

Networking for health protection: the Communicable Diseases Network Australia

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The Communicable Diseases Network Australia (CDNA) has been an active participant in communicable disease activities (under a number of different names) for over a decade. However, because much of its work is behind the scenes and away from the public eye, not many people outside the Network know very much about CDNA, what it does or who is involved. This article is intended to fill in some of this background, and to provide an update on CDNA's recent activities.

Background

What is now CDNA started life in 1989 as the 'Australian Communicable Disease Control Network', a joint initiative of the National Health and Medical Research Council (NHMRC) and the Australian Health Ministers' Advisory Council (AHMAC). AHMAC anticipated¹ that the Network would be a means to ensure improved national co-ordination in the areas of:

- data collection and analysis;
- surveillance;
- training;
- research; and
- policy development.

With the inclusion of New Zealand as an active member, the Network adopted the title Communicable Diseases Network Australia New Zealand (CDNANZ), and was known by this name for many years. In April 2001 it became the Communicable Diseases Network Australia. The new title better reflects the fact that the Network is funded and supported by Australian jurisdictions, and its primary focus and responsibilities are in relation to Australia. However, CDNA continues to recognise the importance of international communication and collaboration on communicable disease matters. New Zealand remains a valued member and the Network is actively developing its links with other regional neighbours.

With the formation of the National Public Health Partnership (NPHP) in 1997, CDNA became one of the key committees reporting to the NPHP (and thence to AHMAC), linking the Network more strongly with the broader public health field.

Membership

CDNA's membership consists of the heads of communicable disease control units in all Australian State and Territory health authorities, the Director of the Surveillance Section of the Commonwealth Department of Health and Ageing (DHA) formerly the Department of Health and Aged Care, plus a number of representatives of other agencies with expertise in communicable disease matters (Table 1). During the last year CDNA was very pleased to welcome 2 new member organisations — OzFoodNet, represented by co-ordinator Martyn Kirk, and the Secretariat

of the Pacific Community (SPC), represented by Dr Yvan Souares. Although at this stage Papua New Guinea and East Timor are not members of the Network, CDNA liaises with health authorities there on communicable disease matters.

Activities

The original concept of the Network envisaged a body with its own specialist staff seconded from government departments and other agencies, providing a direct capacity to undertake the tasks assigned to it. For various reasons this aspect of the Network did not develop, and instead DHA (and its predecessors) has provided secretariat services and other support where this was considered appropriate — and as resources allowed. One consequence has been that many of those original tasks outlined by AHMAC have been undertaken by other bodies on behalf of CDNA. For example, national communicable diseases surveillance for most notifiable diseases is undertaken by DHA's Surveillance Section, with other agencies such as the National Centre for Immunisation and Research of Vaccine Preventable Diseases and the National Centre for HIV Epidemiology and Clinical Research also contributing. Similarly, the ANU's National Centre for Epidemiology and Population Health (NCEPH) has initiated the Master of Applied Epidemiology (MAE) program with strong ongoing support from CDNA.

Another consequence of the absence of a dedicated specialist staff has been that CDNA representatives (or their staff) themselves undertake much of the immediate work of the Network, sometimes a heavy burden for already busy communicable diseases managers and units, and at times a significant limiting factor for the Network's activities.

The best known of CDNA activities are the regular fortnightly national teleconferences, attended by all members (often with other colleagues and staff sitting in). The teleconferences commence with a series of 'status reports', in which each member organisation provides a brief report on notable developments in its area of responsibility. These reports allow members to keep abreast of the rapidly changing picture of communicable diseases across the country and the region, to seek advice on handling some of the more difficult issues that arise, and to co-ordinate responses across jurisdictions and other agencies. Many of these reports refer to evolving investigations which may have significant health, economic or social consequences. Confidentiality is therefore an important issue and the Network operates on the principle that any information provided to members remains in the 'ownership' of the organisation providing it, and should only be used by others for relevant public health purposes.

In addition, the Network holds 'special teleconferences' when events demand more immediate responses or to consider a matter in more depth. Some policy discussion

Table 1. Current membership of CDNA

Current CDNA members	
Chair: Dr Greg Stewart, Acting Chief Health Officer, New South Wales	
Former Chair: Dr Shirley Bowen (Chief Health Officer, Australian Capital Territory, 2000-2001)	
Jurisdictional members	
Dr Eddie O'Brien	Australian Capital Territory
Dr Jeremy McAnulty	New South Wales
Dr Vicki Krause	Northern Territory
Dr Robert Hall	South Australia
Dr Avner Misrachi	Tasmania
Dr Linda Selvey	Queensland
Dr Graham Tallis	Victoria
Dr Gary Dowse	Western Australia
Dr Angela Merianos	Commonwealth (Surveillance Section, Department of Health and Ageing)
Dr Douglas Lush	New Zealand
Dr Yvan Souares	Secretariat of the Pacific Community
Non-jurisdictional members	
Ms Mary Beers	National Centre for Epidemiology and Population Health
Dr Chris Bunn	Department of Agriculture, Fisheries and Forestry — Australia
Professor Margaret Burgess	National Centre for Immunisation Research and Surveillance (of Vaccine Preventable Diseases)
Dr Scott Crerar	Australia New Zealand Food Authority
Professor Lyn Gilbert	Australian Society for Microbiology
Mr Gerard Fitzsimmons	Australian Institute of Health and Welfare
Dr David Smith	PHLN Representative
Professor John Kaldor	National Centre in HIV Epidemiology and Clinical Research
Mr Martyn Kirk	OzFoodNet
Professor Aileen Plant	Curtin University, Western Australia
Sqdn Ldr Anne-Marie Pope	Australian Defence Force

and development also occurs at (both regular and special) teleconferences, but the Network usually holds at least two face-to-face meetings each year to provide a better opportunity to do this in-depth work.

Committees

When work of a more specialised nature is required, this is often assigned to one of a number of standing committees or short term working groups, which generally bring in other people with particular expertise in the fields of interest. Committees and working groups that have operated during 2001 are listed in Table 2.

Recent achievements

The nature of much of its work means that the achievements of CDNA are not always visible or easily measurable. Those closely involved will certainly recognise that outcomes such as earlier or more appropriate responses to outbreaks, better policies on communicable disease management, improved co-ordination of preventive activities, among others, do make an important contribution to public health objectives — containing the spread of disease, reducing morbidity and the burden of communicable diseases on the acute system and maintaining productivity levels.

Although these achievements may not often be quantified, the fact that each fortnight around 20 busy members make it a priority to join a one hour teleconference is one indication of the value of these activities. Even with the development of

Table 2. CDNA committees

CDNA Committees operating during 2001
Communicable Diseases Control Conference Organising Committee
Hepatitis C Surveillance Committee (now Viral Hepatitis Surveillance Committee)
Infection Control Guidelines Steering Committee
Influenza Pandemic Planning Committee
Meningococcal Disease Control Guidelines Committee
National Arbovirus Advisory Committee
National Enteric Pathogens Surveillance System Steering Committee
National Tuberculosis Advisory Committee
Pneumococcal Working Party (co-aided with ATAGI ²)
Public Health Laboratory Network
STI Surveillance Committee

specialised e-mail listservers and Internet sites, the teleconferences seem to remain a most effective way to keep a high level of common understanding among a far-flung and varied group of people in the field.

Conclusively demonstrating the benefits of these connections is generally more difficult, but the recent anthrax scare and other bioterrorism issues did provide an example of the effectiveness of these types of networks. During the days and weeks following the first anthrax cases in the United States and the subsequent rash of threats, CNDA's jurisdictional members communicated regularly via teleconferences and e-mail, keeping all jurisdictions up to date on developments and sharing drafts of incident management protocols tailored to meet Australia's needs. New Zealand was also included in this process. CDNA's Public Health Laboratory Network (PHLN) members were an integral part of the response, ensuring that key laboratories all around the country were aware of the most appropriate methods for testing suspect materials and facilitating specialist training where this was required. These communications were in turn linked to higher level decision-makers within each health authority.

As a result of this work, a relatively consistent national response to these incidents was developed, and all jurisdictions were able to share and benefit from work done elsewhere. Mobilising such systems in emergencies depends heavily on having effective infrastructure already in place. A really effective infrastructure consists not only of appropriate hardware, training and systems, but also requires a common understanding of issues, knowledge of and respect for particular areas of expertise, mutual trust and established relationships — all of which are fostered by Networks such as CDNA and PHLN.

As well as creating and supporting this type of infrastructure, there are also more tangible examples of CDNA's work, many of them the product of committees that draw in a wider circle of expertise. Among the recent achievements this year have been:

Improvement to the National Notifiable Diseases Surveillance System

The National Notifiable Diseases Surveillance System (NNDSS) is operated by the Surveillance Section of the Department of Health and Ageing on behalf of the Network. Although this has been running for some years, following agreement by all Australian jurisdictional CDNA members in late 2000, for the first time Australia now has a list of nationally notifiable diseases that are reported on by all state and territory health authorities. Standard case definitions, reporting systems and access protocols are now being finalised. Web-based systems allow wide access to summary NNDSS information, while researchers are able to obtain more detailed data with the approval of the jurisdictions, which retain ownership of their material.

A number of these diseases (such as tuberculosis, invasive pneumococcal disease and incident hepatitis C) have also been identified as priorities for the development of enhanced surveillance systems that will allow a better understanding of the factors associated with disease spread and the impact of control measures such as vaccination.

Communicable Diseases Control Conference

Held in Canberra at the beginning of April 2001, the Communicable Diseases Control Conference was well

attended and highly rated by participants for topical content and general value. Key note speakers included the Minister for Health and Aged Care, the Commonwealth's Chief Medical Officer, international experts such as Professor Roy Anderson (modelling and planning for BSE and TSEs), Dr Diana Martin (Meningococcal disease) and Dr Allan Hogue (risk assessment of foodborne and waterborne diseases) and many excellent local presenters. The conference provided a valuable opportunity for information exchange and discussion across a range of disciplines and regions, and there was a clear consensus that CDNA should hold another conference in 2 years. (For those with long term diaries, this will again be held in conjunction with NCEPH's MAE Conference in Canberra, probably late March 2003.)

Publication of *Guidelines for the early clinical and public health management of meningococcal disease*

Meningococcal disease is of significant (and arguably growing) concern to the general public; it is a disease that needs careful public health management. The new guidelines are a major revision of the NHMRC's 1996 meningococcal guidelines, and were completed by a CDNA Committee following wide national and international consultation.

Development of guidelines on Australian bat lyssavirus

Although there have only been two human cases of Australian bat lyssavirus since 1996, the existence of lyssavirus in Australian bat populations and the apparent 100 per cent fatality rate of human infections means that the disease poses a potential threat to the Australian population. With input from an expert committee, CDNA has developed information brochures for medical practitioners, veterinarians and the general public on the prevention and management of lyssavirus infection.

Revision of *Infection control guidelines in the health care setting*

The Infection Control Guidelines Steering Committee of CDNA has been working on the revision and expansion of this major document, which will provide an updated set of standards on infection control for the health sector. The work has involved detailed research on international standards, public consultation, the evaluation of numerous submissions from interested groups, and joint activities with other expert committees and individuals. Needless to say, the evolving picture of emerging diseases, particularly transmissible spongiform encephalopathies, has meant that the Committee's work has had to incorporate the latest technical findings and consider the complex public policy issues that result from these developments. It is hoped that the final version of the guidelines will be available by early 2002.

Public health management of communicable diseases among asylum seekers

Significant numbers of people seeking asylum in Australia are accommodated in detention centres located in a number of different States and Territories. The nature of the entry and country of origin of these people often raises communicable disease issues that differ from those of other entrants to the country. Until recently, different Australian jurisdictions had varying protocols with respect to the control of communicable diseases in these detention environments. CDNA has provided a forum for the discussion and

alignment of these policies, with a view to protecting the health of both the detainees and the Australian community. Discussions with the Department of Immigration and Multicultural Affairs have occurred on how the objectives and standards proposed by CDNA can be best met in the widely varying circumstances in which detainees are held.

Formulation of a National TB Strategic Plan

The National TB Strategic Plan was developed by CDNA's National Tuberculosis Advisory Committee. It identifies updated priorities and strategies to ensure continued improvement in Australia's control of TB, and provides linkage with regional and global programs under WHO's auspices. Australia has achieved TB levels that are among the lowest in the world and most programs operate very effectively, but in this elimination phase of the disease it is important to ensure that strategic directions are identified and efforts are maintained.

Laboratory initiatives

The PHLN, the largest of the committees reporting through CDNA, continues to be very active in a number of areas important to laboratory aspects of communicable disease control. PHLN meets by teleconference each month and plays a key role in maintaining and improving the level and co-ordination of the laboratory work that is an essential underpinning for effective surveillance activities. For example, its ongoing program of revising laboratory case definitions helps ensure that new techniques are evaluated and brought into standard use when supported by expert opinion.

PHLN's Laboratory Infection Containment Project (funded by NPHP) is designed to enhance current safeguards against the spread of infectious micro-organisms from laboratories. The project recently completed its first stage, an overview report of the national situation and relevant international developments, and stage two will involve consultation with a broad range of industry stakeholders. PHLN has also been involved in an assessment of the economics of public health laboratory functions in all jurisdictions.

Internal functioning

Over the past 12 months CDNA has taken a number of steps to improve its effectiveness. In conjunction with the Department of Health and Ageing (which provides the secretariat function), it instituted changes in the secretariat that enable more focussed support for Network members and functions. This has also clarified the primary role of the secretariat in supporting the Network as a whole.

In addition, CDNA has commenced a strategic planning process that is intended to provide a better understanding of the changing context of public health communicable disease control, and the ways in which the Network can best contribute. This work has included in-depth interviews with a range of significant stakeholders and consideration of models from overseas. The Network will use this information to continue to develop, retaining those essential core elements while evolving in response to changing needs.

Over the decade since CDNA was established there has been a renewed appreciation of the actual and potential impact of communicable diseases on health status and economic activity. Although the model for the Network originally envisaged by AHMAC did not eventuate, in most of the areas set out in the original charter, CDNA has made important contributions. Data collection is more comprehensive; surveillance is more sophisticated; the MAE program (in particular) is providing high quality training; and the range and quality of relevant policies has been enhanced. Only in the area of research has CDNA not taken an active role, and it is arguable that this was not appropriate or realistic in the first place. As CDNA's strategic planning process is finalised, and with other developments in the field, the Network and the public health system as a whole needs to consider how effectively the present structure of the Network can serve the emerging biological and organisational environments of the future.

References

1. Minutes, first meeting of the Interim Board of Management of the Australian Communicable Diseases Control Network, 8 December 1990.
2. The Australian Technical Advisory Group on Immunisation (ATAGI) reports to the Commonwealth Minister for Health.

New Chairs of CDNA and PHLN

Dr Shirley Bowen steps down from her position as CDNA Chair at the termination of her two year appointment at the end of November 2001. Shirley will also be leaving her position as the Australian Capital Territory's Chief Health Officer to take up a new appointment in Western Australia. The National Public Health Partnership has appointed Dr Greg Stewart, Acting Chief Health Officer in New South Wales, as the new Chair of CDNA.

Professor Lyn Gilbert has resigned from the Chair of PHLN, and has been succeeded by Dr David Smith. Lyn will remain on PHLN, and will continue to be the Australian Society for Microbiology representative on CDNA.

The Network offers its sincere thanks to Dr Bowen for her work as Chair over the last two years, and welcomes its new members