







Summary

Influenza activity was at low levels and decreased in Ireland during week 14 2023, compared to recent weeks. Influenza viruses are circulating at low levels in the community, with influenza B viruses currently the dominant circulating viruses.

- Influenza-like illness (ILI): The sentinel GP influenza-like illness (ILI) consultation rate was 8.3 per 100,000 population during week 14 2023. This is a slight decrease compared to the updated rate of 11.1/100,000 during week 13 2023. ILI consultation rates have been below the Irish baseline threshold (18.1/100,000 population) for the last nine weeks (since week 6 2023). Sentinel GP ILI age specific rates were below age specific baseline thresholds in all age groups during week 14 2023.
- <u>National Virus Reference Laboratory (NVRL)</u>: Data for NVRL sentinel GP Acute Respiratory Infection (ARI) specimens and non-sentinel respiratory specimens were not reported to HPSC during week 14 2023. Retrospective NVRL data for week 14 will be reported next week.
- Influenza notifications: 202 laboratory confirmed influenza cases were notified during week 14 2023- 16 influenza A (not subtyped), four influenza A(H1)pdm09, two influenza A(H3) and 180 influenza B. This is a decrease compared to 231 cases reported during week 13 2023. Age specific rates were low in all age groups during week 14.
- <u>RSV notifications</u>: 13 RSV cases were notified during week 14 2023, stable compared to 13 RSV cases notified in week 13 2023.
- <u>Hospitalisations</u>: During week 14 2023, 44 laboratory confirmed influenza cases were reported as hospital inpatients: four influenza A (not subtyped), one influenza A(H1)pdm09 and 39 influenza B cases. Influenza hospitalised cases during week 14 2023 decreased to 44, compared to 56 in week 13 2023.
- <u>Critical care admissions</u>: One laboratory confirmed influenza B case was admitted to a critical care unit and notified to HPSC during week 14 2023. During weeks 40 2022-14 2023, 180 laboratory confirmed influenza cases 32 A(H1)pdm09, 31 A(H3), 105 A (not subtyped) and 12 influenza B have been admitted to critical care and notified to HPSC. Age specific rates for the season to date were highest in those aged 65 years and older. During weeks 40 2022-14 2023, of 156 laboratory confirmed influenza ICU cases with known influenza vaccination status, 107 (68.5%) were reported as NOT having received the 2022/2023 influenza vaccine.
- Mortality: There was one death in a notified influenza case reported to HPSC during week 14 2023. During weeks 40 2022-14 2023, 191 deaths in notified influenza cases were reported 32 influenza A(H3), 26 A(H1)pdm09, 127 A (not subtyped), five influenza B and one influenza A and B coinfection. During the 2022/2023 season, excess all-cause mortality was reported for six consecutive weeks (weeks 50 2022- 3 2023). Excess pneumonia and influenza mortality was reported for four consecutive weeks (weeks 51 2022- 2 2023)
- **Outbreaks:** There was one influenza B outbreak in a residential institution, and two ARI outbreaks (pathogens unknown) in nursing homes notified during week 14 2023. During weeks 40 2022-14 2023, 156 influenza outbreaks were notified.
- International: Globally, influenza activity continued to decrease following the peak in late 2022. In Europe, influenza activity has decreased in recent weeks.

1. GP sentinel surveillance system - Clinical Data

- During week 14 2023, 24 sentinel GP influenza-like illness (ILI) consultations were reported from the Irish sentinel GP network, corresponding to an ILI consultation rate of 8.3 per 100,000 population, compared to 11.1 per 100,000 population during week 13. The latest available data for the number of NVRL positive specimens are for week 13 2023 (Figure 1).
- Sentinel GP ILI consultation rates were below the baseline threshold during week 14 2023.
- The sentinel GP ILI consultation rates have been below the Irish sentinel GP ILI baseline threshold (18.1/100,000 population) for nine consecutive weeks, since week 6 2023.
- Age specific ILI consultation rates were below age specific baseline thresholds in all age groups during week 14 2023 (Figure 2, Table 1).
- The Irish sentinel baseline ILI threshold for the 2022/2023 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. Age specific MEM threshold levels are shown in Table 1.

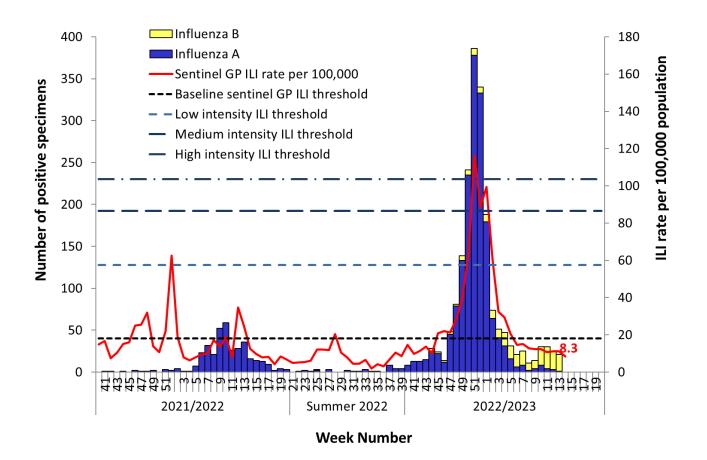


Figure 1: Sentinel GP Influenza-like illness (ILI) consultation rates per 100,000 population, baseline ILI threshold, medium and high intensity ILI thresholds and number of positive influenza A and B specimens tested by the NVRL, by influenza week and season. *Source: ICGP and NVRL*

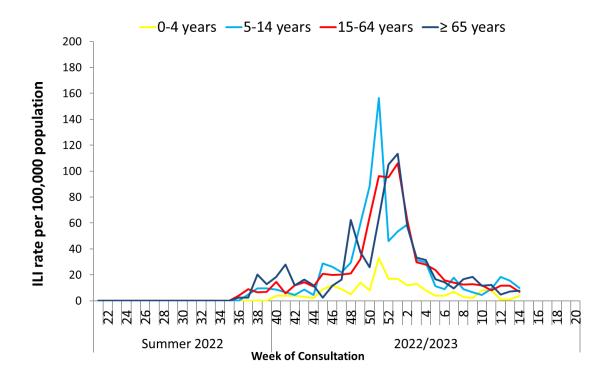


Figure 2: Age specific sentinel GP ILI consultation rate per 100,000 population by week during the summer of 2022 and the 2022/2023 influenza season to date. *Source: ICGP.*

Table 1: Age specific sentinel GP ILI consultation rate per 100,000 population by week (weeks 40 2022-14 2023), colour coded by sentinel GP ILI age specific Moving Epidemic Method (MEM) threshold levels. *Source: ICGP.*

Age group (years)	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14
All Ages	14.6	9.7	11.3	13.7	10.1	20.8	22.0	21.4	27.9	38.9	63.0	116.2	88.6	99.4	60.7	32.4	29.3	20.6	14.7	15.2	12.7	12.4	12.4	10.8	11.1	11.1	8.3
<15 yrs	11.7	10.3	9.1	10.3	6.0	32.8	35.2	28.2	27.3	60.9	71.1	154.3	57.2	62.5	58.4	40.6	32.3	13.5	12.1	22.5	10.5	7.3	14.7	18.5	13.9	12.0	13.2
15-64 yrs	14.7	5.7	11.8	14.2	11.1	20.7	19.9	20.1	21.1	32.1	64.6	96.2	95.4	106.0	62.2	29.6	27.8	23.8	15.6	14.1	12.6	12.8	11.9	8.0	11.5	11.6	6.9
≥65 yrs	18.5	27.9	12.0	16.2	11.8	2.4	11.6	16.4	62.3	37.5	25.7	63.8	105.0	113.5	57.3	33.2	31.6	16.6	14.3	9.5	16.6	18.5	11.6	12.2	4.9	7.1	7.8
Reporting practices (N=61)	60	59	58	60	58	58	60	59	58	59	59	58	58	59	57	59	58	59	58	59	59	60	60	58	57	58	53

	MEM Threshold Levels	Below Baseline	Low	Moderate	High	Extraordinary
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2. Influenza and Other Respiratory Virus Detections - NVRL

The data reported in this section for the 2022/2023 influenza season refers to sentinel GP ILI/ARI and non-sentinel respiratory specimens routinely tested for influenza, 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). In Ireland, virological surveillance for influenza, RSV and other respiratory viruses (ORVs) undertaken by the Irish sentinel GP network is integrated into current testing structures for COVID-19 primary care referrals. As of 9th November 2022, the acute respiratory (ARI) case definition is being used by sentinel GPs for surveillance purposes and to identify cases for respiratory virus swabbing. Case definitions are available in Section 12. Sentinel GPs re-commenced in-surgery swabbing of ARI patients on November 16th 2022.

- A lag time with testing and reporting is noted for the most recent surveillance week. The latest available data is for week 13 2023.
- During week 13 2023, of 71 sentinel GP Acute Respiratory Infection (ARI) specimens tested and reported by the NVRL, seven (9.9%) were positive for influenza B, eight (11.3%) were positive for SARS-CoV-2 and no specimens were positive for RSV.
- During week 12 2023, of 93 sentinel GP ARI specimens tested and reported by the NVRL, 10 (10.8%) were positive for influenza B. There were three (3.2%) specimens positive for SARS-CoV-2 and no specimens were positive for RSV.
- Of 167 non-sentinel respiratory specimens tested and reported by the NVRL during week 13 2023, 14 (8.4%) were positive for influenza: one influenza A(H1)pdm09 and 13 influenza B.
- During week 12 2023, of 228 non-sentinel respiratory specimens tested, 15 (6.6%) were positive for influenza: three influenza A(H3) and 12 influenza B.
- RSV positivity (non-sentinel respiratory specimens) was at low levels in recent weeks, at 0.4% (1/228) during week 12 2023 and no positive RSV specimens were detected out of 167 tested during week 13 2023.
- Rhinovirus/enterovirus positive detections from non-sentinel respiratory specimens were detected at a positivity rate of 21.1% (48/228) during week 12 2023 and 21% (35/167) during week 13 2023 (Figure 3b).
- Other respiratory viruses (ORVs) are being detected at lower levels in recent weeks (Figure 3a and 3b).
- Of 1,936 sentinel GP ARI specimens and non-sentinel respiratory specimens positive for influenza and reported by the NVRL during the 2022/2023 season, 479 (24.7%) were coinfected with other respiratory viruses.

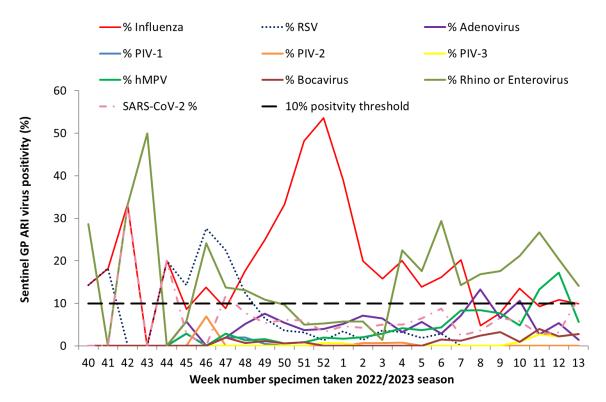


Figure 3a: Percentage positive results for **sentinel GP ARI** specimens tested by the NVRL for influenza, RSV and other respiratory viruses by week specimen was taken, weeks 40 2022-13 2023. *Source: NVRL*

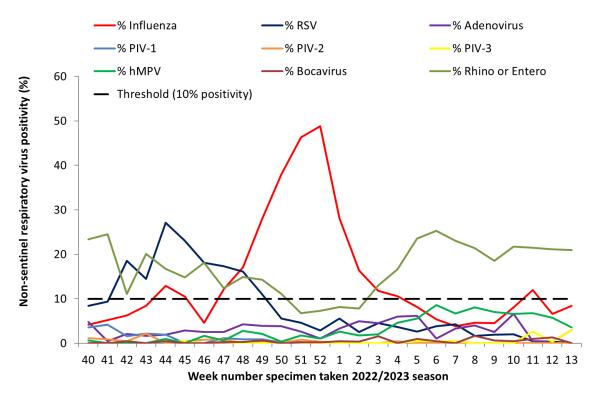


Figure 3b: Percentage positive results for **non-sentinel respiratory** specimens tested by the NVRL for influenza, RSV and other respiratory viruses by week specimen was taken, weeks 40 2022-13 2023. *Source: NVRL*

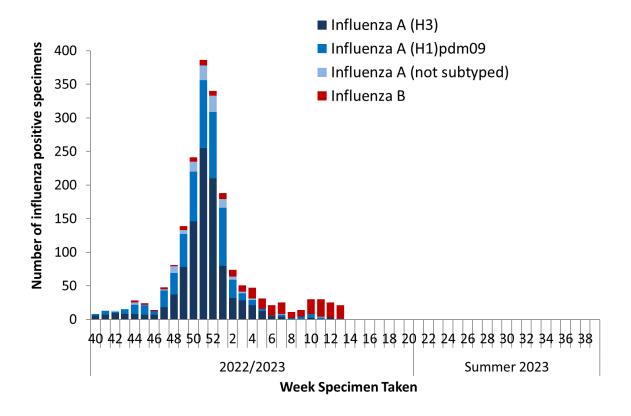


Figure 4: Number of positive influenza specimens (from sentinel GP ARI and non-sentinel respiratory sources) tested by the NVRL by influenza type/subtype and by week specimen was taken for the 2022/2023 influenza season. *Source: NVRL*

Table 2: Number of sentinel GP ARI and non-sentinel respiratory specimens tested by the NVRL and positive influenza results, for weeks 12 and 13 2023 and the 2022/2023 season (weeks 40 2022-13 2023). *Source: NVRL*

Surveillance	Specimentune	Total	Number	% Influenza		In	fluenza A			Influer	nza B	
period	Specimen type	tested	influenza	positive	A(H1)pdm09	A(H3)	A (not subtyped)	Total	В	B Victoria	B Yamagata	Total
	Sentinel GP ARI	71	7	9.9	0	0	0	0	7	0	0	7
Week 13 2023	Non-sentinel respiratory	167	14	8.4	1	0	0	1	13	0	0	13
	Total	238	21	8.8	1	0	0	1	20	0	0	20
	Sentinel GP ARI	93	10	10.8	0	0	0	0	10	0	0	10
Week 12 2023	Non-sentinel respiratory	228	15	6.6	0	3	0	3	12	0	0	12
	Total	321	25	7.8	0	3	0	3	22	0	0	22
	Sentinel GP ARI	2418	569	23.5	209	218	22	449	120	0	0	120
2022/2023	Non-sentinel respiratory	6915	1367	19.8	376	766	87	1229	120	17	1	138
	Total	9333	1936	20.7	585	984	109	1678	240	17	1	258

Table 3: Number of sentinel GP ARI and non-sentinel respiratory specimens tested by the NVRL and positive RSV results, for weeks 12 and 13 2023 and the 2022/2023 season (weeks 40 2022-13 2023). *Source: NVRL*

Surveillance period	Specimen type	Total tested	Number RSV positive	% RSV positive	RSV A	RSV B	RSV (unspecified)
	Sentinel GP ARI	71	0	0.0	0	0	0
Week 13 2023	Non-sentinel	167	0	0.0	0	0	0
	Total	238	0	0.0	0	0	0
	Sentinel GP ARI	93	0	0.0	0	0	0
Week 12 2023	Non-sentinel	228	1	0.4	0	1	0
	Total	321	1	0.3	0	1	0
	Sentinel GP ILI/ARI	2418	107	4.4	3	104	0
2022/2023	Non-sentinel	6915	543	7.9	63	480	0
	Total	9333	650	7.0	66	584	0

Table 4: Number of sentinel GP ILI/ARI specimens tested by the NVRL for respiratory viruses and positive results, for weeks 12 and 13 2023 and 2022/2023 season (weeks 40 2022-13 2023). *Source: NVRL*

	Week 13 20	23 (N=71)	Week 12 20	23 (N=93)	2022/2023	(N=2418)
Virus	Total positive	% positive	Total positive	% positive	Total positive	% positive
Influenza virus	7	9.9	10	10.8	569	23.5
Respiratory Synctial Virus (RSV)	0	0.0	0	0.0	107	4.4
Rhino/enterovirus	10	14.1	19	20.4	302	12.5
Adenovirus	1	1.4	5	5.4	131	5.4
Bocavirus	2	2.8	2	2.2	23	1.0
Human metapneumovirus (hMPV)	4	5.6	16	17.2	93	3.8
Parainfluenza virus type 1 (PIV-1)	0	0.0	0	0.0	7	0.3
Parainfluenza virus type 2 (PIV-2)	0	0.0	0	0.0	5	0.2
Parainfluenza virus type 3 (PIV-3)	2	2.8	2	2.2	9	0.4
Parainfluenza virus type 4 (PIV-4)	0	0.0	0	0.0	4	0.2
SARS-CoV-2	8	11.3	3	3.2	135	5.6

Table 5: Number of non-sentinel respiratory specimens tested by the NVRL for respiratory viruses and positive results, for weeks 12 and 13 2023 and2022/2023 season (weeks 40 2022-13 2023). Source: NVRL

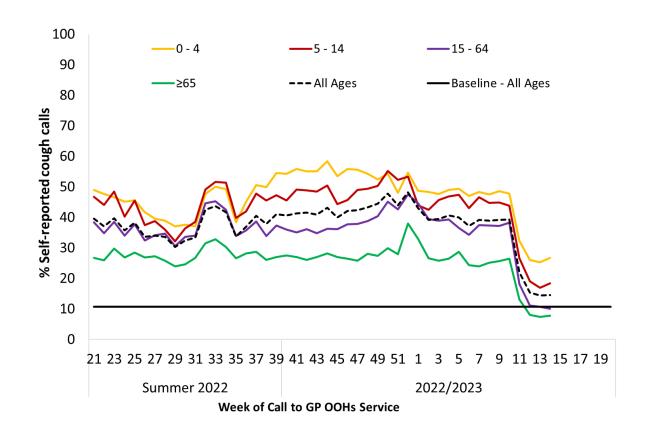
Virus	Week 13 20)23 (N=167)	Week 12 20)23 (N=228)	2022/2023 (N=6915)		
virus	Total positive	% positive	Total positive	% positive	Total positive	% positive	
Influenza virus	14	8.4	15	6.6	1367	19.8	
Respiratory Synctial Virus (RSV)	0	0.0	1	0.4	543	7.9	
Rhino/enterovirus	35	21.0	48	21.1	1028	14.9	
Adenovirus	5	3.0	1	0.4	212	3.1	
Bocavirus	0	0.0	3	1.3	28	0.4	
Human metapneumovirus (hMPV)	6	3.6	13	5.7	186	2.7	
Parainfluenza virus type 1 (PIV-1)	0	0.0	0	0.0	40	0.6	
Parainfluenza virus type 2 (PIV-2)	0	0.0	0	0.0	26	0.4	
Parainfluenza virus type 3 (PIV-3)	5	3.0	1	0.4	18	0.3	
Parainfluenza virus type 4 (PIV-4)	0	0.0	2	0.9	25	0.4	

Influenza Surveillance Report

3. GP Out-Of-Hours services surveillance

The Department of Public Health in HSE-NE is collating national data on calls to nine of thirteen GP Out-of-Hours services in Ireland. Records with clinical symptoms reported as flu/influenza or cough are extracted for analysis. This information may act as an early indicator of circulation of influenza, SARS-CoV-2 or other respiratory viruses. Data are self-reported by callers and are not based on coded diagnoses.

- 2,181 (14.6% of total calls; N=14,962) self-reported cough calls were reported by a network of GP OOHs services during week 14 2023, which was above baseline levels (10.7%) (Figure 5).
- 128 (0.9% of total calls; N=14,962) self-reported 'flu' calls were reported by a network of GP OOHs services during week 14 2023, which is below baseline levels. The baseline threshold level for self-reported 'flu' calls is 2.3% (Figure 7).



• Five GP OOH services provided data for week 14 2023.

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 2022 and the 2022/2023 season. The % cough calls baseline for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours services in Ireland (collated by HSE-NE & ICGP).*

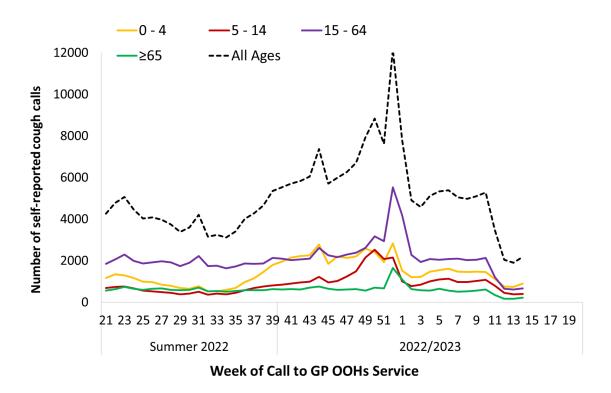


Figure 6: Number of self-reported COUGH calls for all ages and by age group to GP Out-of-Hours services by week of call, Summer 2022 and 2022/2023. *Source: GP Out-Of-Hours services in Ireland (collated by HSE-NE & ICGP).*

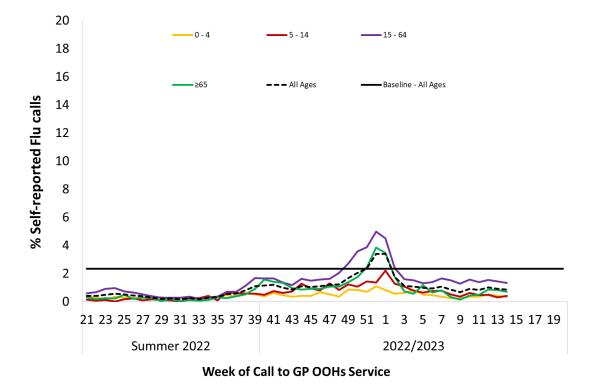


Figure 7: Percentage of self-reported FLU calls for all ages and by age group as a proportion of total calls to GP Outof-Hours services by week of call, Summer 2022 and 2022/2023. The % flu calls baseline for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours services in Ireland (collated by HSE-NE& ICGP)*

4. Influenza & RSV notifications

Influenza and RSV case notifications are reported on Ireland's Computerised Infectious Disease Reporting System (CIDR), including all positive influenza/RSV specimens reported from all laboratories testing for influenza/RSV and reporting to CIDR.

Influenza and RSV notifications are reported in the <u>Weekly Infectious Disease Report for Ireland</u>.

- 202 laboratory confirmed influenza cases were notified during week 14 2023: 16 influenza A (not subtyped), four influenza A(H1)pdm09, two influenza A(H3) and 180 influenza B. This is a decrease compared to 231 cases notified during week 13 2023 (Figures 8 & 9).
- During the 2022/2023 season to date (weeks 40 2022 -14 2023), 15,644 laboratory confirmed influenza cases have been notified to HPSC – 1,204 A(H1)pdm09, 1006 A(H3), 11,252 influenza A (not subtyped), 2,113 influenza B, 47 influenza A and B coinfections, 16 influenza A(H1)pdm09 & A(H3) coinfections and six influenza (type not reported) (Figure 8).
- Laboratory confirmed influenza notified cases by HSE Area, are outlined in Table 6.
- Age specific rates in notified laboratory confirmed influenza cases were low in all age groups (Figure 10).
- 13 RSV cases were notified during week 14 2023, a stable trend compared to 13 RSV cases notified during week 13 2023 (Figure 11).
- During week 14 2023, age specific rates in notified laboratory confirmed RSV cases were low in all age groups (Figure 12).

Table 6: Number of laboratory confirmed influenza notifications by HSE Area during the 2022/2023 season (weeks 402022-14 2023) and week 14 2023 Source: CIDR

HSE area	Week 14 2023	2022/2023 season (Weeks 40 2022 - 14 2023)
HSE-East	45	5117
HSE-Midlands	17	1397
HSE-Mid-West	6	1470
HSE-North-East	16	1510
HSE-North-West	55	1534
HSE-South-East	12	1411
HSE-South	36	1667
HSE-West	15	1538
Total	202	15644

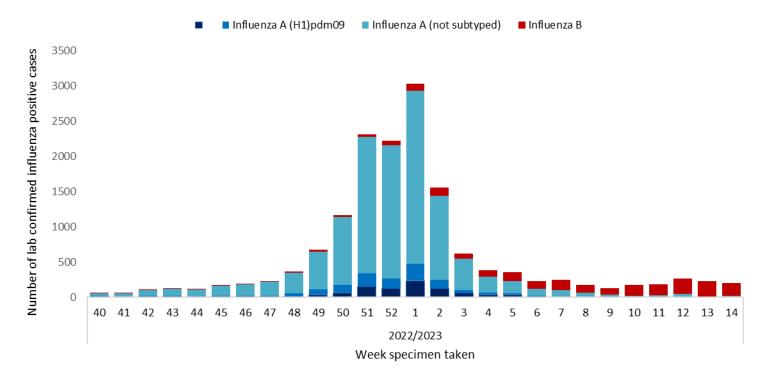


Figure 8: Number of laboratory confirmed **influenza** notifications by influenza type/subtype to HPSC by week 2022-2023 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

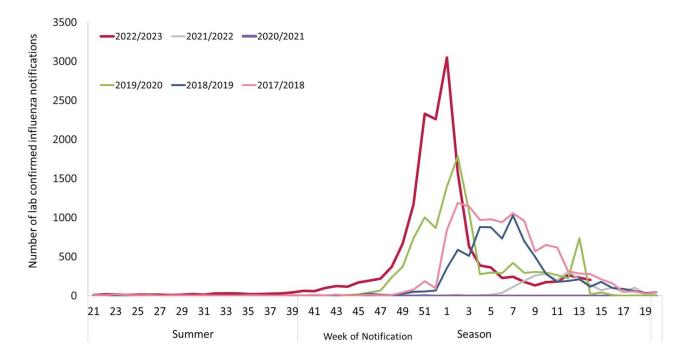


Figure 9: Number of laboratory confirmed **influenza** notifications to HPSC by week and season, 2017/2018 to 2022/2023 influenza seasons. *Source: Ireland's Computerised Infectious Disease Reporting System.*

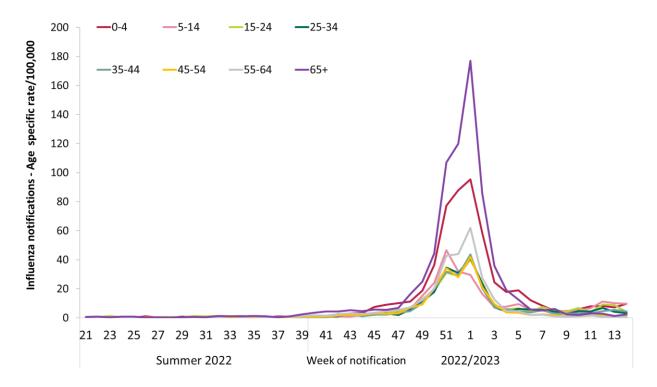


Figure 10: Age specific rates per 100,000 population for laboratory confirmed **influenza** notifications to HPSC by week of notification. *Source: Ireland's Computerised Infectious Disease Reporting System.*

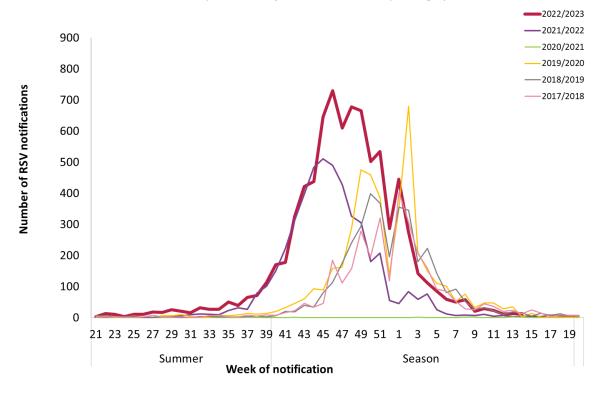


Figure 11: Number of laboratory confirmed **RSV** notifications to HPSC by week of notification, 2017/2018 to 2022/2023 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System.*

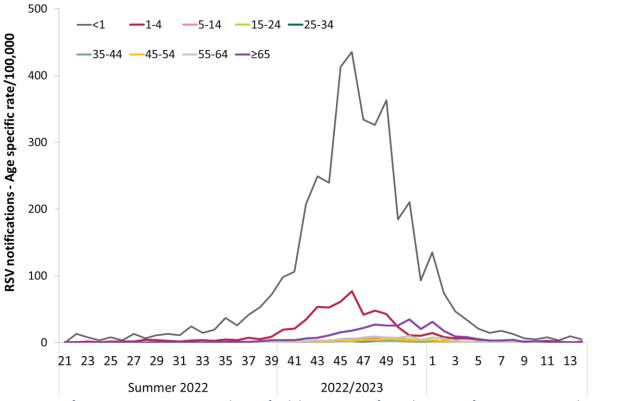


Figure 12: Age specific rates per 100,000 population for laboratory confirmed **RSV** notifications to HPSC by week of notification. *Source: Ireland's Computerised Infectious Disease Reporting System.*

5. Hospitalisations

- During week 14 2023, 44 laboratory confirmed influenza cases were reported as hospital inpatients: four influenza A (not subtyped), one influenza A(H1)pdm09 and 39 influenza B (Figure 13 & 14). Influenza hospitalised cases during week 14 2023 decreased to 44, compared to 56 in week 13 2023.
- During the 2022/2023 season to date (weeks 40 2022 to week 14 2023), 4,451 laboratory confirmed influenza cases have been notified as hospital inpatients: 317 influenza A(H1)pdm09, 205 A(H3), 3,448 influenza A (not subtyped), 465 influenza B, 13 influenza co-infections and three influenza (type not reported) (Figure 13).
- During week 14 2023, age specific rates in notified laboratory confirmed hospitalised influenza cases were low in all age groups (Figure 15).
- The number and age specific rate per 100,000 population of laboratory confirmed notified influenza hospitalised and critical care cases for the 2022/2023 season are detailed in Table 9.
- During week 14 2023, four RSV cases were reported as hospital inpatients (Figures 16 and 17).
- Patient type of laboratory confirmed influenza and RSV notifications by week for the 2022/2023 season are reported in Tables 7 and 8.



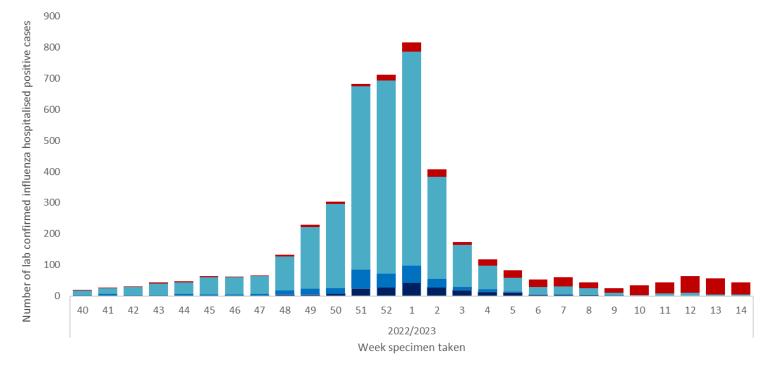


Figure 13: Number of laboratory confirmed **influenza** notifications reported as **hospital inpatients** by influenza type/subtype to HPSC by week, 2022/2023 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

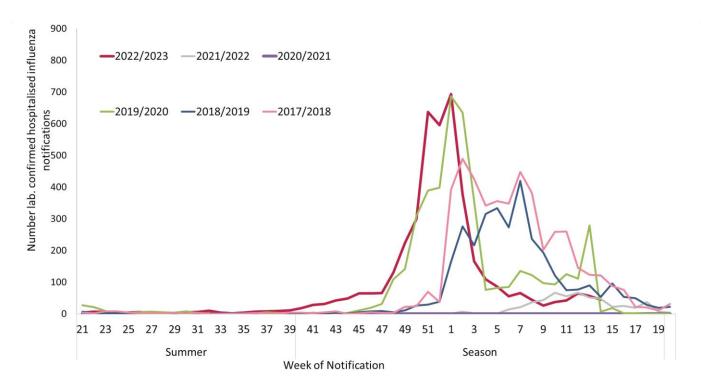


Figure 14: Number of notified laboratory confirmed **influenza** cases reported as **hospital inpatients**, for the 2017/2018 to 2022/2023 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System*

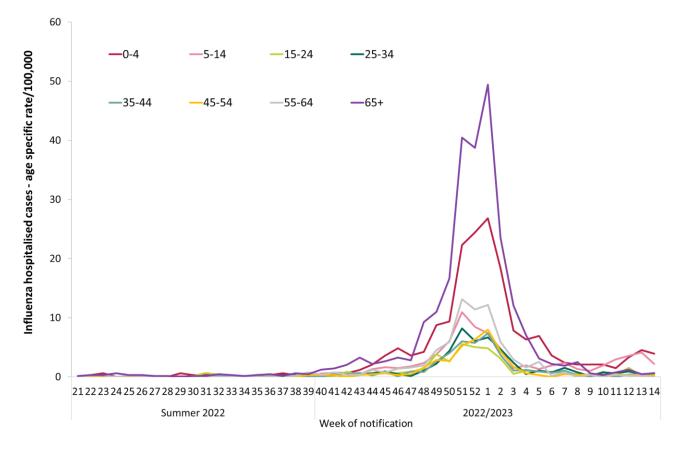


Figure 15: Age specific rates per 100,000 population for laboratory confirmed **influenza** cases reported as **hospital inpatients** by week of notification. *Source: Ireland's Computerised Infectious Disease Reporting System.*

Table 7: Number of notified influenza cases reported by patient type and week of notification, 2022/2023season (weeks 40 2022-14 2023). Source: Ireland's Computerised infectious Disease Reporting System

				Patient Typ)e			
	GP Patient	ED patient	Hospital Inpatient	Hospital Day Patient	Hospital Outpatient	Other	Unknown	Total
Week 40	2	11	18	3	9	7	12	62
Week 41	4	20	28	1	3	2	2	60
Week 42	0	45	31	1	16	3	5	101
Week 43	7	34	44	6	20	7	5	124
Week 44	2	38	48	6	16	2	4	117
Week 45	2	66	65	7	12	12	8	172
Week 46	5	80	65	11	15	12	5	193
Week 47	3	92	66	18	19	7	14	221
Week 48	18	122	131	8	31	20	34	370
Week 49	17	261	229	32	56	19	58	675
Week 50	45	450	298	22	105	46	112	1170
Week 51	100	806	692	30	220	134	235	2328
Week 52	49	1013	710	17	162	143	126	2235
Week 1	122	1308	819	48	201	198	327	3047
Week 2	42	581	405	30	146	165	140	1560
Week 3	31	235	170	8	51	25	91	624
Week 4	20	150	109	5	26	24	44	386
Week 5	30	139	89	7	34	16	37	359
Week 6	10	107	56	4	17	15	18	228
Week 7	15	106	62	4	28	10	19	245
Week 8	11	68	45	1	21	14	17	178
Week 9	5	74	26	0	14	3	9	133
Week 10	6	84	37	1	18	7	19	174
Week 11	16	94	44	3	8	9	8	183
Week 12	11	130	64	6	13	17	25	266
Week 13	14	107	56	7	7	21	13	231
Week 14	5	99	44	7	11	11	19	202
Total	592	6320	4451	293	1279	949	1406	15644

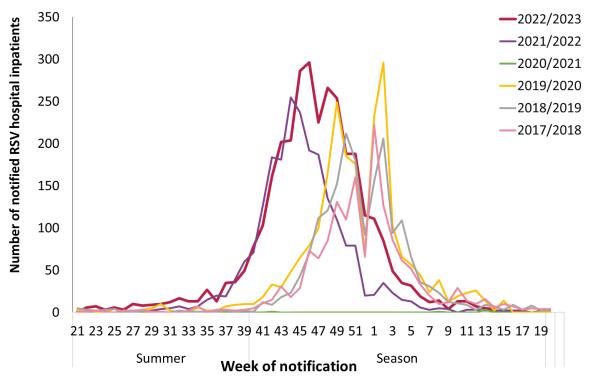


Figure 16: Number of notified **RSV** cases reported as **hospital inpatients**, by week of notification and season, for the 2017/2018 to 2022/2023 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System*.

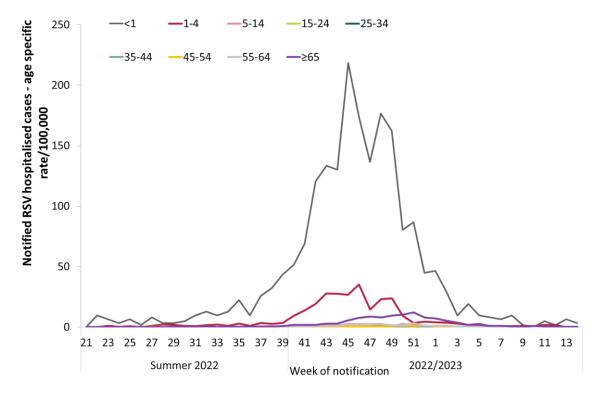


Figure 17: Age specific rates per 100,000 population for laboratory confirmed **RSV** cases reported as **hospital inpatients** by week of notification and season, Summer 2022 and 2022/2023. *Source: Ireland's Computerised Infectious Disease Reporting System*

Table 8: Number of notified **RSV** cases reported by patient type and week of notification (weeks 40 2022-14 2023),2022/2023 season. Source: Ireland's Computerised infectious Disease Reporting System

				Patient 7	Гуре			
	GP Patient	ED patient	Hospital Inpatient	Hospital Day Patient	Hospital Outpatient	Other	Unknown	Total
Week 40	5	51	78	6	12	7	11	170
Week 41	3	45	103	3	12	5	4	177
Week 42	5	121	161	2	14	7	15	325
Week 43	6	149	201	9	20	19	16	421
Week 44	6	172	204	3	22	15	15	437
Week 45	8	239	286	12	37	28	27	646
Week 46	10	319	295	5	32	34	32	729
Week 47	6	273	225	8	24	36	33	609
Week 48	34	246	267	3	35	36	44	678
Week 49	19	254	255	13	17	24	81	665
Week 50	20	175	187	2	28	23	64	502
Week 51	14	172	191	5	32	30	80	532
Week 52	8	82	119	0	12	29	24	286
Week 1	26	165	125	5	21	31	66	444
Week 2	7	92	88	3	20	23	41	277
Week 3	4	44	52	2	13	5	21	142
Week 4	6	39	35	5	6	11	8	111
Week 5	4	27	32	0	9	2	11	85
Week 6	4	23	19	0	3	4	6	59
Week 7	1	23	11	2	3	3	7	50
Week 8	0	19	14	1	7	4	11	58
Week 9	0	13	4	0	2	1	0	20
Week 10	0	8	13	1	2	1	3	29
Week 11	0	5	14	0	3	1	0	23
Week 12	0	2	7	0	0	0	3	12
Week 13	0	3	6	0	1	2	1	13
Week 14	0	5	4	0	0	2	2	13
Total	196	2766	2996	90	387	383	626	7513

6. Critical Care Surveillance

The Intensive Care Society of Ireland (ICSI) and the HSE Critical Care Programme are continuing with the enhanced surveillance system set up during the 2009 pandemic, on all critical care patients with confirmed influenza. HPSC processes and reports on this information on behalf of the regional Directors of Public Health/Medical Officers of Health.

- One laboratory confirmed influenza case (influenza B) was admitted to critical care and notified to HPSC during week 14 2023.
- During the 2022/2023 season to date (weeks 40 2022-14 2023), 180 laboratory confirmed influenza cases 32 A(H1)pdm09, 31 influenza A(H3), 105 influenza A (not subtyped) and 12 influenza B have been admitted to critical care units and notified to HPSC. Age specific rates for the season to date were highest in those aged 65 years and older.
- During the 2022/2023 season (weeks 40 2022-14 2023), of 156 laboratory confirmed influenza ICU cases with known influenza vaccination status, 107 (68.5%) were reported as NOT having received the 2022/2023 influenza vaccine.
- The number and age specific rate per 100,000 population of laboratory confirmed notified influenza hospitalised and critical care cases for the 2022/2023 season are detailed in Table 9.

Table 9: Cumulative number and age specific rate per 100,000 population of laboratory confirmed notified influenzahospitalised and critical care cases, weeks 40 2022-14 2023. Source: Ireland's Computerised infectious DiseaseReporting System.

		Hospitalised	A	dmitted to ICU
Age (years)		Age specific rate per		Age specific rate per
	Number	100,000 pop.	Number	100,000 pop.
<1	139	223.3	2	3.2
1-4	454	168.6	13	4.8
5-14	546	80.9	13	1.9
15-24	237	41.1	8	1.4
25-34	331	50.2	5	0.8
35-44	326	49.4	19	2.5
45-54	272	43.4	25	4.0
55-64	391	76.8	27	5.3
≥65	1755	275.3	68	10.7
Unknown	0	-	0	-
Total	4451	93.5	180	3.8

7. Mortality Surveillance

Influenza-associated deaths include all deaths where influenza is reported as the primary/main cause of death by the physician or if influenza is listed anywhere on the death certificate as the cause of death. 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 deaths as part of the influenza surveillance system and the European Mortality Monitoring Project. These data are provisional due to the time delay in deaths' registration in Ireland. http://www.euromomo.eu/

- There was one death in a notified influenza case reported to HPSC during week 14 2023.
- During the 2022/2023 season (weeks 40 2022-14 2023), 191 deaths in notified influenza cases were reported to HPSC – 32 influenza A(H3), 26 influenza A(H1)pdm09, 127 influenza A (not subtyped), five influenza B and one influenza A and B coinfection.
- During the 2022/2023 season, excess all-cause mortality was reported over six consecutive weeks (weeks 50 2022 3 2023). Excess pneumonia and influenza mortality was also reported over four consecutive weeks (weeks 51 2022 2 2023). Excess mortality analysis is 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.

8. Outbreak Surveillance

COVID-19 outbreaks are not included in this report; surveillance data on COVID-19 outbreaks are detailed on the HPSC website. <u>https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/casesinireland/</u>

• During week 14 2023, there was one influenza B outbreak in a Residential institution and two ARI outbreaks (pathogens unknown) in nursing homes notified to HPSC during week 14 2023. During the 2022/2023 season (weeks 40 2022-14 2023), 156 influenza outbreaks, 56 RSV outbreaks and 13 ARI outbreaks have been notified to HPSC. For an overview of outbreaks for the season to date (weeks 40 2022-14 2023), please see Tables 10 and 11.

Table 10: Summary of influenza, RSV, COVID-19 & influenza mixed outbreaks and ARI (influenza/RSV/SARS-CoV-2 negative) outbreaks by HSE Area during week 14 2023 and the 2022/2023 season (weeks 40 2022-14 2023) *Source: CIDR*

HSE area	Influ	ienza	RS	SV	ļ	ARI	COVID-198	& Influenza	Тс	ıtal
IDE died	Week 14	2022/2023	Week 14	2022/2023	Week 14	2022/2023	Week 14	2022/2023	Week 14	2022/2023
HSE-East	0	55	0	15	0	0	0	0	0	70
HSE-Midlands	0	6	0	0	0	1	0	0	0	7
HSE-Mid-West	0	13	0	4	0	0	0	0	0	17
HSE-North-East	0	22	0	19	0	3	0	2	0	46
HSE-North-West	1	22	0	6	1	7	0	3	2	38
HSE-South-East	0	13	0	0	1	1	0	0	1	14
HSE-South	0	8	0	8	0	0	0	0	0	16
HSE-West	0	17	0	4	0	1	0	0	0	22
Total	1	156	0	56	2	13	0	5	3	230

Table 11: Summary of influenza, RSV, COVID-19 & influenza mixed outbreaks and ARI (influenza/RSV/SARS-CoV-2 negative) outbreaks by outbreak setting during week 14 2023 and the 2022/2023 season (weeks 40 2022-14 2023). *Source: CIDR*

Setting	Influ	Jenza	R	SV	A	RI	COVID-198	& Influenza	Total	
Setting	Week 14	2022/2023	Week 14	2022/2023	Week 14	2022/2023	Week 14	2022/2023	Week 14	2022/2023
Community hospital/Long-stay unit	0	8	0	9	0	3	0	1	0	21
Nursing Home	0	56	0	21	2	7	0	2	2	86
Hospital	0	67	0	8	0	0	0	2	0	77
Residential Institution	1	13	0	4	0	3	0	0	0	20
Childcare facility	0	0	0	1	0	0	0	0	0	1
Family Outbreaks	0	7	0	12	0	0	0	0	0	19
Other settings	0	5	0	1	0	0	0	0	1	6
Total	1	156	0	56	2	13	0	5	3	230

9. International Summary

In the European region, during week 13 2023 (week ending 02/04/2023), influenza virus positivity in sentinel primary care specimens decreased to 16%, from 22% in the previous week, which is above the ECDC influenza positivity threshold of 10%. For week 13 2023, 379 (16%) of 2,316 sentinel GP specimens tested positive for an influenza virus; 89% were type B and 11% were type A. Of 19 subtyped A viruses, 5% were A(H3) and 95% were A(H1)pdm09. Of 133 influenza B viruses ascribed to a lineage, all were B/Victoria.

For week 13 2023, 2,588 of 35,495 specimens from non-sentinel sources (such as hospitals, schools, primary care facilities not involved in sentinel surveillance, or nursing homes and other institutions) tested positive for an influenza virus; 2,046 (79%) were influenza B and 542 (21%) were influenza A. Of 89 subtyped A viruses, 65 (73%) were A(H1)pdm09 and 24 (27%) were A(H3). Of 131 influenza B viruses ascribed to a lineage, all were of B/Victoria lineage. Of 40 countries and areas reporting on geographic spread of influenza viruses, four reported no activity, five reported sporadic spread, two reported local spread, nine reported regional spread and 20 reported widespread influenza activity.

As of 19th March 2023, globally, influenza activity decreased compared to the peak in late 2022. Influenza A viruses predominated with a slightly larger proportion of A(H1N1)pdm09 viruses detected among the subtyped influenza A viruses during the reporting period. The detections of influenza B increased during this reporting period.

See <u>ECDC</u> and <u>WHO</u> influenza surveillance reports for further information.

- Further information on influenza is available on the following websites:
 - Europe ECDC
 http://ecdc.europa.eu/

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

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 2022/2023 northern hemisphere influenza season contain the following:

- an A/Victoria/2570/2019 (H1N1)pdm09-like virus;
- an A/Darwin/9/2021 (H3N2)-like virus;
- 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/teams/global-influenza-programme/vaccines/who-recommendations

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 <u>www.hpsc.ie</u>

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