

Influenza, RSV and Other Respiratory Viruses Surveillance Report

Week 9 2024 (26th February – 3rd March 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 04/03/2024.

Summary Week 9 2024

Most indicators of influenza activity decreased during week 9 2024; notified cases, hospitalisations and sentinel GP influenza positivity remained at low to moderate 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 overall proportions 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 5.8/100,000 population during week 9 2024, which is below the Irish baseline threshold (18.1/100,000). ILI age specific rates were below the age specific baseline for all age groups during week 9 2024.
- **National Virus Reference Laboratory (NVRL):** Of 128 sentinel GP ARI specimens tested and reported by the NVRL during week 9 2024, 30 (23.4%) were positive for influenza (15 A(H3), five A(H1)pdm09 and 10 influenza B), one (0.8%) for RSV, two (1.6%) for SARS-CoV-2, and 18 (14.1%) for rhino/enterovirus.
- Of 172 non-sentinel respiratory specimens tested and reported by the NVRL during week 9 2024, 38 (22.1%) were positive for influenza (21 A(H3), seven A(H1)pdm09, four A (not subtyped) and six influenza B), five (2.9%) for SARS-CoV-2, none for RSV and 11 (6.4%) for rhino/enterovirus.
- **GP Out of hours (OOHs):** Cough calls comprised 20.1% (2748/13646) of all reported GP OOHs calls during week 9 2024 (above the baseline threshold of 10.8%); 38% (1041/2748) of cough calls were in those aged 0-4 years. Flu calls comprised 1.6% (215/13646) of all calls in week 9 2024, which is below the baseline threshold level (2.3%).
- **Influenza notifications:** 566 laboratory confirmed influenza cases were notified during week 9 2024: 92 A(H3), 26 A(H1)pdm09, 361 A (not subtyped), 86 B and one A and B coinfection. This is a decrease compared to 839 cases notified during week 8 2024. The highest burden of notifications occurred in those aged 65 years and older at 32% (180/566) of all influenza notifications in week 9 2024.
- **RSV notifications:** 26 RSV cases were notified during week 9 2024, compared to 43 cases during week 8 2024. Age specific notification rates for RSV are low across all age groups.
- **Hospitalisations:** 135 laboratory confirmed influenza hospitalised case (16 A(H3), three A(H1)pdm09, 103 A (not subtyped) and 13 B) were notified in week 9, a decrease compared to 180 in week 8 2024. During the 2023/2024 season to date, 3,455 laboratory confirmed influenza hospital inpatients were reported: 310 A(H3), 114 A(H1)pdm09, 2,821 A (not subtyped), 208 B and two A and B coinfections. RSV hospitalisations remained at low levels during week 9 2024, six laboratory confirmed RSV hospitalised cases were notified, a decrease compared to 22 cases in week 8 2024. For the 2023/2024 season to date, 3,223 RSV hospitalisations were reported.
- **Intensive care admissions:** There was one laboratory confirmed influenza case (influenza B) admitted to intensive care unit (ICU) and notified to HPSC during week 9 2024. For the season to date, 96 influenza ICU cases (26 A(H3), 15 A(H1)pdm09, 53 A (not subtyped) and two influenza B) have been notified.
- **Mortality:** There were no deaths in notified influenza cases reported to HPSC during week 9 2024. For the season to date, 138 deaths were reported – 30 A(H3), 10 A(H1)pdm09 and 98 A (not-subtyped).
- **Outbreaks:** During week 9 2024, five influenza A outbreaks (one nursing home, two residential institutions and two in other setting) and three ARI (caused by pathogens other than influenza, SARS-CoV-2, or RSV) outbreaks in nursing homes were reported to HPSC.
- **International:** In the EU/EEA during week 8 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 9 2024, 50 sentinel GP influenza-like illness (ILI) consultations were reported from the Irish sentinel GP network, corresponding to an ILI consultation rate of 5.8 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 9.2 per 100,000 population during week 8 2024 (Figure 1).
- Of the 98 GP practices in the Irish sentinel GP network, 95 reported clinical consultation data during week 9 2024 and 33 practices reported ILI consultations.
- Age specific ILI consultation rates were below the age specific baseline thresholds in all age groups during week 9 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.

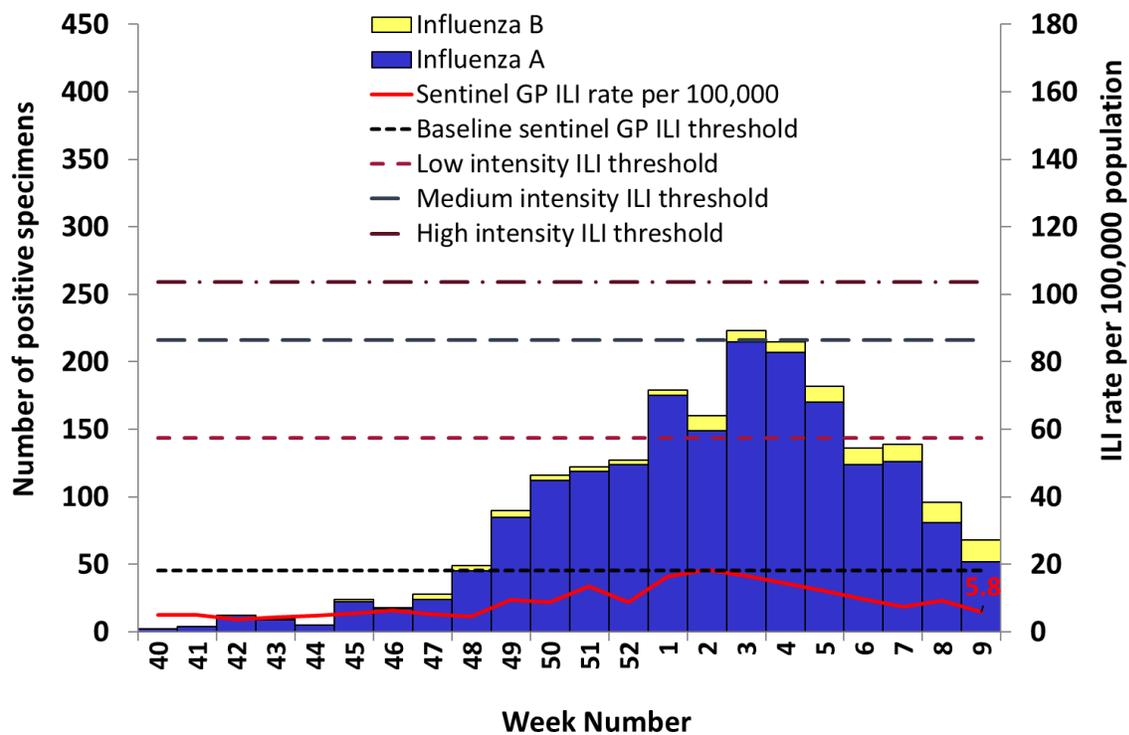


Figure 1: Sentinel GP Influenza-like illness (ILI) consultation rates per 100,000 population, baseline, low, medium and high intensity ILI thresholds and number of positive influenza A and B specimens tested by the NVRL, by influenza week for the 2023/2024 season. Source: ICGP and NVRL

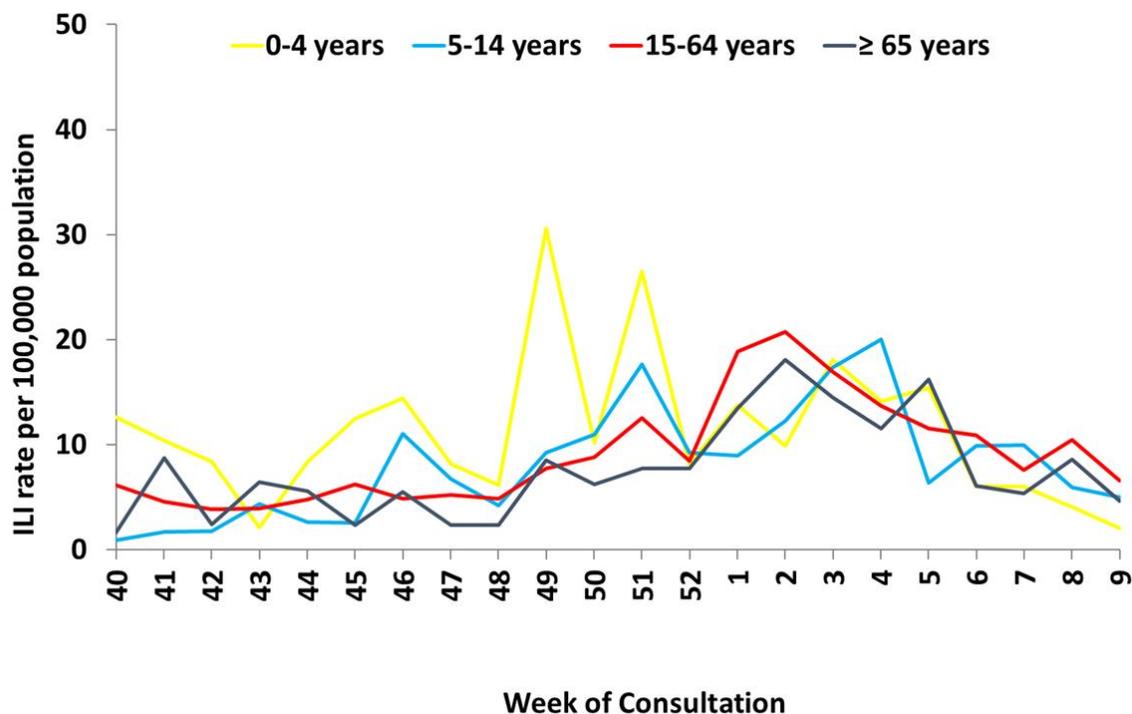


Figure 2: Age specific sentinel GP ILI consultation rate per 100,000 population by week (week 40 2023 to week 9 2024). *Source: ICGP.*

Table 1: Age specific sentinel GP ILI consultation rate per 100,000 population by week (week 40 2023 to week 8 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	8	9	
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	12.1	9.7	7.5	9.2	5.8						
<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	8.4	8.1	8.2	5.0	3.8						
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	10.4	6.6						
≥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	8.6	4.6						
Reporting practices (N=98)	92	94	92	90	92	93	94	96	95	96	95	97	97	96	95	94	93	97	96	97	94	95						

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 9 2024, of 128 sentinel GP ARI specimens tested and reported by the NVRL, 30 (23.4%) were positive for influenza (15 A(H3), five A(H1)pdm09 and 10 influenza B), one (0.8%) for RSV, two (1.6%) for SARS-CoV-2, and 18 (14.1%) for rhino/enterovirus.
- In comparison during week 8 2024, of 171 sentinel GP ARI specimens tested and reported by the NVRL, 45 (26.3%) were positive for influenza (21 A(H3), nine A(H1)pdm09, three A (not subtyped) and 12 B), one (0.6%) for RSV, three (1.8%) for SARS-CoV-2, and 18 (10.5%) for rhino/enterovirus.
- For the 2023/2024 season to date (week 40 2023 to week 9 2024), of 3,442 sentinel GP ARI specimens tested and reported by the NVRL, 709 (20.6%) were positive for influenza (411 A(H3), 178 A(H1)pdm09, 39 A (not subtyped) and 81 influenza B), 258 (7.5%) for RSV, 217 (6.3%) for SARS-CoV-2, and 516 (15.0%) for rhino/enterovirus (Table 4).
- During week 9 2024, of 172 non-sentinel respiratory specimens tested and reported by the NVRL, 38 (22.1%) were positive for influenza (21 A(H3), seven A(H1)pdm09, four A (not subtyped) and six influenza B), five (2.9%) for SARS-CoV-2, none for RSV and 11 (6.4%) for rhino/enterovirus.
- During week 8 2024, of 225 non-sentinel respiratory specimens tested, 51 (22.7%) were positive for influenza (37 A(H3), 10 A(H1)pdm09, one A (not subtyped), and three B), six (2.7%) for SARS-CoV-2, one (0.4%) for RSV, and 13 (5.8%) for rhino/enterovirus (Figure 3b).
- For the 2023/2024 season to date (week 40 2023 to week 9 2024), of 5,499 non-sentinel respiratory specimens tested and reported by the NVRL, 1,296 (23.6%) were positive for influenza (867 A(H3), 334 A(H1)pdm09, 50 A (not subtyped) and 45 influenza B), 277 (5.0%) for RSV, 382 (6.9%) for SARS-CoV-2, and 504 (9.2%) for rhino/enterovirus (Table 5).
- Other respiratory viruses (ORVs) are being detected at lower levels (Figure 3a and 3b).
- Of 2,005 sentinel GP ARI specimens and non-sentinel specimens positive for influenza and reported by the NVRL during the 2023/2024 season, 123 (6.1%) were coinfecting with other viruses.

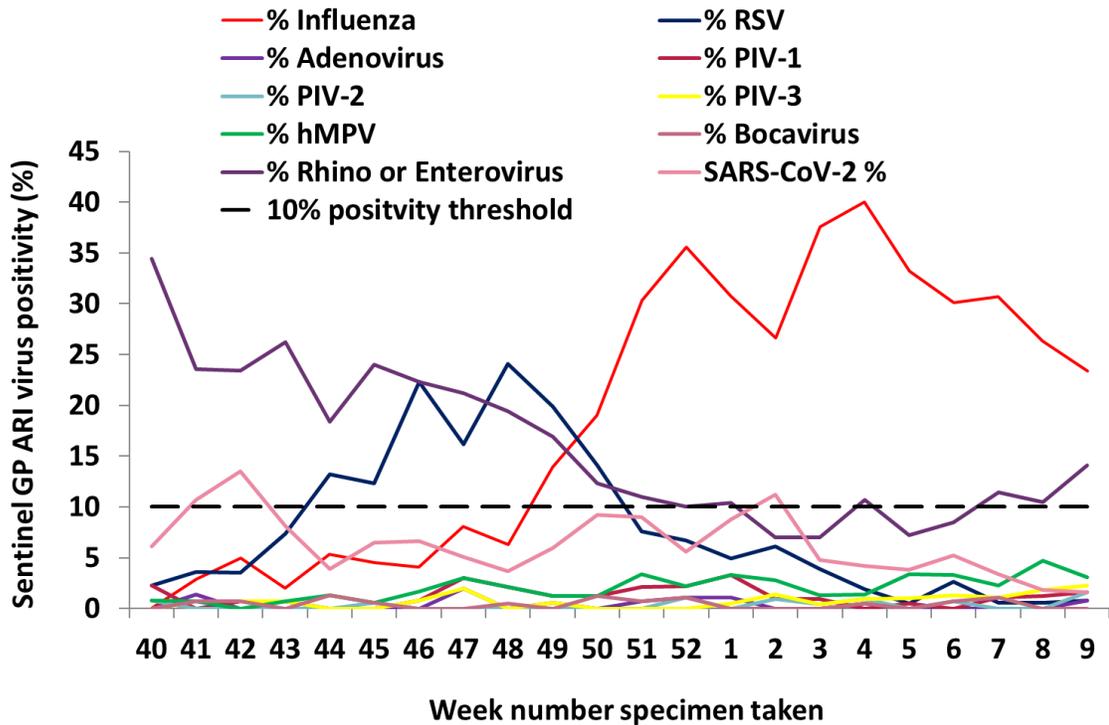


Figure 3a: Percentage positive results for **sentinel GP ARI** specimens tested by the NVRL for influenza, SARS-CoV-2, RSV and other respiratory viruses by week specimen was taken for the 2023/2024 season. *Source: NVRL*

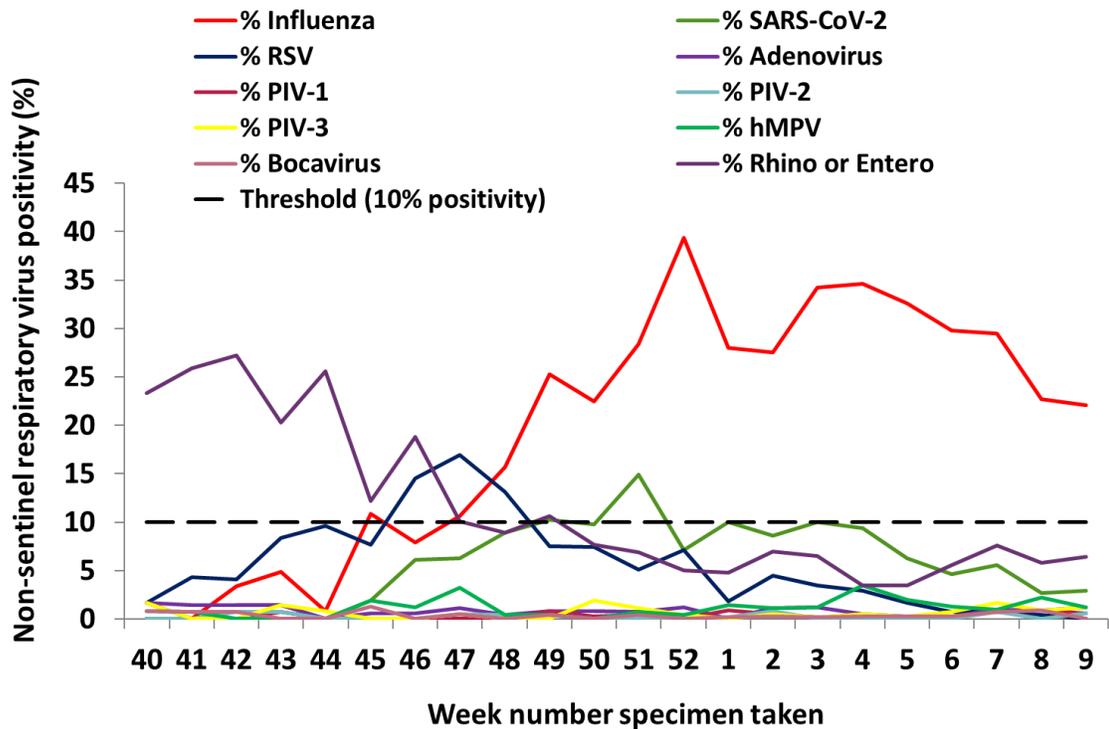


Figure 3b: Percentage positive results for **non-sentinel respiratory** specimens tested by the NVRL for influenza, SARS-CoV-2, RSV and other respiratory viruses by week specimen was taken for the 2023/2024 season. *Source: NVRL*

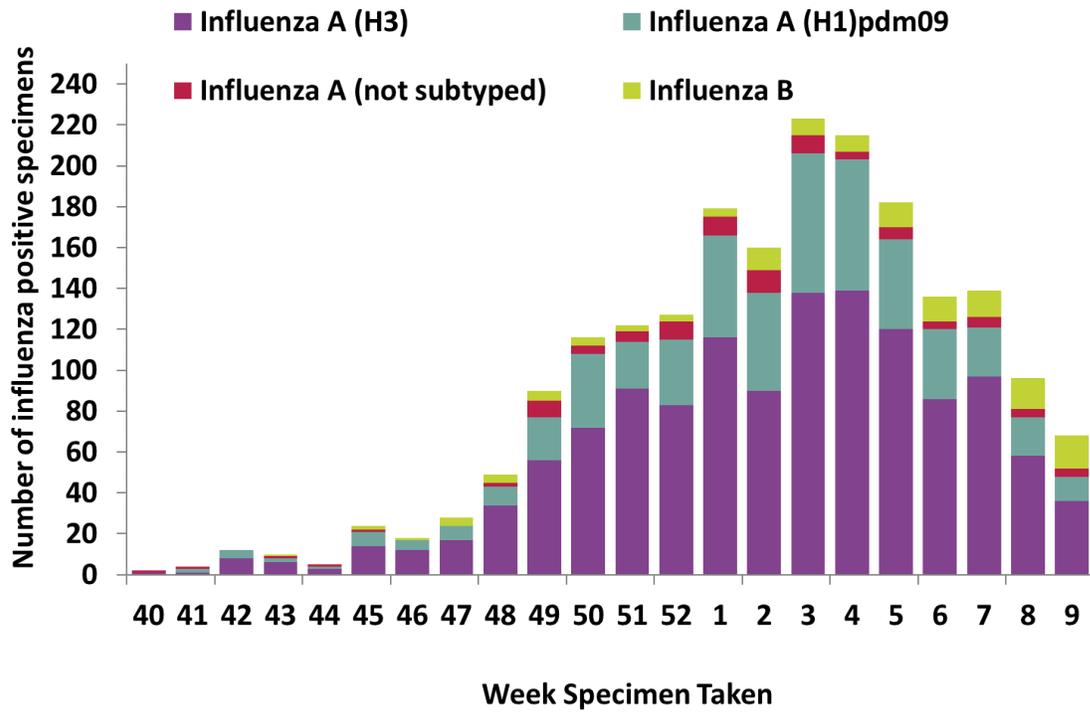


Figure 4: Number of positive **influenza** specimens (from sentinel GP ARI and non-sentinel respiratory sources) tested by the NVRL by influenza type/subtype and by week specimen was taken for the 2023/2024 season. *Source: NVRL*

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 8 and week 9 2024, and the 2023/2024 Season. *Source: NVRL*

Surveillance period	Specimen type	Total tested	Number influenza positive	% Influenza positive	Influenza A				Influenza B			
					A(H1)pdm09	A(H3)	A (not subtyped)	Total influenza A	B (unspecified)	B Victoria lineage	B Yamagata lineage	Total influenza B
Week 9 2024	Sentinel GP ARI	128	30	23.4	5	15	0	20	10	0	0	10
	Non-sentinel respiratory	172	38	22.1	7	21	4	32	6	0	0	6
	Total	300	68	22.7	12	36	4	52	16	0	0	16
Week 8 2024	Sentinel GP ARI	171	45	26.3	9	21	3	33	12	0	0	12
	Non-sentinel respiratory	225	51	22.7	10	37	1	48	3	0	0	3
	Total	396	96	24.2	19	58	4	81	15	0	0	15
2023/2024	Sentinel GP ARI	3442	709	20.6	178	411	39	628	81	0	0	81
	Non-sentinel respiratory	5499	1296	23.6	334	867	50	1251	33	12	0	45
	Total	8941	2005	22.4	512	1278	89	1879	114	12	0	126

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 8 and week 9 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 9 2024	Sentinel GP ARI	128	1	0.8	1	0	0
	Non-sentinel	172	0	0.0	0	0	0
	Total	300	1	0.3	1	0	0
Week 8 2024	Sentinel GP ARI	171	1	0.6	0	1	0
	Non-sentinel	225	1	0.4	1	0	0
	Total	396	2	0.5	1	1	0
2023/2024	Sentinel GP ILI/ARI	3442	258	7.5	193	65	0
	Non-sentinel	5499	277	5.0	214	63	0
	Total	8941	535	6.0	407	128	0

Table 4: Number and percentage positive sentinel GP ARI specimens by **respiratory virus**, week 8 and week 9 2024, and the 2023/2024 season. *Source: NVRL*

Virus	Week 9 2024 (N=128)		Week 8 2024 (N=171)		2023/2024 (N=3442)	
	Total positive	% positive	Total positive	% positive	Total positive	% positive
SARS-CoV-2	2	1.6	3	1.8	217	6.3
Influenza virus	30	23.4	45	26.3	709	20.6
Respiratory Syncytial Virus (RSV)	1	0.8	1	0.6	258	7.5
Rhino/enterovirus	18	14.1	18	10.5	516	15.0
Adenovirus	1	0.8	0	0.0	11	0.3
Bocavirus	0	0.0	0	0.0	13	0.4
Human metapneumovirus (hMPV)	4	3.1	8	4.7	71	2.1
Parainfluenza virus type 1 (PIV-1)	2	1.6	2	1.2	39	1.1
Parainfluenza virus type 2 (PIV-2)	2	1.6	0	0.0	11	0.3
Parainfluenza virus type 3 (PIV-3)	3	2.3	3	1.8	26	0.8
Parainfluenza virus type 4 (PIV-4)	1	0.8	0	0.0	42	1.2

Table 5: Number and percentage positive non-sentinel respiratory specimens, by **respiratory virus**, week 8 and week 9 2024, and the 2023/2024 season. *Source: NVRL*

Virus	Week 9 2024 (N=172)		Week 8 2024 (N=225)		2023/2024 (N=5499)	
	Total positive	% positive	Total positive	% positive	Total positive	% positive
SARS-CoV-2	5	2.9	6	2.7	382	6.9
Influenza virus	38	22.1	51	22.7	1296	23.6
Respiratory Syncytial Virus (RSV)	0	0.0	1	0.4	277	5.0
Rhino/enterovirus	11	6.4	13	5.8	504	9.2
Adenovirus	2	1.2	2	0.9	43	0.8
Bocavirus	0	0.0	2	0.9	18	0.3
Human metapneumovirus (hMPV)	2	1.2	5	2.2	67	1.2
Parainfluenza virus type 1 (PIV-1)	1	0.6	2	0.9	19	1.2
Parainfluenza virus type 2 (PIV-2)	1	0.6	0	0.0	12	0.2
Parainfluenza virus type 3 (PIV-3)	2	1.2	2	0.9	34	0.6
Parainfluenza virus type 4 (PIV-4)	0	0.0	0	0.0	26	0.5

3. Influenza genetic characterisation data

- 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 respiratory samples and 14 sentinel GP ARI samples. Of these, 55 were positive for influenza A(H3), 26 A(H1)pdm09 and three 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 and 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 2022/2023 northern hemisphere vaccine composition. Clade 2a viruses have further evolved into subclades 2a.1, 2a.2, and 2a.3. In particular clades 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 influenza 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 influenza seasons, effectively neutralized these V1A.3a.2 subclade viruses, confirming the vaccine's protection against these currently circulating strains.
- Genetic characterisation suggests that the current vaccine will protect against the influenza A(H1)pdm09 viruses circulating in Ireland, however there may be reduced effectiveness against A(H3) viruses.

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.

- Five of five participating GP OOH services provided data for week 9 2024.
- Out of a total of 13,646 calls made to the participating GP OOHs in week 9 2024:
 - 2,748 (20.1%) were for self-reported ‘cough’, which is above the baseline threshold of 10.8% for cough calls and is stable compared to the percentage of cough calls (20.1%) reported in week 8 2024 (Figures 5 and 6). The greatest burden of cough calls was in those aged 0-4 years at 38% (1041/2748).
 - 215 (1.6%) were for self-reported ‘flu’, which is below the baseline threshold of 2.3% for ‘flu’ calls (Figures 7 and 8). This is stable compared to 1.6% ‘flu’ calls made in week 8.

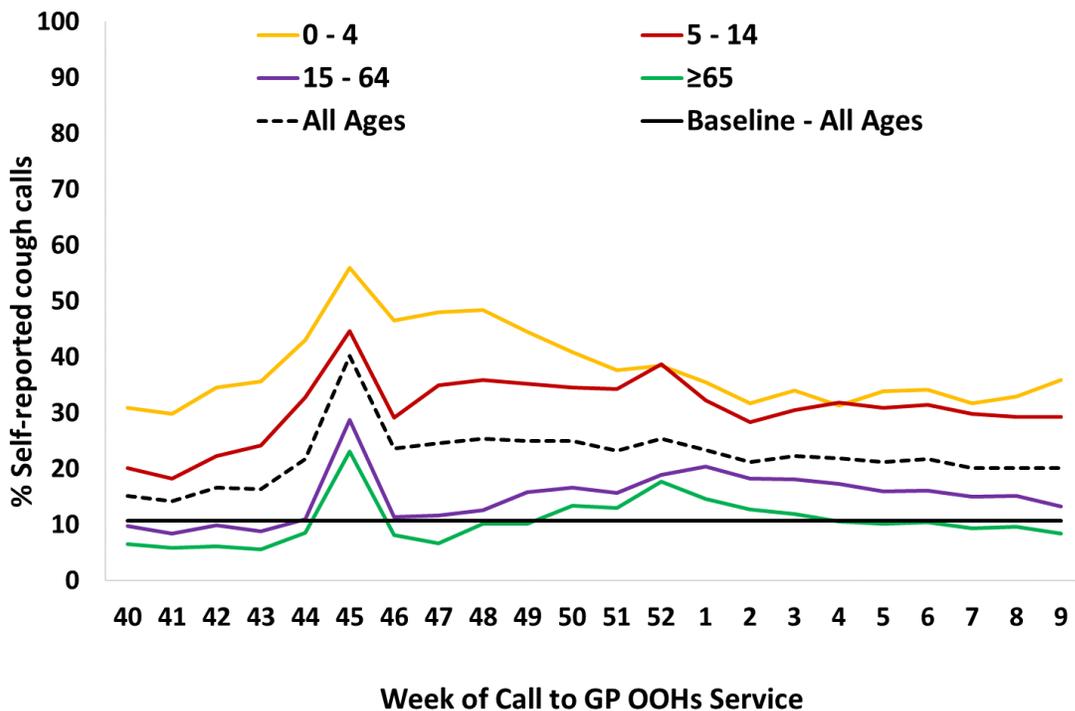


Figure 5: Percentage of self-reported **COUGH** calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call for the 2023/2024 season. The baseline % cough calls for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours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

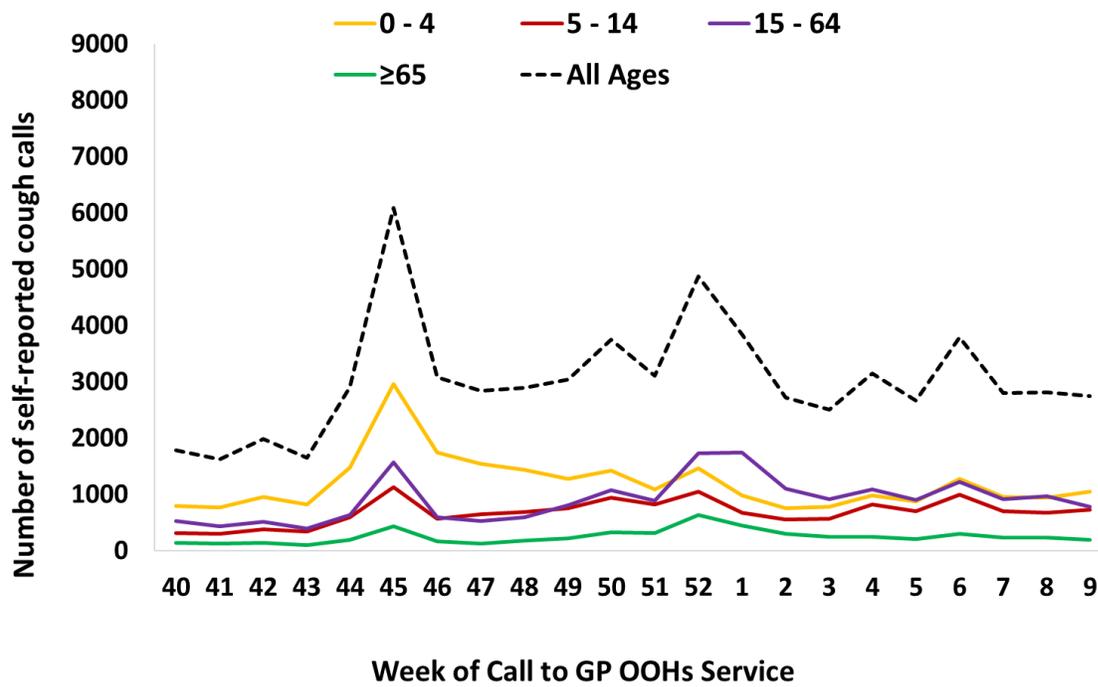


Figure 6: Number of self-reported **COUGH** calls for all ages and by age group to GP Out-of-Hours services by week of call for the 2023/2024 season. *Source: GP Out-Of-Hours services in Ireland (collated by HSE & ICGP).*

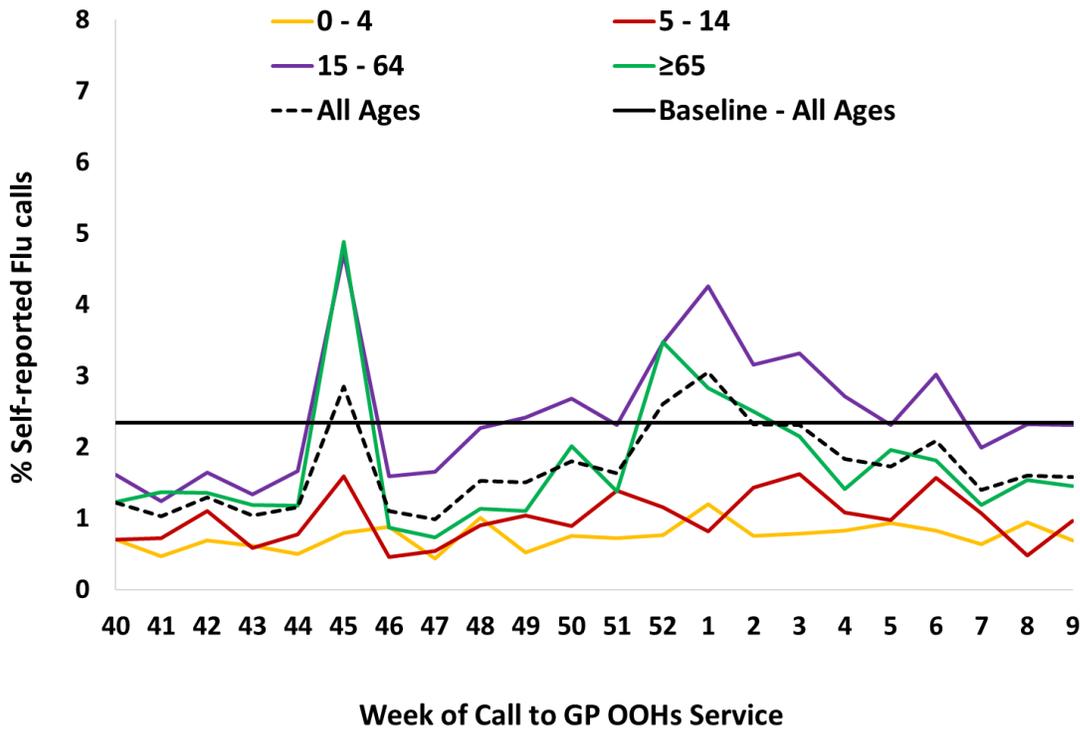


Figure 7: Percentage of self-reported **FLU** calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call for the 2023/2024 season. The baseline % flu calls for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours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

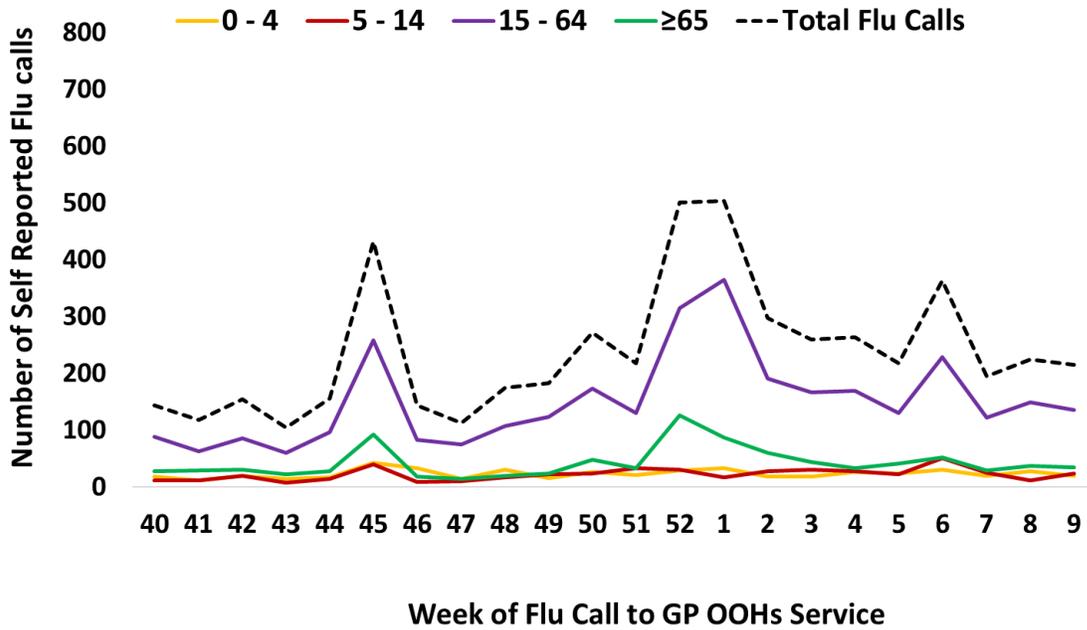


Figure 8: Number of self-reported **FLU** calls for all ages and by age group to GP Out-of-Hours services by week of call for the 2023/2024 season. *Source: GP Out-Of-Hours services in Ireland (collated by HSE & ICGP).*

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](#).

- 566 laboratory confirmed influenza cases were notified during week 9 2024 (Table 6); corresponding to an overall notification rate of 11/100,000 population: 92 A(H3), 26 A(H1)pdm09, 361 A (not subtyped), 86 B and one A and B coinfection. This is a decrease compared to 839 cases notified during week 8 2024 (Figure 10).
- 14,006 laboratory confirmed influenza cases were notified for the 2023/2024 season to date (week 40 2023 to week 9 2024): 1,563 A(H3), 623 A(H1)pdm09, 10,918 A (not subtyped), 899 B and eight influenza coinfections.
- Notification rates decreased among all age groups during week 9 2024 (Figure 11). Age specific influenza notification rates were highest in the 0–4-year age group at 25.0/100,000 population, followed by those aged 65 years and older at 23.2/100,000 during week 9 2024.
- The greatest burden of notifications occurred in those aged 65 years and older at 32% (180/566) of all influenza notifications in week 9 2024.
- Influenza notifications were highest in the Dublin and North East health region accounting for 29% of all notifications (162/566) and a notification rate of 13.6/100,000 population (Table 6) during week 9 2024.
- RSV notifications continued to decline with 26 cases notified during week 9 2024, compared to 43 cases during week 8 2024 (Figure 12).
- 7,665 RSV notifications have been reported for the 2023/2024 season to date.
- Age specific notification rates for RSV are low in all age groups (Figure 13). Notifications in those aged 65 years and older accounted for 35% (9/26) of all RSV notifications in week 9 2024.
- RSV notification rates were low across all regions (Table 7).

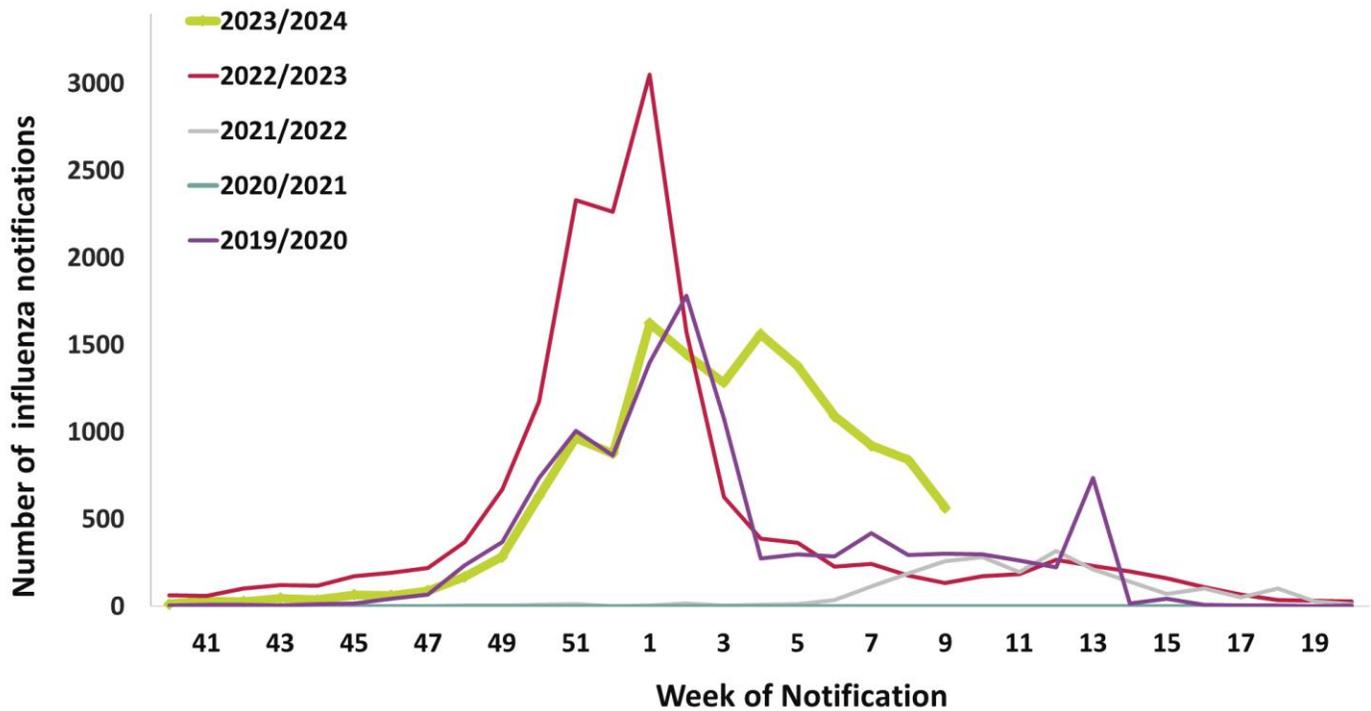


Figure 9: Number of laboratory confirmed **Influenza** notifications to HPSC by week of notification, 2019/2020 to 2023/2024 seasons. *Source: Ireland’s Computerised Infectious Disease Reporting System*

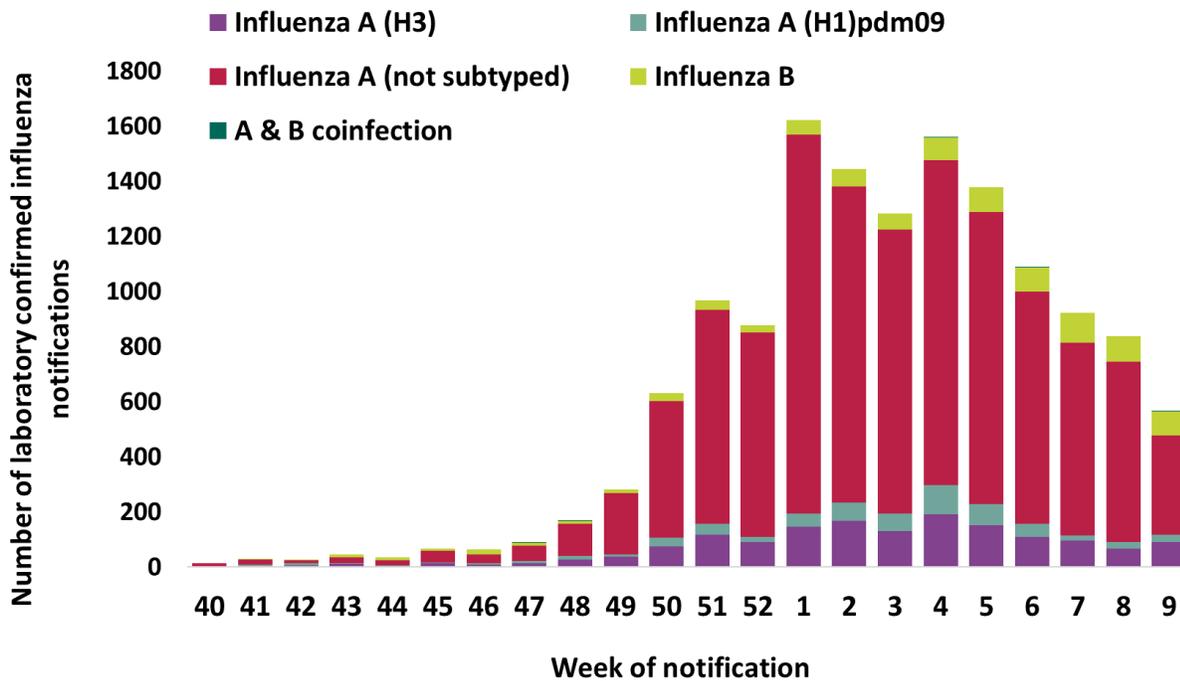


Figure 10: Number of laboratory confirmed **influenza** notifications by influenza type/subtype and week for the 2023/2024 season. *Source: Ireland’s Computerised Infectious Disease Reporting System*

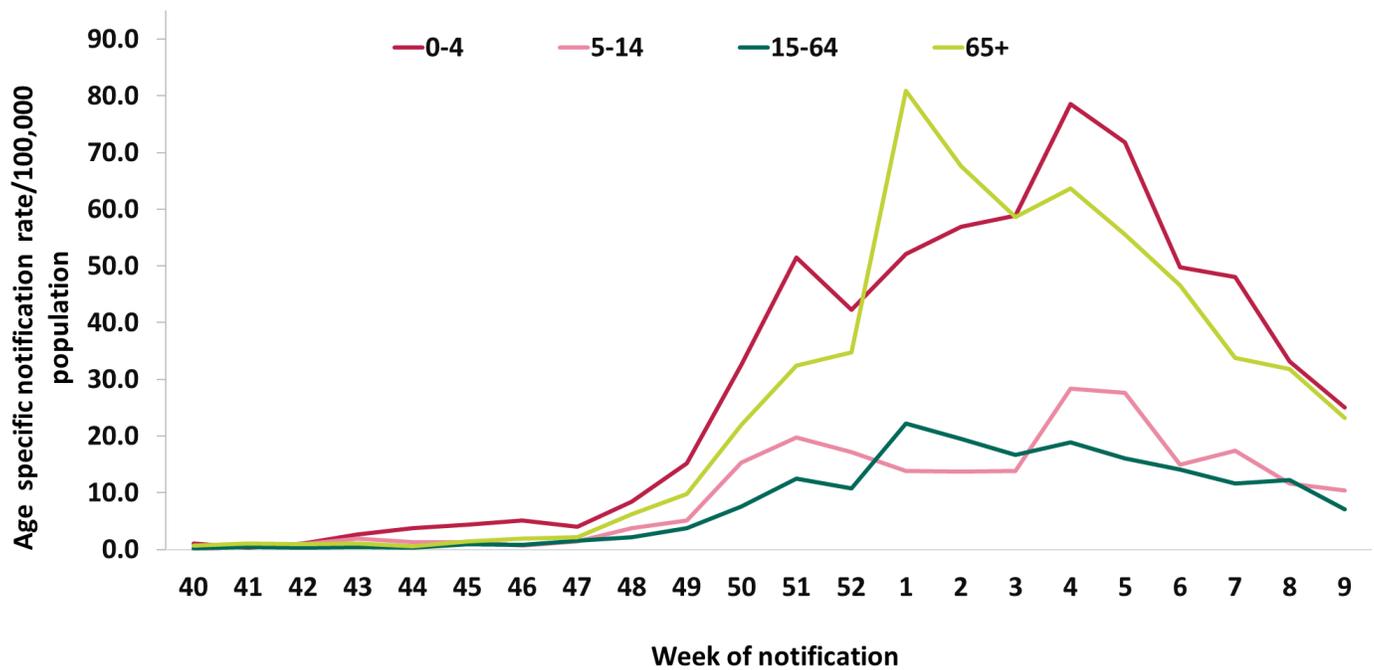


Figure 11: Age specific rates/100,000 population of laboratory confirmed **influenza** notifications to HPSC by week of notification for the 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

Table 6: Number and rate per 100,000 population of laboratory confirmed **influenza** notifications by HSE Health Region for week 9 2024 and the 2023/2024 season to date. *Source: CIDR*

HSE Health Region	Week 9 2024		2023/2024 season (Week 40 2023 - Week 9 2024)	
	Number	Rate/100,000 population	Number	Rate/100,000 population
Dublin and North East	162	13.6	3319	279.6
Dublin and Midlands	156	14.5	2591	240.4
Dublin and South East	118	12.2	2412	248.4
South West	36	4.9	1941	262.1
Mid West	40	9.7	765	185.2
West and North West	54	7.1	2975	391.6
Unknown	0		3	
Total	566	11.0	14006	272.0

Table 7: Number and rate/100,000 population of laboratory confirmed **RSV** notifications by HSE Health Region for week 9 2024 and the 2023/2024 season to date. *Source: CIDR*

HSE Health Region	Week 9 2024		2023/2024 season (Week 40 2023 - Week 9 2024)	
	Number	Rate/100,000 population	Number	Rate/100,000 population
Dublin and North East	6	0.5	1489	125.4
Dublin and Midlands	4	0.4	1632	151.4
Dublin and South East	7	0.7	1134	116.8
South West	3	0.4	943	127.3
Mid West	2	0.5	633	153.2
West and North West	4	0.5	1834	241.4
Total	26	0.5	7665	148.9

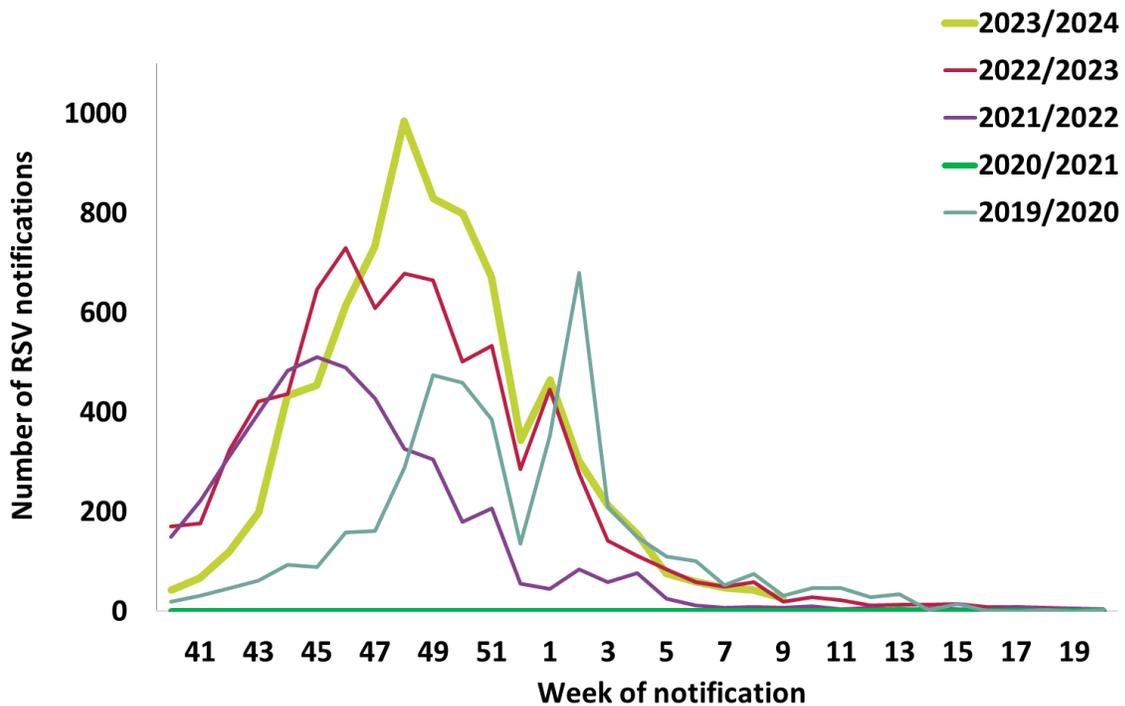


Figure 12: Number of laboratory confirmed **RSV** notifications to HPSC by week of notification, 2019/2020 to 2023/2024 seasons. *Source: Ireland’s Computerised Infectious Disease Reporting System.*

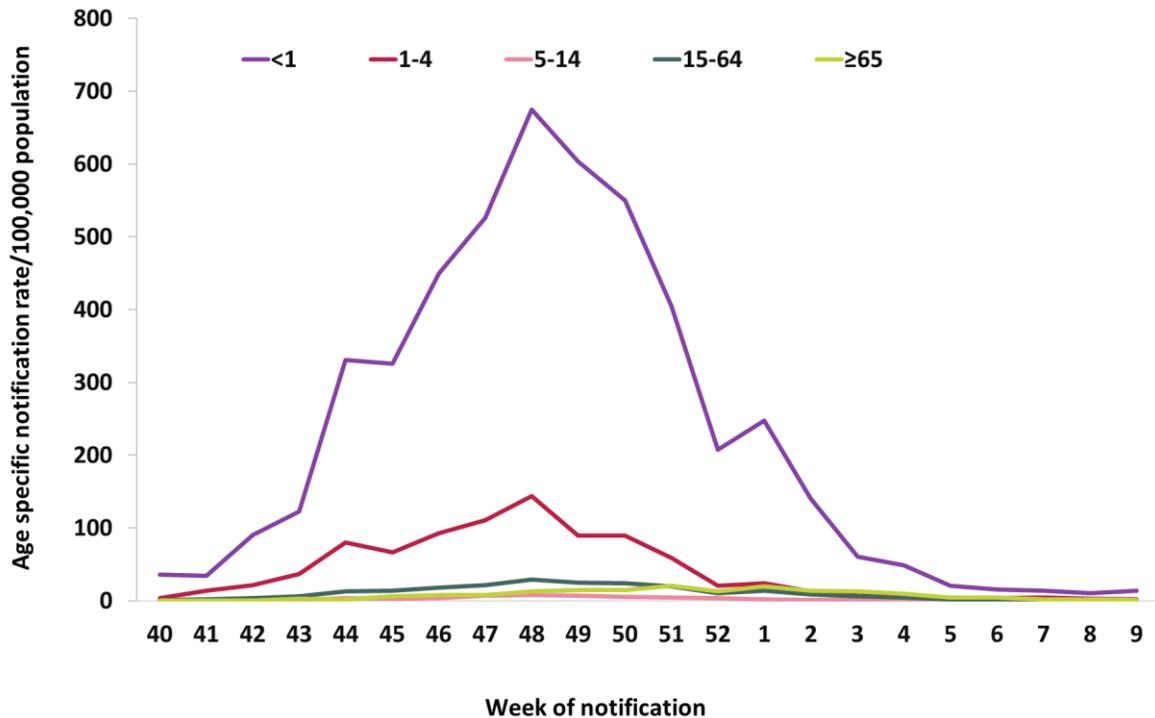


Figure 13: Age specific rates/100,000 population for laboratory confirmed RSV notifications to HPSC by week of notification for the 2023/2024 season. Source: Ireland’s Computerised Infectious Disease Reporting System.

6. Hospitalisations

- During week 9 2024, the number of notified laboratory confirmed influenza hospital inpatients decreased to 135 (16 A(H3), three A(H1)pdm09, 103 A (not subtyped) and 13 B), compared to 180 in week 8 2024. (Figure 15).
- During the 2023/2024 season to date, 3,455 laboratory confirmed influenza hospital inpatients were reported: 310 A(H3), 114 A(H1)pdm09, 2,821 A (not subtyped), 208 B and two A and B coinfections.
- During week 9 2024, the age specific influenza hospitalisation rates are declining in all age groups, most notably in the 0-4 year and the 65 years and older age groups. (Figure 16). Of all hospitalisations in week 9, 42% (57/135) occurred in those aged 65 years and older (Table 8).
- RSV hospitalisations remained at low levels during week 9 2024, six laboratory confirmed RSV hospitalised cases were notified, a decrease compared to 22 cases in week 8 2024 (Figure 17).
- 3,223 RSV hospitalisations were reported for the 2023/2024 season to date.
- 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.

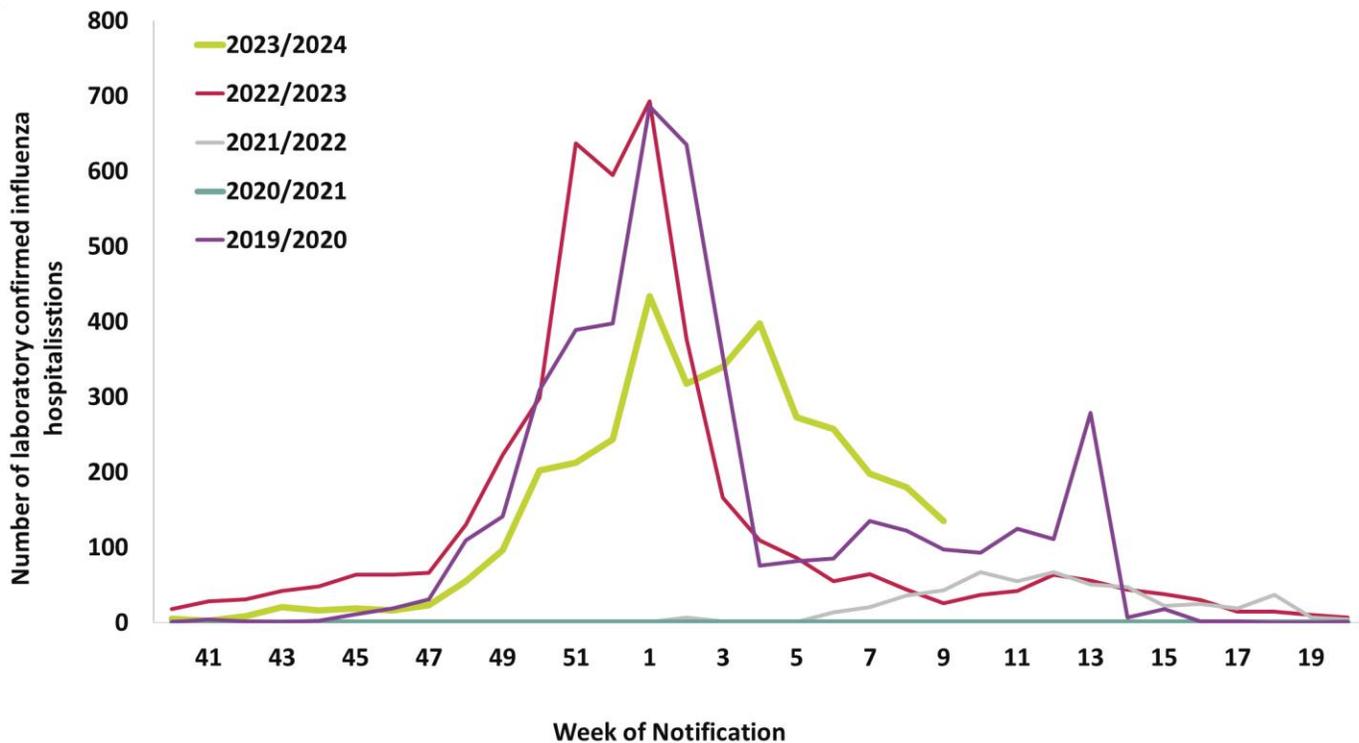


Figure 14: Number of notified influenza hospital inpatients, by week of notification and season, for the 2019/2020 to 2023/2024 seasons. *Source: Ireland’s Computerised Infectious Disease Reporting System.*

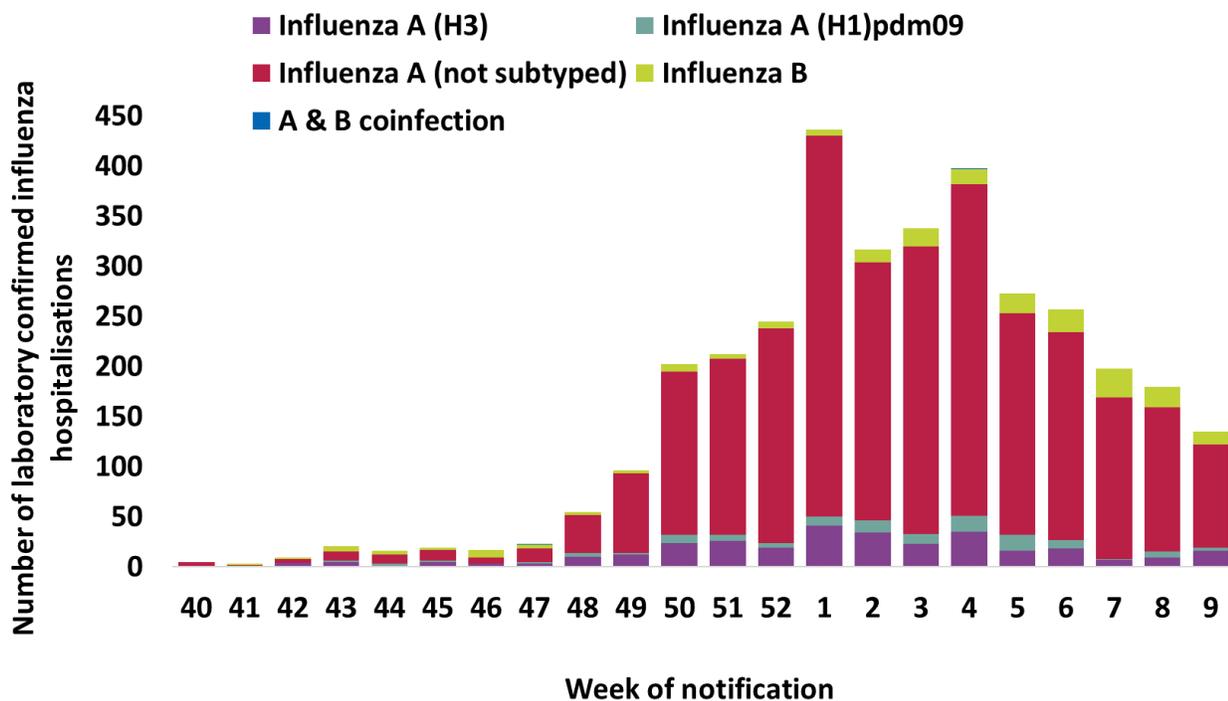


Figure 15: Number of notified laboratory confirmed influenza hospital inpatients by influenza type/subtype by week for the 2023/2024 season. *Source: Ireland’s Computerised Infectious Disease Reporting System.*

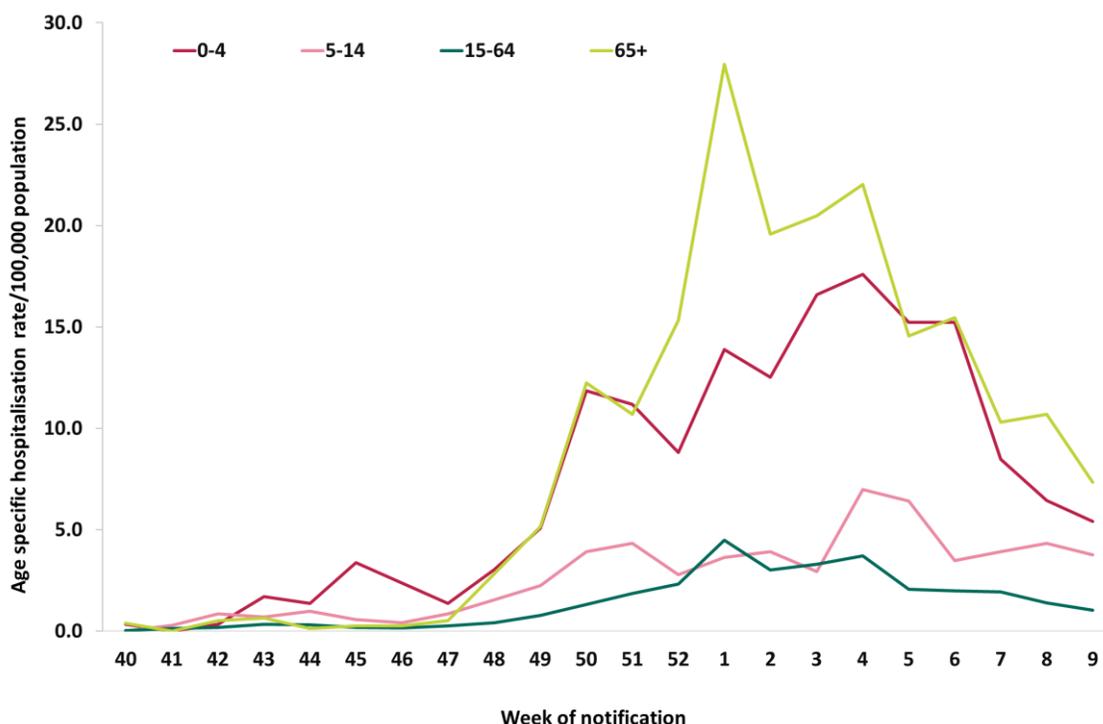


Figure 16: Age specific rates/100,000 population for laboratory confirmed **influenza** cases reported as **hospital inpatients** by week of notification for the 2023/2024 season. *Source: Ireland’s Computerised Infectious Disease Reporting System.*

Table 8: Number, percentage and rate per 100,000 population of notified laboratory-confirmed **influenza hospitalised cases notified** in week 9 2024 and the 2023/2024 season (week 40 2023 onwards). *Source: Ireland’s Computerised infectious Disease Reporting System*

Age (years)	Hospitalised (Week 9)			Season to date (Week 40 2023 - Week 9 2024)		
	Number	% of all Hospitalisations	population	Number	% of all Hospitalisations	population
<1	4	3.0	6.9	102	3.0	176.5
1-4	12	8.9	5.1	379	11.0	159.5
5-14	27	20.0	3.8	418	12.1	58.3
15-24	3	2.2	0.5	136	3.9	21.1
25-34	8	5.9	1.3	197	5.7	31.4
35-44	4	3.0	0.5	217	6.3	27.3
45-54	6	4.4	0.8	173	5.0	24.2
55-64	14	10.4	2.4	300	8.7	51.7
≥65	57	42.2	7.3	1533	44.4	197.5
Total	135	100	2.6	3455	100	67.1

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 9	35	237	135	3	30	16	110	566
Week 8	74	412	180	6	28	5	134	839
Week 7	91	406	198	9	57	30	131	922
Week 6	75	546	257	9	71	18	114	1090
Week 5	130	646	273	8	50	30	242	1379
Week 4	138	684	398	12	82	47	201	1562
Week 3	118	593	340	16	49	33	134	1283
Week 2	111	803	318	17	55	30	110	1444
Week 1	97	815	434	14	73	28	163	1624
Week 52	56	453	244	11	33	14	66	877
Week 51	66	536	213	8	53	13	75	964
Week 50	40	311	202	5	35	3	35	631
Week 49	11	138	96	1	17	7	13	283
Week 48	19	64	55	1	11	6	14	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	1111	6798	3455	123	671	287	1561	14006

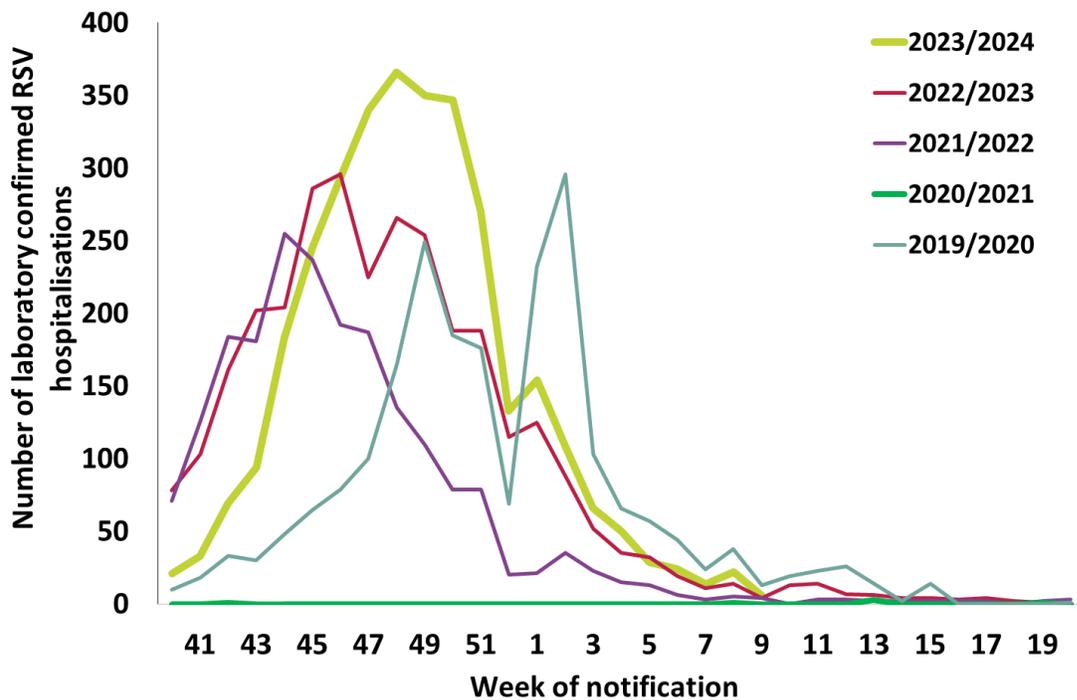


Figure 17: Number of notified RSV hospitalised cases notified, by week of notification and season, for the 2019/2020 to 2023/2024 seasons. Source: Ireland’s Computerised Infectious Disease Reporting System.

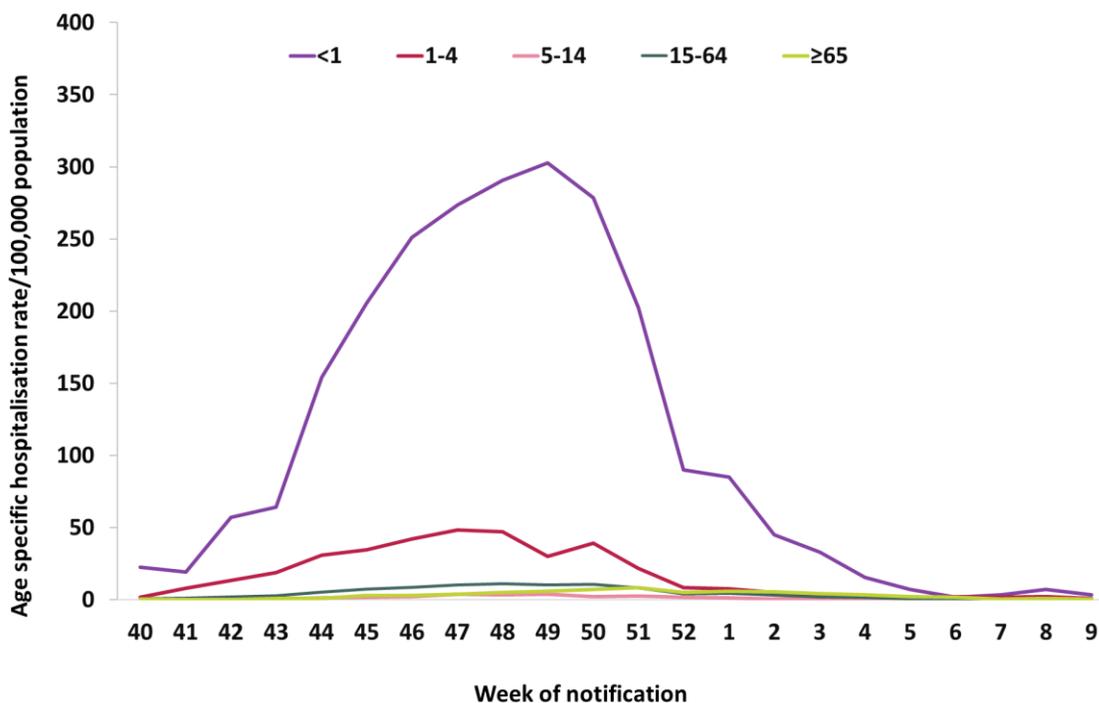


Figure 18: Age specific notification rates/100,000 population for laboratory confirmed RSV hospitalised cases notified by week of notification for the 2023/2024 season. Source: Ireland’s Computerised Infectious Disease Reporting System

Table 10: Number, percentage and rate per100,000 population of notified laboratory-confirmed **RSV hospitalised cases notified** in week 9 2024 and the 2023/2024 season (week 40 2023 onwards). *Source: Ireland's Computerised infectious Disease Reporting System*

Age (years)	Hospitalised (Week 9)			Season to date (Week 40 2023 - Week 9 2024)		
	Number	% of all Hospitalisations	Rate/ 100,000 population	Number	% of all Hospitalisations	Rate/ 100,000 population
<1	2	33.3	3.5	1397	43.3	2417.1
1-4	2	33.3	0.8	880	27.3	370.3
5-14	0	.0	0.0	184	5.7	25.7
15-24	0	.0	0.0	28	0.9	4.3
25-34	0	.0	0.0	31	1.0	4.9
35-44	0	.0	0.0	38	1.2	4.8
45-54	0	.0	0.0	48	1.5	6.7
55-64	0	.0	0.0	91	2.8	15.7
≥65	2	33.3	0.3	526	16.3	67.8
Total	6	100	0.1	3223	100	62.6

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 9	1	10	6	4	0	1	4	26
Week 8	4	9	22	0	0	0	8	43
Week 7	6	12	14	1	0	1	13	47
Week 6	7	17	24	1	3	0	8	60
Week 5	3	20	29	2	1	1	20	76
Week 4	16	55	50	3	7	6	18	155
Week 3	18	60	67	2	9	26	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	265	272	8	13	9	71	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	18	17	52	729
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	12	3	10	433
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	245	3083	3223	93	181	153	687	7665

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.

- There was one laboratory confirmed influenza case (influenza B) admitted to intensive care unit (ICU) and notified to HPSC during week 9 2024.
- Ninety-six influenza cases – 94 influenza A (26 A(H3), 15 A(H1)pdm09 and 53 A (not subtyped)) and two influenza B ICU cases have been notified for the season to date (weeks 40 2023- 9 2024).

Table 12: Cumulative number and age specific rate per100,000 population of laboratory confirmed notified influenza hospitalised and intensive care cases, week 40 2023 – week 9 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	102	176.5	4	6.9
1-4	379	159.5	3	1.3
5-14	418	58.3	5	0.7
15-24	136	21.1	3	0.5
25-34	197	31.4	4	0.6
35-44	217	34.6	4	0.5
45-54	173	24.2	14	2.0
55-64	300	51.7	18	3.1
≥65	1533	197.5	41	5.3
Total	3455	67.1	96	1.9

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 no deaths in notified influenza cases reported to HPSC during week 9 2024.
- For the season to date (weeks 40 2023 - 9 2024), 138 deaths in notified influenza cases (30 A(H3), 10 A(H1)pdm09 and 98 A (not-subtyped)).
- There was no excess all-cause mortality for the entire population reported for week 8 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 9 2024, five influenza A outbreaks (one nursing home, two residential institutions and two in other settings) were notified to HPSC (Tables 13 & 14).
- Three ARI (coronavirus NL63, rhino/enterovirus and one pathogen not identified) outbreaks in nursing homes were notified to HPSC during week 9 2024.
- There have been 270 ARI/influenza/RSV (excluding COVID-19) outbreaks notified to HPSC to date this season, comprising of 199 influenza outbreaks, 37 RSV outbreaks and 34 ARI outbreaks.

Table 13: Summary of influenza, RSV and ARI (influenza/RSV/SARS-CoV-2 negative) outbreaks by HSE Health Region during week 8 2024 and the 2023/2024 season (week 40 2023 – week 9 2024) *Source: CIDR*

HSE Health Region	Influenza		RSV		ARI		Total	
	Week 9	2023/2024	Week 9	2023/2024	Week 9	2023/2024	Week 9	2023/2024
Dublin and North East	0	32	0	7	2	17	2	56
Dublin and Midlands	1	28	0	12	0	0	1	40
Dublin and South East	2	41	0	3	1	7	3	51
South West	0	26	0	1	0	4	0	31
Mid West	0	8	0	3	0	0	0	11
West and North West	2	61	0	9	0	6	2	76
Unknown	0	3	0	2	0	0	0	5
Total	5	199	0	37	3	34	8	270

Table 14: Summary of influenza, RSV and ARI (influenza/RSV/SARS-CoV-2 negative) outbreaks by outbreak setting during week 9 2024 and the 2023/2024 season (week 40 2023 – week 9 2024). *Source: CIDR*

Setting	Influenza		RSV		ARI		Total	
	Week 9	2023/2024	Week 9	2023/2024	Week 9	2023/2024	Week 9	2023/2024
Community hospital/Long-stay unit	0	17	0	2	0	3	0	22
Nursing Home	1	69	0	15	3	25	4	109
Hospital	0	61	0	10	0	0	0	71
Residential Institution	2	26	0	4	0	3	2	33
Childcare facility	0	2	0	2	0	0	0	4
Other settings	2	24	0	4	0	3	2	31
Total	5	199	0	37	3	34	8	270

10. International Summary

According to the [European Respiratory Virus Surveillance Summary](#), in the WHO European region during week 8 2024 (including data up to 25/02/2024), influenza activity remains high but a decreasing trend was observed since week 5 2024; all three influenza virus types/subtypes - A(H1)pdm09, A(H3) and B - are co-circulating, with a dominance of A(H1)pdm09 viruses in most countries, and A(H3) also dominant or co-dominant in a small number of countries. During the 2023/2024 season, RSV activity began increasing around week 41, reaching a peak in week 50 and has been declining for the last 2 months. 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 2024/2025 northern hemisphere influenza season contain the following:

- an A/Victoria/4897/2022 (H1N1)pdm09-like virus;
- an A/Thailand/8/2022 (H3N2)-like virus; and
- a B/Austria/1359417/2021 (B/Victoria lineage)-like virus.

[Recommended composition of influenza virus vaccines for use in the 2024-2025 northern hemisphere influenza season \(who.int\)](#)

- 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

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