

# Influenza Surveillance in Ireland – Weekly Report

Influenza Week 19 & 20 2021 (10<sup>th</sup> May– 23<sup>th</sup> May 2021)



 **Intensive Care Society of Ireland**

## Summary

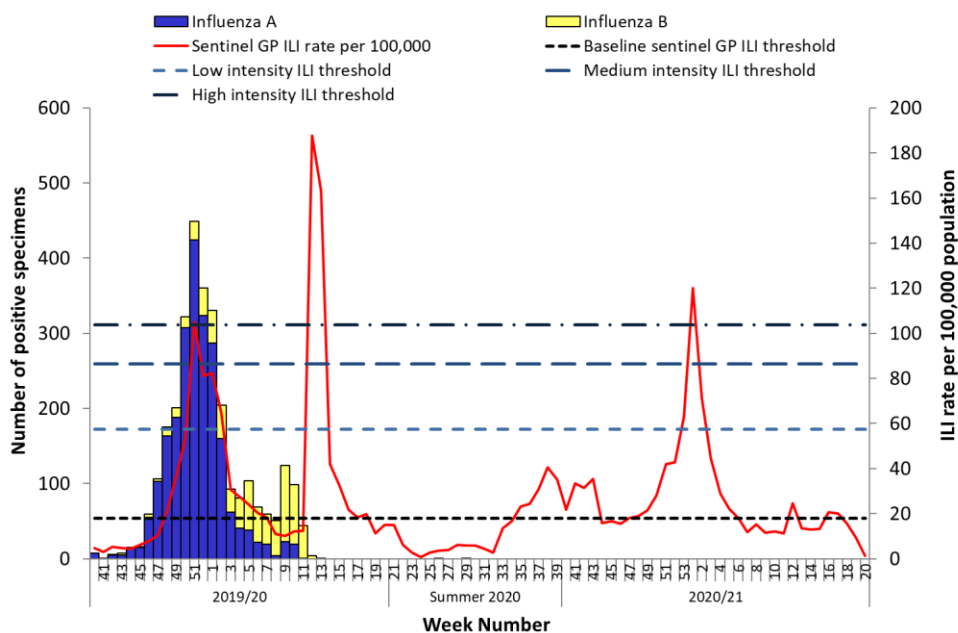
On the 14<sup>th</sup> May 2021 (Week 19 2021) the Health Service Executive and Department of Health experienced a cyberattack which has severely impacted data collection services, as a consequence limited data are available and data may be underreported. Results should be interpreted with caution.

There was no evidence of influenza viruses circulating in the community in Ireland during weeks 19 and 20 2021 (weeks ending 16/05/2021 and 23/05/2021) or during weeks 40 2020 to 18 2021. Sporadic cases of rhinovirus/enterovirus and respiratory syncytial virus (RSV) were reported in recent weeks. COVID-19 epidemiology reports are published on [www.hpsc.ie](http://www.hpsc.ie)

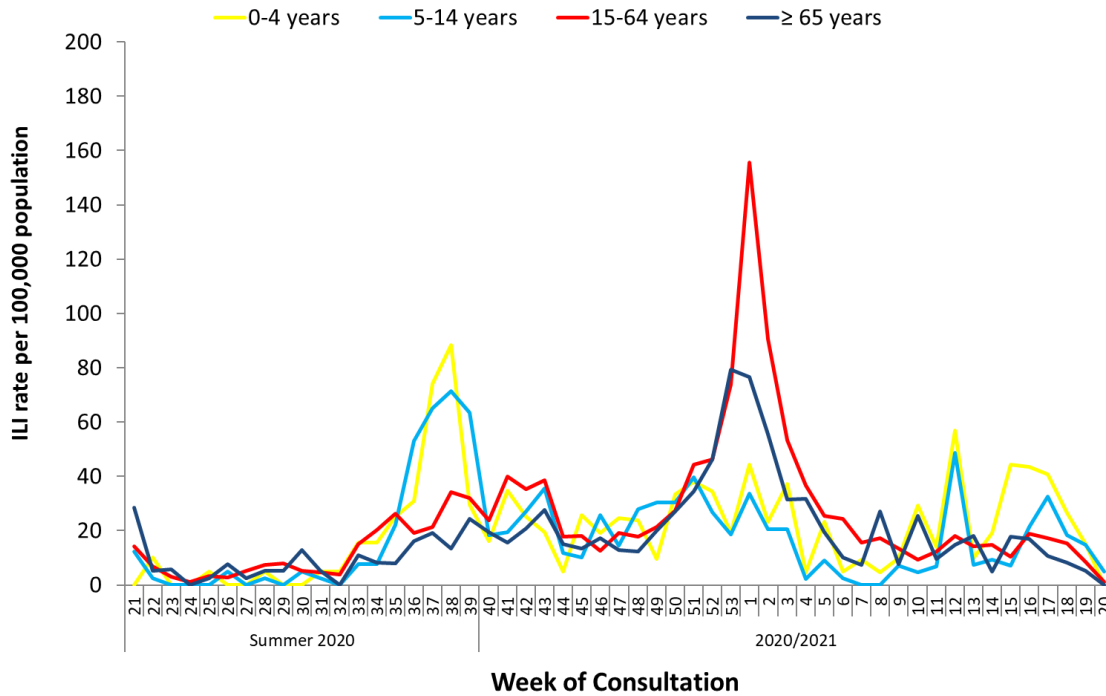
- **Influenza-like illness (ILI):** The sentinel GP influenza-like illness (ILI) consultation rate decreased to 1.4/100,000 population in week 20 2021, compared to 9.4/100,000 in week 19 2021.
  - The sentinel GP ILI consultation rate for week 20 2021 has been below the Irish baseline threshold (18.1/100,000 population) since week 15 2021. These data should be interpreted with caution.
  - The sentinel GP ILI age specific consultation rates decreased in all age groups in week 20 2021, compared to week 19.
  - Sentinel GP ILI consultations for the 2020/2021 season to date are reflecting SARS-CoV-2 activity, rather than influenza activity.
- **National Virus Reference Laboratory (NVRL):**
  - Of 1,860 sentinel GP ILI specimens and 3,419 non-sentinel respiratory specimens tested for influenza and RSV this season to date, no positive influenza detections were reported.
  - Five RSV positive detections were reported by the NVRL between weeks 12 and 18 2021.
  - Rhinovirus/enterovirus positive detections continue to be reported throughout the 2020/2021 season. Sporadic detections of adenovirus, Parainfluenza viruses, human metapneumovirus and bocavirus were also reported this season. A small number of coinfections were detected during weeks 19 & 20 2021.
- **Influenza notifications:** No confirmed influenza cases were notified during the 2020/2021 season to date.  
**No new Influenza or RSV notifications have been identified since 14<sup>th</sup> May 2021.**
- **RSV notifications:** Nine RSV cases have been notified during the 2020/2021 season to date.
- **Hospitalisations and Critical care admissions:** No confirmed influenza hospitalised or critical care cases were notified to HPSC during the 2020/2021 season to date.
- **Mortality:** There were no reports of deaths occurring in notified influenza cases during the 2020/2021 season to date.
- **Outbreaks:** No influenza, RSV or acute respiratory infection (ARI - excluding COVID-19) outbreaks were notified to HPSC during the 2020/2021 season to date.
- **Influenza Vaccinations:** From the 01/09/2020 to 13/05/2021, 1,248,702 influenza vaccinations were provided by GPs and Pharmacists.
- **International:** In the European Region (latest available data up to 16/05/2021), influenza activity remained at inter-seasonal levels with only sporadic detections of influenza A and B reported.

## 1. GP sentinel surveillance system - Clinical Data

- During week 20 2021, 4 influenza-like illness (ILI) consultations were reported from the Irish sentinel GP network, corresponding to an ILI consultation rate of 1.4/100,000 population, a decrease compared to the rate of 9.4/100,000 reported during week 19 2021 (Figure 1). On the 09/03/2020, GP ILI consultations changed from face-to-face to phone consultations.
- The sentinel GP ILI consultation rate was well below the Irish baseline threshold level (18.1/100,000 population) in week 20 2021. These data should be interpreted with caution and rates may change as data are continuously updated as retrospective data are reported.
- Sentinel GP ILI consultations are currently reflecting circulation of SARS-CoV-2 in the community, rather than influenza virus circulation.
- The sentinel GP ILI age specific consultation rates decreased in all age groups in week 20 2021. The rate for those in the <15-year age group was 3.3/100,000 in week 20 2021, a decrease from 14.5/100,000 in week 19 2021. The age specific ILI consultation rate for those aged 15-64 years was 1.1/100,000 in week 20 2021 and 8.5/100,000 in week 19 2021 and the rate in those aged ≥65 years was 0.0/100,000 in week 20 2021, a decrease compared to 5.2/100,000 in 19 2021. (Figure 2 & Table 1). Data should be interpreted with caution rates may change as data are continuously updated as retrospective data are reported.
- HPSC in consultation with the European Centre for Disease Prevention and Control (ECDC) has reviewed the Irish sentinel GP baseline ILI threshold for the 2020/2021 influenza season, which will remain at 18.1 per 100,000 population. ILI rates above this baseline threshold combined with sentinel GP influenza positivity >10% indicates the likelihood that influenza is circulating in the community. The Moving Epidemic Method (MEM) is used to calculate thresholds for GP ILI consultations using 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 week and season. *Source: ICGP and NVRL*



**Figure 2:** Age specific sentinel GP ILI consultation rate per 100,000 population by week of phone consultation during the summer of 2020 and the 2020/2021 influenza season to date. *Source: ICGP.*

<b>Sentinel GP ILI Threshold Levels</b>	<b>Below Baseline</b>	<b>Low</b>	<b>Moderate</b>	<b>High</b>	<b>Extraordinary</b>
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Sentinel GP ILI consultation/100,000 pop.	Week of Consultation																											
	46	47	48	49	50	51	52	53	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
All Ages	15.6	18.1	18.9	21.6	28.1	41.9	42.7	63.0	120.0	71.2	44.6	28.9	22.1	18.0	11.8	15.2	11.5	12.2	11.4	24.7	13.5	12.9	13.3	20.7	20.2	15.6	9.4	1.4
<15 yrs	23.5	17.7	26.6	23.6	31.3	39.0	29.3	18.8	37.2	21.4	26.0	3.1	13.8	3.2	3.1	1.6	8.0	12.8	9.2	51.5	8.2	12.5	19.4	28.5	35.2	21.1	14.8	3.3
15-64 yrs	12.7	19.3	17.7	21.3	27.3	44.3	46.2	73.9	155.7	90.4	53.4	36.6	25.3	24.4	15.5	17.2	13.5	9.3	12.4	18.1	14.2	14.7	10.5	19.0	17.3	15.3	8.5	1.1
≥65 yrs	17.3	12.7	12.4	19.9	27.2	34.5	46.2	79.2	76.6	55.6	31.4	31.8	19.4	10.2	7.4	27.2	7.6	25.3	9.7	14.8	18.0	4.9	17.9	16.9	10.6	8.3	5.2	0.0
Number of reporting practices (N=60)	58	57	58	58	58	58	58	58	55	58	58	55	57	54	56	56	55	55	57	56	53	56	55	53	53	51	55	54

**Table 1:** Age specific sentinel GP ILI consultation rate per 100,000 population by week (week 46 2020 – week 20 2021), colour coded by sentinel GP ILI age specific Moving Epidemic Method (MEM) threshold levels. *Source: ICGP.*

## 2. Influenza and Other Respiratory Virus Detections - NVRL

The data reported in this section for the 2020/2021 influenza season refer to sentinel GP 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 and figures 3 and 4). The COVID-19 pandemic caused disruption to sentinel GP influenza networks across the globe. In Ireland, virological surveillance and testing for influenza and RSV within the Irish sentinel GP network recommenced on swabs taken from the 18<sup>th</sup> November 2020.

- Of 1860 sentinel GP ILI specimens and 3419 non-sentinel respiratory specimens tested for influenza and RSV this season to date, no positive influenza detections were reported. Five positive RSV detections were reported by the NVRL in weeks 12, 13 and 18 2021) (Table 2 and figure 4).
- The number of sentinel GP ILI and non-sentinel respiratory specimens tested each week are continuously updated, as more data are reported.
- Rhinovirus/enterovirus positive detections increased in September 2020 and have continued to be detected throughout the 2020/2021 season. During week 20 2021, rhinovirus/enterovirus detections decreased to 20.3% (12/59), compared to 35.2% (38/108) in week 19 2021 (figure 3). Sporadic detections of adenovirus, parainfluenza virus, hMPV, and bocavirus were reported during the 2020/2021 season to date.
- A small number of co-infections with Rhinovirus/Enterovirus and other respiratory viruses were detected in recent weeks.

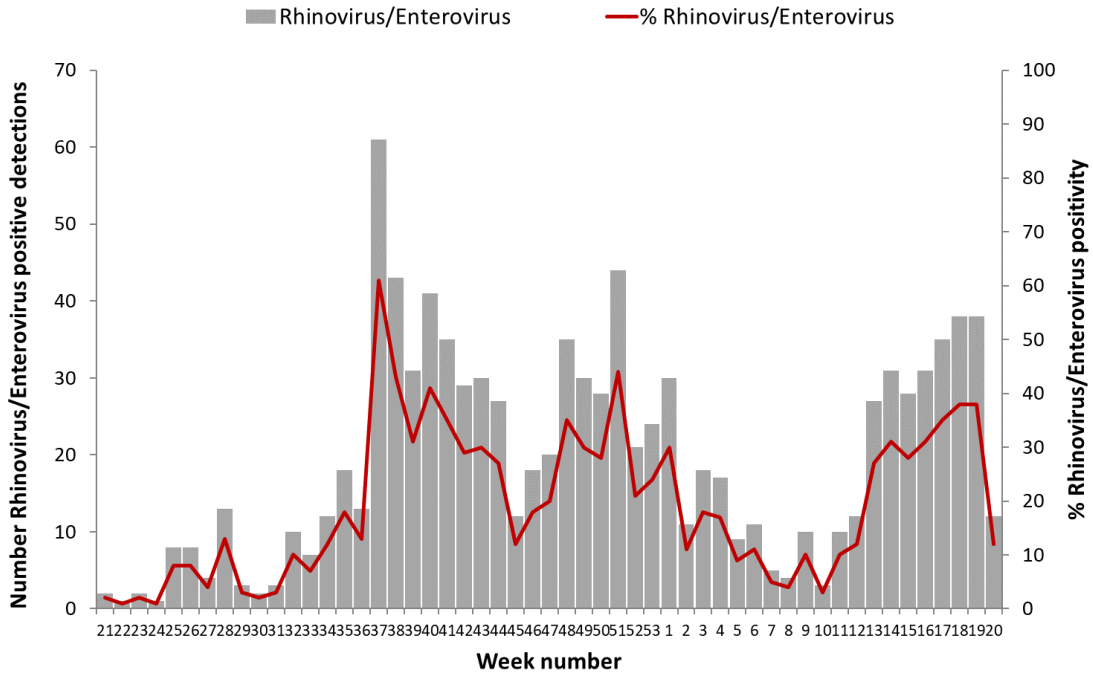
**Table 2:** Number of sentinel GP ILI referrals and non-sentinel\* respiratory specimens tested by the NVRL for influenza and RSV and positive results, for weeks 19 and 20 2021 and the 2020/2021 season to date. *Source: NVRL*

Week	Specimen type	Total tested	Influenza		RSV	
			Number positive	% positive	Number positive	% positive
19 2021	Sentinel GP ILI referral	24	0	0.0	0	0.0
	Non-sentinel	108	0	0.0	0	0.0
20 2021	Sentinel GP ILI referral	2	0	0.0	0	0.0
	Non-sentinel	59	0	0.0	0	0.0
	<b>Total</b>	<b>193</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>
2020/2021	Sentinel GP ILI referral	1860	0	0.0	0	0.0
	Non-sentinel	3419	0	0.0	5	0.1
	<b>Total</b>	<b>5279</b>	<b>0</b>	<b>0.0</b>	<b>5</b>	<b>0.1</b>

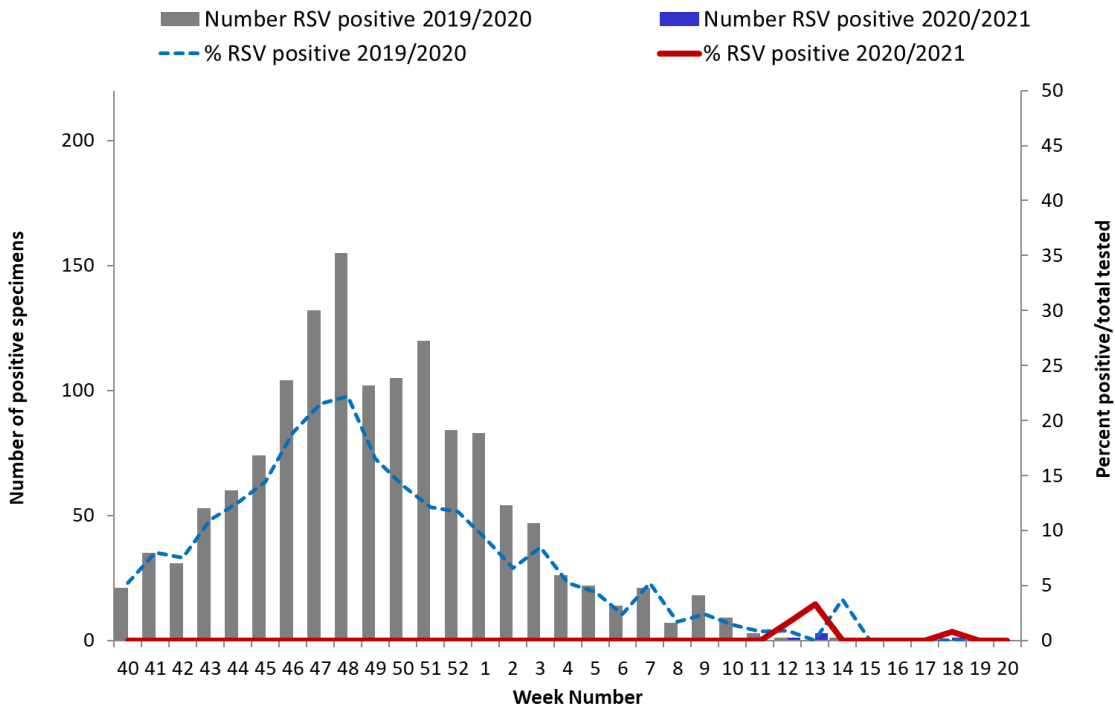
**Table 3:** Number of non-sentinel respiratory specimens tested by the NVRL for other respiratory viruses (excluding SARS-CoV-2) and positive results, for weeks 19 and 20 2021 and the 2020/2021 season to date. *Source: NVRL*

Week	Total tested	Adenovirus	% Adenovirus	Rhino/enterovirus	% Rhino/enterovirus	Bocavirus	% Bocavirus	hMPV	% hMPV	PIV-4	% PIV-4
19 2021	108	2	1.9	38	35.2	1	0.9	0	0	0	0
20 2021	59	1	1.7	12	20.3	0	0	0	0	0	0
2020/2021	3419	121	3.5	774	22.6	15	0.4	13	0.4	2	0.1

\* Please note that non-sentinel specimens relate to specimens referred to the NVRL (other than sentinel specimens) and may include more than one specimen from each case.



**Figure 3:** Number and percentage of non-sentinel Rhinovirus/Enterovirus positive specimens detected by the NVRL during the 2020/2021 season. *Source: NVRL.*



**Figure 4:** Number and percentage of non-sentinel Respiratory Syncytial Virus positive specimens detected by the NVRL during the 2020/2021 season, compared to 2019/2020. Please note; week 53 2020 was not included in this figure, for ease of visual display, as there was no week 53 in 2019. *Source: NVRL.*

### 3. 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.

**There has been no access to Ireland's Computerised Infectious Disease Reporting system (CIDR) since 14<sup>th</sup> May 2021, as a result of the cyber-attack. Therefore data on notifications for influenza and/or RSV are incomplete.**

Influenza and RSV notifications are reported in the Weekly Infectious Disease Report for Ireland.

- No confirmed influenza notifications were reported from week 40 2020 to week 20 2021.
- No RSV cases were notified during weeks 19 and 20 2021. For the 2020-2021 season to date there has been a total of nine RSV cases notified to HPSC (one in week 42 2020 and the other 8 cases were notified between weeks 3 and 18 2021).

### 4. Influenza Hospitalisations

No confirmed influenza hospitalised cases were notified to HPSC during week 40 2020 to week 20 2021.

### 5. 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 confirmed influenza cases were admitted to critical care units and reported to HPSC from week 40 2020 to week 20 2021.

### 6. Influenza Vaccinations

From 01/09/2020 up to the week ending 13/05/2021, the total number of influenza vaccinations provided by GPs and Pharmacists was 1,248,702.

## 7. International Summary

Since the start of the COVID-19 pandemic, influenza activity globally has remained at low levels. The World Health Organization (WHO) has advised that current influenza surveillance data should be interpreted with caution as the ongoing COVID-19 pandemic has influenced health seeking behaviours, surveillance and reporting in sentinel sites, as well as testing priorities and capacities in Member States. The various hygiene and physical distancing measures implemented by Member States to reduce SARS-CoV-2 virus transmission have likely played a role in reducing influenza virus transmission.

As of 24<sup>th</sup> May 2021, based on data up to 9<sup>th</sup> May 2021, WHO reported that globally, despite continued or even increased testing for influenza in some countries, influenza activity remained at lower levels than expected for this time of the year. In the temperate zone of the northern hemisphere, influenza activity remained below baseline, though detections of influenza B-Victoria lineage slightly increased especially in China. In the temperate zone of the southern hemisphere, influenza activity was reported at inter-seasonal level. In the Caribbean and Central American countries there were no influenza detections reported. In tropical South America, no influenza detections were reported. In tropical Africa, influenza detections were reported in some countries in Western and Eastern Africa. In Southern Asia, influenza activity continued to be reported at low levels in Bangladesh and India. In South East Asia, low influenza A(H3N2) detections continued to be reported in Lao People's Democratic Republic (PDR). Worldwide, influenza B detections accounted for the majority of the very low numbers of detections reported. The WHO GISRS laboratories tested more than 269,303 specimens from 26<sup>th</sup> April 2021-09<sup>th</sup> May 2021. A total of 484 specimens were positive for influenza viruses, of which 80 (16.5%) were typed as influenza A and 404 (83.5%) as influenza B. Of the sub-typed influenza A viruses, 20 (55.6 %) were influenza A(H1N1)pdm09 and 16 (44.4%) were influenza A(H3N2). Of the characterised B viruses, 0 (0.0%) belonged to the B-Yamagata lineage and 358 (100%) to the B-Victoria lineage.

In the European region, influenza activity remained at inter-seasonal levels during week 19 2021. During this period, 637 primary care sentinel source specimens were tested for influenza viruses and one was positive for influenza A(H3) virus. Since the start of the season, of 42,855 primary care sentinel specimens that have been tested for influenza viruses, 46 were positive (30 type A and 16 type B viruses). During week 19 2021, 18 of 25,096 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: 11 were type A and 7 were type B. Since the beginning of the season, 857 of 821,955 non-sentinel specimens tested positive for influenza viruses; 435 (51%) were type A and 422 (49 %) type B. Of 79 subtyped A viruses, 28 (35.4 %) were A(H1)pdm09 and 51 (64.5%) were A(H3). Of 422 type B viruses, only 14 were ascribed to a lineage: 11 B/Victoria and 3 B/Yamagata.

See ECDC and WHO influenza surveillance reports for further information.

- Further information on influenza is available on the following websites:  
Northern Ireland <https://www.publichealth.hscni.net/publications/influenza-weekly-surveillance-bulletin-northern-ireland-202021>  
Public Health England <https://www.gov.uk/government/collections/weekly-national-flu-reports>  
  
Europe – ECDC <http://ecdc.europa.eu/>

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 December 2020 – February 2021 <https://www.ecdc.europa.eu/en/publications-data/avian-influenza-overview-december-2020-february-2021>
- 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>

## 8. 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; and
- a B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.

[https://www.who.int/influenza/vaccines/virus/recommendations/2021-22\\_north/en/](https://www.who.int/influenza/vaccines/virus/recommendations/2021-22_north/en/)

Further information on influenza in Ireland is available at [www.hpsc.ie](http://www.hpsc.ie)

### Acknowledgements

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