## **Abstract**

## National notification trend of sexually transmitted infections (STIs) in 2019-2020

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Sexually transmitted infections (STIs) refer to infectious diseases caused by more than 30 bacteria, viruses, and parasites that are commonly transmitted through sexual contact. In Korea, STI cases have increased over the last 10 years. The aim of this study was to review the STI epidemic and trends during the COVID-19 pandemic and the reorganization of legally defined infectious diseases. To do so, this study analyzed the 2019-2020 STI data from the National Infectious Disease Surveillance System. As a result, 26,782 cases of gonorrhea, chlamydia, chancroid, genital herpes, and condyloma acuminata, which have been monitored under the sentinel surveillance system, were reported in 2020. This marked a decline of 16.4% compared to 2019. The sentinel surveillance system expanded its monitoring coverage to syphilis and Human Papillomavirus from 2020, and 330 and 10,945 cases each were reported. It is suggested that social distancing, reduced tests, reduced treatment of STIs, and a reduced willingness to receive medical services affected the decline of case reports. However, more conclusive analysis is required.

According to previous surveillance data in 2011-2019, reported syphilis cases were 1.8 times greater, and 5 types of STIs on sentinel surveillance were reported 3.8 times greater on 2019 compared to 2011. Although there was a decline on 2020, further increase could be predicted if the increase reflects a changing social environment and culture, and the national government should reduce their incidence and minimize their impact on people's health by establishing and implementing national strategies on STIs based on surveillance.

Keywords: Sexually transmitted infections (STIs), Gonorrhea, Chlamydia, Genital herpes, Condyloma acuminata, Syphilis, **Human Papillomavirus** 

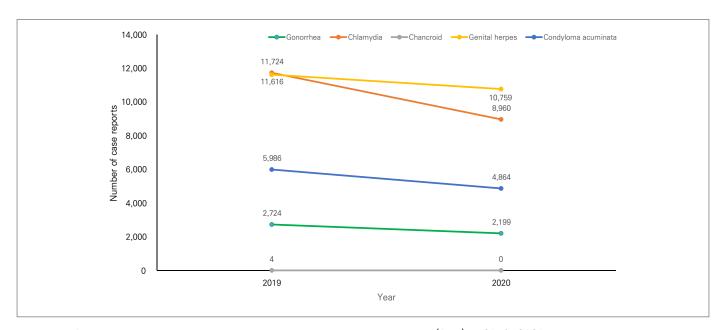


Figure 1. Sentinel surveillance report trend of sexually transmitted infections (STIs) in 2019-2020

<sup>\*</sup> Syphilis and Human Papillomavirus reports are not included

Table 1. Surveillance report on sexually transmitted infections (STIs) in 2019–2020

		2019			2020			
		Male (n=15,066)	Female (n=18,734)	Total (n=33,800)	Male (n=10,953)	Female (n=16,159)	Total (n=27,112)	
Syphilis	Subtotal	1,276	474	1,750	228	102	330	
	0-9 (years old)	14	10	24	1	2	3	
	10-19	36	36	72	8	7	15	
	20-29	478	154	632	97	34	131	
	30-39	323	75	398	56	20	76	
	40-49	202	49	251	33	11	44	
	50-59	112	69	181	17	14	31	
	60-69	59	29	88	10	10	20	
	70 and over	52	52	104	6	4	10	
Gonorrhea	Subtotal	1,881	843	2,724	1,444	755	2,199	
	0-9 (years old)	-	1	1	-	-	-	
	10-19	153	151	304	104	119	223	
	20-29	759	375	1,134	637	367	1,004	
	30-39	506	145	651	391	132	523	
	40-49	285	98	383	205	66	271	
	50-59	129	58	187	79	46	125	
	60-69	44	11	55	22	23	45	
	70 and over	5	4	9	6	2	8	
Chlamydia	Subtotal	4,848	6,876	11,724	3,489	5,471	8,960	
	0-9 (years old)	-	3	3	_	_	-	
	10-19	211	687	898	142	506	648	
	20-29	2,089	3,564	5,653	1,663	3,071	4,734	
	30-39	1,320	1,410	2,730	872	1,032	1,904	
	40-49	746	679	1,425	492	452	944	
	50-59	357	420	777	232	321	553	
	60-69	103	99	202	76	79	155	
	70 and over	22	14	36	12	10	22	
Genital herpes	Subtotal	3,232	8,384	11,616	2,710	8,049	10,759	
	0-9 (years old)	1	1	2	-	-	-	
	10-19	19	176	195	24	139	163	
	20-29	585	1,392	1,977	511	1,331	1,842	
	30-39	800	1,529	2,329	662	1,397	2,059	
	40-49	690	1,377	2,067	545	1,414	1,959	
	50-59	570	2,029	2,599	467	1,874	2,341	
	60-69	368	1,295	1,663	351	1,332	1,683	
	70 and over	199	585	784	150	562	712	

Table 1. (Continued) Surveillance report on sexually transmitted infections (STIs) in 2019–2020

		2019			2020		
		Male (n=15,066)	Female (n=18,734)	Total (n=33,800)	Male (n=10,953)	Female (n=16,159)	Total (n=27,112)
Condyloma acuminata	Subtotal	3,829	2,157	5,986	3,082	1,782	4,864
	0-9 (years old)	2	-	2	3	1	4
	10-19	53	115	168	47	93	140
	20-29	1,356	750	2,106	1,130	631	1,761
	30-39	1,379	504	1,883	1,060	414	1,474
	40-49	589	350	939	496	263	759
	50-59	269	232	501	216	239	455
	60-69	116	145	261	85	92	177
	70 and over	65	61	126	45	49	94
Human Papillomavirus	Subtotal	-	-	-	117	10,828	10,945
	0-9 (years old)	-	-	-	-	-	-
	10-19	-	-	-	-	105	105
	20-29	-	-	-	50	2,413	2,463
	30-39	-	-	-	41	2,748	2,789
	40-49	-	-	-	11	2,052	2,063
	50-59	-	-	-	5	1,869	1,874
	60-69	-	-	-	9	1,257	1,266
	70 and over	-	-	-	1	384	385