# National Communicable Diseases Surveillance Report

#### Fortnight 14, 2020 Summary Notes for Selected Diseases

# 4 July to 17 July 2020

# Infectious and congenital syphilis

Increases in infectious syphilis notifications are attributed to an on-going outbreak occurring in young Aboriginal and Torres Strait Islander people residing in northern and central Australia, continued increases among men who have sex with men (MSM) in urban areas of Victoria (Vic) and New South Wales (NSW), and increases in non-Indigenous women residing in urban areas of Vic, NSW, Queensland (Qld) and Western Australia (WA).

# Outbreak in remote Australia

In January 2011, an increase of infectious syphilis notifications among young (15-29 years) Aboriginal and Torres Strait Islander people was identified in the North West region of Qld, following a steady decline at a national level in remote communities. Subsequent increases in infectious syphilis notifications were reported in the Northern Territory (NT) in 2013, WA in 2014 and South Australia (SA) in 2016, following sustained periods of low notification rates. The outbreak is of significant public health concern given the: elevated rates of infectious syphilis among women of child-bearing age, increasing the risk of congenital syphilis; and the concomitant risk of HIV transmission. For the latest information on the infectious syphilis outbreak, refer to the <u>Department's website</u>.

#### Increases among MSM

Since 2010, increases in notifications of infectious syphilis have been reported in MSM, predominately 20-39 years of age, residing in urban areas of Vic and NSW.

#### Increases among non-Indigenous women

Since 2016, increases in notifications of infectious syphilis have been reported in non-Indigenous women aged predominately 20-39 years of age residing in urban areas of NSW, Vic, Qld and WA. As noted in the outbreak in remote Australia, increases in women of child-bearing age is of significant public health concern given the increased risk of congenital syphilis.

#### Interpretative Notes

Selected diseases are chosen each fortnight based on either exceeding two standard deviations from the 90 day and/or 365 day five year rolling mean or other disease issues of significance identified during the reporting period. All diseases reported are analysed by notification receive date. Data are extracted each Monday of a CDNA week.

Totals comprise data from all States and Territories. Cumulative figures are subject to retrospective revision so there may be discrepancies between the number of new notifications and the increment in the cumulative figure from the previous period.

<sup>1</sup>The past quarter (90 day) surveillance period includes the date range (19/04/2020 to 17/07/2020).

<sup>2</sup>The quarterly (90 day) five year rolling mean is the average of 5 intervals of 90 days up to 17/07/2020. The ratio is the notification activity in the past quarter (90 days) compared with the five year rolling mean for the same period.

<sup>3</sup>The past year (365 day) surveillance period includes the date range (18/07/2019 to 17/07/2020).

<sup>4</sup>The yearly (365 day) five year rolling mean is the average of 5 intervals of 365 days up to 17/07/2020. The ratio is the notification activity in the past year (365 days) compared with the five year rolling mean for the same period.

The five year rolling mean and the ratio of notifications compared with the five year rolling mean should be interpreted with caution. Changes in surveillance practice, diagnostic techniques and reporting may contribute to increases or decreases in the total notifications received over a five year period. Ratios are to be taken as a crude measure of current disease activity and may reflect changes in reporting rather than changes in disease activity.

| AD<br>Disease group               | T FN14/2020<br>Disease name   | State or Territory |         |                 |         |           |         |      |            |                | Notification received date<br>Totals for Australia |                                 |  |                                       | Historical 90 Day Period |                                |                                       |   | Historical Yearly Period |                                     |                                    |                     |
|-----------------------------------|---|--------------------|---------|-----------------|---------|-----------|---------|------|------------|----------------|--|---------------------------------|--|---------------------------------------|--------------------------|--------------------------------|---------------------------------------|---|--------------------------|-------------------------------------|------------------------------------|---------------------|
|                                   |   | sease code         | АСТ     | NSW             | NT      | QIđ       | SA      | Tas  | Vic        | WA             | This reporting period                              | Previous<br>reporting<br>Period | Same<br>reporting<br>period last<br>year | Current year<br>YTD                   | Past Quarter             | Quarterly<br>rolling<br>5 year | Ratio past<br>quarter/5<br>year mean* | Exceeds<br>quarterly<br>rolling<br>mean +2 SD | Past Year                | Yearly<br>rolling<br>5 year<br>mean | Ratio past<br>year/5 year<br>mean* | Exceeds<br>yearly   |
|                                   |   | Dis                |         |                 |         |           |         |      |            |                | 04/07/2020<br>17/07/2020                           | 20/06/2020                      | 04/07/2019<br>17/07/2019                 | 01/01/2020                            | 19/04/2020<br>17/07/2020 | mean                           | , cai incan                           | by  | 18/07/2019<br>17/07/2020 | 18/07/2014<br>17/07/2019            | cuii                               | by                  |
| Bloodborne diseases               | Hepatitis B (newly acquired)  | 039                | -       | -               | -       | 1         | -       | -    | -          | 1              | 2  | 7                               |  |                                       | 31                       | 39.2                           | 0.8                                   | -   | 137                      | 153.4                               | 0.9                                | -                   |
|                                   | Hepatitis B (unspecified)<br>Hepatitis C (newly acquired)                   | 052                | - 3     | 94              | -       | 25<br>10  | 2       | 3    | 45         | 22             | 194<br>13  | 221                             |  | 2,807<br>370                          | 1,270<br>169             | 1,521.8<br>166.0               | 0.8                                   | -   | 5,293<br>806             | 6,089.6<br>697.4                    | 0.9                                |                     |
|                                   | Hepatitis C (unspecified)   | 040                | - 7     | 112             | - 3     | 64        | 2       |      | 47         | 29             | 272  | 283                             |  | 4,066                                 | 1,804                    | 2,427.8                        | 0.7                                   | -   | 7,774                    | 9,936.6                             | 0.8                                | -                   |
|                                   | Hepatitis D   | 050                | -       | 1               | -       | -         | -       | -    | -          | -              | 1  | 3                               |  |                                       | 14                       | 15.8                           | 0.9                                   | -   | 55                       | 67.4                                | 0.8                                |                     |
|                                   | Botulism<br>Campylobacteriosis  | 045                | - 26    | - 302           | -<br>12 | - 214     | - 101   | - 27 | - 214      | - 78           | -<br>974   | - 961                           | - 1,170                                  | - 16,191                              | -<br>5,861               | 0.2<br>6,148.2                 | - 1.0                                 | -   | 1 33,690                 | 1.4<br>27,169.0                     | 0.7                                |                     |
| F                                 | Cryptosporidiosis   | 061                | 1       | 10              | -       | 11        | 4       | 1    | 5          | 3              | 35   | 22                              |  | 1,939                                 | 337                      | 904.6                          | 0.4                                   | -   | 2,927                    | 3,938.8                             | 0.7                                |                     |
| Gastrointestinal diseases         | Haemolytic uraemic syndrome (HUS)<br>Hepatitis A                            | 055                | -       | -               | -       | -         | -       | -    | -          | - 2            | - 2  | - 1                             | - 7                                      | 6<br>85                               | 2                        | 3.0<br>47.4                    | 0.7                                   | -   | 14<br>184                | 16.2<br>244.8                       | 0.9                                |                     |
|                                   | Hepatitis E   | 051                | -       | -               | -       | -         | -       | -    | -          | -              | -  | -                               | 2  | 29                                    | 1                        | 10.2                           | 0.1                                   | -   | 51                       | 46.2                                | 1.1                                | -                   |
|                                   | Listeriosis<br>Paratyphoid  | 018                | -       | 2               | -       | -         | -       | -    | -          | -              | 2  | -                               | - 3                                      | 18<br>45                              | 4                        | 13.8<br>14.4                   | 0.3                                   | -   | 41                       | 72.0                                | 0.6                                |                     |
|                                   | STEC  | 054                | -       | 1               | -       | 1         | 2       | -    | 3          | 5              |  | 16                              | 14                                       |                                       | 91                       | 88.8                           | 1.0                                   | -   | 648                      | 382.0                               | 1.7                                |                     |
|                                   | Salmonellosis<br>Shigellosis  | 030                | - 1     | 49<br>9         | 11      | 76        | 19<br>1 | 2    | 28         | 58             | 244<br>31  | 295<br>28                       | 367<br>85                                | 8,485<br>1,315                        | 2,314<br>198             | 3,512.0<br>449.6               | 0.7                                   | -   | 14,489<br>2,619          | 16,118.2<br>1,803.6                 | 0.9                                |                     |
|                                   | Typhoid Fever   | 031                | -       | 1               | -       | -         | -       | -    | 2          | -              | 31   | - 28                            | 1  | 1,315                                 | 7                        | 26.8                           | 0.4                                   | -   | 2,619                    | 1,803.6                             | 1.5                                |                     |
|                                   | Avian influenza in humans (AIH)   | 076                | -       | -               | -       | -         | -       | -    | -          | -              | -  | -                               | -  | -                                     | -                        | -                              |                                       | -   | -                        | -                                   |                                    | -                   |
|                                   | COVID-19<br>Cholera   | 081                | -       | <u>140</u><br>- | -       | -         | -       | -    | 2,905<br>- | <u>32</u><br>- | <u>3,087</u><br>-                                  | - 767                           | -  | <u>11,493</u><br>-                    | <b>4,681</b><br>-        | - 0.2                          | -                                     | <u>4,681.0</u><br>-                           | <u>11,493</u><br>-       | -<br>1.4                            | -                                  | <u>11,493.</u><br>- |
| Quarantinable diseases            | MERS-CoV  | 079                | -       | -               | -       | -         | -       | -    | -          | -              | -  | -                               | -  | -                                     | -                        | -                              |                                       | -   | -                        | -                                   |                                    | -                   |
|                                   | Plague<br>Rabies  | 025                | -       | -               | -       | -         | -       | -    | -          | -              | -  | -                               | -  | -                                     | -                        | -                              |                                       | -   | -                        | -                                   |                                    | -                   |
|                                   | Severe acute respiratory syndrome (SARS)                                    | 071                | -       | -               | -       | -         | -       | -    | -          | -              | -  | -                               | -  | -                                     | -                        | -                              |                                       | -   | -                        | -                                   |                                    | -                   |
|                                   | Smallpox<br>Viral haemorrhagic fever (NEC)                                  | 069                | -       | -               | -       | -         | -       | -    | -          | -              | -  | -                               | -  | -                                     | -                        | -                              |                                       | -   | -                        | -                                   |                                    | -                   |
|                                   | Yellow fever  | 041                | -       | -               | -       | -         | -       | -    | -          | -              | -  | -                               | -  | -                                     | -                        | -                              |                                       | -   | -                        | -                                   |                                    | -                   |
| Sexually transmissible infections | Chlamydial infection  | 007                | 61      | 854             | 36      | 834       | 220     | 47   | -          | 397            | 2,449  | 2,666                           | 3,896                                    | 40,919                                | 16,277                   | 24,258.8                       | 0.7                                   | -   | 84,334                   | 97,261.4                            | 0.9                                |                     |
|                                   | Donovanosis<br>Gonococcal infection   | 010                | -<br>18 | - 346           | - 32    | - 256     | - 46    | - 4  | - 36       | - 122          | - 860  | - 1,019                         | - 1,356                                  | - 17,300                              | -<br>6,505               | 6,645.8                        | 1.0                                   | -   | - 32,564                 | 25,514.4                            | 1.3                                | -                   |
|                                   | Syphilis < 2 years  | 066                | -       | 20              | 3       | 21        | 3       | -    | 9          | 26             | 82   | 158                             | 220                                      | 2,494                                 | 982                      | 1,032.8                        | 1.0                                   | -   | 5,197                    | 3,954.2                             | 1.3                                |                     |
|                                   | Syphilis > 2 years or unspecified duration<br>Syphilis congenital           | 067                | -       | -               | -       | -         | - 2     | -    | - 54       | - 9            | - 70   | 80                              | 86                                       | 1,514                                 | 655<br>5                 | 538.8<br>0.8                   | 1.2<br>6.3                            | 26.2  | 2,699<br>14              | 2,114.0                             | 1.3<br>2.4                         |                     |
| Vaccine preventable<br>diseases   | Diphtheria  | 009                | -       | -               | -       | -         | -       | -    | -          | -              | -  | -                               | 2  |                                       | -                        | 0.8                            | -                                     | -   | 6                        | 7.2                                 | 0.8                                | -                   |
|                                   | Haemophilus influenzae type b<br>Influenza (laboratory confirmed)           | 012                | -       | 3               | -       | - 26      | -<br>16 | - 2  | - 30       | - 2            | 3<br>92  | 1 123                           |  | 11<br>21,407                          | 6<br>792                 | 5.0                            | 1.2<br>0.0                            | -   | 19<br>165,484            | 19.0<br>146,259.8                   | 1.0<br>1.1                         |                     |
|                                   | Measles   | 002                | -       | -               | -       | -         | -       | -    | -          | -              | -  | -                               | 7  | ,                                     | -                        | 16.6                           | -                                     | -   | 105,484                  | 140,235.8                           | 1.1                                |                     |
|                                   | Mumps<br>Pertussis  | 043                | -       | -<br>14         | -       | 2         | -<br>14 | -    | - 27       | - 2            | 2<br>62  | 2                               | 6<br>354                                 | 115<br>3,358                          | 19<br>723                | 147.6<br>3,087.6               | 0.1                                   | -   | 192<br>9,198             | 615.2<br>16,194.2                   | 0.3                                |                     |
|                                   | Pneumococcal disease (invasive)   | 024                | -       | 22              | 2       | 7         | 8       | 1    | 7          | 13             | 60   | 44                              |  | 592                                   | 214                      | 523.8                          | 0.2                                   | -   | 1,728                    | 1,824.2                             | 0.0                                |                     |
|                                   | Poliovirus infection  | 026                | -       | - 7             | -       | -         | -       | -    | -          | -              | -  | -                               | -  | -                                     | -                        | -                              | 0.2                                   | -   | -                        | -                                   |                                    |                     |
|                                   | Rotavirus<br>Rubella  | 077                | -       | - 7             | -       | - 9       | -       | -    | NN<br>-    | - 10           | 47   | 47                              |  | 1,281                                 | 271                      | 875.2<br>4.4                   | 0.3                                   | -   | 5,800                    | 4,109.2                             | 1.4<br>0.2                         |                     |
|                                   | Rubella congenital  | 046                | -       | -               | -       | -         | -       | -    | -          | -              | -  | -                               | -  | -                                     | -                        | -                              |                                       | -   | -                        | 0.2                                 | -                                  | -                   |
|                                   | Tetanus<br>Varicella zoster (chickenpox)                                    | 033                | - 3     | -<br>NN         | -       | 1         | - 5     | - 1  | -<br>14    | - 10           | 1 34   | - 51                            | - 174                                    | 3                                     | 2<br>337                 | 0.8<br>752.4                   | 2.5                                   | -   | 4 3,664                  | 3.8<br>3,274.6                      | 1.1<br>1.1                         |                     |
|                                   | Varicella zoster (shingles)   | 074                | 10      | NN              | 17      | 1         | 116     | 11   |            | 54             | 259  | 317                             | 606                                      | 7,590                                 | 2,740                    | 2,440.8                        | 1.1                                   | -   | 15,307                   | 9,432.8                             | 1.6                                | -                   |
|                                   | Varicella zoster (unspecified)<br>Barmah Forest virus infection             | 075                | -       | NN<br>19        | - 5     | 376<br>16 | 43      |      | -          | - 86           | 522<br>36  | 515<br>26                       |  |                                       | 3,404<br>298             | 3,474.8<br>112.2               | 1.0<br>2.7                            |   | 12,285<br>569            | 14,353.4<br>417.0                   | 0.9                                |                     |
|                                   | Chikungunya virus infection   | 078                | -       | -               | -       | -         | -       | -    | -          | -              | -  | -                               | 4  | 34                                    | -                        | 16.4                           | -                                     | - 95.0  | 83                       | 92.8                                | 0.9                                | -                   |
|                                   | Dengue virus infection  | 003                | -       | -               | -       | -         | -       | -    | -          | -              | -  | -                               | 48                                       |                                       | 8<br>10                  | 388.2                          | 0.0                                   | -   | 774<br>25                |                                     | 0.5                                |                     |
| Vectorborne diseases              | Flavivirus infection (unspecified)<br>Japanese encephalitis virus infection | 001                | -       | -               | -       | -         | -       | -    | -          | -              | -  | -                               | -  | 16                                    | - 10                     | 6.4<br>0.2                     | 1.6<br>-                              | -   | 4                        | 31.2<br>1.0                         | 0.8<br>4.0                         |                     |
|                                   | Malaria   | 020                | -       | 1               | -       | -         | -       | -    | -          | 2              | 3  | 1                               | 14                                       |                                       | 23                       | 70.2                           | 0.3                                   | -   | 313                      | 329.0                               | 1.0                                | -                   |
|                                   | Murray Valley encephalitis virus infection<br>Ross River virus infection    | 049                | -       | - 34            | - 1     | - 55      | - 2     | -    | -          | - 5            | -<br>97  | - 188                           | - 120                                    | - 5,041                               | -<br>3,688               | 0.2                            | - 2.9                                 | -<br>1,534.0                                  | -<br>5,951               | 0.6                                 | - 1.1                              | -                   |
|                                   | West Nile/Kunjin virus infection  | 060                | -       | -               | -       | -         | -       | -    | -          | -              | -  | -                               | 110                                      | · · · · · · · · · · · · · · · · · · · | -                        | 1.0                            | -                                     | -   | 1                        | 1.6                                 | 0.6                                |                     |
|                                   | Anthrax<br>Australian bat lyssavirus infection                              | 058                | -       | -               | -       | -         | -       | -    | -          | -              | -  | -                               | -  | -                                     | -                        | -                              |                                       | -   | -                        | -                                   |                                    | -                   |
|                                   | Brucellosis   | 003                | -       | -               | -       | -         | -       | -    | -          | -              | -  | 2                               |  |                                       | - 5                      | 4.6                            | 1.1                                   | -   | 17                       | 19.4                                | 0.9                                |                     |
|                                   | Leptospirosis   | 017                | -       | -               | -       | 5         | 1       | -    | -          | 1              | 7  | 1                               | 1  |                                       | 29                       | 33.6                           | 0.9                                   | -   | 84                       | 116.2                               | 0.7                                |                     |
|                                   | Lyssavirus infection (NEC)<br>Ornithosis                                    | 064                | -       | -               | -       | -         | -       | -    | -          | -              | -  | - 1                             | -  | - 17                                  | - 15                     | - 3.2                          | 4.7                                   | - 8.2   | - 30                     | - 20.2                              | 1.5                                | -                   |
|                                   | Q fever   | 027                | -       | 4               | -       | 9         | -       | -    | -          | -              | 13   | 9                               | 13                                       | 290                                   | 136                      | 124.6                          | 1.1                                   | -   | 542                      | 537.2                               | 1.0                                | -                   |
| Other bacterial infections        | Tularaemia<br>Legionellosis   | 070                | -       | - 2             | -       | - 1       | -       | -    | - 2        | - 1            | - 6  | - 21                            | - 20                                     | 298                                   | 2<br>130                 | - 100.8                        | 1.3                                   | 2.0   | 2<br>513                 |                                     | 1.3                                | 2.                  |
|                                   | Leprosy   | 016                | -       | -               | -       | -         | -       | -    | -          | -              | -  | -                               | 2  | 1                                     | 1                        | 3.0                            | 0.3                                   | -   | 5                        | 11.6                                | 0.4                                | -                   |
|                                   | Meningococcal disease (invasive)  | 022                | -       | 1               | -       | -         | -       | -    | 1          | 1              | 3  | 4                               |  |                                       | 17                       | 54.8                           | 0.3                                   | -   | 163                      | 257.0                               | 0.6                                |                     |
|                                   | Tuberculosis  | 034                | 1       | 21              | -       | 11        | -       |      | 18         | 6              | 57   | 44                              | 56                                       | 782                                   | 353                      | 323.6                          | 1.1                                   | -   | 1,511                    | 1,389.0                             | 1.1                                | -                   |

Footnotes: \* Ratio of the 90 day prior surveillance period to the past 90 day 5 year rolling mean, or ratio of the year period prior surveillance period to the year period 5 year rolling mean. NN = Not Notifiable, NEC = Not Elsewhere Classified The data in this report are reliant on the provision of data from states and territories to the Australian Government Department of Health. Backlogs in notifications at the state or territory level may contribute to delays in reporting to the NNDSS. Notifications for some high volume conditions are only uploaded quarterly by some jurisdictions, which can result in apparent large variability over time. The NNDSS is a dynamic dataset, with data in this report representing data available on (20/07/2020). Data in this report are subject to retrospective revision and may vary from data reported in published NNDSS reports and reports of notification data by states and territories.