



## Seasonal Influenza Vaccine Uptake in Ireland, 2022-23 (September 2022 – August 2023)



Data extract from the COVAX system were provided on 27/12/2023. Data are subject to ongoing review, validation and update. As a result, figures in this report may differ from previously published figures. Population projections data were provided by Health Intelligence Unit.

This report represents a revision of previous reported data for 2022/2023 season. The previous report contained **only vaccinations administered through GP and pharmacies, however there are additional flu programmes through which people receive flu vaccination e.g. such as healthcare workers clinics and nursing home vaccination.** This report shows an increase in uptake compared to previous data, and all future annual reports will include all vaccination channels.

### Summary

**Table 1:** Seasonal influenza vaccine uptake (%) by age group in Ireland in 2022/23 influenza season

Age group	No. vaccinated	Pop Proj 2021 M2F2 estimate	% Uptake
2-12 years	128,459	745,669	17.2
13-17 years	37,185	335,563	11.1
18-49 years	244,120	2,169,073	11.3
50-64 years	264,068	879,370	30.0
65-69 years	142,280	228,373	62.3
70-74 years	148,275	195,641	75.8
75 and over	277,956	319,075	87.1
2-17 years	165,644	1,081,232	15.3
65 and over	568,511	743,087	76.5
Overall ≥2 years and over	1,242,343	4,872,762	25.5
≥6months*-64 years with medical risk condition	210,084	na	-
Pregnant women	21,312	na	-

Data source: IIS Flu vaccination dashboard

Data source for denominator: HIU 2021 Popul Projection

na- denominator for those with medical risk condition is not available.

### Introduction

The HSE has provided seasonal influenza (flu) vaccination for persons aged 65 years and older and for younger individuals with clinical risk conditions, as recommended by NIAC, for many years. Between 2004/2005 and 2019/2020 seasons, the HSE provided flu vaccine and administration free of charge for those recommended vaccine if they had medical card or GP visit card.

Since the 2020/2021 season the HSE extended access to free vaccination to all individuals in specified age, clinical, and occupational groups regardless of medical/GP visit card status. Additionally, all children aged 2- 12 years (extended in December 2020 to children up to and including 17 years of age), without clinical risk, are recommended nasal flu vaccine as part of a new child flu vaccination programme. In December 2021, all individuals aged 50 years and over, without specific clinical risk, were included in the HSE free flu vaccination programme. However, for the current season

(2022/2023) the HSE has discontinued this programme for age group 50-64 years (people in this age groups with specified clinical conditions will continue to be eligible under that category).

For the purpose of reporting on seasonal flu vaccination uptake the reporting period is considered to be September to August (the following year). For the 2022/2023 flu season the influenza vaccination campaign formally started on the 3<sup>rd</sup> of October 2022.

In this report we provide data on uptake by age group. We present data also on number vaccinated by medical risk condition. The data extract used in this analysis was obtained from the HSE IIS influenza vaccination dashboard. This includes data on the number of patients vaccinated with influenza vaccine, at GP clinics and pharmacies for the period September 2022 – August 2023 (week 38 2022 – week 34 2023), inclusive. The source of data on this dashboard is the COVAX system, which collects vaccination data related on COVID-19 and influenza vaccines administered to the Irish population.

## Methods

The uptake rates are calculated as follows:

1. Influenza uptake rates by age group are calculated based on the proportion of individuals in the specified age group who are vaccinated during the period September 2022 – August 2023.
2. Rates by age groups for the 2022/2023 season are calculated using HIU 2021 Population Projection estimates.

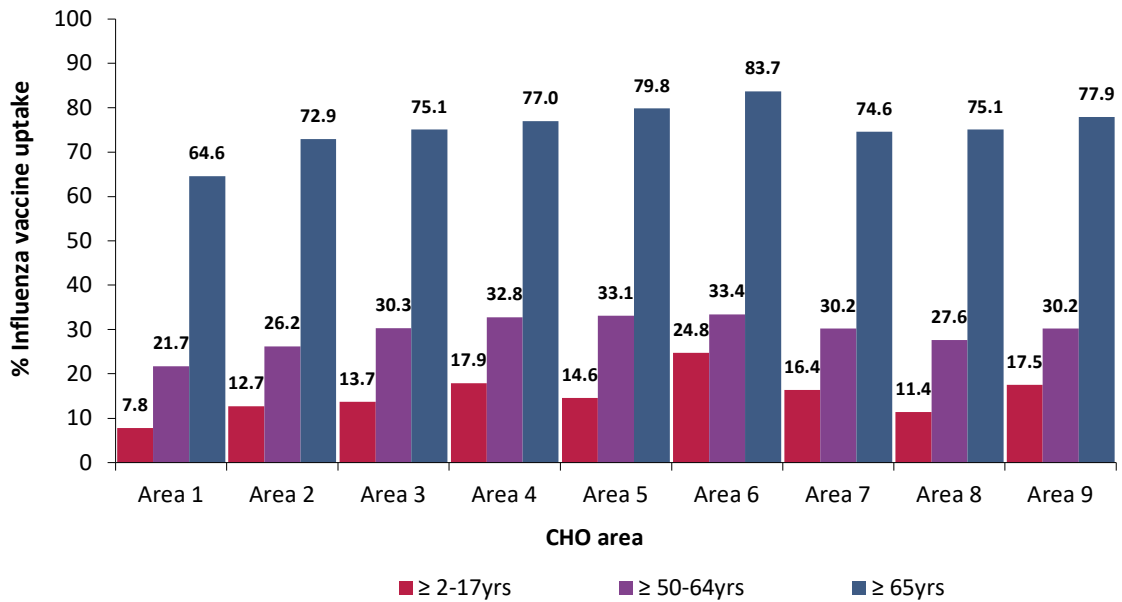
## Results

Data in the results section refer to all submissions to COVAX system for influenza vaccine administered, for the period September 2022 – August 2023 inclusive.

The national influenza vaccine uptake in those aged 65 years and older vaccinated was 76.5%, during the period September 2022 – August 2023 and increased by 1.1% in comparison to last year (75.4%). Vaccine uptake in children 2-17 years was 15.3%, a decrease (1.3%) compared to the influenza season 2021/22 (16.6%) (table 1, figures 3,6).

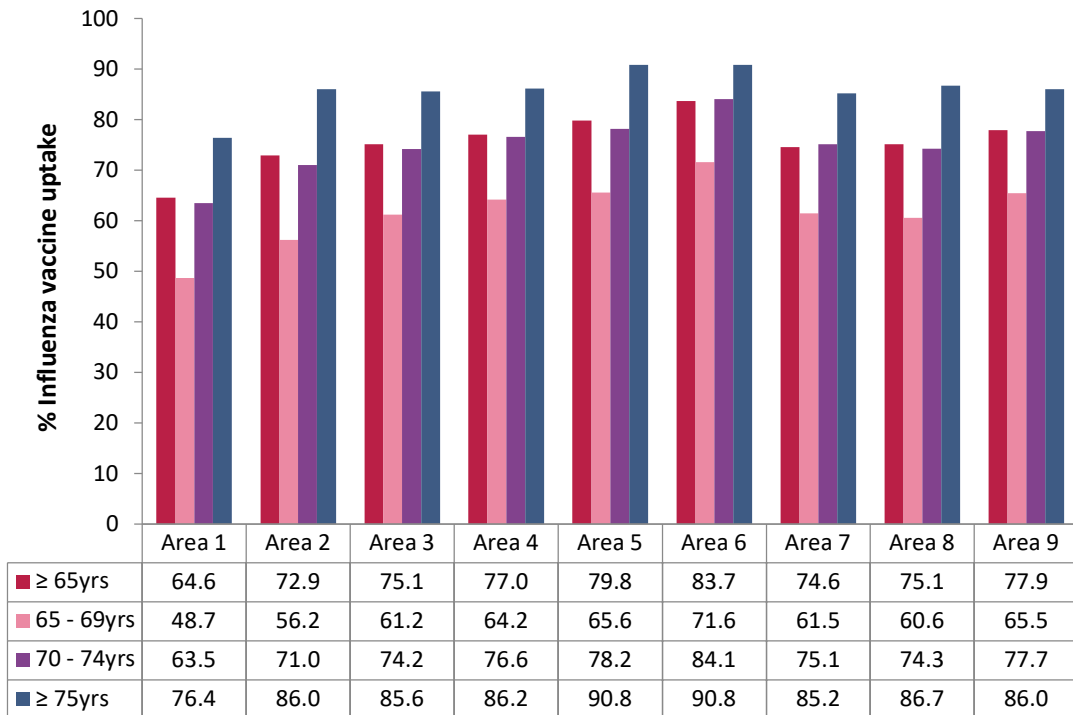
Variation in vaccine uptake was observed between age groups, with the highest uptake (87.1%) in those aged 75 years and older and the lowest uptake in those aged 65-69 years (62.3%) (table 1). Variation in vaccine uptake was also observed between CHO areas, ranging from 64.6% in CHO area 1 to 83.7% in CHO area 6 in those aged 65 and over (figures 1 & 2). Vaccination coverage by CHO areas/counties is presented in figures 1, 2, 5 and table 2.

Vaccination in General Practice accounted for 63.0% (n=783,104) and in pharmacies for 29.0% (n=360,261) of all vaccinations for the period September 2022 - August 2023 (table 4).



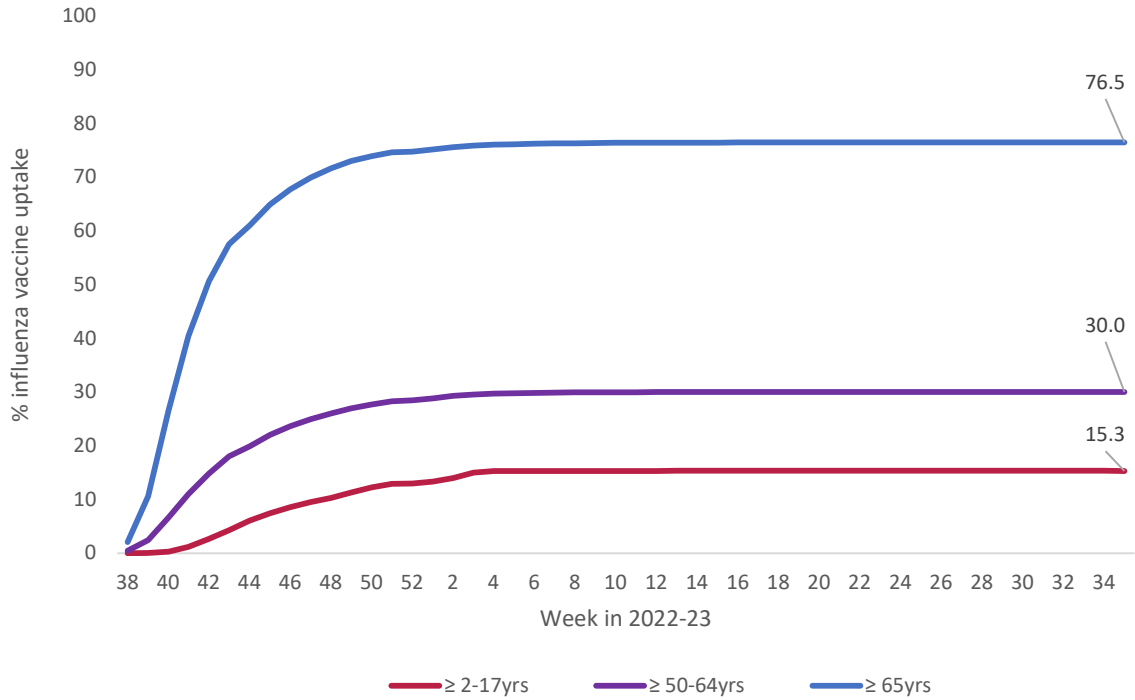
**Figure 1:** Seasonal influenza vaccine uptake (%) by age group and CHO area in Ireland in 2022/23 influenza season

Data source: IIS Flu vaccination dashboard  
 Data source for denominator: HIU 2021 Popul Projection



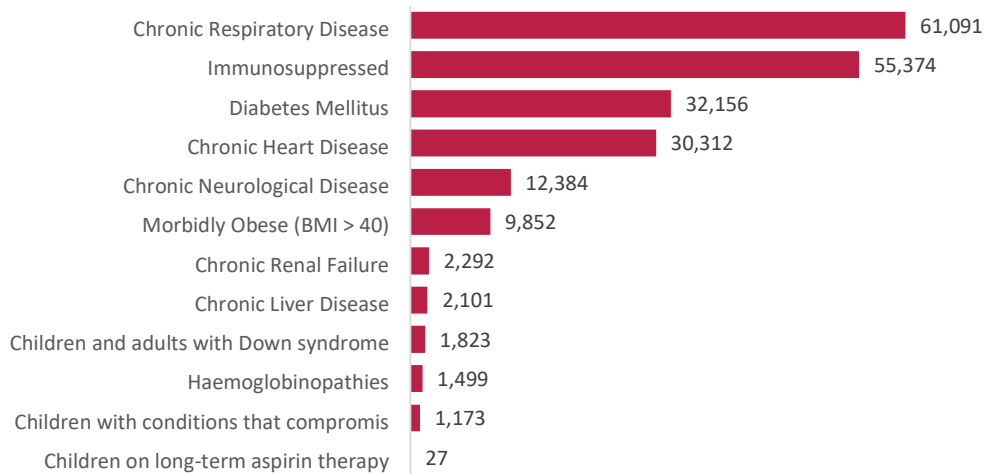
**Figure 2:** Seasonal influenza vaccine uptake (%) in older age groups and CHO areas in Ireland in 2022/23 influenza season

Data source: IIS Flu vaccination dashboard  
 Data source for denominator: HIU 2021 Popul Projection



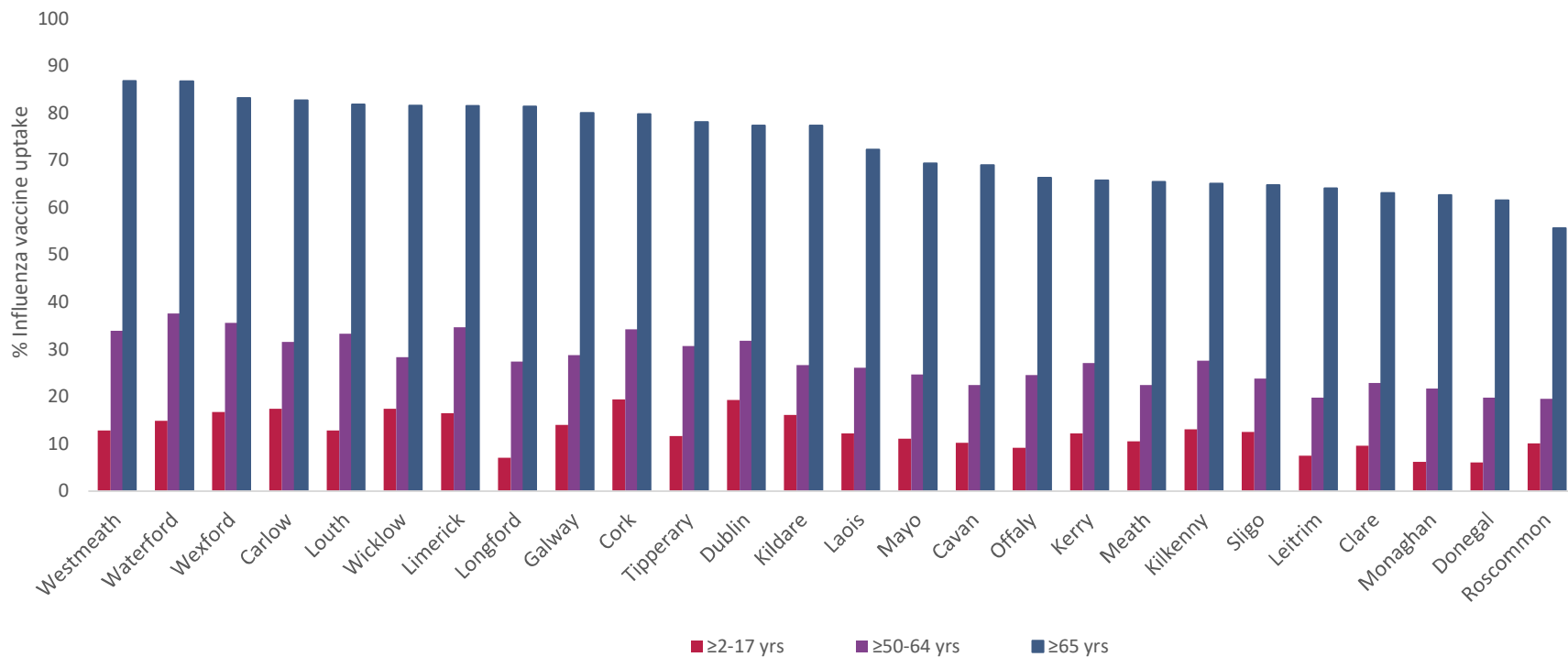
**Figure 3:** Cumulative seasonal influenza vaccine uptake (%) by age groups and week in Ireland in 2022/23 influenza season

Data source: IIS Flu vaccination dashboard.  
 Data source for denominator: HIU 2021 Popul Projection



Data source: IIS Flu vaccination dashboard.

**Figure 4:** Number of individuals with medical risk condition vaccinated with seasonal influenza vaccine in Ireland in 2022/23 influenza season



**Figure 5:** Seasonal influenza vaccine uptake (%) by age groups and counties in Ireland in 2022/23 influenza season

Data source: IIS Flu vaccination dashboard

Data source for denominator: HIU 2021 Popul Projection

## Annex

**Table 2:** Seasonal influenza vaccine uptake (%) by age group and counties in Ireland in 2022/23 influenza season

National/ CHO Area/ LHO Age group	No. vaccinated				Pop Proj 2021 M2F2 estimate				Vaccine uptake (%)			
	≥2-17 yrs	≥18-49 yrs	≥50-64 yrs	≥65 yrs	≥2-17 yrs	≥18-49 yrs	≥50-64 yrs	≥65 yrs	≥2-17 yrs	≥18-49 yrs	≥50-64 yrs	≥65 yrs
Westmeath	2,794	4,414	5,815	11,826	21,812	41,558	17,133	13,631	12.8	10.6	33.9	86.8
Waterford	3,878	8,006	8,575	17,374	26,071	49,388	22,786	20,048	14.9	16.2	37.6	86.7
Wexford	5,824	8,112	10,554	21,218	34,857	62,519	29,658	25,511	16.7	13.0	35.6	83.2
Carlow	2,353	2,346	3,385	7,190	13,504	25,488	10,725	8,695	17.4	9.2	31.6	82.7
Louth	4,091	7,561	8,102	15,760	31,888	60,719	24,300	19,276	12.8	12.5	33.3	81.8
Wicklow	6,038	6,545	8,014	18,419	34,660	64,209	28,316	22,570	17.4	10.2	28.3	81.6
Limerick	7,116	11,809	12,402	26,367	43,104	87,195	35,777	32,362	16.5	13.5	34.7	81.5
Longford	720	1,486	2,107	5,644	10,275	18,135	7,681	6,932	7.0	8.2	27.4	81.4
Galway	8,169	12,858	13,538	31,999	58,187	114,221	46,986	40,016	14.0	11.3	28.8	80.0
Cork	23,630	32,753	34,663	67,954	121,920	244,498	101,412	85,149	19.4	13.4	34.2	79.8
Tipperary	4,157	6,538	9,631	22,077	35,944	65,426	31,389	28,275	11.6	10.0	30.7	78.1
Dublin	54,555	81,522	71,945	146,665	282,471	671,287	226,178	189,579	19.3	12.1	31.8	77.4
Kildare	9,303	10,619	11,116	21,804	57,901	109,285	41,644	28,157	16.1	9.7	26.7	77.4
Laois	2,773	3,288	4,113	8,505	22,760	39,825	15,763	11,761	12.2	8.3	26.1	72.3
Mayo	3,063	4,460	6,415	17,826	27,575	49,663	25,966	25,694	11.1	9.0	24.7	69.4
Cavan	1,921	2,629	3,260	8,318	18,769	32,424	14,535	12,056	10.2	8.1	22.4	69.0
Offaly	1,767	2,995	3,711	8,323	19,220	35,294	15,135	12,549	9.2	8.5	24.5	66.3
Kerry	3,675	5,669	8,064	19,041	30,239	59,508	29,802	28,950	12.2	9.5	27.1	65.8
Meath	5,491	6,541	8,255	16,949	52,269	91,299	36,931	25,864	10.5	7.2	22.4	65.5
Kilkenny	3,024	4,396	5,338	10,676	23,031	42,370	19,329	16,399	13.1	10.4	27.6	65.1
Sligo	1,801	2,651	3,052	7,871	14,415	27,134	12,838	12,144	12.5	9.8	23.8	64.8
Leitrim	545	798	1,258	3,969	7,311	12,410	6,367	6,194	7.5	6.4	19.8	64.1
Clare	2,565	3,594	5,457	13,119	26,763	48,685	23,828	20,796	9.6	7.4	22.9	63.1
Monaghan	931	1,597	2,501	6,222	14,999	26,298	11,505	9,927	6.2	6.1	21.7	62.7
Donegal	2,282	3,989	6,067	17,528	37,108	65,450	30,621	28,448	6.1	6.1	19.8	61.6
Roscommon	1,430	1,794	2,485	6,729	14,180	24,785	12,763	12,104	10.1	7.2	19.5	55.6

Data source: IIS Flu vaccination dashboard.

Data source for denominator: HIU 2021 Popul Projection

Missing information for 20,281 records.

**Table 3:** Seasonal influenza vaccination by age group and medical risk categories in Ireland in 2022/23 influenza season

Medical risk category	Age groups				
	<2years	2-17 years	18-49 years	50-64 years	65 and over
Children and adults with Down syndrome	21	151	1,283	350	18
Children on long-term aspirin therapy	<5	17	7	<5	<5
Children with conditions that compromise respiratory function	39	495	461	176	<5
Chronic Heart Disease	15	93	3,822	23,246	3,136
Chronic Liver Disease	<5	11	648	1,364	76
Chronic Neurological Disease	9	159	5,508	6,258	450
Chronic Renal Failure	<5	18	713	1,388	173
Chronic Respiratory Disease	30	917	24,343	33,309	2,492
Diabetes Mellitus	<5	131	7,894	21,226	2,905
Haemoglobinopathies	<5	44	588	829	37
Immunosuppressed	32	854	20,197	31,310	2,980
Morbidly Obese (BMI > 40)	<5	20	4,372	5,237	223
<b>Total</b>	<b>149</b>	<b>2,910</b>	<b>69,836</b>	<b>124,695</b>	<b>12,493</b>

Data source: IIS Flu vaccination dashboard.

**Table 4:** Seasonal influenza vaccination by month and vaccination site in Ireland in 2022/23 influenza season

Year/month	Number of vaccinated by GP	% vaccinated by GPs	Number of vaccinated in pharmacies	% vaccinated by pharmacies	Number of vaccinated in schools	% vaccinated in schools	Number of vaccinated in HSE other	% vaccinated in HSE other	Total
Sep-22	92,610	80.3	21,493	18.6	0	0.0	1,176	1.0	115,279
Oct-22	425,587	65.4	162,068	24.9	0	0.0	63,464	9.7	651,119
Nov-22	171,637	59.8	96,423	33.6	0	0.0	19,062	6.6	287,122
Dec-22	58,325	51.7	49,352	43.7	0	0.0	5,181	4.6	112,858
Jan-23	27,348	41.9	29,111	44.6	447	0.7	8,436	12.9	65,342
Feb-23	4,633	66.8	1,311	18.9	0	0.0	988	14.3	6,932
Mar-23	1,853	71.1	367	14.1	0	0.0	388	14.9	2,608
Apr-23	661	78.8	106	12.6	0	0.0	72	8.6	839
May-23	235	90.0	23	8.8	0	0.0	<5	1.1	261
Jun-23	102	91.1	7	6.3	0	0.0	<5	2.7	112
Jul-23	39	95.1	<5	0.0	0	0.0	<5	4.9	41
Aug-23	74	97.4	<5	0.0	0	0.0	<5	2.6	76
<b>Total</b>	<b>783,104</b>	<b>63.0</b>	<b>360,261</b>	<b>29.0</b>	<b>447</b>	<b>0.0</b>	<b>98,777</b>	<b>7.9</b>	<b>1,242,589</b>

Data source: IIS Flu vaccination dashboard.

**Table 5:** Seasonal influenza vaccination by age group and vaccination site in Ireland in 2022/23 influenza season

Age group	Number of vaccinated by GP	% vaccinated by GPs	Number of vaccinated in pharmacies	% vaccinated by pharmacies	Number of vaccinated in schools	% vaccinated in schools	Number of vaccinated in HSE other	% vaccinated in HSE other	Total
6-11 months	48	78.7	12	19.7	0	0.0	<5	1.6	61
12-24 months	166	90.7	15	8.2	0	0.0	<5	1.1	183
2-17 years	87,407	52.8	73,425	44.3	439	0.3	4,373	2.6	165,644
18-49 years	107,612	44.1	92,419	37.9	8	0.0	44,081	18.1	244,120
50-64 years	141,141	53.4	99,529	37.7	0	0.0	23,398	8.9	264,068
65 and over	446,728	78.6	94,861	16.7	0	0.0	26,922	4.7	568,511
Total	783,102	63.0	360,261	29.0	447	0.0	98,777	7.9	1,242,587

Data source: IIS Flu vaccination dashboard.  
Missing information for 6 records

**Table 6:** Seasonal influenza vaccination by age group and vaccine type in Ireland in 2022/23 influenza season

Age group	LAIV	% vaccinated	OIV	% vaccinated	Tetra	% vaccinated	Total
6-11 months	0	0.0	27	49.1	28	50.9	55
12-24 months	0	0.0	79	44.4	99	55.6	178
2-17 years	158,476	95.7	2,453	1.5	4,715	2.8	165,644
18-49 years	0	0.0	76,858	31.6	166,152	68.4	243,010
50-64 years	0	0.0	73,540	27.9	190,516	72.1	264,056
65 and over	0	0.0	109,037	19.2	459,458	80.8	568,495
Total	158,476	12.8	261,994	21.1	820,968	66.1	1,241,438

Data source: IIS Flu vaccination dashboard.  
Missing information for 1,153 records

LAIV- Live attenuated Influenza vaccine  
QIV- Quadrivalent Influenza vaccine  
Tetra- Tetravalent influenza vaccine



**Table 7:** Seasonal influenza vaccination by month and medical risk categories for those **less than 65 years of age** in Ireland in 2022/23 influenza season

Year/month	Number of vaccinated	Number in risk category	Children on long-term aspirin therapy	Children with compromise respiratory function	Down syndrome	Chronic Heart Disease	Chronic Liver Disease	Chronic Neurological Disease	Chronic Renal Failure	Chronic Respiratory Disease	Diabetes Mellitus	Haemoglobinopathies	Immunosuppressed	Morbidly Obese
Sep-22	36,642	17,606	<5	34	181	2,561	208	1,101	198	4,770	3,122	130	4,360	940
Oct-22	300,320	97,764	11	487	1,019	13,669	1,048	6,283	1,102	27,716	14,617	675	26,272	4,865
Nov-22	188,467	50,342	6	389	390	6,852	467	2,912	506	15,289	7,052	390	13,769	2,320
Dec-22	85,159	19,329	5	182	156	2,612	186	1,012	186	6,378	2,571	171	4,996	874
Jan-23	55,402	9,647	<5	68	47	1,217	93	499	95	3,441	1,261	82	2,340	501
Feb-23	5,059	1,891	0	7	9	192	18	94	23	664	379	12	392	101
Mar-23	1,981	685	0	<5	0	53	<5	23	6	220	182	<5	172	23
Apr-23	692	215	0	<5	0	17	<5	6	<5	75	46	0	63	<5
May-23	205	83	0	0	<5	<5	<5	<5	0	32	18	0	25	<5
Jun-23	83	12	0	<5	0	<5	0	0	0	6	<5	0	<5	0
Jul-23	25	<5	0	0	0	0	0	0	0	<5	<5	0	0	0
Aug-23	43	13	0	0	<5	<5	0	0	<5	5	0	<5	<5	0
<b>Total</b>	<b>674,078</b>	<b>197,591</b>	<b>26</b>	<b>1,171</b>	<b>1,805</b>	<b>27,176</b>	<b>2,025</b>	<b>11,934</b>	<b>2,119</b>	<b>58,599</b>	<b>29,251</b>	<b>1,462</b>	<b>52,394</b>	<b>9,629</b>

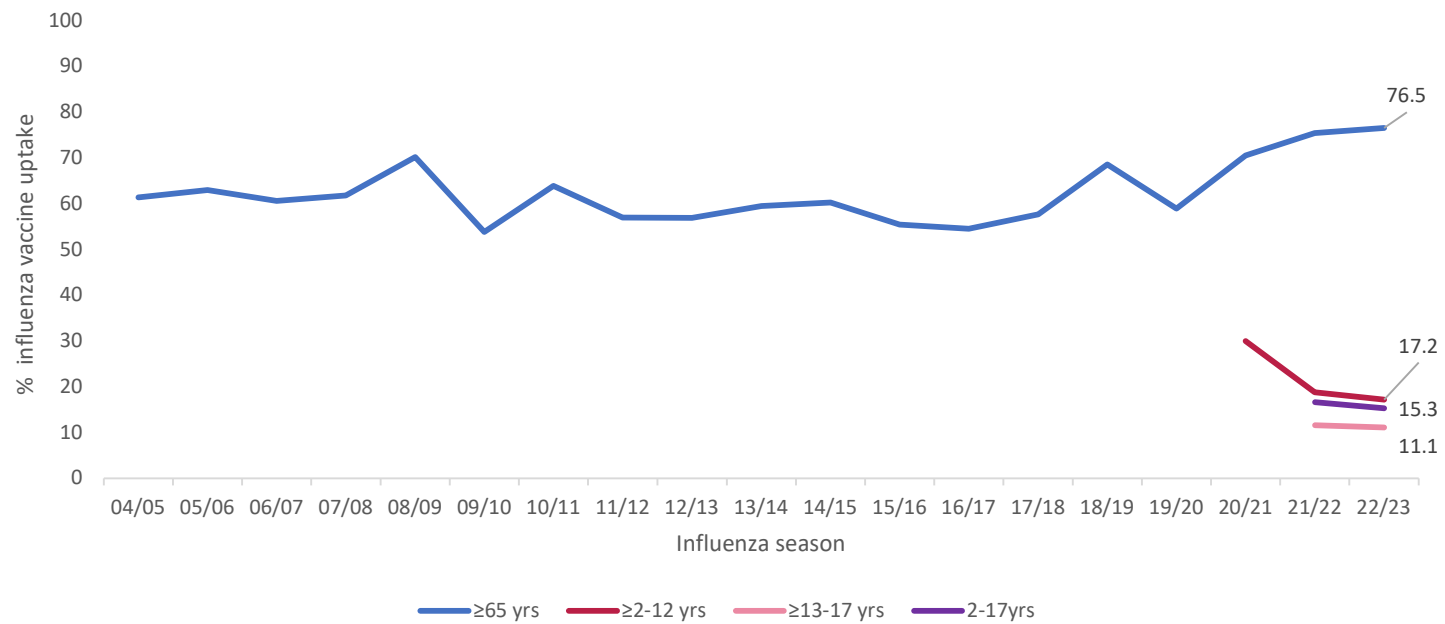
Data source: IIS Flu vaccination dashboard.

**Table 8:** Seasonal influenza vaccination by month and medical risk categories for those **aged 65 years and older** in Ireland in 2022/23 influenza season

Year/month	Number of vaccinated	Number in risk category	Chronic Heart Disease	Chronic Liver Disease	Chronic Neurological Disease	Chronic Renal Failure	Chronic Respiratory Disease	Diabetes Mellitus	Haemoglobinopathies	Immunosuppressed	Morbidly Obese
Sep-22	78,637	1,935	531	7	48	27	374	506	5	404	33
Oct-22	350,799	6,624	1,689	48	250	109	1,275	1,488	24	1,631	110
Nov-22	98,655	2,226	521	9	96	25	455	528	<5	545	45
Dec-22	27,699	726	172	<5	25	<5	144	178	0	187	13
Jan-23	9,940	744	173	<5	22	7	181	150	5	185	17
Feb-23	1,873	152	40	<5	<5	<5	45	40	0	15	<5
Mar-23	627	48	9	<5	<5	0	13	13	<5	7	0
Apr-23	147	11	<5	0	0	0	<5	<5	0	<5	<5
May-23	56	6	0	0	<5	0	<5	0	0	<5	0
Jun-23	29	0	0	0	0	0	0	0	0	0	0
Jul-23	16	0	0	0	0	0	0	0	0	0	0
Aug-23	33	0	0	0	0	0	0	0	0	0	0
<b>Total</b>	<b>568,511</b>	<b>12,472</b>	<b>3,136</b>	<b>76</b>	<b>450</b>	<b>173</b>	<b>2,492</b>	<b>2,905</b>	<b>37</b>	<b>2,980</b>	<b>223</b>

Data source: IIS Flu vaccination dashboard.

Missing information for 21 records



**Figure 6:** Seasonal influenza vaccine uptake (%) by age groups and season in Ireland in 2022/23 influenza season

In 2020/21 influenza vaccine was recommended to those aged 2-12 years; in 2021/22 and 2022/23 to those aged 2-17 years.

**Table 9: Seasonal influenza vaccine uptake (%) by age groups and season (September – August) in Ireland**

Age group	Vaccination	22/23	21/22	20/21	19/20	18/19	17/18	16/17	15/16	14/15	13/14	12/13	11/12	10/11	09/10	08/09	07/08	06/07	05/06	04/05		
65 yrs≥	No. vaccinated	568,511	560,209	524,166	342,505	385,869	315,108	288,071	280,046	275,943	269,202	257,962	250,525	276,240	225,358	294,156	259,100	246,695	249,013	236,425		
	Pop Proj 2021 M2F2 estimate	743,087	743,087	743,088	581,305	563,006	546,742	528,550	505,859	458,141	452,931	453,419	439,980	432,650	419,010	419,327	419,767	407,196	395,458	385,162		
	% Uptake	<b>76.5</b>	<b>75.4</b>	<b>70.5</b>	<b>58.9</b>	<b>68.5</b>	<b>57.6</b>	<b>54.5</b>	<b>55.4</b>	<b>60.2</b>	<b>59.4</b>	<b>56.9</b>	<b>56.9</b>	<b>63.8</b>	<b>53.8</b>	<b>70.1</b>	<b>61.7</b>	<b>60.6</b>	<b>63.0</b>	<b>61.4</b>		
2-12 yrs	No. vaccinated	128,459	140,376	225,603																		
	Pop Proj 2021 M2F2 estimate	745,669	745,669	751,163																		
	% Uptake	<b>17.2</b>	<b>18.8</b>	<b>30.0</b>																		
13-17 yrs	No. vaccinated	37,185	38,986																			
	Pop Proj 2021 M2F2 estimate	335,563	335,563																			
	% Uptake	<b>11.1</b>	<b>11.6</b>																			
2-17yrs	No. vaccinated	165,644	179,362																			
	Pop Proj 2021 M2F2 estimate	1,081,232	1,081,232																			
	% Uptake	<b>15.3</b>	<b>16.6</b>																			

\*Seasonal flu vaccine was not recommended to children before the season 2020/21.

## **Acknowledgements**

Sincere thanks are extended to all those who are providing and collecting data used in these reports. This includes the IIS staff, GPs, pharmacists and administrative staff.