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# IMPROVING INFECTIOUS DISEASES CONTROL

rom November 1991 doctors, hospital chief executive officers (or general managers in Area Health Services) and pathology laboratories will be required to notify the conditions specified in Tables 1, 2 and 3 to the NSW Health Department. Table 5 lists reasons for the inclusion of these conditions. Notification can be by telephone, mail or electronic transfer (not facsimile) to local Public Health Units (see pages 96 and 97 for contact information). Notification must be initiated within 24 hours. Follow-up information will be provided to all people notifying.

In late October new notification forms will be sent to all NSW general practitioners, laboratories and hospitals. If you have not received these by November 14, or have any queries, please call your local Public Health Unit (see pages 96 and 97) or call the NSW Health Department on (02) 391-9111.

For details about the notifying procedures please turn to page 87 for doctors, page 88 for pathology laboratories and page 87 for hospital CEOs. The NSW Health Department's new infectious disease control program has the following elements:

- | goals for minimising infectious diseases in NSW;
- a Statewide network of response-oriented Public Health Units;
- a training program for public health professionals;
- updated legislation;
- a simplified notification system.

# WHY IS THE NEW PROGRAM NECESSARY?

Until recently there has been no well-organised strategy for reducing infectious diseases in the community. Notification of infectious diseases has been low and responses to notifications have been poorly coordinated. As a result, outbreaks of preventable conditions have continued to occur<sup>1</sup>.

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# Correspondence

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### TABLE 1

### CONDITIONS TO BE NOTIFIED BY DOCTORS ON CLINICAL SUSPICION

- Acquired immunodeficiency syndrome (AIDS)
- Acute viral hepatitis
- Adverse event following immunisation\*\*
- Foodborne illness in two or more related cases
- Gastroenteritis among people of any age, in an institution (eg. among people in educational or residential institutions)
- Leprosy
- Measles\*
- Pertussis (Whooping cough)
- Syphilis
- Tuberculosis
- \* To be notified to your Public Health Unit by telephone. See pages 96 and 97.
- \*\* See page 89

### TABLE 2

### **CONDITIONS TO BE NOTIFIED** BY HOSPITAL CHIEF EXECUTIVE OFFICERS ON CLINICAL SUSPICION

- Acquired immunodeficiency syndrome (AIDS)
- Acute viral hepatitis
- Adverse event following immunisation\*\*
- Cholera\*
- Diphtheria
- Foodborne illness in two or more related cases
- Gastroenteritis among people of any age, in an institution (eg. among people in educational or residential institutions)
- Haemophilus influenzae type b: (epiglottitis, meningitis and septicaemia)\*
- Hydatid disease
- Legionnaires' disease\*
- Leprosy
- Measles\*
- Meningococcal disease: (meningitis and septicaemia)\*
- Paratyphoid fever
- Pertussis (Whooping cough)
- Plaque\*
- Poliomyelitis
- Syphilis
- Tetanus
- **Tuberculosis** Typhoid fever
- Typhus (epidemic)\*
- Viral haemorrhagic fevers\*
- Yellow Fever\*
- To be notified to your Public Health Unit by telephone. See pages 96 and 97.
- \*\* See page 89\

Note: Cancer must also be notified by hospital Chief Executive Officers

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Reporting of infectious diseases has been low - estimated to range from 5 per cent<sup>2</sup> to 20 per cent<sup>3</sup>. There are two main reasons for this. First, legislation relating to infectious disease was formulated in 1902 when infectious diseases were more frequent and often fatal. This legislation required doctors to notify a total of 52 conditions and specified complicated reporting channels.

Second, busy medical practitioners were required to notify conditions through these complicated channels with little or no feedback about any action taken over their notification. There was a confusing array of forms and many nonfunctional telephone numbers and addresses. Some doctors were concerned that the confidentiality of their patients would be breached and others were irritated by the payment of \$1.00 for each notification. The notifications which found their way to the appropriate officers were often delayed, making public health responses inappropriate and thereby reinforcing the perception that the whole process was a waste of time.

Even when information was transmitted to those who needed to know, there were too few trained local staff to respond effectively. Also, there were neither response guidelines nor technical support for local staff.

# WHAT IS THE NEW INFECTIOUS DISEASE CONTROL SYSTEM?

Health professionals and community organisations around NSW are formulating strategies to reduce infectious diseases. These will require effective prevention programs, timely control of outbreaks and accurate monitoring of infectious disease occurrence.

Fourteen NSW Public Health Units are responsible for coordinating public health programs, monitoring and research in a variety of areas at the local level 4.5. The areas include maternal and child health, injury, chronic disease and environmental health in addition to infectious disease control. Technical support to the Units is provided by the Epidemiology and Health Services Evaluation Branch which is also training public health professionals to manage public health issues in NSW better6.

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In April this year a new Public Health Act was passed. This legislation and attendant regulations enable:

- adding hospital and laboratory notifications to doctor notifications;
- fewer demands on doctors;
- simplification of notification procedures and channels;
- guidelines for timely public health responses.

## Notification Mechanisms

The Public Health Act (1991) requires that doctors, hospital chief executive officers (or general managers) and pathology laboratories notify conditions that are best and most rapidly identified by them. These notifications should be made to the nearest Public Health Unit and initiated within 24 hours.

## 1. Notification By Doctors

The number of conditions to be notified by doctors has been reduced from 52 to 10. These 10 are the conditions where the diagnosis is essentially clinical, hospital admission is unlikely to result and where public health action needs to begin on first clinical suspicion\*. Doctors are asked to notify these conditions as soon as a provisional diagnosis is made.

Public Health Unit staff may contact doctors to offer assistance with public health action for any patients reported, including those notified by laboratories and hospitals. Notification can be made by mail on specific notification forms OR by telephone. To protect patient confidentiality, notifications must not be made by facsimile. All notifications should be sent to the nearest Public Health Unit (see pages 96 and 97 for contact information).

**Notification forms:** The new forms will make notification quick and easy. They are pre-addressed and reply-paid lettergrams and are in duplicate to facilitate keeping a notification record for the required 10 years\*\*.

### Continued overleaf

### TABLE 3

# CONDITIONS TO BE NOTIFIED BY LABORATORIES ON CONFIRMATION

- Arboviral infections (Flaviviruses\*)
- Brucellosis
- Cholera\*
- Diphtheria
- Gonorrhoea

Haemophilus influenzae type b\* (blood or cerebrospinal fluid only)

- Hepatitis A
- Hepatitis B
- Hepatitis C
- Hepatitis D (Delta)
- Hepatitis E
- Human immunodeficiency virus (HIV) infection
- Legionella spp. infections
- Leptospirosis
- Listeriosis
- Malaria
- Meningococcal infections\*
   (blood or cerebrospinal fluid only)
- Mumps
- Mycobacterial infections
- Pertussis
- Plague\*
- Q fever
- Rubella
- Salmonella infections
- Syphilis
- Typhus (epidemic)\*
- Viral haemorrhagic fevers\*
- Yellow fever\*

Note: Cancer must also be notified by pathology laboratories.

<sup>\*</sup>For AIDS there is no public health action directed to individuals as names and addresses are not reported

<sup>\*\*</sup>This applies for people over 18 years old. For people under 18 a record must be kept for 10 years after they reach the age of 18  $\,$ 

<sup>\*</sup> To be notified to your Public Health Unit by telephone. See pages 96 and 97.

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Public Health Unit staff will ask doctors notifying AIDS to provide information on the likely transmission mode. The extra information will be collected on a separate AIDS notification form which initially will be distributed to AIDS treatment centres, HIV medicine practitioners and Public Health Units.

Notifying by telephone: Doctors can notify a condition 24 hours a day, seven days a week by telephoning the nearest Public Health Unit (see pages 96 and 97). When notifying by telephone, doctors are not required to send a notification form, but must keep a record of the notification for the required 10 years.

# 2. NOTIFICATION BY HOSPITAL CHIEF EXECUTIVE OFFICERS

Chief executive officers of public and private hospitals and nursing homes, and general managers of hospitals in Area Health Services are required to notify conditions for which patients are admitted to hospital or attend Accident and Emergency or Outpatient departments. Notifications should be made on provisional diagnosis, without waiting for confirmation.

CEOs can delegate notification responsibility.

Notification can be made by mail on specific notification forms or computer printout OR by telephone OR by electronic transfer by modem. To protect patient confidentiality, notifications must not be made by facsimile.

### TABLE 4

# ADVERSE EVENT FOLLOWING IMMUNISATION

Notification should be made if one or more of the following events occur within 15 days of the administration of a vaccine

- Persistent screaming (more than three hours)
- Anaphylaxis
- Shock
- Hypotonic/hypertonic episodes
- Encephalopathy
- Convulsions
- Thrombocytopenia
- Death

All notifications should be sent to the nearest Public Health Unit (see pages 96 and 97 for contact information).

**Notification forms:** The forms will make notification quick and easy. They are pre-addressed and reply-paid lettergrams and are in duplicate to facilitate keeping a notification record for the required 10 years\*.

Public Health Unit staff will ask CEOs (or delegates) notifying AIDS to provide information on the likely transmission mode. The extra information will be collected on a separate AIDS notification form which initially will be distributed to AIDS treatment centres, HIV medicine practitioners and Public Health Units.

**Notifying by telephone:** CEOs (or delegates) can notify a condition 24 hours a day, seven days a week by telephoning the nearest Public Health Unit (see pages 96 and 97).

When notifying by telephone, CEOs (or delegates) are not required to send a notification form, but must keep a record of the notification.

Notifying by electronic transfer or computer printout: Electronic or computer printout notifications do not require use of a notification form. However, all the information requested on the notification form must be forwarded and a record must still be kept of the notification.

# 3. Notification by Pathology Laboratories

The person who certifies the positive test result must notify laboratory-confirmed cases. Confirmation may be on identification of a relevant organism or on serology results associated with the condition. Laboratories may notify by mail on specific notification forms or computer printout OR by telephone OR by electronic transfer by modem. To protect patient confidentiality, notifications must not be made by facsimile.

All notifications should be sent to the nearest Public Health Unit (see pages 96 and 97 for contact information).

**Notification forms:** The forms will make notification quick and easy. They are pre-addressed and reply-paid lettergrams.

NSW HIV Reference Laboratories will notify confirmed cases of HIV infection directly to Epidemiology and Health Services Evaluation Branch.

<sup>\*</sup> This applies for people over 18 years old. For people under 18 a record must be kept for 10 years after they reach the age of 18.

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**Notifying by telephone:** Laboratories can notify a condition 24 hours a day, seven days a week by telephoning the nearest Public Health Unit (see pages 96 and 97).

When notifying by telephone, laboratories are not required to send a notification form.

Notifying by electronic transfer or computer printout: Electronic or computer printout notifications do not require use of a notification form. However, all the information requested on the notification must be forwarded.

### INFORMATION FLOW

Notifications flow (in both directions) from doctors, hospitals and laboratories to Public Health Units and from these to the Epidemiology Branch of the NSW Health Department. Public Health Units will transmit notifications of patients not residing in their area to the Unit serving the patient's residence.

While Public Health Units require names to respond and to detect duplication, they will transmit to Epidemiology Branch only the case numbers and demographic data minus identification.

The Epidemiology Branch publishes tabulated data monthly in the NSW Public Health Bulletin (see page 93). The Bulletin is distributed to Public Health Units, public health professionals, hospitals, laboratories and other interested people. If you wish to receive the Bulletin please place your name on the mailing list by completing and sending the form on page 97.

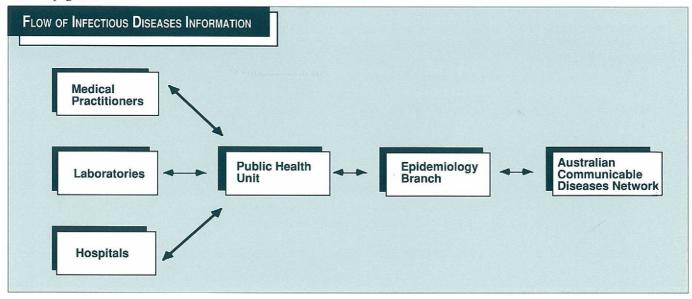
### Public Health Action

All notifiable conditions require some form of public health action (Table 5). The NSW Health Department has developed guidelines for Public Health Unit responses to notifications. Most notifications except AIDS, HIV infection and malaria will elicit an individual response. AIDS and HIV infection notifications have no identifying information. Notifications of malaria enable Australia to verify its malaria-free status to the World Health Organization. Response to notifications will vary according to the condition and the number of cases. The response, always made in consultation with the patient's doctor, may include contact tracing, immunisation, advice on treatment, public awareness campaigns, testing of food, water or the environment, closure of an establishment or collaboration with non-health agencies.

Most importantly, Public Health Units will provide followup information to all people who make a notification.

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### **TABLE 5**

### REASONS FOR NOTIFICATION OF MEDICAL CONDITION

The list of notifiable medical conditions has been reduced to those that require a public health response to enable the control and/or prevention of the condition. Where this response is urgent, telephone notification is required\*. The following is a list of the notifiable conditions and the reason for their inclusion.

CONDITION	REASON FOR NOTIFICATION
AIDS	provide a greater understanding of an evolving epidemic
Acute viral hepatitis	prevent spread through the management of contacts and identification of potential source
Adverse event after mmunisation	monitor risks and benefits of immunisation
Arboviral infections	prevent by vector control and community awareness
Brucellosis	control by determining the source and destroying infected animals or dairy products
Cholera*	determine the source of infection and prevent further spread (a quarantinable condition)
Diphtheria*	prevent spread through antibiotic prophylaxis and immunisation of contacts
Foodborne illness in two or more related cases	rapid control to prevent further cases
Gastroenteritis among people of any age, in an institution	rapid control to prevent further cases
Gonorrhoea	trace and treat contacts to prevent spread
Haemophilus influenzae type b*	prevent further cases by antibiotic prophylaxis for contacts
Hepatitis A,B,C,D,E	prevent spread through management of contacts; provide a greater understanding of the epidemiology of these complex diseases
HIV infection	provide a greater understanding of an evolving epidemic
Hydatid disease	prevent by health education
Legionella infections (incl. Legionnaires' disease*)	determine and eliminate the source to prevent further cases
Leprosy	trace and treat contacts to prevent further cases
Leptospirosis	determine and eliminate the source to prevent further cases

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# TABLE 5 Continued

### REASONS FOR NOTIFICATION OF MEDICAL CONDITION

The list of notifiable medical conditions has been reduced to those that require a public health response to enable the control and/or prevention of the condition. Where this response is urgent, telephone notification is required\*. The following is a list of the notifiable conditions and the reason for their inclusion.

REASON FOR NOTIFICATION .
identify and remove the food or animal source to prevent further cases
verify malaria-free status to WHO and prevent spread in areas that have the vectors
prevent spread by exclusion of cases and immunisation of contacts
prevent spread by exclusion of cases and antibiotic prophylaxis or immunisation of contacts
monitor immunisation programs
trace and treat contacts to prevent further cases; and monitor incidence rates
determine and eliminate the source to prevent further cases
protect unimmunised people by exclusion of cases and contacts
determine and eliminate the source to prevent further cases (a quarantinable condition)
protect unimmunised people by exclusion of the case
determinate and eliminate the source to prevent further cases
monitor immunisation programs
determine and eliminate the source to prevent further cases
trace and treat contacts to prevent spread
monitor immunisation programs
trace and treat contacts to prevent further cases
determine and eliminate the source to prevent further cases
determine and eliminate the vector to prevent further cases (a quarantinable condition)
prevent transmission (a quarantinable condition)
prevent transmission (a quarantinable condition)