Influenza Surveillance in Ireland – Weekly Report

Influenza Week 11 2022 (14th – 20th March 2022)

Summary

Influenza activity remained high in Ireland during week 11 2022 (week ending 20/03/2022). Influenza A(H3) viruses are the predominant influenza viruses circulating in Ireland. Due to the short reporting week (bank holiday weekend) data for week 11 2022 should be interpreted with caution. 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 8.8/100,000 population during week 11 2022, compared to the updated rate of 19.0/100,000 during week 10 2022. Sentinel GP ILI consultation rates during week 11 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 above age specific baseline thresholds in those aged ≥65 years but below baseline thresholds for all other age groups during week 11 2022.
- GP Out of Hours: The proportion of self-reported 'flu' calls to GP Out-of-Hours services remained stable, at 0.8% (139/16,995) during week 11 2022, compared to 0.8% (110/12,747) during week 10. The proportion of cough calls increased to 36.4% (6,191/16,995) during week 11 compared to 15.8% (2,016/12,747) during week 10.
- 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 7.6 (9/119) during week 11 2022 and 21.8% (59/271) during week 10 2022. Influenza positivity reported from the sentinel GP network increased during week 10 2021 to 10.9% (6/55), a lag time with testing and reporting is noted, with influenza positivity at 4.1% (2/49) during week 11 2022. Of the 68 influenza positive detections during weeks 10 and 11 2022, 67 were A(H3) and 1 A not subtyped. For the 2021/2022 season (weeks 40 2021 – 11 2022), of 1,351 sentinel GP ILI specimens and 4,930 non-sentinel respiratory specimens tested, 224 (3.6%) were positive for influenza: 215 A(H3), 3 A(H1)pdm09, 4 A (not subtyped) and 2 B.
- No RSV positive samples were detected from sentinel GP ILI or non-sentinel sources in week 11 2022. Rhinovirus/enterovirus and other respiratory viruses continue to circulate.
- Influenza and RSV notifications: 192 laboratory confirmed influenza cases - 19 A(H3) and 170 A (not subtyped) and 3 unknown subtype - were notified during week 11 2022. During weeks 40 2021-11 2022, 1,134 laboratory confirmed influenza cases were notified: 1,122 influenza A (183 A(H3), 4 A(H1)pdm09 and 935 A not subtyped) 6 influenza B and 6 subtype unknown. Only four RSV cases were notified during week 11 2022.
- Hospitalisations: 45 laboratory confirmed influenza – (three A(H3) ,42 A (not subtyped) hospitalised cases were notified during week 11 2022. During weeks 40 2021 – 11 2022, 240 laboratory confirmed influenza hospitalised cases were notified: 46 A(H3), 189 influenza A, two influenza B cases and three unknown subtypes.
- Critical care admissions: One confirmed influenza A H3 case was admitted to critical care during week 11 2022. For the 2021/2022 season, 7 confirmed influenza A (4 A (H3), 3 A not subtyped) cases were admitted to critical care units.
- Mortality: No deaths in notified influenza cases were notified to HPSC during week 11 2022. No excess all-cause mortality was reported during week 10 2022; data reported with one-week time lag.
- Outbreaks: Two laboratory confirmed influenza outbreaks, one in a nursing home and one in a hospital in HSE-West (n=1), and HSE South (n=1), were notified to HPSC in week 11 2022, bringing the season total to fifteen.
- International: European Region; influenza activity increased in week 10 2022, with different levels of activity observed between countries, both influenza A and B were detected, with general dominance of A(H3) viruses.

1. GP sentinel surveillance system - Clinical Data

- During week 11 2022, 22 influenza-like illness (ILI) cases were reported from the Irish sentinel GP network, corresponding to an ILI consultation rate of 8.8/100,000 population, a decrease compared to the updated rate of 19.0/100,00 during week 10 2022 (Figure 1). The sentinel GP ILI consultation rate is below the Irish sentinel GP ILI baseline threshold (18.1/100,000 population).
- Sentinel GP ILI rates remained below age specific baseline levels for those aged < 15 years (3.8/100,000) and those aged 15-64 years (7.9/100,000) and above baseline in those aged ≥ 65 years (20.9/100,000), 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.

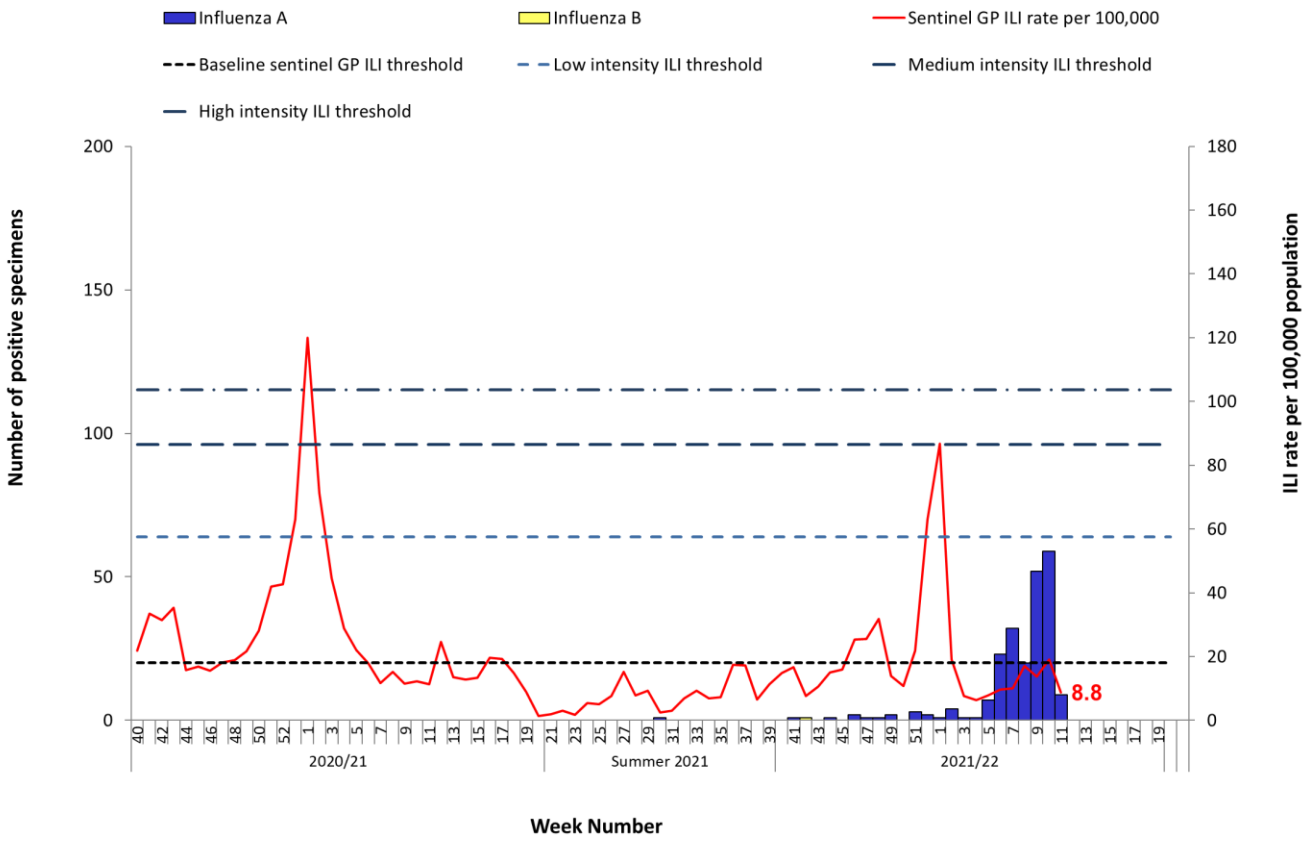

Figure 1: Sentinel GP Influenza-like illness (ILI) consultation rates per 100,000 population, baseline ILI threshold, medium and high intensity ILI thresholds and number of positive influenza A and B specimens tested by the NVRL, by influenza week and season. The current week sentinel GP ILI consultation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

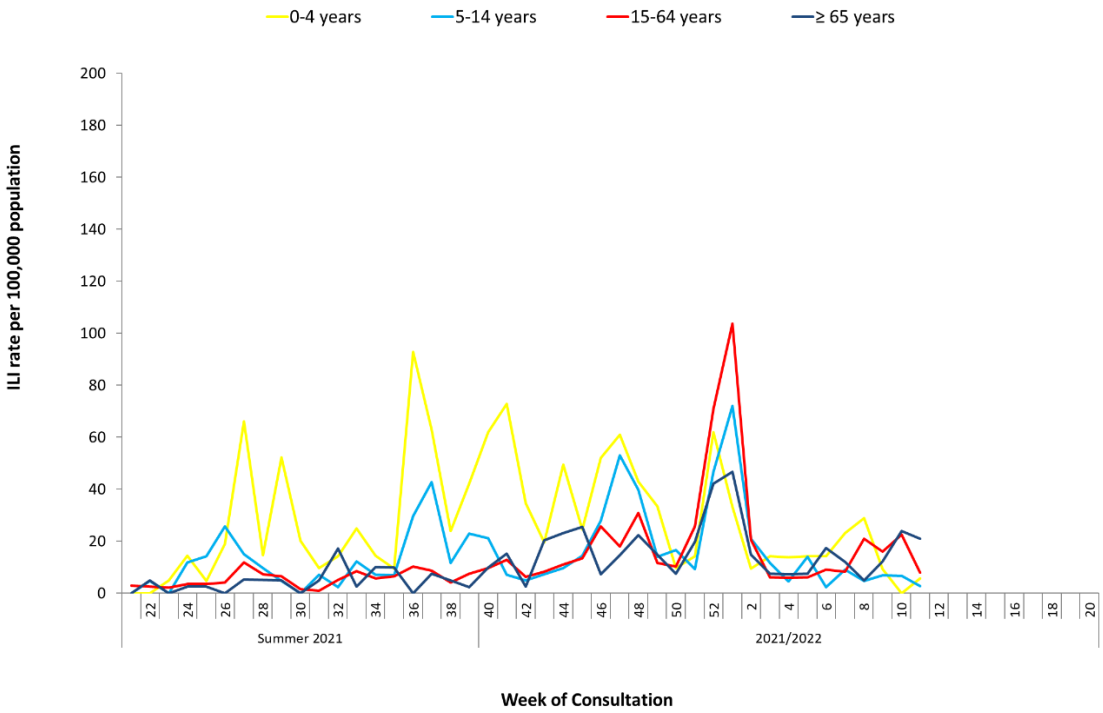

Figure 2: Age specific sentinel GP ILI consultation rate per 100,000 population by week during the summer of 2021 and the 2021/2022 influenza season to date. *Source: ICGP.*

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	10	11
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	13.7	19.0	8.8
<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	7.7	4.6	3.8
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	16.0	22.6	7.9
≥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	12.2	24.0	20.9
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	56	57	50

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 11 2022, 4.1% (2/49) sentinel GP ILI and 10% (7/70) 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 10 2022 was 7.6% (9/119).
- During week 10 2022, 10.9% (6/55) sentinel GP ILI and 24.5% (53/216) 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 10 2022 was 21.8% (59/271)
- During weeks 10 and 11 2022, 68 influenza A specimens were detected by the NVRL; 67 influenza A(H3) and one influenza A not subtyped.
- For the 2021/2022 season (weeks 40 2021 - 11 2022), of 1,351 sentinel GP ILI and 4,930 non-sentinel respiratory specimens tested, 224 were positive for influenza: 215 A(H3), 3 A(H1)pdm09, 4 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 10 and 11 2022. Table 3; Figure 5.
- Rhinovirus/enterovirus positive detections (non-sentinel respiratory sources) continue to be reported, with positivity levels at 2.9% (2/70) during week 11 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).

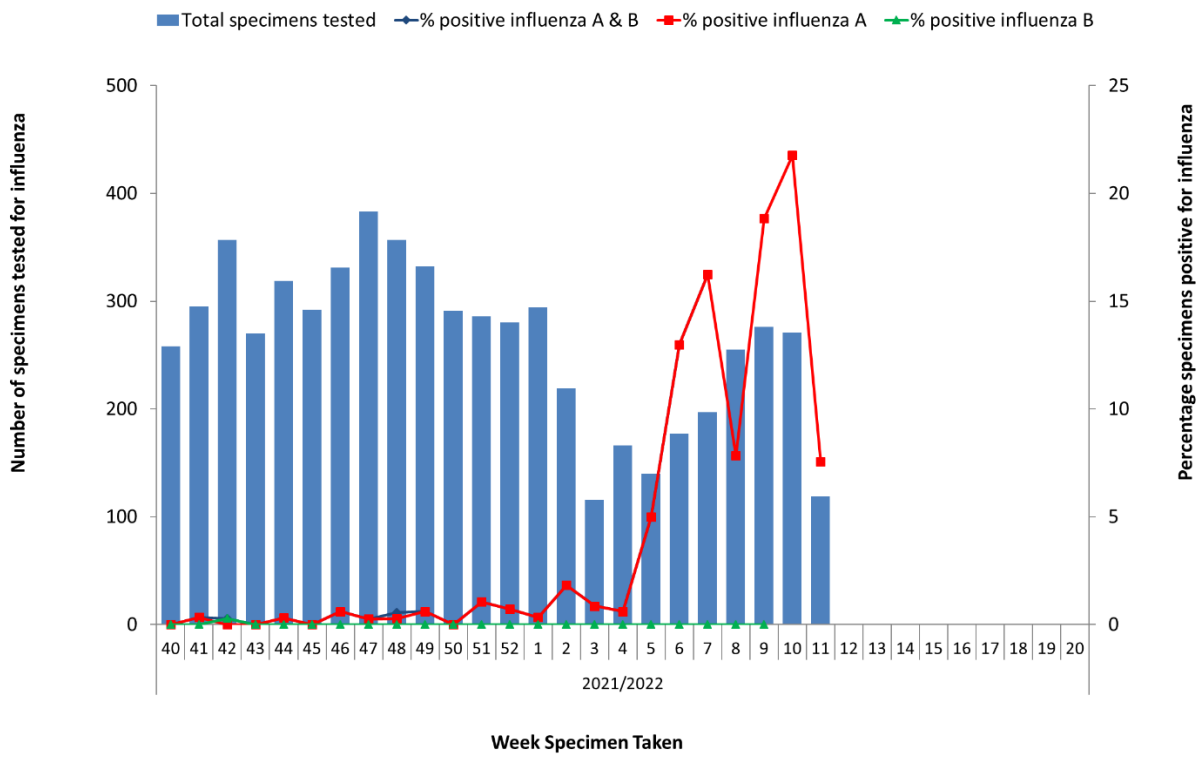

Figure 3: Number of specimens (from sentinel GP ILI and non-sentinel respiratory sources) tested by the NVRL for influenza and percentage influenza positive by week for the 2021/2022 influenza season. *Source: NVRL.*

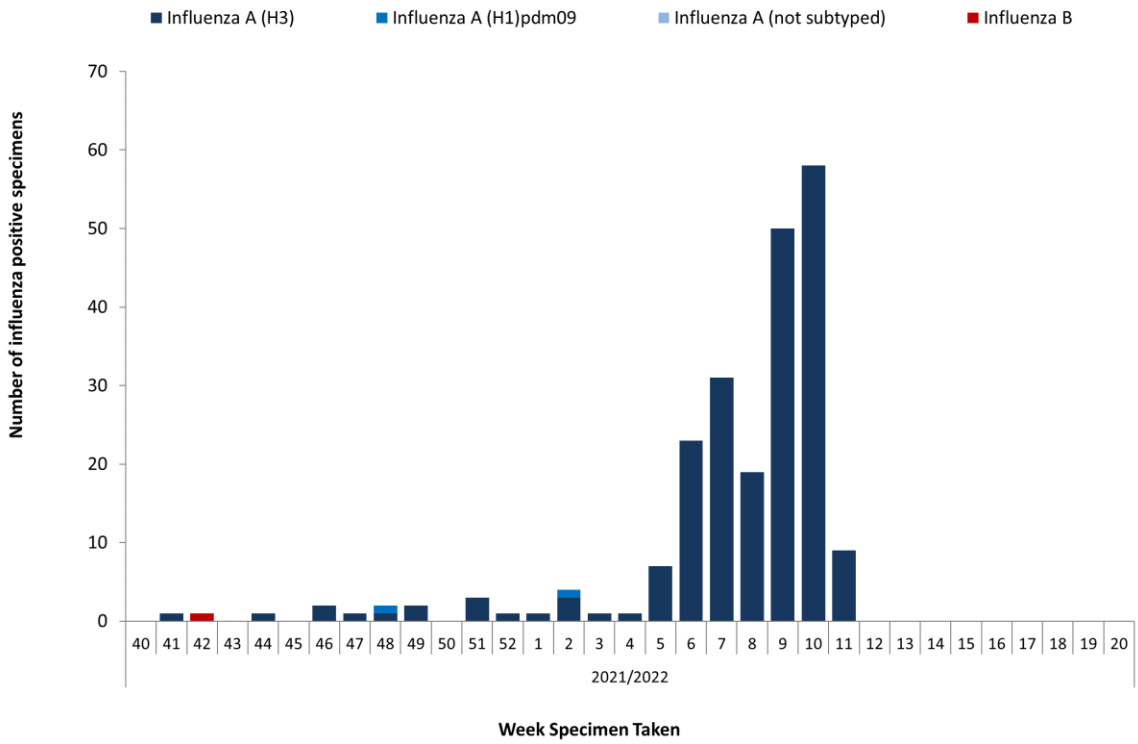

Figure 4: Number of positive influenza specimens (from sentinel GP ILI and non-sentinel respiratory sources) tested by the NVRL by influenza type/subtype and by week for the 2021/2022 influenza season. *Source: NVRL.*

Table 2: Number of sentinel GP ILI and non-sentinel respiratory specimens tested by the NVRL and positive influenza results, for week 10 and week 11 2022 and the 2021/2022 season (weeks 40 2021- 11 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
11 2022	Sentinel GP ILI referral	49	2	4.1	0	2	0	2	0	0	0	0
	Non-sentinel	70	7	10.0	0	7	0	7	0	0	0	0
	Total	**119**	**9**	**7.6**	**0**	**9**	**0**	**9**	**0**	**0**	**0**	**0**
10 2022	Sentinel GP ILI referral	55	6	10.9	0	6	0	6	0	0	0	0
	Non-sentinel	216	53	24.5	0	52	1	53	0	0	0	0
	Total	**271**	**59**	**21.8**	**0**	**58**	**1**	**59**	**0**	**0**	**0**	**0**
2021/2022	Sentinel GP ILI referral	1351	34	2.5	1	33	0	34	0	0	0	0
	Non-sentinel	4930	190	3.9	2	182	4	188	1	1	0	2
	Total	**6281**	**224**	**3.6**	**3**	**215**	**4**	**222**	**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 10 and week 11 2022 and the 2021/2022 season (weeks 40 2021-11 2022). *Source: NVRL*

Surveillance period	Specimen type	Total tested	Number RSV positive	% RSV positive	RSV A	RSV B	RSV (unspecified)
Week 11 2021	Sentinel GP ILI	49	0	0.0	0	0	0
	Non-sentinel	70	0	0.0	0	0	0
	Total	**119**	**0**	**0.0**	**0**	**0**	**0**
Week 10 2021	Sentinel GP ILI	55	0	0.0	0	0	0
	Non-sentinel	216	0	0.0	0	0	0
	Total	**271**	**0**	**0.0**	**0**	**0**	**0**
2021/2022	Sentinel GP ILI	1351	80	5.9	43	37	0
	Non-sentinel	4930	702	14.2	395	306	1
	Total	**6281**	**782**	**12.5**	**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 10 and week 11 2022 and the 2021/2022 season (weeks 40 2021-11 2022). *Source: NVRL*

Virus	Week 11 2021 (N=70)		Week 10 2021 (N=216)		2021/2022 (N=4930)	
	Total positive	% positive	Total positive	% positive	Total positive	% positive
Influenza virus	7	10.0	53	24.5	190	3.9
Respiratory Synctial Virus (RSV)	0	0.0	0	0.0	702	14.2
Rhino/enterovirus	2	2.9	37	17.1	986	20.0
Adenovirus	0	0.0	7	3.2	79	1.6
Bocavirus	0	0.0	7	3.2	136	2.8
Human metapneumovirus (hMPV)	1	1.4	6	2.8	155	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	2.0
Parainfluenza virus type 4 (PIV-4)	0	0.0	1	0.5	67	1.4

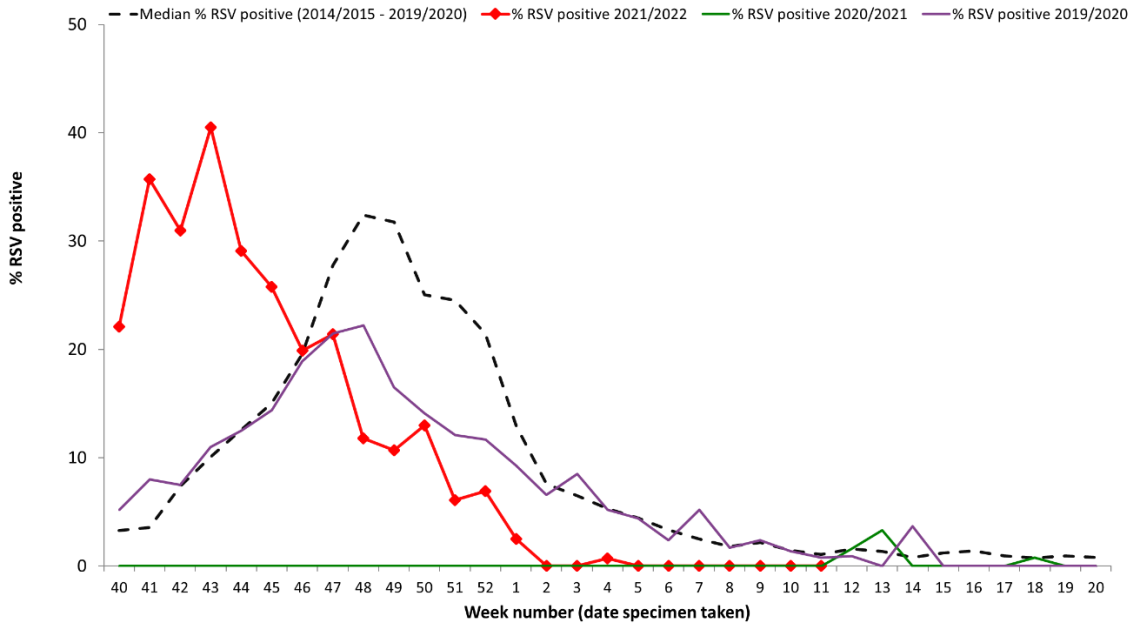

Figure 5: NVRL non-sentinel RSV positivity by week specimen was taken for 2021/2022, 2020/2021 and 2019/2020 seasons compared to median % RSV positivity (2014/2015-2019/2020). *Source: NVRL.*

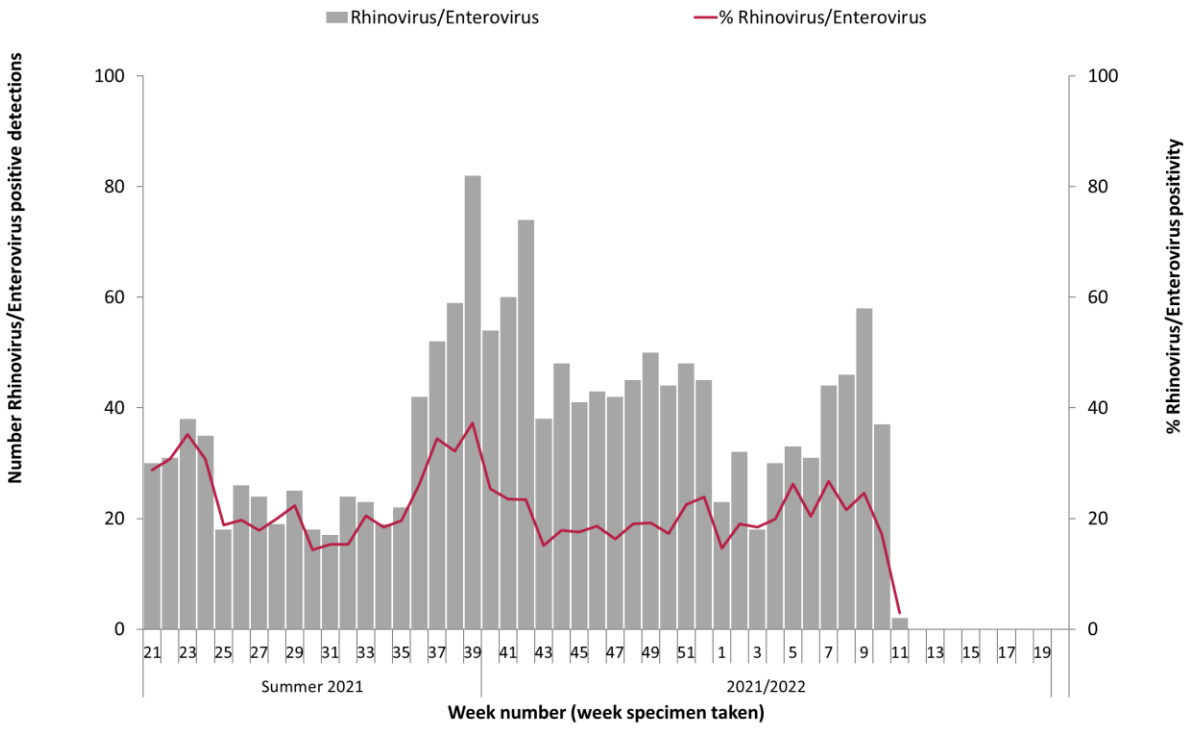

Figure 6: Number (and percentage) of non-sentinel rhinovirus/enterovirus positive detections by week specimen was taken for summer 2021 and 2021/2022 season. *Source: NVRL.*

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 11 2022, with confirmed influenza cases notified in all areas: HSE-East (n=79), HSE-South (n=26), HSE-West (n=27), HSE-Mid West (n=5), HSE-Midlands (n=13), HSE-Northeast (n=6), HSE-Southeast (n=14) and HSE-Northwest (n=22).

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.

- 6,191 (36.4% of total calls; N=16,995) self-reported cough calls were reported by a network of GP OOHs services during week 11 2022, which is above baseline levels (10.7%) and an increase compared to the updated rate of 15.8% (n= 2,016/12,747) during week 10 2022 (Figures 7 & 8).
- 139 (0.8% of total calls; N=16,995) self-reported 'flu' calls were reported by a network of GP OOHs services during week 11 2022, remaining stable compared to 101 (0.8% of total calls; N=12,747) self-reported 'flu' calls during week 10 2022. The baseline threshold level for self-reported 'flu' calls is 2.3%. (Figure 9).
- Four GP OOH services provided data for week 11 2022.

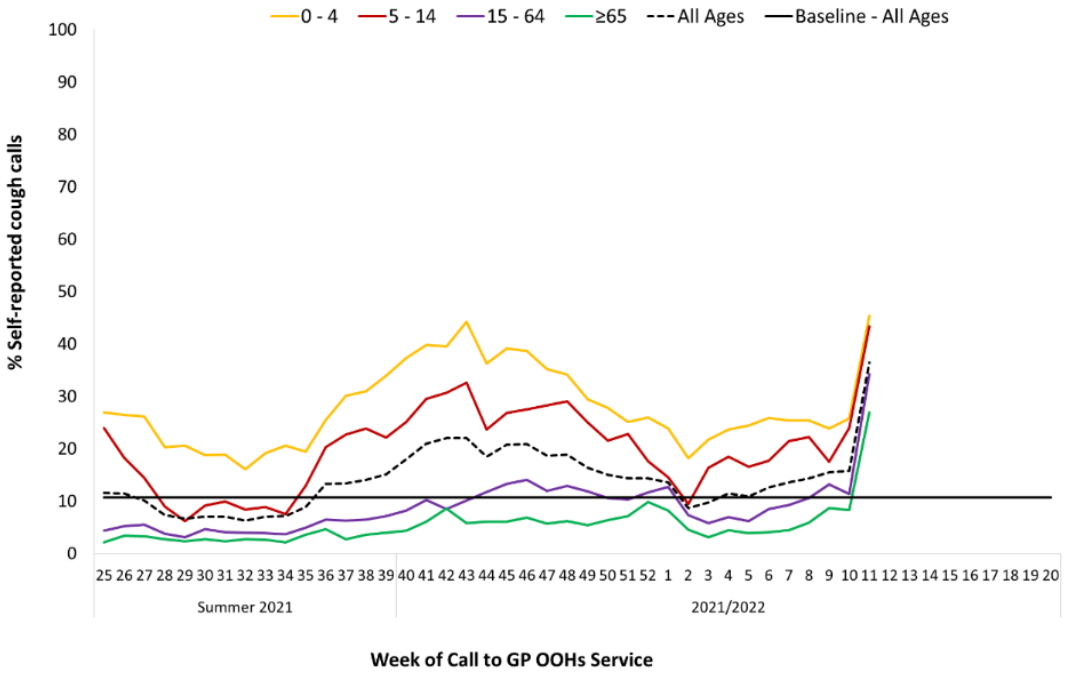

Figure 7: Percentage of self-reported COUGH calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call, 2021-2022. The % cough calls baseline for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours services in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

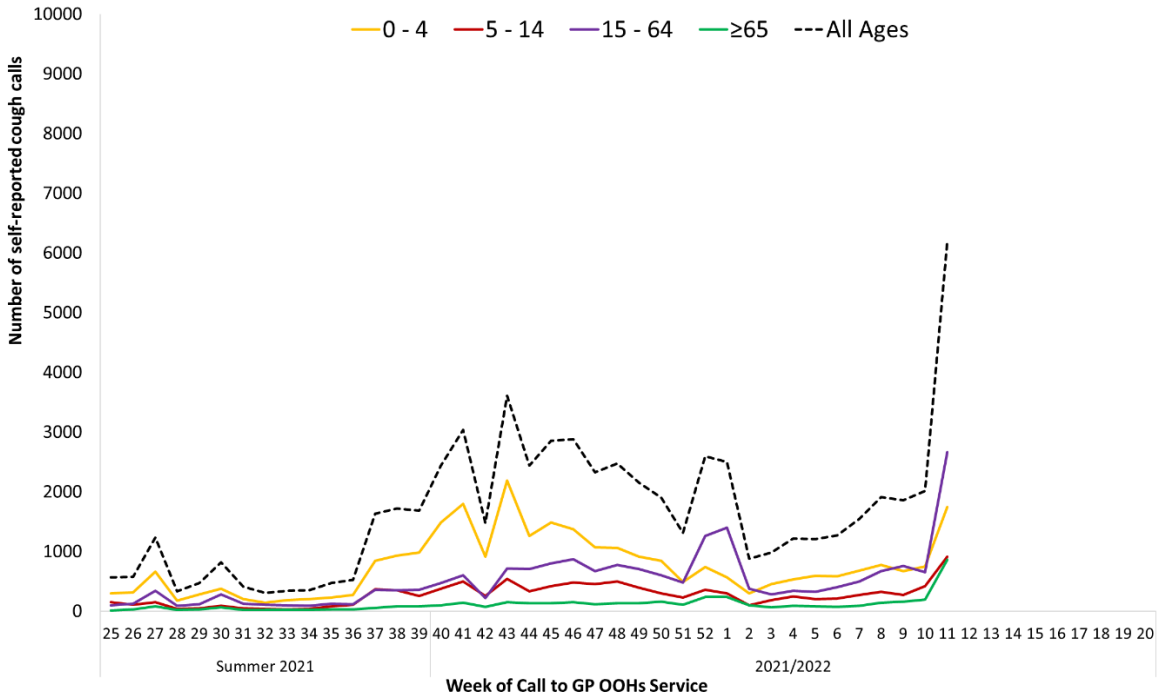

Figure 8: Number of self-reported COUGH calls for all ages and by age group to GP Out-of-Hours services by week of call, 2021-2022. *Source: GP Out-Of-Hours services in Ireland (collated by HSE-NE) & ICGP.*

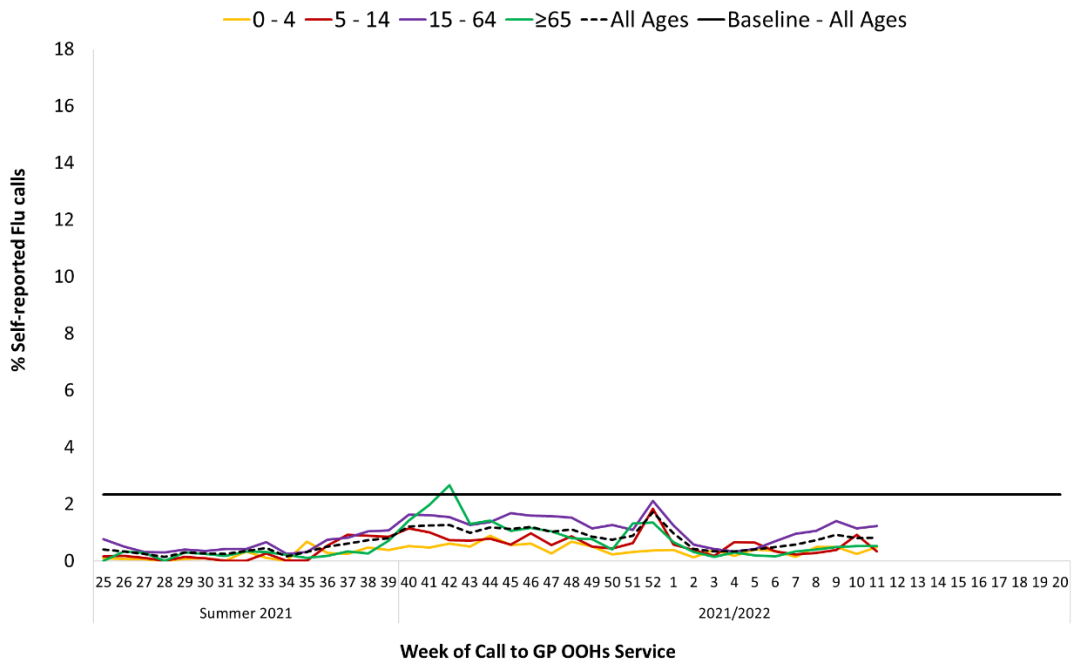

Figure 9: Percentage of self-reported FLU calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call, 2021-2022. The % flu calls baseline for all ages calculated using the MEM method on historic data is shown. *Source: GP Out-Of-Hours services in Ireland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

- One hundred and ninety-two laboratory confirmed influenza cases - 19 A(H3) and 170 A (not subtyped) and 3 unknown subtype - were notified to HPSC during week 11 2022 (Figure 10). The median age of confirmed cases notified during week 11 2022 was 36 years (interquartile range 23-68 years). Laboratory confirmed influenza cases were notified from HSE-East (n=79), HSE-South (n=26), HSE=West (n=27), HSE-Midwest (n=5), HSE-Midlands (n=13), HSE-Northeast (n=6), HSE-Southeast (n=14) and HSE-Northwest (n=22) during week 11 2022.
- One thousand one hundred and thirty four laboratory confirmed influenza cases were notified during the 2021/2022 season (weeks 40 2021 – 11 2022): 1,122 influenza A (183 A(H3), 4 A(H1)pdm09 and 935 A not subtyped) 6 influenza B and 6 subtype unknown. The median age of notified cases for the 2021/2022 season to date is 29 years (interquartile range 21-61 years).
- During week 11 2022, 4 RSV cases were notified; three 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.

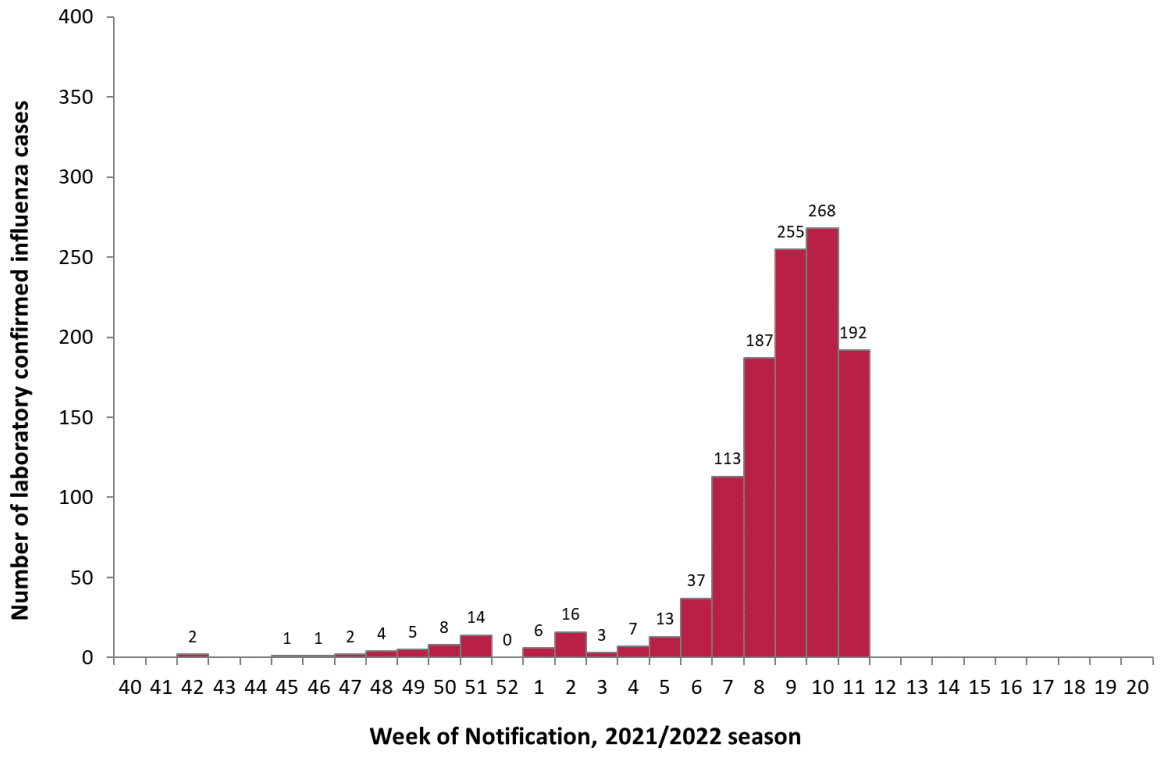

Figure 10: Number of laboratory confirmed influenza cases notified by week of notification, 2021/2022. *Source: Ireland's Computerised Infectious Disease Reporting System*

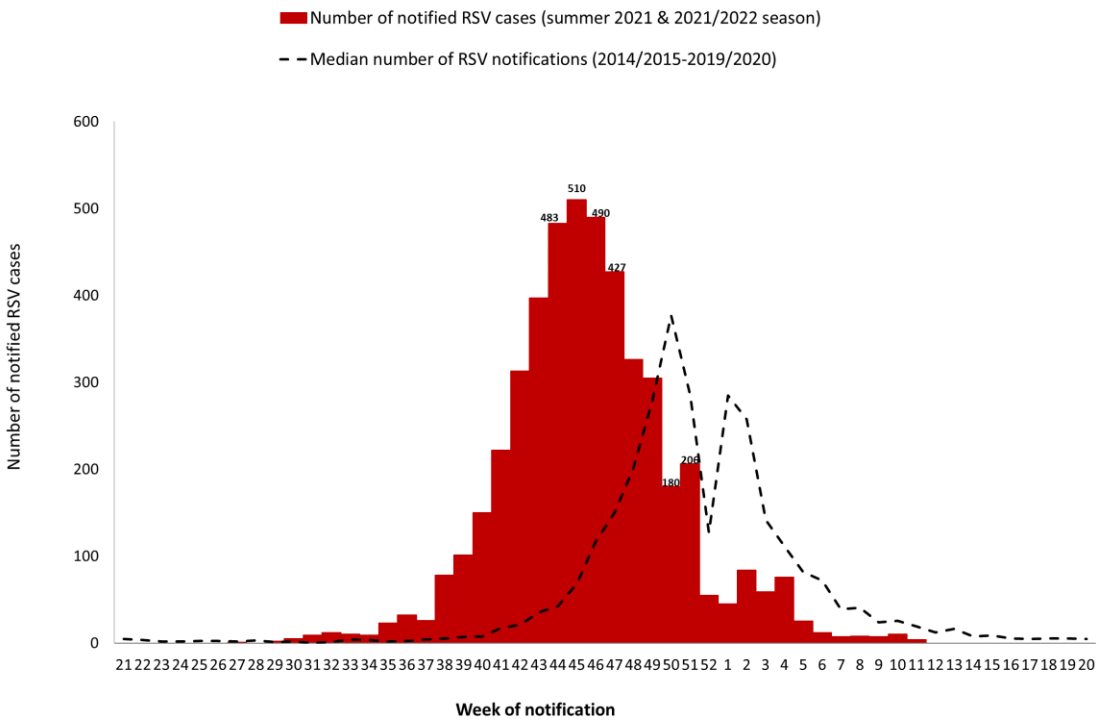

Figure 11: Number of RSV cases notified by week of notification, summer 2021 and 2021/2022, and median number of RSV notifications by week (2014/2015-2019/2020). *Source: Ireland's Computerised Infectious Disease Reporting System.*

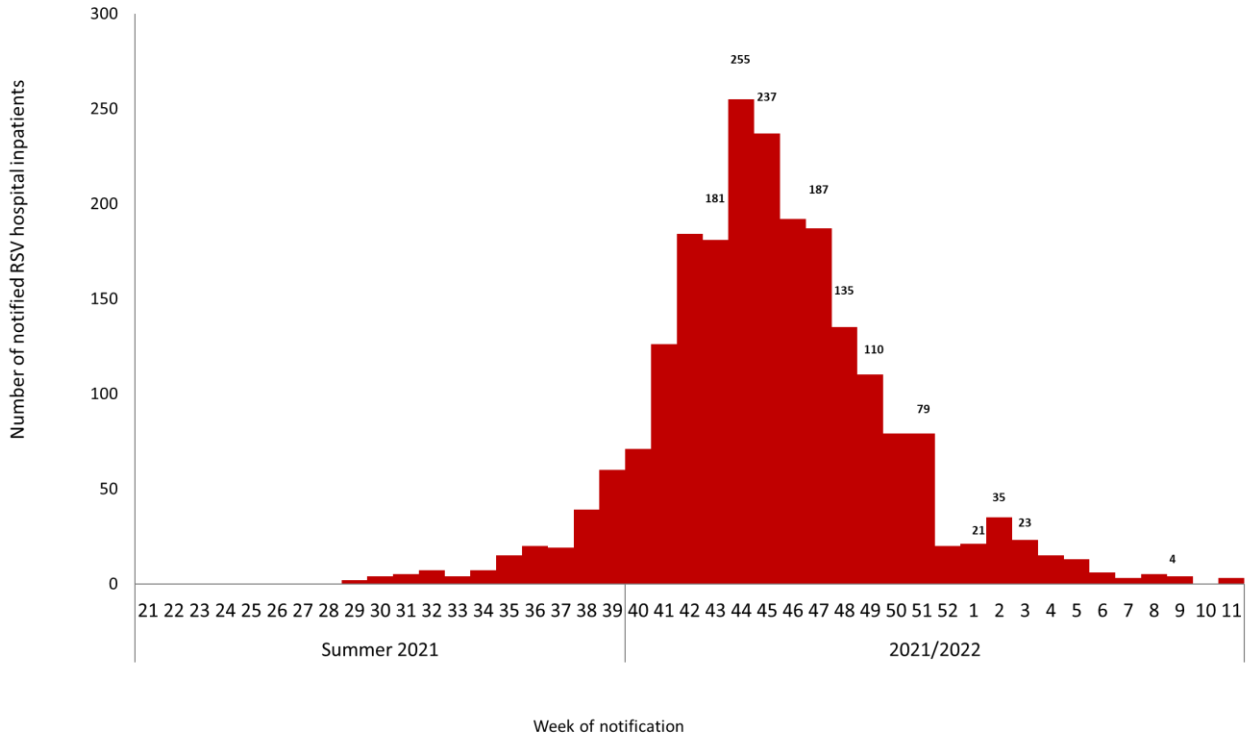

Figure 12: Number of notified RSV cases reported as hospital inpatients, by week of notification, summer 2021 and 2021/2022. *Source: Ireland's Computerised Infectious Disease Reporting System.*

6. Influenza Hospitalisations

- During week 11 2022, forty-five laboratory confirmed influenza A notified cases were reported as hospital inpatients - three subtyped A(H3), 42 influenza A not subtyped. Of these 45 hospital inpatients, the median age is 40 years (interquartile range 24-75 years), 18 cases were aged ≥65 years of age. During week 11 2022, confirmed influenza hospitalised cases have been notified from HSE-East (n=16), -Southeast (n=5), -Midlands (n=3), -Northwest (n=12), -West (n=4) – Northeast (n=2) and HSE-South (n=3).
- During weeks 40 2021 - 11 2022, 240 laboratory confirmed influenza cases reported as hospital inpatients were notified: 46 A(H3), 189 influenza A (not subtyped), two influenza B cases and three unknown subtypes. During week 40 2021-week 11 2022, the median age of those hospitalised is 60 years (interquartile range 23-78 years). Figures 13 & 14 and Table 5.

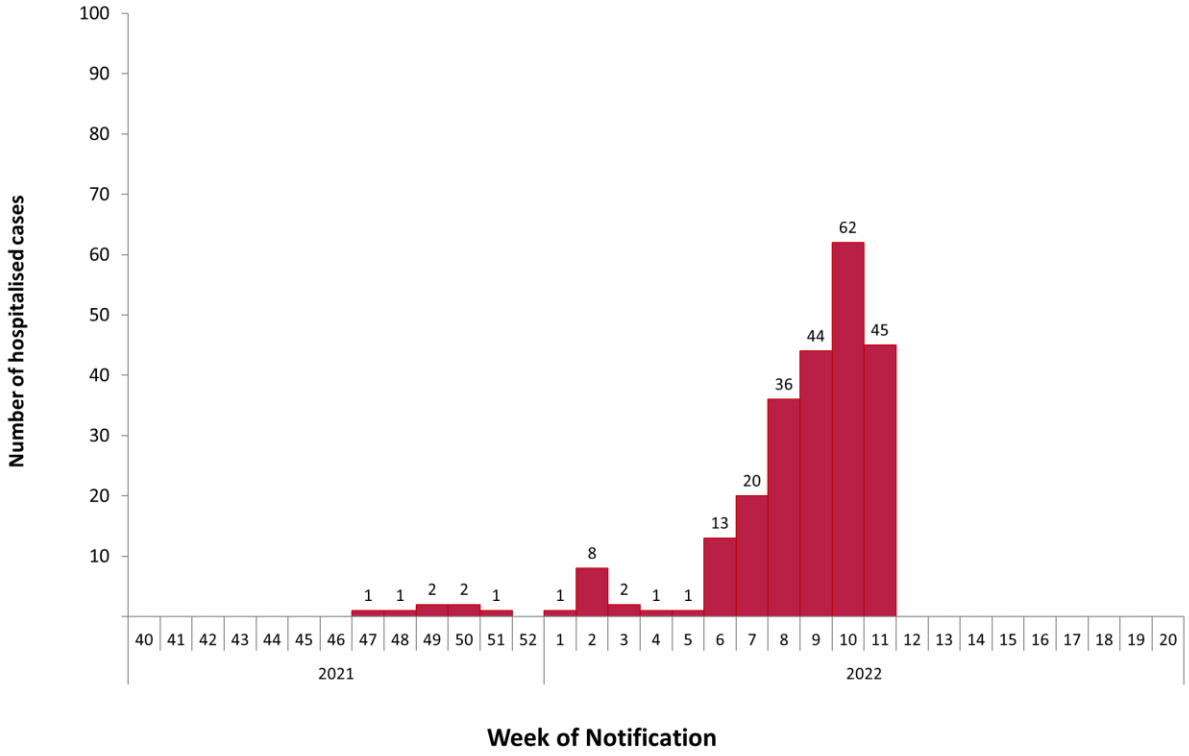

Figure 13: Number of notified laboratory confirmed influenza cases reported as hospital inpatients, by week of notification 2021/2022. *Source: Ireland's Computerised Infectious Disease Reporting System*

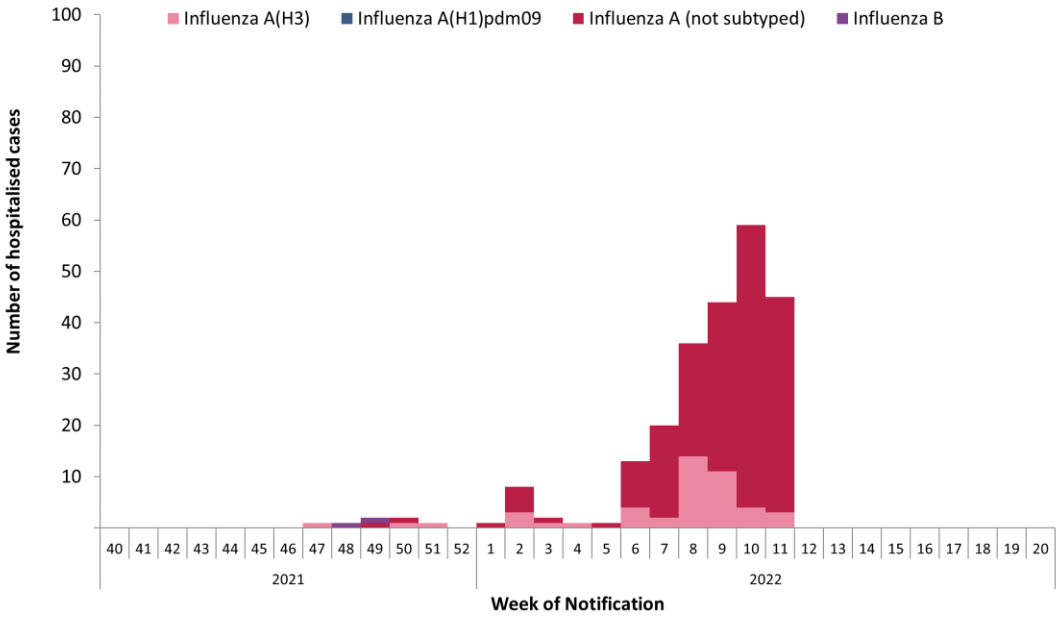

Figure 14: Number of notified laboratory confirmed influenza cases, reported as hospital inpatients, by influenza type/subtype and week of notification, 2021/2022 season *Source: Ireland's Computerised Infectious Disease Reporting System*

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 11 2022, one laboratory confirmed influenza A (H3) case was admitted to critical care and reported to HPSC.
- During the 2021/2022 influenza season to date (week 40 2021 - week 11 2022), seven laboratory confirmed influenza A - 4 A(H3) and 3 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 2021-11 2022. *Source: Ireland's Computerised infectious Disease Reporting System*.

	Hospitalised		Admitted to ICU	
Age (years)	Number	Age specific rate per 100,000 pop.	Number	Age specific rate per 100,000 pop.
<1	5	8.0	0	0.0
1-4	14	5.2	0	0.0
5-14	7	1.0	0	0.0
15-24	44	7.6	0	0.0
25-34	18	2.7	1	0.2
35-44	14	2.1	1	0.1
45-54	7	1.1	0	0.0
55-64	20	3.9	3	0.6
≥65	111	17.4	2	0.3
Unknown	0	-	0	-
Total	**240**	**5.0**	7	**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 11, 2022, twenty SARI cases were admitted to the SARI hospital site, corresponding to an incidence rate per emergency hospitalisation of 78.1/1,000; a decrease on 87.0/1,000 in week 10, 2022.
- The SARI incidence rate per hospital catchment population was 6.6/100,000 population during week 11 a decrease on 8.5/100,000 in week 10, 2022.
- SARI SARS-CoV-2 positivity was 33% (6/18 tested) during week 11 2022, compared to 50% (13/26) during week 10 2022.
- Three SARI cases tested positive for influenza A, during week 11 2022, corresponding to influenza positivity of 18.8% (3/16 tested), compared to 4.5% (1/22 tested) during week 10 2022
- No SARI case tested positive for RSV during weeks 10 and 11 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 11 2022. During the 2021/2022 season (weeks 40 2021- 11 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 10 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/

- Two influenza outbreaks in HSE-West (n=1) -South (n=1) was notified to HPSC during week 11 2022.
- Of the two influenza outbreaks notified during week 11 2022, one occurred in an hospital and one in a nursing home.
- During the 2021/2022 influenza season, fifteen laboratory confirmed influenza outbreaks were notified: seven hospital outbreaks, three nursing home outbreaks, two family outbreaks, two at other healthcare service and one outbreak associated with a social gathering.
- For the 2021/2022 season to date (weeks 40 2021- 11 2022), fifteen influenza outbreaks, five RSV and twelve ARI (SARS-CoV-2 negative) outbreaks were notified to HPSC. Of the twelve ARI outbreaks, two were associated with rhinovirus/enterovirus, four with seasonal coronavirus (OC43), one with human metapneumovirus and five with no pathogen identified.

11. Influenza Vaccinations

From 01/09/2021 up to the week ending 20/03/2022, seasonal influenza vaccination uptake for those aged 2-17 years was 16.3% (n=176,769/1,081,232) and 74.3% (n=552,044/743,087) for those aged ≥65 years. Data were provided by GPs, Pharmacists and PCRS staff.

12. International Summary

In the European region, during week 10 2022 (week ending 13/03/2022), Belgium, Denmark, Estonia, France, Georgia, Ireland, Kazakhstan, Luxemburg, Montenegro, Netherlands, Norway, Portugal, Slovenia and United Kingdom (Scotland) 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 and was 24%. Countries mostly in the western-central part of the Region reported seasonal influenza activity at or above 30% in sentinel primary care: the Netherlands (85%), Hungary (69%), France (57%), Slovenia (57%) Luxemburg (44%), Denmark (36%) and Switzerland (34%). Influenza A and B viruses were both detected with A(H3) viruses being dominant across all monitoring systems. A(H3) viruses were most frequently detected in patients hospitalised with confirmed influenza virus detection.
https://flunewseurope.org/

The latest available WHO influenza report was published on 21 March 2022, based on data up to 6 March 2022. In the temperate zones of the northern hemisphere, influenza activity increased or remained stable with detections of mainly influenza A(H3N2) viruses and B/Victoria lineage viruses reported. In North America, influenza activity increased in recent weeks but remained lower than pre-COVID-19 pandemic levels at this time of the year and was predominantly due to influenza A viruses, with A(H3N2) predominant among the subtyped viruses. Respiratory syncytial virus (RSV) activity further decreased in the United States of America (USA) and Canada. In East Asia, influenza activity with mainly influenza B/Victoria lineage detections increased in China. Elsewhere, influenza illness indicators and activity remained low. Increased RSV activity was reported in Mongolia and the Republic of Korea. In Northern Africa, influenza detections of influenza A(H3N2) continued to be reported. In Western Asia, influenza activity was low across reporting countries. In the Caribbean and Central American countries, influenza detections were predominantly influenza A(H3N2) and activity remained low. In tropical South America, low influenza activity was reported with influenza A(H3N2) predominant. In tropical Africa, influenza activity was reported from Eastern Africa with influenza A(H3N2) predominating followed by influenza B/Victoria lineage viruses. In Southern Asia, influenza virus detections were at low levels with influenza A(H1N1)pdm09, A(H3N2) and B viruses detected. In South-East Asia, influenza detections were at low levels with influenza A(H3N2) predominant. In the temperate zones of the southern hemisphere, influenza activity remained low overall, although detections of influenza A(H3N2) continued to be reported in some countries in temperate South America. A(H3N2) decreased overall. 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 B/Victoria lineage and from Middle Africa with influenza B predominantly detected. 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

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

13. 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

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