The first surveillance report, generated in both English and French, is intended for use by the IOC Medical Commission (which will meet each evening to review medical and health matters). This report presents time series of the frequencies of occurrence of broad categories of illnesses and injuries among different subgroups (including athletes, Olympic Family members, officials, spectators, and nationality groups) and at different venues. It also contains more detailed analysis of the most frequently occurring problems and of any unusual patterns of illness or injury, as well as analyses of the nature of injuries for which competitors have sought treatment. Further ad hoc analysis of the cumulative data will be carried out each evening if required.

The second surveillance report, in English only, is intended for use by the NSW Department of Health and SOCOG medical staff. While similar to the IOC Medical Commission report, it focuses on general public health issues, with detailed analyses of food-related, communicable and potentially communicable illnesses and of the types of injuries suffered by spectators at each venue. This information, in conjunction with information provided by the other health surveillance systems described in this issue of the Bulletin (see the article by Thackway on page 142), will contribute to ensuring rapid and appropriate response to public health issues that arise during the Games.

COMMUNICABLE DISEASE SURVEILLANCE DURING THE SYDNEY 2000 OLYMPIC AND PARALYMPIC GAMES

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A computerised communicable disease surveillance system has been operating in NSW since 1990. The existing system for surveillance of notifiable communicable diseases will be used during the Olympics, with some enhancements to improve timeliness and reliability. In addition, the Emergency Department Olympic Surveillance system (EDOSS) will collect information on cases of selected communicable diseases presenting at emergency departments. EDOSS is further described in the article by Thackway on page 142.

COMMUNICABLE DISEASE SURVEILLANCE AT PRESENT

Under the NSW Public Health Act 1991, medical practitioners, hospitals, laboratories, schools and child care centres are required to notify a range of communicable conditions (currently 40) to the NSW Department of Health, usually via the local public health unit (PHU). This system relies predominantly on notifications from laboratories, as they confirm most diagnoses. Also, laboratories routinely distribute results of pathology tests, so it is administratively straightforward for them to notify. Laboratories provide more than 80 per cent of notifications.

The notification process triggers public health action as well as contributing to the collection of surveillance data. Staff at PHUs respond to each notification, using protocols specified in the Department's Notifiable Diseases Manual, to limit further transmission. The procedures, which differ with each disease, include discussion with the patient's general practitioner, prophylactic immunisation or treatment of contacts, and provision of information on the disease to patients and others concerned.

Notifications are entered on the Notifiable Disease Database (NDD) at each PHU, which holds data from residents of that area health service only. The Communicable Disease Surveillance and Control Unit (CDSCU) at the NSW Department of Health maintains a complete dataset for the State. All changes made to the data held by PHUs are electronically transferred each day to CDSCU. Access to statewide data is provided through the Epidemiology and Surveillance Branch's data warehouse, the Health Outcome Information Statistical Toolkit (HOIST). HOIST processes the NDD dataset each night and makes it available in a standardised de-identified form to approved staff throughout NSW Health. A range of graphs and tables are also prepared nightly, which are available to approved staff via the Department's Intranet (see Figure 4).

ENHANCEMENTS FOR THE SYDNEY 2000 OLYMPIC AND PARALYMPIC GAMES

The notification process for communicable diseases is usually 'passive', that is, initiated by the notifier. During the Games period, however, 'active' surveillance will be carried out for 22 high priority notifiable communicable diseases. This will involve PHU staff contacting all laboratories in their area each morning to collect notifications. This will improve the timeliness of notification and reduce the chance that cases slip through the system without being notified.

During the Games, it will be critical to ensure the reliable and timely flow of data, in order to provide alerts of outbreaks or changed disease patterns as soon as possible. All notifications of high priority diseases will be entered on NDD on the day of receipt. Data will be transferred nightly to CDSCU and processed overnight by HOIST. The transfer of data from PHU to CDSCU has sometimes been a weak link, causing delays of days or weeks. To avoid delays during the Games:

 an alternative method of file transfer via floppy disc will be available;

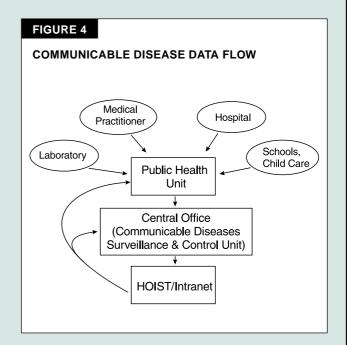
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- improved electronic feedback on the status of data transfer will be provided, so that problems will be identified within 24 hours;
- area health services will provide priority IT support to PHU networks;
- the contractor supporting the NDD software will be on standby to deal with software problems;
- data will be entered by CDSCU staff if any PHU experiences extended difficulties.

These changes to the electronic data flow for notifications of communicable diseases will continue to be used after the Sydney 2000 Olympic and Paralympic Games. The enhancements initiated for the Games will thereby yield benefits for the surveillance and control of communicable diseases in NSW in the longer term.

REFERENCE

1. NSW Department of Health. *Notifiable Diseases Manual*. Sydney: NSW Department of Health, 2000. ⊞



ENVIRONMENTAL HEALTH PREPARATION FOR THE SYDNEY 2000 OLYMPIC AND PARALYMPIC GAMES

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Preventing exposure to environmental hazards is essential to protecting the health and safety of the public during an event such as the Sydney 2000 Olympic and Paralympic Games.

Environmental health activities during the Centenary Olympic and Paralympic Games in Atlanta 1996 concentrated on food safety. In addition, special regulations and procedures for solid waste, vector control, swimming pools, recreational waters, temporary food services, tourist accommodation and sewage disposal were enacted for the Games period.¹

NSW Health has also focused on food safety in its preparations for the Games (see the article by Holroyd et al. on page 151). High priority has also been given to a range of other environmental health issues, particularly preventing Legionnaires' disease. This article outlines NSW Health's preparations for enhancing existing environmental health responsibilities for the Games.

ENVIRONMENTAL HEALTH PLANNING

Early in its planning for the Games, the Olympic Public Health Planning Committee identified key public health issues for management. These provided a framework for developing the Olympic Environmental Health Operational Plan. This Plan is aimed at identifying partnerships, prioritising activities, identifying media issues and providing guidance for local public health unit operational plans.

The Plan has two main components, aimed at:

- minimising the risk to public health in areas outside of Olympic venues and dedicated Olympic areas
- providing an environmental health presence and inspection services *inside* Olympic venues and dedicated areas.

The Environmental Health Operational Plan identified a range of activities that were viewed as essential in the protection of public health. These were summarised under the headings of:

- air quality
- · water quality
- sanitation
- waste
- vector control
- · emergency management
- premises
- standing operating procedures for Olympic venues
- cruise ships (see article by Waples et al. on page 150).

Priority was given to three issues:

- the development of a *Legionella* plan (outlined below)
- education on preventing *Cryptosporidium* in pools
- improved public health preparedness for mass gatherings.

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