Influenza Week 11 2023 (13th - 19th March 2023)











Summary

Influenza activity remained stable in Ireland during week 11 2023, compared to recent weeks. Influenza viruses are circulating at low levels in the community. Influenza B viruses are currently the dominant circulating viruses.

- <u>Influenza-like illness (ILI)</u>: The sentinel GP influenza-like illness (ILI) consultation rate was 11.1 per 100,000 population during week 11 2023. This is a stable trend from the updated rate of 12.4/100,000 during week 10 2023. ILI consultation rates have returned to below the Irish baseline threshold (18.1/100,000 population) for the last six weeks (since week 6 2023). Sentinel GP ILI age specific rates were below the age specific baseline thresholds in all age groups during week 11 2023.
- National Virus Reference Laboratory (NVRL): During week 11 2023, of 75 sentinel GP Acute Respiratory Infection (ARI) specimens tested and reported by the NVRL, 7 (9.3 %) were positive for influenza, one A(H1)pdm09 and six influenza B. There were two specimens (2.7%) positive for SARS-CoV-2 and no specimens were positive for RSV.
- Rhino/enterovirus positivity remained elevated at 22.7% (17/75) in week 11 2023 and Human metapneumovirus positivity increased to 13.3% (10/75) in week 11 2023 compared to 4.8% (5/104) in week 10 2023.
- Of 178 non-sentinel respiratory specimens tested and reported by the NVRL during week 11 2023, 22 (12.4%) were positive for influenza: one influenza A not subtyped, one A(H1)pdm09 and 20 influenza B. RSV positivity (non-sentinel respiratory specimens) was at low levels in recent weeks, at 2% (4/198) during week 10 2023 and 0.6% (1/178) during week 11 2023.
- Of 1,889 sentinel GP ARI specimens and non-sentinel respiratory specimens positive for influenza and reported by the NVRL during the 2022/2023 season, 473 (25%) were coinfected with other respiratory viruses.
- <u>Influenza notifications</u>: 183 laboratory confirmed influenza cases were notified during week 11 2023 one A(H1)pdm09, one A(H3), 26 influenza A (not subtyped) and 155 influenza B. This is a stable trend compared to 174 cases reported during week 10 2023. Age specific rates were highest in those aged less than five years.
- <u>RSV notifications</u>: 23 RSV cases were notified during week 11 2023, a stable trend compared to 29 RSV cases notified during week 10 2023. Age specific rates for hospitalised cases were highest in those aged less than one year.
- <u>Hospitalisations:</u> During week 11 2023, 41 laboratory confirmed influenza cases were reported as hospital inpatients: one A(H3), seven influenza A (not subtyped) and 33 influenza B cases. Influenza hospitalised cases during week 11 2023 increased marginally to 41, compared to 35 in week 10 2023.
- <u>Critical care admissions:</u> No laboratory confirmed influenza cases were admitted to critical care units and notified to HPSC during week 11 2023. During weeks 40 2022-11 2023, 167 laboratory confirmed influenza cases 31 A(H1)pdm09, 31 A(H3), 96 A (not subtyped) and nine 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 2022-11 2023, of 144 laboratory confirmed influenza ICU cases with known influenza vaccination status, 98 (68%) were reported as NOT having received the 2022/2023 influenza vaccine.
- Mortality: There were no deaths in the notified influenza cases reported to HPSC during week 11 2023. During weeks 40 2022-11 2023, 186 deaths in notified influenza cases were reported 32 influenza A(H3), 25 influenza A(H1)pdm09, 124 influenza A (not subtyped), four influenza B and one influenza A and B coinfection. During the 2022/2023 season, excess all-cause mortality was reported for four consecutive weeks (weeks 51 2022- week 2 2023). Excess pneumonia and influenza mortality was reported during the same period.
- <u>Outbreaks:</u> No laboratory confirmed influenza or RSV outbreaks were notified to HPSC during week 11 2023. During weeks 40 2022-11 2023, 155 influenza outbreaks were notified.
- <u>International:</u> In Europe during week 10 2023, 20 countries reported widespread influenza activity indicating substantial influenza virus circulation across the European Region. Both influenza A and B viruses were detected, with influenza B viruses being dominant across all monitoring systems.

1. GP sentinel surveillance system - Clinical Data

- During week 11 2023, 33 sentinel GP influenza-like illness (ILI) consultations were reported from the Irish sentinel GP network, corresponding to an ILI consultation rate of 11.1 per 100,000 population, compared to 12.4 per 100,000 population during week 10 (Figure 1).
- Sentinel GP ILI consultation rates were below the baseline threshold during week 11.
- The sentinel GP ILI consultation rates have returned to below the Irish sentinel GP ILI baseline threshold (18.1/100,000 population) for six consecutive weeks, since week 6 2023.
- Age specific rates were below the baseline threshold in all age groups during week 11 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.

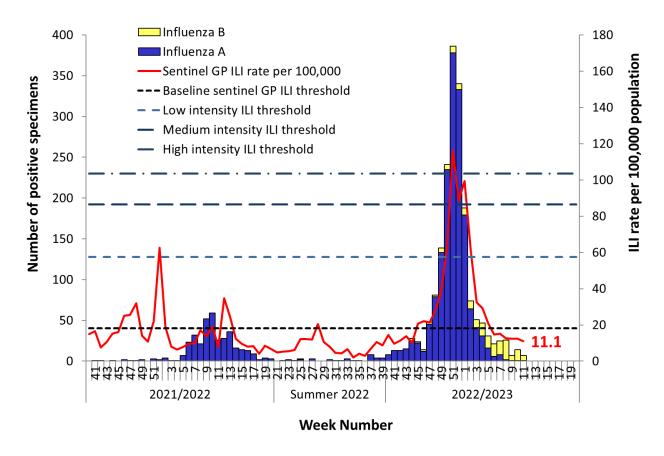


Figure 1: Sentinel GP Influenza-like illness (ILI) consultation rates per 100,000 population, baseline ILI threshold, medium and high intensity ILI thresholds and number of positive influenza A and B specimens tested by the NVRL, by influenza week and season. *Source: ICGP and NVRL*

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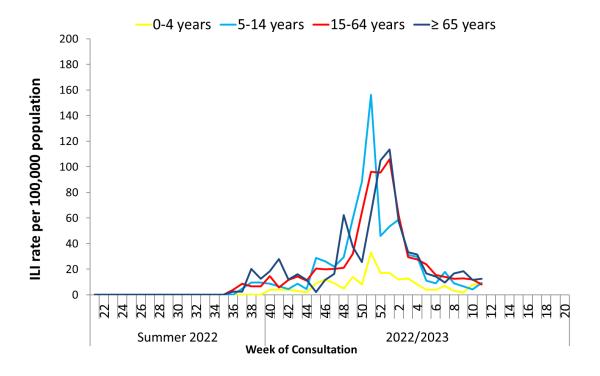


Figure 2: Age specific sentinel GP ILI consultation rate per 100,000 population by week during the summer of 2022 and the 2022/2023 influenza season to date. *Source: ICGP*.

Table 1: Age specific sentinel GP ILI consultation rate per 100,000 population by week (weeks 40 2022-11 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
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	11.1
<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	19.0
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	8.2
≥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	12.5
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	56

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.
- During week 11 2023, of 75 sentinel GP Acute Respiratory Infection (ARI) specimens tested and reported by the NVRL, 7 (9.3%) were positive for influenza, one A(H1)pdm09 and six influenza B. There were two (2.7%) specimens positive for SARS-CoV-2 and no specimens were positive for RSV.
- During week 10 2023, of 104 sentinel GP ARI specimens tested and reported by the NVRL, 14 (13.5%) were positive for influenza, one A(H1)pdm09 and 13 influenza B. There were six (5.8%) specimens positive for SARS-CoV-2 and no specimens were positive for RSV.
- Of 178 non-sentinel respiratory specimens tested and reported by the NVRL during week 11 2023, 22 (12.4%) were positive for influenza: one influenza A not subtyped, one A(H1)pdm09 and 20 influenza B.
- During week 10 2023, of 198 non-sentinel respiratory specimens tested, 16 (8.1%) were positive for influenza: five A(H1)pdm09, two A(H3) and nine influenza B.
- RSV positivity (non-sentinel respiratory specimens) was at low levels in recent weeks, at 2% (4/198) during week 10 2023 and 0.6% (1/178) during week 11 2023.
- Rhinovirus/enterovirus positive detections from non-sentinel respiratory specimens were detected at a positivity rate of 21.7% (43/198) during week 10 2023 and 16.9% (30/178) during week 11 2023 (Figure 3b).
- Other respiratory viruses (ORVs) are being detected at lower levels in recent weeks except for human metapneumovirus(hMPV) which was 13.3% in sentinel GP specimens and 7.3% in non-sentinel specimens during week 11 (Figure 3a and 3b).
- Of 1,889 sentinel GP ARI specimens and non-sentinel respiratory specimens positive for influenza and reported by the NVRL during the 2022/2023 season, 473 (25%) were coinfected with other respiratory viruses.

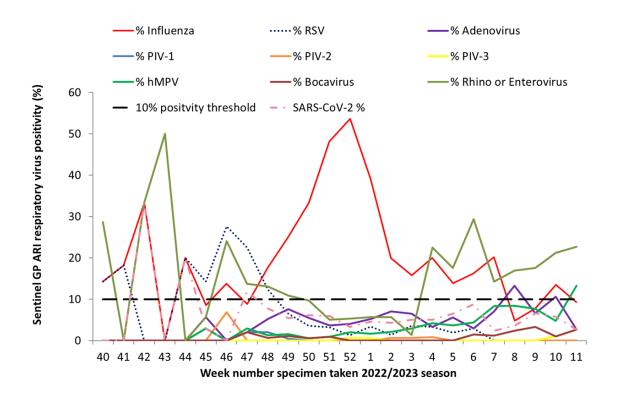


Figure 3a: Percentage positive results for **sentinel GP ARI** specimens tested by the NVRL for influenza, RSV and other respiratory viruses by week specimen was taken, weeks 40 2022-11 2023. *Source: NVRL*

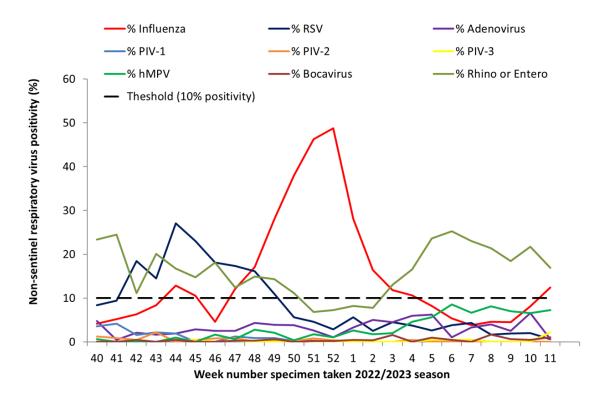


Figure 3b: Percentage positive results for **non-sentinel respiratory** specimens tested by the NVRL for influenza, RSV and other respiratory viruses by week specimen was taken, weeks 40 2022-11 2023. *Source: NVRL*

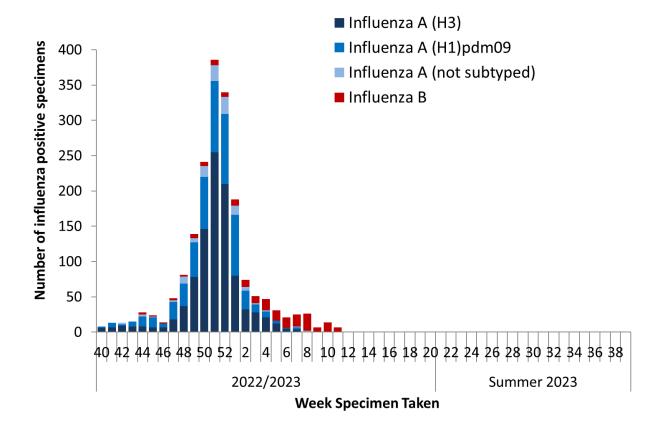


Figure 4: Number of positive influenza specimens (from sentinel GP ARI and non-sentinel respiratory sources) tested by the NVRL by influenza type/subtype and by week specimen was taken for the 2022/2023 influenza season. *Source: NVRL*

Table 2: Number of sentinel GP ARI and non-sentinel respiratory specimens tested by the NVRL and positive influenza results, for weeks 10 and 11 2023 and the 2022/2023 season (weeks 40 2022-11 2023). *Source: NVRL*

Surveillance	Specimen type	Total	Number	% Influenza		Inf	fluenza A		Influenza B					
period	эресппен туре	tested	influenza	positive	A(H1)pdm09	A(H3)	A (not subtyped)	Total	В	B Victoria	B Yamagata	Total		
	Sentinel GP ARI	75	7	9.3	1	0	0	1	6	0	0	6		
Week 11 2023	Non-sentinel respiratory	178	22	12.4	1	0	1	2	20	0	0	20		
	Total	253	29	11.5	2	0	1	3	26	0	0	26		
	Sentinel GP ARI	104	14	13.5	1	0	0	1	13	0	0	13		
Week 10 2023	Non-sentinel respiratory	198	16	8.1	5	2	0	7	9	0	0	9		
	Total	302	30	9.9	6	2	0	8	22	0	0	22		
	Sentinel GP ARI	2254	552	24.5	209	218	22	449	103	0	0	103		
2022/2023	Non-sentinel respiratory	6507	1337	20.5	374	763	87	1224	95	17	1	113		
	Total	8761	1889	21.6	583	981	109	1673	198	17	1	216		

Table 3: Number of sentinel GP ARI and non-sentinel respiratory specimens tested by the NVRL and positive RSV results, for weeks 10 and 11 2023 and the 2022/2023 season (weeks 40 2022-11 2023). *Source: NVRL*

Surveillance period	Specimen type	Total tested	Number RSV positive	% RSV positive	RSV A	RSV B	RSV (unspecified)
	Sentinel GP ARI	75	0	0.0	0	0	0
Week 11 2023	Non-sentinel	178	1	0.6	0	1	0
	Total	253	1	0.4	0	1	0
	Sentinel GP ARI	104	0	0.0	0	0	0
Week 10 2023	Non-sentinel	198	4	2.0	2	2	0
	Total	302	4	1.3	2	2	0
	Sentinel GP ILI/ARI	2254	107	4.7	3	104	0
2022/2023	Non-sentinel	6507	542	8.3	63	479	0
	Total	8761	649	7.4	66	583	0

Table 4: Number of sentinel GP ILI/ARI specimens tested by the NVRL for respiratory viruses and positive results, for weeks 10 and 11 2023 and 2022/2023 season (weeks 40 2022-11 2023). *Source: NVRL*

Virus	Week 11 20	22 (N=75)	Week 10 202	2 (N=104)	2022/2023 (N=2254)		
Viius	Total	% positive	Total positive	% positive	Total positive	% positive	
SARS-CoV-2	2	2.7	6	5.8	124	5.5	
Influenza virus	7	9.3	14	13.5	552	24.5	
Respiratory Syncytial Virus (RSV)	0	0.0	0	0.0	107	4.7	
Rhino/enterovirus	17	22.7	22	21.2	270	12.0	
Adenovirus	2	2.7	11	10.6	125	5.5	
Bocavirus	2	2.7	1	1.0	18	0.8	
Human metapneumovirus (hMPV)	10	13.3	5	4.8	73	3.2	
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	2.7	1	1.0	5	5.0	
Parainfluenza virus type 4 (PIV-4)	0	0.0	0	0.0	4	0.2	

Table 5: Number of non-sentinel respiratory specimens tested by the NVRL for respiratory viruses and positive results, for weeks 10 and 11 2023 and 2022/2023 season (weeks 40 2022-11 2023). *Source: NVRL*

Virus	Week 11 20)22 (N=178)	Week 10 20)22 (N=198)	2022/2023 (N=6507)		
Vilus	Total positive	% positive	Total positive	% positive	Total positive	% positive	
Influenza virus	22	12.4	16	8.1	1337	20.5	
Respiratory Syncytial Virus (RSV)	1	0.6	4	2.0	542	8.3	
Rhino/enterovirus	30	16.9	43	21.7	934	14.4	
Adenovirus	1	0.6	13	6.6	206	3.2	
Bocavirus	2	1.1	1	0.5	25	0.4	
Human metapneumovirus (hMPV)	13	7.3	13	6.6	167	2.6	
Parainfluenza virus type 1 (PIV-1)	0	0.0	0	0.0	40	2.6	
Parainfluenza virus type 2 (PIV-2)	0	0.0	0	0.0	26	0.4	
Parainfluenza virus type 3 (PIV-3)	4	2.2	0	0.0	11	0.2	
Parainfluenza virus type 4 (PIV-4)	0	0.0	0	0.0	21	0.3	

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.

- 1,465 (16% of total calls; N=9,399) self-reported cough calls were reported by a network of GP OOHs services during week 11 2023, which was above baseline levels (10.7%) (Figure 5).
- 57 (0.6% of total calls; N=9,399) self-reported 'flu' calls were reported by a network of GP OOHs services during week 11 2023, which is below baseline levels. The baseline threshold level for self-reported 'flu' calls is 2.3% (Figure 7).
- Four GP OOH services provided data for week 11 2023.

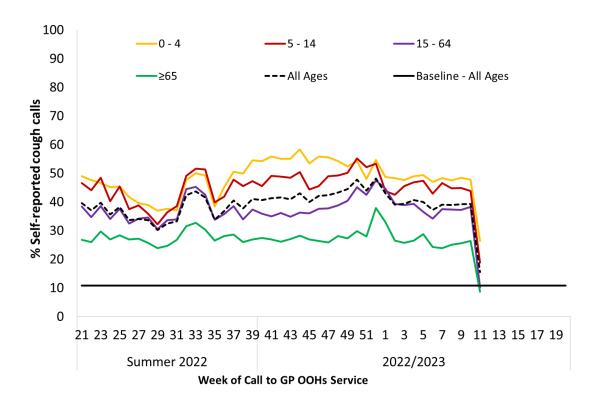


Figure 5: Percentage of self-reported COUGH calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call, summer 2022 and the 2022/2023 season. The % cough calls baseline for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours services in Ireland (collated by HSE-NE & ICGP)*.

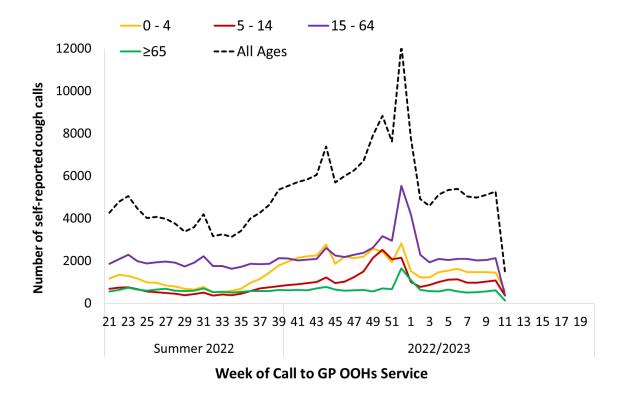


Figure 6: Number of self-reported COUGH calls for all ages and by age group to GP Out-of-Hours services by week of call, Summer 2022 and 2022/2023. *Source: GP Out-Of-Hours services in Ireland (collated by HSE-NE & ICGP).*

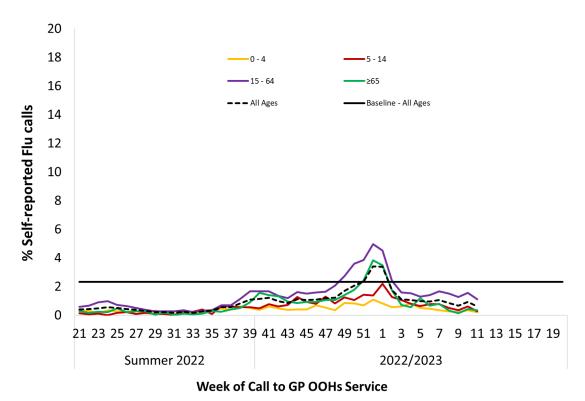


Figure 7: Percentage of self-reported FLU calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call, Summer 2022 and 2022/2023. The % flu calls baseline for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours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

- 183 laboratory confirmed influenza cases were notified during week 11 2023 one A(H1)pdm09, one A(H3), 26 influenza A (not subtyped), and 155 influenza B. This is a stable trend compared to 174 cases reported during week 10 2023 (Figures 8 & 9). Of note, as a proportion of the overall cases, influenza B case is stable at 85% of all cases in week 11 2023 (155/173), compared to 87% in week 10 2023 (152/174).
- During the 2022/2023 season to date (weeks 40 2022 -11 2023), 14,945 laboratory confirmed influenza cases have been notified to HPSC 1,162 A(H1)pdm09, 973 A(H3), 11,246 influenza A (not subtyped), 1,496 influenza B, 46 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 highest in those aged less than five years (Figure 10).
- 23 RSV cases were notified during week 11 2023, a stable trend compared to 29 RSV cases notified during week 10 2023 (Figure 11).
- During week 11 2023, age specific rates in notified laboratory confirmed RSV cases were highest in those aged less than one year old(Figure 12).

Table 6: Number of laboratory confirmed influenza notifications by HSE Area during the 2022/2023 season (weeks 40 2022-11 2023) and week 11 2023 *Source: CIDR*

HSE area	Influenza confirmed cases week 11 2023	Influenza confirmed cases- season to date
HSE-East	54	4917
HSE-Midlands	11	1550
HSE-Mid-West	4	1478
HSE-North-East	22	1457
HSE-North-West	41	1447
HSE-South-East	8	1382
HSE-South	20	1373
HSE-West	23	1341
Total	183	14945

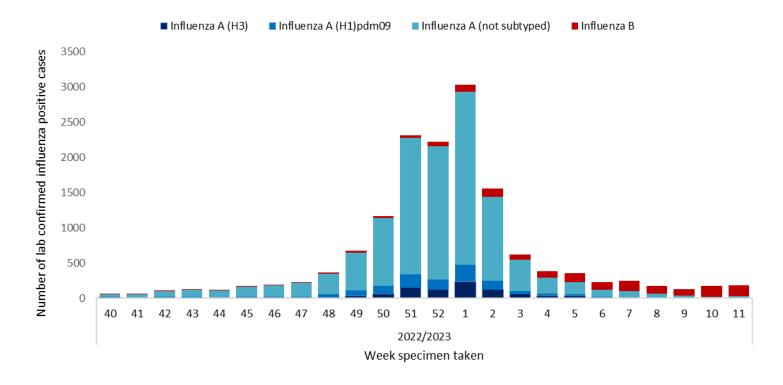


Figure 8: Number of laboratory confirmed **influenza** notifications by influenza type/subtype to HPSC by week 2022-2023 season. *Source: Ireland's Computerised Infectious Disease Reporting System.*

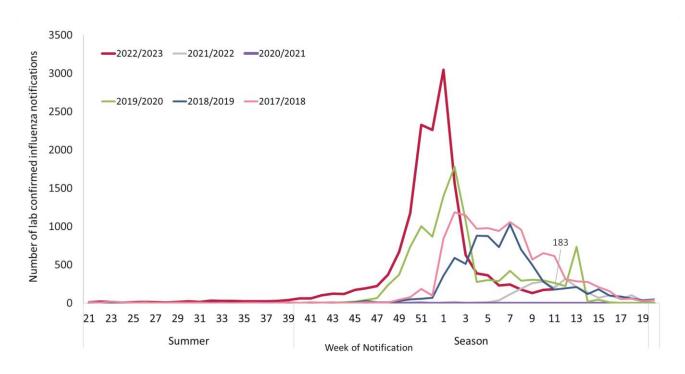


Figure 9: Number of laboratory confirmed **influenza** notifications to HPSC by week and season , 2017/2018 to 2022/2023 influenza seasons. *Source: Ireland's Computerised Infectious Disease Reporting System.*

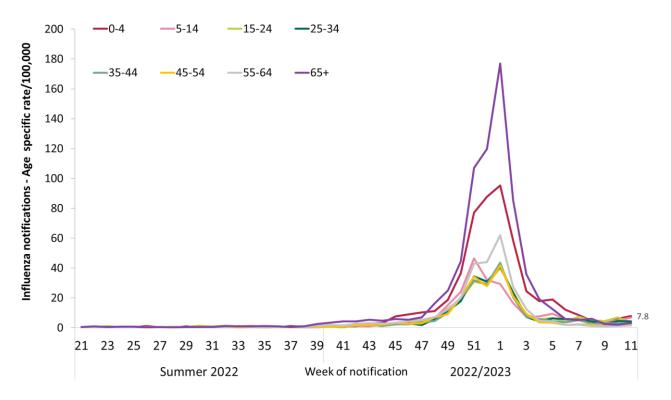


Figure 10: Age specific rates per 100,000 population for laboratory confirmed **influenza** notifications to HPSC by week of notification. *Source: Ireland's Computerised Infectious Disease Reporting System.*

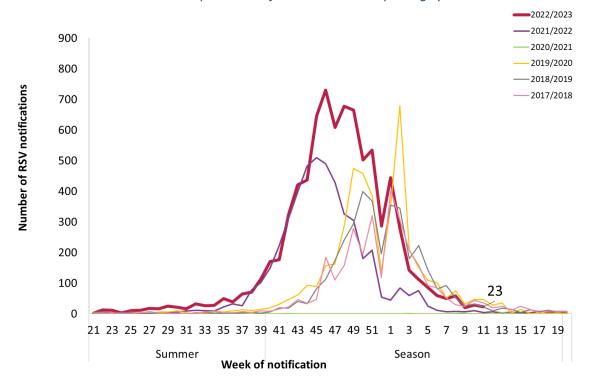


Figure 11: Number of laboratory confirmed **RSV** notifications to HPSC by week of notification, 2017/2018 to 2022/2023 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System.*

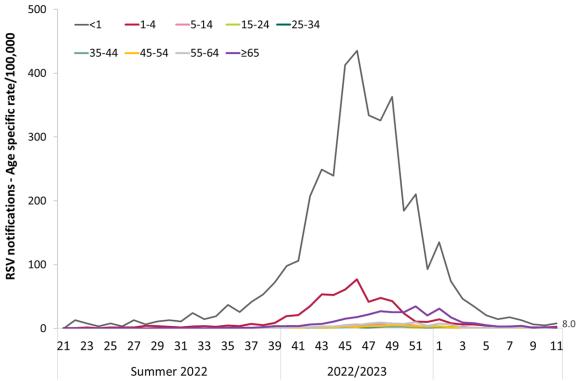


Figure 12: Age specific rates per 100,000 population for laboratory confirmed **RSV** notifications to HPSC by week of notification. *Source: Ireland's Computerised Infectious Disease Reporting System.*

5. Hospitalisations

- During week 11 2023, 41 laboratory confirmed influenza cases were reported as hospital inpatients: seven influenza A (not subtyped), one A(H3), and 33 influenza B (Figure 13 & 14). Influenza hospitalised cases during week 11 2023 increased marginally to 41, compared to 35 in week 10 2023.
- During the 2022/2023 season to date (weeks 40 2022 to week 11 2023), 4,283 laboratory confirmed influenza cases have been notified as hospital inpatients: 291 influenza A(H1)pdm09, 182 A(H3), 3,476 influenza A (not subtyped), 319 influenza B, 12 influenza coinfections and three influenza (type not reported) (Figure 13).
- During week 11 2023, age specific rates in notified laboratory confirmed hospitalised influenza cases were highest in those aged 5 to 14 years (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 11 2023, 13 RSV cases were reported as hospital inpatients (Figure 16).
- During week 11 2023, age specific rates in notified laboratory confirmed hospitalised RSV cases were highest in those aged less than one year (Figure 17).
- Patient type of laboratory confirmed influenza and RSV notifications by week for the 2022/2023 season are reported in Tables 7 and 8.

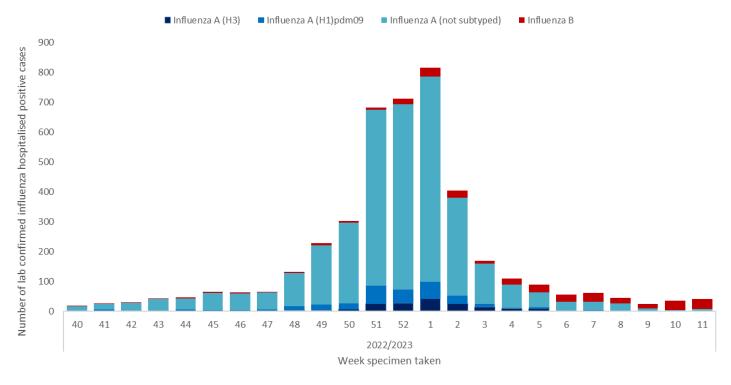


Figure 13: Number of laboratory confirmed **influenza** notifications reported as hospital inpatients by influenza type/subtype to HPSC by week, 2022/2023 season . *Source: Ireland's Computerised Infectious Disease Reporting System.*

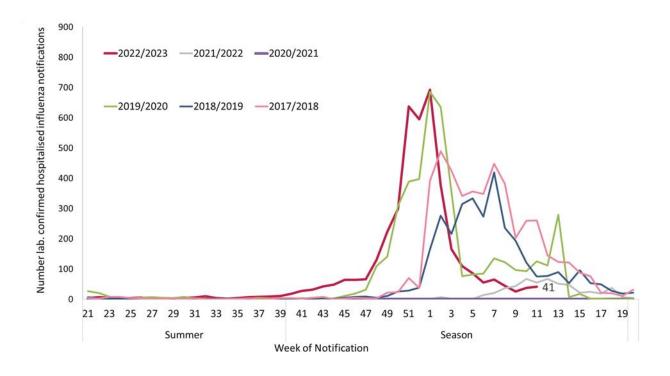


Figure 14: Number of notified laboratory confirmed **influenza** cases reported as hospital inpatients, for the 2017/2018 to 2022/2023 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System*

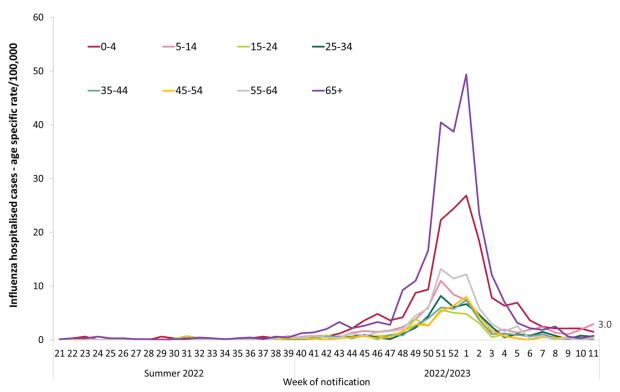


Figure 15: Age specific rates per 100,000 population for laboratory confirmed **influenza** cases reported as hospital inpatients by week of notification. *Source: Ireland's Computerised Infectious Disease Reporting System.*

Table 7: Number of notified **influenza** cases reported by patient type and week of notification, 2022/2023 season (weeks 40 2022-11 2023). *Source: Ireland's Computerised infectious Disease Reporting System*

				Patient Typ	oe .			
	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	43	6	20	8	6	124
Week 44	2	38	48	6	16	2	5	117
Week 45	2	66	65	7	12	12	8	172
Week 46	5	81	64	11	15	12	5	193
Week 47	3	92	66	18	19	7	16	221
Week 48	18	122	132	8	31	19	40	370
Week 49	17	261	229	31	57	19	61	675
Week 50	43	445	303	22	105	46	206	1170
Week 51	100	806	687	29	226	134	346	2328
Week 52	49	1008	715	16	163	143	141	2235
Week 1	121	1309	818	48	201	198	352	3047
Week 2	42	581	404	30	146	165	192	1560
Week 3	31	235	170	8	51	25	104	624
Week 4	20	150	109	5	26	24	52	386
Week 5	30	140	89	7	33	16	44	359
Week 6	9	107	56	4	17	15	20	228
Week 7	15	106	62	4	28	10	20	245
Week 8	9	68	45	1	21	14	20	178
Week 9	5	74	25	0	15	3	11	133
Week 10	6	86	35	1	18	7	21	174
Week 11	16	93	41	3	9	11	10	183
Total	556	5978	4283	270	1257	902	1699	14945

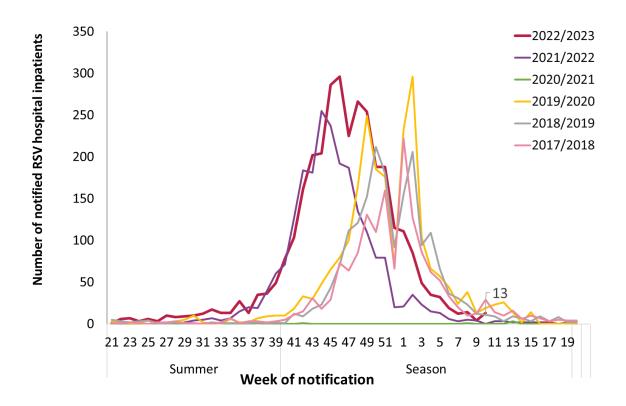


Figure 16: Number of notified **RSV** cases reported as hospital inpatients, by week of notification and season, for the 2017/2018 to 2022/2023 seasons. *Source: Ireland's Computerised Infectious Disease Reporting System.*

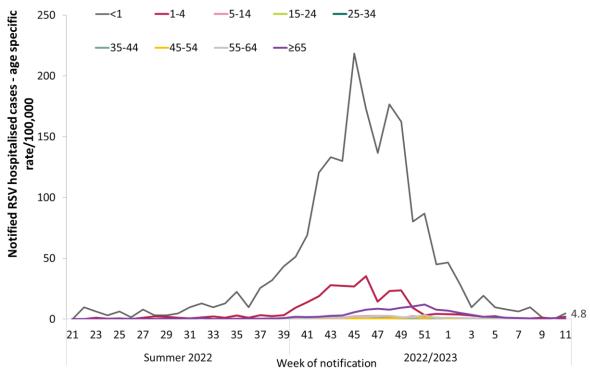


Figure 17: Age specific rates per 100,000 population for laboratory confirmed **RSV** cases reported as hospital inpatients by week of notification and season, Summer 2022 and 2022/2023. *Source: Ireland's Computerised Infectious Disease Reporting System*

Table 8: Number of notified **RSV** cases reported by patient type and week of notification (weeks 40 2022-11 2023), 2022/2023 season. *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 40	5	51	78	6	12	7	11	170
Week 41	3	45	103	3	12	5	6	177
Week 42	5	121	161	2	14	7	15	325
Week 43	6	149	201	9	20	19	17	421
Week 44	6	172	204	3	22	15	15	437
Week 45	8	239	286	12	37	28	36	646
Week 46	10	319	295	5	32	34	34	729
Week 47	6	273	225	8	24	36	37	609
Week 48	34	246	267	3	35	36	57	678
Week 49	19	254	255	13	17	24	83	665
Week 50	20	175	187	2	28	23	67	502
Week 51	14	172	191	5	32	30	88	532
Week 52	8	82	119	0	12	29	36	286
Week 1	26	165	125	5	21	31	71	444
Week 2	7	92	88	3	20	23	44	277
Week 3	4	44	52	2	13	5	22	142
Week 4	6	39	35	5	6	11	9	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	13	58
Week 9	0	13	4	0	2	1	0	20
Week 10	0	8	13	1	2	1	4	29
Week 11	0	6	13	0	3	1	0	23
Total	196	2757	2978	90	386	379	689	7475

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.

- No laboratory confirmed influenza case was admitted to critical care and notified to HPSC during week 11 2023.
- During the 2022/2023 season to date (weeks 40 2022-11 2023), 167 laboratory confirmed influenza cases 31 A(H1)pdm09, 31 influenza A(H3), 96 influenza A (not subtyped) and nine 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 2022-11 2023), of 144 laboratory confirmed influenza ICU cases with known influenza vaccination status, 98 (68%) 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 influenza hospitalised and critical care cases, weeks 40 2022-11 2023. *Source: Ireland's Computerised infectious Disease Reporting System*.

		Hospitalised	P	Admitted to ICU
Age (years)		Age specific rate per		Age specific rate per
	Number	100,000 pop.	Number	100,000 pop.
<1	127	204.0	2	3.2
1-4	426	158.2	14	5.2
5-14	479	71.0	10	1.5
15-24	225	39.0	8	1.4
25-34	318	48.2	4	0.6
35-44	316	47.9	17	2.3
45-54	270	43.1	23	3.7
55-64	386	75.8	24	4.7
≥65	1736	272.3	65	10.2
Unknown		-		-
Total	4283	89.9	167	3.5

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 were no deaths in the notified influenza cases reported to HPSC during week 11 2023.
- During the 2022/2023 season (weeks 40 2022-11 2023), 186 deaths in notified influenza cases were reported to HPSC 32 influenza A(H3), 25 influenza A(H1)pdm09, 124 influenza A (not subtyped), four influenza B and one influenza A and B coinfection.

During the 2022/2023 season, excess all-cause mortality was reported over four consecutive weeks (weeks 51 2022-2 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. https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/casesinireland/

- No laboratory confirmed influenza or RSV outbreaks were notified to HPSC during week 11 2023. During the 2022/2023 season (weeks 40 2022-11 2023), 155 influenza outbreaks have been notified to HPSC.
- For an overview of outbreaks for the season to date (weeks 40 2022-11 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 11 2023 and the 2022/2023 season (weeks 40 2022-11 2023) *Source: CIDR*

HSE area	Influenza		Respiratory syncytial virus infection			espiratory ection	COVID-19 8	& Influenza	Total	
nst alea	Week 11	2022/2023	Week 11	2022/2023	Week 11	2022/2023	Week 11	2022/2023	Week 11	2022/2023
HSE-East	0	55	0	15	0	1	0	0	0	71
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	0	21	0	6	0	4	0	3	0	34
HSE-South-East	0	13	0	0	0	0	0	0	0	13
HSE-South	0	8	0	8	0	0	0	0	0	16
HSE-West	0	17	0	3	0	1	0	0	0	21
Total	0	155	0	55	0	10	0	5	0	225

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 11 2023 and the 2022/2023 season (weeks 40 2022-11 2023). *Source: CIDR*

Sotting	Influenza		Respiratory s	Respiratory syncytial virus		spiratory	COVID-19	& Influenza	Total	
Setting	Week 11	2022/2023	Week 11	2022/2023	Week 11	2022/2023	Week 11	2022/2023	Week 11	2022/2023
Community hospital/Long-stay unit	0	8	0	8	0	2	0	1	0	19
Nursing Home	0	56	0	21	0	5	0	2	0	84
Hospital	0	67	0	8	0	0	0	2	0	77
Residential Institution	0	11	0	4	0	3	0	0	0	18
Childcare facility	0	0	0	1	0	0	0	0	0	1
Family Outbreaks	0	9	0	12	0	0	0	0	0	21
Other settings	0	4	0	1	0	0	0	0	0	5
Total	0	155	0	55	0	10	0	5	0	225

9. International Summary

In the European region, during week 10 2023 (week ending 12/03/2023), influenza virus positivity in sentinel primary care specimens was 26%, compared to 24% in the previous week, which is above the ECDC influenza positivity threshold of 10%. For week 10 2023, 939 (26%) of 3,671 sentinel GP specimens tested positive for an influenza virus; 28% were type A and 72% were type B. Of 186 subtyped A viruses, 7% were A(H3) and 93% were A(H1)pdm09. Of 184 influenza B viruses ascribed to a lineage, all were B/Victoria.

For week 10 2023, 6,693 of 55,690 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; 2,658 (40%) were influenza A and 4,035 (60%) were influenza B. Of 362 subtyped A viruses, 272 (75%) were A(H1)pdm09 and 90 (25%) were A(H3). Of 135 influenza B viruses ascribed to a lineage, all were of B/Victoria lineage. Of 39 countries and areas reporting on geographic spread of influenza viruses, seven reported sporadic spread, four reported local spread, seven reported regional spread and 20 reported widespread influenza activity.

As of 5th 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.

In the countries of North America, most indicators of influenza activity decreased to levels similar or below levels typically observed this time of the year. Influenza A(H3N2) was the predominant virus detected. In Western Asia, influenza activity decreased overall with all seasonal influenza subtypes detected, though increased activity was reported in some countries. In East Asia, influenza activity of predominantly influenza A(H3N2) viruses remained low overall among reporting countries but with increases reported in Mongolia. In the Caribbean and Central American countries, influenza activity of predominantly influenza A(H3N2) viruses continued to decrease due to decreases detections reported in Mexico.

See ECDC and WHO 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 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 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.

 $\underline{https://www.who.int/news/item/24-02-2023-recommendations-announced-for-influenza-vaccine-composition-for-the-2023-2024-northern-hemisphere-influenza-season}$

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

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