MPROVED PUBLIC HEALT

A s in other Australian states, public health¹ and epidemiology² activities have recently returned to the health agenda in NSW. AIDS and the environment have been major stimuli. An enhanced professional infrastructure has been developing since 1988 through which to address disease prevention and control, and health promotion.

In December 1988 the NSW Department of Health created the Epidemiology and Health Services Evaluation Branch (Epidemiology Branch) to upgrade the surveillance of the health status of the NSW population and to conduct epidemiologic studies evaluating the efficacy and effectiveness of health services. In 1989 infectious disease, non-infectious disease, reproductive health and statistical servicès sections were nominated. Infectious disease reporting and response systems were put in place. Branch staff investigated infectious disease outbreaks, studied the health effects of swimming at Sydney beaches, monitored the safety of pregnancy and childbirth³, developed a birth defects data base and motivated the formation of the NSW Advisory Committee on Infectious Diseases. To date, this committee, which meets monthly to consider policy issues and relevant research, has recommended a revised list of notifiable diseases and reporting procedures.

In November 1989 reorganisation of the Central Office of the Department led to the formation of the Public Health Division. The Division has five main branches under the direction of the Chief Health Officer — Public Health and Statewide Health Services, Epidemiology, the Drug Offensive, AIDS and Mental Health⁴.

In December 1989 the NSW Minister for Health approved \$4 million annual recurrent funding for a program to enhance the public health and epidemiology network in the State. The program will have three main components:

Establishing Public Health Units (PHUs) in Areas and Regions. Fourteen PHUs (two will each serve two Areas) are being developed according to the terms of reference in Table 1. The staff configuration will vary from Area/Region to Area/Region but all will have a Medical Officer of Health who is responsible — among other tasks — for infectious disease control and environmental health. The Units, which will link with the central Public Health Division, will concentrate initially on implementing a new infectious disease reporting and response system. This system will rely on information sent from medical practitioners but especially from laboratories to the PHUs. The Department will soon mount a campaign to inform health professionals of the new guidelines and procedures for notifying infectious diseases.

2 Training health professionals in public health practice. Six public health medicine registrars have been appointed to a three-year program rotating through training positions selected to provide challenging experiences in public health practice. Several Masters degree scholarships in public health will be offered to medical and non-medical trainees; short courses in epidemiology and public health practice will be developed and provided for interested health professionals; and, every two years, one person will be sent to the US Centers for Disease Control to participate in their Epidemic Intelligence Service.

Supporting public health policy investigations. Some funds (\$100,000) have been committed to support investigations conducted by the public health medicine trainees and other research relevant to agendas established by expert advisory panels on ►

Continued on Page 6 ►

TABLE 1

1

12

TERMS OF REFERENCE FOR PUBLIC HEALTH UNITS IN NSW

All senior staff appointments should be on performance contracts.

- 2 Funds can only be spent on activities indicated in these terms of reference.
- 3 Allocated funds must not be used for new building construction.
- 4 The Chief or Deputy Chief Health Officer or Director of Epidemiology Branch must participate in the selection of all PHU Directors and/or Medical Officers of Health.
- 5 The Unit Director will:
 - Coordinate public health activity conducted by the Area/Region including public health programs, research and evaluation with health education and health promotion programs.

Evaluate local health priorities and develop a public health strategy including surveillance, epidemiology, evaluation, and prevention/ control in the following areas:

- Infectious diseases (including AIDS, HIV, STDs and developing local notification networks, investigating all reports of notifiable conditions according to protocol and reporting results to the Epidemiology Branch)
- Environmental health
- Environmental monitoring in accordance with Central Administration guidelines
- Pregnancy outcomes
- Birth defects
- Intentional and non-intentional injuries
 Chronic disease including cardiovascular disease and cancer
- Risk factor prevalence (including drugs, alcohol, smoking)
- Special health problems of minority groups
 Other areas specified by the Better Health Commission
- Analyse local health-related databases including hospital morbidity and perinatal collections.
- Prepare and submit to the Chief Health Officer:
 - annual Unit reports
 - Unit objectives/activities for the next year, and
 - monthly activity reports.

Provide on-the-job training for public health medicine trainees and

Participate in regular statewide meetings of PHU staff to discuss progress and program development.

Laboratory Surveillance of Infectious Disease

► Continued from page 5

These data are analysed and a report, consisting of the accumulated data and a brief commentary, is forwarded by facsimile to the participating laboratories within two working days. The enclosed tables show the data collected during 1989 and 1990 by monthly reporting period. The scheme has been maintained by the enthusiastic support and interest of all the participants. The feedback of up to date information has been found to be of considerable benefit to the laboratories, particularly in assisting them to fulfil their consultative role to the primary care practitioners.

The Laboratory ID Surveillance Project also has been successful in promptly identifying outbreaks of infectious diseases. Interventions which have resulted from the Project include education campaigns in eastern Sydney to reduce spread of respiratory syncytial virus and rotavirus, rubella and whooping cough. When it became clear that the outbreaks of rubella and whooping cough were early indicators of more widespread epidemics, the education campaigns were extended statewide through the central office of the Department of Health.

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Improved Public Health

Continued from page 2

infectious and non-infectious disease, reproductive health and injury. Examples include examining horizontal transmission of hepatitis B and investigating risk factors for invasive haemophilus influenza B infection.

It is planned to appoint an experienced epidemiologist to give a personal touch to communications throughout the developing public health and epidemiology network. As well, there will be regular meetings of PHU and Central Office staff.

Future challenges in NSW for public health professionals include developing clear strategies for action at both the central and Area/Regional levels; demonstrating the utility of epidemiologic analyses to health care decision-makers (including clinicians); developing better collaborative linkages between academic departments of public health and public health action/ service groups; and effectively communicating information to health workers and the public in a timely manner.

The Bulletin will provide a useful mechanism for exchange of information and ideas on investigations, programs, and evaluations that (may) affect the health of the citizens of NSW.

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1. An organised societal effort to protect, promote and restore health. It is a combination of sciences, skills and beliefs directed to the maintenance and improvement of health through collective or social actions. The programs, services and institutions involved emphasise the prevention of disease and the health needs of the population.

 The study of the distribution and determinants of health-related states or events in specified populations and the application of this study to control health problems — it is the scientific discipline underpinning public health practice.
 Department of Health, NSW. Epidemiology and Health Services Evaluation Branch.
 1987 Maternal and Perinatal Report.
 Health Services Implementation Branch.
 Central Office Department of Health, NSW, Organisational Structure. November 1989.

Infectious Disease

Continued from page 3

Compared with 1988, there was an eight-fold increase in the number of pertussis cases notified to the Department of Health in 1989 (Table 2). The greatest increase occurred in the latter part of 1989 — in the two months from October 1. The majority of cases occurred in one to two year old children. Males and females were affected equally. Increased pertussis reporting has persisted through to January 1990 (Tables 3 & 4). A likely explanation for this is that immunity of children against B. pertussis is currently suboptimal.

While measles is potentially preventable, cases continue to be notified. Their existence suggests that there is substantial room for improvement in present immunisation practices.

Arbovirus notifications increased during 1989 compared with 1988. It is not known whether this was due to more accurate reporting than previously, or a true increase in incidence. All reported arbovirus notifications were Ross River virus infections, with the majority of cases being reported from the South West Region.

No particular trend in reporting of enteric diseases between 1988 and 1989 could be detected other than Salmonella notifications increased 30% in 1989. Of enteric pathogens, Campylobacter, Giardia and Salmonella were notified more frequently than infections due to Shigella and Yersinia and unclassified infantile diarrhoea. Typhoid fever is no longer endemic in New South Wales; primary cases reported for 1988 and 1989 occurred in overseas visitors. Six cases were notified in the first 2 months of 1990 (Tables 3 & 4).

Sexually transmitted disease notifications declined in 1989 compared with 1988 — genital herpes (7.5%), gonorrhoea (19.2%), syphilis (6.5%) and non-specific urethritis (45%). This pattern of declining notifications is still evident in the first 2 months of 1990 (Table 3).

Malaria notifications increased substantially in the first 8 weeks of 1990 compared with the comparable period in 1989 (Table 3). The majority of these cases reside in northern Sydney (Table 4). Most of these cases were acquired in Papua New Guinea.

Reported by the

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