# COMMUNICABLE DISEASES, NSW: JANUARY–FEBRUARY 2003

## TRENDS

Notifications of communicable diseases were largely in line with seasonal expectations through to December 2002 (Tables 7 and 8, Figure 1). Data for December should be interpreted with caution, as there is likely to be some delay in the notification of some diseases because of the Christmas–New Year holiday period.

## ENTERIC DISEASES

### Hepatitis A

In November, the Northern Sydney Public Health Unit (NSPHU) investigated a cluster of eight cases of hepatitis A linked to a 'yum cha' restaurant. The cases had all eaten in the restaurant in late September. Officers from the NSPHU inspected the restaurant and did not identify any food preparation practices that were high-risk. The staff of the restaurant were interviewed and agreed to have blood tests for hepatitis A serology. No evidence of recent acute infection was found in any of the food handlers. Detailed interviews were conducted with the cases and other patrons but no obvious source of infection was identified.

A similar outbreak occurred in 1997 at a restaurant in South Eastern Sydney. In that investigation, a case-control study found the likely source to be undercooked imported prawns. While the exact cause of the outbreak in Northern Sydney remains unclear, it is likely it was from eating contaminated food, although exactly what food and how it was contaminated remains unclear. Given the negative serology of food handlers, it would seem most likely that a food product was contaminated at source (that is, where the food originates from), probably through exposure to human effluent.

Prevention of food-borne hepatitis A infection must focus on:

- effective surveillance, investigation, and timely intervention;
- hygienic food preparation practices;
- thorough hand washing with soap and running water after using the toilet and before eating or preparing food;
- exclusion of infected food handlers from work while infectious;
- establishing effective systems to control contamination of food 'at source';
- thorough cooking of foods such as prawns and shellfish that could be contaminated with faecal organisms.

### Cryptosporidiosis

Notifications of this parasitic infection increased slightly in December 2002, mainly in rural areas in the north of the state. Epidemics seem to occur every few years in NSW, most likely linked to contaminated swimming pools. To help keep swimming pools clear of the highly infectious and chlorine-resistant *Cryptosporidium* parasites, NSW Health recommends that people with diarrhoea avoid entering swimming pools for at least a week after symptoms have completely resolved.

### Salmonellosis

December was a busy month for food-borne disease notifications and investigations. There were over 250 notifications of salmonellosis this month with increases in infections from some unusual serovars: *S. montevideo* (22), *S. potsdam* (19) and *S. kottbus* (6). The Hunter Public Health Unit (HPHU) investigated an outbreak of *S. montevideo* in Newcastle and linked it to Egyptian tahini imported by a company in Sydney. Tahini is a paste made from sesame seeds and is used as an ingredient for humus. To date there have been 30 notified cases, 21 of these in the Hunter area. The HPHU investigation led to a consumer-level recall of products containing the tahini.

NSW Health identified an increase in the number of *S. potsdam* cases in early December. Other states and territories reported similar increases and an investigation was undertaken to determine the source of the outbreak. The cases spread from the mid-north coast of NSW to Tasmania in the south and South Australia in the west. There are about 60 cases to date. All jurisdictions have conducted hypothesis-generating questionnaires. The source of the outbreak remains unclear and the investigation is continuing.

## ZOONOSES

Q fever remains the most commonly reported zoonotic disease throughout the year. Psittacosis has been the only other zoonosis reported in significant numbers this year, mostly related to an outbreak in the Blue Mountains in the first half of the year. An interim report of this outbreak will appear in the March issue of the *Bulletin*.

## OTHER RESPIRATORY DISEASES

Relatively few notifications of Legionnaires' diseases were received in December 2002, and notifications of meningococcal disease declined as expected for this time of year.

## INVASIVE PNEUMOCOCCAL DISEASE SURVEILLANCE, NSW, JANUARY–JUNE 2002

Invasive pneumococcal disease (IPD) became notifiable by all laboratories in NSW in 2001, and 2002 saw the start of enhanced surveillance for notified cases aged less than five years and 50 years and older. *Streptococcus pneumoniae* is a frequent cause of serious bacterial infections worldwide and not only results in infections of the lower respiratory tract but also invasive infections,

**TABLE 1**

**CASES OF INVASIVE PNEUMOCOCCAL DISEASE, NSW, JANUARY TO JUNE 2002**

| Characteristics | Cases *N* | % | Standardised incidence per 100,000 (annual) |
|---|---|---|---|
| **Age group (years)** | | | |
| 0–<1 | 28 | 8.3 | 65.9 |
| 1–<2 | 45 | 12.7 | 103.8 |
| 2–<5 | 45 | 13.4 | 34.7 |
| 5–<50 | 73 | 21.7 | 3.5 |
| 50–<65 | 46 | 13.7 | 9.1 |
| ≥65–79 | 55 | 16.4 | 17.3 |
| 80 + | 43 | 12.8 | 44.3 |
| Age not given | 1 | 0.3 | |
| **Sex** | | | |
| Male | 189 | 56.0 | |
| Female | 147 | 44.0 | |
| **Area Health Service** | | | |
| Central Coast | 19 | 5.6 | 12.9 |
| Central Sydney | 34 | 10.2 | 13.8 |
| Hunter | 35 | 10.5 | 12.9 |
| Illawarra | 26 | 7.7 | 14.9 |
| North Sydney | 46 | 13.7 | 11.8 |
| South Eastern Sydney | 37 | 11.1 | 9.5 |
| South Western Sydney | 34 | 10.2 | 8.7 |
| Wentworth | 16 | 4.7 | 10.2 |
| Western Sydney | 53 | 15.8 | 15.4 |
| Rural NSW | 32 | 9.5 | 4.4 |
| Area not given | 1 | 1.0 | |
| Total | 333 | 100.0 | 10.3 |

Note:Rural NSW = Mid Western, Macquarie, Greater Murray, Northern Rivers, New England, Mid North Coast, Far Western and Southern Area Health Services.

such as bacteraemia. It is the second most common cause of bacterial meningitis in children. Only cases of invasive disease (defined as isolation of *S. pneumoniae* from culture of any normally sterile site including: blood, cerebral spinal fluid, pleural fluid, joint fluid and peritoneal fluid) are notifiable.

Since January 2001, all laboratories in NSW have been asked to forward isolates to The Children's Hospital at Westmead. Since January 2002, public health units have conducted the enhanced surveillance. Risk factors and information on immunisations are collected through the treating clinicians, hospital records, and case interviews, and is forwarded to the Communicable Diseases Branch of the NSW Department of Health for collation and reporting. Typing and antibiotic sensitivity testing are reported from The Children's Hospital at Westmead database.

From January to June 2002, 333 cases of IPD were reported in NSW (10.3 per 100,000 population). Children aged 1–2 years had the highest incidence (103.7 per 100,000) followed by children aged less than 1 year (65.9) and adults aged more than 80 years (44.3) (Table 1). The male to female ratio was 1.3:1. Western Sydney and the Illawarra Area Health Services had the highest incidence and South Western Sydney and South Eastern Sydney the lowest. The highest number of cases was reported in June (117).

Enhanced data was collected on all 118 children aged less than 5 years, and on 147 adults aged 50 years. Two-thirds of the children were males compared to just under half of adults. Four cases were identified in Indigenous people. Rates among children aged less than 5 years were highest in Western Sydney, Central Coast, and Northern Sydney Areas. In contrast, rates among adults aged more than 50 years were highest in the Hunter, Central Sydney and the Illawarra Areas (Table 2).

Bacteraemia (70 per cent) was the most common clinical presentation among children. Pneumonia (75 per cent) was the most common presentation of infection in adults. Meningitis was an uncommon presentation in both age groups, accounting for nine per cent of cases in children and four per cent in adults. Sixteen per cent of children and 73 per cent of adults had a predisposing condition. Forty deaths (16 per cent) were reported and all these cases who died were adults.

**TABLE 2**

**INVASIVE PNEUMOCOCCAL DISEASE BY AREA HEALTH SERVICE, NSW, JANUARY TO JUNE 2002**

| Area of residence | Number of cases | | Incidence rate per 100,000 | |
|---|---|---|---|---|
| | < 5 y old | ≥ 50 y old | < 5 y old | ≥ 50 y old |
| **Greater Sydney Area** | | | | |
| Western Sydney | 24 | 11 | 92.3 | 13.0 |
| Hunter | 9 | 22 | 50.5 | 27.4 |
| Central Sydney | 8 | 17 | 54.0 | 26.0 |
| Wentworth | 8 | 7 | 66.3 | 19.7 |
| Illawarra | 8 | 13 | 69.8 | 24.3 |
| North Sydney | 20 | 19 | 89.9 | 15.9 |
| Central Coast | 9 | 9 | 90.9 | 18.8 |
| South Eastern Sydney | 12 | 18 | 54.9 | 16.2 |
| South Western Sydney | 12 | 11 | 39.0 | 12.0 |
| **Rural Areas** | | | | |
| Mid Western | 3 | 7 | 51.8 | 28.5 |
| Macquarie | 1 | 2 | 25.2 | 13.3 |
| Greater Murray | 2 | 4 | 22.0 | 10.7 |
| Northern Rivers | 0 | 2 | 0.0 | 4.7 |
| New England | 0 | 1 | 0.0 | 3.8 |
| Mid North Coast | 1 | 1 | 13.1 | 2.1 |
| Far Western | 1 | 2 | 59.1 | 27.6 |
| Southern | 0 | 1 | 0.0 | 3.4 |
| **Total** | **118** | **147** | **54.8** | **16.0** |

Vaccination data were available for 93 (79 per cent) children aged less than 5 years and 62 (42 per cent) of adults aged 50 years or older. Fourteen of the adults (22 per cent) were reported to have been vaccinated but none of the children were.

Antibiotic sensitivity results reported for this time period are reported from the various participating laboratories. Not all laboratories use the same antibiotic testing methods, so results may vary. Resistance was reported in 9.4 per cent of cases, 8.5 per cent in children and 10.2 per cent in adults.

Serotyping was available on 82 per cent of all notified cases (*N*=272). Eighty-seven (90 per cent) of children aged less than 5 years had serotypes that were included in the 7-valent conjugate vaccine. Ten of the fourteen adults vaccinated had a serotype that was contained in the polysaccharide vaccine. Overall, 95 per cent of cases (aged more than15 years) had serotypes contained within the vaccine.

These data suggest that the incidence of IPD varies across the area health services. Within the rural areas of NSW, rates were very high for the Mid Western and the Far West Areas, both for adults and for children. These data may reflect the different practices for taking blood culture in the regions.


## ACKNOWLEDGEMENT

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## BLOOD-BORNE AND SEXUALLY TRANSMISSIBLE INFECTIONS

### Quarterly report: HIV notifications to end of September 2002

HIV notifications in NSW continue to decline in 2002. To the end of September 2002, the cumulative number of HIV diagnoses in NSW residents was 12,723. The number of HIV diagnoses for 2001 was 350, compared with 361 in 2000 (Table 3).

*New HIV diagnoses*

Of the 257 new cases of HIV diagnosed between 1 January and 30 September 2002, 233 (91 per cent) were males, 19 (7 per cent) were females, two (less than 1 per cent) were transgender, and for three (one per cent) their gender was not reported (Table 4). At the time of diagnosis, all notified cases were aged 20 years or older; 25 per cent were aged between 20–29 years; and 42 per cent were aged between 30–39 years. Eighty-five percent of cases

diagnosed were residents of Greater Sydney area health services (which include Central Sydney, North Sydney, Western Sydney, Wentworth, South West Sydney and South East Sydney).

*Risk factors*

Male-to-male sexual contact (with or without a history of injecting drug use) was reported for over two-thirds of cases, and heterosexual contact (as the only risk factor) was reported for 15 per cent (Table 4). Five (two per cent) cases reported injecting drug use as their only risk factor. This compared with 20 cases reported in the previous year. One case of vertical transmission was reported this year, giving a total of 39 cases of vertical transmission for NSW since the beginning of the epidemic. Risk exposure remains undetermined or unknown for 14 per cent of cases notified in 2002.

*Newly-acquired HIV infections*

For the period 1992 to 30 September 2002, there have been 1079 newly-acquired HIV infections (NAIs). A NAI is defined as HIV infection diagnosed within 12 months of a previous negative HIV test or following a seroconversion illness. This represents 21 per cent of all HIV notifications. The number of newly-acquired infections has risen slightly in recent years: 1997 (70); 1998 (72); 1999 (95); 2000 (87); 2001 (98). There were 77 NAIs reported from January to 30 September 2002. The increase in reporting is likely to be due to improvements in both quality and completeness of data.

*AIDS diagnoses and AIDS deaths*

The number of AIDS diagnoses and AIDS deaths continues to decline significantly, with only 39 AIDS cases and 17 deaths reported to 30 September 2002 (Table 3). Active AIDS surveillance through local public health units begins in November each year, which usually results in an increase in numbers of cases of AIDS and AIDS deaths reported in final quarter of the year. Therefore, the cumulative totals for 2002 should be treated with caution, until data for the final quarter is available. The cumulative AIDS diagnoses and AIDS deaths to 30 September 2002 is currently 5098 and 3494 respectively. The estimated number of people living with HIV in NSW was 9229 on 30 September 2002. An estimated 1604 were living with an AIDS-defining illness.

*Combined HIV–AIDS database*

From December 2002, the NSW Department of Health will be operating a combined HIV–AIDS database with a single patient record for HIV and AIDS diagnoses. One of the challenges of the new integrated system is matching of

**TABLE 3**

**NOTIFICATION OF HIV, AIDS AND AIDS DEATHS BY YEAR, NSW, 1981–30 SEPTEMBER 2002**

| | HIV | | AIDS | | AIDS deaths | |
|---|---|---|---|---|---|---|
| Year | *N* | % | *N* | % | *N* | % |
| 1981 | 1 | 0.01 | 1 | 0.02 | 1 | 0.03 |
| 1982 | 1 | 0.01 | 1 | 0.02 | 0 | 0.00 |
| 1983 | 2 | 0.02 | 3 | 0.06 | 1 | 0.03 |
| 1984 | 208 | 1.63 | 30 | 0.59 | 6 | 0.17 |
| 1985 | 1002 | 7.86 | 91 | 1.79 | 46 | 1.32 |
| 1986 | 1106 | 8.67 | 162 | 3.19 | 108 | 3.09 |
| 1987 | 1641 | 12.87 | 251 | 4.94 | 143 | 4.09 |
| 1988 | 1152 | 9.03 | 321 | 6.31 | 139 | 3.98 |
| 1989 | 991 | 7.77 | 355 | 6.98 | 239 | 6.84 |
| 1990 | 820 | 6.43 | 425 | 8.36 | 326 | 9.33 |
| 1991 | 824 | 6.46 | 443 | 8.71 | 344 | 9.85 |
| 1992 | 703 | 5.51 | 432 | 8.50 | 330 | 9.44 |
| 1993 | 594 | 4.66 | 481 | 9.46 | 379 | 10.85 |
| 1994 | 502 | 3.94 | 552 | 10.86 | 423 | 12.11 |
| 1995 | 537 | 4.21 | 473 | 9.30 | 356 | 10.19 |
| 1996 | 455 | 3 57 | 367 | 7.22 | 272 | 7.78 |
| 1997 | 429 | 3.36 | 199 | 3.91 | 125 | 3.58 |
| 1998 | 406 | 3.18 | 173 | 3.40 | 69 | 1.97 |
| 1999 | 379 | 2.97 | 108 | 2.12 | 63 | 1.80 |
| 2000 | 361 | 2.83 | 119 | 2.34 | 71 | 2.03 |
| 2001 | 350 | 2.74 | 69 | 1.36 | 36 | 1.03 |
| 2002 (to September) | 257 | 2.27 | 39 | 0.85 | 17 | 0.49 |
| **Total** | **12723** | **100.00** | **5098** | **100.00** | **3494** | **100.00** |

## TABLE 4

### CHARACTERISTICS OF NSW RESIDENTS REPORTED WITH HIV INFECTION, AIDS, OR WHO HAVE DIED FROM AIDS, 1981 TO 31 SEPTEMBER 2002

| Characteristic | All cases 1981–-Sep 2002 | | | | | | Cases for 2001 | | | | | | Jan–Sep 2002 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | HIV | | AIDS | | AIDS deaths | | HIV | | AIDS | | AIDS deaths | | HIV | | AIDS | | AIDS deaths | |
| | *N* | % | *N* | % | *N* | % | *N* | % | *N* | % | *N* | % | *N* | % | *N* | % | *N* | % |
| **Gender** | | | | | | | | | | | | | | | | | | |
| Female | 675 | 5.3 | 207 | 4.1 | 120 | 3.4 | 32 | 9.1 | 6 | 8.5 | 3 | 8.3 | 19 | 7.4 | 0 | 0.0 | 0 | 0.0 |
| Male | 11767 | 92.5 | 4878 | 95.7 | 3365 | 96.3 | 311 | 88.9 | 65 | 91.5 | 33 | 91.7 | 233 | 90.7 | 38 | 97.4 | 17 | 100.0 |
| Transgender | 24 | 0.2 | 13 | 0.3 | 9 | 0.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 2 | 0.8 | 1 | 2.6 | 0 | 0.0 |
| Not stated | 257 | 2.0 | 0 | 0.0 | 0 | 0.0 | 7 | 2.0 | 0 | 0.0 | 0 | 0.0 | 3 | 1.2 | 0 | 0.0 | 0 | 0.0 |
| **Age** | | | | | | | | | | | | | | | | | | |
| 0 - 2 | 28 | 0.2 | 7 | 0.1 | 3 | 0.1 | 0 | 0.0 | 0 | 0.0 | 1 | 2.8 | 1 | 0.4 | 0 | 0.0 | 0 | 0.0 |
| 3 - 12 | 37 | 0.3 | 11 | 0.2 | 8 | 0.2 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| 13 - 19 | 206 | 1.6 | 13 | 0.3 | 9 | 0.3 | 3 | 0.9 | 0 | 0.0 | 0 | 0.0 | 1 | 0.4 | 0 | 0.0 | 0 | 0.0 |
| 20 - 29 | 4028 | 31.7 | 758 | 14.9 | 539 | 15.4 | 84 | 24.0 | 7 | 9.9 | 4 | 11.1 | 63 | 24.5 | 2 | 5.1 | 1 | 5.9 |
| 30 - 39 | 4861 | 38.2 | 2119 | 41.6 | 1434 | 41.0 | 145 | 41.4 | 26 | 36.6 | 19 | 52.8 | 109 | 42.4 | 14 | 35.9 | 5 | 29.4 |
| 40 - 49 | 2405 | 18.9 | 1487 | 29.2 | 1021 | 29.2 | 75 | 21.4 | 22 | 31.0 | 8 | 22.2 | 57 | 22.2 | 15 | 38.5 | 8 | 47.1 |
| 50 - 59 | 776 | 6.1 | 531 | 10.4 | 350 | 10.0 | 21 | 6.0 | 12 | 16.9 | 2 | 5.6 | 17 | 6.6 | 8 | 20.5 | 3 | 17.6 |
| 60 + | 271 | 2.1 | 172 | 3.4 | 130 | 3.7 | 9 | 2.6 | 4 | 5.6 | 2 | 5.6 | 6 | 2.3 | 0 | 0.0 | 0 | 0.0 |
| Not stated | 111 | 0.9 | 0 | 0.0 | 0 | 0.0 | 13 | 3.7 | 0 | 0.0 | 0 | 0.0 | 3 | 1.2 | 0 | 0.0 | 0 | 0.0 |
| **Exposure** | | | | | | | | | | | | | | | | | | |
| Male homosexual-bisexual | 7560 | 59.4 | 4136 | 81.1 | 2903 | 83.1 | 220 | 62.9 | 54 | 76.1 | 25 | 69.4 | 167 | 65.0 | 29 | 74.4 | 15 | 88.2 |
| Male homosexual-bisexual and IDU | 297 | 2.3 | 200 | 3.9 | 138 | 3.9 | 17 | 4.9 | 1 | 1.4 | 3 | 8.3 | 9 | 3.5 | 4 | 10.3 | 1 | 5.9 |
| Injecting drug use | 434 | 3.4 | 103 | 2.0 | 52 | 1.5 | 20 | 5.7 | 3 | 4.2 | 0 | 0.0 | 5 | 1.9 | 1 | 2.6 | 1 | 5.9 |
| Heterosexual | 901 | 7.1 | 308 | 6.0 | 149 | 4.3 | 57 | 16.3 | 7 | 9.9 | 5 | 13.9 | 37 | 14.4 | 5 | 12.8 | 0 | 0.0 |
| Haemophilia- Coagulation disorders | 114 | 0.9 | 52 | 1.0 | 46 | 1.3 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Blood-Tissue recipient/ NSI* | 119 | 0.9 | 104 | 2.0 | 90 | 2.6 | 0 | 0.0 | 0 | 0.0 | 1 | 2.8 | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Vertical | 39 | 0.3 | 14 | 0.3 | 7 | 0.2 | 0 | 0.0 | 0 | 0.0 | 1 | 2.8 | 1 | 0.4 | 0 | 0.0 | 0 | 0.0 |
| Undetermined | 3193 | 25.1 | 32 | 0.6 | 17 | 0.5 | 13 | 3.7 | 1 | 1.4 | 0 | 0.0 | 11 | 4.3 | 0 | 0.0 | 0 | 0.0 |
| Not stated | 66 | 0.5 | 149 | 2.9 | 92 | 2.6 | 23 | 6.6 | 5 | 7.0 | 1 | 2.8 | 27 | 10.5 | 0 | 0.0 | 0 | 0.0 |
| **Residence** | | | | | | | | | | | | | | | | | | |
| Greater Sydney** | 7057 | 55.5 | 4267 | 83.7 | 2934 | 84.0 | 310 | 88.6 | 54 | 76.1 | 28 | 77.8 | 218 | 84.8 | 35 | 89.7 | 14 | 82.4 |
| Rest of New South Wales | 831 | 6.5 | 674 | 13.2 | 425 | 12.2 | 38 | 10.9 | 16 | 22.5 | 8 | 22.2 | 21 | 8.2 | 4 | 10.3 | 3 | 17.6 |
| Unknown | 4835 | 38.0 | 157 | 3.1 | 135 | 3.9 | 2 | 0.6 | 1 | 1.4 | 0 | 0.0 | 18 | 7.0 | 0 | 0.0 | 0 | 0.0 |
| **Grand Total** | 12723 | 100 | 5098 | 100 | 3494 | 100 | 350 | 100 | 71 | 100 | 36 | 100 | 257 | 100 | 39 | 100 | 17 | 100 |

Source: NSW HIV–AIDS database, Communicable Diseases Branch, NSW Department of Health. Recent HIV data may contain duplicates

* Needle-stick injury

** Greater Sydney area health services include Central Sydney, North Sydney, Western Sydney, Wentworth, South West Sydney, and South East Sydney

the HIV and AIDS records, given that over 40 per cent of HIV notifications had inadequate identifiers (that is, details that make the record unique, such as name codes and date of birth), particularly before 1990. Once in operation, the combined HIV–AIDS database will further improve the timeliness and data quality of all notification data and reduce duplicates.

### GLOSSARY OF TERMS

*New HIV diagnosis* refers to a person who is diagnosed for the first time with human immunodeficiency virus (HIV) infection

*Newly-acquired HIV infection* refers to a person with a new HIV diagnosis who tested HIV negative or reported a seroconversion illness in the 12 months before HIV diagnosis

*AIDS* refers to a person with HIV infection who develops one of several infections, malignancies or other medical conditions indicating immune depression consistent with the definition of the acquired immunodeficiency syndrome (AIDS)

*AIDS death* refers to a person who has died of any cause after being diagnosed with AIDS

## VECTOR-BORNE DISEASES

Notifications of both Ross River virus and Barmah Forest virus infections were few for this time of year, possibly due to reduced mosquitoes activity associated with the drought.

## VACCINE-PREVENTABLE DISEASES

There were no reports of measles for the three-month period to December 2002. Cases of pertussis increased a little in spring, which is typical for this infection.

### Quarterly report: Australian Childhood Immunisation Register

Table 5 details the percentage of fully immunised children aged 12 months to less than 15 months in each area health service, reported by all service providers.

These data refer to five different cohorts of children whose age has been calculated 90 days before data extraction. The information contained in each of the reports has been extracted from the Australian Childhood Immunisation Register (ACIR) and may not reflect actual coverage due to under-reporting. Table 6 details the percentage of fully immunised children identified as Aboriginal or Torres Strait Islander in New South Wales, for the same cohort, reported by all service providers.

**TABLE 5**

**PERCENTAGE OF FULLY IMMUNISED CHILDREN AGED 12 MONTHS TO LESS THAN 15 MONTHS BY AREA HEALTH SERVICE**

| Area Health Service | 31 Dec 01 | 31 Mar 02 | 30 June 02 | 30 Sept 02 | 31 Dec 02 |
|---|---|---|---|---|---|
| Central Coast | 94 | 92 | 90 | 92 | 93 |
| Central Sydney | 87 | 88 | 89 | 90 | 90 |
| Hunter | 93 | 94 | 94 | 93 | 94 |
| Illawarra | 91 | 93 | 89 | 94 | 92 |
| Northern Sydney | 89 | 90 | 89 | 91 | 91 |
| South Eastern Sydney | 89 | 90 | 89 | 92 | 91 |
| South Western Sydney | 89 | 90 | 90 | 90 | 92 |
| Wentworth | 91 | 92 | 90 | 91 | 90 |
| Western Sydney | 89 | 90 | 90 | 91 | 92 |
| Far West | 94 | 92 | 90 | 90 | 89 |
| Greater Murray | 93 | 93 | 92 | 94 | 93 |
| Macquarie | 95 | 92 | 93 | 91 | 92 |
| Mid North Coast | 88 | 90 | 90 | 88 | 90 |
| Mid Western | 92 | 92 | 91 | 91 | 94 |
| New England | 94 | 94 | 92 | 91 | 93 |
| Northern Rivers | 84 | 80 | 84 | 84 | 85 |
| Southern | 89 | 93 | 90 | 91 | 91 |
| **NSW** | **91** | **91** | **90** | **91** | **91** |
| **Australia** | **90** | **91** | **90** | **91** | **92** |

**TABLE 6**

**PERCENTAGE OF FULLY IMMUNISED CHILDREN IDENTIFIED AS ABORIGINAL AND TORRES STRAIT ISLANDER, AGED 12 MONTHS TO LESS THAN 15 MONTHS**

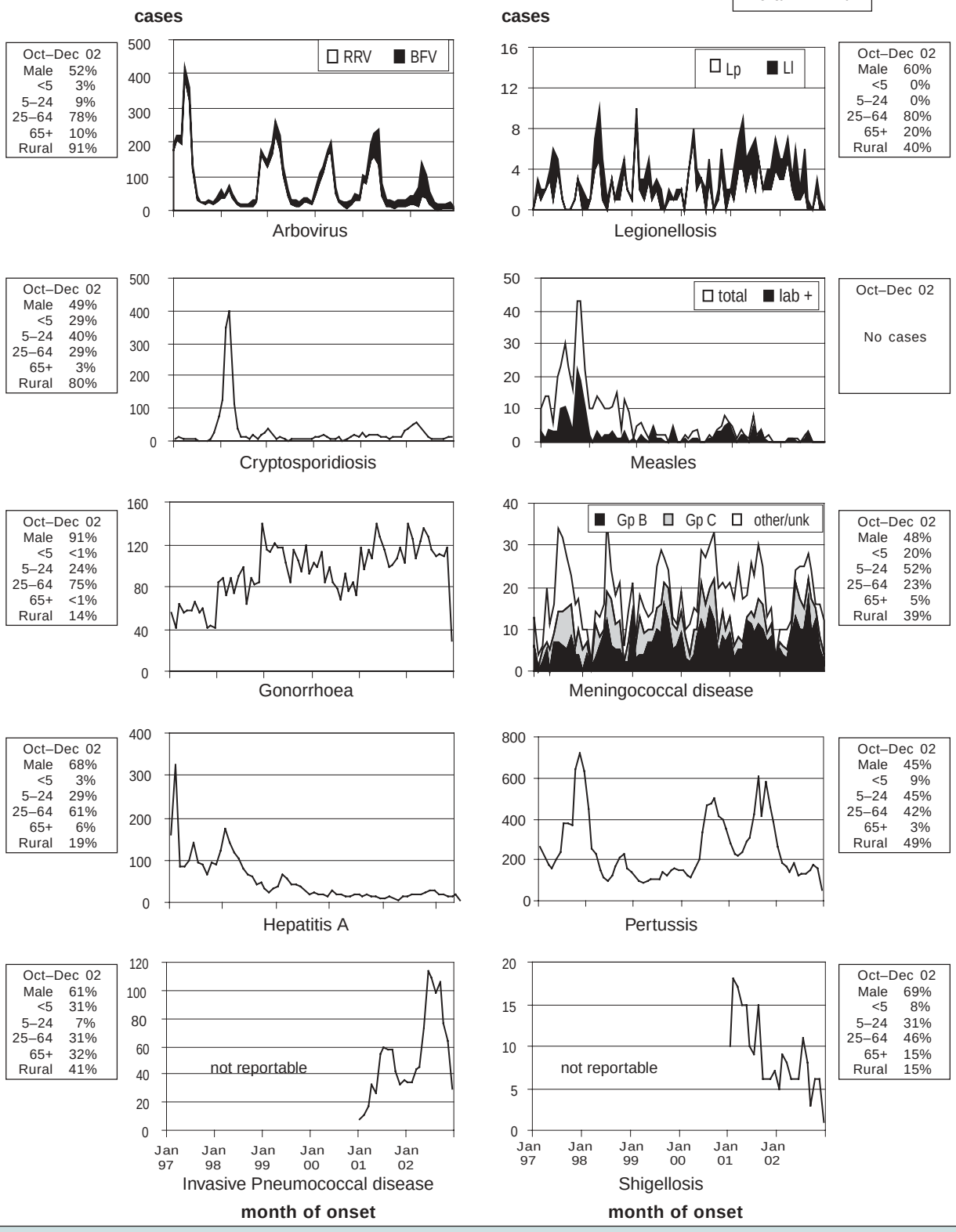
| | 30 June 02 | 30 Sept 02 | 31 Dec 02 |
|---|---|---|---|
| **NSW** | 87 | 85 | 86 |
| **Australia** | 85 | 85 | 84 |

**FIGURE 1**

**REPORTS OF SELECTED COMMUNICABLE DISEASES, NSW, JANUARY 1997 TO DEC 2002, BY MONTH OF ONSET**

Preliminary data: case counts in recent months may increase because of reporting delays.
Laboratory-confirmed cases only, except for measles, meningococcal disease and pertussis
BFV = Barmah Forest virus infections, RRV = Ross River virus infections
LI = Legionella longbeachae infections, Lp = L. pneumophila infections
Gp C and Gp B = disease due to serogroup C and serogroup B infection,
other/unk = other or unknown serogroups

| NSW population | |
|---|---|
| Male | 50% |
| <5 | 7% |
| 5–24 | 28% |
| 25–64 | 52% |
| 65+ | 13% |
| Rural* | 42% |



## TABLE 7 REPORTS OF NOTIFIABLE CONDITIONS RECEIVED IN NOVEMBER 2002 BY AREA HEALTH SERVICES

| Condition | Area Health Service | | | | | | | | | | | | | | | | | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CSA | NSA | WSA | WEN | SWS | CCA | HUN | ILL | SES | NRA | MNC | NEA | MAC | MWA | FWA | GMA | SA | CHS | for Nov† | To date† |
| **Blood-borne and sexually transmitted** | | | | | | | | | | | | | | | | | | | | |
| Chancroid* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Chlamydia (genital)* | 80 | 60 | 38 | 19 | 13 | 13 | 46 | 14 | 85 | 25 | 14 | 14 | 6 | 14 | 5 | 25 | 13 | - | 495 | 5,123 |
| Gonorrhoea* | 20 | 11 | 3 | 1 | 3 | 3 | 3 | 2 | 62 | - | 1 | 1 | - | 2 | 2 | 1 | - | - | 123 | 1,335 |
| Hepatitis B - acute viral* | - | 1 | - | - | 1 | - | 2 | - | 2 | - | - | - | 1 | - | - | - | - | - | 8 | 88 |
| Hepatitis B - other* | 69 | 38 | 71 | 5 | 12 | 5 | 8 | 3 | 29 | 1 | 4 | 2 | 3 | - | - | 2 | 4 | - | 257 | 3,660 |
| Hepatitis C - acute viral* | - | 1 | - | - | - | - | 2 | - | - | - | - | - | 1 | - | - | 1 | - | - | 5 | 134 |
| Hepatitis C - other* | 77 | 47 | 56 | 15 | 14 | 38 | 54 | 33 | 40 | 34 | 34 | 13 | 11 | 20 | - | 15 | 19 | - | 525 | 6,991 |
| Hepatitis D - unspecified* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 8 |
| Syphilis | 8 | 3 | 9 | - | 9 | 3 | - | - | 29 | - | 3 | 3 | 2 | - | - | - | 4 | - | 74 | 662 |
| **Vector-borne** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Barmah Forest virus* | - | - | - | - | - | - | 2 | - | - | 4 | 11 | 1 | - | - | - | 2 | - | - | 20 | 389 |
| Ross River virus* | - | - | - | - | - | - | 3 | - | - | - | 1 | 2 | 2 | - | - | - | - | - | 8 | 187 |
| Arboviral infection (Other)* | 1 | - | - | - | - | 1 | - | 1 | 3 | - | - | - | - | - | 1 | - | - | - | 8 | 78 |
| Malaria* | 1 | - | - | - | - | - | - | - | 3 | - | - | - | - | - | - | - | - | - | 5 | 103 |
| **Zoonoses** | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| Anthrax* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Brucellosis* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 |
| Leptospirosis* | 1 | - | - | - | - | - | 2 | - | - | - | 2 | 2 | - | - | - | - | - | - | 7 | 36 |
| Lyssavirus* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Psittacosis* | - | - | - | - | 1 | - | 3 | - | - | - | - | - | - | - | - | 2 | - | - | 6 | 136 |
| Q fever* | - | - | - | - | 1 | 2 | 2 | 1 | - | 10 | 5 | 1 | 8 | 3 | 2 | 1 | 2 | - | 38 | 272 |
| **Respiratory and other** | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| Blood lead level* | 4 | 3 | - | 2 | 1 | 1 | 9 | 2 | - | - | 1 | - | - | - | - | 1 | - | - | 24 | 462 |
| Influenza* | 4 | 3 | 3 | 4 | - | - | - | 2 | 10 | 1 | - | 3 | - | - | - | - | - | - | 30 | 1,127 |
| Invasive pneumococcal infection* | 5 | 6 | 10 | 3 | 12 | 1 | 10 | 3 | 5 | 2 | - | - | 2 | - | 2 | 2 | 1 | - | 64 | 779 |
| *Legionella longbeachae* infection* | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | 1 | 22 |
| *Legionella pneumophila* infection* | - | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - | 1 | 20 |
| Legionnaires' disease (Other)* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Leprosy | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Meningococcal infection (invasive)* | - | 1 | 2 | 2 | - | - | 3 | 1 | 3 | - | - | - | - | - | - | - | 1 | - | 14 | 198 |
| Tuberculosis* | 4 | - | 2 | 1 | 8 | - | 3 | 1 | 3 | - | - | - | - | - | - | - | - | - | 22 | 422 |
| **Vaccine-preventable** | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| Adverse event after immunisation | 1 | 2 | 1 | - | - | 2 | 2 | - | - | - | - | - | - | 1 | - | 1 | - | - | 10 | 171 |
| H. *Influenzae b* infection (invasive)* | - | - | - | 1 | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | 2 | 11 |
| Measles | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 9 |
| Mumps* | - | - | 1 | - | - | 1 | - | - | - | 1 | - | - | 1 | - | - | - | - | - | 4 | 29 |
| Pertussis | 19 | 37 | 17 | 2 | 15 | 8 | 16 | 3 | 17 | 5 | 26 | 19 | 1 | 10 | 2 | 2 | 4 | - | 203 | 2,076 |
| Rubella* | - | - | - | - | - | - | - | - | - | 1 | - | - | 2 | - | - | - | - | - | 3 | 34 |
| Tetanus | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **Faecal-oral** | | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| Botulism | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Cholera* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 |
| Cryptosporidiosis* | - | - | - | 1 | - | - | - | - | 3 | 2 | 2 | 1 | - | - | - | 1 | - | - | 10 | 288 |
| Food borne illness (not otherwise specified) | 2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | 34 |
| Gastroenteritis (in an institution) | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1,811 |
| Giardiasis* | 2 | 7 | 4 | 3 | 6 | 2 | 3 | 2 | 17 | 4 | 1 | 3 | 1 | 2 | - | - | 1 | - | - | 669 |
| Haemolytic uraemic syndrome | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 | 7 |
| Hepatitis A* | 2 | 2 | 2 | 1 | 1 | - | - | - | 2 | - | 1 | - | - | - | - | - | 1 | - | 12 | 154 |
| Hepatitis E* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 6 |
| Listeriosis* | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | 1 | 9 |
| Salmonellosis (not otherwise specified)* | 7 | 16 | 16 | 13 | 13 | 6 | 16 | 3 | 22 | 19 | 4 | 5 | 6 | 4 | - | 10 | 3 | - | 163 | 1,948 |
| Shigellosis* | 2 | 1 | - | - | 1 | - | - | - | 2 | - | - | - | - | - | - | - | - | - | 6 | 77 |
| Typhoid and paratyphoid* | 2 | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5 | 34 |
| Verotoxin producing *E. coli** | - | 2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | 5 |

* lab-confirmed cases only + includes cases with unknown postcode* * HIV and AIDS data are reported separately in the *NSW Public Health Bulletin*

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## TABLE 8 REPORTS OF NOTIFIABLE CONDITIONS RECEIVED IN DECEMBER 2002 BY AREA HEALTH SERVICES

| Condition | Area Health Service | | | | | | | | | | | | | | | | | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | CSA | NSA | WSA | WEN | SWS | CCA | HUN | ILL | SES | NRA | MNC | NEA | MAC | MWA | FWA | GMA | SA | CHS | for Dec† | To date† |
| **Blood-borne and sexually transmitted** | | | | | | | | | | | | | | | | | | | | |
| Chancroid* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Chlamydia (genital)* | 22 | 57 | 40 | 16 | 1 | 1 | 43 | 18 | 71 | 15 | 14 | 11 | 7 | 9 | 19 | 12 | 8 | - | 372 | 5,527 |
| Gonorrhoea* | - | 9 | 8 | 4 | - | - | 1 | - | 29 | 7 | 1 | 2 | 1 | 1 | - | - | - | - | 65 | 1,407 |
| Hepatitis B - acute viral* | 1 | - | - | - | 2 | - | - | - | - | - | - | - | - | - | - | 1 | - | - | 4 | 92 |
| Hepatitis B - other* | 29 | 30 | 28 | 4 | 1 | 2 | 1 | 4 | 32 | 2 | - | 1 | 2 | 1 | 5 | 2 | 1 | - | 145 | 3,842 |
| Hepatitis C - acute viral* | - | - | - | - | - | - | - | - | - | - | - | - | 1 | - | - | - | - | - | 1 | 149 |
| Hepatitis C - other* | 42 | 22 | 20 | 18 | - | 5 | 50 | 33 | 13 | 33 | 21 | 16 | 7 | 11 | 4 | 7 | 11 | - | 319 | 7,359 |
| Hepatitis D - unspecified* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 8 |
| Syphilis | 22 | 4 | 9 | 1 | - | 1 | - | 3 | 20 | 2 | 2 | 3 | 1 | 1 | 4 | - | - | - | 74 | 770 |
| **Vector-borne** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Barmah Forest virus* | - | - | - | - | - | - | 1 | 1 | - | 1 | 9 | - | 1 | - | - | - | 1 | - | 14 | 403 |
| Ross River virus* | - | - | - | - | - | - | - | - | - | - | 3 | - | 2 | - | - | 1 | - | - | 6 | 194 |
| Arboviral infection (Other)* | - | - | 1 | - | - | - | - | - | 1 | - | - | - | - | - | - | - | 2 | - | 4 | 83 |
| Malaria* | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 | 104 |
| **Zoonoses** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Anthrax* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Brucellosis* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 |
| Leptospirosis* | - | - | - | - | - | - | - | - | - | - | 2 | - | - | - | - | - | - | - | 2 | 38 |
| Lyssavirus* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Psittacosis* | - | - | - | - | - | - | 2 | - | - | - | - | - | - | - | - | - | - | - | 2 | 140 |
| Q fever* | - | - | - | - | - | - | 1 | 2 | - | 5 | 2 | 3 | 7 | 4 | 4 | 2 | 4 | - | 34 | 305 |
| **Respiratory and other** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Blood lead level* | - | 2 | - | - | 1 | - | 3 | 3 | 1 | 1 | 1 | - | 1 | 1 | - | 1 | 1 | - | 18 | 483 |
| Influenza* | - | 3 | 1 | - | - | - | - | 3 | 5 | - | - | - | - | - | - | - | - | - | 13 | 1,140 |
| Invasive pneumococcal infection* | 3 | 11 | 5 | - | 7 | 3 | 5 | 4 | 7 | - | 1 | - | - | 2 | - | 14 | 1 | - | 63 | 843 |
| *Legionella longbeachae* infection* | 1 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 2 | 24 |
| *Legionella pneumophila* infection* | 2 | - | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 3 | 22 |
| Legionnaires' disease (Other)* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Leprosy | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Meningococcal infection (invasive)* | 1 | 2 | 2 | 1 | - | - | 4 | 2 | 1 | - | - | - | 1 | - | - | - | - | - | 14 | 212 |
| Tuberculosis | 5 | - | 2 | - | - | - | 1 | 1 | 1 | 1 | - | - | - | - | - | - | - | - | 11 | 441 |
| **Vaccine-preventable** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Adverse event after immunisation | - | - | 1 | - | - | 1 | - | - | 1 | - | 1 | - | - | 2 | 1 | - | - | - | 7 | 181 |
| H. *Influenzae b* infection (invasive)* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 11 |
| Measles | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 8 |
| Mumps* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 | - | 1 | 30 |
| Pertussis | 13 | 13 | 19 | 3 | 12 | 1 | 15 | 6 | 17 | 5 | 15 | 7 | 4 | - | - | - | 5 | - | 135 | 2,214 |
| Rubella* | 1 | - | 1 | - | - | - | - | - | 1 | - | - | - | - | - | - | - | - | - | 3 | 37 |
| Tetanus | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| **Enteric** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Botulism | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Cholera* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 1 |
| Cryptosporidiosis* | - | - | 1 | - | 1 | 1 | 5 | 1 | - | - | 4 | 7 | - | - | - | - | - | - | 20 | 308 |
| Giardiasis* | - | 8 | 9 | 1 | 2 | - | 9 | 6 | 1 | 2 | 1 | 3 | 3 | - | 4 | 2 | - | - | 51 | 853 |
| Haemolytic uraemic syndrome | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 7 |
| Hepatitis A* | 1 | 1 | - | - | 1 | - | 1 | - | - | - | 2 | - | - | - | - | - | - | - | 6 | 160 |
| Hepatitis E* | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 6 |
| Listeriosis* | - | - | - | - | - | - | - | 1 | 2 | - | - | - | - | - | - | - | - | - | 3 | 12 |
| Salmonellosis (not otherwise specified)* | 6 | 24 | 6 | 8 | 17 | 1 | 26 | 5 | 30 | 22 | 5 | 7 | 3 | 5 | 1 | 8 | 5 | - | 179 | 2,130 |
| Shigellosis* | - | 1 | - | - | 1 | - | - | - | - | - | - | - | - | - | - | - | 1 | - | 3 | 80 |
| Typhoid and paratyphoid* | 1 | - | - | - | 1 | - | - | - | 2 | - | - | - | - | - | - | - | - | - | 4 | 38 |
| Verotoxin producing *E. coli** | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | 5 |

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