

**THE
PIHOA
REGIONAL LABORATORY INITIATIVE
- Then and Now -**

**PIHOA 45th Meeting
Honolulu, Hawaii
April 17 2008**

OVERVIEW

- ❑ Progress: 2005 – 2008
- ❑ Accomplishments
- ❑ Challenges
- ❑ Next steps

Progress: 2005 - 2008

2005

- PIHOA RLC hired and stationed in Guam
- Established contact with the 10 USAPI laboratories:
 - **CLIA-regulated labs:**
 - ✓ CHC Lab, Saipan, CNMI
 - ✓ Guam Public Health Laboratory, Guam
 - ✓ LBJ Tropical Medical Laboratory, American Samoa
 - **Non-regulated labs:**
 - ✓ Palau
 - ✓ Chuuk, Pohnpei, Kosrae & Yap (FSM)
 - ✓ Majuro & Ebeye (RMI)

Progress: 2005 – 2008 (cont'd)

Goal

Provision of core public health laboratory services for the US-affiliated Pacific Islands

for

Influenza

Dengue

Measles

Rubella

Syphilis

Chlamydia

Gonorrhea

HIV

Typhoid

Cholera

Agents of bioterrorism

Progress: 2005 – 2008 (cont'd)

Activities

- i. Guam Public Health Laboratory – Level 2 laboratory
- ii. Build local lab testing capacity in the 9 USAPI labs
- ii. Provide training and technical support, oversee quality assurance
- iii. Coordinate shipping activities to and from the USAPI labs
- iv. Establish and use PIHOA Reimbursable Fund

Progress: 2005 – 2008 (cont'd)

2006

- Oversee IATA shipping training & certification
- Assessment of microbiology labs in the FAS (WHO Assessment Tool)
- Microbiology enhancement training (MET) for Palau (2006)
- Establishment of reference labs for:
 - Dengue – UH Dept. of Tropical Medicine Laboratory
 - Leptospirosis – WHO Reference and Research Lab, QLD Health Dept.,
Brisbane, Australia
 - Influenza:
 - i. CDC Influenza Lab, CDC, Atlanta
 - ii. WHO Influenza Collaborating Center, Melbourne, Australia
 - iii. Hawaii State Lab (pending approval)
 - Other clinical specimens – Diagnostic Laboratory Services, Hawaii

Progress: 2005 – 2008 (cont'd)

2007

- DLS-PIHOA subcontract for TB lab activities in the USAPI
- MET in Pohnpei (July)
- Pandemic Flu Preparedness
 - PCR testing equipment: Majuro & Palau (US Navy Joint Taskforce)
 - Build capacity of US Naval Hospital (Guam) – Level 2 reference lab in the USAPI

Progress: 2005 – 2008 (cont'd)

2008

- Food microbiology training at the Palau Division of Environmental Health:
 - Phase 1 (February) – E.coli & Staphylococcus aureus
 - Phase 2 (July) – Salmonella, Shigella, Vibrio
 - Phase 3 (October) – Bacillus cereus, Listeria
 - Phases 4 – 6 (2009) – Mycological contaminants/microbial toxins in foods

- MET - Kosrae and Ebeye (June & Sept)

- CE sessions for current lab techs (microbiology & immunology/serology) - 2x/year (June and December)

- Microbiology Proficiency Testing in Microbiology for FAS labs - pending

Accomplishments

- **Annual lab visits/lab assessments & recommendations**

- **Lab testing capacity in the USAPI**
 - All labs - Screening tests available for TB, HIV, gonorrhea, chlamydia, syphilis
 - Some labs – screening tests available for dengue, leptospirosis, influenza
 - Most labs (except Guam/ASamoa) – unavailability of screening test for measles & rubella testing

- **Trainings:**
 - MET (Palau & Pohnpei)
 - Food microbiology training in Palau (DEH new food lab)
 - Guam EPA - Drinking water analysis supervisory training attended by the RLC

Accomplishments (cont'd)

➤ **Guam Public Health Laboratory**

- Hire of a BT microbiologist in March 2006

➤ **Pandemic Flu Preparedness**

- PCR equipment for Palau & Majuro
- Current on-going discussions for regional lab testing capacity at the US Naval Hospital, Guam

Accomplishments (cont'd)

➤ **Shipping**

- All types of specimens (except agents of bioterrorism) can be transported on Continental Micronesia (CMI)
- Effective shipping network in the USAPI (CMI)
- Development of shipping protocols for each USAPI lab
- On-going new & recurrent IATA shipping training and certification every 2 years
- 61 current IATA-certified shippers in the USAPI
- Establishment and maintenance of a healthy & trusting relationship with CMI
- Referral of specimens to reference labs in Hawaii; Fort Collins, Colorado; New Caledonia and Australia via CMI have been successful
- Establishment and use of shipping accounts with TNT- Guam and Courier Corporation of Hawaii (freight forwarder), Chemtrec (24hr emergency response number)

Accomplishments (cont'd)

➤ **TB Shipping & Testing**

- All USAPI labs can perform AFB smear microscopy
- Shipping & testing at DLS, Hawaii
- PIHOA-DLS TB lab activities subcontract

➤ **Communication**

- Has improved greatly since 2005

Challenges

- **Guam Public Health Laboratory**
 - No major progress in the BT suite
 - Suspension of Bacteriology testing license (no micro technologist)
 - Resignation of BT microbiologist in March 2008
- **Laboratory test methods**
 - variation in test methods/kits/equipment for some tests
- **Procurement of lab supplies** – a prolonged process
- **Lab surveillance of infectious diseases (other than TB)** – to be further improved

Challenges (cont'd)

➤ **Training & Professional Development**

- Education level of participants – English comprehension
- Shortage of trained & qualified medical lab professionals in the FAS labs
- Continued professional development of current lab staff is

➤ **2006 Lab assessments & recommendations**

- Delayed progress in recommended improvements

➤ **Shipping**

- American Samoa → Shipment to other reference labs in Hawaii, US mainland on Hawaiian Airlines → not permitted

Challenges (cont'd)

➤ **Funding limitations**

- Some labs do not afford to purchase and maintain supply of test kits for dengue, leptospirosis and influenza.
- Limited interaction between public health programs and labs in terms of funding issues relating to training, budget for lab supplies & testing
- Purchase and sustainability of shipping supplies

Next steps

2006 Lab assessment recommendations for improvement

- Revisit with each health director & lab management, obtain time lines for each activity

Training

- Train the younger generation to acquire formal qualifications in medical lab science
- Include public health training programs that will produce public health microbiologists
- Continue to assist with the professional development of the current lab workforce

Next steps

Funding

→ PIHOA to continue to seek assistance (financially or otherwise) for the USAPI labs