

Influenza, RSV and Other Respiratory Viruses Surveillance Report

Week 7 2024 (12th - 18th February 2024)



This report presents data on the epidemiology of influenza, respiratory syncytial virus (RSV) and other respiratory viruses (ORVs). For further information on the epidemiology of COVID-19, please refer to COVID-19 surveillance [reports](#). Data for this report were extracted on 19/02/2024.

Summary Week 7 2024

Most indicators of influenza activity decreased during week 7 2024, however notified cases, hospitalisations and sentinel GP influenza positivity remained at moderate to high levels. Influenza A viruses have predominated this season, with A(H3) and A(H1)pdm09 viruses co-circulating. Influenza B viruses are detected at lower levels with a slight increase in recent weeks. It is recommended that antivirals be used for the treatment and prophylaxis of influenza in clinical at-risk groups and in those with severe influenza disease.

- **Influenza-like illness (ILI):** The sentinel GP influenza-like illness (ILI) consultation rate was 7.5/100,000 population during week 7 2024, which is below the Irish baseline threshold (18.1/100,000) and has been steadily decreasing over recent weeks. ILI age specific rates were below the age specific baseline for all age groups during week 7 2024.
- **National Virus Reference Laboratory (NVRL):** Of 136 sentinel GP ARI specimens tested and reported by the NVRL during week 7 2024, 39 (28.7%) were positive for influenza (23 A(H3), seven A(H1)pdm09, two A (not subtyped), and seven influenza B), one (0.7%) for RSV, five (3.7%) for SARS-CoV-2, and 19 (14%) for rhino/enterovirus.
- Of 211 non-sentinel respiratory specimens tested and reported by the NVRL during week 7 2024, 55 (26.1%) were positive for influenza (47 A(H3), six A(H1)pdm09, one A (not subtyped) and one influenza B), 12 (5.7%) for SARS-CoV-2, two (0.9%) for RSV and 16 (7.6%) for rhino/enterovirus.
- **GP Out of hours (OOHs):** Cough calls comprised 19.2% (2277/11866) of all reported GP OOHs calls during week 7 2024 (above the baseline threshold of 10.8%); 35% (788/2277) of cough calls were in those aged 0-4 years. Flu calls comprised 1.5% (177/11866) of all calls in week 7 2024, which is below the baseline threshold level (2.3%).
- **Influenza notifications:** 923 laboratory confirmed influenza cases were notified during week 7 2024: 87 A(H3), 20 A(H1)pdm09, 709 A (not subtyped) and 107 influenza B. This is a decrease compared to 1,090 cases notified during week 6 2024. The highest burden of notifications occurred in those aged 65 years and older at 28% (263/923) of all influenza notifications in week 7 2024.
- **RSV notifications:** 47 RSV cases were notified during week 7 2024, compared to 60 cases during week 6 2024. Age specific notification rates for RSV are low across all age groups.
- **Hospitalisations:** 196 laboratory confirmed influenza hospitalised cases (three A(H3), one A(H1)pdm09, 164 (not subtyped), and 28 B) were notified in week 7 2024, compared to 257 in week 6 2024. During the 2023/2024 season to date, 3,128 laboratory confirmed influenza hospital inpatients were reported (274 A(H3), 103 A(H1)pdm09, 2,577 A (not subtyped), 172 B and two A and B coinfections). During week 7, 13 laboratory confirmed RSV hospitalised cases were notified compared to 24 cases in week 6 2024. For the 2023/2024 season to date, 3,190 RSV hospitalisations have been reported.
- **Intensive care admissions:** Two laboratory confirmed influenza cases were admitted to intensive care unit (ICU) and notified to HPSC during week 7 2024. For the season to date, 85 influenza ICU cases (25 A(H3), 12 A(H1)pdm09 and 48 A (not subtyped) have been notified.
- **Mortality:** There were three deaths in notified influenza cases reported to HPSC during week 7 2024. For the season to date, 106 deaths were reported – 27 A(H3), eight A(H1)pdm09 and 71 A (not-subtyped).
- **Outbreaks:** During week 7 2024, 14 influenza outbreaks (six nursing homes, three acute hospitals, one residential institutions and four in other settings), one RSV outbreak in a nursing home and two ARI outbreaks in nursing homes were reported to HPSC.
- **International:** In the EU/EEA during week 6 2024, while there is variation across the region, influenza activity remained at high levels. RSV continues to circulate but has declined in recent weeks.

1. GP consultations for influenza-like illness - GP sentinel surveillance system

- During week 7 2024, 65 sentinel GP influenza-like illness (ILI) consultations were reported from the Irish sentinel GP network, corresponding to an ILI consultation rate of 7.5 per 100,000 population which is below the sentinel GP ILI baseline threshold (18.1/100,000 population) and below expected levels this season. This is compared to an updated rate of 9.7 per 100,000 population during week 6 2024 (Figure 1). The ILI consultation rate has been steadily decreasing since week 2 2024.
- Of the 98 GP practices in the Irish sentinel GP network, 97 reported clinical consultation data during week 7 2024.
- Age specific ILI consultation rates were below the age specific baseline thresholds in all age groups during week 7 2024 (Figure 2, Table 1).
- The Irish sentinel baseline ILI threshold for the 2023/2024 influenza season is 18.1 per 100,000 population. ILI rates above this baseline threshold combined with sentinel GP influenza positivity >10% indicate the likelihood that influenza is circulating in the community. The Moving Epidemic Method (MEM) is used to calculate thresholds for GP ILI consultations in a standardised approach across Europe. The baseline ILI threshold (18.1/100,000 population), low (57.5/100,000 population), medium (86.5/100,000 population) and high (103.6/100,000 population) intensity ILI thresholds are shown in Figure 1. The age specific baseline threshold for those aged <15 is 17.1/100,000, for those aged 15-64 is 12.6/100,000 and for those aged ≥65 years is 11.6/100,000.

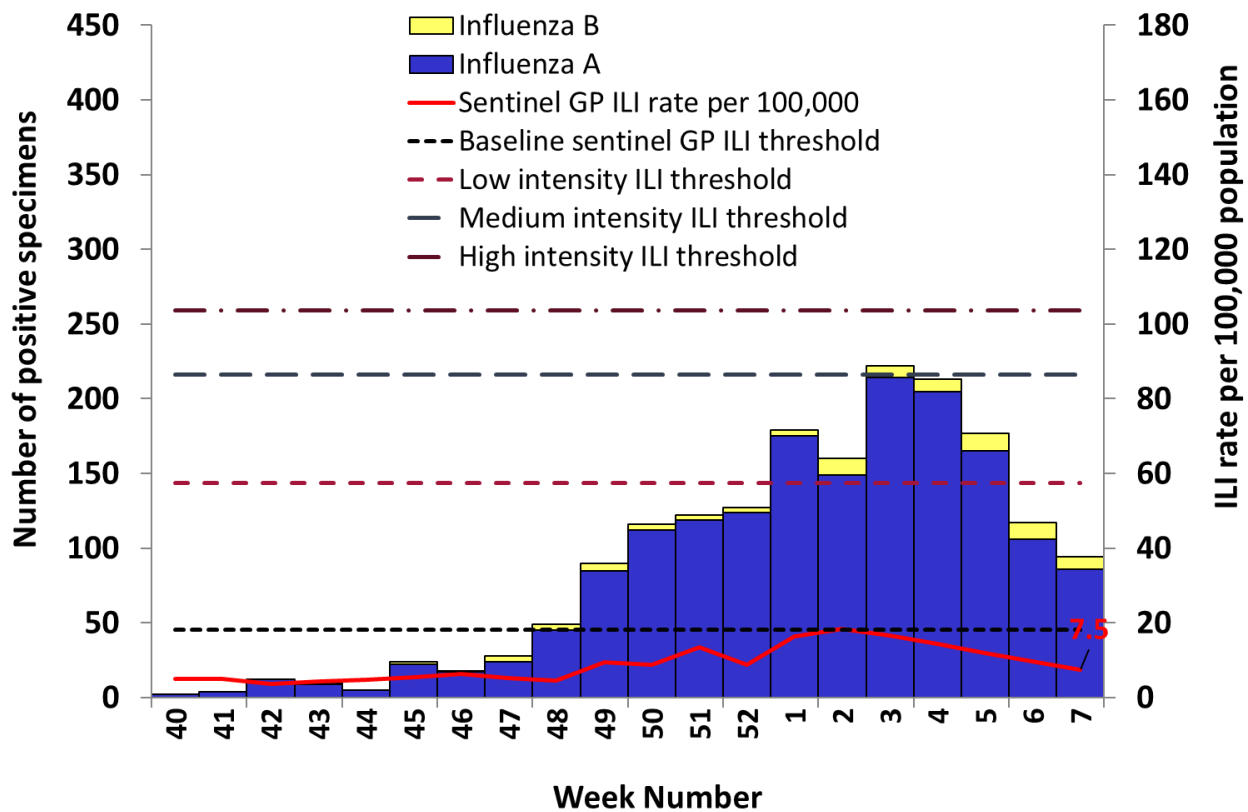


Figure 1: Sentinel GP Influenza-like illness (ILI) consultation rates per 100,000 population, baseline, low, medium and high intensity ILI thresholds and number of positive influenza A and B specimens tested by the NVRL, by influenza week for the 2023/2024 season. Source: ICGP and NVRL

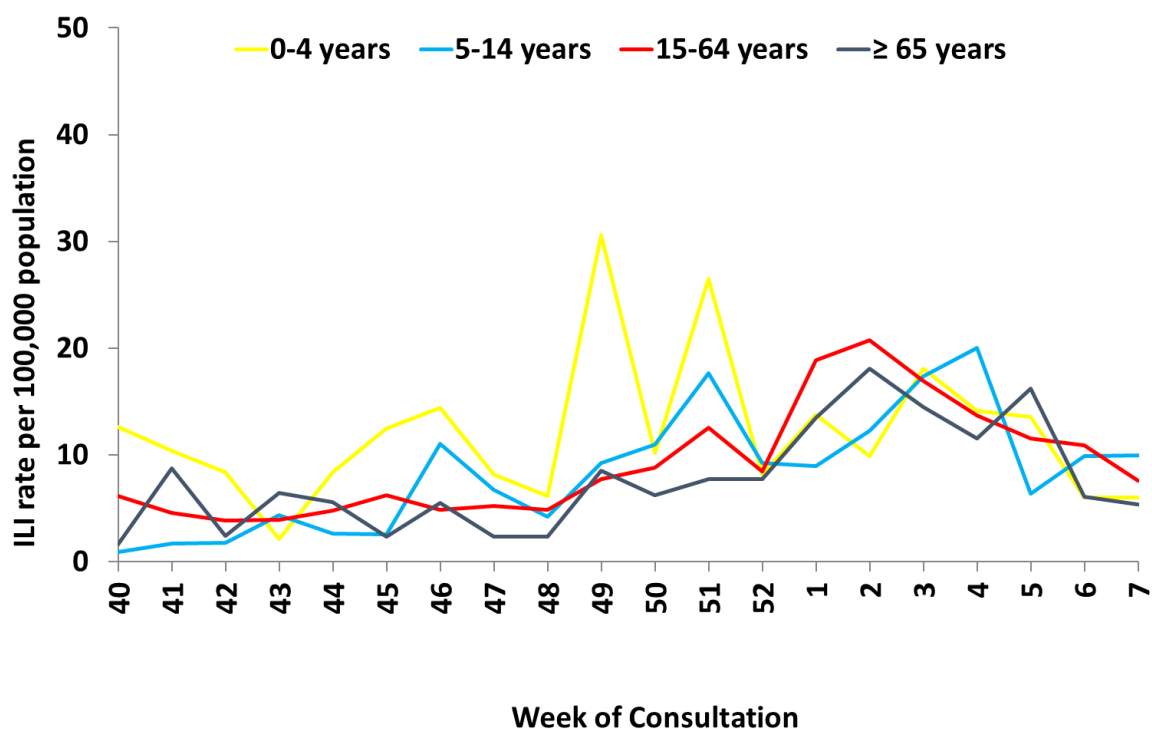


Figure 2: Age specific sentinel GP ILI consultation rate per 100,000 population by week (week 40 2023 to week 7 2024). *Source: ICGP.*

Table 1: Age specific sentinel GP ILI consultation rate per 100,000 population by week (week 40 2023 to week 7 2024), colour coded by sentinel GP ILI age specific Moving Epidemic Method (MEM) threshold levels. *Source: ICGP.*

MEM Threshold Levels	2023/2024																									
	Below Baseline	Low	Moderate	High	Extraordinary	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	
Age group (years)																										
All Ages	5.1	5.1	3.6	4.3	4.8	5.5	6.4	5.2	4.5	9.4	8.8	13.5	8.9	16.4	18.5	16.7	14.4	12.0	9.7	7.5						
<15 yrs	4.0	4.0	3.4	3.4	4.0	5.1	11.2	6.7	4.4	14.4	10.0	18.8	8.3	9.6	10.7	16.4	17.0	7.9	8.1	8.2						
15-64 yrs	6.1	4.6	3.9	3.9	4.8	6.2	4.9	5.2	4.9	7.7	8.8	12.6	8.4	18.9	20.7	17.0	13.7	11.6	10.9	7.6						
≥65 yrs	1.6	8.7	2.4	6.4	5.6	2.4	5.5	2.3	2.3	8.5	6.2	7.8	7.8	13.5	18.1	14.5	11.5	16.2	6.1	5.4						
Reporting practices (N=98)	92	94	92	90	92	93	94	96	95	96	95	97	97	96	95	94	93	97	96	97						

2. Influenza and Other Respiratory Virus Detections - NVRL

The data reported in this section for the 2023/2024 influenza season refers to sentinel GP ARI and non-sentinel respiratory specimens routinely tested for influenza, SARS-CoV-2, respiratory syncytial virus (RSV), adenovirus, parainfluenza virus types 1-4 (PIV-1-4), human metapneumovirus (hMPV) and rhino/enteroviruses by the National Virus Reference Laboratory (NVRL) (Tables 2 & 3, Figure 3a, 3b, 4).

- A lag time with testing and reporting is noted for the most recent surveillance week.
- During week 7 2024, of 136 sentinel GP ARI specimens tested and reported by the NVRL, 39 (28.7%) were positive for influenza (23 A(H3), seven A(H1)pdm09, two A (not subtyped) and seven influenza B), one (0.7%) for RSV, five (3.7%) for SARS-CoV-2, and 19 (14%) for rhino/enterovirus.
- In comparison during week 6 2024, of 151 sentinel GP ARI specimens tested and reported by the NVRL, 46 (30.5%) were positive for influenza (29 A(H3), 10 A(H1)pdm09, one A (not subtyped) and six B), four (2.6%) for RSV, eight (5.3%) for SARS-CoV-2, and 13 (8.6%) for rhino/enterovirus.
- For the 2023/2024 season to date (week 40 2023 to week 7 2024), of 3,090 sentinel GP ARI specimens tested and reported by the NVRL, 617 (20%) were positive for influenza, 255 (8.3%) for RSV, 210 (6.8%) for SARS-CoV-2, and 477 (15.4%) for rhino/enterovirus (Table 4).
- During week 7 2024, of 211 non-sentinel respiratory specimens tested and reported by the NVRL, 55 (26.1%) were positive for influenza (47 A(H3), six A(H1)pdm09, one A (not subtyped) and one influenza B), 12 (5.7%) for SARS-CoV-2, two (0.9%) for RSV and 16 (7.6%) for rhino/enterovirus.
- During week 6 2024, of 278 non-sentinel respiratory specimens tested, 71 (25.5%) were positive for influenza (45 A(H3), 19 A(H1)pdm09, two A (not subtyped), and five B), 14 (5%) for SARS-CoV-2, two (0.7%) for RSV, and 17(6.1%) for rhino/enterovirus (Figure 3b).
- For the 2023/2024 season to date (week 40 2023 to week 7 2024), of 4,992 non-sentinel respiratory specimens tested and reported by the NVRL, 1152 (23%) were positive for influenza, 276 (5.5%) for RSV, 367 (7.4%) for SARS-CoV-2, and 476 (9.5%) for rhino/enterovirus (Table 5).
- Other respiratory viruses (ORVs) are being detected at lower levels (Figure 3a and 3b).
- Of 1,769 sentinel GP ARI specimens and non-sentinel specimens positive for influenza and reported by the NVRL during the 2023/2024 season, 108 (6.1%) were coinfecting with other viruses.

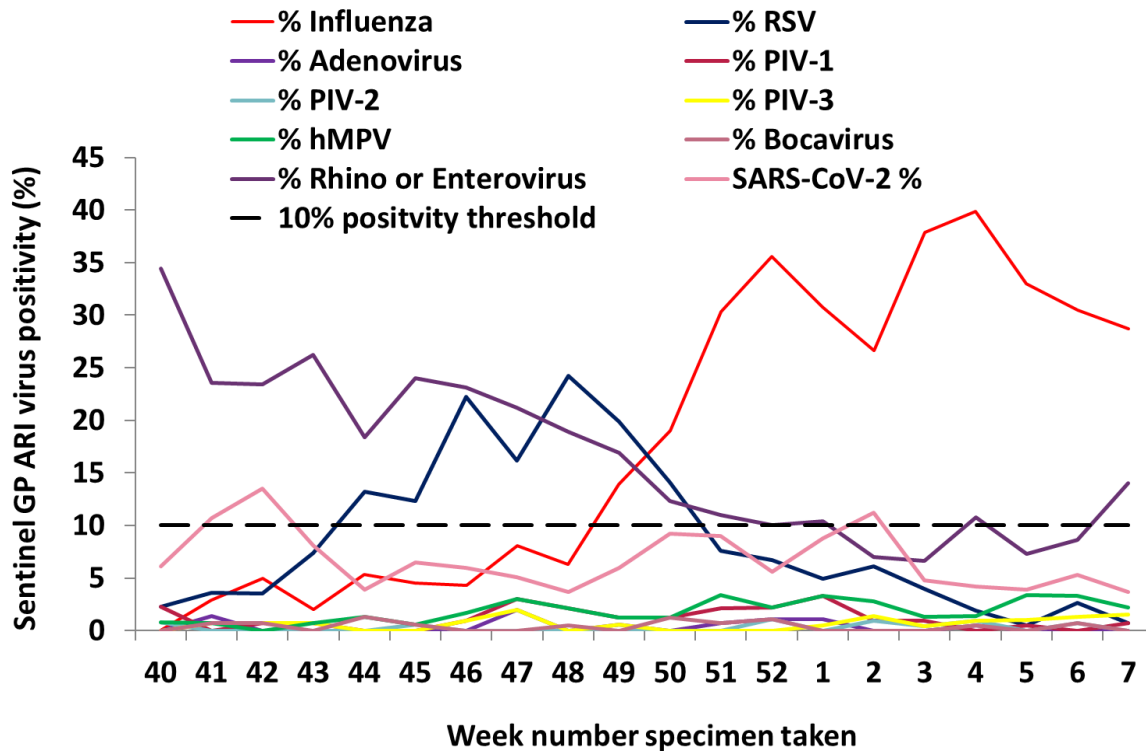


Figure 3a: Percentage positive results for **sentinel GP ARI** specimens tested by the NVRL for influenza, SARS-CoV-2, RSV and other respiratory viruses by week specimen was taken for the 2023/2024 season. *Source: NVRL*

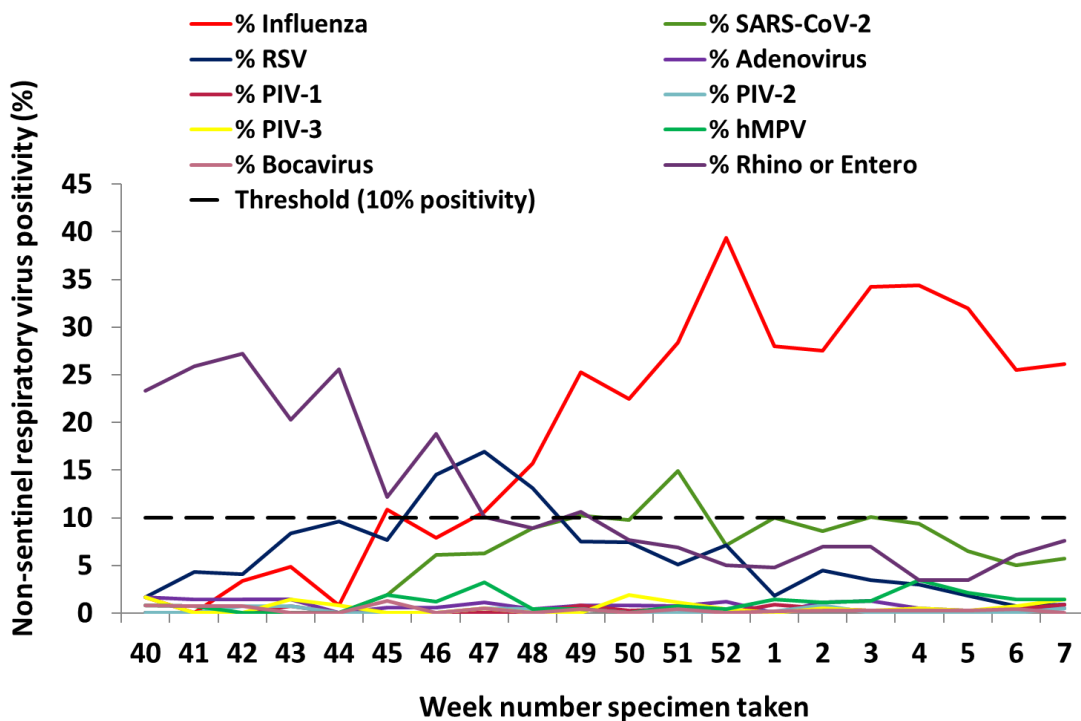


Figure 3b: Percentage positive results for **non-sentinel respiratory** specimens tested by the NVRL for influenza, SARS-CoV-2, RSV and other respiratory viruses by week specimen was taken for the 2023/2024 season. *Source: NVRL*

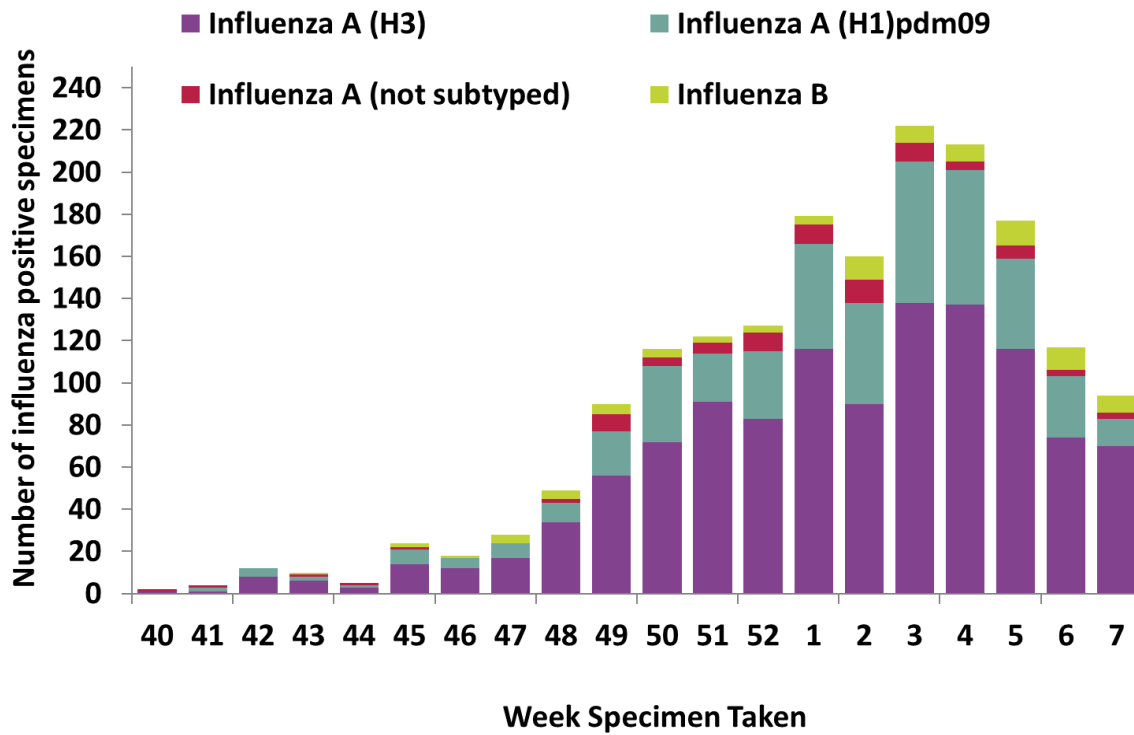


Figure 4: Number of positive influenza specimens (from sentinel GP ARI and non-sentinel respiratory sources) tested by the NVRL by influenza type/subtype and by week specimen was taken for the 2023/2024 season. *Source: NVRL*

Table 2: Number of sentinel GP ARI and non-sentinel respiratory specimens tested by the NVRL and positive **influenza** results, overall and by influenza type and subtype, for week 6 and week 7 2024, and the 2023/2024 Season. *Source: NVRL*

Surveillance period	Specimen type	Total tested	Number influenza positive	% Influenza positive	Influenza A				Influenza B			Total influenza B
					A(H1)pdm09	A(H3)	A (not subtyped)	Total influenza A	B (unspecified)	B Victoria lineage	B Yamagata lineage	
Week 7 2024	Sentinel GP ARI	136	39	28.7	7	23	2	32	7	0	0	7
	Non-sentinel respiratory	211	55	26.1	6	47	1	54	1	0	0	1
	Total	347	94	27.1	13	70	3	86	8	0	0	8
Week 6 2024	Sentinel GP ARI	151	46	30.5	10	29	1	40	6	0	0	6
	Non-sentinel respiratory	278	71	25.5	19	45	2	66	5	0	0	5
	Total	429	117	27.3	29	74	3	106	11	0	0	11
2023/2024	Sentinel GP ARI	3090	617	20.0	160	364	36	560	57	0	0	57
	Non-sentinel respiratory	4992	1152	23.1	303	775	42	1120	24	8	0	32
	Total	8082	1769	21.9	463	1139	78	1680	81	8	0	89

Table 3: Number of sentinel GP ARI and non-sentinel respiratory specimens tested by the NVRL and positive **RSV** results, overall and by RSV type, for week 6 and week 7 2024, and the 2023/2024 Season. *Source: NVRL*

Surveillance period	Specimen type	Total tested	Number RSV positive	% RSV positive	RSV A	RSV B	RSV (unspecified)
Week 7 2024	Sentinel GP ARI	136	1	0.7	1	0	0
	Non-sentinel	211	2	0.9	2	0	0
	Total	347	3	0.9	3	0	0
Week 6 2024	Sentinel GP ARI	151	4	2.6	2	2	0
	Non-sentinel	278	2	0.7	1	1	0
	Total	429	6	1.4	3	3	0
2023/2024	Sentinel GP ILI/ARI	3090	255	8.3	191	64	0
	Non-sentinel	4992	276	5.5	213	63	0
	Total	8082	531	6.6	404	127	0

Table 4: Number and percentage positive sentinel GP ARI specimens by **respiratory virus**, week 6 and week 7 2024, and the 2023/2024 season. *Source: NVRL*

Virus	Week 7 2024 (N=136)		Week 6 2024 (N=151)		2023/2024 (N=3090)	
	Total positive	% positive	Total positive	% positive	Total positive	% positive
SARS-CoV-2	5	3.7	8	5.3	210	6.8
Influenza virus	39	28.7	46	30.5	617	20.0
Respiratory Syncytial Virus (RSV)	1	0.7	4	2.6	255	8.3
Rhino/enterovirus	19	14.0	13	8.6	477	15.4
Adenovirus	0	0.0	0	0.0	10	0.3
Bocavirus	0	0.0	1	0.7	11	0.4
Human metapneumovirus (hMPV)	3	2.2	5	3.3	58	1.9
Parainfluenza virus type 1 (PIV-1)	1	0.7	0	0.0	34	1.1
Parainfluenza virus type 2 (PIV-2)	0	0.0	1	0.7	9	0.3
Parainfluenza virus type 3 (PIV-3)	2	1.5	2	1.3	20	0.6
Parainfluenza virus type 4 (PIV-4)	0	0.0	0	0.0	41	1.3

Table 5: Number and percentage positive non-sentinel respiratory specimens, by **respiratory virus**, week 6 and week 7 2024, and the 2023/2024 season. *Source: NVRL*

Virus	Week 7 2024 (N=211)		Week 6 2024 (N=278)		2023/2024 (N=4992)	
	Total positive	% positive	Total positive	% positive	Total positive	% positive
SARS-CoV-2	12	5.7	14	5.0	367	7.4
Influenza virus	55	26.1	71	25.5	1152	23.1
Respiratory Syncytial Virus (RSV)	2	0.9	2	0.7	276	5.5
Rhino/enterovirus	16	7.6	17	6.1	476	9.5
Adenovirus	1	0.5	1	0.4	37	0.7
Bocavirus	0	0.0	1	0.4	14	0.3
Human metapneumovirus (hMPV)	3	1.4	4	1.4	60	1.2
Parainfluenza virus type 1 (PIV-1)	2	0.9	1	0.4	16	1.2
Parainfluenza virus type 2 (PIV-2)	1	0.5	0	0.0	10	0.2
Parainfluenza virus type 3 (PIV-3)	3	1.4	2	0.7	28	0.6
Parainfluenza virus type 4 (PIV-4)	0	0.0	0	0.0	26	0.5

3. Summary of Influenza genetic characterisation data 2023/2024 season to date

- The National Virus Reference Laboratory (NVRL) conducted genetic characterisation on 84 influenza positive cases detected between week 40 2023 and week 2 2024. This included 70 non-sentinel samples and 14 sentinel samples. Of these, 55 were identified as influenza A(H3), 26 as influenza A(H1)pdm09 and three as influenza B Victoria viruses.
- Globally, all A(H1N1)pdm09 viruses detected recently descend from the 6B.1A.5a clade and therefore, new nomenclature has been introduced which drops the prefix 6B.1A. Clade 5a has split into two antigenically distinct clusters: Clade 5a.1 carries amino acid substitutions D187A, Q189E and is represented by the northern hemisphere 2020-2021 vaccine virus A/Guangdong-Maonan/SWL1536/2019 and Clade 5a.2 viruses carries amino acid substitutions K130N, N156K, A187D, L161I and V250A and is represented by the 2021-2022/2022-2023 northern hemisphere and 2021/2022 southern hemisphere vaccine virus A/Victoria/2570/2019.
- In Ireland the hemagglutinin genes of influenza A(H1)pdm09 viruses characterised (n=26) since week 40/2022 were all attributed to clade 5a.2a of which 13 (50%) was represented by A/Sydney/5/2021 and 13 (50%) of which clustered with 5a.2a.1 virus represented by AH1/Wisconsin/67/2022 virus. A/Sydney/5/2021 group carries the same amino acid substitutions as the A/Victoria/2570/2019 group but with additional HA1 K54Q, D94N, A186T, Q189E, E224A, R259K, T261A and K308R substitutions and AH1/Wisconsin/67/2022 carrying P137S, K142R, D260E and T277A substitutions in the haemagglutinin.
- Globally recent antigenic analysis of viruses collected post-September 2023 found most viruses within subclades 5a.2a and 5a.2a.1 were effectively inhibited by post-ferret antisera raised against the 2024 Southern Hemisphere and 2023-2024 Northern Hemisphere influenza vaccine strains. This includes all Irish influenza A(H1)pdm09 viruses sequenced, which fall into these subclades, indicating that these strains are well protected by the current influenza vaccines for both the Southern and Northern Hemisphere seasons.
- Worldwide, all A (H3) viruses detected recently belong to clade 3C.2a1b.2a which has split into two clades, 3C.2a1b.2a.1 and 3C.2a1b.2a.2. The new nomenclature drops the prefix 3C.2a1b.2a, renaming these clades as 1 and 2. In particular clade 2 has evolved further into clade 2a carrying Y159N, T160I (-CHO), L164Q, N171K, S186D, D190N, P198S with an additional H156S amino acid substitution and represented by A/Darwin/9/2021 virus which was recommended for use 2022-23 northern hemisphere vaccine composition. Clade 2a viruses have further evolved into subclades 2a.1, 2a.2, and 2a.3. In particular Clade 2a.3a and 2a.3a.1 have been circulating in Europe since the beginning of this year's influenza season. 2a.3a viruses carry an amino acid substitution E50K and is represented by A/Finland/402/2023 virus, while 2a.3a.1 virus carry additional I140K, I223V amino acid substitutions and are represented by the A/Thailand/8/2022 virus.
- Among the A(H3) viruses n=55 characterised in Ireland up to week 2 /2024, all were attributed to clade 2a.3a.1, represented by the A/Thailand/8/2022 virus and contained the signature amino acid substitutions characterised by this clade. The 2023-2024 Northern Hemisphere flu vaccine strains effectively recognized many clade 2 viruses but showed reduced effectiveness against viruses with HA genes from subclades 2a.3a.1 such as A/Thailand/8/2022 virus which were observed in Ireland.
- In recent months, the influenza B Victoria virus landscape has primarily consisted of viruses from clade V1A.3a.2, characterised by a set of signature amino acid substitutions and represented by the B/Austria/1359417/2021 virus the recommended vaccine virus for Northern and southern hemisphere. Additionally, there have been several notable subclades of the influenza B virus, each identified by unique amino acid substitutions that contribute to the genetic diversity of the virus, such as the B/Connecticut/01/2021, B/Catalonia/2279261NS/2023, and B/Moldova/2030521/2023 viruses.
- In Ireland, all three characterised influenza B/Victoria viruses up to week 48 were classified under clade V1A.3a.2, represented by B/Catalonia/2279261NS/2023 virus and characterised by its key amino acid substitutions of D197E and E183K. Antigenic analysis showed that the ferret antisera produced for the B/Austria/1359417/2021-like vaccines, designed for the 2024 Southern Hemisphere and the 2023-2024 Northern Hemisphere flu seasons, effectively neutralized these V1A.3a.2 subclade viruses, confirming the vaccine's protective efficacy against these currently circulating strains.

4. GP Out-Of-Hours Surveillance

National data on calls to GP Out-of-Hours services in Ireland are collated by HPSC. Five out of 14 Out-of-Hours GP services currently participate in this programme. Records of calls with clinical symptoms self-reported as ‘flu’ or ‘cough’ are included in the analysis. This information may act as an early indicator of circulation of influenza viruses, SARS-CoV-2, or other respiratory viruses.

- Four out of five participating GP OOH services provided data for week 7 2024.
- Out of a total of 11,866 calls made to the participating GP OOHs in week 7 2024:
 - 2,277 (19.2%) were for self-reported ‘cough’, which is above the baseline threshold of 10.8% for cough calls and is decreasing compared to the percentage of cough calls (21.8%) reported in week 6 2024 (Figures 5 and 6). The highest burden of cough calls was in those aged 0-4 years at 35% (788/2277).
 - 177 (1.5%) were for self-reported ‘flu’, which is below the baseline threshold of 2.3% for ‘flu’ calls (Figures 7 and 8). This is decrease compared to 2.1% ‘flu’ calls made in week 6.

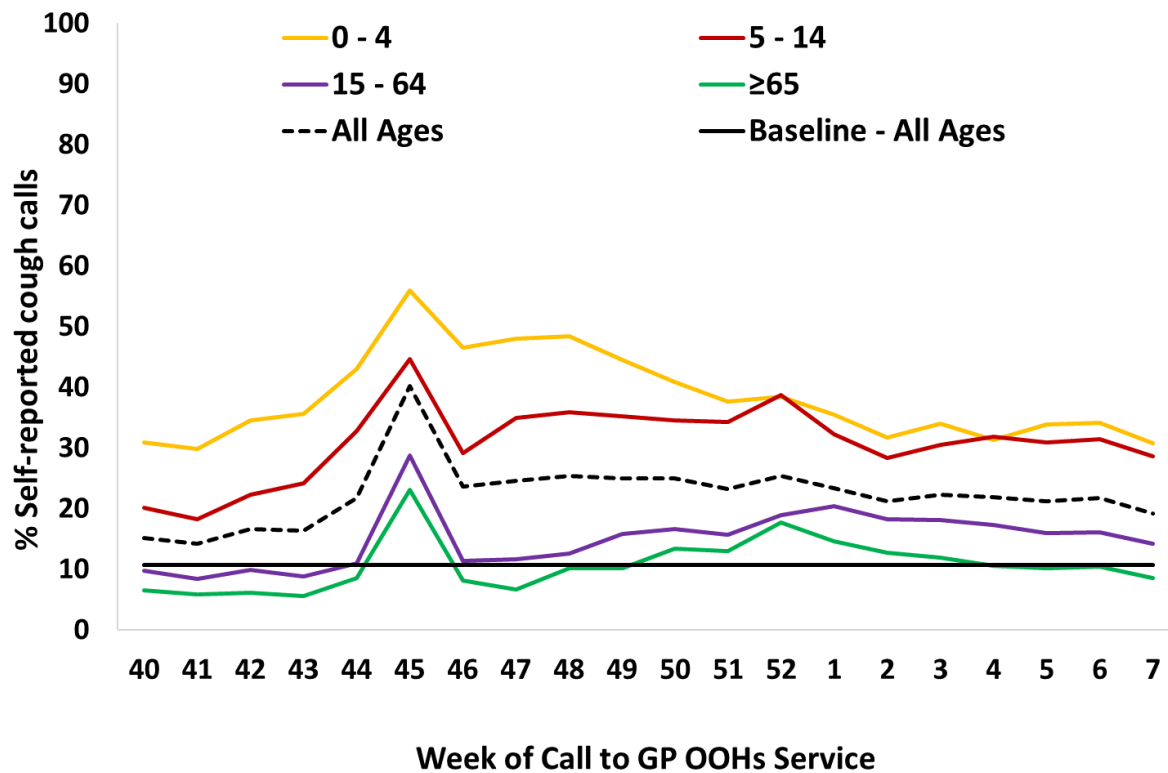


Figure 5: Percentage of self-reported **COUGH** calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call for the 2023/2024 season. The baseline % cough calls for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours services in Ireland (collated by HSE & ICGP).*

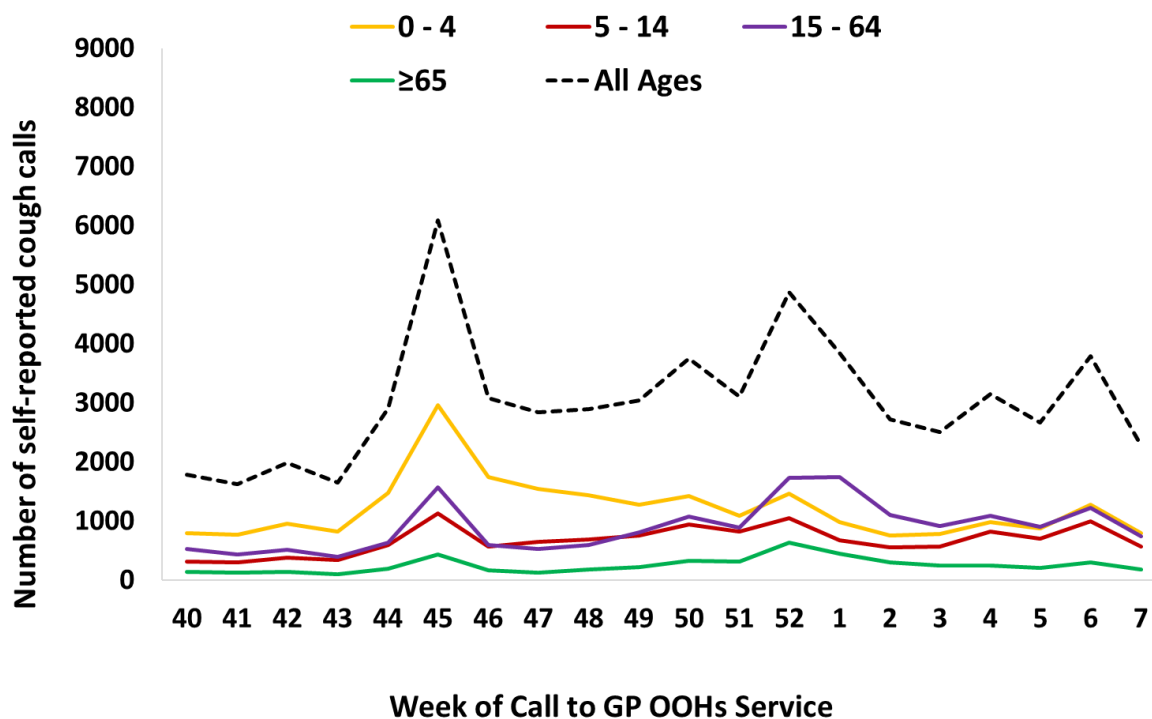


Figure 6: Number of self-reported **COUGH** calls for all ages and by age group to GP Out-of-Hours services by week of call for the 2023/2024 season. *Source: GP Out-Of-Hours services in Ireland (collated by HSE & ICGP).*

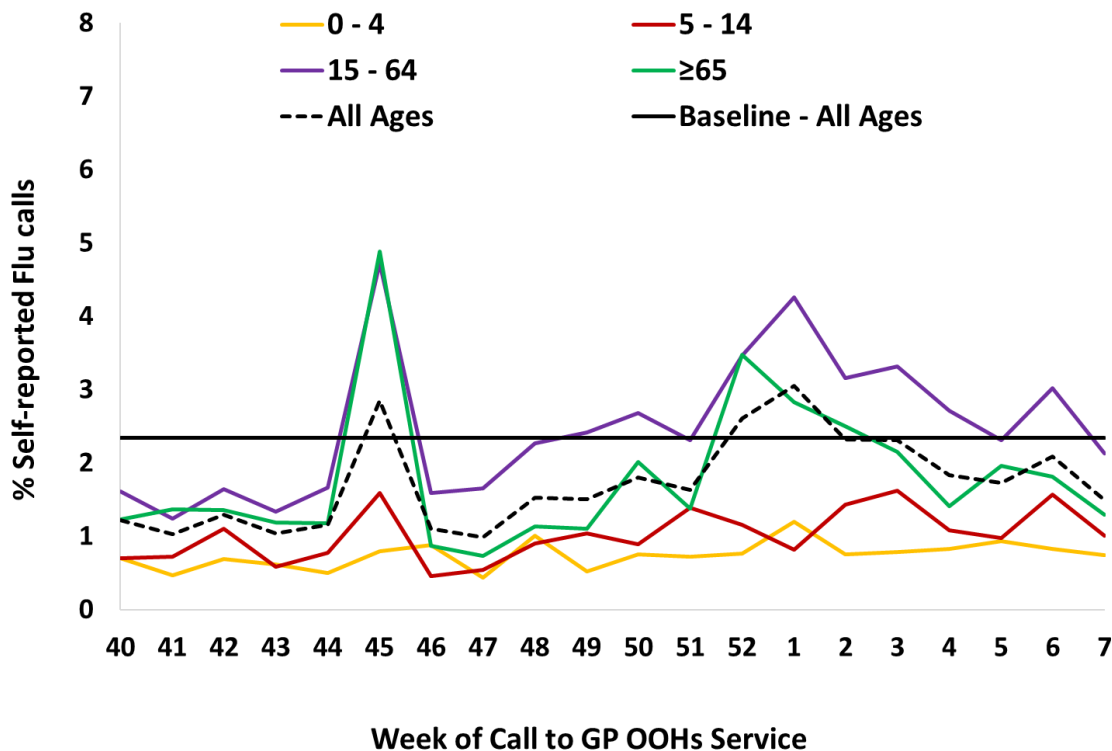


Figure 7: Percentage of self-reported **FLU** calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call for the 2023/2024 season. The baseline % flu calls for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours services in Ireland (collated by HSE & ICGP)*

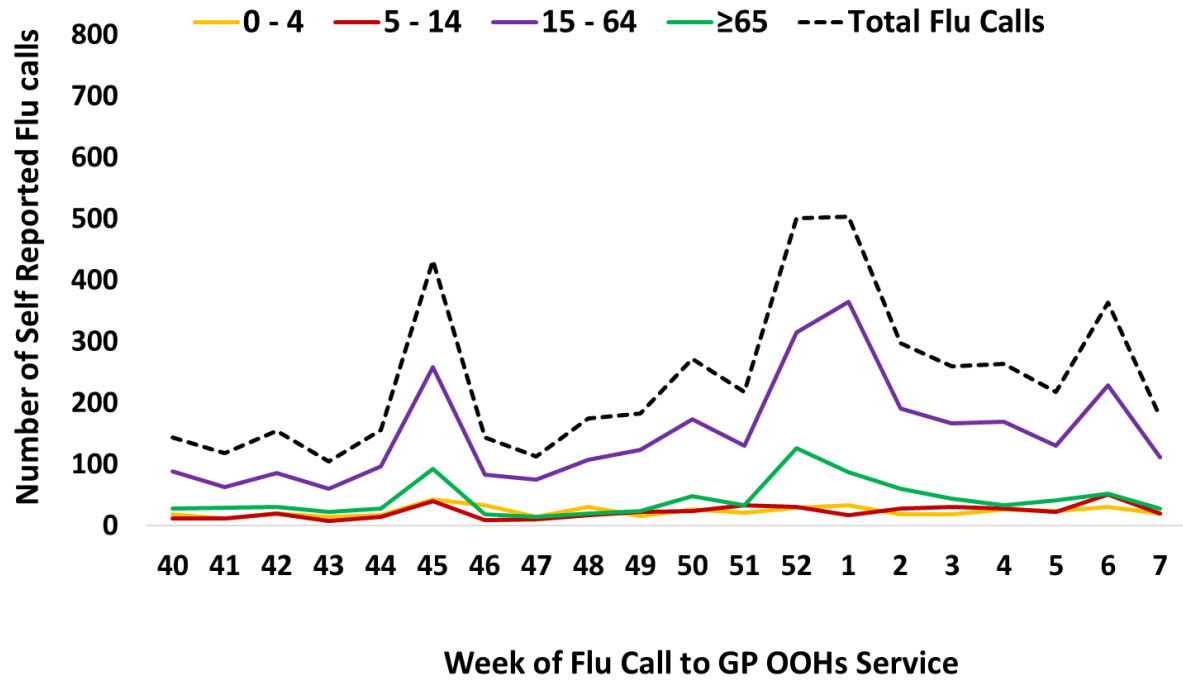


Figure 8: Number of self-reported **FLU** calls for all ages and by age group to GP Out-of-Hours services by week of call for the 2023/2024 season. *Source: GP Out-Of-Hours services in Ireland (collated by HSE & ICGP).*

5. Influenza & RSV notifications

Influenza and RSV case notifications are reported on Ireland's Computerised Infectious Disease Reporting System (CIDR), including all laboratory-confirmed influenza/RSV specimens reported from all laboratories testing for influenza/RSV. Influenza and RSV notifications are reported in the [Weekly Infectious Disease Report for Ireland](#).

- 923 laboratory confirmed influenza cases were notified during week 7 2024 (Table 6); corresponding to an overall notification rate of 18/100,000 population: 87 A(H3), 20 A(H1)pdm09, 709 A (not subtyped) and 107 B. This is a decrease compared to 1,090 cases notified during week 6 2024 (Figure 10).
- 12,603 laboratory confirmed influenza cases were notified for the 2023/2024 season to date (week 40 2023 to week 7 2024): 1,384 A(H3), 569 A(H1)pdm09, 9,924 A (not subtyped), 718 B and eight coinfections (five A and B, one A(H1)pdm09 and A(H3), one A(H1)pdm09 and B and one A(H3) and B) .
- Notification rates decreased among all age groups during week 7 2024 (Figure 10) (Figure 11). Age specific influenza notification rates were highest in the 0–4-year age group at 48.1/100,000 population, followed by those aged 65 years and older at 33.9/100,000 during week 7 2024 .
- The highest burden of notifications occurred in those aged 65 years and older at 28% (263/923) of all influenza notifications in week 7 2024.
- Influenza notification rates were highest in the Dublin and North-East health region at 24.8/100,000 population (Table 6) during week 7 2024, with notifications from this region accounting for 32% of all notifications (294/923).
- RSV notifications continued to decline with 47 cases notified during week 7 2024, compared to 60 cases during week 6 2024 (Figure 12).
- 7,596 RSV notifications have been reported for the 2023/2024 season to date.
- Age specific notification rates for RSV are low in other age groups but remain high in those aged less than one year, at 13.8/100,000 population (Figure 13). Notifications in those aged 65 years and older accounted for 36% (17/47) of all RSV notifications in week 7 2024.
- RSV notification rates were low across all regions (Table 7).

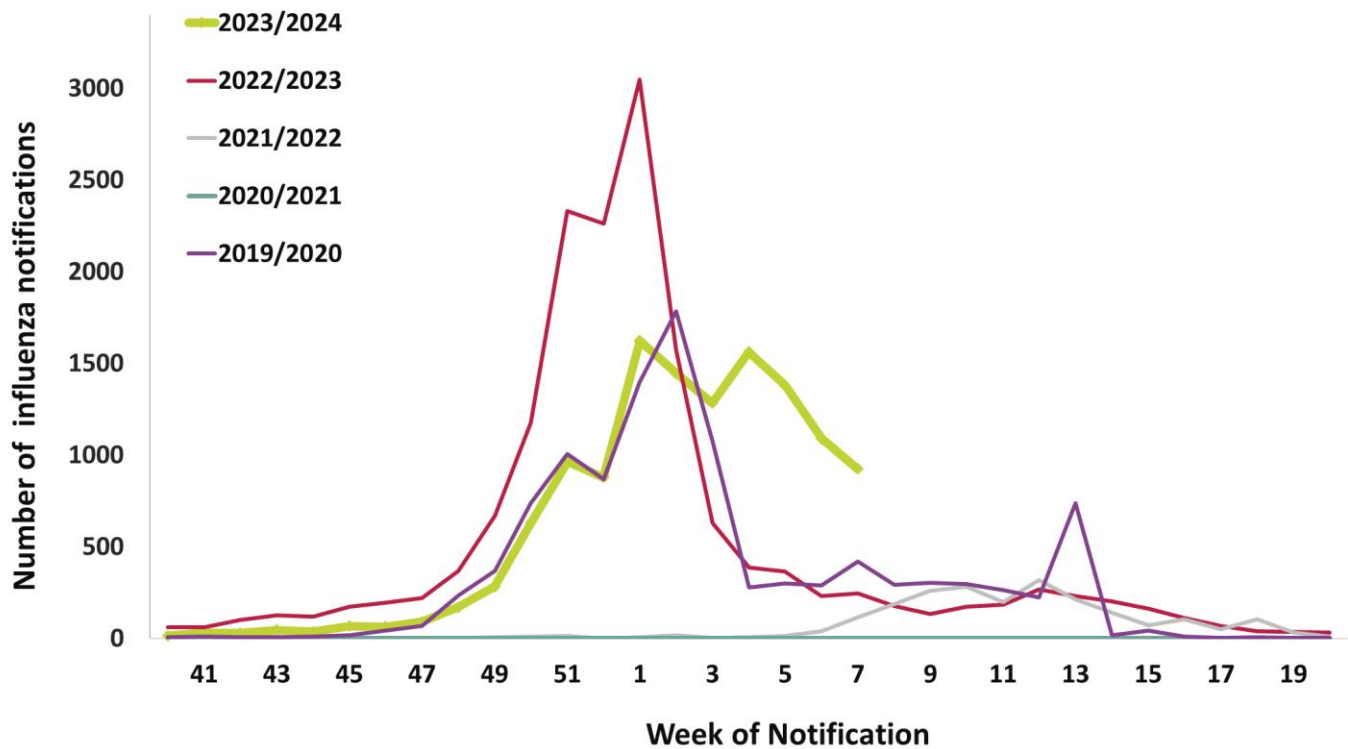


Figure 9: Number of laboratory confirmed **Influenza** notifications to HPSC by week of notification, 2019/2020 to 2023/2024 seasons. *Source: Ireland’s Computerised Infectious Disease Reporting System*

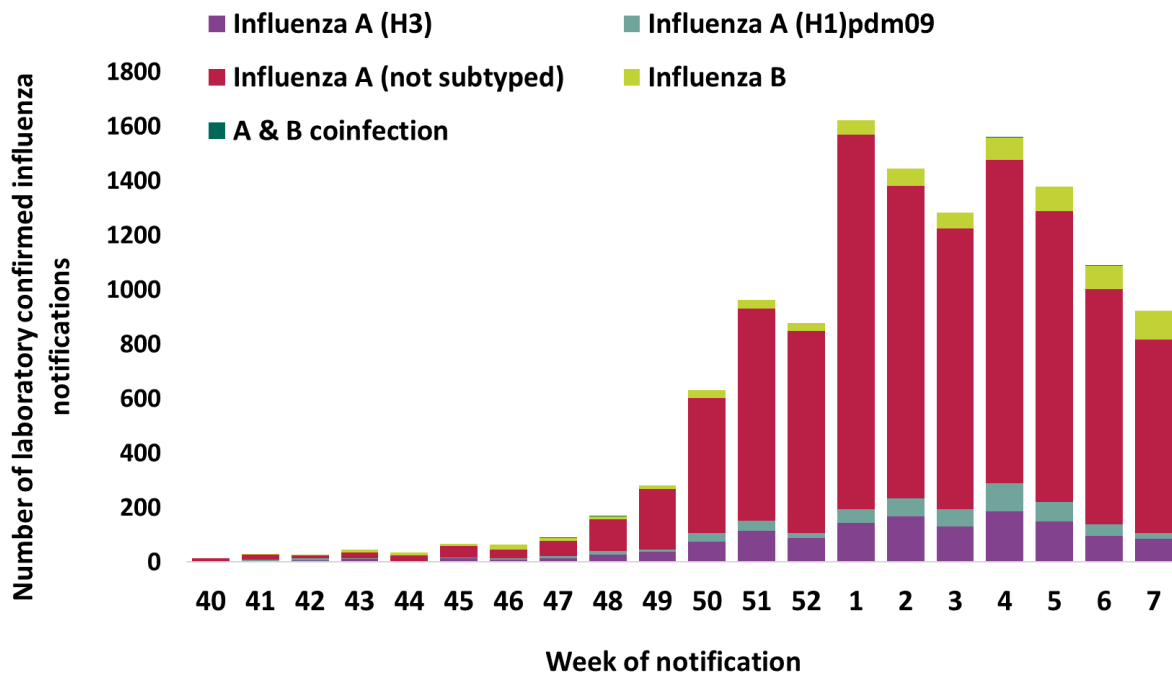


Figure 10: Number of laboratory confirmed **influenza** notifications by influenza type/subtype and week for the 2023/2024 season. *Source: Ireland’s Computerised Infectious Disease Reporting System*

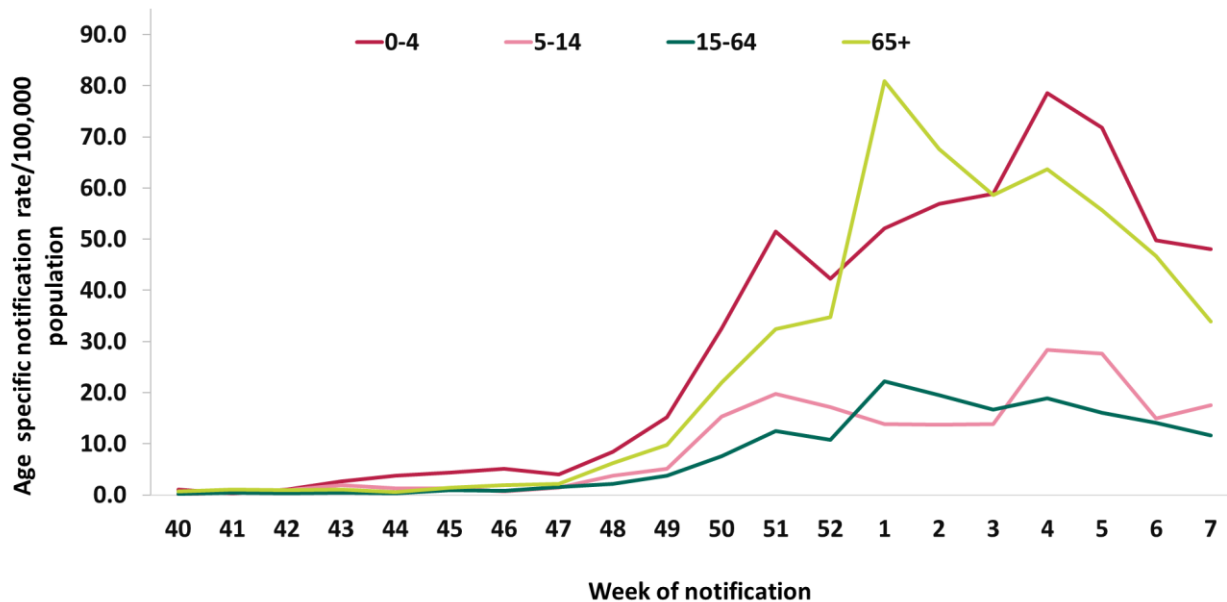


Figure 11: Age specific rates/100,000 population of laboratory confirmed **influenza** notifications to HPSC by week of notification for the 2023/2024 season. *Source: Ireland’s Computerised Infectious Disease Reporting System.*

Table 6: Number and rate/100,000 population of laboratory confirmed **influenza** notifications by HSE Health Region for week 7 2024 and the 2023/2024 season to date. *Source: CIDR*

HSE Health Region	Week 7 2024		2023/2024 season (Week 40 2023 - Week 7 2024)	
	Number	Rate/100,000 population	Number	Rate/100,000 population
Dublin and North East	294	24.8	2849	240.0
Dublin and Midlands	187	17.4	2258	209.5
Dublin and South East	204	21.0	2137	220.1
South West	100	13.5	1847	249.4
Mid West	51	12.3	663	160.5
West and North West	87	11.5	2846	374.6
Unknown	0		3	
Total	923	17.9	12603	244.8

Table 7: Number and rate/100,000 population of laboratory confirmed **RSV** notifications by HSE Health Region for week 7 2024 and the 2023/2024 season to date. *Source: CIDR*

HSE Health Region	Week 7 2024		2023/2024 season (Week 40 2023 - Week 7 2024)	
	Number	Rate/100,000 population	Number	Rate/100,000 population
Dublin and North East	14	1.2	1477	124.4
Dublin and Midlands	9	0.8	1621	150.4
Dublin and South East	7	0.7	1121	115.4
South West	6	0.8	934	126.1
Mid West	2	0.5	624	151.1
West and North West	9	1.2	1819	239.5
Total	47	0.9	7596	147.5

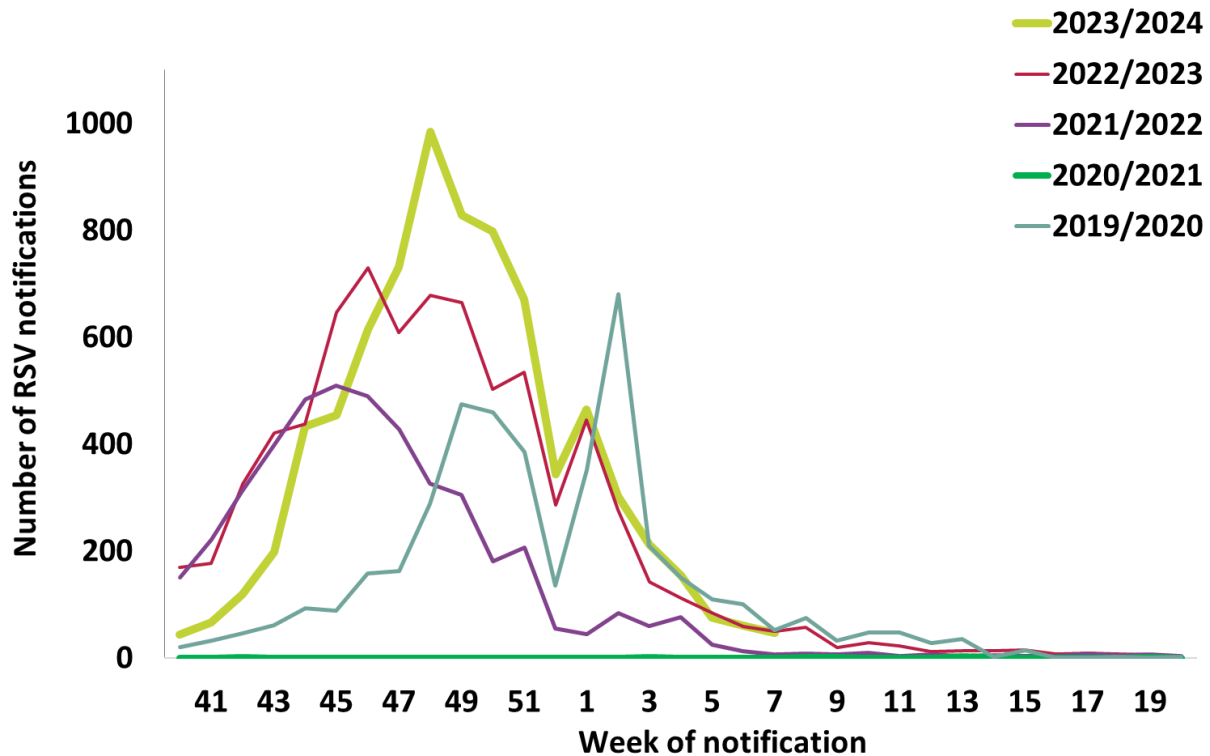


Figure 12: Number of laboratory confirmed **RSV** notifications to HPSC by week of notification, 2019/2020 to 2023/2024 seasons. *Source: Ireland’s Computerised Infectious Disease Reporting System.*

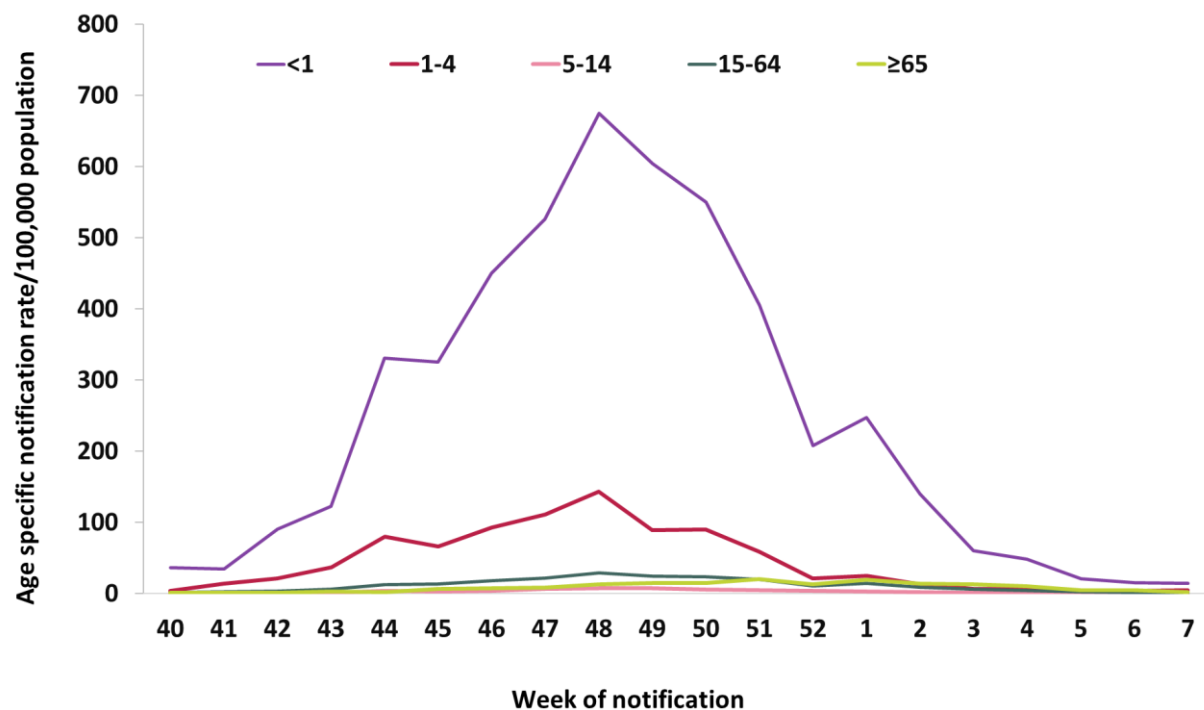


Figure 13: Age specific rates/100,000 population for laboratory confirmed RSV notifications to HPSC by week of notification for the 2023/2024 season. *Source: Ireland’s Computerised Infectious Disease Reporting System.*

6. Hospitalisations

- During week 7 2024, the number of notified laboratory confirmed influenza hospital inpatients decreased to 196 (three A(H3), one A(H1)pdm09, 164 A (not subtyped) and 28 B), compared to 257 in week 6 2024. (Figure 15).
- During the 2023/2024 season to date, 3,128 laboratory confirmed influenza hospital inpatients were reported: 274 A(H3), 103 A(H1)pdm09, 2,577 A (not subtyped), 172 B and two A and B coinfections.
- During week 7 2024, the age specific influenza hospitalisation rates are declining in all age groups, most notably in the 65 and older and 0-4 year age groups, however rates still remain highest in those age groups (65 and older(10/100,000 population) and 0-4 years(8.5/100,000 population)) (Figure16). Of all hospitalisations in week 7, 40% (78/193) occurred in those aged 65 years and older (Table 8).
- RSV hospitalisations continued to decrease during week 7 2024, 13 laboratory confirmed RSV hospitalised cases were notified, a decrease compared to 24 cases in week 6 2024 (Figure 17).
- 3,190 RSV hospitalisations were reported for the 2023/2024 season to date.
- The age specific RSV hospitalisation rates are low in all age-groups (Figure 18 and Table 10).
- The number of laboratory confirmed influenza and RSV notifications by patient type and week for the 2023/2024 season are reported in Tables 9 and 11.

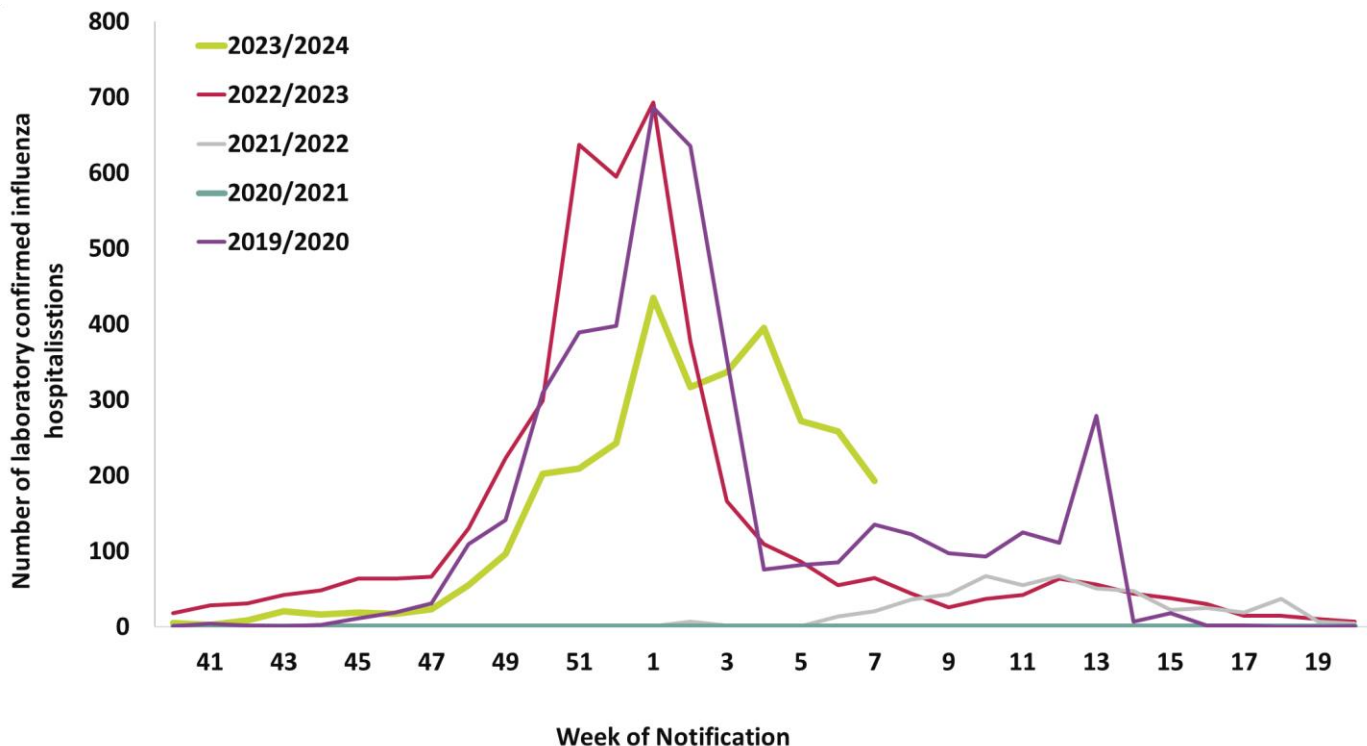


Figure 14: Number of notified **influenza** hospital inpatients, by week of notification and season, for the 2019/2020 to 2023/2024 seasons. *Source: Ireland’s Computerised Infectious Disease Reporting System.*

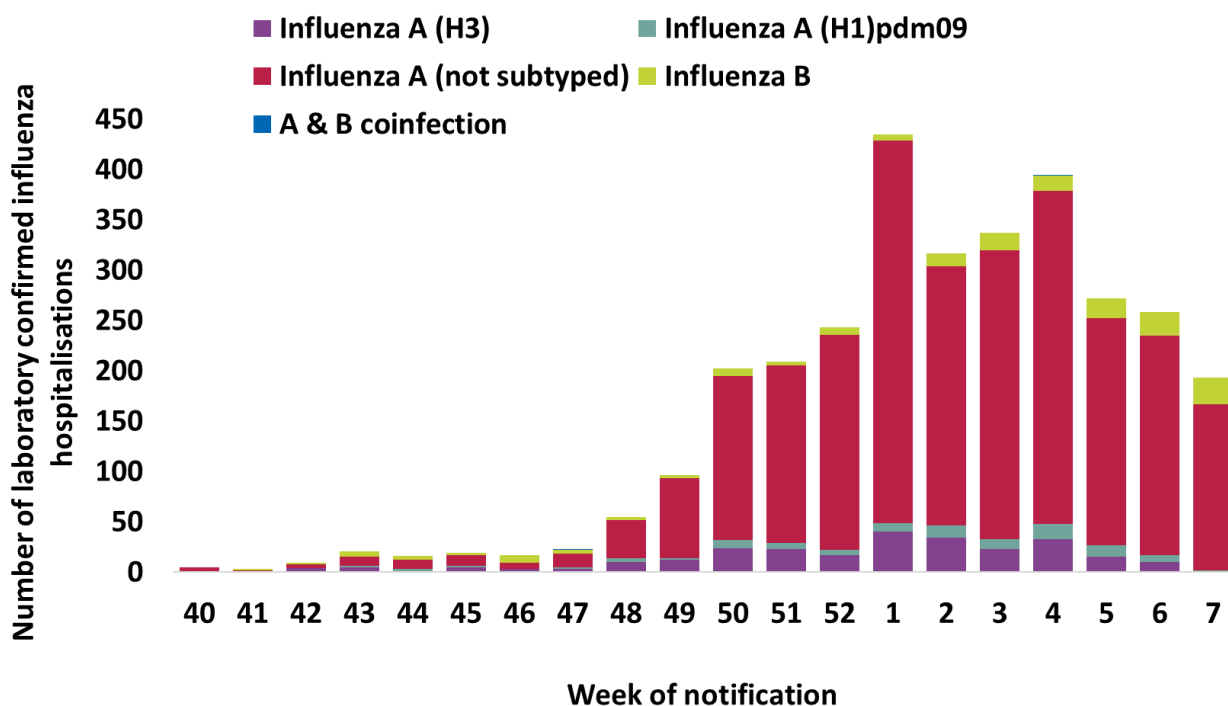


Figure 15: Number of notified laboratory confirmed **influenza** hospital inpatients by influenza type/subtype by week for the 2023/2024 season. *Source: Ireland’s Computerised Infectious Disease Reporting System.*

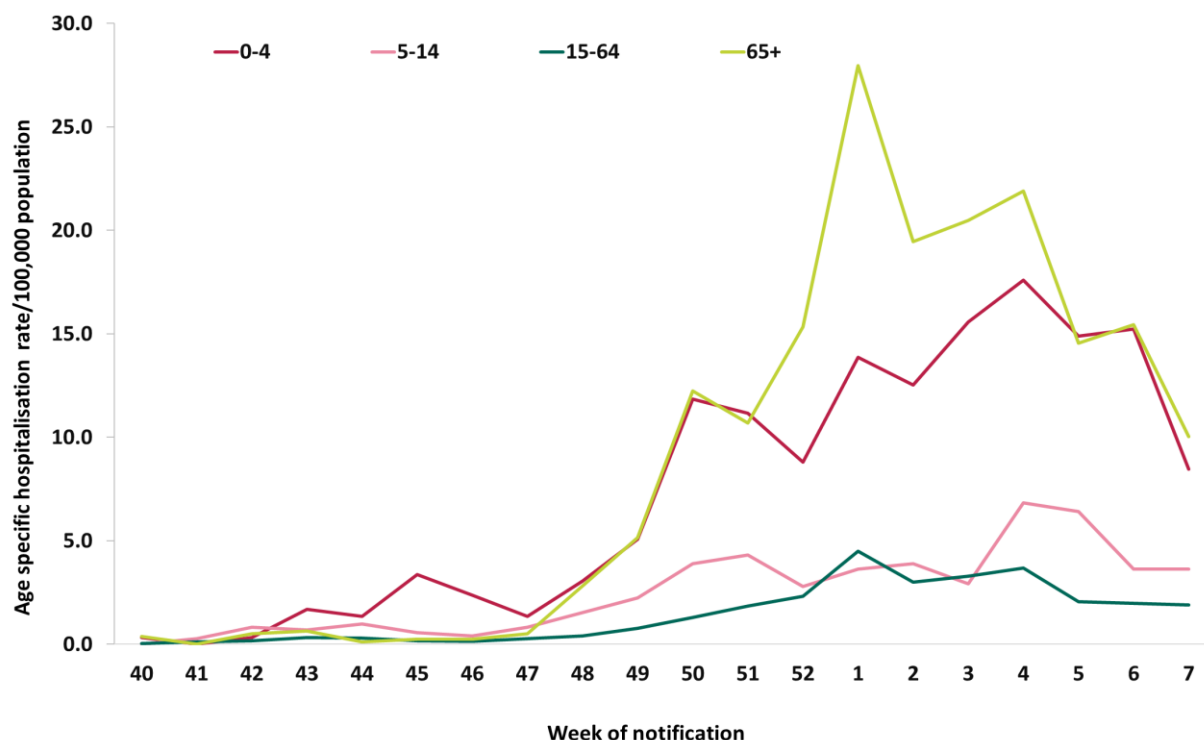


Figure 16: Age specific rates/100,000 population for laboratory confirmed **influenza** cases reported as **hospital inpatients** by week of notification for the 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

Table 8: Number, percentage and rate /100,000 population of notified laboratory-confirmed **influenza hospitalised cases notified** in week 7 2024 and the 2023/2024 season (week 40 2023 onwards). *Source: Ireland's Computerised infectious Disease Reporting System*

Age (years)	Hospitalised (Week 7)			Season to date (Week 40 2023 - Week 7 2024)		
	Number	% of all Hospitalisations	Rate/ 100,000 population	Number	% of all Hospitalisations	Rate/ 100,000 population
<1	7	3.6	12.1	93	3.0	160.9
1-4	18	9.3	7.6	346	11.1	145.6
5-14	26	13.5	3.6	359	11.5	50.1
15-24	12	6.2	1.9	127	4.1	19.7
25-34	11	5.7	1.8	178	5.7	28.3
35-44	15	7.8	1.9	206	6.6	25.9
45-54	12	6.2	1.7	161	5.1	22.6
55-64	14	7.3	2.4	266	8.5	45.9
≥65	78	40.4	10.0	1392	44.5	179.3
Total	193	100	3.7	3128	100	60.7

Table 9: Number of notified laboratory-confirmed **influenza** cases by patient type and week of notification 2023/2024 season (week 40 2023 onwards). *Source: Ireland's Computerised infectious Disease Reporting System*

	Patient Type							Total
	GP Patient	ED patient	Hospital Inpatient	Hospital Day Patient	Hospital Outpatient	Other	Unknown	
Week 7	65	407	196	9	58	33	155	923
Week 6	75	546	257	9	71	17	115	1090
Week 5	130	645	272	8	50	30	245	1380
Week 4	137	682	395	12	82	51	203	1562
Week 3	118	591	337	16	49	35	137	1283
Week 2	111	802	317	17	55	32	110	1444
Week 1	96	814	435	14	73	28	164	1624
Week 52	56	451	243	11	33	16	67	877
Week 51	66	535	211	8	52	13	79	964
Week 50	40	310	202	5	35	3	36	631
Week 49	11	138	96	1	16	7	14	283
Week 48	19	64	55	1	11	4	16	170
Week 47	9	39	23	1	9	2	7	90
Week 46	8	28	16	0	5	1	5	63
Week 45	9	26	19	0	6	4	2	66
Week 44	2	15	16	1	1	0	1	36
Week 43	8	16	21	0	0	0	1	46
Week 42	8	9	9	0	1	0	1	28
Week 41	6	15	3	1	2	0	2	29
Week 40	0	6	5	0	3	0	0	14
Total	974	6139	3128	114	612	276	1360	12603

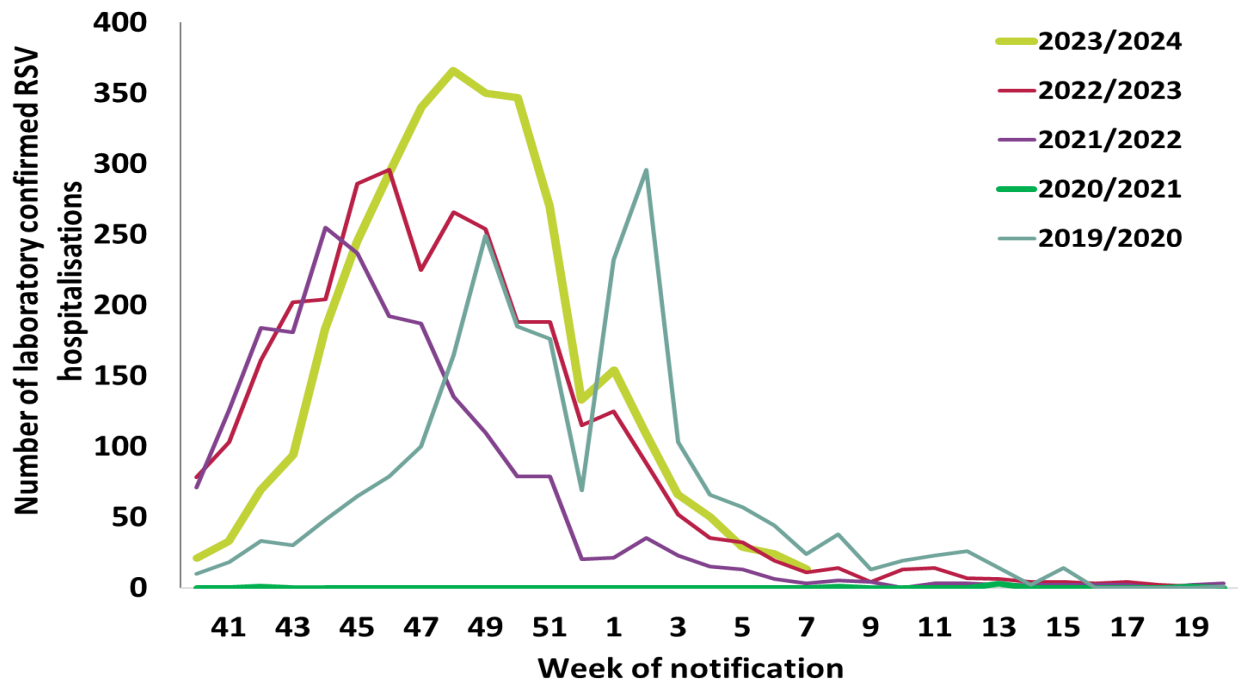


Figure 17: Number of notified RSV hospitalised cases notified, by week of notification and season, for the 2019/2020 to 2023/2024 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System.*

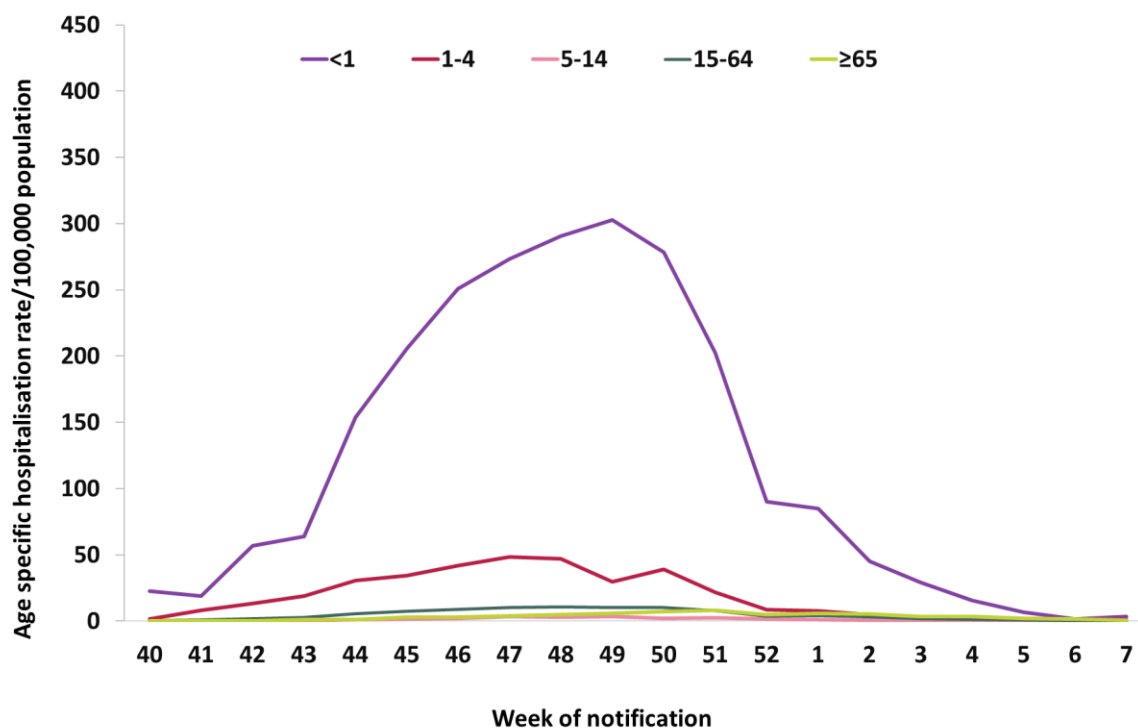


Figure 18: Age specific notification rates/100,000 population for laboratory confirmed **RSV** hospitalised cases notified by week of notification for the 2023/2024 season. *Source: Ireland’s Computerised Infectious Disease Reporting System*

Table 10: Number, percentage and rate/100,000 population of notified laboratory-confirmed **RSV hospitalised cases notified** in week 7 2024 and the 2023/2024 season (week 40 2023 onwards). *Source: Ireland’s Computerised infectious Disease Reporting System*

Age (years)	Hospitalised (Week 7)			Season to date (Week 40 2023 - Week 7 2024)		Rate/ 100,000 population
	Number	% of all Hospitalisations	Rate/ 100,000 population	Number	% of all Hospitalisations	
<1	2	15.4	3.5	1389	43.5	2403.3
1-4	3	23.1	1.3	871	27.3	366.6
5-14	0	.0	0.0	181	5.7	25.2
15-24	1	7.7	0.2	27	0.8	4.2
25-34	0	.0	0.0	31	1.0	4.9
35-44	1	7.7	0.1	38	1.2	4.8
45-54	0	.0	0.0	48	1.5	6.7
55-64	1	7.7	0.2	90	2.8	15.5
≥65	5	38.5	0.6	515	16.1	66.3
Total	13	100	0.3	3190	100	62.0

Table 11: Number of notified laboratory confirmed **RSV** cases by patient type and week of notification, 2023/2024 season (week 40 2023 onwards). *Source: Ireland's Computerised infectious Disease Reporting System*

	Patient Type							Total
	GP Patient	ED patient	Hospital Inpatient	Hospital Day Patient	Hospital Outpatient	Other	Unknown	
Week 7	5	13	13	1	0	1	14	47
Week 6	6	17	24	1	3	0	9	60
Week 5	3	20	29	2	1	1	20	76
Week 4	15	56	50	3	7	6	18	155
Week 3	18	61	65	2	9	27	29	211
Week 2	14	115	109	7	10	12	36	303
Week 1	17	146	154	10	14	16	107	464
Week 52	7	140	133	7	5	17	34	343
Week 51	33	266	270	8	13	9	72	671
Week 50	33	327	348	6	33	12	39	798
Week 49	26	345	350	8	19	9	68	825
Week 48	20	490	366	11	15	11	72	985
Week 47	14	285	340	3	19	17	52	730
Week 46	7	260	294	8	8	1	37	615
Week 45	7	167	245	5	6	2	22	454
Week 44	6	216	183	3	11	3	10	432
Week 43	2	74	94	0	4	2	21	197
Week 42	2	32	69	2	1	6	8	120
Week 41	1	23	33	1	1	1	7	67
Week 40	1	15	21	1	2	0	3	43
Total	237	3068	3190	89	181	153	678	7596

7. Intensive Care Surveillance

The Intensive Care Society of Ireland (ICSI) and the HSE Critical Care Programme conducts enhanced surveillance (established during the 2009 pandemic), on all intensive care patients with laboratory confirmed influenza. HPSC processes and reports on this information on behalf of the regional Directors of Public Health/Medical Officers of Health.

- Two laboratory confirmed influenza case were admitted to intensive care units (ICU) and notified to HPSC during week 7 2024.
- Eighty-five influenza A cases (25 A(H3), 12 A(H1)pdm09 and 48 A (not subtyped)) ICU cases have been notified for the season to date (weeks 40 2023- 7 2024).

Table 12: Cumulative number and age specific rate/100,000 population of laboratory confirmed notified influenza hospitalised and intensive care cases, week 40 2023 – week 7 2024. *Source: Ireland’s Computerised Infectious Disease Reporting System*

Age-group (years)	Hospitalised		Admitted to ICU	
	Number	Rate/100,000 population	Number	Rate/100,000 population
<1	93	160.9	2	3.5
1-4	346	145.6	2	0.8
5-14	359	50.1	4	0.6
15-24	127	19.7	3	0.5
25-34	178	28.3	4	0.6
35-44	206	32.8	3	0.4
45-54	161	22.6	13	1.8
55-64	266	45.9	17	2.9
≥65	1392	179.3	37	4.8
Total	3128	60.7	85	1.7

8. Mortality Surveillance

Influenza deaths include all deaths in notified influenza cases. HPSC receives daily mortality data from the General Register Office (GRO) on all deaths from all causes registered in Ireland. These data have been used to monitor excess all-cause and influenza and pneumonia mortality as part of the influenza surveillance system and the European Mortality Monitoring Project. Excess mortality analyses are corrected for reporting delays with the standardised EuroMOMO algorithm. Due to delays in death registrations in Ireland, excess mortality data included in this report are reported with a one-week lag time. These data are provisional due to the time delay in deaths’ registration in Ireland. <http://www.euromomo.eu/>

- There were three deaths in notified influenza cases reported to HPSC during week 7 2024.
- For the season to date (weeks 40 2023-7 2024), 106 deaths in notified influenza cases (27 A(H3), eight A(H1)pdm09 and 71 A (not-subtyped) have been reported to HPSC.
- There was no excess all-cause mortality for the entire population reported for week 6 2024.

9. Outbreak Surveillance

In this surveillance report, ARI outbreaks refer to outbreaks of acute respiratory infection caused by pathogens other than influenza, SARS-CoV-2 or RSV. COVID-19 outbreaks are not included in this report; surveillance data on COVID-19 outbreaks are detailed on the HPSC website. <https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/casesinireland/>

- During week 7 2024, 14 influenza outbreaks (six nursing homes, three in acute hospitals, one residential institution and four in other settings) were notified to HPSC (Tables 13 & 14).
- Two ARI (caused by pathogens other than influenza, SARS-CoV-2, or RSV) outbreaks in nursing homes and one RSV outbreak in a nursing home were notified to HPSC during week 7 2024.
- There have been 251 ARI/influenza/RSV (excluding COVID-19) outbreaks notified to HPSC to date this season, comprising of 184 influenza outbreaks, 36 RSV outbreaks and 31 ARI outbreaks.

Table 13: Summary of influenza, RSV and ARI (influenza/RSV/SARS-CoV-2 negative) outbreaks by HSE Health Region during week 7 2024 and the 2023/2024 season (week 40 2023 – week 7 2024) *Source: CIDR*

HSE Health Region	Influenza		RSV		ARI		Total	
	Week 7	2023/2024	Week 7	2023/2024	Week 7	2023/2024	Week 7	2023/2024
Dublin and North East	2	28	0	7	0	15	2	50
Dublin and Midlands	2	25	0	12	0	0	2	37
Dublin and South East	5	36	0	3	0	6	5	45
South West	0	26	0	1	2	4	2	31
Mid West	0	8	0	3	0	0	0	11
West and North West	5	58	1	8	0	6	6	72
Unknown	0	3	0	2	0	0	0	5
Total	14	184	1	36	2	31	17	251

Table 14: Summary of influenza, RSV and ARI (influenza/RSV/SARS-CoV-2 negative) outbreaks by outbreak setting during week 7 2024 and the 2023/2024 season (week 40 2023 – week 7 2024). *Source: CIDR*

Setting	Influenza		RSV		ARI		Total	
	Week 7	2023/2024	Week 7	2023/2024	Week 7	2023/2024	Week 7	2023/2024
Community hospital/Long-stay unit	0	17	0	2	0	3	0	22
Nursing Home	6	62	1	14	2	22	9	98
Hospital	3	58	0	10	0	0	3	68
Residential Institution	1	24	0	4	0	3	1	31
Childcare facility	0	2	0	2	0	0	0	4
Other settings	4	21	0	4	0	3	4	28
Total	14	184	1	36	2	31	17	251

10. International Summary

According to the [European Respiratory Virus Surveillance Summary](#), in the WHO European region during week 6 2024 (including data up to 11/02/2024), influenza activity is above baseline levels; all three influenza virus types/subtypes - A(H1)pdm09, A(H3) and B - are co-circulating, with a dominance of A(H3) viruses in most countries, and A(H1)pdm09 also dominant or co-dominant in a small number of countries. Of 34 countries reporting geographical spread of influenza in the WHO European region, 27 reported widespread activity, four reported regional and three reported sporadic. During the 2023/2024 season, RSV activity began increasing around week 41, reaching a peak in week 50 followed by a decreasing trend, although in recent weeks a mixed epidemiological picture has been observed, with increasing and decreasing trends at the national level. RSV continues to have the greatest impact among children aged 0–4 years.

As of 4th February 2024, WHO has reported that globally influenza detections decreased but detections remain elevated in parts of the temperate Northern hemisphere. In the countries of North America, influenza detections remained elevated, but some indicators showed a decreasing trend. Influenza A(H1N1)pdm09 viruses predominated among the detections in the countries of North America. In East Asia, influenza activity remained elevated but is decreasing overall. Influenza activity remained elevated in the Central American and Caribbean countries in sentinel surveillance with detections of predominantly influenza A(H1N1)pdm09 in the Caribbean followed by influenza A(H3N2) viruses, while influenza A(H1N1)pdm09 was predominant in Central America followed by B/Victoria lineage viruses. In tropical Africa, influenza detections remained low in most reporting countries with a few exceptions and influenza A(H3N2) viruses predominated.

See [ECDC](#) and [WHO](#) influenza surveillance reports for further information.

11. WHO recommendations on the composition of influenza virus vaccines

The WHO vaccine strain selection committee recommends that quadrivalent egg-based vaccines for use in the 2023/2024 northern hemisphere influenza season contain the following:

- an A/Victoria/4897/2022 (H1N1)pdm09-like virus;
- an A/Darwin/9/2021 (H3N2)-like virus; and
- a B/Austria/1359417/2021 (B/Victoria lineage)-like virus; and
- a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.

<https://www.who.int/news/item/24-02-2023-recommendations-announced-for-influenza-vaccine-composition-for-the-2023-2024-northern-hemisphere-influenza-season>

- Further information on influenza is available on the following websites:
 - European respiratory virus surveillance summary <https://erviss.org/>
 - Europe – ECDC <http://ecdc.europa.eu/>
 - UK Health Security Agency <https://www.gov.uk/government/collections/weekly-national-flu-reports>
 - United States CDC <http://www.cdc.gov/flu/weekly/fluactivitysurv.htm>
 - Public Health Agency of Canada <http://www.phac-aspc.gc.ca/fluwatch/index-eng.php>
- Influenza case definition in Ireland <https://www.hpsc.ie/a-z/respiratory/influenza/casedefinitions/>
- COVID-19 case definition in Ireland <https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/casedefinitions/>
- Avian influenza overview May – August 2020 <https://www.ecdc.europa.eu/en/publications-data/avian-influenza-overview-may-august-2020>
- Avian influenza: EU on alert for new outbreaks <https://www.ecdc.europa.eu/en/news-events/avian-influenza-eu-alert-new-outbreaks>
- Information on COVID-19 in Ireland is available on the HPSC website <https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/>
- The WHO categorised COVID-19 as a pandemic on 11 March 2020. For more information about the situation in the WHO European Region visit:
 - WHO website: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>
 - ECDC website: <https://www.ecdc.europa.eu/en/novel-coronavirus-china>

Further information on influenza in Ireland is available at www.hpsc.ie

Acknowledgements

This report was prepared by the HPSC influenza epidemiology team: Nancy Somi, Adele McKenna, Eva Kelly, Karen O'Reilly, Amy Griffin, Pamela Lima, Maureen O'Leary, Lisa Domegan and Joan O'Donnell. HPSC wishes to thank the sentinel GPs, the ICGP, NVRL, Departments of Public Health, ICSI and HSE-Healthlink for providing data for this report.