Secretariat of the Pacific Community (SPC)

Overview

The Secretariat of the Pacific Community (SPC) is an international organization with a membership of 22 Pacific Island Countries and Territories (PICT). SPC, through its Public Health Division, is the focal-point of the Coordinating Body of the Pacific Public Health Surveillance Network (PPHSN), a joint initiative of SPC and the WHO, which is dedicated to targeted communicable disease control and surveillance, including influenza. The cooperative agreement between SPC and CDC began in 2005 and supports the development of influenza surveillance networks across a vast area, including both the North and South Pacific. In August 2010, an additional five-year extension was awarded to SPC to further develop the existing surveillance systems and address the challenge of pandemic preparedness.

Highlights

- Strengthened relationships between PICTs and reference laboratories in the region and among local PICT sentinel sites.
- Enhanced H7N9 surveillance in Fiji and Guam Public Health laboratories through the provision of equipment and enhanced testing capacities by providing laboratory supplies.

Surveillance

In 2010, PICTs began implementation of a standard syndromic surveillance system with the assistance of WHO and SPC, comprising four core syndromes including influenza-like illness (ILI). The system is designed to provide data that can be used to fulfil the obligations of countries under the International Health Regulations (2005). Project staff have been actively working to integrate ILI sampling into the syndromic surveillance system in each country with the aim of improving the number and quality of specimens that are collected from patients. This has been achieved by advocating for the use of sentinel surveillance sites for both syndromic and influenza surveillance.

Surveillance Activities

- Conducted several supervisory visits in PICTs to review the influenza sentinel surveillance system, update national plans, and promote the integration of virologic and epidemiologic data at the country level.
Laboratory

LabNet is the three-tiered public health laboratory network of the PPHSN: (i) level one (L1) laboratories receive specimens directly from clinicians and where possible, conduct initial screening tests (e.g. influenza rapid tests), (ii) level two (L2) laboratories receive specimens from L1 laboratories (and may also receive specimens directly from clinicians), for first-level confirmation testing (e.g. influenza RT-PCR testing) and (iii) level three (L3) laboratories are internationally recognized reference laboratories for definitive diagnostic testing and further analysis of specimens (e.g. influenza subtyping, sequencing and virus isolation). Reference laboratories of PPHSN continue to provide influenza diagnostic testing for all specimens sent from PICT L1 laboratories. This service is provided at no cost to the country shipping the specimens provided that the corresponding laboratories comply with the International Air Transport Association (IATA) shipping requirements. A technical working body (TWB) facilitates and coordinates the development of LabNet.

Laboratory staff have continuously been certified or re-certified (biannually) to ensure shipments of all biological specimens across the Pacific comply with IATA regulations. This has been achieved by collaboration between SPC and PIHOA in the North Pacific Region.

**Laboratory Activities**

- Supported laboratory-based influenza surveillance through technical assistance and the procurement of equipment and laboratory supplies to enhance local testing capacities.
- Facilitated transport of shipments of samples to identified reference labs for confirmatory testing.
- Conducted several laboratory trainings with regional partners focused on screening tests and enhancing sample transfers.
- Provided training on laboratory diagnosis and algorithms related to influenza and other outbreak prone diseases in the Pacific Region to several national laboratories.
- Conducted a regional LabNet meeting will be held in Noumea at SPC Headquarters (September 2013).

Preparedness

The Fiji Centre for Communicable Disease Control at the Mataika House and Guam Public Health Laboratory have been able to enhance their H7N9 surveillance capabilities with the emergency supplemental funds received earlier this year. Both Level II laboratories have the ability to provide confirmation of influenza through molecular diagnosis. They are both strategically situated should neighbouring PICTs need assistance with confirmation tests. Shipping biological specimens in the Pacific is an expensive process. Building the capacity in both Level II laboratories within the Pacific ensures timely and reliable laboratory results are sustained with the assistance of partner agencies is the goal of SPC PPHSN Laboratory Network.

Training

- Conducted microbiology enhancement and influenza laboratory-based surveillance training in Samoa and American Samoa.
- Contributed to IATA training in Fiji.
- Organized regional LabNet meeting in Nouméa with participants from all PICTs.
- Attended the Data Management and Epidemiologic Analysis for Influenza Data in the Western Pacific Region in Phnom Penh, Cambodia.