout the state, but no follow through with funding for the court systems, penal system, or for SLD’s analysis or testimony costs, failure is inherently built into the system.

It is also critical to maintain continuity between the agencies when key personnel leave. Many times that communication tree knowledge leaves when the person leaves. Having established agency liaisons would also help ease the transition and maintain communication between agencies.

B. **Regular Stakeholder meetings.**

These meetings would include those with common interests, those with similar functional areas, or those with regional interests. These meetings could also revolve around regulation development/changes, funding opportunities, or legislative concerns. These meetings would serve to increase collaboration and share awareness. These meetings would be useful to develop cohesive legislative funding requests.

C. Increase communication venues.

These venues would be useful to disseminate emergency information, warnings, prevention, and positive events or accomplishments to the general public.

1. Update websites to include pertinent information.

An updated/expanded website would allow potential users easy access to sampling requirements, prevention information, etc.

2. External newsletters.

These newsletters could discuss proposed/new regulations, new testing requirements, new tests, etc. This information would be targeted to current users, but would require the communication plan to be developed in order to determine who would receive the newsletters.

3. Public Relations

The SPHLS needs to promote itself. A public relations officer would be able to disseminate pertinent information to all media outlets. The NM DOH has a communication director and it may be possible to use this position to get more information out to the public. In addition, more positive information, such as accomplishments and public service announcements needs to be disseminated.

4. Publish Protocols

Protocols should be established and available for dissemination to partners. This could include sampling protocols, testing protocols, data transmission protocols, and follow-up protocols. These could be available via agency websites, but they need to be available for ready dissemination when asked for.

D. Laboratory Advisory Group

Evaluate the feasibility of a laboratory advisory group for SLD. This would entail determining which states currently have advisory groups for their state laboratories, how they determined their need for an advisory group, how the advisory group was developed, and if the advisory group has been effective in the overall performance.

II. Preparedness

Preparedness can range from meeting the next emergency to meeting the needs of the current personnel to meeting the needs for employees in the future.

A. Continuity of Operations Planning (COOP).

The entire system needs to plan for the continuity of operations ranging from if one system component is out of operations to if the entire system is out of operations. The Pandemic Influenza planning that the NMDOH is currently developing is an example. This will need to be a concerted effort between all members of the system.

The COOP would include transportation, personnel, and information technology contingencies, up to three deep.

B. System Personnel

The state public health laboratory system needs to maintain a stable and competent employee workforce. The following suggestions would help retain the current workforce.

1. Salaries and Benefits

The state public health laboratory system needs to evaluate the current state of salaries and benefits in comparison to the private sector to determine how to better retain current employees. At the same time, the system needs to include costs of retraining, certifications, and time lost when employees leave.

2. Training

All employees need to have access to training concerning their specific duties, their organization, and their roles in the systems. Care needs to be given to ensure that all employees receive the training, not just those who are vocal (squeaky wheels). The training needs to be standardized to ensure effectiveness. This could be achieved by having a statewide management system develop standardized training.

An effective way to implement the training would be to link specific training to job descriptions and evaluations.

Specific consideration should be taken in the training of managers as they influence the retention of employees and also the efficiency of the system.

C. Future Employees

It is imperative that the state public health laboratory system look ahead to cultivate future employees. Student enrollment in sciences and mathematics has dropped, leaving all science and mathematical fields to compete for those fewer potential employees. In order to increase awareness of the public health laboratory arena, it was suggested that the system promote itself throughout the educational system by collaboration and outreach.

1. Higher Education

It was suggested that the system develop formalized programs with various higher educational institutions to attract recruits. This could include internships, work study, collaborations with student groups/projects, presenting programs/classes to the students, hosting workshops, or presenting at job fairs. Students will not know of job opportunities if they don't know we exist.

2. Middle/High School

At this level, the system could support the middle/high school students through partnerships with the teachers. This could include support of science/math fairs, demonstrations, and field trips.

3. Elementary Schools

It is critical to develop the interest in sciences and mathematics at this level. This could be done by supporting the teachers with science/math projects, field trips, and demonstrations.

III. Effectiveness

A. Metric Development

The State Public Health Laboratory System needs to develop objectives and implement a metrics system to determine current capability and capacity as well as improve services and increase funding. Careful consideration is needed in defining the metrics systems which should include a defined parameter with a numerical value. The metrics would be a valuable tool to determine if the system is meeting its objectives, and where the problems are. If properly defined, the metrics would also be useful to see where the system would need more resources, including funding.

B. System Evaluation

The State Public Health Laboratory System needs to develop a method to survey stakeholders in order to evaluate processes, such as communication, data reporting, etc. The evaluations would be useful in determining where the system is working and where it isn't. It would also be useful to determine whether the stakeholders' needs have changes. The evaluations should be used as part of the strategic planning of the system. The evaluations should be on a regular basis (i.e. annually or semi-annually).

CONCLUSION

SLD is only one component of the New Mexico State Public Health Laboratory System. However, as such, SLD will review these suggestions and consider which are feasible for SLD to initiate in order to improve and promote the functionality of the public health laboratory system. This process will be completed by September 1, 2008, at which time SLD will submit a report to their partners describing what actions SLD will undertake. However, we would strongly encourage our partners to take the suggestions back to their organizations in order to improve and promote their portion of the New Mexico State Public Health Laboratory System.

ACKNOWLEDGEMENTS

The background information was based on the APHL State Public Health Laboratory Assessment Instrument and User Guide.

The assessment team would also like to acknowledge the services of the New Mexico Department of Health facilitators: Katie Avery, Kate Rooney, and Penny Jimerson; and the theme takers from the Scientific Laboratory Division: Phill Baker, Celina Phelps, Chris McClelland, Pascale Leonard, Pam Morden, and Melissa Bell.

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1. Association of Public Health Laboratories. Definition of a State Public Health Laboratory System, May 24, 2007.
2. Public Health Functions Steering Committee: *Public Health in America*. July 1994.
3. Core Functions and Capabilities of State Public Health Laboratories: A Report of the Association of Public Health Laboratories (CDC 20Sept02)

APPENDIX A

May 6, 2008 Notes

Essential Service #1: Monitor Health Status to Identify Community Health Problems

Indicator 1.1: Surveillance Information Systems

Key Idea 1.1.1: Surveillance Information Systems

Participants discussed what the Sentinel laboratories were and how it related to the public health laboratory system. They also believed that there was lack of money for state of the art equipment. Most of the participants were unaware of the surveillance system.

Vote: 1 Blue, 8 Green - with Green (Optimal Activity) being the consensus vote.
The blue vote indicated that their vote was based on lack of knowledge of the system.

Key Idea 1.1.2: The SPH Laboratory System participates in national surveillance systems for state and national linkage.

There was minimal awareness in some agencies about the surveillance systems. For example, some in Environment Department knew of FoodNet and PulseNet. This led to discussion about SLD's participation in other surveillance systems such as FERN, LRN, and EID.

Vote: 3 Blue, 8 Green - with Green (Optimal Activity) being the consensus vote.
The blue vote indicated that their vote was based on lack of knowledge of the system.

Key Idea 1.1.3: SPH Laboratory System partners collaborate to strengthen surveillance system.

The group discussed several aspects that would help strengthen the surveillance system. They asked if there were continuity of operations planning happening both at SLD and with the rest of the system. They were also interested in database development and better computer systems (both at SLD and elsewhere), especially the connectedness of those systems. It was explained how the use of bioterrorism funds improved both IT and instrument capabilities at SLD and other agencies.

They noted that friendly competition between groups, such as SLD, SED, and TriCore, was a good collaboration tool. They also noted that while there was good collaboration, it was maybe too informal. They expressed the need to formalize the collaborations.

Vote: 3 Yellow, 5 Blue, 1 Green – with Blue (Significant Activity) being the consensus vote.
The yellow vote indicated their votes were based on lack of knowledge, and the collaboration being too “informal”.
The green vote indicated that there was very good collaboration (clinical partner).

Indicator 1.2: Monitoring of Community Health Status

Key Idea 1.2.1: SPH Laboratory System has a comprehensive system to gather data, organisms, and samples to support evaluating community environmental health.

There are too many informal relationships within the system instead of formal relationships between bureaus. An example is that people within bureaus may call counterparts to discuss situations but do not document who they called. This creates problems if/when a person or persons with specific knowledge leave the system, because a communication gap opens up in the system. There should be more formal meetings and relationships that are documented.

Some bureaus need better equipment, while others are more up to date. Most IT systems throughout the public health laboratory system can search and access data, but can not pool or pull from different databases for comparison. For example, the actual monitoring and sampling systems (e.g. water) are great. However, the IT issues with the databases, including difficulty in using (especially with federal databases) and inability to access more than one at a time, is a problem.

Vote: 1 Red, 4 Yellow, 4 blue – with Yellow (Moderate Activity) being the consensus vote. The red vote indicated that the systems were not comprehensive.

Key Idea 1.2.2: The SPH Laboratory System identifies and detects infectious diseases and contributes to a statewide surveillance system.

Some bureaus report that their data software is not user friendly, thus leading to problems with data reporting. Databases crash often and are very counter intuitive.

Drug resistant microbes are not being formally reported. Some feel that these organisms should be reportable to a database or the like.

This is reflected in the informal relationships between bureaus. Someone might see a drug resistant organism, call a colleague in another bureau to inform but no formal records are made.

The system is doing a good job with known and historical identification. Where the system has problems is with emerging organism identification and drug-resistant testing. There also needs to be a better system of pooling data, with better, more formal collaborations.

Vote: 4 Yellow, 3 Blue, 2 Green, with a second vote of 4 Yellow, 5 Blue – with Blue (Significant Activity) being the consensus vote.

The green votes indicated that we do a good job of identification, but don't always get the credit (publicity).

The yellow vote indicated the need for better work with emerging and drug resistant organisms.

Key Idea 1.2.3: The SPH Laboratory System provides information to support monitoring of congenital, inherited, and metabolic diseases of public health significance.

There was concern that the state was sending out newborn screening to Oregon. It was explained that the decision to send these tests to Oregon was based on the fact that the screening panel went from 13 to 26 tests, that NM need greater than 75,000 births/year to make the test cost effective, and we have less than one-third the number of births, and finally, Oregon has established specialists available for counseling, which NM does not have.

Vote: 1 Yellow, 8 Green - with Green (Optimal Activity) being the consensus vote. The yellow vote indicated lack of knowledge about the system.

Key Idea 1.2.4: The SPH Laboratory System generates reliable information about chronic diseases of public health significance.

There is no database to report chronic disease conditions, such as renal insufficiency, etc. If there were a database, the state would have to rely on clinicians to report incidence in their patients, which may or may not happen regularly. The state would need funds to begin any program to report and track chronic conditions.

Questions brought up were:

Are other labs (not SLD) performing testing? Aren't chronic diseases reportable?

Vote: 3 White, 6 Red – with Red (Minimal Activity) being the consensus vote.

Overall, the votes were based on lack of knowledge. The group may not represent accurate vote because unaware of system role. It was mentioned that there is a DOH Chronic Diseases division.

Key Idea 1.2.5: The SPH Laboratory System has a secure, accountable and integrated information management system for data storage, analysis, and retrieval, reporting and exchange.

Some bureaus have databases that will be able to contact and transfer information with LIMS but LIMS is not functional yet. LIMS sounds great on paper but the fear is that it will end up like share and other failed systems. Once the LIMS is up and running, provided it works well, it will be a great tool for reporting, data basing, and tracking information.

Potential action items would include:

- Have a stakeholder meeting to formalize communications between bureaus.
- Start a database to track emerging or reemerging infectious diseases, such as drug resistant organisms.
- Efforts should be made to start diagnosing these diseases at the community level.
- Prevention programs should be considered and information should be disseminated through the media.
- The system must address the database problems that have been encountered by some bureaus.
- An SLD newsletter to the system which summarizes reports and data.

Vote: 1 White, 7 Red, 1 Yellow – with Red (Minimal Activity) being the consensus vote.
The yellow vote indicated that there seems to be significant positive progress
The white vote expressed cynicism of IT systems.

Essential Service #1 Next Steps:

1. Stakeholder meetings: more concrete collaboration, share awareness.
2. Diagnosis of issues at community level.
3. Get back to “prevention” for chronic illness.
4. “Power in Numbers” when developing LIMS.
5. Newsletter to share ideas, information, resources (DOH, Epidemiology Report).
6. Quarterly meeting to share ideas, info, etc.

Essential Service #2: Diagnose and Investigate Health Problems and Health Hazards in the Community

Indicator 2.1: Appropriate State of the Art Testing

Key Idea 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 of public health significance.

SPH System partners have been impressed by the quality of the work done in Toxicology, but not the turn around time, while other partners are impressed by both the quality and the turn around time of SLD work.

The group felt that for the most part, the scientific staff has the expertise needed for the work. There was concern that although there was quality testing, turn around issues were big. Paper reports are not adequate. Electronic versions would be much better. The new LIMS should help here. It was noted that electronic copies are not legal documents. However, death certificates have electronic signatures that legalize the electronic copies. Participants working with the courts thought it would be nice if reports were enough in court, but often that isn't the case. There was a question about sample preservation requirement after testing for samples.

Vote: 1 Blue, 7 Green – with Green (Optimal Activity) being the consensus vote. The blue vote indicated turnaround times as the reason for their vote.

Indicator 2.2: Collaboration and Networks

Key Idea 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.

The Laboratory System is doing well with this (i.e. HAN); however IT is the weakest area. There is a lack of redundancy in the telecommunications system. If there is an outage, there is no backup. There was discussion about continuation of operations plans. There were questions about having more exercises and inviting the partners to participate in those exercises.

Vote: 4 Blue, 3 Green – with Blue (Significant Activity) being the consensus vote. Vote discussion included the need to increase the redundancy for communications

Indicator 2.3: Continuity of Operations Plan and Surge Capacity

Key Idea 2.3.1: The SPH Laboratory System has the necessary capacity, authority, and other preparations in place to assure a rapid response to public health emergencies.

The discussion revolved around the issue of while we have the authority, we may not have the capacity needed to fulfill all roles.

Vote: 4 Blue, 3 Green – with Blue (Significant Activity) being the consensus vote.

Essential Service #2 Next Steps:

1. More Exercises with lab and other agencies
2. Upgrade communications to increase redundancy
3. Ensure cross-training for information technology surge capacity
4. Have multiple contingency plans (i.e. backup everything 3 levels deep).

Essential Service #3: Inform, Educate, and Empower People about Health Issues

Indicator 3.1: Outreach and Communication with Partners

Key Idea 3.1.1: The SPH Laboratory System has an identified system of outreach and communication to inform about relevant health issues associated with laboratory services.

The group shared how the state public health laboratory system communicates with partners via the exchange of data and test results through presentations at conferences, conventions, and meetings; dissemination of information to the public in the form of statistics (i.e., MMWR); Public Information Officers (both DOH and ED) who inform the community of health concerns, prophylaxis and prevention. It was suggested that the State PHL needs a committee or advisory group of partners to provide feedback to the lab.

Vote: 4 Blue, 3 Green – with Blue (Significant Activity) being the consensus vote.

Indicator 3.2: Public Information

Key Idea 3.2.1: The SPH laboratory System creates and delivers targeted laboratory information to appropriate health partners.

The laboratory does provide information to health partners concerning proper sample collection and transportation requirements. There are web alerts posted on the DOH website when there is a health alert. SLD does not self-market, nor should it. As a public service entity, it would be inappropriate for the Lab to promote itself, and such activity might be perceived by private labs as competition. An advisory group may help the promotion aspect. The SPHLS does not have a mechanism in place to evaluate the usefulness of its information, tools, etc. However, the SPHLS does share information with public health officials.

Vote: 2 Yellow, 4 Blue – with Blue (Significant Activity) being the consensus vote.

Key Idea 3.2.2: The SPH Laboratory System creates and delivers targeted laboratory information to appropriate non-health partners and the public.

An example of a non-health care partner was given as Family and Maternal-Child Health. They do not provide medical care, but they do need information from SPHLS for decisions and policies. It was also agreed that while SLD probably does not need its own information officer, SLD could forward more information to the DOH PIO such as important updates and commendations for dissemination.

Vote: 6 Yellow, 1 Blue – with Yellow (Moderate Activity) being the consensus vote.

Indicator 3.3: Education.

Key Idea 3.3.1 Education and relationship building opportunities are employed to empower community partners.

While other departments are involved with public educations (Environment Department), it is not the role of SLD to be an educator. However, having said that, education is important for public acceptance of the procedures being done at SLD. This would include regularly updating sample collection and submission requirement on the website. There can be targeted email updates to specific parties with links to the DOH or SLD websites for further information. The group realized that the emphasis for this Key Idea was on educating the public, not communicating with other members of the SPHLS.

Vote: 5 Red, 2 Yellow – with Red (Minimal Activity) being the consensus vote.

Essential Service #3 Next Steps:

3. SLD needs an advisory group to advocate, to procure funding and to market the Lab.
4. Designate a SLD liaison to the DOH Communications Director. This would also include creating or expanding a public education and outreach program.

Essential Service #4: Mobilize Community Partnerships to Identify and Solve Health Problems

Indicator 4.1: Constituency Development

Key Idea 4.1.1: Partners in the SPH Laboratory System develop and maintain positive relationships with each other and with other key constituencies.

SLD has many partners in the Public Health Laboratory System, including the Veterinary Diagnostic Services (animal reference samples), Office of Medical Investigator (autopsy clinical and toxicological samples), Epidemiology and Response Division (surveillance and outbreak specimens), Public Health Division (clinical samples), Environment Department (air, water, and soil testing), local fire departments (white powders, fire water run-off); local and state police (toxicology samples); FBI (suspect biological or chemical terrorism samples). The formal communication does appear to exist but it could involve an advisory/advocacy committee of stakeholders. Currently, there are personal relationships between the Environment Department and the chemists at SLD; and between public and legal system. Some in the group thought that communication is good right now—is there a need for improvement? It was also noted that all of the various entities relate to SLD but not necessarily to each other (i.e. Environment Department with city/county environment department). Questions brought up were:

- What would be a model for communication between stakeholders?
- How to identify which groups need to be talking with each other?

Vote: 3 Red, 2 Yellow, 1 Blue – with Red (Minimal Activity) being the consensus vote. It was repeated by some participants that some areas of communication are excellent, while other areas need improvement.

Indicator 4.2: Communication

Key Idea 4.2.1: The SPH Laboratory System communication plan is fully integrated with partners' and collaborators' communication plans.

Members of the SPHLS have communication plans for their respective organizations. However, the communication plans are not fully integrated, nor are they tested or evaluated on a regular basis.

Vote: 2 White, 1 Red, 2 Yellow, 1 Blue (revote was done and listed below)

Discussion between votes:

There is a system for communication, and we do communicate. However, do we have a formal, written plan for communication? Examples of the type of information that is not being transmitted to our stakeholders are:

1. SLD is short on chemists because of funding
2. Many attendees did not know about the new building.
3. New capabilities acquired by SLD – new tests to come on board.

It was suggested that ongoing committee discussions will allow other entities to become informed. SLD and DOH do have communications in place. Some research data has not been

reported in a timely fashion. It was suggested that a specified time frame be put into future contracts. The potential for a list serve, as well as an external newsletter were discussed. New developments could be posted either on the list serve or on the website.

Revote: 1 White, 3 Red, 1 Yellow, 1 Blue – with Red (Minimal Activity) being the consensus vote.

Key Idea 4.2.2: The SPH Laboratory System communicates effectively in a regular, timely, and accurate way to support collaboration.

Results are reported; if there's an outbreak or contamination issue, this is reported to the public. What had not been communicated to partners are new procedures that have been added without notifying certain stakeholders of the change.

Vote: 4 Red, 2 Yellow– with Red (Minimal Activity) being the consensus vote.

Indicator 4.3: Resources.

Key Idea 4.3.1: 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.

This is a very important point and stakeholders need to support and advocate both for the laboratory and for the system. SLD does not have a way to identify needs that stakeholders could assist with, or a way to express them to stakeholders. SLD needs something more systematic, to be pro-active rather than reactive. However, this brought up the question of how pro-active can SLD be when it's a state agency at the mercy of bureaucracy? It was described as a "constipated" process.

Vote: 1 White, 3 Red, 1 Yellow, 1 Blue – with Red (Minimal Activity) being the consensus vote.

Essential Service #4 Next Steps:

1. Need to have regular meetings based on regions, functional areas, common interests, etc, - between SLD and stakeholders to exchange ideas, explore ways stakeholders can share resources among themselves and the systems, and give all parties a forum at which to express needs and concerns.
2. An advocacy group needs to be convened to lobby for SLD.
3. Develop a formal communication plan for the public health laboratory system.
4. Stakeholders want to contribute – there needs to be a mechanism in place to do this.

Essential Service #4 Parking Lot:

1. Should SLD be subdivided (chemistry, water, clinical, etc) to be less cumbersome? Or will this result in competition for funds and splinter the groups?

Essential Service #5: Develop Policies and Plans that Support Individual and Community Health Efforts

Indicator 5.1: Role in Laboratory Related Policy Making

Key Idea 5.1.1: The SPH Laboratory and system partners contribute their expertise and resources to inform and influence policy.

Some partners felt that the system does contribute and others look to them for leadership. This is helped by the laboratory systems participation with other agencies. However, not all partners felt the laboratory system was heard, as policies are being made without asking for laboratory input. Also, many mandates are implemented without necessary funding needed for implementation, equipment, or personnel.

Other agencies that would have public health laboratory system connections would be education, corrections, and behavioral health.

Laboratory reporting of reportable diseases was discussed. One partner felt that the laboratory system could do more. He felt the laboratory didn't push for reporting, so he would give them a B.

It's hard to determine who is responsible for policy making. It's hard to tell if the laboratory system is responsible, or if it should be epidemiology. However, it was noted that SLD should be neutral in many aspects. SLD's role should be to provide unbiased results and data based on lab tests. SLD shouldn't be viewed as bringing a biased viewpoint or agenda to a court hearing, for example.

Vote: 1 Yellow, 4 Blue, 3 Green – with Blue (Significant Activity) being the consensus vote.

Further discussion after the vote noted that communications could be improved, but who would be responsible? Should the Secretary be involved in improving communications?

Key Idea 5.1.2: Policies and plans are informed by science and data.

The group felt that data was not being made available to partners nor was it even being used for background information. This was in part due to the lack of a complete computer/LIM system. Are there political considerations when asking for money to develop surveillance for current problems, such as drug use, etc?

The group felt that DOH is responsible for policy development and changes, and to get the data from the laboratory system. The system should be talking with legislators and decision makers about state and regional concerns. They asked whether the Secretary of Health visited the laboratory, and were told that he has visited.

Vote: 5 Blue, 3 Green – with Blue (Significant Activity) being the consensus vote.

Indicator 5.2: Partnerships in Public Health Planning.

Key Idea 5.2.1: The SPH Laboratory System obtains input from diverse partners and constituencies to develop new policies and plans and modify existing ones.

The group felt that this event was addressing the question of obtaining input. The reality is that the system has great goals, but these are difficult to attain. The group felt that there was dialogue between the laboratory system and partners, including private and community advocacy groups, especially for prevention. They have worked with Department of Public Safety to be pro-active in terms of developing new polices and plans. It's important to have agencies work towards the same goal to coordinate and pool resources. The Department Secretaries should work with each other to ensure that no programs fall through the cracks and to share information. This would alleviate duplication of programs.

No one knew if the laboratory or DOH had a liaison for other agencies to work with. The consensus is that someone at the cabinet level should be the liaison, with a liaison for agency-to-agency work and one for division-to-division work. Who's the right person?

Vote: 2 Yellow, 6 Blue – with Blue (Significant Activity) being the consensus vote.

Explanation of votes: One yellow vote felt there was a disconnect in the system but it's not necessarily the laboratory. There are lots of missing links. The other yellow vote felt the system is working adversely against funding. An example is DWI and the lab, with the increasing number of subpoena's pulling scientists out of the laboratory, along with increasing the number of compounds being tested for, all without an increase of funding or scientists.

Key Idea 5.2.2: SPH Laboratory System issues are represented in state-level plans and policies.

There is good representation in state-level plans and policies for emergencies, but not with routine work.

Vote: 8 Blue – with Blue (Significant Activity) being the consensus vote.

Indicator # 5.3: Dissemination and Evaluation

Key Idea 5.3.1: Plans and policies are widely disseminated to inform members of the SPH Laboratory System, other stakeholders and the public.

There was discussion about the creation of a newsletter that would go out to all laboratory system partners, not just DOH, would be informative. There is no work or advisory group to evaluate the big picture, although this may be happening at a different level, such as at the program level.

There were conflicting thoughts concerning whether information is routinely communicated. One group felt that positive information is not routinely communicated. One participant stated they were learning to push positive stories in the news media. Another group stated that the

stories are going out, but the media isn't picking them up. They tend to pick up the negative stories.

HAN and DOH newsletter aren't enough to disseminate information. Some partners working within the court system felt that the information is reaching some of the partners.

Vote: 2 Yellow, 6 Blue – with Blue (Significant Activity) being the consensus vote.

Explanation of votes: Yellow vote: One partner feels that the system is good in giving his organization information, but not to the community as a whole.

Blue: One participant indicated there is no control of what is disseminated so it is unfair to ding the laboratory.

Key Idea 5.3.2: SPH Laboratory System plans and policies are routinely evaluated and updated.

One partner thought there were no evaluations or reviews because of limited resources. There is the attitude of 'if it ain't broken, don't fix it'. There should be reevaluation for efficiency and best use of resources. Partners are not routinely asked for feedback. The Department of Public Safety did get to test different breathalyzers before the lab bought the new ones. This was greatly appreciated. It was also suggested that there should be more meetings with legislative interim committees. Meeting with legislators during the interim should be a priority in order to advocate for the needs of the SPH Laboratory System. These committees are more casual and the legislators are much more approachable at this time than during the legislative session.

Vote: 1 Yellow, 6 Blue, 1 Green – with Blue (Significant Activity) being the consensus vote.

Explanation of votes: Green voted this way because this meeting occurred.

Essential Service #5 Next Steps

1. Develop a System Advisory Group
2. Begin an external laboratory newsletter that goes out to all partners
3. Develop DOH and lab liaisons. OMI has used this successfully.
4. Have a Public Relations person (such as a retired journalist who would be happy working ½ or ¼ time) who knows how to deal with, approach and hook the media.
5. Four types of stories need to be put out there:
 - a. Emergency information;
 - b. Warnings (e.g. watch your pet if you live in this region because of increased rabies/plague);
 - c. Prevention (get your influenza vaccine);
 - d. Positive events/accomplishments.
6. Get an interagency liaison at the legislative level to ensure that work between agencies isn't redundant. See 5.2.1 #2
7. Set up a policy development committee for PH System to develop/change policies in order to improve the PH system. This would also include reviewing legislative bills with an eye on the impact it will have on the PH system.
8. Look at other states to see how they deal with these issues

9. There should be a second meeting with the same people as today and with upper people in DOH and beyond. This follow-up meeting should occur within the next year, preferably before the legislative session. An early fall meeting would be useful to have an impact on the session.
10. Of course, all these require money.

Essential Service #6: Enforce Laws and Regulations that Protect Health and Ensure Safety

Indicator 6.1: Revision of Laws and Regulations

Key Idea 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.

One partner indicated that he didn't feel he could say anything because the laboratory review process is done by the federal agency instead of local officers. One view from those who work in the legal system was that the regulations were great for prosecutors as they can defend the regulations and are easily understood by all. If changes are requested, there is usually a good response to change them. Another partner working in DOH replied that they work with different partners through hearings, using information gained in these meetings to develop changes. When the group asked if there were any pieces that are flawed, some participants replied, in the context of the court system, there aren't any big flaws in the regulations for the prosecution, but the defense side may have a different view. The dairy representatives meet every odd year with the FDA to revise regulations. They inform the laboratory if new regulations need to be implemented (i.e. new media is allowed or new tests are to be implemented).

Vote: 6 Blue, 5 Green – with Blue (Significant Activity) being the consensus vote.

Discussion of vote: One blue vote indicated they were aware that there is a struggle to maintain compliance. If law is good, then the system needs to deal with compliance. However, if law is bad, then the system needs to change it.

There was a question as to why the newborn screening samples were being sent to Oregon. It was explained that Oregon has a geneticist on staff to provide clinical support (and NM does not have this available).

Department of Public Safety (DPS) representative indicated that breathalyzers need to be certified twice a year. One of those has to be 'in lab check' which is a real problem for DPS. They wondered if local officers who are trained to certify the instruments could certify them both times? Do the regulations have to be changed? The group decided to put this into the parking lot.

Indicator 6.2: Encourage Compliance.

Key Idea 6.2.1: The SPH Laboratory System has mechanisms in place to encourage or promote compliance by all laboratories in the system with all applicable State and federal regulations.

The group felt that most agencies don't have a QA person (either full or part-time).

Vote: 9 Blue, 2 Green – with Blue (Significant Activity) being the consensus vote.

Explanation of vote: There needs to be more communication concerning regulation changes.

Key Idea 6.2.2: All laboratories in the SPH Laboratory System comply with all applicable laws and regulations.

Not all laboratories are not accredited and it is difficult to determine who there are (as they don't advertise their 'non-accredited' status).

Vote: 3 Blue, 8 Green – with Green (Optimal Activity) being the consensus vote.

Indicator 6.3: Enforcement of Laws and Regulations.

Key Idea 6.3.1: The SPH Laboratory System has the appropriate resources to support enforcement functions for laws and regulations.

Unfortunately, the rise in DWI fines and jail times encourages defendants to fight the charges in court. Participants working in the legal system felt that having scientists traveling to court for testimony is ridiculous and often times burdensome. It decreases the available workforce. There should be a method in place so that they don't have to travel (i.e., videoconferencing). How can this problem be resolved? Would this be a legislative or judicial problem? They thought it would be judicial and that laws would have to be changed. They felt that the laboratory data should not be disputable, but judges are not going that way. Some are, but only a few.

The dairy representative indicated their legal problems involve tankers of milk being thrown away. However, the laboratory data is not questioned.

The group then asked how regulations are mandated on the laboratory system and how the system has to work with those regulations.

It was also suggested that that a process should be in place to compensate for services. For example, if sales increase (like alcohol), then the tax dollars received from the sales should proportionately go to those involved with the consequences of this. With alcohol, that would include Department of Public Safety, legal, laboratory, etc. This should be a statute level directive. Another example would be milk production. If there is an increase in producers or volume, then more money (from fees or taxes) should go to testing. One negative example of this is occurring in the DWI arena. Even though there is a system in place for court fees being delegated to individual programs, are more subpoenas and samples being tested, more judges are eliminating court fees, which are reducing money being paid to the laboratory. In other words, more work but less money.

Vote: 1 Red, 6 Yellow, 1 Blue, 2 Green – with Yellow (Moderate Activity)

Explanation of the vote: A yellow vote indicated that the system is not working, but it's not the laboratory's fault. The blue vote indicated that the laboratory has done really well for not getting any increase in funding; even though there has been a huge increase in testing demand.

Final Vote: 5 Yellow. 2 Blue, 2 Green – with Yellow (Moderate Activity) being the consensus vote.

Key Idea 6.3.2: The SPH Laboratory and other appropriate government agencies collaborate to fulfill their enforcement function.

There was concern that some government agencies that are not working with the laboratory system during the planning process.

Vote: 1 Yellow, 4 Blue, 4 Green (tie).

Explanation of vote: The yellow vote indicated that the laboratory should post certification for technologists and laboratory in a place where the general public could look it up (online, etc). They felt that they had to trust that the laboratory is certified but didn't have the documentation. They also asked whether the laboratory or the scientist was certified. It was clarified that it depends on the regulatory agency. They would also like to see updates about various laboratory testing.

The green vote indicated that they were satisfied with their certification system.

The blue vote indicated they felt that SLD communicates well with submitters but not as well with legal partners.

Vote: 4 Blue, 5 Green – with Green (Optimal Activity) being the consensus vote.

Essential Service #6 Next Steps:

1. There needs to be better communication with partners about regulation changes.
2. There needs to be work on the laws/regulations that require scientists testifying in court. One suggestion is incorporating video conferencing.
3. The laboratory should be proactive in communicating needed changes to legal representatives and public defenders.
4. The laboratory needs to improve turn-around times for samples where people are in jail. The laboratory is always identified with the prosecution, which hurts the laboratory's neutral position. Laboratory data can be either exculpatory OR inculpatory.
5. The laboratory should be present at yearly public defenders' training and yearly judges' meeting of judges to explain laboratory results and the laboratory's neutrality.
6. When laws are being considered, ensure that DOH is involved.

Essential Service #6 Parking Lot:

1. DPS indicated that breathalyzers need to be certified twice a year. One of those has to be 'in lab check' which is a real problem for DPS. They wondered if local officers who are trained to certify the instruments could certify them both times. Do the regulations have to be changed? Participants asked to check the legal requirements for this suggestion.

Essential Service #7: Link People To Needed Personal Health Services and Assure the Provision of Healthcare When Otherwise Unavailable

Indicator 7.1: Availability of Laboratory Services.

Key Idea 7.1.1: The SPH Laboratory System identifies laboratory service needs and collaborates to fill gaps.

Epidemiology reported that there is a very good laboratory system in NM. The Dairy representative discussed the problem with a 72 hour hold time for milk. Being in eastern NM, travel time is a problem, although it does help to have the courier system to deliver samples. The main problem is on holidays, when the courier doesn't pick up samples nor is SLD open to receive milk samples. Laboratory space is also a problem, because SLD cannot bring in additional equipment. The SLD Director explained that per USDA regulations, there must be a specified amount of linear bench space per analyst. This was why we could not purchase an additional incubator as it would take up needed bench space. Another partner indicated the hold times were also an issue for plating out samples. OMI discussed the issue of SLD not being a 24/7 clinical laboratory. For example, NM is second in the nation for accidental deaths, but SLD is not doing well at testing overdoses because it is not a 24/7 laboratory.

The Epidemiology representative explained the difference between a clinical laboratory and a public health laboratory. Clinical laboratories test samples for diagnostic purposes. Public health laboratories test samples for public health purposes. The public health samples tend to be those that are not requested in large numbers that require specialized testing, or are needed for surveillance purposes. He cited rabies testing as an example. Public health laboratories do not need to be open 24/7 for routine work, although they are on call for outbreak or emergency situations. One partner suggested that a group be convened to determine what testing should be done by the diagnostic vs. public health laboratory and to better improve communication between partners.

One partner expressed appreciation for the ability to drop off specimens at the laboratory on Saturdays. Another partner expressed concern about long turn-around times, sometimes as long as six months, for clinical samples submitted to the laboratory. Another idea was that the laboratory should be allowed to double fill positions. This would allow for training of new personnel, reducing the strain on staff to train new personnel, and retain some expertise.

The SLD Director explained that the six month turn-around occurs when samples are sent to CDC for reference testing. SLD has no control over the length of time it takes to receive those results. SLD has been able to add new employees, which has decreased turn around times.

It was suggested that the State Personnel Office should make an exception for double-filling positions at SLD. New employees need to be trained while the current scientist is in place. This would alleviate some of the knowledge and expertise that is lost during staff turnover.

It was acknowledged that SLD must go through a cumbersome procurement process for personnel, equipment, etc. It was also discussed about the need to inform the legislature about

SLD's funding requirements. The budget process that was completed this past legislative session was described. Based on population growth, a one million dollar expansion budget was asked for. SLD was given approximately half of the request. They are currently working on next year's budget where the remainder of the request will be asked for.

The SED partner indicated that they have a great working relationship with DOH and SLD is excellent, with the communication and information superb. Another partner expressed appreciation for the fact that SLD is accepting samples on Saturdays that were collected from the public health laboratory on Fridays.

A Public Health Division office representative noted that SLD tests tens of thousands of STD samples. He would like to expand his program to include jail inmates, but funding is the problem. Another partner indicated that she's always had a good response and timing with the after hours on-call team. SLD was also commended on how they train others and share expertise.

One question asked was if there were projections for SLD staffing, funding, and budget. SLD's Director responded that it was hard to project because funding is contingent on the legislature and governor. One partner brought up that there is a need to educate the legislature on the importance of funding public health. But, how does everyone work together to fill the gaps? Does it happen? The Dairy representative indicated that from their (Dairy's) perspective, it appears that DOH diverts funds from the laboratory for other divisions.

The SLD Director clarified that money is appropriated to the Scientific Laboratory Division by the legislature and that the Department of Health not only does not re-direct this money to other programs, but it cannot re-direct funds without external approval from the Department of Finance authorization and review by the analysts within the state legislature. He further explained that it was the Dairy Commission who made the final push at the Legislature to pass the funding for the new building. Unfortunately, other entities (Environment Department, DWI, etc.) get funding to expand their programs, but they don't request money for SLD to take on this additional load. It is understandable that they only ask for their own division, but there's only so much money to go around. Unfortunately, many mandates are unfunded for analyses. This raised the idea that agencies that use the laboratory should meet before legislature (November) to discuss funding concerns.

When asked whether the new laboratory would help alleviate problems, the SLD Director thought it would because the space would be better designed and that there may be money available for the purchase of new instrument. One partner acknowledged that Dr. Mills is the only person lobbying for SLD.

Vote: 1 White, 1 Red, 5 Yellow, 17 Blue, 1 Green – with Blue (Significant Activity) being the consensus vote.

Discussion of the vote:

The white vote noted that the Biological Oxygen Demand (BOD) testing was being discontinued in July '08 even though it is a required test for sewage treatment plants. The only place available

to the participant's program for this BOD testing is SLD. The participant felt that SLD should still accept the samples for tests and outsource the testing since the lab is getting funds to do this testing. It was explained that after reviewing the number of BOD tests done for the Environment Department for the last couple of years, it was determined that there were three (3) BOD's done per year. This number does not support the amount of money that is spent on proficiency tests and the amount of analyst time that is spent to maintain proficiency. The 'WTU money' (Work Time Units) was also explained as money from SLD's general fund budget that SLD allocates to the Groundwater Bureau, the Surface Water Bureau, and other bureaus within the Environment Department. It was further explained that the Drinking Water Bureau, Public Health Division, and the Epidemiology and Response Division paid for their services. There is some funding for DWI services through court fees. The Dairy Division contracts with SLD for services. SLD does not receive funding for OMI services.

The Red vote expressed concern as to how this assessment process would be used. It was explained that this was an assessment of the public health Laboratory System, so suggestions would not only be applied to SLD, but to the entire system. This could be suggestions for every participant in the room as they were all members of the system.

The Yellow vote expressed concern for how the reporting of results was being done. Of specific concern were heavy metal test results that were amended multiple times. It was noted that this occurred over a year ago, and that the analyst involved was no longer working at the laboratory. However, what procedures are in place to prevent this from happening again?

Another Yellow vote expressed frustration about TB testing. The participant had wanted SLD to do QuantiFERON[®] testing for TB. However, because SLD elected not to do the testing, samples are being sent to TriCore. The participant felt like it would be a better way to maximize money allocated to DOH for testing and that the money for testing should go to SLD. Dr. Mills explained that the nature of the test, a 24/7 test, made it more appropriately placed with TriCore. Also, TriCore could run more samples which fiscally made more sense.

Essential Service #7 Next Steps:

1. Biannual survey of the stakeholders to see what the needs are and where funds are needed.
2. Meet in December to write a budget proposal and present to the legislature as a united front.
3. Stakeholders and SLD meet together to decide how the funding should be allocated. This would also include supporting each other when testifying during legislature.
4. Official protocols for communications. This would include identifying partners, identifying means of communication, protocols (sampling, preservation, hold times, testing schedule, results turn-around, etc)
5. Official protocol for sample collections (collection container, maximum hold times, turn around times, testing schedule, etc.). This would also include data reporting.
6. Implement a survey/report card evaluating various laboratory processes, including results reporting times, hold times and turn around times.
7. Evaluate the possibility of developing an advisory group for SLD.

Essential Service #8: Assure a Competent Public Health and Personal Health Care Workforce

Indicator 8.1: Workforce Competencies

Key Idea 8.1.1: All laboratories within the SPH Laboratory System identify position requirements for all laboratory workforce categories.

There was confusion over this issue as participants seemed to misunderstand the aims of the section. Training and competency has gotten better over the past couple of years. Turn-around issues may be partially due to turn-over and subsequent younger employees filling the positions. The laboratory system seems to be doing a good job having qualified people in appropriate positions. The whole system seems to have a lack of communication between divisions, especially at the top. Is there a need for a specific training budget?

Young employees, TAT issue may be partially due to turnover
Good job having qualified people in appropriate positions
Whole system seems to have a lack of communication between divisions (especially at the top)
Need for specific training budget?

Vote: 2 Yellow, 3 Blue, 3 Green – with Blue (Significant Activity) being the consensus vote.
Explanation of vote: A yellow vote presumed that SLD is governed by the NM State Personnel Office. A green vote said their vote was passed on interactions with SLD.

Key Idea 8.1.2: The SPH Laboratory System has tools to assess competency of the laboratory workforce.

There was minimal discussion about this key idea because the group felt the laboratory was doing what it could to assess competency.

Vote: 1 Yellow, 4 Blue, 3 Green – with Blue (Significant Activity) being the consensus vote.

Indicator 8.2: Staff Development

Key Idea 8.2.1: Laboratories within the SPH Laboratory System identify staff development needs.

There was discussion about the fact that no one from one bureau could objectively judge the gaps in skill sets of personnel from other bureaus. It was suggested that new procedures and SOPS be placed on the internet for reading by personnel. There was a suggestion to have information on the intranet or on the new LIMS.

Vote: 6 Yellow, 2 Blue – with Yellow (Moderate Activity) being the consensus vote.
Explanation of vote: A yellow vote indicated that training can always use more improvement. A blue vote indicated that there needs to be more awareness of what needs development.

Key Idea 8.2.2: Laboratories within the SPH Laboratory System promote the availability of resources for staff development.

Training and staff development was judged to be moderate for the SLD but minimal for any field components of the system. This was determined to be because of lack of funding for training as well as a lack of organization as there is no overseer for all training in the state. Training opportunities should be communicated to all components of the system and collaborations should be strengthened to allow for further training opportunities to develop. It was suggested to link the performance appraisal with required training.

Vote: 5 Red, 3 Yellow – with Red (Minimal Activity) as the consensus vote.

Explanation of vote: One red vote indicated that the laboratory system training needs a lot of improvement. It was not utilizing the proximity of UNM for training opportunities

A yellow vote indicated an appreciation of molecular training opportunities.

Indicator 8.3: Assuring Laboratory Workforce

Key Idea 8.3.1: The SPH Laboratory System maintains an environment that attracts and retains exceptional staff.

The group judged this area to be minimal and stated that there were pay band problems as well as staff loyalty problems. It was pointed out that technical staff was paid less than field staff, which exacerbated recruiting competent personnel. It was also pointed out that working for the state was stricter than working for academia and that this might result in good personnel favoring university work over government. The private sector pays better than the state. Also, the state bureaucracy and regulations hinder employee flexibility. It was noted that the state has better benefits.

Vote: 8 Red – with Red (Minimal Activity).

Key Idea 8.3.2: The SPH Laboratory System addresses workforce shortage issues.

The group determined that there were problems with recruiting new staff and several reasons were given. One reason given was that there was no outreach by the state to prospective recruits. A broader issue of science education was cited as another reason for lack of interest in working for the state. Pay was also an issue as was the lack of formal partnerships between bureaus and other institutions such as UNM, NMSU, and NM Tech. Many participants felt that the state should work harder to promote science education in order to expand the pool of potential scientists in the future. Others felt that if interns are not given a broad experience (were used improperly); interns leave the experience believing that all state work involves only paperwork and filing.

Vote: 7 Red, 1 Yellow – with Red (Minimal Activity) being the consensus vote.

Explanation of vote: A yellow vote indicated that the state is aware of the problem and needs. One red vote (who changed from yellow) indicated the other agencies (i.e. Environment

Department) have had many applications for posted positions, so there is availability of applicants in the field.

Essential Service #8 Next Steps:

1. The state needs to work on better pay and better management.
2. Overall training should be standardized, with a management program installed to oversee statewide training.
3. Develop a fair distribution of training opportunities. Don't always give the same 'squeaky wheel' access to all of the training.
4. Link specific training to job description and evaluations.
5. Better promotion, collaboration and outreach with local schools to support education and future employees. This would include working on formalized programs with educational institutes to attract recruits. This also includes working with elementary school to develop interests in sciences and mathematics.
6. There needs to be a formalized communications policy and a corresponding program for inter-bureau communication procedures.
7. The state should create more positive media, public service announcements, and promote media literacy.

Essential Service #9: Evaluate Effectiveness, Accessibility, and Quality of Personal and Population-Based Services.

Indicator 9.1: System Mission and Purpose

Key Idea 9.1.1: The SPH Laboratory System range of services, as related to its mission and purpose, are evaluated on a regular basis.

The first question raised was “Does the stakeholder need to know the mission of SLD?”. One comment was that as long as SLD knows what their mission is, does the stakeholder need to know what the mission is?” Another response was that having SLD’s mission made public allows other entities to contribute to the success of the laboratory. Participants agreed that SLD has a formal mission statement, clearly knows what it is, and does appear to re-examine it on a regular basis.

Periodic re-evaluation of the scope of services does take place, but funding also drives the process, For example, bioterrorism funding has increased the speed and efficacy of communication when intentional contamination of a water supply occurs. It has also increased the lines of communication between public health offices (i.e. Stanford PHO) and SLD.

It was questioned whether metrics are in place to measure, track and evaluate the number of tests, the number of pass/fails, types of samples, or types of tests? When used properly, metric results could be used to pressure for more funds, equipment, and/or personnel. It was noted that if the metrics are not given enough thought during development, the measures may be useless. Also, metrics could be used to punish the agency. (“You’re not meeting the metrics, so we’re not going to fund you.”)

Vote: 4 Yellow, 3 Blue – with Yellow (Moderate Activity).

Key Idea 9.1.2: The SPH Laboratory System has a process in place for periodic review and evaluation of the test menus and technologies in use by laboratories within the system.

There was discussion of current laboratory certification (FDA, EPA, CLIA), which is considered periodic review. SLD also acts as a certifying agent for other laboratories. If various laboratories are certified by different agencies for the same procedures, for example standard EPA methods, the test results should be consistent. SLD is a Reference Laboratory, with other entities using SLD for confirmation.

Vote: 1 Red, 1Yellow, 5 Blue – with Blue (Significant Activity).

Indicator 9.2: System Effectiveness, Quality, and Consumer Satisfaction.

Key Idea 9.2.1: The accessibility and effectiveness of personal and population-based laboratory services provided throughout the state is regularly determined.

There has to be a process in place to evaluate the SPHLS, as it is a requirement for funding. This follows the earlier suggestion that metrics could be used as a way to track lab services, costs, etc. It was also suggested there are not enough laboratories in the state. In order to improve sample holding and turn-around times (from collection to processing), there should be satellite labs, or improved transportation to the central laboratory. Rural satellite labs used to have shorter turn around times and eased sample handling with no shipping costs, easier handling, and fewer hassles. However, most of them have been shut down. It was noted that the cost of starting up these labs again would be very high, especially now with CLIA.

Vote: 1 Red, 3 Yellow, 2 Blue – with Yellow (Moderate Activity) as the consensus vote.

Key Idea 9.2.2: The quality of personal and population-based laboratory services provided throughout the state is regularly determined.

The group felt that the cost of laboratory services is analyzed, but this information is not always kept up-to-date. There is a lack of transparency in the SPHLS overall.

Vote: 1 White, 3 Red, 2 Yellow, 1 Blue – with Red (Minimal Activity) being the consensus vote.

Indicator 9.3: SPH Laboratory System Collaboration

Key Idea 9.3.1: The level and utility of collaboration among members of the SPH Laboratory System is measured and the results are shared.

The responses to this key point were varied. One example of collaboration cited was a foodborne outbreak. Samples come into the laboratory from various sources, and in various forms (food, water, beverages, eating utensils, clinical samples, etc) and are processed in various sections at SLD (EM, GM, MB). The results are reported to the various submitters and to Epidemiology. The discussion developed around the definition of collaboration. One definition was that a stakeholder is a collaborator because it submits samples to the laboratory. It was pointed out that submitting a sample is NOT collaborating, because collaborating involves meeting and discussing. It was also noted that the process isn't being evaluated.

There are collaborations between Epidemiology, SED, TriCore, and SLD to discuss what analyses will be done by which laboratory. It was also questions as to whether there was a contingency of operations plan in place if there ever was a problem at the laboratory.

Vote: 3 Red, 4 Yellow – with Yellow (Moderate Activity) as the consensus vote.

Essential Service #9 Next Steps:

1. Consider developing objectives and implementing a metrics system to determine current capability and capacity as well as improve services and increase funding. (Definition of a metrics system is a carefully defined parameter given a numeric value). The evaluation process should include surveys of stakeholders.
2. Have a contingency plan in place to outsource or have memorandum of understandings in place in the event the laboratory is pushed beyond capacity.

Essential Service #10: Research for Insights and Innovative Solutions to Health Problems.

The group felt that, overall, there was not much information of research within the system. This was compounded by the fact that research is not a priority of the system and any research being conducted is likely to be limited to educational institutions. The group felt that judging the state on this issue was not fair due to the fact the research is not encouraged within state agencies.

Indicator 10.1: Planning and Financing Research Activities

Key Idea 10.1.1: The SPH Laboratory System has adequate capacity to plan research and innovation activities.

Vote: 4 Red, 4 Yellow

Further Discussion:

More collaboration with UNM (and other labs)

Is SPHL system unaware of what research is going on in other groups?

Does their research apply to Public Health?

Vote: 4 Red, 4 Yellow – with Red (Minimal Activity) being the consensus vote.

Key Idea 10.1.2: The SPH Laboratory System collaborates to finance research activities.

It was agreed that this was not in SLD's mandate.

Vote: 8 White – with White (No Activity) being the consensus vote.

Indicator 10.2: Implementation, Evaluation and Dissemination

Key Idea 10.2.1: The SPH Laboratory System research efforts draw on diverse perspectives and expertise to stimulate innovative thinking.

The group had little knowledge of this process.

Vote: 2 White, 6 Red – with Red (Minimal Activity) being the consensus vote.

Key Idea 10.2.2: The SPH Laboratory System research is evaluated to foster improvement and innovation.

The group had little knowledge of this process.

Vote: 2 White, 7 Red – with Red (Minimal Activity) being the consensus vote.

Key Idea 10.2.3: The SPH Laboratory System disseminates research outcomes, best practices, and recognition of research activities.

The group had little knowledge of this process.

Vote: 4 Red, 3 Yellow – with Red (Minimal Activity) being the consensus vote.

One yellow vote indicated they knew more about university publishing policies.

Essential Service #10 Next Steps:

1. Share research information.
2. Involve universities in research and discussions.
3. Define “research.” Does it include trending and surveillance or is it strictly “hard” science?

APPENDIX B

Overall Scoring from May 6, 2008 Meeting

Each Essential Service was broken into Indicators, which were then broken down into Key Ideas. For example, **Essential Service #1: Monitor Health Status to Identify Community Health Problems** had two Indicators, with Indicator 1.1 having three Key Ideas and Indicator 1.2 having five Key Ideas. The Key Idea scores were calculated using a formula with weighting and calculation factors. The Indicator scores are the sum of the Key Idea scores. The Essential Service scores are the average of the Indicator scores.

PERFORMANCE										
Essential Public Health Service:										
	1	2	3	4	5	6	7	8	9	10
Optimal Activity		XX								
Significant Activity	XX				XX	XX	XX			
Moderate Activity			XX					XX	XX	
Minimal Activity				XX						XX
No Activity										

The next table shows the scores for each of the Key Ideas.

Essential Service #1: Monitor Health Status		Essential Service #2: Diagnose & Investigate	
1.1 Surveillance Information Systems	89.0	2.1 State of the Art Testing	100.0
1.2 Monitoring Health Status	42.0	2.2 Collaboration & Networks	67.0
		2.3 Continuity of Operations	67.0
Essential Service #3: Inform, Educate & Empower		Essential Service #4: Mobilize Partnerships	
3.1 Outreach & Communication	67.0	4.1 Constituency Development	5.0
3.2 Public Information	83.5	4.2 Communication	5.0
3.3 Education	5.0	4.3 Resources	5.0
Essential Service #5: Develop Policies & Plans		Essential Service #6: Enforce Laws & Regulations	
5.1 Role in Policy Making	67.0	6.1 Revision of Laws & Regulations	67.0
5.2 Partnerships in Planning	67.0	6.2 Encourage Compliance	83.5
5.3 Dissemination & Evaluation	67.0	6.3 Enforcement	66.5
Essential Service #7: Link People to Services		Essential Service #8: Competent Workforce	
7.1 Availability of Lab Services	67.0	8.1 Workforce Competencies	67.0
		8.2 Staff Development	19.0
		8.3 Assuring Workforce	5.0
Essential Service #9: Evaluation of Effectiveness		Essential Service #10: Research	
9.1 System Mission & Purpose	50.0	10.1 Planning & Financing	1.7
9.2 System Effectiveness	19.0	10.2 Implementation & Dissemination	5.0
9.3 System Collaboration	33.0		