

# Public Health Weekly Report Disease Surveillance Statistics

Vol. 11, No. 30 July 26, 2018

## I. National Notifiable Infectious Diseases

# 1. Reported cases, week ending July 21, 2018 (29th Week)\*

| Class    | -::::                               | Current | Cum.   | 5-year            |        | Total no. | of cases | s by year |        | Imported cases of current week                                |
|----------|-------------------------------------|---------|--------|-------------------|--------|-----------|----------|-----------|--------|---|
| Class    | sification of disease <sup>‡</sup>  | week    | 2018   | weekly<br>average | 2017   | 2016      | 2015     | 2014      | 2013   | : Country (no. o<br>cases)                                    |
| Category | I<br>Cholera                        | 0       | 2      | 0                 | 5      | 4         | 0        | 0         | 3      |   |
|          | Typhoid fever                       | 10      | 191    | 3                 | 128    | 121       | 121      | 251       | 156    |   |
|          | Paratyphoid fever                   | 6       | 29     | 1                 | 73     | 56        | 44       | 37        | 54     |   |
|          | Shigellosis                         | 7       | 156    | 3                 | 111    | 113       | 88       | 110       | 294    | Philippines(1),   |
|          | EHEC                                | 11      | 79     | 4                 | 138    | 104       | 71       | 111       | 61     | Ghana(1)  |
|          | Viral hepatitis A                   | 51      | 1,593  | 44                | 4,419  | 4,679     | 1,804    | 1,307     | 867    |   |
| Category | II                                  |         |        |                   |        |           |          |           |        |   |
| 3 ,      | Pertussis                           | 56      | 386    | 5                 | 318    | 129       | 205      | 88        | 36     |   |
|          | Tetanus                             | 2       | 19     | 1                 | 34     | 24        | 22       | 23        | 22     |   |
|          | Measles                             | 11      | 73     | 2                 | 7      | 18        | 7        | 442       | 107    |   |
|          | Mumps                               | 458     | 12,240 | 388               | 16,924 | 17,057    | 23,448   | 25,286    | 17,024 |   |
|          | Rubella                             | 2       | 46     | 1                 | 7      | 11        | 11       | 11        | 18     |   |
|          | Viral hepatitis B<br>(Acute)        | 16      | 237    | 5                 | 391    | 359       | 155      | 173       | 117    |   |
|          | Japanese encephalitis               | 0       | 0      | 0                 | 9      | 28        | 40       | 26        | 14     |   |
|          | Varicella                           | 2,113   | 52,471 | 722               | 80,092 | 54,060    | 46,330   | 44,450    | 37,361 | Taiwan(1)   |
|          | <i>Haemophilus influenza</i> type b | 0       | 2      | 0                 | 3      | 0         | 0        | 0         | 0      |   |
|          | Streptococcus                       | 2       | 446    | 3                 | 523    | 441       | 228      | 36        | -      |   |
|          | pneumoniae                          |         |        |                   |        |           |          |           |        |   |
| Category |                                     | 2.4     | 227    | 22                | F4.F   | 672       | 600      | 620       | 4.45   | N: : (4)  |
|          | Malaria                             | 24      | 337    | 32                | 515    | 673       | 699      | 638       | 445    | Nigeria(1),<br>Republic of Cot<br>d'Ivoire(1),<br>Thailand(1) |
|          | Scarlet fever <sup>§</sup>          | 298     | 11,755 | 167               | 22,838 | 11,911    | 7,002    | 5,809     | 3,678  | mananu(1)   |
|          | Meningococcal<br>meningitis         | 0       | 10     | 0                 | 17     | 6         | 6        | 5         | 6      |   |
|          | Legionellosis                       | 7       | 162    | 2                 | 198    | 128       | 45       | 30        | 21     |   |
|          | Vibrio vulnificus sepsis            | 2       | 3      | 1                 | 46     | 56        | 37       | 61        | 56     |   |
|          | Murine typhus                       | 2       | 9      | 0                 | 18     | 18        | 15       | 9         | 19     |   |
|          | Scrub typhus                        | 78      | 1,171  | 19                | 10,528 | 11,105    | 9,513    | 8,130     | 10,365 |   |
|          | Leptospirosis                       | 6       | 40     | 1                 | 103    | 117       | 104      | 58        | 50     |   |
|          | Brucellosis                         | 16      | 41     | 0                 | 6      | 4         | 5        | 8         | 16     | Thailand(1)   |
|          | Rabies                              | 0       | 0      | 0                 | 0      | 0         | 0        | 0         | 0      | , ,   |
|          | HFRS                                | 18      | 194    | 6                 | 531    | 575       | 384      | 344       | 527    |   |
|          | Syphilis                            | 52      | 1,363  | 28                | 2,148  | 1,569     | 1,006    | 1,015     | 799    |   |
|          | CJD/vCJD                            | 3       | 40     | 1                 | 36     | 42        | 33       | 65        | 34     |   |
|          | Tuberculosis                        | 607     | 15,855 | 658               | 28,161 | 30,892    | 32,181   | 34,869    | 36,089 |   |
|          | HIV/AIDS                            | 22      | 497    | 23                | 1,009  | 1,062     | 1,018    | 1,081     | 1,013  |   |
|          | Viral hepatitis C                   | 251     | 6,410  | -                 | 6,396  | -         | -        | -         | -      | Vietnam(1)  |
|          | VRSA                                | 0       | 0      | -                 | 0      | -         | -        | -         | -      |   |
|          | CRE                                 | 226     | 6,040  | -                 | 5,716  | -         | -        | _         | -      |   |

Unit: no. of cases<sup>†</sup>

|  |         |      |                   |      | T         |          | 1       |      | Imported cases  |
|--|---------|------|-------------------|------|-----------|----------|---------|------|---|
| Cl ''.' '.' ' t l' ‡                   | Current | Cum. | 5-year _          |      | Total no. | of cases | by year |      | Imported cases of current week  |
| Classification of disease <sup>‡</sup> | week    | 2018 | weekly<br>average | 2017 | 2016      | 2015     | 2014    | 2013 | : Country (no. of cases)  |
| Category IV                            |         |      |                   |      |           |          |         |      |   |
| Dengue fever                           | 10      | 111  | 7                 | 171  | 313       | 255      | 165     | 252  | Vietnam(3),<br>Thailand(2),<br>Malaysia(1),<br>Maldives(1),<br>Cambodia(1),<br>Thailand/<br>Myanmar(1),<br>Philippines(1) |
| Q fever                                | 32      | 226  | 1                 | 96   | 81        | 27       | 8       | 11   | Thailand(1)   |
| West Nile fever                        | 0       | 0    | 0                 | 0    | 0         | 0        | 0       | 0    |   |
| Lyme Borreliosis                       | 15      | 66   | 1                 | 31   | 27        | 9        | 13      | 11   | Kenya(1)  |
| Melioidosis                            | 0       | 0    | 0                 | 2    | 4         | 4        | 2       | 2    |   |
| Chikungunya fever                      | 0       | 10   | 0                 | 5    | 10        | 2        | 1       | 2    |   |
| SFTS                                   | 12      | 105  | 5                 | 272  | 165       | 79       | 55      | 36   |   |
| MERS                                   | 0       | 0    | -                 | 0    | 0         | 185      | -       | -    |   |
| Zika virus infection                   | 1       | 3    | -                 | 11   | 16        | -        | -       | -    | Cambodia(1)   |

Abbreviation: EHEC= Enterohemorrhagic Escherichia coli, HFRS= Hemorrhagic fever with renal syndrome,

MERS-CoV= Middle East Respiratory Syndrome Coronavirus.

CJD/vCJD= Creutzfeldt-Jacob Disease / variant Creutzfeldt-Jacob Disease, VRSA = Vancomycin-resistant *Staphylococcus aureus*, CRE = Carbapenem-resistant Enterobacteriaceae, SFTS = Severe fever with thrombocytopenia syndrome,

<sup>\*</sup> The reported data for year 2018 are provisional but the data from 2013 to 2017 are finalized data.

<sup>†</sup> According to surveillance data, the reported cases may include all of the cases such as confirmed, suspected, and asymptomatic carrier in the group.

<sup>†</sup> The reported surveillance data excluded Hansen's disease and no incidence data such as Diphtheria, Poliomyelitis, Epidemic typhus, Anthrax, Plague, Yellow fever, Viral hemorrhagic fever, Smallpox, Severe Acute Respiratory Syndrome, Animal influenza infection in humans, Novel Influenza, Tularemia, Newly emerging infectious disease syndrome and Tick-borne Encephalitis.

<sup>§</sup> Data on scarlet fever included both cases of confirmed and suspected since September 27, 2012.

Unit: no. of cases<sup>†</sup>

|           |                 |              |                            | Diseases of Category I |              |  |                 |              |  |                 |              | or cases                               |
|-----------|-----------------|--------------|----------------------------|------------------------|--------------|--|-----------------|--------------|--|-----------------|--------------|--|
| Reporting |                 | Cholera      |                            | Тур                    | ohoid fe     |  |                 | atyphoid t   | fever                                  | 9               | Shigellosis  | ;                                      |
| area      | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average§ | Current<br>week        | Cum.<br>2018 | Cum.<br>5-year<br>average <sup>§</sup> | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average <sup>§</sup> | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average <sup>§</sup> |
| Overall   | 0               | 2            | 0                          | 10                     | 191          | 100                                    | 6               | 29           | 28                                     | 7               | 156          | 54                                     |
| Seoul     | 0               | 0            | 0                          | 2                      | 35           | 19                                     | 1               | 9            | 6                                      | 1               | 29           | 11                                     |
| Busan     | 0               | 2            | 0                          | 3                      | 25           | 6                                      | 1               | 2            | 3                                      | 1               | 13           | 3                                      |
| Daegu     | 0               | 0            | 0                          | 0                      | 5            | 4                                      | 0               | 1            | 1                                      | 0               | 16           | 1                                      |
| Incheon   | 0               | 0            | 0                          | 2                      | 12           | 5                                      | 0               | 1            | 3                                      | 3               | 15           | 9                                      |
| Gwangju   | 0               | 0            | 0                          | 0                      | 5            | 4                                      | 0               | 1            | 1                                      | 0               | 3            | 1                                      |
| Daejeon   | 0               | 0            | 0                          | 0                      | 4            | 5                                      | 0               | 0            | 1                                      | 0               | 2            | 1                                      |
| Ulsan     | 0               | 0            | 0                          | 1                      | 6            | 0                                      | 0               | 0            | 0                                      | 1               | 2            | 0                                      |
| Sejong    | 0               | 0            | 0                          | 0                      | 2            | 0                                      | 0               | 0            | 0                                      | 0               | 1            | 0                                      |
| Gyonggi   | 0               | 0            | 0                          | 0                      | 40           | 17                                     | 2               | 8            | 5                                      | 0               | 22           | 14                                     |
| Gangwon   | 0               | 0            | 0                          | 0                      | 9            | 1                                      | 1               | 2            | 0                                      | 0               | 4            | 0                                      |
| Chungbuk  | 0               | 0            | 0                          | 0                      | 7            | 2                                      | 0               | 1            | 1                                      | 0               | 1            | 1                                      |
| Chungnam  | 0               | 0            | 0                          | 0                      | 6            | 6                                      | 0               | 0            | 1                                      | 1               | 16           | 2                                      |
| Jeonbuk   | 0               | 0            | 0                          | 1                      | 4            | 2                                      | 0               | 0            | 2                                      | 0               | 1            | 2                                      |
| Jeonnam   | 0               | 0            | 0                          | 0                      | 6            | 5                                      | 1               | 4            | 1                                      | 0               | 5            | 3                                      |
| Gyeongbuk | 0               | 0            | 0                          | 0                      | 9            | 4                                      | 0               | 0            | 1                                      | 0               | 20           | 1                                      |
| Gyeongnam | 0               | 0            | 0                          | 1                      | 13           | 18                                     | 0               | 0            | 1                                      | 0               | 6            | 4                                      |
| Jeju      | 0               | 0            | 0                          | 0                      | 3            | 2                                      | 0               | 0            | 1                                      | 0               | 0            | 1                                      |

<sup>\*</sup> The reported data for year 2018 are provisional but the data from 2013 to 2017 are finalized data.

<sup>†</sup> According to surveillance data, the reported cases may include all of the cases such as confirmed, suspected, and asymptomatic carrier in the group.

<sup>§</sup> Cum. 5-year average is mean value calculated by cumulative counts from 1st week to current week for 5 preceding years.

Unit: no. of cases<sup>†</sup>

|                |                 | Di                         | seases of                  | Category        | I            |  |                 | D            | iseases of                             | Category        | <u>Jnit: no. (</u><br>II | of cases'                              |
|----------------|-----------------|----------------------------|----------------------------|-----------------|--------------|--|-----------------|--------------|--|-----------------|--------------------------|--|
| Reporting area |                 | ohemorr<br><i>herichia</i> | nagic                      |                 | hepati       | tis A                                  |                 | Pertussis    |  |                 | Tetanus                  |  |
| arca           | Current<br>week | Cum.<br>2018               | Cum.<br>5-year<br>average§ | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average <sup>§</sup> | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average <sup>§</sup> | Current<br>week | Cum.<br>2018             | Cum.<br>5-year<br>average <sup>§</sup> |
| Overall        | 11              | 79                         | 50                         | 51              | 1,593        | 1,706                                  | 56              | 386          | 67                                     | 2               | 19                       | 10                                     |
| Seoul          | 1               | 13                         | 6                          | 13              | 322          | 332                                    | 3               | 42           | 14                                     | 0               | 3                        | 1                                      |
| Busan          | 0               | 4                          | 2                          | 1               | 36           | 92                                     | 9               | 31           | 4                                      | 1               | 2                        | 1                                      |
| Daegu          | 2               | 9                          | 6                          | 0               | 45           | 37                                     | 1               | 9            | 1                                      | 0               | 2                        | 0                                      |
| Incheon        | 2               | 7                          | 4                          | 1               | 109          | 146                                    | 2               | 29           | 4                                      | 0               | 1                        | 0                                      |
| Gwangju        | 0               | 6                          | 10                         | 0               | 20           | 55                                     | 1               | 13           | 4                                      | 0               | 0                        | 0                                      |
| Daejeon        | 0               | 2                          | 1                          | 1               | 81           | 70                                     | 1               | 8            | 1                                      | 0               | 0                        | 0                                      |
| Ulsan          | 0               | 4                          | 2                          | 0               | 13           | 19                                     | 4               | 17           | 1                                      | 0               | 1                        | 0                                      |
| Sejong         | 0               | 0                          | 0                          | 1               | 11           | 8                                      | 0               | 7            | 0                                      | 0               | 0                        | 0                                      |
| Gyonggi        | 1               | 8                          | 7                          | 17              | 490          | 509                                    | 6               | 67           | 12                                     | 0               | 2                        | 1                                      |
| Gangwon        | 0               | 4                          | 2                          | 3               | 40           | 37                                     | 0               | 3            | 1                                      | 0               | 0                        | 1                                      |
| Chungbuk       | 0               | 2                          | 2                          | 1               | 55           | 48                                     | 1               | 18           | 0                                      | 0               | 0                        | 0                                      |
| Chungnam       | 0               | 3                          | 1                          | 5               | 145          | 101                                    | 2               | 9            | 2                                      | 0               | 0                        | 0                                      |
| Jeonbuk        | 0               | 1                          | 0                          | 4               | 104          | 76                                     | 1               | 9            | 1                                      | 0               | 0                        | 0                                      |
| Jeonnam        | 2               | 5                          | 3                          | 0               | 23           | 69                                     | 1               | 11           | 4                                      | 0               | 3                        | 2                                      |
| Gyeongbuk      | 2               | 4                          | 1                          | 1               | 48           | 36                                     | 1               | 19           | 8                                      | 1               | 4                        | 2                                      |
| Gyeongnam      | 1               | 3                          | 1                          | 3               | 44           | 59                                     | 23              | 93           | 9                                      | 0               | 1                        | 2                                      |
| Jeju           | 0               | 4                          | 2                          | 0               | 7            | 12                                     | 0               | 1            | 1                                      | 0               | 0                        | 0                                      |

<sup>\*</sup> The reported data for year 2018 are provisional but the data from 2013 to 2017 are finalized data.

<sup>†</sup> According to surveillance data, the reported cases may include all of the cases such as confirmed, suspected, and asymptomatic carrier in the group.

<sup>§</sup> Cum. 5-year average is mean value calculated by cumulative counts from 1st week to current week for 5 preceding years.

Unit: no. of cases<sup>†</sup>

|                | Diseases of Category II |              |                            |                 |              |                            |                 |              |                            |                 |                        |  |
|----------------|-------------------------|--------------|----------------------------|-----------------|--------------|----------------------------|-----------------|--------------|----------------------------|-----------------|------------------------|--|
| Reporting area |                         | Measles      |                            |                 | Mumps        |                            |                 | Rubella      |                            | Vira            | l hepatiti:<br>(Acute) | 5 B                                    |
| urcu           | Current<br>week         | Cum.<br>2018 | Cum.<br>5-year<br>average§ | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average§ | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average§ | Current<br>week | Cum.<br>2018           | Cum.<br>5-year<br>average <sup>§</sup> |
| Overall        | 11                      | 73           | 111                        | 458             | 12,240       | 10,731                     | 2               | 46           | 10                         | 16              | 237                    | 131                                    |
| Seoul          | 0                       | 13           | 23                         | 48              | 1,521        | 1,045                      | 0               | 11           | 3                          | 2               | 41                     | 22                                     |
| Busan          | 0                       | 1            | 4                          | 19              | 725          | 762                        | 0               | 3            | 1                          | 0               | 11                     | 10                                     |
| Daegu          | 3                       | 4            | 2                          | 19              | 501          | 337                        | 1               | 1            | 1                          | 1               | 9                      | 5                                      |
| Incheon        | 0                       | 5            | 11                         | 20              | 631          | 473                        | 0               | 0            | 0                          | 0               | 12                     | 9                                      |
| Gwangju        | 0                       | 0            | 1                          | 17              | 356          | 758                        | 0               | 0            | 0                          | 0               | 5                      | 2                                      |
| Daejeon        | 0                       | 2            | 3                          | 13              | 438          | 402                        | 0               | 3            | 0                          | 1               | 10                     | 4                                      |
| Ulsan          | 0                       | 0            | 1                          | 14              | 388          | 336                        | 0               | 0            | 0                          | 3               | 8                      | 4                                      |
| Sejong         | 0                       | 0            | 0                          | 2               | 78           | 27                         | 0               | 0            | 0                          | 0               | 0                      | 0                                      |
| Gyonggi        | 4                       | 31           | 30                         | 153             | 3,413        | 2,391                      | 1               | 12           | 4                          | 3               | 64                     | 30                                     |
| Gangwon        | 2                       | 3            | 1                          | 15              | 399          | 400                        | 0               | 3            | 0                          | 1               | 8                      | 4                                      |
| Chungbuk       | 0                       | 3            | 2                          | 11              | 350          | 189                        | 0               | 2            | 0                          | 0               | 7                      | 4                                      |
| Chungnam       | 1                       | 3            | 3                          | 22              | 533          | 407                        | 0               | 4            | 0                          | 1               | 11                     | 7                                      |
| Jeonbuk        | 0                       | 1            | 1                          | 19              | 508          | 923                        | 0               | 1            | 0                          | 1               | 9                      | 10                                     |
| Jeonnam        | 1                       | 2            | 8                          | 18              | 457          | 552                        | 0               | 2            | 0                          | 2               | 11                     | 6                                      |
| Gyeongbuk      | 0                       | 2            | 5                          | 24              | 644          | 489                        | 0               | 3            | 1                          | 1               | 12                     | 6                                      |
| Gyeongnam      | 0                       | 2            | 16                         | 42              | 1,105        | 1,080                      | 0               | 1            | 0                          | 0               | 17                     | 7                                      |
| Jeju           | 0                       | 1            | 0                          | 2               | 193          | 160                        | 0               | 0            | 0                          | 0               | 2                      | 1                                      |

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<sup>†</sup> According to surveillance data, the reported cases may include all of the cases such as confirmed, suspected, and asymptomatic carrier in the group.

<sup>§</sup> Cum. 5-year average is mean value calculated by cumulative counts from 1st week to current week for 5 preceding years.

Unit: no. of cases<sup>†</sup>

|                |                 | Dis          | seases of                  | Category        | II           |  |                 | D            | iseases of                             | Category III    | Jnit: no. (  | or cases                   |
|----------------|-----------------|--------------|----------------------------|-----------------|--------------|--|-----------------|--------------|--|-----------------|--------------|----------------------------|
| Reporting area | Japane          | se encep     | ohalitis                   |                 | Varicella    |  |                 | Malaria      |  | Sc              | arlet feve   | r <sup>1</sup>             |
| urcu           | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average§ | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average <sup>§</sup> | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average <sup>§</sup> | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average§ |
| Overall        | 0               | 0            | 0                          | 2,113           | 52,471       | 28,112                                 | 24              | 337          | 298                                    | 298             | 11,755       | 6,050                      |
| Seoul          | 0               | 0            | 0                          | 199             | 5,541        | 2,845                                  | 3               | 41           | 37                                     | 55              | 1,778        | 711                        |
| Busan          | 0               | 0            | 0                          | 107             | 2,922        | 1,881                                  | 0               | 5            | 4                                      | 18              | 1,043        | 426                        |
| Daegu          | 0               | 0            | 0                          | 101             | 2,823        | 1,573                                  | 0               | 7            | 4                                      | 3               | 345          | 269                        |
| Incheon        | 0               | 0            | 0                          | 85              | 2,165        | 1,645                                  | 3               | 46           | 43                                     | 8               | 537          | 276                        |
| Gwangju        | 0               | 0            | 0                          | 101             | 1,802        | 811                                    | 0               | 4            | 2                                      | 28              | 493          | 264                        |
| Daejeon        | 0               | 0            | 0                          | 41              | 1,388        | 763                                    | 0               | 2            | 1                                      | 7               | 364          | 213                        |
| Ulsan          | 0               | 0            | 0                          | 41              | 1,792        | 900                                    | 0               | 1            | 2                                      | 17              | 676          | 226                        |
| Sejong         | 0               | 0            | 0                          | 24              | 799          | 147                                    | 0               | 0            | 1                                      | 2               | 69           | 25                         |
| Gyonggi        | 0               | 0            | 0                          | 633             | 14,723       | 7,996                                  | 13              | 199          | 172                                    | 89              | 3,150        | 1,812                      |
| Gangwon        | 0               | 0            | 0                          | 39              | 1,497        | 1,107                                  | 2               | 9            | 12                                     | 8               | 193          | 96                         |
| Chungbuk       | 0               | 0            | 0                          | 119             | 2,139        | 565                                    | 0               | 1            | 3                                      | 9               | 234          | 105                        |
| Chungnam       | 0               | 0            | 0                          | 51              | 1,654        | 1,168                                  | 0               | 3            | 3                                      | 15              | 410          | 287                        |
| Jeonbuk        | 0               | 0            | 0                          | 75              | 2,313        | 1,254                                  | 0               | 3            | 2                                      | 7               | 596          | 185                        |
| Jeonnam        | 0               | 0            | 0                          | 94              | 1,849        | 1,250                                  | 1               | 4            | 2                                      | 6               | 449          | 220                        |
| Gyeongbuk      | 0               | 0            | 0                          | 125             | 2,443        | 1,283                                  | 0               | 1            | 5                                      | 11              | 513          | 377                        |
| Gyeongnam      | 0               | 0            | 0                          | 181             | 4,508        | 2,221                                  | 2               | 8            | 4                                      | 14              | 810          | 480                        |
| Jeju           | 0               | 0            | 0                          | 97              | 2,113        | 703                                    | 0               | 3            | 1                                      | 1               | 95           | 78                         |

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<sup>†</sup> According to surveillance data, the reported cases may include all of the cases such as confirmed, suspected, and asymptomatic carrier in the group.

<sup>§</sup> Cum. 5-year average is mean value calculated by cumulative counts from 1st week to current week for 5 preceding years.

|                |                 |              |                            | Diseases of Category III |              |  |                 |              |  |                 |              |  |
|----------------|-----------------|--------------|----------------------------|--------------------------|--------------|--|-----------------|--------------|--|-----------------|--------------|--|
| Reporting area | Meningo         | coccal m     | neningitis                 | Le                       | gionellos    | sis                                    | Vibrio          | vulnificus   | sepsis                                 | Mu              | ırine typh   | us                                     |
| u. cu          | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average§ | Current<br>week          | Cum.<br>2018 | Cum.<br>5-year<br>average <sup>§</sup> | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average <sup>§</sup> | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average <sup>§</sup> |
| Overall        | 0               | 10           | 5                          | 7                        | 162          | 39                                     | 2               | 3            | 3                                      | 2               | 9            | 8                                      |
| Seoul          | 0               | 1            | 2                          | 1                        | 40           | 12                                     | 0               | 0            | 0                                      | 0               | 1            | 2                                      |
| Busan          | 0               | 0            | 1                          | 0                        | 13           | 3                                      | 0               | 0            | 0                                      | 0               | 0            | 1                                      |
| Daegu          | 0               | 0            | 0                          | 0                        | 7            | 1                                      | 0               | 0            | 0                                      | 0               | 0            | 0                                      |
| Incheon        | 0               | 3            | 0                          | 1                        | 13           | 3                                      | 0               | 1            | 0                                      | 1               | 2            | 1                                      |
| Gwangju        | 0               | 0            | 0                          | 1                        | 1            | 0                                      | 0               | 0            | 0                                      | 0               | 0            | 1                                      |
| Daejeon        | 0               | 0            | 0                          | 0                        | 3            | 0                                      | 0               | 0            | 0                                      | 0               | 0            | 0                                      |
| Ulsan          | 0               | 0            | 0                          | 0                        | 3            | 1                                      | 0               | 0            | 0                                      | 0               | 0            | 0                                      |
| Sejong         | 0               | 0            | 0                          | 0                        | 0            | 0                                      | 0               | 0            | 0                                      | 0               | 0            | 0                                      |
| Gyonggi        | 0               | 2            | 2                          | 2                        | 35           | 8                                      | 0               | 0            | 1                                      | 0               | 2            | 1                                      |
| Gangwon        | 0               | 0            | 0                          | 1                        | 7            | 2                                      | 0               | 0            | 0                                      | 0               | 0            | 0                                      |
| Chungbuk       | 0               | 0            | 0                          | 0                        | 9            | 1                                      | 0               | 0            | 0                                      | 0               | 0            | 0                                      |
| Chungnam       | 0               | 1            | 0                          | 0                        | 3            | 1                                      | 1               | 1            | 0                                      | 0               | 0            | 1                                      |
| Jeonbuk        | 0               | 0            | 0                          | 0                        | 1            | 1                                      | 0               | 0            | 0                                      | 0               | 0            | 0                                      |
| Jeonnam        | 0               | 0            | 0                          | 0                        | 1            | 1                                      | 1               | 1            | 1                                      | 1               | 1            | 1                                      |
| Gyeongbuk      | 0               | 0            | 0                          | 0                        | 20           | 2                                      | 0               | 0            | 0                                      | 0               | 0            | 0                                      |
| Gyeongnam      | 0               | 3            | 0                          | 1                        | 5            | 2                                      | 0               | 0            | 1                                      | 0               | 3            | 0                                      |
| Jeju           | 0               | 0            | 0                          | 0                        | 1            | 1                                      | 0               | 0            | 0                                      | 0               | 0            | 0                                      |

Cum: Cumulative counts from 1st week to current week in a year \* The reported data for year 2018 are provisional but the data from 2013 to 2017 are finalized data.

<sup>†</sup> According to surveillance data, the reported cases may include all of the cases such as confirmed, suspected, and asymptomatic carrier in the group.

<sup>§</sup> Cum. 5-year average is mean value calculated by cumulative counts from 1st week to current week for 5 preceding years.

|                |                 |              |                            | Diseases of Category III |              |                            |                 |              |                            |                 |                            |                            |
|----------------|-----------------|--------------|----------------------------|--------------------------|--------------|----------------------------|-----------------|--------------|----------------------------|-----------------|----------------------------|----------------------------|
| Reporting area | Sci             | rub typh     | us                         | Le                       | ptospiro     | sis                        | E               | Brucellosis  | 3                          |                 | orrhagic fe<br>renal syndr |                            |
|                | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average§ | Current<br>week          | Cum.<br>2018 | Cum.<br>5-year<br>average§ | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average§ | Current<br>week | Cum.<br>2018               | Cum.<br>5-year<br>average§ |
| Overall        | 78              | 1,171        | 413                        | 6                        | 40           | 16                         | 16              | 41           | 5                          | 18              | 194                        | 136                        |
| Seoul          | 1               | 46           | 19                         | 1                        | 3            | 0                          | 1               | 3            | 1                          | 0               | 9                          | 6                          |
| Busan          | 2               | 35           | 19                         | 0                        | 0            | 1                          | 0               | 1            | 0                          | 0               | 6                          | 3                          |
| Daegu          | 1               | 12           | 6                          | 0                        | 1            | 0                          | 1               | 3            | 1                          | 0               | 2                          | 1                          |
| Incheon        | 1               | 23           | 9                          | 0                        | 0            | 0                          | 2               | 6            | 0                          | 0               | 2                          | 2                          |
| Gwangju        | 0               | 28           | 10                         | 0                        | 1            | 1                          | 0               | 0            | 0                          | 0               | 3                          | 2                          |
| Daejeon        | 6               | 19           | 14                         | 0                        | 0            | 1                          | 1               | 1            | 0                          | 0               | 2                          | 3                          |
| Ulsan          | 3               | 20           | 9                          | 0                        | 1            | 0                          | 0               | 0            | 1                          | 0               | 2                          | 1                          |
| Sejong         | 0               | 3            | 2                          | 0                        | 0            | 0                          | 0               | 1            | 0                          | 0               | 0                          | 0                          |
| Gyonggi        | 7               | 85           | 51                         | 0                        | 5            | 4                          | 2               | 6            | 0                          | 6               | 40                         | 43                         |
| Gangwon        | 4               | 21           | 15                         | 0                        | 1            | 1                          | 0               | 0            | 0                          | 2               | 8                          | 11                         |
| Chungbuk       | 3               | 38           | 5                          | 1                        | 3            | 1                          | 0               | 6            | 0                          | 0               | 12                         | 7                          |
| Chungnam       | 10              | 146          | 32                         | 1                        | 9            | 1                          | 5               | 8            | 0                          | 4               | 31                         | 12                         |
| Jeonbuk        | 12              | 128          | 39                         | 1                        | 2            | 1                          | 2               | 2            | 0                          | 3               | 20                         | 10                         |
| Jeonnam        | 13              | 315          | 83                         | 1                        | 6            | 2                          | 0               | 2            | 0                          | 1               | 23                         | 16                         |
| Gyeongbuk      | 4               | 71           | 30                         | 1                        | 7            | 1                          | 1               | 1            | 1                          | 2               | 25                         | 12                         |
| Gyeongnam      | 10              | 172          | 66                         | 0                        | 1            | 2                          | 1               | 1            | 0                          | 0               | 8                          | 6                          |
| Jeju           | 1               | 9            | 4                          | 0                        | 0            | 0                          | 0               | 0            | 1                          | 0               | 1                          | 1                          |

Cum: Cumulative counts from 1st week to current week in a year \* The reported data for year 2018 are provisional but the data from 2013 to 2017 are finalized data.

<sup>†</sup> According to surveillance data, the reported cases may include all of the cases such as confirmed, suspected, and asymptomatic carrier in the group.

<sup>§</sup> Cum. 5-year average is mean value calculated by cumulative counts from 1st week to current week for 5 preceding years.

Unit: no. of cases<sup>†</sup>

|                |                 |              |                            |                 | Diseases of Category IV |                            |                 |              |  |                 |              |                            |
|----------------|-----------------|--------------|----------------------------|-----------------|-------------------------|----------------------------|-----------------|--------------|--|-----------------|--------------|----------------------------|
| Reporting area |                 | Syphilis     |                            | (               | CJD/vCJD                | )                          | Τι              | uberculosi   | S                                      | De              | ngue fev     | er                         |
|                | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average§ | Current<br>week | Cum.<br>2018            | Cum.<br>5-year<br>average§ | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average <sup>§</sup> | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average§ |
| Overall        | 52              | 1,363        | 650                        | 3               | 40                      | 28                         | 607             | 15,855       | 18,495                                 | 10              | 111          | 103                        |
| Seoul          | 10              | 297          | 129                        | 0               | 13                      | 6                          | 112             | 2,804        | 3,570                                  | 2               | 40           | 33                         |
| Busan          | 4               | 109          | 34                         | 1               | 7                       | 2                          | 47              | 1,067        | 1,369                                  | 0               | 10           | 5                          |
| Daegu          | 2               | 58           | 30                         | 0               | 3                       | 2                          | 22              | 726          | 925                                    | 1               | 6            | 5                          |
| Incheon        | 7               | 113          | 63                         | 0               | 1                       | 1                          | 35              | 823          | 961                                    | 1               | 6            | 4                          |
| Gwangju        | 4               | 58           | 19                         | 0               | 0                       | 1                          | 17              | 406          | 459                                    | 0               | 1            | 1                          |
| Daejeon        | 1               | 39           | 16                         | 0               | 0                       | 0                          | 12              | 353          | 428                                    | 0               | 0            | 4                          |
| Ulsan          | 0               | 15           | 11                         | 0               | 0                       | 0                          | 19              | 347          | 397                                    | 0               | 1            | 1                          |
| Sejong         | 0               | 8            | 2                          | 0               | 0                       | 0                          | 2               | 63           | 48                                     | 0               | 0            | 0                          |
| Gyonggi        | 11              | 371          | 176                        | 1               | 9                       | 6                          | 128             | 3,412        | 3,851                                  | 4               | 33           | 28                         |
| Gangwon        | 1               | 28           | 18                         | 0               | 0                       | 1                          | 21              | 675          | 773                                    | 2               | 3            | 2                          |
| Chungbuk       | 2               | 38           | 14                         | 0               | 0                       | 1                          | 18              | 541          | 556                                    | 0               | 1            | 1                          |
| Chungnam       | 1               | 44           | 22                         | 0               | 0                       | 2                          | 32              | 774          | 816                                    | 0               | 1            | 3                          |
| Jeonbuk        | 2               | 31           | 14                         | 0               | 1                       | 1                          | 28              | 635          | 696                                    | 0               | 1            | 3                          |
| Jeonnam        | 0               | 21           | 19                         | 0               | 0                       | 1                          | 20              | 840          | 921                                    | 0               | 3            | 2                          |
| Gyeongbuk      | 4               | 55           | 25                         | 1               | 4                       | 3                          | 42              | 1,102        | 1,301                                  | 0               | 3            | 3                          |
| Gyeongnam      | 3               | 46           | 39                         | 0               | 2                       | 1                          | 44              | 1,068        | 1,213                                  | 0               | 1            | 6                          |
| Jeju           | 0               | 32           | 19                         | 0               | 0                       | 0                          | 8               | 219          | 211                                    | 0               | 1            | 2                          |

<sup>\*</sup> The reported data for year 2018 are provisional but the data from 2013 to 2017 are finalized data.

<sup>†</sup> According to surveillance data, the reported cases may include all of the cases such as confirmed, suspected, and asymptomatic carrier in the group.

<sup>§</sup> Cum. 5-year average is mean value calculated by cumulative counts from 1st week to current week for 5 preceding years.

|                |                 |              |                            |                 |              | Diseases (                 | of Category     | y IV         |                            |                 | Jilit. 110.  | or cases                   |
|----------------|-----------------|--------------|----------------------------|-----------------|--------------|----------------------------|-----------------|--------------|----------------------------|-----------------|--------------|----------------------------|
| Reporting area |                 | Q fever      |                            | Lym             | e Borreli    | iosis                      |                 | SFTS         |                            | Zika            | virus infe   | ction                      |
|                | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average§ | Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average§ | Current<br>week | Cum.<br>2018 | Cum.<br>3-year<br>average§ | Current<br>week | Cum.<br>2018 | Cum.<br>3-year<br>average§ |
| Overall        | 32              | 226          | 22                         | 15              | 66           | 5                          | 12              | 105          | 32                         | 1               | 3            | -                          |
| Seoul          | 6               | 50           | 2                          | 5               | 29           | 2                          | 0               | 3            | 1                          | 0               | 1            | -                          |
| Busan          | 0               | 5            | 1                          | 0               | 2            | 1                          | 0               | 3            | 0                          | 0               | 0            | -                          |
| Daegu          | 2               | 13           | 1                          | 1               | 2            | 0                          | 0               | 0            | 0                          | 1               | 1            | -                          |
| Incheon        | 2               | 8            | 0                          | 4               | 7            | 0                          | 0               | 0            | 1                          | 0               | 0            | -                          |
| Gwangju        | 0               | 5            | 0                          | 0               | 1            | 0                          | 0               | 0            | 0                          | 0               | 0            | -                          |
| Daejeon        | 2               | 5            | 1                          | 1               | 1            | 0                          | 1               | 1            | 0                          | 0               | 0            | -                          |
| Ulsan          | 3               | 6            | 0                          | 1               | 1            | 0                          | 1               | 2            | 1                          | 0               | 0            | -                          |
| Sejong         | 1               | 2            | 0                          | 0               | 0            | 0                          | 0               | 0            | 0                          | 0               | 0            | -                          |
| Gyonggi        | 5               | 41           | 3                          | 1               | 7            | 1                          | 0               | 11           | 5                          | 0               | 0            | -                          |
| Gangwon        | 0               | 2            | 0                          | 0               | 1            | 0                          | 2               | 17           | 3                          | 0               | 0            | -                          |
| Chungbuk       | 2               | 26           | 5                          | 0               | 1            | 0                          | 0               | 3            | 0                          | 0               | 0            | -                          |
| Chungnam       | 3               | 16           | 3                          | 1               | 5            | 0                          | 2               | 12           | 4                          | 0               | 0            | -                          |
| Jeonbuk        | 2               | 4            | 1                          | 0               | 1            | 0                          | 1               | 9            | 1                          | 0               | 0            | -                          |
| Jeonnam        | 3               | 14           | 1                          | 1               | 1            | 0                          | 2               | 9            | 2                          | 0               | 0            | -                          |
| Gyeongbuk      | 0               | 8            | 1                          | 0               | 3            | 1                          | 2               | 13           | 6                          | 0               | 0            | -                          |
| Gyeongnam      | 1               | 18           | 3                          | 0               | 3            | 0                          | 1               | 16           | 3                          | 0               | 1            | -                          |
| Jeju           | 0               | 3            | 0                          | 0               | 1            | 0                          | 0               | 6            | 5                          | 0               | 0            | -                          |

Cum: Cumulative counts from 1st week to current week in a year \* The reported data for year 2018 are provisional but the data from 2013 to 2017 are finalized data.

<sup>†</sup> According to surveillance data, the reported cases may include all of the cases such as confirmed, suspected, and asymptomatic carrier in the group.

<sup>§</sup> Cum. 5-year average is mean value calculated by cumulative counts from 1st week to current week for 5 preceding years.

# II. Sentinel-Reporting Infectious Diseases

#### 1. Influenza, weeks ending July 21, 2018 (29th Week)

- Weekly proportion of influenza-like illness per 1,000 outpatients: 5.2 cases (=0.52%)
- Variation: increase from 4.2 cases in 28th week
- Sentinel reporting sites: 200 hospitals/clinics
   2017-2018 outbreak standard: 6.6 cases (/1,000)

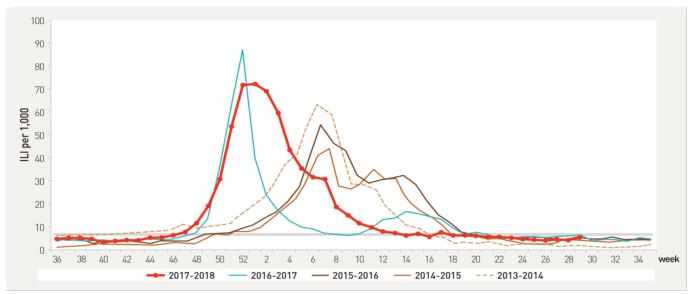


Figure 1. Weekly proportion of influenza-like illness per 1,000 outpatients, 2013-2014 to 2017-2018 flu seasons

## 2. Hand, Foot and Mouth Disease (HFMD), weeks ending July 21, 2018 (29th Week)

- Weekly proportion of hand, foot and mouth disease (HFMD) per 1,000 outpatients: 33.5 cases
- Variation: increase from 30.7 cases in 28th week
- Sentinel reporting sites: 95 hospitals/clinics

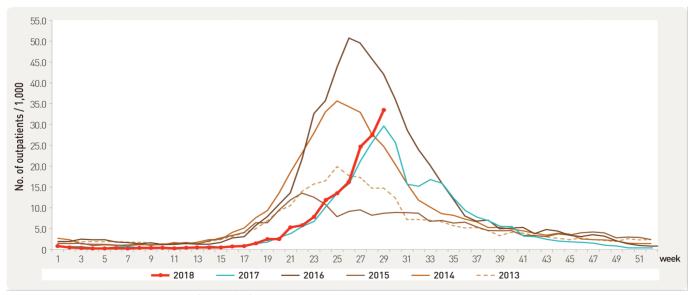


Figure 2. Weekly proportion of hand, foot and mouth per 1,000 outpatients, 2013-2017

#### 3. Ophthalmologic infectious diseases, weeks ending July 21, 2018 (29th Week)

- Weekly proportion of epidemic keratoconjunctivitis per 1,000 outpatients: 27.3 cases
- Variation: increase from 22.3 cases in 28th week
- Sentinel reporting sites: 92 hospitals/clinics

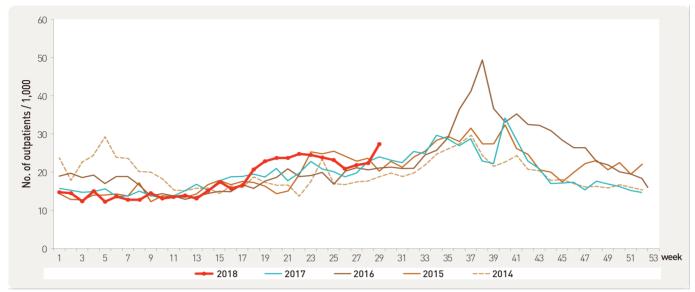


Figure 3. Weekly proportion of epidemic keratoconjunctivitis per 1,000 outpatients, 2014-2018

- Weekly proportion of acute hemorrhagic conjunctivitis per 1,000 outpatients: 0.8 case
- Variation: decrease from 1.0 case in 28th week
- Sentinel reporting sites: 92 hospitals/clinics

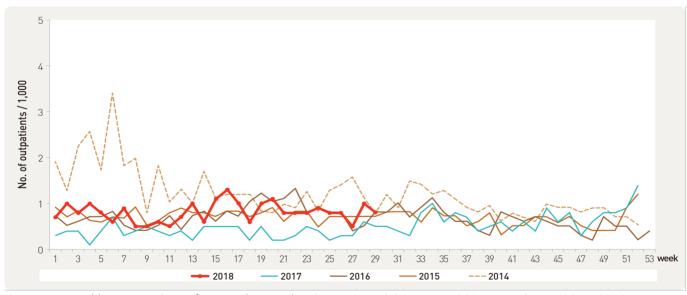


Figure 4. Weekly proportion of acute hemorrhagic conjunctivitis per 1,000 outpatients, 2014-2018

## 4. Sexually Transmitted Diseases<sup>†</sup>, weeks ending July 21, 2018 (29th Week)

- Cases per sentinel: 3.5 for genital herpes, 2.3 for condyloma acuminata, 2.0 for chlamydia, 1.4 for gonorrhea
- Variation from 28<sup>th</sup> week Increase: chlamydia (1.8  $\rightarrow$  2.0), genital herpes (2.8  $\rightarrow$  3.5), condyloma acuminata (2.2  $\rightarrow$  2.3) No change: gonorrhea  $(1.4 \rightarrow 1.4)$
- Sentinel reporting sites: 580 hospitals/clinics \*\* No. of reported sites in 29<sup>th</sup> week: 15 for gonorrhea, 53 for chlamydia, 41 for genital herpes, 24 for condyloma acuminata

| L    | Init: n | o. of | cases/sentinels |
|------|---------|-------|-----------------|
| Co   | ondyl   | oma   | acuminata       |
| <br> |         |       | Cum             |

|                 | Gonorrhe     | ea                         |                 | Chlamydi     | ia                         | Gei             | nital her    | pes                        | Condylo         | oma acı      | uminata                    |
|-----------------|--------------|----------------------------|-----------------|--------------|----------------------------|-----------------|--------------|----------------------------|-----------------|--------------|----------------------------|
| Current<br>week | Cum.<br>2018 | Cum.<br>5-year<br>average§ |
| 1.4             | 5.5          | 7.0                        | 2.0             | 19.2         | 16.4                       | 3.5             | 25.4         | 18.7                       | 2.3             | 15.0         | 11.4                       |

Cum: Cumulative counts from 1st week to current week in a year

#### III. Waterborne and Foodborne Infectious Diseases

#### 1. Waterborne and foodborne disease outbreaks, weeks ending July 21, 2018 (29th Week)

- No. of reported outbreaks: 19 with 378 patients (cumulative no. of outbreaks: 340 with 5,596 patients)
- Variation: increase from 13 in 28<sup>th</sup> week
- · Reporting sites: 254 health centers

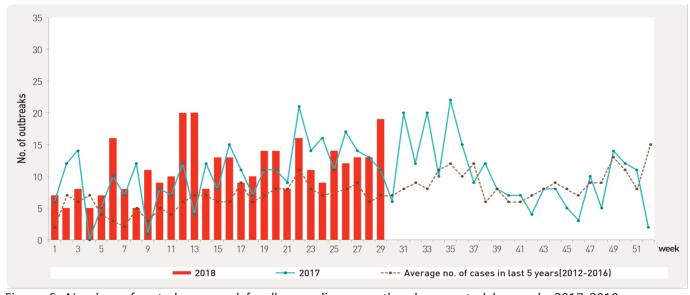


Figure 5. Number of waterborne and foodborne disease outbreaks reported by week, 2017-2018

<sup>†</sup> According to surveillance data, the reported cases may include all of the cases such as confirmed, suspected, and asymptomatic carrier in the group.

<sup>§</sup> Cum. 5-year average is mean value calculated by cumulative counts from 1st week to current week for 5 preceding years.

#### IV. Laboratory-based Pathogen Surveillance: Influenza and Respiratory Viruses

#### 1. Influenza viruses, Republic of Korea, weeks ending July 21, 2018 (29th Week)

- Weekly reported number of specimens positive for influenza: 2 cases (1.2%) / 166 specimens [influenza subtype: A(H1N1)pdm09 2 cases, A(H3N2) 0 case, B 0 case]
- Variation(%p): increase from 0 case (0.0%) / 191 specimens in 28th week
- Sentinel reporting sites: 52 hospitals/clinics

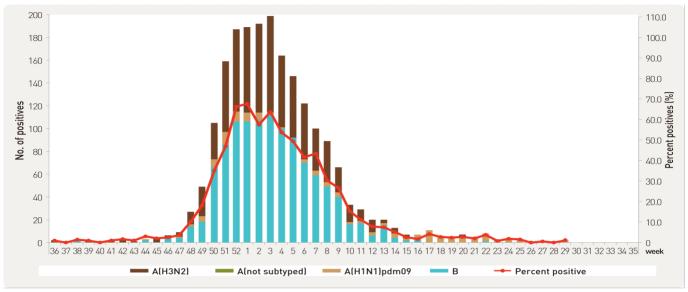


Figure 6. Number of specimens positive for influenza by subtype, 2016-2017 to 2017-2018 flu season

## 2. Respiratory viruses, weeks ending July 21, 2018 (29th Week)

- Detection rate: 52.4% (cumulative mean proportion during preceding three weeks plus current week: 53.9% out of 731 specimens)
- Variation(%p): increase from 48.2% in 28th week
- Sentinel reporting sites: 17 city/provincial health and environmental institutes and 52 hospitals/clinics

| 2018<br>(week)         | Weekly<br>total |                    | Detection rate (%) |      |      |      |      |      |      |      |  |  |
|------------------------|-----------------|--------------------|--------------------|------|------|------|------|------|------|------|--|--|
|                        | No. of samples  | Detection rate (%) | HAdV               | HPIV | HRSV | IFV  | HCoV | HRV  | HBoV | HMPV |  |  |
| 26                     | 200             | 56.5               | 4.5                | 15.5 | 0.5  | 0.0  | 0.0  | 25.0 | 7.5  | 3.5  |  |  |
| 27                     | 174             | 58.6               | 5.2                | 12.6 | 1.1  | 0.6  | 0.6  | 20.1 | 13.2 | 5.2  |  |  |
| 28                     | 191             | 48.2               | 5.2                | 13.1 | 0.0  | 0.0  | 0.5  | 18.8 | 6.8  | 3.7  |  |  |
| 29                     | 166             | 52.4               | 6.0                | 13.3 | 1.8  | 1.2  | 1.2  | 23.5 | 3.6  | 1.8  |  |  |
| Cum.**                 | 731             | 53.9               | 5.2                | 13.7 | 0.8  | 0.4  | 0.5  | 21.9 | 7.8  | 3.6  |  |  |
| 2017 Cum. <sup>∀</sup> | 11,915          | 56.6               | 3.7                | 6.3  | 4.6  | 10.9 | 4.4  | 19.4 | 2.0  | 5.3  |  |  |

<sup>-</sup> HAdV: human Adenovirus, HPIV: human Parainfluenza virus, HRSV: human Respiratory syncytial virus, IFV: Influenza virus,

HCoV: human Coronavirus, HRV: human Rhinovirus, HBoV: human Bocavirus, HMPV: human Metapneumovirus

X Cum.: the rate of detected cases between June 24. 2018. – July 21. 2018, (Average No. of detected cases is 183 in last 4 weeks)

 $<sup>\</sup>forall\ 2017\ \text{Cum.}$  : the rate of detected cases between January 01. 2017. - December 30. 2017.

## V. Laboratory-based Pathogen Surveillance: Acute Gastroenteritis Viruses/Bacteria

#### 1. Acute gastroenteritis-causing virus, weeks ending July 14, 2018 (28th Week)

- Detection rate: 20.0% [cumulative mean proportion in 2018: 592 cases (30.0%) out of 1,974 specimens]
- Variation(%P): increase from 11.1% in 27<sup>th</sup> week of 2018
- Sentinel reporting sites: 17 city/provincial health and environmental institutes and 70 hospitals/clinics

|              |    | No. of | No. of detection (Detection rate, %) |        |           |        |                       |       |            |       |       |        |  |
|--------------|----|--------|--------------------------------------|--------|-----------|--------|-----------------------|-------|------------|-------|-------|--------|--|
| Week         |    | sample | Group A<br>Rotavirus                 |        | Norovirus |        | Enteric<br>Adenovirus |       | Astrovirus |       | Total |        |  |
| 2018         | 25 | 97     | 7                                    | (7.2)  | 11        | (11.3) | 3                     | (3.1) | 2          | (2.1) | 23    | (23.7) |  |
|              | 26 | 74     | 2                                    | (2.7)  | 11        | (14.9) | 4                     | (5.4) | 0          | (0.0) | 17    | (23.0) |  |
|              | 27 | 81     | 1                                    | (1.2)  | 4         | (4.9)  | 4                     | (4.9) | 0          | (0.0) | 9     | (11.1) |  |
|              | 28 | 50     | 0                                    | (0.0)  | 6         | (12.0) | 1                     | (2.0) | 3          | (6.0) | 10    | (20.0) |  |
| Cum.<br>2018 |    | 1,974  | 210                                  | (10.6) | 287       | (14.5) | 62                    | (3.1) | 33         | (1.7) | 592   | (30.0) |  |

<sup>\*</sup> The samples were collected from children ≤5 years of sporadic acute gastroenteritis in Korea.

## 2. Acute gastroenteritis-causing bacteria, weeks ending July 14, 2018 (28th Week)

- Detection rate: 26.7% [cumulative mean proportion in 2018: 566 cases (11.1%) out of 5,095 specimens]
- Variation(%P): increase from 18.3% in 27<sup>th</sup> week of 2018
- Sentinel reporting sites: 17 city/provincial health and environmental institutes and 70 hospitals/clinics

| Week |           | No. of<br>Sample | No. of isolation (Isolation rate, %) |                              |               |                        |             |                            |             |             |             |               |  |
|------|-----------|------------------|--------------------------------------|------------------------------|---------------|------------------------|-------------|----------------------------|-------------|-------------|-------------|---------------|--|
|      |           |                  | Salmonell a spp.                     | Pathogeni<br>c <i>E.coli</i> | Shigella spp. | V.parahae<br>molyticus | V. cholerae | <i>Campylob</i> acter spp. | , ,         | S. aureus   | B. cereus   | Total         |  |
| 2018 | 25        | 182              | 16<br>(8.8)                          | 15<br>(8.2)                  | 0<br>(0)      | 0<br>(0)               | 0 (0)       | 3<br>(1.6)                 | 3<br>(1.6)  | 7<br>(3.8)  | 4<br>(2.2)  | 48<br>(26.4)  |  |
|      | 26        | 201              | 8<br>(4.0)                           | 13<br>(6.5)                  | 0 (0)         | 0 (0)                  | 0 (0)       | 3<br>(1.5)                 | 1<br>(0.5)  | 11<br>(5.5) | 4<br>(2.0)  | 40<br>(19.9)  |  |
|      | 27        | 213              | 8<br>(3.8)                           | 12<br>(5.6)                  | 0 (0)         | 1<br>(0.5)             | 0 (0)       | 5<br>(2.3)                 | 3<br>(1.4)  | 2<br>(0.9)  | 8<br>(3.8)  | 39<br>(18.3)  |  |
|      | 28        | 191              | 10<br>(5.2)                          | 19<br>(9.9)                  | 0 (0)         | 0 (0)                  | 0 (0)       | 8<br>(4.2)                 | 2 (1.0)     | 6<br>(3.1)  | 6<br>(3.1)  | 51<br>(26.7)  |  |
|      | ım.<br>18 | 5,095            | 123<br>(2.4)                         | 163<br>(3.2)                 | 2 (0.04)      | 3 (0.1)                | 0 (0)       | 41<br>(0.8)                | 60<br>(1.2) | 87<br>(1.7) | 83<br>(1.6) | 566<br>(11.1) |  |

<sup>\*</sup> Bacterial Pathogens : Salmonella spp., E. coli (EHEC, ETEC, EPEC, EIEC), Shigella spp., Vibrio parahaemolyticus, Vibrio cholerae, Campylobacter spp.,

Clostridium perfringens, Staphylococcus aureus, Bacillus cereus, Listeria monocytogenes, Yersinia enterocolitica.

<sup>\*</sup> Hospitals participating in Laboratory surveillance in 2018 (70 hospitals)

## VI. Laboratory-based Pathogen Surveillance: Enterovirus

#### 1. Enterovirus, weeks ending July 14, 2018 (28th Week)

- Detection rate: 57.0% (53 cases / 93 specimens) [cumulative mean proportion in 2018: 25.4% (241 cases / 950 specimens)]
  - Aseptic meningitis: 9 cases (Cum. 2018: 52 cases)
  - HFMD and herpangina: 25 cases (Cum. 2018: 129 cases)
  - HFMD with complications: 3 cases (Cum. 2018: 4 cases)
  - Other: 16 cases (Cum. 2018: 56 cases)
- Variation(%P): increase from 48.4% in 27<sup>th</sup> week of 2018
- Sentinel reporting sites: 8 city/provincial health and environmental institutes and 63 hospitals/clinics

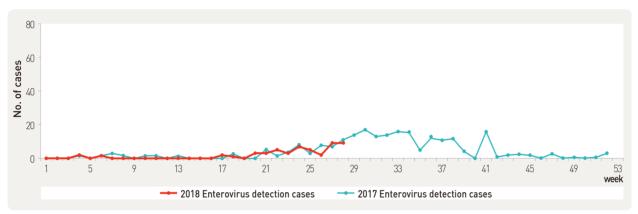


Figure 7. Detection of enterovirus in aseptic meningitis patients from 2017 to 2018

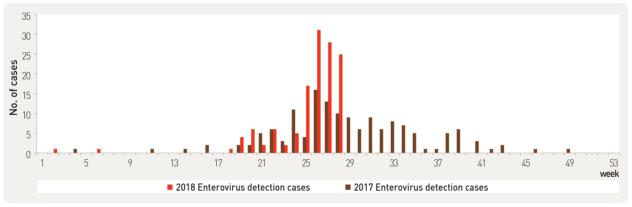


Figure 8. Detection of enterovirus in HFMD and herpangina patients from 2017 to 2018

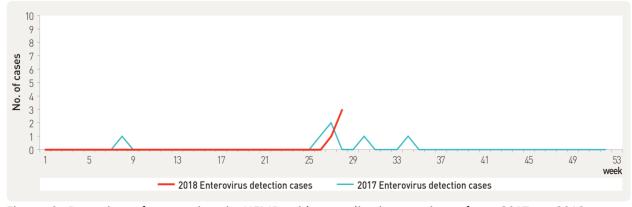


Figure 9. Detection of enterovirus in HFMD with complications patients from 2017 to 2018

## VII. Vector Surveillance: Malaria Vector Mosquitoes

#### 1. Malaria vector mosquitoes, weeks ending July 14, 2018 (28th Week)

- No. of malaria vector mosquitoes: 3
- Variation: decrease from 5 in 27th week of 2018
- Sentinel reporting sites: 3 city/province (20 sites)

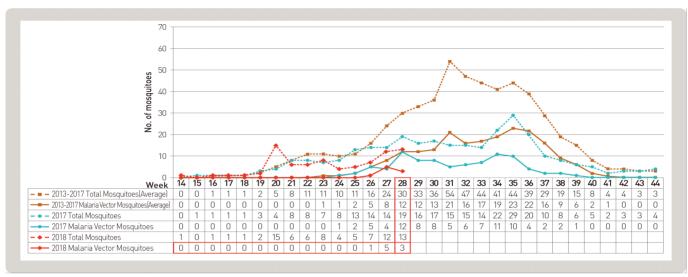


Figure 10. Weekly incidences of malaria vector mosquitoes in 2018

## VIII. Vector Surveillance: Japanese encephalitis vector Mosquitoes

## 1. Japanese encephalitis vector mosquitoes, weeks ending July 14, 2018 (28th Week)

- No. of Japanese encephalitis vector mosquitoes: 8
   X JEV: Japanese encephalitis vector
- Variation: increase from 5 in 27th week of 2018
- Sentinel reporting sites: 10 city/provincial health and environmental institutes (10 sites)

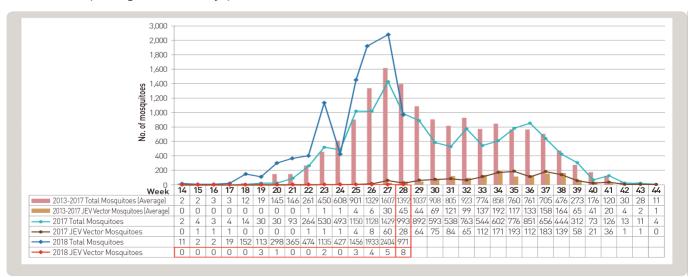


Figure 11. Weekly incidences of Japanese encephalitis vector mosquitoes in 2018

#### **About PHWR Disease Surveillance Statistics**

The Public Health Weekly Report (PHWR) Disease Surveillance Statistics is prepared by the Korea Centers for Disease Control and Prevention (Korea CDC). These provisional surveillance data on the reported occurrence of national notifiable diseases and conditions are compiled through population-based or sentinel-based surveillance systems and published weekly, except for data on infrequent or recently-designated diseases. These surveillance statistics are informative for analyzing infectious disease or condition numbers and trends. However, the completeness of data might be influenced by some factors such as a date of symptom or disease onset, diagnosis, laboratory result, reporting of a case to a jurisdiction, or notification to Korea Centers for Disease Control and Prevention. The official and final disease statistics are published in infectious disease surveillance yearbook annually.

#### Using and Interpreting These Data in Tables

- Current Week The number of cases under current week denotes cases who have been reported to Korea CDC at the central level via corresponding jurisdictions(health centers, and health departments) during that week and accepted/approved by surveillance staff.
- Cum. 2018 For the current year, it denotes the cumulative(Cum) year-to-date provisional counts for the specified condition.
- 5-year weekly average The 5-year weekly average is calculated by summing, for the 5 proceeding years, the provisional incidence counts for the current week, the two weeks preceding the current week, and the two weeks following the current week. The total sum of cases is then divided by 25 weeks. It gives help to discern the statistical aberration of the specified disease incidence by comparing difference between counts under current week and 5-year weekly average.

#### For example,

|      |      | Week Number |     |         |     |     |  |  |  |  |  |
|------|------|-------------|-----|---------|-----|-----|--|--|--|--|--|
|      |      | 10          | 11  | 12      | 13  | 14  |  |  |  |  |  |
| Year | 2018 |             |     | Current |     |     |  |  |  |  |  |
| rear | 2018 |             |     | week    |     |     |  |  |  |  |  |
|      | 2017 | X1          | X2  | Х3      | X4  | X5  |  |  |  |  |  |
|      | 2016 | X6          | X7  | X8      | X9  | X10 |  |  |  |  |  |
|      | 2015 | X11         | X12 | X13     | X14 | X15 |  |  |  |  |  |
|      | 2014 | X16         | X17 | X18     | X19 | X20 |  |  |  |  |  |
|      | 2013 | X21         | X22 | X23     | X24 | X25 |  |  |  |  |  |

#### 5-year weekly average for current week

$$= (X1 + X2 + ... + X25) / 25$$

• Cum. 5-year average – Mean value calculated by cumulative counts from 1<sup>st</sup> week to current week for 5 preceding years. It gives help to understand the increasing or decreasing pattern of the specific disease incidence by comparing difference between cum. 2018 and cum. 5-year average.

#### **Contact Us**

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