Influenza, RSV and Other Respiratory Viruses Surveillance Report
Week 49 2023 (4th– 10th December 2023)

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 49 2023

Influenza activity increased significantly during week 49 2023 with increasing numbers of influenza cases being reported. Increasing detections of influenza A(H1)pdm09, A(H3) and influenza B are being reported. The influenza-like illness (ILI) rate was highest in those aged 0-4 years. Given the continued increase in influenza surveillance indicators, HPSC considers that influenza viruses are circulating in Ireland. It is now 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) circulation remains at very high levels and RSV hospitalised cases remain high with the highest rates in those aged less than one year old, followed by the 1-4 year age group. Rhino/enteroviruses have been circulating at high levels in recent weeks and are now decreasing.

- **Influenza-like illness (ILI):** The sentinel GP ILI consultation rate was 10 per 100,000 population during week 49 2023, compared to the updated rate of 4.8/100,000 in week 48. ILI consultation rates have been below the Irish baseline threshold (18.1/100,000 population) for the season to date (weeks 40-49 2023). Sentinel GP ILI age specific rates increased substantially during week 49 in those aged 0-4 years at 32.6/100,000 compared to 6.5/100,000 the previous week. ILI age specific rates are also increasing in those aged 5-14 years, 15-64 years and the≥ 65 year age group.
- **National Virus Reference Laboratory (NVRL):** During week 49 2023, of 98 sentinel GP acute respiratory infection (ARI) specimens tested and reported by the NVRL, nine (9.2%) were positive for influenza (two influenza A (not subtyped), two influenza A(H1)pdm09, four influenza A(H3) and one influenza B), seven (7.1%) for SARS-CoV-2, 24 (24.5%) for RSV and 15 (15.3%) for rhino/enterovirus.
- Of 155 non-sentinel respiratory specimens tested and reported by the NVRL during week 49 2023, 11 (7.1%) were positive for influenza (one influenza A (not subtyped), eight influenza A(H3) and two influenza B), 17 (11.0%) for SARS-CoV-2, 9 (5.8%) for RSV and 21 (13.5%) for rhino/enterovirus.
- Of 147 specimens (including both sentinel GP ARI and non-sentinel respiratory specimens) testing positive for influenza and reported by the NVRL during the 2023/24 season, 13 (8.8%) were coinfected with other viruses.
- **GP Out of hours (OOHs):** Cough calls comprised 25% (3039/12,174) of all reported GP OOHs calls during week 49 2023, which is above the baseline threshold of 10.8%. 42% (1277/3039) of cough calls were in those aged 0-4 years. The number of flu calls was 183/12,174 (1.5%) in week 49, which is below the baseline threshold level (2.3%).
- **Influenza notifications:** 283 laboratory confirmed influenza cases were notified during week 49 2023: 11 influenza A (H3), two A(H1)pdm09, 255 influenza A (not subtyped) and 15 influenza B. This is an increase compared to 172 cases notified during week 48 2023.
- **RSV notifications:** 829 RSV cases were notified during week 49 2023, a decrease compared to 985 cases notified during week 48 2023. Age specific rates were highest in those aged less than one year.
- **Hospitalisations:** Notified laboratory confirmed influenza hospital inpatients increased with 97 cases notified in week 49 2023 compared to 55 in week 48. 94 of the hospitalised cases were influenza A (not subtyped), one was influenza A(H3) and two were influenza B. There were 335 laboratory confirmed RSV hospital inpatients notified in week 49, compared to 368 cases in week 48 2023. Of the hospitalised RSV cases, 50% (166/335) were aged less than one year.
- **Intensive care admissions:** One laboratory confirmed influenza (influenza A (not subtyped)) case was admitted to an intensive care unit and notified to HPSC during week 49 2023. Three influenza ICU cases (two influenza A (not subtyped) and one A(H1)pdm09) have been notified for the season to date (weeks 40 - 49 2023).
- **Mortality:** One death in a notified influenza case was reported to HPSC during week 49 2023 and for the season to date. No excess all-cause mortality has been reported since week 2 2023.
- **Outbreaks:** During week 49 2023, seven influenza outbreaks (one in a nursing home, three in acute hospitals, two in residential institutions and one in a private home), four RSV outbreaks (three in acute hospitals, one in a residential

institution) and two acute respiratory infection (ARI) outbreaks (one in a nursing home and one in a healthcare service) were reported to HPSC.

- **International:** In the European region during week 48 2023, influenza activity remained at low levels but is increasing. RSV and SARS-CoV-2 activity are at elevated levels. Rates of ILI and/or ARI were elevated above baseline levels in 7 of 25 countries of the WHO European Region.

1. Consultations for Influenza Like Illness - GP sentinel surveillance system

- During week 49 2023, 80 sentinel GP influenza-like illness (ILI) consultations were reported from the Irish sentinel GP network, corresponding to an ILI consultation rate of 10 per 100,000 population, compared to an updated rate of 4.8 per 100,000 population during week 48 2023 (Figure 1).
- Out of the 95 GP practices reporting ILI consultations from the Irish sentinel GP network, 95 provided data for consultations in week 49.
- 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 49 and the 2023/2024 season to date (weeks 40-49 2023). However, rates increased substantially in those aged 0-4 years to 32.6/100,000 in week 49 compared to 6.5 in the previous week (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.

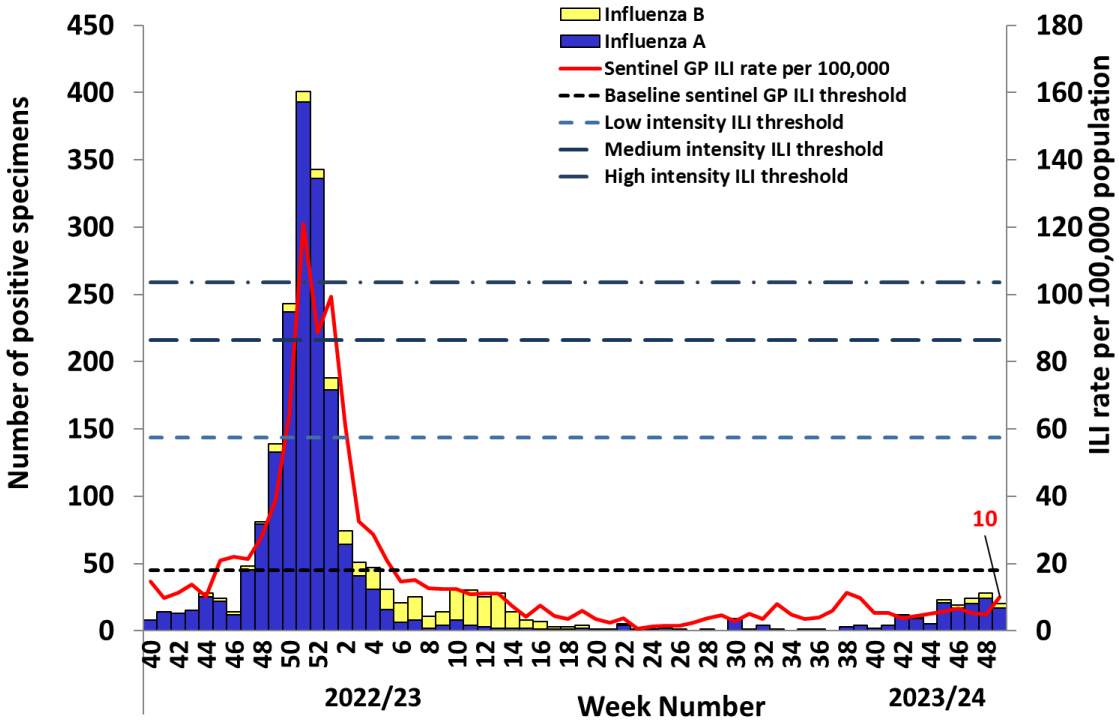

Figure 1: Sentinel GP **Influenza-like illness (ILI)** consultation rates per 100,000 population, baseline, low, medium and high intensity ILI thresholds and number of positive influenza A and B specimens tested by the NVRL, by influenza week and season. *Source: ICGP and NVRL*

Please note that the weekly ILI rate has been retrospectively updated for the 2023/2024 season to date, in response to a technical issue which has been resolved since week 48 2023.

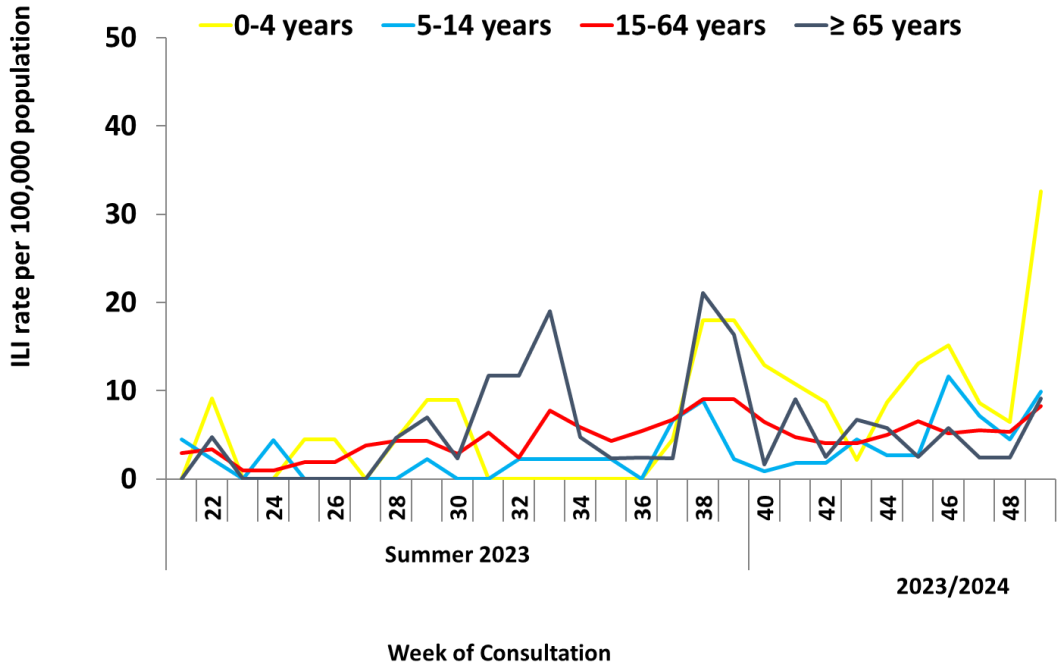

Figure 2: Age specific sentinel GP **ILI consultation** rate per 100,000 population by week (weeks 21-49 2023). *Source: ICGP.*

Table 1: Age specific sentinel GP **ILI consultation** rate per 100,000 population by week (weeks 40-49 2023), 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
All Ages	5.3	5.3	3.7	4.4	5.0	5.8	6.7	5.4	4.8	10.0
<15 yrs	4.1	4.1	3.5	3.6	4.1	5.3	11.8	7.0	4.7	15.4
15-64 yrs	6.4	4.7	4.0	4.0	5.0	6.5	5.1	5.5	5.3	8.2
≥65 yrs	1.6	9.0	2.5	6.7	5.8	2.5	5.8	2.5	2.5	9.1
Reporting practices (N=95)	93	93	92	91	92	92	93	95	95	95

2. Influenza and Other Respiratory Virus Detections - NVRL

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

- A lag time with testing and reporting is noted for the most recent surveillance week.
- During week 49 2023 of 98 sentinel GP ARI specimens tested and reported by the NVRL, nine (9.2%) were positive for influenza (two influenza A (not subtyped), two influenza A(H1)pdm09, four influenza A(H3) and one influenza B), seven (7.1%) for SARS-CoV-2, 24 (24.5%) for RSV and 15 (15.3%) for rhino/enterovirus.
- In comparison during week 48 2023, of 186 sentinel GP ARI specimens tested and reported by the NVRL, 11 (5.9%) were positive for influenza (eight influenza A(H3) and three influenza B), seven (3.8%) for SARS-CoV-2, 45 (24.2%) for RSV and 35 (18.8%) for rhino/enterovirus.
- During week 49 2023, of 155 non-sentinel respiratory specimens tested and reported by the NVRL, 11 (7.1%) were positive for influenza (one influenza A (not subtyped), eight influenza A(H3) and two influenza B), 17 (11.0%) for SARS-CoV-2, 9 (5.8%) for RSV and 21 (13.5%) for rhino/enterovirus.
- During week 48 2023, of 206 non-sentinel respiratory specimens tested, 17 (8.3%) were positive for influenza (two influenza A (not subtyped), four influenza A(H1)pdm09, 10 influenza A (H3) and one influenza B), 19 (9.2%) for SARS-CoV-2, 31 (15%) for RSV, and 21 (10.2%) for rhino/enterovirus (Figure 3b).
- Other respiratory viruses (ORVs) are being detected at lower levels (Figure 3a and 3b).
- Of 147 sentinel GP ARI specimens and non-sentinel specimens positive for influenza and reported by the NVRL during the 2023/24 season, 13 (8.8%) were coinfected with other viruses, three (2%) with rhino/enteroviruses, three (2%) with RSV, five (3.4%) with SARS-CoV-2, one with bocavirus (0.7%) and one with coronavirus NL63 (0.7%)

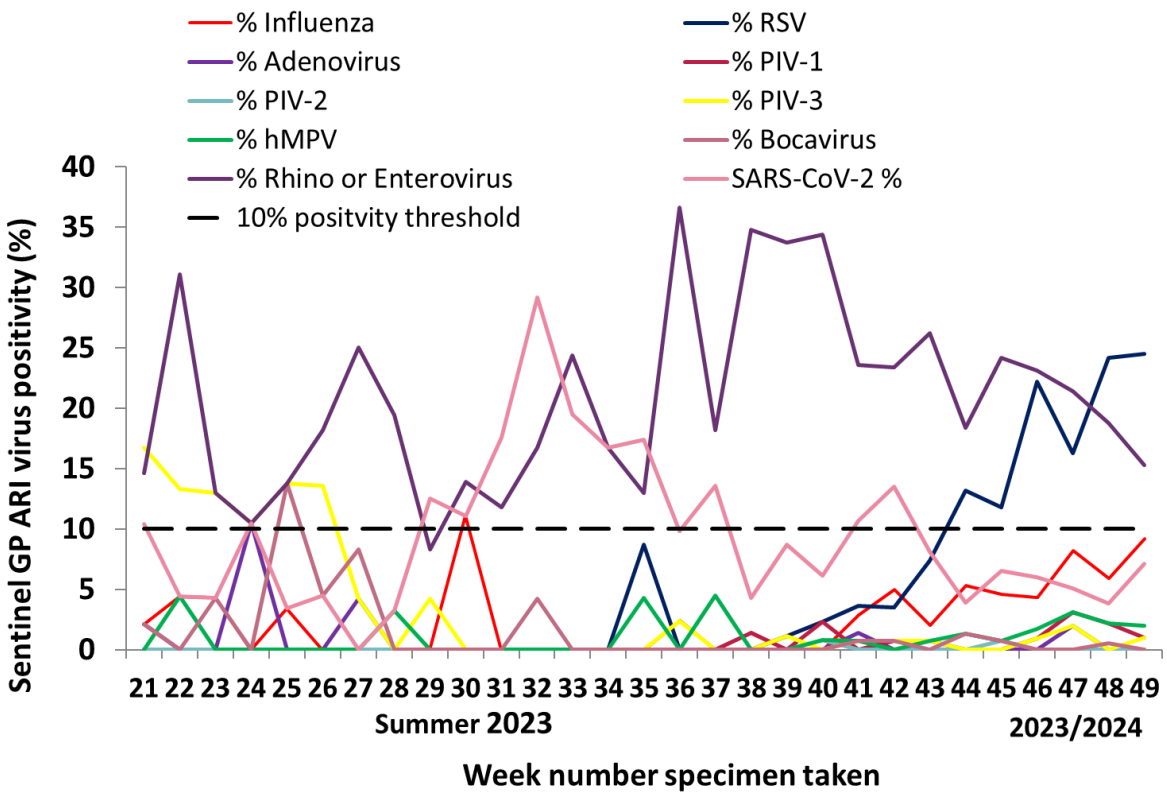

Figure 3a: Percentage positive results for **sentinel GP ARI** specimens tested by the NVRL for influenza, SARS-CoV-2, RSV and other respiratory viruses by week specimen was taken, weeks 21-49 2023. *Source: NVRL*

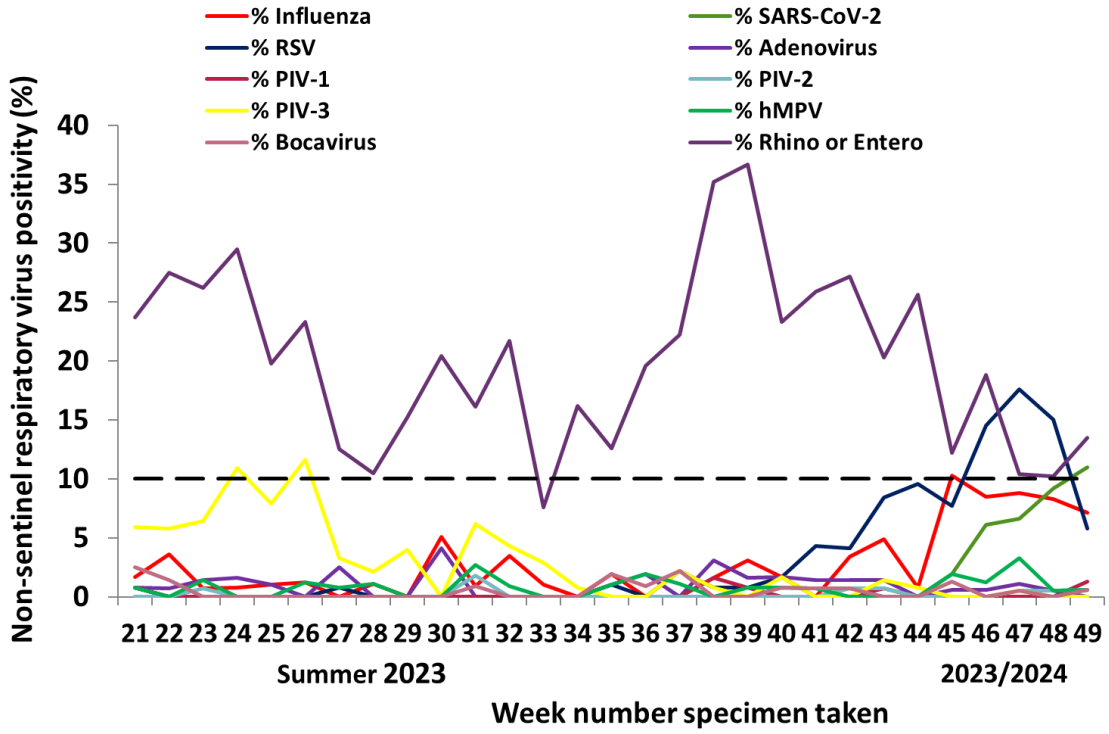

Figure 3b: Percentage positive results for **non-sentinel respiratory** specimens tested by the NVRL for influenza, SARS-CoV-2, RSV and other respiratory viruses by week specimen was taken, weeks 21-49 2023. *Source: NVRL*

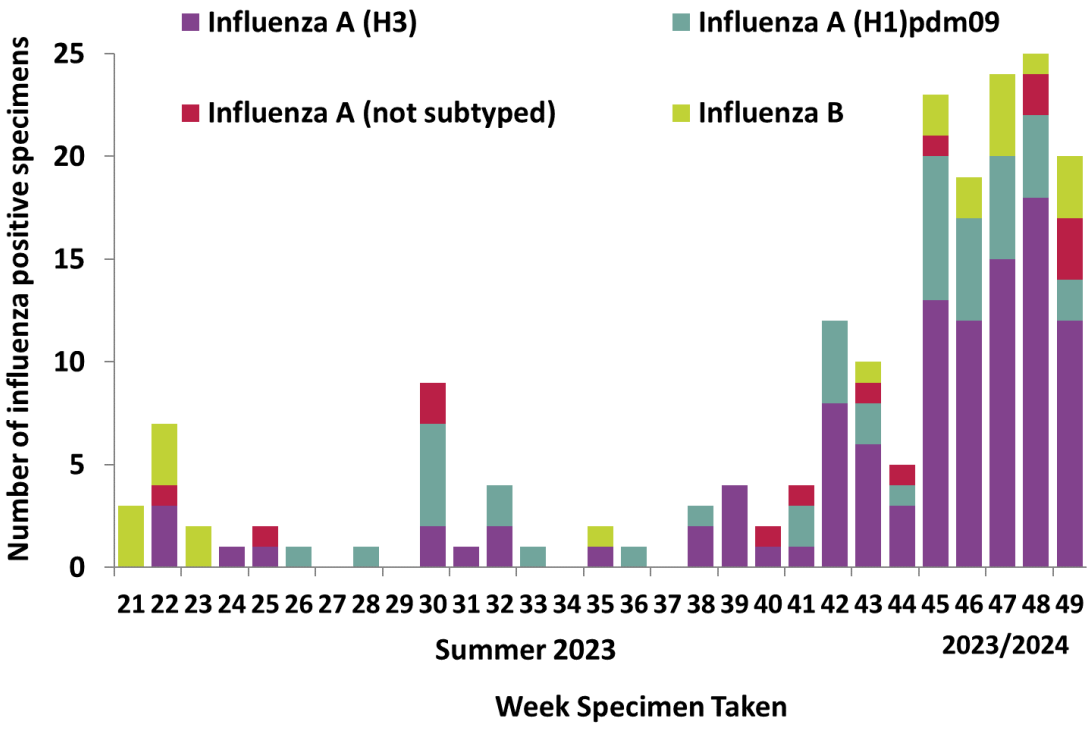

Figure 4: Number of positive **influenza** specimens (from sentinel GP ARI and non-sentinel respiratory sources) tested by the NVRL by influenza type/subtype and by week specimen was taken, weeks 21-49 2023. *Source: NVRL*

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 weeks 48 and 49 2023 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 49 2023	Sentinel GP ARI	98	9	9.2	2	4	2	8	1	0	0	1
	Non-sentinel respiratory	155	11	7.1	0	8	1	9	2	0	0	2
	Total	**253**	**20**	**7.9**	**2**	**12**	**3**	**17**	**3**	**0**	**0**	**3**
Week 48 2023	Sentinel GP ARI	186	11	5.9	0	8	0	8	3	0	0	3
	Non-sentinel respiratory	206	17	8.3	4	10	2	16	0	1	0	1
	Total	**392**	**28**	**7.1**	**4**	**18**	**2**	**24**	**3**	**1**	**0**	**4**
2023/2024	Sentinel GP ARI	1289	58	4.5	15	31	5	51	7	0	0	7
	Non-sentinel respiratory	1538	89	5.8	17	58	5	80	5	3	1	9
	Total	**2827**	**147**	**5.2**	**32**	**89**	**10**	**131**	**12**	**3**	**1**	**16**

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 weeks 48 and 49 2023 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 49 2023	Sentinel GP ARI	98	24	24.5	20	4	0
	Non-sentinel	155	9	5.8	8	1	0
	Total	**253**	**33**	**13.0**	**28**	**5**	**0**
Week 48 2023	Sentinel GP ARI	186	45	24.2	39	6	0
	Non-sentinel	206	31	15.0	27	4	0
	Total	**392**	**76**	**19.4**	**66**	**10**	**0**
2023/2024	Sentinel GP ILI/ARI	1289	163	12.6	124	39	0
	Non-sentinel	1538	146	9.5	118	28	0
	Total	**2827**	**309**	**10.9**	**242**	**67**	**0**

Table 4: Number and percentage positive sentinel GP ARI specimens by **respiratory virus**, weeks 48 and 49 2023, and the 2023/2024 season. *Source: NVRL*

Virus	Week 49 2023 (N=98)		Week 48 2023 (N=186)		2023/2024 (N=1289)	
	Total positive	% positive	Total positive	% positive	Total positive	% positive
SARS-CoV-2	7	7.1	7	3.8	93	10.1
Influenza virus	9	9.2	11	5.9	58	1.6
Respiratory Syncytial Virus (RSV)	24	24.5	45	24.2	3	0.4
Rhino/enterovirus	15	15.3	35	18.8	156	22.5
Adenovirus	0	0.0	0	0.0	4	0.6
Bocavirus	0	0.0	1	0.5	10	1.4
Human metapneumovirus (hMPV)	2	2.0	4	2.2	6	0.9
Parainfluenza virus type 1 (PIV-1)	1	1.0	4	2.2	1	0.1
Parainfluenza virus type 2 (PIV-2)	0	0.0	0	0.0	0	0.0
Parainfluenza virus type 3 (PIV-3)	1	1.0	0	0.0	30	4.3
Parainfluenza virus type 4 (PIV-4)	2	2.0	5	2.7	35	5.1

Table 5: Number and percentage positive non-sentinel respiratory specimens, by **respiratory virus**, weeks 48 and 49 2023, and the 2023/2024 season. *Source: NVRL*

Virus	Week 49 2023 (N=155)		Week 48 2023 (N=206)		2023/2024 (N=1538)	
	Total positive	% positive	Total positive	% positive	Total positive	% positive
SARS-CoV-2	17	11.0	19	9.2	61	4.0
Influenza virus	11	7.1	17	8.3	89	5.8
Respiratory Syncytial Virus (RSV)	9	5.8	31	15.0	146	9.5
Rhino/enterovirus	21	13.5	21	10.2	276	17.9
Adenovirus	0	0.0	1	0.5	13	0.8
Bocavirus	1	0.6	0	0.0	7	0.5
Human metapneumovirus (hMPV)	1	0.6	1	0.5	15	1.0
Parainfluenza virus type 1 (PIV-1)	2	1.3	0	0.0	3	1.0
Parainfluenza virus type 2 (PIV-2)	1	0.6	1	0.5	5	0.3
Parainfluenza virus type 3 (PIV-3)	0	0.0	0	0.0	6	0.4
Parainfluenza virus type 4 (PIV-4)	0	0.0	2	1.0	22	1.4

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.

- Four out of the five participating GP OOH services provided data for week 49 2023.
- Out of a total of 12,174 calls made to the participating GP OOHs in week 49:
    - 3039 (25%) 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 (25.4%) in week 48 (Figures 5 and 6).
    - 183 (1.5%) were for self-reported 'flu', which is below the baseline threshold of 2.3% for 'flu' calls (Figures 7 and 8).
- 42% (1277/3039) of all cough calls were from those aged four years and under.

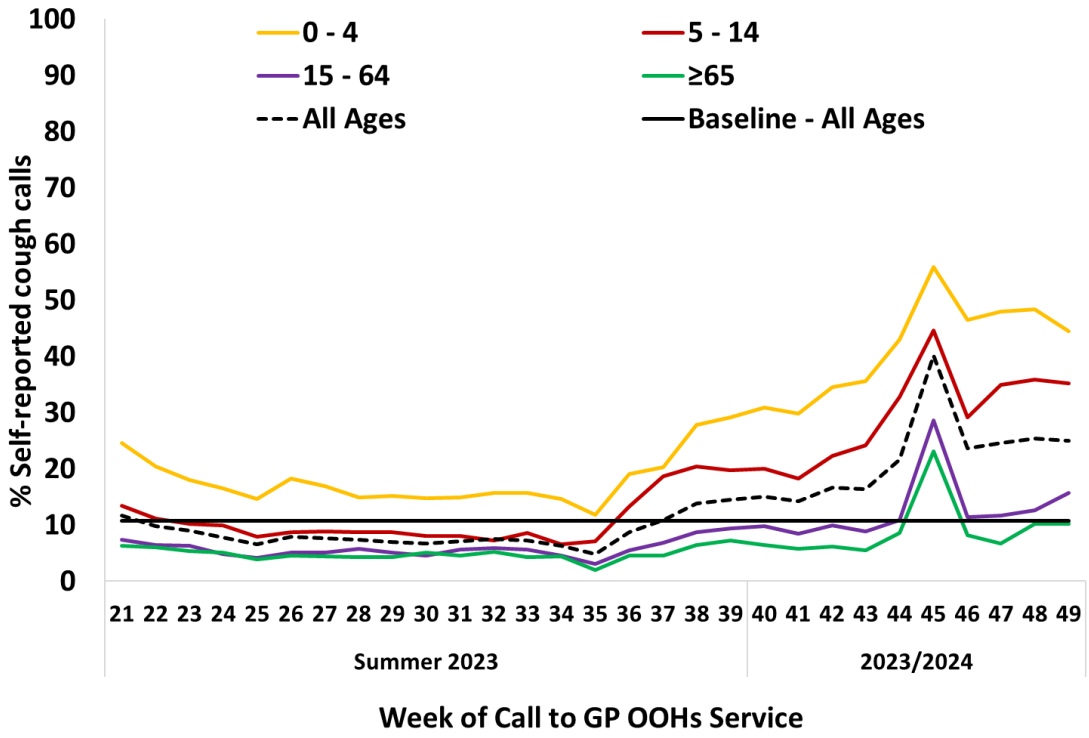

Figure 5: Percentage of self-reported **COUGH** calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call, summer 2023 and the 2023/2024 season. The baseline % cough calls for all ages calculated using the MEM method on historic data is shown. *Source: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

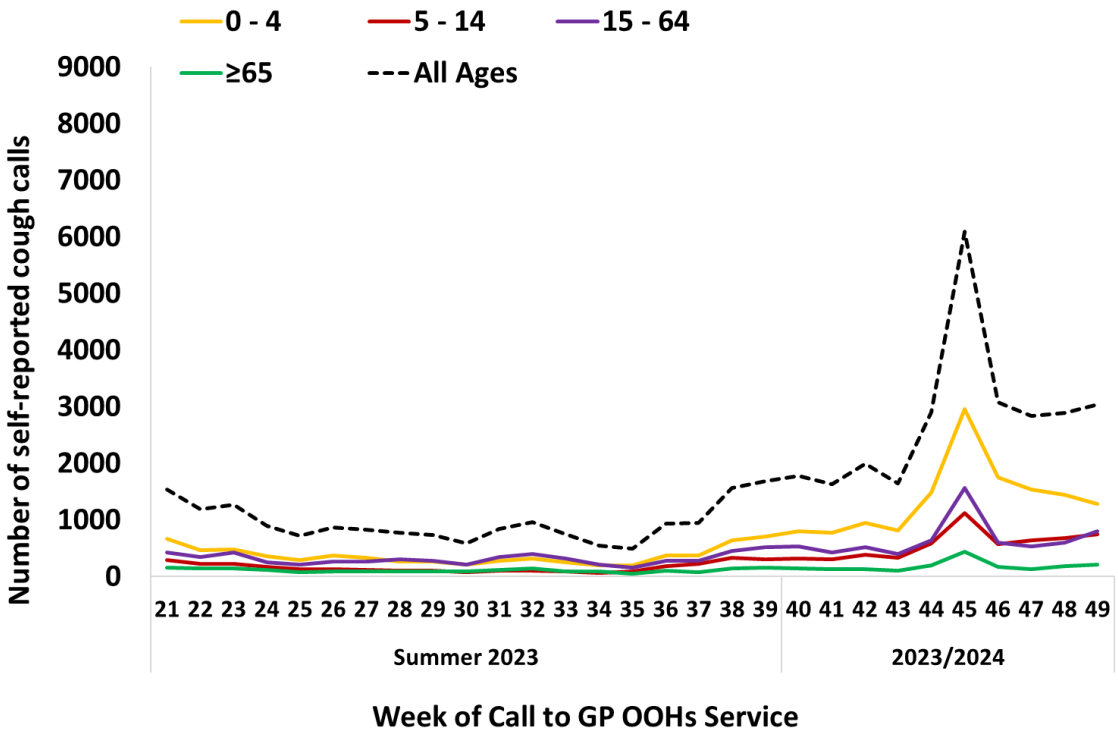

Figure 6: Number of self-reported **COUGH** calls for all ages and by age group to GP Out-of-Hours services by week of call, Summer 2023 and 2023/2024. *Source: GP Out-Of-Hours services in Ireland (collated by HSE & ICGP).*

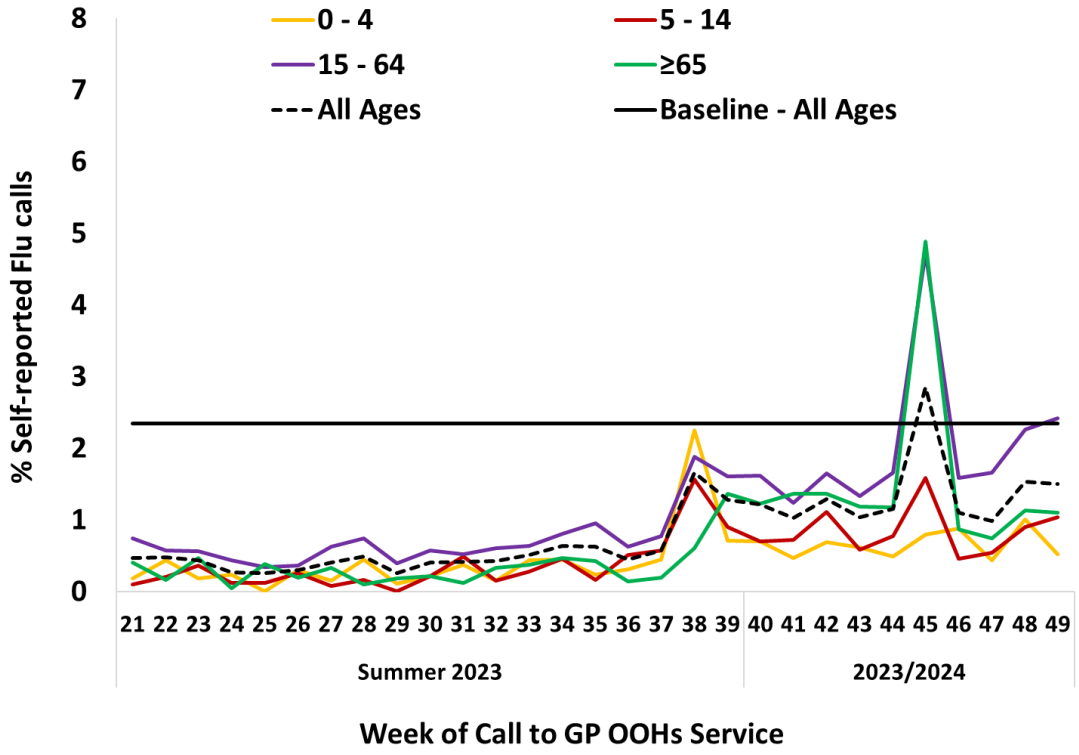

Figure 7: Percentage of self-reported **FLU** calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call, Summer 2023 and 2023/2024. The baseline % flu calls for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours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

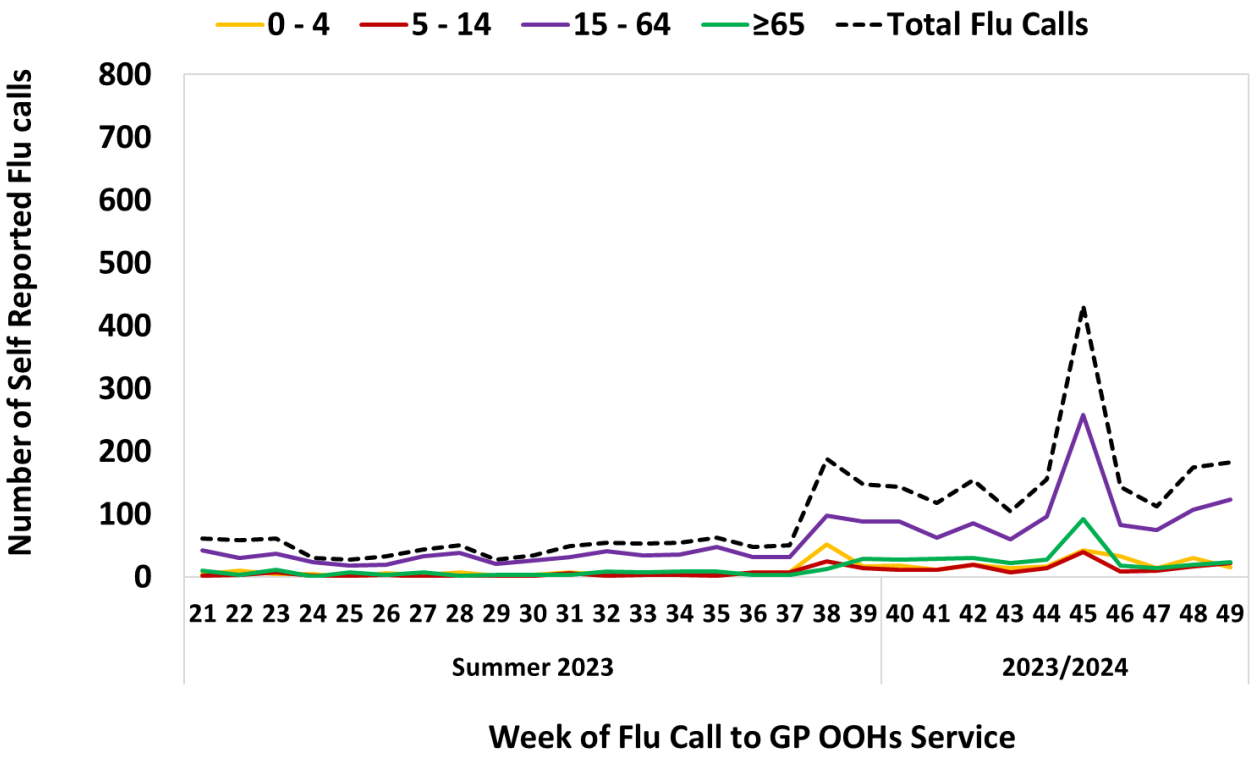

Figure 8: Number of self-reported **FLU** calls for all ages and by age group to GP Out-of-Hours services by week of call, Summer 2023 and 2023/2024. *Source: GP Out-Of-Hours services in Ireland (collated by HSE & ICGP).*

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.
- 283 laboratory confirmed influenza cases were notified during week 49 2023 (Table 6): 11 influenza A (H3), two A(H1)pdm09, 255 influenza A (not subtyped) and 15 influenza B. This is an increase compared to 172 cases notified during week 48 2023 (Figure 10).
- Age specific influenza notification rates, although overall low, were increasing in all age-groups, and were highest in those aged 0 to 4 years, at 15.2/100,000 population, followed by those aged 65 years and older at 9.8/100,000 (Figure 11).
- Laboratory confirmed influenza and RSV notified cases by HSE Health Region, are reported in Table 6 and 7.
- Influenza and RSV notification rates were highest in the West and North West health region at 13/100,000 population for influenza (Table 6) and 28/100,000 for RSV (Table 7). The South West health region influenza rates were second highest (11/100,000 population) and the Midwest RSV rates were second highest (21/100,000 population) for week 49 2023.
- 829 RSV cases were notified during week 49 2023, a decrease compared to 985 cases notified during week 48 2023 (Figure 12).
- Age specific notification rates for RSV were highest in those aged less than one year, at 606/100,000 population, followed by the 1–4-year age group at 90/100,000 (Figure 13). Notifications in those aged less than one year accounted for 42% (350/829) of all RSV notifications in week 49.

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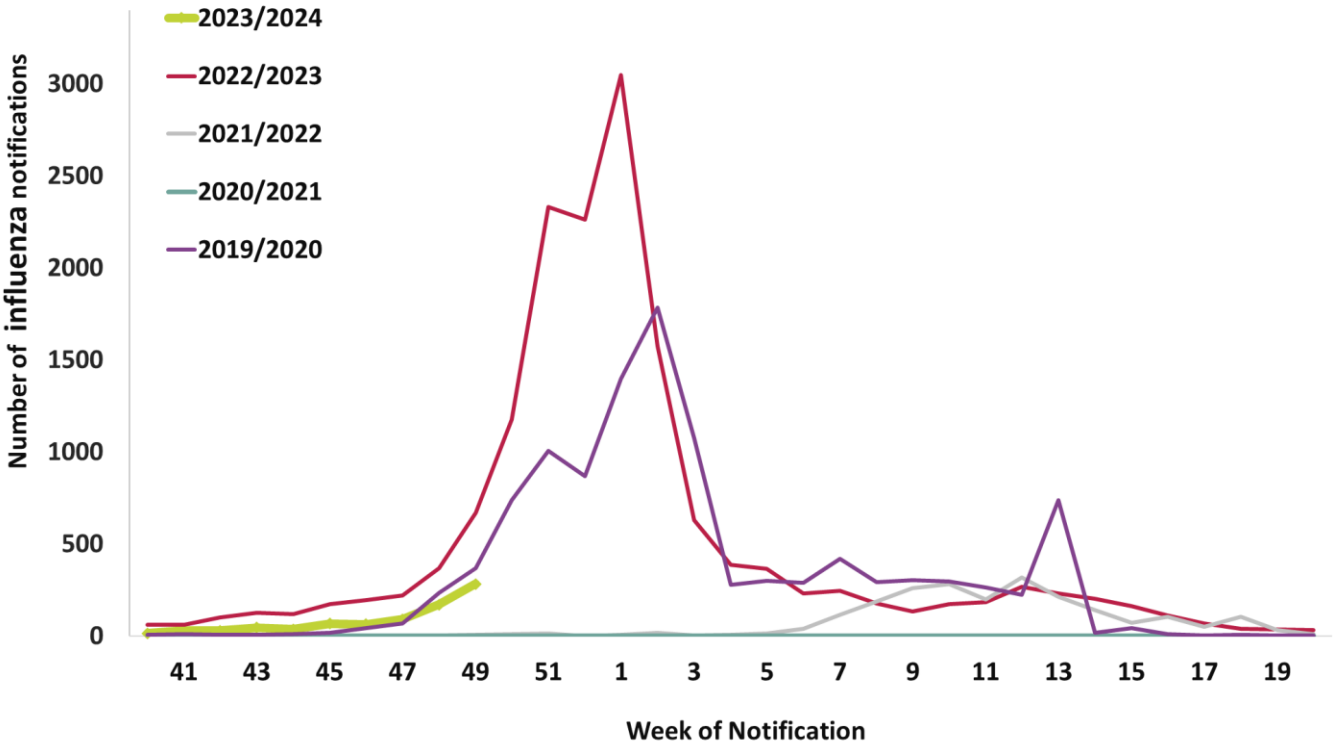

Figure 9: Number of laboratory confirmed **Influenza** notifications to HPSC by week of notification, 2019/2020 to 2023/2024 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System*

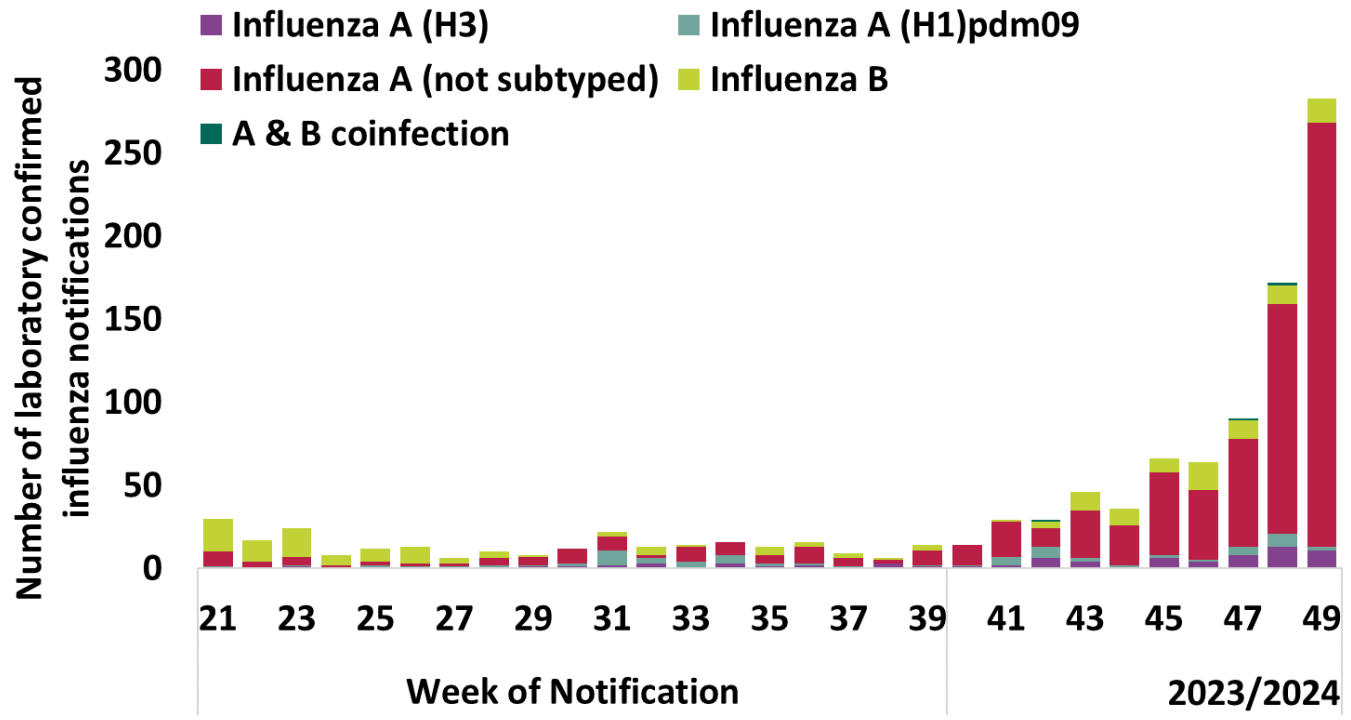

Figure 10: Number of laboratory confirmed **influenza** notifications by influenza type/subtype and week, summer 2023 and 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System*

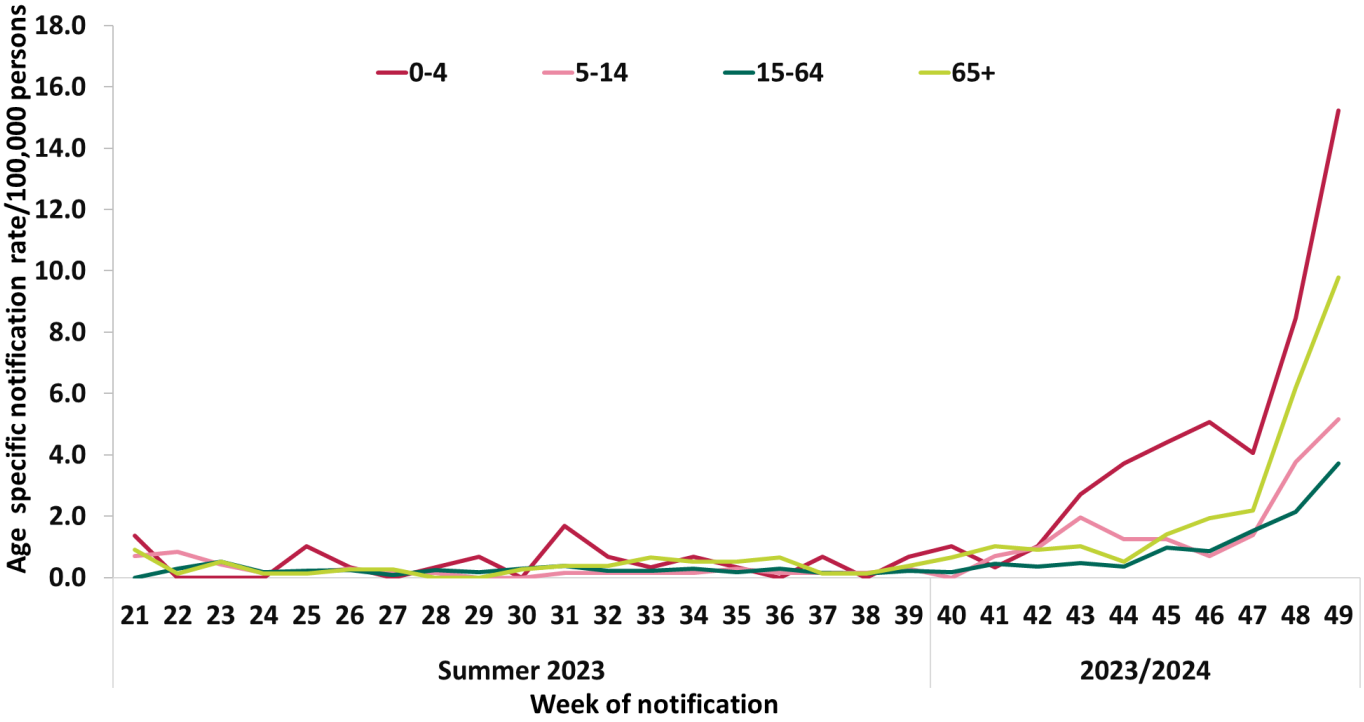

Figure 11: Age specific rates per 100,000 population of laboratory confirmed **influenza** notifications to HPSC by week of notification and season, Summer 2023 and 2023/2024. *Source: Ireland's Computerised Infectious Disease Reporting System.*

Table 6: Number and rate per 100,000 population of laboratory confirmed **influenza** notifications by HSE Health Region for week 49 2023 and the 2023/2024 season to date. *Source: CIDR*

HSE Health Region	Week 49 2023		2023/2024 season (Week 40- 49 2023)	
	Number	Rate/100,000 persons	Number	Rate/100,000 persons
Dublin and North East	39	3.3	160	13.5
Dublin and Midlands	30	2.8	102	9.5
Dublin and South East	30	3.1	106	10.9
South West	78	10.5	197	26.6
Mid West	10	2.4	33	8.0
West and North West	96	12.6	228	30.0
Total	**283**	**5.5**	**826**	**16.0**

Table 7: Number and rate per 100,000 population of laboratory confirmed **RSV** notifications by HSE Health Region for week 49 2023 and the 2023/2024 season to date. *Source: CIDR*

HSE Health Region	Week 49 2023		2023/2024 season (Week 40- 49 2023)	
	Number	Rate/100,000 persons	Number	Rate/100,000 persons
Dublin and North East	137	11.5	806	67.9
Dublin and Midlands	152	14.1	983	91.2
Dublin and South East	139	14.3	682	70.2
South West	97	13.1	622	84.0
Mid West	87	21.1	307	74.3
West and North West	216	28.4	1071	141.0
Unknown	0		1	
Total	**828**	**16.1**	**4472**	**86.8**

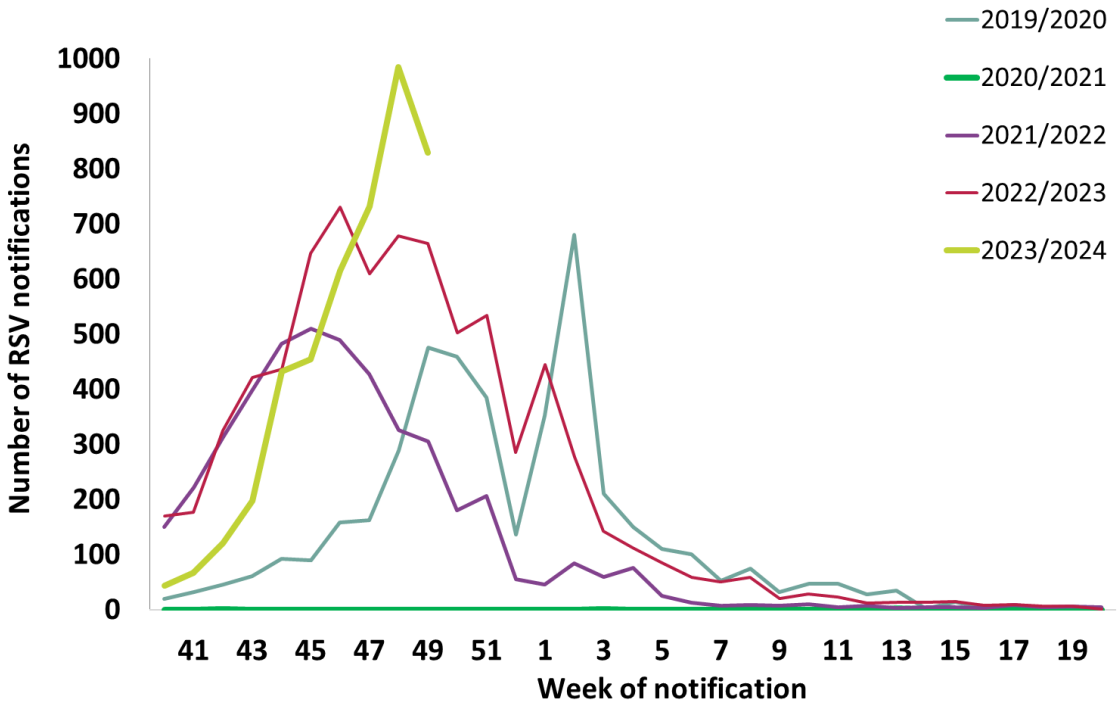

Figure 12: Number of laboratory confirmed **RSV** notifications to HPSC by week of notification*, 2019/2020 to 2023/2024 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System.*

Please note that due to a reporting delay, approximately 10% of RSV cases notified in week 44 were diagnosed between weeks 40 and 43

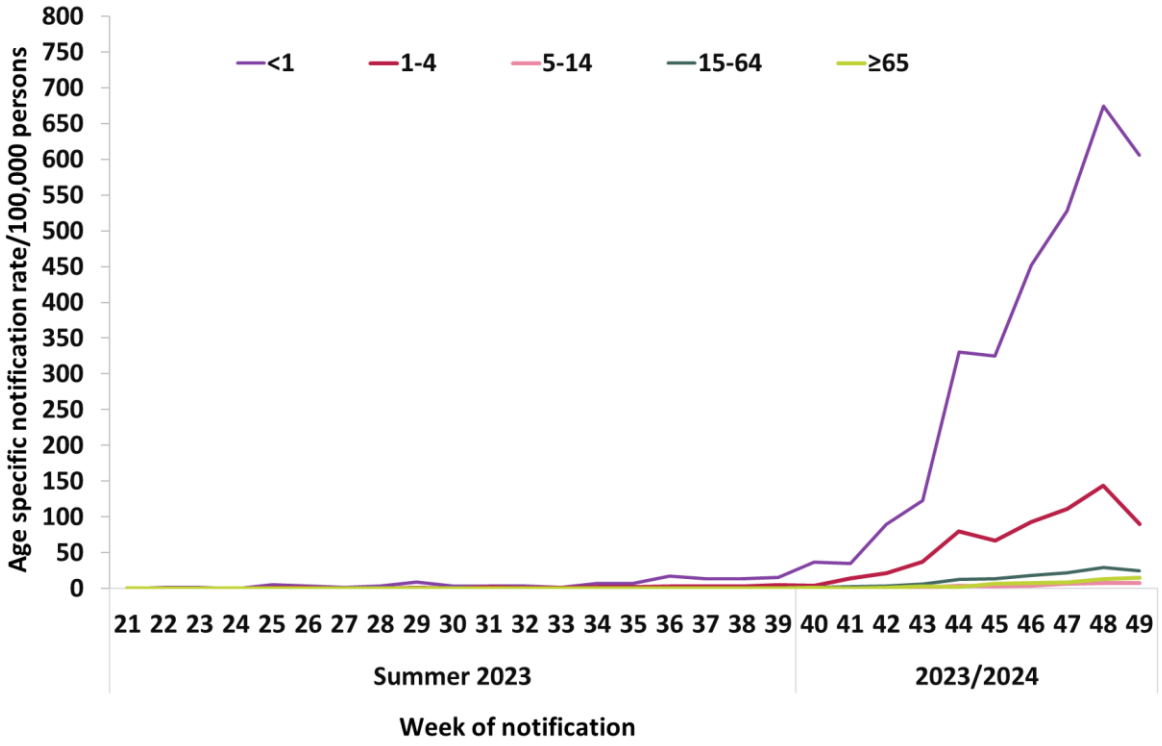

Figure 13: Age specific rates per 100,000 population for laboratory confirmed **RSV** notifications* to HPSC by week of notification-weeks 21-49, 2023. *Source: Ireland's Computerised Infectious Disease Reporting System.*

5. Hospitalisations

- During week 49 2023, the number of notified laboratory confirmed influenza hospital inpatients increased with 97 cases notified compared to 55 in week 48. 94 of the hospitalised cases were influenza A (not subtyped), one was influenza A (H3) and two were influenza B (Figure 15).
- During week 49 2023, 335 laboratory confirmed RSV hospital inpatients were notified, compared to 368 cases in week 48 2023 (Figure 17). Of the hospitalised RSV cases, 50% (166/335) were aged less than one year.
- The age specific influenza hospitalisation rate was highest in those aged 65+ years (5.2/100,000 population) and those aged 0-4 years (5.1/100,000 population). 41% of all influenza hospitalisations occurred in those aged 65+ years.
- The age specific RSV hospitalisation rate was highest in those aged less than one year (287/100,000 population) and those aged 1-4 years (30/100,000 population).
- The number of laboratory confirmed influenza and RSV notifications by patient type and week for the 2023/2024 season are reported in Tables 8 and 9.

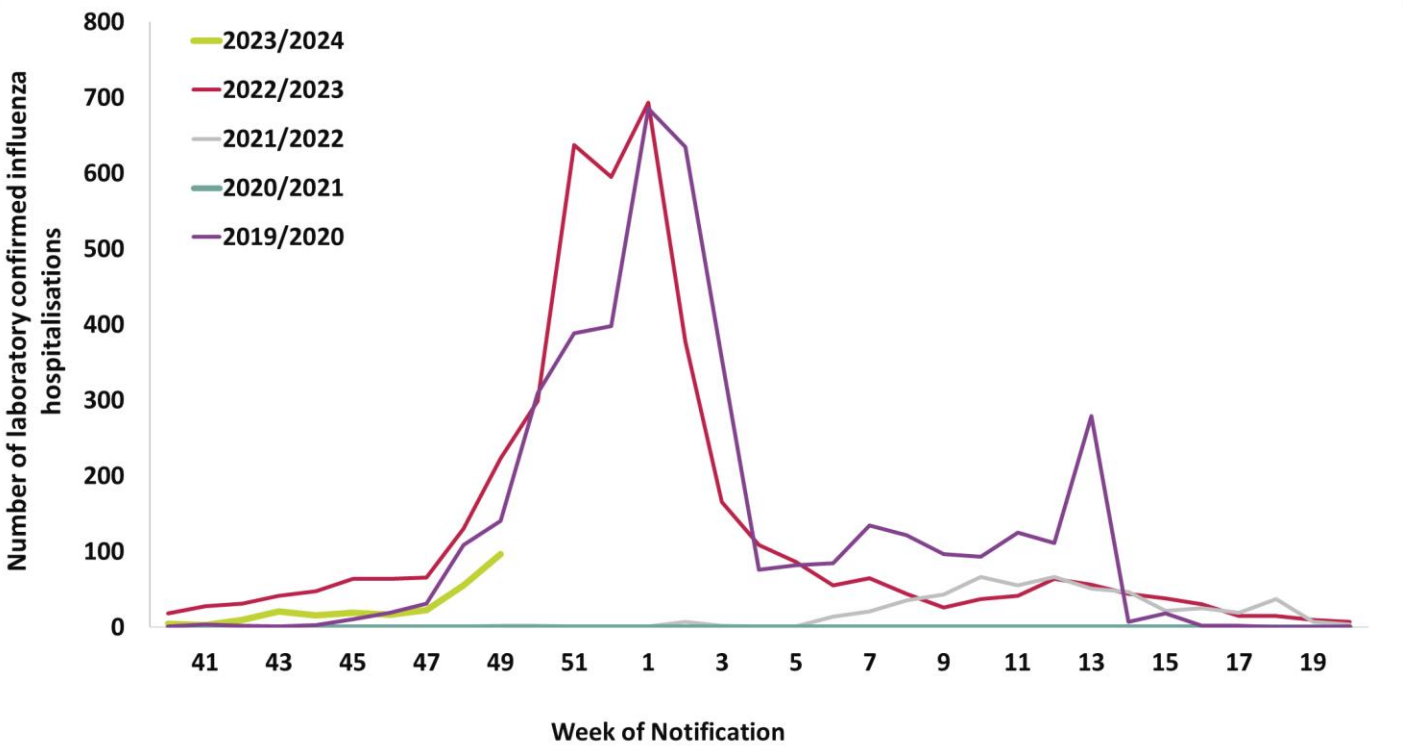

Figure 14: Number of notified **influenza** hospital inpatients, by week of notification and season, for the 2019/2020 to 2023/2024 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System.*

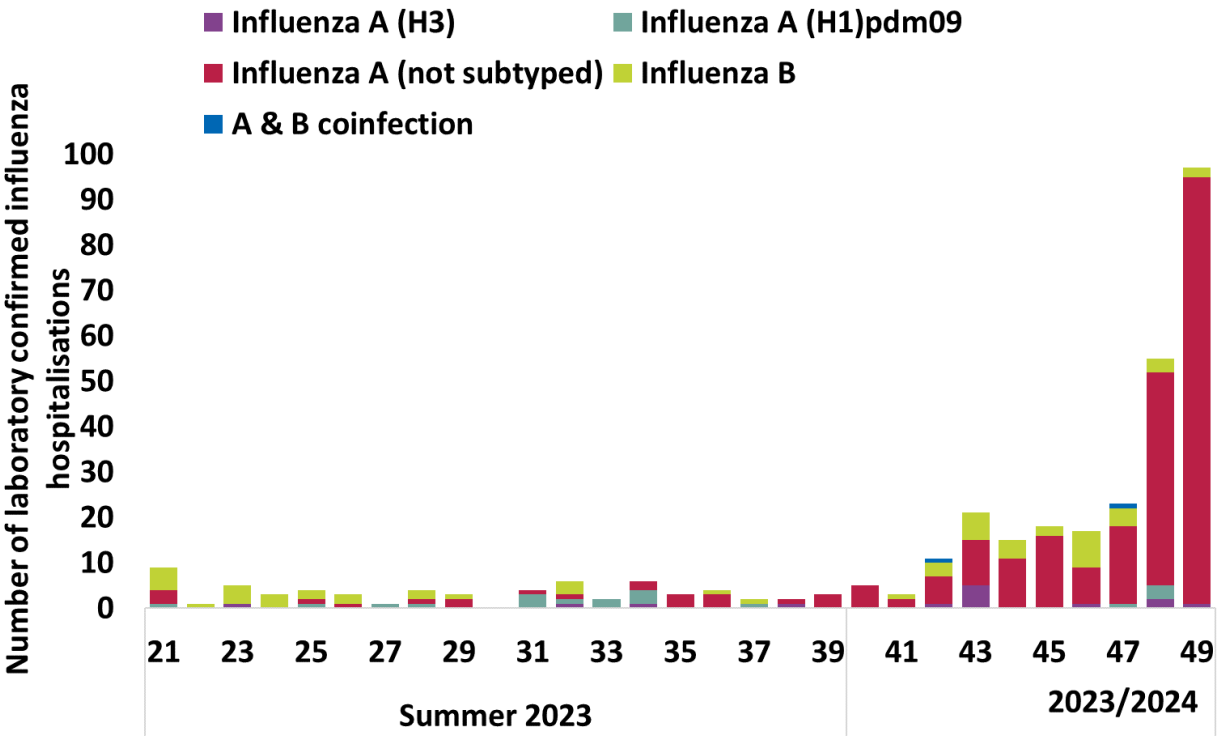

Figure 15: Number of notified laboratory confirmed **influenza** hospital inpatients by influenza type/subtype by week, summer 2023 and 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

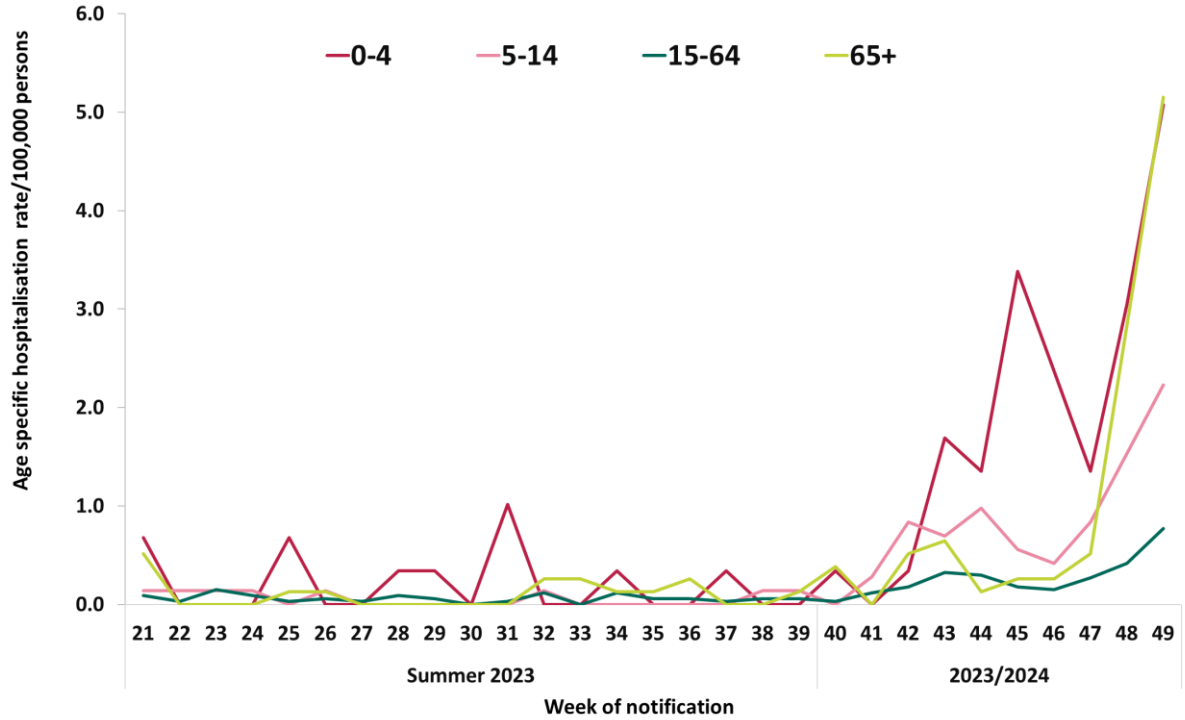

Figure 16: Age specific rates per 100,000 population for laboratory confirmed **influenza** cases reported as **hospital inpatients** by week of notification and season, Summer 2023 and 2023/2024. *Source: Ireland's Computerised Infectious Disease Reporting System.*

Table 8: 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 49	7	126	97	1	16	14	22	**283**
Week 48	15	62	55	2	11	5	20	**170**
Week 47	7	40	23	1	9	2	9	**90**
Week 46	8	28	17	0	5	1	5	**64**
Week 45	4	26	19	0	6	4	6	**66**
Week 44	0	15	16	1	1	0	3	**36**
Week 43	7	17	21	0	0	0	2	**46**
Week 42	6	8	9	0	1	0	3	**28**
Week 41	3	14	3	1	2	0	5	**29**
Week 40	0	6	5	0	3	0	0	**14**
Total	**57**	**342**	**265**	**6**	**54**	**26**	**75**	**826**

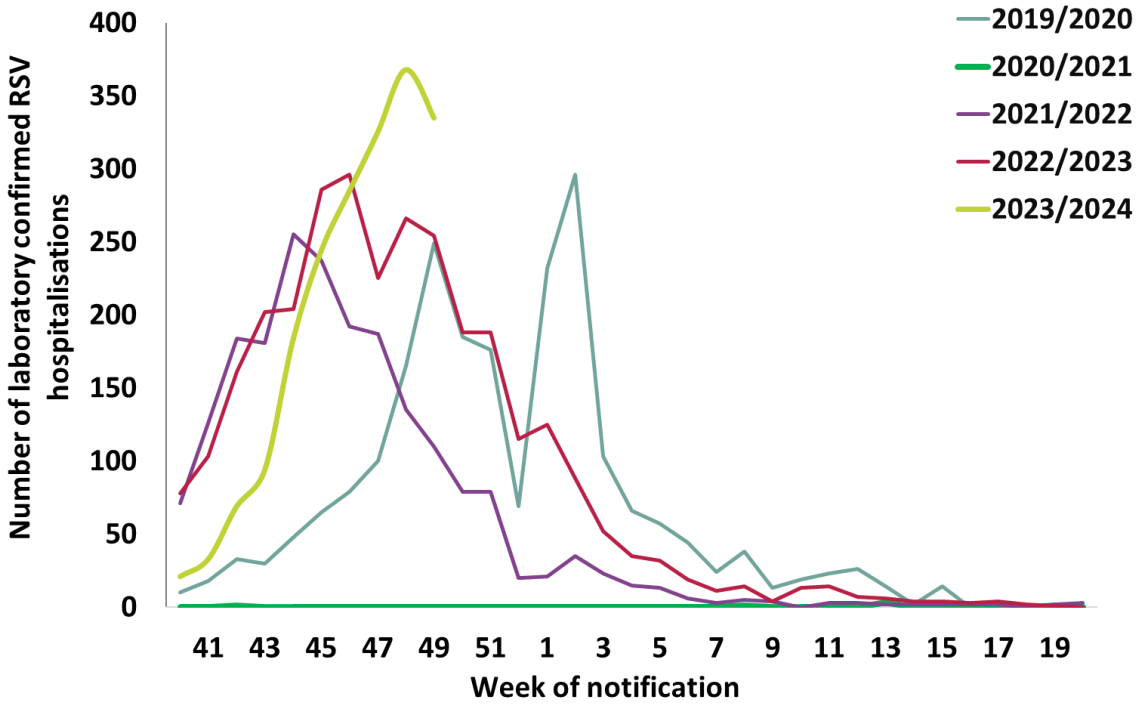

Figure 17: Number of notified **RSV** hospital inpatients, by week of notification and season, for the 2019/2020 to 2023/2024 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System.*

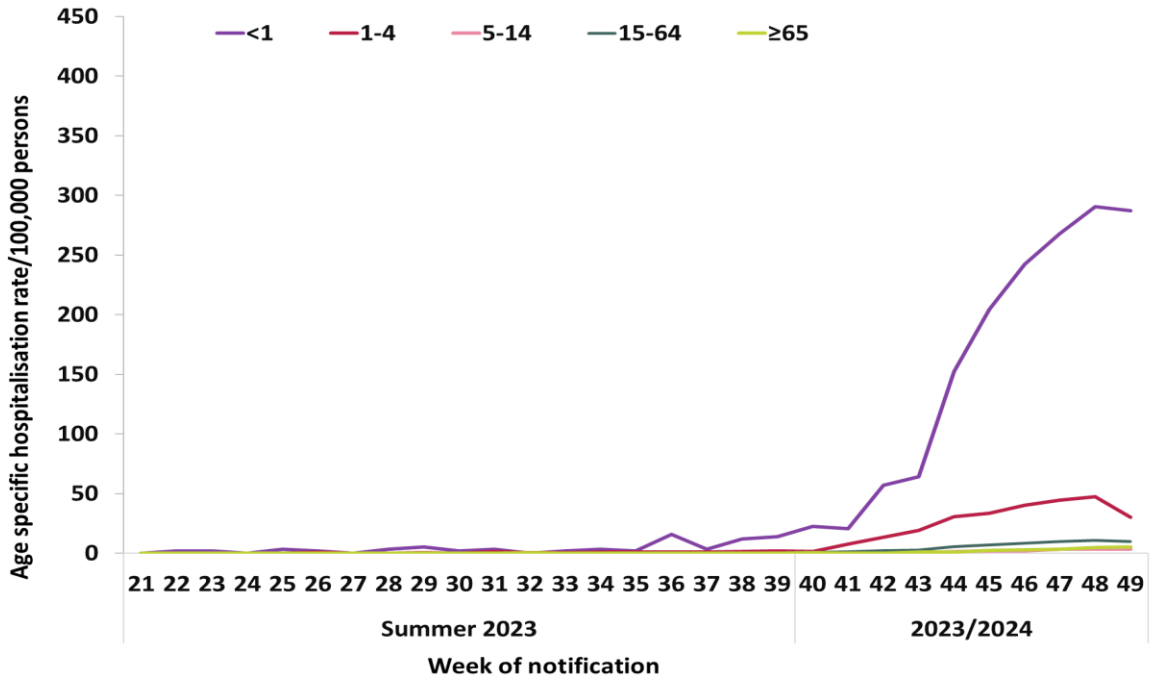

Figure 18: Age specific notification rates per 100,000 population for laboratory confirmed **RSV** hospital inpatients by week of notification and season, Summer 2023 and 2023/2024. *Source: Ireland's Computerised Infectious Disease Reporting System*

Table 9: 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 49	22	325	335	7	21	32	87	**829**
Week 48	18	475	370	10	17	12	83	**985**
Week 47	12	277	342	2	19	24	54	**730**
Week 46	7	260	294	7	9	1	37	**615**
Week 45	6	170	240	6	6	2	24	**454**
Week 44	7	215	182	4	12	4	9	**433**
Week 43	1	72	92	0	8	2	22	**197**
Week 42	2	31	64	0	9	6	8	**120**
Week 41	1	23	33	1	1	1	7	**67**
Week 40	0	16	20	1	2	3	1	**43**
Total	**76**	**1864**	**1972**	**38**	**104**	**87**	**332**	**4473**

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 was one laboratory confirmed influenza case (influenza A (not subtyped)) admitted to intensive care and notified to HPSC during week 49 2023.
- Three influenza (two influenza A (not subtyped) and one A(H1)pdm09)) ICU cases have been notified for the season to date (Week 40-Week 49).

Table 10: Cumulative number and age specific rate per 100,000 population of laboratory confirmed notified influenza hospitalised and intensive care cases, weeks 40-49 2023. *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	9	15.6	0	0.0
1-4	48	20.2	0	0.0
5-14	58	8.1	1	0.1
15-24	8	1.2	0	0.0
25-34	15	2.4	0	0.0
35-44	15	2.4	0	0.0
45-54	11	1.5	1	0.1
55-64	19	3.3	1	0.2
≥65	82	10.6	0	0.0
Unknown	0	–	0	–
Total	**265**	**5.1**	**3**	**0.1**

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 49 2023
- There was no excess mortality reported for week 48 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 49 2023, seven influenza outbreaks (five influenza A (not subtyped) (two in acute hospitals and two in residential institutions and one in a nursing home) and two influenza A(H3) outbreaks (one in a private home and one in an acute hospital)) were reported to HPSC. (Tables 11 & 12).
- There were also four RSV outbreaks (three in acute hospitals and one in a residential institution) and two ARI (no pathogen identified) outbreaks (one in nursing home and one in a healthcare service) reported to HPSC.
- There have been 41 outbreaks reported to date this season, including 18 influenza outbreaks, 11 RSV outbreaks and 12 acute respiratory infection (ARI) outbreaks.

Table 11: Summary of influenza, RSV and ARI (influenza/RSV/SARS-CoV-2 negative) outbreaks by HSE Area during week 49 2023 and the 2023/2024 season (weeks 40-49 2023) *Source: CIDR*

HSE Health Region	Influenza		RSV		ARI		Total	
	Week 49	2023/2024	Week 49	2023/2024	Week 49	2023/2024	Week 49	2023/2024
Dublin and North East	0	1	0	1	1	6	1	8
Dublin and Midlands	1	2	3	7	0	0	4	9
Dubin and South East	2	5	0	1	0	3	2	9
South West	2	4	0	0	0	0	2	4
Mid West	1	1	0	0	0	0	1	1
West and North West	1	5	1	2	1	3	3	10
Unknown	0	0	0	0	0	0	0	0
Total	**7**	**18**	**4**	**11**	**2**	**12**	**13**	**41**

Table 12: Summary of influenza, RSV and ARI (influenza/RSV/SARS-CoV-2 negative) outbreaks by outbreak setting during week 49 2023 and the 2023/2024 season (weeks 40-49 2023). *Source: CIDR*

Setting	Influenza		RSV		ARI		Total	
	Week 49	2023/2024	Week 49	2023/2024	Week 49	2023/2024	Week 49	2023/2024
Community hospital/Long-stay unit	0	0	0	0	0	2	0	2
Nursing Home	1	4	0	2	1	7	2	13
Hospital	3	7	3	5	0	0	6	12
Residential Institution	2	6	1	2	0	1	3	9
Childcare facility	0	0	0	2	0	0	0	2
Family Outbreaks	1	1	0	0	0	0	1	1
Other settings	0	0	0	0	1	2	1	2
Total	**7**	**18**	**4**	**11**	**2**	**12**	**13**	**41**

9. International Summary

According to European Respiratory Virus Surveillance Summary, during week 48 2023 (including data up to 03/12/2023), Influenza activity remains low but is slowly increasing; all three influenza virus types/subtypes (A(H1)pdm09, A(H3) and B) are co-circulating. Of 37 countries reporting the geographical spread of influenza, eight countries reported no activity, 15 reported sporadic activity, three reported local, five reported regional and six reported widespread activity. The change from last week suggests increasing geographical spread in some countries. RSV activity began in around week 36 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. Transmission of SARS-CoV-2 began increasing in the late summer and continues to show an increase based on the sentinel median positivity data as well as severity indicators (hospital admissions, ICU admissions, and death rates). The impact of SARS-CoV-2 on severe disease mainly affects those aged 65 years and above.

As of 27th November 2023, WHO has reported that globally influenza detections increased due to increases in parts of the temperate Northern hemisphere. In the countries of North America, influenza detections increased but remained low or below baseline. 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, with influenza A(H3N2) and A(H1N1)pdm09 viruses more frequently detected, respectively. In the Central American and Caribbean countries, influenza activity continued to increase 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.

- 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

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 in Ireland is available at www.hpsc.ie

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