Public Health Laboratory Network (PHLN)

The Public Health Laboratory Network (PHLN) is a collaborative group of laboratories nominated by State and Territory health departments, which have expertise and provide services in public health microbiology. National bodies involved in animal health and epidemiology of communicable diseases are also represented, as is the major public health laboratory in New Zealand. Participating laboratories and organisations are listed at the end of this article.

The PHLN was established in 1997 as part of the implementation of the National Communicable Diseases Surveillance Strategy (NCDSS) to complement the activities of the then Communicable Diseases Network Australia New Zealand, now the Communicable Disease Network Australia (CDNA). PHLN aims to provide a national source of expertise in the laboratory aspects of communicable disease surveillance and control, and to take an active role in strategic planning in these areas.

Professor Lyn Gilbert was the inaugural chair of the PHLN, and was succeeded by Dr David Smith in 2001, with Dr Gary Lum as Deputy Chair. The group meets at monthly teleconferences supplemented by annual face-to-face planning meetings. Various formal and informal working groups hold teleconference and exchange information as required between the full PHLN meetings.

During its first 4 years, PHLN has been very active in providing strategic advice to CDNA and the Commonwealth Department of Health and Ageing on a coordinated national approach to public health microbiology for surveillance and control of communicable diseases. In addition it has commented on public health microbiology to a wide range of other organisations, usually following an invitation from that organisation. However, all matters relevant to public health microbiology are considered, and PHLN has been prepared to initiate input where appropriate.

One of the major undertakings has been to assist the CDNA and Department of Health and Ageing to improve the quality and timeliness of laboratory based communicable disease surveillance to introduce laboratory surveillance standards. The PHLN has now produced a set of Laboratory Case Definitions. They are designed to provide nationally consistent criteria for significant laboratory results and cover all of the current notifiable diseases. They have also been used by CDNA as part of the process of developing national case definitions for notifiable diseases. PHLN is providing ongoing input with the aim of creating complementary laboratory and public health definitions. In addition, more detailed case definitions are being produced for each of the notifiable infections that provide an up-to-date summary of testing methods and performance. PHLN is collaborating in a review of the Serology and Virology Laboratory Reporting Scheme (LabVISE) reporting system, with the aim of producing a suitable national laboratory basis for non notifiables communicable disease surveillance.

PHLN has provided a laboratory perspective on a wide range of other microbiological and public health issues, including laboratory testing, surveillance, specimen transport and financing of public health testing. Members of the PHLN have been instrumental in providing information for the current review Financing of Public Health Laboratory Services commissioned by the National Public Health Partnership (NPHP). It is also represented on committees involved in the review of regulations related to the transport of infectious materials, influenza pandemic planning, hepatitis C surveillance, pneumococcal surveillance, nucleic acid testing for sexually transmitted infections and many others. More recently a Laboratory Infection Containment Working Party has been formed at the request of the National Public Health Partnership to provide advice on guidance and containment of pathogenic organisms.

The PHLN also acts as a first point of contact to identify individuals or laboratories with appropriate expertise for unusual outbreak investigations. In the recent past this was effectively applied to the white powder incidents following the anthrax incidents in the USA in October 2001. The PHLN was able to exchange information and rapidly develop protocols for handling suspect materials. This is being progressed further to develop plans for the handling of future bioterrorist threats. Members have previously been involved in establishing plans for the Sydney Olympics.

PHLN has taken an active role in a number of areas related to the implementation of quality assurance (QA) measures for laboratories. It was represented on the working group of the National Pathology Accreditation Advisory Committee to develop standards for laboratories undertaking nucleic acid detection tests, and has collaborated in serology QA exercises. There has also been an active interest in proposals for regulation of laboratory tests being developed by the Therapeutic Goods Administration. PHLN has acted with the Royal College of Pathologists of Australasia and other organisations to represent and promote the interests of laboratories in the process, and now sits on an Australian Health Ministers Advisory Committee (AHMAC) working group that is considering the role and impact of these proposed regulations.

In addition to the PHLN Summary Laboratory Definitions mentioned above, PHLN has also produced a document on *Laboratory Precautions for Samples Collected from Patients with Suspected Viral Haemorrhagic Fevers.* It was recognised that most suspected cases of viral haemorrhagic fever will be managed in hospitals without very high-level containment facilities in their laboratory, but there were no guidelines available to assist with processing of these specimens under such conditions. These were written to address that deficiency.

This article has provided a brief overview of the history and range of activities of the PHLN. It has been a valuable addition to the Australian scene and has provided a mechanism for consensus on a wide range of issues related to the laboratory aspects of public health. Members of PHLN also participate in a variety of other public health related activities at the local, national and international level. Through PHLN they are able to effectively provide a national perspective on issues discussed and to disseminate information from these other sources. We look forward to continuing and expanding our activities in the future.

Contact details

For further information on the Public Health Laboratory Network including Public Health Laboratory Network publications contact:

Secretariat, Public Health Laboratory Network, MDP6, GP0 Box 9848, Canberra, Australian Capital Territory, 2601. Telephone: +61 2 6289 7401. Facsimile +61 2 6289 7791. E-mail: PHLN@health.gov.au.

You may also contact one of the participating laboratories if you want matters raised at PHLN.

New South Wales

Institute of Clinical Pathology and Medical Research Professor Lyn Gilbert Dr Dominic Dwyer

South East Area Laboratory Service

A/Prof William Rawlinson A/Prof John Tapsall

Australian Capital Territory

ACT Pathology Mr Paul Southwell

Northern Territory

Territory Health Services Dr Gary Lum (Deputy Chair)

Queensland

Queensland Health Pathology Service Dr Joan Faoagali

Queensland Health Scientific Services Mr John Bates

South Australia

Institute of Medical and Veterinary Science Prof Chris Burrell Dr Geoff Higgins Dr Jan Lanser Dr Ivan Bastian

Tasmania

Royal Hobart Hospital Dr Alistair McGregor

Victoria

Microbiological Diagnostic Unit A/Prof Geoff Hogg

Victorian Infectious Disease Reference Laboratory Dr Mike Catton

Western Australia

PathCentre Dr David Smith, (Chair PHLN) Dr Tim Inglis

National

CSIRO Australian Animal Health Laboratory Dr Tony Della-Porta

Communicable Diseases Network Australia Dr Vicki Krause

Department of Health and Ageing Ms Robyn Leader

National Centre for Epidemiology and Population Health Ms Mary Beers

New Zealand

Institute of Environmental Science and Research Ltd Dr Fiona Thomson-Carter Dr Diana Martin