

Public Health Weekly Report
Disease Surveillance Statistics

Vol. 12, No. 51 December 19, 2019

I. National Notifiable Infectious Diseases

1. Reported cases, week ending December 14, 2019 (50th Week)*

Unit: no. of cases[†]

		Current	Cum.	5-year		Total no.	of cases	by year		Imported cases of current week
Class	sification of disease [‡]	week	2019	weekly average	2018	2017	2016	2015	2014	: Country (no. of cases)
Category	I									,
	Cholera	0	1	0	2	5	4	0	0	
	Typhoid fever	2	102	3	213	128	121	121	251	
	Paratyphoid fever	3	60	0	47	73	56	44	37	
	Shigellosis	8	147	2	191	112	113	88	110	Philippines(3)
	EHEC	0	159	1	121	138	104	71	111	
	Viral hepatitis A	82	17,502	45	2,437	4,419	4,679	1,804	1,307	Russia(1), Philippines(1)
Category	II									
sategory	Pertussis	16	475	8	980	318	129	205	88	
	Tetanus	0	37	0	31	34	24	203	23	
	Measles	4	282	1	15	7	18	7	442	
	Mumps	274	15,624	419	19,237	16,924	17,057	23,448	25,286	
	Rubella	2	13	1	0	7	11	11	11	
	Viral hepatitis B (Acute)	6	371	7	392	391	359	155	173	
	Japanese encephalitis	0	33	0	17	9	28	40	26	
	Varicella	2,620	77,427	2,374	96,467	80,092	54,060	46,330	44,450	
	Haemophilus influenza type b	0	0	0	2	3	0	0	0	
	Streptococcus pneumoniae	6	494	11	670	523	441	228	36	
Category	III									
	Malaria	3	559	2	576	515	673	699	638	Senegal(1), Cameroon(1)
	Scarlet fever [§]	158	7,328	289	15,777	22,838	11,911	7,002	5,809	• • • • • • • • • • • • • • • • • • • •
	Meningococcal meningitis	1	16	0	14	17	6	6	5	
	Legionellosis	10	447	3	305	198	128	45	30	
	Vibrio vulnificus sepsis	0	40	0	47	46	56	37	61	
	Murine typhus	1	22	0	16	18	18	15	9	
	Scrub typhus	99	3,935	208	6,668	10,528	11,105	9,513	8,130	
	Leptospirosis	2	148	2	118	103	117	104	58	
	Brucellosis	0	3	0	5	6	4	5	8	
	Rabies	0	0	0	0	0	0	0	0	
	HFRS	18	411	17	433	531	575	384	344	
	Syphilis	37	1,697	34	2,280	2,148	1,569	1,006	1,015	
	CJD/vCJD	1	68	1	53	36	42	33	65	
	Tuberculosis	508	23,349	575	26,433	28,161	30,892	32,181	34,869	
	HIV/AIDS	22	954	19	989	1,008	1,060	1,018	1,081	
	Viral hepatitis C	163	9,392	-	10,811	6,396	-	-	-	
	VRSA	0	2	-	0	0	-	-	-	
	CRE	274	14,740	-	11,954	5,717	-	-	-	

Unit: no. of cases[†]

	Current	Cum.	5-year _		Total no.	of cases	by year		Imported cases
Classification of disease [‡]	week	2019	wéekly average	2018	2017	2016	2015	2014	of current week : Country (no. of cases)
Category IV									
Dengue fever	5	269	3	159	171	313	255	165	Philippines(2), Maldives(1), Vietnam(1), Thailand(1)
Q fever	1	220	1	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	1	259	272	165	79	55	
MERS	0	0	-	1	0	0	185	-	
Zika virus infection	2	10	-	3	11	16	-	-	Indonesia(1), 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.

^{*} The reported data for year 2019 are provisional but the data from 2014 to 2018 are 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.

Unit: no. of cases[†]

						Diseases	of Categoi	γI			oriit. 110. t	or cases
Reporting area		Cholera		Тур	phoid fe			ityphoid 1	ever	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 [§]	Current week	Cum. 2019	Cum. 5-year average [§]
Overall	0	1	2	2	102	161	3	60	52	8	147	116
Seoul	0	1	0	0	19	28	1	12	10	1	45	26
Busan	0	0	1	2	8	10	1	5	6	2	13	7
Daegu	0	0	0	0	2	5	0	3	2	0	8	6
Incheon	0	0	0	0	7	8	0	1	3	0	8	14
Gwangju	0	0	0	0	0	6	0	3	2	0	3	2
Daejeon	0	0	0	0	7	8	0	2	2	0	4	2
Ulsan	0	0	0	0	3	2	0	1	1	1	4	1
Sejong	0	0	0	0	0	1	0	0	0	0	0	0
Gyonggi	0	0	0	0	30	33	0	14	9	3	34	19
Gangwon	0	0	0	0	1	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	0	3	3	0	2	3	0	2	3
Jeonnam	0	0	0	0	2	8	0	0	3	0	9	6
Gyeongbuk	0	0	0	0	4	6	0	3	2	1	2	6
Gyeongnam	0	0	1	0	8	22	1	8	3	0	8	11
Jeju	0	0	0	0	0	3	0	1	1	0	3	2

^{*} The reported data for year 2019 are provisional but the data from 2014 to 2018 are 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.

Unit: no. of cases[†]

		Di	seases of	Category	1			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	0	159	108	82	17,502	2,813	16	475	333	0	37	24
Seoul	0	36	14	12	3,126	553	1	69	45	0	2	3
Busan	0	3	4	4	494	118	0	28	30	0	2	2
Daegu	0	6	9	2	188	61	1	21	9	0	6	1
Incheon	0	12	9	10	985	240	3	19	20	0	0	1
Gwangju	0	9	16	0	161	81	0	25	16	0	2	1
Daejeon	0	2	3	2	2,667	130	0	16	5	0	2	0
Ulsan	0	5	6	0	82	28	0	10	10	0	2	0
Sejong	0	3	1	0	391	18	0	6	5	0	1	0
Gyonggi	0	31	18	30	5,371	855	8	78	53	0	6	2
Gangwon	0	5	3	5	263	66	0	6	3	0	1	1
Chungbuk	0	9	2	3	1,075	84	0	9	7	0	1	1
Chungnam	0	4	3	3	1,432	178	0	6	11	0	3	1
Jeonbuk	0	6	2	6	556	141	0	15	5	0	1	1
Jeonnam	0	13	7	1	161	88	0	35	15	0	2	4
Gyeongbuk	0	6	3	1	251	70	1	46	21	0	4	3
Gyeongnam	0	4	4	2	230	85	2	78	73	0	2	3
Jeju	0	5	4	1	69	17	0	8	5	0	0	0

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[§] 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[†]

						Diseases	of Categor	y II				
Reporting area		Measles	;		Mumps			Rubella		Vira	l hepatiti (Acute)	s B
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	4	282	106	274	15,624	19,634	2	13	18	6	371	283
Seoul	1	40	25	30	2,012	1,860	0	2	3	1	61	48
Busan	0	8	4	19	862	1,402	0	0	1	0	33	17
Daegu	0	20	3	9	675	619	0	0	1	0	8	10
Incheon	0	14	12	27	784	798	0	1	0	0	19	16
Gwangju	0	3	1	7	468	1,527	0	0	1	0	5	6
Daejeon	2	38	4	9	464	420	0	1	1	0	13	9
Ulsan	0	4	1	7	484	626	0	0	0	1	5	8
Sejong	0	2	0	2	90	67	0	0	0	0	0	0
Gyonggi	0	95	33	73	4,528	4,545	2	4	6	1	87	72
Gangwon	0	7	1	15	511	622	0	0	0	1	12	9
Chungbuk	0	2	2	9	415	377	0	1	1	0	18	9
Chungnam	0	5	4	10	706	733	0	0	1	0	19	14
Jeonbuk	0	9	1	7	711	1,797	0	0	0	1	16	18
Jeonnam	0	11	9	9	600	978	0	1	0	0	18	13
Gyeongbuk	0	11	5	16	816	846	0	2	2	1	28	15
Gyeongnam	1	10	1	19	1,236	2,176	0	0	1	0	22	17
Jeju	0	3	0	6	262	241	0	1	0	0	7	2

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[§] 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[†]

	Diseases of Category II orting Japanese encephalitis Varicella							С	Diseases of	Category II	Jnit: no. (or cases
Reporting area	Japane	se ence	ohalitis		Varicella			Malaria		Sc	arlet feve	r ¹
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	0	33	24	2,620	77,427	59,142	3	559	619	158	7,328	11,980
Seoul	0	6	9	350	9,166	6,876	3	100	86	28	1,219	1,494
Busan	0	0	1	110	3,709	3,417	0	14	8	8	412	884
Daegu	0	3	1	136	4,200	3,147	0	2	9	5	220	461
Incheon	0	1	1	95	3,601	3,191	0	87	98	5	363	546
Gwangju	0	2	1	86	2,749	1,917	0	4	4	5	382	561
Daejeon	0	1	1	58	1,905	1,690	0	5	4	6	316	430
Ulsan	0	0	0	28	1,859	1,720	0	2	4	6	297	499
Sejong	0	0	0	12	831	504	0	1	1	2	50	58
Gyonggi	0	8	5	674	22,131	16,860	0	294	345	53	2,124	3,486
Gangwon	0	2	0	76	1,644	1,839	0	15	18	2	118	191
Chungbuk	0	1	1	73	1,880	1,475	0	7	5	3	119	221
Chungnam	0	4	1	66	2,866	2,265	0	9	8	7	319	545
Jeonbuk	0	0	0	151	2,992	2,677	0	3	5	3	231	430
Jeonnam	0	2	1	103	2,933	2,547	0	0	4	5	236	469
Gyeongbuk	0	1	1	209	5,166	2,772	0	5	8	8	323	635
Gyeongnam	0	2	1	333	8,347	4,762	0	8	9	11	498	935
Jeju	0	0	0	60	1,448	1,483	0	3	3	1	101	135

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[§] 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[†]

						Diseases	of Categor	y III		-		
Reporting area	Meningo	coccal m	neningitis	Le	gionellos	sis	Vibrio	vulnificus	sepsis	Mu	ırine typh	us
a. oa	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	1	16	9	10	447	131	0	40	50	1	22	15
Seoul	0	3	3	2	132	38	0	6	5	0	2	2
Busan	0	0	1	0	19	8	0	3	5	0	0	1
Daegu	0	0	1	0	15	4	0	0	1	0	0	0
Incheon	0	1	0	0	34	10	0	0	4	0	4	1
Gwangju	0	0	0	0	14	0	0	0	1	0	1	2
Daejeon	0	0	0	0	4	1	0	0	1	0	0	0
Ulsan	0	1	0	0	3	3	0	1	1	0	2	2
Sejong	0	1	0	0	0	0	0	0	0	0	0	0
Gyonggi	1	6	2	4	120	29	0	10	9	0	4	2
Gangwon	0	2	0	1	11	7	0	0	0	0	0	0
Chungbuk	0	0	0	0	12	5	0	2	1	0	1	1
Chungnam	0	1	0	0	12	4	0	1	3	0	0	1
Jeonbuk	0	0	0	1	7	2	0	2	2	0	1	0
Jeonnam	0	0	0	0	17	3	0	7	7	0	2	1
Gyeongbuk	0	0	1	2	33	9	0	1	3	0	1	0
Gyeongnam	0	1	1	0	8	5	0	6	6	0	0	2
Jeju	0	0	0	0	6	3	0	1	1	1	4	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.

[†] 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.

Unit: no. of cases[†]

						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§	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	99	3,935	9,092	2	148	96	0	3	4	18	411	426
Seoul	4	115	266	0	13	5	0	2	1	0	12	18
Busan	13	273	612	0	7	5	0	0	0	0	19	11
Daegu	1	66	193	0	2	1	0	0	0	0	3	3
Incheon	0	50	87	0	4	1	0	0	0	1	9	7
Gwangju	2	78	296	0	4	2	0	0	0	0	7	8
Daejeon	1	115	273	0	0	2	0	0	0	1	3	6
Ulsan	6	138	428	0	1	2	0	0	1	0	2	2
Sejong	0	11	54	0	1	0	0	0	0	0	0	3
Gyonggi	6	288	765	1	20	17	0	0	0	4	49	95
Gangwon	0	28	78	0	10	4	0	0	0	1	16	16
Chungbuk	0	92	228	0	5	4	0	0	0	0	18	24
Chungnam	5	439	963	0	26	12	0	0	0	2	55	57
Jeonbuk	9	395	1,006	1	8	5	0	0	0	3	60	43
Jeonnam	15	649	1,511	0	15	17	0	1	0	2	76	65
Gyeongbuk	3	277	569	0	17	8	0	0	1	3	41	37
Gyeongnam	24	823	1,675	0	14	11	0	0	0	0	39	30
Jeju	10	98	88	0	1	0	0	0	1	1	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.

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[§] 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[†]

				Disease	es of Cat	tegory III					of Cate	
Reporting area		Syphilis		(CJD/vCJD)	Τι	uberculos	is	De	ngue fev	er
	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	37	1,697	1,535	1	68	46	508	23,349	29,323	5	269	206
Seoul	2	335	322	0	13	10	91	4,180	5,499	2	71	65
Busan	2	171	98	0	2	3	42	1,620	2,074	0	10	13
Daegu	3	87	69	0	3	3	24	1,030	1,433	0	16	10
Incheon	6	133	133	0	3	2	33	1,285	1,514	1	19	10
Gwangju	3	40	52	0	1	0	13	562	718	1	3	3
Daejeon	2	61	46	0	4	1	13	484	679	0	7	5
Ulsan	0	19	21	0	0	1	11	466	604	0	12	2
Sejong	1	6	6	0	0	0	1	66	84	0	0	1
Gyonggi	8	439	424	1	20	10	123	5,151	6,207	1	83	57
Gangwon	0	45	36	0	2	2	21	994	1,254	0	5	3
Chungbuk	1	36	35	0	2	1	12	659	896	0	6	2
Chungnam	0	61	50	0	1	3	19	1,083	1,357	0	7	6
Jeonbuk	2	51	34	0	4	1	18	912	1,115	0	10	4
Jeonnam	1	35	39	0	4	1	33	1,267	1,490	0	2	4
Gyeongbuk	3	72	63	0	4	4	27	1,756	2,093	0	3	8
Gyeongnam	3	79	70	0	5	4	23	1,518	1,955	0	10	11
Jeju	0	27	37	0	0	0	4	316	349	0	5	2

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[§] 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[†]

											Jnit: no.	or cases
						Diseases (of Category	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 [§]	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§
Overall	1	220	72	0	21	20	0	223	180	2	10	-
Seoul	1	20	6	0	9	5	0	9	11	1	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	1	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	0	38	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	28	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	-

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II. Sentinel-Reporting Infectious Diseases

1. Influenza, weeks ending December 14, 2019 (50th Week)

- Weekly proportion of influenza-like illness per 1,000 outpatients: 28.5 cases (=2.85%)
- Variation: increase from 19.5 cases in 49th week of 2019
- Sentinel reporting sites: 200 hospitals/clinics
 2019-2020 outbreak standard: 5.9 cases (/1,000)

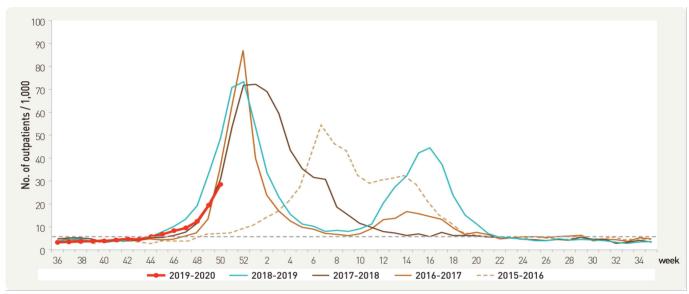


Figure 1. Weekly proportion of influenza-like illness per 1,000 outpatients, 2015-2016 to 2019-2020 flu seasons

2. Hand, Foot and Mouth Disease (HFMD), weeks ending December 14, 2019 (50th Week)

- Weekly proportion of hand, foot and mouth disease (HFMD) per 1,000 outpatients: 2.1 cases
- Variation: increase from 1.8 cases in 49th week of 2019
- Sentinel reporting sites: 97 hospitals/clinics

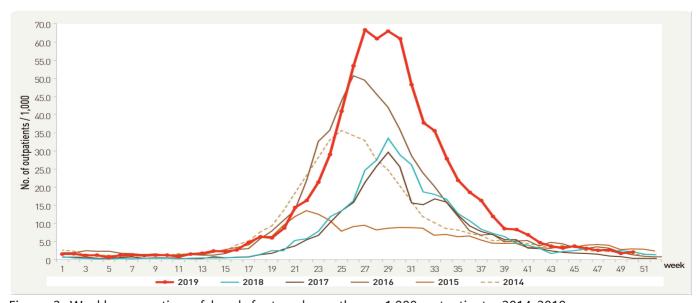


Figure 2. Weekly proportion of hand, foot and mouth per 1,000 outpatients, 2014-2019

3. Ophthalmologic infectious diseases, weeks ending December 14, 2019 (50th Week)

- Weekly proportion of epidemic keratoconjunctivitis per 1,000 outpatients: 14.4 cases
- Variation: increase from 13.5 cases in 49th 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: 0.4 case
- Variation: increase from 0.3 case in 49th week of 2019
- Sentinel reporting sites: 90 hospitals/clinics

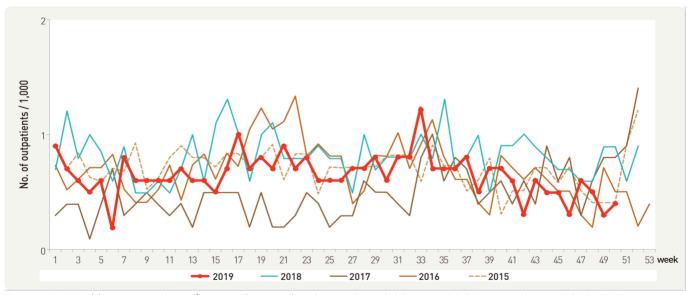


Figure 4. Weekly proportion of acute hemorrhagic conjunctivitis per 1,000 outpatients, 2015-2019

4. Sexually Transmitted Diseases[†], weeks ending December 14, 2019 (50th Week)

- Cases per sentinel: 2.0 for genital herpes, 2.0 for chlamydia, 2.0 for condyloma acuminata, 1.8 for gonorrhea
- Variation from 49^{th} week of 2019 No change: gonorrhea $(1.8 \rightarrow 1.8)$

Decrease: chlamydia (3.3 \rightarrow 2.0), genital herpes (3.5 \rightarrow 2.0), condyloma acuminata (2.8 \rightarrow 2.0)

• Sentinel reporting sites: 592 hospitals/clinics

X No. of reported sites in 50th week: 20 for gonorrhea, 57 for chlamydia, 43 for genital herpes, 40 for condyloma acuminata

Unit: no. of cases/sentine

(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 [§]	Current week	Cum. 2019	Cum. 5-year average§	Current week	Cum. 2019	Cum. 5-year average§
1.8	8.9	10.0	2.0	33.6	27.9	2.0	47.9	32.2	2.0	25.4	19.6

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

§ 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 December 14, 2019 (50th Week)

- No. of reported outbreaks: 6 with 63 patients (cumulative no. of outbreaks: 576 with 6,820 patients)
- Variation: decrease from 8 in 49th week of 2019
- Reporting sites: 254 health centers

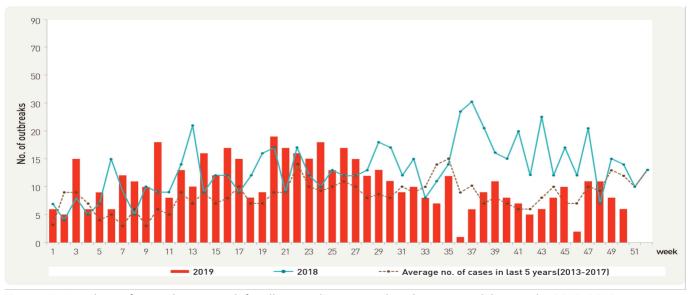


Figure 5. Number of waterborne and foodborne disease outbreaks reported by week, 2018-2019

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

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

1. Influenza viruses, weeks ending December 14, 2019 (50th Week)

- Weekly reported number of specimens positive for influenza: 50 cases (16.2%) / 308 specimens [influenza subtype: A(H1N1)pdm09 32 cases, A(H3N2) 15 cases, B 3 cases]
- Variation (%p): decrease from 59 cases (18.6%) / 318 specimens in 49th week of 2019
- Sentinel reporting sites: 52 hospitals/clinics

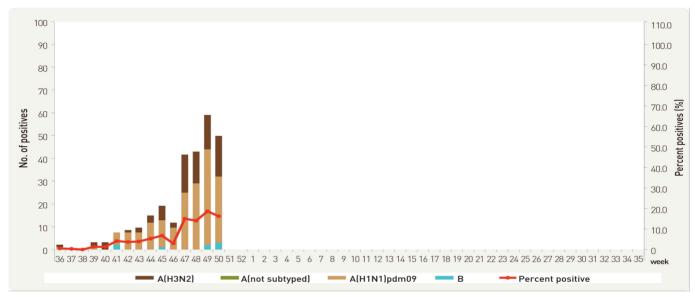


Figure 6. Number of specimens positive for influenza by subtype, 2019-2020 flu season

2. Respiratory viruses, weeks ending December 14, 2019 (50th Week)

- Detection rate: 66.6% (cumulative mean proportion during preceding three weeks plus current week: 62.7% out of 1,207 specimens)
- Variation (%p): increase from 64.2% in 49th 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		
47	272	64.0	11.0	1.1	10.7	15.4	3.7	20.6	1.5	0.0		
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		
Cum.**	1,207	62.7	10.3	1.6	11.5	16.1	5.0	16.2	1.2	0.8		
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 November 17, 2019 − December 14, 2019 (Average no. of detected cases is 302 last 4 weeks)

 $[\]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 7, 2019 (49th Week)

- Detection rate: 22.6% [cumulative mean proportion in 2019: 732 cases (28.3%) out of 2,586 specimens]
- Variation (%p): increase from 13.8% in 48th week of 2019
- Sentinel reporting sites: 17 city/provincial health and environmental institutes and 70 hospitals/clinics

		No. of sample	No. of detection (Detection rate, %)											
W	eek		Norovirus			Group A Rotavirus A		eric ovirus	Astrovirus		Sapovirus		Total	
2019	46	22	0	(0.0)	0	(0.0)	0	(0.0)	0	(0.0)	1	(4.5)	1	(4.5)
	47	19	1	(5.3)	1	(5.3)	0	(0.0)	2	(10.5)	0	(0.0)	4	(21.1)
	48	29	0	(0.0)	2	(6.9)	1	(3.4)	1	(3.4)	0	(0.0)	4	(13.8)
	49	31	5	(16.1)	1	(3.2)	0	(0.0)	1	(3.2)	0	(0.0)	7	(22.6)
	ım.)19	2,586	464	(17.9)	129	(5.0)	40	(1.5)	55	(2.1)	44	(1.7)	732	(28.3)

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

2. Acute gastroenteritis-causing bacteria, weeks ending December 7, 2019 (49th Week)

- Detection rate: 9.9% [cumulative mean proportion in 2019: 1,250 cases (15.5%) out of 8,052 specimens]
- Variation (%p): decrease from 11.5% in 48th week of 2019
- Sentinel reporting sites: 17 city/provincial health and environmental institutes and 70 hospitals/clinics

			No. of	No. of isolation (Isolation rate, %)										
	Week		No. of Sample		Pathogenic <i>E.coli</i>	<i>Shigella</i> spp.	V.parahae molyticus	V. cholerae	Campylob acter spp.		S. aureus	B. cereus	Total	
í	2019	46	129	2 (1.6)	2 (1.6)	0 (0)	0 (0)	0 (0)	1 (0.8)	4 (3.1)	2 (1.6)	0 (0)	11 (8.5)	
		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	111	1 (0.9)	4 (3.6)	0 (0)	0 (0)	0 (0)	1 (0.9)	2 (1.8)	3 (2.7)	0 (0)	11 (9.9)	
	Cu 20		8,052	258 (3.2)	419 (5.2)	1 (0.01)	7 (0.08)	0 (0)	108 (1.3)	171 (2.1)	162 (2.0)	115 (1.4)	1,250 (15.5)	

^{*} 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 December 7, 2019 (49th Week)

- Detection rate: 40.0% (4 cases / 10 specimens) [cumulative mean proportion in 2019: 37.9% (667 cases / 1,761 specimens)]
 - Aseptic meningitis: 2 cases (Cum. 2019: 256 cases)
 - HFMD and herpangina: 0 case (Cum. 2019: 247 cases)
 - HFMD with complications: 0 case (Cum. 2019: 14 cases)
 - Other: 2 cases (Cum. 2019: 150 cases)
- Variation (%p): increase from 0.0% in 48th week of 2019
- Sentinel reporting sites: 14 city/provincial health and environmental institutes and 59 hospitals/clinics

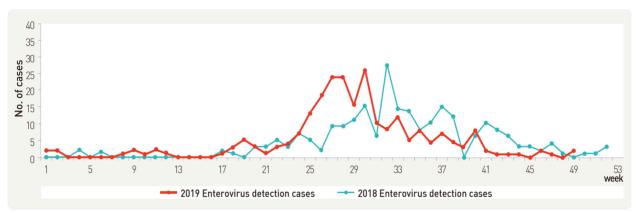


Figure 7. Detection of enterovirus in aseptic meningitis patients from 2018 to 2019

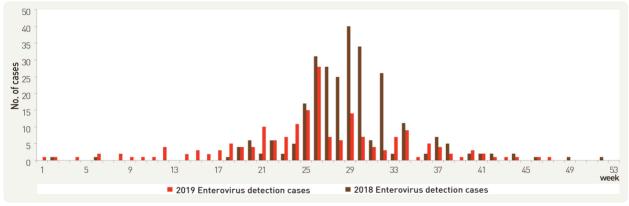


Figure 8. Detection of enterovirus in HFMD and herpangina patients from 2018 to 2019

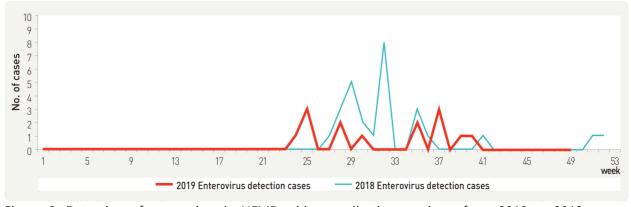


Figure 9. Detection of enterovirus in HFMD with complications patients from 2018 to 2019

VII. Vector Surveillance: Scrub typhus vector chigger mites

1. Scrub typhus vector chigger mites, weeks ending December 14, 2019 (50th Week)

• No. of chigger mites: 115

• Variation: decrease from 177 in 49th week of 2019

• Sentinel reporting sites: 9 city/province (16 sites)

X No. of chigger mites: total number of chigger in 320 traps

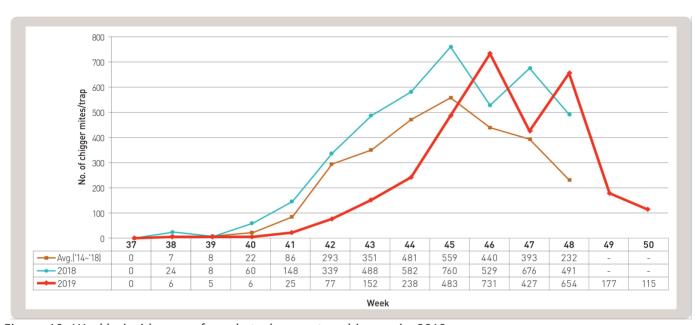


Figure 10. Weekly incidences of scrub typhus vector chiggers in 2019

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 1st 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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