

## APPENDIX: NATIONAL DATA AND TRENDS



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## Comparison of notifiable disease cases and rates for 2011 and 2012

**Table 41. Numbers of cases and rates per 100 000 population for common (10 or more cases reported per year) notifiable diseases in New Zealand, 2011–2012**

| Disease                       | 2011  |       | 2012  |       | Change <sup>d,e</sup> |
|-------------------------------|-------|-------|-------|-------|-----------------------|
|                               | Cases | Rate  | Cases | Rate  |                       |
| AIDS <sup>a</sup>             | 24    | 0.5   | 20    | 0.5   | -                     |
| Campylobacteriosis            | 6 689 | 151.8 | 7 031 | 158.6 | ➔                     |
| Cryptosporidiosis             | 610   | 13.8  | 877   | 19.8  | ➔                     |
| Dengue fever                  | 42    | 1.0   | 77    | 1.7   | ➔                     |
| Gastroenteritis <sup>b</sup>  | 630   | 14.3  | 735   | 16.6  | ➔                     |
| Giardiasis                    | 1 934 | 43.9  | 1 719 | 38.8  | ⬅                     |
| Hepatitis A                   | 26    | 0.6   | 82    | 1.8   | ➔                     |
| Hepatitis B <sup>c</sup>      | 51    | 1.2   | 39    | 0.9   | ⬅                     |
| Hepatitis C <sup>c</sup>      | 26    | 0.6   | 32    | 0.7   | ➔                     |
| Invasive pneumococcal disease | 552   | 12.5  | 488   | 11.0  | ⬅                     |
| Lead absorption               | 230   | 5.2   | 272   | 6.1   | ➔                     |
| Legionellosis                 | 158   | 3.6   | 152   | 3.4   | ⬅                     |
| Leptospirosis                 | 68    | 1.5   | 113   | 2.5   | ➔                     |
| Listeriosis                   | 26    | 0.6   | 25    | 0.6   | ⬅                     |
| Malaria                       | 52    | 1.2   | 38    | 0.9   | ⬅                     |
| Measles                       | 596   | 13.5  | 68    | 1.5   | ⬅                     |
| Meningococcal disease         | 119   | 2.7   | 85    | 1.9   | ⬅                     |
| Mumps                         | 51    | 1.2   | 26    | 0.6   | ⬅                     |
| Paratyphoid fever             | 13    | 0.3   | 22    | 0.5   | ➔                     |
| Pertussis                     | 1 996 | 45.3  | 5 902 | 133.1 | ➔                     |
| Rheumatic fever               | 164   | 3.7   | 179   | 4.0   | ➔                     |
| Salmonellosis                 | 1 055 | 23.9  | 1 085 | 24.5  | ➔                     |
| Shigellosis                   | 101   | 2.3   | 132   | 3.0   | ➔                     |
| Tuberculosis disease          | 309   | 7.0   | 297   | 6.7   | ⬅                     |
| Typhoid fever                 | 45    | 1.0   | 45    | 1.0   | ⬅                     |
| VTEC/STEC infection           | 153   | 3.5   | 147   | 3.3   | ⬅                     |
| Yersiniosis                   | 514   | 11.7  | 517   | 11.7  | ⬅                     |

<sup>a</sup>Data source [16].

<sup>b</sup>Cases of acute gastroenteritis from a common source or foodborne intoxication, e.g., staphylococcal intoxication.

<sup>c</sup>Only acute cases of this disease are notifiable.

<sup>d</sup>⬅ = significant decrease, ➔ = significant increase, - = no change, ⏪ = not significant decrease, ➤ = not significant increase.

<sup>e</sup>Fisher's exact tests were used to determine statistical significance. Results are considered statistically significant when the *P* value is less than or equal to 0.05.

## Comparison of notifiable disease cases and rates for 2011 and 2012

**Table 42. Numbers of cases for rare (fewer than 10 cases reported per year) notifiable diseases in New Zealand, 2011–2012**

| Disease <sup>a</sup>                    | 2011 | 2012 |
|---|------|------|
| Chemical poisoning from the environment | 3    | 7    |
| Chikungunya fever                       | 1    | 0    |
| <i>Cronobacter</i> species              | 0    | 1    |
| <i>Haemophilus influenzae</i> type b    | 8    | 4    |
| Hepatitis NOS                           | 7    | 2    |
| Hydatid disease                         | 6    | 1    |
| Leprosy                                 | 1    | 2    |
| Q fever                                 | 1    | 0    |
| Rickettsial disease                     | 5    | 4    |
| Ross River virus infection              | 3    | 1    |
| Rubella                                 | 22   | 4    |
| Taeniasis                               | 10   | 6    |
| Tetanus                                 | 0    | 2    |
| Toxic shellfish poisoning               | 3    | 34   |

<sup>a</sup> No cases of the following notifiable diseases were reported in 2011 and 2012: anthrax, brucellosis, Barmah Forest virus infection, cholera, congenital rubella, cysticercosis, decompression sickness, highly pathogenic avian influenza, non-seasonal influenza, plague, poliomyelitis, primary amoebic meningo-encephalitis, rabies, severe acute respiratory syndrome (SARS), trichinosis, viral haemorrhagic fever and yellow fever.

## Deaths from notifiable diseases in EpiSurv, 1997–2012

**Table 43. Deaths due to notifiable diseases recorded in EpiSurv, 1997–2012**

| Disease                                      | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| AIDS <sup>a</sup>                            | 34   | 19   | 18   | 19   | 14   | 11   | 10   | 13   | 15   | 14   | 5    | 2    | 2    | 8    | 1    | 3    |
| Campylobacteriosis                           | 2    | 2    | 1    | 3    | 1    | 1    | 0    | 0    | 1    | 1    | 1    | 0    | 0    | 0    | 0    | 0    |
| Chemical poisoning from the environment      | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 2    |
| Creutzfeldt-Jakob disease <sup>b</sup>       | 3    | 0    | 2    | 3    | 1    | 3    | 4    | 3    | 0    | 5    | 0    | 0    | 0    | 0    | 0    | 8    |
| Gastroenteritis <sup>c</sup>                 | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Giardiasis                                   | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| <i>Haemophilus influenzae</i> type b disease | 1    | 0    | 0    | 0    | 1    | 1    | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 1    |
| Hepatitis B                                  | 2    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 1    | 0    | 1    | 0    | 0    | 0    | 0    | 1    |
| Hydatid disease                              | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Invasive pneumococcal disease <sup>d</sup>   |      |      |      |      |      |      |      |      |      |      |      | 8    | 35   | 27   | 32   | 31   |
| Legionellosis <sup>e</sup>                   | 4    | 1    | 1    | 5    | 2    | 3    | 1    | 1    | 4    | 3    | 1    | 4    | 2    | 5    | 4    | 6    |
| Listeriosis - non perinatal                  | 2    | 0    | 1    | 2    | 1    | 0    | 2    | 3    | 1    | 0    | 2    | 3    | 2    | 3    | 1    | 4    |
| Listeriosis - perinatal                      | 6    | 0    | 2    | 4    | 1    | 3    | 2    | 2    | 0    | 1    | 2    | 2    | 2    | 4    | 0    | 2    |
| Malaria                                      | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Meningococcal disease                        | 24   | 23   | 23   | 17   | 26   | 18   | 13   | 8    | 14   | 7    | 7    | 8    | 5    | 6    | 13   | 6    |
| Non-seasonal influenza <sup>f</sup>          |      |      |      |      |      |      |      |      |      |      |      |      | 36   | 17   | 0    | 0    |
| Pertussis                                    | 0    | 0    | 0    | 1    | 0    | 1    | 1    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 2    |
| Primary amoebic meningoencephalitis          | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Rheumatic fever                              | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Salmonellosis                                | 2    | 2    | 1    | 7    | 2    | 1    | 0    | 0    | 1    | 1    | 1    | 1    | 1    | 0    | 0    | 0    |
| Shigellosis                                  | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| Tetanus                                      | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 1    | 0    | 0    |
| Tuberculosis disease                         | 15   | 8    | 14   | 8    | 2    | 6    | 6    | 6    | 4    | 5    | 3    | 4    | 4    | 9    | 3    | 3    |
| VTEC/STEC infection                          | 1    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    |
| Yersiniosis                                  | 0    | 2    | 0    | 0    | 0    | 0    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |

<sup>a</sup> Data source [16].

<sup>b</sup> Data source [20].

<sup>c</sup> Cases of acute gastroenteritis from a common source or foodborne intoxication, e.g., staphylococcal intoxication.

<sup>d</sup> Invasive pneumococcal disease became notifiable on 17 October 2008.

Note: The numbers in this table are those recorded in EpiSurv where the notifiable disease was the primary cause of death. Information on a death is most likely to be reported by public health services when it occurs close to the time of notification and investigation.

<sup>e</sup> One further legionellosis death occurred in a laboratory-reported but non-notified case in 2002.

<sup>f</sup> Non-seasonal influenza became notifiable on 26 April 2009. Deaths recorded in 2009 and 2010 were due to influenza A(H1N1)pdm09. Influenza A(H1N1)pdm09 virus was re-classified as seasonal influenza from 1 January 2011.

## Mortality data for selected notifiable diseases, 2008–2010 (Ministry of Health, NMDS)

**Table 44. Reported deaths from selected notifiable diseases, 2008–2010**

| Disease                   | ICD 10 codes   | 2008             |                   | 2009             |                   | 2010 <sup>a</sup> |                   |
|---------------------------|----------------|------------------|-------------------|------------------|-------------------|-------------------|-------------------|
|                           |                | Und <sup>b</sup> | Cont <sup>c</sup> | Und <sup>b</sup> | Cont <sup>c</sup> | Und <sup>b</sup>  | Cont <sup>c</sup> |
| AIDS                      | B20-B24        | 7                | 4                 | 10               | 8                 | 14                | 6                 |
| Campylobacteriosis        | A04.5          |                  | 4                 | 1                |                   |                   | 4                 |
| Creutzfeldt-Jakob disease | A81.0          | 2                |                   | 7                | 1                 | 4                 |                   |
| Dengue fever              | A90, A91       | 1                |                   |                  |                   |                   |                   |
| Hepatitis A               | B15            |                  | 1                 |                  |                   |                   | 2                 |
| Hepatitis B               | B16            | 1                | 3                 | 1                | 1                 |                   | 2                 |
| Hepatitis C               | B17.1          |                  | 5                 | 1                | 2                 |                   | 2                 |
| Hydatid disease           | B67            |                  | 2                 |                  |                   |                   | 1                 |
| Legionellosis             | A48.1          | 3                | 2                 | 3                |                   | 6                 | 1                 |
| Listeriosis               | A32            | 1                | 1                 | 3                | 3                 | 3                 |                   |
| Meningococcal disease     | A39            | 8                |                   | 4                |                   | 6                 |                   |
| Pertussis                 | A37            |                  |                   |                  |                   | 1                 |                   |
| Rheumatic fever           | I00, I01, I02  |                  |                   | 1                |                   |                   |                   |
| Salmonellosis             | A02            | 1                | 2                 | 1                | 4                 |                   | 1                 |
| Shigellosis               | A03            | 1                |                   |                  |                   |                   |                   |
| Tetanus                   | A33-A35        |                  |                   |                  |                   | 1                 |                   |
| Tuberculosis              | A15-A19, P37.0 | 8                | 11                | 8                | 24                | 9                 | 17                |
| Yersiniosis               | A04.6          | 1                | 1                 | 1                |                   |                   |                   |

<sup>a</sup> Latest year that data are available.

<sup>b</sup> Underlying – main cause of death.

<sup>c</sup> Contributory – selected contributory cause of death (not main cause of death).

## Morbidity data for selected notifiable diseases, 2010–2012 (Ministry of Health, NMDS)

**Table 45. Hospital admissions for selected notifiable diseases, 2010–2012**

| Disease                   | ICD 10 codes                          | 2010              |                  | 2011              |                  | 2012              |                  |
|---------------------------|---------------------------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|
|                           |                                       | Prin <sup>a</sup> | Oth <sup>b</sup> | Prin <sup>a</sup> | Oth <sup>b</sup> | Prin <sup>a</sup> | Oth <sup>b</sup> |
| AIDS                      | B20-B24                               | 17                | 298              | 13                | 245              | 6                 | 253              |
| Arboviral diseases        | A83, A84, A85.2, A92, A93, A94, B33.1 | 2                 |                  |                   |                  | 1                 | 1                |
| Campylobacteriosis        | A04.5                                 | 526               | 107              | 445               | 132              | 544               | 116              |
| Cholera                   | A00                                   | 1                 |                  | 1                 |                  |                   |                  |
| Creutzfeldt-Jakob disease | A81.0                                 | 5                 | 2                | 4                 | 4                | 6                 | 3                |
| Cryptosporidiosis         | A07.2                                 | 16                | 14               | 16                | 2                | 42                | 12               |
| Cysticercosis             | B69                                   | 4                 | 1                |                   |                  |                   | 3                |
| Decompression sickness    | T70.3                                 | 24                | 2                | 33                | 4                | 33                | 1                |
| Dengue fever              | A90, A91                              | 16                | 2                | 15                |                  | 16                |                  |
| Diphtheria                | A36                                   | 2                 |                  |                   |                  |                   | 1                |
| Giardiasis                | A07.1                                 | 18                | 15               | 35                | 25               | 27                | 23               |
| Hepatitis A               | B15                                   | 20                | 13               | 8                 | 11               | 35                | 4                |
| Hepatitis B               | B16                                   | 26                | 24               | 27                | 33               | 24                | 25               |
| Hepatitis C               | B17.1                                 | 13                | 12               | 9                 | 31               | 21                | 30               |
| Hydatid disease           | B67                                   | 5                 | 9                | 14                | 7                | 8                 | 3                |
| Lead absorption           | T56.0                                 | 6                 |                  | 5                 | 1                | 6                 | 3                |
| Legionellosis             | A48.1                                 | 68                | 11               | 61                | 21               | 68                | 14               |
| Leprosy                   | A30                                   | 1                 | 3                | 1                 | 1                | 1                 | 1                |
| Leptospirosis             | A27                                   | 57                | 3                | 49                | 5                | 69                | 12               |
| Listeriosis               | A32                                   | 13                | 18               | 11                | 19               | 14                | 13               |
| Malaria                   | B50-B54                               | 40                | 2                | 44                | 1                | 28                |                  |
| Measles                   | B05                                   | 5                 | 1                | 133               | 10               | 19                | 1                |
| Meningococcal disease     | A39                                   | 112               | 23               | 122               | 21               | 90                | 27               |
| Mumps                     | B26                                   | 10                | 3                | 13                | 1                | 9                 | 5                |
| Paratyphoid               | A01.1-A01.4                           | 6                 | 1                | 5                 |                  | 6                 |                  |
| Pertussis                 | A37                                   | 134               | 23               | 144               | 17               | 396               | 72               |
| Q fever                   | A78                                   | 1                 |                  | 1                 |                  |                   |                  |
| Rheumatic fever           | I00, I01, I02                         | 252               | 55               | 256               | 43               | 229               | 35               |
| Rickettsial disease       | A75, A77, A79                         | 6                 | 1                | 7                 | 1                | 2                 |                  |
| Rubella                   | B06                                   | 1                 | 1                | 1                 | 2                | 2                 |                  |
| Salmonellosis             | A02                                   | 121               | 49               | 107               | 29               | 128               | 46               |
| Shigellosis               | A03                                   | 21                | 4                | 22                | 6                | 12                | 8                |
| Taeniasis                 | B689                                  |                   | 1                |                   | 1                |                   |                  |
| Tetanus                   | A33-A35                               | 7                 | 1                | 3                 | 2                | 4                 | 4                |
| Tuberculosis              | A15-A19, P37.0                        | 258               | 158              | 225               | 106              | 203               | 109              |
| Typhoid                   | A01.0                                 | 34                | 1                | 34                | 5                | 48                | 5                |
| Viral haemorrhagic fever  | A95, A98, A99                         |                   |                  | 2                 |                  |                   |                  |
| VTEC/STEC infection       | A04.0-A04.4                           | 35                | 24               | 50                | 23               | 55                | 23               |
| Yellow fever              | A95                                   |                   |                  | 1                 | 1                |                   |                  |
| Yersiniosis               | A04.6                                 | 13                | 14               | 16                | 23               | 18                | 23               |

<sup>a</sup> Principal diagnosis.

<sup>b</sup> Other relevant diagnosis.

Note: Hospital admission data may include multiple admissions (to the same or different hospitals) for the same case and admissions may relate to cases first diagnosed in previous years.

## Notifiable disease cases and rates by District Health Board, 2012

Table 46a. Number of cases and rate per 100 000 population of notifiable diseases by DHB, 2012

| Disease                       | District Health Board <sup>a</sup> |       |           |       |          |       |                  |      |         |       |       |       |               |       |            |       |          |       |             |       |
|-------------------------------|------------------------------------|-------|-----------|-------|----------|-------|------------------|------|---------|-------|-------|-------|---------------|-------|------------|-------|----------|-------|-------------|-------|
|                               | Northland                          |       | Waitemata |       | Auckland |       | Counties Manukau |      | Waikato |       | Lakes |       | Bay of Plenty |       | Tairawhiti |       | Taranaki |       | Hawke's Bay |       |
|                               | Cases                              | Rate  | Cases     | Rate  | Cases    | Rate  | Cases            | Rate | Cases   | Rate  | Cases | Rate  | Cases         | Rate  | Cases      | Rate  | Cases    | Rate  | Cases       | Rate  |
| Campylobacteriosis            | 230                                | 145.3 | 776       | 140.2 | 524      | 113.4 | 480              | 94.5 | 695     | 187.7 | 166   | 161.0 | 267           | 125.9 | 54         | 115.4 | 220      | 199.4 | 297         | 191.1 |
| Cryptosporidiosis             | 37                                 | 23.4  | 43        | 7.8   | 29       | 6.3   | 38               | 7.5  | 179     | 48.3  | 22    | 21.3  | 21            | 9.9   | 1          |       | 28       | 25.4  | 48          | 30.9  |
| Dengue fever                  | 2                                  |       | 12        | 2.2   | 19       | 4.1   | 11               | 2.2  | 2       |       | 0     |       | 3             |       | 1          |       | 0        |       | 0           |       |
| Gastroenteritis <sup>b</sup>  | 1                                  |       | 88        | 15.9  | 123      | 26.6  | 42               | 8.3  | 46      | 12.4  | 24    | 23.3  | 45            | 21.2  | 3          |       | 13       | 11.8  | 2           |       |
| Giardiasis                    | 43                                 | 27.2  | 214       | 38.7  | 257      | 55.6  | 131              | 25.8 | 156     | 42.1  | 59    | 57.2  | 95            | 44.8  | 8          | 17.1  | 38       | 34.4  | 60          | 38.6  |
| Hepatitis A                   | 1                                  |       | 36        | 6.5   | 15       | 3.2   | 15               | 3.0  | 3       |       | 0     |       | 1             |       | 0          |       | 1        |       | 2           |       |
| Hepatitis B <sup>c</sup>      | 2                                  |       | 5         | 0.9   | 3        |       | 6                | 1.2  | 3       |       | 1     |       | 1             |       | 2          |       | 2        |       | 1           |       |
| Hepatitis C <sup>c</sup>      | 0                                  |       | 0         |       | 1        |       | 1                |      | 0       |       | 0     |       | 0             |       | 0          |       | 3        |       | 2           |       |
| Invasive pneumococcal disease | 23                                 | 14.5  | 38        | 6.9   | 52       | 11.3  | 75               | 14.8 | 42      | 11.3  | 14    | 13.6  | 36            | 17.0  | 3          |       | 14       | 12.7  | 21          | 13.5  |
| Lead absorption               | 3                                  |       | 35        | 6.3   | 66       | 14.3  | 43               | 8.5  | 9       | 2.4   | 4     |       | 8             | 3.8   | 3          |       | 7        | 6.3   | 3           |       |
| Legionellosis                 | 5                                  | 3.2   | 20        | 3.6   | 21       | 4.5   | 11               | 2.2  | 9       | 2.4   | 0     |       | 2             |       | 0          |       | 0        |       | 1           |       |
| Leptospirosis                 | 4                                  |       | 2         |       | 2        |       | 2                |      | 31      | 8.4   | 0     |       | 4             |       | 3          |       | 4        |       | 19          | 12.2  |
| Listeriosis                   | 0                                  |       | 3         |       | 2        |       | 5                | 1.0  | 3       |       | 0     |       | 5             | 2.4   | 0          |       | 1        |       | 4           |       |
| Malaria                       | 2                                  |       | 5         | 0.9   | 12       | 2.6   | 9                | 1.8  | 0       |       | 1     |       | 0             |       | 0          |       | 0        |       | 3           |       |
| Measles                       | 8                                  | 5.1   | 10        | 1.8   | 8        | 1.7   | 33               | 6.5  | 1       |       | 0     |       | 0             |       | 0          |       | 0        |       | 0           |       |
| Meningococcal disease         | 3                                  |       | 9         | 1.6   | 8        | 1.7   | 7                | 1.4  | 5       | 1.4   | 5     | 4.8   | 5             | 2.4   | 1          |       | 6        | 5.4   | 2           |       |
| Mumps                         | 1                                  |       | 2         |       | 2        |       | 0                |      | 2       |       | 0     |       | 1             |       | 1          |       | 1        |       | 0           |       |
| Paratyphoid fever             | 0                                  |       | 2         |       | 8        | 1.7   | 1                |      | 0       |       | 0     |       | 1             |       | 0          |       | 0        |       | 1           |       |
| Pertussis                     | 82                                 | 51.8  | 275       | 49.7  | 275      | 59.5  | 338              | 66.5 | 355     | 95.9  | 94    | 91.2  | 189           | 89.1  | 150        | 320.5 | 131      | 118.7 | 126         | 81.1  |
| Rheumatic fever               | 14                                 | 8.8   | 16        | 2.9   | 11       | 2.4   | 78               | 15.4 | 19      | 5.1   | 6     | 5.8   | 3             |       | 8          | 17.1  | 2        |       | 6           | 3.9   |
| Salmonellosis                 | 29                                 | 18.3  | 120       | 21.7  | 121      | 26.2  | 71               | 14.0 | 94      | 25.4  | 23    | 22.3  | 36            | 17.0  | 9          | 19.2  | 29       | 26.3  | 29          | 18.7  |
| Shigellosis                   | 2                                  |       | 31        | 5.6   | 24       | 5.2   | 25               | 4.9  | 6       | 1.6   | 0     |       | 7             | 3.3   | 0          |       | 4        |       | 1           |       |
| Tuberculosis disease          | 3                                  |       | 42        | 7.6   | 58       | 12.5  | 47               | 9.3  | 22      | 5.9   | 2     |       | 11            | 5.2   | 2          |       | 5        | 4.5   | 21          | 13.5  |
| Typhoid fever                 | 0                                  |       | 7         | 1.3   | 10       | 2.2   | 14               | 2.8  | 0       |       | 1     |       | 2             |       | 1          |       | 0        |       | 1           |       |
| VTEC/STEC infection           | 12                                 | 7.6   | 14        | 2.5   | 6        | 1.3   | 10               | 2.0  | 22      | 5.9   | 3     |       | 18            | 8.5   | 1          |       | 8        | 7.3   | 4           |       |
| Yersiniosis                   | 16                                 | 10.1  | 91        | 16.4  | 60       | 13.0  | 56               | 11.0 | 48      | 13.0  | 9     | 8.7   | 22            | 10.4  | 6          | 12.8  | 11       | 10.0  | 12          | 7.7   |

<sup>a</sup> Table is continued on the following page.<sup>b</sup> Cases of acute gastroenteritis from a common source or foodborne intoxication, e.g., staphylococcal intoxication.<sup>c</sup> Only acute cases of this disease are notifiable.

Note: Where fewer than five cases have been notified a rate has not been calculated and the cell has been left blank.

## Notifiable disease cases and rates by District Health Board, 2012

Table 46b. Number of cases and rate per 100 000 population of notifiable diseases by DHB, 2012 (continued)

| Disease                       | District Health Board <sup>a</sup> |       |            |       |             |       |                   |       |           |       |                    |       |            |       |            |       |                  |       |          |       |
|-------------------------------|------------------------------------|-------|------------|-------|-------------|-------|-------------------|-------|-----------|-------|--------------------|-------|------------|-------|------------|-------|------------------|-------|----------|-------|
|                               | Whanganui                          |       | MidCentral |       | Hutt Valley |       | Capital and Coast |       | Wairarapa |       | Nelson Marlborough |       | West Coast |       | Canterbury |       | South Canterbury |       | Southern |       |
|                               | Cases                              | Rate  | Cases      | Rate  | Cases       | Rate  | Cases             | Rate  | Cases     | Rate  | Cases              | Rate  | Cases      | Rate  | Cases      | Rate  | Cases            | Rate  | Cases    | Rate  |
| Campylobacteriosis            | 91                                 | 145.6 | 199        | 117.6 | 171         | 118.5 | 430               | 144.7 | 73        | 179.7 | 303                | 215.4 | 72         | 218.8 | 1 127      | 225.2 | 178              | 314.8 | 678      | 220.2 |
| Cryptosporidiosis             | 3                                  |       | 25         | 14.8  | 34          | 23.6  | 111               | 37.3  | 16        | 39.4  | 17                 | 12.1  | 10         | 30.4  | 88         | 17.6  | 46               | 81.3  | 81       | 26.3  |
| Dengue fever                  | 0                                  |       | 5          | 3.0   | 2           |       | 9                 | 3.0   | 0         |       | 0                  |       | 0          |       | 5          | 1.0   | 0                |       | 6        | 1.9   |
| Gastroenteritis <sup>b</sup>  | 11                                 | 17.6  | 127        | 75.1  | 43          | 29.8  | 79                | 26.6  | 3         |       | 17                 | 12.1  | 7          | 21.3  | 47         | 9.4   | 2                |       | 12       | 3.9   |
| Giardiasis                    | 7                                  | 11.2  | 20         | 11.8  | 51          | 35.3  | 128               | 43.1  | 20        | 49.2  | 67                 | 47.6  | 11         | 33.4  | 195        | 39.0  | 24               | 42.4  | 135      | 43.9  |
| Hepatitis A                   | 0                                  |       | 0          |       | 1           |       | 6                 | 2.0   | 0         |       | 0                  |       | 0          |       | 1          |       | 0                |       | 0        |       |
| Hepatitis B <sup>c</sup>      | 0                                  |       | 2          |       | 0           |       | 2                 |       | 0         |       | 1                  |       | 0          |       | 6          | 1.2   | 0                |       | 2        |       |
| Hepatitis C <sup>c</sup>      | 0                                  |       | 0          |       | 0           |       | 3                 |       | 0         |       | 2                  |       | 0          |       | 5          | 1.0   | 2                |       | 13       | 4.2   |
| Invasive pneumococcal disease | 6                                  | 9.6   | 11         | 6.5   | 12          | 8.3   | 29                | 9.8   | 10        | 24.6  | 20                 | 14.2  | 1          |       | 40         | 8.0   | 6                | 10.6  | 35       | 11.4  |
| Lead absorption               | 10                                 | 16.0  | 10         | 5.9   | 13          | 9.0   | 17                | 5.7   | 7         | 17.2  | 3                  |       | 2          |       | 11         | 2.2   | 3                |       | 15       | 4.9   |
| Legionellosis                 | 1                                  |       | 4          |       | 1           |       | 7                 | 2.4   | 0         |       | 5                  | 3.6   | 1          |       | 52         | 10.4  | 2                |       | 10       | 3.2   |
| Leptospirosis                 | 6                                  | 9.6   | 11         | 6.5   | 1           |       | 0                 |       | 4         |       | 4                  |       | 5          | 15.2  | 5          | 1.0   | 2                |       | 4        |       |
| Listeriosis                   | 0                                  |       | 0          |       | 0           |       | 1                 |       | 0         |       | 0                  |       | 0          |       | 0          |       | 1                |       | 0        |       |
| Malaria                       | 0                                  |       | 1          |       | 1           |       | 0                 |       | 0         |       | 1                  |       | 0          |       | 3          |       | 0                |       | 0        |       |
| Measles                       | 0                                  |       | 0          |       | 0           |       | 3                 |       | 0         |       | 0                  |       | 1          |       | 4          |       | 0                |       | 0        |       |
| Meningococcal disease         | 1                                  |       | 3          |       | 1           |       | 9                 | 3.0   | 0         |       | 2                  |       | 0          |       | 10         | 2.0   | 3                |       | 5        | 1.6   |
| Mumps                         | 0                                  |       | 0          |       | 1           |       | 2                 |       | 1         |       | 3                  |       | 0          |       | 8          | 1.6   | 1                |       | 0        |       |
| Paratyphoid fever             | 0                                  |       | 0          |       | 0           |       | 1                 |       | 0         |       | 1                  |       | 0          |       | 3          |       | 0                |       | 4        |       |
| Pertussis                     | 149                                | 238.4 | 205        | 121.1 | 358         | 248.1 | 680               | 228.8 | 123       | 302.7 | 673                | 478.3 | 153        | 465.0 | 1 227      | 245.2 | 58               | 102.6 | 261      | 84.8  |
| Rheumatic fever               | 0                                  |       | 3          |       | 3           |       | 9                 | 3.0   | 0         |       | 0                  |       | 0          |       | 1          |       | 0                |       | 0        |       |
| Salmonellosis                 | 9                                  | 14.4  | 31         | 18.3  | 32          | 22.2  | 44                | 14.8  | 5         | 12.3  | 58                 | 41.2  | 14         | 42.6  | 133        | 26.6  | 29               | 51.3  | 169      | 54.9  |
| Shigellosis                   | 0                                  |       | 2          |       | 1           |       | 11                | 3.7   | 0         |       | 1                  |       | 0          |       | 9          | 1.8   | 0                |       | 8        | 2.6   |
| Tuberculosis disease          | 1                                  |       | 6          | 3.5   | 10          | 6.9   | 23                | 7.7   | 0         |       | 14                 | 10.0  | 1          |       | 19         | 3.8   | 1                |       | 9        | 2.9   |
| Typhoid fever                 | 0                                  |       | 0          |       | 3           |       | 2                 |       | 0         |       | 0                  |       | 0          |       | 3          |       | 0                |       | 1        |       |
| VTEC/STEC infection           | 0                                  |       | 1          |       | 1           |       | 0                 |       | 0         |       | 4                  |       | 2          |       | 23         | 4.6   | 4                |       | 14       | 4.5   |
| Yersiniosis                   | 3                                  |       | 7          | 4.1   | 22          | 15.2  | 54                | 18.2  | 4         |       | 4                  |       | 2          |       | 59         | 11.8  | 13               | 23.0  | 18       | 5.8   |

<sup>a</sup> Table is continued from the previous page.

<sup>b</sup> Cases of acute gastroenteritis from a common source or foodborne intoxication, e.g., staphylococcal intoxication.

<sup>c</sup> Only acute cases of this disease are notifiable.

Note: Where fewer than five cases have been notified a rate has not been calculated and the cell has been left blank.

## Notifiable disease cases and rates by sex, 2012

**Table 47. Number of cases and rate per 100 000 population of notifiable diseases by sex, 2012**

| Disease                       | Sex   |       |        |       |                    |       |
|-------------------------------|-------|-------|--------|-------|--------------------|-------|
|                               | Male  |       | Female |       | Total <sup>a</sup> |       |
|                               | Cases | Rate  | Cases  | Rate  | Cases              | Rate  |
| Campylobacteriosis            | 3 938 | 180.6 | 3 093  | 137.3 | 7 031              | 158.6 |
| Cryptosporidiosis             | 452   | 20.7  | 425    | 18.9  | 877                | 19.8  |
| Dengue fever                  | 42    | 1.9   | 35     | 1.6   | 77                 | 1.7   |
| Gastroenteritis <sup>b</sup>  | 313   | 14.4  | 422    | 18.7  | 735                | 16.6  |
| Giardiasis                    | 811   | 37.2  | 907    | 40.3  | 1 719              | 38.8  |
| Hepatitis A                   | 45    | 2.1   | 37     | 1.6   | 82                 | 1.8   |
| Hepatitis B <sup>c</sup>      | 25    | 1.1   | 14     | 0.6   | 39                 | 0.9   |
| Hepatitis C <sup>c</sup>      | 17    | 0.8   | 15     | 0.7   | 32                 | 0.7   |
| Invasive pneumococcal disease | 262   | 12.0  | 226    | 10.0  | 488                | 11.0  |
| Lead absorption               | 256   | 11.7  | 16     | 0.7   | 272                | 6.1   |
| Legionellosis                 | 98    | 4.5   | 54     | 2.4   | 152                | 3.4   |
| Leptospirosis                 | 104   | 4.8   | 9      | 0.4   | 113                | 2.5   |
| Listeriosis                   | 11    | 0.5   | 14     | 0.6   | 25                 | 0.6   |
| Malaria                       | 32    | 1.5   | 5      | 0.2   | 38                 | 0.9   |
| Measles                       | 33    | 1.5   | 35     | 1.6   | 68                 | 1.5   |
| Meningococcal disease         | 41    | 1.9   | 44     | 2.0   | 85                 | 1.9   |
| Mumps                         | 12    | 0.6   | 14     | 0.6   | 26                 | 0.6   |
| Paratyphoid fever             | 14    | 0.6   | 8      | 0.4   | 22                 | 0.5   |
| Pertussis                     | 2 538 | 116.4 | 3 364  | 149.3 | 5 902              | 133.1 |
| Rheumatic fever               | 100   | 4.6   | 79     | 3.5   | 179                | 4.0   |
| Salmonellosis                 | 561   | 25.7  | 524    | 23.3  | 1 085              | 24.5  |
| Shigellosis                   | 62    | 2.8   | 70     | 3.1   | 132                | 3.0   |
| Tuberculosis disease          | 156   | 7.2   | 140    | 6.2   | 297                | 6.7   |
| Typhoid fever                 | 25    | 1.1   | 20     | 0.9   | 45                 | 1.0   |
| VTEC/STEC infection           | 74    | 3.4   | 73     | 3.2   | 147                | 3.3   |
| Yersiniosis                   | 282   | 12.9  | 234    | 10.4  | 517                | 11.7  |

<sup>a</sup>Total includes cases where sex was unknown.

<sup>b</sup>Cases of acute gastroenteritis from a common source or foodborne intoxication, e.g., staphylococcal intoxication.

<sup>c</sup>Only acute cases of this disease are notifiable.

Note: Where fewer than five cases have been notified a rate has not been calculated and the cell has been left blank.

## Notifiable disease cases and rates by age group, 2012

Table 48. Number of cases and rate per 100 000 population of notifiable diseases by age group, 2012

| Disease                       | Age group (years) |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       |       | Total <sup>a</sup> |       |
|-------------------------------|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------------|-------|
|                               | <1                |       | 1–4   |       | 5–9   |       | 10–14 |       | 15–19 |       | 20–29 |       | 30–39 |       | 40–49 |       | 50–59 |       | 60–69 |       | 70+   |       | Total <sup>a</sup> |       |
|                               | Cases             | Rate  | Cases | Rate  | Cases | Rate  | Cases | Rate  | Cases | Rate  | Cases | Rate  | Cases | Rate  | Cases | Rate  | Cases | Rate  | Cases | Rate  | Cases | Rate  | Cases              | Rate  |
| Campylobacteriosis            | 163               | 269.0 | 754   | 300.1 | 347   | 119.0 | 274   | 94.8  | 440   | 141.3 | 1124  | 179.0 | 714   | 128.0 | 855   | 136.6 | 842   | 147.9 | 769   | 179.5 | 742   | 176.5 | 7031               | 158.6 |
| Cryptosporidiosis             | 19                | 31.4  | 303   | 120.6 | 113   | 38.8  | 61    | 21.1  | 61    | 19.6  | 93    | 14.8  | 108   | 19.4  | 51    | 8.1   | 33    | 5.8   | 21    | 4.9   | 14    | 3.3   | 877                | 19.8  |
| Dengue fever                  | 0                 |       | 0     |       | 2     |       | 2     |       | 5     | 1.6   | 18    | 2.9   | 13    | 2.3   | 12    | 1.9   | 14    | 2.5   | 10    | 2.3   | 1     |       | 77                 | 1.7   |
| Gastroenteritis <sup>b</sup>  | 27                | 44.6  | 83    | 33.0  | 18    | 6.2   | 15    | 5.2   | 27    | 8.7   | 83    | 13.2  | 104   | 18.6  | 85    | 13.6  | 82    | 14.4  | 46    | 10.7  | 141   | 33.5  | 735                | 16.6  |
| Giardiasis                    | 38                | 62.7  | 343   | 136.5 | 102   | 35.0  | 36    | 12.5  | 39    | 12.5  | 177   | 28.2  | 402   | 72.1  | 236   | 37.7  | 156   | 27.4  | 146   | 34.1  | 41    | 9.8   | 1719               | 38.8  |
| Hepatitis A                   | 0                 |       | 13    | 5.2   | 21    | 7.2   | 10    | 3.5   | 5     | 1.6   | 12    | 1.9   | 7     | 1.3   | 7     | 1.1   | 3     |       | 3     |       | 1     |       | 82                 | 1.8   |
| Hepatitis B <sup>c</sup>      | 0                 |       | 0     |       | 0     |       | 0     |       | 2     |       | 3     |       | 6     | 1.1   | 15    | 2.4   | 8     | 1.4   | 5     | 1.2   | 0     |       | 39                 | 0.9   |
| Hepatitis C <sup>c</sup>      | 0                 |       | 0     |       | 0     |       | 0     |       | 3     |       | 13    | 2.1   | 7     | 1.3   | 6     | 1.0   | 1     |       | 0     |       | 2     |       | 32                 | 0.7   |
| Invasive pneumococcal disease | 31                | 51.2  | 27    | 10.7  | 13    | 4.5   | 7     | 2.4   | 11    | 3.5   | 18    | 2.9   | 35    | 6.3   | 34    | 5.4   | 63    | 11.1  | 84    | 19.6  | 165   | 39.2  | 488                | 11.0  |
| Lead absorption               | 0                 |       | 2     |       | 2     |       | 1     |       | 4     |       | 28    | 4.5   | 45    | 8.1   | 71    | 11.3  | 68    | 11.9  | 44    | 10.3  | 7     | 1.7   | 272                | 6.1   |
| Legionellosis                 | 0                 |       | 0     |       | 0     |       | 0     |       | 0     |       | 7     | 1.1   | 11    | 2.0   | 16    | 2.6   | 29    | 5.1   | 41    | 9.6   | 48    | 11.4  | 152                | 3.4   |
| Leptospirosis                 | 0                 |       | 0     |       | 0     |       | 0     |       | 4     |       | 21    | 3.3   | 18    | 3.2   | 31    | 5.0   | 26    | 4.6   | 12    | 2.8   | 1     |       | 113                | 2.5   |
| Listeriosis                   | 0                 |       | 0     |       | 0     |       | 1     |       | 0     |       | 1     |       | 1     |       | 1     |       | 2     |       | 6     | 1.4   | 13    | 3.1   | 25                 | 0.6   |
| Malaria                       | 0                 |       | 0     |       | 0     |       | 1     |       | 3     |       | 16    | 2.5   | 3     |       | 9     | 1.4   | 5     | 0.9   | 1     |       | 0     |       | 38                 | 0.9   |
| Measles                       | 17                | 28.1  | 19    | 7.6   | 8     | 2.7   | 7     | 2.4   | 8     | 2.6   | 2     |       | 4     |       | 3     |       | 0     |       | 0     |       | 0     |       | 68                 | 1.5   |
| Meningococcal disease         | 12                | 19.8  | 14    | 5.6   | 4     |       | 6     | 2.1   | 15    | 4.8   | 12    | 1.9   | 7     | 1.3   | 5     | 0.8   | 6     | 1.1   | 2     |       | 2     |       | 85                 | 1.9   |
| Mumps                         | 0                 |       | 5     | 2.0   | 6     | 2.1   | 0     |       | 0     |       | 2     |       | 6     | 1.1   | 2     |       | 3     |       | 1     |       | 1     |       | 26                 | 0.6   |
| Paratyphoid fever             | 0                 |       | 2     |       | 0     |       | 2     |       | 5     | 1.6   | 4     |       | 7     | 1.3   | 1     |       | 0     |       | 0     |       | 1     |       | 22                 | 0.5   |
| Pertussis                     | 421               | 694.8 | 896   | 356.6 | 759   | 260.4 | 540   | 186.9 | 280   | 89.9  | 535   | 85.2  | 680   | 121.9 | 755   | 120.6 | 486   | 85.4  | 336   | 78.4  | 214   | 50.9  | 5902               | 133.1 |
| Rheumatic fever               | 0                 |       | 0     |       | 42    | 14.4  | 77    | 26.7  | 24    | 7.7   | 32    | 5.1   | 3     |       | 1     |       | 0     |       | 0     |       | 0     |       | 179                | 4.0   |
| Salmonellosis                 | 65                | 107.3 | 185   | 73.6  | 59    | 20.2  | 34    | 11.8  | 49    | 15.7  | 172   | 27.4  | 106   | 19.0  | 117   | 18.7  | 119   | 20.9  | 93    | 21.7  | 85    | 20.2  | 1085               | 24.5  |
| Shigellosis                   | 0                 |       | 16    | 6.4   | 10    | 3.4   | 1     |       | 5     | 1.6   | 26    | 4.1   | 17    | 3.0   | 15    | 2.4   | 17    | 3.0   | 19    | 4.4   | 6     | 1.4   | 132                | 3.0   |
| Tuberculosis disease          | 1                 |       | 4     |       | 3     |       | 5     | 1.7   | 12    | 3.9   | 73    | 11.6  | 61    | 10.9  | 34    | 5.4   | 27    | 4.7   | 34    | 7.9   | 43    | 10.2  | 297                | 6.7   |
| Typhoid fever                 | 0                 |       | 1     |       | 1     |       | 2     |       | 4     |       | 18    | 2.9   | 5     | 0.9   | 7     | 1.1   | 2     |       | 2     |       | 3     |       | 45                 | 1.0   |
| VTEC/STEC infection           | 9                 | 14.9  | 57    | 22.7  | 15    | 5.1   | 6     | 2.1   | 8     | 2.6   | 11    | 1.8   | 9     | 1.6   | 7     | 1.1   | 9     | 1.6   | 7     | 1.6   | 9     | 2.1   | 147                | 3.3   |
| Yersiniosis                   | 49                | 80.9  | 135   | 53.7  | 20    | 6.9   | 23    | 8.0   | 24    | 7.7   | 57    | 9.1   | 45    | 8.1   | 45    | 7.2   | 51    | 9.0   | 28    | 6.5   | 40    | 9.5   | 517                | 11.7  |

<sup>a</sup> Total includes cases where age was unknown.

<sup>b</sup> Cases of acute gastroenteritis from a common source or foodborne intoxication, e.g., staphylococcal intoxication.

<sup>c</sup> Only acute cases of this disease are notifiable.

Note: Where fewer than five cases have been notified a rate has not been calculated and the cell has been left blank.

## Notifiable disease cases and rates by ethnic group, 2012

Table 49. Number of cases and rate per 100 000 population of notifiable diseases by ethnic group, 2012

| Disease                       | Ethnic group |       |                 |      |       |      |                    |       |                   |       |                    |       |
|-------------------------------|--------------|-------|-----------------|------|-------|------|--------------------|-------|-------------------|-------|--------------------|-------|
|                               | Māori        |       | Pacific Peoples |      | Asian |      | MELAA <sup>a</sup> |       | European or Other |       | Total <sup>b</sup> |       |
|                               | Cases        | Rate  | Cases           | Rate | Cases | Rate | Cases              | Rate  | Cases             | Rate  | Cases              | Rate  |
| Campylobacteriosis            | 490          | 75.7  | 111             | 41.6 | 306   | 75.0 | 28                 | 74.2  | 5 620             | 182.9 | 7 031              | 158.6 |
| Cryptosporidiosis             | 69           | 10.7  | 15              | 5.6  | 18    | 4.4  | 5                  | 13.2  | 746               | 24.3  | 877                | 19.8  |
| Dengue fever                  | 2            |       | 2               |      | 15    | 3.7  | 3                  |       | 46                | 1.5   | 77                 | 1.7   |
| Gastroenteritis <sup>c</sup>  | 57           | 8.8   | 16              | 6.0  | 32    | 7.8  | 2                  |       | 549               | 17.9  | 735                | 16.6  |
| Giardiasis                    | 104          | 16.1  | 12              | 4.5  | 74    | 18.1 | 39                 | 103.3 | 1 375             | 44.7  | 1 719              | 38.8  |
| Hepatitis A                   | 1            |       | 10              | 3.7  | 53    | 13.0 | 5                  | 13.2  | 11                | 0.4   | 82                 | 1.8   |
| Hepatitis B <sup>d</sup>      | 8            | 1.2   | 2               |      | 7     | 1.7  | 1                  |       | 20                | 0.7   | 39                 | 0.9   |
| Hepatitis C <sup>d</sup>      | 4            |       | 1               |      | 0     |      | 0                  |       | 27                | 0.9   | 32                 | 0.7   |
| Invasive pneumococcal disease | 102          | 15.8  | 59              | 22.1 | 16    | 3.9  | 4                  |       | 294               | 9.6   | 488                | 11.0  |
| Lead absorption               | 9            | 1.4   | 16              | 6.0  | 11    | 2.7  | 2                  |       | 188               | 6.1   | 272                | 6.1   |
| Legionellosis                 | 8            | 1.2   | 9               | 3.4  | 7     | 1.7  | 0                  |       | 126               | 4.1   | 152                | 3.4   |
| Leptospirosis                 | 19           | 2.9   | 2               |      | 1     |      | 0                  |       | 86                | 2.8   | 113                | 2.5   |
| Listeriosis                   | 1            |       | 4               |      | 1     |      | 1                  |       | 18                | 0.6   | 25                 | 0.6   |
| Malaria                       | 1            |       | 5               | 1.9  | 25    | 6.1  | 3                  |       | 4                 |       | 38                 | 0.9   |
| Measles                       | 25           | 3.9   | 28              | 10.5 | 1     |      | 0                  |       | 14                | 0.5   | 68                 | 1.5   |
| Meningococcal disease         | 29           | 4.5   | 10              | 3.7  | 1     |      | 3                  |       | 42                | 1.4   | 85                 | 1.9   |
| Mumps                         | 2            |       | 1               |      | 7     | 1.7  | 0                  |       | 15                | 0.5   | 26                 | 0.6   |
| Paratyphoid fever             | 0            |       | 0               |      | 13    | 3.2  | 0                  |       | 8                 | 0.3   | 22                 | 0.5   |
| Pertussis                     | 820          | 126.6 | 210             | 78.7 | 170   | 41.7 | 35                 | 92.7  | 4 543             | 147.8 | 5 902              | 133.1 |
| Rheumatic fever               | 96           | 14.8  | 69              | 25.9 | 3     |      | 0                  |       | 11                | 0.4   | 179                | 4.0   |
| Salmonellosis                 | 94           | 14.5  | 38              | 14.2 | 101   | 24.8 | 8                  | 21.2  | 781               | 25.4  | 1 085              | 24.5  |
| Shigellosis                   | 6            | 0.9   | 36              | 13.5 | 13    | 3.2  | 3                  |       | 64                | 2.1   | 132                | 3.0   |
| Tuberculosis disease          | 38           | 5.9   | 34              | 12.7 | 177   | 43.4 | 14                 | 37.1  | 31                | 1.0   | 297                | 6.7   |
| Typhoid fever                 | 0            |       | 28              | 10.5 | 16    | 3.9  | 0                  |       | 1                 |       | 45                 | 1.0   |
| VTEC/STEC infection           | 15           | 2.3   | 0               |      | 5     | 1.2  | 1                  |       | 125               | 4.1   | 147                | 3.3   |
| Yersiniosis                   | 42           | 6.5   | 29              | 10.9 | 128   | 31.4 | 4                  |       | 280               | 9.1   | 517                | 11.7  |

<sup>a</sup>Middle Eastern/Latin American/African.<sup>b</sup>Total includes cases where ethnicity was unknown.<sup>c</sup>Cases of acute gastroenteritis from a common source or foodborne intoxication, e.g., staphylococcal intoxication.<sup>d</sup>Only acute cases of this disease are notifiable.

Note: Denominator data used to determine disease rates for ethnic groups are based on the proportion of people in each ethnic group from the estimated resident 2006 census population applied to the 2012 mid-year population estimates from Statistics New Zealand. Ethnicity is prioritised in the following order: Māori, Pacific Peoples, Asian, MELAA and European or Other (including New Zealander) ethnic groups. Where fewer than five cases have been notified, a rate has not been calculated and the cell has been left blank.

## Notifiable disease cases by year and source, 1988–2012

**Table 50. Number of notifiable disease cases by year and source, 1988–2000**

| Disease                              | Source <sup>a</sup> | 1988  | 1989  | 1990  | 1991  | 1992  | 1993  | 1994  | 1995  | 1996  | 1997  | 1998   | 1999  | 2000  |
|--------------------------------------|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|
| AIDS                                 | N                   | 38    | 59    | 73    | 78    | 50    | 70    | 44    | 49    | 76    | 43    | 29     | 33    | 26    |
| Campylobacteriosis                   | N                   | 2 796 | 4 187 | 3 850 | 4 148 | 5 144 | 8 101 | 7 714 | 7 442 | 7 635 | 8 924 | 11 572 | 8 161 | 8 418 |
| Cholera                              | N                   | 0     | 0     | 5     | 0     | 0     | 0     | 2     | 2     | 0     | 0     | 1      | 1     | 0     |
| Creutzfeldt-Jakob disease            | N                   |       |       |       |       |       |       |       |       | 2     | 1     | 0      | 2     | 3     |
| Cryptosporidiosis                    | N                   |       |       |       |       |       |       |       |       | 119   | 357   | 866    | 977   | 775   |
| Dengue fever                         | N                   | 1     | 3     | 2     | 3     | 1     | 1     | 0     | 6     | 23    | 14    | 26     | 9     | 7     |
| Gastroenteritis <sup>b</sup>         | N                   |       |       |       |       |       |       |       |       | 555   | 310   | 492    | 601   | 727   |
| Giardiasis                           | N                   |       |       |       |       |       |       |       |       | 1 235 | 2 127 | 2 183  | 1 793 | 1 688 |
| <i>Haemophilus influenzae</i> type b | N                   |       |       |       |       |       |       |       |       | 26    | 9     | 11     | 10    | 13    |
|                                      | L                   | 107   | 121   | 143   | 148   | 166   | 118   | 75    | 14    | 24    | 8     | 10     | 9     | 10    |
| Hepatitis A                          | N                   | 176   | 134   | 150   | 224   | 288   | 257   | 179   | 338   | 311   | 347   | 145    | 119   | 107   |
| Hepatitis B <sup>c</sup>             | N                   | 370   | 309   | 242   | 227   | 221   | 145   | 133   | 125   | 104   | 138   | 88     | 94    | 79    |
| Hepatitis C <sup>c</sup>             | N                   | 20    | 13    | 11    | 25    | 89    | 91    | 79    | 88    | 59    | 92    | 102    | 96    | 80    |
| Hydatid disease                      | N                   | 2     | 0     | 4     | 0     | 4     | 4     | 1     | 5     | 3     | 2     | 2      | 8     | 3     |
| Influenza                            | S                   | 136   | 119   | 343   | 183   | 317   | 423   | 441   | 521   | 673   | 743   | 127    | 425   | 73    |
| Legionellosis                        | N                   | 62    | 17    | 20    | 14    | 11    | 24    | 66    | 33    | 36    | 63    | 43     | 51    | 61    |
|                                      | L                   |       |       | 21    | 42    | 60    | 76    | 121   | 76    | 60    | 109   | 107    | 65    | 56    |
| Leprosy                              | N                   | 2     | 4     | 1     | 4     | 5     | 3     | 1     | 1     | 10    | 3     | 3      | 10    | 4     |
| Leptospirosis                        | N                   | 99    | 90    | 117   | 106   | 70    | 116   | 70    | 65    | 56    | 52    | 75     | 59    | 98    |
|                                      | L                   | 192   | 182   | 229   | 176   | 218   | 234   | 168   | 183   | 140   | 84    | 117    | 76    | 114   |
| Listeriosis                          | N                   | 7     | 10    | 16    | 26    | 16    | 11    | 8     | 13    | 10    | 35    | 17     | 19    | 22    |
| Malaria                              | N                   | 25    | 27    | 32    | 39    | 29    | 58    | 34    | 41    | 107   | 65    | 73     | 46    | 111   |
| Measles                              | N                   |       |       |       |       |       |       |       |       | 68    | 1984  | 164    | 107   | 64    |
| Meningococcal disease                | N                   | 83    | 49    | 53    | 71    | 153   | 202   | 208   | 394   | 473   | 609   | 439    | 507   | 477   |
| Mumps                                | N                   |       |       |       |       |       |       |       |       | 76    | 90    | 85     | 56    | 50    |
| Paratyphoid fever                    | N                   | 2     | 0     | 1     | 1     | 2     | 10    | 7     | 24    | 20    | 25    | 18     | 17    | 24    |
| Pertussis                            | N                   |       |       |       |       |       |       |       |       | 1 022 | 284   | 153    | 1 046 | 4 140 |
| Rheumatic fever - initial attack     | N                   | 153   | 148   | 90    | 97    | 70    | 81    | 98    | 88    | 110   | 93    | 66     | 97    | 108   |
| Rubella                              | N                   |       |       |       |       |       |       |       |       | 306   | 80    | 53     | 35    | 26    |
| Salmonellosis                        | N                   | 1 128 | 1 860 | 1 619 | 1 244 | 1 239 | 1 340 | 1 522 | 1 334 | 1 141 | 1 177 | 2 069  | 2 077 | 1 795 |
| Shigellosis                          | N                   | 145   | 137   | 197   | 152   | 124   | 128   | 185   | 191   | 167   | 117   | 122    | 147   | 115   |
| Tetanus                              | N                   | 1     | 0     | 0     | 0     | 8     | 2     | 2     | 2     | 3     | 0     | 2      | 6     | 1     |
| Tuberculosis disease                 | N                   | 295   | 303   | 348   | 335   | 327   | 323   | 352   | 391   | 352   | 323   | 365    | 446   | 354   |
| Typhoid fever                        | N                   | 15    | 17    | 7     | 9     | 11    | 14    | 24    | 21    | 15    | 16    | 31     | 10    | 21    |
| VTEC/STEC infection                  | N                   |       |       |       |       |       | 3     | 3     | 6     | 7     | 13    | 48     | 64    | 67    |
| Yersiniosis                          | N                   |       |       |       |       |       |       |       |       | 330   | 488   | 546    | 503   | 396   |

<sup>a</sup> Source: Notification (N), Laboratory (L), Sentinel isolates (S).

<sup>c</sup> Only acute cases of this disease are notifiable.

<sup>b</sup> Cases of acute gastroenteritis from a common source or foodborne intoxication, e.g., staphylococcal intoxication.

## Notifiable disease cases by year and source, 1988–2012

Table 51. Number of notifiable disease cases by year and source, 2001–2012

| Disease                              | Source <sup>a</sup> | 2001   | 2002   | 2003   | 2004   | 2005   | 2006   | 2007   | 2008  | 2009  | 2010  | 2011  | 2012  |
|--------------------------------------|---------------------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|
| AIDS                                 | N                   | 26     | 17     | 33     | 38     | 49     | 29     | 31     | 48    | 28    | 39    | 24    | 20    |
| Campylobacteriosis                   | N                   | 10 145 | 12 493 | 14 788 | 12 215 | 13 836 | 15 873 | 12 778 | 6 694 | 7 177 | 7 346 | 6 689 | 7 031 |
| Cholera                              | N                   | 3      | 1      | 1      | 2      | 0      | 0      | 1      | 0     | 0     | 2     | 0     | 0     |
| Creutzfeldt--Jakob disease           | N                   | 1      | 3      | 6      | 8      | 3      | 5      | 8      | 5     | 8     | 5     | 4     | 9     |
| Cryptosporidiosis                    | N                   | 1 208  | 975    | 817    | 611    | 888    | 737    | 924    | 764   | 854   | 954   | 610   | 877   |
| Dengue fever                         | N                   | 93     | 70     | 55     | 8      | 11     | 19     | 114    | 113   | 139   | 50    | 42    | 77    |
| Gastroenteritis <sup>b</sup>         | N                   | 940    | 1 087  | 1 026  | 1 363  | 557    | 937    | 622    | 686   | 712   | 493   | 630   | 735   |
| Giardiasis                           | N                   | 1 604  | 1 547  | 1 570  | 1 514  | 1 231  | 1 214  | 1 402  | 1 660 | 1 639 | 1 985 | 1 934 | 1 719 |
| <i>Haemophilus influenzae</i> type b | N                   | 11     | 3      | 12     | 4      | 7      | 9      | 15     | 9     | 10    | 8     | 8     | 4     |
|                                      | L                   | 8      | 3      | 9      | 3      | 6      | 8      | 13     | 4     | 8     | 8     | 8     | 4     |
| Hepatitis A                          | N                   | 61     | 106    | 70     | 49     | 51     | 123    | 42     | 89    | 44    | 46    | 26    | 82    |
| Hepatitis B <sup>c</sup>             | N                   | 56     | 67     | 61     | 38     | 59     | 62     | 72     | 38    | 55    | 51    | 51    | 39    |
| Hepatitis C <sup>c</sup>             | N                   | 58     | 53     | 40     | 24     | 29     | 35     | 30     | 22    | 32    | 17    | 26    | 32    |
| Hydatid disease                      | N                   | 7      | 2      | 0      | 1      | 2      | 0      | 6      | 7     | 2     | 4     | 6     | 1     |
| Influenza                            | S                   | 313    | 241    | 230    | 231    | 273    | 315    | 239    | 466   | 624   | 349   | 336   | 399   |
| Legionellosis                        | N                   | 46     | 49     | 77     | 62     | 85     | 52     | 64     | 73    | 74    | 173   | 158   | 152   |
|                                      | L                   | 56     | 53     | 82     | 75     | 83     | 54     | 72     | 74    | 77    | 178   | 160   | 152   |
| Leprosy                              | N                   | 3      | 4      | 4      | 3      | 2      | 4      | 8      | 5     | 3     | 3     | 1     | 2     |
| Leptospirosis                        | N                   | 99     | 140    | 113    | 102    | 85     | 87     | 66     | 118   | 69    | 80    | 68    | 113   |
|                                      | L                   | 113    | 181    | 149    | 113    | 109    | 67     | 42     | 72    | 60    | 58    | 45    | 78    |
| Listeriosis                          | N                   | 18     | 19     | 24     | 26     | 20     | 19     | 26     | 27    | 28    | 23    | 26    | 25    |
| Malaria                              | N                   | 54     | 61     | 46     | 33     | 32     | 30     | 25     | 40    | 50    | 44    | 52    | 38    |
| Measles                              | N                   | 82     | 21     | 66     | 32     | 18     | 18     | 24     | 12    | 248   | 48    | 596   | 68    |
| Meningococcal disease                | N                   | 648    | 555    | 542    | 343    | 226    | 160    | 104    | 122   | 133   | 97    | 119   | 85    |
| Mumps                                | N                   | 56     | 64     | 56     | 45     | 61     | 47     | 73     | 76    | 63    | 41    | 51    | 26    |
| Paratyphoid fever                    | N                   | 32     | 16     | 18     | 28     | 25     | 23     | 23     | 25    | 25    | 19    | 13    | 22    |
| Pertussis                            | N                   | 1 334  | 1 068  | 585    | 3 485  | 2 719  | 1 120  | 332    | 417   | 1 398 | 872   | 1 996 | 5 902 |
| Rheumatic fever - initial attack     | N                   | 114    | 87     | 148    | 75     | 76     | 104    | 135    | 140   | 125   | 153   | 152   | 164   |
| Rubella                              | N                   | 30     | 33     | 26     | 23     | 13     | 8      | 11     | 9     | 4     | 4     | 22    | 4     |
| Salmonellosis                        | N                   | 2 417  | 1 880  | 1 401  | 1 081  | 1 382  | 1 335  | 1 275  | 1 339 | 1 128 | 1 146 | 1 055 | 1 085 |
| Shigellosis                          | N                   | 157    | 112    | 87     | 140    | 183    | 102    | 129    | 113   | 119   | 104   | 101   | 132   |
| Tetanus                              | N                   | 4      | 1      | 2      | 1      | 1      | 1      | 1      | 0     | 1     | 7     | 0     | 2     |
| Tuberculosis disease                 | N                   | 369    | 380    | 422    | 373    | 330    | 350    | 282    | 293   | 298   | 304   | 309   | 297   |
| Typhoid fever                        | N                   | 27     | 23     | 20     | 31     | 30     | 42     | 48     | 29    | 34    | 31    | 45    | 45    |
| VTEC/STEC infection                  | N                   | 76     | 73     | 104    | 89     | 92     | 87     | 100    | 124   | 143   | 138   | 153   | 147   |
| Yersiniosis                          | N                   | 429    | 472    | 436    | 407    | 383    | 453    | 502    | 508   | 430   | 406   | 514   | 517   |

<sup>a</sup> Source: Notification (N), Laboratory (L), Sentinel isolates (S).<sup>c</sup> Only acute cases of this disease are notifiable.<sup>b</sup> Cases of acute gastroenteritis from a common source or foodborne intoxication, e.g., staphylococcal intoxication.

## Selected *Salmonella* serotypes and phage types, 2008–2012 (Enteric Reference Laboratory, ESR)

**Table 52. Number of laboratory-reported cases of salmonellosis for selected *Salmonella* serotypes and phage types, 2008–2012**

| Serotype <sup>a</sup>                        | 2008         | 2009         | 2010         | 2011         | 2012         |
|--|--------------|--------------|--------------|--------------|--------------|
| <i>S. Typhimurium</i>                        | <b>729</b>   | <b>661</b>   | <b>594</b>   | <b>495</b>   | <b>459</b>   |
| 1  | 72           | 94           | 36           | 54           | 35           |
| 12a  | 28           | 28           | 35           | 28           | 26           |
| 101  | 72           | 56           | 70           | 50           | 26           |
| 160  | 135          | 106          | 107          | 66           | 58           |
| 135  | 27           | 20           | 48           | 47           | 44           |
| 156  | 67           | 54           | 35           | 29           | 21           |
| RDNC <sup>b</sup> -May 06                    | 55           | 43           | 85           | 73           | 73           |
| Other or unknown                             | 301          | 288          | 213          | 176          | 176          |
| <i>S. Enteritidis</i>                        | <b>124</b>   | <b>95</b>    | <b>113</b>   | <b>134</b>   | <b>125</b>   |
| 1b   | 19           | 4            | 5            | 8            | 9            |
| 11 <sup>c</sup>                              | 45           | 39           | 49           | 56           | 52           |
| Other or unknown                             | 60           | 52           | 59           | 70           | 64           |
| <b>Other serotypes</b>                       | <b>486</b>   | <b>366</b>   | <b>437</b>   | <b>410</b>   | <b>460</b>   |
| <i>S. Agona</i>                              | 10           | 10           | 12           | 20           | 11           |
| <i>S. Brandenburg</i>                        | 33           | 36           | 47           | 34           | 34           |
| <i>S. Infantis</i>                           | 86           | 71           | 54           | 65           | 52           |
| <i>S. Mississippi</i>                        | 10           | 14           | 9            | 13           | 12           |
| <i>S. Montevideo</i>                         | 0            | 9            | 13           | 1            | 26           |
| <i>S. Saintpaul</i>                          | 35           | 26           | 34           | 31           | 27           |
| <i>S. Stanley</i>                            | 10           | 9            | 28           | 28           | 22           |
| <i>S. Virchow</i>                            | 14           | 12           | 16           | 18           | 17           |
| <i>S. Weltevreden</i>                        | 8            | 10           | 23           | 16           | 24           |
| <i>S. enterica</i> (I) ser. 4,[5],12 : i : - | -            | 8            | 21           | 21           | 38           |
| Other or unknown                             | 288          | 188          | 224          | 201          | 197          |
| <b>Total</b>                                 | <b>1 339</b> | <b>1 122</b> | <b>1 144</b> | <b>1 039</b> | <b>1 044</b> |

<sup>a</sup> Excludes *S. Paratyphi* and *S. Typhi*.

<sup>b</sup> RDNC reacts but does not conform to a known phage-type pattern.

<sup>c</sup> Prior to 2012, *S. Enteritidis* phage type 11 was known as a 9a.

