

## I. National Notifiable Infectious Diseases

## 1. Reported cases, week ending April 20, 2019 (16th Week)\*

Unit: no. of cases<sup>†</sup>

Classification of disease <sup>†</sup>		Current week	Cum. 2019	5-year weekly average	Total no. of cases by year					Imported cases of current week : Country (no. of cases)
					2018	2017	2016	2015	2014	
Category I										
Cholera		0	0	0	2	5	4	0	0	Laos(2), Thailand(1) Vietnam(1), Cambodia(1)
Typhoid fever		11	62	4	214	128	121	121	251	
Paratyphoid fever		5	16	1	47	73	56	44	37	
Shigellosis		0	25	1	191	111	113	88	110	
EHEC		2	18	2	121	138	104	71	111	
Viral hepatitis A		404	3,373	83	2,437	4,419	4,679	1,804	1,307	
Category II										
Pertussis		15	161	3	980	318	129	205	88	Philippines(1)
Tetanus		2	13	0	31	34	24	22	23	
Measles		115	466	4	15	7	18	7	442	
Mumps		404	4,523	454	19,236	16,924	17,057	23,448	25,286	
Rubella		4	14	0	0	7	11	11	11	
Viral hepatitis B (Acute)		8	118	6	392	391	359	155	173	
Japanese encephalitis		0	0	0	17	9	28	40	26	
Varicella		1,443	24,981	1,165	96,467	80,092	54,060	46,330	44,450	
<i>Haemophilus influenza</i> type b		0	0	0	2	3	0	0	0	
<i>Streptococcus pneumoniae</i>		12	184	10	670	523	441	228	36	
Category III										
Malaria		0	19	5	576	515	673	699	638	Kazakhstan(1)
Scarlet fever <sup>§</sup>		187	2,640	334	15,777	22,838	11,911	7,002	5,809	
Meningococcal meningitis		0	5	0	14	17	6	6	5	
Legionellosis		4	102	2	305	198	128	45	30	
<i>Vibrio vulnificus</i> sepsis		0	0	0	47	46	56	37	61	
Murine typhus		0	1	0	16	18	18	15	9	
Scrub typhus		33	215	20	6,682	10,528	11,105	9,513	8,130	
Leptospirosis		3	22	0	118	103	117	104	58	
Brucellosis		7	68	0	5	6	4	5	8	
Rabies		0	0	0	0	0	0	0	0	
HFRS		12	73	4	434	531	575	384	344	
Syphilis		39	566	29	2,280	2,148	1,569	1,006	1,015	
CJD/vCJD		4	50	1	50	36	42	33	65	
Tuberculosis		602	8,000	620	26,433	28,161	30,892	32,181	34,869	
HIV/AIDS		19	236	18	989	1,009	1,062	1,018	1,081	
Viral hepatitis C		187	3,050	-	10,974	6,396	-	-	-	
VRSA		0	0	-	0	0	-	-	-	
CRE		208	3,848	-	11,911	5,716	-	-	-	

# 1. (Continued) Reported cases, week ending April 20, 2019 (16th Week)\*

Unit: no. of cases<sup>†</sup>

Classification of disease <sup>‡</sup>	Current week	Cum. 2019	5-year weekly average	Total no. of cases by year					Imported cases of current week : Country (no. of cases)
				2018	2017	2016	2015	2014	
Category IV									
Dengue fever	7	61	3	159	171	313	255	165	Philippines(3), Ghana(1), Nepal(1), Bangladesh(1), Vietnam(1)
Q fever	27	165	1	163	96	81	27	8	
West Nile fever	0	0	0	0	0	0	0	0	
Lyme Borreliosis	8	32	0	23	31	27	9	13	
Melioidosis	0	1	0	2	2	4	4	2	
Chikungunya fever	2	6	0	3	5	10	2	1	Nepal(1), Bangladesh(1)
SFTS	0	0	1	259	272	165	79	55	
MERS	0	0	-	1	0	0	185	-	
Zika virus infection	1	9	-	3	11	16	-	-	Thailand(1)

Abbreviation: EHEC= Enterohemorrhagic *Escherichia coli*, HFRS= Hemorrhagic fever with renal syndrome, CJD/vCJD= Creutzfeldt-Jacob Disease / variant Creutzfeldt-Jacob Disease, VRSA = Vancomycin-resistant *Staphylococcus aureus*, CRE = Carbapenem-resistant Enterobacteriaceae, SFTS = Severe fever with thrombocytopenia syndrome, MERS-CoV= Middle East Respiratory Syndrome Coronavirus.

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

\* The reported data for year 2018-2019 are provisional but the data from 2014 to 2017 were finalized.

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

‡ 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.

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

## 2. Reported cases by geography, week ending April 20, 2019 (16th Week)\*

Unit: no. of cases†

Reporting area	Diseases of Category I											
	Cholera			Typhoid fever			Paratyphoid fever			Shigellosis		
	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§
Overall	0	0	0	11	62	65	5	16	13	0	25	47
Seoul	0	0	0	5	17	12	1	2	3	0	8	9
Busan	0	0	0	0	6	4	0	2	2	0	0	4
Daegu	0	0	0	0	1	2	0	1	0	0	1	4
Incheon	0	0	0	2	4	5	0	1	1	0	2	7
Gwangju	0	0	0	0	0	2	1	1	0	0	2	1
Daejeon	0	0	0	0	4	3	0	1	0	0	0	1
Ulsan	0	0	0	0	3	1	0	1	0	0	1	0
Sejong	0	0	0	0	0	1	0	0	0	0	0	0
Gyeonggi	0	0	0	2	15	12	1	3	3	0	6	8
Gangwon	0	0	0	0	0	2	0	0	0	0	0	1
Chungbuk	0	0	0	0	1	2	0	0	1	0	1	1
Chungnam	0	0	0	0	3	3	0	0	0	0	0	1
Jeonbuk	0	0	0	0	1	1	0	0	1	0	0	2
Jeonnam	0	0	0	0	1	3	2	2	1	0	3	2
Gyeongbuk	0	0	0	1	3	3	0	0	1	0	0	4
Gyeongnam	0	0	0	1	3	8	0	2	0	0	1	1
Jeju	0	0	0	0	0	1	0	0	0	0	0	1

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

\* The reported data for year 2018-2019 are provisional but the data from 2014 to 2017 were finalized.

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

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

## 2. (Continued) Reported cases by geography, week ending April 20, 2019 (16th Week)\*

Unit: no. of cases†

Reporting area	Diseases of Category I						Diseases of Category II					
	Enterohemorrhagic <i>Escherichia coli</i>			Viral hepatitis A			Pertussis			Tetanus		
	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§
Overall	2	18	12	404	3,373	1,112	15	161	60	2	13	5
Seoul	0	5	2	71	541	212	2	23	13	0	1	0
Busan	0	1	0	7	87	54	0	5	3	0	1	1
Daegu	0	0	2	2	25	27	0	10	1	1	2	0
Incheon	0	2	0	23	199	91	0	9	6	0	0	0
Gwangju	1	1	2	2	35	29	0	6	4	0	2	0
Daejeon	0	0	0	56	593	48	1	6	1	0	1	0
Ulsan	0	0	0	1	13	12	0	4	1	0	1	0
Sejong	0	0	0	11	79	8	0	6	1	0	0	0
Gyeonggi	0	3	2	142	985	325	1	15	9	0	1	1
Gangwon	0	1	1	5	61	23	0	1	1	0	1	0
Chungbuk	0	0	0	23	206	30	1	6	2	0	1	0
Chungnam	0	0	0	38	291	78	4	8	2	0	0	0
Jeonbuk	0	0	0	12	87	52	0	5	2	0	0	0
Jeonnam	0	1	0	3	31	48	1	10	3	1	1	1
Gyeongbuk	0	0	1	1	60	26	1	20	5	0	1	1
Gyeongnam	0	2	1	5	66	41	4	26	5	0	0	1
Jeju	1	2	1	2	14	8	0	1	1	0	0	0

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

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

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

## 2. (Continued) Reported cases by geography, week ending April 20, 2019 (16th Week)\*

Unit: no. of cases†

Reporting area	Diseases of Category II											
	Measles			Mumps			Rubella			Viral hepatitis B (Acute)		
	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§
Overall	115	466	34	404	4,523	5,506	4	14	5	8	118	89
Seoul	4	37	4	45	555	526	0	0	1	3	18	14
Busan	3	22	1	24	287	403	0	2	1	0	12	7
Daegu	0	28	0	22	171	172	0	1	0	0	3	2
Incheon	1	10	3	28	221	215	1	2	0	0	5	5
Gwangju	0	1	0	16	152	399	0	0	0	0	0	2
Daejeon	64	117	3	18	149	130	0	1	0	0	3	3
Ulsan	0	2	0	12	181	169	0	0	0	0	2	3
Sejong	13	14	0	5	29	19	0	0	0	0	0	0
Gyeonggi	21	161	13	99	1,240	1,283	1	2	2	3	33	23
Gangwon	1	10	0	12	138	194	0	0	0	0	4	2
Chungbuk	0	7	1	7	148	104	0	0	0	1	6	3
Chungnam	4	6	2	18	200	211	0	0	0	0	8	4
Jeonbuk	2	9	0	15	212	520	0	2	0	0	3	6
Jeonnam	1	9	6	19	176	315	0	1	0	1	6	3
Gyeongbuk	1	25	1	16	231	232	2	3	1	0	8	5
Gyeongnam	0	5	0	37	356	542	0	0	0	0	5	7
Jeju	0	3	0	11	77	72	0	0	0	0	2	0

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

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

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

## 2. (Continued) Reported cases by geography, week ending April 20, 2019 (16th Week)\*

Unit: no. of cases†

Reporting area	Diseases of Category II						Diseases of Category III					
	Japanese encephalitis			Varicella			Malaria			Scarlet fever‡		
	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§
Overall	0	0	0	1,443	24,981	17,077	0	19	37	187	2,640	4,461
Seoul	0	0	0	174	2,733	1,823	0	5	8	29	443	570
Busan	0	0	0	60	1,362	1,131	0	1	1	11	163	366
Daegu	0	0	0	82	1,180	953	0	0	1	6	71	166
Incheon	0	0	0	77	1,291	921	0	2	4	11	141	195
Gwangju	0	0	0	39	1,191	466	0	0	1	12	164	196
Daejeon	0	0	0	48	470	506	0	1	0	1	96	155
Ulsan	0	0	0	39	528	556	0	1	1	11	117	200
Sejong	0	0	0	15	251	127	0	0	0	2	15	19
Gyeonggi	0	0	0	398	6,867	4,837	0	6	17	45	733	1,250
Gangwon	0	0	0	36	476	547	0	0	2	5	50	60
Chungbuk	0	0	0	21	501	383	0	1	0	2	49	74
Chungnam	0	0	0	65	951	682	0	0	1	6	132	202
Jeonbuk	0	0	0	30	998	749	0	0	1	11	92	168
Jeonnam	0	0	0	35	1,043	755	0	0	0	6	86	175
Gyeongbuk	0	0	0	102	1,664	821	0	0	0	6	101	248
Gyeongnam	0	0	0	205	2,955	1,334	0	2	0	22	168	359
Jeju	0	0	0	17	520	486	0	0	0	1	19	58

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

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

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

## 2. (Continued) Reported cases by geography, week ending April 20, 2019 (16th Week)\*

Unit: no. of cases†

Reporting area	Diseases of Category III											
	Meningococcal meningitis			Legionellosis			<i>Vibrio vulnificus</i> sepsis			Murine typhus		
	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§
Overall	0	5	3	4	102	39	0	0	0	0	1	1
Seoul	0	1	1	1	30	12	0	0	0	0	0	0
Busan	0	0	0	0	4	3	0	0	0	0	0	0
Daegu	0	0	0	0	3	2	0	0	0	0	0	0
Incheon	0	0	0	0	6	3	0	0	0	0	0	0
Gwangju	0	0	0	0	0	0	0	0	0	0	0	0
Daejeon	0	0	0	0	1	1	0	0	0	0	0	0
Ulsan	0	0	0	0	1	1	0	0	0	0	0	0
Sejong	0	0	0	0	0	0	0	0	0	0	0	0
Gyeonggi	0	2	1	3	29	8	0	0	0	0	0	0
Gangwon	0	2	0	0	4	2	0	0	0	0	0	0
Chungbuk	0	0	0	0	4	1	0	0	0	0	0	0
Chungnam	0	0	0	0	3	1	0	0	0	0	0	1
Jeonbuk	0	0	0	0	0	1	0	0	0	0	0	0
Jeonnam	0	0	0	0	3	0	0	0	0	0	0	0
Gyeongbuk	0	0	0	0	8	3	0	0	0	0	0	0
Gyeongnam	0	0	1	0	5	1	0	0	0	0	0	0
Jeju	0	0	0	0	1	0	0	0	0	0	1	0

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

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

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

## 2. (Continued) Reported cases by geography, week ending April 20, 2019 (16th Week)\*

Unit: no. of cases†

Reporting area	Diseases of Category III											
	Scrub typhus			Leptospirosis			Brucellosis			Hemorrhagic fever with renal syndrome		
	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§
Overall	33	215	213	3	22	10	7	68	0	12	73	65
Seoul	1	9	12	0	4	0	0	6	0	0	3	4
Busan	1	7	10	0	0	1	0	5	0	1	2	1
Daegu	0	0	3	0	1	0	0	1	0	0	1	0
Incheon	0	9	6	0	0	0	0	6	0	0	1	1
Gwangju	1	3	3	0	1	0	0	0	0	0	0	1
Daejeon	1	3	5	0	0	0	0	2	0	0	0	1
Ulsan	1	7	6	0	0	0	0	2	0	0	0	0
Sejong	0	1	1	0	0	0	0	0	0	0	0	0
Gyeonggi	5	18	20	2	10	2	2	19	0	4	16	22
Gangwon	0	3	6	0	0	1	0	0	0	0	2	4
Chungbuk	0	4	4	0	1	0	1	10	0	1	2	3
Chungnam	3	21	18	0	3	1	0	4	0	0	8	6
Jeonbuk	2	16	16	0	0	1	0	0	0	2	15	5
Jeonnam	5	46	49	0	0	2	0	3	0	3	12	6
Gyeongbuk	4	11	15	0	0	1	2	3	0	0	7	7
Gyeongnam	6	46	35	1	2	1	2	6	0	0	3	3
Jeju	3	11	4	0	0	0	0	1	0	1	1	1

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

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

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



## 2. (Continued) Reported cases by geography, week ending April 20, 2019 (16th Week)\*

Unit: no. of cases†

Reporting area	Diseases of Category III									Diseases of Category IV		
	Syphilis			CJD/vCJD			Tuberculosis			Dengue fever		
	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§
Overall	39	566	471	4	50	13	602	8,000	9,349	7	61	55
Seoul	7	119	103	0	9	3	119	1,414	1,767	1	15	17
Busan	7	54	28	1	5	1	47	563	672	0	2	3
Daegu	2	24	21	0	0	1	27	347	466	0	3	3
Incheon	2	46	40	0	2	1	35	439	489	0	5	2
Gwangju	2	11	17	0	0	0	15	209	240	0	1	1
Daejeon	1	22	12	1	1	0	15	169	223	0	0	2
Ulsan	0	5	6	1	3	0	13	150	187	2	3	1
Sejong	0	1	2	0	1	0	3	26	30	0	0	0
Gyeonggi	8	136	128	0	13	4	128	1,749	1,944	2	15	16
Gangwon	0	18	12	0	2	0	23	334	415	0	4	1
Chungbuk	1	16	10	0	1	1	11	238	285	1	5	1
Chungnam	0	22	17	0	1	1	34	368	423	0	2	2
Jeonbuk	1	19	10	0	3	0	16	289	364	1	2	0
Jeonnam	1	7	13	1	2	0	25	438	464	0	2	1
Gyeongbuk	2	32	18	0	5	1	44	603	659	0	0	2
Gyeongnam	5	26	20	0	2	0	38	543	611	0	1	3
Jeju	0	8	14	0	0	0	9	121	110	0	1	0

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

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

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

## 2. (Continued) Reported cases by geography, week ending April 20, 2019 (16th Week)\*

Unit: no. of cases†

Reporting area	Diseases of Category IV											
	Q fever			Lyme Borreliosis			SFTS			Zika virus infection		
	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§
Overall	27	165	18	8	32	1	0	0	1	1	9	-
Seoul	8	27	2	3	15	1	0	0	0	0	2	-
Busan	0	10	0	0	2	0	0	0	0	0	1	-
Daegu	0	2	0	0	1	0	0	0	0	0	0	-
Incheon	0	11	0	1	3	0	0	0	0	0	1	-
Gwangju	2	3	1	2	2	0	0	0	0	0	0	-
Daejeon	0	3	0	0	0	0	0	0	0	0	0	-
Ulsan	0	4	1	1	2	0	0	0	0	0	0	-
Sejong	0	0	0	0	0	0	0	0	0	0	0	-
Gyeonggi	2	28	3	0	3	0	0	0	0	1	5	-
Gangwon	0	1	0	0	0	0	0	0	0	0	0	-
Chungbuk	2	19	4	0	0	0	0	0	0	0	0	-
Chungnam	2	11	2	0	1	0	0	0	0	0	0	-
Jeonbuk	1	14	0	0	0	0	0	0	0	0	0	-
Jeonnam	2	15	1	1	2	0	0	0	0	0	0	-
Gyeongbuk	4	7	1	0	0	0	0	0	0	0	0	-
Gyeongnam	4	9	3	0	1	0	0	0	0	0	0	-
Jeju	0	1	0	0	0	0	0	0	1	0	0	-

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

\* The reported data for year 2018-2019 are provisional but the data from 2014 to 2017 were finalized.

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

§ 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 April 20, 2019 (16th Week)

- Weekly proportion of influenza-like illness per 1,000 outpatients: 44.2 cases (=4.42%)
- Variation: increase from 42.1 cases in 15<sup>th</sup> week of 2019
- Sentinel reporting sites: 200 hospitals/clinics
- ※ 2018-2019 outbreak standard: 6.3 cases (/1,000)

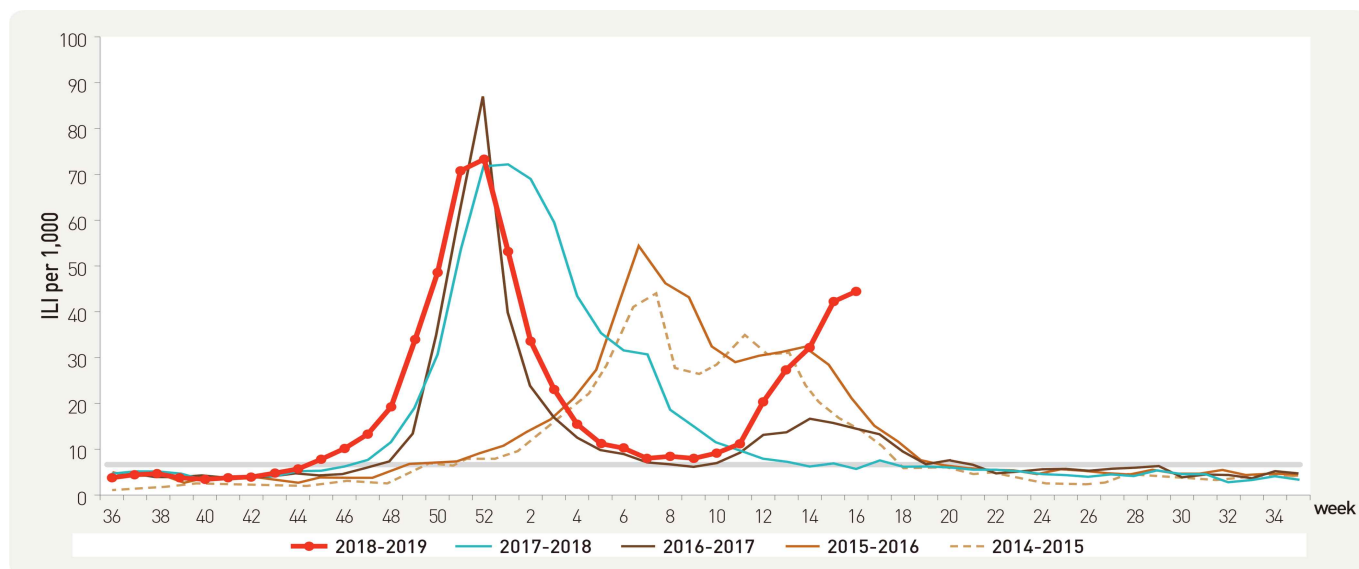


Figure 1. Weekly proportion of influenza-like illness per 1,000 outpatients, 2014-2015 to 2018-2019 flu seasons

### 2. Hand, Foot and Mouth Disease (HFMD), weeks ending April 20, 2019 (16th Week)

- Weekly proportion of hand, foot and mouth disease (HFMD) per 1,000 outpatients: 2.8 cases
- Variation: increase from 2.3 cases in 15<sup>th</sup> week of 2019
- Sentinel reporting sites: 95 hospitals/clinics

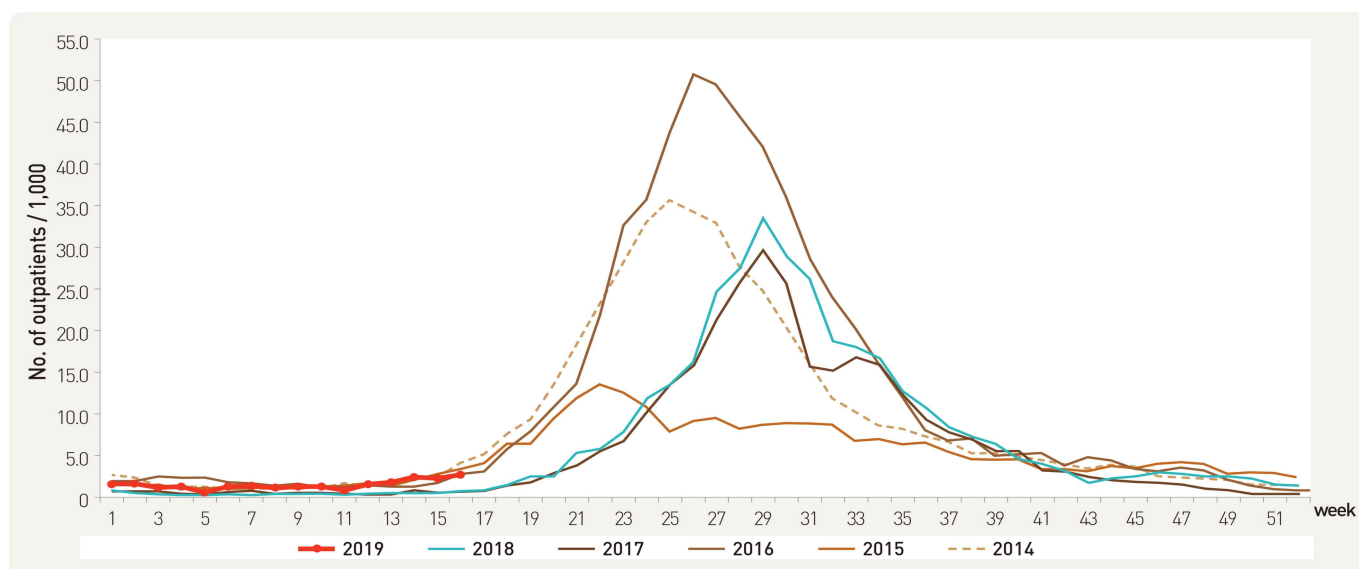


Figure 2. Weekly proportion of hand, foot and mouth per 1,000 outpatients, 2014-2019

### 3. Ophthalmologic infectious diseases, weeks ending April 20, 2019 (16th Week)

- Weekly proportion of epidemic keratoconjunctivitis per 1,000 outpatients: 13.5 cases
- Variation: decrease from 13.8 cases in 15<sup>th</sup> week of 2019
- Sentinel reporting sites: 92 hospitals/clinics

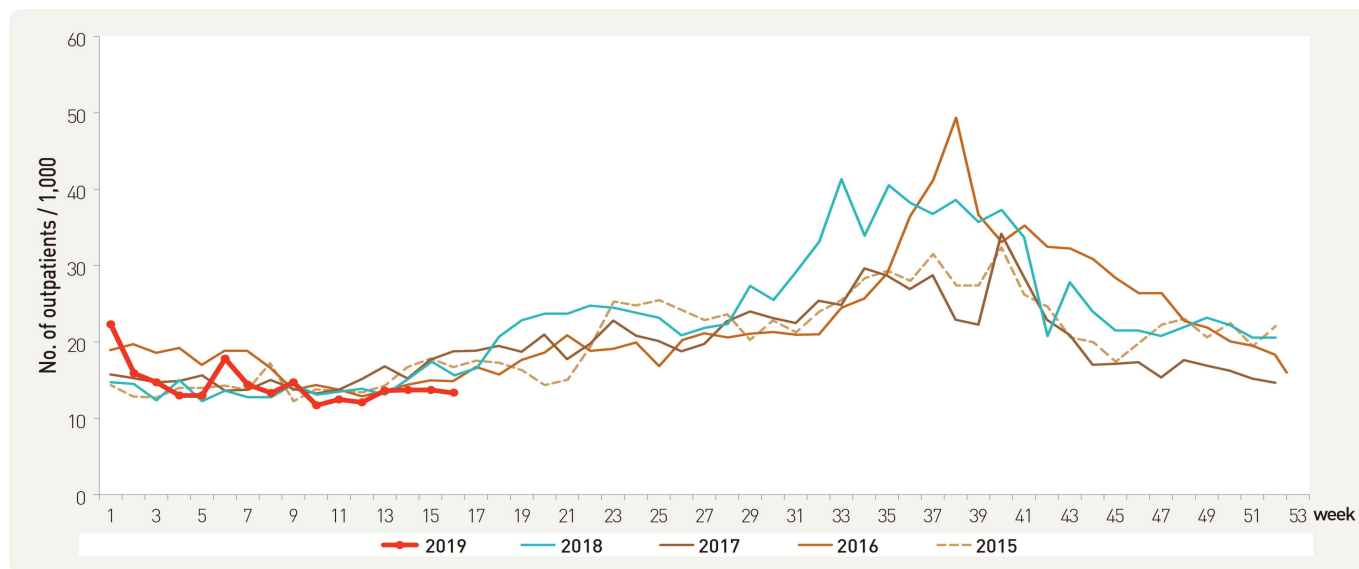


Figure 3. Weekly proportion of epidemic keratoconjunctivitis per 1,000 outpatients, 2015-2019

- Weekly proportion of acute hemorrhagic conjunctivitis per 1,000 outpatients: 0.7 case
- Variation: increase from 0.5 case in 15<sup>th</sup> week of 2019
- Sentinel reporting sites: 92 hospitals/clinics

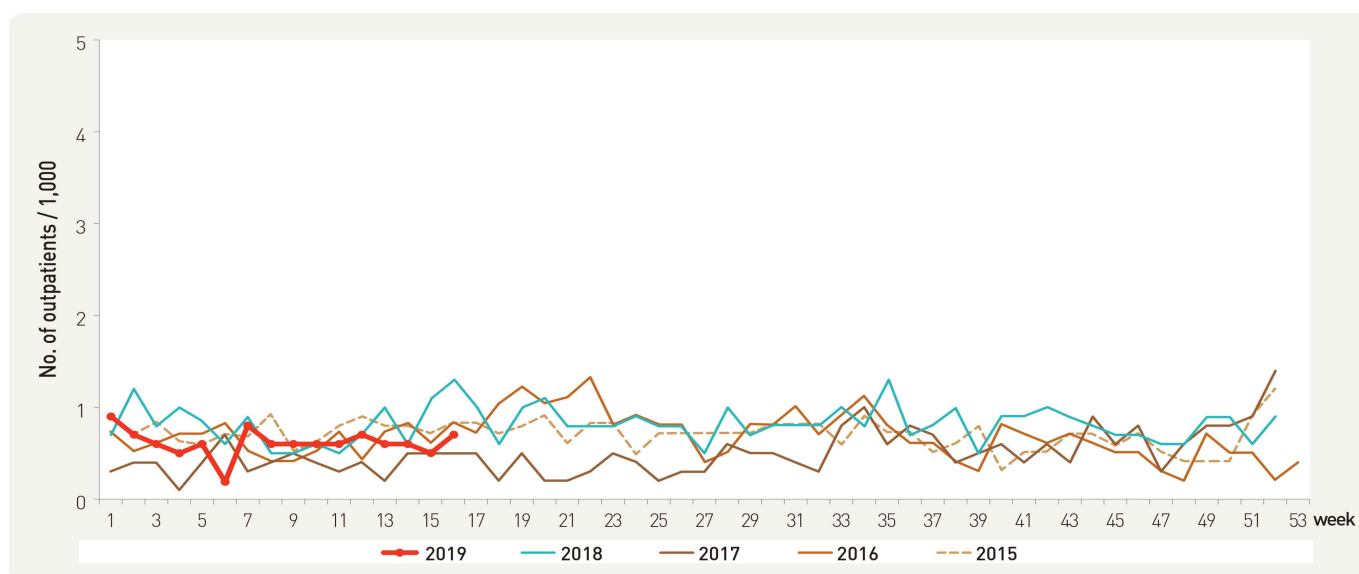


Figure 4. Weekly proportion of acute hemorrhagic conjunctivitis per 1,000 outpatients, 2015-2019

#### 4. Sexually Transmitted Diseases<sup>†</sup>, weeks ending April 20, 2019 (16th Week)

- Cases per sentinel: 2.5 for genital herpes, 2.2 for chlamydia, 1.9 for condyloma acuminata, 1.1 for gonorrhea
- Variation from 15<sup>th</sup> week of 2019  
Increase: genital herpes (2.3 → 2.5)  
No change: chlamydia (2.2 → 2.2)  
Decrease: gonorrhea (1.5 → 1.1), condyloma acuminata (2.1 → 1.9)
- Sentinel reporting sites: 590 hospitals/clinics  
※ No. of reported sites in 16<sup>th</sup> week: 20 for gonorrhea, 56 for chlamydia, 48 for genital herpes, 28 for condyloma acuminata

Unit: no. of cases/sentinels											
Gonorrhea			Chlamydia			Genital herpes			Condyloma acuminata		
Current week	Cum. 2019	Cum. 5-year average <sup>§</sup>	Current week	Cum. 2019	Cum. 5-year average <sup>§</sup>	Current week	Cum. 2019	Cum. 5-year average <sup>§</sup>	Current week	Cum. 2019	Cum. 5-year average <sup>§</sup>
1.1	3.8	4.8	2.2	11.8	11.0	2.5	17.8	12.8	1.9	9.3	8.3

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

<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.

### III. Waterborne and Foodborne Infectious Diseases

#### 1. Waterborne and foodborne disease outbreaks, weeks ending April 20, 2019 (16th Week)

- No. of reported outbreaks: 17 with 259 patients (cumulative no. of outbreaks: 174 with 1,940 patients)
- Variation: increase from 12 in 15<sup>th</sup> week of 2019
- Reporting sites: 254 health centers

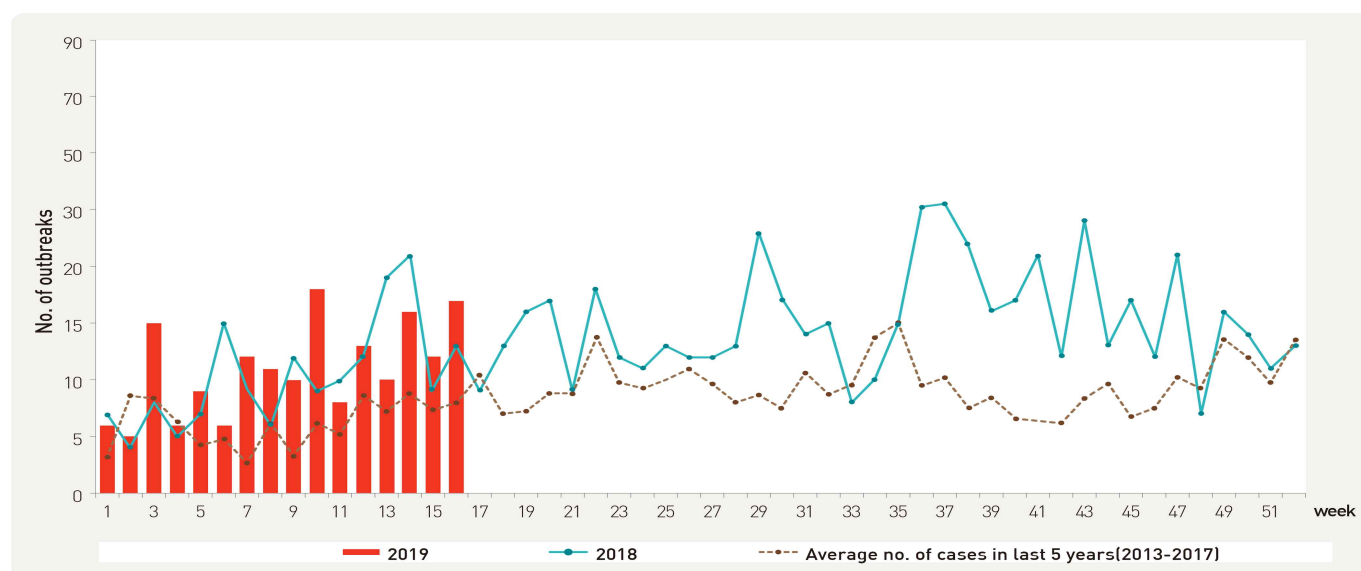


Figure 5. Number of waterborne and foodborne disease outbreaks reported by week, 2018-2019

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

### 1. Influenza viruses, Republic of Korea, weeks ending April 20, 2019 (16th Week)

- Weekly reported number of specimens positive for influenza: 111 cases (34.9%) / 318 specimens [influenza subtype: A(H1N1)pdm09 0 case, A(H3N2) 7 cases, B 104 cases]
- Variation(%p): decrease from 143 cases (44.1%) / 324 specimens in 15<sup>th</sup> week of 2019
- Sentinel reporting sites: 52 hospitals/clinics

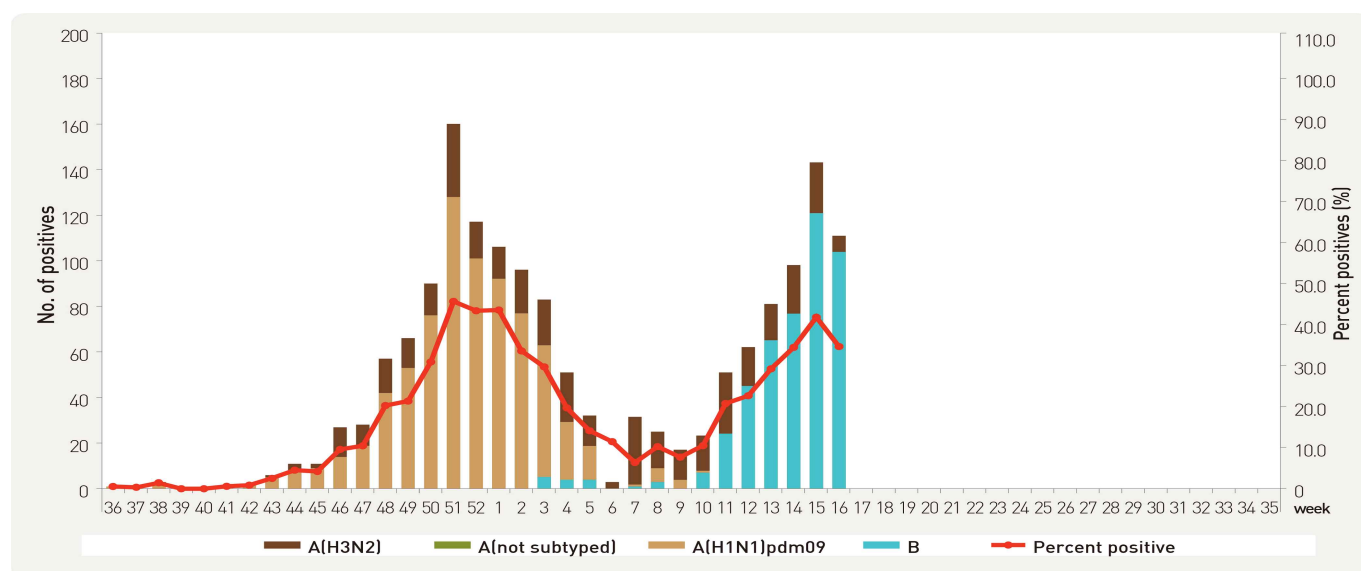


Figure 6. Number of specimens positive for influenza by subtype, 2018-2019 flu season

### 2. Respiratory viruses, weeks ending April 20, 2019 (16th Week)

- Detection rate: 67.6% (cumulative mean proportion during preceding three weeks plus current week: 70.8% out of 1,207 specimens)
- Variation(%p): decrease from 76.2% in 15<sup>th</sup> week of 2019
- Sentinel reporting sites: 17 city/provincial health and environmental institutes and 52 hospitals/clinics

2019 (week)	Weekly total		Detection rate (%)							
	No. of samples	Detection rate (%)	HAdV	HPIV	HRSV	IFV	HCoV	HRV	HBoV	HMPV
13	277	69.7	5.1	2.5	1.1	29.2	2.5	18.1	2.9	8.3
14	288	69.4	2.8	1.0	1.0	34.0	1.7	18.1	1.7	9.0
15	324	76.2	3.7	1.2	0.9	44.1	1.9	13.9	2.2	8.3
16	318	67.6	6.6	3.8	0.6	34.9	0.6	13.2	0.6	7.2
Cum.*	1,207	70.8	4.5	2.1	0.9	35.9	1.7	15.7	1.8	8.2
2018 Cum.†	11,966	63.0	6.8	6.1	4.4	17.0	5.7	16.3	1.7	4.9

- 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

\* Cum. : the rate of detected cases between March 24, 2019 – April 20, 2019 (Average no. of detected cases is 302 last 4 weeks)

† 2018 Cum. : the rate of detected cases between January 01, 2018 – December 29, 2018

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

### 1. Acute gastroenteritis-causing virus, weeks ending April 13, 2019 (15th Week)

- Detection rate: 41.3% [cumulative mean proportion in 2019: 396 cases (44.1%) out of 898 specimens]
- Variation(%p): decrease from 44.0% in 14<sup>th</sup> week of 2019
- Sentinel reporting sites: 17 city/provincial health and environmental institutes and 70 hospitals/clinics

Week	No. of sample	No. of detection (Detection rate, %)											
		Norovirus		Group A Rotavirus		Enteric Adenovirus		Astrovirus		Sapovirus		Total	
2019 12	77	16	(20.8)	14	(18.2)	2	(2.6)	4	(5.2)	0	(0.0)	36	(46.8)
13	53	20	(37.7)	3	(5.7)	3	(5.7)	2	(3.8)	1	(1.9)	29	(54.7)
14	50	16	(32.0)	2	(4.0)	2	(4.0)	0	(0.0)	2	(4.0)	22	(44.0)
15	63	23	(36.5)	1	(1.6)	1	(1.6)	1	(1.6)	0	(0.0)	26	(41.3)
Cum. 2019	898	278	(31.0)	82	(9.1)	10	(1.1)	21	(2.3)	5	(0.6)	396	(44.1)

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

### 2. Acute gastroenteritis-causing bacteria, weeks ending April 13, 2019 (15th Week)

- Detection rate: 9.2% [cumulative mean proportion in 2019: 213 cases (8.6%) out of 2,483 specimens]
- Variation(%p): increase from 6.7% in 14<sup>th</sup> week of 2019
- Sentinel reporting sites: 17 city/provincial health and environmental institutes and 70 hospitals/clinics

Week		No. of Sample	No. of isolation (Isolation rate, %)									
			<i>Salmonella</i> spp.	Pathogenic <i>E.coli</i>	<i>Shigella</i> spp.	<i>V.parahaemolyticus</i>	<i>V. cholerae</i>	<i>Campylobacter</i> spp.	<i>C.perfringens</i>	<i>S. aureus</i>	<i>B. cereus</i>	Total
2019	12	179	4 (2.2)	7 (3.9)	0 (0)	0 (0)	0 (0)	0 (0)	2 (1.1)	2 (1.1)	1 (0.6)	16 (8.9)
	13	143	2 (1.4)	2 (1.4)	0 (0)	0 (0)	0 (0)	0 (0)	6 (4.2)	3 (2.1)	3 (2.1)	17 (11.9)
	14	135	2 (1.5)	0 (0)	0 (0)	0 (0)	0 (0)	2 (1.5)	2 (1.5)	3 (2.2)	0 (0)	9 (6.7)
	15	142	2 (1.4)	5 (3.5)	0 (0)	0 (0)	0 (0)	0 (0)	1 (0.7)	5 (3.5)	0 (0)	13 (9.2)
Cum. 2019		2,483	34 (1.4)	45 (1.8)	0 (0)	0 (0)	0 (0)	14 (0.6)	54 (2.2)	48 (1.9)	16 (0.6)	213 (8.6)

\* 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*.

\* Hospitals participating in Laboratory surveillance in 2019 (70 hospitals)

## VI. Laboratory-based Pathogen Surveillance: Enterovirus

### 1. Enterovirus, weeks ending April 13, 2019 (15th Week)

- Detection rate: 19.2% (5 cases / 26 specimens) [cumulative mean proportion in 2019: 12.2% (34 cases / 278 specimens)]
  - Aseptic meningitis: 0 case (Cum. 2019: 10 cases)
  - HFMD and herpangina: 3 cases (Cum. 2019: 17 cases)
  - HFMD with complications: 0 case (Cum. 2019: 0 case)
  - Other: 2 cases (Cum. 2019: 7 cases)
- Variation(%p): increase from 18.8% in 14<sup>th</sup> week of 2019
- Sentinel reporting sites: 8 city/provincial health and environmental institutes and 53 hospitals/clinics

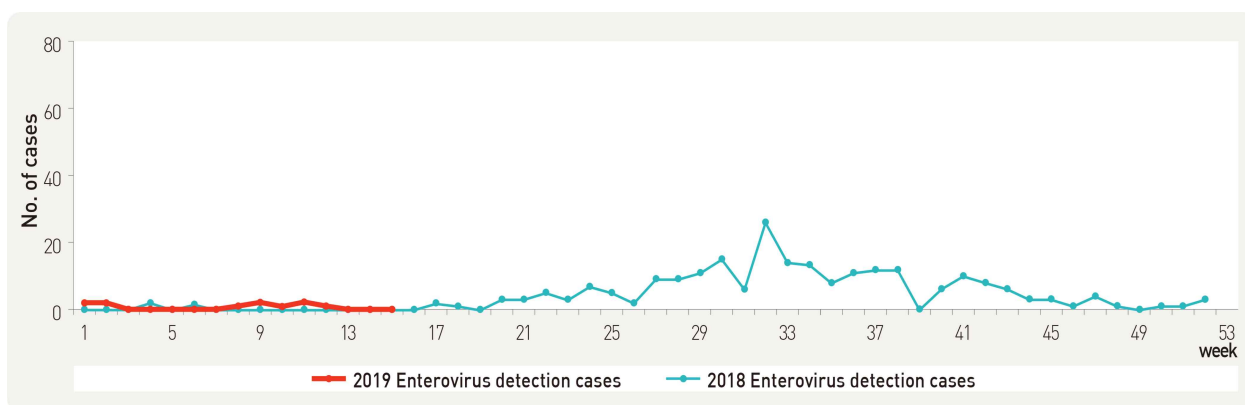


Figure 7. Detection of enterovirus in aseptic meningitis patients from 2017 to 2018

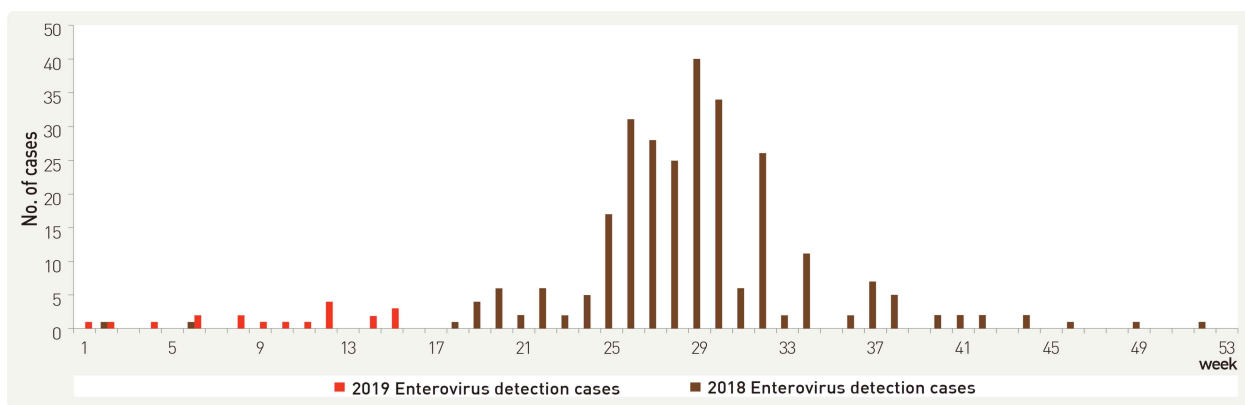


Figure 8. Detection of enterovirus in HFMD and herpangina patients from 2017 to 2018

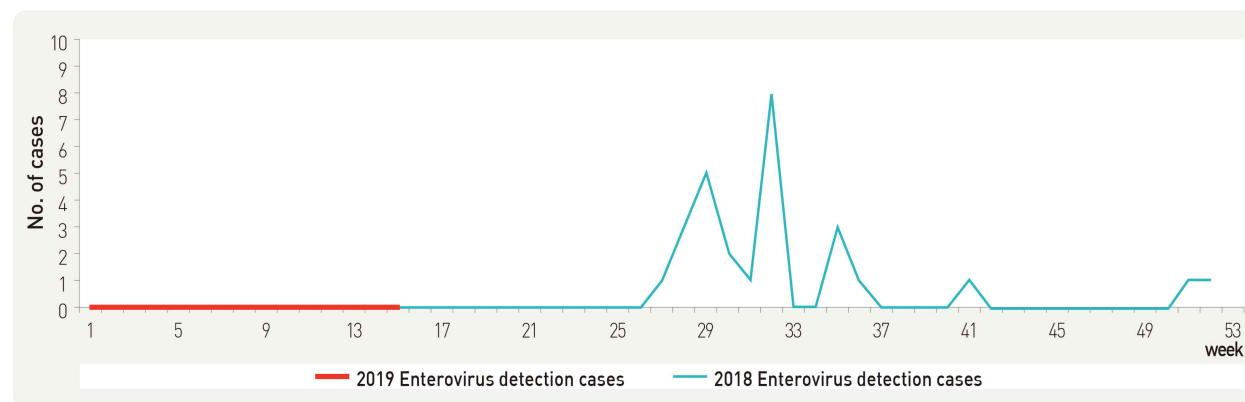


Figure 9. Detection of enterovirus in HFMD with complications patients from 2017 to 2018



**VII. Vector Surveillance: Malaria Vector Mosquitoes**

**1. Malaria vector mosquitoes, weeks ending April 13, 2019 (15th Week)**

- No. of malaria vector mosquitoes: 0
- Variation: no change from 0 in 14<sup>th</sup> week of 2019
- Sentinel reporting sites: 3 city/province (32 sites)
- ※ No. of mosquitoes: average number of mosquitoes/trap/day

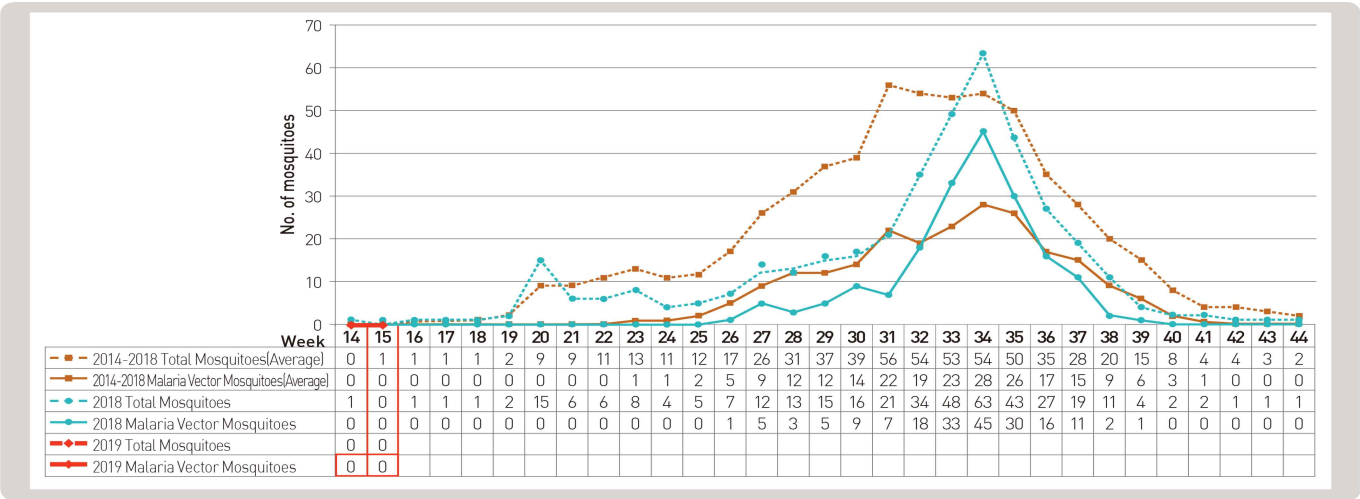


Figure 10. Weekly incidences of malaria vector mosquitoes in 2018

**VIII. Vector Surveillance: Japanese encephalitis vector Mosquitoes**

**1. Japanese encephalitis vector mosquitoes, weeks ending April 13, 2019 (15th Week)**

- No. of Japanese encephalitis vector mosquitoes: 0
- ※ JEV: Japanese encephalitis vector
- Variation: no change from 0 in 14<sup>th</sup> week of 2019
- Sentinel reporting sites: 10 city/provincial health and environmental institutes (10 sites)
- ※ No. of mosquitoes: average number of mosquitoes/trap/day

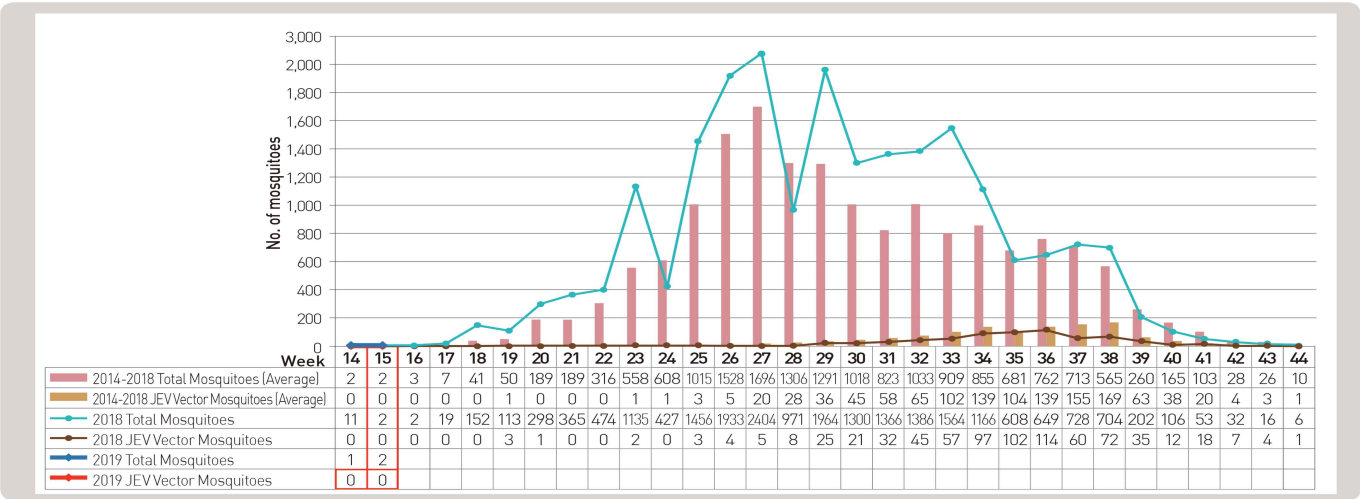


Figure 11. Weekly incidences of Japanese encephalitis vector mosquitoes in 2018

## 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 5 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 week		
	2017	X1	X2	X3	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**

$$= (X1 + X2 + \dots + X25) / 5$$

- **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

Questions or comments about the PHWR Disease Surveillance Statistics can be sent to [kcdc215@korea.kr](mailto:kcdc215@korea.kr) or to the following:

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