

# Influenza, RSV and Other Respiratory Viruses Surveillance Report

## Week 3 2024 (15<sup>th</sup> – 21<sup>st</sup> January 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](#).

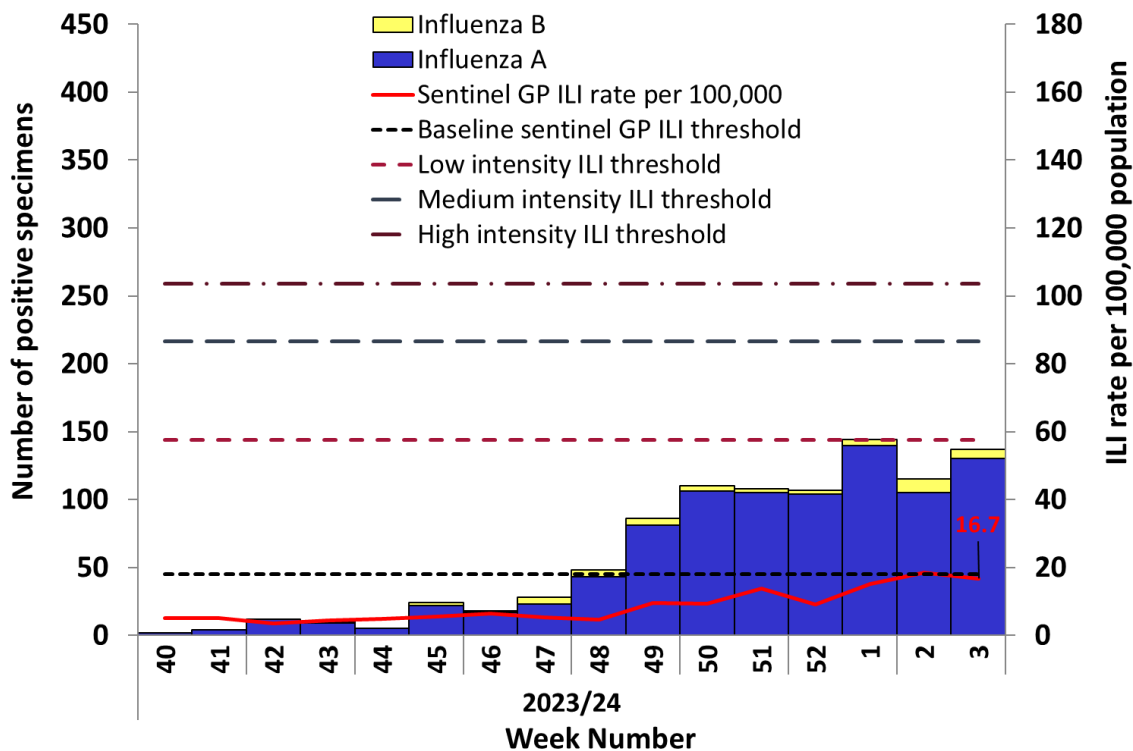
### Summary Week 3 2024

**Influenza activity remained at moderate to high levels during week 3 2024, with sentinel GP influenza positivity at high levels. Influenza A(H3) viruses accounted for the majority of subtyped viruses; with influenza A(H1)pdm09 and B also co-circulating. 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.**

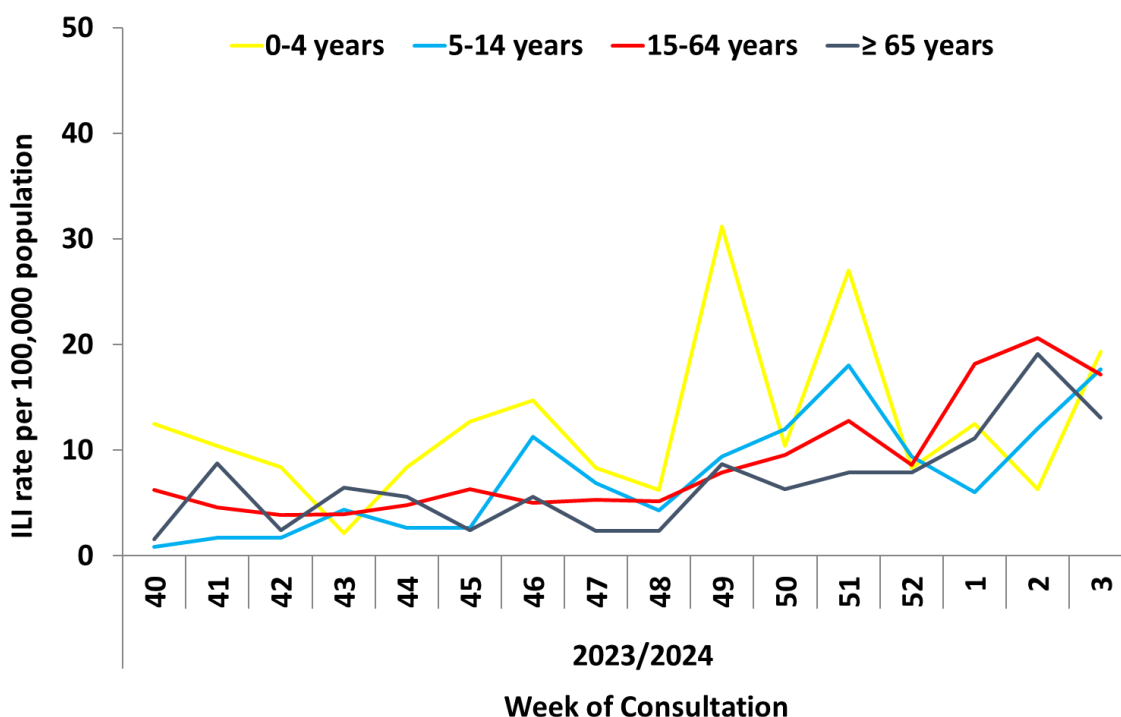
- **Influenza-like illness (ILI):** The sentinel GP influenza-like illness (ILI) consultation rate was 16.7 per 100,000 population during week 3 2024 which is below the Irish baseline threshold (18.1/100,000) and below expected levels this season. ILI age specific rates were below the age specific baseline for all age groups during week 3 2024.
- **National Virus Reference Laboratory (NVRL):** Of 198 sentinel GP ARI specimens tested and reported by the NVRL during week 3 2024, 76 (38.4%) were positive for influenza (45 A(H3), 22 A(H1)pdm09, four A (not subtyped) and five influenza B), nine (4.5%) RSV, nine (4.5%) SARS-CoV-2, and 12 (6.1%) rhino/enterovirus.
- Of 271 non-sentinel respiratory specimens tested and reported by the NVRL during week 3 2024, 61 (22.5%) were positive for influenza (35 A(H3), 21 A(H1)pdm09, three A (not subtyped) and two influenza B), 31 (11.4%) SARS-CoV-2, seven (2.6%) RSV and 17 (6.3%) rhino/enterovirus.
- **GP Out of hours (OOHs):** Cough calls comprised 22% (2499/11234) of all reported GP OOHs calls during week 3 2024, which is above the baseline threshold of 10.8%. Thirty-one percent (781/2499) of cough calls were in those aged 0-4 years. Flu calls comprised 2.3% (259/11234) of all calls in week 3 2024, which is at the baseline threshold level (2.3%). The majority (64%; 166/259) of all flu calls were in those aged 15-64 years.
- **Influenza notifications:** 1,287 laboratory confirmed influenza cases were notified during week 3 2024: 102 influenza A (H3), 42 A(H1)pdm09, 1,085 influenza A (not subtyped) and 58 influenza B. This is a decrease compared to 1444 cases notified during week 2 2024. The highest burden of notifications occurred in those aged 65 years and older at 35% (455/1287) of all influenza notifications in week 3 2024.
- **RSV notifications:** 212 RSV cases were notified during week 3 2024, a decrease compared to 303 cases during week 2 2024. Age specific rates were highest in those aged less than one year. The highest burden of notifications occurred in those aged 65 years and older at 48% (102/212) of all RSV notifications in week 3 2024.
- **Hospitalisations:** 328 laboratory confirmed influenza hospitalised cases were notified in week 3 2024, compared to 310 in week 1 2024. Of the hospitalised cases during week 3 2024, 298 were positive for influenza A (not subtyped), 13 A(H3), one A(H1)pdm09 and 16 influenza B. 62 laboratory confirmed RSV hospitalised cases were notified in week 3 2024, a decrease compared to 107 cases in week 2 2024. Of the hospitalised RSV cases notified during week 3 2024, 44% (27/62) were aged 65 years and older.
- **Intensive care admissions:** Six laboratory confirmed influenza A cases (not subtyped) were admitted to intensive care unit (ICU) and notified to HPSC during week 3 2024. Fifty influenza ICU cases (10 A(H3), two A(H1)pdm09 and 38 A (not subtyped) have been notified during weeks 40 2023 – 3 2024.
- **Mortality:** Two deaths in notified influenza cases were reported to HPSC during week 3 2024 and 23 deaths were reported for the season to date – 19 influenza A (not-subtyped), three A(H3) and one A(H1)pdm09.
- **Outbreaks:** During week 3 2024, 22 influenza outbreaks (eight nursing homes, nine acute hospitals, four residential institutions and one other healthcare setting) and six RSV outbreaks (five nursing homes and one community hospital).
- **International:** In the EU/EEA during week 2 2024, while there is variation across the region, influenza activity remains at high levels. RSV continues to circulate but has declined in the last few weeks.

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

- During week 3 2024, 136 sentinel GP influenza-like illness (ILI) consultations were reported from the Irish sentinel GP network, corresponding to an ILI consultation rate of 16.7 per 100,000 population which is below the sentinel GP ILI baseline threshold. This is compared to an updated rate of 18.4 per 100,000 population during week 2 2024 (Figure 1).
- Out of the 96 GP practices in the Irish sentinel GP network, 92 reported clinical consultations data during week 3 2024.
- The sentinel GP ILI consultation rates were below the Irish sentinel GP ILI baseline threshold (18.1/100,000 population) for week 3 2024 and remain below expected levels this season.
- Age specific ILI consultation rates were below the age specific baseline thresholds in all age groups during week 3 2024. The age specific baseline threshold for those aged <15 is 19.0/100,000, for those aged 15-64 is 21.3/100,000 and for those aged ≥65 years is 19.4/100,000.
- ILI age specific rates were highest in those aged 0-4 years (19.3/100,000) during week 3 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.



**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 3 2024). *Source: ICGP.*

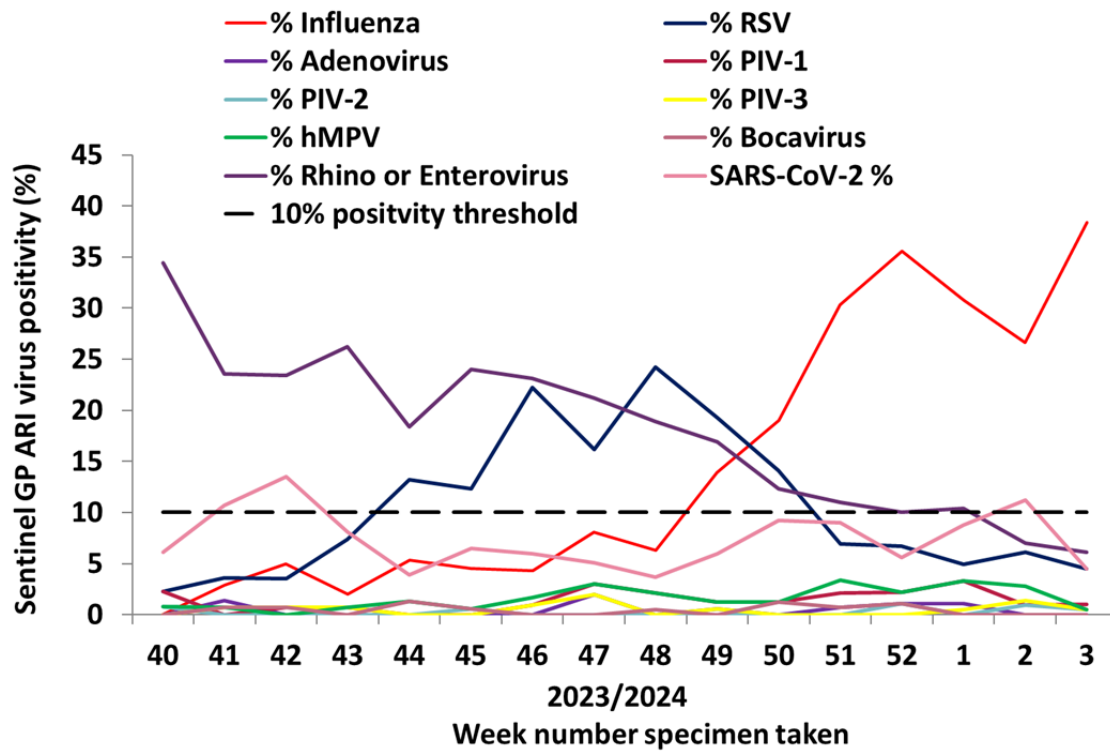
**Table 1:** Age specific sentinel GP ILI consultation rate per 100,000 population by week (week 40 2023 to week 3 2024), colour coded by sentinel GP ILI age specific Moving Epidemic Method (MEM) threshold levels. *Source: ICGP.*

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
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	16.7
<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	16.9
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	17.2
≥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	13.1
Reporting practices (N=96)	93	93	92	91	92	92	93	95	95	96	96	96	96	95	94	92

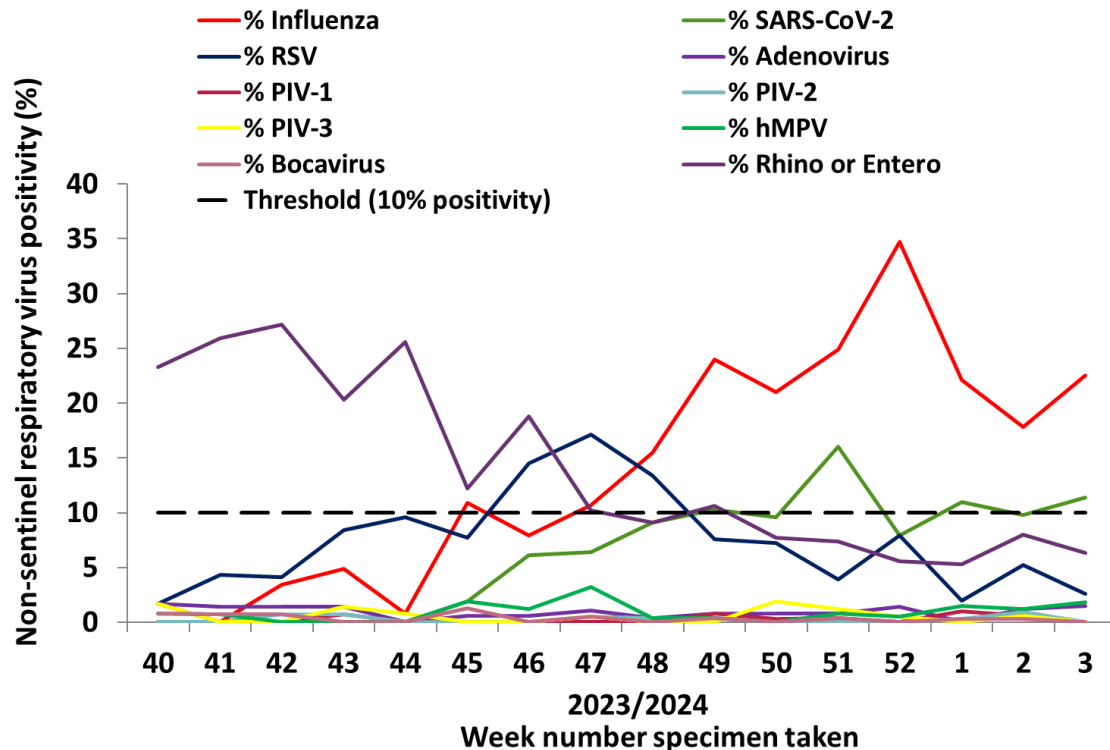
## 2. Influenza and Other Respiratory Virus Detections - NVRL

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).

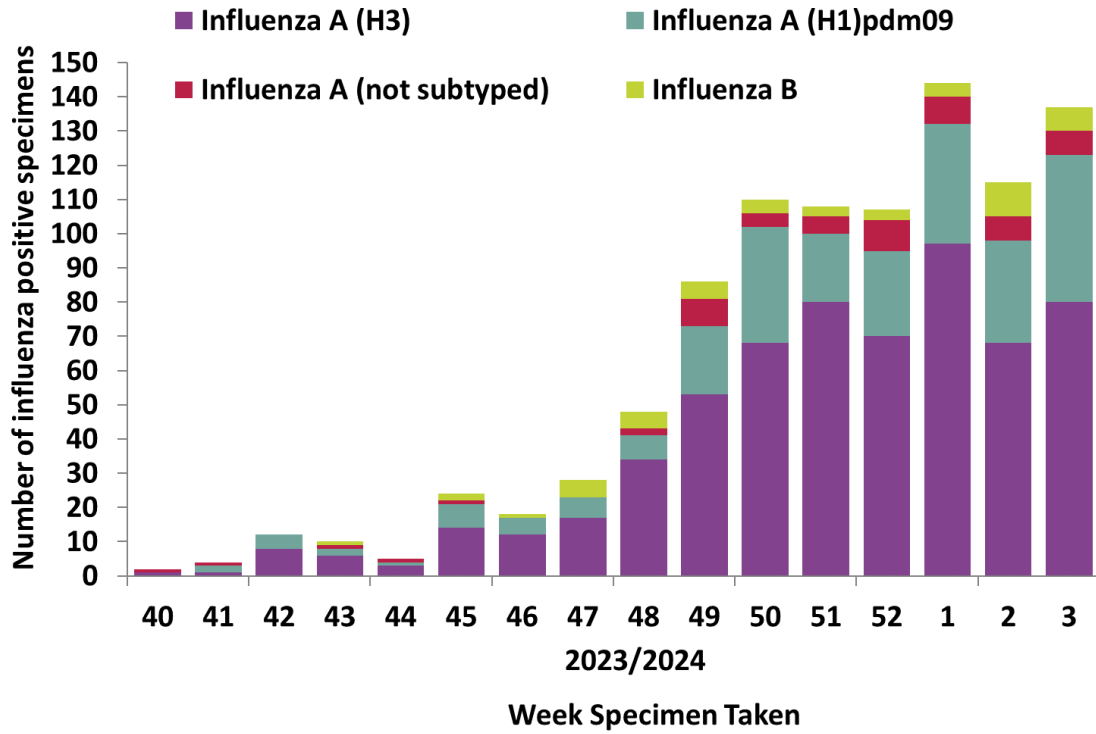
- A lag time with testing and reporting is noted for the most recent surveillance week.
- During week 3 2024, of 198 sentinel GP ARI specimens tested and reported by the NVRL, 76 (38.4%) were positive for influenza (45 A(H3), 22 A(H1)pdm09, four A (not subtyped), and five influenza B), nine (4.5%) for RSV, nine (4.5%) for SARS-CoV-2, and 12 (6.1%) for rhino/enterovirus.
- In comparison during week 2 2024, of 214 sentinel GP ARI specimens tested and reported by the NVRL, 57 (26.6%) were positive for influenza (29 A(H3), 17 A(H1)pdm09, three A (not subtyped) and eight B), 13 (6.1%) for RSV, 24 (11.2%) for SARS-CoV-2, and 15 (7%) for rhino/enterovirus.
- For the 2023/2024 season to date (week 40 2023 to week 3 2024), of 2,355 sentinel GP ARI specimens tested and reported by the NVRL, 369 (15.7%) were positive for influenza, 243 (10.3%) for RSV, 178 (7.6%) for SARS-CoV-2, and 404 (17.2%) for rhino/enterovirus (Table 4).
- During week 3 2024, of 271 non-sentinel respiratory specimens tested and reported by the NVRL, 61 (22.5%) were positive for influenza (35 A(H3), 21 A(H1)pdm09, three A (not subtyped) and two influenza B), 31 (11.4%) for SARS-CoV-2, seven (2.6%) for RSV and 17 (6.3%) for rhino/enterovirus.
- During week 2 2024, of 326 non-sentinel respiratory specimens tested, 58 (17.8%) were positive for influenza (39 A(H3), 13 A(H1)pdm09, four A (not subtyped), and two B), 32 (9.8%) for SARS-CoV-2, 17 (5.2%) for RSV, and 26 (8.0%) for rhino/enterovirus (Figure 3b).
- For the 2023/2024 season to date (week 40 2023 to week 3 2024), of 3,522 non-sentinel respiratory specimens tested and reported by the NVRL, 589 (16.7%) were positive for influenza, 243 (6.9%) for RSV, 274 (7.8%) for SARS-CoV-2, and 407 (11.6%) for rhino/enterovirus (Table 5).
- Other respiratory viruses (ORVs) are being detected at lower levels (Figure 3a and 3b).
- Of 958 sentinel GP ARI specimens and non-sentinel specimens positive for influenza and reported by the NVRL during the 2023/2024 season, 60 (6.3%) 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 2 and week 3 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	
<b>Week 3 2024</b>	Sentinel GP ARI	198	76	38.4	22	45	4	71	5	0	0	5
	Non-sentinel respiratory	271	61	22.5	21	35	3	59	2	0	0	2
	<b>Total</b>	<b>469</b>	<b>137</b>	<b>29.2</b>	<b>43</b>	<b>80</b>	<b>7</b>	<b>130</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>7</b>
<b>Week 2 2024</b>	Sentinel GP ARI	214	57	26.6	17	29	3	49	8	0	0	8
	Non-sentinel respiratory	326	58	17.8	13	39	4	56	2	0	0	2
	<b>Total</b>	<b>540</b>	<b>115</b>	<b>21.3</b>	<b>30</b>	<b>68</b>	<b>7</b>	<b>105</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>10</b>
<b>2023/2024</b>	Sentinel GP ARI	2355	369	15.7	98	214	29	341	28	0	0	28
	Non-sentinel respiratory	3522	589	16.7	143	398	26	567	15	7	0	22
	<b>Total</b>	<b>5877</b>	<b>958</b>	<b>16.3</b>	<b>241</b>	<b>612</b>	<b>55</b>	<b>908</b>	<b>43</b>	<b>7</b>	<b>0</b>	<b>50</b>

**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 2 and week 3 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)
<b>Week 3 2024</b>	Sentinel GP ARI	198	9	4.5	7	2	0
	Non-sentinel	271	7	2.6	2	5	0
	<b>Total</b>	<b>469</b>	<b>16</b>	<b>3.4</b>	<b>9</b>	<b>7</b>	<b>0</b>
<b>Week 2 2024</b>	Sentinel GP ARI	214	13	6.1	8	5	0
	Non-sentinel	326	17	5.2	12	5	0
	<b>Total</b>	<b>540</b>	<b>30</b>	<b>5.6</b>	<b>20</b>	<b>10</b>	<b>0</b>
<b>2023/2024</b>	Sentinel GP ILI/ARI	2355	243	10.3	183	60	0
	Non-sentinel	3522	243	6.9	195	48	0
	<b>Total</b>	<b>5877</b>	<b>486</b>	<b>8.3</b>	<b>378</b>	<b>108</b>	<b>0</b>

**Table 4:** Number and percentage positive sentinel GP ARI specimens by **respiratory virus**, week 2 and week 3 2024, and the 2023/2024 season. *Source: NVRL*

Virus	Week 3 2024 (N=198)		Week 2 2024 (N=214)		2023/2024 (N=2355)	
	Total positive	% positive	Total positive	% positive	Total positive	% positive
SARS-CoV-2	9	4.5	24	11.2	178	7.6
Influenza virus	76	38.4	57	26.6	369	15.7
Respiratory Syncytial Virus (RSV)	9	4.5	13	6.1	243	10.3
Rhino/enterovirus	12	6.1	15	7.0	404	17.2
Adenovirus	0	0.0	0	0.0	9	0.4
Bocavirus	0	0.0	0	0.0	9	0.4
Human metapneumovirus (hMPV)	1	0.5	6	2.8	38	1.6
Parainfluenza virus type 1 (PIV-1)	2	1.0	2	0.9	32	1.4
Parainfluenza virus type 2 (PIV-2)	1	0.5	2	0.9	6	0.3
Parainfluenza virus type 3 (PIV-3)	1	0.5	3	1.4	12	0.5
Parainfluenza virus type 4 (PIV-4)	0	0.0	0	0.0	41	1.7

**Table 5:** Number and percentage positive non-sentinel respiratory specimens, by **respiratory virus**, week 2 and week 3 2024, and the 2023/2024 season. *Source: NVRL*

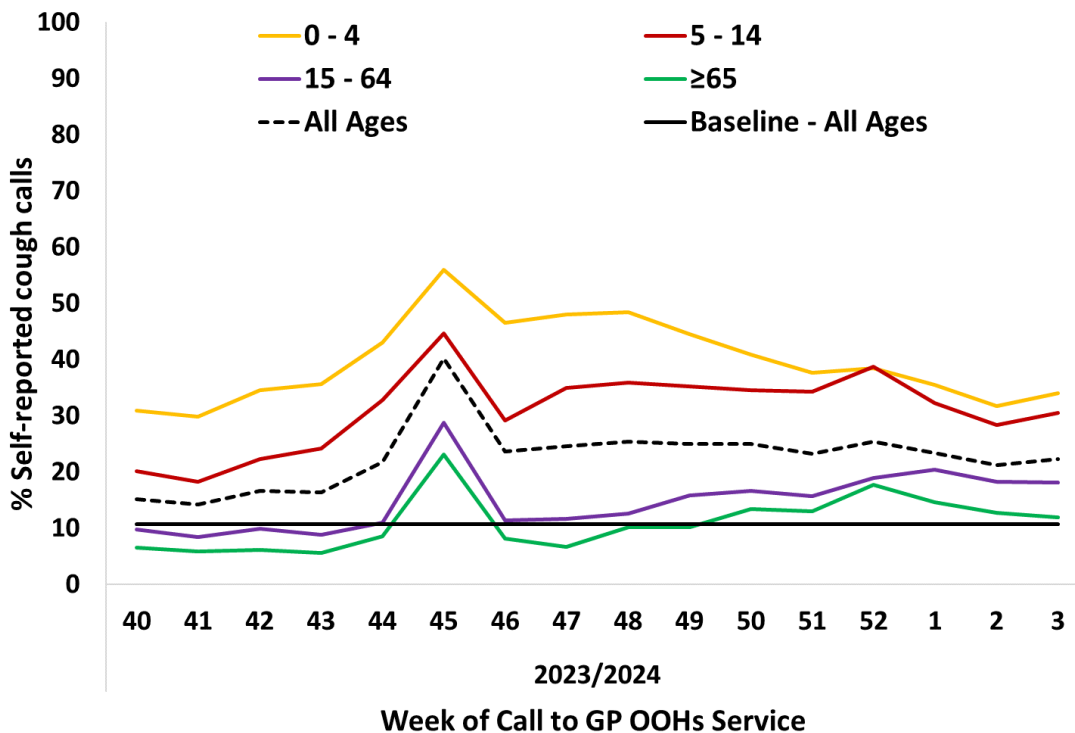
Virus	Week 3 2024 (N=271)		Week 2 2024 (N=326)		2023/2024 (N=3522)	
	Total positive	% positive	Total positive	% positive	Total positive	% positive
SARS-CoV-2	31	11.4	32	9.8	274	7.8
Influenza virus	61	22.5	58	17.8	589	16.7
Respiratory Syncytial Virus (RSV)	7	2.6	17	5.2	243	6.9
Rhino/enterovirus	17	6.3	26	8.0	407	11.6
Adenovirus	4	1.5	4	1.2	31	0.9
Bocavirus	0	0.0	1	0.3	10	0.3
Human metapneumovirus (hMPV)	5	1.8	4	1.2	33	0.9
Parainfluenza virus type 1 (PIV-1)	0	0.0	2	0.6	11	0.9
Parainfluenza virus type 2 (PIV-2)	0	0.0	3	0.9	9	0.3
Parainfluenza virus type 3 (PIV-3)	0	0.0	2	0.6	19	0.5
Parainfluenza virus type 4 (PIV-4)	0	0.0	0	0.0	23	0.7



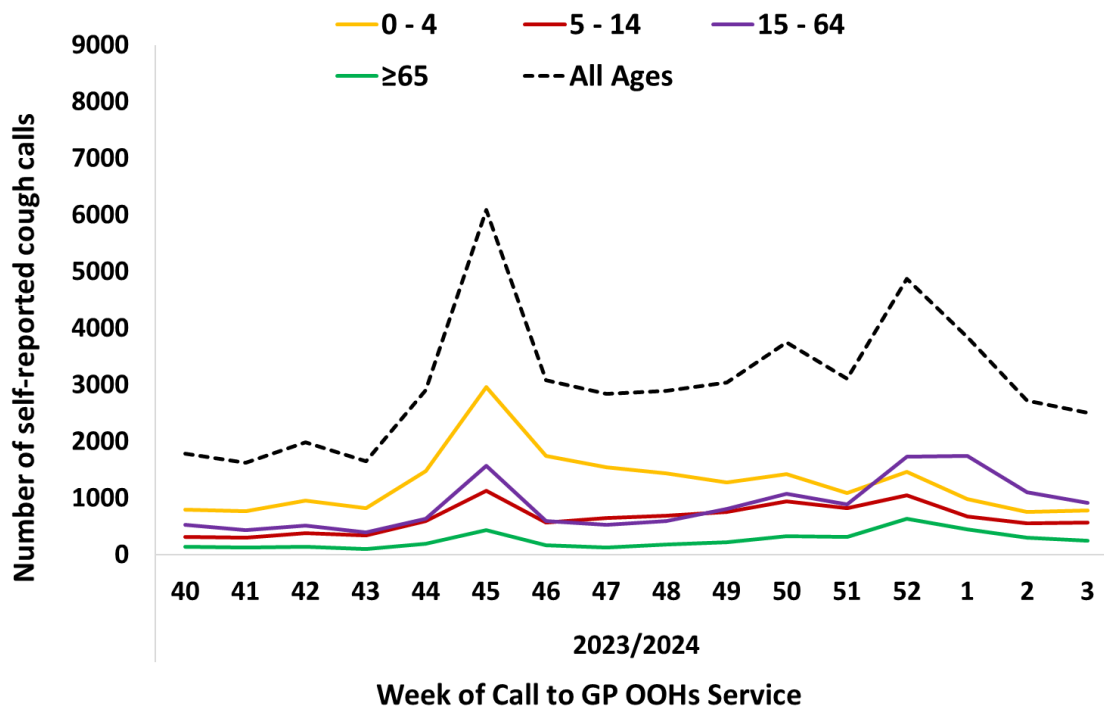
### 3. GP Out-Of-Hours Surveillance

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.

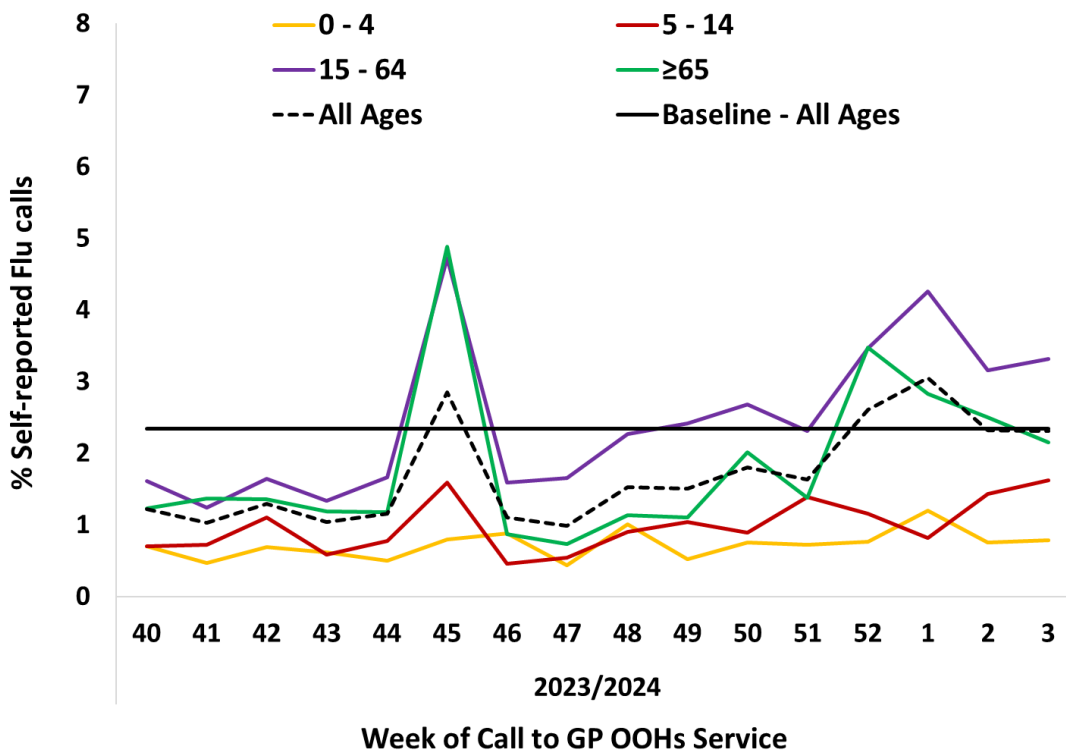
- Four participating GP OOH services provided data for week 3 2024.
- Out of a total of 11,234 calls made to the participating GP OOHs in week 3 2024:
  - 2499 (22%) were for self-reported 'cough', which is above the baseline threshold of 10.8% for cough calls. Coughs as a percentage of all calls is stable compared to the percentage of cough calls (21%) in week 2 2024 (Figures 5 and 6). Thirty-one percent (31%, 781/2499) of all cough calls were from those aged four years and under.
  - 259 (2.3%) were for self-reported 'flu', which is at the baseline threshold of 2.3% for 'flu' calls (Figures 7 and 8). This is stable compared to 2.3% 'flu' calls made in week 2. The highest burden of flu calls was in those aged 15 to 64 years at 64% (166/259), followed by those aged 65 years and older at 17% (44/259).



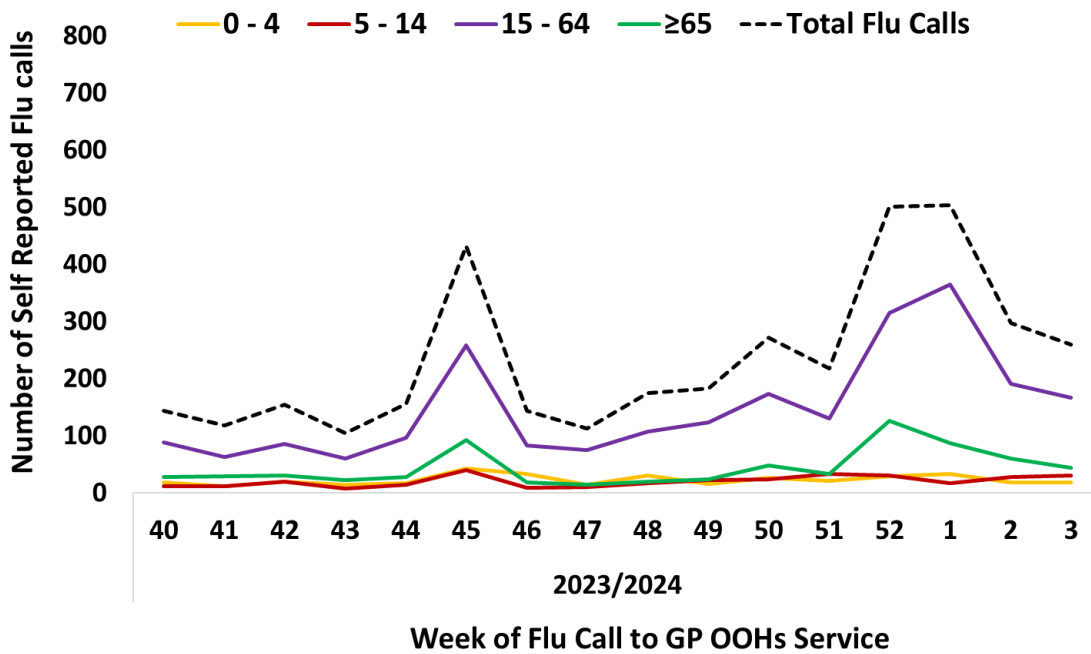
**Figure 5:** Percentage of self-reported **COUGH** calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call for the 2023/2024 season. The baseline % cough calls for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours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

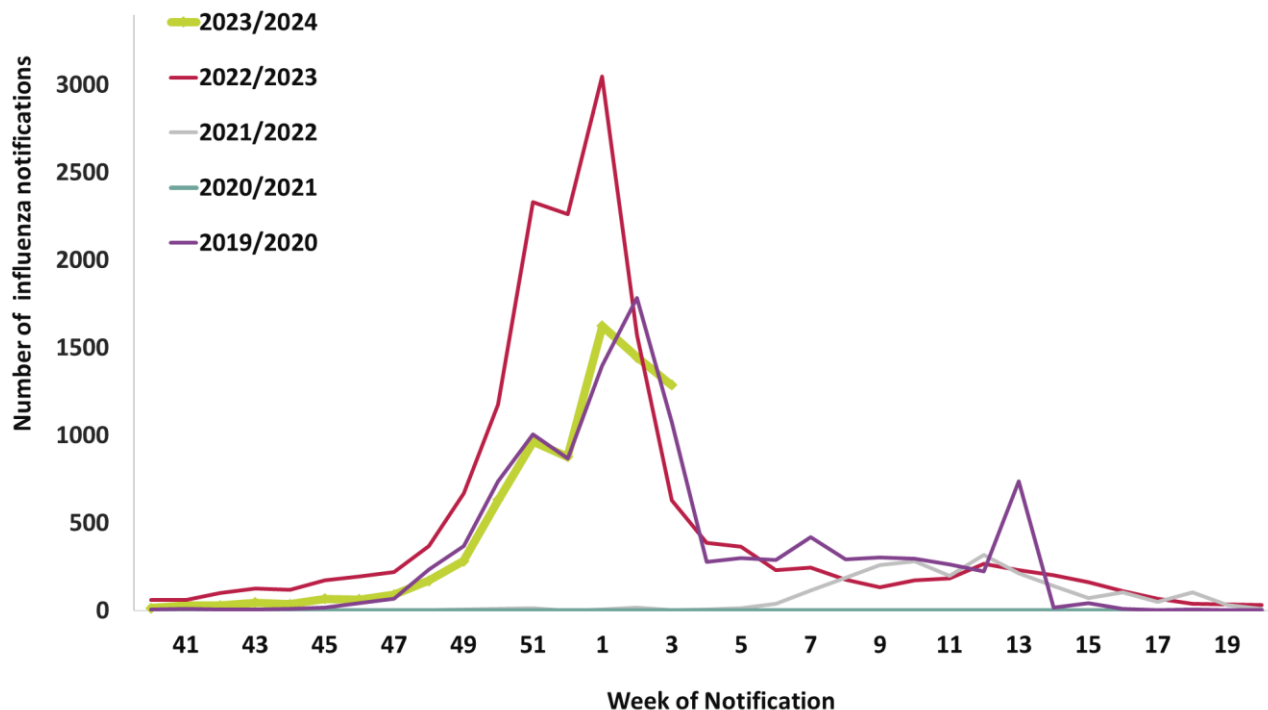


**Figure 8:** Number of self-reported **FLU** calls for all ages and by age group to GP Out-of-Hours services by week of call for the 2023/2024 season. *Source: GP Out-Of-Hours services in Ireland (collated by HSE & ICGP).*

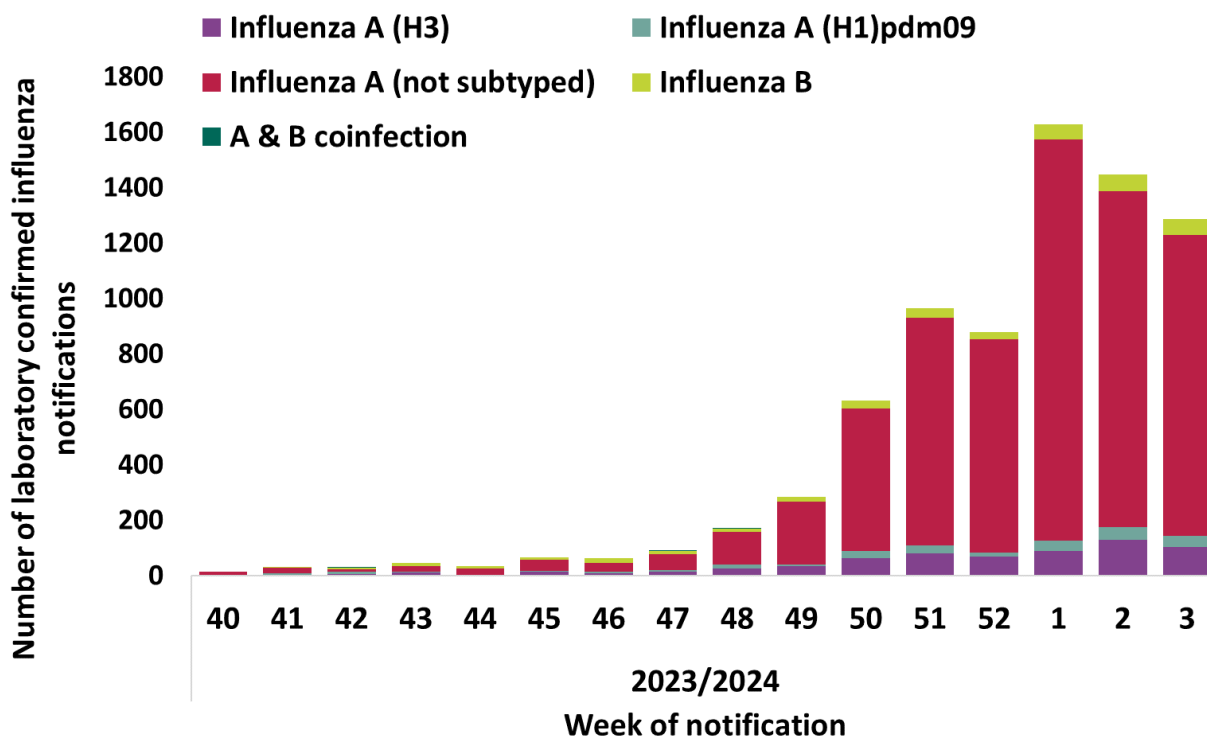
#### 4. Influenza & RSV notifications

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.

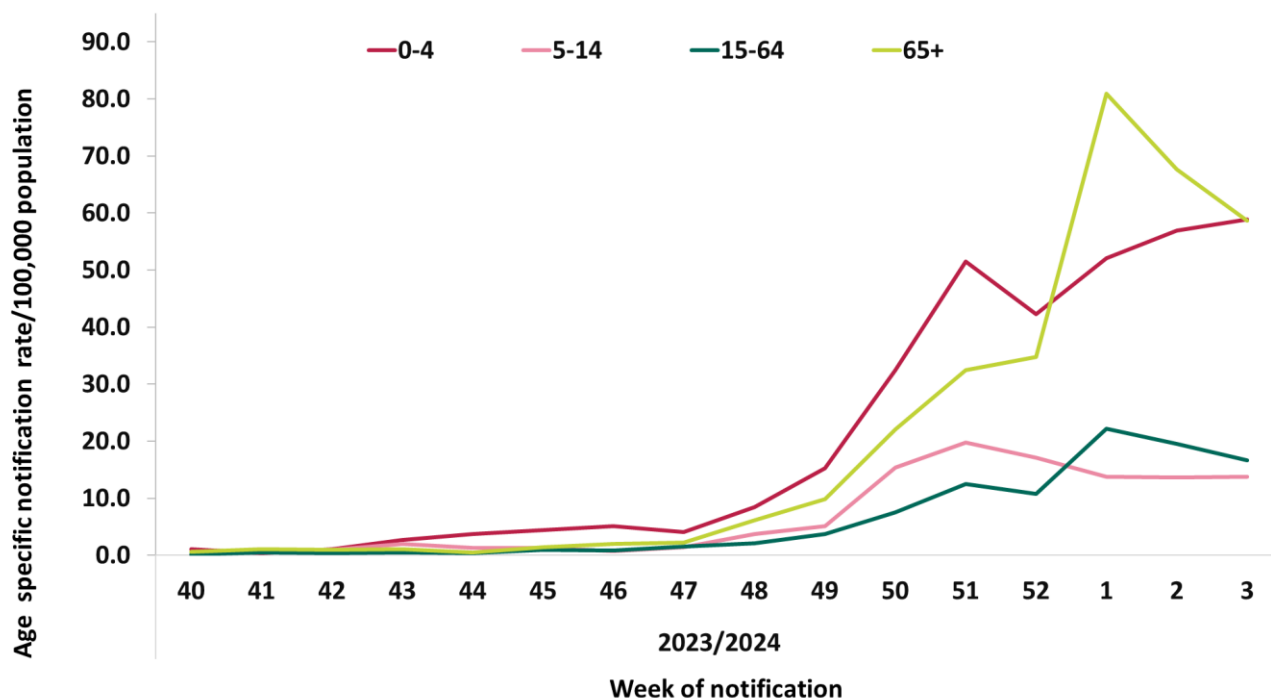
- Influenza and RSV notifications are reported in the [Weekly Infectious Disease Report for Ireland](#).
- 1287 laboratory confirmed influenza cases were notified during week 3 2024 (Table 6); corresponding to an overall notification rate of 25.0/100,000 population: 102 A(H3), 42 A(H1)pdm09, 1085 A (not subtyped) and 58 B. This is a decrease compared to 1444 cases notified during week 2 2024 (Figure 10).
- Although notification rates declined overall (Figure 10), notification rates in those aged 0-4 years continued to increase (Figure 11). Age specific influenza notification rates were highest in those this age-group, at 58.9/100,000 population, followed by those aged 65 years and older at 58.6/100,000 during week 3 2024 (Figure 11).
- The highest burden of notifications occurred in those aged 65 years and older at 35% (455/1287) of all influenza notifications in week 3 2024.
- Influenza notification rates were highest in the West and Northwest health region at 40.0/100,000 population (Table 6) during week 3 2024, with notifications from this region accounting for 24% of all notifications (304/1287).
- RSV notifications continued to decline with 212 cases notified during week 3 2024, compared to 303 cases during week 2 2024 (Figure 12).
- Age specific notification rates for RSV were highest in those aged less than one year, at 60.6/100,000 population, followed by those aged 65 years and older at 13.1/100,000 (Figure 13). Notifications in those aged 65 years and older accounted for 48% (102/212) of all RSV notifications in week 3 2024.
- RSV notification rates were highest in the Mid-West health region at 8.2/100,000 (Table 7), followed by the Dublin and Midlands health region at 4.4/100,000 population during week 3 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*



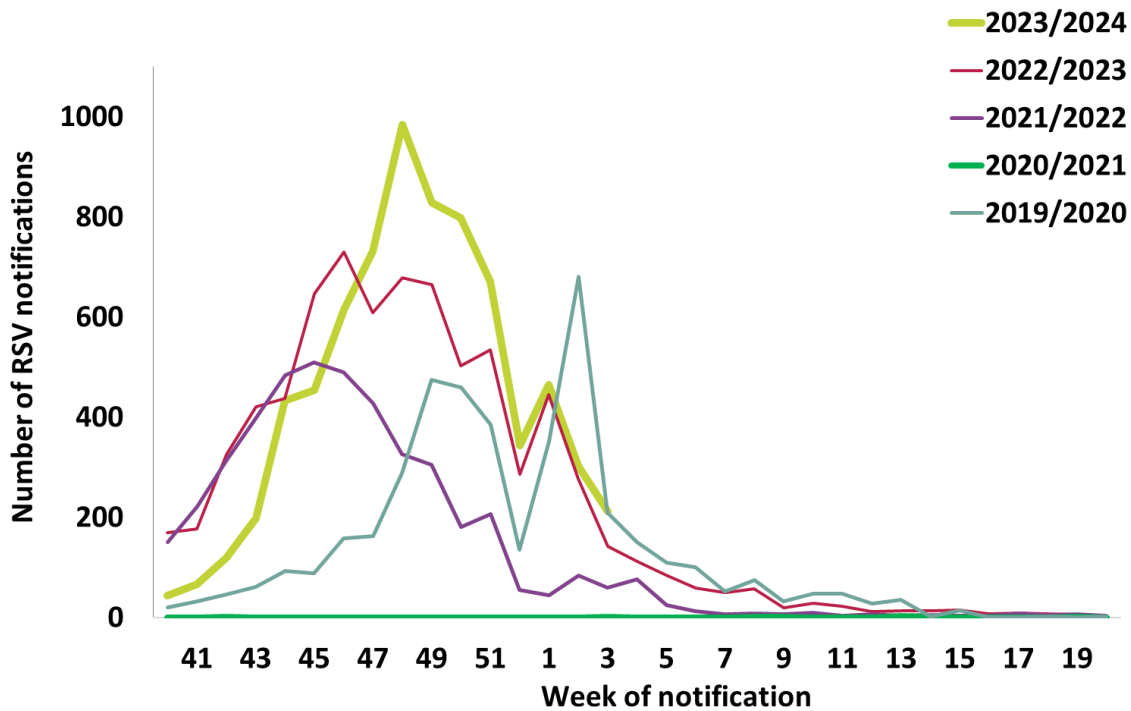
**Figure 11:** Age specific rates/100,000 population of laboratory confirmed **influenza** notifications to HPSC by week of notification for the 2023/2024 season. *Source: Ireland’s Computerised Infectious Disease Reporting System.*

**Table 6:** Number and rate/100,000 population of laboratory confirmed **influenza** notifications by HSE Health Region for week 3 2024 and the 2023/2024 season to date. *Source: CIDR*

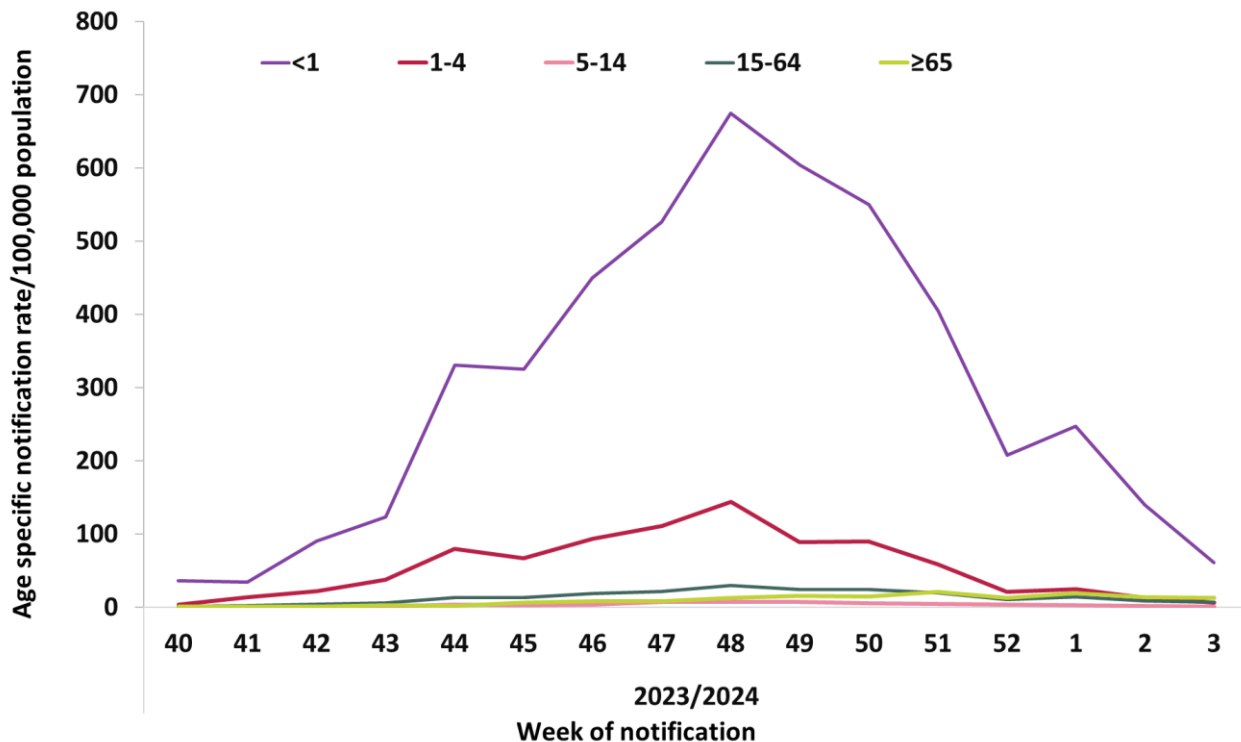
HSE Health Region	Week 3 2024		2023/2024 season (Week 40 2023 - Week 3	
	Number	Rate/100,000 population	Number	Rate/100,000 population
Dublin and North East	270	22.7	1390	117.1
Dublin and Midlands	257	23.8	1281	118.9
Dublin and South East	195	20.1	1170	120.5
South West	189	25.5	1330	179.6
Mid West	69	16.7	352	85.2
West and North West	304	40.0	2125	279.7
Unknown	3		5	
<b>Total</b>	<b>1287</b>	<b>25.0</b>	<b>7653</b>	<b>148.6</b>

**Table 7:** Number and rate/100,000 population of laboratory confirmed **RSV** notifications by HSE Health Region for week 3 2024 and the 2023/2024 season to date. *Source: CIDR*

HSE Health Region	Week 3 2024		2023/2024 season (Week 40 2023 - Week 3)	
	Number	Rate/100,000 population	Number	Rate/100,000 population
Dublin and North East	39	3.3	1402	118.1
Dublin and Midlands	47	4.4	1539	142.8
Dublin and South East	39	4.0	1066	109.8
South West	23	3.1	900	121.5
Mid West	34	8.2	591	143.1
West and North West	30	3.9	1761	231.8
<b>Total</b>	<b>212</b>	<b>4.1</b>	<b>7259</b>	<b>141.0</b>



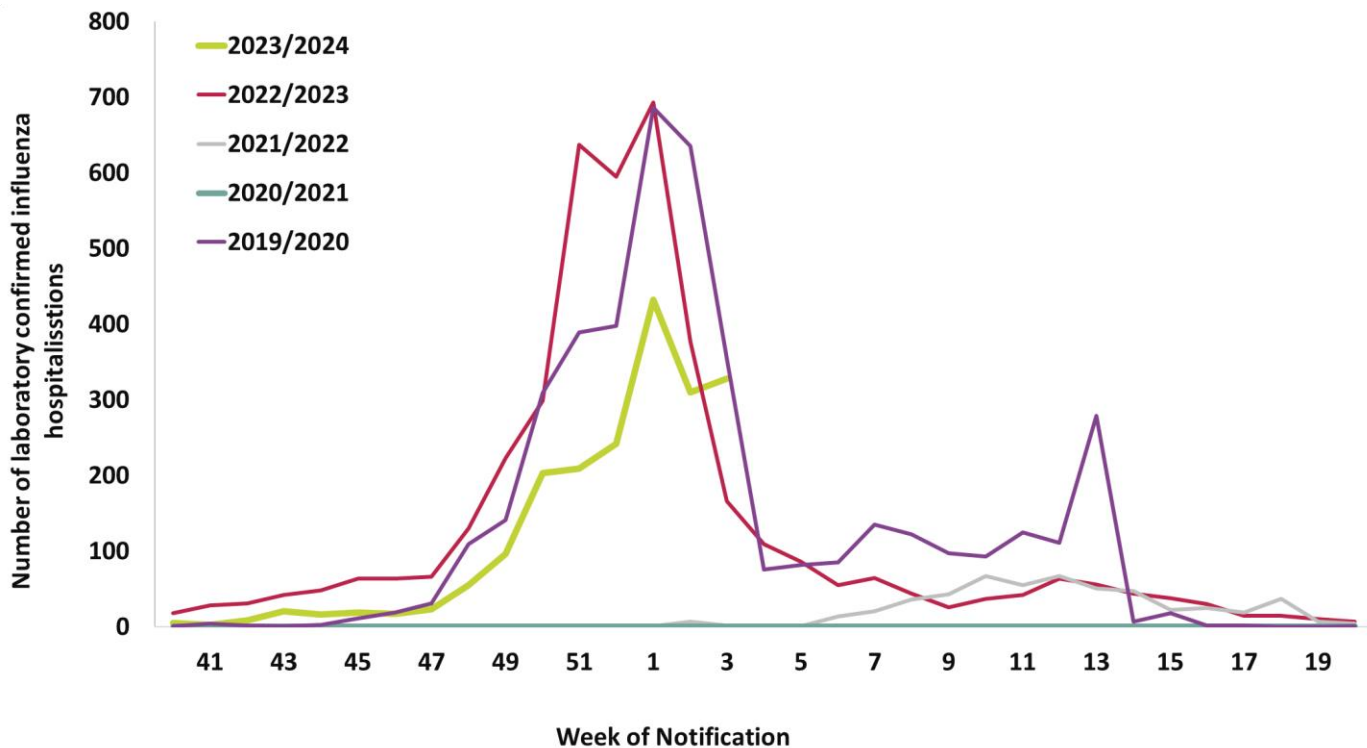
**Figure 12:** Number of laboratory confirmed **RSV** notifications to HPSC by week of notification, 2019/2020 to 2023/2024 seasons. *Source: Ireland’s Computerised Infectious Disease Reporting System.*



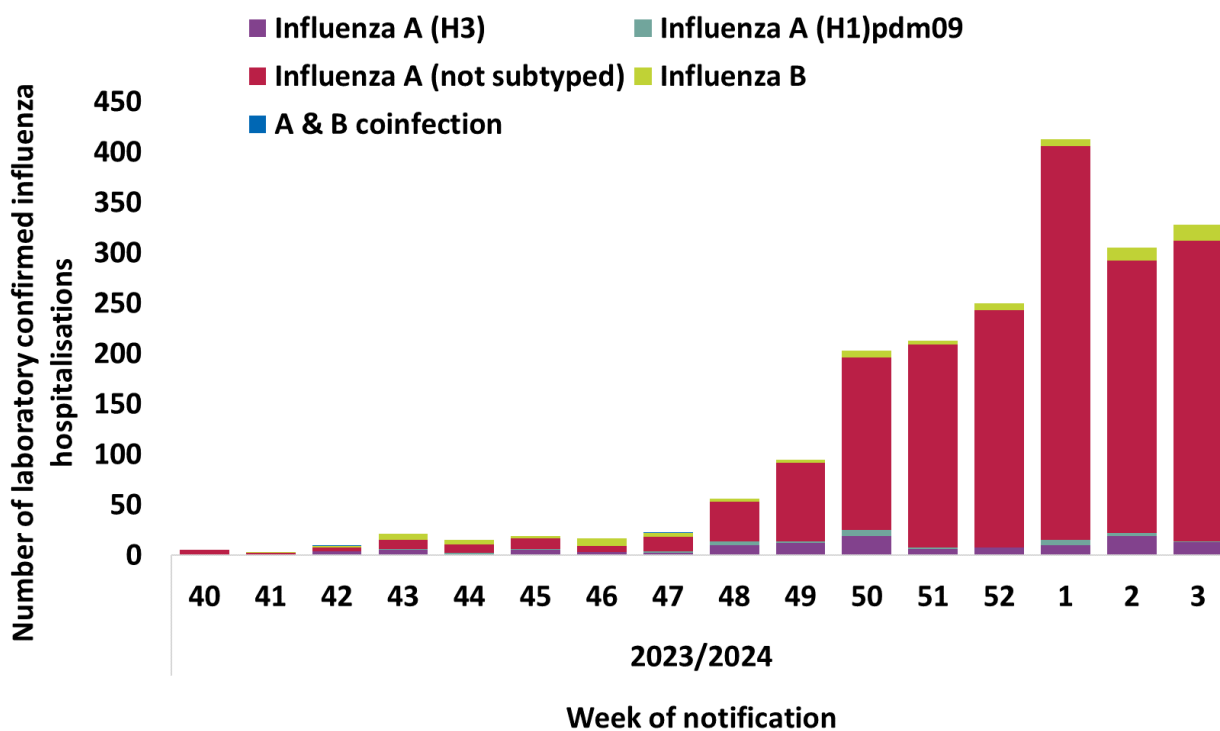
**Figure 13:** Age specific rates/100,000 population for laboratory confirmed RSV notifications to HPSC by week of notification for the 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

## 5. Hospitalisations

- During week 3 2024, the number of notified laboratory confirmed influenza hospital inpatients remained stable at 328, compared to 310 in week 2 2024. Of hospitalised cases, 298 were positive for A (not subtyped), 13 A(H3), one A(H1)pdm09 and 16 B (Figure 15).
- During week 3 2024, the age specific influenza hospitalisation rate was highest in those aged ≥65 years (20.4/100,000 population) and those aged 0-4 years (15.2/100,000 population) (Figure 16). Almost half (48%, 158/328) of all influenza hospitalisations occurred in those aged 65 years and older (Table 8).
- During week 3 2024, 62 laboratory confirmed RSV hospitalised cases were notified, a 42% decrease compared to 107 cases in week 2 2024 (Figure 17).
- The age specific RSV hospitalisation rate was highest in those aged less than one year (29.4/100,000 population) and those aged over 65 years (3.5/100,000 population) during week 3 2024 (Figure 18). Of the hospitalised RSV cases, 44% (27/62) 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.

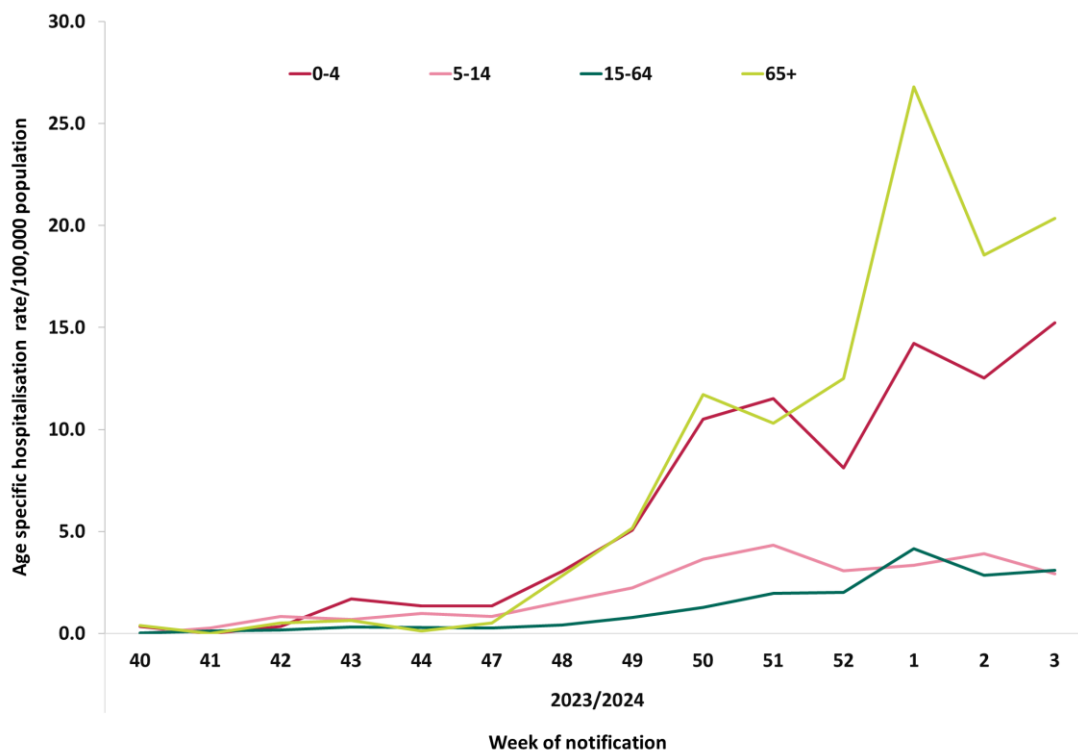


**Figure 14:** Number of notified **influenza** hospital inpatients, by week of notification and season, for the 2019/2020 to 2023/2024 seasons. *Source: Ireland’s Computerised Infectious Disease Reporting System.*



**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.*





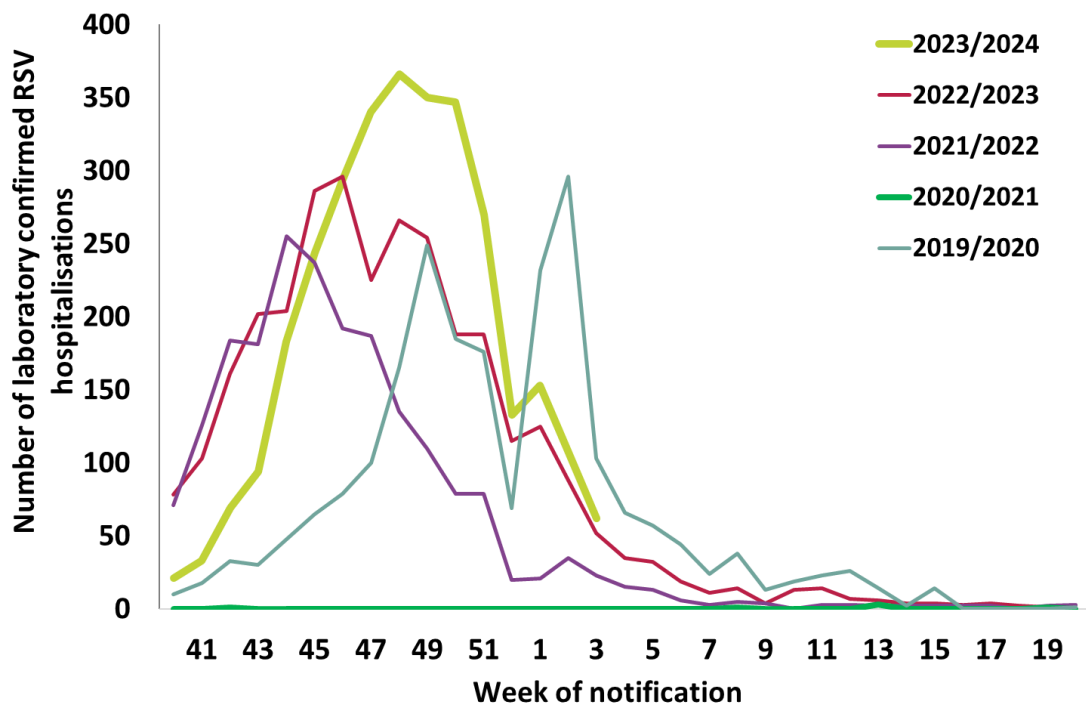
**Figure 16:** Age specific rates/100,000 population for laboratory confirmed **influenza** cases reported as **hospital inpatients** by week of notification for the 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

**Table 8:** Number, percentage and rate /100,000 population of notified laboratory-confirmed **influenza hospitalised cases notified** in week 3 2024 and the 2023/2024 season (week 40 2023 onwards). *Source: Ireland's Computerised infectious Disease Reporting System*

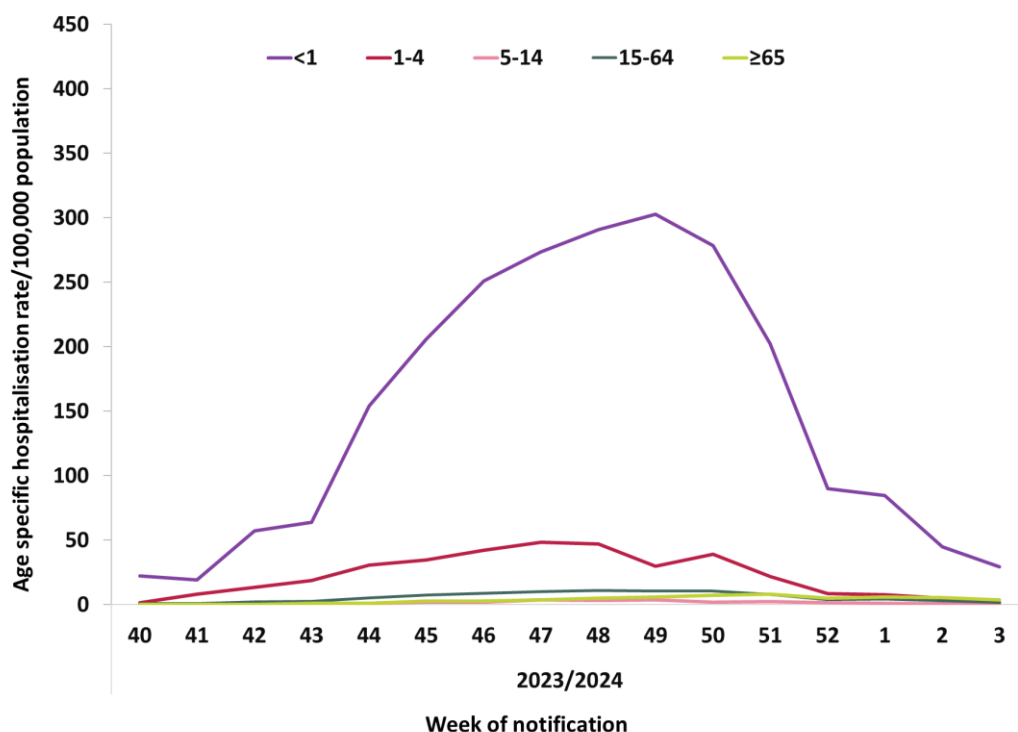
Age (years)	Hospitalised (Week 3)			Season to date (Week 40 2023 - Week 3 2024)		
	Number	% of all Hospitalisations	Rate/ 100,000 population	Number	% of all Hospitalisations	Rate/ 100,000 population
<1	12	3.7	20.8	59	3.0	102.1
1-4	33	10.1	13.9	214	10.8	90.1
5-14	21	6.4	2.9	211	10.6	29.4
15-24	15	4.6	2.3	79	4.0	12.3
25-34	18	5.5	2.9	111	5.6	17.7
35-44	26	7.9	3.3	142	7.1	17.9
45-54	15	4.6	2.1	99	5.0	13.9
55-64	30	9.1	5.2	172	8.7	29.7
≥65	158	48.2	20.4	901	45.3	116.1
Unknown	0		-	0		-
<b>Total</b>	<b>328</b>	<b>100</b>	<b>6.4</b>	<b>1988</b>	<b>100</b>	<b>342.9</b>

**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 3	65	597	328	16	50	40	191	<b>1287</b>
Week 2	89	813	310	17	55	31	129	<b>1444</b>
Week 1	98	817	432	14	74	28	161	<b>1624</b>
Week 52	56	455	242	11	32	16	65	<b>877</b>
Week 51	64	537	209	8	52	13	81	<b>964</b>
Week 50	27	311	203	5	35	5	45	<b>631</b>
Week 49	8	139	96	1	16	8	15	<b>283</b>
Week 48	16	64	55	1	11	4	19	<b>170</b>
Week 47	7	39	23	1	9	2	9	<b>90</b>
Week 46	8	28	17	0	5	1	5	<b>64</b>
Week 45	4	26	19	0	6	4	7	<b>66</b>
Week 44	0	15	16	1	1	0	3	<b>36</b>
Week 43	7	16	21	0	0	0	2	<b>46</b>
Week 42	6	9	9	0	1	0	3	<b>28</b>
Week 41	3	15	3	1	2	0	5	<b>29</b>
Week 40	0	6	5	0	3	0	0	<b>14</b>
<b>Total</b>	<b>458</b>	<b>3887</b>	<b>1988</b>	<b>76</b>	<b>352</b>	<b>152</b>	<b>740</b>	<b>7653</b>



**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 3 2024 and the 2023/2024 season (week 40 2023 onwards). *Source: Ireland’s Computerised infectious Disease Reporting System*

Age (years)	Hospitalised (Week 3 2024)			Season to date (Week 40 2023 - Week 3 2024)		
	Number	% of all Hospitalisations	Rate/ 100,000	Number	% of all Hospitalisations	Rate/ 100,000
<1	17	27.4	29.4	1373	44.8	2375.6
1-4	4	6.5	1.7	855	27.9	359.8
5-14	5	8.1	0.7	177	5.8	24.7
15-24	2	3.2	0.3	25	0.8	3.9
25-34	0	.0	0.0	29	0.9	4.6
35-44	3	4.8	0.4	36	1.2	4.5
45-54	2	3.2	0.3	45	1.5	6.3
55-64	2	3.2	0.3	81	2.6	14.0
≥65	27	43.5	3.5	446	14.5	57.5
Unknown	0		-	0		-
<b>Total</b>	<b>62</b>	<b>100</b>	<b>1.2</b>	<b>3067</b>	<b>100</b>	<b>59.6</b>

**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 3	18	63	62	1	9	28	31	<b>212</b>
Week 2	15	115	107	6	12	11	37	<b>303</b>
Week 1	17	146	153	10	14	16	108	<b>464</b>
Week 52	6	140	133	7	5	17	36	<b>344</b>
Week 51	33	266	270	8	13	9	72	<b>671</b>
Week 50	33	327	347	6	33	13	39	<b>798</b>
Week 49	26	346	350	8	19	9	67	<b>825</b>
Week 48	20	489	366	11	16	11	72	<b>985</b>
Week 47	14	285	340	3	19	17	52	<b>730</b>
Week 46	7	260	294	7	9	1	37	<b>615</b>
Week 45	7	167	245	5	6	2	22	<b>454</b>
Week 44	6	216	183	4	11	3	10	<b>433</b>
Week 43	2	74	94	0	4	2	21	<b>197</b>
Week 42	2	32	69	2	1	6	8	<b>120</b>
Week 41	1	23	33	1	1	1	7	<b>67</b>
Week 40	1	15	21	1	2	0	3	<b>43</b>
<b>Total</b>	<b>208</b>	<b>2964</b>	<b>3067</b>	<b>80</b>	<b>174</b>	<b>146</b>	<b>622</b>	<b>7261</b>

## 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 six laboratory confirmed influenza cases (all A (not subtyped)) admitted to intensive care units (ICU) and notified to HPSC during week 3 2024.
- Fifty influenza (38 A (not subtyped), 10 A(H3) and two A(H1)pdm09)) ICU cases have been notified for the season to date (weeks 40 2023- 3 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 3 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	59	102.1	1	1.7
1-4	214	90.1	1	0.4
5-14	211	29.4	2	0.3
15-24	79	12.3	2	0.3
25-34	111	17.7	3	0.5
35-44	142	22.6	3	0.4
45-54	99	13.9	5	0.7
55-64	172	29.7	12	2.1
≥65	901	116.1	21	2.7
Unknown	0	-	0	-
<b>Total</b>	<b>1988</b>	<b>38.6</b>	<b>50</b>	<b>1.0</b>

## 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 two deaths in notified influenza cases reported to HPSC during week 3 2024.
- 23 influenza A deaths (19 A (not-subtyped), three A(H3) and one A(H1)pdm09) have been notified for the season to date (weeks 40 2023-3 2024).
- There was no excess all-cause mortality for the entire population reported for week 2 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 3 2024, 22 influenza outbreaks (eight in nursing homes, nine in acute hospitals, four in residential institution and one in an other health and care setting) were notified to HPSC. (Tables 13 & 14).
- Six RSV outbreaks (five in nursing homes and one in a community hospital/long-stay unit) and no other ARI (caused by pathogens other than influenza, SARS-CoV-2, or RSV) outbreaks were notified to HPSC during week 3 2024.
- There have been 158 ARI/influenza/RSV (excluding COVID-19) outbreaks notified to HPSC to date this season, comprising 102 influenza outbreaks, 32 RSV outbreaks and 24 other ARI outbreaks.

**Table 13:** Summary of influenza, RSV and ARI (influenza/RSV/SARS-CoV-2 negative) outbreaks by HSE Health Region during week 3 2024 and the 2023/2024 season (week 40 2023 – week 3 2024) *Source: CIDR*

HSE Health Region	Influenza		RSV		ARI		Total	
	Week 3	2023/2024	Week 3	2023/2024	Week 3	2023/2024	Week 3	2023/2024
Dublin and North East	2	7	1	7	0	11	3	25
Dublin and Midlands	5	13	1	11	0	0	6	24
Dublin and South East	3	15	1	3	0	6	4	24
South West	2	18	0	0	0	1	2	19
Mid West	0	3	1	3	0	0	1	6
West and North West	7	43	0	6	0	6	7	55
Unknown	3	3	2	2	0	0	5	5
<b>Total</b>	<b>22</b>	<b>102</b>	<b>6</b>	<b>32</b>	<b>0</b>	<b>24</b>	<b>28</b>	<b>158</b>

**Table 14:** Summary of influenza, RSV and ARI (influenza/RSV/SARS-CoV-2 negative) outbreaks by outbreak setting during week 3 2024 and the 2023/2024 season (week 40 2023 – week 3 2024). *Source: CIDR*

Setting	Influenza		RSV		ARI		Total	
	Week 3	2023/2024	Week 3	2023/2024	Week 3	2023/2024	Week 3	2023/2024
Community hospital/Long-stay unit	0	8	1	2	0	3	1	13
Nursing Home	8	36	5	11	0	15	13	62
Hospital	9	34	0	10	0	0	9	44
Residential Institution	4	15	0	4	0	3	4	22
Childcare facility	0	0	0	2	0	0	0	2
Other settings	1	9	0	3	0	3	2	15
<b>Total</b>	<b>22</b>	<b>102</b>	<b>6</b>	<b>32</b>	<b>0</b>	<b>24</b>	<b>29</b>	<b>158</b>

## 9. International Summary

According to [European Respiratory Virus Surveillance Summary](#), in the WHO European region during week 2 2024 (including data up to 14/01/2024), influenza activity is above baseline levels; all three influenza virus types/subtypes - A(H1N1)pdm09, A(H3) and B - are co-circulating. Of 38 countries reporting geographical spread of influenza in the WHO European region, 25 reported widespread activity, six reported regional, one reported local and five reported sporadic activity. During the 2023/2024 season, RSV activity began to increase around week 36 2023. Countries continue to report a mix of increasing and decreasing trends for RSV activity and severity indicators. The increase appears to have occurred around four weeks later than last year.

As of 24<sup>th</sup> December 2023, WHO has reported that globally influenza detections increased due to increases 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 increased 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 continued to increase mainly due to activity in China and the Republic of Korea. Influenza activity remained moderate in the Caribbean with detections of predominantly influenza A(H1N1)pdm09 and remained low overall in Central America with detections of predominantly B/Victoria lineage viruses. In tropical Africa, influenza detections decreased in Western Africa but increased 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](http://www.hpsc.ie)**

#### **Acknowledgements**

This report was prepared by the HPSC influenza epidemiology team: Adele McKenna, Eva Kelly, Nancy Somi, 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.