Influenza, RSV and Other Respiratory Viruses Surveillance Report Week 5 2024 (29th January- 4th 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.

Summary Week 5 2024

Most indicators of influenza activity decreased during week 5 2024, however notified cases, hospitalisations, outbreaks 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 and influenza B viruses detected at lower levels. 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 12.7/100,000 population during week 5 2024, which is below the Irish baseline threshold (18.1/100,000) and remains below expected levels this season. ILI age specific rates were below the age specific baseline for all age groups during week 5 2024.
- **National Virus Reference Laboratory (NVRL):** Of 158 sentinel GP ARI specimens tested and reported by the NVRL during week 5 2024, 53 (33.5%) were positive for influenza (29 A(H3), 13 A(H1)pdm09, two A (not subtyped) and nine influenza B), one (0.6%) for RSV, four (2.5%) for SARS-CoV-2, and 14 (8.9%) for rhino/enterovirus.
- Of 250 non-sentinel respiratory specimens tested and reported by the NVRL during week 5 2024, 57 (22.8%) were positive for influenza (45 A(H3), eight A(H1)pdm09, three A (not subtyped) and one influenza B), 21 (8.4%) for SARS-CoV-2, five (2.0%) for RSV and seven (2.8%) for rhino/enterovirus.
- **GP Out of hours (OOHs):** Cough calls comprised 21% (2671/12,569) of all reported GP OOHs calls during week 5 2024 (above the baseline threshold of 10.8%); 32% (868/2671) of cough calls were in those aged 0-4 years. Flu calls comprised 1.7% (217/12,569) of all calls in week 5 2024, which is just below the baseline threshold level (2.3%). The majority (60%; 130/217) of all flu calls were in those aged 15-64 years.
- **Influenza notifications**: 1,381 laboratory confirmed influenza cases were notified during week 5 2024: 54 A(H3), 30 A(H1)pdm09, 1,206 A (not subtyped) and 91 B. This is a decrease compared to 1,563 cases notified during week 4 2024. The highest burden of notifications occurred in those aged 65 years and older at 31% (432/1381) of all influenza notifications in week 5 2024.
- **RSV notifications:** 76 RSV cases were notified during week 5 2024, compared to 155 cases during week 4 2024. Age specific notification rates for RSV were highest in those aged less than one year.
- **Hospitalisations:** 253 laboratory confirmed influenza hospitalised cases (eight A(H3), five A(H1)pdm09, 220 (not subtyped), and 20 B) were notified in week 5 2024, compared to 393 in week 4 2024. During the 2023/2024 season to date, 2,650 laboratory confirmed influenza hospital inpatients were reported (219 A(H3), 52 A(H1)pdm09, 2,256 A (not subtyped), 121 B and two A and B coinfections). During week 5, 28 laboratory confirmed RSV hospitalised cases were notified compared to 50 cases in week 4 2024. For the 2023/2024 season to date, 3,153 RSV hospitalisations were reported.
- **Intensive care admissions:** Two laboratory confirmed influenza cases (two flu A (not subtyped)) were admitted to intensive care unit (ICU) and notified to HPSC during week 5 2024. For the season to date, 72 influenza ICU cases (17 A(H3), four A(H1)pdm09) and 51 A (not subtyped) have been notified.
- **Mortality:** Three deaths in notified influenza cases were reported to HPSC during week 5 2024. 68 deaths were reported for the season to date – 11 A(H3), four A(H1)pdm09 and 53 A (not-subtyped).
- **Outbreaks:** During week 5 2024, 28 influenza outbreaks (seven acute hospitals, 10 nursing homes, two residential institutions, four community hospitals/long stay units, one childcare facility and four other settings), two RSV outbreaks (one nursing home and one other setting) and one ARI nursing home outbreak were reported to HPSC.
- **International:** In the EU/EEA during week 4 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 5 2024, 102 sentinel GP influenza-like illness (ILI) consultations were reported from the Irish sentinel GP network, corresponding to an ILI consultation rate of 12.7 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 14.3 per 100,000 population during week 4 2024 (Figure 1).
- Out of the 96 GP practices in the Irish sentinel GP network, 91 reported clinical consultation data during week 5 2024.
- Age specific ILI consultation rates were below the age specific baseline thresholds in all age groups during week 5 2024. ILI age specific rates were highest in those aged 65 or older (16.6/100,000) during week 5 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.

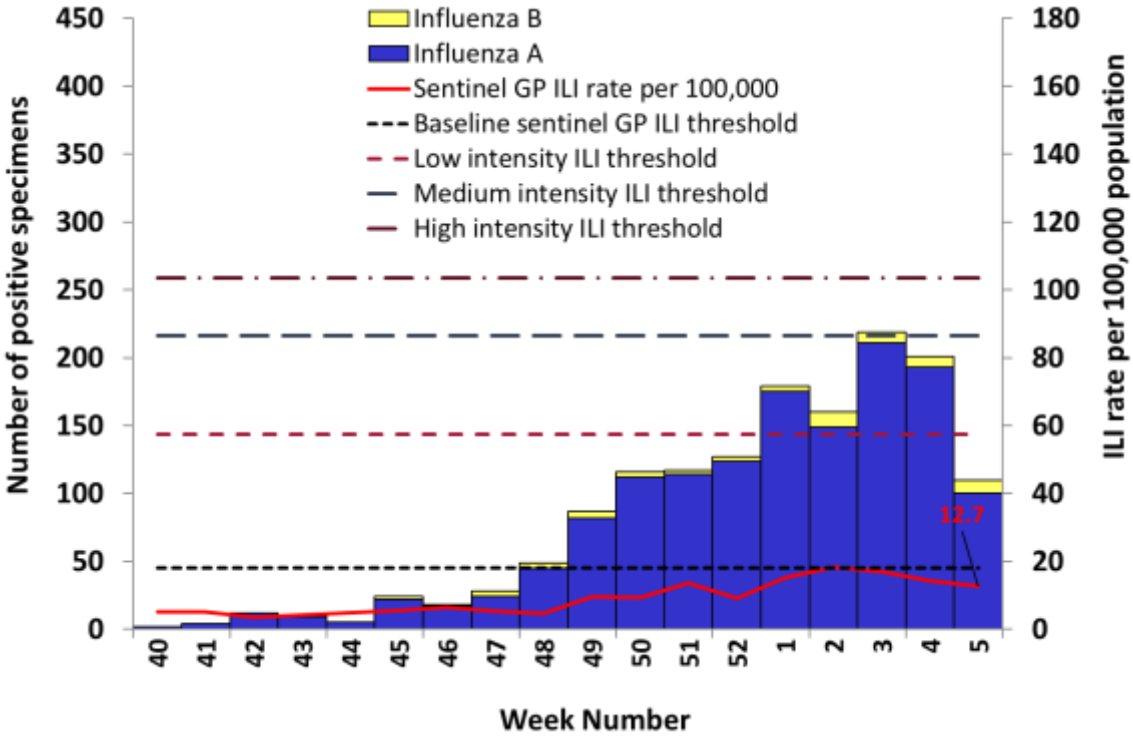

Figure 1: Sentinel GP Influenza-like illness (ILI) consultation rates per 100,000 population, baseline, low, medium and high intensity ILI thresholds and number of positive influenza A and B specimens tested by the NVRL, by influenza week for the 2023/2024 season. Source: ICGP and NVRL

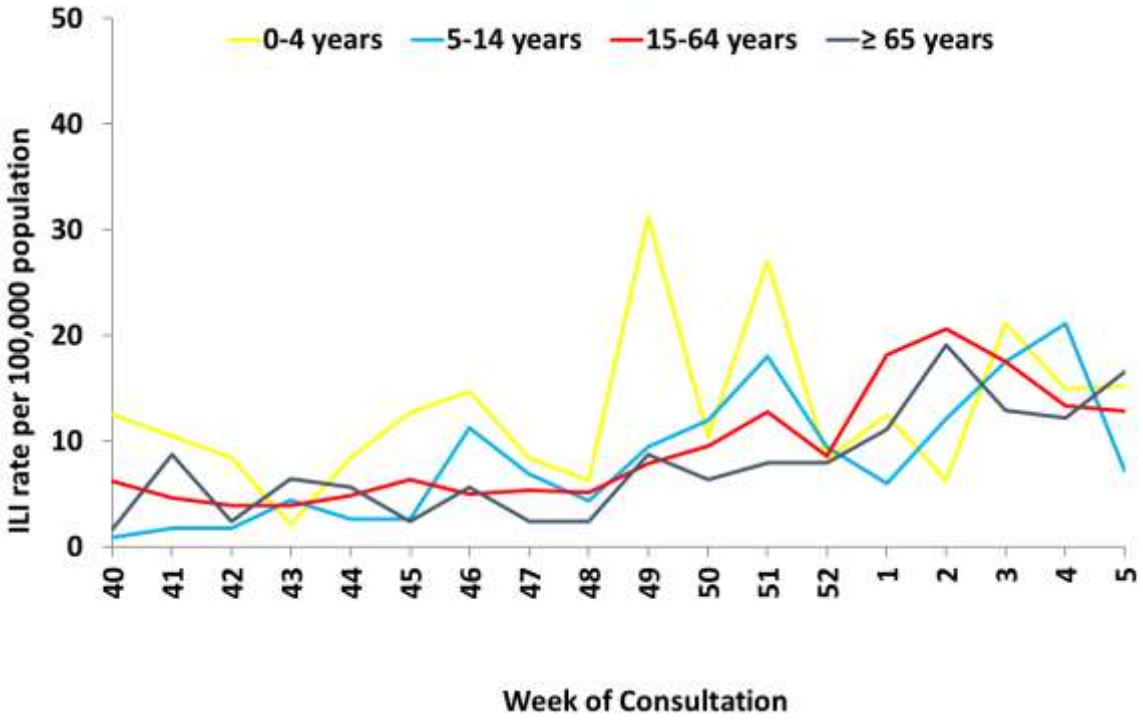

Figure 2: Age specific sentinel GP **ILI consultation** rate per 100,000 population by week (week 40 2023 to week 5 2024). *Source: ICGP.*

Table 1: Age specific sentinel GP **ILI consultation** rate per 100,000 population by week (week 40 2023 to week 5 2024), colour coded by sentinel GP ILI age specific Moving Epidemic Method (MEM) threshold levels. *Source: ICGP.*

MEM Threshold Levels	Below Baseline	Low	Moderate	High	Extraordinary

	2023/2024																	
Age group (years)	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5
All Ages	5.1	5.1	3.6	4.3	4.8	5.6	6.5	5.3	4.7	9.5	9.4	13.7	9.1	15.1	18.4	17.0	14.3	12.7
<15 yrs	4.0	4.0	3.4	3.5	4.0	5.2	11.4	6.8	4.5	14.7	10.7	19.2	8.5	7.4	9.7	17.3	17.9	8.9
15-64 yrs	6.2	4.6	3.9	3.9	4.8	6.3	5.0	5.3	5.1	7.9	9.5	12.8	8.6	18.1	20.6	17.5	13.3	12.8
≥65 yrs	1.6	8.7	2.4	6.5	5.6	2.4	5.6	2.4	2.4	8.7	6.3	7.9	7.9	11.1	19.1	12.9	12.2	16.6
Reporting practices (N=96)	93	94	93	92	93	93	94	96	96	97	97	97	97	96	95	95	93	91

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 5 2024, of 158 sentinel GP ARI specimens tested and reported by the NVRL, 53 (33.5%) were positive for influenza (29 A(H3), 13 A(H1)pdm09, two A (not subtyped) and nine influenza B), one (0.6%) for RSV, four (2.5%) for SARS-CoV-2, and 14 (8.9%) for rhino/enterovirus.
- In comparison during week 4 2024, of 212 sentinel GP ARI specimens tested and reported by the NVRL, 85 (40.1%) were positive for influenza (49 A(H3), 30 A(H1)pdm09, one A (not subtyped) and five B), four (1.9%) for RSV, nine (4.2%) for SARS-CoV-2, and 23 (10.8%) for rhino/enterovirus.
- For the 2023/2024 season to date (week 40 2023 to week 5 2024), of 2,754 sentinel GP ARI specimens tested and reported by the NVRL, 517 (18.8%) were positive for influenza, 248 (9.0%) for RSV, 193 (7.0%) for SARS-CoV-2, and 444 (16.1%) for rhino/enterovirus (Table 4).
- During week 5 2024, of 250 non-sentinel respiratory specimens tested and reported by the NVRL, 57 (22.8%) were positive for influenza (45 A(H3), eight A(H1)pdm09, three A (not subtyped) and one influenza B), 21 (8.4%) for SARS-CoV-2, five (2.0%) for RSV and seven (2.8%) for rhino/enterovirus.
- During week 4 2024, of 359 non-sentinel respiratory specimens tested, 116 (32.3%) were positive for influenza (79 A(H3), 31 A(H1)pdm09, three A (not subtyped), and three B), 35 (9.7%) for SARS-CoV-2, 11 (3.1%) for RSV, and 12 (3.3%) for rhino/enterovirus (Figure 3b).
- For the 2023/2024 season to date (week 40 2023 to week 5 2024), of 4,386 non-sentinel respiratory specimens tested and reported by the NVRL, 951 (21.7%) were positive for influenza, 266 (6.1%) for RSV, 340 (7.8%) for SARS-CoV-2, and 435 (9.9%) for rhino/enterovirus (Table 5).
- Other respiratory viruses (ORVs) are being detected at lower levels (Figure 3a and 3b).
- Of 1,468 sentinel GP ARI specimens and non-sentinel specimens positive for influenza and reported by the NVRL during the 2023/2024 season, 86 (5.9%) were coinfected with other viruses.

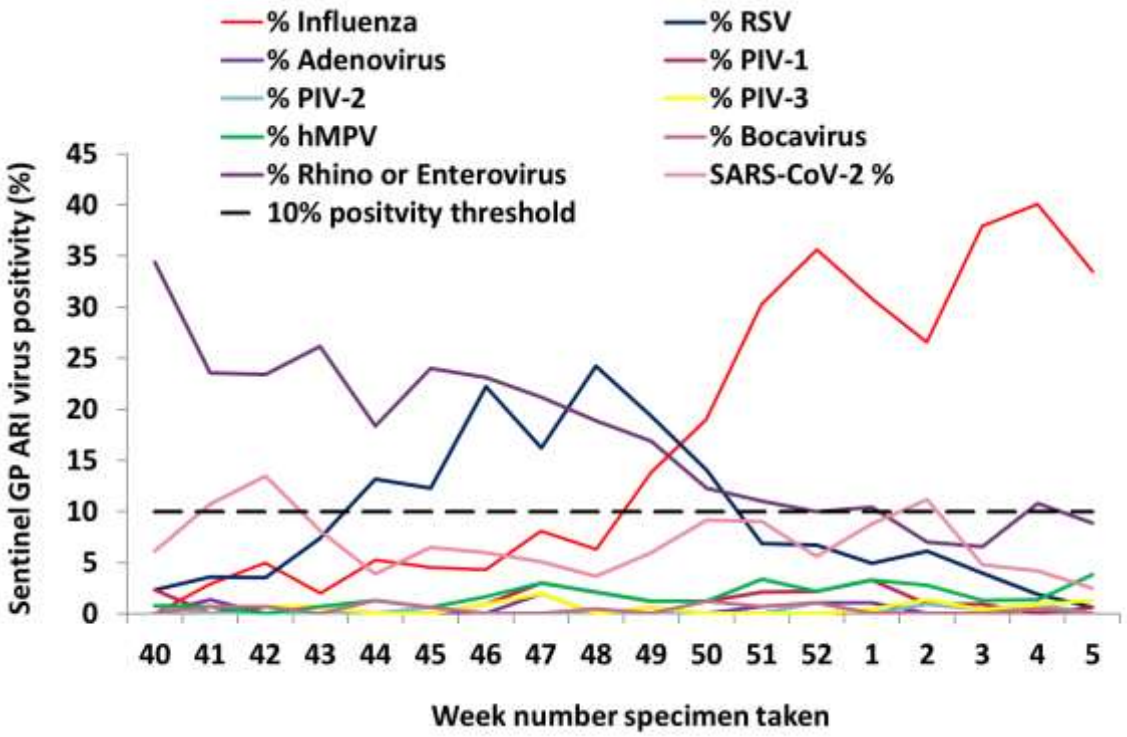

Figure 3a: Percentage positive results for **sentinel GP ARI** specimens tested by the NVRL for influenza, SARS-CoV-2, RSV and other respiratory viruses by week specimen was taken for the 2023/2024 season. *Source: NVRL*

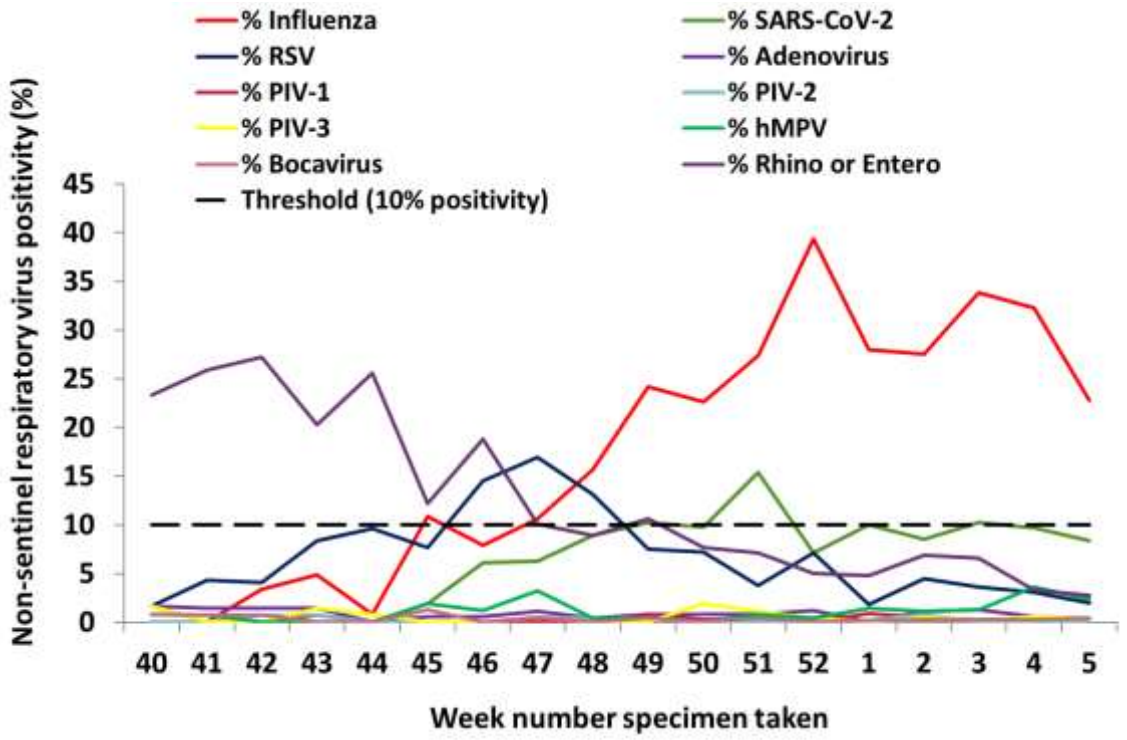

Figure 3b: Percentage positive results for **non-sentinel respiratory** specimens tested by the NVRL for influenza, SARS-CoV-2, RSV and other respiratory viruses by week specimen was taken for the 2023/2024 season. *Source: NVRL*

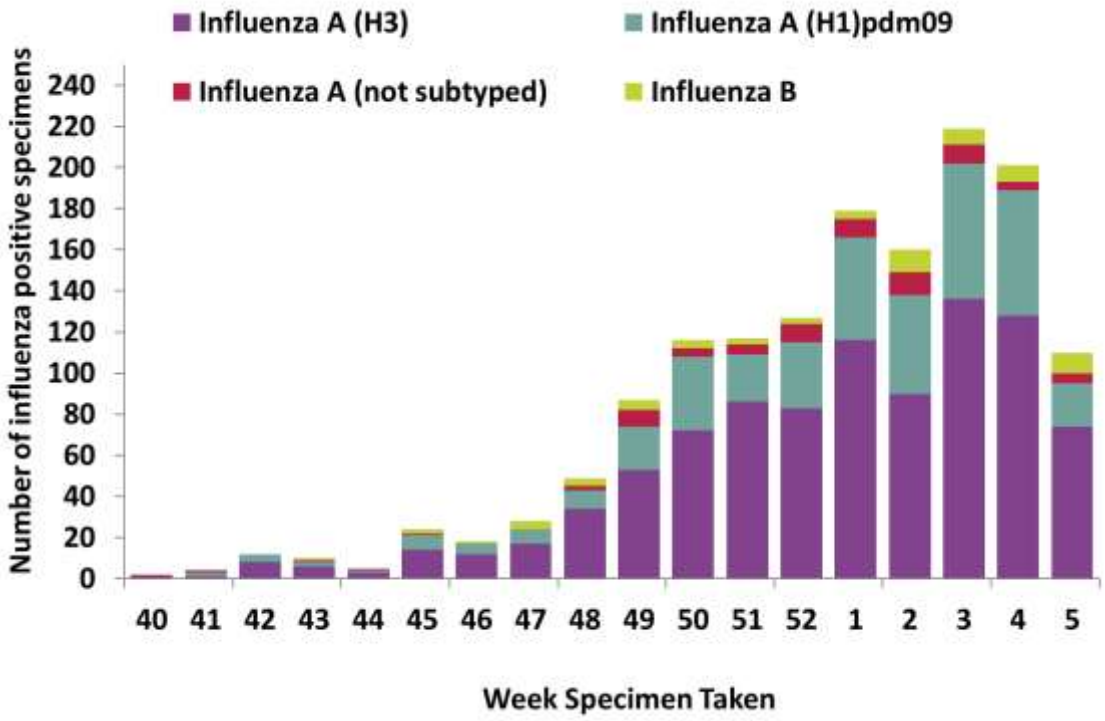

Figure 4: Number of positive **influenza** specimens (from sentinel GP ARI and non-sentinel respiratory sources) tested by the NVRL by influenza type/subtype and by week specimen was taken for the 2023/2024 season. *Source: NVRL*

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 4 and week 5 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 5 2024	Sentinel GP ARI	158	53	33.5	13	29	2	44	9	0	0	9
	Non-sentinel respiratory	250	57	22.8	8	45	3	56	1	0	0	1
	Total	**408**	**110**	**27.0**	**21**	**74**	**5**	**100**	**10**	**0**	**0**	**10**
Week 4 2024	Sentinel GP ARI	212	85	40.1	30	49	1	80	5	0	0	5
	Non-sentinel respiratory	359	116	32.3	31	79	3	113	2	1	0	3
	Total	**571**	**201**	**35.2**	**61**	**128**	**4**	**193**	**7**	**1**	**0**	**8**
2023/2024	Sentinel GP ARI	2754	517	18.8	142	299	33	474	43	0	0	43
	Non-sentinel respiratory	4386	951	21.7	253	635	38	926	18	7	0	25
	Total	**7140**	**1468**	**20.6**	**395**	**934**	**71**	**1400**	**61**	**7**	**0**	**68**

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 4 and week 5 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 5 2024	Sentinel GP ARI	158	1	0.6	0	1	0
	Non-sentinel	250	5	2.0	0	5	0
	Total	**408**	**6**	**1.5**	**0**	**6**	**0**
Week 4 2024	Sentinel GP ARI	212	4	1.9	3	1	0
	Non-sentinel	359	11	3.1	6	5	0
	Total	**571**	**15**	**2.6**	**9**	**6**	**0**
2023/2024	Sentinel GP ILI/ARI	2754	248	9.0	186	62	0
	Non-sentinel	4386	266	6.1	205	61	0
	Total	**7140**	**514**	**7.2**	**391**	**123**	**0**

Table 4: Number and percentage positive sentinel GP ARI specimens by **respiratory virus**, week 4 and week 5 2024, and the 2023/2024 season. *Source: NVRL*

Virus	Week 5 2024 (N=158)		Week 4 2024 (N=212)		2023/2024 (N=2754)	
	Total positive	% positive	Total positive	% positive	Total positive	% positive
SARS-CoV-2	4	2.5	9	4.2	193	7.0
Influenza virus	53	33.5	85	40.1	517	18.8
Respiratory Syncytial Virus (RSV)	1	0.6	4	1.9	248	9.0
Rhino/enterovirus	14	8.9	23	10.8	444	16.1
Adenovirus	0	0.0	1	0.5	10	0.4
Bocavirus	0	0.0	1	0.5	10	0.4
Human metapneumovirus (hMPV)	6	3.8	3	1.4	49	1.8
Parainfluenza virus type 1 (PIV-1)	1	0.6	0	0.0	33	1.2
Parainfluenza virus type 2 (PIV-2)	0	0.0	2	0.9	8	0.3
Parainfluenza virus type 3 (PIV-3)	2	1.3	2	0.9	16	0.6
Parainfluenza virus type 4 (PIV-4)	0	0.0	0	0.0	41	1.5

Table 5: Number and percentage positive non-sentinel respiratory specimens, by **respiratory virus**, week 4 and week 5 2024, and the 2023/2024 season. *Source: NVRL*

Virus	Week 5 2024 (N=250)		Week 4 2024 (N=359)		2023/2024 (N=4386)	
	Total positive	% positive	Total positive	% positive	Total positive	% positive
SARS-CoV-2	21	8.4	35	9.7	340	7.8
Influenza virus	57	22.8	116	32.3	951	21.7
Respiratory Syncytial Virus (RSV)	5	2.0	11	3.1	266	6.1
Rhino/enterovirus	7	2.8	12	3.3	435	9.9
Adenovirus	1	0.4	2	0.6	35	0.8
Bocavirus	1	0.4	1	0.3	13	0.3
Human metapneumovirus (hMPV)	6	2.4	13	3.6	52	1.2
Parainfluenza virus type 1 (PIV-1)	0	0.0	1	0.3	13	1.2
Parainfluenza virus type 2 (PIV-2)	0	0.0	0	0.0	9	0.2
Parainfluenza virus type 3 (PIV-3)	1	0.4	2	0.6	23	0.5
Parainfluenza virus type 4 (PIV-4)	0	0.0	1	0.3	24	0.5

3. 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 participating GP OOH services provided data for week 5 2024.
- Out of a total of 12,569 calls made to the participating GP OOHs in week 5 2024:
  - 2,671 (21%) were for self-reported 'cough', which is above the baseline threshold of 10.8% for cough calls, and which is stable compared to the percentage of cough calls (22%) reported in week 4 2024 (Figures 5 and 6). The highest burden of cough calls was in those aged 15-64 at 34% (895/2671).
  - 217 (1.7%) were for self-reported 'flu', which is just below baseline threshold of 2.3% for 'flu' calls (Figures 7 and 8). This is stable compared to 1.8% 'flu' calls made in week 4. The highest burden of flu calls and cough was in those aged 15 to 64 years at 60% (130/217).

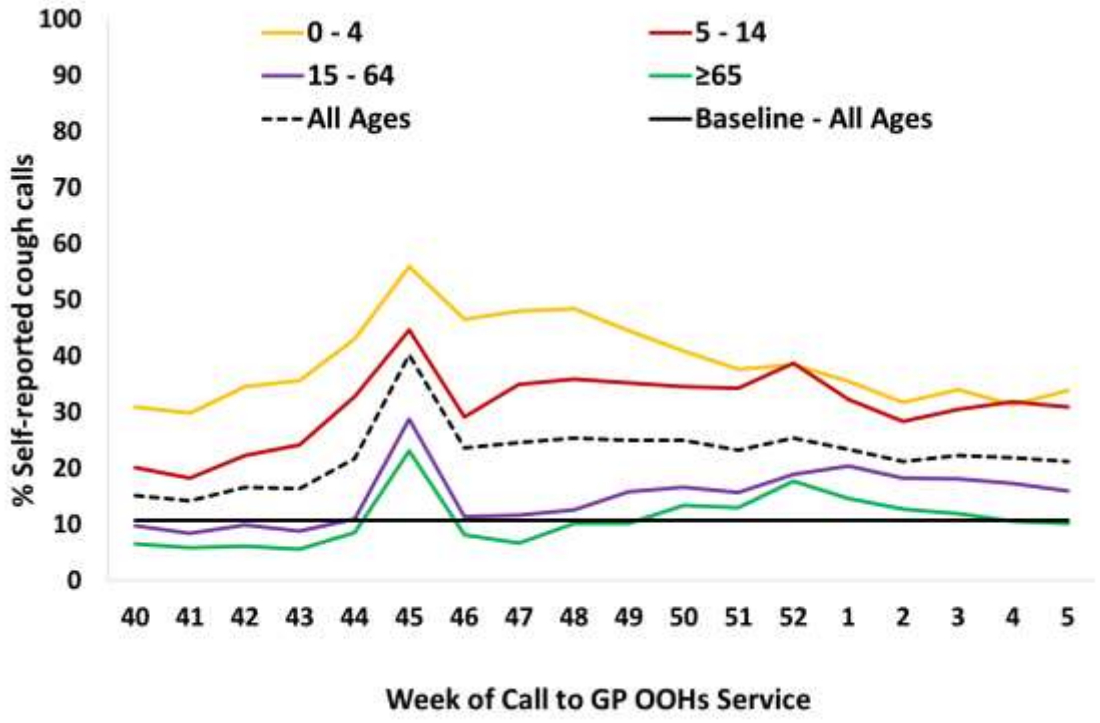

Figure 5: Percentage of self-reported **COUGH** calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call for the 2023/2024 season. The baseline % cough calls for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours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

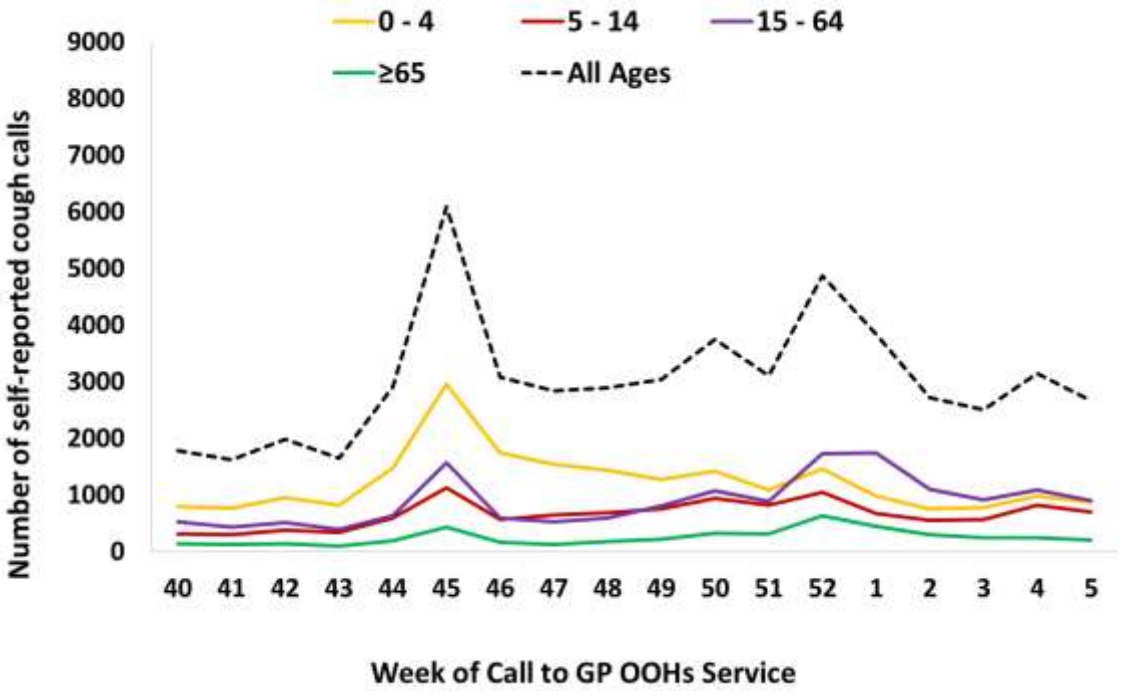

Figure 6: Number of self-reported **COUGH** calls for all ages and by age group to GP Out-of-Hours services by week of call for the 2023/2024 season. *Source: GP Out-Of-Hours services in Ireland (collated by HSE & ICGP).*

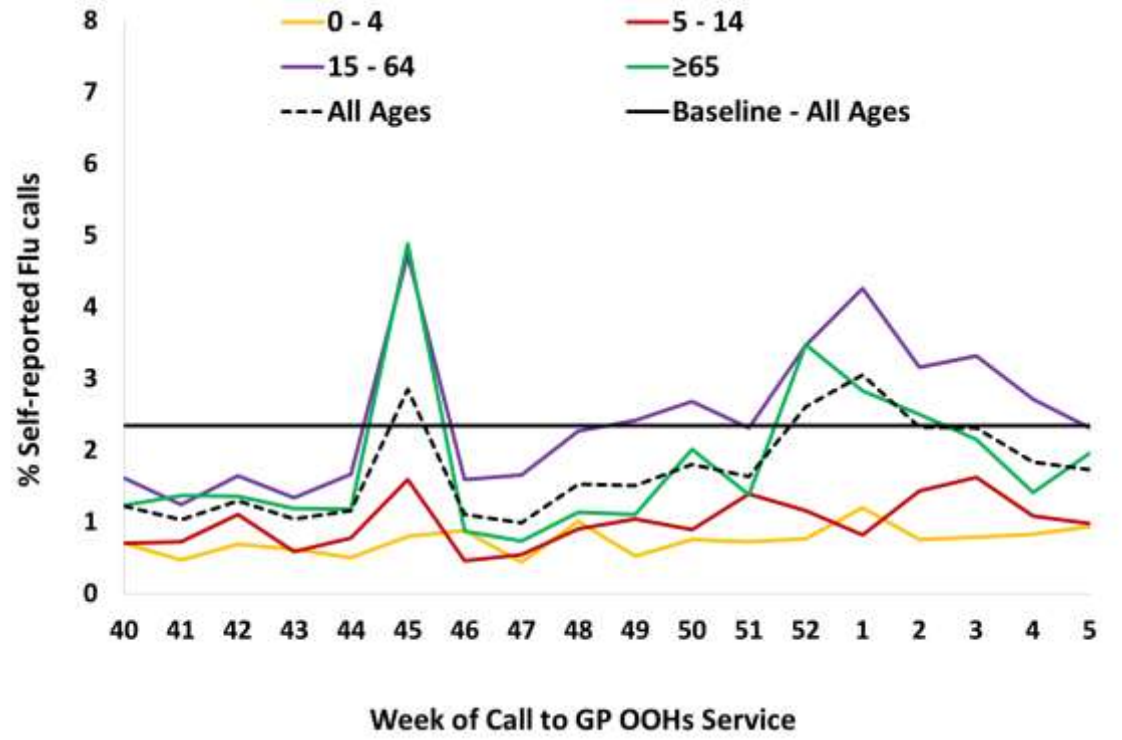

Figure 7: Percentage of self-reported **FLU** calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call for the 2023/2024 season. The baseline % flu calls for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours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

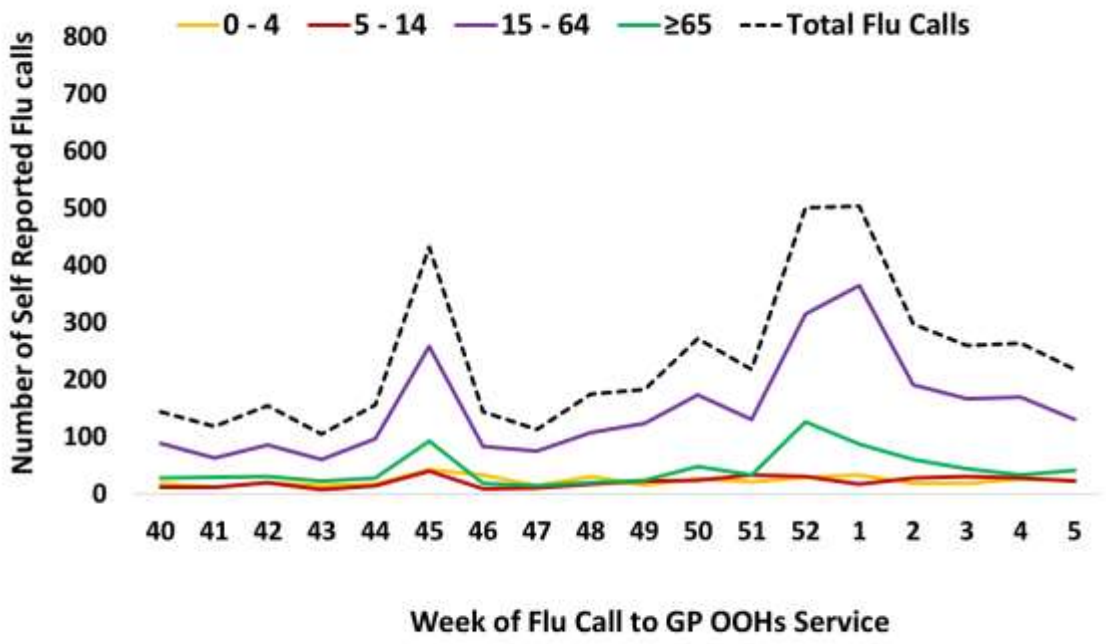

Figure 8: Number of self-reported **FLU** calls for all ages and by age group to GP Out-of-Hours services by week of call for the 2023/2024 season. *Source: GP Out-Of-Hours services in Ireland (collated by HSE & ICGP).*

4. 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.
- 1,381 laboratory confirmed influenza cases were notified during week 5 2024 (Table 6); corresponding to an overall notification rate of 30.0/100,000 population: 54 A(H3), 30 A(H1)pdm09, 1,206 A (not subtyped) and 91 B. This is a decrease compared to 1,563 cases notified during week 4 2024 (Figure 10).
- 10,593 laboratory confirmed influenza cases were notified for the 2023/2024 season to date (week 40 2023 to week 5 2024): 1,022 A(H3), 393 A(H1)pdm09, 8,648 A (not subtyped), 525 B, four A and B coinfections and one A(H1)pdm09 and A(H3) coinfection.
- Notification rates slightly decreased among all age groups during week 5 2024 (Figure 10) (Figure 11). Age specific influenza notification rates were highest in the 0–4-year age group at 71.8/100,000 population, followed by those aged 65 years and older at 55.6/100,000 during week 5 2024 (Figure 11).
- The highest burden of notifications occurred in those aged 65 years and older at 31% (432/1381) of all influenza notifications in week 5 2024.
- Influenza notification rates were highest in the Dublin and North-East health region at 35.6/100,000 population (Table 6) during week 5 2024, with notifications from this region accounting for 31% of all notifications (423/1381).
- RSV notifications continued to decline with 76 cases notified during week 5 2024, compared to 155 cases during week 4 2024 (Figure 12).
- 7,490 RSV notifications have been reported for the 2023/2024 season to date.
- Age specific notification rates for RSV were highest in those aged less than one year, at 20.8/100,000 population, followed by those aged 65 years and older at 4.4/100,000 (Figure 13). Notifications in those aged 65 years and older accounted for 45% (34/76) of all RSV notifications in week 5 2024.
- RSV notification rates were low across all regions and were highest in the Dublin and North-East health region at 2.0/100,000 (Table 7), followed by the Dublin and Midlands health region at 1.6/100,000 population during week 5 2024.

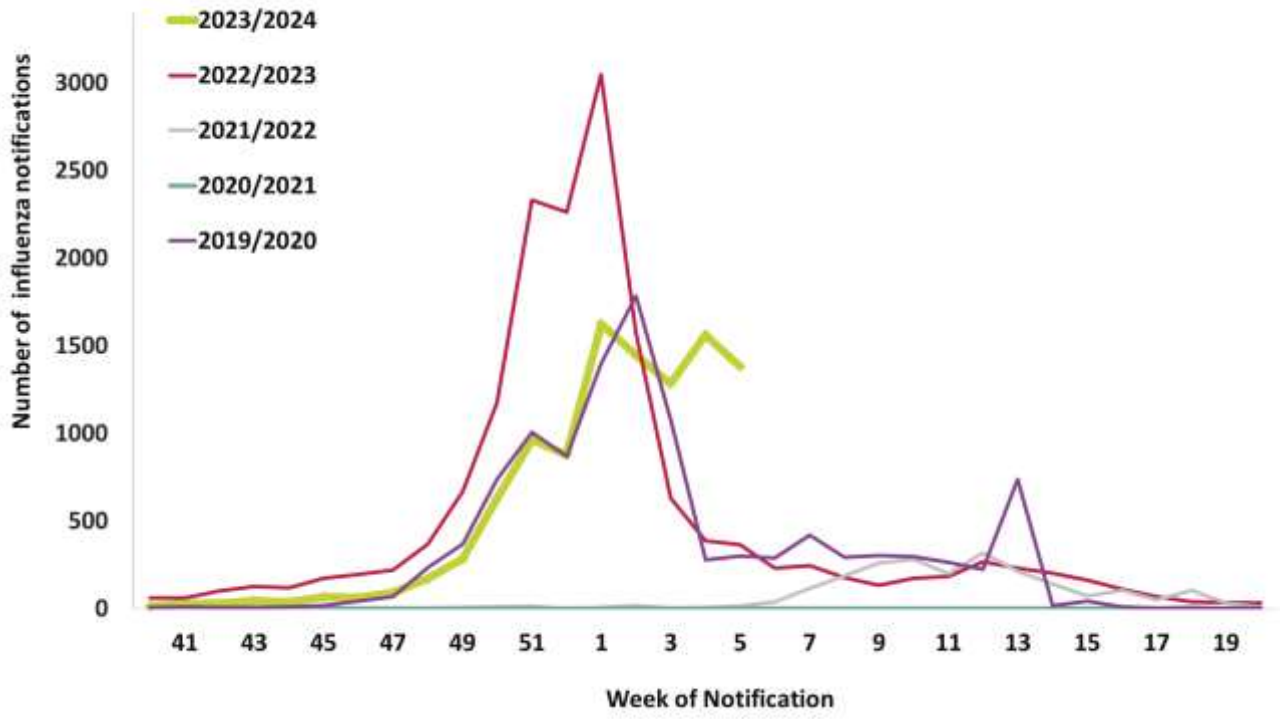

Figure 9: Number of laboratory confirmed **Influenza** notifications to HPSC by week of notification, 2019/2020 to 2023/2024 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System*

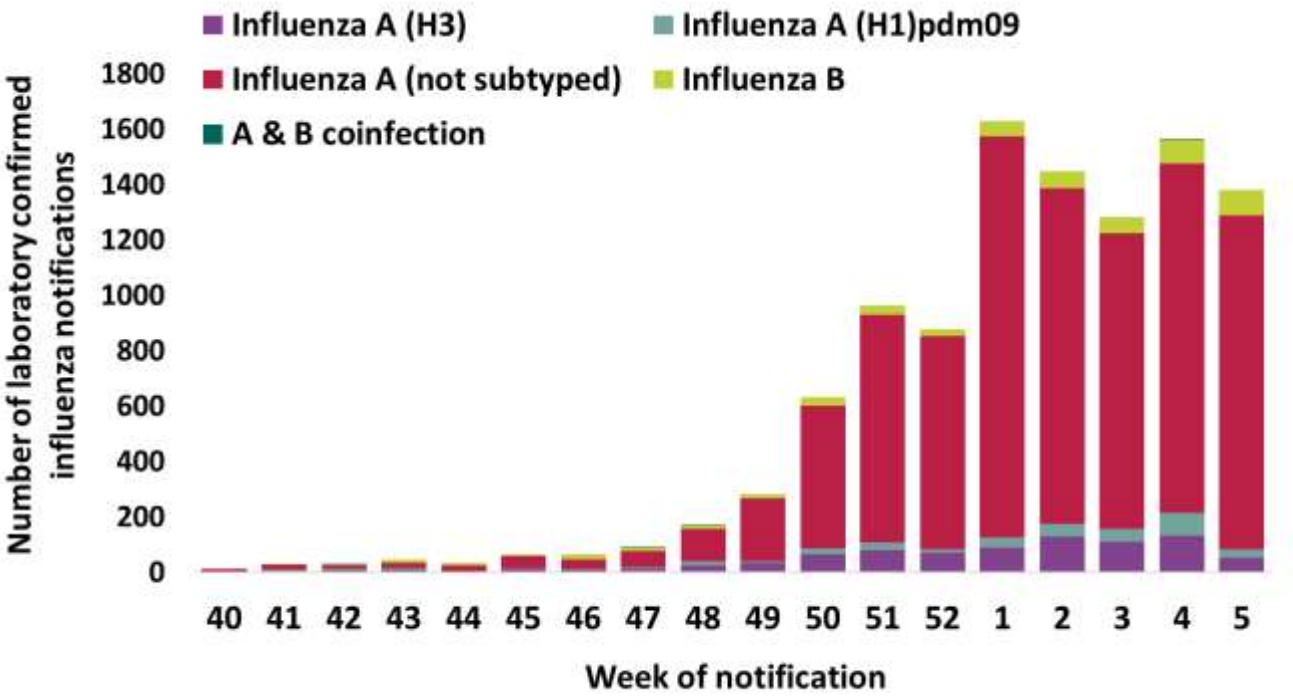

Figure 10: Number of laboratory confirmed **influenza** notifications by influenza type/subtype and week for the 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System*

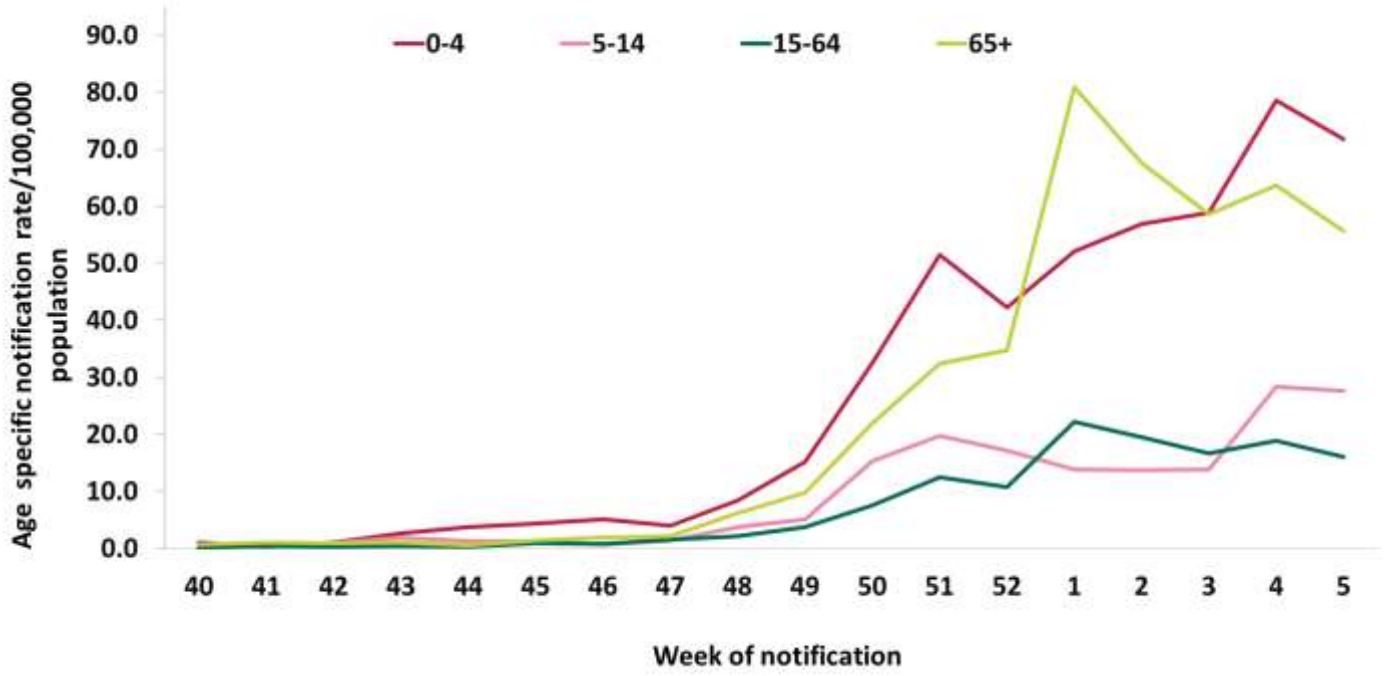

Figure 11: Age specific rates/100,000 population of laboratory confirmed **influenza** notifications to HPSC by week of notification for the 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

Table 6: Number and rate/100,000 population of laboratory confirmed **influenza** notifications by HSE Health Region for week 5 2024 and the 2023/2024 season to date. *Source: CIDR*

HSE Health Region	Week 5 2024		2023/2024 season (Week 40 2023 - Week 5 2024)	
	Number	Rate/100,000 population	Number	Rate/100,000 population
Dublin and North East	423	35.6	2222	187.2
Dublin and Midlands	272	25.2	1860	172.6
Dublin and South East	244	25.1	1695	174.5
South West	155	20.9	1647	222.4
Mid West	97	23.5	538	130.2
West and North West	188	24.7	2625	345.6
Unknown	2		6	
Total	**1381**	**26.8**	**10593**	205.7

Table 7: Number and rate/100,000 population of laboratory confirmed **RSV** notifications by HSE Health Region for week 5 2024 and the 2023/2024 season to date. *Source: CIDR*

HSE Health Region	Week 5 2024		2023/2024 season (Week 40 2023 - Week 5 2024)	
	Number	Rate/100,000 population	Number	Rate/100,000 population
Dublin and North East	24	2.0	1453	122.4
Dublin and Midlands	17	1.6	1596	148.1
Dublin and South East	9	0.9	1102	113.5
South West	9	1.2	925	124.9
Mid West	6	1.5	615	148.9
West and North West	11	1.4	1799	236.8
Unknown	0		1	
Total	**76**	**1.5**	**7491**	145.5

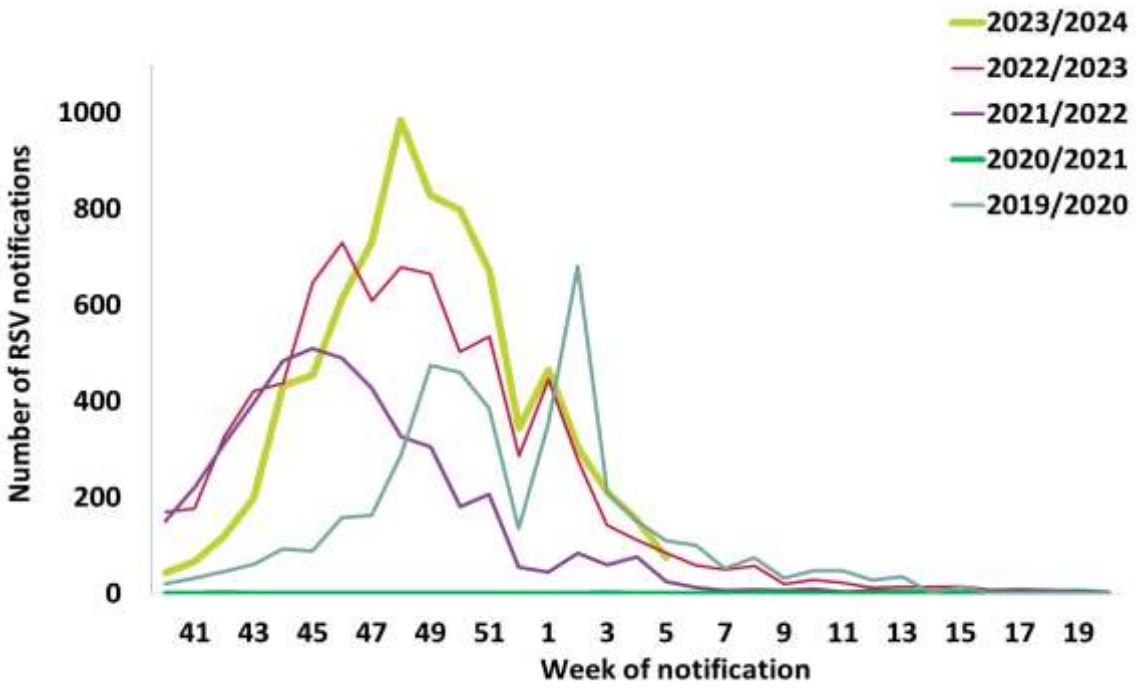

Figure 12: Number of laboratory confirmed **RSV** notifications to HPSC by week of notification, 2019/2020 to 2023/2024 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System.*

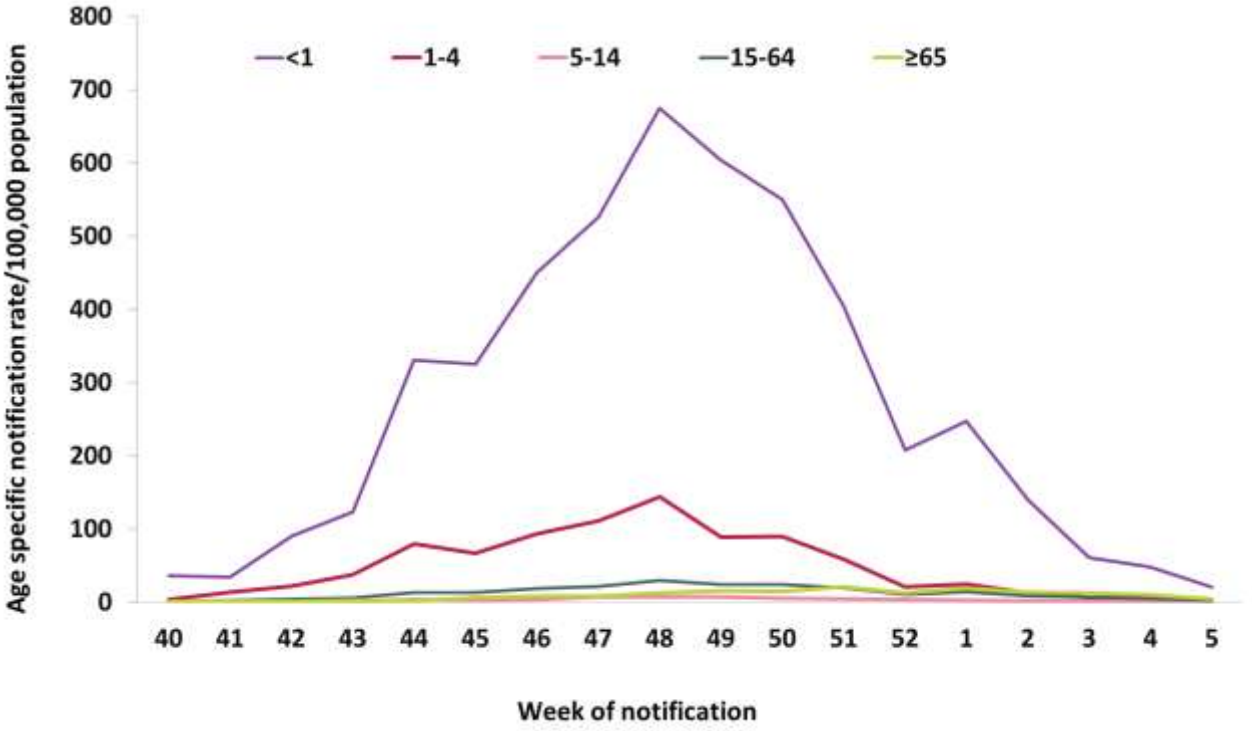

Figure 13: Age specific rates/100,000 population for laboratory confirmed **RSV** notifications to HPSC by week of notification for the 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

5. Hospitalisations

- During week 5 2024, the number of notified laboratory confirmed influenza hospital inpatients decreased to 253 (eight A(H3), five A(H1)pdm09, 220 A (not subtyped) and 20 B), compared to 393 in week 4 2024. (Figure 15).
- During the 2023/2024 season to date, 2,650 laboratory confirmed influenza hospital inpatients were reported: 219 A(H3), 52 A(H1)pdm09, 2,256 A (not subtyped), 121 B and two A and B coinfections.
- During week 5 2024, the age specific influenza hospitalisation rate was highest in those aged 0-4 years (14.6/100,000 population) and those aged 65 and older (13.0/100,000 population) (Figure 16). Forty percent (101/253) of all influenza hospitalisations occurred in those aged 65 years and older (Table 8).
- RSV hospitalisations continued to decrease during week 5 2024, 28 laboratory confirmed RSV hospitalised cases were notified, a decrease compared to 50 cases in week 4 2024 (Figure 17).
- 3,153 RSV hospitalisations were reported for the 2023/2024 season to date.
- The age specific RSV hospitalisation rates have decreased in recent weeks. In week 5 2024 the rate was highest in those aged less than one year (6.9/100,000 population), followed by those aged 65 years and older (2.2/100,000 population) (Figure 18). Of the hospitalised RSV cases, 61% (17/28) were aged 65 years and older (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.

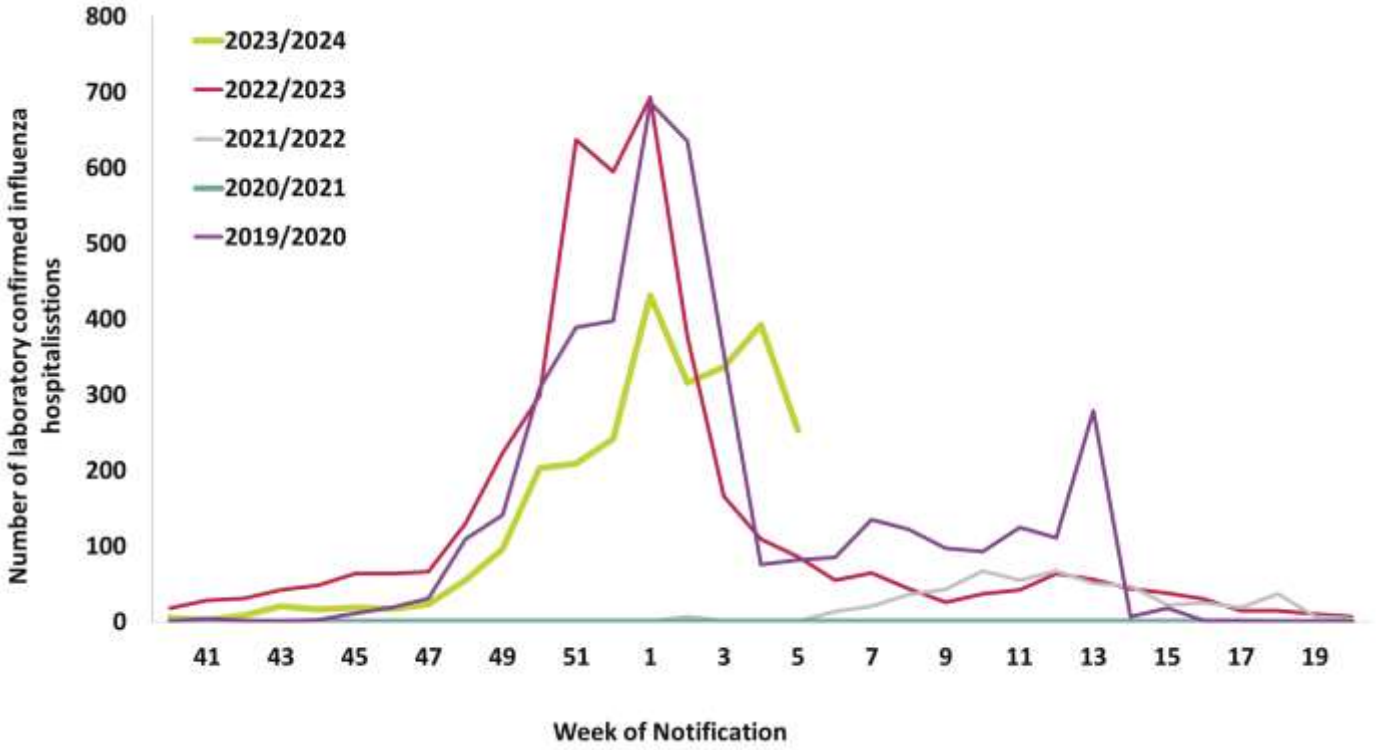

Figure 14: Number of notified **influenza** hospital inpatients, by week of notification and season, for the 2019/2020 to 2023/2024 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System.*

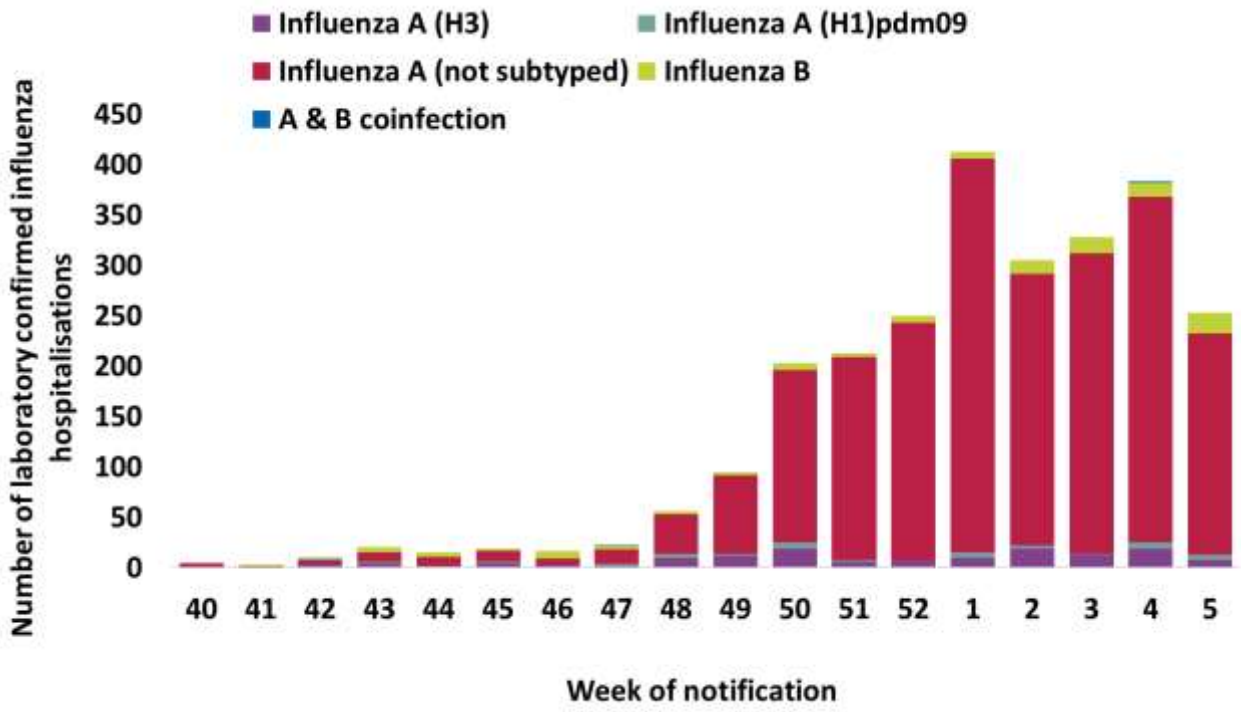

Figure 15: Number of notified laboratory confirmed **influenza** hospital inpatients by influenza type/subtype by week for the 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

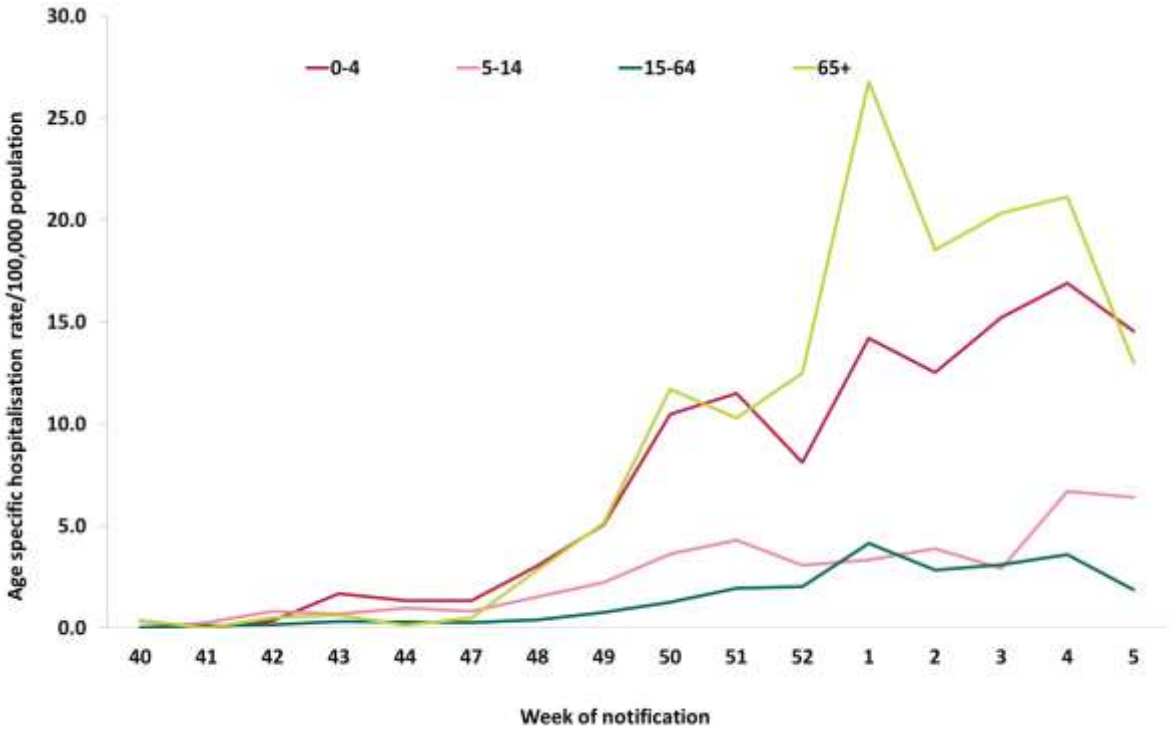

Figure 16: Age specific rates/100,000 population for laboratory confirmed **influenza** cases reported as **hospital inpatients** by week of notification for the 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

Table 8: Number, percentage and rate /100,000 population of notified laboratory-confirmed **influenza hospitalised cases notified** in week 5 2024 and the 2023/2024 season (week 40 2023 onwards). *Source: Ireland's Computerised infectious Disease Reporting System*

Age (years)	Hospitalised (Week 5)			Season to date (Week 40 2023 - Week 5 2024)		
	Number	% of all Hospitalisations	Rate/ 100,000 population	Number	% of all Hospitalisations	Rate/ 100,000 population
<1	11	4.3	19.0	75	2.8	129.8
1-4	32	12.6	13.5	293	11.1	123.3
5-14	46	18.2	6.4	306	11.5	42.7
15-24	10	4.0	1.6	104	3.9	16.1
25-34	15	5.9	2.4	150	5.7	23.9
35-44	12	4.7	1.5	181	6.8	22.8
45-54	9	3.6	1.3	134	5.1	18.8
55-64	17	6.7	2.9	233	8.8	40.2
≥65	101	39.9	13.0	1174	44.3	151.2
Unknown	0		-	0		-
Total	**253**	**100**	**4.9**	**2650**	**100**	**51.5**

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							
	GP Patient	ED patient	Hospital Inpatient	Hospital Day Patient	Hospital Outpatient	Other	Unknown	Total
Week 5	75	656	253	8	51	33	305	**1381**
Week 4	138	682	393	13	82	50	205	**1563**
Week 3	118	591	337	16	49	35	137	**1283**
Week 2	111	804	316	17	55	31	110	**1444**
Week 1	96	816	433	14	73	28	164	**1624**
Week 52	56	452	243	11	32	16	67	**877**
Week 51	66	537	209	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	17	0	5	1	5	**64**
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	**780**	**5204**	**2650**	**97**	**483**	**227**	**1152**	**10593**

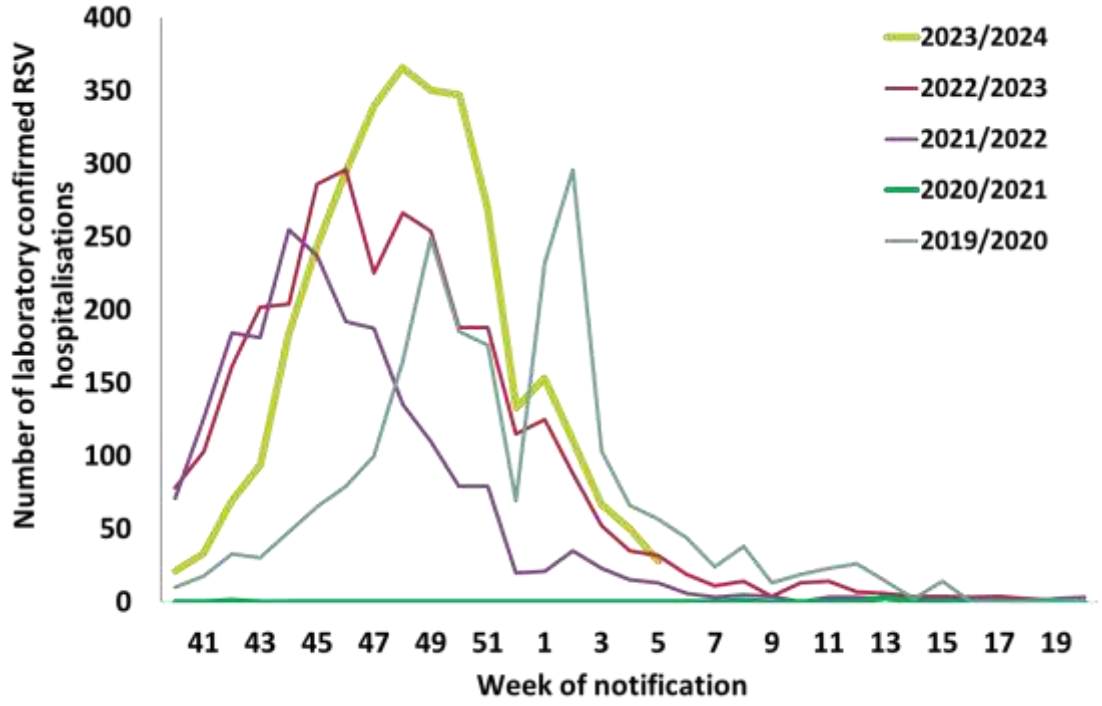

Figure 17: Number of notified **RSV** hospitalised cases notified, by week of notification and season, for the 2019/2020 to 2023/2024 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System.*

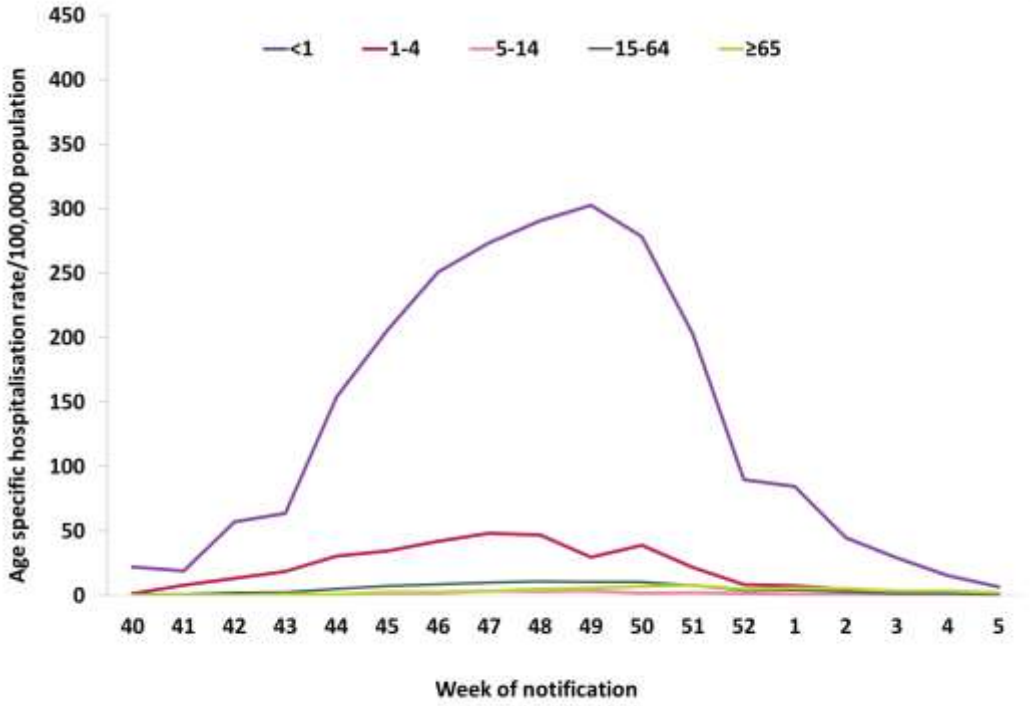

Figure 18: Age specific notification rates/100,000 population for laboratory confirmed **RSV** hospitalised cases notified by week of notification for the 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System*

Table 10: Number, percentage and rate/100,000 population of notified laboratory-confirmed **RSV hospitalised cases notified** in week 5 2024 and the 2023/2024 season (week 40 2023 onwards). *Source: Ireland's Computerised infectious Disease Reporting System*

Age (years)	Hospitalised (Week 5)			Season to date (Week 40 2023 - Week 5 2024)		
	Number	% of all Hospitalisations	Rate/ 100,000 population	Number	% of all Hospitalisations	Rate/ 100,000 population
<1	4	14.3	6.9	1386	44.0	2398.1
1-4	1	3.6	0.4	862	27.3	362.8
5-14	2	7.1	0.3	180	5.7	25.1
15-24	0	.0	0.0	26	0.8	4.0
25-34	0	.0	0.0	30	1.0	4.8
35-44	0	.0	0.0	37	1.2	4.7
45-54	1	3.6	0.1	48	1.5	6.7
55-64	3	10.7	0.5	87	2.8	15.0
≥65	17	60.7	2.2	497	15.8	64.0
Unknown	0		-	0		-
Total	**28**	**100**	**0.5**	**3153**	**100**	**61.2**

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							
	GP Patient	ED patient	Hospital Inpatient	Hospital Day Patient	Hospital Outpatient	Other	Unknown	Total
Week 5	2	21	28	2	1	1	21	**76**
Week 4	15	56	50	3	7	6	18	**155**
Week 3	18	61	67	1	8	28	29	**212**
Week 2	15	114	110	6	10	11	37	**303**
Week 1	17	146	153	10	14	16	108	**464**
Week 52	6	140	133	7	5	17	36	**344**
Week 51	33	266	270	8	13	9	72	**671**
Week 50	33	327	347	6	33	13	39	**798**
Week 49	26	346	350	8	19	9	67	**825**
Week 48	20	489	366	11	15	11	72	**984**
Week 47	14	285	340	3	19	17	52	**730**
Week 46	7	260	294	7	8	1	37	**614**
Week 45	7	167	245	5	6	2	22	**454**
Week 44	6	216	183	4	11	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	**225**	**3038**	**3153**	**85**	**177**	**153**	**659**	**7490**

6. 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 were two laboratory confirmed influenza cases (two A (not subtyped)) admitted to intensive care units (ICU) and notified to HPSC during week 5 2024.
- Seventy-two influenza A cases (17 A(H3), four A(H1)pdm09 and 51 A (not subtyped)) ICU cases have been notified for the season to date (weeks 40 2023- 5 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 5 2024. *Source: Ireland's Computerised infectious Disease Reporting System*

Age (years)	Hospitalised		Admitted to ICU	
	Number	Age specific rate/100,000 population	Number	Age specific rate/100,000 population
<1	75	129.8	1	1.7
1-4	293	123.3	2	0.8
5-14	306	42.7	3	0.4
15-24	104	16.1	3	0.5
25-34	150	23.9	4	0.6
35-44	181	28.8	3	0.4
45-54	134	18.8	11	1.5
55-64	233	40.2	15	2.6
≥65	1174	151.2	30	3.9
Unknown	0	–	0	–
Total	**2650**	**51.5**	**72**	**1.4**

7. 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 5 2024.
- For the season to date (weeks 40 2023-5 2024), 68 deaths in notified influenza cases (11 A(H3), four A(H1)pdm09 and 53 A (not-subtyped)) have been reported to HPSC.
- There was no excess all-cause mortality for the entire population reported for week 4 2024.

8. 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 5 2024, 28 influenza outbreaks (seven in acute hospitals, 10 nursing homes, two residential institutions, four community hospital/long stay units, one childcare facility and four in other settings) were notified to HPSC (Tables 13 & 14).
- Two RSV outbreaks and one ARI (caused by pathogens other than influenza, SARS-CoV-2, or RSV) outbreak in nursing homes were notified to HPSC during week 5 2024.
- There have been 226 ARI/influenza/RSV (excluding COVID-19) outbreaks notified to HPSC to date this season, comprising of 163 influenza outbreaks, 35 RSV outbreaks and 28 other ARI outbreaks.

Table 13: Summary of influenza, RSV and ARI (influenza/RSV/SARS-CoV-2 negative) outbreaks by HSE Health Region during week 5 2024 and the 2023/2024 season (week 40 2023 – week 5 2024) *Source: CIDR*

HSE Health Region	Influenza		RSV		ARI		Total	
	Week 5	2023/2024	Week 5	2023/2024	Week 5	2023/2024	Week 5	2023/2024
Dublin and North East	10	26	0	7	1	15	11	48
Dublin and Midlands	1	20	0	12	0	0	1	32
Dubin and South East	8	27	0	3	0	6	8	36
South West	3	25	1	1	0	1	4	27
Mid West	2	8	0	3	0	0	2	11
West and North West	4	53	1	7	0	6	5	66
Unknown	0	4	0	2	0	0	0	6
Total	**28**	**163**	**2**	**35**	**1**	**28**	**31**	**226**

Table 14: Summary of influenza, RSV and ARI (influenza/RSV/SARS-CoV-2 negative) outbreaks by outbreak setting during week 5 2024 and the 2023/2024 season (week 40 2023 – week 5 2024). *Source: CIDR*

Setting	Influenza		RSV		ARI		Total	
	Week 5	2023/2024	Week 5	2023/2024	Week 5	2023/2024	Week 5	2023/2024
Community hospital/Long-stay unit	4	16	0	2	0	3	4	21
Nursing Home	10	54	1	13	1	19	12	86
Hospital	7	53	0	10	0	0	7	63
Residential Institution	2	21	0	4	0	3	2	28
Childcare facility	1	2	0	2	0	0	1	4
Other settings	4	17	1	4	0	3	5	24
Total	**28**	**163**	**2**	**35**	**1**	**28**	**31**	**226**

9. International Summary

According to the European Respiratory Virus Surveillance Summary, in the WHO European region during week 4 2024 (including data up to 28/01/2024), 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(H1)pdm09 viruses in most countries, and A(H3) also dominant or co-dominant in a small number of countries. Of 21 countries reporting geographical spread of influenza in the WHO European region, 17 reported widespread activity. 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 7th January 2024, WHO has reported that globally influenza detections decreased but detections continue to increase in parts of the temperate Northern hemisphere, including parts of Europe and Central Asia, North America, and Eastern and Western Asia. In the countries of North America, influenza detections remained elevated and influenza activity was above the baseline threshold. Influenza A(H1N1)pdm09 viruses predominated among the detections in the countries of North America. In East Asia, influenza activity remained elevated but there is a slight decrease in China and the Republic of Korea. Influenza activity increased in the Caribbean with detections of predominantly influenza A(H1N1)pdm09 and decreased in Central America with detections of predominantly B/Victoria lineage viruses. In tropical Africa, influenza detections remained low in Western Africa and decreased in Eastern and Middle Africa.

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

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