Influenza, RSV and Other Respiratory Viruses Surveillance Report Week 50 2023 (11th– 17th 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 50 2023

Influenza activity increased during week 50 2023, with an increase in notified influenza cases and hospitalised cases reported. 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) activity has started to decline, although remains at very high levels, with the highest rates in those aged less than one year old, followed by the 1-4 year age group.

- <u>Influenza-like illness (ILI):</u> The sentinel GP influenza-like illness (ILI) consultation rate was 9.5 per 100,000 population during week 50 2023, compared to an updated rate of 9.9/100,000 in week 49. ILI consultation rates have been below the Irish baseline threshold (18.1/100,000 population) for the season to date (weeks 40-50 2023). ILI age specific rates were highest in the 0–14-year age group (10/100,000), however remain below baseline in all age groups.
- National Virus Reference Laboratory (NVRL): During week 50 2023, of 68 sentinel GP acute respiratory infection (ARI) specimens tested and reported by the NVRL, 10 (14.7%) were positive for influenza (six A(H3), two A(H1)pdm09, one A (not subtyped) and one B), 10 (14.7%) for RSV, five (7.4%) for SARS-CoV-2 and nine (13.2%) for rhino/enterovirus.
- Of 191 non-sentinel respiratory specimens tested and reported by the NVRL during week 50 2023, 14 (7.3%) were positive for influenza (7 A(H3), 5 A(H1)pdm09, 1 A (not subtyped) and one influenza B), 28 (14.7%) for SARS-CoV-2, 10 (5.2%) for RSV and 17 (8.9%) for rhino/enterovirus.
- Of 219 specimens (including both sentinel GP ARI and non-sentinel respiratory specimens) testing positive for influenza and reported by the NVRL during the 2023/2024 season, 18 (8.2%) were coinfected with other viruses.
- <u>GP Out of hours (OOHs):</u> Cough calls comprised 25% (3745/15033) of all reported GP OOHs calls during week 50 2023, which is above the baseline threshold of 10.8%. 38% (1416/3745) of cough calls were in those aged 0-4 years. The number of flu calls was 271/15033 (1.8%) in week 50, which is below the baseline threshold level (2.3%).
- <u>Influenza notifications:</u> 631 laboratory confirmed influenza cases were notified during week 50 2023: 51 influenza A (H3), 17 A(H1)pdm09, 535 influenza A (not subtyped) and 28 influenza B. This is a significant increase compared to 283 cases notified during week 49 2023.
- RSV notifications: 800 RSV cases were notified during week 50 2023, a decrease compared to 826 cases during week 49 2023. Age specific rates were highest in those aged less than one year.
- <u>Hospitalisations:</u> Notified laboratory confirmed influenza hospitalised cases increased, with 191 cases notified in week 50 2023, compared to 95 in week 49 2023. 169 of the hospitalised cases were positive for influenza A (not subtyped), 11 A(H3), four A(H1)pdm09 and seven influenza B. There were 300 laboratory confirmed RSV hospitalised cases notified in week 50 2023, compared to 332 cases in week 49 2023. Of the hospitalised RSV cases, 46% (139/300) were aged less than one year.
- <u>Intensive care admissions:</u> Three laboratory confirmed influenza (A (not subtyped)) cases were admitted to an intensive care unit and notified to HPSC during week 50 2023. Seven influenza ICU cases (one A(H1)pdm09) and six A (not subtyped)) have been notified for the season to date (weeks 40 50 2023).
- Mortality: Two deaths in notified influenza cases were reported to HPSC during week 50 2023 and three for the season to date (all influenza A(unsubtyped). No excess all-cause mortality reported for the entire population since week 2 2023.
- <u>Outbreaks:</u> During week 50 2023, five influenza outbreaks (2 in nursing homes, 1 in acute hospital, 1 in a residential institution and 1 in a private home), one RSV outbreak in acute hospital and five ARI (not influenza/RSV/COVID-19 outbreaks (4 in nursing homes and 1 in a residential institution) were reported to HPSC.
- <u>International:</u> In the EU/EEA during week 49 2023, while there is variation in the region, influenza activity continues to increase, with increasing GP ILI/ARI consultation rates. RSV activity continues to rise, but at a slower rate than previous weeks.

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

- During week 50 2023, sentinel GP influenza-like illness (ILI) consultations were reported from the Irish sentinel GP network, corresponding to an ILI consultation rate of 9.5 per 100,000 population, compared to an updated rate of 9.9 per 100,000 population during week 49 2023 (Figure 1).
- Out of the 95 GP practices in the Irish sentinel GP network, 93 provided data for on clinical consultations during week 50 2023.
- 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 50 and the 2023/2024 season to date (weeks 40-50 2023). ILI age specific rates were highest in those aged less than 15 years (10/100,000) during week 50 2023 (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.

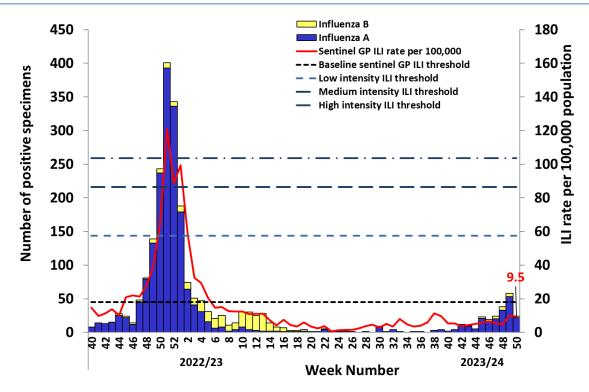


Figure 1: Sentinel GP **Influenza-like illness (ILI)** consultation rates per 100,000 population, baseline, low, medium and high intensity ILI thresholds and number of positive influenza A and B specimens tested by the NVRL, by influenza week and season. *Source: ICGP and NVRL*

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^{*}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.

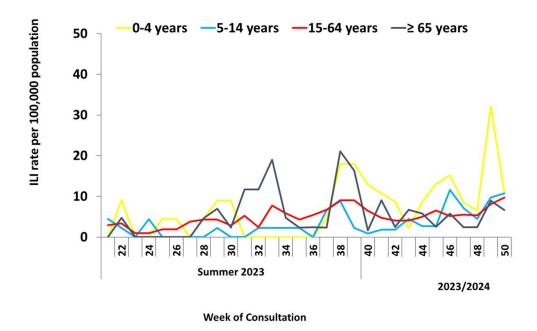


Figure 2: Age specific sentinel GP ILI consultation rate per 100,000 population by week (weeks 21-50 2023). *Source: ICGP.*

Table 1: Age specific sentinel GP **ILI consultation** rate per 100,000 population by week (weeks 40-50 2023), colour coded by sentinel GP ILI age specific Moving Epidemic Method (MEM) threshold levels. *Source: ICGP*.

MEM Threshold Levels		Below Baseline		line	Low	Mod	lerate	Hig	h	Extrao	rdinary
		2023/2024									
Age group (years)	40	41	42	43	44	45	46	47	48	49	50
All Ages	5.3	5.3	3.7	4.4	5.0	5.8	6.7	5.4	4.8	9.9	9.5
<15 yrs	4.1	4.1	3.5	3.6	4.1	5.3	11.8	7.0	4.7	15.1	10.0
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
≥65 yrs	1.6	9.0	2.5	6.7	5.8	2.5	5.8	2.5	2.5	9.0	6.6
Reporting practices (N=95)	93	93	92	91	92	92	93	95	95	96	93

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 50 2023, of 68 sentinel GP ARI specimens tested and reported by the NVRL, ten (14.7%) were positive for influenza (six A(H3), two A(H1)pdm09, one A (not subtyped), and one influenza B), 10 (14.7%) for RSV, five (7.4%) for SARS-CoV-2, and nine (13.2%) for rhino/enterovirus.
- In comparison during week 49 2023, of 158 sentinel GP ARI specimens tested and reported by the NVRL, 20 (12.7%) were positive for influenza (nine influenza A(H3), five influenza A(H1)pdm09, four influenza A (not subtyped) and two influenza B), 31 (19.6%) for RSV, ten (6.3%) for SARS-CoV-2, and 26 (16.5%) for rhino/enterovirus.
- During week 50 2023, of 191 non-sentinel respiratory specimens tested and reported by the NVRL, 14 (7.3%) were positive for influenza (seven A(H3), five A(H1)pdm09, one A (not subtyped), , and one influenza B), 28 (14.7 %) for SARS-CoV-2, 10 (5.2%) for RSV and 17 (8.9%) for rhino/enterovirus.
- During week 49 2023, of 233 non-sentinel respiratory specimens tested, 38 (16.3%) were positive for influenza (26 A(H3), eight A(H1)pdm09, one A (not subtyped), and three influenza B), 27 (11.6%) for SARS-CoV-2, 20 (8.6%) for RSV, and 27 (11.6%) for rhino/enterovirus (Figure 3b).
- Other respiratory viruses (ORVs) are being detected at lower levels (Figure 3a and 3b).
- Of 219 sentinel GP ARI specimens and non-sentinel specimens positive for influenza and reported by the NVRL during the 2023/2024 season, 18 (8%) were coinfected with other viruses.

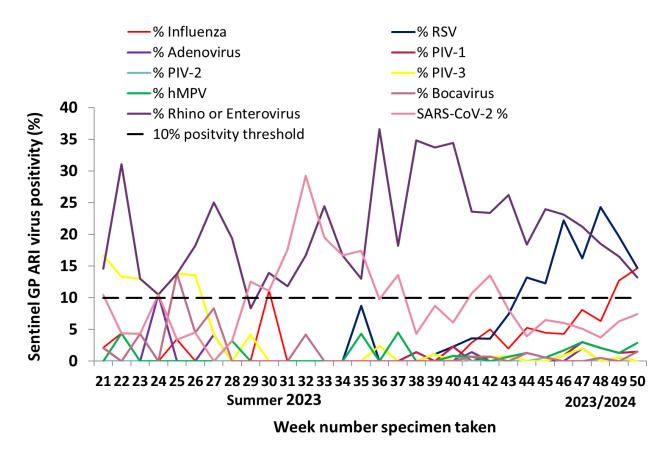


Figure 3a: Percentage positive results for **sentinel GP ARI** specimens tested by the NVRL for influenza, SARS-CoV-2, RSV and other respiratory viruses by week specimen was taken, weeks 21-50 2023. *Source: NVRL*

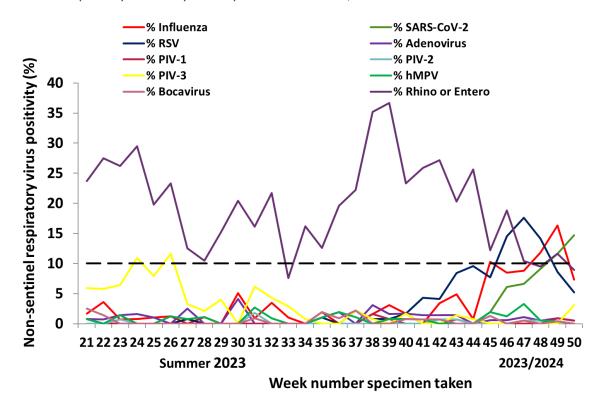


Figure 3b: Percentage positive results for **non-sentinel respiratory** specimens tested by the NVRL for influenza, SARS-CoV-2, RSV and other respiratory viruses by week specimen was taken, weeks 21-50 2023. *Source: NVRL*

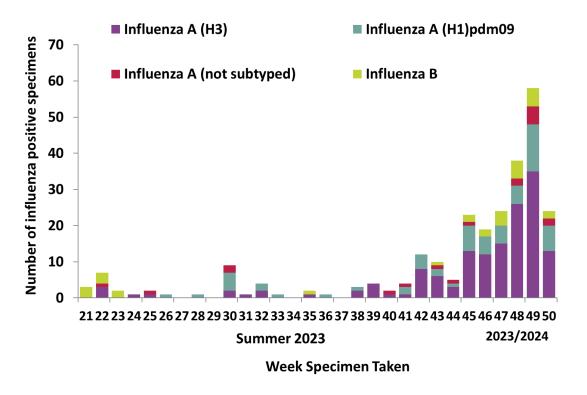


Figure 4: Number of positive **influenza** specimens (from sentinel GP ARI and non-sentinel respiratory sources) tested by the NVRL by influenza type/subtype and by week specimen was taken, weeks 21-50 2023. *Source: NVRL*

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 49 and 50 2023 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 lineage	Total influenza B
	Sentinel GP ARI	68	10	14.7	2	6	1	9	1	0	0	1
Week 50 2023	Non-sentinel respiratory	191	14	7.3	5	7	1	13	1	0	0	1
	Total	259	24	9.3	7	13	2	22	2	0	0	2
	Sentinel GP ARI	158	20	12.7	5	9	4	18	2	0	0	2
Week 49 2023	Non-sentinel respiratory	233	38	16.3	8	26	1	35	3	0	0	3
	Total	391	58	14.8	13	35	5	53	5	0	0	5
	Sentinel GP ARI	1422	80	5.6	20	43	8	71	9	0	0	9
2023/2024	Non-sentinel respiratory	1821	139	7.6	31	90	6	127	8	3	1	12
	Total	3243	219	6.8	51	133	14	198	17	3	1	21

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 49 and 50 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)
	Sentinel GP ARI	68	10	14.7	8	2	0
Week 50 2023	Non-sentinel	191	10	5.2	8	2	0
	Total	259	20	7.7	16	4	0
	Sentinel GP ARI	158	31	19.6	26	5	0
Week 49 2023	Non-sentinel	233	20	8.6	18	2	0
	Total	391	51	13.0	44	7	0
	Sentinel GP ILI/ARI	1422	182	12.8	140	42	0
2023/2024	Non-sentinel	1821	167	9.2	136	31	0
	Total	3243	349	10.8	276	73	0

Table 4: Number and percentage positive sentinel GP ARI specimens by respiratory virus, weeks 49 and 50 2023, and the 2023/2024 season. Source: NVRL

Virus	Week 50 20	023 (N=68)	Week 49 20)23 (N=158)	2023/2024	ł (N=1422)
VIIUS	Total positive	% positive	Total positive	% positive	Total positive	% positive
SARS-CoV-2	5	7.4	10	6.3	101	10.1
Influenza virus	10	14.7	20	12.7	80	1.6
Respiratory Syncytial Virus (RSV)	10	14.7	31	19.6	182	0.4
Rhino/enterovirus	9	13.2	26	16.5	319	22.5
Adenovirus	0	0.0	1	0.6	5	0.6
Bocavirus	1	1.5	0	0.0	6	1.4
Human metapneumovirus (hMPV)	2	2.9	2	1.3	18	0.9
Parainfluenza virus type 1 (PIV-1)	1	1.5	2	1.3	16	0.1
Parainfluenza virus type 2 (PIV-2)	0	0.0	0	0.0	2	0.0
Parainfluenza virus type 3 (PIV-3)	0	0.0	1	0.6	7	4.3
Parainfluenza virus type 4 (PIV-4)	2	2.9	2	1.3	37	5.1

Table 5: Number and percentage positive non-sentinel respiratory specimens, by **respiratory virus**, weeks 49 and 50 2023, and the 2023/2024 season. *Source: NVRL*

Virus	Week 50 20	023 (N=191)	Week 49 20)23 (N=233)	2023/2024	4 (N=1821)
viius	Total positive	% positive	Total positive	% positive	Total positive	% positive
SARS-CoV-2	28	14.7	27	11.6	100	5.5
Influenza virus	14	7.3	38	16.3	139	7.6
Respiratory Syncytial Virus (RSV)	10	5.2	20	8.6	167	9.2
Rhino/enterovirus	17	8.9	27	11.6	299	16.4
Adenovirus	1	0.5	2	0.9	16	0.9
Bocavirus	0	0.0	1	0.4	7	0.4
Human metapneumovirus (hMPV)	0	0.0	1	0.4	15	8.0
Parainfluenza virus type 1 (PIV-1)	1	0.5	2	0.9	4	0.8
Parainfluenza virus type 2 (PIV-2)	0	0.0	1	0.4	5	0.3
Parainfluenza virus type 3 (PIV-3)	6	3.1	0	0.0	12	0.7
Parainfluenza virus type 4 (PIV-4)	0	0.0	0	0.0	22	1.2

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 50 2023.
- Out of a total of 15,033 calls made to the participating GP OOHs in week 50 2023:
 - 3745 (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%)
 in week 49 (Figures 5 and 6).
 - o 271 (1.8%) were for self-reported 'flu', which is below the baseline threshold of 2.3% for 'flu' calls (Figures 7 and 8).
- 38% (1416/3745) of all cough calls were from those aged four years and under.

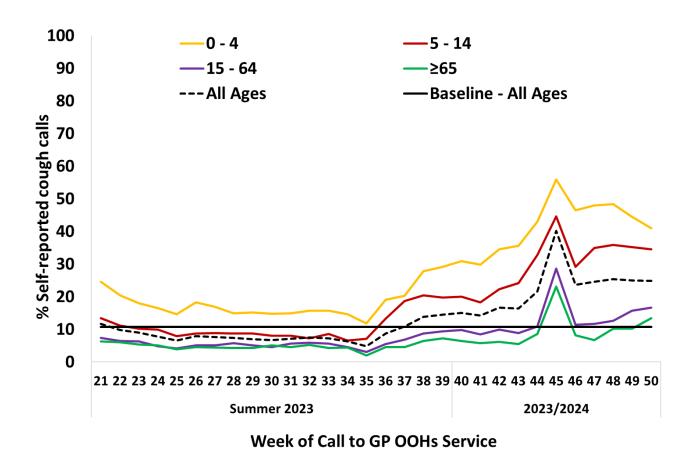


Figure 5: Percentage of self-reported **COUGH** calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call, summer 2023 and the 2023/2024 season. The baseline % cough calls for all ages calculated using the MEM method on historic data is shown. *Source: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

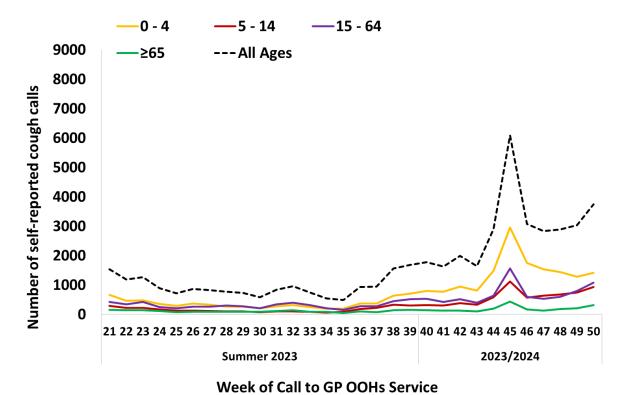


Figure 6: Number of self-reported **COUGH** calls for all ages and by age group to GP Out-of-Hours services by week of call, Summer 2023 and 2023/2024. *Source: GP Out-Of-Hours services in Ireland (collated by HSE & ICGP)*.

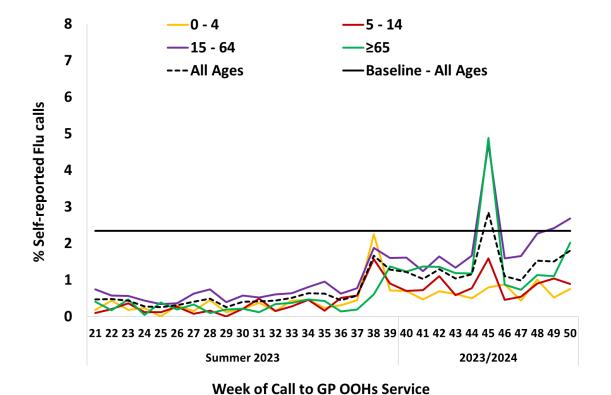


Figure 7: Percentage of self-reported **FLU** calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call, Summer 2023 and 2023/2024. The baseline % flu calls for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours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

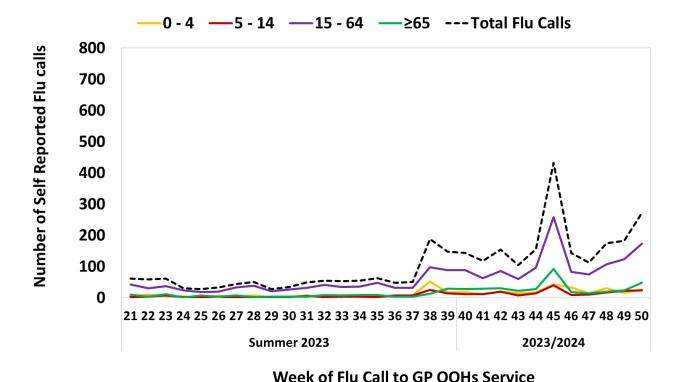


Figure 8: Number of self-reported **FLU** calls for all ages and by age group to GP Out-of-Hours services by week of call, Summer 2023 and 2023/2024. *Source: GP Out-Of-Hours services in Ireland (collated by HSE & ICGP)*.

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.
- 631 laboratory confirmed influenza cases were notified during week 50 2023 (Table 6) (corresponding to an overall notification rate of 12.3/100,000 population): 51 influenza A(H3), 17 A(H1)pdm09, 535 influenza A (not subtyped) and 28 influenza B. This is an increase compared to 283 cases notified during week 49 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 32.5/100,000 population, followed by those aged 65 years and older at 22.0/100,000 (Figure 11).
- Influenza notification rates were highest in the West and North West health region at 31.5/100,000 population (Table 6), with notifications from this region accounting for 38% of all notifications (239/631). Influenza rates were second highest in the South West at 19.0/100,000 population.
- RSV notifications remained at very high levels, however decreased, with 800 cases notified during week 50 2023, compared to 826 cases during week 49 2023 (Figure 12).
- Age specific notification rates for RSV were highest in those aged less than one year, at 550/100,000 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 40% (318/800) of all RSV notifications in week 50 2023.
- RSV notification rates were highest in the West and North West health region at 32.1/100,000 (Table 7), followed by the Midwest at 17.4/100,000 population.

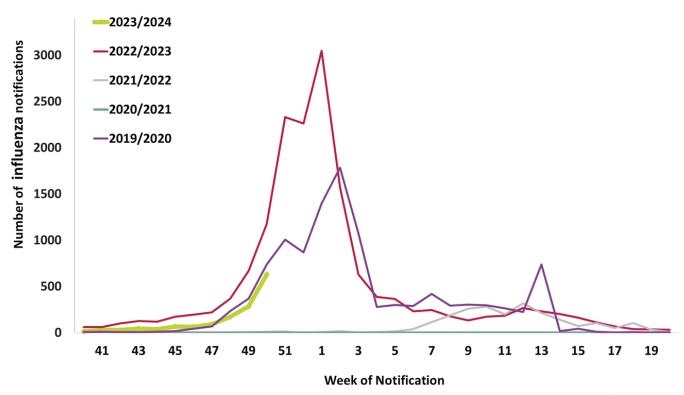


Figure 9: Number of laboratory confirmed **Influenza** notifications to HPSC by week of notification, 2019/2020 to 2023/2024 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System*

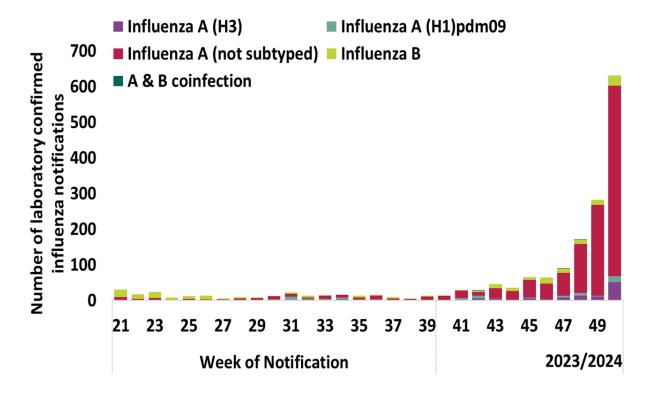


Figure 10: Number of laboratory confirmed **influenza** notifications by influenza type/subtype and week, summer 2023 and 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System*

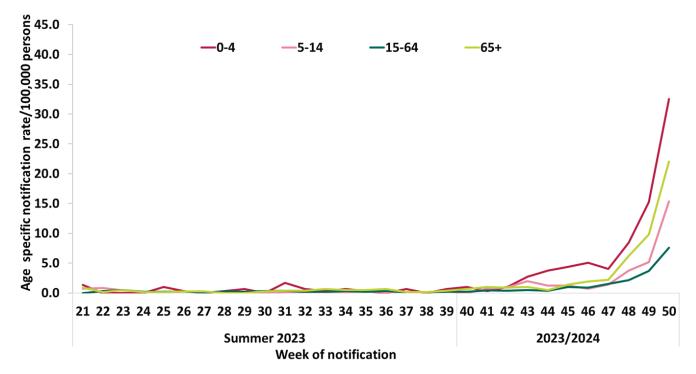


Figure 11: Age specific rates per 100,000 population of laboratory confirmed **influenza** notifications to HPSC by week of notification, Summer 2023 and 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

Table 6: Number and rate per 100,000 population of laboratory confirmed **influenza** notifications by HSE Health Region for week 50 2023 and the 2023/2024 season to date. *Source: CIDR*

	Week 5	50 2023	2023/2024 season (Week 40- 50 2023)
HSE Health Region	Number Rate/100,000 persons		Number	Rate/100,000 persons
Dublin and North East	109	9.2	257	21.6
Dublin and Midlands	58	5.4	163	15.1
Dublin and South East	59	6.1	174	17.9
South West	141	19.0	338	45.6
Mid West	25	6.1	58	14.0
West and North West	239	31.5	467	61.5
Total	631	12.3	1457	28.3

Table 7: Number and rate per 100,000 population of laboratory confirmed **RSV** notifications by HSE Health Region for week 50 2023 and the 2023/2024 season to date. *Source: CIDR*

	Week	50 2023	2023/2024 season (Week 40- 50 2023)
HSE Health Region	Number	Rate/100,000 persons	Number	Rate/100,000 persons
Dublin and North East	194	16.3	1000	84.2
Dublin and Midlands	115	10.7	1098	101.9
Dublin and South East	80	8.2	762	78.5
South West	95	12.8	717	96.8
Mid West	72	17.4	379	91.8
West and North West	244	32.1	1313	172.8
Unknown	0		1	
Total	800	15.5	5270	102.3

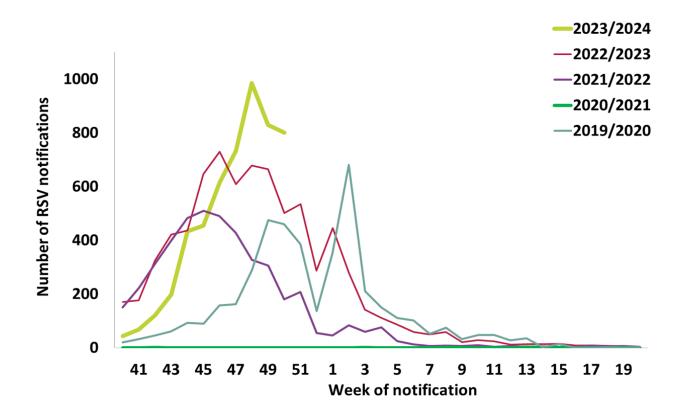


Figure 12: Number of laboratory confirmed **RSV** notifications to HPSC by week of notification, 2019/2020 to 2023/2024 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System.*

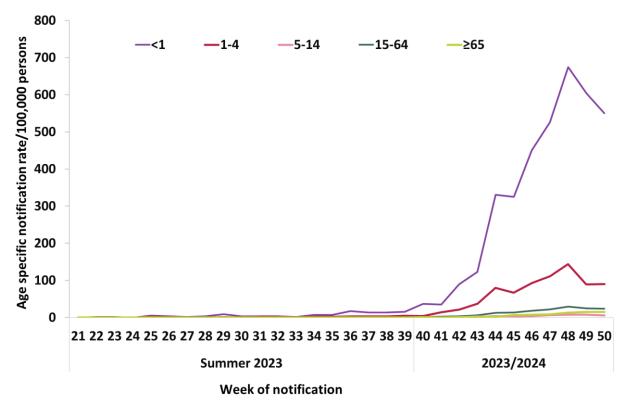


Figure 13: Age specific rates per 100,000 population for laboratory confirmed **RSV** notifications* to HPSC by week of notification, Summer 2023 and 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

5. Hospitalisations

- During week 50 2023, the number of notified laboratory confirmed influenza hospital inpatients increased, with 191 cases notified compared to 97 in week 49 2023. 169 of the hospitalised cases were positive for influenza A (not subtyped), 11 were influenza A (H3), four were A(H1)pdm09 and seven were influenza B (Figure 15).
- During week 50 2023, the age specific influenza hospitalisation rate was highest in those aged ≥65 years (11.7/100,000 population) and those aged 0-4 years (10.5/100,000 population) (Figure 16). 48% (91/191) of all influenza hospitalisations occurred in those aged 65+ years (Table 8).
- During week 50 2023, 300 laboratory confirmed RSV hospitalised cases were notified, compared to 332 cases in week 49 2023 (Figure 17). Of the hospitalised RSV cases, 46% (139/300) were aged less than one year (Table 10).
- The age specific RSV hospitalisation rate was highest in those aged less than one year (240.5/100,000 population) and those aged 1-4 years (30.7/100,000 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.

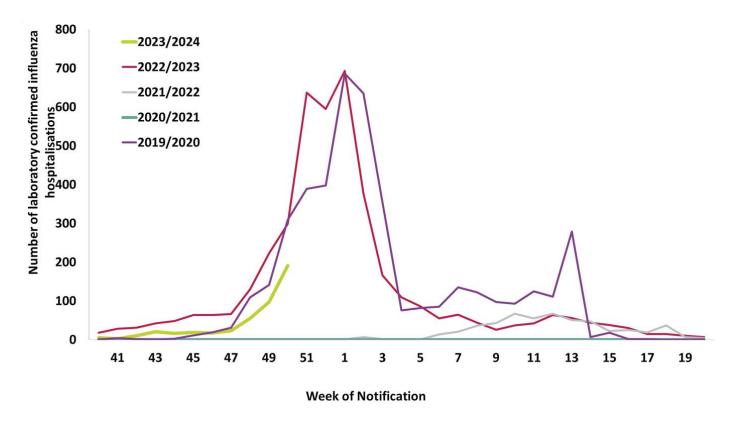


Figure 14: Number of notified **influenza** hospital inpatients, by week of notification and season, for the 2019/2020 to 2023/2024 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System.*

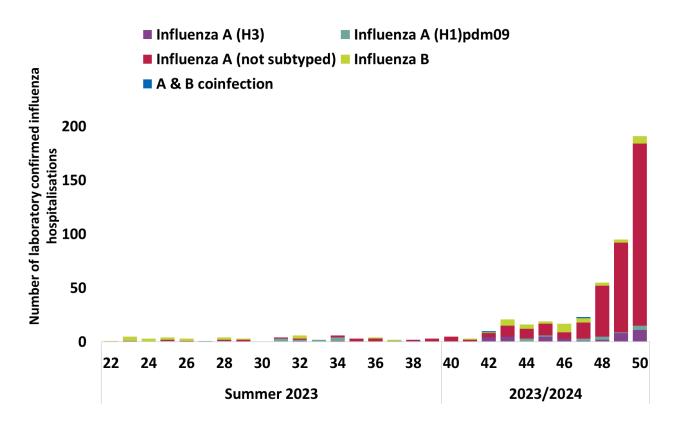


Figure 15: Number of notified laboratory confirmed **influenza** hospital inpatients by influenza type/subtype by week, summer 2023 and 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

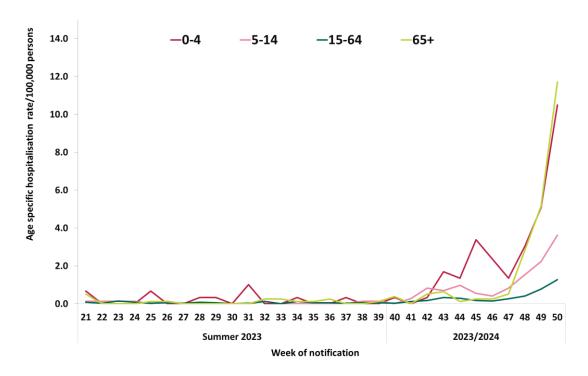


Figure 16: Age specific rates per 100,000 population for laboratory confirmed **influenza** cases reported as **hospital inpatients** by week of notification and season, Summer 2023 and 2023/2024. *Source: Ireland's Computerised Infectious Disease Reporting System.*

Table 8: Number, percentage and rate of notified laboratory-confirmed **influenza hospitalised cases notified** in week 50 2023 and the 2023/2024 season (week 40 2023 onwards). *Source: Ireland's Computerised infectious Disease Reporting System*

Age (years)		Week 50		Season to date (Weeks 40 to 50)				
- " '	Number	% of all Hospitalisations	Rate/ 100,000	Number	% of all Hospitalisations	Rate/ 100,000		
<1	2	1.0	3.5	11	2.4	19.0		
1-4	29	15.2	12.2	75	16.5	31.6		
5-14	26	13.6	3.6	83	18.3	11.6		
15-24	7	3.7	1.1	14	3.1	2.2		
25-34	7	3.7	1.1	22	4.8	3.5		
35-44	6	3.1	0.8	22	4.8	2.8		
45-54	5	2.6	0.7	16	3.5	2.2		
55-64	18	9.4	3.1	37	8.1	6.4		
≥65	91	47.6	11.7	174	38.3	22.4		
Unknown	0		-	0		_		
Total	191	100	3.7	454	100	78.3		

Table 9: Number of notified laboratory-confirmed **influenza** cases by patient type and week of notification 2023/2024 season (week 40 2023 onwards). *Source: Ireland's Computerised infectious Disease Reporting System*

	Patient Type									
	GP Patient	ED patient	Hospital Inpatient	Hospital Day Patient	Hospital Outpatient	Other	Unknown	Total		
Week 50	26	316	191	1	39	7	51	631		
Week 49	8	137	95	1	16	8	18	283		
Week 48	16	64	55	1	11	4	19	170		
Week 47	7	39	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	16	21	0	0	0	2	46		
Week 42	6	9	9	0	1	0	3	28		
Week 41	3	15	3	1	2	0	5	29		
Week 40	0	6	5	0	3	0	0	14		
Total	85	671	454	6	93	26	121	1457		

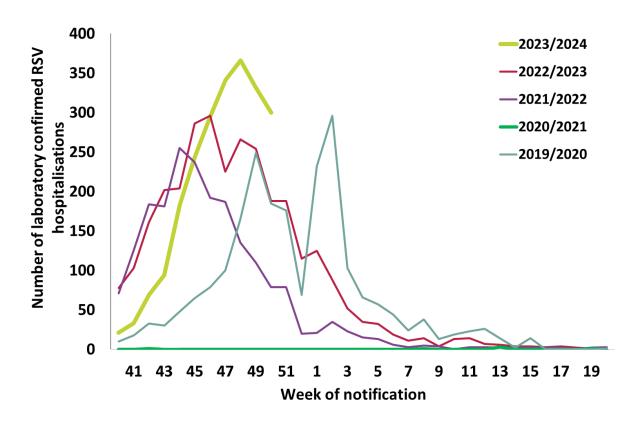


Figure 17: Number of notified **RSV** hospitalised cases notified, by week of notification and season, for the 2019/2020 to 2023/2024 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System.*

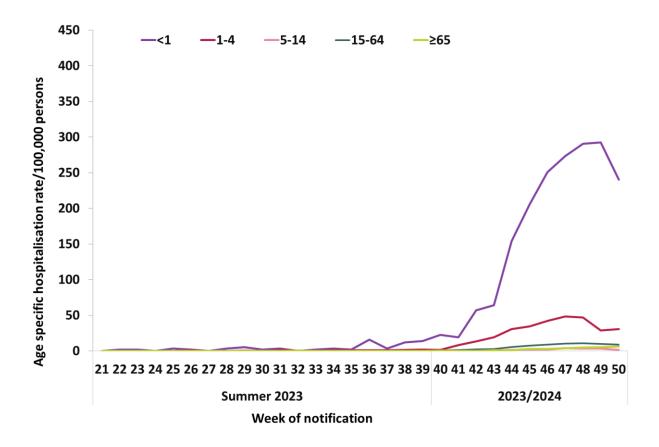


Figure 18: Age specific notification rates per 100,000 population for laboratory confirmed **RSV** hospitalised cases notified by week of notification and season, Summer 2023 and 2023/2024. *Source: Ireland's Computerised Infectious Disease Reporting System*

Table 10: Number, percentage and rate of notified laboratory-confirmed **RSV hospitalised cases notified** in week 50 2023 and the 2023/2024 season (week 40 2023 onwards). *Source: Ireland's Computerised infectious Disease Reporting System*

Age (veeys)		Hospitalised (Week	: 50)	Season to date (Weeks 40 to 50)				
Age (years)	Number	% of all Hospitalisations	Rate/ 100,000	Number	% of all Hospitalisations	Rate/ 100,000		
<1	139	46.3	240.5	1081	47.5	1870.4		
1-4	73	24.3	30.7	723	31.8	304.3		
5-14	12	4.0	1.7	125	5.5	17.4		
15-24	1	.3	0.2	11	0.5	1.7		
25-34	5	1.7	0.8	18	0.8	2.9		
35-44	5	1.7	0.6	25	1.1	3.1		
45-54	6	2.0	0.8	30	1.3	4.2		
55-64	9	3.0	1.6	42	1.8	7.2		
≥65	50	16.7	6.4	222	9.7	28.6		
Unknown	0		-	0		-		
Total	300	100	5.8	2277	100	44.2		

Table 11: Number of notified laboratory confirmed **RSV** cases by patient type and week of notification, 2023/2024 season (week 40 2023 onwards). *Source: Ireland's Computerised infectious Disease Reporting System*

				Patient 1	Гуре			
	GP Patient	ED patient	Hospital Inpatient	Hospital Day Patient	Hospital Outpatient	Other	Unknown	Total
Week 50	27	343	300	5	34	27	64	800
Week 49	22	337	332	7	20	32	76	826
Week 48	19	488	366	10	17	14	71	985
Week 47	12	279	341	2	18	28	50	730
Week 46	7	259	294	7	10	2	36	615
Week 45	8	170	244	5	6	5	19	457
Week 44	6	215	183	4	11	3	10	432
Week 43	2	72	94	0	4	5	18	195
Week 42	2	31	69	2	1	7	7	119
Week 41	1	23	33	1	1	1	7	67
Week 40	1	16	21	1	2	0	3	44
Total	107	2233	2277	44	124	124	361	5270

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 three laboratory confirmed influenza cases (influenza A (not subtyped)) admitted to intensive care and notified to HPSC during week 50 2023.
- Seven influenza (six influenza A (not subtyped) and one A(H1)pdm09)) ICU cases have been notified for the season to date (Week 40-Week 50).

Table 12: Cumulative number and age specific rate per 100,000 population of laboratory confirmed notified influenza hospitalised and intensive care cases, weeks 40-50 2023. *Source: Ireland's Computerised infectious Disease Reporting System*

		Hospitalised	A	Admitted to ICU
Age (years)	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 were two deaths in notified influenza cases notified to HPSC during week 50 2023.
- Three influenza A deaths (influenza A not-subtyped) have been reported for the season to date.
- There was no excess all-cause mortality for the entire population reported for week 49 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 50 2023, five influenza outbreaks (four influenza A (not subtyped) (two in nursing homes, one in acute hospital and one in private home) and one influenza A(H3) outbreak in a residential institution were notified to HPSC. (Tables 11 & 12).
- There was also one RSV outbreak in acute hospital and five ARI (no pathogen identified) outbreaks (four in nursing homes and one in a residential institution) reported to HPSC.
- There have been 53 ARI/influenza/RSV (excluding COVID-19) outbreaks notified to HPSC to date this season, including 23 influenza outbreaks, 13 RSV outbreaks and 17 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 Area during week 50 2023 and the 2023/2024 season (weeks 40-50 2023) *Source: CIDR*

HSE Health Region	Influenza		RS	5V	ARI		Total	
	Week 50	2023/2024	Week 50	2023/2024	Week 50	2023/2024	Week 50	2023/2024
Dublin and North East	0	1	0	2	3	9	3	12
Dublin and Midlands	0	2	1	8	0	0	1	10
Dubin and South East	2	7	0	1	2	5	4	13
South West	2	6	0	0	0	0	2	6
Mid West	0	1	0	0	0	0	0	1
West and North West	1	6	0	2	0	3	1	11
Unknown	0	0	0	0	0	0	0	0
Total	5	23	1	13	5	17	11	53

Table 14: Summary of influenza, RSV and ARI (influenza/RSV/SARS-CoV-2 negative) outbreaks by outbreak setting during week 50 2023 and the 2023/2024 season (weeks 40-50 2023). *Source: CIDR*

Setting	Influenza		RSV		ARI		Total	
6	Week 50	2023/2024	Week 50	2023/2024	Week 50	2023/2024	Week 50	2023/2024
Community hospital/Long-stay unit	0	0	0	0	0	2	0	2
Nursing Home	2	6	0	2	4	11	6	19
Hospital	1	8	1	6	0	0	2	14
Residential Institution	1	7	0	3	1	2	2	12
Childcare facility	0	0	0	2	0	0	0	2
Family Outbreaks	1	2	0	0	0	0	1	2
Other settings	0	0	0	0	0	2	0	2
Total	5	23	1	13	5	17	11	53

9. International Summary

According to <u>European Respiratory Virus Surveillance Summary</u>, in the WHO European region during week 49 2023 (including data up to 10/12/2023), influenza activity is increasing; all three influenza virus types/subtypes (A(H1)pdm09, A(H3) and B) are co-circulating. Of 33 countries reporting the geographical spread of influenza in the WHO European region, three countries reported no activity, 16 reported sporadic activity, three reported local, four reported regional and seven reported widespread 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 26th 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/

 $\begin{tabular}{ll} UK Health Security Agency & $\underline{$https://www.gov.uk/government/collections/weekly-national-flu-reports} \end{tabular}$

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
 - o 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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