

Abstract

Immunization program against influenza in Korea, 2020-2021 season

Kim So Yeon, Lee Hye Lim, Choo Jihye, Ahn AeSun, Lee Jaeyoung, Yang Eunji, Hong JungIk
Division of Immunization, Korea Disease Control and Prevention Agency, KDCA

The Korean 'National Immunization Program against Influenza' has been implemented every year since 1997. In the 2020-2021 season, as part of the program free influenza vaccination were offered to the elderly (62 years of age and older), pregnant women and children (under 18 years of age). As temporary assistance for those in need, free influenza vaccinations were also made available, for disabled pensioners and medical aid beneficiaries.

In the 2020-2021 season, the influenza vaccination rate was 73.0% for the elderly, 47.8% for pregnant women, 73.4% for children, and 19.7% for disabled pensioners and medical aid beneficiaries. Key finding indicated that, in children, the vaccination rate tended to decrease as age increased. In addition, adverse reactions to the influenza vaccine were reported in 1,626 cases; 1,015 cases among the elderly people, 34 cases among pregnant women, 565 cases among children, 12 cases disabled pensioners and medical aid beneficiaries.

Keywords: Influenza, Immunization, Vaccination coverage

Table 1. Influenza vaccination target and period, 2020–2021 season

Vaccination target		Vaccination period
Children (Born in Jan. 1, 2002 – Aug. 1, 2020)	Two doses of flu vaccine	2020.9.8. – 2021.4.30. (Interruption period 9.22. – 24.)
	One dose of flu vaccine (under 12 years of age)	2020.9.25. – 2020.12.31.
	One dose of flu vaccine (13–18 years of age)	2020.10.13. – 2020.12.31.
Pregnant women		2020.9.25. – 2021.4.30.
The elderly (Born before Dec. 31, 1958)	Over 70 yrs.	2020.10.19. – 2020.12.31.
	Over 62 yrs.	2020.10.26. – 2020.12.31.
Disabled pensioners, medical aid beneficiaries		2020.11. 5. – 2021.4.30.

Table 2. Number of influenza vaccinations among the elderly, by healthcare facility, 2020–2021 season

Unit: Cases (%)

Characteristics	No. of people	No. of people vaccinated			Vaccine coverage (%)
		Total	Public health center	Medical institution	
2020–2021 season	10,590,367	7,730,901 (100.0%)	495,285 (6.4%)	7,235,616 (93.6%)	73.0%
2019–2020 season	7,952,353	6,642,854 (100.0%)	722,952 (9.7%)	5,919,902 (89.1%)	83.5%

Table 3. Influenza vaccination coverage of the elderly, by region 2020–2021 season

Unit: Cases, %

Region	No. of people	No. of people vaccinated	Vaccine coverage (%)
Seoul	1,905,076	1,334,762	70.1%
Busan	818,123	586,837	71.7%
Daegu	500,882	353,238	70.5%
Incheon	530,704	377,887	71.2%
Gwangju	257,089	195,293	76.0%
Daejeon	268,177	200,995	74.9%
Ulsan	190,890	137,657	72.1%
Sejong	45,011	32,961	73.2%
Gyeonggi	2,270,241	1,619,767	71.3%
Gangwon	397,936	298,016	74.9%
Chungbuk	362,266	280,614	77.5%
Chungnam	493,006	375,977	76.3%
Jeonbuk	465,481	362,092	77.8%
Jeonnam	521,237	414,559	79.5%
Gyeongbuk	703,052	524,354	74.6%
Gyeongnam	729,794	537,379	73.6%
Jeju	131,402	98,513	75.0%

Table 4. Number of influenza vaccinations among elderly, by the week, 2020–2021 season

Unit: Cases (%)

Characteristics	Week 42 (10.19. – 10.25.)	Week 43 (10.26. – 11.1.)	Week 44 (11.2. – 11.8.)	Week 45 (11.9. – 11.15.)	Week 46 (11.16. – 11.22.)	Week 47 (11.23. – 11.29.)	Week 48 (11.30. – 12.6.)
No. of people vaccinated	4,152,313	1,821,743	581,751	278,999	163,261	116,122	72,985
Vaccine coverage (%)	39.2	56.4	61.9	64.5	66.1	67.2	67.9

Table 5. Number of influenza vaccinations among pregnant women, by healthcare facility, 2020–2021 season

Unit: Cases (%)

Characteristics	No. of people	No. of people vaccinated			Vaccine coverage (%)
		Total	Public health center	Medical institution	
2020–2021 season	272,565	130,230 (100.0%)	954 (0.7%)	129,276 (99.3%)	47.8%
2019–2020 season	303,613	126,780 (100.0%)	1,070 (0.8%)	125,710 (99.2%)	41.8%

Table 6. Influenza vaccination coverage among pregnant women, by region, 2020–2021 season

Unit: Cases, %

Region	No. of people	No. of people vaccinated	Vaccine coverage (%)
Seoul	45,823	23,318	50.9%
Busan	15,191	7,281	47.9%
Daegu	11,297	4,637	41.0%
Incheon	15,635	8,013	51.3%
Gwangju	7,639	3,701	48.4%
Daejeon	7,585	4,005	52.8%
Ulsan	6,484	2,986	46.1%
Sejong	3,432	1,517	44.2%
Gyeonggi	79,716	38,643	48.5%
Gangwon	7,932	3,800	47.9%
Chungbuk	8,660	3,701	42.7%
Chungnam	12,015	5,791	48.2%
Jeonbuk	8,148	3,454	42.4%
Jeonnam	9,525	4,636	48.7%
Gyeongbuk	12,777	5,069	39.7%
Gyeongnam	16,750	7,680	45.9%
Jeju	3,956	1,998	50.5%

Table 7. Influenza vaccination coverage among children, by age, 2020–2021 season

Unit: Persons, Cases, %

Characteristics		No. of people		No. of people vaccinated			Vaccine coverage (%)		
		1-shot	2-shot	1-shot	2-shot		1-shot	2-shot	
					1st shot	2nd shot		1st shot	2nd shot
2020–2021 season	Total	7,639,620	476,808	5,608,150	292,729	240,213	73.4	61.4	50.4
	6–59 mo.	1,360,617	379,148	1,182,686	264,640	233,254	86.9	69.8	61.5
	60 mo.–12 yrs	3,438,652	97,660	2,736,603	28,089	6,959	79.6	28.8	7.1
	60–83 mo.	697,237	45,633	598,363	12,676	3,929	85.8	27.8	8.6
	7–9 yrs.	1,353,089	52,027	1,107,147	15,413	3,030	81.8	29.6	5.8
	10–12 yrs.	1,388,326	–	1,031,093	–	–	74.3	–	–
	13–18 yrs.	2,840,351	–	1,688,861	–	–	59.5	–	–
2019–2020 season	Total	4,901,596	585,206	3,847,396	421,864	311,464	78.5	72.1	53.2
	6–59 mo.	1,458,871	440,677	1,316,031	340,259	305,183	90.2	77.2	69.3
	60 mo.–12 yrs.	3,442,725	144,529	2,531,365	81,605	6,281	73.5	56.5	4.3
	60–83 mo.	678,554	60,715	580,019	17,197	3,171	85.5	28.3	5.2
	7–9 yrs.	1,353,521	83,814	1,027,614	64,408	3,110	75.9	76.8	3.7
	10–12 yrs.	1,410,650	–	923,732	–	–	65.5	–	–

Table 8. Influenza vaccination coverage among children, by region, 2020–2021 season

Unit: %

Region	Total	6–59 months	60–83 months	7–9 yrs.	10–12 yrs.	13–15 yrs.	16–18 yrs.
Seoul	68.7%	83.4%	80.8%	77.6%	71.9%	60.7%	43.4%
Busan	74.4%	83.9%	84.2%	83.7%	78.5%	68.3%	50.5%
Daegu	72.3%	82.3%	82.9%	80.6%	74.2%	68.9%	50.5%
Incheon	75.6%	84.0%	83.3%	84.0%	79.4%	70.7%	54.2%
Gwangju	75.4%	83.7%	84.0%	82.8%	77.3%	71.1%	58.2%
Daejeon	72.4%	80.4%	81.9%	79.4%	73.8%	70.1%	54.2%
Ulsan	73.5%	82.9%	83.1%	80.5%	73.7%	67.7%	54.3%
Sejong	75.2%	83.5%	83.0%	78.1%	73.7%	68.6%	56.7%
Gyeonggi	71.6%	83.3%	81.8%	78.4%	72.4%	64.4%	50.1%
Gangwon	75.6%	84.4%	83.7%	81.7%	76.4%	73.5%	58.5%
Chungbuk	74.9%	81.7%	81.8%	79.7%	74.0%	73.9%	60.3%
Chungnam	74.8%	82.7%	82.1%	79.8%	74.5%	72.7%	58.0%
Jeonbuk	71.3%	83.1%	81.6%	79.4%	73.8%	65.4%	51.1%
Jeonnam	77.1%	83.1%	83.3%	82.1%	77.3%	75.1%	64.6%
Gyeongbuk	74.7%	82.3%	81.8%	79.8%	74.0%	72.2%	60.2%
Gyeongnam	74.0%	83.1%	82.6%	80.6%	75.4%	70.0%	54.7%
Jeju	76.3%	85.4%	84.6%	84.8%	79.2%	68.1%	56.7%

Table 9. Number of influenza vaccinations among disabled pensioners and medical aid beneficiaries, by health service, 2020–2021 season

Unit: Cases (%)

Characteristics	No. of people	No. of people vaccinated			Vaccine coverage (%)
		Total	Public health center	Medical institution	
2020–2021 season	635,477	125,120 (100.0%)	22,375 (17.9%)	102,745 (82.1%)	19.7%