

Influenza Surveillance in Ireland – Weekly Report

Influenza Week 9 2022 (28th February– 6th March 2022)



Summary

Influenza activity continued to increase in Ireland during week 9 2022 (week ending 06/03/2022). Influenza A(H3) viruses are the predominant influenza viruses circulating in Ireland. It is recommended that antivirals be used for the treatment and prophylaxis of influenza in clinical at-risk groups and in those with severe influenza disease.

- **Influenza-like illness (ILI):** The sentinel GP influenza-like illness (ILI) consultation rate decreased to 14.6/100,000 population during week 9 2022, compared to the updated rate of 17.1/100,000 during week 8 2022. Sentinel GP ILI consultation rates during week 9 2022 were below the Irish baseline threshold (18.1/100,000 population). As the number of laboratory confirmed influenza cases in Ireland increases, sentinel GP ILI consultations reflect the co-circulation of influenza and SARS-CoV-2 viruses.
- Sentinel GP ILI consultation rates were below age specific baseline thresholds for all age groups during week 9 2022.
- **GP Out of Hours:** The proportion of self-reported 'flu' calls to GP Out-of-Hours services continued to increase, at 0.9% (110/11,971) during week 9 2022, compared to 0.7% (97/13,318) during week 8.
- **National Virus Reference Laboratory (NVRL):** The influenza positivity rate reported by the NVRL for both sentinel GP ILI and non-sentinel respiratory specimens tested was 8.5% (15/177) during week 9 2022 and 7.8% (20/255) during week 8 2022. Influenza positivity reported from the sentinel GP network increased during week 8 2021 to 21.4% (9/42), a lag time with testing and reporting is noted, with influenza positivity at 5.1% (2/39) during week 9 2022. Of the 35 influenza positive detections during weeks 8 and 9 2022, 34 were positive for A(H3) and one for A(H1)pdm09. For the 2021/2022 season (weeks 40 2021 – 9 2022), of 1,246 sentinel GP ILI specimens and 4,546 non-sentinel respiratory specimens tested, 119 (2.1%) were positive for influenza: 113 A(H3), 3 A(H1)pdm09, 1 A (not subtyped) and 2 B.
- No RSV positive samples were detected from sentinel GP ILI or non-sentinel sources in week 9 2022. Rhinovirus/enterovirus and other respiratory viruses continue to circulate.
- **Influenza and RSV notifications:** 255 laboratory confirmed influenza cases - 25 A(H3) and 230 A (not subtyped) - were notified during week 9 2022. During the 2021/2022 season (weeks 40 2021-9 2022), 674 laboratory confirmed influenza cases were notified: 668 influenza A (102 A(H3), 3 A(H1)pdm09 and 563 A not subtyped) and 6 influenza B. Only seven RSV cases were notified during week 9 2022.
- **Hospitalisations:** 45 laboratory confirmed influenza A - one A(H3) and 44 A (not subtyped) - hospitalised cases were notified during week 9 2022. During weeks 40 2021 – 9 2022, 136 laboratory confirmed influenza hospitalised cases were notified: 22 A(H3), 112 influenza A (not subtyped) and 2 B.
- **Critical care admissions:** No confirmed influenza cases admitted to critical care were notified during week 9 2022. For the 2021/2022 season, four confirmed influenza A notified cases were admitted to critical care units.
- **Mortality:** No deaths in notified influenza cases were notified to HPSC during week 9 2022. No excess all-cause mortality was reported during week 8 2022; data reported with one-week time lag.
- **Outbreaks:** One laboratory confirmed influenza A hospital outbreak in HSE-West was notified to HPSC in week 9 2022, bringing the season total to seven confirmed influenza A outbreaks.
- **International:** For the European Region, influenza activity increased in week 8 2022, with different levels of activity observed between countries and areas of the Region, and a general dominance of A(H3) viruses.

1. GP sentinel surveillance system - Clinical Data

- During week 9 2022, 41 influenza-like illness (ILI) cases were reported from the Irish sentinel GP network, corresponding to an ILI consultation rate of 14.6/100,000 population, a decrease compared to the updated rate of 17.1/100,00 during week 8 2022 (Figure 1). The sentinel GP ILI consultation rate has been below the Irish sentinel GP ILI baseline threshold (18.1/100,000 population) for seven consecutive weeks (weeks 3 to 9 2022).
- Sentinel GP respiratory consultations are currently via phone consultations. As the number of laboratory confirmed influenza cases detected/notified in Ireland continue to increase, sentinel GP ILI consultations reflect the co-circulation of influenza and SARS-CoV-2 viruses in the community. Recent trends in sentinel GP ILI consultation rates are also likely reflecting changes to health seeking behaviour relating to GP consultations.
- Sentinel GP ILI rates remained below age specific baseline levels for all age groups during week 9 2022, Figure 2 & Table 1.
- The Irish sentinel baseline ILI threshold for the 2021/2022 influenza season is 18.1/100,000 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), medium (57.5/100,000) and high (86.5/100,000) intensity ILI thresholds are shown in figure 1. Age specific MEM threshold levels are shown in Table 1.

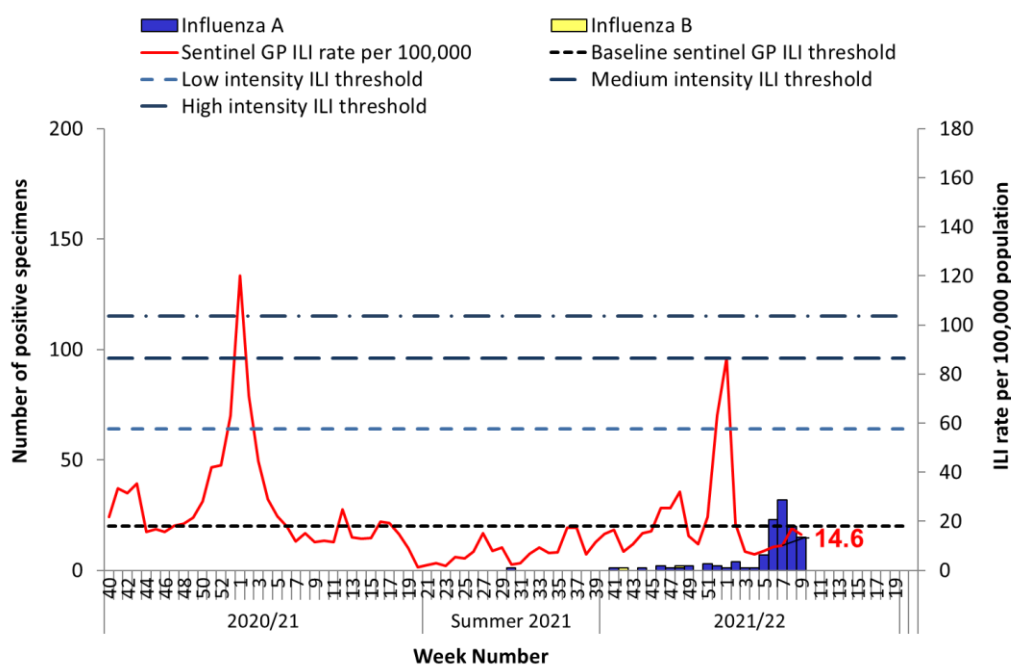


Figure 1: Sentinel GP Influenza-like illness (ILI) consultation rates per 100,000 population, baseline ILI threshold, medium and high intensity ILI thresholds and number of positive influenza A and B specimens tested by the NVRL, by influenza week and season. The current week sentinel GP ILI consultation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

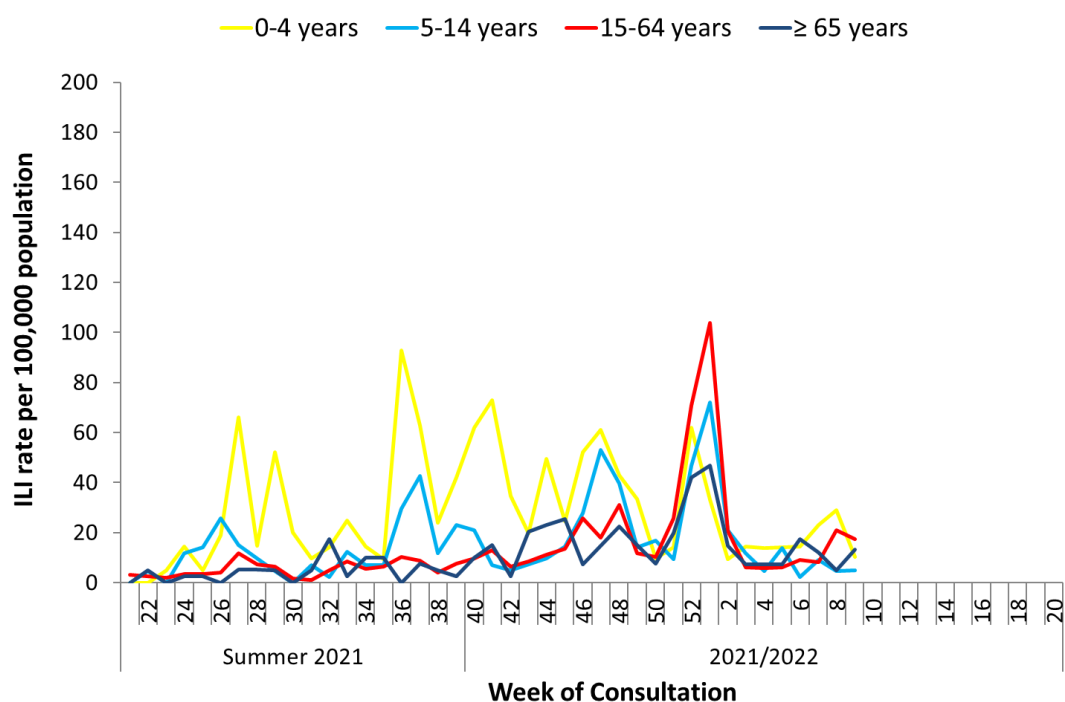


Figure 2: Age specific sentinel GP ILI consultation rate per 100,000 population by week during the summer of 2021 and the 2021/2022 influenza season to date. *Source: ICGP.*

Table 1: Age specific sentinel GP ILI consultation rate per 100,000 population by week for the 2021/2022 season, colour coded by sentinel GP ILI age specific Moving Epidemic Method (MEM) threshold levels. *Source: ICGP.*

Sentinel GP ILI Threshold Levels				Below Baseline				Low		Moderate				High		Extraordinary						
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
All Ages	14.9	16.6	7.6	10.6	15.1	16.0	25.3	25.5	31.9	14.0	10.8	21.8	63.0	86.7	19.1	7.6	6.4	7.9	9.6	10.0	17.1	14.6
<15 yrs	34.6	28.8	14.6	11.3	22.8	17.7	35.8	55.6	40.8	20.5	14.4	10.9	51.7	59.3	17.2	12.6	7.6	14.1	6.3	13.7	12.7	6.7
15-64 yrs	9.6	12.9	6.3	8.4	11.0	13.5	25.6	18.0	30.9	11.7	10.3	25.7	70.9	103.8	20.7	6.1	5.9	6.1	9.1	8.4	21.0	17.4
≥65 yrs	9.9	15.2	2.6	20.4	23.1	25.4	7.4	14.6	22.3	14.9	7.6	19.7	42.1	46.8	14.8	7.4	7.2	7.4	17.4	12.0	5.0	13.3
Reporting practices (N=61)	57	56	54	55	54	55	56	57	55	54	55	56	55	56	56	56	57	55	55	57	55	53

2. Influenza and Other Respiratory Virus Detections - NVRL

The data reported in this section for the 2021/2022 influenza season refer to sentinel GP ILI 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 3). 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. Non-sentinel respiratory specimens relate to specimens referred to the NVRL (other than sentinel GP specimens) and may include more than one specimen from each case.

During the COVID-19 pandemic, there may be a lag time receiving data for the current week from the NVRL and laboratories under the clinical governance of the NVRL, caution is advised therefore interpreting the most recent week's data. These data are continuously updated.

- During week 9 2022, 5.1% (2/39) sentinel GP ILI and 9.4% (13/138) non-sentinel respiratory specimens tested and reported by the NVRL were positive for influenza. The overall influenza positivity for sentinel GP ILI and non-sentinel respiratory specimens during week 9 2022 was 8.5% (15/177).
- During week 8 2022, 21.4% (9/42) sentinel GP ILI and 5.2% (11/213) non-sentinel respiratory specimens tested and reported by the NVRL were positive for influenza. The overall influenza positivity for sentinel GP ILI and non-sentinel respiratory specimens during week 8 2022 was 7.8% (20/255)
- During weeks 8 and 9 2022, 34 influenza A(H3) and 1 influenza A A(H1)pdm09 positive specimens were detected and reported by the NVRL.
- For the 2021/2022 season (weeks 40 2021 - 9 2022), of 1,246 sentinel GP ILI and 4,546 non-sentinel respiratory specimens tested, 119 were positive for influenza: 113 A(H3), 3 A(H1)pdm09, 1 A (not subtyped) and 2 B (one B/Victoria and one B/lineage not specified), Figures 3 & 4.
- No RSV positive samples were detected from sentinel GP ILI and non-sentinel respiratory specimens tested during weeks 8 and 9 2022. Table 3; Figure 5.
- Rhinovirus/enterovirus positive detections (non-sentinel respiratory sources) continue to be reported, with positivity levels at 21.7% (30/138) during week 9 2022 (Figure 6). Other respiratory viruses (ORVs) continue to be detected at lower levels (Table 4).
- The NVRL has genetically characterised and reported data on 26 positive influenza samples in Ireland to date this season. Twenty-five positive samples were genetically characterised as A(H3) of those, 24/25 A(H3) positive samples clustered in a genetic group that is represented by the A/Bangladesh/4005/2020 virus, the predominant subgroup circulating globally. A/Bangladesh viruses are antigenically diverse to the A(H3)/Cambodia/e0826360/2020 vaccine strain which was chosen for the northern hemisphere 2021/2022 vaccine. One positive sample fell into the 3C.2a1b.1a subgroup represented by the A/Denmark/3264/2019 virus, which has been identified less frequently this season. One influenza A(H1)pdm09 virus sample was genetically characterised and belonged to the genetic subgroup, 6B.1A.5a.2, clustering in a subgroup that is represented by the 2021/2022 northern hemisphere vaccine virus strain (A/Victoria/2570/2019 (H1N1)pdm09-like virus).

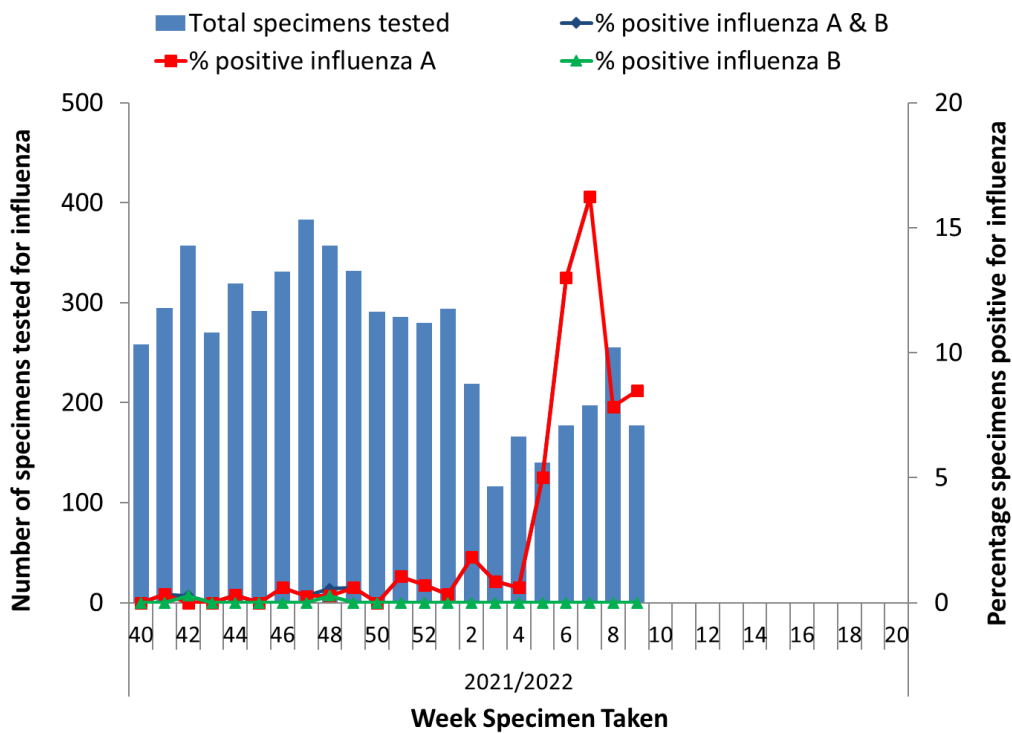


Figure 3: Number of specimens (from sentinel GP ILI and non-sentinel respiratory sources) tested by the NVRL for influenza and percentage influenza positive by week for the 2021/2022 influenza season. *Source: NVRL.*

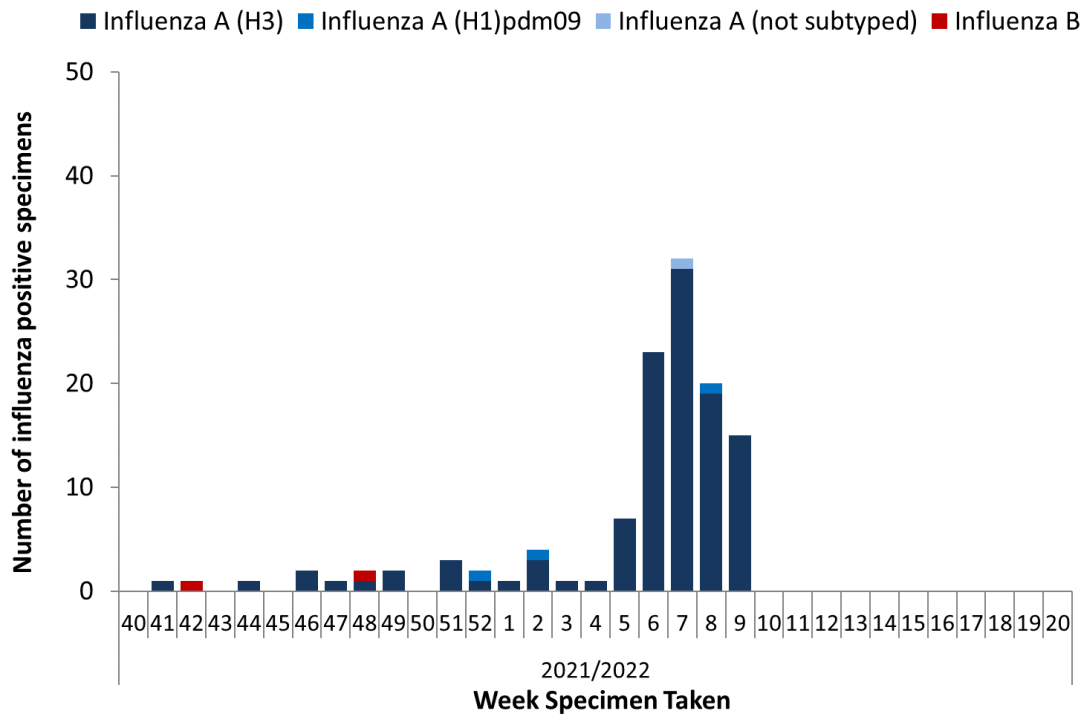


Figure 4: Number of positive influenza specimens (from sentinel GP ILI and non-sentinel respiratory sources) tested by the NVRL by influenza type/subtype and by week for the 2021/2022 influenza season. *Source: NVRL.*

Table 2: Number of sentinel GP ILI and non-sentinel respiratory specimens tested by the NVRL and positive influenza results, for week 9 and week 8 2022 and the 2021/2022 season (weeks 40 2021- 9 2022). *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
9 2022	Sentinel GP ILI referral	39	2	5.1	0	2	0	2	0	0	0	0
	Non-sentinel	138	13	9.4	0	13	0	13	0	0	0	0
	Total	177	15	8.5	0	15	0	15	0	0	0	0
8 2022	Sentinel GP ILI referral	42	9	21.4	0	9	0	9	0	0	0	0
	Non-sentinel	213	11	5.2	1	10	0	11	0	0	0	0
	Total	255	20	7.8	1	19	0	20	0	0	0	0
2021/2022	Sentinel GP ILI referral	1246	22	1.8	1	21	0	22	0	0	0	0
	Non-sentinel	4546	97	2.1	2	92	1	95	1	1	0	2
	Total	5792	119	2.1	3	113	1	117	1	1	0	2

Table 3: Number of sentinel GP ILI and non-sentinel respiratory specimens tested by the NVRL and positive RSV results, for week 9 and week 8 2022 and the 2021/2022 season (weeks 40 2021-9 2022). *Source: NVRL*

Surveillance period	Specimen type	Total tested	Number RSV positive	% RSV positive	RSV A	RSV B	RSV (unspecified)
Week 9 2021	Sentinel GP ILI	39	0	0.0	0	0	0
	Non-sentinel	138	0	0.0	0	0	0
	Total	177	0	0.0	0	0	0
Week 8 2021	Sentinel GP ILI	42	0	0.0	0	0	0
	Non-sentinel	213	0	0.0	0	0	0
	Total	255	0	0.0	0	0	0
2021/2022	Sentinel GP ILI	1246	80	6.4	43	37	0
	Non-sentinel	4546	702	15.4	395	306	1
	Total	5792	782	13.5	438	343	1

Table 4: Number of non-sentinel respiratory specimens tested by the NVRL for other respiratory viruses (ORVs) and positive results, for week 9 and week 8 2022 and the 2021/2022 season (weeks 40 2021-9 2022). *Source: NVRL*

Virus	Week 9 2021 (N=138)		Week 8 2021 (N=213)		2021/2022 (N=4546)	
	Total positive	% positive	Total positive	% positive	Total positive	% positive
Influenza virus	13	9.4	11	5.2	97	2.1
Respiratory Syncytial Virus (RSV)	0	0.0	0	0.0	702	15.4
Rhino/enterovirus	30	21.7	46	21.6	919	20.2
Adenovirus	0	0.0	9	4.2	70	1.5
Bocavirus	3	2.2	5	2.3	126	2.8
Human metapneumovirus (hMPV)	5	3.6	14	6.6	141	3.1
Parainfluenza virus type 1 (PIV-1)	0	0.0	0	0.0	0	0.0
Parainfluenza virus type 2 (PIV-2)	0	0.0	0	0.0	1	0.0
Parainfluenza virus type 3 (PIV-3)	0	0.0	0	0.0	101	2.2
Parainfluenza virus type 4 (PIV-4)	1	0.7	2	0.9	66	1.5

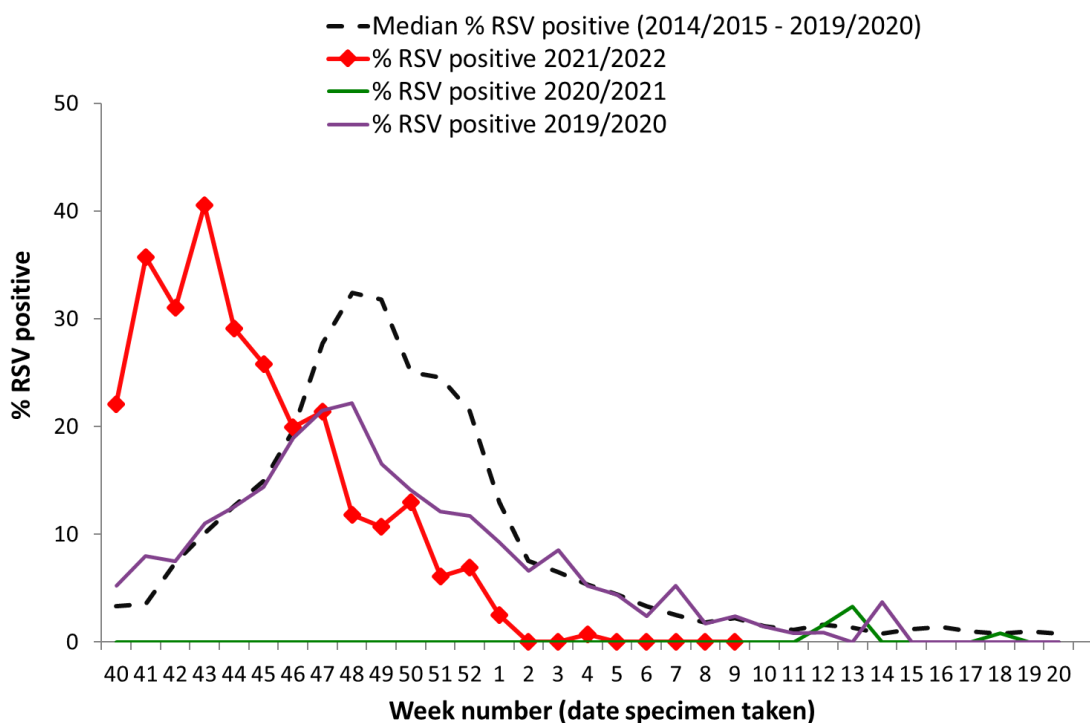


Figure 5: NVRL non-sentinel RSV positivity by week specimen was taken for 2021/2022, 2020/2021 and 2019/2020 seasons compared to median % RSV positivity (2014/2015-2019/2020). *Source: NVRL.*

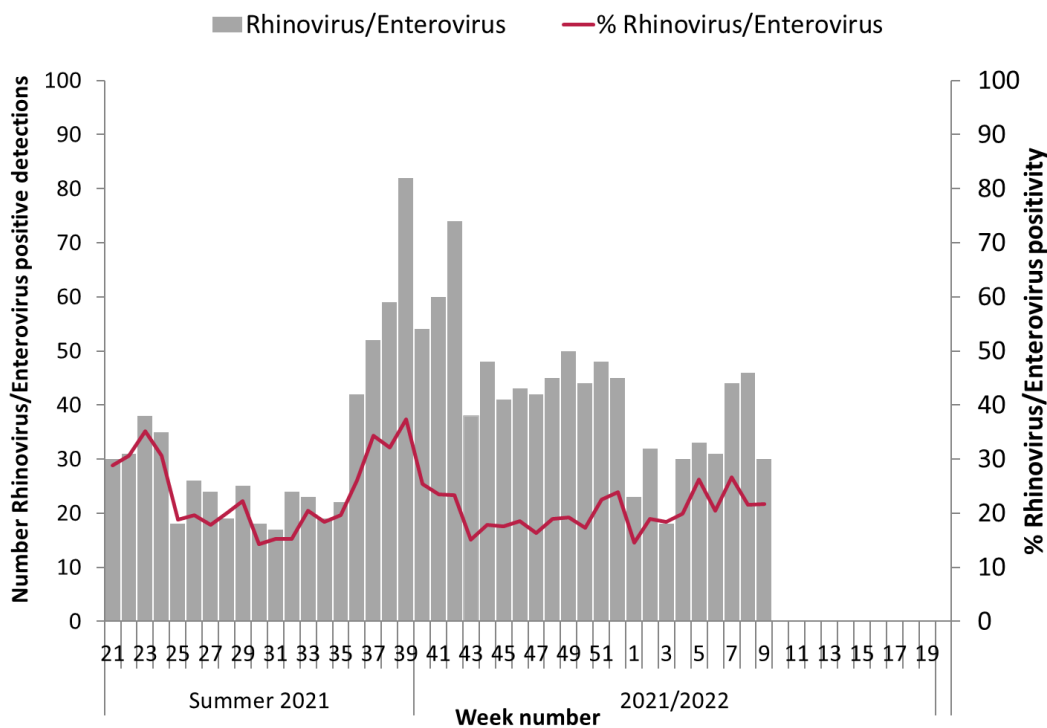


Figure 6: Number (and percentage) of non-sentinel rhinovirus/enterovirus positive detections by week specimen was taken for summer 2021 and 2021/2022 season. *Source: NVRL.*

3. Regional Influenza Activity by HSE-Area

Regional influenza activity levels is based on laboratory confirmed influenza cases and/or outbreaks.

Widespread influenza activity was observed in Ireland during week 9 2022, with confirmed influenza cases notified in all areas: HSE-East (n=118), HSE-South (n=21), HSE-West (n=55), HSE-Mid West (n=19), HSE-Midlands (n=14), HSE-Northeast (n=11), HSE-Southeast (n=9) and HSE-Northwest (n=8) during week 9 2022.

4. 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 (GP OOHs) 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.

- 1,860 (15.5% of total calls; N=11,971) self-reported cough calls were reported by a network of GP OOHs services during week 9 2022, which is above baseline levels (10.7%) and an increase compared to the updated rate of 14.4% (n= 1915/13,318) during week 8 2022 (Figures 7 & 8).
- 110 (0.9% of total calls; N=11,971) self-reported 'flu' calls were reported by a network of GP OOHs services during week 9 2022, an increase compared to 97 (0.7% of total calls; N=13,318) self-reported 'flu' calls during week 8 2022. The baseline threshold level for self-reported 'flu' calls is 2.3%. (Figure 9).
- Five GP OOH services provided data for week 9 2022.

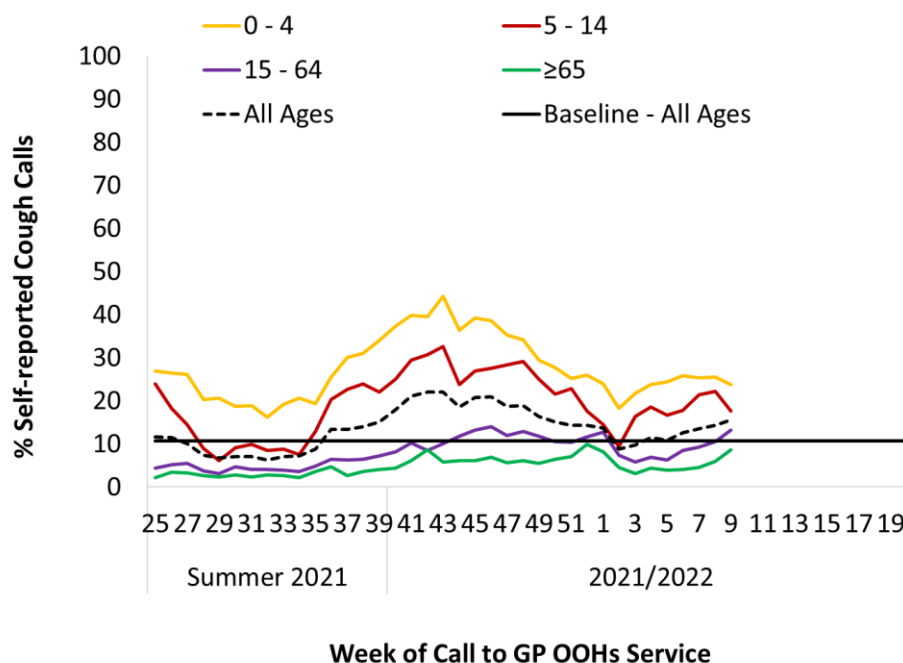


Figure 7: Percentage of self-reported COUGH calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call, 2021-2022. The % cough calls baseline for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours services in Ireland (collated by HSE-NE) & ICGP.*

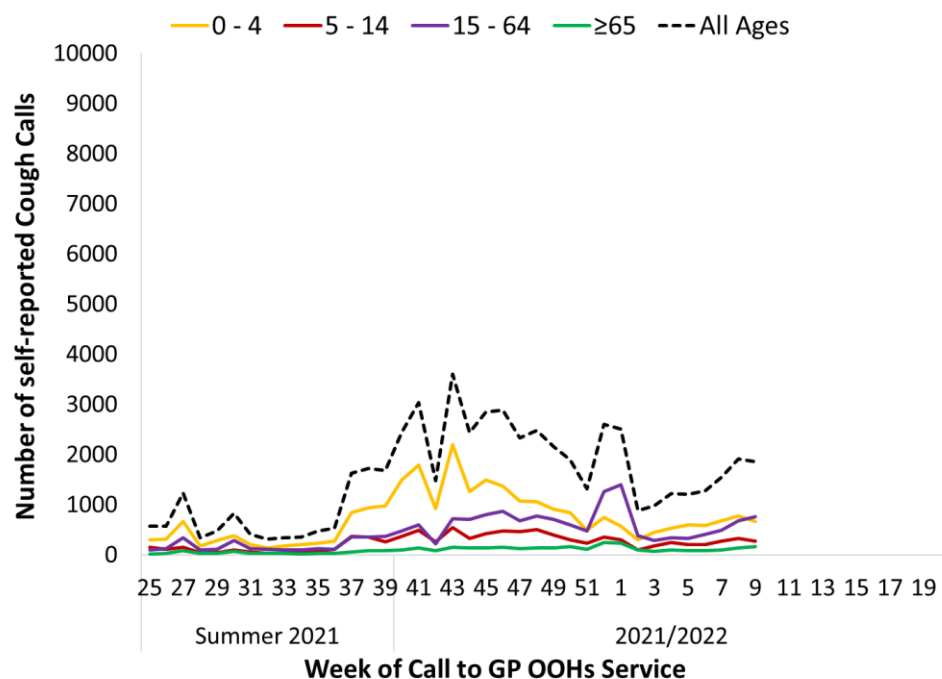


Figure 8: Number of self-reported COUGH calls for all ages and by age group to GP Out-of-Hours services by week of call, 2021-2022. *Source: GP Out-Of-Hours services in Ireland (collated by HSE-NE) & ICGP.*

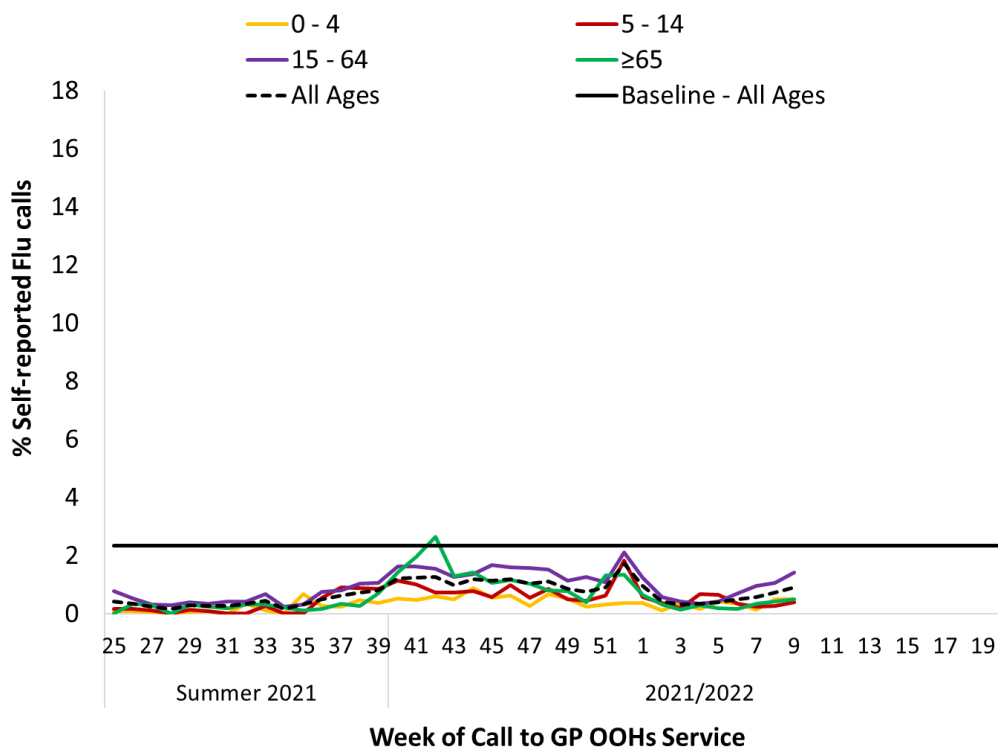


Figure 9: Percentage of self-reported FLU calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call, 2021-2022. The % flu calls baseline for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours services in Ireland (collated by HSE-NE) & ICGP*

5. Influenza & RSV notifications

Influenza and RSV cases 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](#).

- Two hundred and fifty-five laboratory confirmed influenza cases - 25 A(H3) and 230 A (not subtyped) - were notified to HPSC during week 9 2022 (Figure 10). The median age of confirmed cases notified during week 9 2022 was 27 years (interquartile range 20-58 years). Laboratory confirmed influenza cases were notified from HSE-East (n=118), HSE-South (n=21), HSE=West (n=55), HSE-Midwest (n=19), HSE-Midlands (n=14), HSE-Northeast (n=11), HSE-Southeast (n=9) and HSE-Northwest (n=8) during week 9 2022.
- Six hundred and seventy-four laboratory confirmed influenza cases were notified during the 2021/2022 season (weeks 40 2021 – 9 2022): 668 influenza A (102 A(H3), 3 A(H1)pdm09 and 563 A not subtyped) and 6 influenza B. The median age of notified cases for the 2021/2022 season to date is 26 years (interquartile range 20-56 years).
- During week 9 2022, 7 RSV cases were notified; 4 of these cases were reported as hospital inpatients (Figures 11 & 12). It should be noted that patient type is not always reported/updated for RSV notified cases; an RSV patient may be admitted to hospital and patient type not updated on CIDR.

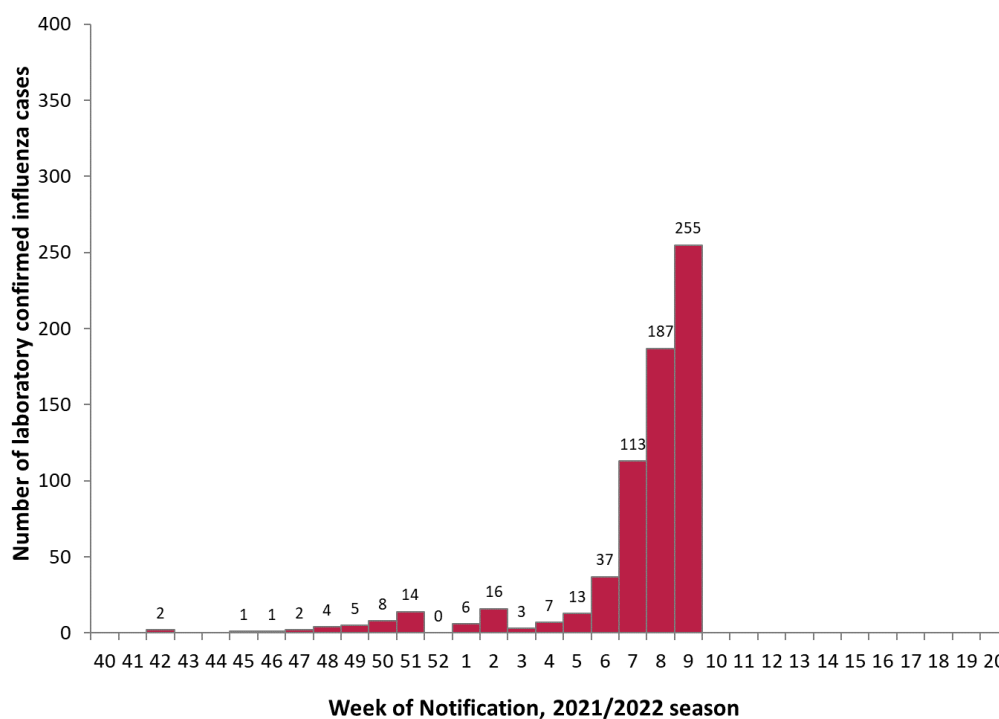


Figure 10: Number of laboratory confirmed influenza cases notified by week of notification, 2021/2022. *Source: Ireland's Computerised Infectious Disease Reporting System*

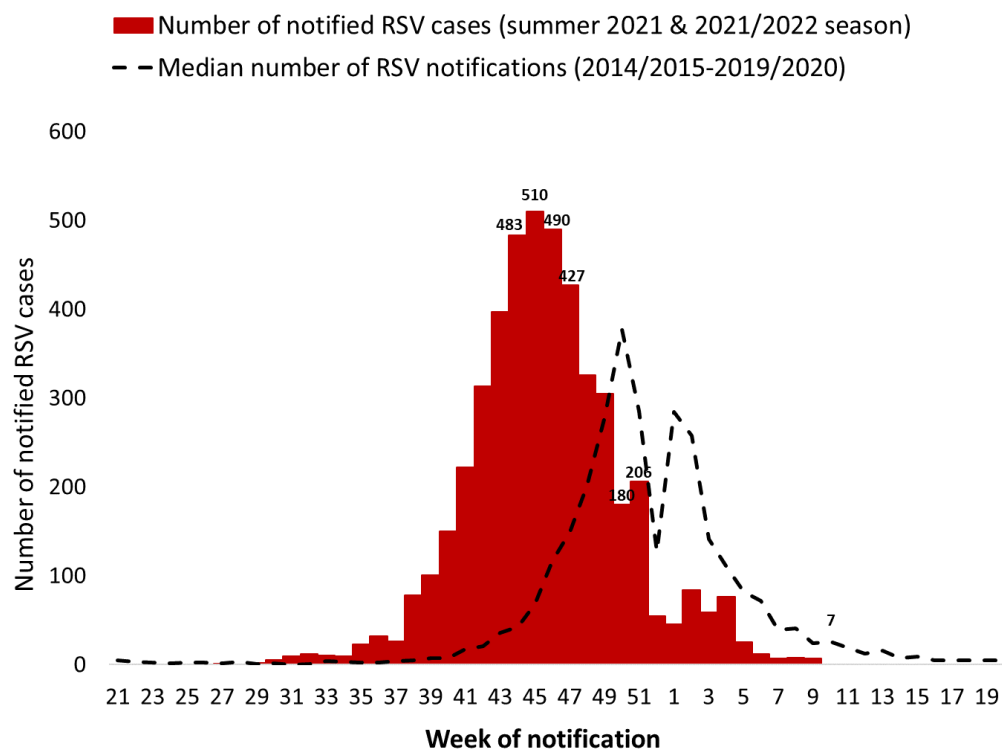


Figure 11: Number of RSV cases notified by week of notification, summer 2021 and 2021/2022, and median number of RSV notifications by week (2014/2015-2019/2020). *Source: Ireland's Computerised Infectious Disease Reporting System.*

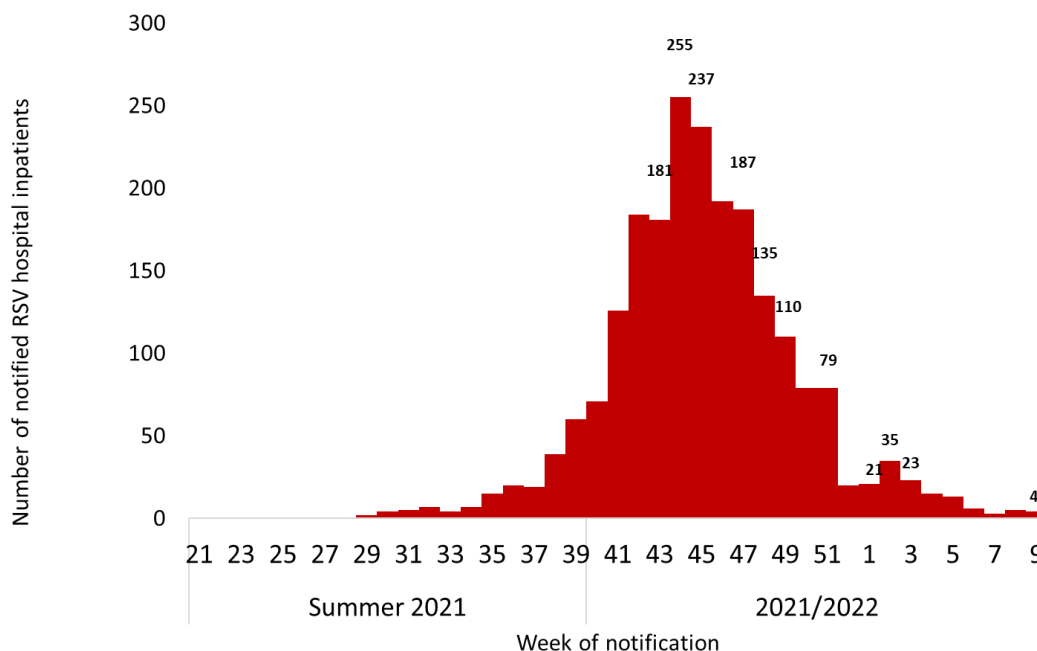


Figure 12: Number of notified RSV cases reported as hospital inpatients, by week of notification, summer 2021 and 2021/2022. *Source: Ireland's Computerised Infectious Disease Reporting System.*

6. Influenza Hospitalisations

- Forty-five laboratory confirmed influenza A notified cases were reported as hospital inpatients, one subtyped A(H3) and 44 influenza A not subtyped, during week 9 2022. Of these 45 hospital inpatients, the median age is 65 years (interquartile range 20-79 years), 23 cases were aged ≥ 65 years of age. During week 9 2022, confirmed influenza hospitalised cases have been notified from HSE-MidWest (n=8), -East (n=13), -Southeast (n=1), -Midlands (n=1), -Northwest (n=2), -West (n=14) and HSE-South (n=6).
- During weeks 40 2021 - 9 2022, 136 laboratory confirmed influenza cases reported as hospital inpatients were notified: 22 A(H3), 112 influenza A (not subtyped) and two influenza B cases. During week 40 2021-week 8 2022, the median age of those hospitalised is 62 years (interquartile range 21-78 years). Figures 13 & 14 and Table 5.

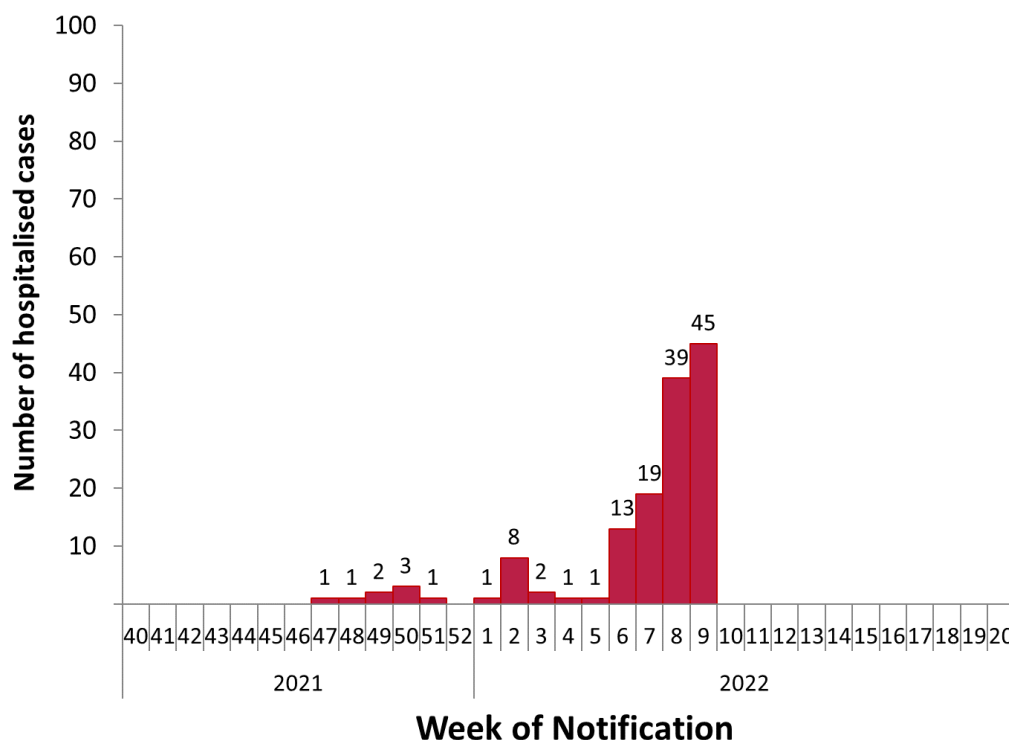


Figure 13: Number of notified laboratory confirmed influenza cases reported as hospital inpatients, by week of notification 2021/2022. *Source: Ireland's Computerised Infectious Disease Reporting System*

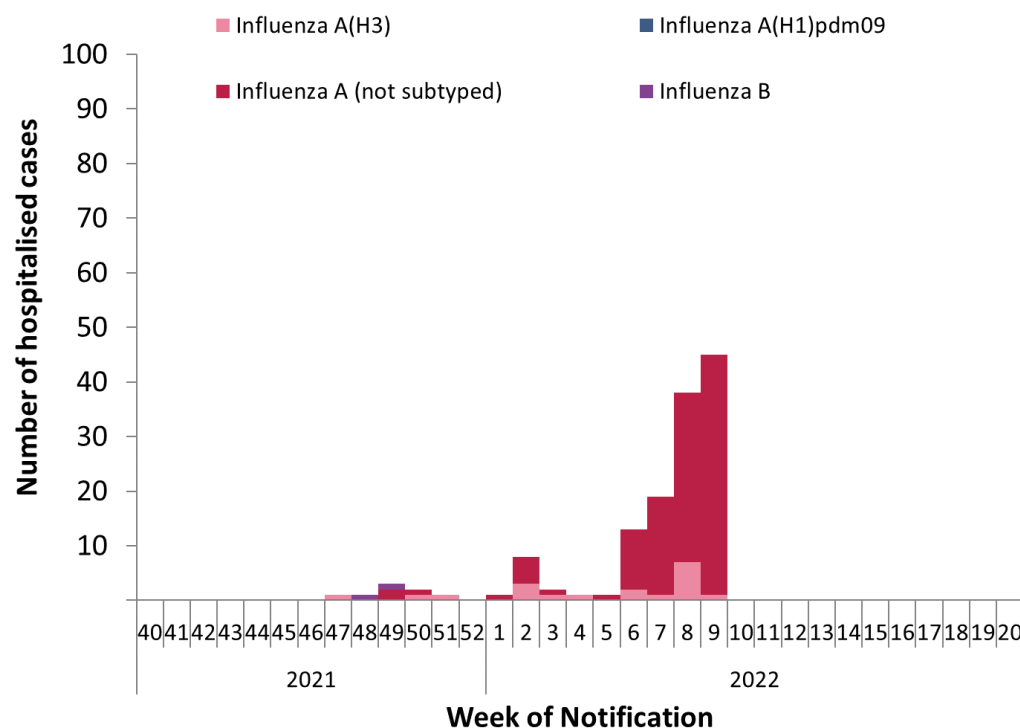


Figure 14: Number of notified laboratory confirmed influenza cases, reported as hospital inpatients, by influenza type/subtype and week of notification, 2021/2022 season *Source: Ireland's Computerised Infectious Disease Reporting System*

7. 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.

- During week 9 2022, no laboratory confirmed influenza cases were admitted to critical care and reported to HPSC.
- During the 2021/2022 influenza season to date (week 40 2021 - week 9 2022), four laboratory confirmed influenza A - 2 A(H3) and 2 A(not subtyped) - cases were admitted to critical care and reported to HPSC (Table 5).

Table 5: Number (and age specific rate per 100,000 population) of laboratory confirmed notified influenza hospitalised and critical care cases, weeks 40 2021-8 2022. Source: Ireland 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	3	4.8	0	0.0
1-4	9	3.3	0	0.0
5-14	5	0.7	0	0.0
15-24	25	4.3	0	0.0
25-34	6	0.9	0	0.0
35-44	6	0.9	0	0.0
45-54	3	0.5	0	0.0
55-64	13	2.6	2	0.4
≥65	66	10.4	2	0.3
Unknown	0	-	0	-
Total	136	2.9	4	0.1

8. Severe Acute Respiratory Infection (SARI) surveillance

Severe Acute Respiratory Infection (SARI) surveillance was implemented in one tertiary care adult hospital; St. Vincent's University Hospital, Dublin (SVUH) on the 5th of July 2021. SARI cases are identified from new admissions (aged ≥15 years) through the SVUH Emergency Department. The current SARI ECDC case definition used is defined as a hospitalised person (hospitalised for at least 24 hours) with acute respiratory infection, with at least one of the following symptoms: cough, fever, shortness of breath OR sudden onset of anosmia, ageusia or dysgeusia with onset of symptoms within 14 days prior to hospital admission. SARI patients are tested for SARS-CoV-2, influenza and RSV.

- During week 9 2022, twelve SARI cases were admitted to the SARI hospital site, corresponding to an incidence rate per emergency hospitalisation of 42.0/1,000; a decrease on 59.7/1,000 in week 8 2022.
- The SARI incidence rate per hospital catchment population was 3.9/100,000 population during week 9, a decrease from 5.3/100,000 in week 8 2022.
- SARI SARS-CoV-2 positivity was 42% (5/12 tested) during week 9 2022, compared to 25% (4/16) during week 8 2022.
- No SARI cases tested positive for influenza A, during week 9 2022, compared to 18% (2/11 tested) positivity during week 8 2022.
- No SARI case tested positive for RSV during weeks 8 and 9 2022.

9. Mortality Surveillance

Influenza 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/>

- No deaths in notified influenza cases were reported to HPSC during week 9 2022. During the 2021/2022 season (weeks 40 2021- 9 2022), three deaths in notified influenza cases were reported to HPSC: 2 A(H3) and 1 A not subtyped.
- No excess all-cause mortality was reported during week 8 2022, after correcting data 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.

10. 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/surveillance/>

- One influenza A hospital outbreak in HSE-West was notified to HPSC during week 9 2022..
- During the 2021/2022 influenza season, seven laboratory confirmed influenza A outbreaks were notified: three hospital outbreaks, one nursing home outbreak, two family outbreaks and one outbreak associated with a social gathering..
- For the 2021/2022 season to date (weeks 40 2021- 9 2022), seven influenza A outbreaks, five RSV and ten ARI (SARS-CoV-2 negative) outbreaks were notified to HPSC. Of the ten ARI outbreaks, two were associated with rhinovirus/enterovirus, four with seasonal coronavirus (OC43) and four with no pathogen identified.

11. Influenza Vaccinations

From 01/09/2021 up to the week ending 6/03/2022, seasonal influenza vaccination uptake for those aged 2-17 years was 16.3% (n=176,138/1,081,232) and 74.2% (n=551,136/743,087) for those aged ≥65 years. Data were provided by GPs, Pharmacists and PCRS staff.

12. International Summary

In the European region, during week 8 2022 (week ending 27/02/2022), Armenia, Estonia, Georgia, Hungary, Ireland, Kazakhstan, Republic of Moldova, Slovakia and Slovenia reported widespread influenza activity and/or medium influenza intensity. The percentage of all sentinel primary care specimens from patients presenting with ILI or ARI symptoms that tested positive for an influenza virus has been rising again since week 4, reaching 9.7% in week 8 2022. Seven countries reported seasonal influenza activity above 10% positivity in sentinel primary care: Slovenia (52%), Hungary (47%), Italy (35%), France (32%), Luxembourg (23%), Ireland (15%) and United Kingdom (Scotland) (11%). Influenza A and B viruses were both detected with A(H3) viruses being dominant across all monitoring systems.

<https://flunewseurope.org/>

The latest available WHO influenza report was published on 21 February 2022, based on data up to 6 February 2022. In the temperate zones of the northern hemisphere, **influenza activity decreased** with detections of mainly influenza A(H3N2) viruses and B/Victoria lineage viruses reported. In North America, influenza virus detections decreased and were predominantly A(H3N2) among those detected and subtyped. Influenza detections remained low compared to similar periods in past seasons (except 2020-2021). In East Asia, influenza activity with mainly influenza B/Victoria lineage detections decreased in China, while influenza illness indicators and activity remained low in the rest of the subregion. In North Africa, influenza increased with influenza A(H3N2) and A(H3N2)pdm09 detections. In Western Asia, influenza activity continued to decrease. In the Caribbean and Central American countries, some influenza activity was reported with influenza A(H3N2) predominating. In tropical South America, some influenza activity was reported with influenza A(H3N2) predominating. In tropical Africa, influenza activity was reported mainly from Eastern Africa with influenza A(H3N2) predominating followed by influenza A (both subtypes). In Southern Asia, influenza virus detections of predominantly influenza A(H3N2) decreased. In South-East Asia, mainly influenza A(H3N2) detections were reported as well as some influenza B. In the temperate zones of the southern hemisphere, influenza activity remained low overall, although increased detections of influenza A(H3N2) were reported in some countries in temperate South America.

<https://www.who.int/teams/global-influenza-programme/surveillance-and-monitoring/influenza-updates/current-influenza-update>

- 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>
 - 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 recommend that quadrivalent egg-based vaccines for use in the **2021/2022** northern hemisphere influenza season contain the following:

an A/Victoria/2570/2019 (H1N1)pdm09-like virus;

an A/Cambodia/e0826360/2020 (H3N2)-like virus;

a B/Washington/02/2019 (B/Victoria lineage)-like virus;

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 recommend 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>

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

This report was prepared by the HPSC influenza epidemiology team: Martha Neary, Maeve McEnery, Lisa Domegan, Eva Kelly, Adele McKenna, Amy Griffin, and Joan O'Donnell.

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