

# INFECTIOUS DISEASES

## NOTIFICATIONS

### TIMELINESS AND COMPLETENESS OF REPORTING

The following table lists the number of weekly reports made to the Epidemiology and Health Services Evaluation Branch in the past two months, i.e. from Epiweek 40 to Epiweek 48.

TABLE 3

NUMBER OF WEEKLY REPORTS  
MADE TO EPIDEMIOLOGY BRANCH:  
OCTOBER-NOVEMBER 1992

| Public Health Unit      | Number | Status   |
|-------------------------|--------|----------|
| Central/Southern Sydney | 9      | Complete |
| Eastern Sydney          | 9      | Complete |
| South Western Sydney    | 6      | Complete |
| Western Sector          | 9      | Complete |
| Northern Sydney         | 9      | Complete |
| Central Coast           | 7      | Complete |
| Illawarra               | 9      | Complete |
| Hunter                  | 9      | Complete |
| North Coast             | 8      | Complete |
| New England             | 9      | Complete |
| Orana and Far West      | 8      | Complete |
| Central West            | 7      | Complete |
| South-West              | 9      | Complete |
| South-East              | 9      | Complete |

TABLE 4

PERCENTAGE OF NOTIFICATIONS WITH INCOMPLETE  
INFORMATION BY VARIABLE AND PUBLIC HEALTH UNIT  
OCTOBER-NOVEMBER 1992

| Public Health Unit   | Age      | Sex      | Aboriginality <sup>1</sup> |
|----------------------|----------|----------|----------------------------|
| Central Sydney       | Complete | 0.7      | 50.0                       |
| Southern Sydney      | Complete | 0.7      | 44.8                       |
| Eastern Sydney       | 3.6      | 2.4      | 75.0                       |
| South Western Sydney | 2.0      | 15.0     | 43.9                       |
| Western Sydney       | Complete | 1.7      | 23.3                       |
| Wentworth            | Complete | 2.0      | Complete                   |
| Northern Sydney      | 5.0      | Complete | 100.0                      |
| Central Coast        | 3.8      | 1.9      | 71.4                       |
| Illawarra            | 2.0      | Complete | 65.8                       |
| Hunter               | Complete | 2.4      | 94.1                       |
| North Coast          | 0.7      | 2.7      | 16.7                       |
| New England          | 1.6      | 1.6      | 64.7                       |
| Orana and Far West   | 3.4      | Complete | 18.0                       |
| Central West         | 2.5      | 2.5      | 21.4                       |
| South-West           | Complete | Complete | Complete                   |
| South-East           | Complete | Complete | 25.0                       |

<sup>1</sup> Reportable only on notifications from medical practitioners and hospital Chief Executive Officers.

## VACCINE PREVENTABLE DISEASES

### PUBLIC HEALTH AMENDMENT ACT 1992

The Public Health Amendment Act 1992 was passed by both Houses of Parliament on November 26. Included in the provisions of this Act is the requirement for school entrants and children entering day-care facilities to provide documentation of immunisation. Those whose immunisation status was not verified would be excluded from school if a case of a vaccine preventable disease occurred within the school or day-care facility.

### RUBELLA

Rubella (German measles) continues to be reported nationally at rates up to 10 times the rates of historical

data for the period. Rubella became a laboratory notifiable condition in NSW in November 1991.

For 1992, 164 notifications have been received for rubella.

Six Areas and Regions notified a total of 20 cases during November, for a rate of 4.1 cases per 100,000 population.

The Hunter Area notified seven cases, for a rate of 17.2 cases per 100,000 population.

The current epidemic is a predicted result of past immunisation strategies, which targeted adolescent girls only. Since 1989 all children have been offered measles-mumps-rubella vaccine at the age of 12 months.

All women of child-bearing age should be screened for rubella immunity. Women who have low, or absent, titres should be immunised. Immunisation is not recommended during pregnancy — in fact, pregnancy should be avoided for three months after immunisation.

### MEASLES

There have been 473 cases of measles notified to date — the highest number of notifications since the disease became notifiable in 1981. The notification pattern reveals that Statewide, measles has become an endemic condition with localised epidemics. The notification rate for the year to date is 8.7 notifications per 100,000 population.

Eleven Areas and Regions notified a total of 76 cases of measles in November, for a rate of 15.5/100,000 population. Orana and Far West notified measles at a rate of 308.1/100,000 population.

### LISTERIA

The National Health and Medical Research Council has requested that information on *Listeria* be made available to the general public and the medical community.

*Listeria monocytogenes* is a bacterium that is widespread in nature and has been found in many fresh and processed foods (for example, vegetables, dairy products, processed meats, smoked seafood and smoked shellfish). It has been recognised as a human and animal pathogen since the late 1920s, but its significance as a cause of food poisoning has become apparent only in the past decade. The increasing incidence of listeriosis may be due in part to greater awareness of the problem but is also likely to be related to changes in farming practice, changes in dietary preference (more fresh products and products without preservatives) and increased reliance on refrigeration.

Outbreaks of listeriosis have been traced to contaminated dairy products (such as soft cheeses) and certain prepared meat products (such as pate). *Listeria* can grow under refrigeration at temperatures as low as 0.5 degrees Celsius and can withstand a wide range of pH and salt concentrations up to 10 per cent NaCl.

Listeriosis causes mortality in high risk groups, particularly in fetuses and neonates. Those most at risk from listeriosis are pregnant women, the immunocompromised, the frail aged and the very young, but the disease also occurs in otherwise healthy young adults. The case fatality rate in neonates is 30 per cent to 50 per cent. In a food-related outbreak in Perth in 1990, which was related to liver pate, the mortality rate in fetuses and neonates born to infected mothers was 55 per cent.

Infection of the foetus occurs about three days after maternal infection. In older adults and neonates it may present as septicaemia, meningitis or pneumonia.



Listeriosis has not been frequently identified in Australia (46 cases were notified in five States in 1991), but it is likely that many cases are undetected. Most cases are subclinical but some patients may present with influenza-like symptoms. About 5 per cent of the population are asymptomatic carriers.

Because it does not usually cause typical food poisoning symptoms, foodborne *Listeria* infection is often not diagnosed. The incubation period has been reported to vary between 1 and 90 days. This incubation period makes it difficult to establish an association with a particular contaminated food.

#### Laboratory diagnosis

The organism can be identified in blood, cerebrospinal fluid, meconium, lochia, gastric washings and from other sites of infection.

A firm diagnosis of listeriosis in an adult is usually possible in cases of septicaemia or other obvious infection. Infection of a foetus can be identified by histological examination of the placenta and by culture of the organism.

#### Treatment

Antibiotic treatment is effective. Amoxycillin is the treatment of choice. In mild adult cases where infection is demonstrated or strongly suspected, oral amoxycillin should be given in a dosage of 1 gram 8 hourly for 10 to 14 days.

#### Advice to patients

Patients should be told that *Listeria* infection is common and usually asymptomatic. Accurate clinical diagnosis is difficult in most cases in healthy adults. Minor illnesses in pregnancy do not warrant speculative treatment with antibiotics because of concern about listeriosis.

The main protection against *Listeria* infection is through careful attention to food preparation and storage and personal hygiene. The most important aspects of this are:

- Freshly prepared foods are the safest and *Listeria* are readily destroyed by cooking.
- *Listeria* bacteria can grow in refrigerated products, so pregnant women should not eat at-risk foods that have been stored for more than 24 hours, even under refrigeration. They should not eat foods where there is some doubt about the quality of food preparation or storage.
- Cross-contamination between raw and processed foods can occur during preparation, and care should be taken to keep these items separate — for example by using separate implements and cutting boards.
- Fruit and vegetables that will be eaten raw or used to make salads should be thoroughly washed.
- Adequate refrigeration of all prepared foods — especially prepared salad such as coleslaw, meat products and dairy products — is enough to protect the public under most circumstances.
- Foods that are not safe for those at high risk: Foods which should not be eaten by pregnant women and the immunocompromised are unpasteurised dairy products, pates, meatloaf products (such as pre-sliced chicken loaf), cooked diced chicken as used in sandwich shops, uncooked smoked seafood, smoked shellfish, soft cheeses (such as brie, camembert and ricotta), and previously prepared coleslaws and salads. These foods pose only a minor risk to those other than pregnant women and the immunocompromised.
- Most foods are safe for those at risk and freshly

#### INVESTIGATION OF RISE IN *SALMONELLA* HADAR

**T**wenty-seven notifications of *S. hadar* have been received to December 1, 1992. Eight of these were in October, which represents 13 per cent of *Salmonella* notifications for this month. Six notifications were received for November. The age range of notifications in 1992 has been from under 12 months to 62 years, but five notifications (19 per cent) have been from those under one year old and 14 (52 per cent) under five years. Mean age has been 16 years. No geographical relationship between cases is apparent.

Questionnaires have been sent to all cases or their parents and eight replies have been received. Three replies have identified an infant food produced by the same manufacturer as the food the parents believed caused the illness in their children. This may be a coincidence as the food is a low-risk fruit-based product, but further investigation would appear warranted — particularly when the incidence in young children is considered. One reply reported overseas travel.

Food Inspectors have submitted quality control samples of the infant food for analysis. No results are yet available.

All recent notifications are being investigated by Food Inspectors from relevant Public Health Units using standardised interview forms. Community and family controls will also be sought.

#### *Salmonella hadar*

*S. hadar* was first notified in Australia in 1982 and was associated with overseas travel, generally from South-East Asia. The rate of notifications has steadily increased and in 1991 there were 80 notifications Australia-wide. Overseas travel was associated with 19 (24 per cent) of the Australian notifications of *S. hadar* recorded by the National Salmonella Surveillance Scheme (NSSS) in 1991. Of the 80 notifications in 1991 there were 13 reported from NSW, which represented 5 per cent of salmonella notifications for the State.

*S. hadar* is commonly associated with poultry. The first Australian isolation from poultry was in 1989. In 1990 there were 28 poultry isolations and in 1991 there were 114 poultry isolations. The organism has also been isolated from animal feed — soy meal.

A previous rise in incidence of *S. hadar* was investigated by Food Branch in late 1991. This rise appeared to be a possible outbreak centred around the Liverpool area. No relationship between cases could be found other than living or travelling to the Liverpool area.

cooked foods are safest. In regard to dairy products, hard cheeses, fresh pasteurised milk, UHT milk and yoghurt may be considered to be free of *Listeria*.

#### Veterinary risks

*Listeria* infection causes abortion in farm animals so it is important that pregnant women avoid contact with aborted animal fetuses on farms or in veterinary clinics.

#### Notification

Listeriosis is a laboratory notifiable condition under the Public Health Act 1991. Because contaminated food may cause outbreaks, it is vital cases be notified immediately.

**Note:** The NHMRC has also prepared a statement, "The risk of *Listeria* infection from contaminated food — special advice for pregnant women, transplant patients and other immunocompromised persons", for distribution to patients. Copies are available from your Public Health Units.



TABLE 5

**NOTIFICATIONS FOR INFECTIOUS DISEASES  
BY HEALTH AREA AND REGION  
NOVEMBER 1992**

| DISEASE NAME                     | CSA | SSA | ESA | SWS | WSA | WEN | NSA | CCA | ILL | HUN | NCR | NER | OFR | CWR | SWR | SER | OTH/UK | TOTAL |
|----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|-------|
| Adverse event after immunisation | 2   | 3   | -   | -   | 2   | -   | -   | 1   | -   | 1   | 5   | 7   | -   | 1   | 2   | 5   | -      | 29    |
| AIDS infection                   | -   | -   | 1   | -   | -   | -   | -   | 1   | -   | 8   | -   | -   | -   | -   | -   | -   | -      | 10    |
| Arboviral infection              | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 2   | 1   | -   | -   | -   | -   | -      | 3     |
| Foodborne illness (NOS)          | -   | -   | 1   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 1   | -   | -   | -   | -      | 2     |
| Gastroenteritis (instit)         | -   | -   | -   | -   | 1   | -   | -   | -   | -   | -   | -   | -   | 3   | -   | -   | -   | -      | 4     |
| Gonorrhoea infection             | -   | 1   | 6   | -   | -   | -   | 2   | 1   | -   | 3   | -   | -   | -   | -   | 1   | 1   | -      | 15    |
| H. Influenzae epiglottitis       | -   | -   | -   | -   | -   | -   | 1   | -   | -   | 1   | -   | 1   | -   | -   | -   | -   | -      | 3     |
| H. Influenzae infection (NOS)    | -   | -   | -   | -   | -   | -   | -   | -   | 2   | -   | -   | -   | -   | -   | -   | -   | -      | 2     |
| H. Influenzae meningitis         | -   | -   | -   | -   | -   | -   | -   | -   | 1   | -   | -   | -   | -   | -   | 1   | -   | -      | 2     |
| Hepatitis A — acute viral        | -   | 2   | -   | -   | -   | -   | -   | -   | 3   | -   | 3   | 1   | 2   | -   | -   | -   | -      | 11    |
| Hepatitis B — unspecified        | 2   | 21  | -   | 2   | 7   | -   | 6   | 1   | 3   | 4   | 2   | -   | -   | 3   | 1   | -   | -      | 52    |
| Hepatitis C — unspecified        | 11  | 3   | 3   | 1   | 10  | 2   | 5   | 1   | 5   | 15  | 13  | 1   | -   | -   | -   | 5   | -      | 75    |
| HIV infection                    | 5   | -   | 18  | -   | 1   | -   | 3   | 1   | -   | 1   | -   | -   | -   | -   | -   | 1   | 11     | 41    |
| Measles                          | 2   | 3   | -   | 9   | 8   | 7   | 3   | 2   | -   | 3   | 2   | 1   | 36  | -   | -   | -   | -      | 76    |
| Meningococcal infection          | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 1   | -   | -   | -   | -   | -      | 1     |
| Meningococcal meningitis         | -   | -   | -   | 1   | -   | -   | -   | -   | -   | 1   | -   | -   | -   | 2   | -   | -   | -      | 4     |
| Meningococcal septicaemia        | -   | -   | -   | -   | -   | -   | -   | -   | 1   | -   | -   | -   | -   | -   | -   | -   | -      | 1     |
| Mycobacterial infection (NOS)    | -   | -   | -   | -   | -   | -   | 2   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -      | 2     |
| Mycobacterial tuberculosis       | 1   | 1   | -   | -   | 1   | -   | 1   | 2   | -   | -   | 1   | 1   | -   | 1   | -   | -   | -      | 9     |
| Pertussis                        | -   | -   | -   | -   | 1   | -   | -   | -   | 1   | -   | 1   | -   | -   | 1   | -   | 1   | -      | 5     |
| Q fever                          | -   | -   | -   | -   | -   | -   | -   | -   | -   | 1   | 1   | 2   | -   | -   | -   | -   | -      | 4     |
| Rubella                          | -   | -   | -   | -   | -   | -   | 4   | 4   | -   | 7   | -   | 3   | 1   | -   | -   | 1   | -      | 20    |
| Salmonella (NOS)                 | -   | 1   | -   | -   | -   | 1   | -   | -   | 1   | 2   | 2   | 1   | -   | 1   | 2   | -   | -      | 11    |
| Syphilis infection               | -   | 2   | -   | 4   | -   | -   | 1   | -   | -   | -   | -   | 3   | 1   | -   | -   | -   | -      | 11    |

### HEPATITIS B IMMUNISATION SCHEDULE

The recommended protocol for the hepatitis B immunisation schedule for infants and children at high risk of acquiring hepatitis B is outlined in the NSW Health Department's Information Bulletin 92/53.

#### Primary hepatitis B immunisation schedule

All infants born into high risk groups should receive three doses of hepatitis B vaccine at birth, one month and six months of age. Interruption to the primary immunisation schedule is not advisable. The interval between the first and second doses should not be less than one month and should not exceed three months.

The third dose gives an optimal response if given six months after the first dose. Doses at three or twelve months, after the first dose, have given satisfactory responses in limited clinical trials. Therefore, delay in administration of the third dose does not warrant restarting the course, if given within 12 months of the first dose.

#### Administration of vaccine

The vaccine should be administered by intramuscular (IM) injection. For infants, the anterolateral aspect of the thigh is the preferred site. The deltoid muscle is the preferred site in older children. The gluteal area *should not* be used in infants or children. Children under 10 years of age should be given a 0.5 mL dose of hepatitis B vaccine by IM injection, irrespective of the vaccine brand used.

#### Note:

*Recombivax* (MSD) paediatric hepatitis B vaccine contains 5 µg of HBsAg per 0.5mL

*Engerix-B* (SKB) paediatric hepatitis B vaccine contains 10 µg of HBsAg per 0.5mL

#### Hepatitis B booster doses

In the absence of international consensus or local data the following recommendation is made. It may change as data become available. A booster dose should be given every five years. The booster, for children under 10 years of age, is a single dose (0.5 mL) of hepatitis B vaccine given by IM injection.

#### Infants born to hepatitis B positive mothers

All infants born to hepatitis B surface antigen (HBsAg) positive mothers should receive hepatitis B immunoglobulin (HBIG) within 12 hours of birth and begin the course of hepatitis B vaccine as soon as possible after birth. The vaccine may be administered at the same time as HBIG but at a different site.

TABLE 6

**SUMMARY OF NSW INFECTIOUS DISEASE NOTIFICATIONS  
NOVEMBER 1992**

| Condition                     | Number of cases notified |           | Period    |           | Cumulative |           |
|-------------------------------|--------------------------|-----------|-----------|-----------|------------|-----------|
|                               | Nov. 1991                | Nov. 1992 | Nov. 1991 | Nov. 1992 | Nov. 1991  | Nov. 1992 |
| Adverse reaction              | N/A                      | -         | N/A       | -         | 29         | -         |
| AIDS                          | 23                       | 10        | 339       | 162       | 162        | -         |
| Arboviral infection           | 6                        | 5         | 473       | 595       | 595        | -         |
| Brucellosis                   | -                        | -         | 2         | 1         | 1          | -         |
| Cholera                       | -                        | -         | -         | -         | -          | -         |
| Diphtheria                    | -                        | -         | -         | -         | -          | -         |
| Foodborne illness (NOS)       | 175                      | 2         | 2756      | 216       | 216        | -         |
| Gastroenteritis (instit.)     | 35                       | 4         | 80        | 380       | 380        | -         |
| Gonorrhoea                    | 42                       | 15        | 388       | 417       | 417        | -         |
| H influenzae epiglottitis     | 3                        | 3         | 21        | 44        | 44         | -         |
| H influenzae B — meningitis   | 4                        | 2         | 59        | 94        | 94         | -         |
| H influenzae B — septicaemia  | -                        | -         | 10        | 22        | 22         | -         |
| H influenzae infection (NOS)  | 9                        | 2         | 119       | 33        | 33         | -         |
| Hepatitis A                   | 162                      | 11        | 1019      | 858       | 858        | -         |
| Hepatitis B                   | 138                      | 52        | 1258      | 2764      | 2764       | -         |
| Hepatitis C                   | 150                      | 75        | 639       | 3571      | 3571       | -         |
| Hepatitis D                   | N/A                      | -         | N/A       | 6         | 6          | -         |
| Hepatitis, acute viral (NOS)  | 4                        | -         | 241       | 15        | 15         | -         |
| HIV infection*                | 75                       | 42        | 715       | 604       | 604        | -         |
| Hydatid disease               | -                        | -         | 7         | 4         | 4          | -         |
| Legionnaires' disease         | 1                        | -         | 26        | 81        | 81         | -         |
| Leprosy                       | -                        | -         | -         | 5         | 5          | -         |
| Leptospirosis                 | 2                        | -         | 31        | 15        | 15         | -         |
| Listeriosis                   | N/A                      | -         | N/A       | 13        | 13         | -         |
| Malaria                       | 12                       | -         | 185       | 104       | 104        | -         |
| Measles                       | 56                       | 76        | 360       | 473       | 473        | -         |
| Meningococcal meningitis      | 6                        | 4         | 48        | 75        | 75         | -         |
| Meningococcal septicaemia     | 3                        | 1         | 15        | 13        | 13         | -         |
| Meningococcal infection (NOS) | 2                        | 1         | 39        | 12        | 12         | -         |
| Mumps                         | N/A                      | -         | N/A       | 19        | 19         | -         |
| Mycobacterial tuberculosis    | 35                       | 9         | 316       | 341       | 341        | -         |
| Mycobacterial — atypical      | 8                        | -         | 104       | 245       | 245        | -         |
| Mycobacterial infection (NOS) | 10                       | 2         | 158       | 46        | 46         | -         |
| Pertussis                     | 4                        | 5         | 44        | 129       | 129        | -         |
| Plague                        | -                        | -         | -         | -         | -          | -         |
| Polio myelitis                | -                        | -         | -         | -         | -          | -         |
| Q fever                       | 9                        | 4         | 172       | 168       | 168        | -         |
| Rubella                       | 14                       | 20        | 56        | 164       | 164        | -         |
| Salmonella infection (NOS)    | 96                       | 11        | 1179      | 684       | 684        | -         |
| Syphilis                      | 47                       | 11        | 561       | 753       | 753        | -         |
| Tetanus                       | 1                        | -         | 5         | 2         | 2          | -         |
| Typhoid and paratyphoid       | 10                       | -         | 60        | 23        | 23         | -         |
| Typhus                        | -                        | -         | -         | -         | -          | -         |
| Viral haemorrhagic fevers     | -                        | -         | -         | -         | -          | -         |
| Yellow fever                  | -                        | -         | -         | -         | -          | -         |

\*Data to October only



TABLE 7

NOTIFICATIONS FOR INFECTIOUS DISEASES  
BY HEALTH AREA AND REGION  
CUMULATIVE JANUARY-NOVEMBER 1992

| CONDITION                        | CSA | SSA | ESA | SWS | WSA | WEN | NSA | CCA | ILL | HUN | NCR | NER | OFR | CWR | SWR | SER | OTH | TOTAL |
|----------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| Adverse event after immunisation | 2   | 3   | -   | -   | 2   | -   | -   | 1   | -   | 1   | 5   | 7   | -   | -   | 2   | 5   | -   | 29    |
| AIDS infection                   | 34  | 3   | 18  | 5   | 11  | 5   | 34  | 7   | 6   | 10  | 13  | 4   | 1   | 3   | 5   | 3   | -   | 162   |
| Arboviral infection              | 1   | 2   | -   | -   | 7   | 6   | 6   | 7   | 8   | 23  | 113 | 34  | 58  | 10  | 27  | -   | -   | 302   |
| Ross river                       | 1   | 2   | -   | -   | 6   | 6   | 6   | 4   | 8   | 23  | 110 | 31  | 58  | 10  | 25  | -   | -   | 290   |
| Other alphaviruses               | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | 2   | 1   | -   | -   | 2   | -   | -   | 5     |
| Foodborne illness (NOS)          | 7   | 2   | 32  | 10  | 54  | 21  | -   | 30  | 4   | 7   | 5   | 4   | 36  | 1   | 1   | 2   | -   | 216   |
| Gastroenteritis (instit.)        | 26  | 1   | 9   | 28  | 8   | 1   | 1   | -   | 1   | 94  | 2   | 96  | 16  | -   | -   | 97  | -   | 380   |
| Gonorrhoea infection             | 69  | 25  | 150 | 25  | 25  | 1   | 23  | 5   | 3   | 14  | 21  | 12  | 16  | 13  | 8   | 7   | -   | 417   |
| H. Influenzae epiglottitis       | -   | 3   | 1   | 3   | 6   | 3   | 4   | -   | 2   | 6   | 6   | 6   | -   | -   | 1   | 3   | -   | 44    |
| H. Influenzae infection (NOS)    | 3   | 2   | 2   | 1   | 2   | -   | 1   | 5   | 3   | 2   | -   | 3   | 1   | 2   | 2   | 4   | -   | 33    |
| H. Influenzae meningitis         | 3   | 4   | 4   | 6   | 6   | 7   | 17  | 4   | 8   | 7   | 6   | 5   | 2   | 4   | 5   | 6   | -   | 94    |
| H. Influenzae septicaemia        | -   | 1   | 2   | 5   | 2   | -   | 3   | -   | -   | 5   | 1   | -   | -   | 2   | 1   | -   | -   | 22    |
| Hepatitis A - acute viral        | 88  | 35  | 110 | 35  | 49  | 10  | 88  | 8   | 31  | 29  | 123 | 127 | 88  | 13  | 12  | 11  | 1   | 858   |
| Hepatitis B - acute viral        | 5   | 4   | 30  | 6   | 5   | 5   | 4   | 3   | 6   | 1   | 10  | 5   | 20  | 2   | 3   | 2   | -   | 111   |
| Hepatitis B - unspecified        | 388 | 398 | 21  | 753 | 394 | 33  | 300 | 31  | 22  | 113 | 56  | 45  | 29  | 25  | 14  | 29  | 2   | 2653  |
| Hepatitis C - acute viral        | 1   | 1   | 4   | 1   | 10  | 1   | 3   | 1   | 3   | -   | 8   | 6   | 4   | 3   | -   | 2   | -   | 48    |
| Hepatitis C - unspecified        | 522 | 186 | 387 | 247 | 310 | 68  | 250 | 356 | 81  | 415 | 514 | 58  | 11  | 58  | 21  | 38  | 1   | 3523  |
| Hepatitis D - unspecified        | -   | -   | 1   | -   | -   | 1   | -   | 1   | -   | 1   | 2   | -   | -   | -   | -   | -   | -   | 6     |
| Hepatitis, acute viral (NOS)     | -   | -   | 1   | 2   | 4   | -   | -   | 1   | -   | -   | 1   | 3   | 2   | 1   | -   | -   | -   | 15    |
| HIV infection                    | 60  | 21  | 200 | 15  | 30  | 7   | 37  | 6   | 3   | 23  | 16  | -   | 3   | 2   | 3   | 6   | 172 | 604   |
| Legionnaires' disease            | 5   | 2   | 2   | 36  | 16  | 2   | 4   | 7   | 2   | 2   | 2   | -   | -   | -   | -   | 1   | -   | 81    |
| Malaria                          | 10  | 7   | 8   | 4   | 14  | -   | 22  | 2   | 8   | 4   | 8   | 7   | 1   | 1   | 5   | 3   | -   | 104   |
| Meningococcal infection (NOS)    | -   | -   | 2   | -   | -   | -   | 1   | -   | 1   | 1   | -   | 3   | 2   | 2   | -   | -   | -   | 12    |
| Meningococcal meningitis         | 4   | 7   | -   | 6   | 7   | 3   | 1   | 6   | 5   | 8   | 9   | 5   | 1   | 10  | -   | 3   | -   | 75    |
| Meningococcal septicaemia        | 1   | 1   | 2   | 3   | -   | 2   | -   | 1   | 1   | 1   | -   | 1   | -   | -   | -   | -   | -   | 13    |
| Mycobacterial atypical           | 48  | 25  | 42  | 20  | 26  | 4   | 31  | 1   | 13  | 20  | 4   | 3   | 2   | -   | 3   | 2   | -   | 244   |
| Mycobacterial infection (NOS)    | 12  | 3   | 4   | 1   | 5   | 3   | 6   | -   | 5   | 4   | -   | 1   | -   | -   | 1   | -   | 1   | 46    |
| Mycobacterial tuberculosis       | 44  | 36  | 27  | 69  | 43  | 6   | 50  | 13  | 11  | 6   | 12  | 6   | -   | 4   | 7   | 6   | -   | 340   |
| Q fever                          | -   | -   | -   | -   | 7   | 3   | -   | 1   | 1   | 8   | 71  | 29  | 32  | 10  | 4   | 2   | -   | 168   |
| Salmonella (NOS)                 | 23  | 33  | 36  | 48  | 39  | 29  | 76  | 15  | 9   | 24  | 51  | 25  | 22  | 20  | 15  | 17  | -   | 482   |
| Salmonella bovis moribundans     | 1   | 3   | 1   | -   | 2   | 1   | 2   | -   | 2   | 1   | 1   | 3   | -   | -   | -   | 1   | -   | 15    |
| Salmonella typhimurium           | 9   | 23  | 2   | 25  | 31  | 19  | 22  | 10  | 9   | 20  | 2   | 3   | 6   | -   | 6   | -   | -   | 187   |
| Syphilis infection               | 121 | 42  | 125 | 58  | 38  | 8   | 43  | 1   | 8   | 15  | 105 | 45  | 112 | 17  | 12  | 2   | 1   | 753   |
| Typhoid and paratyphoid          | 4   | 1   | 6   | 1   | 3   | -   | 5   | -   | 1   | -   | -   | -   | -   | -   | 2   | -   | -   | 23    |

TABLE 8

OTHER INFECTIOUS DISEASE NOTIFICATIONS  
BY MONTH OF ONSET  
CUMULATIVE JANUARY-NOVEMBER 1992

| CONDITION                     | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV | TOTAL |
|-------------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| AIDS infection                | 23  | 12  | 16  | 17  | 22  | 16  | 12  | 16  | 10  | 8   | 10  | 162   |
| Arboviral infection           | 14  | 40  | 89  | 78  | 39  | 11  | 11  | 7   | 4   | 6   | 3   | 302   |
| Ross river                    | 14  | 38  | 85  | 77  | 39  | 10  | 11  | 7   | 4   | 5   | -   | 290   |
| Other alphaviruses            | -   | -   | 2   | -   | -   | 1   | -   | -   | -   | -   | 2   | 5     |
| Brucellosis                   | -   | -   | -   | -   | -   | 1   | -   | -   | -   | -   | -   | 1     |
| Foodborne illness (NOS)       | 55  | 28  | 27  | 20  | 15  | 7   | 13  | 18  | 20  | 11  | 2   | 216   |
| Gastroenteritis (instit.)     | 88  | 7   | 17  | 9   | 36  | 22  | 41  | 129 | 4   | 23  | 4   | 380   |
| Gonorrhoea infection          | 31  | 22  | 49  | 38  | 49  | 30  | 54  | 41  | 50  | 38  | 15  | 417   |
| H. Influenzae epiglottitis    | 4   | 1   | 3   | 2   | 4   | 10  | 24  | 4   | 4   | 5   | 3   | 44    |
| H. Influenzae infection (NOS) | 5   | 2   | 1   | 2   | 2   | 4   | 5   | 6   | 1   | 3   | 2   | 33    |
| H. Influenzae meningitis      | 5   | 9   | 10  | 5   | 11  | 13  | 7   | 12  | 9   | 11  | 2   | 94    |
| H. Influenzae septicaemia     | 1   | 1   | 3   | 3   | 3   | 2   | 5   | -   | 3   | 1   | -   | 22    |
| Hepatitis A - acute viral     | 114 | 98  | 121 | 98  | 89  | 82  | 66  | 64  | 49  | 66  | 11  | 858   |
| Hepatitis B - acute viral     | 10  | 12  | 17  | 22  | 18  | 9   | 5   | 5   | 10  | 3   | -   | 111   |
| Hepatitis B - unspecified     | 279 | 179 | 274 | 253 | 246 | 307 | 287 | 287 | 249 | 240 | 52  | 2653  |
| Hepatitis C - acute viral     | 14  | 7   | 3   | 5   | 6   | 2   | 4   | 1   | 4   | 2   | -   | 48    |
| Hepatitis C - unspecified     | 236 | 256 | 316 | 253 | 450 | 394 | 424 | 414 | 330 | 375 | 75  | 3523  |
| Hepatitis D - unspecified     | 1   | -   | -   | 1   | 3   | -   | -   | -   | -   | 1   | -   | 6     |
| Hepatitis, acute viral (NOS)  | -   | 3   | 1   | 4   | 2   | 1   | 1   | -   | 1   | 2   | -   | 15    |
| HIV infection                 | 95  | 74  | 71  | 60  | 72  | 52  | 56  | 45  | 37  | 42  | 31  | 635   |
| Hydatid disease               | 2   | -   | 2   | -   | -   | -   | -   | -   | -   | -   | -   | 4     |
| Legionnaires' disease         | 1   | 9   | 3   | 42  | 8   | 5   | 8   | 2   | 1   | 2   | -   | 81    |
| Leprosy                       | 1   | 1   | -   | -   | 1   | 1   | 1   | -   | -   | -   | -   | 5     |
| Leptospirosis                 | 3   | 2   | -   | 1   | 4   | 1   | 2   | 1   | 1   | -   | -   | 15    |
| Listeriosis                   | 1   | 1   | 1   | 3   | 1   | 1   | 1   | -   | 2   | 2   | -   | 13    |
| Malaria                       | 12  | 5   | 16  | 9   | 14  | 17  | 13  | 8   | 7   | 3   | -   | 104   |
| Meningococcal infection (NOS) | 2   | 2   | -   | -   | -   | 2   | 3   | 1   | 1   | 1   | 1   | 12    |
| Meningococcal meningitis      | -   | 3   | 2   | 8   | 2   | 6   | 15  | 13  | 9   | 13  | 4   | 75    |
| Meningococcal septicaemia     | 1   | -   | -   | -   | -   | 2   | 2   | 3   | 3   | 1   | 1   | 13    |
| Mycobacterial atypical        | 33  | 32  | 48  | 25  | 30  | 29  | 22  | 13  | 11  | -   | -   | 245   |
| Mycobacterial infection (NOS) | 7   | 5   | 6   | 2   | 4   | 6   | -   | 2   | 5   | 7   | 2   | 46    |
| Mycobacterial tuberculosis    | 76  | 33  | 35  | 38  | 28  | 39  | 17  | 27  | 20  | 17  | 9   | 341   |
| Q fever                       | 13  | 12  | 11  | 13  | 9   | 22  | 21  | 28  | 20  | 15  | 4   | 168   |
| Salmonella (NOS)              | 100 | 60  | 59  | 54  | 44  | 34  | 37  | 43  | 25  | 30  | 11  | 497   |
| Salmonella typhimurium        | 20  | 21  | 51  | 23  | 23  | 7   | 9   | 10  | 10  | 13  | -   | 187   |
| Syphilis                      | 54  | 85  | 70  | 83  | 88  | 94  | 90  | 77  | 50  | 51  | 11  | 753   |
| Typhoid and paratyphoid       | 6   | 4   | 2   | -   | 3   | 2   | 3   | 2   | 1   | -   | -   | 23    |

Abbreviations used in this Bulletin:

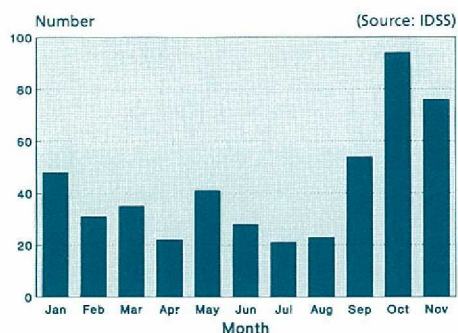
CSA Central Sydney Health Area, SSA Southern Sydney Health Area, ESA Eastern Sydney Health Area, SWS South Western Sydney Health Area, WSA Western Sydney Health Area, WEN Wentworth Health Area, NSA Northern Sydney Health Area, CCA Central Coast Health Area, ILL Illawarra Health Area, HUN Hunter Health Area, NCR North Coast Health Region, NER New England Health Region, OFR Orana & Far West Health Region, CWR Central West Health Region, SWR South West Health Region, SER South East Health Region, OTH Interstate/Overseas, U/K Unknown, NOS Not Otherwise Stated

Please note that the data contained in this Bulletin are provisional and subject to change because of late reports or changes in case classification. Data are tabulated where possible by area of residence and by the disease onset date and not simply the date of notification or receipt of such notification.

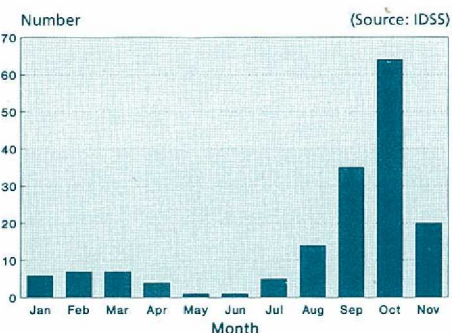


**FIGURE 2**

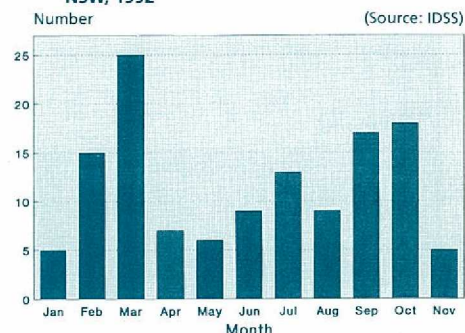
MEASLES NOTIFICATIONS, NSW, 1992

**FIGURE 3**

RUBELLA NOTIFICATIONS, NSW, 1992

**FIGURE 4**

WHOOPIING COUGH NOTIFICATIONS, NSW, 1992

**TABLE 9**

NOTIFICATIONS FOR VACCINE PREVENTABLE DISEASES  
BY MONTH OF ONSET  
CUMULATIVE JANUARY-NOVEMBER 1992

| DISEASE NAME | MONTH |     |     |     |     |     |     |     |     |     |     | TOTAL |
|--------------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
|              | JAN   | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP | OCT | NOV |       |
| Measles      | 48    | 31  | 35  | 22  | 41  | 28  | 21  | 23  | 54  | 94  | 76  | 473   |
| Mumps        | 3     | 5   | 2   | —   | 3   | 2   | 1   | 1   | 2   | —   | —   | 19    |
| Pertussis    | 5     | 15  | 25  | 7   | 6   | 9   | 13  | 9   | 17  | 18  | 5   | 129   |
| Rubella      | 6     | 7   | 7   | 4   | 1   | 1   | 5   | 14  | 35  | 64  | 20  | 164   |
| Tetanus      | 1     | —   | —   | —   | —   | —   | —   | —   | 1   | —   | —   | 2     |

**TABLE 10**

RARELY NOTIFIED DISEASES  
BY HEALTH AREA AND REGION  
CUMULATIVE JANUARY-NOVEMBER 1992

| DISEASE NAME    | PUBLIC HEALTH UNIT |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     | TOTAL |
|-----------------|--------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
|                 | CSA                | SSA | ESA | SWS | WSA | WEN | NSA | CCA | ILL | HUN | NCR | NER | OFR | CWR | SWR | SER |       |
| Brucellosis     | —                  | —   | —   | 1   | —   | —   | —   | —   | —   | —   | —   | —   | —   | —   | —   | —   | 1     |
| Hydatid disease | —                  | —   | —   | —   | —   | —   | —   | —   | —   | —   | 1   | 2   | —   | 1   | —   | —   | 4     |
| Leprosy         | —                  | —   | —   | 1   | 1   | 1   | —   | —   | —   | —   | —   | 1   | —   | —   | 1   | —   | 5     |
| Leptospirosis   | —                  | 1   | —   | —   | —   | 1   | —   | —   | —   | —   | 6   | 2   | —   | 5   | —   | —   | 15    |
| Listeriosis     | —                  | 2   | —   | 1   | —   | 2   | 4   | 1   | —   | 1   | 1   | —   | —   | 1   | —   | —   | 13    |

**TABLE 11**

NOTIFICATIONS OF NON-NOTIFIABLE  
SEXUALLY TRANSMITTED INFECTIONS  
FROM SEXUAL HEALTH CLINICS  
JANUARY-NOVEMBER 1992

<sup>1</sup> 1/1/92-31/8/92  
<sup>2</sup> 1/1/92-31/8/92  
<sup>3</sup> 1/1/92-31/8/92  
<sup>4</sup> 1/3/92-31/11/92  
<sup>5</sup> 1/5/92-30/10/92  
<sup>6</sup> 1/1/92-30/8/92

<sup>7</sup> 1/3/92-30/9/92  
<sup>8</sup> 1/7/92-31/10/92  
<sup>9</sup> 14/5/92-30/9/92  
<sup>10</sup> 1/7/92-31/10/92  
<sup>11</sup> No SHC in the Region  
<sup>12</sup> No SHC in the Region  
<sup>13</sup> No SHC in the Region

| AHS Infection                | CSA | SSA <sup>1</sup> | ESA <sup>2</sup> | SWS | WSA <sup>3</sup> + WEN | NSA <sup>4</sup> | CCA <sup>5</sup> | ILL <sup>6</sup> | HUN <sup>7</sup> | NCR <sup>8</sup> | NER <sup>9</sup> | OFR <sup>10</sup> | CWR <sup>11</sup> | SWR <sup>12</sup> | SER <sup>13</sup> |
|------------------------------|-----|------------------|------------------|-----|------------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| <i>Chlamydia trachomatis</i> | —   | 8                | 157              | —   | 40                     | 5                | 3                | 15               | 40               | 1                | 6                | 7                 | —                 | —                 | —                 |
| Donovanosis                  | —   | —                | —                | —   | —                      | —                | —                | —                | —                | —                | —                | —                 | —                 | —                 | —                 |
| Genital herpes               | —   | 12               | 406              | —   | 44                     | 18               | 5                | 29               | 50               | —                | 6                | 11                | —                 | —                 | —                 |
| Genital warts                | —   | 105              | 907              | —   | 220                    | 56               | 7                | 191              | 159              | 17               | 20               | 8                 | —                 | —                 | —                 |
| Non-specific urethritis      | —   | 9                | 577              | —   | 244                    | 26               | 1                | 70               | 68               | 4                | 7                | 3                 | —                 | —                 | —                 |
| <i>Lymphoma granuloma</i>    | —   | —                | —                | —   | —                      | —                | —                | —                | —                | —                | —                | —                 | —                 | —                 | —                 |