

Enhancing the role of LabNet in the Pacific region

The creation and implementation, in 2000, of the laboratory network LabNet has had a significant impact on PPHSN. Laboratories in Pacific Island countries have made considerable improvements in their ability to provide reliable testing for ongoing clinical needs and also for various outbreaks that have occurred in the region. Some of the biggest improvements experienced are:

- ability to perform a wider range of specific test methods, within individual laboratories at Level 1 (L1 – national/territorial laboratories) and Level 2 (L2 – four public health laboratories in Fiji Islands, French Polynesia, Guam and New Caledonia that have accepted responsibility to provide select diagnostic services to neighbouring countries and territories according to their individual capacity) to identify the target diseases of PPHSN;
- access to Level 3 laboratories (L3 – reference laboratories in Australia, New Caledonia, New Zealand and the United States), which has further increased the ability to identify target diseases;
- access to technical training and expertise from L3 laboratories and other LabNet professional partners to enhance the performance abilities of L1 and L2 laboratories;
- shipping mechanisms, particularly in northern Pacific Island territories, to package and ship specimens to meet all regulatory requirements; and
- communications between members through enhanced electronic mechanisms.

The world is currently faced with the emerging threat of a highly pathogenic influenza epidemic and possibly a new influenza pandemic, and to prepare for this, one of the goals of PPHSN is for Pacific Island countries to implement a surveillance strategy for circulating influenza strain occurrences. This surveillance strategy will be accomplished by the implementation of a screening test to be performed in L1 laboratories and then sending specimens for confirmation to an L3 laboratory, as part of the LabNet mechanisms. This will provide us with a better knowledge of the usual annual influenza statistics and will help identify serious epidemic situations when they occur.



Recognising the positive impact the LabNet function has had on communicable disease control, ADB, through SPC, has contracted Mr Albert Gurusamy to serve as Laboratory Specialist Consultant for PPHSN to evaluate and enhance LabNet activities in the region. Mr Gurusamy, who most recently worked at the Commonwealth Health Center in Saipan, Commonwealth of the Northern Mariana Islands, and in Guam, managing clinical laboratory operations, will focus his attention on the reinforcement and enhancement of laboratory activities in the Pacific region. Key tasks will include:

- assessing and reviewing in-country lab performances;
- analysing training needs to meet lab performance goals;
- improving network relationships between L1, L2 and L3 laboratories; and
- evaluating and implementing new test methods to enhance PPHSN target disease testing.

The LabNet functions play a vital role in supporting the ongoing efforts of PPHSN and the goals of SPC, and the role performed by the Laboratory Specialist will serve to enhance laboratory performances in all PPHSN core member countries and territories.

As part of the project funded by CDC to increase influenza surveillance in the Pacific Island region (see *Inform'ACTION* 22: 27–28), SPC and IPNC have also contracted a Laboratory

Technical Specialist, Ms Melissa Pontré, to work specifically on enhancing the development of molecular testing techniques for influenza and other respiratory pathogens.

Ms Pontré, who most recently worked at the Victorian Infectious Diseases Reference Laboratory (VIDRL) in Melbourne, Australia, will be based primarily in Noumea at IPNC, and will be devoting most of her time to assisting in the development and strengthening of PCR testing, specifically the use of Real-Time PCR (RT-PCR) to identify various influenza types. She will also be working with Mr Gurusamy to implement protocols in the six initial Pacific Island countries selected for this project, which are Cook Islands, Fiji Islands, Guam, Palau, Tonga and Wallis and Futuna. The goal is for L1/L2 labs to perform a screening test, utilising fluorescent stains and microscopy, on specimens that meet the clinical criteria for influenza and influenza-like illnesses and then to send specimens to IPNC for confirmation by PCR. Participants in the project will be provided with equipment and reagents, and key personnel from the labs will be sent for an intensive training session at one of the designated influenza testing facilities in Australia and New Zealand. The equipment and reagents have been ordered and initial site visits will be made to the participating country sites in mid-June.



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