

Public Health Weekly Report
Disease Surveillance Statistics

Vol. 12, No. 52 December 26, 2019

## I. National Notifiable Infectious Diseases

# 1. Reported cases, week ending December 21, 2019 (51st Week)\*

										المسمسمين
Class	sification of disease <sup>‡</sup>	Current	Cum.	5-year weekly		Total no.	of cases	by year		Imported cases of current week
Cids	Sincution of discuse	week	2019	average	2018	2017	2016	2015	2014	: Country (no. of cases)
Category	' I									
	Cholera Typhoid fever Paratyphoid fever Shigellosis EHEC Viral hepatitis A	0 5 1 10 5 62	1 105 60 153 164 17,562	0 3 1 3 1 47	2 213 47 191 121 2,437	5 128 73 112 138 4,419	4 121 56 113 104 4,679	0 121 44 88 71 1,804	0 251 37 110 111 1,307	Philippines(4)
Category	/ II									
<i>J</i> ,	Pertussis Tetanus Measles	15 0 11	484 37 288	8 0 1	980 31 15	318 34 7	129 24 18	205 22 7	88 23 442	Philippines(2), Cambodia(1)
	Mumps Rubella Viral hepatitis B (Acute)	269 1 4	15,861 13 374	394 1 6	19,237 0 392	16,924 7 391	17,057 11 359	23,448 11 155	25,286 11 173	
	Japanese encephalitis Varicella Haemophilus influenza type b	0 2,403 0	34 79,907 0	0 2,280 0	17 96,467 2	9 80,092 3	28 54,060 0	40 46,330 0	26 44,450 0	
	Streptococcus pneumoniae	14	508	11	670	523	441	228	36	
Category	Malaria Scarlet fever <sup>§</sup> Meningococcal meningitis	0 150 0	559 7,465 17	2 285 0	576 15,777 14	515 22,838 17	673 11,911 6	699 7,002 6	638 5,809 5	
	Legionellosis  Vibrio vulnificus sepsis  Murine typhus  Scrub typhus	14 2 1 53	461 42 23 3,986	3 0 0 111	305 47 16 6,668	198 46 18 10,528	128 56 18 11,105	45 37 15 9,513	30 61 9 8,130	
	Leptospirosis Brucellosis Rabies	5 0 0	147 3 0	2 0 0	118 5 0	103 6 0	117 4 0	104 5 0	58 8 0	
	HFRS Syphilis CJD/vCJD	9 24 4	419 1,727 70	14 30 1	433 2,280 53	531 2,148 36	575 1,569 42	384 1,006 33	344 1,015 65	
	Tuberculosis HIV/AIDS Viral hepatitis C VRSA	519 21 193 0	23,776 975 9,593 2	521 20 -	26,433 989 10,811 0	28,161 1,008 6,396	30,892 1,060 -	32,181 1,018 -	34,869 1,081 -	
	CRE	280	15,040	-	11,954	5,717	-	-	-	

Unit: no. of cases<sup>†</sup>

	Current	Cum.	5-year <sub>-</sub>		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	275	3	159	171	313	255	165	Vietnam(2), Cambodia(1)
Q fever	1	221	2	163	96	81	27	8	
West Nile fever	0	0	0	0	0	0	0	0	
Lyme Borreliosis	0	21	1	23	31	27	9	13	
Melioidosis	0	7	0	2	2	4	4	2	
Chikungunya fever	0	16	0	3	5	10	2	1	
SFTS	0	223	0	259	272	165	79	55	
MERS	0	0	-	1	0	0	185	-	
Zika virus infection	0	10	-	3	11	16	-	-	

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.

<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 Catego	ry I			oriit. 110. t	or cases
Reporting area		Cholera		Тур	ohoid fe			ntyphoid 1	fever	S	higellosis	
area	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 <sup>§</sup>
Overall	0	1	2	5	105	163	1	60	52	10	153	119
Seoul	0	1	0	0	19	28	0	12	10	6	51	26
Busan	0	0	1	1	8	10	0	5	6	0	12	7
Daegu	0	0	0	0	2	5	0	3	2	1	9	6
Incheon	0	0	0	0	7	8	0	1	3	1	9	14
Gwangju	0	0	0	0	0	6	0	3	2	0	3	3
Daejeon	0	0	0	0	7	8	0	2	2	0	4	2
Ulsan	0	0	0	0	3	3	0	1	1	0	3	1
Sejong	0	0	0	0	0	1	0	0	0	0	0	0
Gyonggi	0	0	0	2	32	33	0	13	9	1	33	20
Gangwon	0	0	0	0	0	5	0	2	2	0	1	2
Chungbuk	0	0	0	0	3	4	0	3	2	0	1	3
Chungnam	0	0	0	0	5	9	0	0	1	0	2	6
Jeonbuk	0	0	0	1	4	4	0	2	3	0	2	3
Jeonnam	0	0	0	1	3	8	1	1	3	0	9	7
Gyeongbuk	0	0	0	0	4	6	0	3	2	1	3	6
Gyeongnam	0	0	1	0	8	22	0	8	3	0	8	11
Jeju	0	0	0	0	0	3	0	1	1	0	3	2

<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 Category I  Enterohemorrhagic  Virgl benefitied								С	iseases of	Category	II	Of Cases
Reporting area		ohemorri <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 average⁵	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§
Overall	5	164	110	62	17,562	2,851	15	484	342	0	37	24
Seoul	2	38	15	12	3,136	562	0	68	47	0	2	3
Busan	0	3	4	1	495	119	2	28	30	0	2	2
Daegu	1	7	9	2	190	61	0	21	10	0	6	1
Incheon	1	13	9	2	987	243	0	19	21	0	0	1
Gwangju	0	9	16	1	162	81	1	25	17	0	2	1
Daejeon	0	2	3	4	2,671	133	0	16	5	0	2	0
Ulsan	0	5	6	0	82	28	0	10	10	0	2	0
Sejong	0	3	1	1	392	18	0	6	5	0	1	0
Gyonggi	1	32	18	21	5,392	866	6	82	54	0	6	2
Gangwon	0	5	3	3	266	68	0	6	3	0	1	1
Chungbuk	0	9	2	3	1,078	86	0	10	7	0	1	1
Chungnam	0	4	3	4	1,436	181	2	8	11	0	3	1
Jeonbuk	0	6	2	2	558	143	1	16	6	0	1	1
Jeonnam	0	13	7	2	163	88	0	34	16	0	2	4
Gyeongbuk	0	6	3	0	251	71	1	47	21	0	4	3
Gyeongnam	0	4	4	2	232	86	1	79	74	0	2	3
Jeju	0	5	5	2	71	17	1	9	5	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 Category II							
Reporting area		Measles	<u> </u>		Mumps			Rubella		Vira	l hepatiti: (Acute)	5 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§	Current week	Cum. 2019	Cum. 5-year average§	
Overall	11	288	107	269	15,861	20,034	1	13	18	4	374	287	
Seoul	3	40	25	28	2,034	1,894	0	2	3	1	62	48	
Busan	0	8	4	17	874	1,435	0	0	1	0	33	18	
Daegu	2	22	3	12	688	629	0	0	1	0	8	10	
Incheon	0	12	12	11	795	808	0	1	0	1	20	17	
Gwangju	0	3	1	8	472	1,559	0	0	1	1	6	6	
Daejeon	0	37	4	4	466	427	0	1	1	0	13	9	
Ulsan	0	4	1	15	499	643	0	0	0	0	5	8	
Sejong	0	2	0	0	90	68	0	0	0	0	0	0	
Gyonggi	2	98	34	88	4,607	4,635	1	4	6	0	87	73	
Gangwon	0	7	1	8	519	635	0	0	0	0	12	9	
Chungbuk	0	2	2	9	422	385	0	1	1	0	18	9	
Chungnam	2	7	4	12	718	751	0	0	1	1	20	14	
Jeonbuk	0	9	1	11	722	1,841	0	0	0	0	15	19	
Jeonnam	1	12	9	15	614	998	0	1	0	0	18	13	
Gyeongbuk	0	11	5	12	826	862	0	2	2	0	28	15	
Gyeongnam	1	11	1	17	1,251	2,221	0	0	1	0	22	17	
Jeju	0	3	0	2	264	243	0	1	0	0	7	2	

<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.

		Dis	seases of	Category	II			С	Diseases of	Category III	Jnit: no. (	or cases
Reporting area	Japane	se encep	halitis		Varicella			Malaria		Sc	arlet feve	r¹
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 <sup>§</sup>
Overall	0	34	24	2,403	79,907	61,500	0	559	622	150	7,465	12,288
Seoul	0	7	9	268	9,441	7,164	0	100	87	17	1,233	1,528
Busan	0	0	1	85	3,793	3,544	0	14	8	9	418	909
Daegu	0	3	1	125	4,328	3,265	0	2	9	2	222	471
Incheon	0	1	1	103	3,703	3,320	0	87	98	14	377	560
Gwangju	0	2	1	125	2,932	2,011	0	4	4	15	396	577
Daejeon	0	1	1	93	2,002	1,745	0	5	4	6	322	444
Ulsan	0	0	0	31	1,891	1,783	0	2	4	7	304	513
Sejong	0	0	0	31	862	527	0	1	1	0	50	59
Gyonggi	0	8	5	647	22,780	17,543	0	294	346	47	2,169	3,572
Gangwon	0	2	0	57	1,710	1,901	0	15	18	0	118	195
Chungbuk	0	1	1	86	1,965	1,517	0	7	5	3	122	229
Chungnam	0	4	1	91	2,958	2,364	0	9	9	3	322	557
Jeonbuk	0	0	0	111	3,099	2,782	0	3	5	3	234	440
Jeonnam	0	2	1	110	3,042	2,668	0	0	4	2	236	485
Gyeongbuk	0	1	1	108	5,274	2,868	0	5	8	5	328	650
Gyeongnam	0	2	1	292	8,638	4,967	0	8	9	11	508	959
Jeju	0	0	0	40	1,489	1,531	0	3	3	6	106	140

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>

											Jille 110.	Ji Cases
						Diseases	of Categor	y III				
Reporting area	Meningo	coccal m	neningitis	Le	gionello	sis	Vibrio	vulnificus	sepsis	Mu	rine typh	us
area	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>	Current week	Cum. 2019	Cum. 5-year average§
Overall	0	17	9	14	461	135	2	42	50	1	23	15
Seoul	0	4	3	4	136	39	1	7	5	0	2	2
Busan	0	0	1	1	20	8	0	3	5	0	0	1
Daegu	0	0	1	0	15	4	0	0	1	0	0	0
Incheon	0	1	0	2	36	11	0	0	4	1	5	1
Gwangju	0	0	0	0	14	0	0	0	1	0	1	2
Daejeon	0	0	0	0	4	2	0	0	1	0	0	0
Ulsan	0	1	0	1	4	3	1	2	1	0	2	2
Sejong	0	1	0	0	0	0	0	0	0	0	0	0
Gyonggi	0	6	2	0	120	30	0	10	9	0	4	2
Gangwon	0	2	0	0	11	7	0	0	0	0	0	0
Chungbuk	0	0	0	1	13	5	0	2	1	0	1	1
Chungnam	0	1	0	0	12	4	0	1	3	0	0	1
Jeonbuk	0	0	0	2	9	2	0	2	2	0	1	0
Jeonnam	0	0	0	0	17	3	0	7	7	0	2	1
Gyeongbuk	0	0	1	0	33	9	0	1	3	0	1	0
Gyeongnam	0	1	1	2	10	5	0	6	6	0	0	2
Jeju	0	0	0	1	7	3	0	1	1	0	4	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.

		Diseases of Category III										
Reporting area	Sci	rub typh	us	Le	ptospiro	sis	E	Brucellosis	;		orrhagic for renal syndr	
	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	53	3,986	9,168	5	147	97	0	3	5	9	419	442
Seoul	0	115	269	0	11	5	0	2	1	0	13	20
Busan	8	281	618	0	7	5	0	0	0	0	19	12
Daegu	0	66	194	0	2	1	0	0	0	0	3	3
Incheon	0	50	88	0	4	1	0	0	0	1	10	7
Gwangju	0	78	299	1	5	2	0	0	0	0	7	8
Daejeon	2	117	274	0	0	2	0	0	0	0	2	6
Ulsan	3	141	430	0	1	2	0	0	1	0	2	2
Sejong	0	11	54	0	1	0	0	0	0	0	0	3
Gyonggi	0	288	769	1	21	17	0	0	0	0	50	100
Gangwon	0	28	79	0	8	4	0	0	0	0	16	17
Chungbuk	0	92	229	1	6	4	0	0	0	0	17	25
Chungnam	5	444	968	2	27	12	0	0	0	0	55	57
Jeonbuk	4	400	1,013	0	8	6	0	0	0	2	62	45
Jeonnam	17	663	1,524	0	15	17	0	1	0	1	76	67
Gyeongbuk	1	278	573	0	16	8	0	0	1	3	44	38
Gyeongnam	10	832	1,694	0	14	11	0	0	1	2	41	31
Jeju	3	102	93	0	1	0	0	0	1	0	2	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>

				Disease	es of Ca	tegory III					of Cate	
Reporting area		Syphilis		(	CJD/vCJE	)	Τι	uberculos	is	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 <sup>§</sup>	Current week	Cum. 2019	Cum. 5-year average <sup>§</sup>
Overall	24	1,727	1,570	4	70	47	519	23,776	29,894	3	275	209
Seoul	7	347	329	1	14	10	89	4,237	5,605	0	73	65
Busan	2	173	101	0	2	3	38	1,652	2,111	0	10	14
Daegu	2	89	70	0	2	3	20	1,050	1,458	0	16	10
Incheon	0	133	136	0	3	2	27	1,312	1,543	0	19	10
Gwangju	3	43	53	0	1	0	13	570	729	1	4	3
Daejeon	1	63	47	0	4	1	24	507	693	0	7	5
Ulsan	0	19	22	0	0	1	7	471	620	0	12	2
Sejong	0	6	6	0	0	0	3	69	86	0	0	1
Gyonggi	4	443	434	2	22	11	101	5,231	6,330	1	84	58
Gangwon	1	46	38	0	1	2	17	1,008	1,279	0	5	3
Chungbuk	0	36	37	0	2	1	26	682	914	0	7	3
Chungnam	2	63	51	0	1	3	23	1,105	1,385	0	7	6
Jeonbuk	1	52	34	0	4	1	24	934	1,139	0	10	4
Jeonnam	0	35	39	0	4	1	38	1,300	1,521	0	2	4
Gyeongbuk	0	72	64	1	5	4	35	1,785	2,135	0	3	8
Gyeongnam	1	80	71	0	5	4	28	1,541	1,990	1	11	11
Jeju	0	27	38	0	0	0	6	322	355	0	5	2

 $<sup>^{\</sup>star}$  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 Category IV									Jilit. 110. (	51 Cd3C3	
Reporting area		Q fever		Lym	e Borrel	iosis		SFTS		Zika	virus infe	ction
u.cu	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	1	221	72	0	21	21	0	223	181	0	10	-
Seoul	0	20	6	0	9	6	0	9	11	0	3	-
Busan	0	2	2	0	0	1	0	1	2	0	1	-
Daegu	0	5	1	0	0	1	0	7	5	0	0	-
Incheon	0	7	1	0	1	2	0	3	3	0	2	-
Gwangju	0	8	3	0	0	0	0	1	1	0	0	-
Daejeon	0	7	2	0	0	1	0	4	3	0	1	-
Ulsan	0	1	2	0	0	0	0	8	3	0	0	-
Sejong	0	1	0	0	0	0	0	4	1	0	0	-
Gyonggi	0	35	8	0	6	4	0	42	30	0	2	-
Gangwon	0	0	0	0	0	1	0	30	25	0	0	-
Chungbuk	1	39	17	0	0	0	0	3	9	0	0	-
Chungnam	0	21	10	0	1	1	0	24	14	0	0	-
Jeonbuk	0	19	3	0	0	1	0	18	6	0	0	-
Jeonnam	0	30	7	0	2	0	0	16	11	0	1	-
Gyeongbuk	0	16	3	0	0	2	0	25	29	0	0	-
Gyeongnam	0	10	7	0	2	1	0	19	16	0	0	-
Jeju	0	0	0	0	0	0	0	9	12	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 December 21, 2019 (51st Week)

- Weekly proportion of influenza-like illness per 1,000 outpatients: 37.8 cases (=3.78%)
- Variation: increase from 28.5 cases in 50<sup>th</sup> week of 2019
- Sentinel reporting sites: 200 hospitals/clinics
   2019-2020 outbreak standard: 5.9 cases (/1,000)

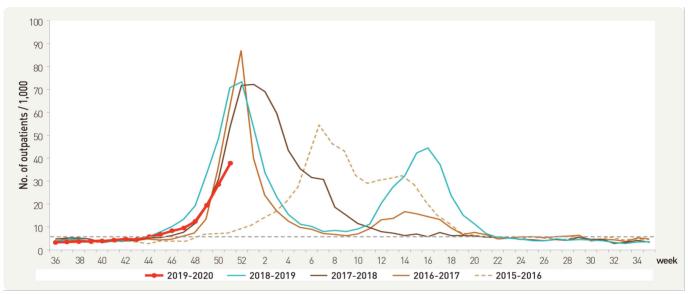


Figure 1. Weekly proportion of influenza-like illness per 1,000 outpatients, 2015-2016 to 2019-2020 flu seasons

## 2. Hand, Foot and Mouth Disease (HFMD), weeks ending December 21, 2019 (51st Week)

- Weekly proportion of hand, foot and mouth disease (HFMD) per 1,000 outpatients: 1.1 cases
- Variation: decrease from 2.1 cases in 50<sup>th</sup> week of 2019
- Sentinel reporting sites: 97 hospitals/clinics

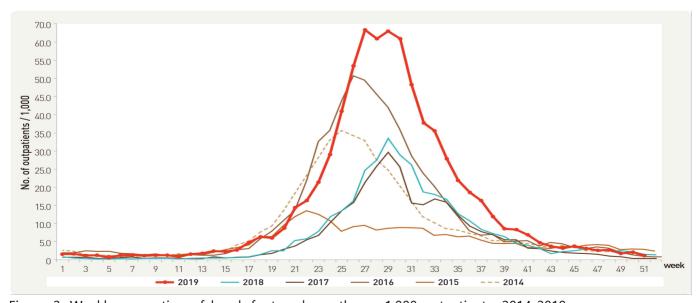


Figure 2. Weekly proportion of hand, foot and mouth per 1,000 outpatients, 2014-2019

- 11 -

## 3. Ophthalmologic infectious diseases, weeks ending December 21, 2019 (51st Week)

- Weekly proportion of epidemic keratoconjunctivitis per 1,000 outpatients: 9.3 cases
- Variation: decrease from 14.1 cases in 50<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: 0.2 case
- Variation: decrease from 0.3 case in 50<sup>th</sup> week of 2019
- Sentinel reporting sites: 90 hospitals/clinics

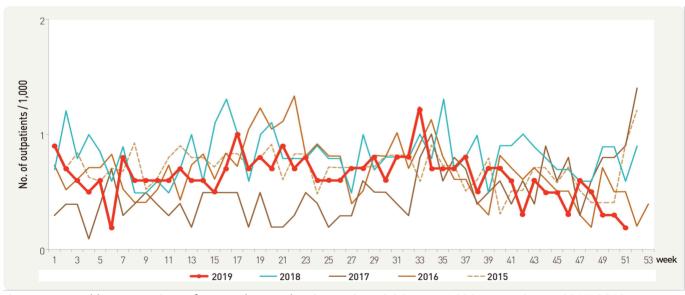


Figure 4. Weekly proportion of acute hemorrhagic conjunctivitis per 1,000 outpatients, 2015-2019

## 4. Sexually Transmitted Diseases<sup>†</sup>, weeks ending December 21, 2019 (51st Week)

- Cases per sentinel: 3.7 for genital herpes, 3.6 for condyloma acuminata, 3.3 for chlamydia, 3.1 for gonorrhea
- Variation from 50<sup>th</sup> week of 2019

Increase: gonorrhea (1.8  $\rightarrow$  3.1), chlamydia (2.0  $\rightarrow$  3.3), genital herpes (2.0  $\rightarrow$  3.7), condyloma acuminata (2.0  $\rightarrow$  3.6)

• Sentinel reporting sites: 592 hospitals/clinics

X No. of reported sites in 51st week: 14 for gonorrhea, 59 for chlamydia, 53 for genital herpes, 32 for condyloma acuminata

Uı	าit:	no.	of	cases/	'sentine	ŀ
----	------	-----	----	--------	----------	---

C	Gonorrhe	ea		Chlamyd	ia	Gei	nital her	pes	Condyl	oma acı	uminata
Current week	Cum. 2019	Cum. 5-year average§									
3.1	9.1	10.1	3.3	34.5	28.4	3.7	49.1	32.6	3.6	26.0	19.9

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 December 21, 2019 (51st Week)

- No. of reported outbreaks: 15 with 154 patients (cumulative no. of outbreaks: 591 with 6,974 patients)
- Variation: increase from 6 in 50th week of 2019
- Reporting sites: 254 health centers

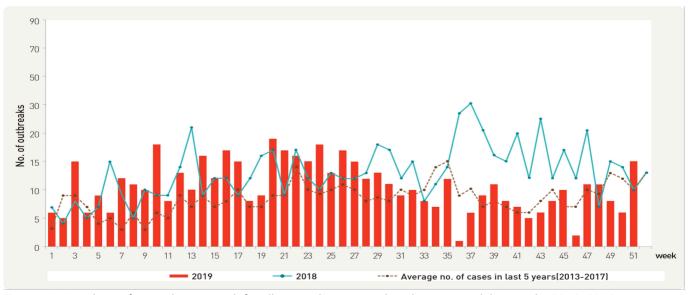


Figure 5. Number of waterborne and foodborne disease outbreaks reported by week, 2018-2019

<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 December 21, 2019 (51st Week)

- Weekly reported number of specimens positive for influenza: 83 cases (25.9%) / 321 specimens [influenza subtype: A(H1N1)pdm09 53 cases, A(H3N2) 27 cases, B 3 cases]
- Variation (%p): Increase from 50 cases (16.2%) / 308 specimens in 50<sup>th</sup> week of 2019
- Sentinel reporting sites: 52 hospitals/clinics

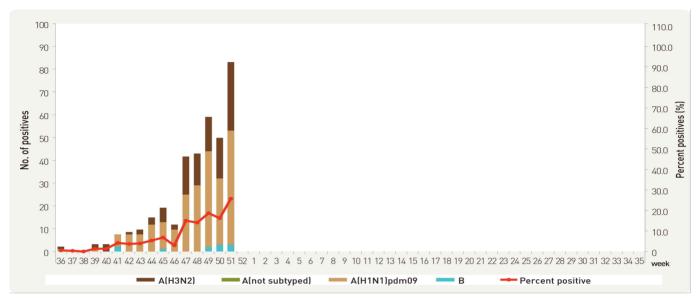


Figure 6. Number of specimens positive for influenza by subtype, 2019-2020 flu season

## 2. Respiratory viruses, weeks ending December 21, 2019 (51st Week)

- Detection rate: 68.2% (cumulative mean proportion during preceding three weeks plus current week: 63.9% out of 1,256 specimens)
- Variation (%p): increase from 66.6% in 50<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		
48	309	56.3	9.1	2.3	10.4	13.9	3.6	15.2	0.6	1.3		
49	318	64.2	11.9	1.6	9.7	18.6	4.4	15.4	1.9	0.6		
50	308	66.6	9.1	1.6	15.3	16.2	8.1	14.0	1.0	1.3		
51	321	68.2	7.8	2.5	11.2	25.9	9.7	7.8	0.9	2.5		
Cum.**	1,256	63.9	9.5	2.0	11.6	18.7	6.4	13.1	1.1	1.4		
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 November 24, 2019 − December 21, 2019 (Average no. of detected cases is 314 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 December 14, 2019 (50th Week)

- Detection rate: 42.5% [cumulative mean proportion in 2019: 752 cases (28.5%) out of 2,636 specimens]
- Variation (%p): increase from 20.0% in 49<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	47	22	1	(4.5)	1	(4.5)	0	(0.0)	2	(9.1)	0	(0.0)	4	(18.2)
	48	30	1	(3.3)	2	(6.7)	1	(3.3)	1	(3.3)	1	(3.3)	6	(20.0)
	49	35	5	(14.3)	1	(2.9)	0	(0.0)	1	(2.9)	0	(0.0)	7	(20.0)
	50	40	14	(35.0)	1	(2.5)	1	(2.5)	1	(2.5)	0	(0.0)	17	(42.5)
Cu 20		2,636	480	(18.2)	130	(4.9)	41	(1.6)	56	(2.1)	45	(1.7)	752	(28.5)

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

## 2. Acute gastroenteritis-causing bacteria, weeks ending December 14, 2019 (50th Week)

- Detection rate: 10.3% [cumulative mean proportion in 2019: 1,265 cases (15.5%) out of 8,172 specimens]
- Variation (%p): decrease from 11.8% in 49<sup>th</sup> week of 2019
- Sentinel reporting sites: 17 city/provincial health and environmental institutes and 70 hospitals/clinics

		NIf	No. of isolation (Isolation rate, %)										
Week		No. of Sample	Salmonella spp.	Pathogenic <i>E.coli</i>	<i>Shigella</i> spp.	V.parahae molyticus	V. cholerae	Campylob acter spp.	C.perfring ens	S. aureus	B. cereus	Total	
2019	47	127	4 (3.1)	8 (6.3)	0 (0)	1 (0.8)	0 (0)	1 (0.8)	6 (4.7)	8 (6.3)	0 (0)	28 (22.0)	
	48	130	3 (2.3)	2 (1.5)	0 (0)	1 (0.8)	0 (0)	0 (0)	5 (3.8)	4 (3.1)	0 (0)	15 (11.5)	
	49	144	1 (0.7)	5 (3.5)	0 (0)	0 (0)	0 (0)	2 (1.4)	3 (2.1)	4 (2.8)	1 (0.7)	17 (11.8)	
	50	87	1 (1.1)	0 (0)	0 (0)	0 (0)	0 (0)	4 (4.6)	1 (1.1)	3 (3.4)	0 (0)	9 (10.3)	
	ım. 19	8,172	259 (3.2)	420 (5.1)	1 (0.01)	7 (0.08)	0 (0)	113 (1.4)	173 (2.1)	166 (2.0)	116 (1.4)	1,265 (15.5)	

<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 December 14, 2019 (50th Week)

- Detection rate: 21.1% (4 cases / 19 specimens) [cumulative mean proportion in 2019: 37.7% (671 cases / 1,782 specimens)]
  - Aseptic meningitis: 0 case (Cum. 2019: 256 cases)
  - HFMD and herpangina: 0 case (Cum. 2019: 247 cases)
  - HFMD with complications: 0 case (Cum. 2019: 14 cases)
  - Other: 4 cases (Cum. 2019: 154 cases)
- Variation (%p): decrease from 40.0% in 49<sup>th</sup> week of 2019
- Sentinel reporting sites: 14 city/provincial health and environmental institutes and 59 hospitals/clinics

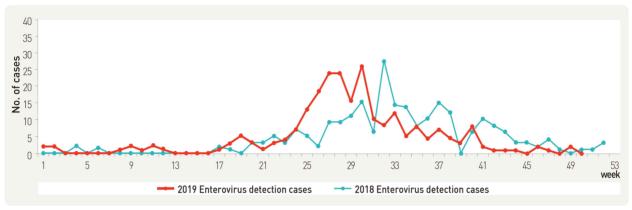


Figure 7. Detection of enterovirus in aseptic meningitis patients from 2018 to 2019

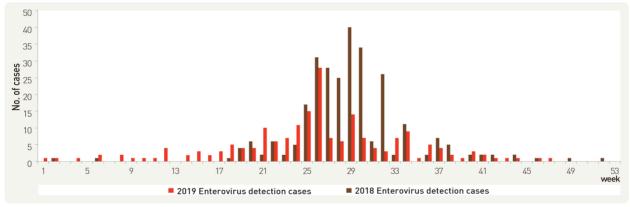


Figure 8. Detection of enterovirus in HFMD and herpangina patients from 2018 to 2019

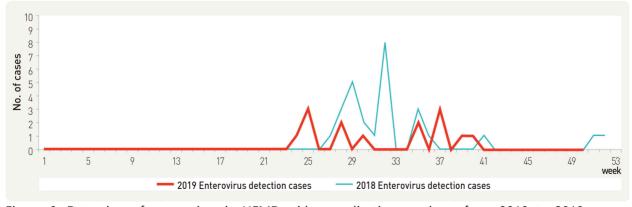


Figure 9. Detection of enterovirus in HFMD with complications patients from 2018 to 2019

### **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	14				
Year	2018			Current						
rear	2010			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

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

• 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:

### Mail:

Division of Medical Science Knowledge Management Korea Centers for Disease Control and Prevention

202 Osongsaengmyeong 2-ro, Osong-eup, Heungdeok-gu, Cheongju-si, Chungcheongbuk-do, Korea, 28160