

NSW PUBLIC HEALTH BULLETIN

The *NSW Public Health Bulletin* is a publication of the NSW Department of Health. The editor is Dr Lynne Madden, Manager, Public Health Training and Development Unit. The assistant editor is Ms Allison Salmon. Dr Michael Giffin is managing editor.

The *Bulletin* aims to provide its readers with population health data and information to support effective public health action.

Submission of articles

Articles, news and comments should be 1000 words or less in length and include a summary of the key points to be made in the first paragraph. References should be set out in the Vancouver style, described in the *New England Journal of Medicine*, 1997; 336: 309–315. Send submitted articles on paper and in electronic form, either on disc (Word for Windows is preferred), or by email. The article must be accompanied by a letter signed by all authors. Full instructions for authors are available on request from the editor.

Editorial correspondence

Please address all correspondence and potential contributions to The Editor, *NSW Public Health Bulletin*, Locked Mail Bag 961, North Sydney NSW 2059 or to Lmadd@doh.health.nsw.gov.au. Tel (02) 9391 9956, Fax (02) 9391 9232.

Distribution

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HEALTH SURVEILLANCE AT OLYMPIC VENUES: THE MEDICAL ENCOUNTER REPORTING SYSTEM

Tim Churches

Manager Public Health Information
Epidemiology and Surveillance Branch
NSW Department of Health

Uniquely large numbers of people from all over the world will concentrate at Olympic venues scattered across Sydney, during the weeks in which the Sydney 2000 Olympic and Paralympic Games will be held. The Sydney Organising Committee for the Olympic Games (SOCOG), under the aegis of the International Olympic Committee (IOC) Medical Commission, is responsible for organising appropriate medical services at these venues.

These services include:

- specialist sports medicine facilities for athletes at competition and training venues;
- general medical facilities accessible to spectators, staff, SOCOG volunteers, the media and visiting Olympic officials at competition venues;
- a comprehensive Polyclinic at the Homebush Olympic Village providing medical and allied health services, including dental care, optometry, podiatry, physiotherapy, massage and pharmacy services;
- medical support at the press and broadcast centres, the media village and at designated Olympic hotels;

- access to Olympic designated hospitals for athletes (Concord), Olympic Family (Royal Prince Alfred) and spectators (Westmead);
- transport from Olympic sites to hospital by the Ambulance Service of NSW;
- provision of a comprehensive health care interpreter service (see the article by Gerber on page 155).

During the Games period, information on every encounter with these services (other than hospital and ambulance services) will be captured on a standard form. One side of this form acts as a medical and treatment record for each patient; the other side captures demographic details of the patient and categorised information about the nature of the injury, illness or health problem from which the patient is suffering and, in the case of injuries, the circumstances in which the injury occurred.

Several times each day throughout the Olympic period, the demographic and categorical information on each encounter form will be faxed to SOCOG headquarters in Ultimo where it will be entered into a central database. Each evening, these data will be used to generate a number of surveillance reports, using an automated system designed and implemented on behalf of SOCOG by the Epidemiology and Surveillance Branch of the NSW Department of Health.

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

Robert Menzies

*Communicable Diseases Surveillance and Control Unit
NSW Department of Health*

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.¹ 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;