



Seasonal Influenza Vaccine Uptake in Ireland, 2023-24 (September 2023 – August 2024)



Data extract from the COVAX system were provided on 29/08/2024. 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.

Summary

Table 1: Seasonal influenza vaccine uptake (%) by age group in Ireland in 2023/24 influenza season

Age group	No. vaccinated	Pop Proj 2021 M2F2 estimate	% Uptake
2-12 years	147,115	745,669	19.7
13-17 years	28,977	335,563	8.6
18-49 years	221,008	2,169,073	10.2
50-64 years	257,134	879,370	29.2
65-69 years	137,217	228,373	60.1
70-74 years	143,420	195,641	73.3
75 and over	281,964	319,075	88.4
2-17 years	176,092	1,081,232	16.3
65 and over	562,601	743,087	75.7
Overall ≥2 years and over	1,216,835	4,872,762	25.0
≥6months-64 years with medical risk condition	186,273	na	-
Pregnant women	20,665	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 2023 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).

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 people vaccinated with influenza vaccine, for the period September 2023 – August 2024 (week 38 2023 – week 35 2024), 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 2023 – August 2024.
2. Rates by age groups for the 2023/2024 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 2023 – August 2024 inclusive.

The national influenza vaccine uptake in those aged 65 years and older vaccinated was 75.7%, during the period September 2023 – August 2024 and decreased by 0.8% in comparison to last year (76.5%). Vaccine uptake in children 2-17 years was 16.3%, an increase (1.0%) compared to the influenza season 2022/23 (15.3%) (table 1, figures 3,6).

Variation in vaccine uptake was observed between age groups, with the highest uptake (88.4%) in those aged 75 years and older and the lowest uptake in those aged 65-69 years (60.1%) (table 1). Variation in vaccine uptake was also observed between CHO areas, ranging from 62.3% in CHO area 1 to 85.5% 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 59.1% (n=719,030) and in pharmacies for 30.7% (n=374,043) of all vaccinations for the period September 2023 - August 2024 (table 5).

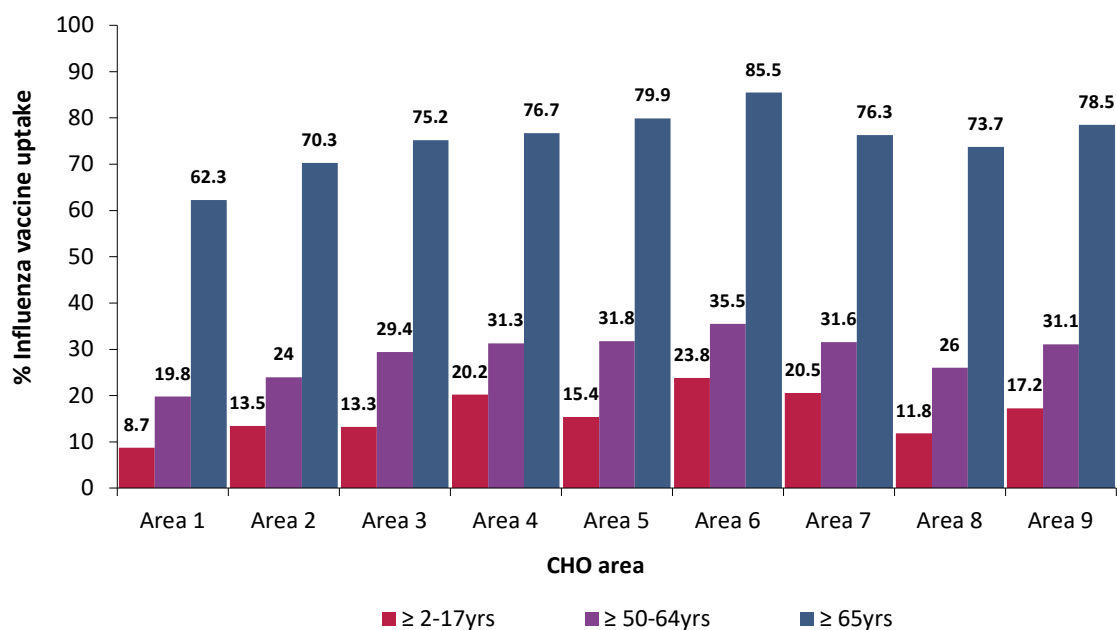


Figure 1: Seasonal influenza vaccine uptake (%) by age group and CHO area in Ireland in 2023/24 influenza season

Data source: IIS Flu vaccination dashboard

Data source for denominator: HIU 2021 Popul Projection

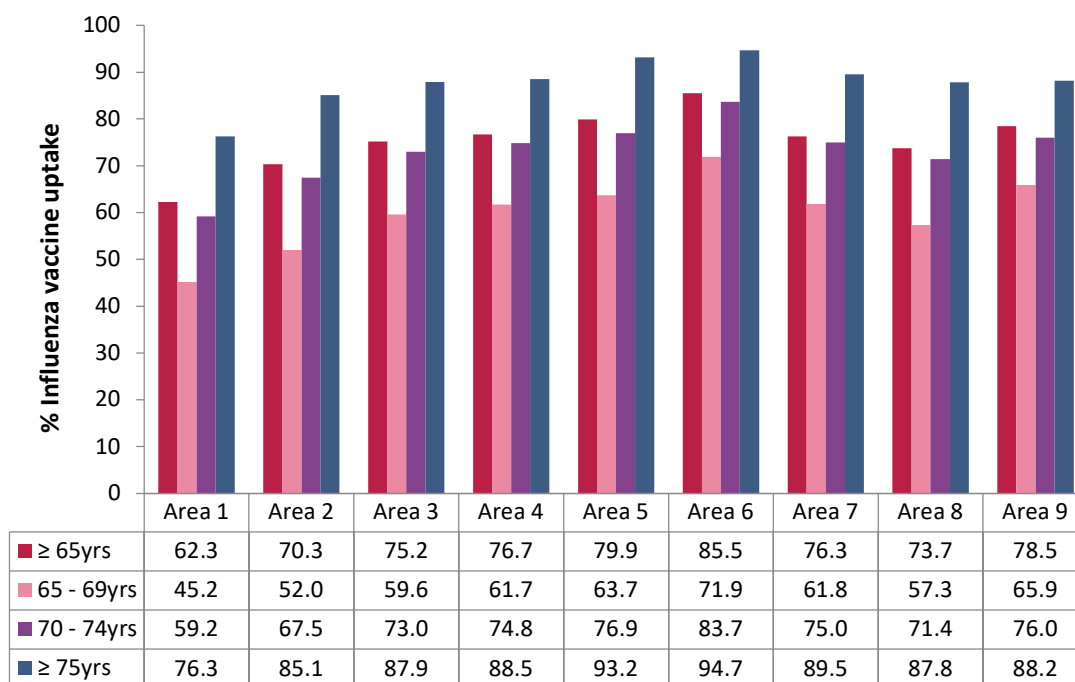


Figure 2: Seasonal influenza vaccine uptake (%) in older age groups and CHO areas in Ireland in 2023/24 influenza season

Data source: IIS Flu vaccination dashboard

Data source for denominator: HIU 2021 Popul Projection

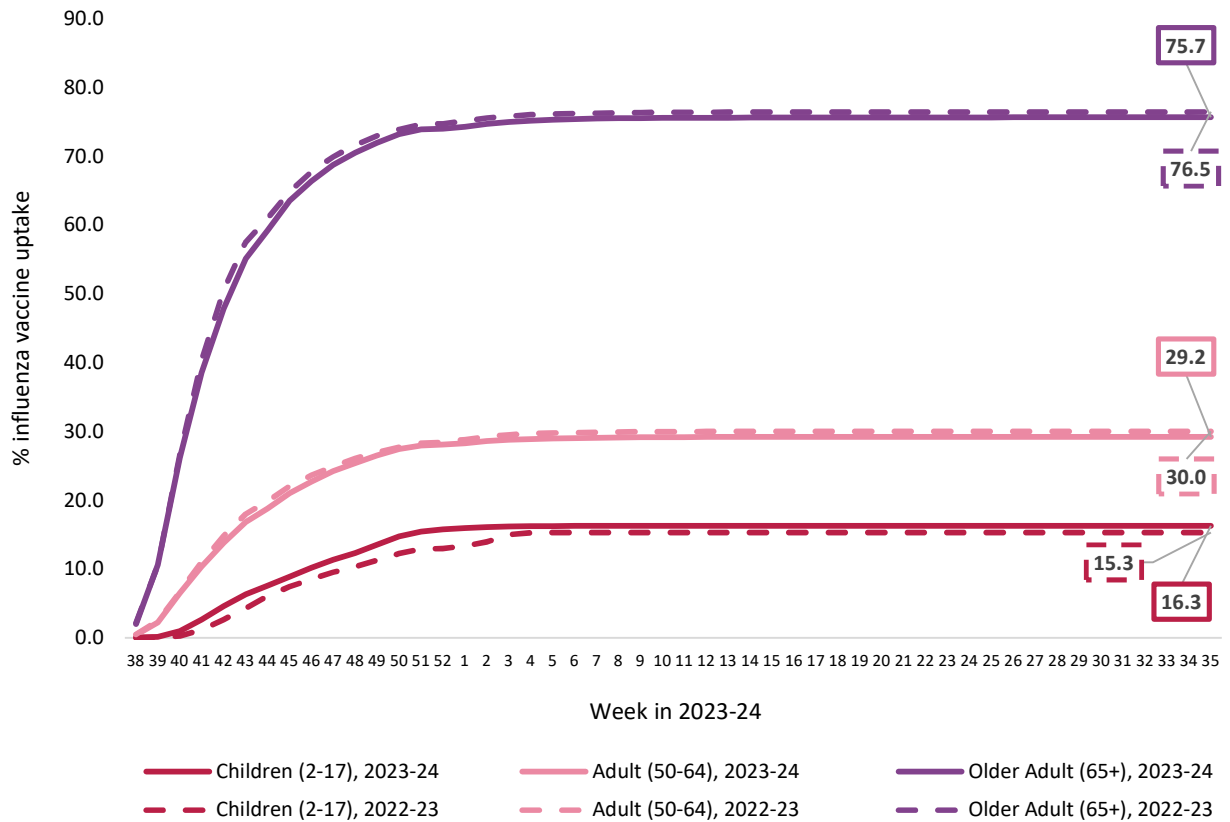
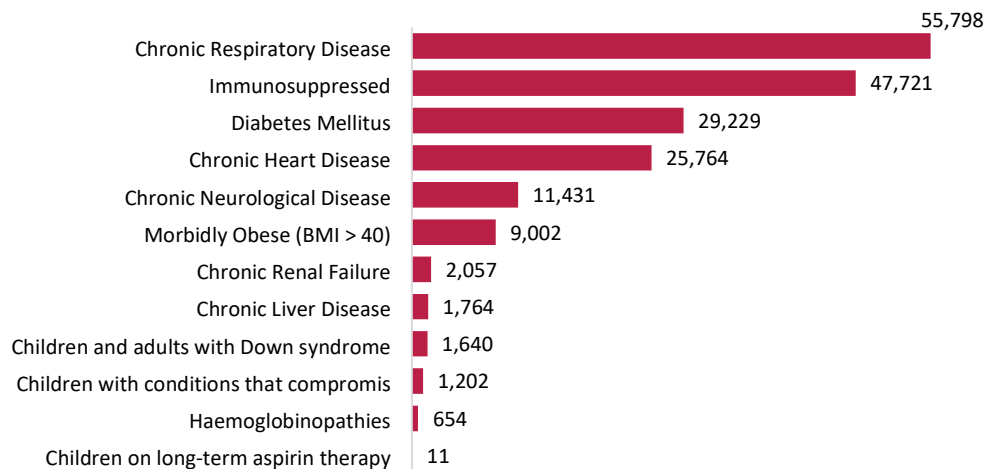


Figure 3: Cumulative seasonal influenza vaccine uptake (%) by age groups and week in Ireland in 2023/24 influenza season

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 2023/24 influenza season



Figure 5: Seasonal influenza vaccine uptake (%) by age groups and counties in Ireland in 2023/24 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 2023/24 influenza season

National/ CHO Area/ LHO	No. vaccinated			Pop Proj 2021 M2F2 estimate			Vaccine uptake (%)		
Age group	≥2-17 yrs	≥50-64 yrs	≥65 yrs	≥2-17 yrs	≥50-64 yrs	≥65yrs	≥2-17 yrs	≥50-64 yrs	≥65 yrs
Carlow	2,073	2,837	5,747	13,504	10,725	8,695	15.4	26.5	66.1
Cavan	2,086	2,975	8,172	18,769	14,535	12,056	11.1	20.5	67.8
Clare	2,793	5,258	13,052	26,764	23,828	20,796	10.4	22.1	62.8
Cork	26,409	32,749	67,323	121,920	101,412	85,149	21.7	32.3	79.1
Donegal	2,640	5,400	16,411	37,108	30,621	28,448	7.1	17.6	57.7
Dublin	60,662	75,679	149,162	282,471	226,178	189,579	21.5	33.5	78.7
Galway	7,904	12,690	30,844	58,187	46,986	40,016	13.6	27.0	77.1
Kerry	4,327	7,826	19,460	30,239	29,802	28,950	14.3	26.3	67.2
Kildare	7,993	11,277	22,425	57,901	41,644	28,157	13.8	27.1	79.6
Kilkenny	3,164	5,221	10,936	23,031	19,329	16,399	13.7	27.0	66.7
Laois	2,282	3,907	8,290	22,759	15,763	11,761	10.0	24.8	70.5
Leitrim	613	1,409	3,774	7,311	6,367	6,194	8.4	22.1	60.9
Limerick	6,265	12,052	26,144	43,104	35,777	32,362	14.5	33.7	80.8
Longford	1,121	1,830	5,351	10,275	7,681	6,932	10.9	23.8	77.2
Louth	3,903	7,471	15,235	31,888	24,300	19,276	12.2	30.7	79.0
Mayo	3,552	5,675	17,335	27,575	25,966	25,694	12.9	21.9	67.5
Meath	6,119	7,972	17,501	52,269	36,931	25,864	11.7	21.6	67.7
Monaghan	1,061	2,214	6,077	14,999	11,505	9,927	7.1	19.2	61.2
Offaly	1,853	3,184	6,948	19,220	15,135	12,549	9.6	21.0	55.4
Roscommon	2,013	2,204	6,326	14,179	12,763	12,104	14.2	17.3	52.3
Sligo	1,776	2,706	7,569	14,415	12,838	12,144	12.3	21.1	62.3
Tipperary	4,498	8,949	21,889	35,944	31,389	28,275	12.5	28.5	77.4
Waterford	4,311	8,066	17,446	26,072	22,786	20,048	16.5	35.4	87.0
Westmeath	2,967	5,332	11,909	21,812	17,133	13,631	13.6	31.1	87.4
Wexford	6,134	10,124	21,315	34,856	29,658	25,511	17.6	34.1	83.6
Wicklow	6,275	8,217	18,450	34,660	28,316	22,570	18.1	29.0	81.7

Data source: IIS Flu vaccination dashboard.

Data source for denominator: HIU 2021 Popul Projection

Missing information for 12,718 records.

Table 3: Seasonal influenza vaccination by age group and medical risk categories in Ireland in 2023/24 influenza season

Medical risk category	Age groups					Total
	<2years	2-17 years	18-49 years	50-64 years	65 and over	
Children and adults with Down syndrome	16	166	1,177	277	<5	1,640
Children on long-term aspirin therapy	<5	8	<5	0	0	11
Children with conditions that compromise respiratory function	36	1,080	77	0	0	1,193
Chronic Heart Disease	10	138	3,248	21,732	636	25,764
Chronic Liver Disease	<5	9	498	1,229	27	1,764
Chronic Neurological Disease	10	700	4,873	5,717	131	11,431
Chronic Renal Failure	<5	17	731	1,267	41	2,057
Chronic Respiratory Disease	47	3001	20,761	31,224	765	55,798
Diabetes Mellitus	<5	208	7,331	21,171	517	29,229
Haemoglobinopathies	<5	22	213	405	14	654
Immunosuppressed	25	928	17,095	29,010	663	47,721
Morbidly Obese (BMI > 40)	<5	36	3,637	5,248	81	9,002
Total	149	6,313	59,643	117,280	2,879	186,264

Data source: IIS Flu vaccination dashboard. Missing/mismatching information for 9 records.

Table 4: Seasonal influenza vaccination by month and vaccination site in Ireland in 2023/24 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-23	87,731	77.0	25,978	22.8	0	0.0	295	0.3	114,004
Oct-23	400,531	61.6	174,366	26.8	6,391	1.0	68,901	10.6	650,189
Nov-23	152,973	52.4	106,960	36.7	10,831	3.7	21,016	7.2	291,780
Dec-23	52,121	44.5	53,311	45.5	5,000	4.3	6,786	5.8	117,218
Jan-24	17,567	53.5	11,697	35.6	7	0.0	3,552	10.8	32,823
Feb-24	5,090	69.6	1,347	18.4	<5	0.0	871	11.9	7,309
Mar-24	1,812	77.0	237	10.1	0	0.0	304	12.9	2,353
Apr-24	787	87.2	96	10.6	0	0.0	20	2.2	903
May-24	333	88.8	42	11.2	0	0.0	0	0.0	375
Jun-24	81	81.0	9	9.0	0	0.0	10	10.0	100
Jul-24	<5	100.0	0	0.0	0	0.0	0	0.0	<5
Aug-24	0	0.0	0	0.0	0	0.0	0	0.0	0
Total	719,030	59.1	374,043	30.7	22,230	1.8	101,755	8.4	1,217,058

Data source: IIS Flu vaccination dashboard.

Table 5: Seasonal influenza vaccination by age group and vaccination site in Ireland in 2023/24 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	34	75.6	<5	8.9	0	0.0	7	15.6	45
12-24 months	150	91.5	13	7.9	0	0.0	<5	0.6	164
2-17 years	72,717	41.3	79,855	45.3	22,180	12.6	1,340	0.8	176,092
18-49 years	92,636	41.9	82,494	37.3	38	0.0	45,840	20.7	221,008
50-64 years	133,043	51.7	98,741	38.4	0	0.0	25,350	9.9	257,134
65 and over	420,447	74.7	112,936	20.1	0	0.0	29,217	5.2	562,600
Total	719,030	59.1	374,043	30.7	22,230	1.8	101,755	8.4	1,217,043

Data source: IIS Flu vaccination dashboard.

Missing/mismatching information for 15 records.

Table 6: Seasonal influenza vaccination by age group and vaccine type in Ireland in 2023/24 influenza season

Age group	LAIV	% vaccinated	OIV	% vaccinated	Tetra	% vaccinated	Total
6-11 months	0	0.0	0	0.0	44	100.0	44
12-24 months	0	0.0	0	0.0	161	100.0	161
2-17 years	168,354	95.6	125	0.1	7,613	4.3	176,092
18-49 years	503	0.2	9,183	4.2	211,322	95.6	221,008
50-64 years	0	0.0	6,570	2.6	250,551	97.4	257,121
65 and over	0	0.0	146	0.0	562,445	100.0	562,591
Total	168,857	13.9	16,024	1.3	1,032,139	84.8	1,217,020

Data source: IIS Flu vaccination dashboard.

Missing/mismatching information for 38 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 2023/24 influenza season

Year/month	Number of vaccinated	Number in risk category	Children and adults with Down syndrome	Children on long-term aspirin therapy	Children with conditions that compromise	Chronic Heart Disease	Chronic Liver Disease	Chronic Neurological Disease	Chronic Renal Failure	Chronic Respiratory Disease	Diabetes Mellitus	Haemoglobinopathies	Immunosuppressed	Morbidly Obese
Sep-23	35,175	15,625	147	0	22	2,211	197	1,165	214	4487	3,022	58	3,169	933
Oct-23	311,337	91,813	946	7	688	12,386	825	5,936	1,053	26,452	14,384	312	24,354	4,470
Nov-23	186,836	49,301	399	<5	427	6,894	473	2,872	484	15,387	7,154	177	12,667	2,363
Dec-23	89,629	17,510	101	0	51	2,615	155	903	172	5,557	2,533	61	4,570	792
Jan-24	23,331	6,369	34	0	11	755	63	315	70	2,194	1,058	23	1,594	252
Feb-24	5,178	1,820	7	0	<5	207	15	78	14	628	364	<5	408	93
Mar-24	1,830	659	<5	0	<5	48	8	21	7	232	131	<5	197	11
Apr-24	749	188	<5	0	0	10	<5	7	<5	64	44	<5	53	<5
May-24	302	90	0	0	0	<5	0	<5	0	27	19	<5	35	<5
Jun-24	86	18	0	0	0	0	0	0	0	5	<5	0	11	0
Jul-24	<5	<5	0	0	0	0	0	0	0	0	<5	0	0	0
Aug-24	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	654,457	183,394	1,636	11	1,202	25,128	1,737	11,300	2,016	55,033	28,712	640	47,058	8,921

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 2023/24 influenza season

Year/month	Number of vaccinated	Number in risk category	Adults with Down syndrome	Chronic Heart Disease	Chronic Liver Disease	Chronic Neurological Disease	Chronic Renal Failure	Chronic Respiratory Disease	Diabetes Mellitus	Haemoglobinopathies	Immunosuppressed	Morbidly Obese
Sep-23	78,829	411	0	86	<5	19	10	105	108	<5	65	12
Oct-23	338,852	1,554	<5	338	16	73	17	405	279	5	374	44
Nov-23	104,944	459	0	111	<5	24	9	117	58	<5	121	12
Dec-23	27,589	65	0	14	<5	<5	<5	15	11	0	17	<5
Jan-24	9,492	299	<5	68	<5	12	<5	86	44	<5	72	11
Feb-24	2,131	66	0	15	<5	<5	0	28	11	0	10	0
Mar-24	523	15	0	<5	0	0	<5	7	<5	0	<5	<5
Apr-24	154	8	0	<5	0	0	0	<5	<5	0	0	0
May-24	73	<5	0	0	0	0	0	0	0	0	<5	0
Jun-24	14	<5	0	<5	0	0	0	0	0	0	0	0
Jul-24	0	0	0	0	0	0	0	0	0	0	0	0
Aug-24	0	0	0	0	0	0	0	0	0	0	0	0
Total	562,601	2,879	<5	636	27	131	41	765	517	14	663	81

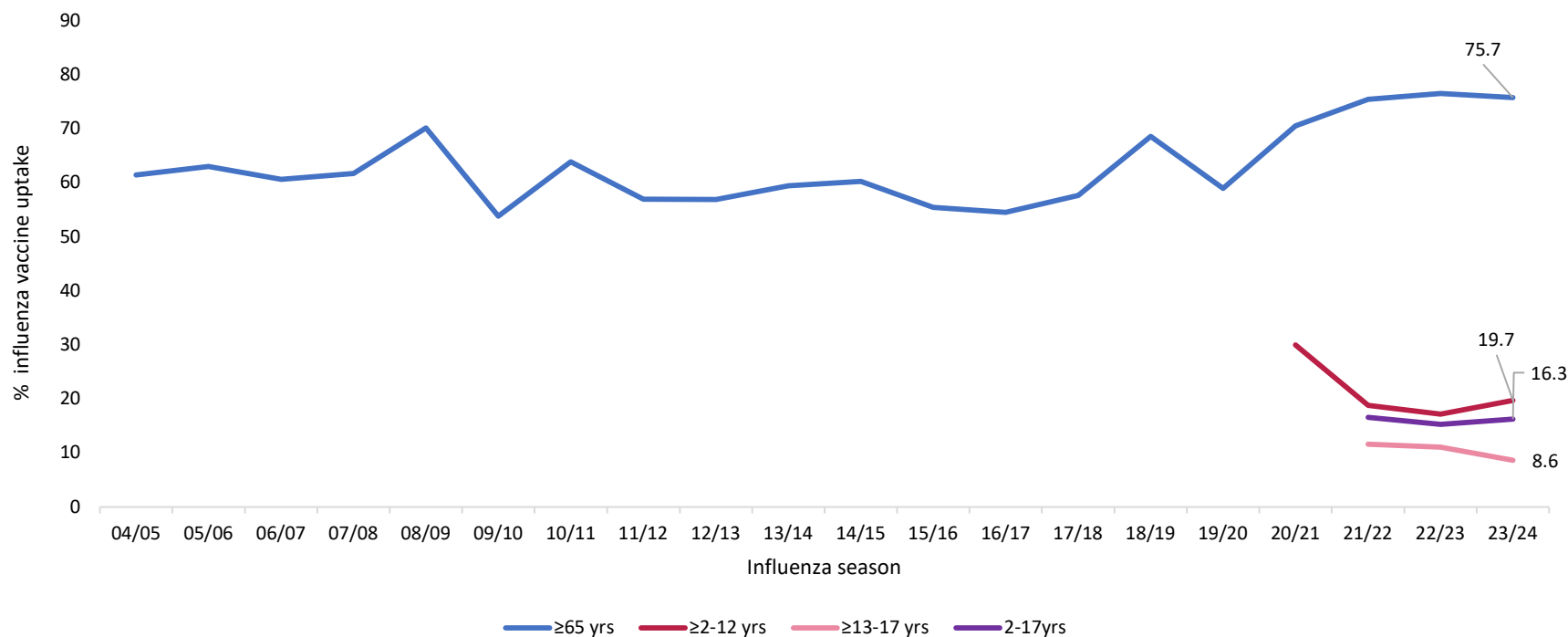


Figure 6: Seasonal influenza vaccine uptake (%) by age groups and season in Ireland in 2023/24 influenza season

In 2020/21 influenza vaccine was recommended to those aged 2-12 years: in 2021/22, 2022/23 and 2023/24 to those aged 2-17 years.

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

Age group		65 yrs≥		2-12 yrs				13-17 yrs		2-17yrs		
Flu season	No. vaccinated	Pop Proj 2021 M2F2 estimate	% Uptake	No. vaccinated	Pop Proj 2021 M2F2 estimate	% Uptake	No. vaccinated	Pop Proj 2021 M2F2 estimate	% Uptake	No. vaccinated	Pop Proj 2021 M2F2 estimate	% Uptake
23/24	562,601	743,087	75.7	147,115	745,669	19.3	28,977	335,563	8.6	176,092	1,081,232	16.3
22/23	568,511	743,087	76.5	128,459	745,669	17.2	37,185	335,563	11.1	165,644	1,081,232	15.3
21/22	560,209	743,087	75.4	140,376	745,669	18.8	38,986	335,563	11.6	179,362	1,081,232	16.6
20/21	524,166	743,088	70.5	225,603	751,163	30.0						
19/20	342,505	581,305	58.9									
18/19	385,869	563,006	68.5									
17/18	315,108	546,742	57.6									
16/17	288,071	528,550	54.5									
15/16	280,046	505,859	55.4									
14/15	275,943	458,141	60.2									
13/14	269,202	452,931	59.4									
12/13	257,962	453,419	56.9									
11/12	250,525	439,980	56.9									
10/11	276,240	432,650	63.8									
09/10	225,358	419,010	53.8									
08/09	294,156	419,327	70.1									
07/08	259,100	419,767	61.7									
06/07	246,695	407,196	60.6									
05/06	249,013	395,458	63.0									
04/05	236,425	385,162	61.4									

*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.