

**Public Health Weekly Report Disease Surveillance Statistics** 

Vol. 12, No. 32 August 8, 2019

#### I. National Notifiable Infectious Diseases

# 1. Reported cases, week ending August 3, 2019 (31st Week)\*

Unit: no. of cases<sup>†</sup>

Classification of disease <sup>‡</sup>	Current	Cum.	5-year weekly		Total no.	of cases	by year		Imported cases of current week
Classification of disease	week	2019	average	2018	2017	2016	2015	2014	: Country (no. of cases)
Category I									,
Cholera Typhoid fever Paratyphoid fever Shigellosis EHEC	0 9 10 6 13	0 91 53 88 96	0 3 1 3 4	2 213 47 191 121	5 128 73 112 138	4 121 56 113 104	0 121 44 88 71	0 251 37 110 111	
Viral hepatitis A	597	11,253	43	2,437	4,419	4,679	1,804	1,307	India(1)
Category II									
Pertussis Tetanus Measles Mumps Rubella Viral hepatitis B (Acute) Japanese encephalitis Varicella Haemophilus influenza type b Streptococcus pneumoniae	8 0 15 281 0 3 0 1,354 0	290 27 349 10,784 11 223 0 52,708 0	13 1 1 337 1 5 0 862 0	980 31 15 19,237 0 392 17 96,467 2	318 34 7 16,924 7 391 9 80,092 3	129 24 18 17,057 11 359 28 54,060 0	205 22 7 23,448 11 155 40 46,330 0	88 23 442 25,286 11 173 26 44,450 0	
Category III  Malaria  Scarlet fever§  Meningococcal meningitis  Legionellosis  Vibrio vulnificus sepsis  Murine typhus  Scrub typhus  Leptospirosis  Brucellosis  Rabies  HFRS  Syphilis  CJD/vCJD  Tuberculosis  HIV/AIDS  Viral hepatitis C	25 164 2 11 1 1 33 4 0 0 7 19 5 543 18 232 0	341 5,145 12 229 4 6 583 53 5 0 156 1,066 36 15,245 547 6,099 1	31 158 0 3 2 0 23 2 0 6 34 1 597 18	576 15,777 14 305 47 16 6,668 118 5 0 433 2,280 53 26,433 989 10,811	515 22,838 17 198 46 18 10,528 103 6 0 531 2,148 36 28,161 1,008 6,396 0	673 11,911 6 128 56 18 11,105 117 4 0 575 1,569 42 30,892 1,060	699 7,002 6 45 37 15 9,513 104 5 0 384 1,006 33 32,181 1,018	638 5,809 5 30 61 9 8,130 58 8 0 344 1,015 65 34,869 1,081	Republic of South Sudan(1), Uganda(1)

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Unit: no. of cases<sup>†</sup>

	Current	Cum.	5-year _		Total no.	of cases	by year		Imported cases of current week
Classification of disease <sup>‡</sup>	week	2019	wéekly average	2018	2017	2016	2015	2014	: Country (no. of cases)
Category IV									
Dengue fever	3	114	6	159	171	313	255	165	Philippines(2), Laos(1)
Q fever	5	170	2	163	96	81	27	8	
West Nile fever	0	0	0	0	0	0	0	0	
Lyme Borreliosis	11	70	1	23	31	27	9	13	
Melioidosis	0	3	0	2	2	4	4	2	
Chikungunya fever	2	8	0	3	5	10	2	1	Myanmar(2)
SFTS	11	96	6	259	272	165	79	55	
MERS	0	0	-	1	0	0	185	-	
Zika virus infection	1	5	-	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.

<sup>\*</sup> The reported data for year 2019 are provisional but the data from 2014 to 2018 are finalized.

<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 Categoi	y I				
Reporting area		Cholera		Тур	ohoid fe	ver	Para	typhoid t	fever	S	Shigellosis	;
arca	Current week	Cum. 2019	Cum. 5-year average <sup>§</sup>									
Overall	0	0	0	9	91	115	10	53	28	6	88	73
Seoul	0	0	0	1	18	21	0	6	5	1	33	14
Busan	0	0	0	0	7	8	2	6	3	0	3	5
Daegu	0	0	0	0	2	4	1	3	1	0	1	4
Incheon	0	0	0	1	7	6	0	1	2	0	5	12
Gwangju	0	0	0	0	0	4	0	3	1	0	3	1
Daejeon	0	0	0	0	6	6	1	3	1	0	0	1
Ulsan	0	0	0	0	3	2	0	1	0	0	1	0
Sejong	0	0	0	0	0	1	0	0	0	0	0	0
Gyonggi	0	0	0	6	27	21	2	10	5	3	26	13
Gangwon	0	0	0	0	0	2	3	4	1	0	1	1
Chungbuk	0	0	0	0	1	3	0	3	1	1	2	1
Chungnam	0	0	0	0	5	5	0	0	1	0	1	5
Jeonbuk	0	0	0	0	3	2	0	2	2	0	1	2
Jeonnam	0	0	0	0	1	5	1	1	2	1	7	3
Gyeongbuk	0	0	0	0	3	5	0	3	1	0	1	5
Gyeongnam	0	0	0	1	8	17	0	6	2	0	3	5
Jeju	0	0	0	0	0	3	0	1	0	0	0	1

<sup>\*</sup> The reported data for year 2019 are provisional but the data from 2014 to 2018 are finalized.

<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			С	iseases of	Category	Unit: no.	or cases
Reporting area		ohemorrl <i>herichia</i>		Vira	l hepatit	is A		Pertussis			Tetanus	
urcu	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	13	96	67	597	11,253	1,997	8	290	164	0	27	15
Seoul	7	29	9	126	2,129	384	0	44	21	0	2	1
Busan	0	3	2	42	269	100	1	18	13	0	2	2
Daegu	0	1	8	7	104	46	0	11	3	0	3	1
Incheon	0	11	5	34	687	162	0	14	11	0	0	0
Gwangju	0	2	10	7	96	61	0	15	7	0	2	0
Daejeon	0	0	1	72	1,582	85	0	12	3	0	2	0
Ulsan	1	2	3	1	46	22	0	6	4	0	2	0
Sejong	0	2	0	15	244	11	0	6	2	0	0	0
Gyonggi	0	16	10	154	3,537	601	3	37	28	0	3	1
Gangwon	1	5	3	8	170	45	0	2	2	0	0	1
Chungbuk	0	3	2	41	732	54	0	7	4	0	1	0
Chungnam	1	2	2	43	924	131	2	7	4	0	2	1
Jeonbuk	0	1	1	22	287	93	0	8	3	0	1	1
Jeonnam	1	8	4	3	118	75	1	19	7	0	2	3
Gyeongbuk	2	6	2	9	153	45	1	26	12	0	3	2
Gyeongnam	0	2	2	11	135	69	0	50	38	0	2	2
Jeju	0	3	3	2	40	13	0	8	2	0	0	0

<sup>\*</sup> The reported data for year 2019 are provisional but the data from 2014 to 2018 are finalized.

<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 Categor	y II				
Reporting area		Measles	;		Mumps			Rubella		Vira	l hepatiti: (Acute)	s B
arca	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average <sup>§</sup>	Current week	Cum. 2019	Cum. 5-year average§
Overall	15	349	97	281	10,784	12,372	0	11	9	3	223	174
Seoul	5	46	23	36	1,382	1,218	0	1	2	1	33	30
Busan	1	17	4	17	626	902	0	0	1	0	25	12
Daegu	0	22	2	11	483	393	0	0	0	0	4	6
Incheon	1	13	11	8	519	532	0	1	0	0	10	10
Gwangju	0	1	1	13	341	848	0	0	0	0	4	4
Daejeon	1	49	4	12	340	280	0	0	1	0	11	6
Ulsan	0	2	1	8	386	395	0	0	0	0	2	5
Sejong	0	2	0	2	64	40	0	0	0	0	0	0
Gyonggi	7	123	31	85	3,053	2,953	0	2	3	0	51	41
Gangwon	0	7	1	9	323	391	0	0	0	0	8	5
Chungbuk	0	3	2	7	294	246	0	0	0	1	10	5
Chungnam	0	4	3	9	475	465	0	0	1	0	14	9
Jeonbuk	0	11	1	9	500	1,049	0	0	0	0	10	12
Jeonnam	0	12	8	11	401	654	0	1	0	0	11	9
Gyeongbuk	0	26	5	18	549	548	0	4	1	1	16	8
Gyeongnam	0	8	0	22	864	1,297	0	1	0	0	11	11
Jeju	0	3	0	4	184	161	0	1	0	0	3	1

<sup>\*</sup> The reported data for year 2019 are provisional but the data from 2014 to 2018 are finalized.

<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.

		Di	seases of	Category	II			С	Diseases of	Category II	Jnit: no. (	or cases
Reporting area	Japane	se ence	ohalitis		Varicella			Malaria		Sc	arlet feve	r <sup>1</sup>
urcu	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average <sup>§</sup>	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§
Overall	0	0	0	1,354	52,708	36,241	25	341	376	164	5,145	8,335
Seoul	0	0	0	168	5,919	3,785	3	58	49	30	853	1,054
Busan	0	0	0	68	2,616	2,275	2	8	5	10	318	631
Daegu	0	0	0	81	3,005	2,025	0	2	5	7	160	328
Incheon	0	0	0	57	2,577	1,866	6	49	56	7	258	372
Gwangju	0	0	0	50	1,908	1,070	0	4	2	10	284	365
Daejeon	0	0	0	46	1,226	1,016	0	4	1	5	204	295
Ulsan	0	0	0	57	1,460	1,132	0	1	3	10	217	359
Sejong	0	0	0	19	576	314	0	1	1	3	30	41
Gyonggi	0	0	0	344	15,096	10,300	10	179	216	41	1,459	2,427
Gangwon	0	0	0	31	897	1,128	1	12	13	5	81	136
Chungbuk	0	0	0	33	1,036	949	1	5	3	4	92	141
Chungnam	0	0	0	58	2,068	1,395	2	5	4	7	237	373
Jeonbuk	0	0	0	41	1,832	1,637	0	2	3	4	179	295
Jeonnam	0	0	0	45	1,883	1,535	0	0	3	2	169	320
Gyeongbuk	0	0	0	110	3,554	1,730	0	2	4	6	194	450
Gyeongnam	0	0	0	110	6,142	3,025	0	7	5	12	349	653
Jeju	0	0	0	36	913	1,059	0	2	3	1	61	95

Cum: Cumulative counts from 1st week to current week in a year \* The reported data for year 2019 are provisional but the data from 2014 to 2018 are finalized.

<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.

											Jille 110. C	or cases
						Diseases	of Categor	y III				
Reporting area	Meningo	coccal m	neningitis	Le	gionello	sis	Vibrio	vulnificus	sepsis	Mu	rine typh	us
urcu	Current week	Cum. 2019	Cum. 5-year average <sup>§</sup>									
Overall	2	12	6	11	229	74	1	4	8	1	6	5
Seoul	0	2	2	0	63	20	1	3	1	0	2	1
Busan	0	0	1	4	14	5	0	0	0	0	0	0
Daegu	0	0	1	0	8	3	0	0	0	0	0	0
Incheon	0	1	0	0	13	6	0	0	1	1	2	1
Gwangju	0	0	0	0	7	0	0	0	0	0	0	1
Daejeon	0	0	0	1	4	1	0	0	0	0	0	0
Ulsan	0	0	0	0	1	2	0	0	0	0	0	0
Sejong	1	1	0	0	0	0	0	0	0	0	0	0
Gyonggi	0	4	1	4	59	15	0	0	1	0	1	0
Gangwon	0	2	0	1	6	4	0	0	0	0	0	0
Chungbuk	0	0	0	1	5	4	0	0	0	0	0	0
Chungnam	0	1	0	0	4	2	0	0	0	0	0	1
Jeonbuk	0	0	0	0	5	1	0	0	1	0	0	0
Jeonnam	0	0	0	0	12	1	0	0	3	0	0	1
Gyeongbuk	0	0	0	0	19	6	0	0	0	0	0	0
Gyeongnam	1	1	1	0	7	3	0	1	1	0	0	0
Jeju	0	0	0	0	2	1	0	0	0	0	1	0

Cum: Cumulative counts from 1st week to current week in a year \* The reported data for year 2019 are provisional but the data from 2014 to 2018 are finalized.

<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 Categor	y III				
Reporting area	Sci	rub typh	us	Le	ptospiro	sis	E	Brucellosis	3		orrhagic for	
	Current week	Cum. 2019	Cum. 5-year average <sup>§</sup>									
Overall	33	583	644	4	53	22	0	5	1	7	156	153
Seoul	0	23	28	0	7	0	0	3	1	1	4	7
Busan	0	18	25	0	2	1	0	0	0	0	6	4
Daegu	0	0	7	0	1	0	0	0	0	0	1	1
Incheon	1	9	13	0	2	0	0	0	0	0	2	2
Gwangju	0	7	16	0	2	1	0	0	0	0	1	2
Daejeon	2	11	16	0	2	1	0	0	0	0	0	3
Ulsan	2	16	13	0	1	0	0	0	0	1	1	1
Sejong	1	2	2	0	0	0	0	0	0	0	0	0
Gyonggi	0	31	66	0	8	5	0	1	0	1	29	45
Gangwon	1	5	19	0	5	1	0	0	0	0	7	9
Chungbuk	2	8	12	0	2	1	0	0	0	0	6	10
Chungnam	6	67	58	2	8	3	0	0	0	0	22	16
Jeonbuk	6	68	62	0	3	1	0	0	0	1	22	11
Jeonnam	3	170	153	2	4	3	0	0	0	2	31	19
Gyeongbuk	1	18	46	0	2	2	0	0	0	1	16	14
Gyeongnam	8	118	102	0	3	3	0	1	0	0	8	8
Jeju	0	12	6	0	1	0	0	0	0	0	0	1

Cum: Cumulative counts from 1st week to current week in a year \* The reported data for year 2019 are provisional but the data from 2014 to 2018 are finalized.

<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>

											Jnit: no. (	Ji Cases
				Disease	es of Cat	tegory III				Diseases	of Cate	gory IV
Reporting area		Syphilis		(	CJD/vCJD	)	Τι	uberculosi	s	De	ngue fev	er
	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average <sup>§</sup>	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§
Overall	19	1,066	913	5	36	27	543	15,245	18,581	3	114	108
Seoul	1	220	191	0	8	6	97	2,691	3,471	1	29	35
Busan	3	111	56	1	3	2	31	1,049	1,337	0	5	7
Daegu	2	50	41	0	0	2	21	682	911	0	7	6
Incheon	3	83	82	2	2	1	20	829	962	0	9	5
Gwangju	1	23	32	0	1	0	6	380	464	0	2	1
Daejeon	1	38	26	0	1	0	12	318	426	1	1	3
Ulsan	0	14	13	0	1	0	11	311	393	0	6	1
Sejong	1	4	4	0	0	0	0	40	55	0	0	0
Gyonggi	2	272	250	0	5	6	119	3,324	3,907	0	33	30
Gangwon	0	25	23	2	3	1	30	666	810	0	5	2
Chungbuk	0	24	20	0	1	1	14	463	571	0	4	1
Chungnam	1	38	30	0	1	1	34	702	853	0	2	3
Jeonbuk	1	31	19	0	2	1	19	569	714	1	4	1
Jeonnam	0	17	24	0	2	1	26	834	944	0	2	3
Gyeongbuk	1	51	35	0	4	3	51	1,159	1,317	0	1	4
Gyeongnam	1	49	43	0	2	2	41	1,015	1,229	0	3	5
Jeju	1	16	24	0	0	0	11	213	216	0	1	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.

						Diseases (	of Categor	y IV				
Reporting area		Q fever		Lym	e Borrel	iosis		SFTS		Zika	virus infe	ction
	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average <sup>§</sup>	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average <sup>§</sup>
Overall	5	170	44	11	70	7	11	96	69	1	5	-
Seoul	1	19	3	6	25	2	0	2	2	0	1	-
Busan	0	2	1	0	2	1	0	1	1	0	1	-
Daegu	0	2	1	0	0	0	0	2	1	0	0	-
Incheon	0	6	1	0	4	1	0	2	1	0	1	-
Gwangju	0	3	2	0	1	0	0	1	0	0	0	-
Daejeon	0	5	1	0	1	0	1	1	1	0	0	-
Ulsan	0	0	2	0	1	0	1	1	1	0	0	-
Sejong	0	0	0	0	1	0	0	0	0	0	0	-
Gyonggi	0	32	6	1	15	1	2	17	9	1	2	-
Gangwon	0	1	0	0	2	0	2	19	8	0	0	-
Chungbuk	0	23	10	0	2	0	0	0	2	0	0	-
Chungnam	1	14	6	1	4	0	2	12	8	0	0	-
Jeonbuk	1	17	1	0	0	1	1	12	3	0	0	-
Jeonnam	2	23	4	1	9	0	1	6	5	0	0	-
Gyeongbuk	0	11	2	1	2	1	1	10	11	0	0	-
Gyeongnam	0	11	4	1	1	0	0	8	9	0	0	-
Jeju	0	1	0	0	0	0	0	2	7	0	0	-

Cum: Cumulative counts from 1st week to current week in a year \* The reported data for year 2019 are provisional but the data from 2014 to 2018 are finalized.

<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 August 3, 2019 (31st Week)

- Weekly proportion of influenza-like illness per 1,000 outpatients: 4.0 cases (=0.40%)
- Variation: decrease from 4.3 cases in 30<sup>th</sup> week of 2019
- Sentinel reporting sites: 200 hospitals/clinics
   2018-2019 outbreak standard: 6.3 cases (/1,000)

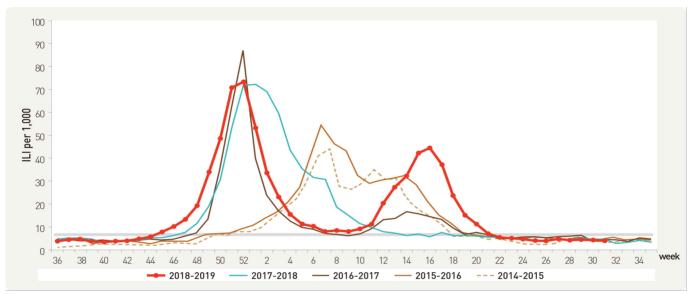


Figure 1. Weekly proportion of influenza-like illness per 1,000 outpatients, 2014-2015 to 2018-2019 flu seasons

#### 2. Hand, Foot and Mouth Disease (HFMD), weeks ending August 3, 2019 (31st Week)

- Weekly proportion of hand, foot and mouth disease (HFMD) per 1,000 outpatients: 48.6 cases
- Variation: decrease from 63.3 cases in 30<sup>th</sup> week of 2019
- Sentinel reporting sites: 97 hospitals/clinics

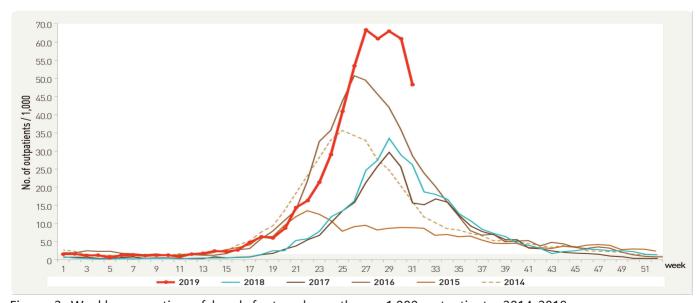


Figure 2. Weekly proportion of hand, foot and mouth per 1,000 outpatients, 2014-2019

#### 3. Ophthalmologic infectious diseases, weeks ending August 3, 2019 (31st Week)

- Weekly proportion of epidemic keratoconjunctivitis per 1,000 outpatients: 14.4 cases
- Variation: increase from 13.3 cases in 30<sup>th</sup> week of 2019
- Sentinel reporting sites: 90 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: 0.8 case
- Variation: increase from 0.6 case in 30<sup>th</sup> week of 2019
- Sentinel reporting sites: 90 hospitals/clinics

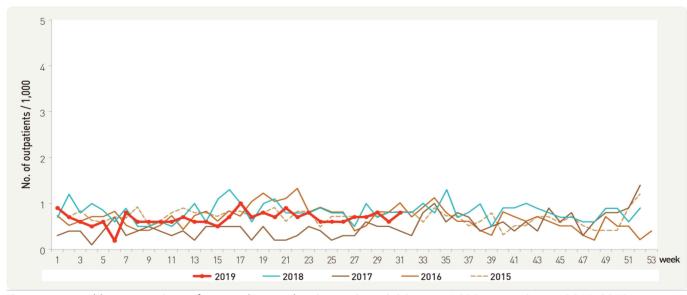


Figure 4. Weekly proportion of acute hemorrhagic conjunctivitis per 1,000 outpatients, 2015-2019

#### 4. Sexually Transmitted Diseases<sup>†</sup>, weeks ending August 3, 2019 (31st Week)

- Cases per sentinel: 3.7 for genital herpes, 2.6 for condyloma acuminata, 2.4 for chlamydia, 1.3 for gonorrhea
- Variation from  $30^{th}$  week of 2019 Increase: chlamydia (2.1  $\rightarrow$  2.4), genital herpes (2.8  $\rightarrow$  3.7), condyloma acuminata (2.0  $\rightarrow$  2.6) Decrease: gonorrhea (1.6  $\rightarrow$  1.3)
- Sentinel reporting sites: 592 hospitals/clinics

  \*\*No. of reported sites in 31st week: 26 for gonorrhea, 66 for chlamydia, 49 for genital herpes, 32 for condyloma acuminata

Unit: no. of cases/sentinel	5
-----------------------------	---

(	Gonorrhe	ea	(	Chlamyd	ia	Gei	nital her	pes	Condyl	oma acı	uminata
Current	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average <sup>§</sup>	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average <sup>§</sup>
1.3	5.9	7.2	2.4	21.1	18.6	3.7	30.9	21.9	2.6	16.5	13.5

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 August 3, 2019 (31st Week)

- No. of reported outbreaks: 9 with 46 patients (cumulative no. of outbreaks: 401 with 4,905 patients)
- Variation: decrease from 11 in 30th week of 2019
- Reporting sites: 254 health centers

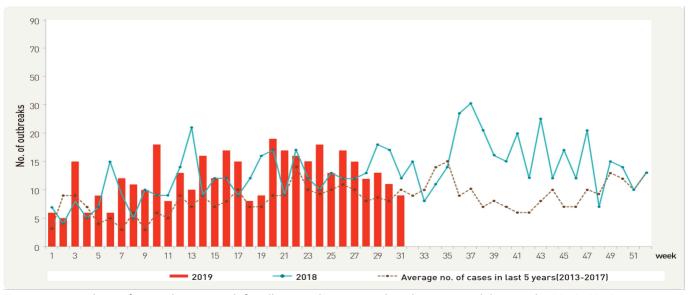


Figure 5. Number of waterborne and foodborne disease outbreaks reported by week, 2018-2019

<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, weeks ending August 3, 2019 (31st Week)

- Weekly reported number of specimens positive for influenza: 0 case (0.0%) / 163 specimens [influenza subtype: A(H1N1)pdm09 0 case, A(H3N2) 0 case, B 0 case]
- Variation (%p): no change from 0 case (0.0%) / 183 specimens in 30<sup>th</sup> week of 2019
- Sentinel reporting sites: 52 hospitals/clinics

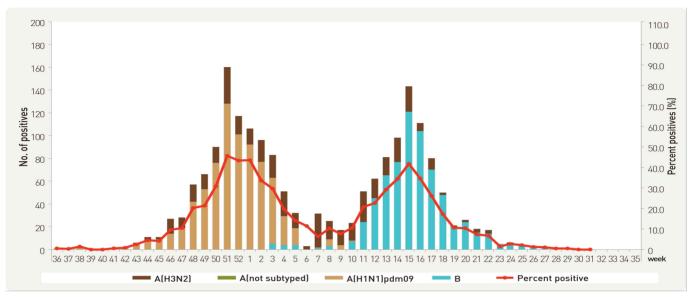


Figure 6. Number of specimens positive for influenza by subtype, 2018-2019 flu season

#### 2. Respiratory viruses, weeks ending August 3, 2019 (31st Week)

- Detection rate: 49.1% (cumulative mean proportion during preceding three weeks plus current week: 58.0% out of 731 specimens)
- Variation (%p): decrease from 54.6% in 30<sup>th</sup> week of 2019
- Sentinel reporting sites: 17 city/provincial health and environmental institutes and 52 hospitals/clinics

2019	Weekly total		Detection rate (%)									
(week)	No. of samples	Detection rate (%)	HAdV	HPIV	HRSV	IFV	HCoV	HRV	HBoV	HMPV		
28	188	61.2	8.5	15.4	0.0	0.5	1.1	21.3	9.6	4.8		
29	197	65.5	8.1	14.7	0.0	0.5	0.0	28.4	9.1	4.6		
30	183	54.6	7.7	14.8	0.0	0.0	1.1	23.5	3.8	3.8		
31	163	49.1	4.3	14.7	0.0	0.0	0.0	22.7	4.9	2.5		
Cum.**	731	58.0	7.2	14.9	0.0	0.3	0.5	24.1	7.0	4.0		
2018 Cum. <sup>∀</sup>	11,966	63.0	6.8	6.1	4.4	17.0	5.7	16.3	1.7	4.9		

<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

<sup>※</sup> Cum.: the rate of detected cases between June 30, 2019 − July 27, 2019 (Average no. of detected cases is 192 last 4 weeks)

 $<sup>\</sup>forall$  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 July 27, 2019 (30th Week)

- Detection rate: 5.4% [cumulative mean proportion in 2019: 628 cases (35.0%) out of 1,795 specimens]
- Variation (%p): decrease from 13.5% in 29th week of 2019
- Sentinel reporting sites: 17 city/provincial health and environmental institutes and 70 hospitals/clinics

			No. of detection (Detection rate, %)											
Week		No. of sample	Norovirus		Group A Rotavirus		Enteric Adenovirus		Astrovirus		Sapovirus		Total	
2019	27	47	7	(14.9)	0	(0.0)	0	(0.0)	0	(0.0)	4	(8.5)	11	(23.4)
	28	48	1	(2.1)	1	(2.1)	0	(0.0)	1	(2.1)	2	(4.2)	5	(10.4)
	29	52	2	(3.8)	0	(0.0)	0	(0.0)	2	(3.8)	3	(5.8)	7	(13.5)
	30	37	2	(5.4)	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	2	(5.4)
Cur 201		1,795	437	(24.3)	112	(6.2)	23	(1.3)	35	(1.9)	21	(1.2)	628	(35.0)

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

#### 2. Acute gastroenteritis-causing bacteria, weeks ending July 27, 2019 (30th Week)

- Detection rate: 26.7% [cumulative mean proportion in 2019: 638 cases (12.3%) out of 5,168 specimens]
- Variation (%p): increase from 19.2% in 29<sup>th</sup> week of 2019
- Sentinel reporting sites: 17 city/provincial health and environmental institutes and 70 hospitals/clinics

			No. of	No. of isolation (Isolation rate, %)										
We		ek	Sample		Pathogenic <i>E.coli</i>	<i>Shigella</i> spp.	V.parahae molyticus	V. cholerae	Campylob acter spp.		S. aureus	B. cereus	Total	
	2019	27	188	6 (3.2)	17 (9.0)	0 (0)	0 (0)	0 (0)	2 (1.1)	7 (3.7)	2 (1.1)	2 (1.1)	37 (19.7)	
		28	205	3 (1.5)	9 (4.4)	0 (0)	0 (0)	0 (0)	3 (1.5)	3 (1.5)	5 (2.4)	2 (1.0)	25 (12.2)	
		29	193	8 (4.1)	18 (9.3)	0 (0)	0 (0)	0 (0)	3 (1.6)	3 (1.6)	3 (1.6)	2 (1.0)	37 (19.2)	
		30	90	6 (6.7)	13 (14.4)	0 (0)	0 (0)	0 (0)	2 (2.2)	0 (0)	1 (1.1)	2 (2.2)	24 (26.7)	
	Cui 20		5,168	126 (2.4)	186 (3.6)	0 (0)	1 (0.02)	0 (0)	47 (0.9)	106 (2.1)	104 (2.0)	62 (1.2)	638 (12.3)	

<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 2019 (70 hospitals)

# VI. Laboratory-based Pathogen Surveillance: Enterovirus

#### 1. Enterovirus, weeks ending July 27, 2019 (30th Week)

- Detection rate: 58.3% (35 cases / 60 specimens) [cumulative mean proportion in 2019: 37.2% (428 cases / 1,150 specimens)]
  - Aseptic meningitis: 23 cases (Cum. 2019: 162 cases)
  - HFMD and herpangina: 7 cases (Cum. 2019: 192 cases)
  - HFMD with complications: 1 case (Cum. 2019: 7 cases)
  - Other: 4 cases (Cum. 2019: 67 cases)
- Variation (%p): increase from 55.1% in 29th week of 2019
- Sentinel reporting sites: 14 city/provincial health and environmental institutes and 59 hospitals/clinics

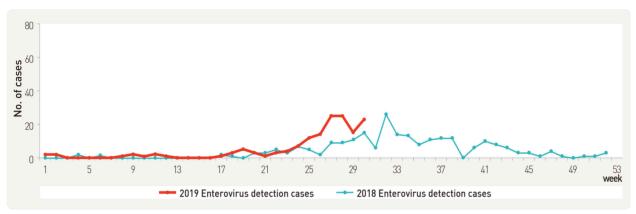


Figure 7. Detection of enterovirus in aseptic meningitis patients from 2017 to 2018

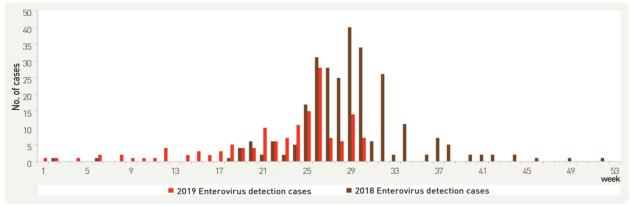


Figure 8. Detection of enterovirus in HFMD and herpangina patients from 2017 to 2018

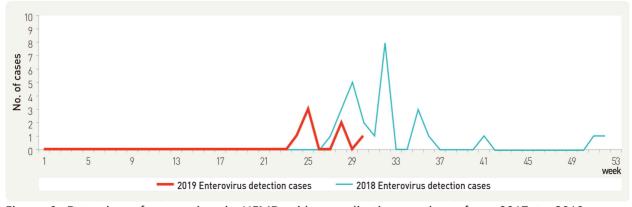


Figure 9. Detection of enterovirus in HFMD with complications patients from 2017 to 2018

## VII. Vector Surveillance: Malaria Vector Mosquitoes

#### 1. Malaria vector mosquitoes, weeks ending July 27, 2019 (30th Week)

- No. of malaria vector mosquitoes: 8
- Variation: increase from 6 in 29th week of 2019
- Sentinel reporting sites: 3 city/province (44 sites)
  - X No. of mosquitoes: average number of mosquitoes/trap/day

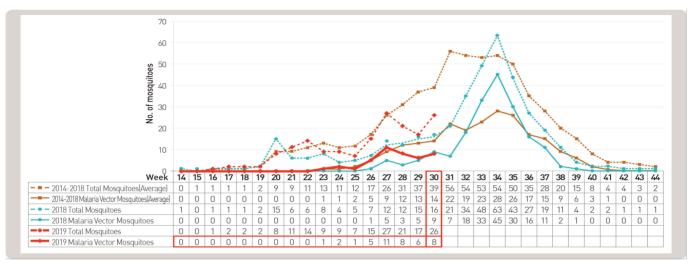


Figure 10. Weekly incidences of malaria vector mosquitoes in 2018

# VIII. Vector Surveillance: Japanese encephalitis vector Mosquitoes

## 1. Japanese encephalitis vector mosquitoes, weeks ending August 3, 2019 (31st Week)

- No. of Japanese encephalitis vector mosquitoes: 65
  - **X JEV: Japanese encephalitis vector**
- Variation: increase from 43 in 30<sup>th</sup> week of 2019
- Sentinel reporting sites: 10 city/provincial health and environmental institutes and health centers (10 sites) \*\* No. of mosquitoes: average number of mosquitoes/trap/day

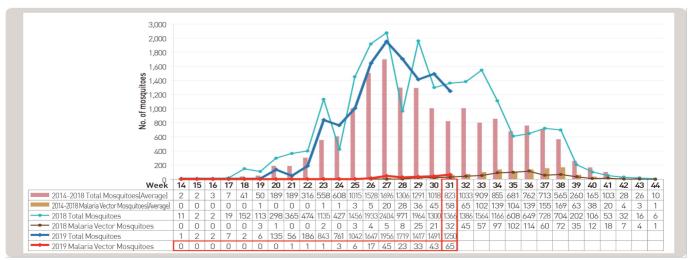


Figure 11. Weekly incidences of Japanese encephalitis vector mosquitoes in 2018

# IX. Vector Surveillance: Severe fever with thrombocytopia syndrome vector ticks

# 1. Severe fever with thrombocytopenia syndrome vector ticks, weeks ending July 27, 2019 (30th Week, July)

- No. of severe fever with thrombocytopenia syndrome vector ticks per trap: 49.5
  - ※ T.I.: Trap index (No. of ticks / trap)
- Variation: decrease from 61.2 in 25th week (June) of 2019
- Sentinel reporting sites: 11 city/province (16 sites)
  - X No. of vector ticks: average number of vector ticks/trap/day



Figure 12. Monthly incidences of severe fever with thrombocytopenia syndrome vector ticks in 2019

#### **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								
Year	2018			Current						
rear	2010			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**

Questions or comments about the PHWR Disease Surveillance Statistics can be sent to <a href="kcdc215@korea.kr">kcdc215@korea.kr</a> or to the following:

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