

Influenza

Weekly Surveillance Bulletin

Weeks 46 - 47 (15 November — 28 November 2021)

Community Activity

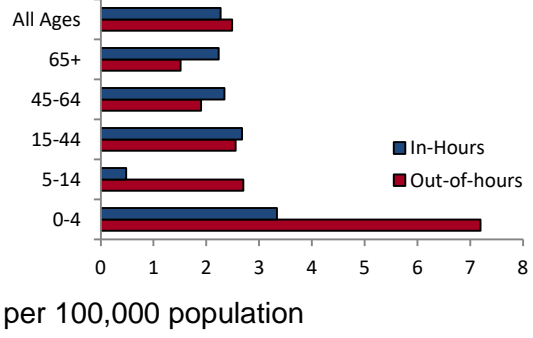
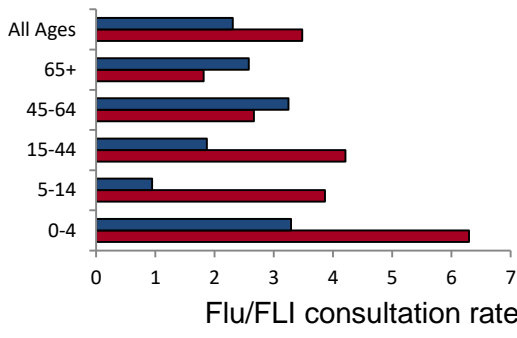


Week	October					November				December					January					February				March				April				May						
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20				
2021/22																																						
2020/21																																						
2019/20																																						

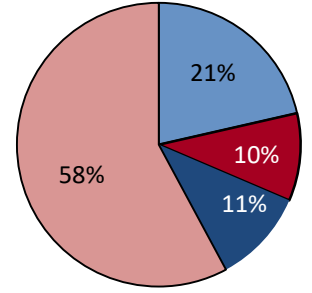
GP consultation rates for 'flu/flu-like-illness' ('flu/FLI')

(Wk 46: 15 Nov - 21 Nov 2021)

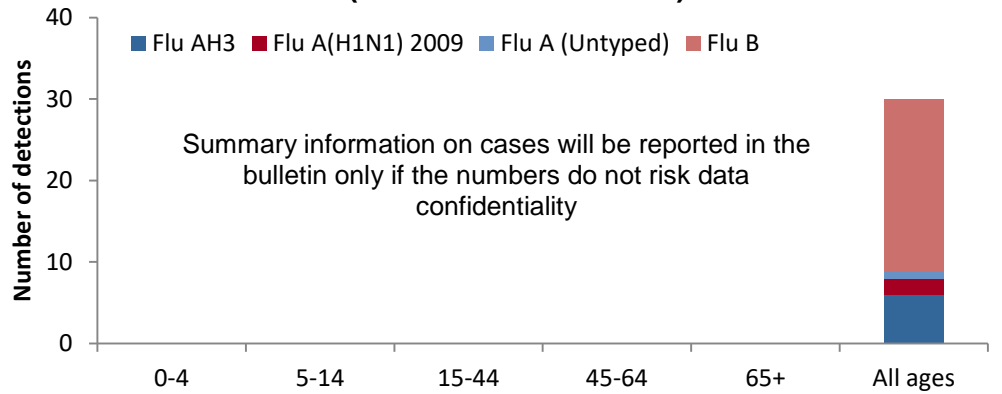
(Wk 47: 22 Nov - 28 Nov 2021)



Circulating strains this season to date



Number of hospital cases with confirmed flu (15 Nov - 28 Nov 2021)



To date there has been no admissions to ICU with confirmed influenza

Influenza Outbreaks (15 Nov - 28 Nov 2021)

0

To date there have been no flu outbreaks reported

Influenza vaccine uptake 2021/22

Vaccine uptake rates for 2021/22 will appear here later in the season

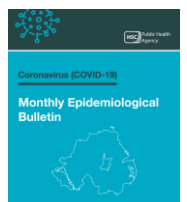
Annual Influenza Surveillance Report 2019-20

The end of season report, Surveillance of Influenza in Northern Ireland 2019-20 is available to download [here](#).



COVID-19 Monthly Bulletin

The weekly and monthly COVID-19 Bulletins are available to download [here](#).



Note

Surveillance systems should be interpreted with caution due to the impact of the COVID-19 pandemic.

Surveillance data from the 2019/20 flu season has been included to allow comparison with the last influenza season with “normal activity” (2020/21 had extremely low influenza activity as a result of the COVID-19 prevention measures).

Differences observed between previous seasons may also be due the ongoing impact of COVID-19 pandemic, for example changes in health-seeking behaviour, GP consultations and testing practices.

GP consultation rates for ‘flu/flu-like-illness’ (‘flu/FLI’)

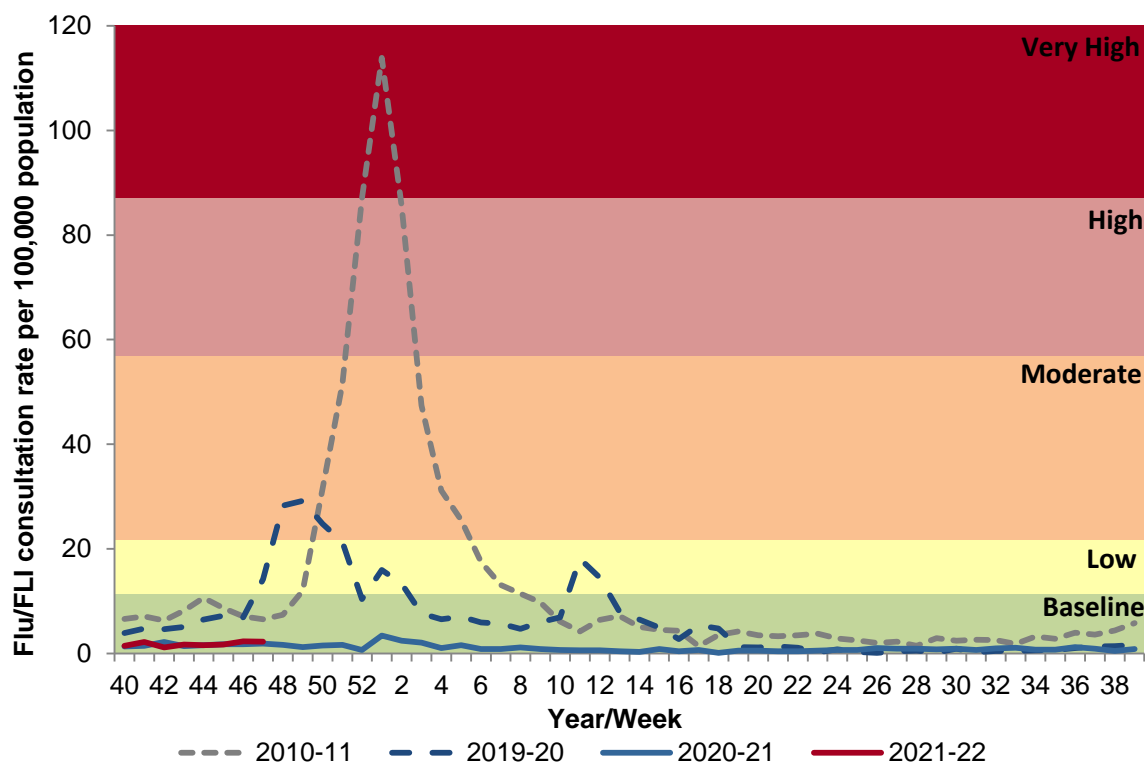


Figure 1. Northern Ireland GP consultation rates for ‘flu/FLI’ 2019/20 – 2021/22, 2010/11 for comparison

The baseline MEM threshold for Northern Ireland is 11.3 per 100,000 population for 2021-22. Low activity is 11.3 to <21.8, moderate activity 21.8 to <57.0, high activity 57.0 to <87.1 and very high activity is >87.1

Comment

GP flu/FLI consultation rates were 2.3 per 100,000 population in both weeks 46 and 47, which is lower than the same time in 2019-20 (14.2 per 100,000 in week 47). Activity remains below the baseline threshold for Northern Ireland (<11.3 per 100,000) (Figure 1).

Flu/FLI consultation rates were highest in 0-4 year olds in weeks 46 and 47 (both 3.3 per 100,000). Rates are lower in all age groups compared to the same time in 2019-20 (Week 47).

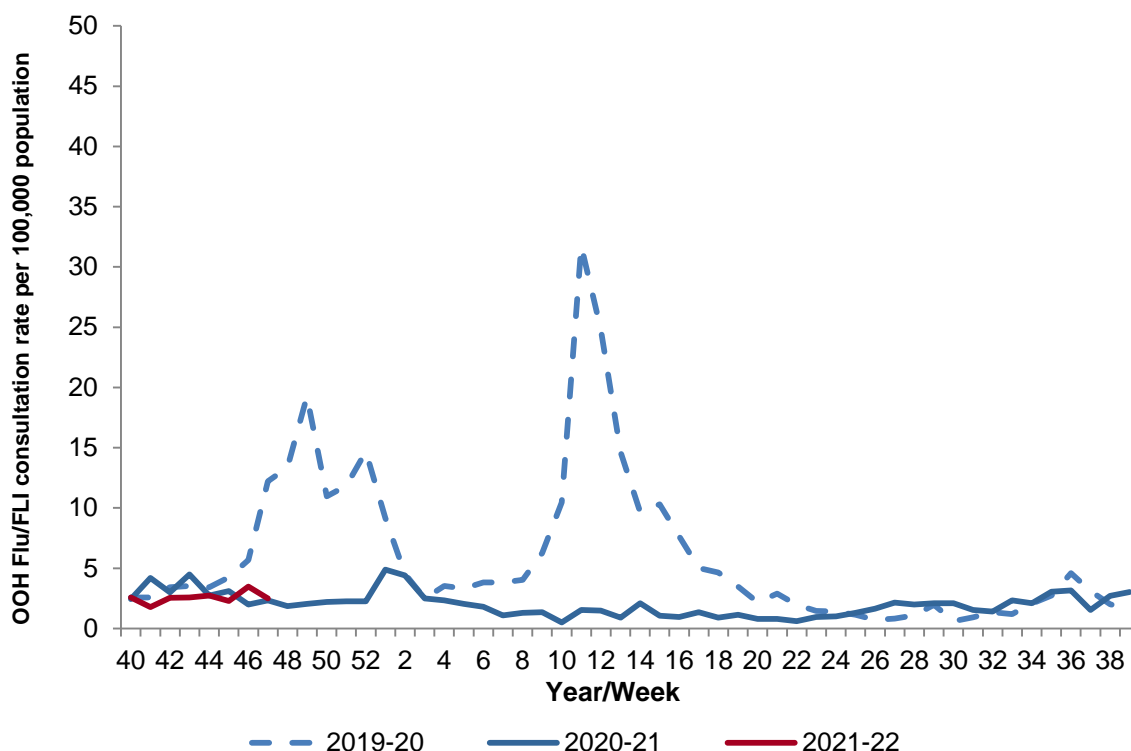


Figure 2. Northern Ireland Out of Hours (OOH) consultation rates for ‘flu/FLI’ 2019/20 – 2021/22

Flu/FLI consultation rates in Primary Care Out-of-Hours (OOH) Centres were 3.5 per 100,000 population in week 46 and 2.5 per 100,000 in week 47. This is lower than the same time in 2019-20 (12.2 per 100,000 in week 47) (Figure 2).

In weeks 46 and 47 the percentage of calls to an OOH Centre due to flu/FLI was 0.6% and 0.4%, respectively. This is lower than when compared to the same period in 2019-20 (1.7% in week 47).

Rates were highest in those aged 0-4 years in weeks 46 and 47 (6.3 and 7.2 per 100,000 population, respectively). In comparison to week 47, 2019-20, consultation rates were lower in all age groups.

Virology

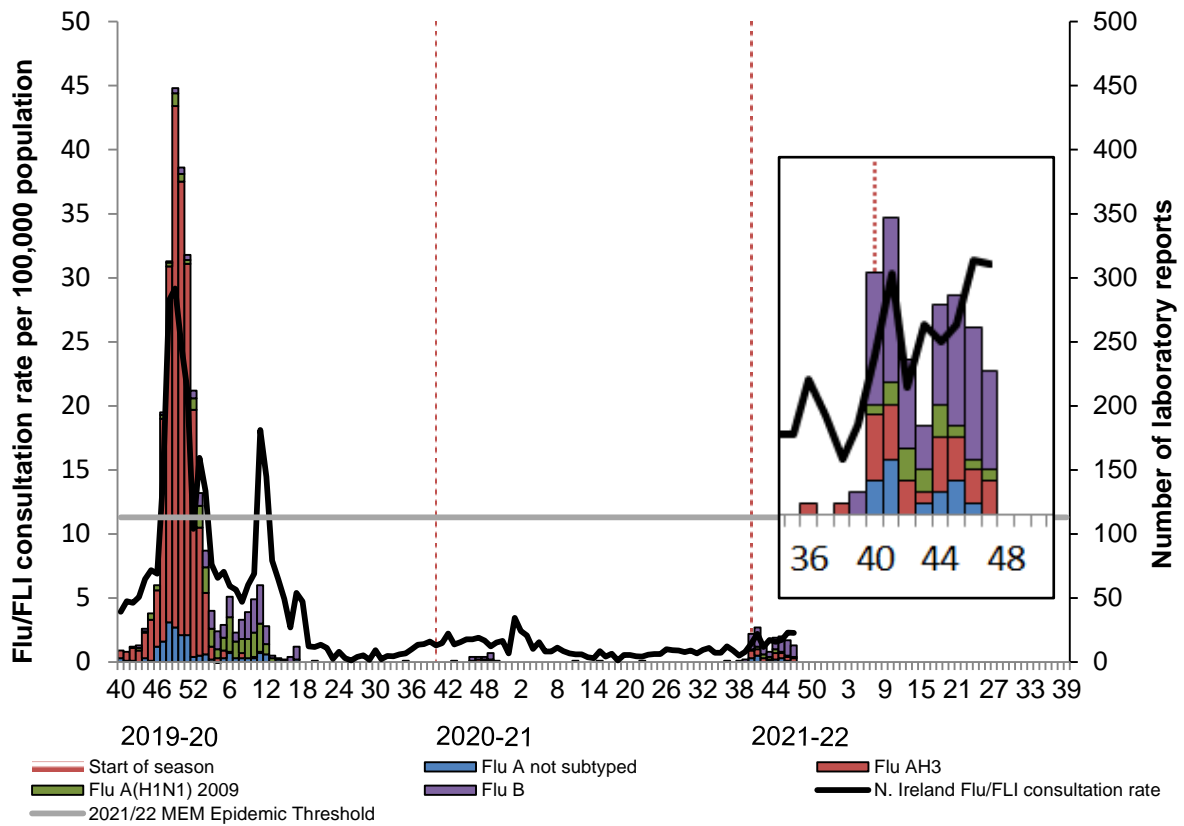


Figure 3. Weekly number of flu laboratory reports from week 40, 2019 with weekly GP consultation rates for ‘flu/FLI’

Table 1. Virus activity in Northern Ireland by source, Weeks 46-47, 2021-22

Source	Specimens tested	Flu AH3	Flu A(H1N1) 2009	Flu A (Untyped)	Flu B	RSV	Total Influenza Positive	% Influenza Positive
Sentinel	30	0	0	0	0	0	0	0.0%
Non-sentinel	12391	6	2	1	21	65	30	0.2%
Total	12421	6	2	1	21	65	30	0.2%

Table 2. Cumulative virus activity from all sources by age group, Week 40 - 47, 2021-22

Age Group	Flu AH3	Flu A(H1N1) 2009	Flu A (Untyped)	Flu B	Total Influenza	RSV
0-4	13	7	0	30	50	491
5-14	13	5	12	41	71	47
15-64	3	2	2	10	17	136
65+	1	0	1	0	2	93
Unknown	0	0	0	0	0	0
All ages	30	14	15	81	140	767

Table 3. Cumulative virus activity by age group and source, Week 40 - 47, 2021-22

Age Group	Sentinel						Non-sentinel					
	Flu AH3	Flu A(H1N1) 2009	Flu A (Untyped)	Flu B	Total Influenza	RSV	Flu AH3	Flu A(H1N1) 2009	Flu A (Untyped)	Flu B	Total Influenza	RSV
0-4	0	0	0	0	0	0	13	7	0	30	50	491
5-14	0	0	0	0	0	1	13	5	12	41	71	46
15-64	0	0	0	0	0	0	3	2	2	10	17	136
65+	0	0	0	0	0	0	1	0	1	0	2	93
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
All ages	0	0	0	0	0	1	30	14	15	81	140	766

Note

All virology data are provisional. The virology figures for previous weeks included in this or future bulletins are updated with data from laboratory returns received after the production of the last bulletin. The current bulletin reflects the most up-to-date information available. Sentinel and non-sentinel samples are tested for influenza and for respiratory syncytial virus. Cumulative reports of influenza A (untyped) may vary from week to week as these may be subsequently typed in later reports.

The GP based sentinel programme is being redeveloped due to the impact of the COVID-19 pandemic. Therefore, preliminary sentinel testing needs to be interpreted with caution

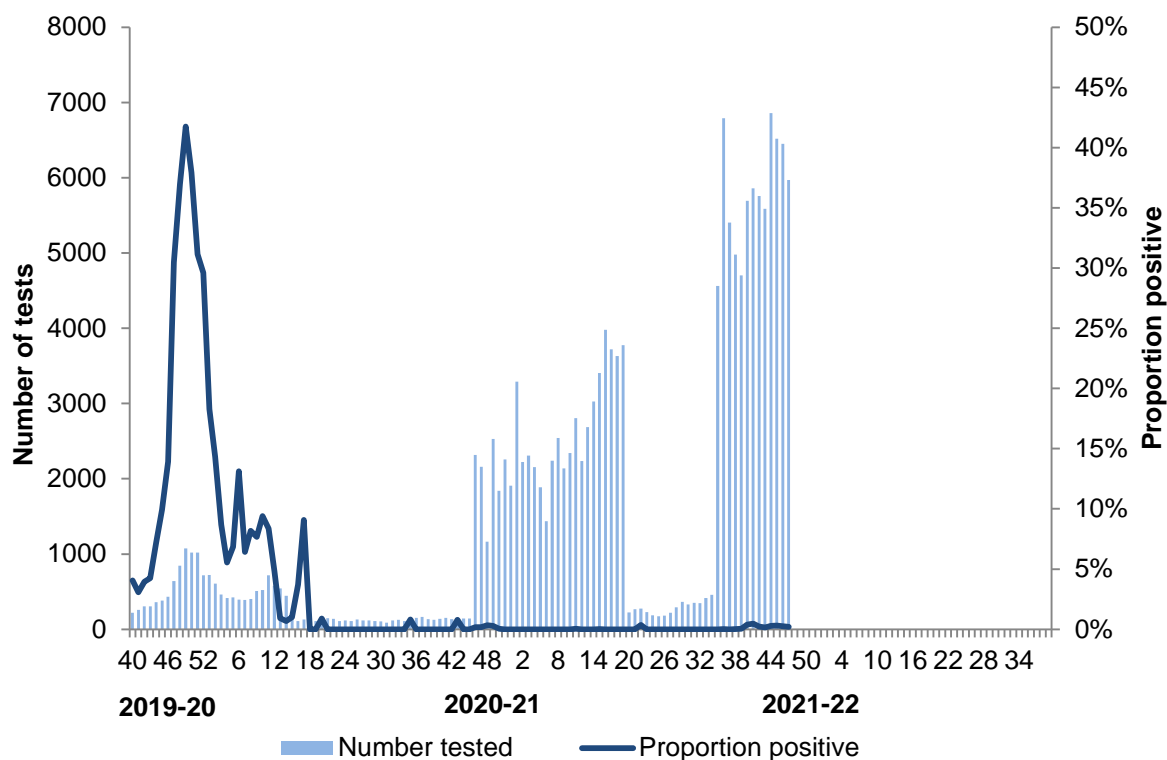


Figure 4. Number of samples tested for influenza and proportion positive, 2019/20 and 2021/22, all sources*

Comment

Prior to the beginning of the 2021-22 flu season (week 40, 2021) four samples tested positive for flu in weeks 36 to 39, 2021 (two Flu A(H3) and two Flu B). In weeks 46 and 47, 30 samples were positive for flu (six Flu A(H3), two Flu A(H1N1), one Flu A (untyped), and 21 Flu B) from 12,421 submitted for testing in laboratories across Northern Ireland. Positivity for weeks 46 and 47 combined (0.2%) is lower when compared to this time in 2019-20 (23.8%). The majority (86.4%) of total influenza positive samples since week 40 occurred in children aged 0-14 years.

The number of positive flu results should be interpreted with caution as this total could be inflated by a number of possible vaccine contaminated specimens. Possible vaccine contamination leading to a positive flu result (dual positive Flu A and Flu B) can occur when vaccine virus is detected in a specimen taken from a person (e.g. a child under 16 years) who recently received intranasal administration of live attenuated influenza virus vaccine (LAIV). Unfortunately we are unable to definitively determine the number of vaccine contaminated positive flu results, as at present we are unable to

confirm vaccination history of persons tested. (Figures 3 and 4; Tables 1, 2 and 3).

****Please note that multiplex testing for SARS-CoV-2/Flu/RSV was introduced at the Regional Virology Laboratory from Week 34, 2021, and local HSCT laboratories (SHSCT in August 2021, SEHSCT week 40, 2021 and WHSCT in October 2021) therefore an increase in flu and RSV testing (and reporting) should be expected. At present, only positive flu and RSV results are available from WHSCT laboratory. It is anticipated that multiplex testing will also be commenced at remaining local HSCT laboratories as the season progresses.***

Respiratory Syncytial Virus (RSV)

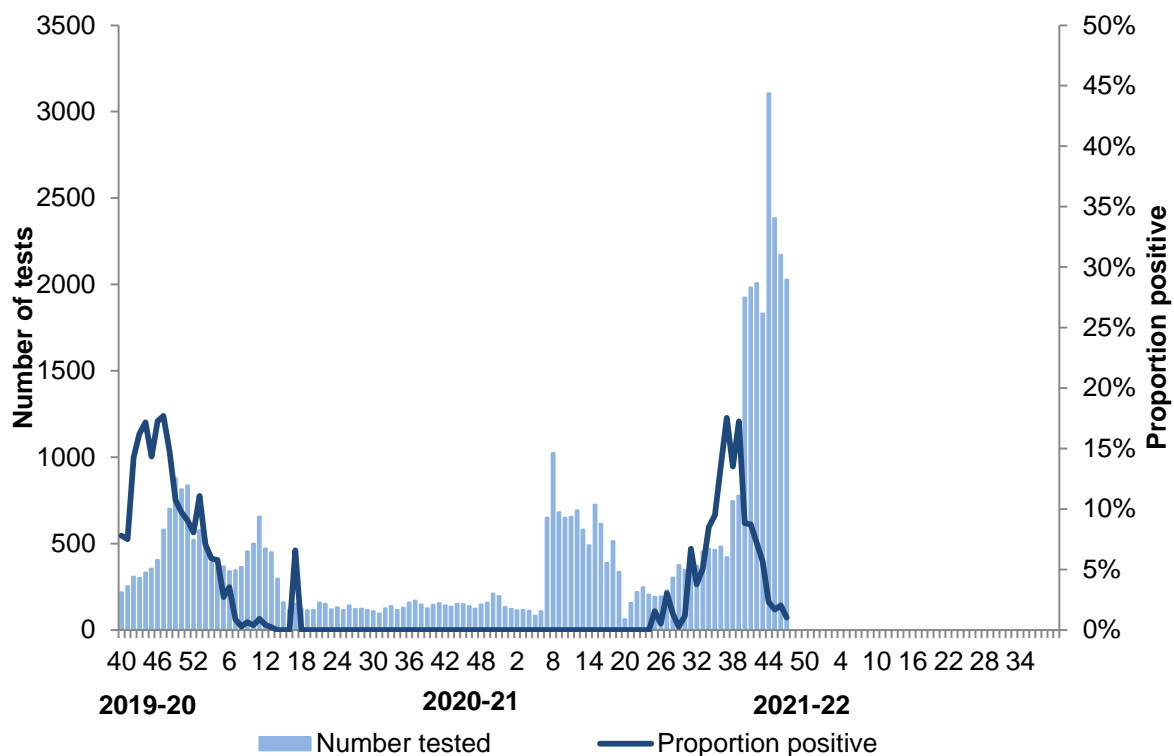


Figure 5. Number of samples tested for RSV and proportion positive, 2019/20 – 2021/22, all sources**

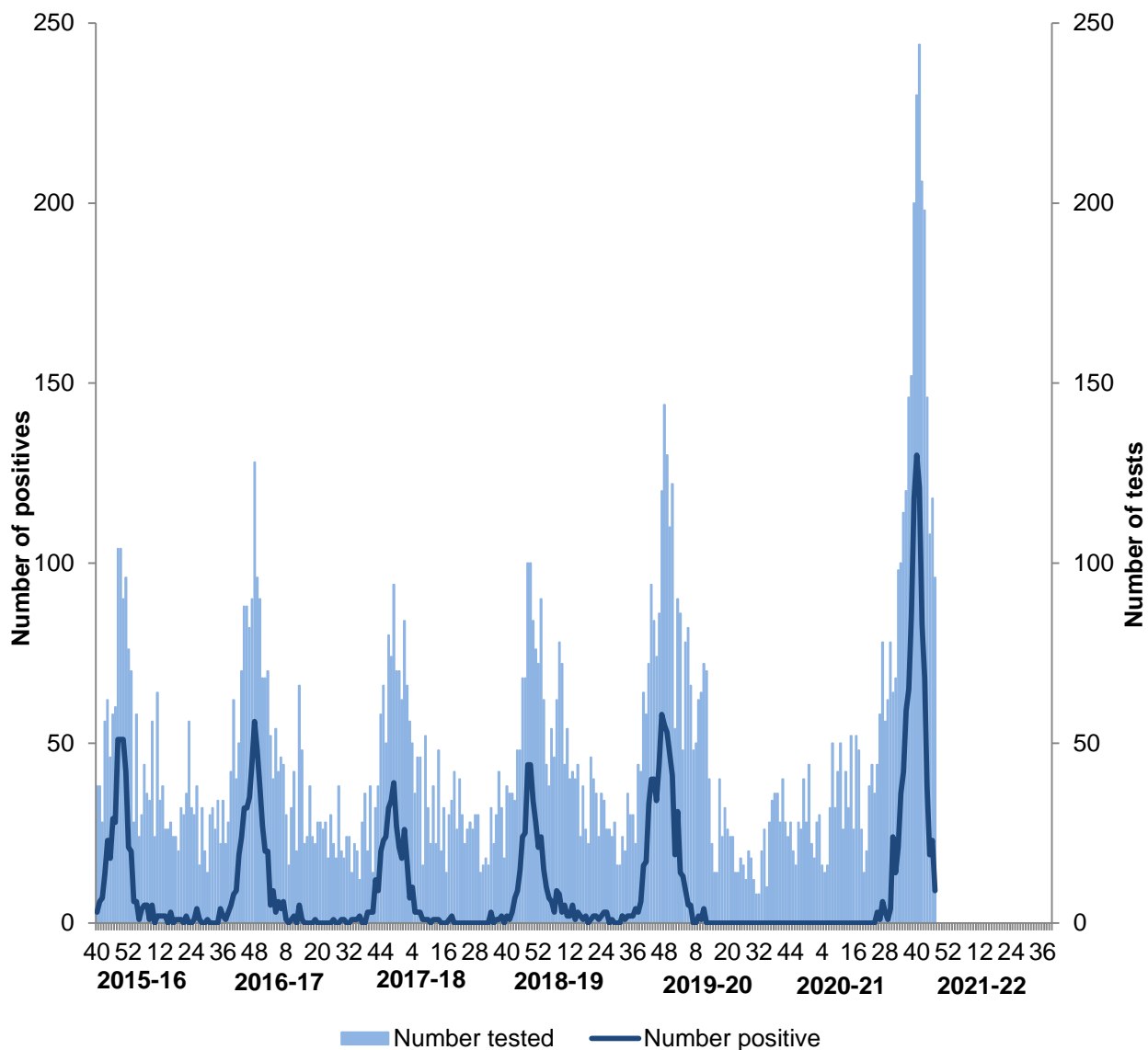


Figure 6. Number of samples tested for RSV and number of positive samples in children under 5 years, 2015/16 – 2021/22, all sources**

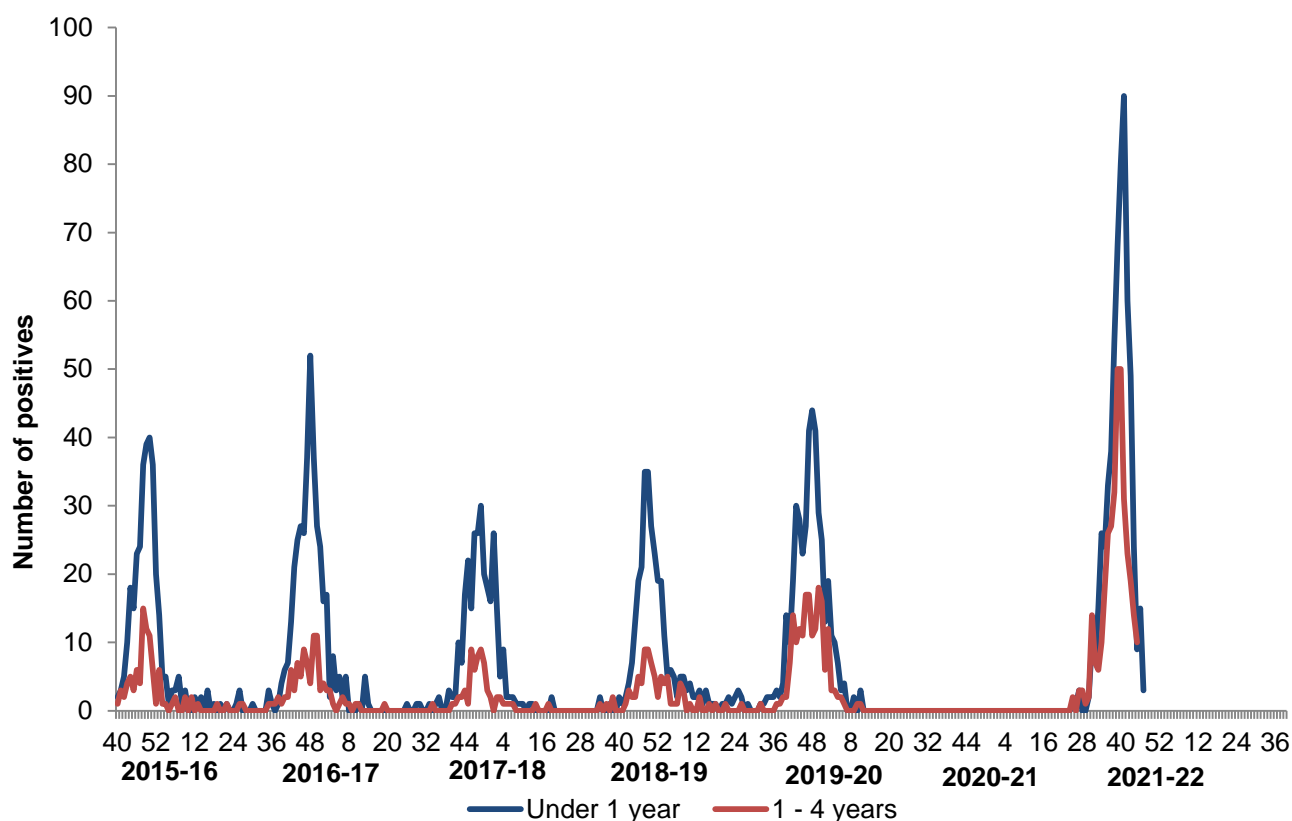


Figure 7. Number of positive tests for RSV in children under 1 year and 1-4 years, 2015/16 – 2021/22, all sources**

Comment

An earlier start to the typical RSV season was observed, with positivity beginning to increase from week 25, 2021 (2.0%) and peaking in week 37 at 18%. In weeks 46 and 47, 65 samples tested positive for RSV, with positivity decreasing in week 47 to 1% (18% in week 47, 2019-20). The recent increase in testing in local HSCT laboratories should also be noted.**

The majority (64%) of RSV positive samples since week 40 occurred in children aged 0-4 years.

The number of positive samples in children under 1 year peaked in week 41, 2021 (90 positive samples) whilst the peak in children 1-4 years was observed in week 39 and 40, 2021 (50 positive samples) (Table 2, Figures 5, 6 and 7).

****Please note that multiplex testing for SARS-CoV-2/Flu/RSV was introduced at the Regional Virology Laboratory from Week 34, 2021, and local HSCT laboratories (SHSCT in August 2021, SEHSCT week 40, 2021 and WHSCT in October 2021) therefore an increase in flu and RSV testing (and reporting) should be expected. At present, only positive flu and RSV results are available from WHSCT laboratory. It is anticipated that multiplex testing will also be commenced at remaining local HSCT laboratories as the season progresses.**

The virology data does not currently include data on Point of Care RSV tests conducted in RBHSC. The virology data in future bulletins will be updated with this information once available to the PHA respiratory surveillance team.

Hospital Surveillance (Non-ICU/HDU)

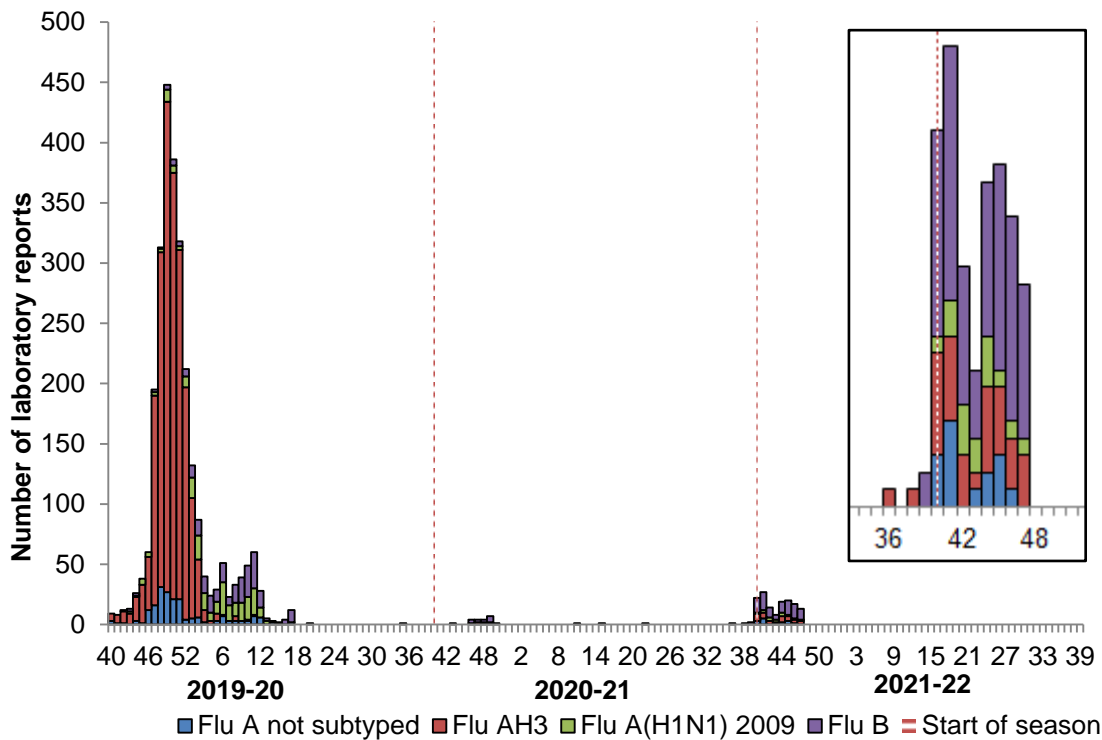


Figure 8. Weekly number of hospitalisations testing positive for influenza by week of specimen, 2019/20 – 2021/22***

Comment

Prior to the beginning of the 2021-22 flu season (week 40, 2021) four samples tested positive for flu in weeks 36 to 39, 2021 (two Flu A(H3) and two Flu B). In weeks 46 and 47, 30 hospitalisations tested positive for flu (six Flu A(H3), two Flu A(H1N1), one Flu A (untyped), and 21 Flu B). This is lower than the number of hospitalisations which tested positive for flu at the same time in 2019-20 (255 in weeks 46 and 47 in 2019-20) (Figure 8).

Of note, not all positive specimens may have been reported as this point.

*****Please note that multiplex testing for SARS-CoV-2/Flu/RSV was introduced at the Regional Virology Laboratory from Week 34, 2021, and local HSCT laboratories (SHSCT in August 2021, SEHSCT week 40, 2021 and WHSCT in October 2021) therefore an increase in flu and RSV testing (and reporting) should be expected. At present, only positive flu and RSV results are available from WHSCT laboratory. It is anticipated that multiplex testing will also be commenced at remaining local HSCT laboratories as the season progresses.**

ICU/HDU Surveillance

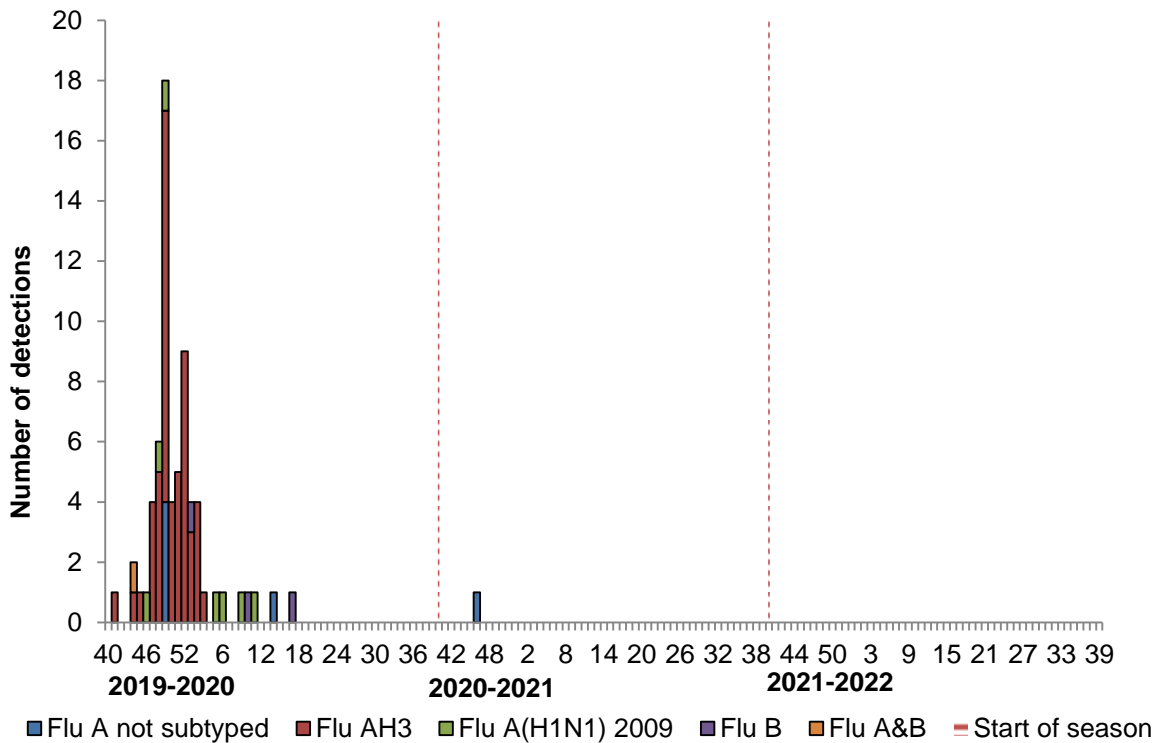


Figure 9. Confirmed ICU/HDU influenza cases by week of specimen, 2019/20 – 2021/22*

Comment

Data are collected on laboratory confirmed influenza patients and deaths in critical care (level 2 and level 3).

There were no new admissions to ICU with confirmed influenza reported to the Public Health Agency (PHA) in weeks 46 and 47 (Figure 9).

Summary information on cases will be reported in the bulletin only if the numbers do not risk data confidentiality.

Outbreaks

Comment

There have been no confirmed influenza outbreaks reported to the PHA Health Protection acute response duty room so far this season.

Mortality

The Northern Ireland Statistics and Research Agency (NISRA) provide the weekly number of **respiratory associated deaths** and its proportion of all-cause registered deaths.

Respiratory associated deaths include those that are attributable to influenza, other respiratory infections or their complications. This includes “*bronchiolitis, bronchitis, influenza or pneumonia*” keywords recorded on the death certificate.

Please note, NISRA mortality data is not the same as the actual number of deaths during the reporting period.

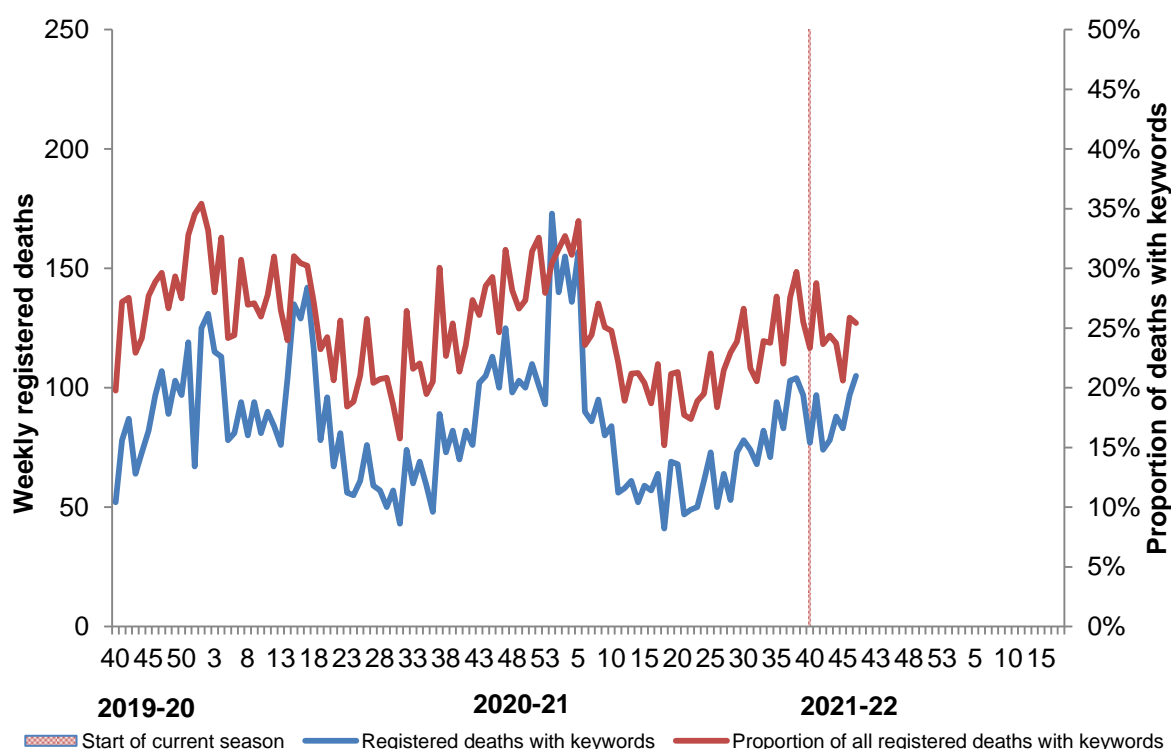


Figure 10. Weekly registered deaths and proportion of all deaths with keywords, by week of registration from week 40, 2019*

Comment

In week 46, 97 respiratory associated deaths out of 375 all-cause deaths were reported (25.9%), with 25.4% in week 47. These trends are broadly the same as the same period in 2019/20 (Figure 10).

EuroMOMO

There was no excess all-cause mortality reported in Northern Ireland in weeks 46 and 47.

Please note this data is provisional due to the time delay in registration; numbers may vary from week to week.

Information on mortality from all causes is provided for management purpose from the United Kingdom Health Security Agency. Excess mortality is defined as a statistically significant increase in the number of deaths reported over the expected number for a given point in time. This calculation allows for a weekly variation in the number of deaths registered and takes account of deaths registered retrospectively. Information is used to provide an early warning to the health service of any seasonal increases in mortality to allow further investigation of excess detections.

There is no single cause of ‘additional’ deaths in the winter months but they are often attributed in part to cold weather (e.g. directly from falls, fractures, road traffic accidents), through worsening of chronic medical conditions e.g. heart and respiratory complaints and through respiratory infections including influenza.

For more information on EuroMOMO and interactive maps of reporting across the season please see <http://www.euromomo.eu/index.html>

Influenza Vaccine Uptake

Vaccine uptake rates for 2021-22 will be reported in the bulletin later in the season (initial reports may not match previous year's data formatting as a result of the introduction of the new Vaccine Management System (VMS)). Uptake rates for the previous two seasons are shown below.

	Delivered by	2020/21 (to 31 Mar)	2019/20 (to 31 Mar)
All 2 to 4 year olds	GP	55.2%	48.5%
All pregnant women	GP	42.1%	46.3%
All individuals under 65 years with a chronic medical condition	GP	67.8%	58.9%
All individuals 65 years and over	GP	79.1%	74.8%
% of all primary school children vaccinated to date	Trust School Nurse Service*	72.9%	72.1%
% of all year 8 school children vaccinated to date	Trust School Nurse Service	66.6%	n/a

* This figure includes nasal and injected vaccines delivered by the school, as well as a small number of nasal vaccines delivered by their GP

	% of all frontline health care workers employed by a Trust		% of all frontline social care workers employed by a Trust	
	2020/21 (to 31 Mar)	2019/20 (to 31 Mar)	2020/21 (to 31 Mar)	2019/20 (to 31 Mar)
Belfast HSCT*	50.0%	43.4%	41.8%	24.4%
South Eastern HSCT	59.1%	43.6%	48.5%	22.9%
Northern HSCT**	54.8%	43.5%	40.1%	27.9%
Southern HSCT***	50.9%	39.6%	36.4%	23.5%
Western HSCT	46.2%	29.1%	38.8%	12.1%
NIAS****	77.3%	62.4%	n/a	n/a
Northern Ireland	52.4%	41.2%	40.8%	22.8%

*Belfast HSCT figures were reported up to 31st January 2021

**Northern HSCT figures were not reported for January or March 2021

***Southern HSCT figures were reported up to 28th February 2021

****NIAS figures were reported up to 31st December 2020

Further Information and International/National Updates

Further information

Further information on influenza is available at the following websites:

[PHA Seasonal Influenza](#)

[nidirect Flu Vaccination](#)

[PHE Seasonal Influenza Guidance - Data and Analysis](#)

[WHO Influenza](#)

[ECDC Seasonal Influenza](#)

National updates

Detailed influenza weekly reports can be found at the following websites:

England [UKHSA Weekly National Flu and Covid-19 Surveillance Report](#)

Scotland [HPS Weekly National Seasonal Respiratory Report](#)

Wales [PHW Weekly Influenza and Acute Respiratory Infection Report](#)

Republic of Ireland [HPSC Influenza Surveillance Report](#)

International updates

Europe (ECDC and WHO) [Flu News Europe](#)

Worldwide (WHO) [WHO Influenza Surveillance and Monitoring](#)

Acknowledgements

We would like to extend our thanks to all those who assist us in the surveillance of influenza in particular the sentinel GPs, Out-of-Hours Centres, Apollo Medical, Regional Virus Laboratory, Critical Care Network for Northern Ireland and Public Health England. Their work is greatly appreciated and their support vital in the production of this bulletin.

The author also acknowledges the Northern Ireland Statistics and Research Agency (NISRA) and the General Register Office Northern Ireland (GRONI) for the supply of data used in this publication. NISRA and GRONI do not accept responsibility for any alteration or manipulation of data once it has been provided.

For further information on the Enhanced Surveillance of Influenza in Northern Ireland scheme or to be added to the circulation list for this bulletin please contact:

Ms Emma Dickson
Senior Epidemiological Scientist
Public Health Agency

Mr Paul Cabrey
Epidemiological Scientist
Public Health Agency

Miss Meg Wallace
Epidemiological Scientist
Public Health Agency

Mrs Suzanne Wilton
Surveillance Information Analyst
Public Health Agency

Dr David Irwin
Consultant in Health Protection
Public Health Agency

Email: flusurveillance@hscni.net