

Influenza Surveillance Report - Week 15 2023 (10th - 16th April 2023)



Summary

Influenza activity remained at low levels in Ireland during week 15 2023, with influenza B viruses the dominant circulating viruses. Other respiratory viruses circulating include rhino/enteroviruses, human metapneumovirus (hMPV) and parainfluenza virus type 3 (PIV-3).

- **Influenza-like illness (ILI):** The sentinel GP influenza-like illness (ILI) consultation rate was 4.7 per 100,000 population during week 15 2023. This is a decrease compared to the updated rate of 7.7/100,000 during week 14 2023. ILI consultation rates have been below the Irish baseline threshold (18.1/100,000 population) for the last 10 weeks (since week 6 2023). Sentinel GP ILI age specific rates were below age specific baseline thresholds in all age groups during week 15 2023.
- **National Virus Reference Laboratory (NVRL):**
- During week 15 2023, of 47 sentinel GP Acute Respiratory Infection (ARI) specimens tested and reported by the NVRL, two (4.3%) were positive for influenza B, three (6.4%) were positive for SARS-CoV-2 and no specimens were positive for RSV. hMPV positivity decreased to 6.4% (3/47) in week 15 2023, compared to 8.1% (5/62) in week 14 2023. There were six (12.8%) rhino/enterovirus and three (6.4%) PIV-3 positive specimens in week 15 2023.
- Of 160 non-sentinel respiratory specimens tested by the NVRL during week 15 2023, four (2.5%) were positive for influenza: one influenza A(H1N1)pdm09 and three influenza B. There were no positive specimens for RSV (0/160) detected during week 15 2023. Rhino/enterovirus positivity decreased to 11.2% (18/160) in week 15, compared to 23.1% (39/169) in week 14. hMPV positivity remained stable at 3.8% in week 15 and PIV-3 positivity increased to 7.5% (12/160), compared to 2.4% (4/169) in week 14.
- Of 1,955 sentinel GP ARI specimens and non-sentinel respiratory specimens positive for influenza and reported by the NVRL during the 2022/2023 season, 482 (24.6%) were coinfecting with other respiratory viruses.
- **Influenza notifications:** 162 laboratory confirmed influenza cases were notified during week 15 2023 - 12 influenza A (not subtyped), two influenza A(H1N1)pdm09 and 148 influenza B. This is a decrease compared to 201 cases reported during week 14 2023. Age specific rates were low in all age groups during week 15.
- **RSV notifications:** 15 RSV cases were notified during week 15 2023, stable compared to 13 RSV cases notified in week 14 2023.
- **Hospitalisations:** During week 15 2023, 38 laboratory confirmed influenza cases were reported as hospital inpatients: two influenza A (not subtyped) and 36 influenza B cases. Influenza hospitalised cases during week 14 2023 decreased marginally to 38, compared to 43 in week 14 2023.
- **Critical care admissions:** No laboratory confirmed cases were admitted to critical care units and notified to HPSC during week 15 2023. During weeks 40 2022-15 2023, 180 laboratory confirmed influenza cases – 32 A(H1N1)pdm09, 31 A(H3N2), 105 A (not subtyped) and 12 influenza B have been admitted to critical care and notified to HPSC. Age specific rates for the season to date were highest in those aged 65 years and older. During weeks 40 2022-15 2023, of 156 laboratory confirmed influenza ICU cases with known influenza vaccination status, 106 (67.9%) were reported as NOT having received the 2022/2023 influenza vaccine.
- **Mortality:** There were no deaths in notified influenza cases reported to HPSC during week 15 2023. During weeks 40 2022-15 2023, 193 deaths in notified influenza cases were reported – 32 influenza A(H3N2), 26 A(H1N1)pdm09, 128 A (not subtyped), six influenza B and one influenza A and B coinfection. During the 2022/2023 season, excess all-cause mortality was reported for five consecutive weeks (weeks 51 2022 - 3 2023). Excess pneumonia and influenza mortality was reported for four consecutive weeks (weeks 51 2022 - 2 2023).
- **Outbreaks:** There were two ARI outbreaks (one in a residential institution and one in a healthcare setting), and one COVID-19 and influenza A mixed outbreak in a nursing home notified during week 15 2023. During weeks 40 2022-15 2023, 156 influenza outbreaks were notified.
- **International:** Globally, influenza activity continued to decrease following the peak in late 2022. In Europe, influenza activity has decreased in recent weeks.

1. GP sentinel surveillance system - Clinical Data

- During week 15 2023, 13 sentinel GP influenza-like illness (ILI) consultations were reported from the Irish sentinel GP network, corresponding to an ILI consultation rate of 4.7 per 100,000 population, compared to 7.7 per 100,000 population during week 14 (Figure 1).
- Sentinel GP ILI consultation rates were below the baseline threshold during week 15 2023.
- The sentinel GP ILI consultation rates have been below the Irish sentinel GP ILI baseline threshold (18.1/100,000 population) for 10 consecutive weeks, since week 6 2023.
- Age specific ILI consultation rates were below age specific baseline thresholds in all age groups during week 15 2023 (Figure 2, Table 1).
- The Irish sentinel baseline ILI threshold for the 2022/2023 influenza season is 18.1 per 100,000 population. ILI rates above this baseline threshold combined with sentinel GP influenza positivity >10% indicate the likelihood that influenza is circulating in the community. The Moving Epidemic Method (MEM) is used to calculate thresholds for GP ILI consultations in a standardised approach across Europe. The baseline ILI threshold (18.1/100,000 population), low (57.5/100,000 population), medium (86.5/100,000 population) and high (103.6/100,000 population) intensity ILI thresholds are shown in Figure 1. Age specific MEM threshold levels are shown in Table 1.

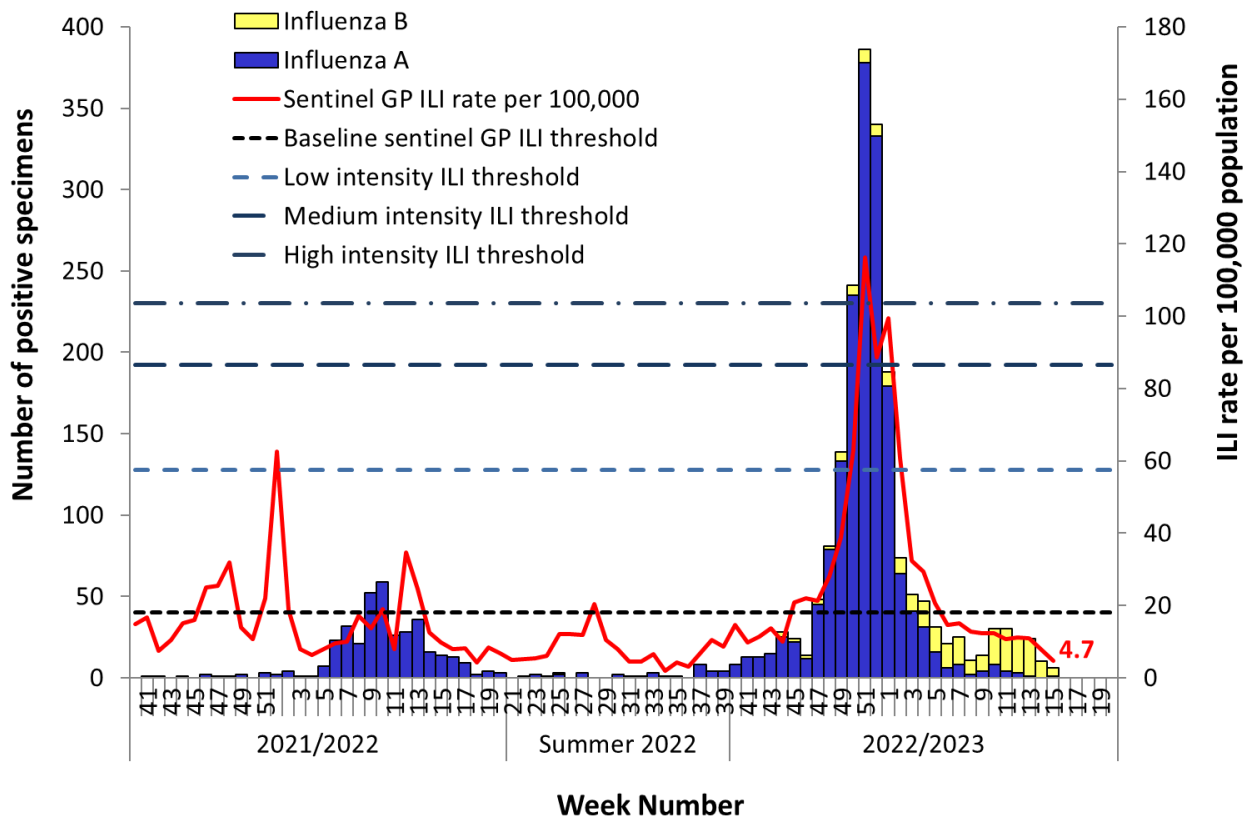


Figure 1: Sentinel GP Influenza-like illness (ILI) consultation rates per 100,000 population, baseline ILI threshold, medium and high intensity ILI thresholds and number of positive influenza A and B specimens tested by the NVRL, by influenza week and season. *Source: ICGP and NVRL*

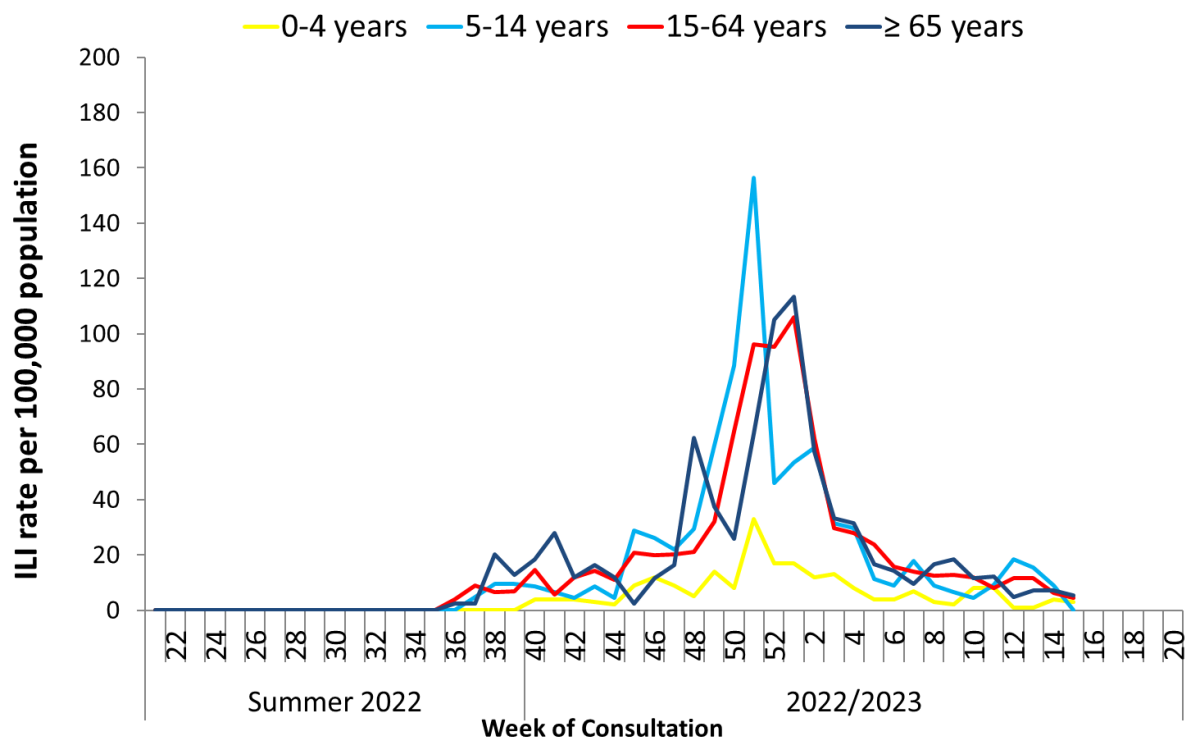


Figure 2: Age specific sentinel GP ILI consultation rate per 100,000 population by week during the summer of 2022 and the 2022/2023 influenza season to date. *Source: ICGP.*

Table 1: Age specific sentinel GP ILI consultation rate per 100,000 population by week (weeks 48 2022-15 2023), colour coded by sentinel GP ILI age specific Moving Epidemic Method (MEM) threshold levels. *Source: ICGP.*

Age group (years)	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
All Ages	27.9	38.9	63.0	116.2	88.6	99.4	60.7	32.4	29.3	20.6	14.7	15.2	12.7	12.4	12.4	10.8	11.1	11.0	7.7	4.7
<15 yrs	27.3	60.9	71.1	154.3	57.2	62.5	58.4	40.6	32.3	13.5	12.1	22.5	10.5	7.3	14.7	18.5	13.9	11.9	12.1	5.2
15-64 yrs	21.1	32.1	64.6	96.2	95.4	106.0	62.2	29.6	27.8	23.8	15.6	14.1	12.6	12.8	11.9	8.0	11.5	11.5	6.4	4.4
≥65 yrs	62.3	37.5	25.7	63.8	105.0	113.5	57.3	33.2	31.6	16.6	14.3	9.5	16.6	18.5	11.6	12.2	4.9	7.0	7.2	5.4
Reporting practices (N=61)	58	59	59	58	58	59	57	59	58	59	58	59	59	60	60	58	57	59	58	54

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 15 2023, of 47 sentinel GP Acute Respiratory Infection (ARI) specimens tested and reported by the NVRL, two (4.3%) were positive for influenza B, three (6.4%) were positive for SARS-CoV-2 and no specimens were positive for RSV. hMPV positivity decreased to 6.4% (3/47) in week 15 2023, compared to 8.1% (5/62) in week 14 2023. There were six (12.8%) rhino/enterovirus and three (6.4%) PIV-3 positive specimens in week 15 2023.
- During week 14 2023, of 62 sentinel GP ARI specimens tested and reported by the NVRL, six (9.7%) were positive for influenza B. There were seven (11.3%) specimens positive for SARS-CoV-2 and no specimens were positive for RSV. There were eight (12.9%) rhino/enterovirus and two (3.2%) PIV-3 positive specimens in week 14 2023.
- Of 160 non-sentinel respiratory specimens tested and reported by the NVRL during week 15 2023, four (2.5%) were positive for influenza: one influenza A(H1)pdm09 and three influenza B.
- During week 14 2023, of 169 non-sentinel respiratory specimens tested, four (2.4%) were positive for influenza: all were influenza B.
- RSV positivity (non-sentinel respiratory specimens) was at low levels in recent weeks, at 1.2% (2/169) during week 14 2023 and no positive RSV specimens were detected (0/160) during week 15 2023.
- Rhinovirus/enterovirus positivity from non-sentinel respiratory specimens decreased to 11.2% (18/160) during week 15 2023 compared to 23.1% (39/169) during week 14 2023 (Figure 3b).
- Parainfluenza virus type 3 (PIV-3) positivity increased to 7.5% (12/160) in week 15 2023 compared to 2.4% (4/169) in week 14 2023
- Other respiratory viruses (ORVs) are being detected at lower levels in recent weeks (Figure 3a and 3b).
- Of 1,955 sentinel GP ARI specimens and non-sentinel respiratory specimens positive for influenza and reported by the NVRL during the 2022/2023 season, 482 (24.6%) were coinfecting with other respiratory viruses.

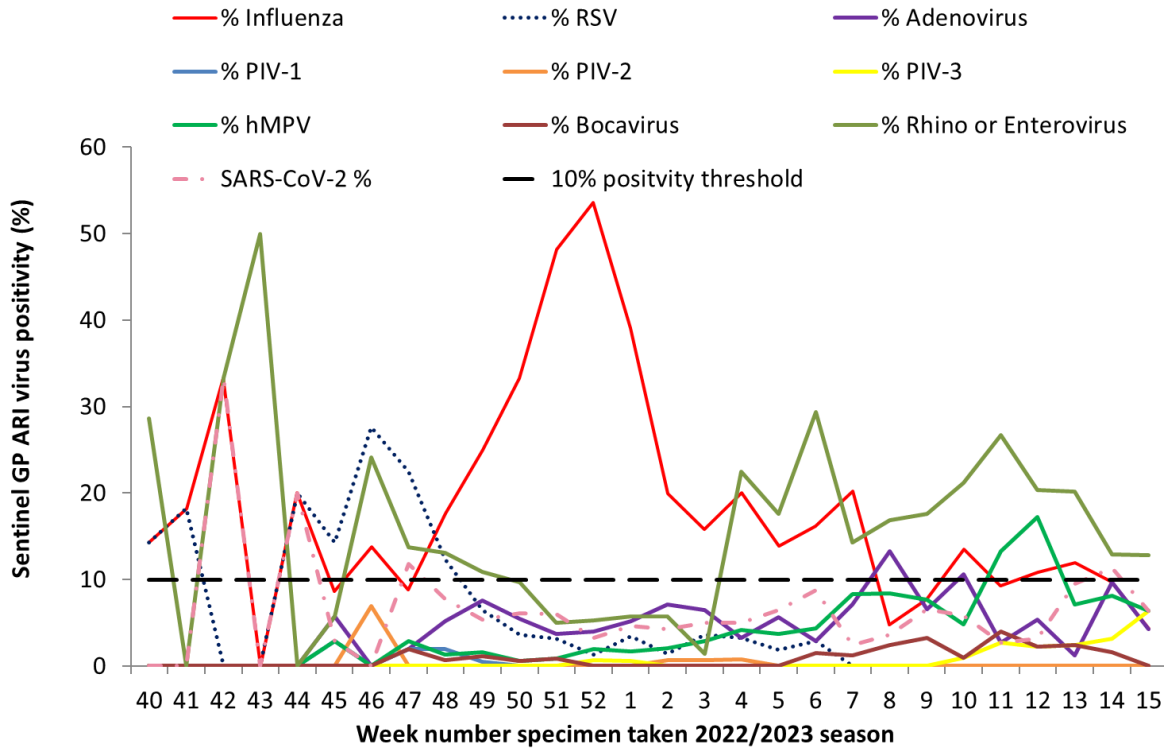


Figure 3a: Percentage positive results for **sentinel GP ARI** specimens tested by the NVRL for influenza, RSV and other respiratory viruses by week specimen was taken, weeks 40 2022-15 2023. *Source: NVRL*

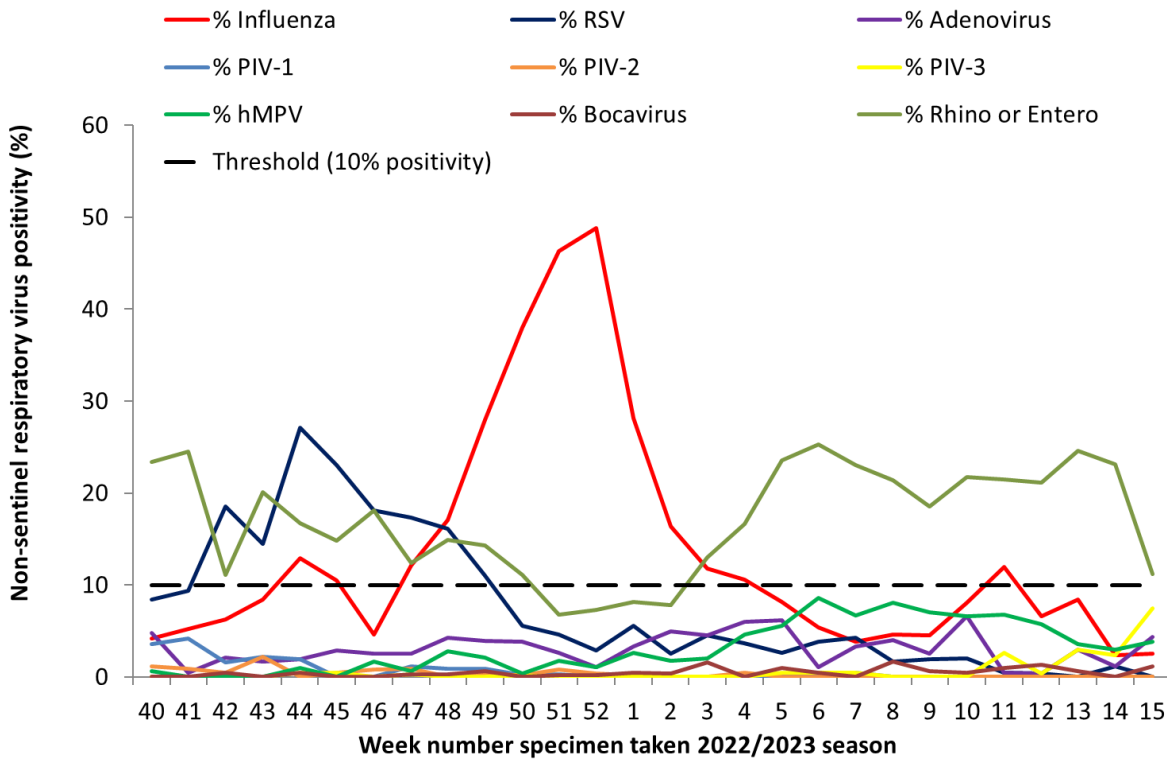


Figure 3b: Percentage positive results for **non-sentinel respiratory** specimens tested by the NVRL for influenza, RSV and other respiratory viruses by week specimen was taken, weeks 40 2022-15 2023. *Source: NVRL*

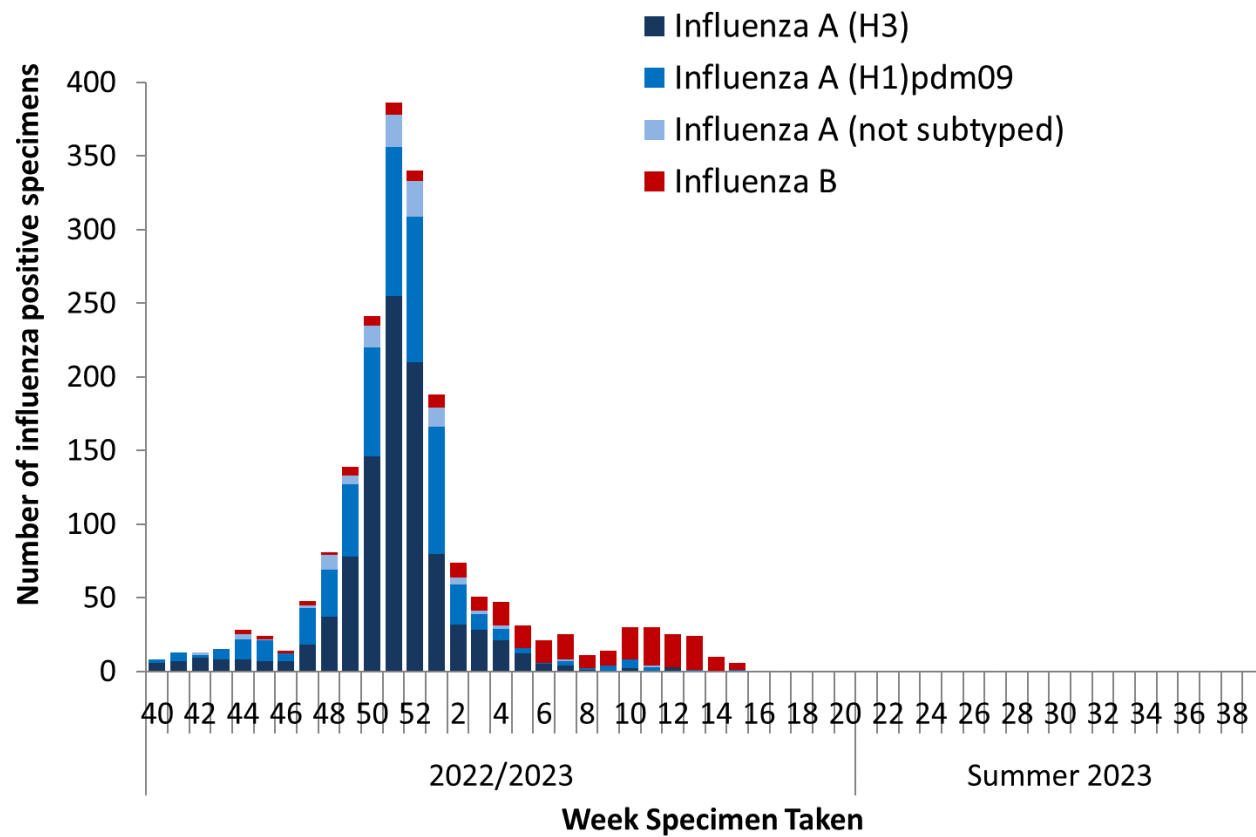


Figure 4: Number of positive influenza specimens (from sentinel GP ARI and non-sentinel respiratory sources) tested by the NVRL by influenza type/subtype and by week specimen was taken for the 2022/2023 influenza season. *Source: NVRL*

Table 2: Number of sentinel GP ARI and non-sentinel respiratory specimens tested by the NVRL and positive influenza results, for weeks 14 and 15 2023 and the 2022/2023 season (weeks 40 2022-15 2023). *Source: NVRL*

Surveillance period	Specimen type	Total tested	Number influenza	% Influenza positive	Influenza A				Influenza B			
					A(H1)pdm09	A(H3)	A (not subtyped)	Total	B	B Victoria	B Yamagata	Total
Week 15 2023	Sentinel GP ARI	47	2	4.3	0	0	0	0	2	0	0	2
	Non-sentinel respiratory	160	4	2.5	1	0	0	1	3	0	0	3
	Total	207	6	2.9	1	0	0	1	5	0	0	5
Week 14 2023	Sentinel GP ARI	62	6	9.7	0	0	0	0	6	0	0	6
	Non-sentinel respiratory	169	4	2.4	0	0	0	0	4	0	0	4
	Total	231	10	4.3	0	0	0	0	10	0	0	10
2022/2023	Sentinel GP ARI	2540	580	22.8	209	218	22	449	131	0	0	131
	Non-sentinel respiratory	7244	1375	19.0	377	766	87	1230	127	17	1	145
	Total	9784	1955	20.0	586	984	109	1679	258	17	1	276

Table 3: Number of sentinel GP ARI and non-sentinel respiratory specimens tested by the NVRL and positive RSV results, for weeks 14 and 15 2023 and the 2022/2023 season (weeks 40 2022-15 2023). *Source: NVRL*

Surveillance period	Specimen type	Total tested	Number RSV positive	% RSV positive	RSV A	RSV B	RSV (unspecified)
Week 15 2023	Sentinel GP ARI	47	0	0.0	0	0	0
	Non-sentinel	160	0	0.0	0	0	0
	Total	207	0	0.0	0	0	0
Week 14 2023	Sentinel GP ARI	62	0	0.0	0	0	0
	Non-sentinel	169	2	1.2	1	0	1
	Total	231	2	0.9	1	0	1
2022/2023	Sentinel GP ILI/ARI	2540	107	4.2	3	104	0
	Non-sentinel	7244	545	7.5	64	480	1
	Total	9784	652	6.7	67	584	1

Table 4: Number of sentinel GP ILI/ARI specimens tested by the NVRL for respiratory viruses and positive results, for weeks 14 and 15 2023 and 2022/2023 season (weeks 40 2022-15 2023). *Source: NVRL*

Virus	Week 15 2022 (N=47)		Week 14 2022 (N=62)		2022/2023 (N=2540)	
	Total	% positive	Total positive	% positive	Total positive	% positive
SARS-CoV-2	3	6.4	7	11.3	145	5.7
Influenza virus	2	4.3	6	9.7	580	22.8
Respiratory Syncytial Virus (RSV)	0	0.0	0	0.0	107	4.2
Rhino/enterovirus	6	12.8	8	12.9	323	12.7
Adenovirus	2	4.3	6	9.7	139	5.5
Bocavirus	0	0.0	1	1.6	24	0.9
Human metapneumovirus (hMPV)	3	6.4	5	8.1	103	4.1
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)	3	6.4	2	3.2	14	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 14 and 15 2023 and 2022/2023 season (weeks 40 2022-15 2023). *Source: NVRL*

Virus	Week 15 2022 (N=160)		Week 14 2022 (N=169)		2022/2023 (N=7244)	
	Total positive	% positive	Total positive	% positive	Total positive	% positive
Influenza virus	4	2.5	4	2.4	1375	19.0
Respiratory Syncytial Virus (RSV)	0	0.0	2	1.2	545	7.5
Rhino/enterovirus	18	11.2	39	23.1	1091	15.1
Adenovirus	7	4.4	2	1.2	221	3.1
Bocavirus	2	1.2	0	0.0	31	0.4
Human metapneumovirus (hMPV)	6	3.8	5	3.0	197	2.7
Parainfluenza virus type 1 (PIV-1)	0	0.0	0	0.0	40	2.7
Parainfluenza virus type 2 (PIV-2)	0	0.0	0	0.0	26	0.4
Parainfluenza virus type 3 (PIV-3)	12	7.5	4	2.4	34	0.5
Parainfluenza virus type 4 (PIV-4)	0	0.0	0	0.0	25	0.3

3. GP Out-Of-Hours services surveillance

National data on calls to GP Out-of-Hours services in Ireland is collated by HPSC. Five services currently participate in this program. 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.

- 1,886 (12.7% of total calls; N=14,855) self-reported 'cough' calls were reported by a network of GP OOHs services during week 15 2023, which was above baseline levels (10.8%) (Figure 5).
- 94 (0.6% of total calls; N=14,855) self-reported 'flu' calls were reported by a network of GP OOHs services during week 15 2023, which is below baseline levels. The baseline threshold level for self-reported 'flu' calls is 2.3% (Figure 7).
- Five GP OOH services provided data for week 15 2023.

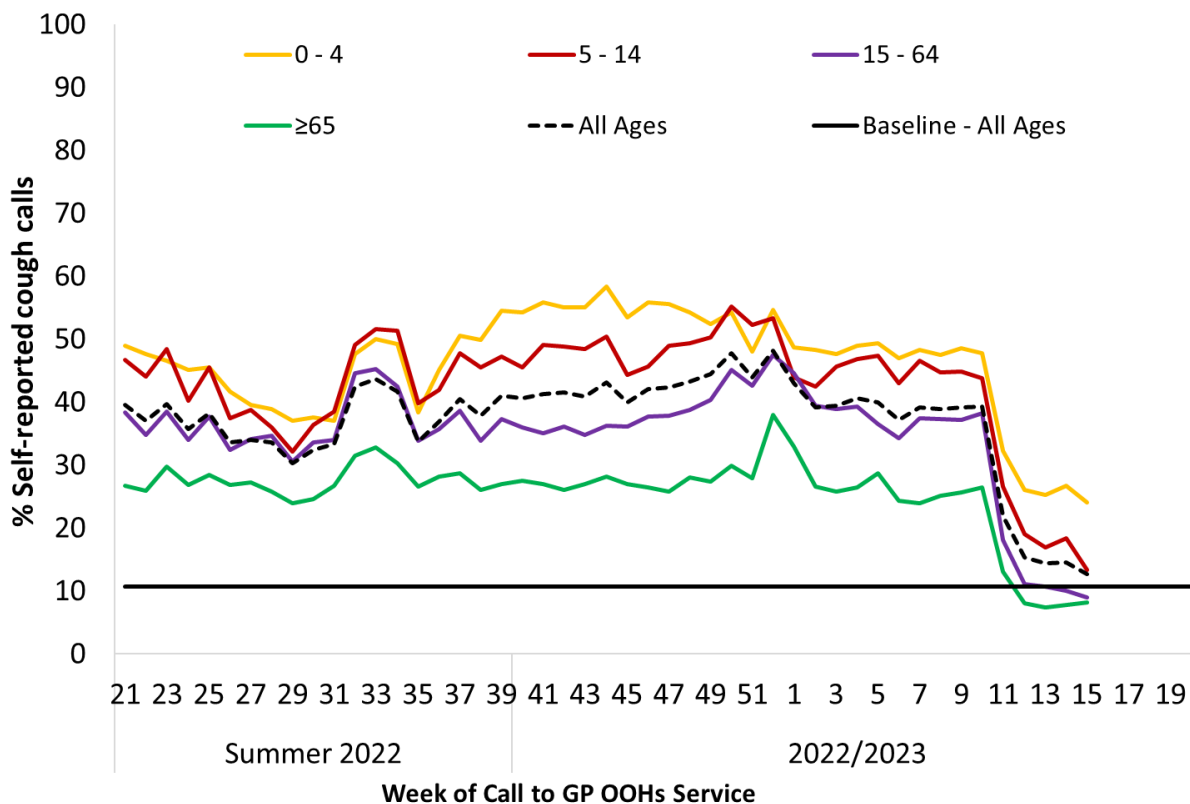


Figure 5: Percentage of self-reported COUGH calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call, summer 2022 and the 2022/2023 season. The % cough calls baseline for all ages calculated using the MEM method on historic data is shown. *Source: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

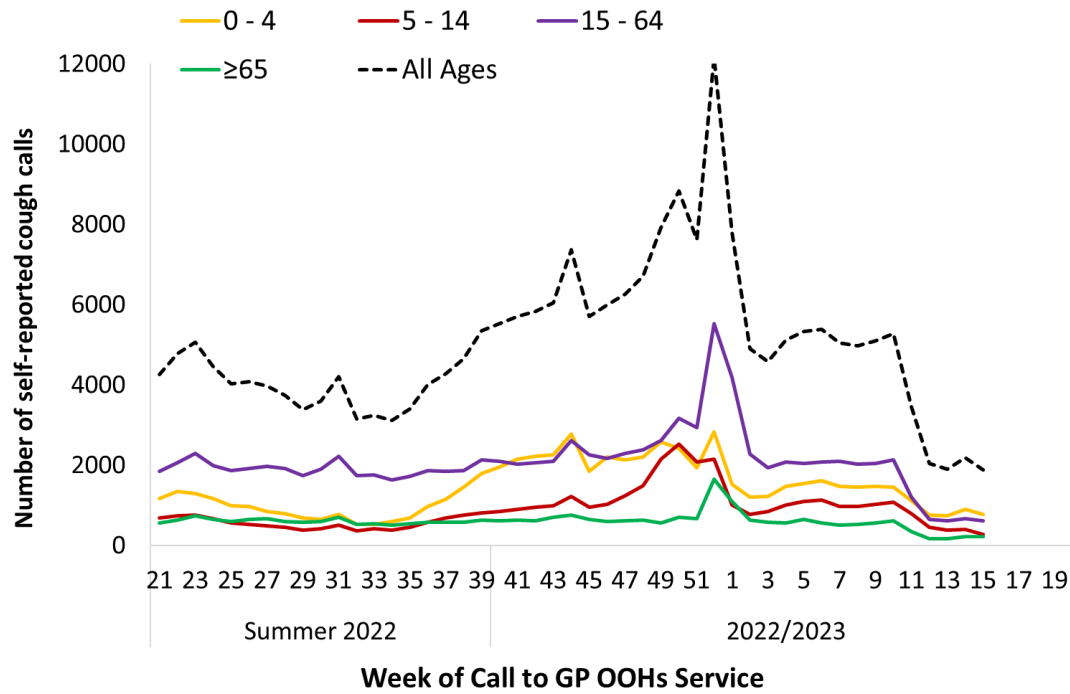


Figure 6: Number of self-reported COUGH calls for all ages and by age group to GP Out-of-Hours services by week of call, Summer 2022 and 2022/2023. Source: GP Out-Of-Hours services in Ireland (collated by HSE & ICGP).

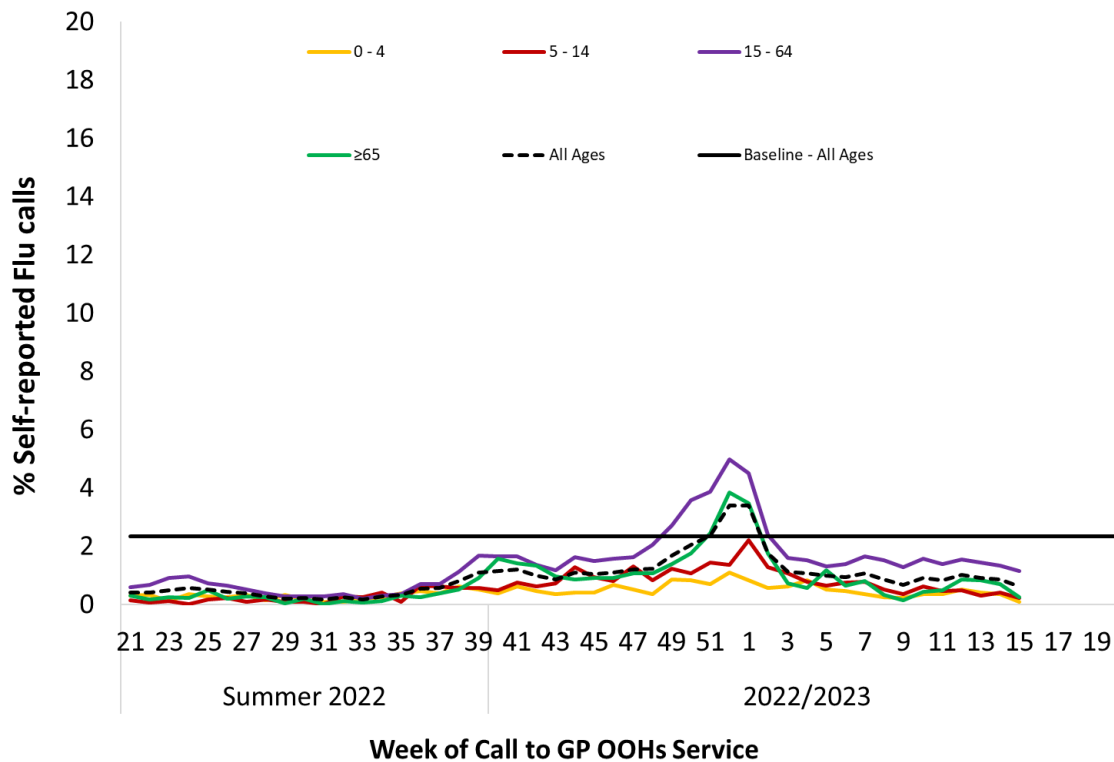


Figure 7: Percentage of self-reported FLU calls for all ages and by age group as a proportion of total calls to GP Out-of-Hours services by week of call, Summer 2022 and 2022/2023. The % flu calls baseline for all ages calculated using the MEM method on historic data is shown. Source: GP Out-Of-Hours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

- 162 laboratory confirmed influenza cases were notified during week 15 2023: 12 influenza A (not subtyped), two influenza A(H1)pdm09 and 148 influenza B. This is a decrease compared to 201 cases notified during week 14 2023 (Figures 8 & 9).
- During the 2022/2023 season to date (weeks 40 2022 -15 2023), 15,805 laboratory confirmed influenza cases have been notified to HPSC – 1,205 A(H1)pdm09, 1007 A(H3), 11,262 influenza A (not subtyped), 2,260 influenza B, 48 influenza A and B coinfections, 16 influenza A(H1)pdm09 & A(H3) coinfections and six influenza (type not reported) (Figure 8).
- Laboratory confirmed influenza notified cases by HSE Area, are outlined in Table 6.
- Age specific rates in notified laboratory confirmed influenza cases were low in all age groups during week 15 2023 (Figure 10).
- Fifteen RSV cases were notified during week 15 2023, a stable trend compared to 13 RSV cases notified during week 14 2023 (Figure 11).
- During week 15 2023, age specific rates in notified laboratory confirmed RSV cases were low in all age groups (Figure 12).

Table 6: Number of laboratory confirmed influenza notifications by HSE Area during the 2022/2023 season (weeks 40 2022-15 2023) and week 15 2023 *Source: CIDR*

HSE area	Week 15 2023	2022/2023 season (Weeks 40 2022 - 15 2023)
HSE-East	56	5174
HSE-Midlands	14	1411
HSE-Mid-West	5	1475
HSE-North-East	10	1520
HSE-North-West	38	1572
HSE-South-East	9	1419
HSE-South	12	1678
HSE-West	18	1556
Total	162	15805

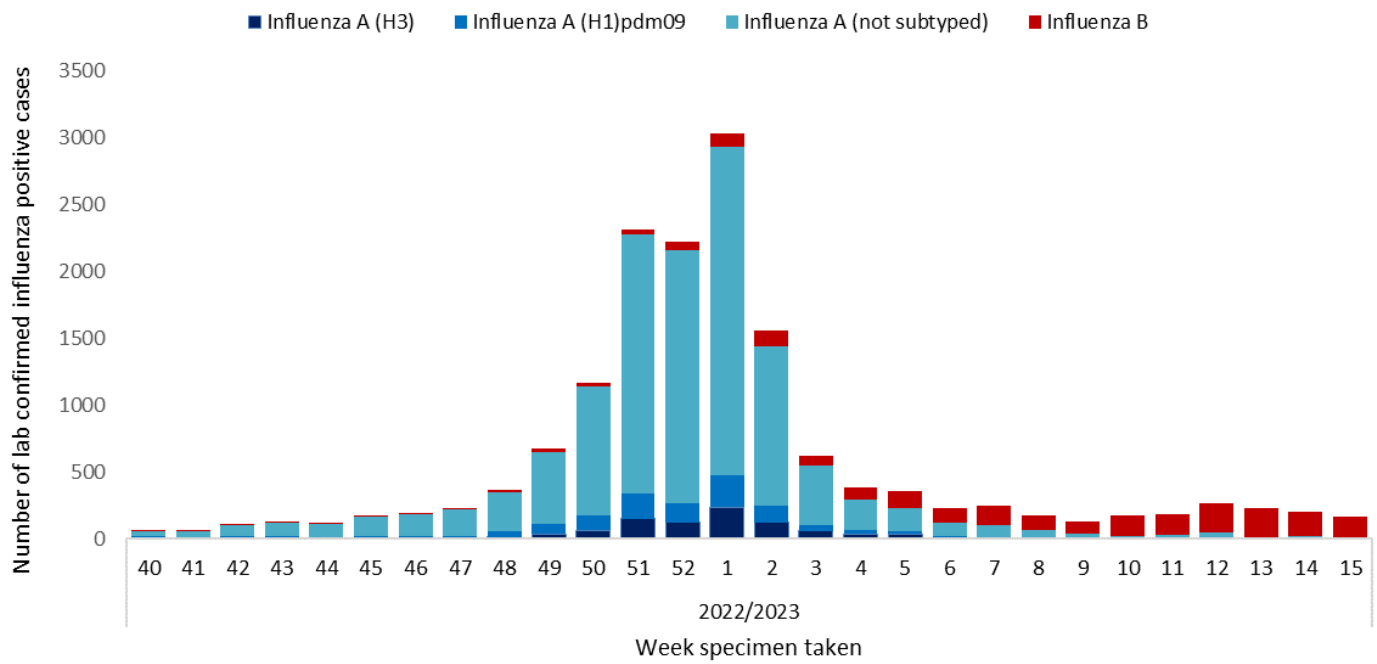


Figure 8: Number of laboratory confirmed influenza notifications by influenza type/subtype to HPSC by week 2022-2023 season. Source: Ireland’s Computerised Infectious Disease Reporting System.

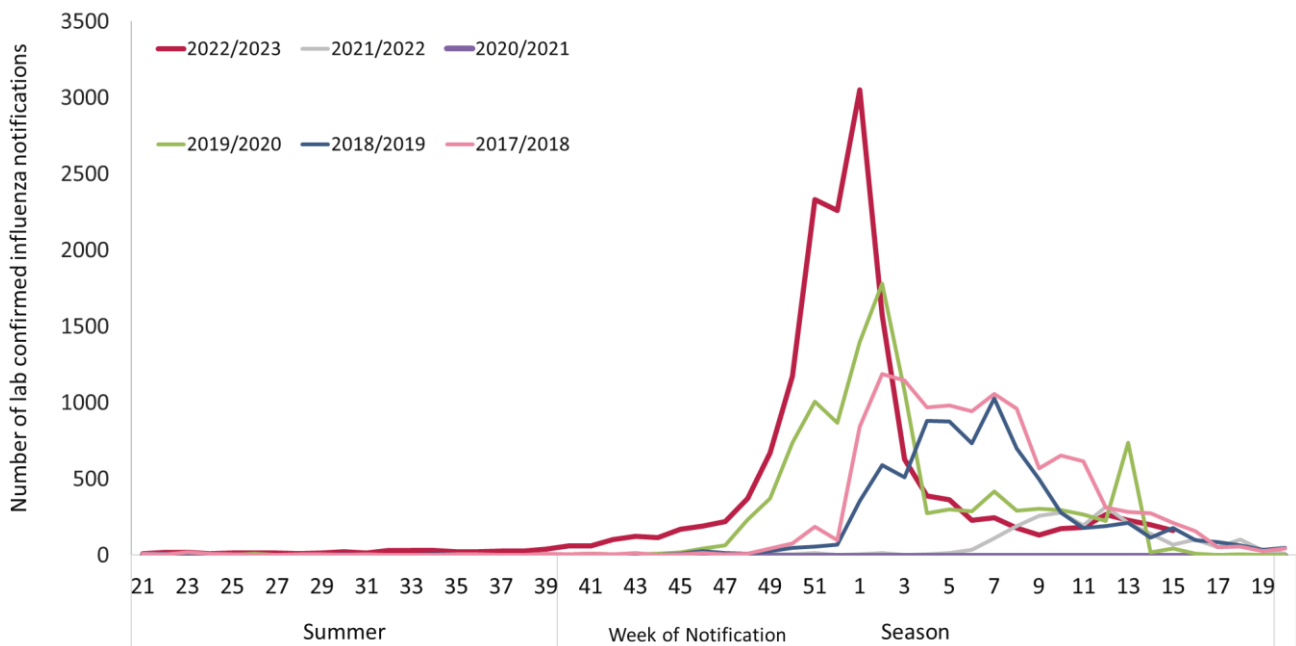


Figure 9: Number of laboratory confirmed influenza notifications to HPSC by week and season, 2017/2018 to 2022/2023 influenza seasons. Source: Ireland’s Computerised Infectious Disease Reporting System.

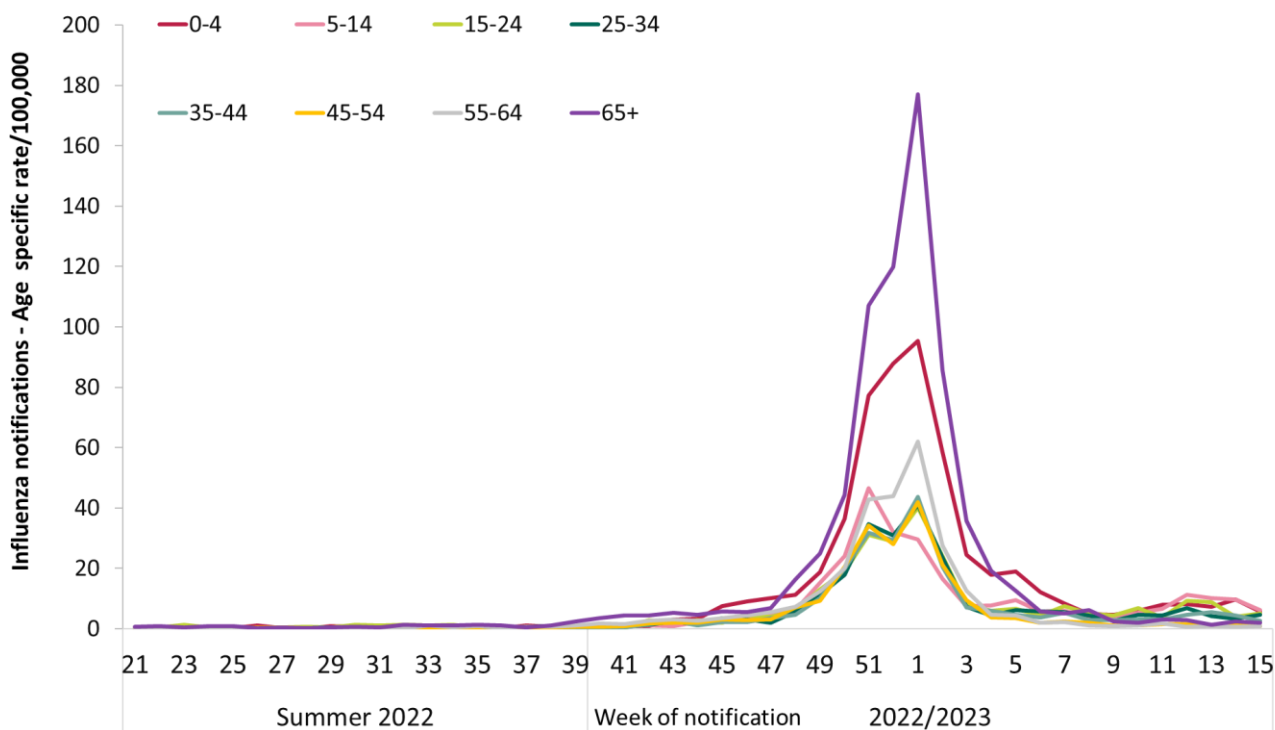


Figure 10: Age specific rates per 100,000 population for laboratory confirmed **influenza** notifications to HPSC by week of notification. *Source: Ireland’s Computerised Infectious Disease Reporting System.*

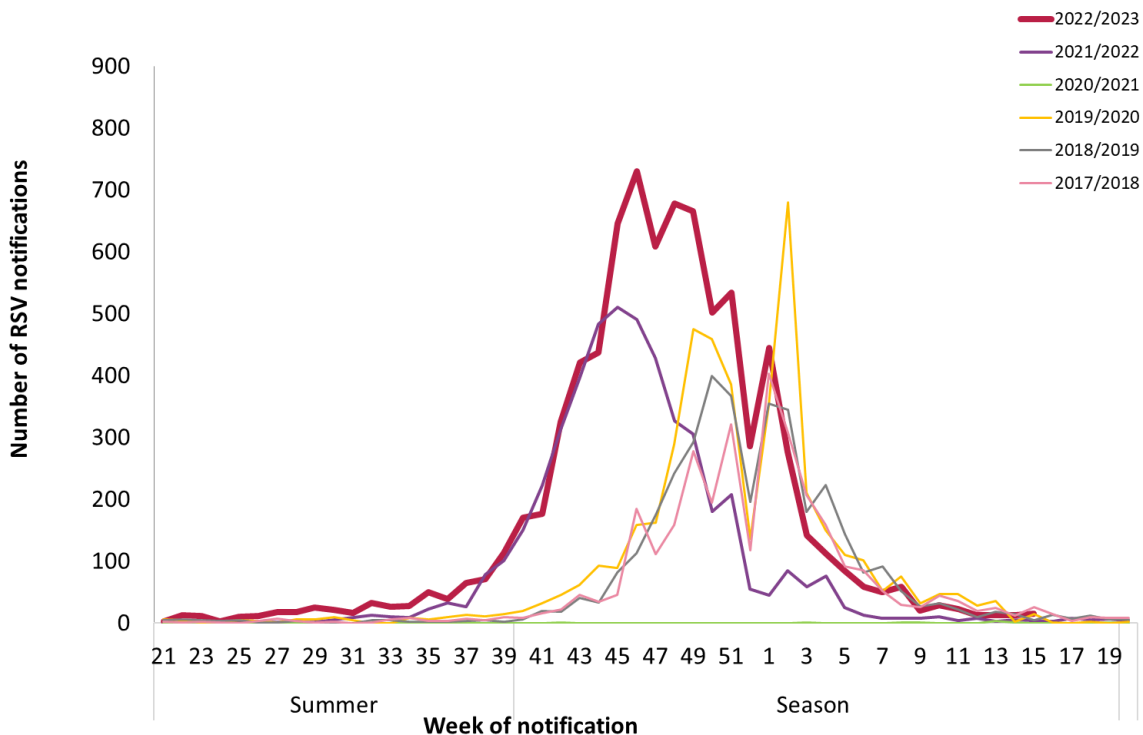


Figure 11: Number of laboratory confirmed **RSV** notifications to HPSC by week of notification, 2017/2018 to 2022/2023 seasons. *Source: Ireland’s Computerised Infectious Disease Reporting System.*

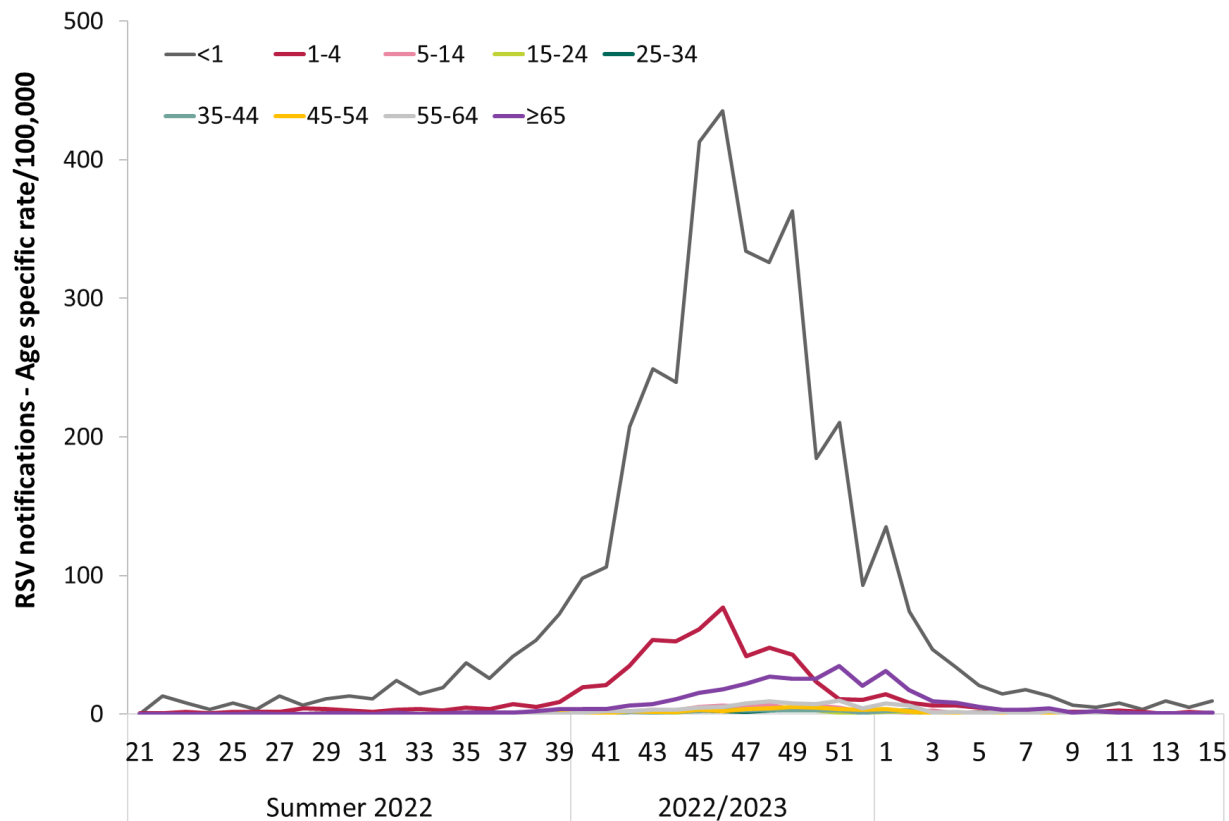


Figure 12: Age specific rates per 100,000 population for laboratory confirmed RSV notifications to HPSC by week of notification. Source: Ireland’s Computerised Infectious Disease Reporting System.

5. Hospitalisations

- During week 15 2023, 38 laboratory confirmed influenza cases were reported as hospital inpatients: two influenza A (not subtyped) and 36 influenza B (Figure 13 & 14). Influenza hospitalised cases during week 15 2023 decreased marginally to 38, compared to 43 in week 14 2023.
- During the 2022/2023 season to date (weeks 40 2022 to week 15 2023), 4,501 laboratory confirmed influenza cases have been notified as hospital inpatients: 317 influenza A(H1)pdm09, 206 A(H3), 3,460 influenza A (not subtyped), 501 influenza B, 14 influenza co-infections and three influenza (type not reported) (Figure 13).
- During week 15 2023, age specific rates in notified laboratory confirmed hospitalised influenza cases were low in all age groups (Figure 15).
- The number and age specific rate per 100,000 population of laboratory confirmed notified influenza hospitalised and critical care cases for the 2022/2023 season are detailed in Table 9.
- During week 15 2023, four RSV cases were reported as hospital inpatients (Figures 16 and 17).
- Patient type of laboratory confirmed influenza and RSV notifications by week for the 2022/2023 season are reported in Tables 7 and 8.

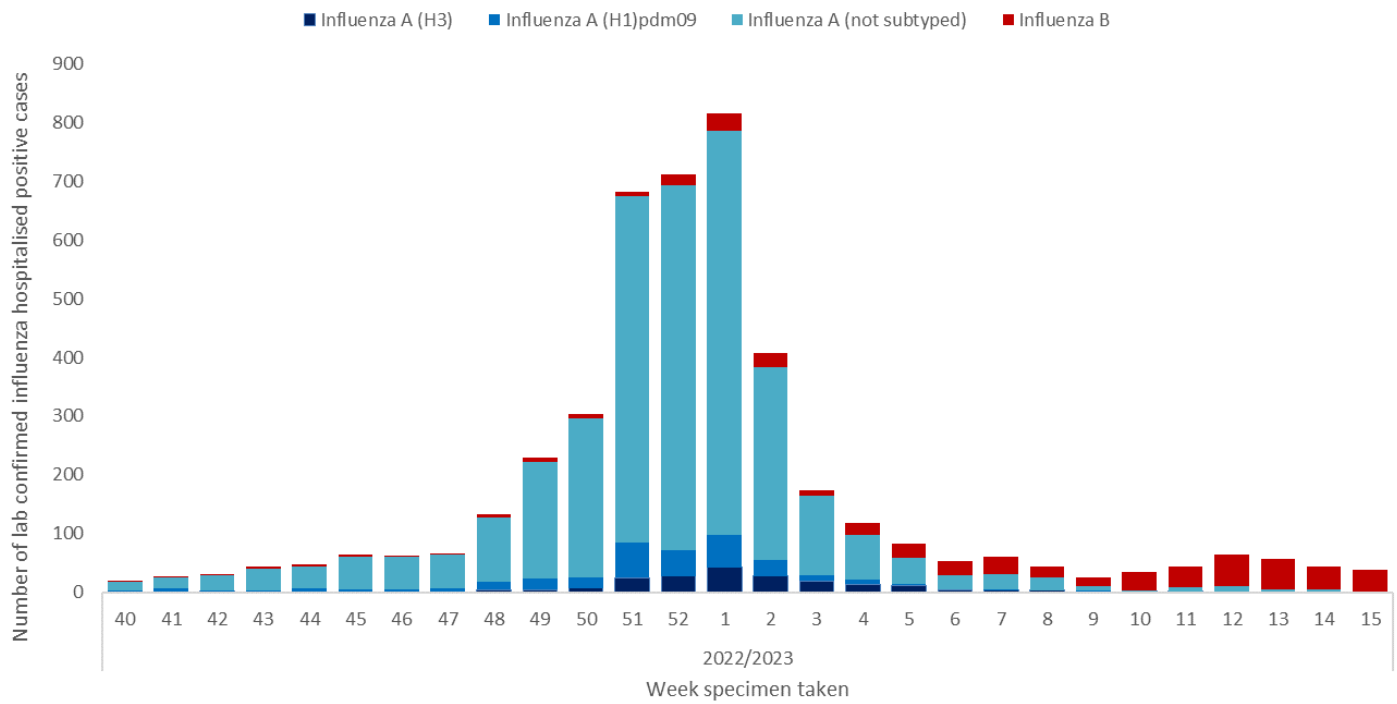


Figure 13: Number of laboratory confirmed **influenza** notifications reported as **hospital inpatients** by influenza type/subtype to HPSC by week, 2022/2023 season. *Source: Ireland’s Computerised Infectious Disease Reporting System.*

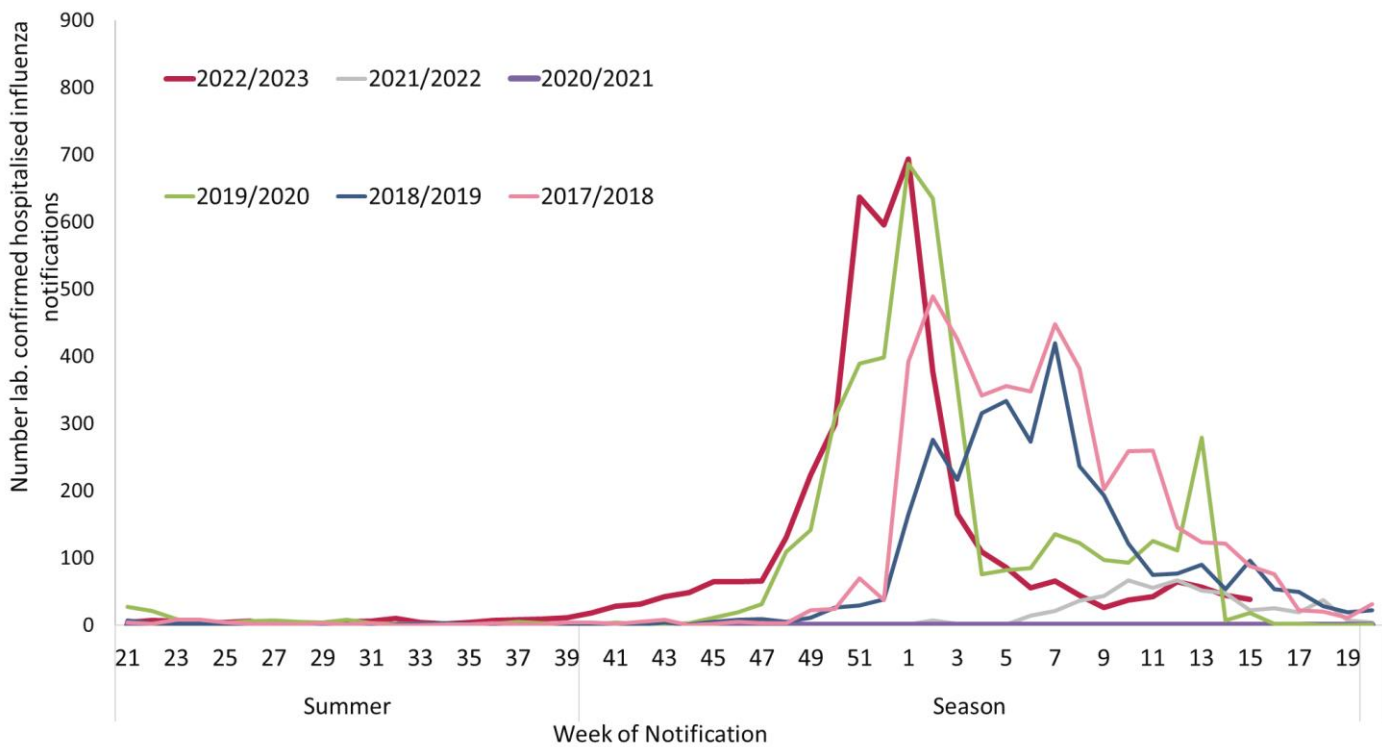


Figure 14: Number of notified laboratory confirmed **influenza** cases reported as **hospital inpatients**, for the 2017/2018 to 2022/2023 seasons. *Source: Ireland’s Computerised Infectious Disease Reporting System*

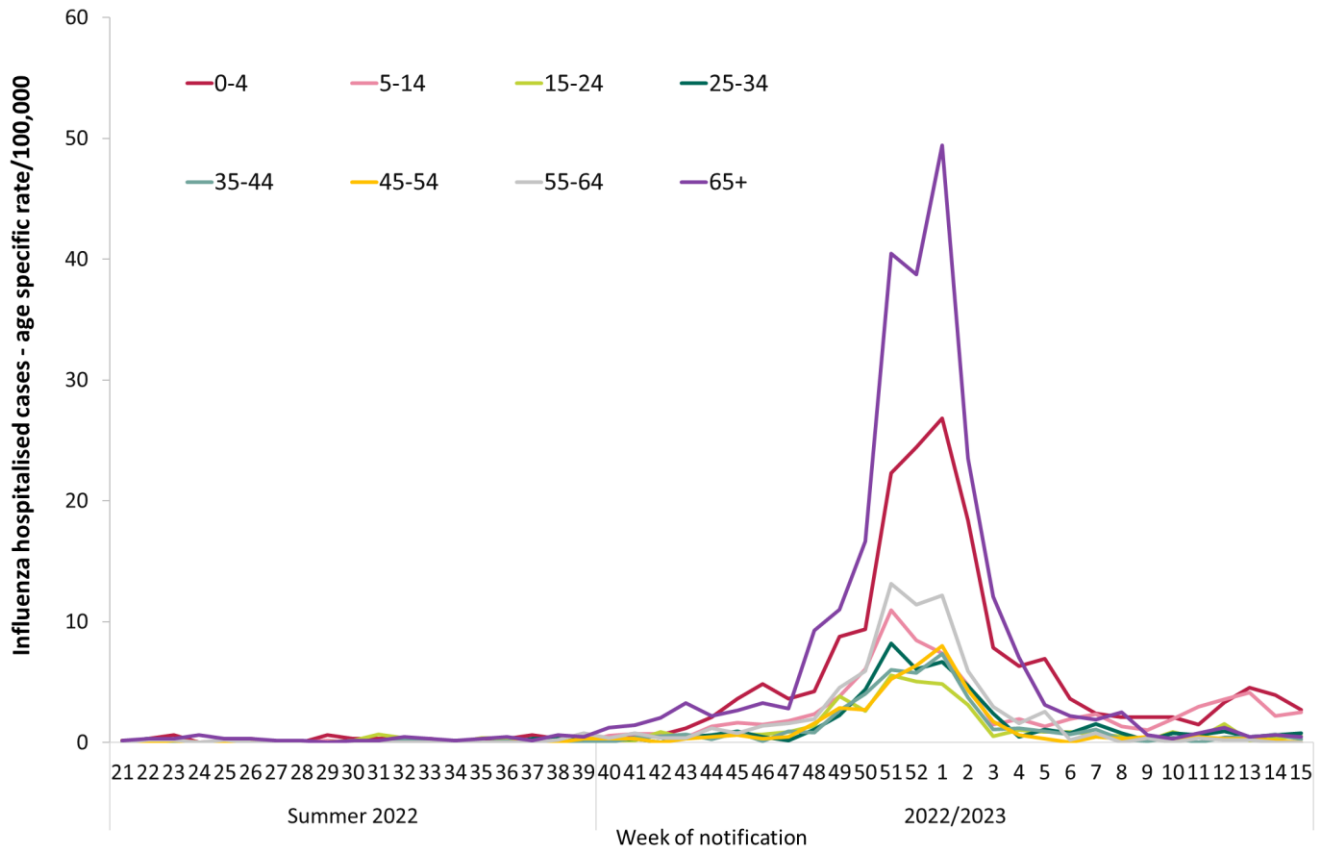


Figure 15: Age specific rates per 100,000 population for laboratory confirmed **influenza** cases reported as **hospital inpatients** by week of notification. *Source: Ireland's Computerised Infectious Disease Reporting System.*

Table 7: Number of notified **influenza** cases reported by patient type and week of notification, 2022/2023 season (weeks 40 2022-15 2023). *Source: Ireland's Computerised infectious Disease Reporting System*

	Patient Type							Total
	GP Patient	ED patient	Hospital Inpatient	Hospital Day Patient	Hospital Outpatient	Other	Unknown	
Week 40	2	11	18	3	9	7	12	62
Week 41	4	20	28	1	3	2	2	60
Week 42	0	45	31	1	16	3	5	101
Week 43	7	34	44	6	20	7	5	124
Week 44	2	38	48	6	16	2	4	117
Week 45	2	66	65	7	12	12	8	172
Week 46	5	80	65	11	15	12	5	193
Week 47	3	92	66	18	19	7	14	221
Week 48	18	122	131	8	31	20	34	370
Week 49	17	261	229	32	56	19	58	675
Week 50	45	450	298	22	105	46	112	1170
Week 51	100	806	692	30	220	134	235	2328
Week 52	49	1013	710	17	162	143	126	2235
Week 1	122	1308	819	48	201	198	327	3047
Week 2	42	581	405	30	146	165	140	1560
Week 3	31	235	170	8	51	25	91	624
Week 4	20	150	109	5	26	24	44	386
Week 5	30	139	89	7	34	16	37	359
Week 6	10	107	56	4	17	15	18	228
Week 7	15	106	62	4	28	10	19	245
Week 8	11	68	45	1	21	14	17	178
Week 9	5	74	26	0	14	3	9	133
Week 10	6	85	37	1	18	6	19	174
Week 11	16	96	44	3	8	7	8	183
Week 12	11	134	66	6	13	11	25	266
Week 13	14	107	56	8	6	21	13	231
Week 14	4	100	43	7	11	12	19	201
Week 15	3	79	38	5	7	11	12	162
Total	617	6473	4501	298	1285	878	1403	15805

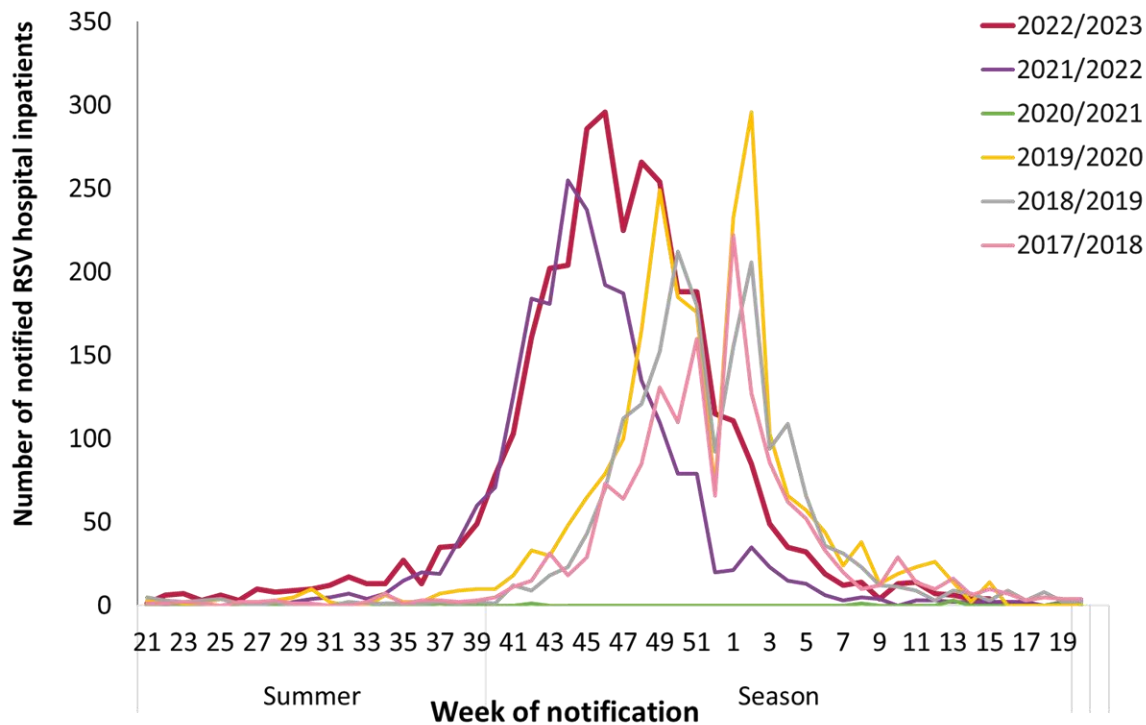


Figure 16: Number of notified RSV cases reported as **hospital inpatients**, by week of notification and season, for the 2017/2018 to 2022/2023 seasons. *Source: Ireland’s Computerised Infectious Disease Reporting System.*

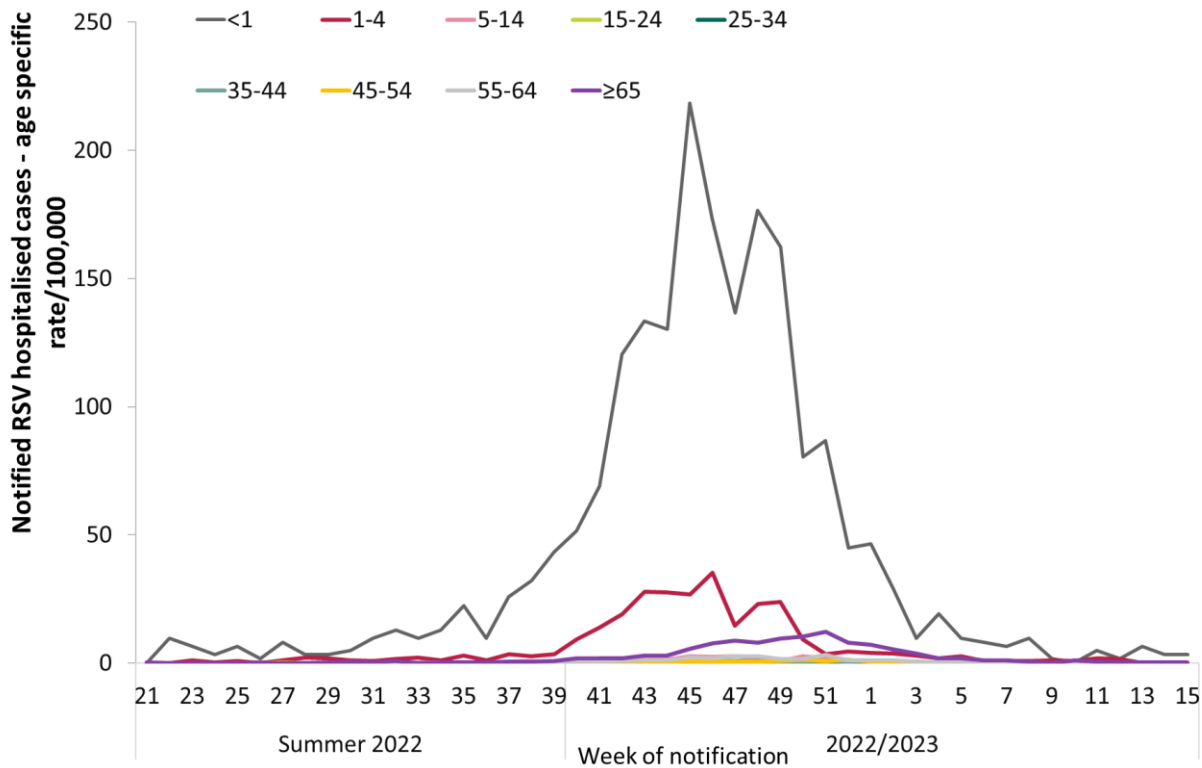


Figure 17: Age specific rates per 100,000 population for laboratory confirmed **RSV** cases reported as **hospital inpatients** by week of notification and season, Summer 2022 and 2022/2023. *Source: Ireland’s Computerised Infectious Disease Reporting System*

Table 8: Number of notified **RSV** cases reported by patient type and week of notification (weeks 40 2022-15 2023), 2022/2023 season. *Source: Ireland's Computerised Infectious Disease Reporting System*

	Patient Type							Total
	GP Patient	ED patient	Hospital Inpatient	Hospital Day Patient	Hospital Outpatient	Other	Unknown	
Week 40	5	51	78	6	12	7	11	170
Week 41	3	45	103	3	12	5	4	177
Week 42	5	121	161	2	14	7	15	325
Week 43	6	149	201	9	20	19	16	421
Week 44	6	172	204	3	22	15	15	437
Week 45	8	239	286	12	37	28	27	646
Week 46	10	319	295	5	32	34	32	729
Week 47	6	273	225	8	24	36	33	609
Week 48	34	246	267	3	35	36	44	678
Week 49	19	254	255	13	17	24	81	665
Week 50	20	175	187	2	28	23	64	502
Week 51	14	172	191	5	32	30	80	532
Week 52	8	82	119	0	12	29	24	286
Week 1	26	165	125	5	21	31	66	444
Week 2	7	92	88	3	20	23	41	277
Week 3	4	44	52	2	13	5	21	142
Week 4	6	39	35	5	6	11	8	111
Week 5	4	27	32	0	9	2	11	85
Week 6	4	23	19	0	3	4	6	59
Week 7	1	23	11	2	3	3	7	50
Week 8	0	19	14	1	7	4	11	58
Week 9	0	13	4	0	2	1	0	20
Week 10	0	8	13	1	2	1	3	29
Week 11	0	5	14	0	3	1	0	23
Week 12	0	2	7	0	0	0	3	12
Week 13	0	3	6	0	1	2	1	13
Week 14	0	5	4	0	0	2	2	13
Week 15	0	10	4	0	0	0	1	15
Total	196	2776	3000	90	387	383	627	7528

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 cases were admitted to critical care and notified to HPSC during week 15 2023.
- During the 2022/2023 season to date (weeks 40 2022-15 2023), 180 laboratory confirmed influenza cases – 32 A(H1)pdm09, 31 influenza A(H3), 105 influenza A (not subtyped) and 12 influenza B have been admitted to critical care units and notified to HPSC. Age specific rates for the season to date were highest in those aged 65 years and older.
- During the 2022/2023 season (weeks 40 2022-15 2023), of 156 laboratory confirmed influenza ICU cases with known influenza vaccination status, 106 (67.9%) 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 2022-15 2023. *Source: Ireland's Computerised Infectious Disease Reporting System.*

Age (years)	Hospitalised		Admitted to ICU	
	Number	Age specific rate per 100,000 pop.	Number	Age specific rate per 100,000 pop.
<1	141	226.5	2	3.2
1-4	463	172.0	13	4.8
5-14	564	83.6	13	1.9
15-24	242	42.0	8	1.4
25-34	336	51.0	5	0.8
35-44	328	49.7	19	2.5
45-54	272	43.4	25	4.0
55-64	392	77.0	27	5.3
≥65	1763	276.5	68	10.7
Unknown	0	–	0	–
Total	4501	94.5	180	3.8

7. Mortality Surveillance

Influenza-associated deaths include all deaths where influenza is reported as the primary/main cause of death by the physician or if influenza is listed anywhere on the death certificate as the cause of death. HPSC receives daily mortality data from the General Register Office (GRO) on all deaths from all causes registered in Ireland. These data have been used to monitor excess all-cause and influenza and pneumonia deaths as part of the influenza surveillance system and the European Mortality Monitoring Project. These data are provisional due to the time delay in deaths' registration in Ireland. <http://www.euromomo.eu/>

- There were no deaths in notified influenza cases reported to HPSC during week 15 2023.
- During the 2022/2023 season (weeks 40 2022-15 2023), 193 deaths in notified influenza cases were reported to HPSC – 32 influenza A(H3), 26 influenza A(H1)pdm09, 128 influenza A (not subtyped), six influenza B and one influenza A and B coinfection.
- During the 2022/2023 season, excess all-cause mortality was reported over five consecutive weeks (weeks 51 2022 - 3 2023). Excess pneumonia and influenza mortality was also reported over four consecutive weeks (weeks 51 2022 – 2 2023). Excess mortality analyses are corrected for reporting delays with the standardised EuroMOMO algorithm. Due to delays in death registrations in Ireland, excess mortality data included in this report are reported with a one-week lag time.

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/>

- During week 15 2023, there were two ARI outbreaks, in a residential institution and in a healthcare setting, and one COVID-19 and influenza A mixed outbreak in a nursing home notified to HPSC.
- During the 2022/2023 season (weeks 40 2022-15 2023), 156 laboratory confirmed influenza outbreaks were notified to HPSC. For an overview of outbreaks for the season to date (weeks 40 2022-15 2023), 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 15 2023 and the 2022/2023 season (weeks 40 2022-15 2023) *Source: CIDR*

HSE area	Influenza		RSV		ARI		COVID-19 & Influenza		Total	
	Week 15	2022/2023	Week 15	2022/2023	Week 15	2022/2023	Week 15	2022/2023	Week 15	2022/2023
HSE-East	0	55	0	15	1	1	1	1	1	72
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	22	0	6	1	8	0	3	1	39
HSE-South-East	0	13	0	0	0	1	0	0	0	14
HSE-South	0	8	0	8	0	0	0	0	0	16
HSE-West	0	17	0	4	0	1	0	0	0	22
Total	0	156	0	56	2	15	1	6	2	233

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 15 2023 and the 2022/2023 season (weeks 40 2022-15 2023).

Source: CIDR

Setting	Influenza		RSV		ARI		COVID-19 & Influenza		Total	
	Week 15	2022/2023	Week 15	2022/2023	Week 15	2022/2023	Week 15	2022/2023	Week 15	2022/2023
Community hospital/Long-stay unit	0	8	0	9	0	3	0	1	0	21
Nursing Home	0	56	0	21	0	7	1	3	1	87
Hospital	0	67	0	8	0	0	0	2	0	77
Residential Institution	0	14	0	4	1	4	0	0	1	22
Childcare facility	0	0	0	1	0	0	0	0	0	1
Family Outbreaks	0	7	0	12	0	0	0	0	0	19
Other settings	0	4	0	1	1	1	0	0	0	6
Total	0	156	0	56	2	15	1	6	2	233

9. International Summary

In the European region, during week 14 2023 (week ending 09/04/2023), influenza virus positivity in sentinel primary care specimens fluctuated to 15%, from 16% in the previous week, which is above the ECDC influenza positivity threshold of 10%. For week 14 2023, 328 (15%) of 2,118 sentinel GP specimens tested positive for an influenza virus; 83% were type B and 17% were type A. Of 14 subtyped A viruses, 14% were A(H3) and 86% were A(H1)pdm09. Of 53 influenza B viruses ascribed to a lineage, all were B/Victoria.

For week 14 2023, 2,429 of 44,097 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; 1,675 (69%) were influenza B and 754 (31%) were influenza A. Of 67 subtyped A viruses, 50 (75%) were A(H1)pdm09 and 17 (25%) were A(H3). Of 83 influenza B viruses ascribed to a lineage, 74 (89.2%) were B/Victoria and 9 (10.8%) were B/Yamagata reported by a single country. The B/Yamagata reports are under investigation. Of 41 countries and areas reporting on geographic spread of influenza viruses, three reported no activity, nine reported sporadic spread, five reported local spread, eight reported regional spread and 16 reported widespread influenza activity.

As of 2nd April 2023, globally, influenza activity decreased compared to the peak in late 2022. Influenza A viruses predominated with a slightly larger proportion of A(H1N1)pdm09 viruses detected among the subtyped influenza A viruses during the reporting period. The detections of influenza B increased during this reporting period.

See [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>
 - 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.

<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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