Influenza, RSV and Other Respiratory Viruses Surveillance Report Week 6 2024 (5th - 11th February 2024)











This report presents data on the epidemiology of influenza, respiratory syncytial virus (RSV) and other respiratory viruses (ORVs). For further information on the epidemiology of COVID-19, please refer to COVID-19 surveillance $\frac{reports.}{reports}$ Data for this report were extracted on $\frac{12}{02}$ 2024.

Summary Week 6 2024

Most indicators of influenza activity decreased during week 6 2024, however notified cases, hospitalisations and sentinel GP influenza positivity remained at moderate to high levels. Influenza A viruses have predominated this season, with A(H3) and A(H1)pdm09 viruses co-circulating and influenza B viruses detected at lower levels. It is recommended that antivirals be used for the treatment and prophylaxis of influenza in clinical at-risk groups and in those with severe influenza disease.

- <u>Influenza-like illness (ILI)</u>: The sentinel GP influenza-like illness (ILI) consultation rate was 9.7/100,000 population during week 6 2024, which is below the Irish baseline threshold (18.1/100,000) and has been steadily decreasing over recent weeks. ILI age specific rates were below the age specific baseline for all age groups during week 6 2024.
- National Virus Reference Laboratory (NVRL): Of 119 sentinel GP ARI specimens tested and reported by the NVRL during week 6 2024, 38 (32%) were positive for influenza (25 A(H3), seven A(H1)pdm09 and six influenza B), four (3.4%) for RSV, five (4.2%) for SARS-CoV-2, and 10 (8.4%) for rhino/enterovirus.
- Of 216 non-sentinel respiratory specimens tested and reported by the NVRL during week 6 2024, 44 (20.4%) were positive for influenza (23 A(H3), 15 A(H1)pdm09, two A (not subtyped) and four influenza B), 14 (6.5%) for SARS-CoV-2, two (0.9%) for RSV and 14 (6.5%) for rhino/enterovirus.
- GP Out of hours (OOHs): Cough calls comprised 22% (3791/17,406) of all reported GP OOHs calls during week 6 2024 (above the baseline threshold of 10.8%); 34% (1270/3791) of cough calls were in those aged 0-4 years. Flu calls comprised 2.1% (363/17,406) of all calls in week 6 2024, which is just below the baseline threshold level (2.3%). The majority (63%; 229/363) of all flu calls were in those aged 15-64 years.
- Influenza notifications: 1,091 laboratory confirmed influenza cases were notified during week 6 2024: 42 A(H3), 23 A(H1)pdm09, 937 A (not subtyped), 86 influenza B and three influenza A and B coinfections. This is a decrease compared to 1,381 cases notified during week 5 2024. The highest burden of notifications occurred in those aged 65 years and older at 33% (363/1091) of all influenza notifications in week 6 2024.
- **RSV notifications:** 60 RSV cases were notified during week 6 2024, compared to 76 cases during week 5 2024. Age specific notification rates for RSV were highest in those aged less than one year.
- <u>Hospitalisations:</u> 255 laboratory confirmed influenza hospitalised cases (eight A(H3), four A(H1)pdm09, 221 (not subtyped), and 22 B) were notified in week 6 2024, compared to 267 in week 5 2024. During the 2023/2024 season to date, 2,919 laboratory confirmed influenza hospital inpatients were reported (247 A(H3), 84 A(H1)pdm09, 2,443 A (not subtyped), 143 B and two A and B coinfections). During week 6, 22 laboratory confirmed RSV hospitalised cases were notified compared to 29 cases in week 5 2024. For the 2023/2024 season to date, 3,175 RSV hospitalisations have been reported.
- <u>Intensive care admissions:</u> No laboratory confirmed influenza cases were admitted to intensive care unit (ICU) and notified to HPSC during week 6 2024. For the season to date, 79 influenza ICU cases (22 A(H3), 10 A(H1)pdm09 and 47 A (not subtyped) have been notified.
- Mortality: There were no deaths in notified influenza cases reported to HPSC during week 6 2024. For the season to date, 77 deaths were reported 17 A(H3), six A(H1)pdm09 and 54 A (not-subtyped).
- <u>Outbreaks:</u> During week 6 2024, 8 influenza outbreaks (two acute hospitals, three nursing homes, two residential institutions and one community hospitals/long stay units), no RSV outbreaks and two ARI outbreaks in nursing homes were reported to HPSC.
- <u>International:</u> In the EU/EEA during week 5 2024, while there is variation across the region, influenza activity remained at high levels. RSV continues to circulate but has declined in recent weeks.

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

- During week 6 2024, 84 sentinel GP influenza-like illness (ILI) consultations were reported from the Irish sentinel GP network, corresponding to an ILI consultation rate of 9.7 per 100,000 population which is below the sentinel GP ILI baseline threshold (18.1/100,000 population) and below expected levels this season. This is compared to an updated rate of 12.0 per 100,000 population during week 5 2024 (Figure 1). The ILI consultation rate has been steadily decreasing since week 2 2024.
- Of the 98 GP practices in the Irish sentinel GP network, 94 reported clinical consultation data during week 6 2024.
- Age specific ILI consultation rates were below the age specific baseline thresholds in all age groups during week 6 2024. ILI age specific rates were highest in those aged 15-64 years (10.8/100,000)(Figure 2, Table 1).
- The Irish sentinel baseline ILI threshold for the 2023/2024 influenza season is 18.1 per 100,000 population. ILI rates above this baseline threshold combined with sentinel GP influenza positivity >10% indicate the likelihood that influenza is circulating in the community. The Moving Epidemic Method (MEM) is used to calculate thresholds for GP ILI consultations in a standardised approach across Europe. The baseline ILI threshold (18.1/100,000 population), low (57.5/100,000 population), medium (86.5/100,000 population) and high (103.6/100,000 population) intensity ILI thresholds are shown in Figure 1. The age specific baseline threshold for those aged <15 is 17.1/100,000, for those aged 15-64 is 12.6/100,000 and for those aged ≥65 years is 11.6/100,000.

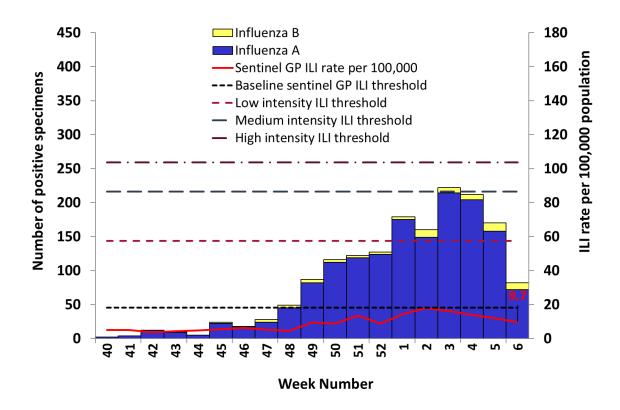


Figure 1: Sentinel GP Influenza-like illness (ILI) consultation rates per 100,000 population, baseline, low, medium and high intensity ILI thresholds and number of positive influenza A and B specimens tested by the NVRL, by influenza week for the 2023/2024 season. Source: ICGP and NVRL

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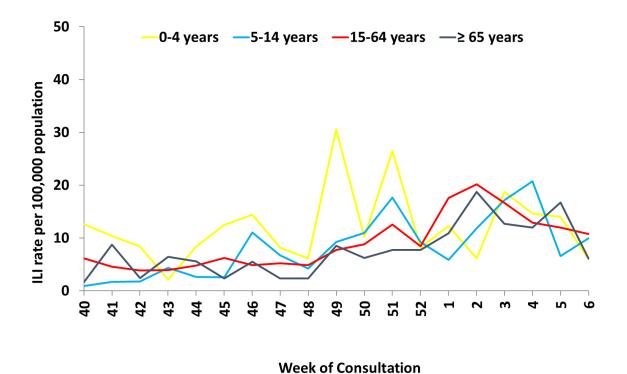


Figure 2: Age specific sentinel GP **ILI consultation** rate per 100,000 population by week (week 40 2023 to week 6 2024). *Source: ICGP.*

Table 1: Age specific sentinel GP **ILI consultation** rate per 100,000 population by week (week 40 2023 to week 6 2024), colour coded by sentinel GP ILI age specific Moving Epidemic Method (MEM) threshold levels. *Source: ICGP*.

MEM Th	reshol	d Leve	els		Below	Baselin	ie	Low		Mod	derate		Н	igh		Extr	aordi	nary	
		-					-		2023/2	2024									
Age group (years)	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6
All Ages	5.1	5.1	3.6	4.3	4.8	5.5	6.4	5.2	4.5	9.4	8.8	13.5	8.9	14.6	18.0	16.2	13.9	12.0	9.7
<15 yrs	4.0	4.0	3.4	3.4	4.0	5.1	11.2	6.7	4.4	14.4	10.0	18.8	8.3	7.2	9.5	16.4	17.6	8.1	8.2
15-64 yrs	6.1	4.6	3.9	3.9	4.8	6.2	4.9	5.2	4.9	7.7	8.8	12.6	8.4	17.6	20.2	16.6	12.9	11.9	10.8
≥65 yrs	1.6	8.7	2.4	6.4	5.6	2.4	5.5	2.3	2.3	8.5	6.2	7.8	7.8	10.9	18.7	12.7	11.9	16.7	6.1
Reporting practices (N=98)	92	94	92	90	92	93	94	96	95	96	95	97	97	95	94	93	92	96	94

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 6 2024, of 119 sentinel GP ARI specimens tested and reported by the NVRL, 38 (32%) were positive for influenza (25 A(H3), seven A(H1)pdm09 and six influenza B), four (3.4%) for RSV, five (4.2%) for SARS-CoV-2, and 10 (8.4%) for rhino/enterovirus.
- In comparison during week 5 2024, of 206 sentinel GP ARI specimens tested and reported by the NVRL, 68 (33.%) were positive for influenza (42 A(H3), 14 A(H1)pdm09, two A (not subtyped) and 10 B), one (0.5%) for RSV, eight (3.9%) for SARS-CoV-2, and 15 (7.3%) for rhino/enterovirus.
- For the 2023/2024 season to date (week 40 2023 to week 6 2024), of 2,921 sentinel GP ARI specimens tested and reported by the NVRL, 570 (19.5%) were positive for influenza, 254 (8.7%) for RSV, 202 (6.9%) for SARS-CoV-2, and 455 (15.6%) for rhino/enterovirus (Table 4).
- During week 6 2024, of 216 non-sentinel respiratory specimens tested and reported by the NVRL, 44 (20.4%) were positive for influenza (23 A(H3), 15 A(H1)pdm09, two A (not subtyped) and four influenza B), 14 (6.5%) for SARS-CoV-2, two (0.9%) for RSV and 14 (6.5%) for rhino/enterovirus.
- During week 5 2024, of 333 non-sentinel respiratory specimens tested, 102 (30.6%) were positive for influenza (71 A(H3), 25 A(H1)pdm09, four A (not subtyped), and two B), 22 (6.6%) for SARS-CoV-2, six (1.8%) for RSV, and 12 (3.6%) for rhino/enterovirus (Figure 3b).
- For the 2023/2024 season to date (week 40 2023 to week 6 2024), of 4,711 non-sentinel respiratory specimens tested and reported by the NVRL, 1059 (22.5%) were positive for influenza, 274 (5.8%) for RSV, 355 (7.5%) for SARS-CoV-2, and 455 (9.7%) for rhino/enterovirus (Table 5).
- Other respiratory viruses (ORVs) are being detected at lower levels (Figure 3a and 3b).
- Of 1,629 sentinel GP ARI specimens and non-sentinel specimens positive for influenza and reported by the NVRL during the 2023/2024 season, 101 (6.2%) were coinfected with other viruses.

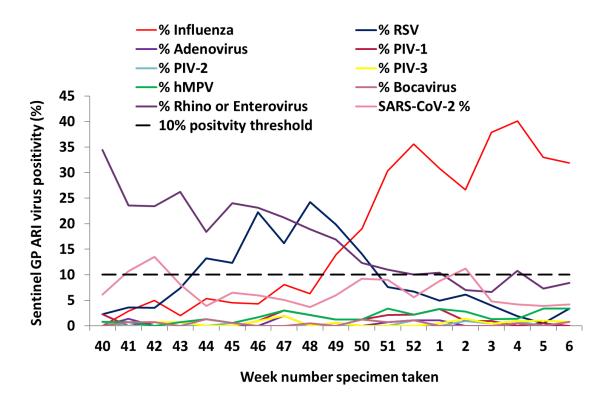


Figure 3a: Percentage positive results for **sentinel GP ARI** specimens tested by the NVRL for influenza, SARS-CoV-2, RSV and other respiratory viruses by week specimen was taken for the 2023/2024 season. *Source: NVRL*

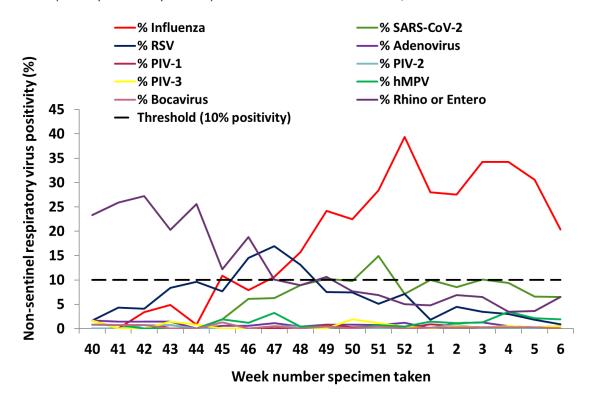


Figure 3b: Percentage positive results for **non-sentinel respiratory** specimens tested by the NVRL for influenza, SARS-CoV-2, RSV and other respiratory viruses by week specimen was taken for the 2023/2024 season. *Source: NVRL*

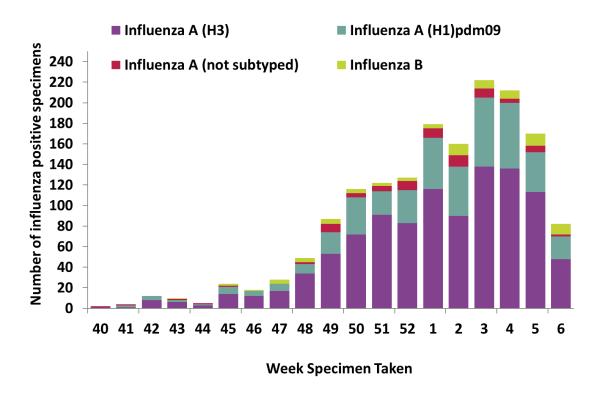


Figure 4: Number of positive **influenza** specimens (from sentinel GP ARI and non-sentinel respiratory sources) tested by the NVRL by influenza type/subtype and by week specimen was taken for the 2023/2024 season. *Source:* NVRL

Table 2: Number of sentinel GP ARI and non-sentinel respiratory specimens tested by the NVRL and positive **influenza** results, overall and by influenza type and subtype, for week 5 and week 6 2024, and the 2023/2024 Season. *Source: NVRL*

			Number			Influ	ienza A		Influenza B			
Surveillance period	Specimen type	Total tested	influenza positive	% Influenza positive	A(H1)pdm09	A(H3)	A (not subtyped)	Total influenza A	B (unspecified)	B Victoria lineage	B Yamagata Iineage	Total influenza B
	Sentinel GP ARI	119	38	31.9	7	25	0	32	6	0	0	6
Week 6 2024	Non-sentinel respiratory	216	44	20.4	15	23	2	40	4	0	0	4
	Total	335	82	24.5	22	48	2	72	10	0	0	10
	Sentinel GP ARI	206	68	33.0	14	42	2	58	10	0	0	10
Week 5 2024	Non-sentinel respiratory	333	102	30.6	25	71	4	100	1	1	0	2
	Total	539	170	31.5	39	113	6	158	11	1	0	12
	Sentinel GP ARI	2921	570	19.5	150	337	33	520	50	0	0	50
2023/2024	Non-sentinel respiratory	4711	1059	22.5	289	699	41	1029	22	8	0	30
	Total	7632	1629	21.3	439	1036	74	1549	72	8	0	80

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 5 and week 6 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)
	Sentinel GP ARI	119	4	3.4	2	2	0
Week 6 2024	Non-sentinel	216	2	0.9	1	1	0
	Total	335	6	1.8	3	3	0
	Sentinel GP ARI	206	1	0.5	0	1	0
Week 5 2024	Non-sentinel	333	6	1.8	0	6	0
	Total	539	7	1.3	0	7	0
	Sentinel GP ILI/ARI	2921	254	8.7	190	64	0
2023/2024	Non-sentinel	4711	274	5.8	211	63	0
	Total	7632	528	6.9	401	127	0

Table 4: Number and percentage positive sentinel GP ARI specimens by **respiratory virus**, week 5 and week 6 2024, and the 2023/2024 season. *Source: NVRL*

Virus	Week 6 202	24 (N=119)	Week 5 202	24 (N=206)	2023/2024	I (N=2921)
Vilus	Total positive	% positive	Total positive	% positive	Total positive	% positive
SARS-CoV-2	5	4.2	8	3.9	202	6.9
Influenza virus	38	31.9	68	33.0	570	19.5
Respiratory Syncytial Virus (RSV)	4	3.4	1	0.5	254	8.7
Rhino/enterovirus	10	8.4	15	7.3	455	15.6
Adenovirus	0	0.0	0	0.0	10	0.3
Bocavirus	1	0.8	0	0.0	11	0.4
Human metapneumovirus (hMPV)	4	3.4	7	3.4	54	1.8
Parainfluenza virus type 1 (PIV-1)	0	0.0	1	0.5	33	1.1
Parainfluenza virus type 2 (PIV-2)	1	0.8	0	0.0	9	0.3
Parainfluenza virus type 3 (PIV-3)	1	0.8	2	1.0	17	0.6
Parainfluenza virus type 4 (PIV-4)	0	0.0	0	0.0	41	1.4

Table 5: Number and percentage positive non-sentinel respiratory specimens, by **respiratory virus**, week 5 and week 6 2024, and the 2023/2024 season. *Source: NVRL*

Virus	Week 6 20	24 (N=216)	Week 5 20	24 (N=333)	2023/2024	1 (N=4711)
Viius	Total positive	% positive	Total positive	% positive	Total positive	% positive
SARS-CoV-2	14	6.5	22	6.6	355	7.5
Influenza virus	44	20.4	102	30.6	1059	22.5
Respiratory Syncytial Virus (RSV)	2	0.9	6	1.8	274	5.8
Rhino/enterovirus	14	6.5	12	3.6	455	9.7
Adenovirus	1	0.5	1	0.3	36	0.8
Bocavirus	0	0.0	1	0.3	13	0.3
Human metapneumovirus (hMPV)	4	1.9	7	2.1	57	1.2
Parainfluenza virus type 1 (PIV-1)	1	0.5	0	0.0	14	1.2
Parainfluenza virus type 2 (PIV-2)	0	0.0	0	0.0	9	0.2
Parainfluenza virus type 3 (PIV-3)	1	0.5	1	0.3	24	0.5
Parainfluenza virus type 4 (PIV-4)	0	0.0	2	0.6	26	0.6

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.

- Five participating GP OOH services provided data for week 6 2024.
- Out of a total of 17,406 calls made to the participating GP OOHs in week 6 2024:
 - 3,791 (22%) were for self-reported 'cough', which is above the baseline threshold of 10.8% for cough calls and is stable compared to the percentage of cough calls (21%) reported in week 5 2024 (Figures 5 and 6). The highest burden of cough calls was in those aged 0-4 years at 34% (1270/3791).
 - 363 (2.1%) were for self-reported 'flu', which is just below the baseline threshold of 2.3% for 'flu' calls (Figures 7 and 8). This compares to 1.7% 'flu' calls made in week 5. The highest burden of flu calls and cough was in those aged 15 to 64 years at 63% (229/363).

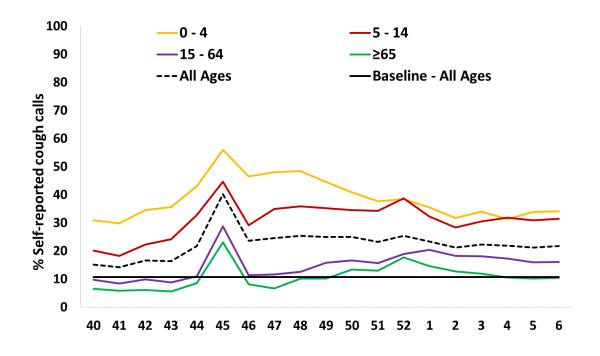


Figure 5: Percentage of self-reported **COUGH** calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call for the 2023/2024 season. The baseline % cough calls for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours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

Week of Call to GP OOHs Service

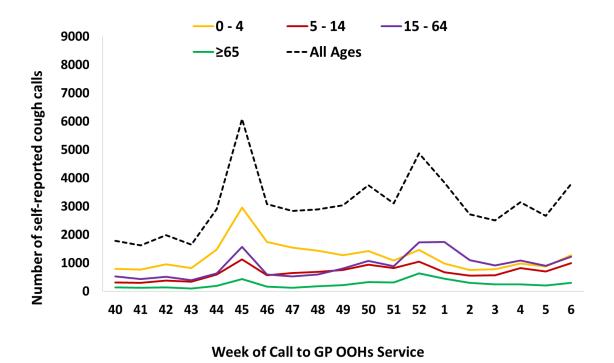


Figure 6: Number of self-reported **COUGH** calls for all ages and by age group to GP Out-of-Hours services by week of call for the 2023/2024 season. *Source: GP Out-Of-Hours services in Ireland (collated by HSE & ICGP).*

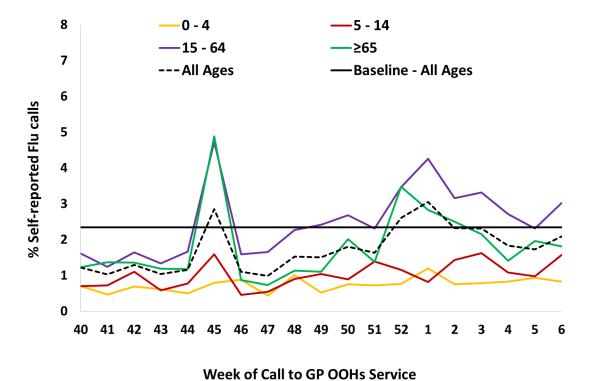


Figure 7: Percentage of self-reported **FLU** calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call for the 2023/2024 season. The baseline % flu calls for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours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

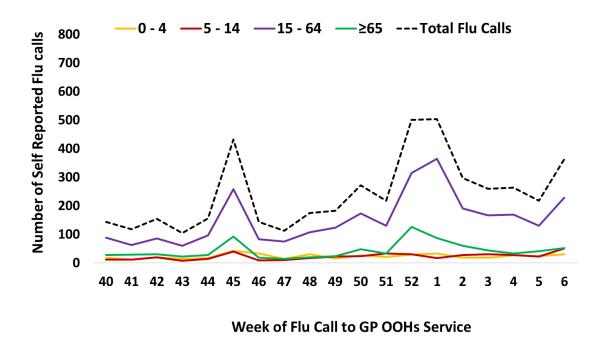


Figure 8: Number of self-reported **FLU** calls for all ages and by age group to GP Out-of-Hours services by week of call for the 2023/2024 season. *Source: GP Out-Of-Hours services in Ireland (collated by HSE & ICGP).*

4. Influenza & RSV notifications

Influenza and RSV case notifications are reported on Ireland's Computerised Infectious Disease Reporting System (CIDR), including all laboratory-confirmed influenza/RSV specimens reported from all laboratories testing for influenza/RSV. Influenza and RSV notifications are reported in the Weekly Infectious Disease Report for Ireland.

- 1,091 laboratory confirmed influenza cases were notified during week 6 2024 (Table 6); corresponding to an overall notification rate of 21/100,000 population: 42 A(H3), 23 A(H1)pdm09, 937 A (not subtyped) and 86 B and three influenza A and B coinfections. This is a decrease compared to 1,381 cases notified during week 5 2024 (Figure 10).
- 11,684 laboratory confirmed influenza cases were notified for the 2023/2024 season to date (week 40 2023 to week 6 2024): 1,187 A(H3), 502 A(H1)pdm09, 9,376 A (not subtyped), 610 B, eight A and B coinfections, and one A(H1)pdm09 and A(H3) coinfection.
- Notification rates decreased among all age groups during week 6 2024 (Figure 10) (Figure 11). Age specific influenza notification rates were highest in the 0–4-year age group at 49.8/100,000 population, followed by those aged 65 years and older at 46.8/100,000 during week 6 2024 (Figure 11).
- The highest burden of notifications occurred in those aged 65 years and older at 33% (363/1091) of all influenza notifications in week 6 2024.
- Influenza notification rates were highest in the Dublin and North-East health region at 29.6/100,000 population (Table 6) during week 6 2024, with notifications from this region accounting for 32% of all notifications (351/1091).
- RSV notifications continued to decline with 60 cases notified during week 6 2024, compared to 76 cases during week 5 2024 (Figure 12).
- 7,551 RSV notifications have been reported for the 2023/2024 season to date.
- Age specific notification rates for RSV were highest in those aged less than one year, at 15.6/100,000 population, followed by those aged 65 years and older at 4.3/100,000 (Figure 13). Notifications in those aged 65 years and older accounted for 55% (33/60) of all RSV notifications in week 6 2024.
- RSV notification rates were low across all regions (Table 7).

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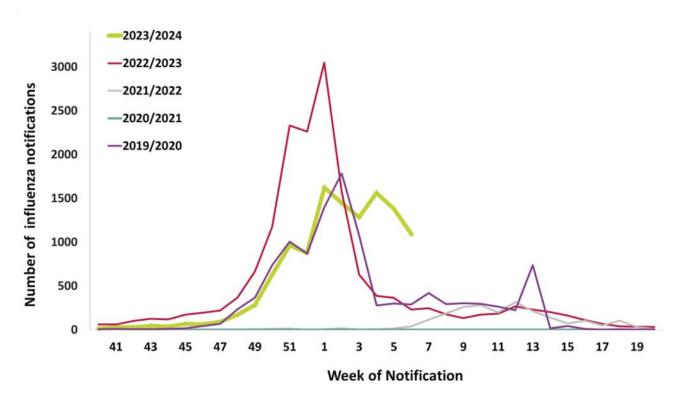


Figure 9: Number of laboratory confirmed **Influenza** notifications to HPSC by week of notification, 2019/2020 to 2023/2024 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System*

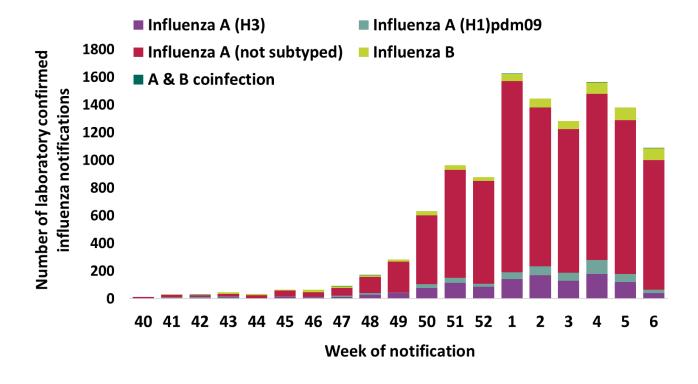


Figure 10: Number of laboratory confirmed **influenza** notifications by influenza type/subtype and week for the 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System*

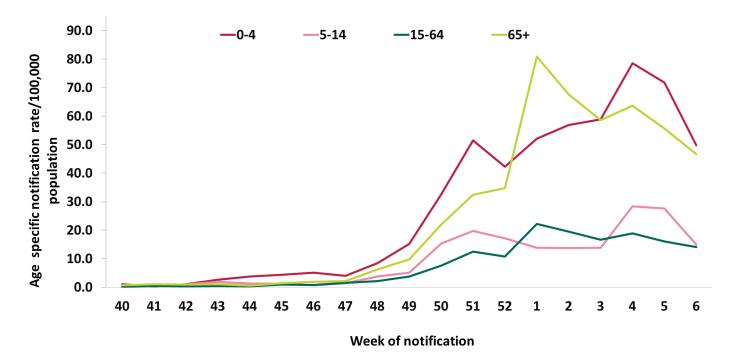


Figure 11: Age specific rates/100,000 population of laboratory confirmed **influenza** notifications to HPSC by week of notification for the 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

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

	Week	6 2024	2023/2024 season (\	Week 40 2023 - Week 6 2024)
HSE Health Region	Number	Rate/100,000 population	Number	Rate/100,000 population
Dublin and North East	351	29.6	2568	216.3
Dublin and Midlands	202	18.7	2063	191.4
Dublin and South East	229	23.6	1930	198.7
South West	100	13.5	1747	235.9
Mid West	74	17.9	612	148.2
West and North West	135	17.8	2761	363.5
Unknown	0		3	
Total	1091	21.2	11684	226.9

Table 7: Number and rate/100,000 population of laboratory confirmed **RSV** notifications by HSE Health Region for week 6 2024 and the 2023/2024 season to date. *Source: CIDR*

HSE Health Region		Week 6 2024	2023/2024 season (Week 40 2023 - Week 6 2024)
nsc nealth Region	Number Rate/100,000 populati		Number	Rate/100,000 population
Dublin and North East	9	0.8	1463	123.2
Dublin and Midlands	15	1.4	1611	149.5
Dublin and South East	13	1.3	1115	114.8
South West	3	0.4	928	125.3
Mid West	9	2.2	624	151.1
West and North West	11	1.4	1810	238.3
Total	60	1.2	7551	146.6

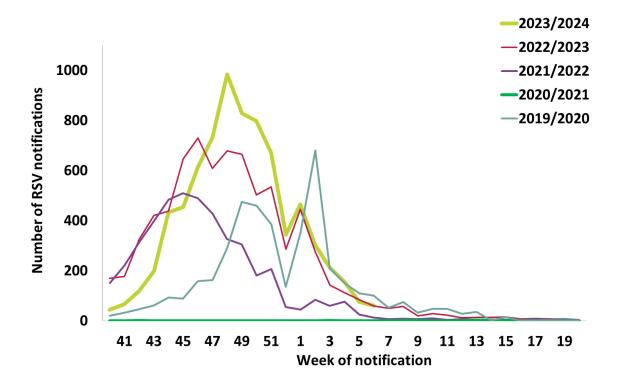


Figure 12: Number of laboratory confirmed **RSV** notifications to HPSC by week of notification, 2019/2020 to 2023/2024 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System.*

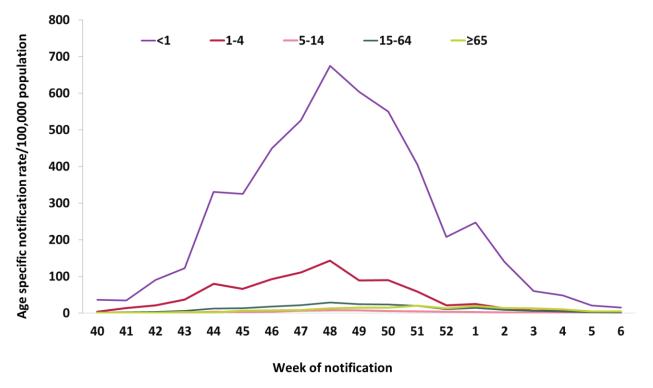


Figure 13: Age specific rates/100,000 population for laboratory confirmed **RSV** notifications to HPSC by week of notification for the 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

5. Hospitalisations

- During week 6 2024, the number of notified laboratory confirmed influenza hospital inpatients decreased to 255 (eight A(H3), four A(H1)pdm09, 221 A (not subtyped) and 22 B), compared to 267 in week 5 2024. (Figure 15).
- During the 2023/2024 season to date, 2,919 laboratory confirmed influenza hospital inpatients were reported: 247 A(H3), 84 A(H1)pdm09, 2,443 A (not subtyped), 143 B and two A and B coinfections.
- During week 6 2024, the age specific influenza hospitalisation rate was highest in those aged 65 and older (15.5/100,000 population) and those aged 0-4 years (14.9/100,000 population) (Figure 16). Almost half, 47% (120/255) of all influenza hospitalisations occurred in those aged 65 years and older (Table 8).
- RSV hospitalisations continued to decrease during week 6 2024, 22 laboratory confirmed RSV hospitalised cases were notified, a decrease compared to 29 cases in week 5 2024 (Figure 17).
- 3,175 RSV hospitalisations were reported for the 2023/2024 season to date.
- The age specific RSV hospitalisation rates are low in all age-groups (Figure 18), with the highest number of hospitalisations (55%; 12/22) occurring in those 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.

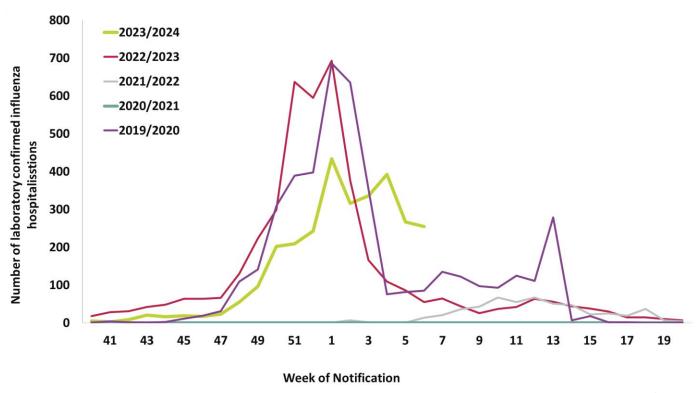


Figure 14: Number of notified **influenza** hospital inpatients, by week of notification and season, for the 2019/2020 to 2023/2024 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System.*

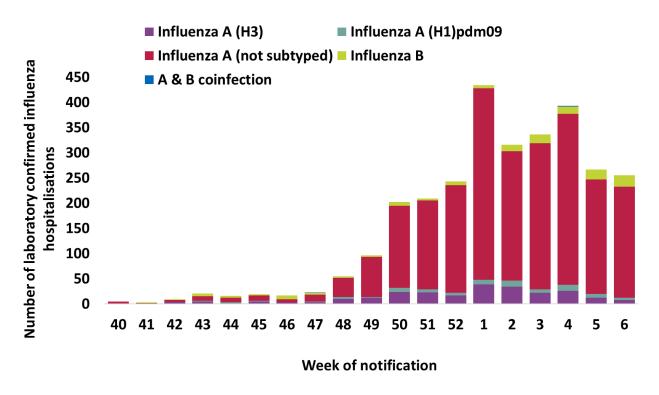


Figure 15: Number of notified laboratory confirmed **influenza** hospital inpatients by influenza type/subtype by week for the 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

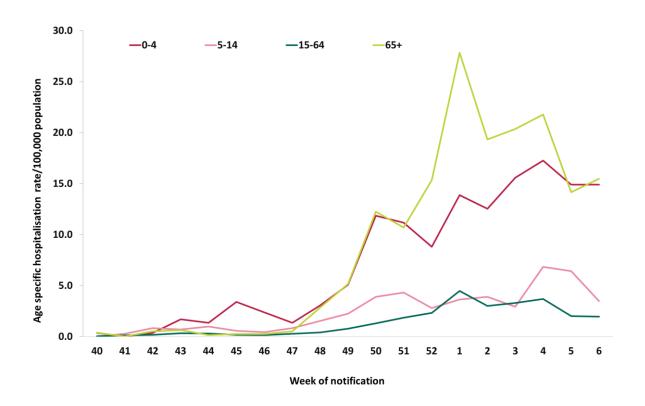


Figure 16: Age specific rates/100,000 population for laboratory confirmed **influenza** cases reported as **hospital inpatients** by week of notification for the 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

Table 8: Number, percentage and rate /100,000 population of notified laboratory-confirmed **influenza hospitalised cases notified** in week 6 2024 and the 2023/2024 season (week 40 2023 onwards). *Source: Ireland's Computerised infectious Disease Reporting System*

Age		Hospitalised (Week 6	5)	Season to date (Week 40 2023 - Week 6 2024)					
(years)	Number	% of all Hospitalisations	Rate/ 100,000 population	Number	% of all Hospitalisations	Rate/ 100,000 population			
<1	9	3.5	15.6	85	2.9	147.1			
1-4	35	13.7	14.7	328	11.2	138.0			
5-14	25	9.8	3.5	331	11.3	46.2			
15-24	10	3.9	1.6	114	3.9	17.7			
25-34	17	6.7	2.7	167	5.7	26.6			
35-44	10	3.9	1.3	190	6.5	23.9			
45-54	13	5.1	1.8	148	5.1	20.7			
55-64	16	6.3	2.8	252	8.6	43.5			
≥65	120	47.1	15.5	1304	44.7	168.0			
Total	255	100	5.0	2919	100	56.7			

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 Typ	е			
	GP Patient	ED patient	Hospital Inpatient	Hospital Day Patient	Hospital Outpatient	Other	Unknown	Total
Week 6	46	536	255	9	79	20	146	1091
Week 5	130	649	267	8	50	31	246	1381
Week 4	138	683	393	12	82	51	204	1563
Week 3	118	592	336	16	49	35	137	1283
Week 2	111	804	316	17	55	31	110	1444
Week 1	96	816	433	14	73	28	164	1624
Week 52	56	452	243	11	32	16	67	877
Week 51	66	537	209	8	52	13	79	964
Week 50	40	310	202	5	35	3	36	631
Week 49	11	138	96	1	16	7	14	283
Week 48	19	64	55	1	11	4	16	170
Week 47	9	39	23	1	9	2	7	90
Week 46	8	28	17	0	5	1	5	64
Week 45	9	26	19	0	6	4	2	66
Week 44	2	15	16	1	1	0	1	36
Week 43	8	16	21	0	0	0	1	46
Week 42	8	9	9	0	1	0	1	28
Week 41	6	15	3	1	2	0	2	29
Week 40	0	6	5	0	3	0	0	14
Total	881	5735	2918	105	561	246	1238	11684

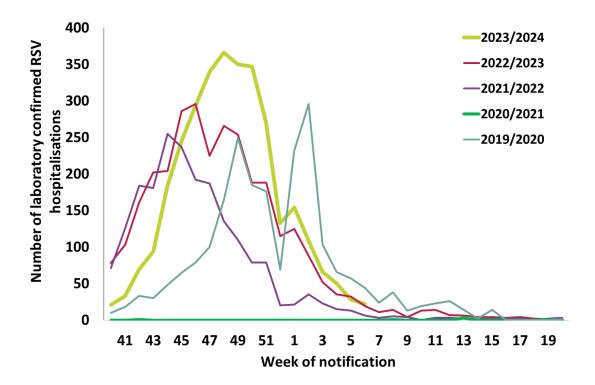


Figure 17: Number of notified **RSV** hospitalised cases notified, by week of notification and season, for the 2019/2020 to 2023/2024 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System.*

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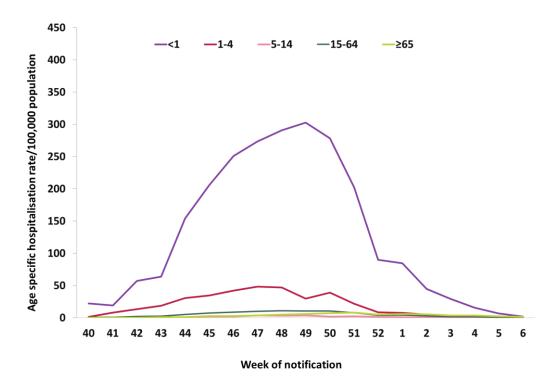


Figure 18: Age specific notification rates/100,000 population for laboratory confirmed **RSV** hospitalised cases notified by week of notification for the 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System*

Table 10: Number, percentage and rate/100,000 population of notified laboratory-confirmed **RSV hospitalised cases notified** in week 6 2024 and the 2023/2024 season (week 40 2023 onwards). *Source: Ireland's Computerised infectious Disease Reporting System*

		Hospitalised (Week 6)	Season to d	ate (Week 40 2023 - Week	6 2024)
Age (years)	Number	% of all Hospitalisations	Rate/ 100,000 population	Number	% of all Hospitalisations	Rate/ 100,000 population
<1	1	4.5	1.7	1387	43.7	2399.8
1-4	4	18.2	1.7	867	27.3	364.9
5-14	0	.0	0.0	181	5.7	25.2
15-24	2	9.1	0.3	27	0.9	4.2
25-34	1	4.5	0.2	31	1.0	4.9
35-44	0	.0	0.0	37	1.2	4.7
45-54	0	.0	0.0	48	1.5	6.7
55-64	2	9.1	0.3	89	2.8	15.3
≥65	12	54.5	1.5	508	16.0	65.4
Total	22	100	0.4	3175	100	61.7

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 ¹	Гуре			
	GP Patient	ED patient	Hospital Inpatient	Hospital Day Patient	Hospital Outpatient	Other	Unknown	Total
Week 6	6	19	22	1	3	0	9	60
Week 5	3	20	29	2	1	1	20	76
Week 4	15	56	50	3	7	6	18	155
Week 3	18	61	66	2	9	27	29	212
Week 2	14	115	109	7	10	12	36	303
Week 1	17	146	154	10	14	16	107	464
Week 52	7	140	133	7	5	17	34	343
Week 51	33	266	270	8	13	9	72	671
Week 50	33	327	347	6	33	13	39	798
Week 49	26	346	350	8	19	9	67	825
Week 48	20	490	366	11	15	11	72	985
Week 47	14	285	340	3	19	17	52	730
Week 46	7	260	294	8	8	1	37	615
Week 45	7	167	245	5	6	2	22	454
Week 44	6	216	183	4	11	3	10	433
Week 43	2	74	94	0	4	2	21	197
Week 42	2	32	69	2	1	6	8	120
Week 41	1	23	33	1	1	1	7	67
Week 40	1	15	21	1	2	0	3	43
Total	232	3058	3175	89	181	153	663	7551

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 no laboratory confirmed influenza cases admitted to intensive care units (ICU) and notified to HPSC during week 6 2024.
- Seventy-nine influenza A cases (22 A(H3), 10 A(H1)pdm09 and 47 A (not subtyped)) ICU cases have been notified for the season to date (weeks 40 2023- 6 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 6 2024. *Source: Ireland's Computerised infectious Disease Reporting System*

		Hospitalised	А	dmitted to ICU
Age (years)	Number	Age specific rate/100,000 population	Number	Age specific rate/100,000 population
<1	85	147.1	1	1.7
1-4	328	138.0	2	0.8
5-14	331	46.2	3	0.4
15-24	114	17.7	3	0.5
25-34	167	26.6	4	0.6
35-44	190	30.3	3	0.4
45-54	148	20.7	12	1.7
55-64	252	43.5	16	2.8
≥65	1304	168.0	35	4.5
Total	2919	56.7	79	1.5

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 no deaths in notified influenza cases reported to HPSC during week 6 2024.
- For the season to date (weeks 40 2023- 6 2024), 77 deaths in notified influenza cases (17 A(H3), six A(H1)pdm09 and 54 A (not-subtyped)) have been reported to HPSC.
- There was no excess all-cause mortality for the entire population reported for week 5 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 6 2024, 8 influenza outbreaks (two in acute hospitals, three nursing homes, two residential institutions and one community hospital/long stay units) were notified to HPSC (Tables 13 & 14).
- Two ARI (caused by pathogens other than influenza, SARS-CoV-2, or RSV) outbreaks in nursing homes and no RSV outbreaks were notified to HPSC during week 6 2024.
- There have been 234 ARI/influenza/RSV (excluding COVID-19) outbreaks notified to HPSC to date this season, comprising of 170 influenza outbreaks, 35 RSV outbreaks and 29 other ARI outbreaks.

Table 13: Summary of influenza, RSV and ARI (influenza/RSV/SARS-CoV-2 negative) outbreaks by HSE Health Region during week 6 2024 and the 2023/2024 season (week 40 2023 – week 6 2024) *Source: CIDR*

HSE Health Region	Influenza		R	sv	ARI		Total	
	Week 6	2023/2024	Week 6	2023/2024	Week 6	2023/2024	Week 6	2023/2024
Dublin and North East	0	26	0	7	1	15	1	48
Dublin and Midlands	3	23	0	12	0	0	3	35
Dubin and South East	4	31	0	3	0	6	4	40
South West	1	26	0	1	1	2	2	29
Mid West	0	8	0	3	0	0	0	11
West and North West	0	53	0	7	0	6	0	66
Unknown	0	3	0	2	0	0	0	5
Total	8	170	0	35	2	29	10	234

Table 14: Summary of influenza, RSV and ARI (influenza/RSV/SARS-CoV-2 negative) outbreaks by outbreak setting during week 6 2024 and the 2023/2024 season (week 40 2023 – week 6 2024). *Source: CIDR*

Codalina	Influenza		RSV		ARI		Total	
Setting	Week 6	2023/2024	Week 6	2023/2024	Week 6	2023/2024	Week 6	2023/2024
Community hospital/Long-stay unit	1	17	0	2	0	3	1	22
Nursing Home	3	56	0	13	2	20	5	89
Hospital	2	55	0	10	0	0	2	65
Residential Institution	2	23	0	4	0	3	2	30
Childcare facility	0	2	0	2	0	0	0	4
Other settings	0	17	0	4	0	3	0	24
Total	8	170	0	35	2	29	10	234

9. International Summary

According to the <u>European Respiratory Virus Surveillance Summary</u>, in the WHO European region during week 5 2024 (including data up to 04/02/2024), influenza activity is above baseline levels; all three influenza virus types/subtypes - A(H1)pdm09, A(H3) and B - are co-circulating, with a dominance of A(H1)pdm09 viruses in most countries, and A(H3) also dominant or co-dominant in a small number of countries. Of 36 countries reporting geographical spread of influenza in the WHO European region, 29 reported widespread activity, 1 reported regional, 2 reported sporadic, 2 reported local and the remaining two reported no activity. During the 2023/2024 season, RSV activity began increasing around week 41, reaching a peak in week 50 followed by a decreasing trend, although in recent weeks a mixed epidemiological picture has been observed, with increasing and decreasing trends at the national level. RSV continues to have the greatest impact among children aged 0–4 years.

As of 21st January 2024, WHO has reported that globally influenza detections decreased but detections remain elevated in parts of the temperate Northern hemisphere. In the countries of North America, influenza detections remained elevated and influenza activity was above the baseline threshold. Influenza A(H1N1)pdm09 viruses predominated among the detections in the countries of North America. In East Asia, influenza activity remained elevated but is decreasing overall. Influenza activity increased in the Central American and Caribbean countries with detections of predominantly influenza A(H1N1)pdm09 in the Caribbean followed by influenza a(H3N2) viruses, while influenza A(H1N1)pdm09 was predominant in Central America followed by B/Victoria lineage viruses. In tropical Africa, influenza detections remained low in most reporting countries with a few exceptions and influenza A(H3N2) viruses predominated.

See ECDC and WHO influenza surveillance reports for further information.

11. WHO recommendations on the composition of influenza virus vaccines

The WHO vaccine strain selection committee recommends that quadrivalent egg-based vaccines for use in the 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 <u>http://ecdc.europa.eu/</u>

UK Health Security Agency https://www.gov.uk/government/collections/weekly-national-flu-reports

United States CDC http://www.cdc.gov/flu/weekly/fluactivitysurv.htm
Public Health Agency of Canada http://www.phac-aspc.gc.ca/fluwatch/index-eng.php

- Influenza case definition in Ireland https://www.hpsc.ie/a-z/respiratory/influenza/casedefinitions/
- COVID-19 case definition in Ireland https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/casedefinitions/
- Avian influenza overview May August 2020 https://www.ecdc.europa.eu/en/publications-data/avian-influenza-overview-may-august-2020
- Avian influenza: EU on alert for new outbreaks https://www.ecdc.europa.eu/en/news-events/avian-influenza-eu-alert-new-outbreaks
- Information on COVID-19 in Ireland is available on the HPSC website https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/
- The WHO categorised COVID-19 as a pandemic on 11 March 2020. For more information about the situation in the WHO European Region visit:
 - WHO website: https://www.who.int/emergencies/diseases/novel-coronavirus-2019
 - ECDC website: https://www.ecdc.europa.eu/en/novel-coronavirus-china

Further information on influenza in Ireland is available at www.hpsc.ie

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