

# Influenza, RSV and Other Respiratory Viruses Surveillance Report

## Week 1 2024 (1<sup>st</sup> – 7<sup>th</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](#).

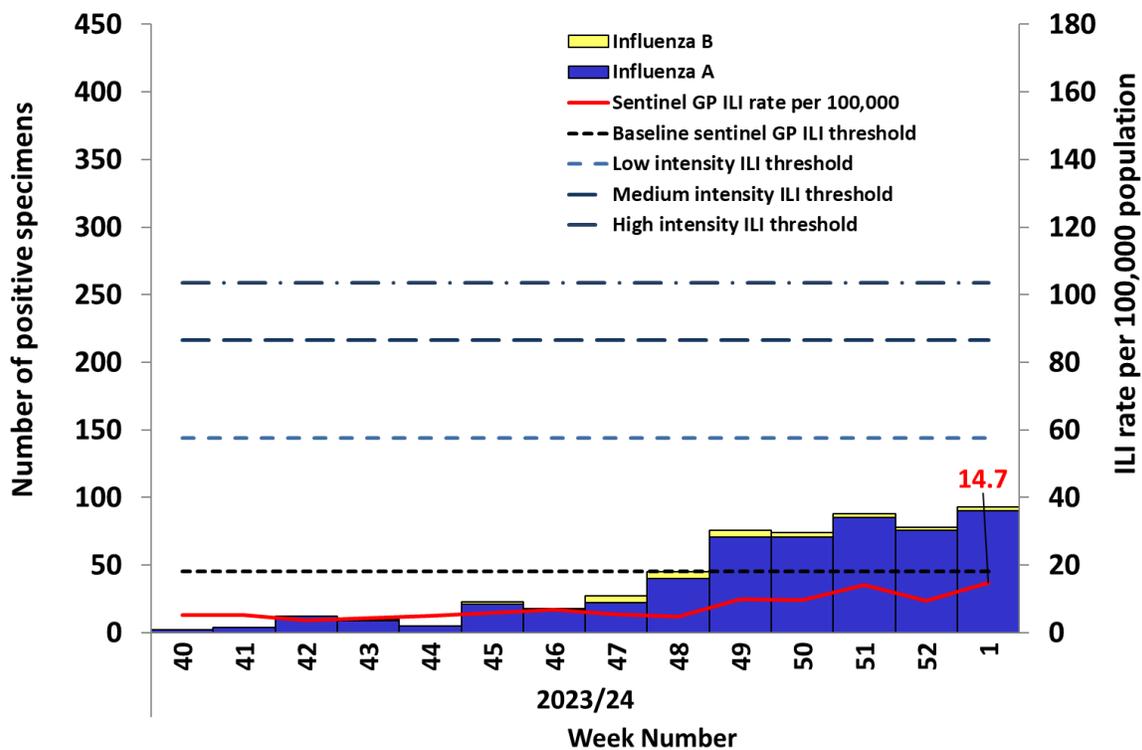
### Summary Week 1 2024

Influenza activity increased significantly during week 1 2024, with an increase in notified influenza cases, hospitalised cases and outbreaks reported. Influenza A(H3) viruses are beginning to predominate; with influenza A(H3), A(H1)pdm09 and B all 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. Respiratory syncytial virus (RSV) activity peaked in early December and continued to decrease throughout December; a slight increase was noted during week 1 2024.

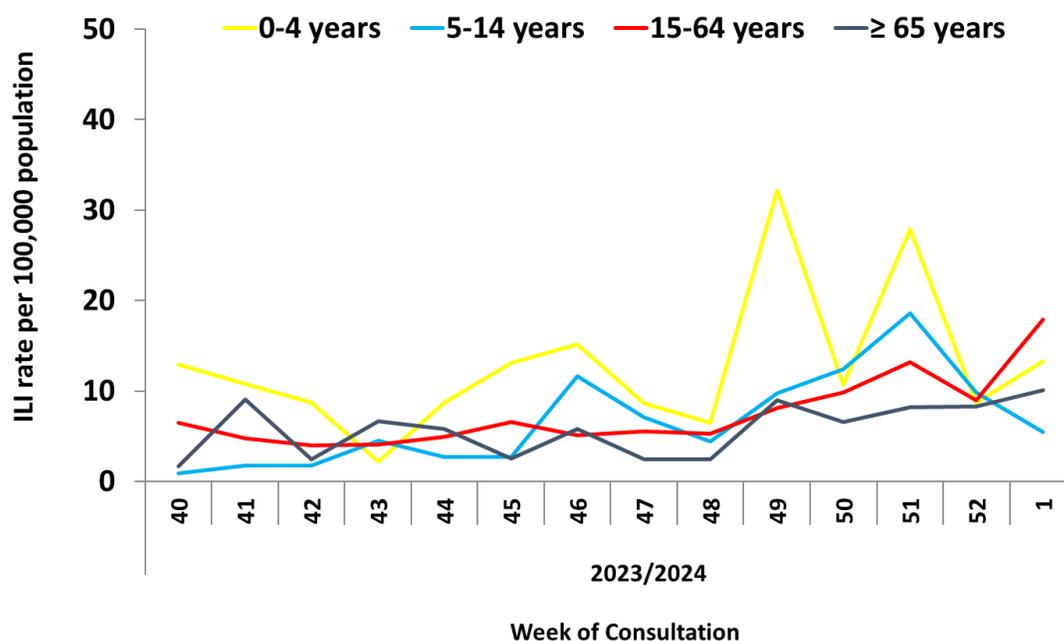
- **Influenza-like illness (ILI):** The sentinel GP influenza-like illness (ILI) consultation rate was 14.7 per 100,000 population during week 1 2024, compared to an updated rate of 9.5/100,000 in week 52 2023. ILI consultation rates have been below the Irish baseline threshold (18.1/100,000 population) for the season to date (week 40 2023 to week 1 2024). ILI age specific rates were highest in the 15–64 year age group (17.9/100,000), however remain below baseline in all age groups.
- **National Virus Reference Laboratory (NVRL):** During week 1 2024, of 165 sentinel GP acute respiratory infection (ARI) specimens tested and reported by the NVRL, 47 (28.5%) were positive for influenza (27 A(H3), 15 A(H1)pdm09, two A (not subtyped) and three B), nine (5.5%) for RSV, 15 (9.1%) for SARS-CoV-2 and 19 (11.5%) for rhino/enterovirus.
- Of 306 non-sentinel respiratory specimens tested and reported by the NVRL during week 1 2024, 46 (15.0%) were positive for influenza (31 A(H3), 13 A(H1)pdm09 and two A (not subtyped)), 32 (10.5%) for SARS-CoV-2, five (1.6%) for RSV and 18 (5.9%) for rhino/enterovirus.
- **GP Out of hours (OOHs):** Cough calls comprised 23% (3842/16476) of all reported GP OOHs calls during week 1 2024, which is above the baseline threshold of 10.8%. Twenty-five percent (25%-975/3842) of cough calls were in those aged 0-4 years. Flu calls comprised 3.1% (503/16476) of all calls in week 1 2024, which is above the baseline threshold level (2.3%). The majority (72%; 364/503) of all flu calls were in those aged 15-64 years.
- **Influenza notifications:** 1628 laboratory confirmed influenza cases were notified during week 1 2024: 90 influenza A (H3), 36 A(H1)pdm09, 1448 influenza A (not subtyped) and 54 influenza B. This is a substantial increase compared to 879 cases notified during week 52 2023.
- **RSV notifications:** 465 RSV cases were notified during week 1 2024, compared to 344 cases during week 52 2023. Age specific rates were highest in those aged less than one year.
- **Hospitalisations:** Notified laboratory confirmed influenza hospitalised cases increased, with 414 cases notified in week 1 2024, compared to 249 in week 52 2023. Of the hospitalised cases, 392 were positive for influenza A (not-subtyped), 10 A(H3), five A(H1)pdm09 and seven influenza B. There were 146 laboratory confirmed RSV hospitalised cases notified in week 1 2024, compared to 133 cases in week 52 2023. Of hospitalised RSV cases, 34% (49/146) were aged <1 year.
- **Intensive care admissions:** Six laboratory confirmed influenza A cases (not subtyped) were admitted to an intensive care unit and notified to HPSC during week 1 2024. Twenty-six influenza ICU cases (four A(H3), two A(H1)pdm09) and 20 A (not subtyped) have been notified for the season to date (week 40 2023 – week 1 2024).
- **Mortality:** One death in a notified influenza case was reported to HPSC during week 1 2024 and 15 for the season to date (13 influenza A (not-subtyped), one A(H3) and one A(H1)pdm09). No excess all-cause mortality was reported for the entire population since week 2 2023.
- **Outbreaks:** During week 1 2024, 23 influenza outbreaks (9 in nursing homes, 5 in acute hospitals, 4 in community hospitals, 3 in residential institutions and 2 in other settings), two RSV outbreaks in nursing homes and five ARI (not influenza/RSV/COVID-19) outbreaks (4 in nursing homes and 1 in a residential institution) were notified to HPSC.
- **International:** In the EU/EEA during week 52 2023, while there is variation in the region, influenza activity continues to increase, with increasing GP ILI/ARI consultation rates. 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 1 2024, 116 sentinel GP influenza-like illness (ILI) consultations were reported from the Irish sentinel GP network, corresponding to an ILI consultation rate of 14.7 per 100,000 population, compared to an updated rate of 9.5 per 100,000 population during week 52 2023 (Figure 1).
- Out of the 99 GP practices in the Irish sentinel GP network, 91 provided clinical consultations data during week 1 2024.
- The sentinel GP ILI consultation rates have been below the Irish sentinel GP ILI baseline threshold (18.1/100,000 population) this season to date.
- Age specific ILI consultation rates were below age specific baseline thresholds in all age groups during week 1 2024 and the 2023/2024 season to date (week 40 2023 to week 1 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 15-64 years (17.9/100,000) during week 1 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 1 2024). *Source: ICGP.*

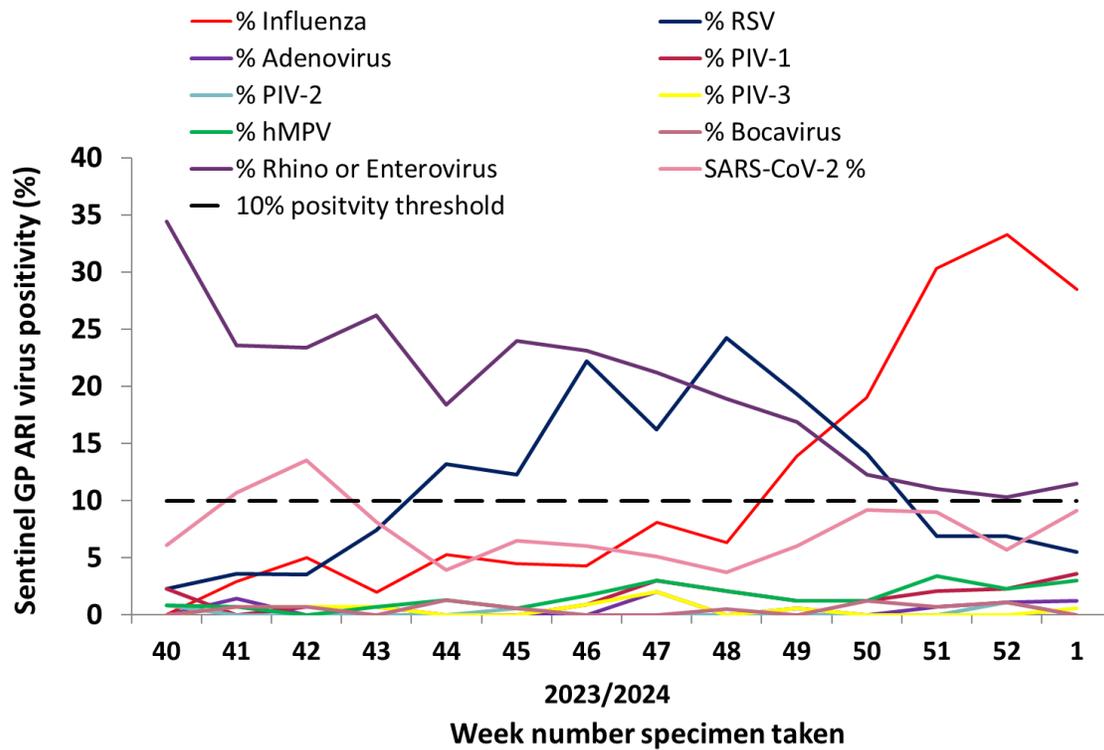
**Table 1:** Age specific sentinel GP ILI consultation rate per 100,000 population by week (week 40 2023 to week 1 2024), colour coded by sentinel GP ILI age specific Moving Epidemic Method (MEM) threshold levels. *Source: ICGP.*

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
All Ages	5.3	5.3	3.7	4.4	5.0	5.8	6.7	5.4	4.8	9.9	9.7	14.2	9.5	14.7
<15 yrs	4.1	4.1	3.5	3.6	4.1	5.3	11.8	7.0	4.7	15.1	11.1	19.8	8.8	7.2
15-64 yrs	6.4	4.7	4.0	4.0	5.0	6.5	5.1	5.5	5.3	8.1	9.8	13.2	9.0	17.9
≥65 yrs	1.6	9.0	2.5	6.7	5.8	2.5	5.8	2.5	2.5	9.0	6.5	8.2	8.3	10.1
Reporting practices (N=99)	93	93	92	91	92	92	93	95	95	96	96	96	95	91

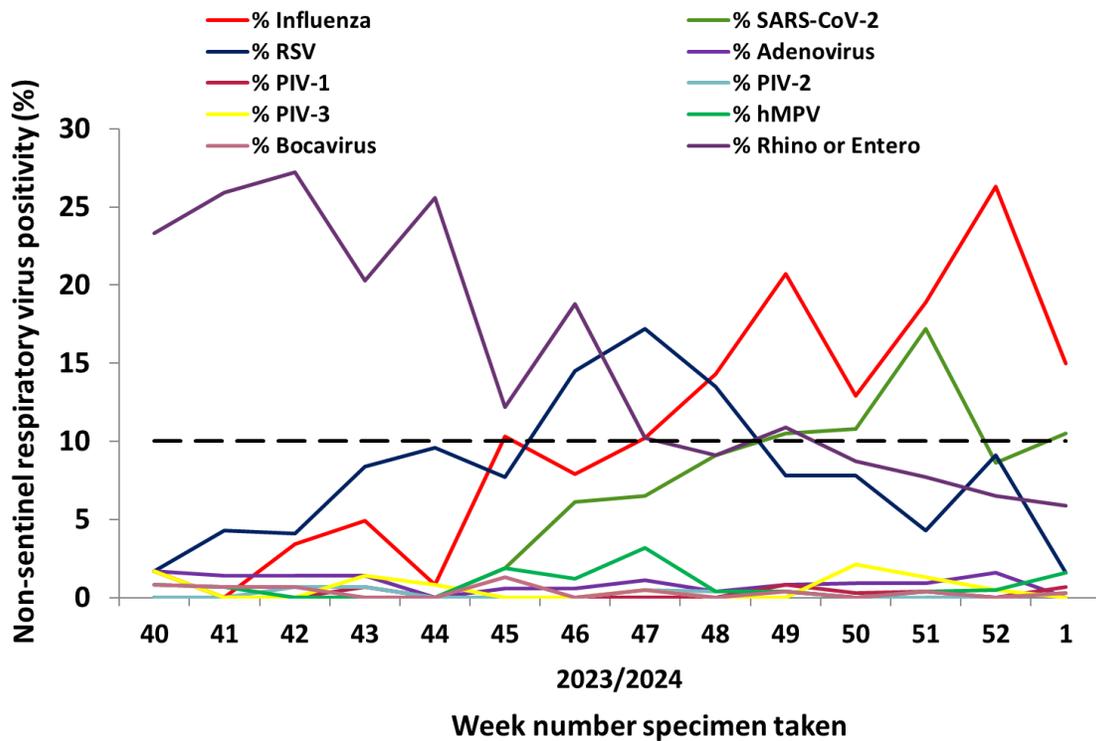
## 2. Influenza and Other Respiratory Virus Detections - NVRL

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).

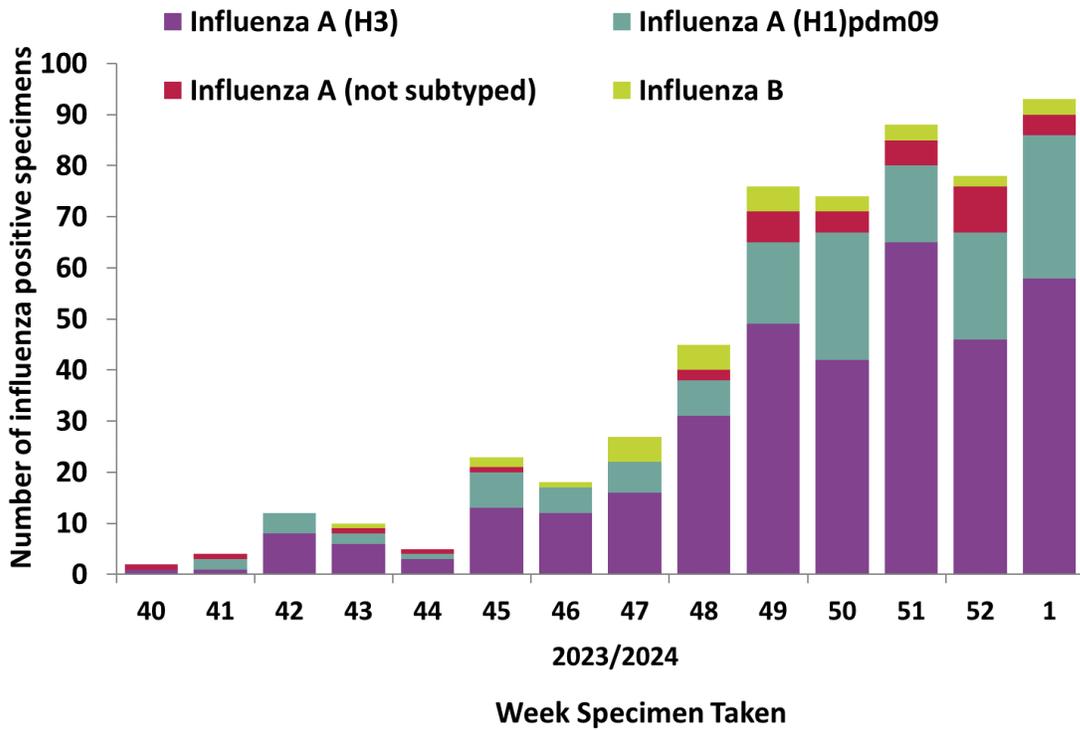
- A lag time with testing and reporting is noted for the most recent surveillance week.
- During week 1 2024, of 165 sentinel GP ARI specimens tested and reported by the NVRL, 47 (28.5%) were positive for influenza (27 A(H3), 15 A(H1)pdm09, two A (not subtyped), and three influenza B), nine (5.5%) for RSV, 15 (9.1%) for SARS-CoV-2, and 19 (11.5%) for rhino/enterovirus.
- In comparison during week 52 2023, of 87 sentinel GP ARI specimens tested and reported by the NVRL, 29 (33.3%) were positive for influenza (16 A(H3), seven A(H1)pdm09, five A (not subtyped) and one B), six (6.9%) for RSV, five (5.7%) for SARS-CoV-2, and nine (10.3%) for rhino/enterovirus.
- For the 2023/2024 season to date (week 40 2023 to week 1 2024), of 1923 sentinel GP ARI specimens tested and reported by the NVRL, 224 (11.6%) were positive for influenza, 221 (11.5%) for RSV, 144 (7.5%) for SARS-CoV-2, and 377 (19.6%) for rhino/enterovirus (Table 4).
- During week 1 2024, of 306 non-sentinel respiratory specimens tested and reported by the NVRL, 46 (15.0%) were positive for influenza (31 A(H3), 13 A(H1)pdm09 and two A (not subtyped)), 32 (10.5%) for SARS-CoV-2, five (1.6%) for RSV and 18 (5.9%) for rhino/enterovirus.
- During week 52 2023, of 186 non-sentinel respiratory specimens tested, 49 (26.3%) were positive for influenza (30 A(H3), 14 A(H1)pdm09, four A (not subtyped), and one B), 16 (8.6%) for SARS-CoV-2, 17 (9.1%) for RSV, and 12 (6.5%) for rhino/enterovirus (Figure 3b).
- For the 2023/2024 season to date (week 40 2023 to week 1 2024), of 2725 non-sentinel respiratory specimens tested and reported by the NVRL, 331 (12.1%) were positive for influenza, 215 (7.9%) for RSV, 197 (7.2%) for SARS-CoV-2, and 360 (13.2%) for rhino/enterovirus (Table 5).
- Other respiratory viruses (ORVs) are being detected at lower levels (Figure 3a and 3b).
- Of 558 sentinel GP ARI specimens and non-sentinel specimens positive for influenza and reported by the NVRL during the 2023/2024 season, 37 (6.6%) 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 52 2023 and week 1 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 1 2024</b>	Sentinel GP ARI	165	47	28.5	15	27	2	44	3	0	0	3
	Non-sentinel respiratory	306	46	15.0	13	31	2	46	0	0	0	0
	<b>Total</b>	<b>471</b>	<b>93</b>	<b>19.7</b>	<b>28</b>	<b>58</b>	<b>4</b>	<b>90</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>
<b>Week 52 2023</b>	Sentinel GP ARI	87	29	33.3	7	16	5	28	1	0	0	1
	Non-sentinel respiratory	186	49	26.3	14	30	4	48	1	0	0	1
	<b>Total</b>	<b>273</b>	<b>78</b>	<b>28.6</b>	<b>21</b>	<b>46</b>	<b>9</b>	<b>76</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>2</b>
<b>2023/2024</b>	Sentinel GP ARI	1923	224	11.6	56	134	19	209	15	0	0	15
	Non-sentinel respiratory	2725	331	12.1	83	217	16	316	9	6	0	15
	<b>Total</b>	<b>4648</b>	<b>555</b>	<b>11.9</b>	<b>139</b>	<b>351</b>	<b>35</b>	<b>525</b>	<b>24</b>	<b>6</b>	<b>0</b>	<b>30</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 week50 2023 and week 1 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 1 2024</b>	Sentinel GP ARI	165	9	5.5	6	3	0
	Non-sentinel	306	5	1.6	4	1	0
	<b>Total</b>	<b>471</b>	<b>14</b>	<b>3.0</b>	<b>10</b>	<b>4</b>	<b>0</b>
<b>Week 52 2023</b>	Sentinel GP ARI	87	6	6.9	4	2	0
	Non-sentinel	186	17	9.1	15	2	0
	<b>Total</b>	<b>273</b>	<b>23</b>	<b>8.4</b>	<b>19</b>	<b>4</b>	<b>0</b>
<b>2023/2024</b>	Sentinel GP ILI/ARI	1923	221	11.5	168	53	0
	Non-sentinel	2725	215	7.9	179	36	0
	<b>Total</b>	<b>4648</b>	<b>436</b>	<b>9.4</b>	<b>347</b>	<b>89</b>	<b>0</b>

**Table 4:** Number and percentage positive sentinel GP ARI specimens by **respiratory virus**, week 52 2023 and week 1 2024, and the 2023/2024 season. *Source: NVRL*

Virus	Week 1 2024 (N=165)		Week 52 2023 (N=87)		2023/2024 (N=1923)	
	Total positive	% positive	Total positive	% positive	Total positive	% positive
SARS-CoV-2	15	9.1	5	5.7	144	7.5
Influenza virus	47	28.5	29	33.3	224	11.6
Respiratory Syncytial Virus (RSV)	9	5.5	6	6.9	221	11.5
Rhino/enterovirus	19	11.5	9	10.3	377	19.6
Adenovirus	2	1.2	1	1.1	9	0.5
Bocavirus	0	0.0	1	1.1	9	0.5
Human metapneumovirus (hMPV)	5	3.0	2	2.3	30	1.6
Parainfluenza virus type 1 (PIV-1)	6	3.6	2	2.3	28	1.5
Parainfluenza virus type 2 (PIV-2)	0	0.0	1	1.1	3	0.2
Parainfluenza virus type 3 (PIV-3)	1	0.6	0	0.0	8	0.4
Parainfluenza virus type 4 (PIV-4)	1	0.6	0	0.0	41	2.1

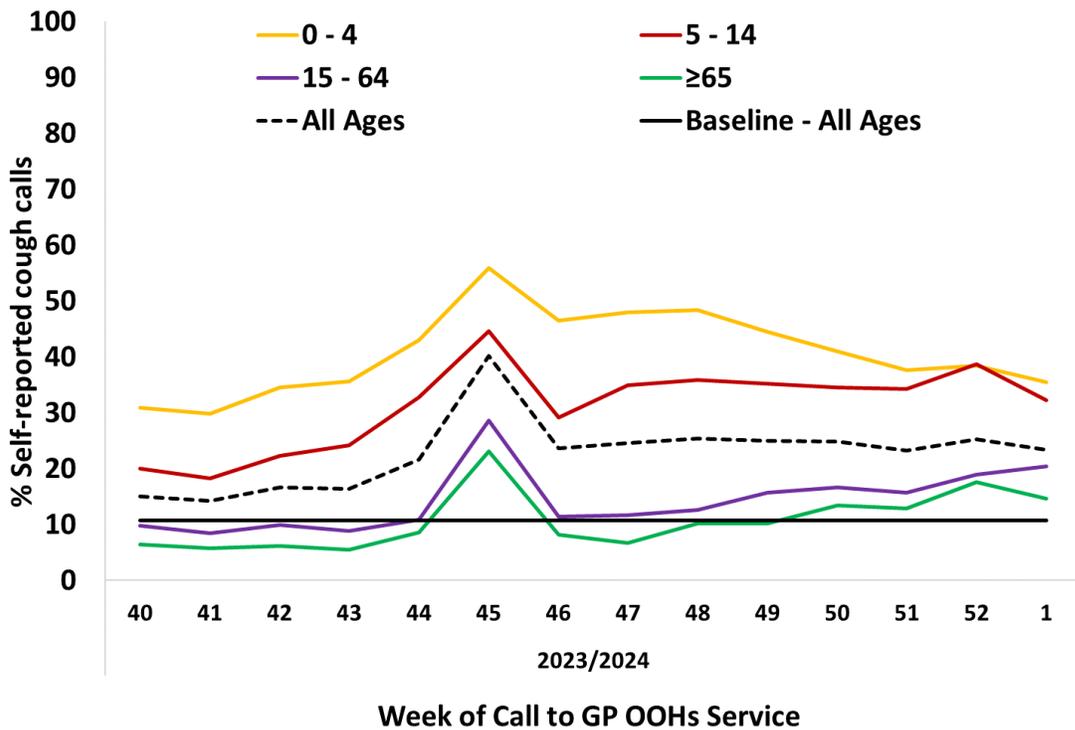
**Table 5:** Number and percentage positive non-sentinel respiratory specimens, by **respiratory virus**, week 52 2023 and week 1 2024, and the 2023/2024 season. *Source: NVRL*

Virus	Week 1 2024 (N=306)		Week 52 2023 (N=186)		2023/2024 (N=2725)	
	Total positive	% positive	Total positive	% positive	Total positive	% positive
SARS-CoV-2	32	10.5	16	8.6	197	7.2
Influenza virus	46	15.0	49	26.3	334	12.3
Respiratory Syncytial Virus (RSV)	5	1.6	17	9.1	215	7.9
Rhino/enterovirus	18	5.9	12	6.5	360	13.2
Adenovirus	0	0.0	3	1.6	23	0.8
Bocavirus	1	0.3	0	0.0	9	0.3
Human metapneumovirus (hMPV)	5	1.6	1	0.5	22	0.8
Parainfluenza virus type 1 (PIV-1)	2	0.7	0	0.0	7	0.8
Parainfluenza virus type 2 (PIV-2)	1	0.3	0	0.0	6	0.2
Parainfluenza virus type 3 (PIV-3)	0	0.0	1	0.5	17	0.6
Parainfluenza virus type 4 (PIV-4)	0	0.0	0	0.0	23	0.8

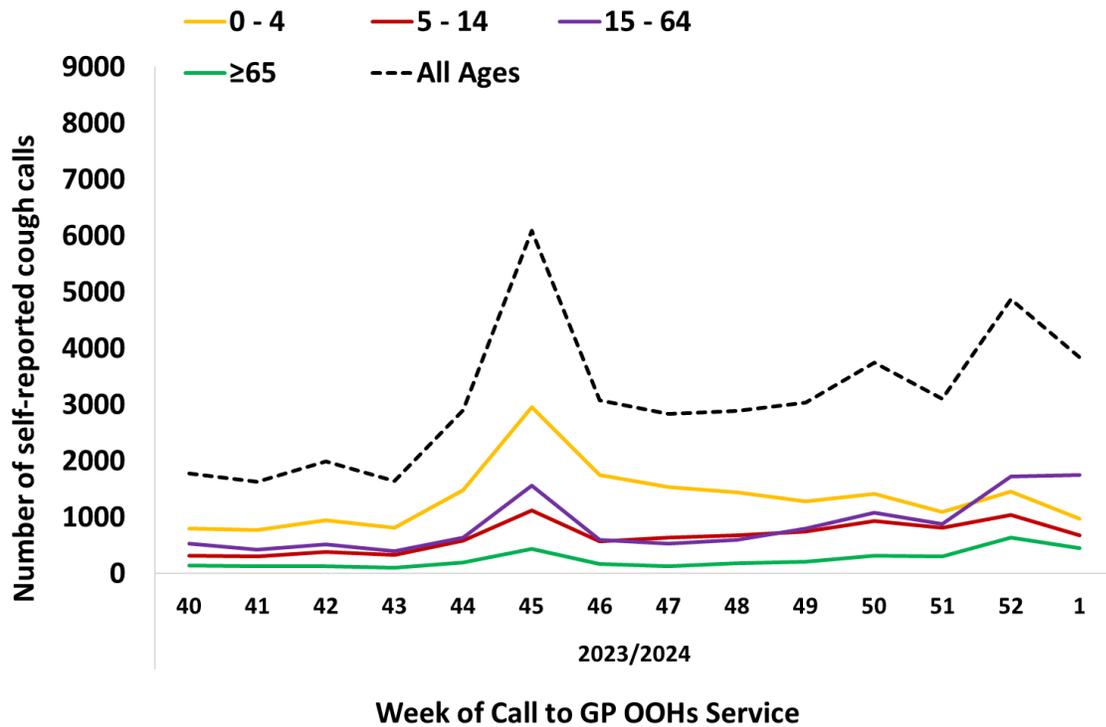
### 3. GP Out-Of-Hours services surveillance

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.

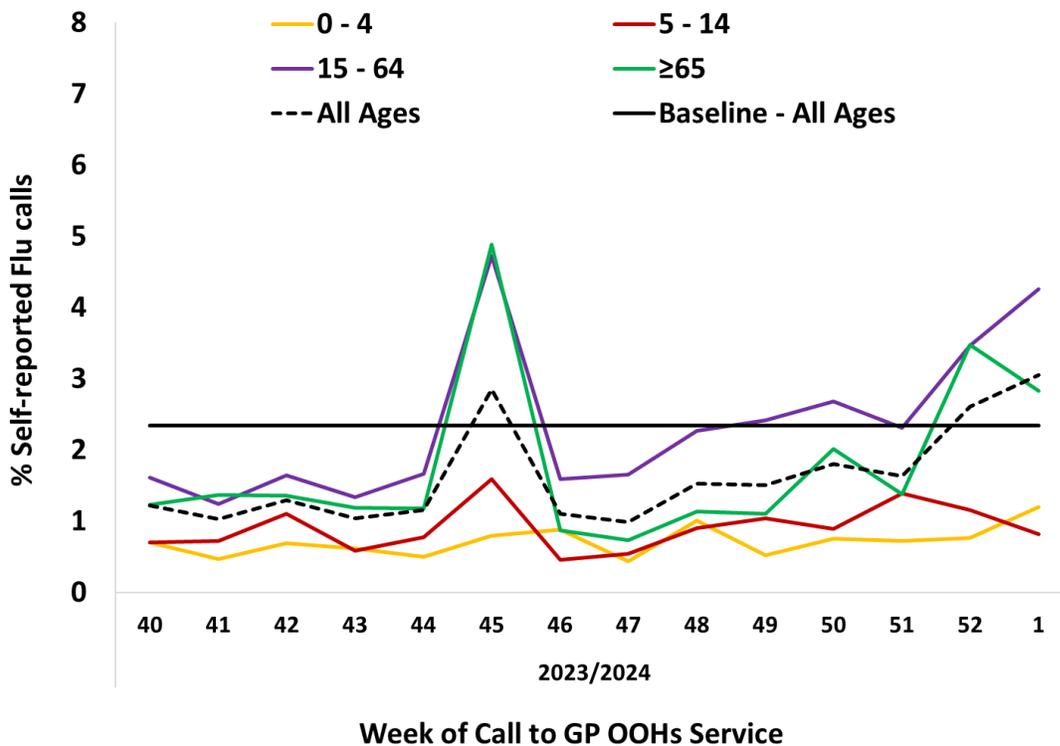
- Five participating GP OOH services provided data for week 1 2024.
- Out of a total of 16,476 calls made to the participating GP OOHs in week 1 2024:
  - 3842 (23%) were for self-reported ‘cough’, which is above the baseline threshold of 10.8% for cough calls. Coughs as a percentage of all calls is stable compared to the percentage of cough calls (25%) in week 52 2023 (Figures 5 and 6). Twenty-five percent (25%-975/3842) of all cough calls were from those aged four years and under.
  - 503 (3.1%) were for self-reported ‘flu’, which is above the baseline threshold of 2.3% for ‘flu’ calls (Figures 7 and 8). The highest burden of flu calls was in those aged 16 to 64 years at 72% (364/503), followed by those aged 65 years and older at 17% (87/503).



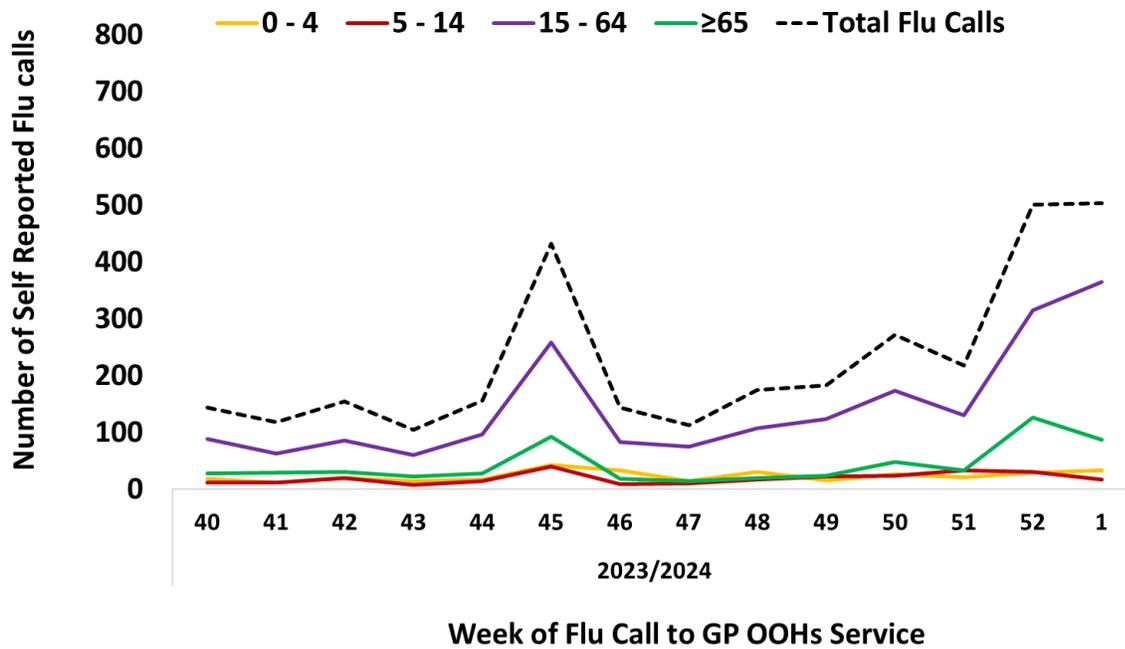
**Figure 5:** Percentage of self-reported **COUGH** calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call for the 2023/2024 season. The baseline % cough calls for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours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

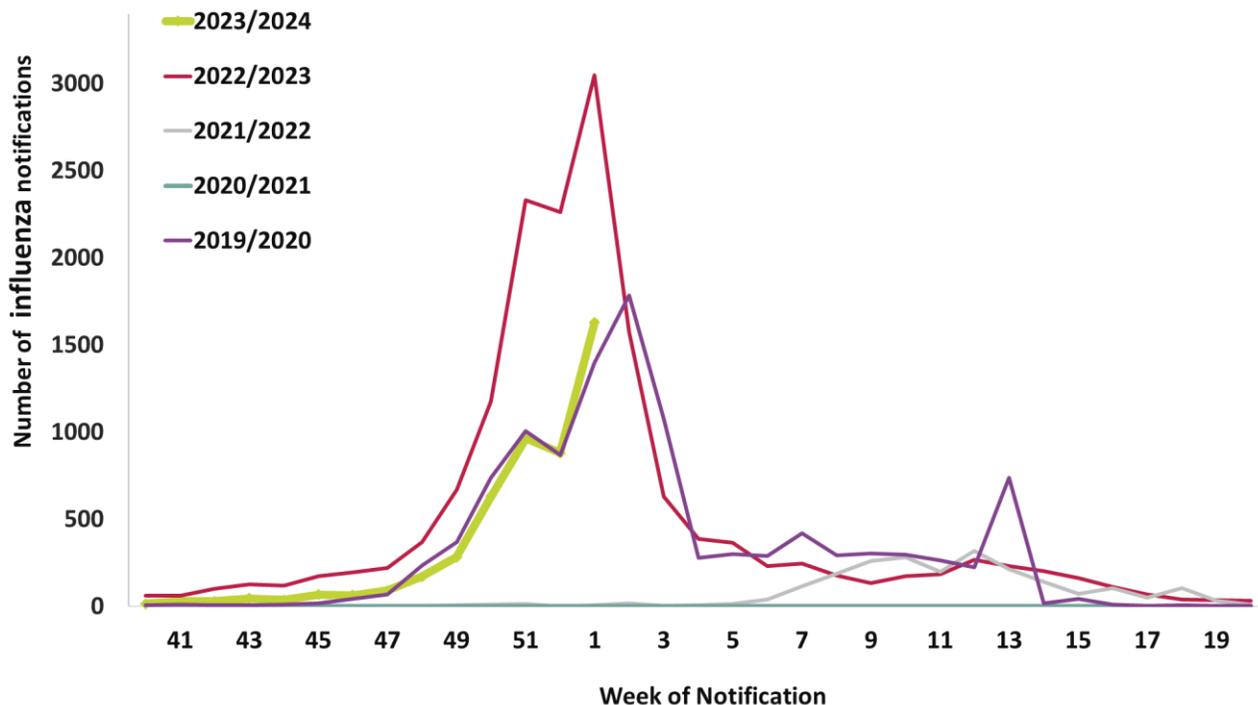


**Figure 8:** Number of self-reported **FLU** calls for all ages and by age group to GP Out-of-Hours services by week of call for the 2023/2024 season. *Source: GP Out-Of-Hours services in Ireland (collated by HSE & ICGP).*

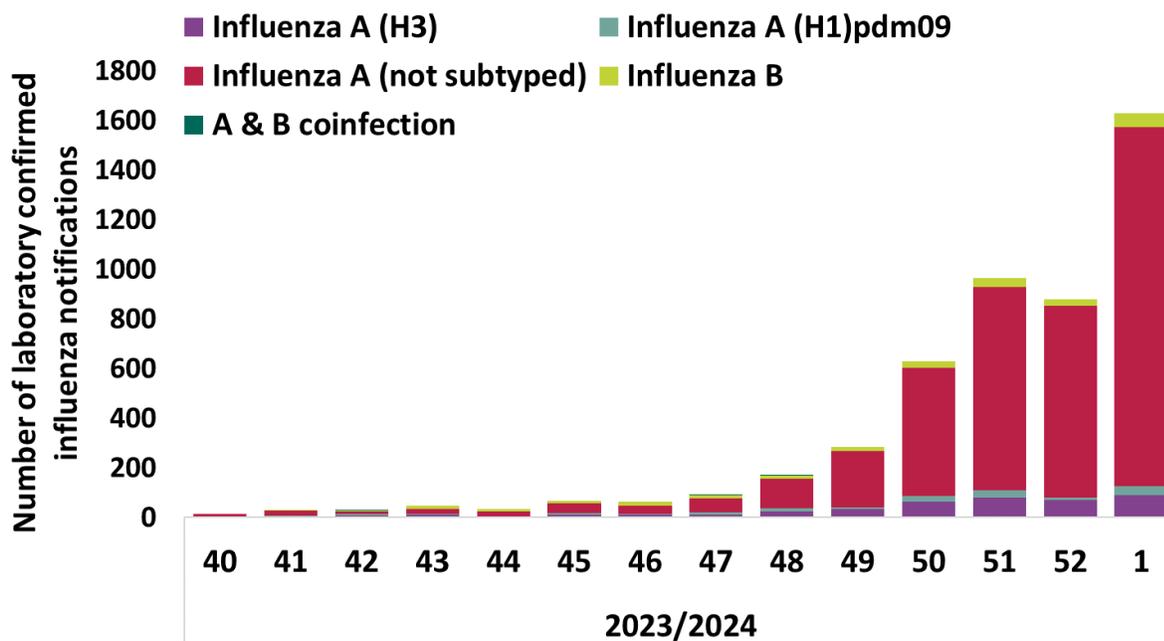
#### 4. Influenza & RSV notifications

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.

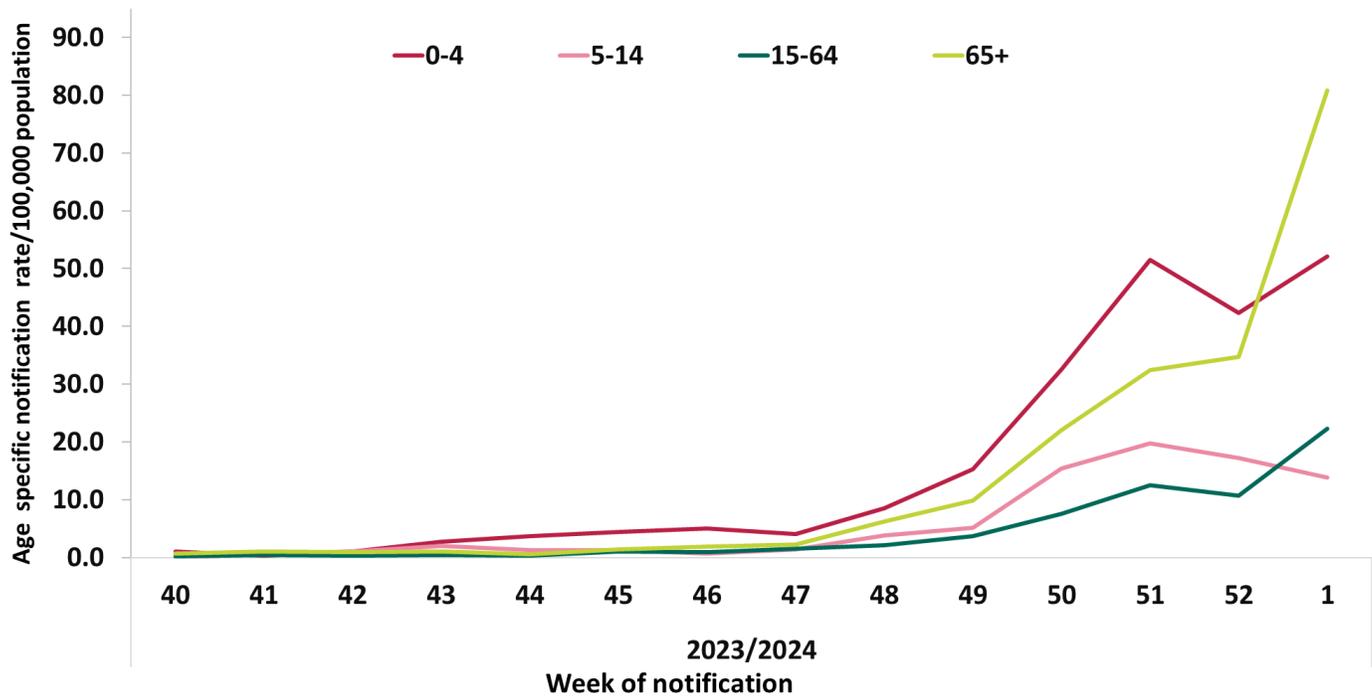
- Influenza and RSV notifications are reported in the [Weekly Infectious Disease Report for Ireland](#).
- 1628 laboratory confirmed influenza cases were notified during week 1 2024 (table 6) (corresponding to an overall notification rate of 31.6/100,000 population): 90 A(H3), 36 A(H1)pdm09, 1448 A (not subtyped) and 54 B. This is an increase compared to 879 cases notified during week 52 2023 (Figure 10).
- Age specific influenza notification rates were increasing in all age-groups and were highest in those aged 65 years and older, at 80.9/100,000 population, followed by those aged 0 to 4 years at 52.1/100,000 during week 1 2024 (Figure 11).
- Influenza notification rates were highest in the West and North West health region at 50.4/100,000 population (Table 6) during week 1 2024, with notifications from this region accounting for 24% of all notifications (383/1628). Influenza rates were second highest in the Dublin and South East region at 33.0/100,000 population.
- RSV notifications remained at high levels with 465 cases notified during week 1 2024, compared to 344 cases during week 52 2023 (Figure 12).
- Age specific notification rates for RSV were highest in those aged less than one year, at 247.4/100,000 population, followed by the 1–4-year age group at 24.4/100,000 (Figure 13). Notifications in those aged less than one year accounted for 31% (143/465) of all RSV notifications in week 1 2024.
- RSV notification rates were highest in the Dublin and North East health region at 11.8/100,000 (Table 7), followed by the West and North West at 10.4/100,000 population during week 1 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*



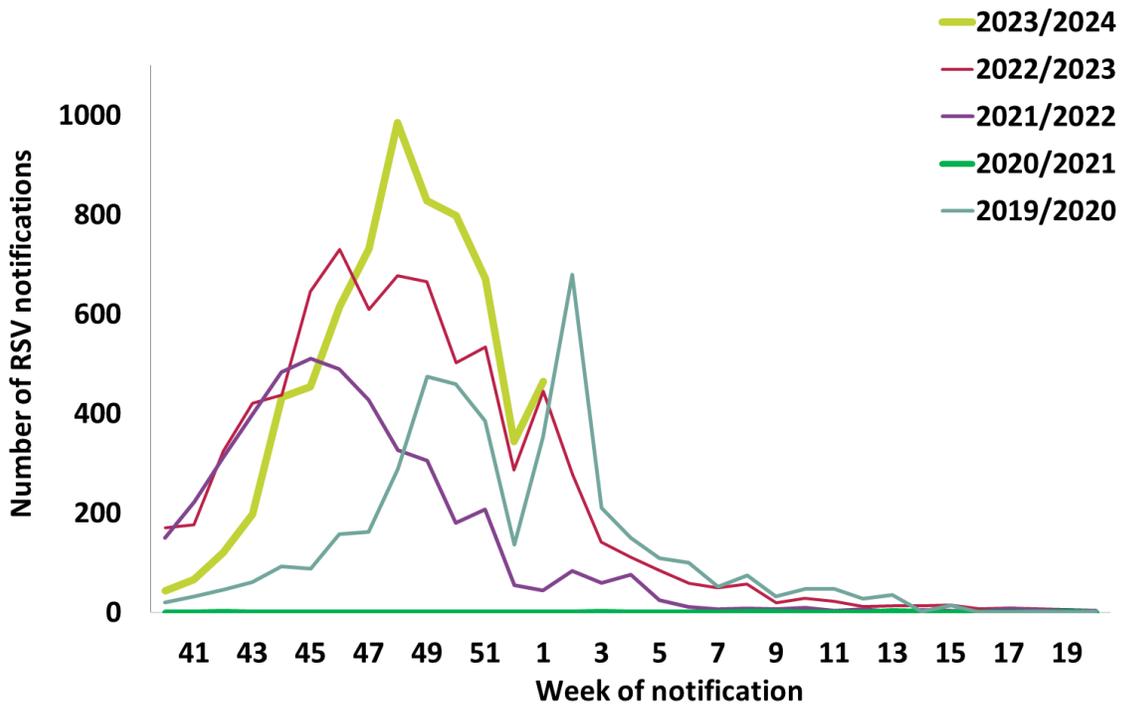
**Figure 11:** Age specific rates per 100,000 population of laboratory confirmed **influenza** notifications to HPSC by week of notification for the 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

**Table 6:** Number and rate per 100,000 population of laboratory confirmed **influenza** notifications by HSE Health Region for week 1 2024 and the 2023/2024 season to date. *Source: CIDR*

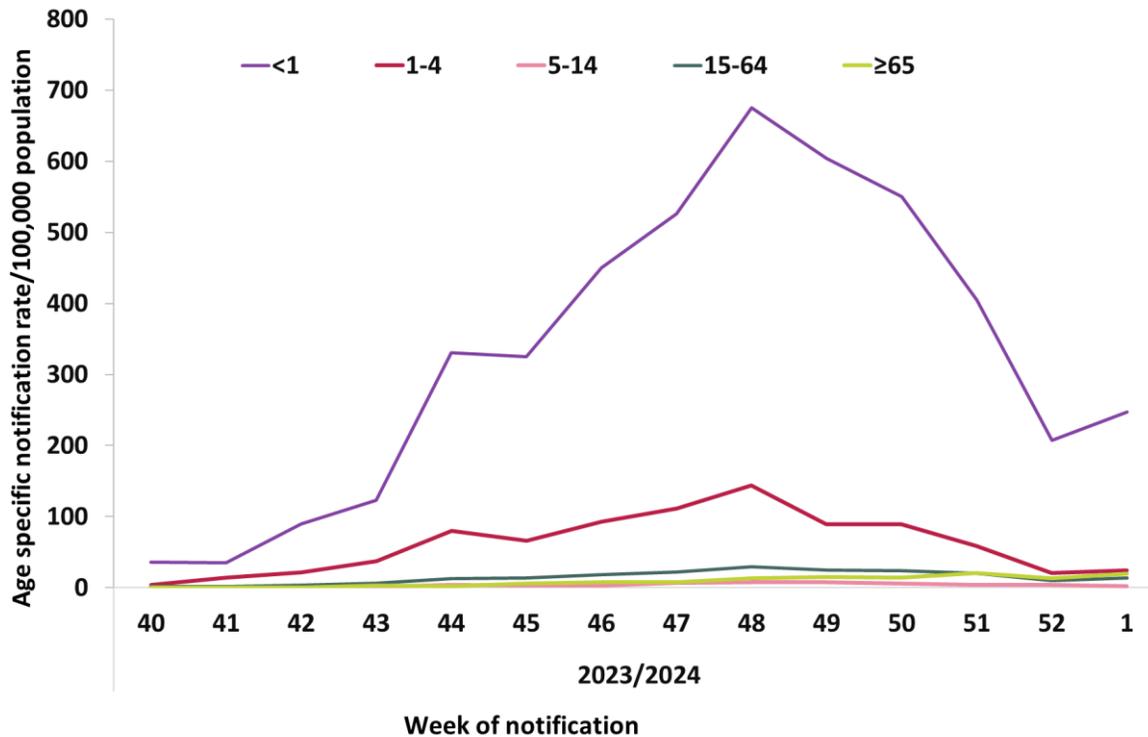
HSE Health Region	Week 1 2024		2023/2024 season (Week 40 2023 - Week 1 2024)	
	Number	Rate/100,000 persons	Number	Rate/100,000 persons
Dublin and North East	380	32.0	930	78.3
Dublin and Midlands	287	26.6	706	65.5
Dublin and South East	320	33.0	667	68.7
South West	197	26.6	974	131.5
Mid West	61	14.8	221	53.5
West and North West	383	50.4	1432	188.5
<b>Total</b>	<b>1628</b>	<b>31.6</b>	<b>4930</b>	<b>95.7</b>

**Table 7:** Number and rate per 100,000 population of laboratory confirmed **RSV** notifications by HSE Health Region for week 1 2024 and the 2023/2024 season to date. *Source: CIDR*

HSE Health Region	Week 1 2024		2023/2024 season (Week 40 2023 - Week 1 2024)	
	Number	Rate/100,000 persons	Number	Rate/100,000 persons
Dublin and North East	140	11.8	1349	113.6
Dublin and Midlands	88	8.2	1413	131.1
Dublin and South East	75	7.7	959	98.8
South West	45	6.1	840	113.4
Mid West	38	9.2	519	125.6
West and North West	79	10.4	1666	219.3
Unknown	0		1	
<b>Total</b>	<b>465</b>	<b>9.0</b>	<b>6747</b>	<b>131.0</b>



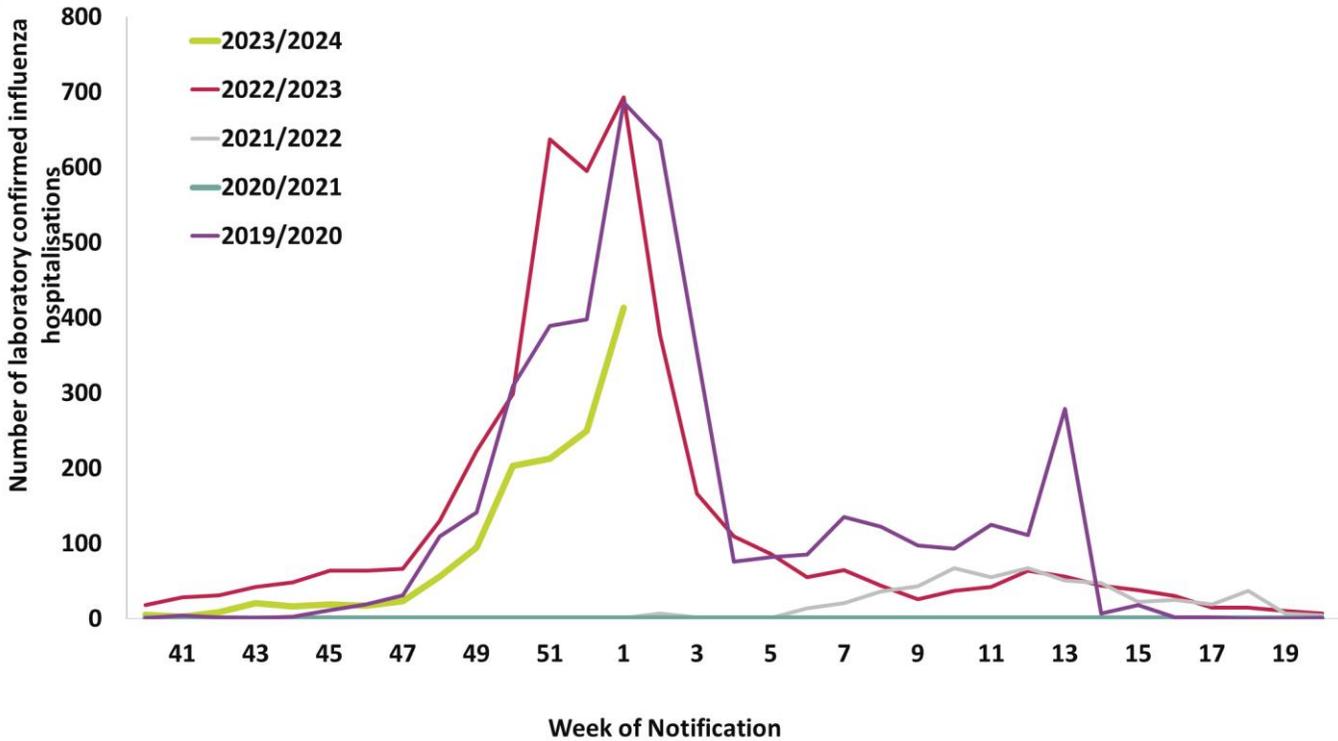
**Figure 12:** Number of laboratory confirmed **RSV** notifications to HPSC by week of notification, 2019/2020 to 2023/2024 seasons. *Source: Ireland’s Computerised Infectious Disease Reporting System.*



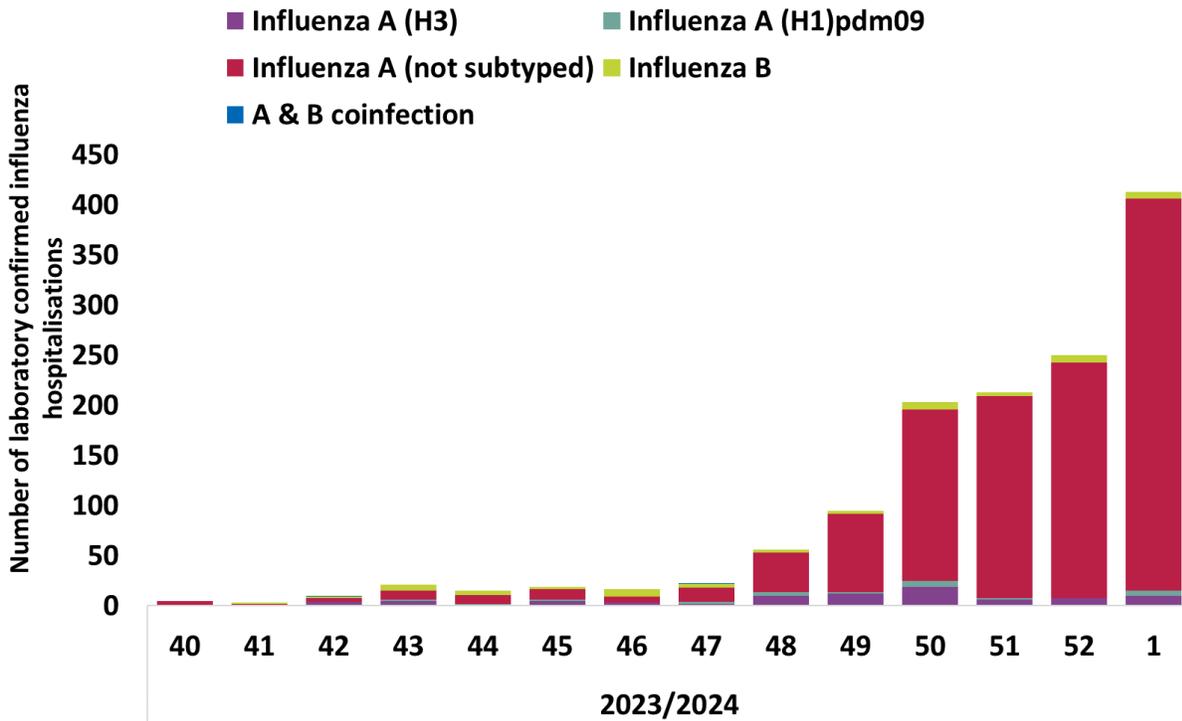
**Figure 13:** Age specific rates per 100,000 population for laboratory confirmed RSV notifications to HPSC by week of notification for the 2023/2024 season. *Source: Ireland’s Computerised Infectious Disease Reporting System.*

## 5. Hospitalisations

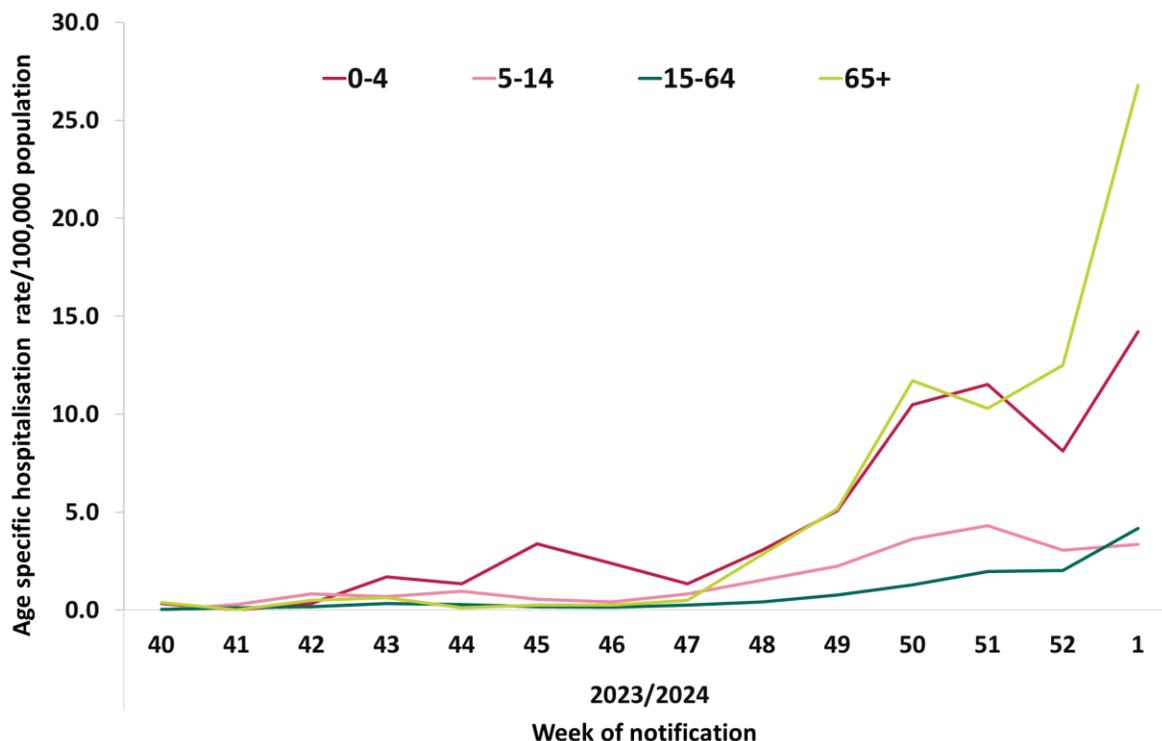
- During week 1 2024, the number of notified laboratory confirmed influenza hospital inpatients increased, with 414 cases notified, compared to 249 in week 52 2023. Of hospitalised cases, 392 were positive for A (not subtyped), 10 A(H3), five A(H1)pdm09 and seven B (Figure 15).
- During week 1 2024, the age specific influenza hospitalisation rate was highest in those aged ≥65 years (26.8/100,000 population) and those aged 0-4 years (14.2/100,000 population) (Figure 16). Half (50% - 208/414) of all influenza hospitalisations occurred in those aged 65 years and older (Table 8).
- During week 1 2024, 146 laboratory confirmed RSV hospitalised cases were notified, compared to 133 cases in week 52 2023 (Figure 17). Of the hospitalised RSV cases, 34% (49/146) were aged less than one year (Table 10).
- The age specific RSV hospitalisation rate was highest in those aged less than one year (84.8/100,000 population) and those aged 1-4 years (7.6/100,000 population) (Figure 18).
- 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.*



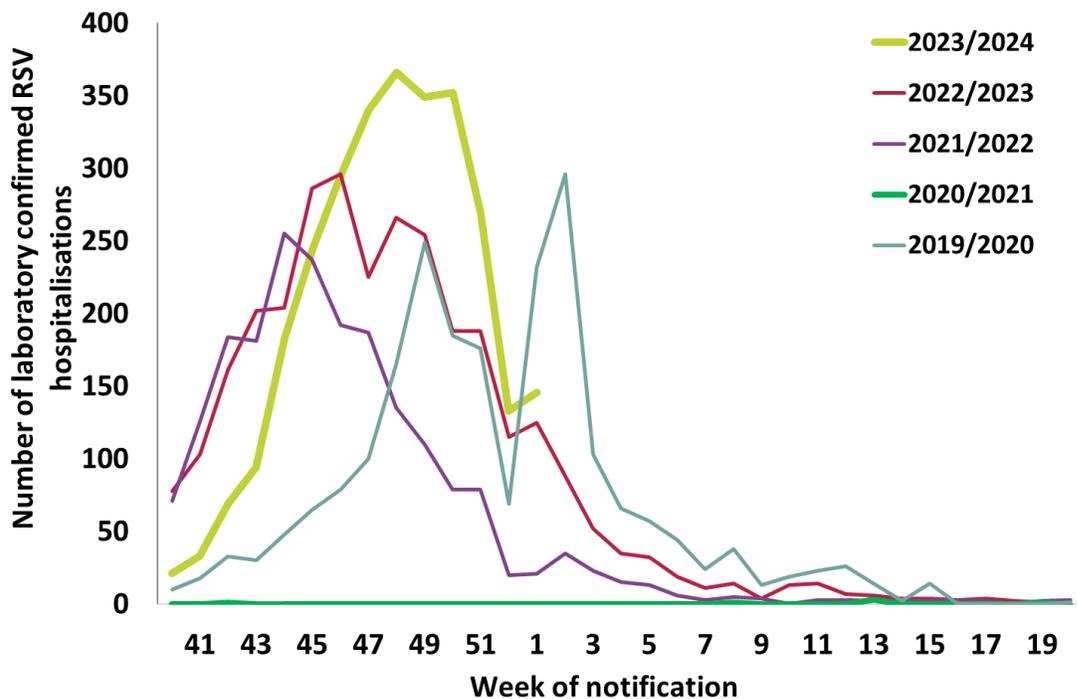
**Figure 16:** Age specific rates per 100,000 population for laboratory confirmed **influenza** cases reported as **hospital inpatients** by week of notification for the 2023/2024 season. *Source: Ireland’s Computerised Infectious Disease Reporting System.*

**Table 8:** Number, percentage and rate of notified laboratory-confirmed **influenza hospitalised cases notified** in week 1 2024 and the 2023/2024 season (week 40 2023 onwards). *Source: Ireland’s Computerised infectious Disease Reporting System*

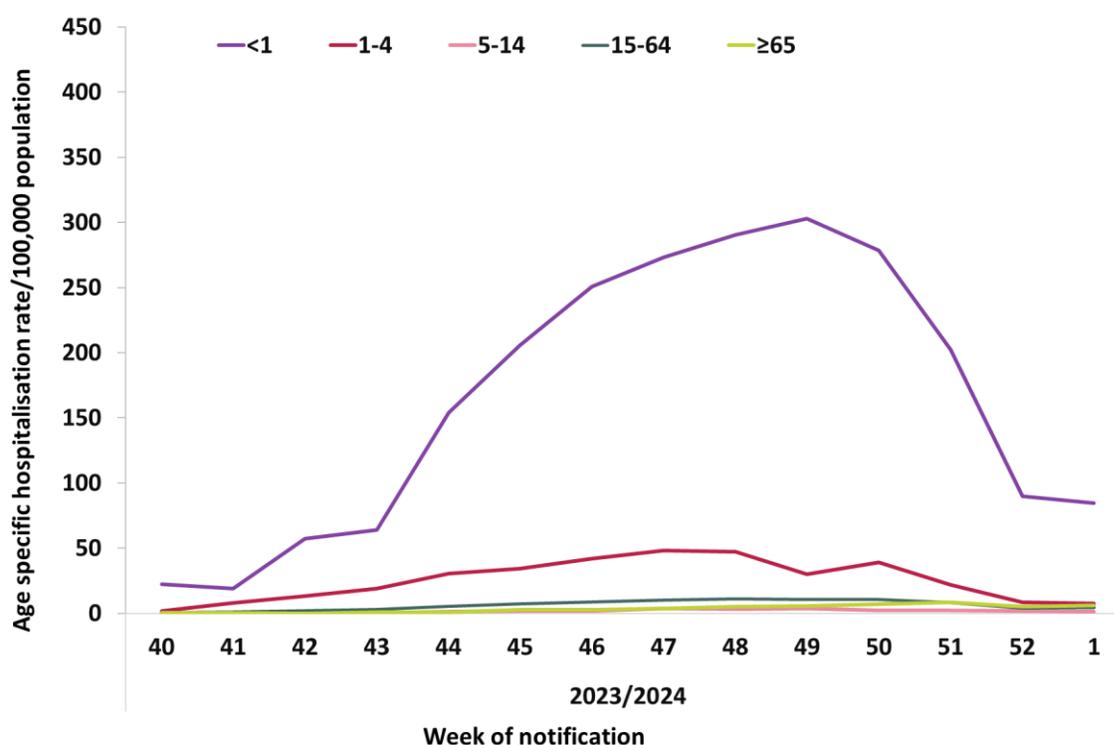
Age (years)	Hospitalised (Week 1)			Season to date (Week 40 2023 - Week 1 2024)		
	Number	% of all Hospitalisations	Rate/ 100,000	Number	% of all Hospitalisations	Rate/ 100,000
<1	10	2.4	17.3	32	2.4	55.4
1-4	32	7.7	13.5	162	12.1	68.2
5-14	24	5.8	3.3	162	12.1	22.6
15-24	20	4.8	3.1	52	3.9	8.1
25-34	23	5.6	3.7	73	5.4	11.6
35-44	38	9.2	4.8	97	7.2	12.2
45-54	21	5.1	2.9	63	4.7	8.8
55-64	38	9.2	6.6	109	8.1	18.8
≥65	208	50.2	26.8	590	44.0	76.0
Unknown	0		-	0		-
<b>Total</b>	<b>414</b>	<b>100</b>	<b>8.0</b>	<b>1340</b>	<b>100</b>	<b>231.1</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 1	59	845	414	10	76	30	194	<b>1628</b>
Week 52	55	441	249	11	32	23	68	<b>879</b>
Week 51	64	538	213	7	52	11	80	<b>965</b>
Week 50	26	312	201	5	35	6	46	<b>631</b>
Week 49	8	140	95	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>263</b>	<b>2494</b>	<b>1340</b>	<b>38</b>	<b>249</b>	<b>89</b>	<b>456</b>	<b>4929</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 per 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 of notified laboratory-confirmed RSV hospitalised cases notified in week 1 2024 and the 2023/2024 season (week 40 2023 onwards). *Source: Ireland's Computerised infectious Disease Reporting System*

Age (years)	Hospitalised (Week 1 2024)			Season to date (Week 40 2023 - Week 1 2024)		
	Number	% of all Hospitalisations	Rate/ 100,000	Number	% of all Hospitalisations	Rate/ 100,000
<1	49	33.6	84.8	1327	45.9	2296.0
1-4	18	12.3	7.6	836	28.9	351.8
5-14	8	5.5	1.1	167	5.8	23.3
15-24	2	1.4	0.3	19	0.7	2.9
25-34	3	2.1	0.5	24	0.8	3.8
35-44	4	2.7	0.5	35	1.2	4.4
45-54	6	4.1	0.8	40	1.4	5.6
55-64	9	6.2	1.6	66	2.3	11.4
≥65	47	32.2	6.1	379	13.1	48.8
Unknown	0		-	0		-
<b>Total</b>	<b>146</b>	<b>100</b>	<b>2.8</b>	<b>2893</b>	<b>100</b>	<b>56.2</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 1	14	140	146	8	16	22	119	<b>465</b>
Week 52	6	140	133	7	5	17	36	<b>344</b>
Week 51	30	250	269	7	13	28	74	<b>671</b>
Week 50	28	318	352	4	32	21	43	<b>798</b>
Week 49	23	348	349	7	19	8	71	<b>825</b>
Week 48	20	489	366	11	16	11	72	<b>985</b>
Week 47	13	285	340	3	18	18	53	<b>730</b>
Week 46	7	259	294	7	10	1	37	<b>615</b>
Week 45	8	167	244	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>161</b>	<b>2756</b>	<b>2893</b>	<b>67</b>	<b>154</b>	<b>140</b>	<b>576</b>	<b>6747</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 (A (not subtyped)) admitted to intensive care and notified to HPSC during week 1 2024.
- Twenty-six influenza (20 A (not subtyped), four A(H3) and two A(H1)pdm09)) ICU cases have been notified for the season to date (Week 40 2023-Week 1 2024).

**Table 12:** Cumulative number and age specific rate per 100,000 population of laboratory confirmed notified influenza hospitalised and intensive care cases, week 40 2023 – week 1 2024. *Source: Ireland's Computerised infectious Disease Reporting System*

Age (years)	Hospitalised		Admitted to ICU	
	Number	Age specific rate per 100,000 pop.	Number	Age specific rate per 100,000 pop.
<1	32	55.4	0	0.0
1-4	162	68.2	0	0.0
5-14	162	22.6	1	0.1
15-24	52	8.1	1	0.2
25-34	73	11.6	3	0.5
35-44	97	15.4	2	0.3
45-54	63	8.8	2	0.3
55-64	109	18.8	7	1.2
≥65	590	76.0	10	1.3
Unknown	0	–	0	–
<b>Total</b>	<b>1340</b>	<b>26.0</b>	<b>26</b>	<b>0.5</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 was one death in a notified influenza case reported to HPSC during week 1 2024.
- 15 influenza A deaths (13 A (not-subtyped), one A(H3) and one A(H1)pdm09) have been reported for the season to date.
- There was no excess all-cause mortality for the entire population reported for week 52 2023.

## 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 1 2024, 23 influenza outbreaks (nine in nursing homes, five in acute hospitals, four in community hospitals/long-stay units, three in residential institutions and two in other settings) were notified to HPSC. (Tables 13 & 14).
- There were also two RSV outbreaks (in nursing homes) and five ARI outbreaks caused by unknown pathogens (four in nursing homes and one in a residential institution) reported to HPSC.
- There have been 111 ARI/influenza/RSV (excluding COVID-19) outbreaks notified to HPSC to date this season, comprising 62 influenza outbreaks, 24 RSV outbreaks and 25 ARI (ARI-excluding influenza, RSV and COVID-19) outbreaks.

**Table 13:** Summary of influenza, RSV and ARI (influenza/RSV/SARS-CoV-2 negative) outbreaks by HSE Health Region during week 1 2024 and the 2023/2024 season (week 40 2023 – week 1 2024) *Source: CIDR*

HSE Health Region	Influenza		RSV		ARI		Total	
	Week 1	2023/2024	Week 1	2023/2024	Week 1	2023/2024	Week 1	2023/2024
Dublin and North East	1	3	0	6	2	12	3	21
Dublin and Midlands	4	6	0	9	0	0	4	15
Dublin and South East	3	12	1	2	0	6	4	20
South West	5	15	0	0	1	1	6	16
Mid West	1	2	0	2	0	0	1	4
West and North West	9	24	1	5	2	6	12	35
Unknown	0	0	0	0	0	0	0	0
<b>Total</b>	<b>23</b>	<b>62</b>	<b>2</b>	<b>24</b>	<b>5</b>	<b>25</b>	<b>30</b>	<b>111</b>

**Table 14:** Summary of influenza, RSV and ARI (influenza/RSV/SARS-CoV-2 negative) outbreaks by outbreak setting during week 1 2024 and the 2023/2024 season (week 40 2023 – week 1 2024). *Source: CIDR*

Setting	Influenza		RSV		ARI		Total	
	Week 1	2023/2024	Week 1	2023/2024	Week 1	2023/2024	Week 1	2023/2024
Community hospital/Long-stay unit	4	6	0	0	0	3	4	9
Nursing Home	9	19	2	6	4	16	15	41
Hospital	5	17	0	10	0	0	5	27
Residential Institution	3	12	0	3	1	3	4	18
Childcare facility	0	0	0	2	0	0	0	2
Other settings	2	8	0	3	0	3	2	14
<b>Total</b>	<b>23</b>	<b>62</b>	<b>2</b>	<b>24</b>	<b>5</b>	<b>25</b>	<b>30</b>	<b>111</b>

## 9. International Summary

According to [European Respiratory Virus Surveillance Summary](#), in the WHO European region during week 52 2023 (including data up to 31/12/2023), influenza activity is increasing; all three influenza virus types/subtypes - A(H1N1)pdm09, A(H3) and B - are co-circulating. Of 30 countries reporting the geographical spread of influenza in the WHO European region, 15 reported widespread activity, five reported regional, three reported local and seven reported sporadic activity. Increasing geographical spread was reported in some countries. RSV activity began around week 36 2023 and has been increasing since, resulting in increasing hospital admissions particularly among the 0–4-years age group. This 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 East Asia, influenza activity continued to increase mainly due to activity in China and the Republic of Korea. In the Central American and Caribbean countries, 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)**

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