The Role of Public Health Laboratories

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Presentation to CLIAC
Public Health Laboratories

- Customers
- Scope of Services
- Performance Standards & Accreditation
Customer = the Community

- Federal, State Agencies
- Public Health Partners
- Clinical Laboratories
West Nile Virus: Case Study of Laboratory Roles
Scope of Services

- Perform expansive range of testing
- Support public health programs
- Each laboratory is unique
  - Environmental
  - Newborn Screening
  - Emerging Infectious Disease
  - Terrorism Response
  - Food Safety
New Demands
Disease Prevention, Control and Surveillance

- Center of expertise for the detection and identification of biologic agents
- Specialized tests for low-incidence, high-risk diseases
Integrated Data Management

- Hub of scientific information in support of public health programs
Reference and Specialized Testing

- Confirmatory testing
- Diagnosis of unusual pathogens
- Toxicology testing
- Epidemiologically-significant specimens
- Esoteric assays
Environmental Health and Protection

- Safe drinking water
- Water quality
- Air quality
- Radiation control
- Lead surveillance and abatement
- Occupational health
- Environmental monitoring
Food Safety

• Identify causes and sources of foodborne illness
• Evaluate quality of foods, beverages and dairy products
• Detect foodborne outbreaks
• Evaluate bacterial, radioactive, pesticide, herbicide and drug contamination of foods
Laboratory Improvement and Regulation

- Quality assurance programs
- Licensure, certification and accreditation
- Environmental laboratory oversight
- Analytical support of federal, state, local regulations
Policy Development

- Scientific leadership in developing state and federal public health policy
- Standards for all health-related laboratories
Emergency Preparedness

- Terrorism response
- Environmental hazards
- Natural disasters
- Radiation releases
- Emergency foodborne outbreaks
- Infectious disease emergencies
Public Health Related Research

- New technologies and analytical methods
- Research to improve laboratory testing
- Applied studies
- Public health research
Training and Education

- Scientific and technical training for clinical and environmental laboratorians
- Preparing scientists for careers in public health laboratories
- Education in management and leadership
- Training of international laboratory scientists
Partnerships and Communication

- Partnerships among public health leaders, managed care, academia, private industry
- State strategic planning and development meetings
- Communications with public health officers and directors, legislators, state health budget personnel
Performance Standards

- Voluntary
- Gold Standard Level
- Based on 10 Essential Health Services
- Uses 11 Core Functions of a PHL
- Systems Level
APHL Performance Standards Project

Phase I  |  Completed February 2005
• Method for developing standards and assessment of acceptability

Phase II  |  Begun July 2005
• Development of the standards

Phase III
• Implementation of performance standards nationwide
The Future = Collaboration Across Labs

Clinical + Public Health Labs ➔

Real-time Information ➔

Positive Health Outcomes