

APHL-CDC Cooperative Agreement Activities

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APHL-CDC Cooperative Agreement Activities

Infectious Disease Program

The Infectious Disease Program at APHL strives to improve the knowledge and utilization of quality laboratory practices related to infectious disease testing, and to improve legislation and policies that affect laboratory practice. Staff members provide rapid communication and technical assistance to member laboratories as new tests are deployed and new diseases emerge. The Infectious Disease Committee addresses current issues faced by the public health community, including deployment of new technology, utilization of proper algorithms, and biosafety.

Major Goals/Objectives:

- Obtain and rapidly move critical response information to the public health laboratory community
- Convene national conferences on emerging disease topics as needed
- Deliver laboratory training workshops, teleconferences, and distance learning products related to infectious disease testing
- Convene committees and expert panels to address relevant infectious disease issues

Activities This Year:

- Disseminated information from the CDC Rabies group to state public health laboratories (SPHL) on the problems with the interpretation of Rabies Direct Fluorescent Antibody (DFA) tests due to non-specific fluorescence
- Alerted membership regarding recent false-positive results with commercially available West Nile virus IgM ELISA kits
- Partnering with CDC to develop core public health infectious diseases capabilities to better define direction for Epidemiology and Laboratory Capacity (ELC) funding resources
- Collaborating with CDC/DHQP to develop a survey of SPHL to assess capabilities to perform antimicrobial susceptibility testing of pathogens of public health importance



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Infectious Disease Program

Highlights from the Beginning of the CA:

- Convened laboratory experts to address SARS testing algorithms and biosafety issues, and facilitated national conferences calls for technical assistance
- Developed officially-adopted CLIA surveyor guidelines that allow PHL's, in emerging disease/emergency situations, to use tests with minimal validation studies when control and calibration materials are in short supply
- Distributed Rabies testing guidelines to public health laboratories
- Obtained USDA permit waiver to allow transfer of WNV positive control material; convened 2nd National Conference on West Nile Virus
- Launched surveys of public health testing practices and published survey briefs and other summary documents
- Assisted CDC in rapidly disseminating information regarding Monkeypox testing and Mumps testing during national outbreaks
- Assisted CDC in transferring laboratory protocols for respiratory pathogens to public health laboratories
- Convened expert panel meetings to establish national testing strategies for Smallpox including evaluation and selection of laboratory testing protocols; assisted in developing the algorithm for appropriate laboratory testing based on the clinical rash algorithm
- Collaborated with USDA and CDC to develop a model public health VS permit that allows for the movement of a broad range of non-select agents that affect both human and animal health
- Collected data on laboratory testing for vaccine preventable diseases to assist CDC in technology transfer and technical assistance development

Products of Interest:

- Emerging Infectious Disease Planning and Response Framework
- APHL Influenza Testing Guidelines for Public Health Laboratories
- Position Statement: "The Role of the Public Health Laboratory in Pandemic Influenza: Preparedness and Response"
- Position Statement: "Technology Transfer from Federal Agencies to Public Health Laboratories"
- Training CD: Antimicrobial Resistance Testing (16,000 copies distributed worldwide)

Links: <http://www.aphl.org/aphlprograms/infectious/Pages/default.aspx>

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APHL-CDC Cooperative Agreement Activities

Infectious Disease Program Influenza Activities

The Infectious Disease Program at APHL strives to improve the knowledge and utilization of quality laboratory practices related to infectious disease testing, and to improve legislation and policies that affect laboratory practice. Seasonal influenza and pandemic influenza have been a priority for the Infectious Disease Program this year. Staff members provide rapid communication and technical assistance to member laboratories as new tests are deployed. The Infectious Disease Committee addresses current issues faced by the public health community, including pre-pandemic influenza planning and testing algorithms .

Major Goals/Objectives:

- Obtain and rapidly move critical response information to the public health laboratory community
- Improve laboratory capability to detect seasonal and novel influenza viruses
- Define laboratory capacity needs and explore strategies to meet surge demands
- Convene committees and expert panels to address relevant seasonal and pandemic influenza issues

Activities This Year:

- Strengthened laboratory surveillance for influenza by providing training in detection and characterization of influenza viruses using molecular methods.
- Collaborated with CDC to validate and gain FDA approval of the rRT-PCR 5-Target Assay to detect influenza viruses, including the H5 subtype.
- Convened partners from public and private sector laboratories and the federal government to participate in an exercise focusing on possible roles for commercial and clinical laboratories during a pandemic.
- Assessed surge capacity of state public health laboratories using statistical and simulation models that forecast pandemic workloads, resource utilization, and sample through-put.
- Increased understanding of laboratory planning efforts with Canadian counterparts.



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Infectious Disease Program Influenza Activities

Highlights from the Beginning of the CA:

- Provided a member witness for a hearing by the House Homeland Security Committee, Threats Subcommittee on federal preparedness efforts for an influenza pandemic
- Managed outreach grants to improve clinical laboratory knowledge of state public health laboratory Influenza surveillance and pandemic planning efforts
- Assisted in the validation of real-time RT-PCR reagent panels for human Influenza viruses, and collaborated with CDC to gain FDA approval of this assay.
- Convened the third Influenza Clinical Laboratory Partners Meeting at CDC
- Convened the first Binational Pandemic Influenza Laboratory Summit with the Canadian Public Health Laboratory network
- Assisted CDC in transferring laboratory protocols for respiratory pathogens to public health laboratories
- Submitted comments on HHS pandemic plan for Influenza and the CDC Response Plan
- Collaborated with CDC to deliver hands-on rapid Influenza detection and subtyping training for laboratorians from 48 states
- Rapidly moved information to the public health laboratories in response to the distribution of an Influenza H2 PT sample
- Collaborated with USDA and CDC to develop a model public health VS permit that allows for the movement of a broad range of non-select agents that affect both human and animal health

Products of Interest:

- Emerging Infectious Disease Planning and Response Framework
- APHL Influenza Testing Guidelines for Public Health Laboratories
- Position Statement: “The Role of the Public Health Laboratory in Pandemic Influenza: Preparedness and Response”
- Position Statement: “Technology Transfer from Federal Agencies to Public Health Laboratories”

Links: <http://www.aphl.org/aphlprograms/infectious/Pages/default.aspx>

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APHL-CDC Cooperative Agreement Activities

HIV Program

The HIV Program at APHL monitors key HIV diagnostic testing issues, such as supply shortages of diagnostic testing kits; identifies and prioritizes relevant laboratory diagnostic information for dissemination to public health laboratories and other partners; evaluates emerging issues; and develops recommendations and guidelines as needed.

Major Goals/Objectives:

- Facilitate lines of communication between the CDC and public health laboratories
- Provide direction and expertise in the area of HIV diagnostics including:
 - Addressing issues related to shortage of diagnostic testing kits, and discontinuation of kits
 - Providing input and leadership to the development and implementation of new HIV algorithms
 - Identifying key HIV diagnostic issues and plans to address them

Activities This Year:

- Monthly conference calls with the CDC/APHL HIV Steering Committee including one in-person meeting to discuss strategic plan for upcoming years
- At least bi-weekly calls with the HIV Status Report Workgroup which was tasked with creating a report on the proposed HIV testing algorithms
- Formed the Western Blot Criteria Workgroup tasked with evaluating available data in order to make a determination on calling indeterminate bands when using Western Blots in HIV diagnosis
- Began preliminary planning of the 2010 HIV Diagnostics Conference
- Monitored a shortage of diagnostic testing kits; notified membership of shortages and discontinuations, and formulated a plan of action to address the discontinuation



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HIV Program

Highlights from the Beginning of the CA:

- Approval of two CMS Proposals to assist public health laboratories with the testing of oral fluid specimens in light of reagent shortages and market withdrawal of the only FDA – approved oral fluid screening test in the US
- Formation of an APHL/CDC HIV Steering Committee
- Development of Draft HIV testing algorithms
- Co-sponsorship of 2005 and 2007 HIV Diagnostics Conferences
- Convener of Human Retroviral Testing Conferences
- Production of the 2004 and 2006 HIV Diagnostics Survey Reports
- Development of a position statement on HIV rapid testing

Products of Interest:

- 2004 and 2006 HIV Diagnostics Survey Published Reports
- 2005 and 2007 HIV Diagnostics Conferences
- CMS accepted proposals to assist public health laboratories with the testing of oral fluid specimens
- HIV discussion board on SharePoint for laboratories to share validation protocols

Links to Relevant Sites:

- www.hivtestingconference.org (2005 and 2007 HIV Diagnostic Conferences)
- <http://www.aphl.org/aphlprograms/infectious/hiv/pages/default.aspx> (APHL HIV webpage)
- http://www.aphl.org/policy/Documents/HIV_rapid_testing.pdf (APHL HIV position statement)

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APHL-CDC Cooperative Agreement Activities

Sexually Transmitted Diseases Program

The Sexually Transmitted Diseases Program at APHL is used to monitor key STD diagnostic testing issues; identify and prioritize relevant laboratory diagnostic information for dissemination to public health laboratories and other partners; evaluate emerging issues; and develop recommendations and guidelines as needed.

Major Goals/Objectives:

- Facilitate bi-directional communication between CDC and public health laboratories.
- Provide direction and expertise in the area of STD diagnostics including:
 - Development of new STD testing guidelines
 - Addressing issues surrounding disease reporting and electronic data collection
 - Identifying key STD diagnostic issues and a plan to address them

Activities This Year:

- Monthly conference calls with the CDC/APHL STD Steering Committee including one in-person meeting to discuss a strategic plan for upcoming years
- Formation of the STD Testing Guidelines Taskforce, tasked with evaluating available data and forming recommendations for CDC's STD Testing Guidelines; weekly conference calls to discuss the taskforce's progress
- Planning of the STD Testing Guidelines Expert Consultation, to take place January 2009
- Participation in the American Social Health Association's Steering Committee for the STD State Funding Project which assessed the amount of dollars that each state invests in STD prevention activities.



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Sexually Transmitted Diseases Program

Highlights from the Beginning of the CA:

- Instrumental partner in development of new STD testing guidelines (ongoing)
- Organized a round table on Syphilis diagnostics at the 2008 Annual Meeting in St. Louis
- Formation of an APHL/CDC STD Steering Committee
- Contracted with four public health laboratories for the collection of gonococcal isolates as part of the CDC isolate surveillance project aimed at identifying resistant Gonorrhea strains
- Assisted with the creation of biannual CDC STD survey designed to assess the STD capabilities, capacity, and testing practices of public health laboratories

Links:

<http://www.aphl.org/aphlprograms/infectious/Pages/SexuallyTransmittedDiseases.aspx>

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APHL-CDC Cooperative Agreement Activities

Tuberculosis Program

The Tuberculosis program at APHL monitors key TB diagnostic testing issues; identifies and prioritizes relevant laboratory diagnostic information for dissemination to public health laboratories and other partners; evaluates emerging TB issues; and develops recommendations and guidelines as needed.

Major Goals/Objectives:

- Facilitate lines of communication between the CDC and public health laboratories
- Provide direction and expertise in the area of TB diagnostics including:
 - Addressing issues related to new Interferon Gamma Release Assays (i.e. QuantiFERON-TB Gold)
 - Working with TB partners to advocate for more TB funding for laboratories
 - Partnering with the CDC to standardize TB drug susceptibility testing in the US
 - Identifying key TB diagnostic issues and plans to address them

Activities This Year:

- Convener and Facilitator of the APHL TB Strategic Initiatives Planning Meeting at which APHL's leadership prioritized the association's TB activities and developed an action plan for the TB Steering Committee
- Reformation of the APHL TB Steering Committee with members from APHL and CDC
- Update of the 1995 *Mycobacterium tuberculosis: Assessing Your Laboratory* manual as a means of addressing benchmarks of *The Future of TB Laboratory Services*, an APHL/CDC Task Force report and conversion to an electronic tool
- Participation in CDC's TB Cooperative Agreement Funding Formula Revision Workgroup and continue to assist CDC in disseminating information regarding the outcomes of that Workgroup



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Tuberculosis Program

More Activities This Year:

- Convener and facilitator of an expert panel consultation on Nucleic Acid Amplification testing (NAAT) to assist CDC in revising the NAAT Guidelines for TB
- Convener and facilitator of the 5th National Conference on Laboratory Aspects of TB

Highlights from the Beginning of the CA:

- Formation of an APHL/CDC TB Steering Committee
- Development of *The Future of TB Laboratory Services* report
- Wet laboratory trainings for public health laboratorians on mycobacteriological methods
- Convener of five National TB Laboratory Conferences
- Provided technical assistance to public health laboratories
- Organized web conferences to educate public health laboratorians about issues surrounding the QuantiFERON-TB Gold assay, the TB cooperative agreement, and the TB universal genotyping program
- Served on the planning committee for the 2007-08 National TB Controllers Association (NTCA) Workshop
- Partner with the American Thoracic Society and NTCA to provide input on and assistance with the House and Senate domestic TB bills (ongoing)

Products of Interest:

- *The Future of TB Laboratory Services* report (2004)
- *Mycobacterium tuberculosis: Assessing your Laboratory* (1995)
- TB Hill Day Fact Sheets (2005-2008)

Links:

<http://www.aphl.org/aphlprograms/infectious/tuberculosis/pages/default.aspx> (APHL TB Webpage)

<http://www.aphl.org/profdev/conferences/proceedings/Pages/2008TBconference.aspx> (2008 TB Conference Proceedings)

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APHL-CDC Cooperative Agreement Activities

Food Safety Program

The APHL Food Safety Program strives to advance food safety laboratory practice by increasing the visibility of food safety laboratories and their work, by increasing the competence of food safety laboratory staff, by improving the capability of food safety laboratories, and by improving the utilization of food safety laboratory technologies.

Major Goals/Objectives:

- To support laboratory activities that improve foodborne disease outbreak detection and investigation, including PulseNet, and to build relationships with food safety partners through the Council to Improve Foodborne Outbreak Response (CIFOR) Council and Workgroups
- To improve coordination and collaboration among public health laboratories that participate in Food Emergency Response Network (FERN)
- To increase the rate of isolate submission to the public health system, especially in regards to Shiga toxin-producing *E. coli* (STEC) surveillance
- To develop position statements and message pallets to advocate for support of foodborne disease surveillance and detection

Activities This Year:

- An APHL taskforce has expanded upon current APHL guidelines for food safety laboratories and developed a food safety laboratory self assessment manual. The manual is currently under review and will be launched as an on-line tool in 2009, in coordination with CIFOR.
- APHL is leading a CIFOR workgroup to Improve Epi-Lab Reporting through the creation of open source software that will allow data to be extracted into a shared database
- In an effort to improve lab-epi linkages, APHL awarded travel scholarships to laboratorians who attended Epi-Ready team trainings throughout the country.
- APHL members are leading the development of a PulseNet cost effectiveness project. The study will provide stakeholders with factual data on the economic impact of PulseNet and can be used as a reference in future advocacy efforts and position statements.
- APHL published the 2008 Food Safety Issue Brief based on the results of the 2007 Food Safety Survey and the 2007 PulseNet survey, which identified gaps in existing food safety laboratory activities.



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Food Safety Program

Activities This Year continued:

- APHL assisted CDC with PFGE, BioNumerics, and MLVA training workshops both nationally and abroad, and the first molecular serotyping courses for *Salmonella*.
- APHL, in collaboration with CDC, facilitated the third clinical laboratory partners meeting in March 2008 to develop consensus for STEC diagnosis and isolate submission guidelines.
- APHL continued its active membership in CIFOR — a collaborative effort between federal agencies and associations to brainstorm and implement ideas to decrease the incidence of foodborne disease.
- APHL is building relationships with epidemiologist through support of the FoodNet Vision meeting, the OutbreakNet Vision Meeting, and a *C. difficile* in retail meats consultation.

Highlights from the Beginning of the CA:

- APHL conducted a Food Safety Survey in 2004 and 2007, and published corresponding issue briefs which have been used to advocate for greater public health resources
- APHL facilitated communication efforts during various foodborne outbreaks, notably the 2006 *E. coli* O157:H7 outbreak in spinach, the 2006-2007 *Salmonella* outbreak in peanut butter, and 2008 *Salmonella* Saintpaul outbreak.
- Since 2003, APHL has organized two rounds of 8 regional lab-epi conferences to discuss the benefits of PulseNet, the use of PulseNet data by epidemiologists, best practices for foodborne outbreak investigations, and the challenges to performing those best practices.
- From 2004-2006, APHL administered two rounds of grants that provided money directly to public health laboratories to improve food safety capacity in states and be used for national implementation.
- In 2002, APHL conducted a consensus conference to define optimal public health laboratory capacity. As a result of that conference, APHL published a series of food safety laboratory recommendations.

Products of Interest:

- [2008 Food Safety Issue Brief](#)
- APHL published STEC detection guidelines for public health laboratories (now in revision)
- [Enhancing Food Safety Capacity in State Public Health Laboratories](#)
- APHL has published position statements on: *Contribution of State and Local Laboratories in the Development of Federal Food Safety Policy*; *Use of Non-Culture Assays to Detect Foodborne Communicable Infectious Agents*; and *PulseNet and Foodborne Disease Surveillance: A Critical National Priority*

Links: <http://www.aphl.org/aphlprograms/food/pages/default.aspx>

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APHL-CDC Cooperative Agreement Activities

PulseNet Program

The PulseNet Program at APHL promotes molecular subtyping activities at the local, state, and federal level; identifies and prioritizes relevant information for dissemination to the PulseNet network; highlights emerging issues through the PulseNet Steering Committee; facilitates the development and implementation of new subtyping methods and the expansion of the network; and develops policy statements, recommendations and guidelines as needed.

Major Goals/Objectives:

- Facilitate communication among all PulseNet network participants
- Promote the work of PulseNet laboratories in submitting timely, high-quality data to the PulseNet National Database
- Encourage collaboration among PulseNet laboratorians, sanitarians/ environmental health specialists, and foodborne epidemiologists

Activities This Year:

- Co-organized the 12th Annual PulseNet Update Meeting in St Louis, MO and the Annual Meeting of the PulseNet International Steering Committee in Halifax, Nova Scotia
- In coordination with CIFOR, leading the development of a PulseNet cost effectiveness project. The study will provide stakeholders with factual data on the economic impact of PulseNet and can be used as a reference in future advocacy efforts and position statements
- Monitored on-going beta testing and validation of MLVA protocols as the second generation PulseNet method; assisted with 2 MLVA trainings in Atlanta
- Organized a national conference call to discuss troubleshooting concerns during the *Salmonella* Saintpaul outbreak associated with produce; ensured that all participating laboratories had access to the modifications to the standard procedure or could contact the relevant CDC staff for further assistance



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PulseNet Program

More Activities This Year:

- Organized four regional PulseNet Lab/Epi Meetings in Salt Lake City, East Lansing, Atlanta, and Omaha. Attendees drafted action plans to implement in their state/local jurisdiction after these meetings
- Leading a *Salmonella* working group to develop best practices for *Salmonella* laboratory-based surveillance, starting with a survey of *Salmonella* testing activities across the country
- Organizing the 2009 OutbreakNet Conference, in conjunction with the 13th Annual PulseNet Update Meeting in Salt Lake City
- Organized the first Reference Identification Meeting in St. Louis, MO

Highlights from the Beginning of the CA:

- Twelve Annual PulseNet Update Meetings, two of which were held jointly with 1st and 2nd National Foodborne Epidemiologists Meetings
- Regional meetings with PulseNet laboratorians, foodborne epidemiologists, and other food safety partners
- STEC Diagnostics Meetings with Commercial Laboratory partners held annually at CDC
- Contractors hired to write training manuals, update and implement the PulseNet Quality Assurance program, and manage the *Salmonella* Typhimurium database
- Training courses held for PFGE, BioNumerics, STEC surveillance, norovirus detection, *Campylobacter* identification, *Salmonella* serotyping, and MLVA subtyping
- Assisted with the expansion of PulseNet International networks

Products of Interest:

- 2002 PulseNet Annual Report
- Policy Statement: “PulseNet and Foodborne Disease Surveillance: A Critical National Priority”
- Policy Statement: “Use of Non-Culture Assays to Detect Foodborne Communicable Infectious Agents”
- PulseNet Guidelines for Second Enzyme Subtyping

Links: <http://www.aphl.org/aphlprograms/food/pulsenet/pages/default.aspx>

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APHL-CDC Cooperative Agreement Activities

Emergency Preparedness and Response Program

The Emergency Preparedness and Response Program at APHL is committed to enhancing laboratory preparedness and response to emergencies such as terrorist acts, natural disasters and other public health threats. The program remains focused on activities that prepare member laboratories for their critical role in our nation's rapid response to emergencies. Staff members serve as liaisons between the CDC, other federal agencies and member laboratories, providing timely communications and technical assistance to all partners to ensure they are aware of new technologies and policies affecting laboratory testing.

Major Goals/Objectives:

- Improve the capacity and capability of member laboratories in their response to biological, chemical, and radiological threats, as well as other public health emergencies
- Promote information and technology transfer from the CDC and other agencies to members to support preparedness functions
- Expand and enhance relationships among member laboratories, CDC, FBI, and other federal, state and local agencies
- Provide support for the Laboratory Response Network (LRN)
- Promote policies in support of laboratory preparedness

Achievements This Year:

- Collaborated with the College of American Pathologists (CAP) and CDC to deliver the Laboratory Preparedness Exercise (LPX) to over 1300 laboratories across the country
- Developed guidance for LRN member laboratories on planning for surge capacity
- Collaborated with the CDC to convene and deliver laboratory training courses
- Collaborated with CDC and LRN public health laboratories to conduct limits of detection studies for 3 biological agents and review LRN protocols and other systems for quality
- Convened partnership meetings, such as LRN Partners and Joint Leadership Committee (JLC)
- Worked with the Environmental Health and Research Programs to develop and conduct the second annual All-Hazards Laboratory Preparedness Survey
- Prepared and delivered testimony before Congress on the BioWatch Program



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Emergency Preparedness and Response Program

Achievements This Year continued:

- Participated on the Public Health Emergency Preparedness Cooperative Agreement (PHEP CA) Evaluation Workgroup and subcommittees, providing guidance to CDC on the implementation and evaluation of laboratory specific performance measures for the PHEP CA
- Collaborated with partners to identify key preparedness policy priorities

Highlights from the Beginning of the CA:

- Contributed to the development of two publications for *Morbidity and Mortality Weekly Reports* (MMWR), which summarized the potential exposures to a bioterrorism agent (*Brucella abortus* RB-51 vaccine strain) and post exposure prophylaxis recommendations
- Collaborated with CDC to convene five courses, where 80 laboratorians from local, state and federal LRN reference laboratories were trained on LRN confirmatory methods
- Coordinated calls with public health laboratories to provide guidance on preparedness
- Participated and contributed to the External Peer Review of the LRN Program
- Convened meetings, such as the LRN National Meeting, to enable laboratorians and agency preparedness partners to exchange technical information and address coordination issues
- Developed the first annual All-Hazards Laboratory Preparedness Survey, analyzed and published results

Products of Interest:

- Determining Surge Capacity in the Laboratory Response Network: Guidance for Conducting Assessments
- Guidance Tool on the CDC Continuation Guidance for Cooperative Agreement on Public Health Emergency Preparedness
- Annual All-Hazards Laboratory Preparedness Survey Instrument and Report
- Public Health Emergency Preparedness: Six Years of Achievement
- Informational fact sheets for congressional staff on public health preparedness
- Articles in APHL's publication, *Lab Matters*, on public health preparedness
- APHL Bioterrorism Laboratory Coordinators Webboard
- State Public Health Laboratory Emergency Contact List

Links: <http://www.aphl.org/aphlprograms/ep/pages/default.aspx>; http://www.aphl.org/AboutAPHL/publications/Documents/All_Hazards_2008.pdf

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APHL-CDC Cooperative Agreement Activities

Environmental Health Program

APHL's Environmental Health (EH) cooperative agreement encompasses traditional environmental public health areas including biomonitoring (measuring chemicals in people, such as blood lead levels), chemical terrorism preparedness and other environmental/chemistry testing aspects of the public health laboratory.

APHL works to raise awareness of environmental health issues, develop policies and respond to member laboratory needs. Staff serve as liaisons between laboratories and the National Center for Environmental Health (NCEH) Division of Laboratory Sciences in order to promote, discuss, define and explain the unique challenges faced by public health laboratories. Ultimately, these activities will help build sound policies and increase the visibility of the environmental health laboratory community, which will in turn support the improvement of environmental health laboratory practice.

Major Goals/Objectives:

Goals:

- Promote and improve EH laboratory practice
- Increase competency of EH laboratory staff
- Expand capabilities within EH laboratories

Objectives:

- Collect and disseminate information to laboratory personnel, federal partners, et al.
- Centralize, collect and synthesize quality EH laboratory practices
- Provide training opportunities for EH laboratorians
- Maintain and develop resources for chemical component of the Laboratory Response Network (LRN-C)

Activities This Year:

- Assisted states in coordinating their EPA regional functional exercise with CDC to test laboratories readiness to respond to chemical emergencies involving water samples and clinical specimens.
- Collected biomonitoring success stories.



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Environmental Health Program

Activities This Year continued:

- The Biomonitoring Subcommittee is developing a National Biomonitoring Plan.
- Convened conference calls with states and CDC to discuss changes to the LRN-C program.
- Worked with the Emergency Preparedness Program to develop the second annual survey to assess all-hazards laboratory preparedness, including questions on biological, chemical and radiological threats.
- Worked with the LRN-C workgroups to develop: a white paper and an article on collaboration with first responders, a database for laboratories interested in biomonitoring and guidance documents for laboratories receiving suspicious powders.
- Collaborated with APHL Department of Continuing Education and Training to assess the need for a training course on chromatography.
- Provided traineeship opportunities to two laboratories in 2007 and an additional two in the first half of 2008.
- Provided the opportunity and funding for 5 laboratories to host an EH fellow, now through a new process of the Environmental Public Health Laboratory Fellowship Program.
- Convened an in-person meeting for the LRN-C workgroups to discuss the needs and desired outcome of the groups.

Products of Interest:

- Connect state public health laboratories with environmental laboratories in several ways including, holding the State Environmental Laboratory Conferences during the APHL Annual Meeting.
- Develop annual surveys of state public health Laboratories to assess preparedness and highlight gaps. A comprehensive report reviews the most important findings of the survey while a fact sheet increases the visibility of the laboratories among the public and policy makers.
- Develop informational sheets on laboratory issues, for example the brochure on the chemical laboratories in the LRN.
- Educate members about environmental health issues through articles for APHL's quarterly publication, *Lab Matters*, on the subjects of chemical and radiological threats, the EH fellowship program, biomonitoring and other environmental laboratory activities.

Links:

<http://www.aphl.org/aphlprograms/eh/pages/default.aspx>

http://www.aphl.org/AboutAPHL/publications/Documents/All_Hazards_2008.pdf

<http://www.cdc.gov/nceh/default.htm>

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APHL-CDC Cooperative Agreement Activities

Newborn Screening and Genetics in Public Health Program

The Newborn Screening and Genetics in Public Health program (NBSGPH) strengthens the role of public health laboratories in genetics testing and facilitates the implementation of strategies to address changes in the newborn screening testing field. With the boon of technology and knowledge of genetics, there is a growing need to incorporate advanced testing technologies into public health laboratories, as well as to explore the public health laboratory's role in newborn screening and genetics testing. APHL works together to raise awareness of newborn screening and genetics in public health issues, develop policies and respond to member laboratory needs.

Major Goals/Objectives:

- Expanding the role of genetics/ genomics in public health laboratories
- Developing newborn screening and genetic training workshops and seminar for laboratorians
- Coordinating and promoting a newborn screening quality assurance model
- Coordinating the Newborn Screening and Genetics Testing Symposia
- Developing and adopting position statements for newborn screening and genetics

Activities This Year:

- Collaborated with CDC and HRSA to develop a national Newborn Screening Contingency Plan to address future emergencies to the newborn screening system.
- Trained 16 state public health laboratorians in molecular (DNA) techniques, using cystic fibrosis as a model.
- Created a Genetics/Genomics Taskforce to explore the role of genetics in public health laboratories.
- Convened the 2008 Newborn Screening and Genetic Testing symposium, with almost 400 participants in attendance from 50 states and 21 countries.



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Newborn Screening and Genetics in Public Health Program

Highlights from the Beginning of the Cooperative Agreement:

- Twenty Newborn Screening and Genetics Testing Symposia (since 1981), with thousands of participants from around the globe
- Tandem Mass Spectrometry Workshops, with 73 newborn screening laboratorians from 33 states trained
- Development of five newborn screening and genetics policy statements:
 - Quality Assurance in the Newborn Screening Laboratory
 - The Role of the Private Laboratory Sector in Public Health Newborn Screening Programs
 - Parental Consent in Public Health Newborn Screening Programs
 - Residual Newborn Screening Specimens
 - Newborn Screening Follow-up

Products of Interest:

- On the Front Line “Promoting the Health of America’s Newborns” brochure highlighting the importance of newborn screening and the vital role that state public health laboratories play in the newborn screening system.
- Newborn Screening Contingency Planning Framework, detailing all of the variables to be considered in during an emergency situation to a state public health newborn screening laboratories. The framework also includes a template Memorandum of Understanding between two state public health laboratories.
- Proceedings from the Newborn Screening and Genetic Testing Symposia, available for public downloads. The proceedings also help to disseminate important information to the broader scientific and policy community, as well as the public.

Links: <http://www.cdc.gov/labstandards/nsqap.htm>
<http://genes-r-us.uthscsa.edu/>
<http://www.hrsa.gov/heritabledisorderscommittee/default.htm>
<http://www.nccrcg.org/>
<http://www.acmg.net>

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APHL-CDC Cooperative Agreement Activities

National Laboratory Training Network Program

The National Laboratory Training Network (NLTN) develops and delivers education programs for professionals in public and private sector laboratories. APHL has collaborated with the Centers for Disease Control and Prevention for nearly twenty years to offer continuing education programs through the National Laboratory Training Network. This highly respected national program provides training across a spectrum of topics in microbiology, virology, epidemiology and other disciplines.

Since its inception, the NLTN has developed and delivered over 4,500 courses reaching well over 275,000 students. The NLTN has trained students from all 50 states plus Guam, Puerto Rico and the Virgin Islands plus 18 other countries. Course topics include but are not limited to Antimicrobial Resistance, Bioterrorism, [CLIA/QA/QC](#), Chemical Terrorism, Cytology, Environmental, Epidemiology, Foodborne Disease, Genetics/NBS, Infectious Disease, Molecular, Mycology, NBS/Genetics, Parasitology, Regulatory, Safety, Tuberculosis, and Virology.

Major Objectives/Goals:

The overall goal for the NLTN is to strengthen public health laboratory workforce readiness by improving the quality of laboratory practice and the skills of laboratorians performing testing of public health significance through training and continuing education. Using training needs assessments, appropriate training responses are developed and delivered and evaluated to assure effective response to articulated needs.

Activities this Year:

The NLTN will:

- Develop and deliver two public health series courses: one on food in July 2008 and another on advanced diagnostic mycobacteriology in November 2008. These week-long, hands-on laboratory workshops are specifically targeted to the public health laboratory community.
- Deliver multiple offerings of packaging and shipping workshops and biosafety/biosecurity seminars and teleconferences.



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National Laboratory Training Network Program

Activities this Year Continued:

- Develop and deliver seminars on bioterrorism for sentinel laboratories, parasitology, laboratory identification of pathogenic mold, identification of medically important filamentous fungi among others.
- Deliver teleconferences on topics including food borne illness, zoonotic arbovirus, detecting and monitoring carbapenemases among others.
- Implement the NLTN reorganization plan to maximize resources benefitting our target laboratory audiences. This will include the centralization of key support administrative, financial, technology and customer support functions and will allow for economies of effort, a more standardized national approach. As a result, NLTN staff will be able to focus on the development of training products that are cutting-edge, national in focus, timely, developed in multiple modalities, award CEUs, and use expert faculty.

Products of Interest:

To address issues of accessibility, the NLTN develops training products in multiple modalities to address a variety of learners' preferences, as well as level of training from broad overviews to intricate, step-by-step detailed testing methodologies incorporating enhanced hands on practical experiences.

Modalities include:

- Hands-on laboratory workshops
- Seminars
- Teleconferences
- Web conferences
- On-demand courses: including on-line courses, podcasts, archived programs and "Laboratory Workshops to Go."

Link: www.nltn.org

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APHL– CDC Cooperative Agreement Activities

Emerging Infectious Diseases Laboratory Fellowship Program

The Emerging Infectious Diseases (EID) Laboratory Fellowship Program is designed to introduce and prepare bachelor's, master's, and postdoctoral level scientists for careers in public health laboratories. The program emphasizes the practical application of technologies, methodologies, practices, and research in infectious diseases. Fellows are placed in local, state, or federal (CDC) public health laboratories to receive advanced training and conduct approved laboratory-related research.

Training and research opportunities include: vaccine-preventable diseases, drug-resistant pathogens, molecular methods, vector-borne or zoonotic diseases, foodborne and waterborne diseases, sexually transmitted diseases, diagnostic testing methods, development and evaluation of diagnostic and subtyping techniques, and laboratory information systems. Additional curriculum may include participation in field and/or outbreak investigations, seminar series/teleconferences, publication and/or presentation of research results, and management training courses.

Major Goals/Objectives:

- Train scientists in local, state, and federal public health laboratories to conduct high priority infectious disease research, including developing new methods of diagnosis, evaluating control measures, and participating in intervention and surveillance measures relating to emerging infectious diseases.
- Prepare scientists for careers in public health laboratory practice.
- Meet ongoing needs of public health laboratories.

Activities this year:

In 2008, over 90 scientists participated in the EID Laboratory Fellowship Programs. This includes the 14th class of fellows recruited in the summer. During their fellowship terms, fellows participated in many research projects, outbreak investigations, short-term international assignments, and published and presented their research in peer-reviewed journals and at domestic and international meetings.



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Emerging Infectious Diseases Laboratory Fellowship Program

Highlights from the beginning of the CA:

- Since the fellowship program's inception, fellows have participated in: more than 600 publications, over 170 outbreak investigations, 1,000 domestic and international meetings, short-term international assignments around the world, EPA training courses, and NLTN Public Health Series Courses.
- Approximately 29% of program participants accepted temporary or permanent positions in local, state, or CDC public health laboratories upon completion of the program. Many others accepted laboratory positions and/or research at academic institutions, hospitals, or private laboratories.
- Approximately one-third of program participants pursued advanced degrees; others accepted positions in federal agencies and health-related private industry or non-profit health-related organizations.
- Several former fellows have advanced to leadership positions in public health laboratories. These include a director of a state public health laboratory (North Carolina), Chief of Biological Sciences at the New Mexico Department of Health, and Director of the Bacteriology Laboratory at the NY State Department of Health.

Products of interest:

"Focus on Fellows" brochure (published each year); program marketing brochure and poster; Plans of Action, quarterly, and final reports produced by each fellow; articles in the APHL newsletter highlighting recent fellow accomplishments.

Links to Relevant Sites:

www.aphl.org/fellowships

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APHL– CDC Cooperative Agreement Activities

National Center for Public Health Laboratory Leadership Program

The Association of Public Health Laboratories (APHL) launched the National Center for Public Health Laboratory Leadership (NCPHLL) in November 2002 to prepare both current and emerging leaders with the strategy and decision-making skills needed to strengthen the capacity and performance of the nation's laboratory system. This is done through: (1) education and training opportunities designed for current and future laboratory leaders and other key decision-makers; and, (2) technical assistance activities designed to support laboratory leaders in applying strategy and decision-making skills to real-world problems.

Major Goals/Objectives: The specific goal of the NCPHLL is to strengthen the capacity and performance of the nation's public health laboratories by providing a central source of information, training, technical assistance, and best practices regarding the administration of public health laboratories.

NCPHLL initiatives target current senior public health laboratory administrators, future and emerging leaders who are likely to assume important decision-making roles within public health laboratories, and decision-makers outside of public health who interact with or influence laboratories in important ways.

Activities This Year:

NCPHLL will:

- Deliver a series of developed skill building workshops on topics such as media and risk communication, legislative policy, story telling and team building.
- Convene a series of regional leadership forums will address succession planning; recruitment and retention; facilities construction from concept to actual coordination of move and commissioning of laboratory facility and continuity of operations.
- Deliver an orientation for new laboratory directors incorporating a team building workshop with orientation to APHL, its mission, organization, member benefits and history as well as opportunities on site at CDC to meet with key stakeholders and understand CDC's mission, history, goals and role.
- Further develop a mentoring program coupling new and emerging leaders with seasoned experts to encourage exchange of best practices.



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National Center for Public Health Laboratory Leadership Program

Activities This Year continued:

- Support a cohort of leaders who will participate in a series of leadership building and skill building events and help shape the mentoring program to meet expressed needs.
- Promote the role of APHL member laboratories in the broader national health community and participates in activities to highlight careers in laboratory science.
- Provide consultative and technical services to laboratories using expert teams to address issues related to organizational design and planning; laboratory testing services; among others.

Highlights from the Beginning of the CA: The NCPHLL:

- Developed an orientation program for new laboratory directors;
- Developed and distributed *The Practical Guide for Public Health Laboratory Leaders* – essentially a how to guide for the first 100 days on the job;
- Conducted a series of regional forums around topics of interest to the laboratory community with an eye towards capturing and sharing of best practices. Leadership competencies were developed for five job categories including public health laboratory director, supervisor, department manager, journeyman, and entry level.
- Sponsored three teams of APHL scholars to attend the UNC sponsored National Public Health Leadership Institute.
- In collaboration with the Brookings Institute, developed a three day legislative policy workshop to familiarize laboratory scientists with the legislative process and demonstrate the importance of effective communication of science information to influence national health policy.

Products of Interest:

- *The Practical Guide for Public Health Laboratory Leaders*;
- Message pallets from various media/risk communication workshops;
- Leadership competencies documents for five levels of laboratory science professionals;
- TMS profile process to identify and address differences in work preferences;
- Team building workshop using rowing as an experiential method to understand aspects of leadership, functions of teams, etc.

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APHL–CDC Cooperative Agreement Activities

Laboratory Systems and Standards Program

The Laboratory Systems and Standards program promotes the development and adoption of quality laboratory practices and integrated, responsive health systems within the national laboratory system.

Major Goals/Objectives:

- *State Public Health Laboratory System* – continue to promote the concept of a state public health laboratory system within the context of the greater national laboratory system.
- *Laboratory System Improvement Program* – promote assessment using a performance standards tool that leads to the implementation of a quality system improvement process within state public health laboratory systems.
- *Accreditation* – ensure the interests of state public health laboratories are represented within the broader accreditation of public health departments' movement and explore the feasibility of developing an accreditation program for state public health laboratories.
- *Comprehensive Laboratory Services* – conduct a biennial assessment of state public health laboratories to address Healthy People 2010 Objective 23-13 goals.
- *Public-Private Laboratory Partnerships* – promote concept of national laboratory system by supporting collaboration among clinical, environmental, agricultural and veterinary laboratories to assure quality laboratory services and protection against emerging health threats.
- *Clinical Laboratory Improvement Amendment (CLIA)* – assist public health laboratories in meeting and maintaining the CLIA regulations to ensure high quality laboratory testing within public health laboratories nationwide.

Activities This Year:

- The Laboratory System Improvement Program is providing technical assistance for approximately ten states to take part in the assessment process, including mini-grants to help defray assessment costs. The emphasis on quality improvement includes the release of an Online Resource Center of over 100 quality improvement related tools. The Quality Improvement Subcommittee has been helping to prepare for the first in a series of quality improvement technical assistance calls for assessment sites.
- The Comprehensive Laboratory Services Survey was revised and launched in October 2008. APHL also joined the Healthy People 2020 Consortium in order to support the retention of Objective 23-13 in Healthy People 2020 and continue the Comprehensive Laboratory Services Survey to serve as the data source for this objective.



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Laboratory Systems and Standards Program

Activities This Year:

- An editorial committee was formed to steer the direction of a supplement on the state public health laboratory system that will be published in *Public Health Reports* in Spring 2010.
- A ListServ was formed for QA officers. There are representatives from 36 SPHLs and 8 LPHLs on the listserv. There have been 2-5 inquires per month and between 2-20 responses.
- Five bench aids were developed on CLIA certificate types to assist in addressing the problem of non-traditional trained staff performing waived laboratory tests such as urine dipstick, specimen collection, etc. 1,500 of the urine dipstick bench aids have been handed out and are frequently requested.
- An Accreditation Workgroup was formed.

Highlights from the Beginning of the CA:

- The CDC has provided three rounds of funding (18 total) for National Laboratory System grants. The goal of these projects is to encourage public-private laboratory partnerships.
- APHL spearheaded the effort to develop a HP2010 objective focused on comprehensive laboratory services. Data for this objective is gathered using the APHL CLSS assessment.
- APHL and CDC have developed performance standards for public health laboratory systems. To date, 16 states have implemented the performance standards assessment tools.
- A CLIA Subcommittee was formed to address issues that state PHLs are encountering regarding CLIA inspections and certification.
- A definition of the state public health laboratory systems was developed and distributed.
- An APHL member representative participated on a steering committee supporting the "Exploring Accreditation Project" formed to develop a model for a national public health accreditation program. APHL now has representation on a workgroup of the Public Health Accreditation Board.

Products of Interest:

[CLIA Good Laboratory Practice Bench Aid for Urine Dipstick Testing](#), 2008. Bench Aid.

[Comprehensive Laboratory Services Survey](#), 2008. Brief.

[Multi-site CLIA Certificate Programs](#), 2007. Brief.

[Definition of a State Public Health Laboratory System](#), 2007. Summary.

[APHL Public Health Laboratory Systems Performance Standards Program](#), 2007. Summary.

[Building A National Laboratory System](#), 2006. Brief.

[Core Functions and Capabilities of State Public Health Laboratories](#), 2000. Technical Document.

Links: <http://www.aphl.org/programs/LSS/Pages/default.aspx>

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APHL-CDC Cooperative Agreement Activities

Informatics Program

The APHL informatics program strives to promote the needs of public health laboratories in the area of information technology. Work in this program area encompasses a broad range of activities in the informatics realm, from educational and collaborative activities to the investigation and piloting of viable technology architectures. The overarching goals of this program are:

- Develop and promote the use of effective laboratory information management systems (LIMS).
- Enhance the role of public health laboratories (PHL's) as partners in the collection, analysis and presentation of data.
- Collaborate with association and federal partners on major informatics initiatives such as Public Health Information Network (PHIN) and National Health Information Network (NHIN).

Major Goals/Objectives:

- Work with CDC and PHIN partners on new PHIN initiatives and requirements
- Institute and Support subcommittees in LIMS related domains
- Update and publish a second edition of the document "Requirements for Public Health Laboratory Information Management Systems"
- Continue to work collaboratively with the APHL Global Health program on President's Emergency Plan for AIDS Relief, Laboratory Information System activities.
- Attend and Contribute to the Office of the National Coordinator-National

Activities This Year:

- The members of the Informatics committee meet on the fourth Thursday of each month via conference call. They also meet in person annually; it is an opportunity for committee members to strategically plan the work and involvement of the Informatics program with other APHL program areas and with its federal partners (Dec 10/11 2008).
- APHL supported a meeting for 35 members of the STARLiMS subcommittee to convene in Richmond Virginia to collaborate around their LIMS solution and plan for the future as a community.



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Informatics Program

Activities This Year continued:

- Policy Statement published: “Laboratory Information Management Systems for Every Public Health Laboratory”.
- The Requirements for Public Health Laboratories Information Management Systems document was updated based on workgroup recommendations and is currently in electronic form as a wiki on the APHL SharePoint site. The committee would like to move this wiki to the live website so that the public can also modify at will.
- APHL continues to hone the LIS/LIMS Vendor Information. This will be a continually updated list of commercially and publicly available laboratory software applications and providers.
- Collaborating with other partner organizations on the Joint Public Health Informatics Taskforce. APHL was one of seven organizations to vet and sign the JPHIT charter.
- APHL is providing technical assistance to support expansion of LIS activities in the following countries: Mozambique, Tanzania, Viet Nam, Kenya, Ethiopia and Botswana.
- The Informatics Program hosted a 22 country LIS meeting in Hanoi Viet Nam. Major goals were to create a global LIS community, gain insight into strengthening the “Guidebook for Implementing LIS in resource poor settings” and give attendees a forum to showcase the work they have done in the past year.
- A Laboratory Profile has been created in SharePoint (an effort towards eliminating yearly surveys). The STARLiMS group is piloting version 1.0 of the profile.

Products of Interest:

- Updated “live” version of the LIMS requirements document on SharePoint
- Laboratory Information Management Systems for Every Public Health Laboratory position statement.
- PHL LIMS profile in Beta testing.
- Lab Informatics workforce development charter created.

Links: <http://www.aphl.org/aphlprograms/informatics/collaborations/Documents/LIMS-every-phl-lab.pdf>

<http://www.aphl.org/aphlprograms/informatics/collaborations/pages/default.aspx>

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APHL-CDC Cooperative Agreement Activities

The Public Health Laboratory Interoperability Project (PHLIP)

The Public Health Laboratory Interoperability Project is currently in its second funded year. Since last year, we have seen PHLIP move from a pilot project into a production system and have expanded the effort, both in scope and in number of participants. This project has become integral to keeping public health laboratories relevant in the arena of health IT and has successfully fostered a network of collaborative partners in the effort to standardize and prove electronic laboratory messaging. Sharing laboratory data across public health partners is essential for public health reporting and planning, and crucial in responding to outbreaks, events and emerging health threats.

Major Goals/Objectives:

PHLIP fosters collaboration in the areas of information technology and laboratory science, with the immediate goal of developing, piloting and deploying viable IT architecture options and tools for the exchange of electronic laboratory data at all levels of public health laboratories.

- To expand participation in the PHLIP Influenza Implementation Group to 10 new states by the end of CY 2009.
- To develop standard electronic test order/result message containing all information relating to the specimen submitted for testing (for Surge Capacity and Mutual Assistance).
- To meet the practical needs of communicating test orders and test results among Public Health Laboratories and their partners.
- To provide all participants with a complete test catalog for each of the partner laboratories, defining their orderable tests and expected result reports
- To accelerate efforts for revising and enhancing standard vocabularies to meet real world practice
- To share the PHLIP deliverables as reference guideline tools for electronic laboratory reporting projects and applications nationally.
- To distribute all standard vocabulary from a centrally managed location such as PHIN VADS.



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The Public Health Laboratory Interoperability Project (PHLIP)

Activities This Year:

- PHLIP work groups have expanded to Seven different Areas, each workgroups meets on a weekly basis (web and phone):
 - PHLIP NEW STATE Implementation Workgroup – The purpose of the workgroup is to work through the technical details of the PHLIP Influenza HL7 solution and the current PHIN MS technical architecture for the 11 new states. (Rhode Island, Maine, Texas, North Dakota, Massachusetts, New York, Hawaii, Idaho, Wyoming, Wisconsin, Utah)
 - PHLIP V&M Workgroup – The Vocabulary and Messaging workgroup’s purpose is to work with PHLIP states (and others) as well as CCID to harmonize the test method and result vocabulary (LOINC/SNOMED) used in PHLIP implementation guides.
 - PHLIP CORE Vocabulary workgroup: Work on core vocabulary issues, brings options and solution to the larger V&M group.
 - PHLIP Route Not Read Hub Workgroup – The RnR hub is the PHLIP interim architecture to support electronic data exchange while the CDC pursues development of the long-term solution. States will utilize two initial RnR hubs to demonstrate the messaging architecture and functionality. The architecture will be scalable to allow for future expansion and RnR hub additions (hubs will be live by Feb 1 2009).
 - PHLIP Electronic Test Order and Result (ETOR) Workgroup-Developing the HL7 2.6 PHLIP ETOR Implementation Guide. Draft guide is now available for peer review on Internal SharePoint site.
 - PHLIP Pan Flu Grantee Workgroup: This group is comprised of Pan Flu grantees and plans to be the test bed for the ETOR message for surge capacity and mutual assistance.
 - PHLIP Steering Committee– The governance body of PHLIP (for daily work/tasks).
- 11 states selected to participate in the PHLIP HL7 Electronic Laboratory Surveillance Message for reporting Influenza results to CDC’s CCID Influenza Division in 2009. This brings PHLIP participation up to 18 states.
- The PHLIP state readiness assessment was created.
- HL7 v2.3.1 Influenza Message Guide ORU has been updated to changing requirements, version 1.0.2 will be released in January 2009.
- PHLIP Vocabulary and Messaging Workgroup has completed the disease test and result vocabularies for 18 NNDs.
- PHLIP vocabulary included in the newest release of PHIN VADS 2.5.

Products of Interest:

- HL7 v2.3.1 Influenza Message Guide ORU (Version 2)
- PHLIP primer
- DRAFT- HL7 v2.6 Order/Result messaging for testing by public health laboratories.

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Numerous Partners in:

CCID
NCPHI
COTPER

APHL-CDC Cooperative Agreement Activities

Knowledge Management Program

APHL has been capturing data about public health laboratories (PHLs) for almost 20 years. However, it is only in the last five years that APHL has attempted to capture and store data so that it can be easily retrieved for additional analysis. More recent still is APHL's attempt to capture "knowledge" both about public health laboratories and for public health laboratories.

To build upon the successes from past cooperative agreements and ensure that important information about public health laboratories continues to be captured, APHL has identified the following objectives for the new cooperative agreement period:

Major Goals/Objectives:

- Implement quality improvement throughout APHL survey and research projects
- Coordinate the systems and resources within APHL to foster the maintenance and sharing of public health research data
- Provide assistance and guidance in establishing public health forums in order to foster interfaces and interactions amongst APHL members and stakeholders
- Produce useful and relevant information for public health practices

Activities This Year:

- Administered the following assessments—All-Hazards, PulseNet, Trust for America's Health, Antimicrobial Susceptibility Testin, Hepatitis, Public Health Series, Comprehensive Laboratory Services—related to a variety of public health program areas.
- Implementing process evaluation mechanisms to continually improve data collection
- Building internal capacity among APHL staff—trainings were held on survey methodology and use of the MR Interview Survey Platform
- Developing front-end data interface for sharing of survey data; the interface will allow members to review their data as well as use it to generate simple reports.



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Knowledge Management Program

Activities This Year continued:

- Developed and presented KM overview to APHL committees.
- Drafted research agenda to serve as a framework around which we organize information and build a knowledge base.
 - The agenda was created after conducting an environmental scan which included qualitative as well as quantitative interviews with our stakeholders. In addition to organizing the information we collect, we would like to re-examine information already collected as well as partner with other organizations to investigate questions deemed important by our stakeholders.
- Completed pilot work on the storytelling concept as method for gathering and retaining

Highlights from the Beginning of the CA:

- Beginning organizational change towards a systematic data collection to create more efficient knowledge management. Benchmarks in the process include:
 - Survey Program Re-Design conducted April 2007
 - Taskforce convened Oct. 2007 to draft agenda
 - Research Agenda drafted Nov. 2008
 - Continuous Quality Improvement processes implemented July 2008

Links: http://www.aphl.org/programs/knowledge_management/Pages/default.aspx

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APHL-CDC Cooperative Agreement Activities

Global Health Program

The APHL Global Health Program is committed to supporting a *systems approach* to achieve the vision of “a healthier world through quality laboratory practice.” The Global Health Program promotes the development of national laboratory strategic plans, implementation of quality systems and practices, building laboratory networks and mentoring by senior APHL members in public health laboratory reference testing, laboratory-based surveillance, health event detection and response, quality assurance and control and laboratory management.

Major Goals/Objectives:

- Promote development of national laboratory strategic plans and capacity in quality laboratory systems and practices.
- Foster skills building by providing laboratory education and training programs in US public health laboratories and abroad
- Build communication networks among laboratorians internationally

Activities This Year

- APHL and The George Washington University International Institute for Public Health Laboratory Management delivered the second 11 countries attended the 2 week advanced seminar that improved abilities in strategic planning, developing quality management systems, managing public health laboratory networks and other
- APHL Global Health Program Director and former Chair of the Laboratory Division of the American Society for Microbiology (ASM), Ralph Timperi, organized an oral session at the ASM 108th General Meeting on “Implementing quality assurance effectively in resource constrained settings”.
- APHL staff and members participated in CDC led activities with the Global Laboratory Initiative and the WHO Biosafety Consultation.
- APHL laboratories are actively participating in the WHO Laboratory Strengthening Initiative through twinning agreements with Mozambique, Ethiopia, Barbados, Guyana and Paraguay; and drafting strategic plans in Namibia, Tanzania and Lesotho.



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Global Health Program

Activities This Year Continued

- APHL was awarded three funded Twinning Projects following a competitive application process through the Lyon World Health Organization Office. This initiative is one of the efforts to strengthen laboratory capacity in developing countries and to support countries in meeting the requirements of the new International Health Regulations (IHR, 2005).
- APHL Global Health Committee member, Dr. Eric Blank (MO State Public Health Lab) attended the annual meeting of the Canadian Public Health Laboratory Network (CPHLN) and facilitated the meeting between representatives from CPHLN and APHL staff in Silver Spring, MD. Discussions were held around the subject of renewing the Memorandum of Understanding between the two organizations with the intent to develop systems of appropriate laboratory processes and procedures for implementation in resource poor settings. Collaboration with CPHLN and international organizations can leverage considerable existing resources that are relevant and readily useable for best practices, procedures, and laboratory systems in developing countries.
- The Florida State Public Health Laboratory and the Norfolk County Laboratory hosted 4 representatives from the China CDC office. Discussions were held during this meeting on surveillance and laboratory networks. The China delegation visited the Virology, TB and Emergency Preparedness units as well as the Epidemiology teams from these laboratories.

Highlights from the Beginning of the CA

- Provided advanced training and learning opportunities for senior laboratory technicians in U.S. Public Health Laboratories.
- Developed and implemented a laboratory assessment tool for different laboratories.
- Performed laboratory assessments and/or assisted in development of strategic and implementation plans in several countries
- Developed, in collaboration with key stakeholders and partners, the EQA for AFB Smear Microscopy manual
- Developed, in collaboration with key stakeholders and partners, the Acid-Fast Direct Smear Microscopy training package

Products of Interest

- Guidebook for Implementation of Laboratory Information Systems (LIS) in Resource Poor Settings & LIS Technical Manual
- Third edition of External Quality Assessment of AFB Microscopy
- AFB Smear Microscopy Training Products

Links to Relevant Sites

http://www.aphl.org/programs/Global_Health/Pages/default.aspx

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APHL–CDC Cooperative Agreement Activities

Health Marketing and Communications Program

The APHL Communications Program is responsible for the association's print and electronic publications, media relations and messaging. Products include a quarterly magazine, an electronic newsletter, briefs and reports, collateral materials and the APHL website. Redesign of the website has been the program's top priority over the last two years.

Website Development:

APHL launched its redesigned website in 2008. The new site offers deeper content, new features and improved functionality including:

- Single sign-on affording members access to the external-facing site, intranet and database via a single login.
- MyAPHL page that provides single-point access to course registration, committee and workgroup sites, saved topics/pages, member search and member interests.
- Permission-based access by member category to documents and pages.
- Narratives describing the contributions of laboratories in public health.
- Robust federated search capability plus special search features on selected pages.

Major Goals/Objectives:

Goals:

- Build recognition among key audiences of the contributions of laboratories in public health.
- Produce and disseminate scientific information and association messages to target audiences through print/electronic publications and media coverage.
- Provide effective online communications tools and resources for members.

Objectives:

- Continue to develop the website with the support of dedicated employee. Implement "shopping cart" functionality, make enhancements to training pages and introduce Web 2.0 applications. Link content across print and electronic publications.
- Expand coverage of member achievements in APHL and external publications to build recognition of their contributions to laboratory science, practice, training and research.



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Health Marketing and Communications Program

Activities of FY 2008-2009

Lab Matters: APHL's quarterly magazine ran cover stories on electronic data sharing and the future of newborn screening in the summer and fall editions. The two previous editions were devoted to all-hazards preparedness and the APHL global health program.

Publications: APHL produced issue briefs on all-hazards preparedness, food safety and the comprehensive laboratory services survey; a guidance document for assessment of laboratory surge capacity; the 2007 annual report; fact sheets; conference materials and other informational resources.

Highlights of FY 2005-2007

- *New Logo and Identity:* APHL reinforced its brand by developing a new logo and identity to provide a consistent, contemporary image for the association. This effort was supported by a team of members and partners.
- *PR Vehicle:* APHL published *Defending the Public's Health*, a brochure promoting the contributions of public health laboratories.
- *Strategic Plan for Communications:* APHL updated its strategic plan for communications to reflect current association priorities and trends. It also updated the association's crisis communications plan and style guide.
- *Media Database in AMS:* All media contacts are in the association management system as of November 2006. This change has improved reporting capabilities and staff access to media information.
- *Other Publications:* APHL routinely produced technical, promotional and policy materials, including a weekly electronic newsletter, annual report, conference materials and technical documents. Processes and standards have been established to streamline production and maintain quality.
- *Media:* APHL regularly responded to media inquiries and developed messages for use with the media and policy makers.
- *Messaging Strategy:* APHL adopted a messaging strategy that positions member laboratories as advanced diagnostic centers that protect public health and safety. Narratives from incidents at member laboratories provide a non-technical explanation of laboratory roles and contributions. Messages are driven by the APHL Strategic Plan and responsive to emerging developments.

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