

Influenza, RSV and Other Respiratory Viruses Surveillance Report

Weeks 51 and 52 2023 (18th– 31st 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 Weeks 51 and 52 2023

Data should be interpreted with caution, as reporting levels are affected by the Christmas holiday period and associated changes to healthcare provision and healthcare seeking behaviour

Influenza activity increased during weeks 51 and 52 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 high levels, with the highest rates in those aged less than one year old.

- **Influenza-like illness (ILI):** The sentinel GP influenza-like illness (ILI) consultation rate was 13.7 per 100,000 population during week 51 2023 and 9.0 per 100,000 population during week 52 2023 compared to an updated rate of 9.7/100,000 in week 50. ILI consultation rates have been below the Irish baseline threshold (18.1/100,000 population) for the season to date (weeks 40-52 2023). ILI age specific rates were highest in the 0–14 year age group (18.8/100,000 in week 51 and 9.0/100,000 in week 52), however, currently, remain below baseline in all age groups.
- **National Virus Reference Laboratory (NVRL):** During week 51 2023, of 110 sentinel GP acute respiratory infection (ARI) specimens tested and reported by the NVRL, 30 (27.3%) were positive for influenza (26 influenza A(H3) and four influenza A(H1)pdm09), 8 (7.3%) for RSV, 11 (10%) for SARS-CoV-2, and 13 (11.8%) for rhino/enterovirus. During week 52 2023, of five sentinel GP ARI specimens tested and reported by the NVRL, one (20%) was positive for influenza (one A(H1)pdm09), none for RSV or SARS-CoV-2 and one (20%) for rhino/enterovirus.
- During week 51 2023, of 222 non-sentinel respiratory specimens tested, 38 (17.1%) were positive for influenza (27 A(H3), eight A(H1)pdm09, one A (not subtyped) and two influenza B), 39 (17.6%) for SARS-CoV-2, 10 (4.5%) for RSV, and 17 (7.7%) for rhino/enterovirus. During week 52, of 91 non-sentinel respiratory specimens tested and reported by the NVRL, 26 (28.6%) were positive for influenza (15 A(H3), 10 A(H1)pdm09 and one A (not subtyped)), 6 (6.6 %) for SARS-CoV-2, eight (8.8%) for RSV and five (5.5%) for rhino/enterovirus.
- Of 394 sentinel GP ARI specimens and non-sentinel specimens positive for influenza and reported by the NVRL during the 2023/2024 season, 23 (6%) were coinfecting with other viruses.
- **GP Out of Hours (OOHs):** Cough calls comprised 23% (3102/13325) of all reported GP OOHs calls during week 51 and 25% (4866/19225) during week 52, both above the baseline threshold of 10.8%. Thirty percent (35%) (1093/3102) of cough calls were in those aged 0-4 years in week 51 and 30% (1457/4866) in week 52. Flu calls comprised 1.6% (217/13325) of all out of hours calls in week 51, which is below the baseline threshold level (2.3%). The percentage of flu calls was slightly above the baseline threshold during week 52 at 2.6% (501/19225). The highest burden of flu calls in week 52 was in those aged 16 to 64 years at 63% (315/501) (up from 60% (130/217) in week 51), followed by those aged 65 years and older at 25% (126/501) (up from 15% (33/217) in week 51).
- **Influenza notifications:** The number of influenza notifications increased during weeks 51 and 52 2023 at 965 and 879, respectively, compared to 631 during week 50 2023. During weeks 51 and 52, 1,844 laboratory confirmed influenza cases were notified: 139 influenza A(H3), 36 A(H1)pdm09, 1,608 influenza A (not subtyped) and 61 influenza B.
- **RSV notifications:** RSV notifications decreased, with 675 and 341 cases notified during weeks 51 and 52 2023, respectively, a decrease compared to 798 cases during week 50 2023. Age specific rates were highest in those aged less than one year.
- **Hospitalisations:** Notified laboratory confirmed influenza hospitalised cases increased, with 211 cases notified for both weeks 51 and 52 2023 compared to 198 in week 50 2023. Of the 422 hospitalised cases reported during

weeks 51 and 52, 398 were positive for influenza A (not subtyped), 12 influenza A (H3), two A(H1)pdm09 and 10 influenza B. During weeks 51 and 52 2023, 254 and 113 laboratory confirmed RSV hospitalised cases were notified, respectively, compared to 348 cases in week 50 2023. Of the hospitalised RSV cases, 43% (109/254) were aged less than one year in week 51 and 38% (43/113) in week 52.

- **Intensive care admissions:** During weeks 51 and 52 2023, seven laboratory confirmed influenza cases (one influenza A (H3) and six influenza A (not subtyped)) were admitted to intensive care and notified to HPSC. 18 influenza (one influenza A (H1)pdm09, 14 influenza A (not subtyped) and three influenza A (H3)) ICU cases have been notified for the season to date (Week 40-Week 52).
- **Mortality:** Three deaths (one influenza (AH1) pdm09 and two influenza A (not subtyped)) were reported in influenza cases notified to HPSC in weeks 51 and 52 2023. Six deaths (one influenza (AH1) pdm09 and five influenza A (not subtyped)) have been reported for the season to date.
- **Outbreaks:** During weeks 51 and 52 2023, 15 influenza outbreaks (four in nursing homes, four in acute hospitals, one in a community hospital/long-stay unit, two in residential institutions and four in other settings), nine RSV outbreaks (four in acute hospitals, two in nursing homes and three in other settings) and three ARI outbreaks (one rhino/enterovirus in an “other” healthcare setting and two unknown pathogens in nursing homes) were reported.
- **International:** In the EU/EEA during week 50 2023, influenza activity has rapidly increased, with increasing GP ILI/ARI consultation rates. For RSV, countries continue to report a mix of increasing and decreasing trends for activity.

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

- During week 51 2023, 110 sentinel GP influenza-like illness (ILI) consultations were reported from the Irish sentinel GP network, corresponding to an ILI consultation rate of 13.7 per 100,000 population compared to an updated rate of 9.7 per 100,000 population during week 50 2023 (Figure 1). During week 52 2023, 71 sentinel GP ILI consultations were reported, corresponding to an ILI consultation rate of 9.0 per 100,000 population.
- Of the 95 GP practices in the Irish sentinel GP network, 94 provided data on clinical consultations during week 51 2023 and 92 provided data during week 52 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 weeks 51 and 52 and for the 2023/2024 season to date (weeks 40-52 2023). The age specific baseline threshold for those aged <15 is 19.0/100,000, for those aged 15-64 is 21.3/100,000 and for those aged ≥65 yrs is 19.4/ 100,000.
- ILI age specific rates were highest in those aged less than 15 years during both week 51 (18.8/100,000) and week 52 (9.0/100,000) 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.

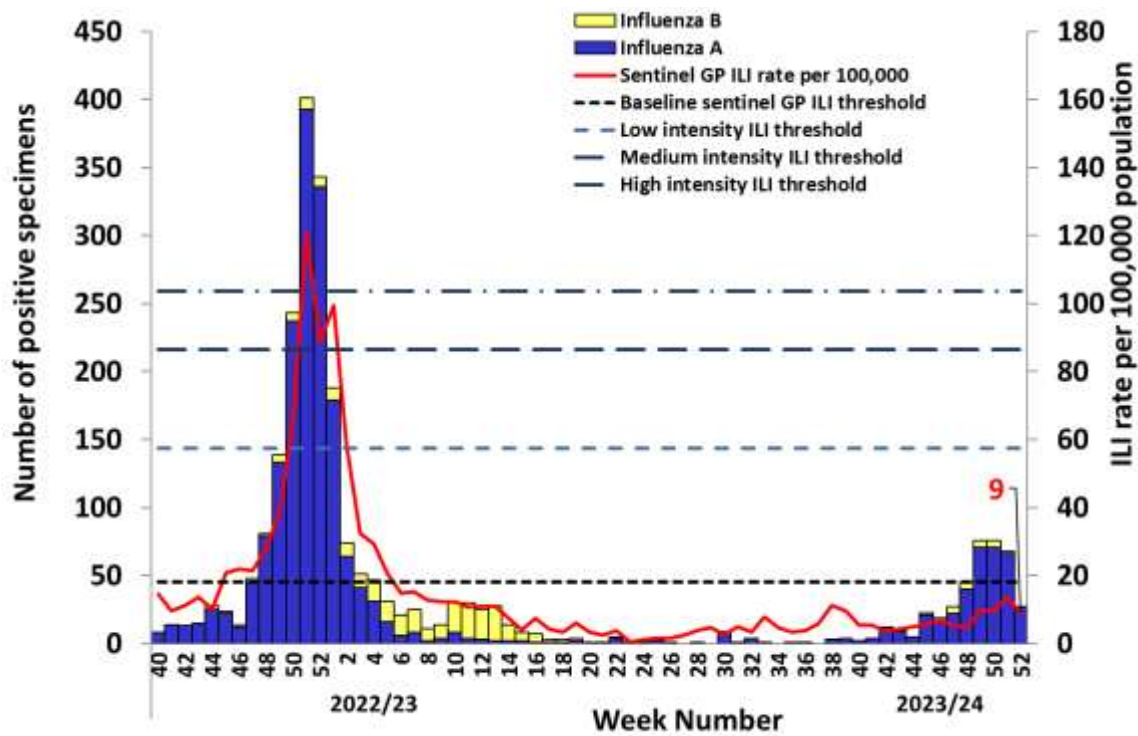


Figure 1: Sentinel GP Influenza-like illness (ILI) consultation rates per 100,000 population, baseline, low, medium and high intensity ILI thresholds and number of positive influenza A and B specimens tested by the NVRL, by influenza week and season. *Source: ICGP and NVRL*

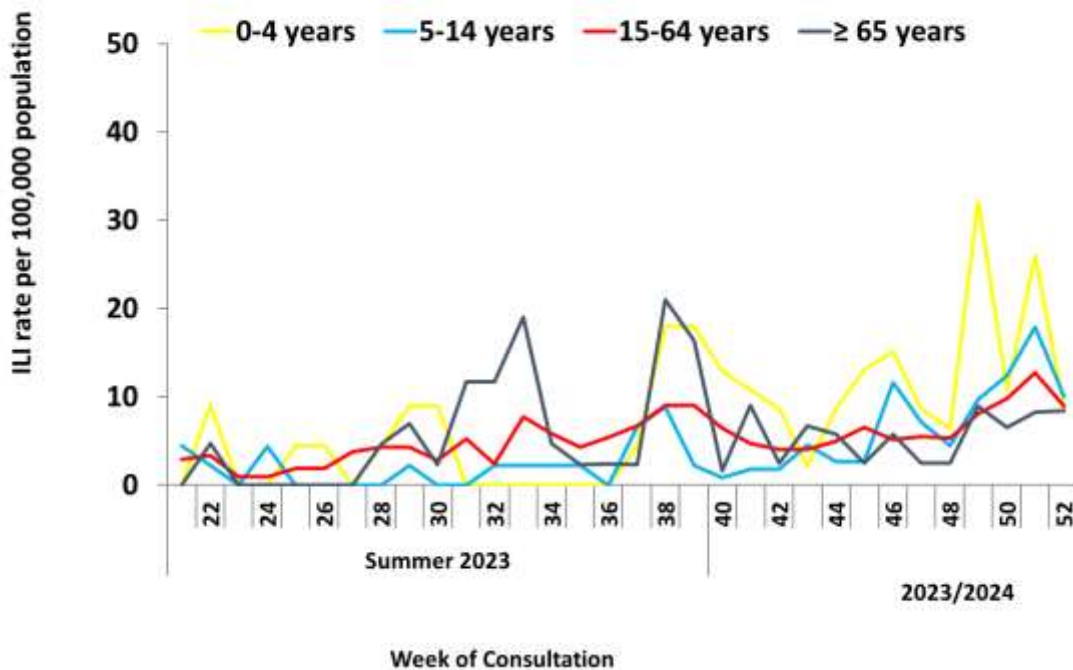


Figure 2: Age specific sentinel GP ILI consultation rate per 100,000 population by week (weeks 21-52 2023). *Source: ICGP.*

Table 1: Age specific sentinel GP **ILI consultation** rate per 100,000 population by week (weeks 40-52 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	50	51	52
All Ages	5.3	5.3	3.7	4.4	5.0	5.8	6.7	5.4	4.8	9.9	9.7	13.7	9.0
<15 yrs	4.1	4.1	3.5	3.6	4.1	5.3	11.8	7.0	4.7	15.1	11.1	18.8	9.0
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	12.8	9.0
≥65 yrs	1.6	9.0	2.5	6.7	5.8	2.5	5.8	2.5	2.5	9.0	6.5	8.2	8.4
Reporting practices (N=95)	93	93	92	91	92	92	93	95	95	96	96	94	92

2. Influenza and Other Respiratory Virus Detections - NVRL

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

- A lag time with testing and reporting is noted for the most recent surveillance week.
- During week 51 2023, of 110 sentinel GP ARI specimens tested and reported by the NVRL, 30 (27.3%) were positive for influenza (26 influenza A(H3) and four influenza A(H1)pdm09), 8 (7.3%) for RSV, 11 (10%) for SARS-CoV-2, and 13 (11.8%) for rhino/enterovirus.
- Due to a low number of samples authorised during week 52 please interpret the following data with caution. During week 52 2023, of five sentinel GP ARI specimens tested and reported by the NVRL, one (20%) was positive for influenza (one influenza A(H1)pdm09), none for RSV or SARS-CoV-2, and one (20%) for rhino/enterovirus.
- During week 51 2023, of 222 non-sentinel respiratory specimens tested, 38 (17.1%) were positive for influenza (27 A(H3), eight A(H1)pdm09, one A (not subtyped) and two influenza B), 39 (17.6%) for SARS-CoV-2, 10 (4.5%) for RSV, and 17 (7.7%) for rhino/enterovirus (Figure 3b).
- During week 52 2023, of 91 non-sentinel respiratory specimens tested and reported by the NVRL, 26 (28.6%) were positive for influenza (15 A(H3), 10 A(H1)pdm09 and one A (not subtyped)), six (6.6 %) for SARS-CoV-2, eight (8.8%) for RSV and five (5.5%) for rhino/enterovirus.
- Other respiratory viruses (ORVs) are being detected at lower levels (Figure 3a and 3b).
- Of 394 sentinel GP ARI specimens and non-sentinel specimens positive for influenza and reported by the NVRL during the 2023/2024 season, 23 (6%) were coinfecting with other viruses.

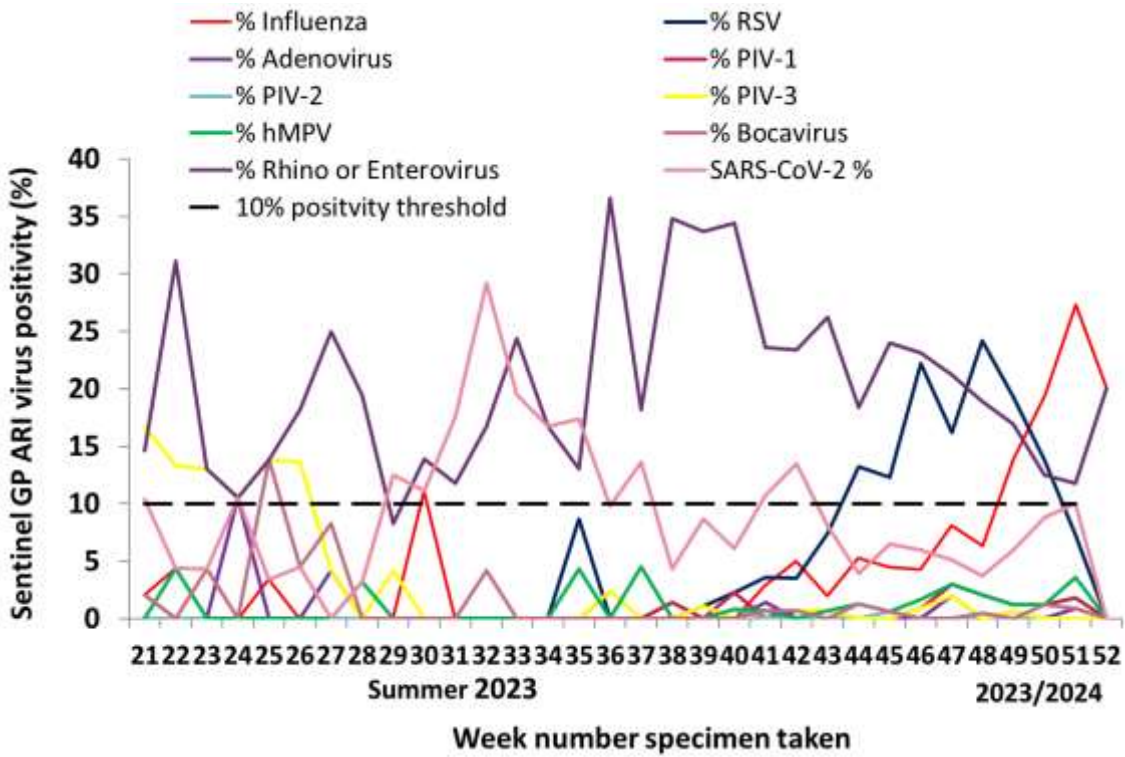


Figure 3a: Percentage positive results for **sentinel GP ARI** specimens tested by the NVRL for influenza, SARS-CoV-2, RSV and other respiratory viruses by week specimen was taken, weeks 21-52 2023. *Source: NVRL*

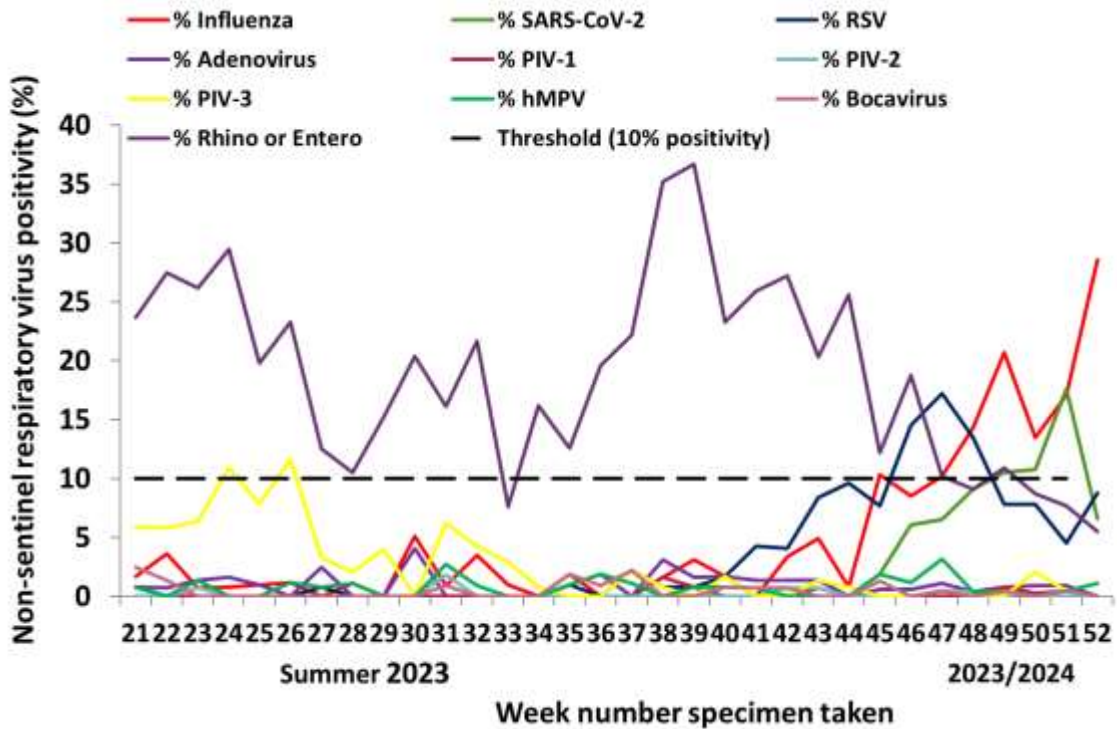


Figure 3b: Percentage positive results for **non-sentinel respiratory** specimens tested by the NVRL for influenza, SARS-CoV-2, RSV and other respiratory viruses by week specimen was taken, weeks 21-52 2023. *Source: NVRL*

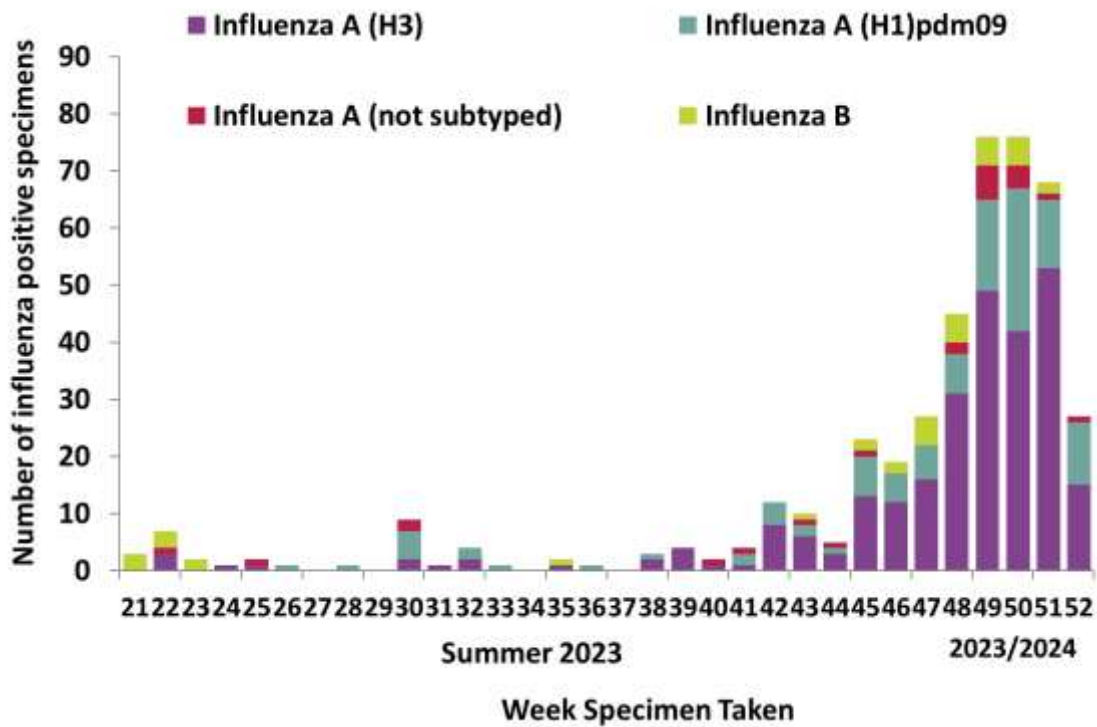


Figure 4: Number of positive influenza specimens (from sentinel GP ARI and non-sentinel respiratory sources) tested by the NVRL by influenza type/subtype and by week specimen was taken, weeks 21-52 2023. *Source: NVRL*

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 51 and 52 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 52 2023	Sentinel GP ARI	5	1	20.0	1	0	0	1	0	0	0	0
	Non-sentinel respiratory	91	26	28.6	10	15	1	26	0	0	0	0
	Total	96	27	28.1	11	15	1	27	0	0	0	0
Week 51 2023	Sentinel GP ARI	110	30	27.3	4	26	0	30	0	0	0	0
	Non-sentinel respiratory	222	38	17.1	8	27	1	36	2	0	0	2
	Total	332	68	20.5	12	53	1	66	2	0	0	2
2023/2024	Sentinel GP ARI	1638	135	8.2	33	82	10	125	10	0	0	10
	Non-sentinel respiratory	2313	259	11.2	65	168	9	242	9	6	2	17
	Total	3951	394	10.0	98	250	19	367	19	6	2	27

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 51 and 52 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 52 2023	Sentinel GP ARI	5	0	0.0	0	0	0
	Non-sentinel	91	8	8.8	6	2	0
	Total	96	8	8.3	6	2	0
Week 51 2023	Sentinel GP ARI	110	8	7.3	4	4	0
	Non-sentinel	222	10	4.5	9	1	0
	Total	332	18	5.4	13	5	0
2023/2024	Sentinel GP ILI/ARI	1638	203	12.4	156	47	0
	Non-sentinel	2313	201	8.7	166	35	0
	Total	3951	404	10.2	322	82	0

Table 4: Number and percentage positive sentinel GP ARI specimens by **respiratory virus**, weeks 51 and 52 2023, and the 2023/2024 season. *Source: NVRL*

Virus	Week 52 2023 (N=5)		Week 51 2023 (N=110)		2023/2024 (N=1638)	
	Total positive	% positive	Total positive	% positive	Total positive	% positive
SARS-CoV-2	0	0.0	11	10.0	121	7.4
Influenza virus	1	20.0	30	27.3	135	8.2
Respiratory Syncytial Virus (RSV)	0	0.0	8	7.3	203	12.4
Rhino/enterovirus	1	20.0	13	11.8	347	21.2
Adenovirus	0	0.0	1	0.9	6	0.4
Bocavirus	0	0.0	1	0.9	8	0.5
Human metapneumovirus (hMPV)	0	0.0	4	3.6	22	1.3
Parainfluenza virus type 1 (PIV-1)	0	0.0	2	1.8	19	1.2
Parainfluenza virus type 2 (PIV-2)	0	0.0	0	0.0	2	0.1
Parainfluenza virus type 3 (PIV-3)	0	0.0	0	0.0	7	0.4
Parainfluenza virus type 4 (PIV-4)	0	0.0	2	1.8	40	2.4

Table 5: Number and percentage positive non-sentinel respiratory specimens, by **respiratory virus**, weeks 51 and 52 2023, and the 2023/2024 season. *Source: NVRL*

Virus	Week 52 2023 (N=91)		Week 51 2023 (N=222)		2023/2024 (N=2313)	
	Total positive	% positive	Total positive	% positive	Total positive	% positive
SARS-CoV-2	6	6.6	39	17.6	154	6.7
Influenza virus	26	28.6	38	17.1	259	11.2
Respiratory Syncytial Virus (RSV)	8	8.8	10	4.5	201	8.7
Rhino/enterovirus	5	5.5	17	7.7	334	14.4
Adenovirus	0	0.0	2	0.9	20	0.9
Bocavirus	0	0.0	1	0.5	8	0.3
Human metapneumovirus (hMPV)	1	1.1	1	0.5	17	0.7
Parainfluenza virus type 1 (PIV-1)	0	0.0	1	0.5	5	0.7
Parainfluenza virus type 2 (PIV-2)	0	0.0	0	0.0	5	0.2
Parainfluenza virus type 3 (PIV-3)	1	1.1	1	0.5	15	0.6
Parainfluenza virus type 4 (PIV-4)	0	0.0	0	0.0	23	1.0

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 participating GP OOH services provided data for week 51 2023.
- Out of a total of 13,325 calls made to the participating GP OOHs in week 51 2023:
 - 3102 (23%) were for self-reported ‘cough’, which is above the baseline threshold of 10.8% for cough calls. Coughs as a percentage of all calls is stable compared to the percentage of cough calls (25%) in week 50 (Figures 5 and 6). 35% (1093/3102) of all cough calls were from those aged four years and under.
 - 217 (1.6%) were for self-reported ‘flu’, which is below the baseline threshold of 2.3% for ‘flu’ calls (Figures 7 and 8). The highest burden of flu calls was in those aged 16 to 64 years at 60% (130/217), followed by those aged 65 years and older at 15% (33/217).
- Five participating GP OOH services provided data for week 52 2023.
- Out of a total of 19,225 calls made to the participating GP OOHs in week 52 2023:
 - 4866 (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 (23%) in week 51 (Figures 5 and 6). 30% (1457/4866) of all cough calls were from those aged four years and under.
 - 501 (2.6%) were for self-reported ‘flu’, which is slightly above the baseline threshold of 2.3% for ‘flu’ calls (Figures 7 and 8). The highest burden of flu calls was in those aged 16 to 64 years at 63% (315/501), followed by those aged 65 years and older at 25% (126/501).

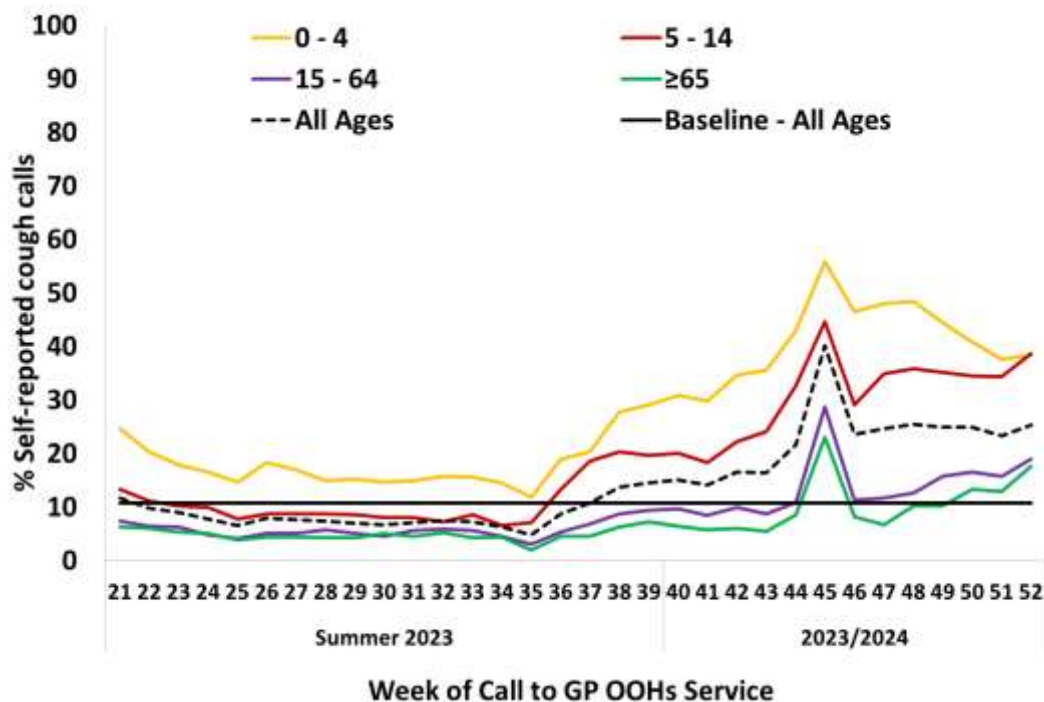


Figure 5: Percentage of self-reported **COUGH** calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call, summer 2023 and the 2023/2024 season. The baseline % cough calls for all ages calculated using the MEM method on historic data is shown. *Source: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

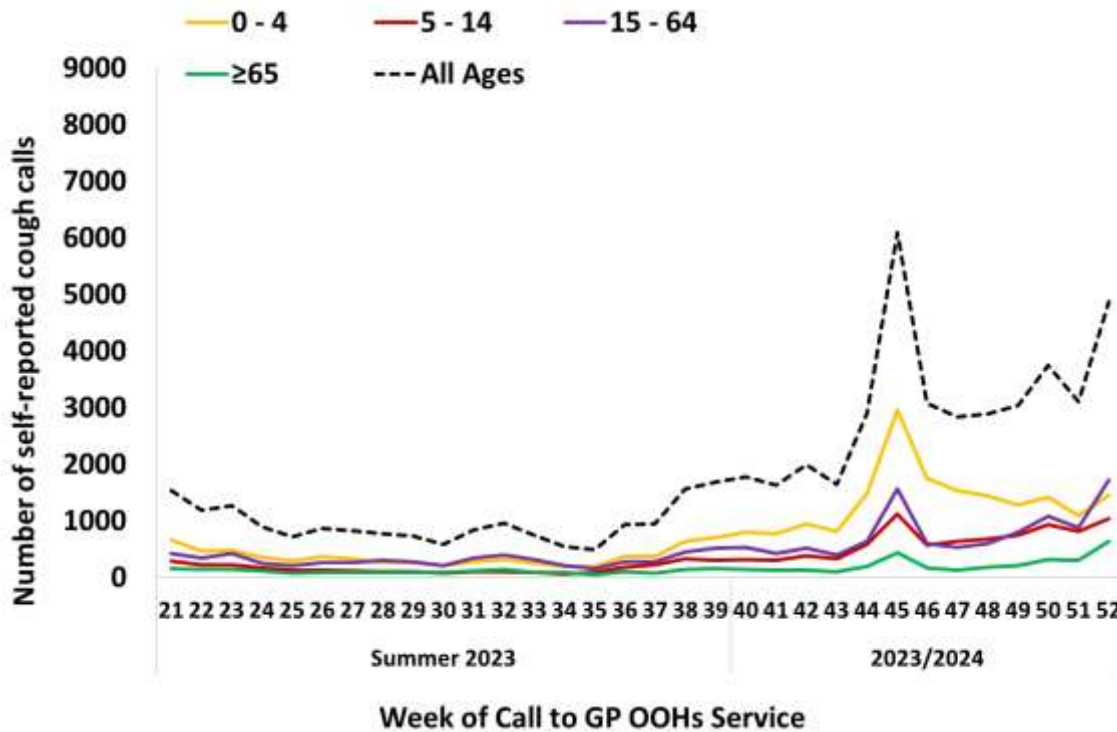


Figure 6: Number of self-reported **COUGH** calls for all ages and by age group to GP Out-of-Hours services by week of call, Summer 2023 and 2023/2024. *Source: GP Out-Of-Hours services in Ireland (collated by HSE & ICGP).*

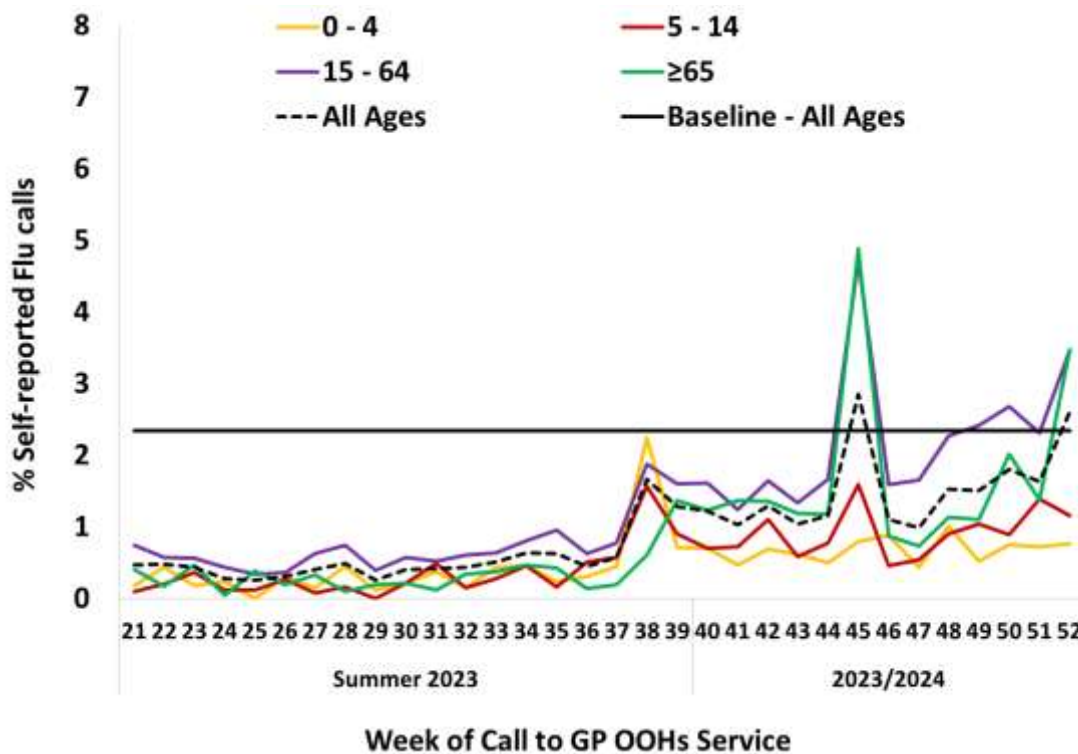


Figure 7: Percentage of self-reported **FLU** calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call, Summer 2023 and 2023/2024. The baseline % flu calls for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours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

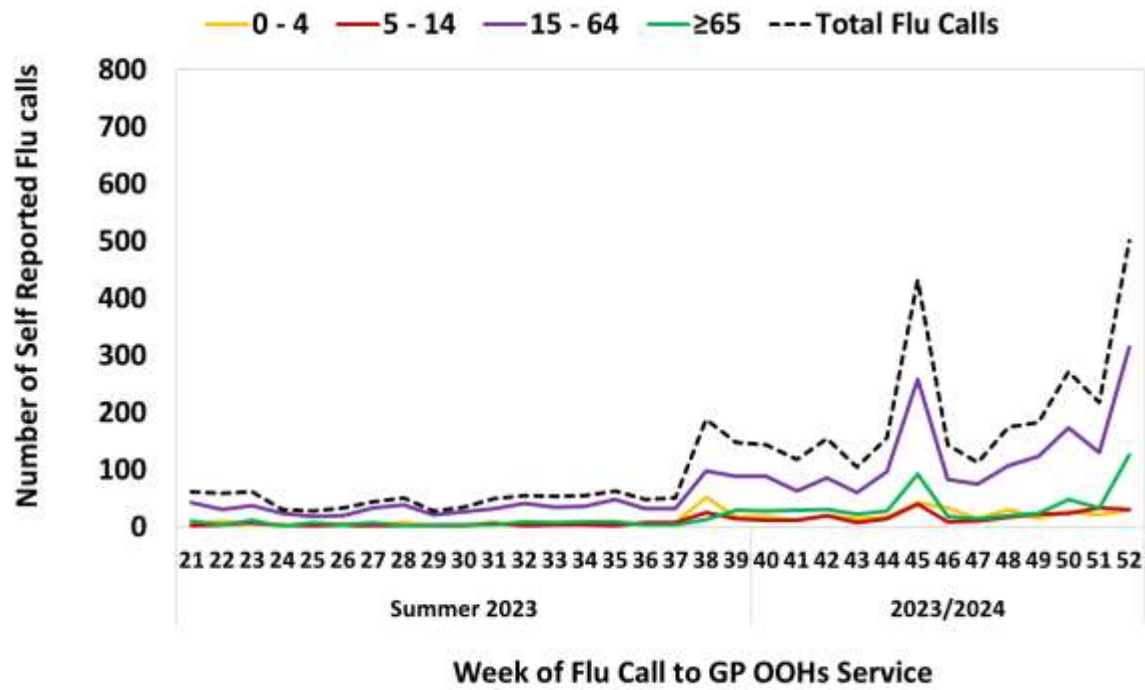


Figure 8: Number of self-reported **FLU** calls for all ages and by age group to GP Out-of-Hours services by week of call, Summer 2023 and 2023/2024. *Source: GP Out-Of-Hours services in Ireland (collated by HSE & ICGP).*

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](#).
- The number of influenza notifications during weeks 51 and 52 2023 were 965 and 879, respectively and increased compared to 631 during week 50 2023.
- 1,844 laboratory confirmed influenza cases were notified during weeks 51 and 52 2023 (Table 6) (corresponding to an overall notification rate of 18.7/100,000 population for week 51 and 17.1/100,000 population for week 52). For both weeks combined, notified cases included 139 influenza A(H3), 36 A(H1)pdm09, 1,608 influenza A (not subtyped) and 61 influenza B.
- Age specific influenza notification rates increased in all age-groups and were highest in those aged 0 to 4 years, at 51.5/100,000 population for week 51 and 42.3/100,000 population for week 52, followed by those aged 65 years and older at 32.5/100,000 for week 51 and 34.8/100,000 for week 52 (Figure 11).
- Influenza notification rates were highest in the West and North West health region at 36.2/100,000 during week 51 2023 and 40.3/100,000 population during week 52 (Table 6), with notifications from this region accounting for 28% (275/965) of all notifications in week 51 and 35% of all notifications (306/879) in week 52. Influenza rates were second highest in the South West at 28.2/100,000 population during week 51 and 31.2/100,000 population during week 52.
- RSV notifications remained at high levels, however decreased, with 671 and 345 cases notified during weeks 51 and 52 2023, respectively. This is compared to 798 cases during week 50 2023 (Figure 12).
- Age specific notification rates for RSV were highest in those aged less than one year, at 404.9/100,000 population for week 51 and 207.6/100,000 population for week 52 (Figure 13). Notifications in those aged less than one year accounted for 35% (120/345) of all RSV notifications in week 51 2023 and 35% (234/671) in week 52.
- RSV notification rates were highest in the West and North West health region at 19.0/100,000 population for week 51 and 17.0/100,000 for week 52 (Table 7).

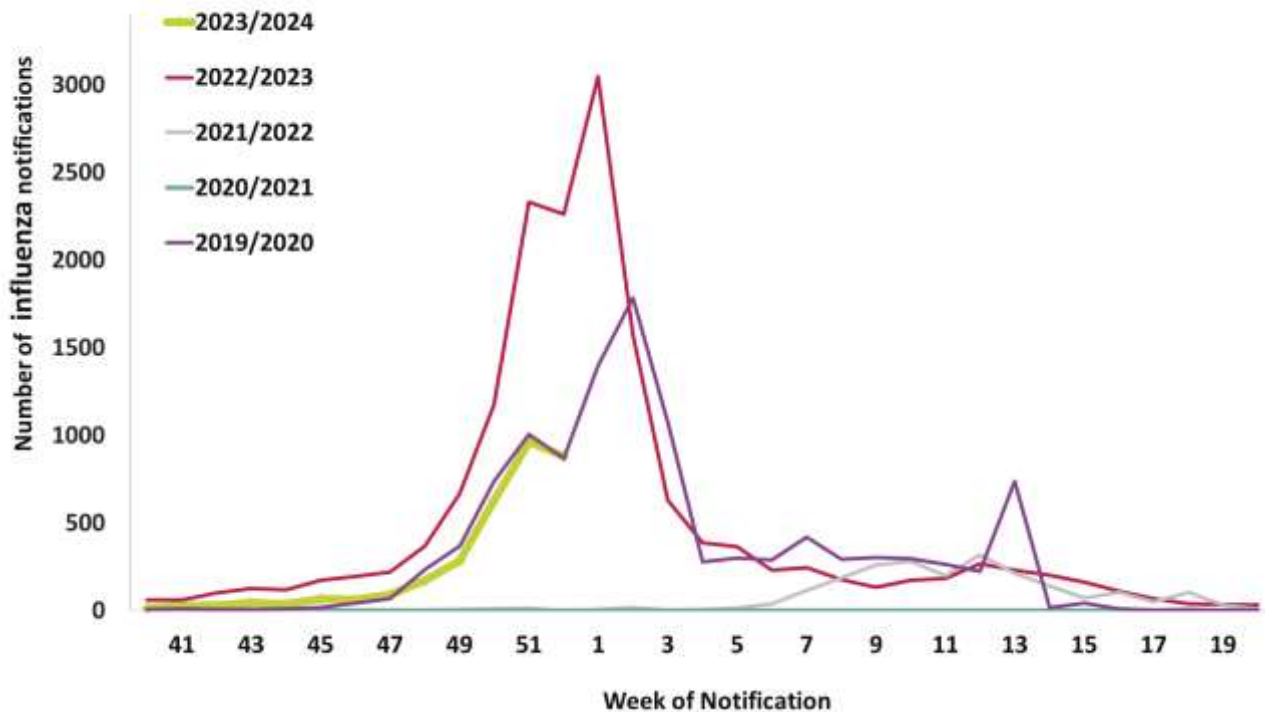


Figure 9: Number of laboratory confirmed **Influenza** notifications to HPSC by week of notification, 2019/2020 to 2023/2024 seasons. *Source: Ireland’s Computerised Infectious Disease Reporting System*

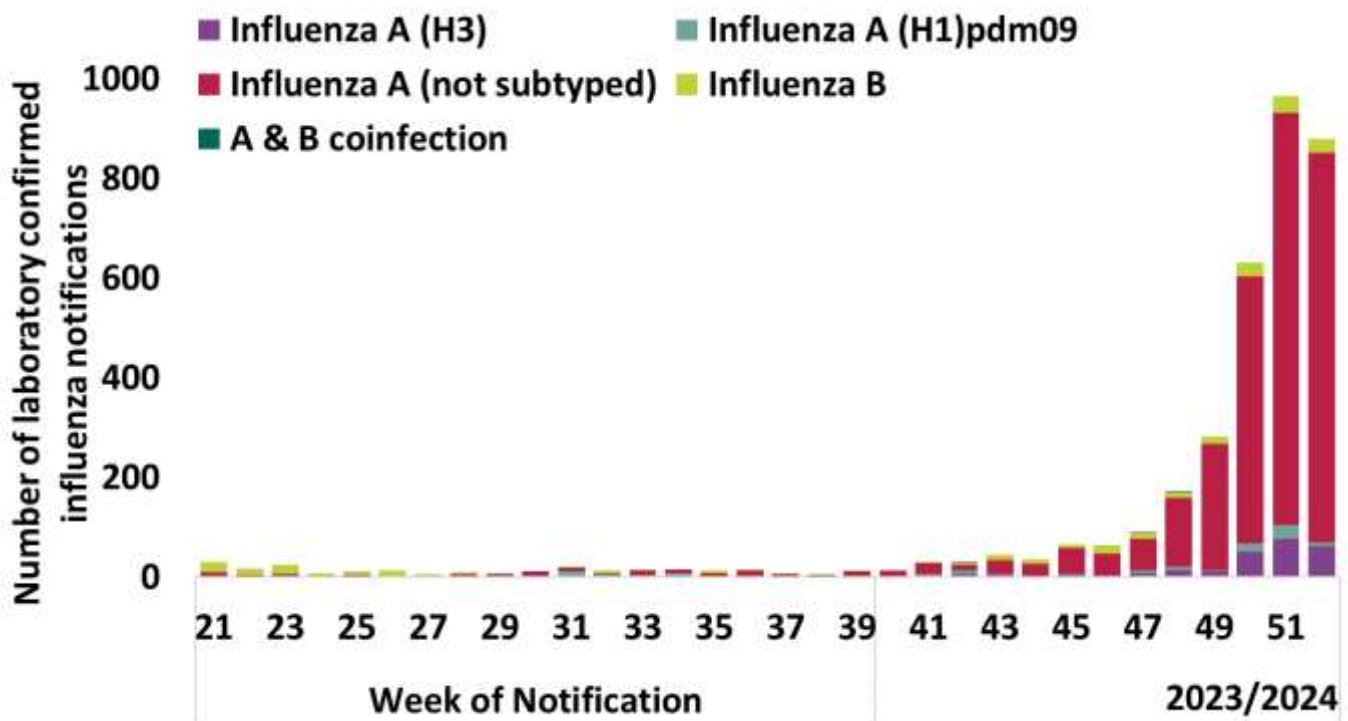


Figure 10: Number of laboratory confirmed **influenza** notifications by influenza type/subtype and week, summer 2023 and 2023/2024 season. *Source: Ireland’s Computerised Infectious Disease Reporting System*

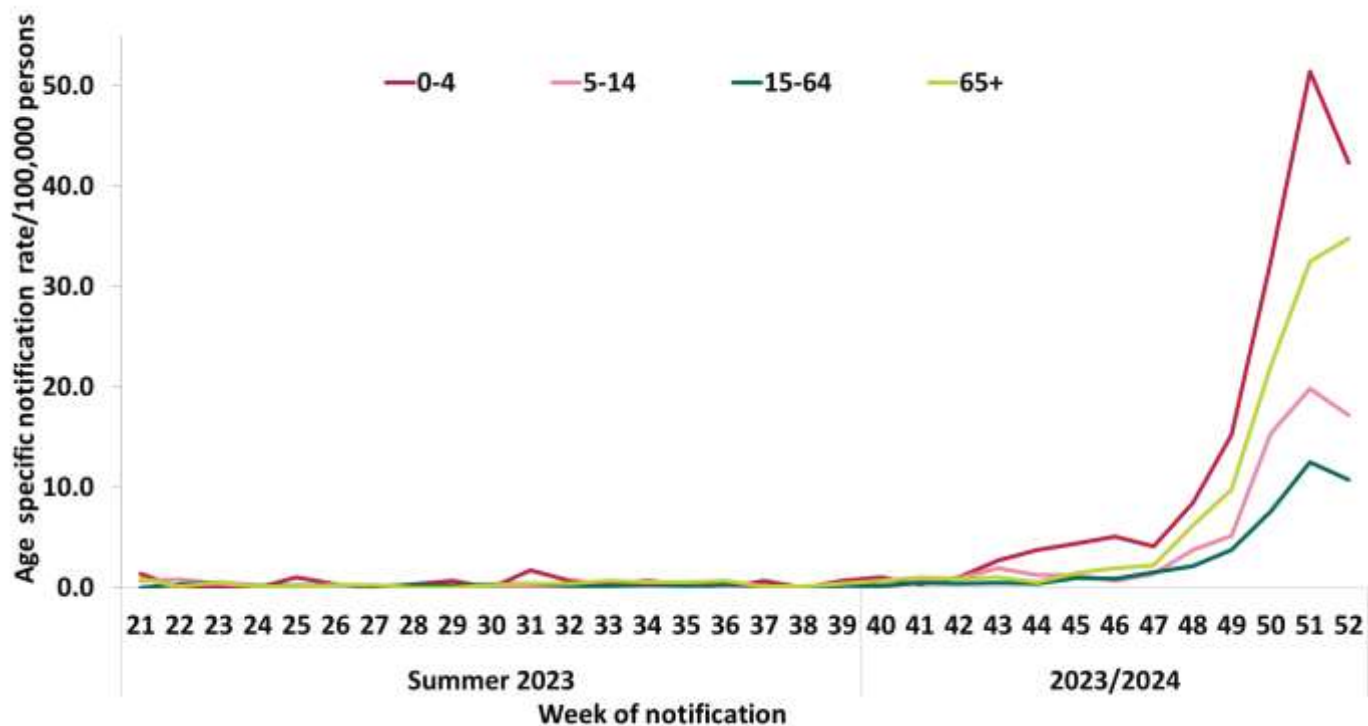


Figure 11: Age specific rates per 100,000 population of laboratory confirmed **influenza** notifications to HPSC by week of notification, Summer 2023 and 2023/2024 season. *Source: Ireland’s Computerised Infectious Disease Reporting System.*

Table 6: Number and rate per 100,000 population of laboratory confirmed **influenza** notifications by HSE Health Region for weeks 51 and 52 2023 and the 2023/2024 season to date. *Source: CIDR*

HSE Health Region	Week 51 2023		Week 52 2023		2023/2024 season (Week 40- 52 2023)	
	Number	Rate/100,000 persons	Number	Rate/100,000 persons	Number	Rate/100,000 persons
Dublin and North East	164	13.8	129	10.9	550	46.3
Dublin and Midlands	143	13.3	112	10.4	418	38.8
Dublin and South East	131	13.5	43	4.4	347	35.7
South West	209	28.2	231	31.2	778	105.0
Mid West	43	10.4	58	14.0	160	38.7
West and North West	275	36.2	306	40.3	1048	138.0
Total	965	18.7	879	17.1	3301	64.1

Table 7: Number and rate per 100,000 population of laboratory confirmed **RSV** notifications by HSE Health Region for weeks 51 and 52 2023 and the 2023/2024 season to date. *Source: CIDR*

HSE Health Region	Week 51 2023		Week 52 2023		2023/2024 season (Week 40- 52)	
	Number	Rate/100,000 persons	Number	Rate/100,000 persons	Number	Rate/100,000 persons
Dublin and North East	135	11.4	71	6.0	1206	101.6
Dublin and Midlands	164	15.2	62	5.8	1325	123.0
Dublin and South East	109	11.2	14	1.4	886	91.2
South West	59	8.0	34	4.6	796	107.5
Mid West	59	14.3	35	8.5	481	116.4
West and North	145	19.1	129	17.0	1588	209.0
Unknown	0		0		1	
Total	671	13.0	345	6.7	6283	122.0

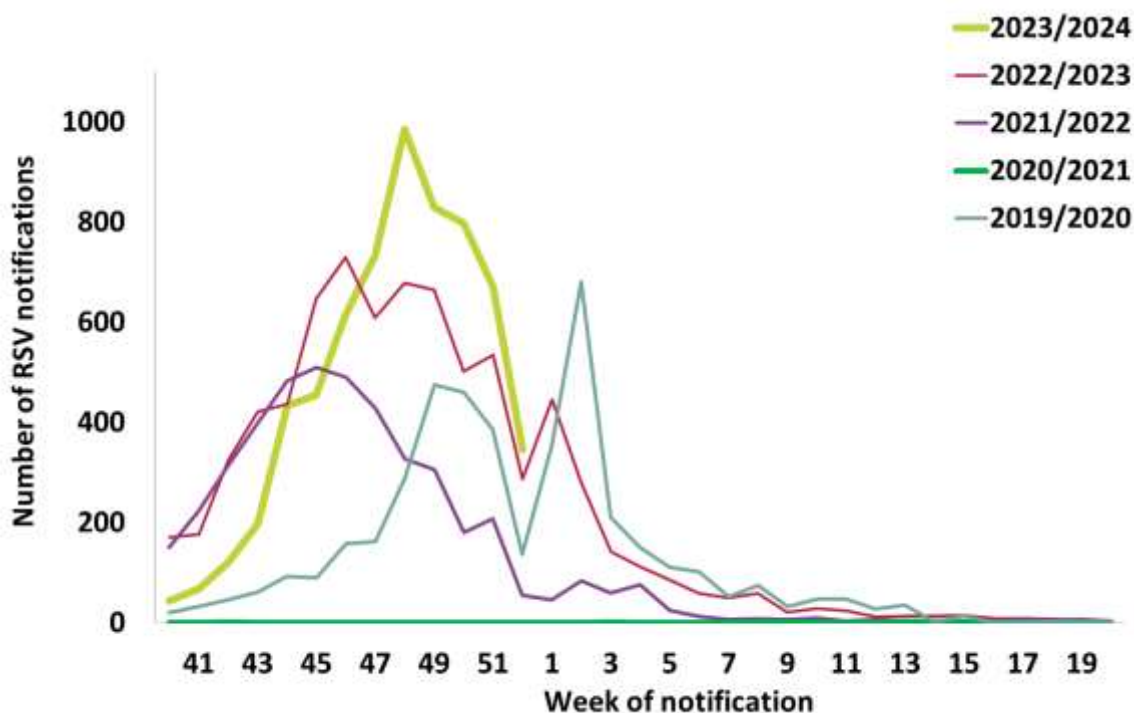


Figure 12: Number of laboratory confirmed **RSV** notifications to HPSC by week of notification, 2019/2020 to 2023/2024 seasons. *Source: Ireland’s Computerised Infectious Disease Reporting System.*

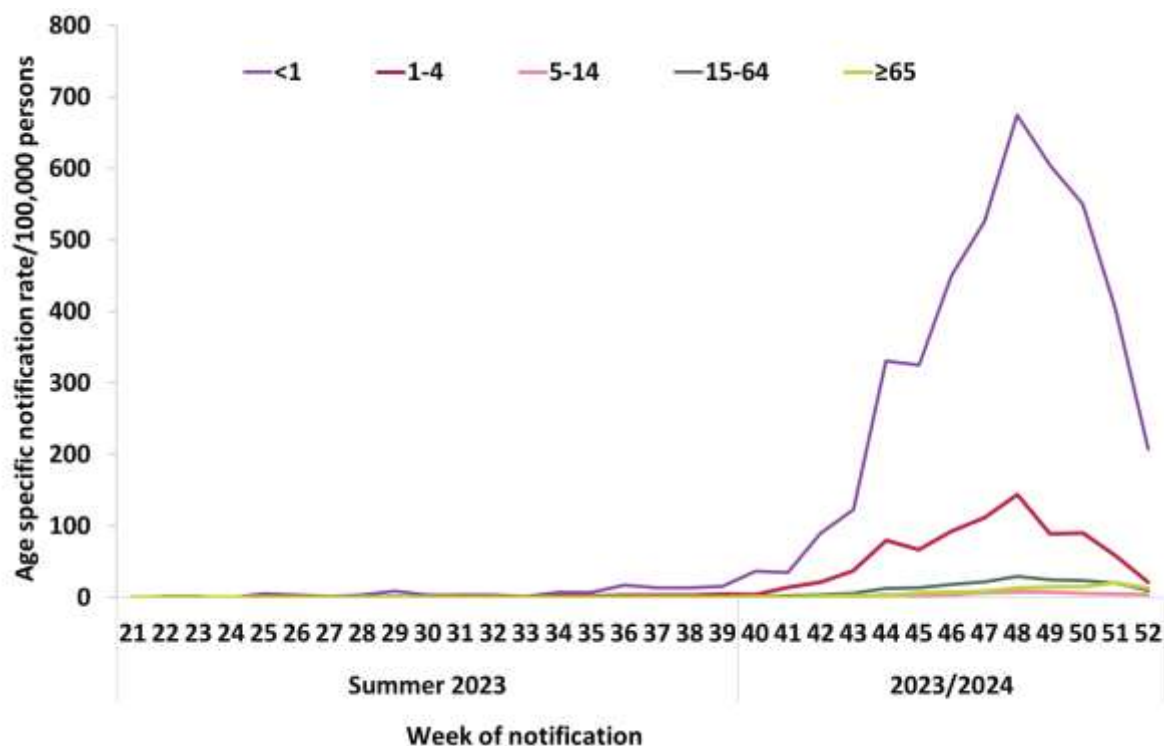


Figure 13: Age specific rates per 100,000 population for laboratory confirmed RSV notifications* to HPSC by week of notification, Summer 2023 and 2023/2024 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

5. Hospitalisations

- During weeks 51 and 52 2023, 211 laboratory confirmed influenza cases were reported as hospital inpatients for both weeks, a slight increase compared to the 198 hospitalisations notified in week 50. Out of a total of 422 hospitalised cases for weeks 51 and 52 2023: 398 were positive for influenza A (not subtyped), 12 for influenza A (H3), two for A(H1)pdm09 and 10 for influenza B (Figure 15).
- During week 51 2023, the age specific influenza hospitalisation rate was highest in those aged 0-4 years (11.5/100,000) and ≥65 years (10.3/100,000). In week 52 they were highest in those aged ≥65 years (12.5/100,000 population) and those aged 0-4 years (8.1/100,000 population) (Figure 16). 38% (80/211) of all influenza hospitalisations occurred in those aged ≥65 in week 51 and 46% (97/211) in week 52 2023 (Table 8).
- During weeks 51 and 52 2023, 254 and 113 laboratory confirmed RSV hospitalised cases were notified, respectively. This is compared to 348 cases in week 50 2023 (Figure 17).
- The age specific RSV hospitalisation rate was highest in those aged less than one year in week 51 (188.6/100,000 population) and week 52 (74.4/100,000 population) (Figure 18), and 43% (109/254) of all hospitalised RSV cases occurred in this age-group in week 51 and 38% (43/113) in week 52 (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.

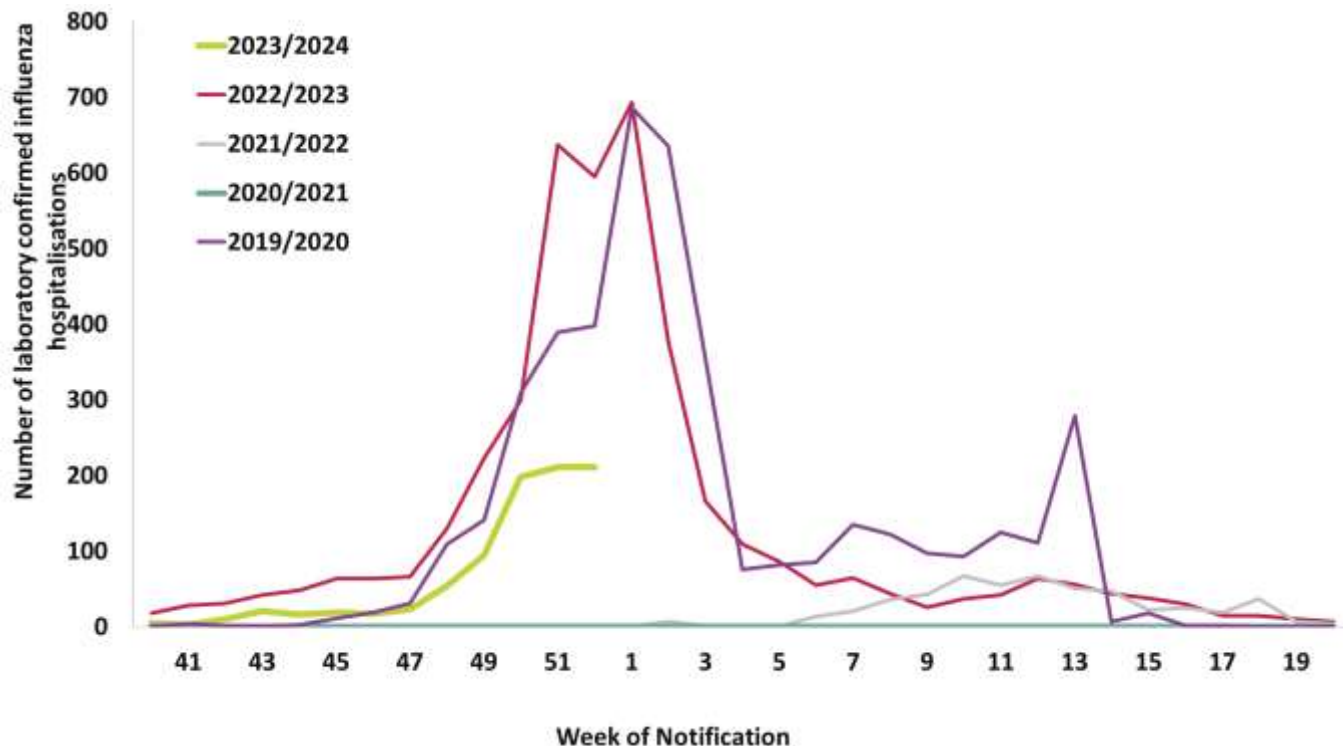


Figure 14: Number of notified **influenza** hospital inpatients, by week of notification and season, for the 2019/2020 to 2023/2024 seasons. *Source: Ireland’s Computerised Infectious Disease Reporting System*

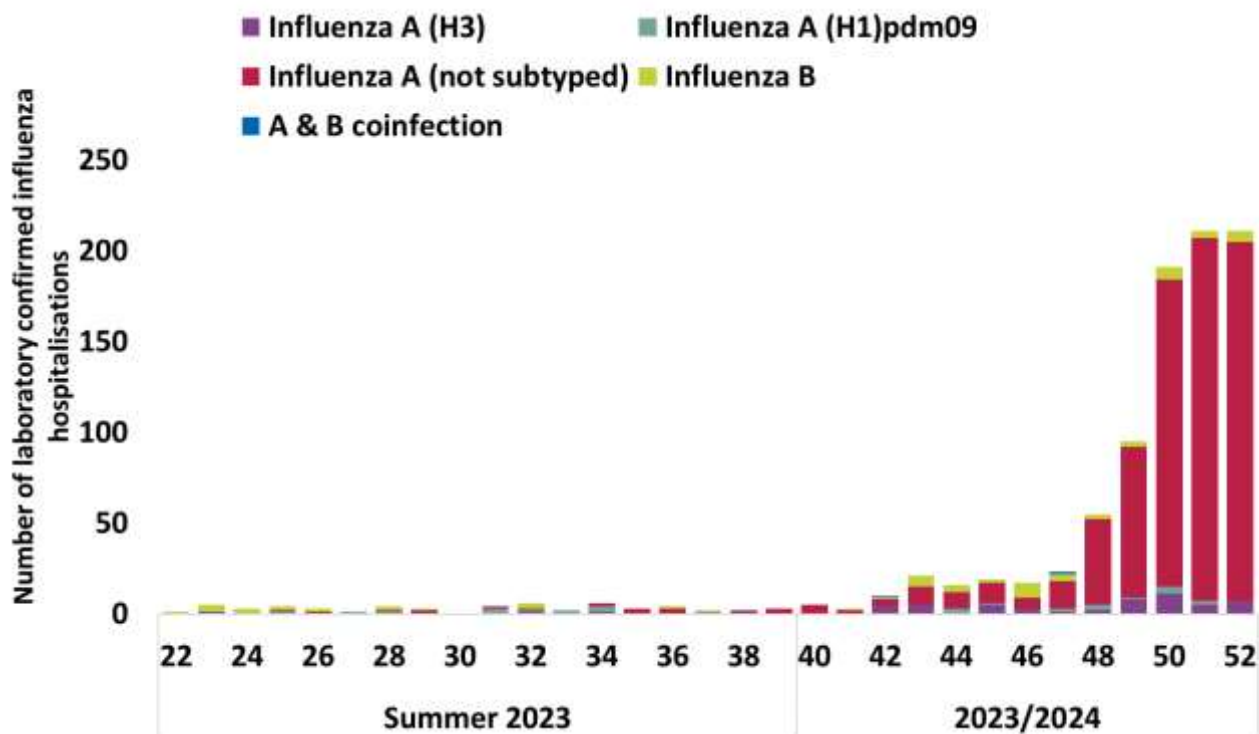


Figure 15: Number of notified laboratory confirmed **influenza** hospital inpatients by influenza type/subtype by week, summer 2023 and 2023/2024 season. *Source: Ireland’s Computerised Infectious Disease Reporting System.*

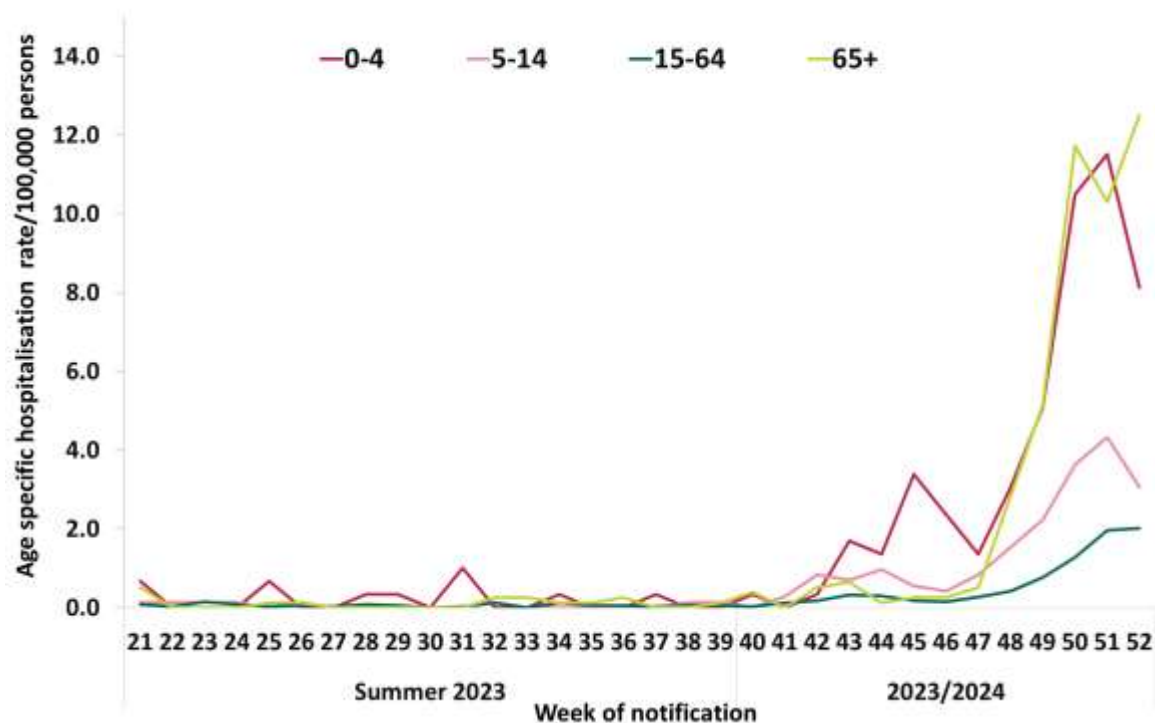


Figure 16: Age specific rates per 100,000 population for laboratory confirmed **influenza** cases reported as **hospital inpatients** by week of notification and season, Summer 2023 and 2023/2024. *Source: Ireland's Computerised Infectious Disease Reporting System.*

Table 8: Number, percentage and rate of notified laboratory-confirmed **influenza hospitalised cases notified** in weeks 51 and 52 2023 and the 2023/2024 season (week 40 2023 onwards). *Source: Ireland's Computerised infectious Disease Reporting System*

Age (years)	Hospitalised (Week 51)			Hospitalised (Week 52)			Season to date (Weeks 40 to 52)		
	Number	% of all Hospitalisations	Rate/ 100,000	Number	% of all Hospitalisations	Rate/ 100,000	Number	% of all Hospitalisations	Rate/ 100,000
<1	5	2.4	8.7	4	1.9	6.9	21	2.4	36.3
1-4	29	13.7	12.2	20	9.5	8.4	126	14.3	53.0
5-14	31	14.7	4.3	22	10.4	3.1	137	15.5	19.1
15-24	7	3.3	1.1	11	5.2	1.7	32	3.6	5.0
25-34	12	5.7	1.9	15	7.1	2.4	48	5.4	7.6
35-44	14	6.6	1.8	18	8.5	2.3	55	6.2	6.9
45-54	14	6.6	2.0	9	4.3	1.3	40	4.5	5.6
55-64	19	9.0	3.3	15	7.1	2.6	71	8.0	12.2
≥65	80	37.9	10.3	97	46.0	12.5	352	39.9	45.3
Unknown	0		-	0		-	0		-
Total	211	100	4.1	211	100	4.1	882	100	152.1

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

	Patient Type							Total
	GP Patient	ED patient	Hospital Inpatient	Hospital Day Patient	Hospital Outpatient	Other	Unknown	
Week 52	36	437	211	9	38	61	87	879
Week 51	46	538	211	6	53	13	98	965
Week 50	26	311	198	4	37	9	46	631
Week 49	8	139	95	1	16	8	16	283
Week 48	16	65	54	1	11	4	19	170
Week 47	7	39	23	1	9	2	8	89
Week 46	8	28	17	0	5	1	5	64
Week 45	4	26	19	0	6	4	6	65
Week 44	0	15	15	1	1	1	3	36
Week 43	7	17	20	0	0	0	2	46
Week 42	6	8	11	0	1	0	3	29
Week 41	3	14	4	1	2	0	5	29
Week 40	0	6	5	0	3	0	0	14
Total	167	1643	883	24	182	103	298	3300

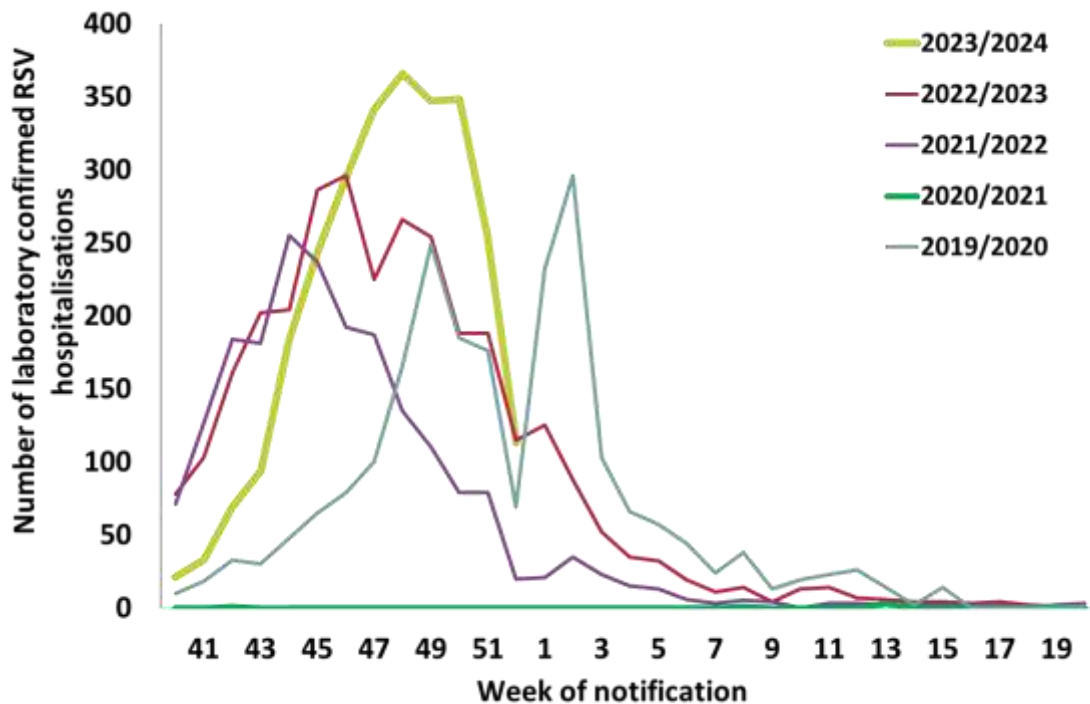


Figure 17: Number of notified RSV hospitalised cases notified, by week of notification and season, for the 2019/2020 to 2023/2024 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System.*

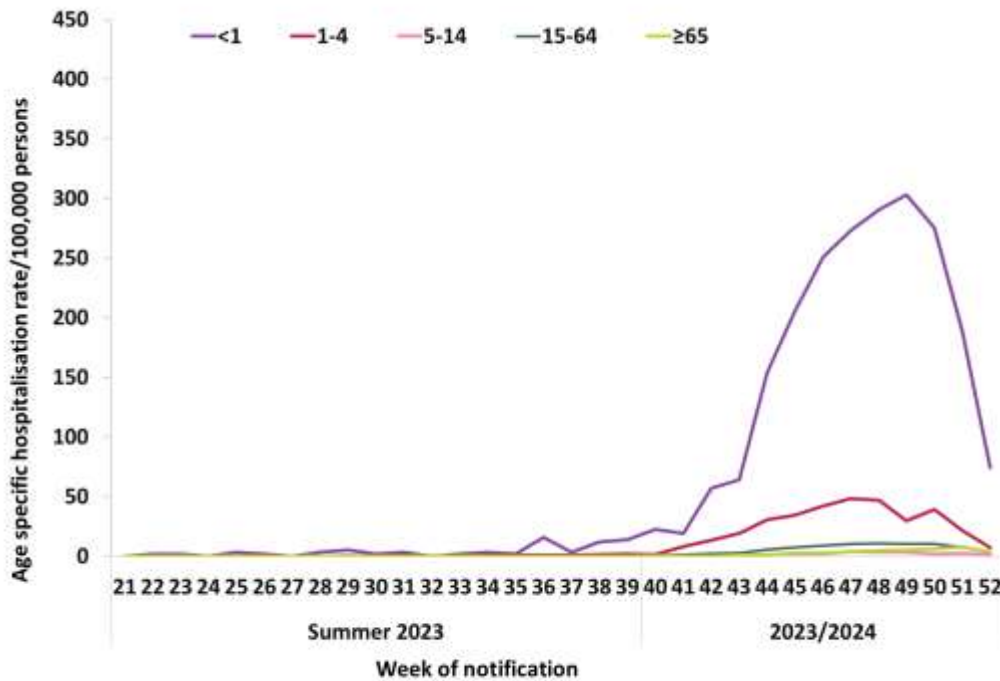


Figure 18: Age specific notification rates per 100,000 population for laboratory confirmed **RSV** hospitalised cases notified by week of notification and season, Summer 2023 and 2023/2024. *Source: Ireland's Computerised Infectious Disease Reporting System*

Table 10: Number, percentage and rate of notified laboratory-confirmed **RSV** hospitalised cases notified in weeks 51 and 52 2023 and the 2023/2024 season (week 40 2023 onwards). *Source: Ireland's Computerised infectious Disease Reporting System*

Age (years)	Hospitalised (Week 51)			Hospitalised (Week 52)			Season to date (Weeks 40 to 52)		
	Number	% of all Hospitalisations	Rate/100,000	Number	% of all Hospitalisations	Rate/100,000	Number	% of all Hospitalisations	Rate/100,000
<1	109	42.9	188.6	43	38.1	74.4	1259	46.5	2178.4
1-4	51	20.1	21.5	17	15.0	7.2	814	30.1	342.6
5-14	17	6.7	2.4	10	8.8	1.4	157	5.8	21.9
15-24	4	1.6	0.6	2	1.8	0.3	17	0.6	2.6
25-34	1	.4	0.2	2	1.8	0.3	21	0.8	3.3
35-44	3	1.2	0.4	3	2.7	0.4	31	1.1	3.9
45-54	4	1.6	0.6	0	.0	0.0	35	1.3	4.9
55-64	6	2.4	1.0	6	5.3	1.0	57	2.1	9.8
≥65	59	23.2	7.6	30	26.5	3.9	316	11.7	40.7
Unknown	0		-	0		-	0		-
Total	254	100	4.9	113	100	2.2	2707	100	52.6

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

	Patient Type							Total
	GP Patient	ED patient	Hospital Inpatient	Hospital Day Patient	Hospital Outpatient	Other	Unknown	
Week 52	5	151	113	4	5	29	38	345
Week 51	30	263	254	7	15	28	74	671
Week 50	28	314	348	4	34	27	43	798
Week 49	22	325	347	7	21	31	72	825
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	143	2606	2707	54	145	180	448	6283

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.

- During weeks 51 and 52 2023 there were seven (four in week 51 and three in week 52) laboratory confirmed influenza cases (one influenza A (H3) and six influenza A (not subtyped)) admitted to intensive care and notified to HPSC.
- 18 influenza (one influenza A (H1)pdm09, 14 influenza A (not subtyped) and three influenza A (H3)) ICU cases have been notified for the season to date (Week 40-Week 52).

Table 12: Cumulative number and age specific rate per 100,000 population of laboratory confirmed notified influenza hospitalised and intensive care cases, weeks 40-52 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	21	36.3	0	0.0
1-4	126	53.0	0	0.0
5-14	137	19.1	1	0.1
15-24	32	5.0	1	0.2
25-34	48	7.6	1	0.2
35-44	55	8.8	1	0.1
45-54	40	5.6	2	0.3
55-64	71	12.2	4	0.7
≥65	352	45.3	8	1.0
Unknown	0	–	0	–
Total	882	17.1	18	0.3

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/>

- During weeks 51 and 52, there were three deaths (two in week 51 and one in week 52) (one influenza (AH1)pdm09 and two influenza A (not subtyped)) in influenza cases notified to HPSC, respectively.
- Six deaths (one influenza (AH1) pdm09 and five 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 51 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 weeks 51 and 52 2023, fifteen influenza outbreaks (four in nursing homes, four in acute hospitals, one in a community hospital/long-stay unit, two in residential institutions and four in other settings) were reported to HPSC (Tables 13 & 14).
- During weeks 51 and 52 2023, nine RSV outbreaks (four in acute hospitals, two in nursing homes and three in other settings) were reported to HPSC.
- During week 51, three ARI outbreaks (one rhino/enterovirus in an “other” healthcare setting and two unknown pathogens in nursing homes) were reported to HPSC. There were no ARI outbreaks reported for week 52 2023.
- There have been 81 ARI/influenza/RSV (excluding COVID-19) outbreaks notified to HPSC to date this season, including 39 influenza outbreaks, 22 RSV outbreaks and 20 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 weeks 51 and 52 2023 and the 2023/2024 season (weeks 40-52 2023) *Source: CIDR*

HSE Health Region	Influenza			RSV			ARI			Total		
	Week 51	Week 52	2023/2024	Week 51	Week 52	2023/2024	Week 51	Week 52	2023/2024	Week 51	Week 52	2023/2024
Dublin and North East	0	1	2	3	1	6	2	0	10	5	2	18
Dublin and Midlands	0	0	2	1	0	9	0	0	0	1	0	11
Dublin and South East	1	1	9	0	0	1	1	0	6	2	1	16
South West	4	0	10	0	0	0	0	0	0	4	0	10
Mid West	0	0	1	2	0	2	0	0	0	2	0	3
West and North West	5	3	15	0	2	4	0	0	4	5	5	23
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Total	10	5	39	6	3	22	3	0	20	19	8	81

Table 14: Summary of influenza, RSV and ARI (influenza/RSV/SARS-CoV-2 negative) outbreaks by outbreak setting during weeks 51 and 52 2023 and the 2023/2024 season (weeks 40-52 2023). *Source: CIDR*

Setting	Influenza			RSV			ARI			Total		
	Week 51	Week 52	2023/2024	Week 51	Week 52	2023/2024	Week 51	Week 52	2023/2024	Week 51	Week 52	2023/2024
Community hospital/Long-stay unit	1	0	2	0	0	0	0	0	3	1	0	5
Nursing Home	2	2	10	0	2	4	2	0	12	4	4	26
Hospital	4	0	12	3	1	10	0	0	0	7	1	22
Residential Institution	1	1	9	0	0	3	0	0	2	1	1	14
Childcare facility	0	0	0	0	0	2	0	0	0	0	0	2
Other settings	2	2	6	3	0	3	1	0	3	6	2	12
Total	10	5	39	6	3	22	3	0	20	19	8	81

9. International Summary

According to [European Respiratory Virus Surveillance Summary](#), in the WHO European region during week 50 2023 (including data up to 17/12/2023), influenza has rapidly increased in the past two weeks from a median test positivity of 10% (pooled country data 10%) in week 49 2023 to 18% (pooled country data 15%) for week 50 2023, all three influenza virus types/subtypes (A(H1N1)pdm09, A(H3N2) and B) are co-circulating. Of 25 countries reporting data, 14 reported seasonal influenza activity above the 10% positivity threshold in sentinel primary care. Concurrently, a large number of countries report an increased geographic spread, indicating that influenza activity is intensifying. Both in week 49 and week 50, the pooled positivity at EU/EEA level was at or above 10% for influenza virus infection in sentinel primary care settings, marking the start of the seasonal influenza epidemic in week 50/2023. For RSV, countries continue to report a mix of increasing and decreasing trends for activity and severity indicators. The highest impact of RSV continues to be among children aged 0–4 years.

As of 10th December 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 and were above the seasonal baseline. In East Asia, influenza activity continued to increase mainly due to activity in China and the Republic of Korea. In Western Asia, influenza activity remained elevated in some countries of the Arabian Peninsula and remained low in other reporting countries except for Jordan that reported increased influenza A(H3N2) detections. In the Central American and Caribbean countries, influenza activity remained moderate in the Caribbean with detections of predominantly influenza A(H1N1)pdm09 and remained low but increased in Central America with detections of predominantly B/Victoria lineage viruses. In tropical Africa, influenza detections decreased in Western Africa but were elevated in some countries of Eastern and Middle Africa. Influenza A(H3N2) viruses were predominant but all seasonal influenza subtypes were reported.

See [ECDC](#) and [WHO](#) influenza surveillance reports for further information.

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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