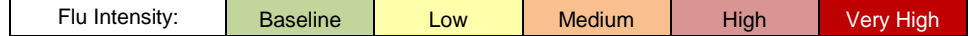


Influenza

Weekly Surveillance Bulletin

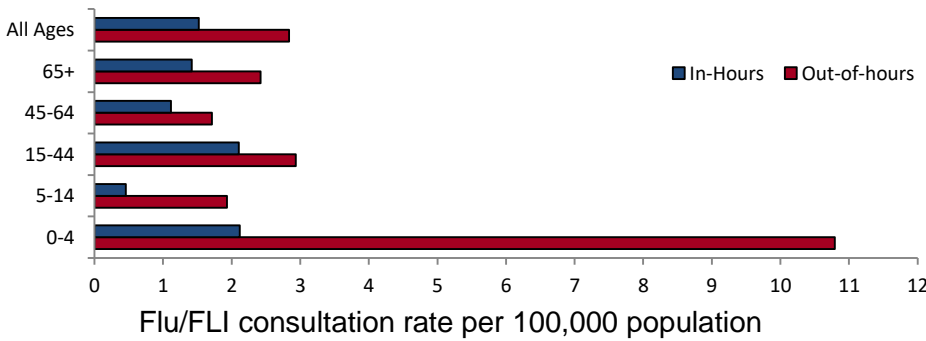
Week 49 (06 December —12 December 2021)

Community Activity

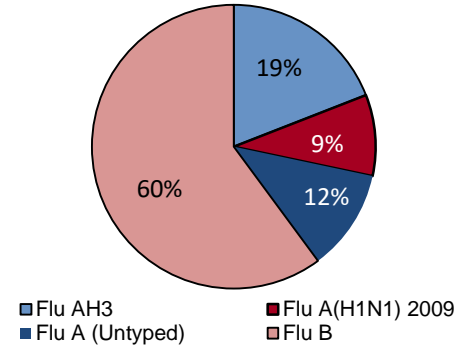


Week	October					November				December					January					February				March				April				May			
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
2021/22																																			
2020/21																																			
2019/20																																			

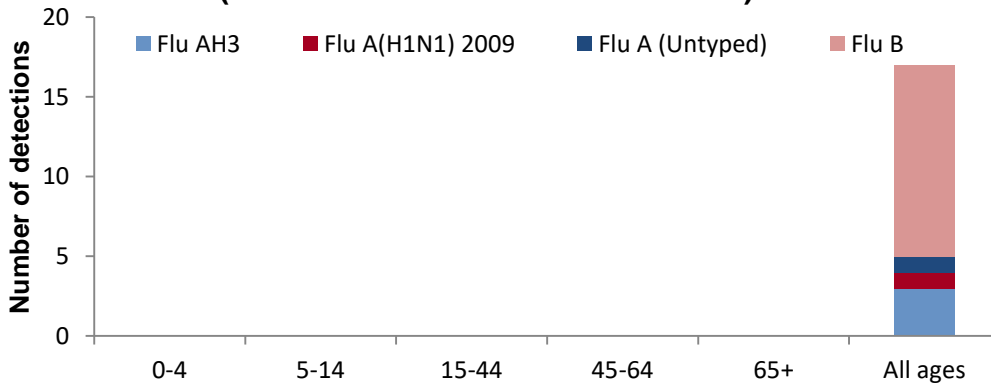
GP consultation rates for 'flu/flu-like-illness' ('flu/FLI') (06 December - 12 December 2021)



Circulating strains this season to date



Number of hospital cases with confirmed flu (06 December – 12 December 2021)



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

Influenza Outbreaks (06 Dec – 12 Dec 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

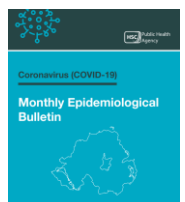
Annual Influenza Surveillance Report 2019-20

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’)

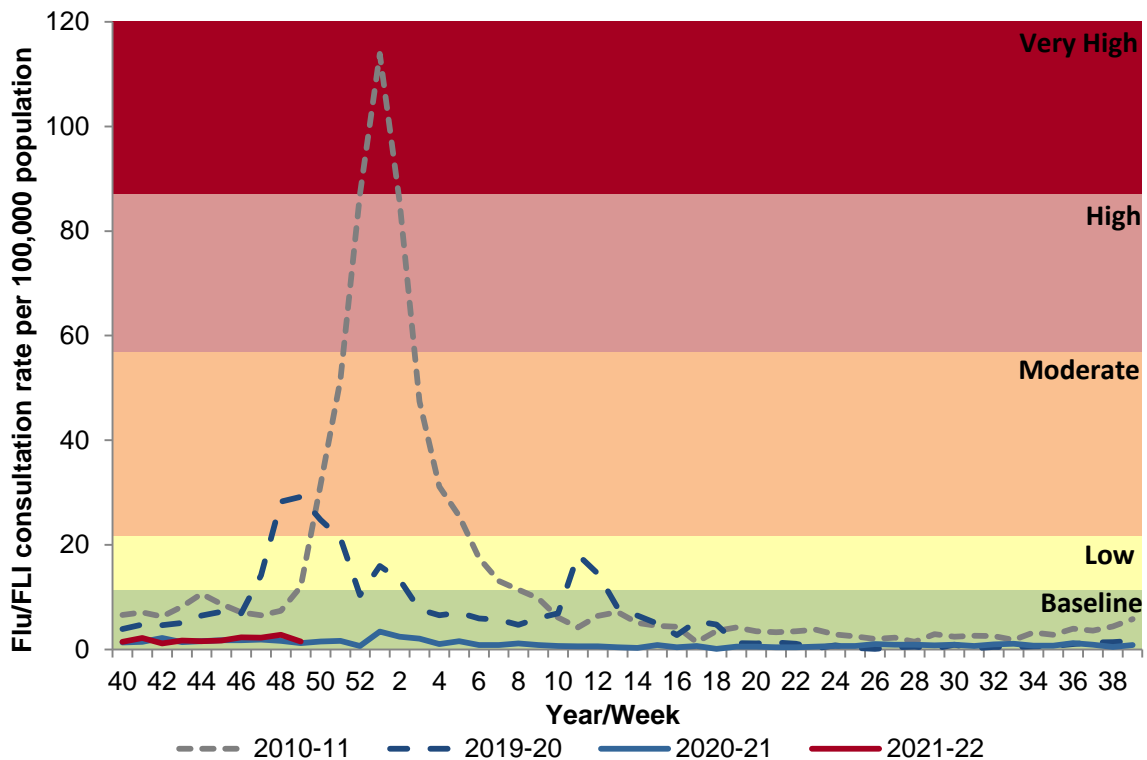


Figure 1. Northern Ireland GP consultation rates for ‘flu/FLI’ 2019/20 – 2021/22, 2010/11 for comparison

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

The GP flu/FLI consultation rate during week 49 was 1.5 per 100,000 population, slightly lower than week 48 (2.8 per 100,000). This is significantly lower than the same period in 2019-20 (29.2 per 100,000 in week 49). Activity remains below the baseline threshold for Northern Ireland (<11.3 per 100,000) (Figure 1).

Flu/FLI consultation rate was highest in 0-4 year olds in week 49 at 2.1 per 100,000. Rates are lower in all age groups compared to the same time in 2019-20 (week 49).

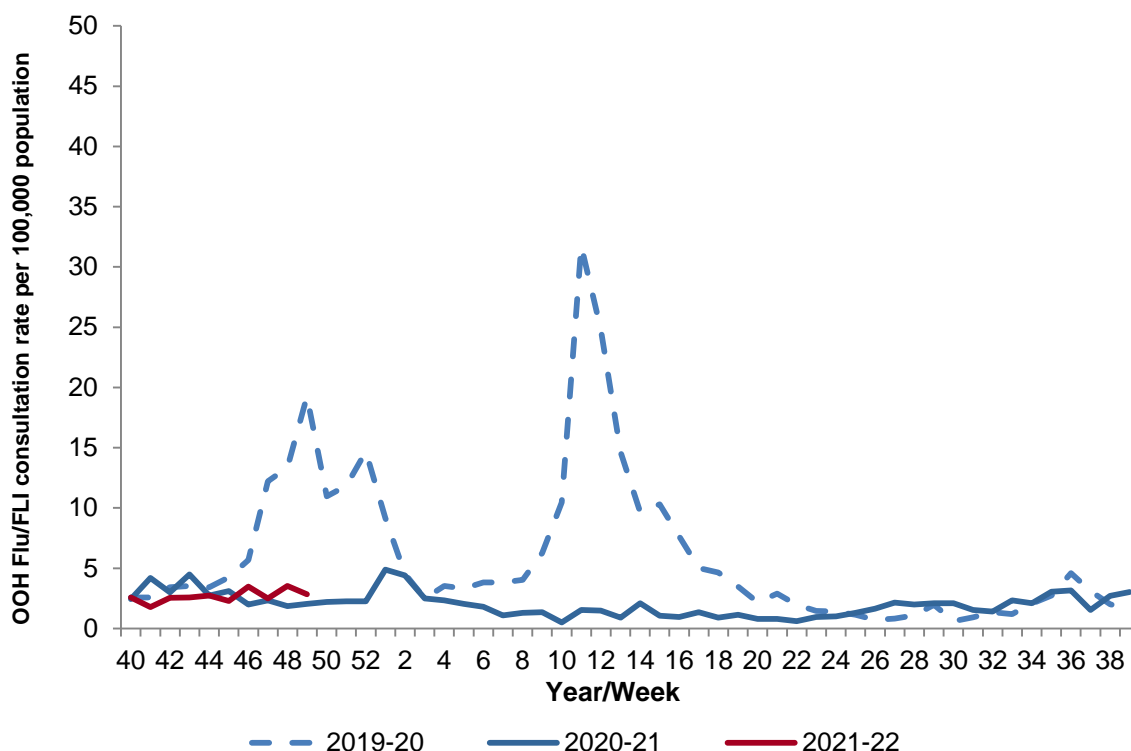


Figure 2. Northern Ireland Out of Hours (OOH) consultation rates for ‘flu/FLI’ 2019/20 – 2021/22

The flu/FLI consultation rate in Primary Care Out-of-Hours (OOH) Centres was 2.8 per 100,000 population in week 49. This is slightly lower than week 48 (3.5 per 100,000) but significantly lower than the same time in 2019-20 (19.3 per 100,000 in week 49) (Figure 2).

In week 49 the percentage of calls to an OOH Centre due to flu/FLI was 0.5%. This is similar to the previous week (0.6% in week 48) but lower than when compared to the same period in 2019-20 (3.1% in week 49).

Rates were highest in those aged 0-4 years in week 49 (10.8 per 100,000 population). In comparison to week 49, 2019-20, consultation rates were lower in all age groups.

Virology

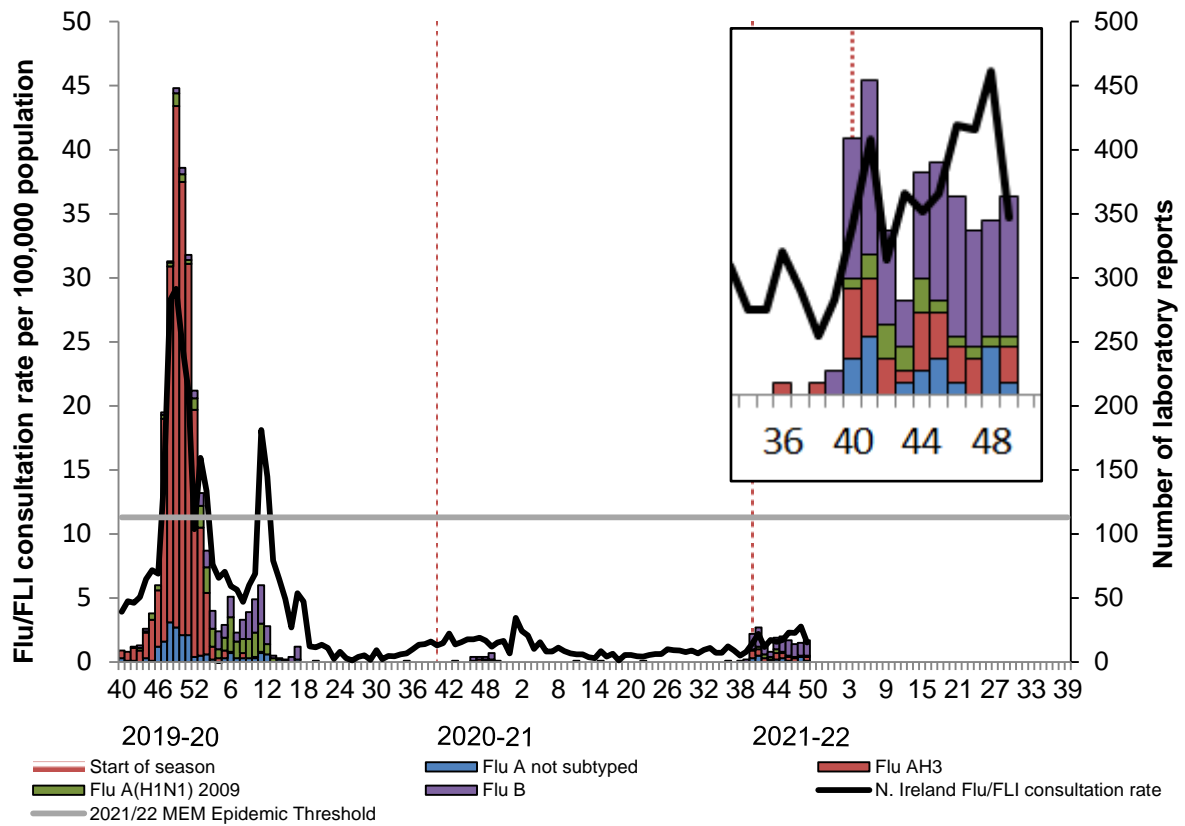


Figure 3. Weekly number of flu laboratory reports from week 40, 2019 with weekly GP consultation rates for ‘flu/FLI’

Table 1. Virus activity in Northern Ireland by source, Week 49, 2021-22

Source	Specimens tested	Flu AH3	Flu A(H1N1) 2009	Flu A (Untyped)	Flu B	RSV	Total Influenza Positive	% Influenza Positive
Sentinel	13	0	0	0	0	0	0	0.0%
Non-sentinel	6608	3	1	1	12	10	17	0.3%
Total	6621	3	1	1	12	10	17	0.3%

Table 2. Cumulative virus activity from all sources by age group, Week 40 - 49, 2021-22

Age Group	Flu AH3	Flu A(H1N1) 2009	Flu A (Untyped)	Flu B	Total Influenza	RSV
0-4	14	8	2	36	60	506
5-14	15	6	13	54	88	49
15-64	3	2	4	12	21	143
65+	1	0	1	2	4	100
Unknown	0	0	0	0	0	0
All ages	33	16	20	104	173	798

Table 3. Cumulative virus activity by age group and source, Week 40 - 49, 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	14	8	2	36	60	506
5-14	0	0	0	0	0	1	15	6	13	54	88	48
15-64	0	0	0	0	0	0	3	2	4	12	21	143
65+	0	0	0	0	0	0	1	0	1	2	4	100
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
All ages	0	0	0	0	0	1	33	16	20	104	173	797

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

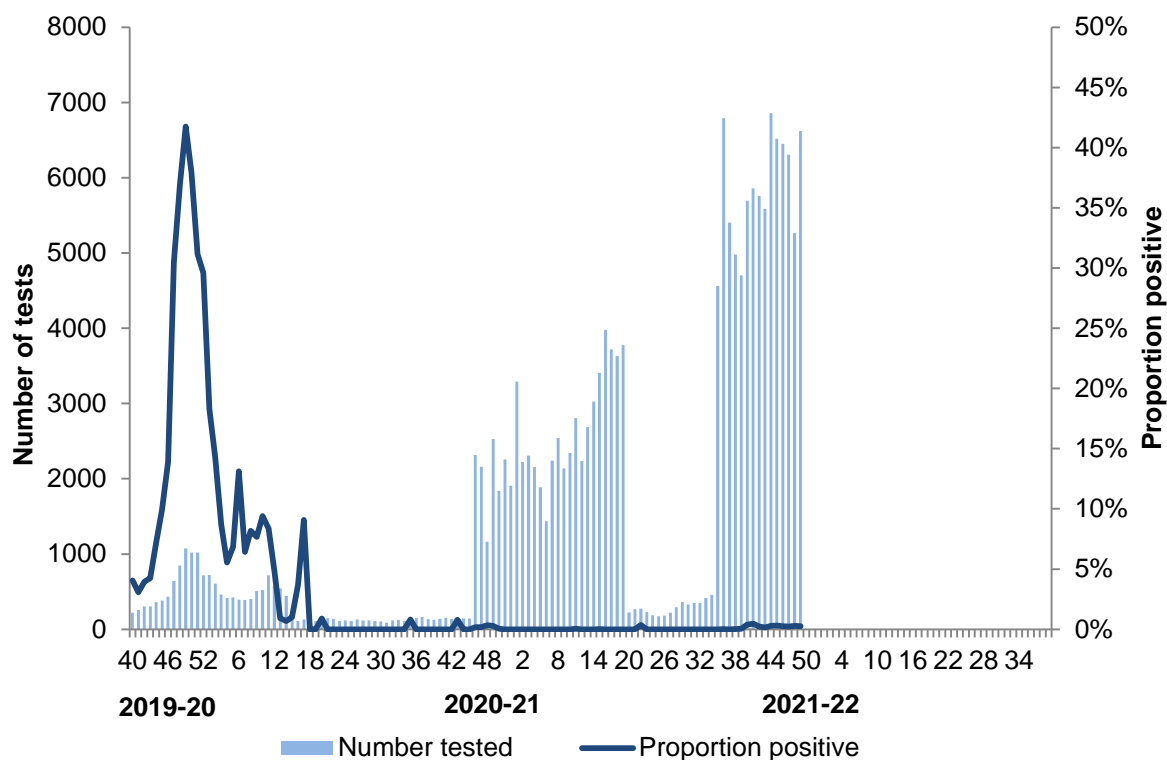


Figure 4. Number of samples tested for influenza and proportion positive, 2019/20 and 2021/22, all sources*

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 week 49, 17 samples were positive for flu (three Flu A(H3), one Flu A(H1N1), one Flu A (untyped) and 12 Flu B) from 6,621 submitted for testing in laboratories across Northern Ireland. Positivity for week 49 (0.3%) is significantly lower when compared to this time in 2019-20 (42%). The majority (85.5%) 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)

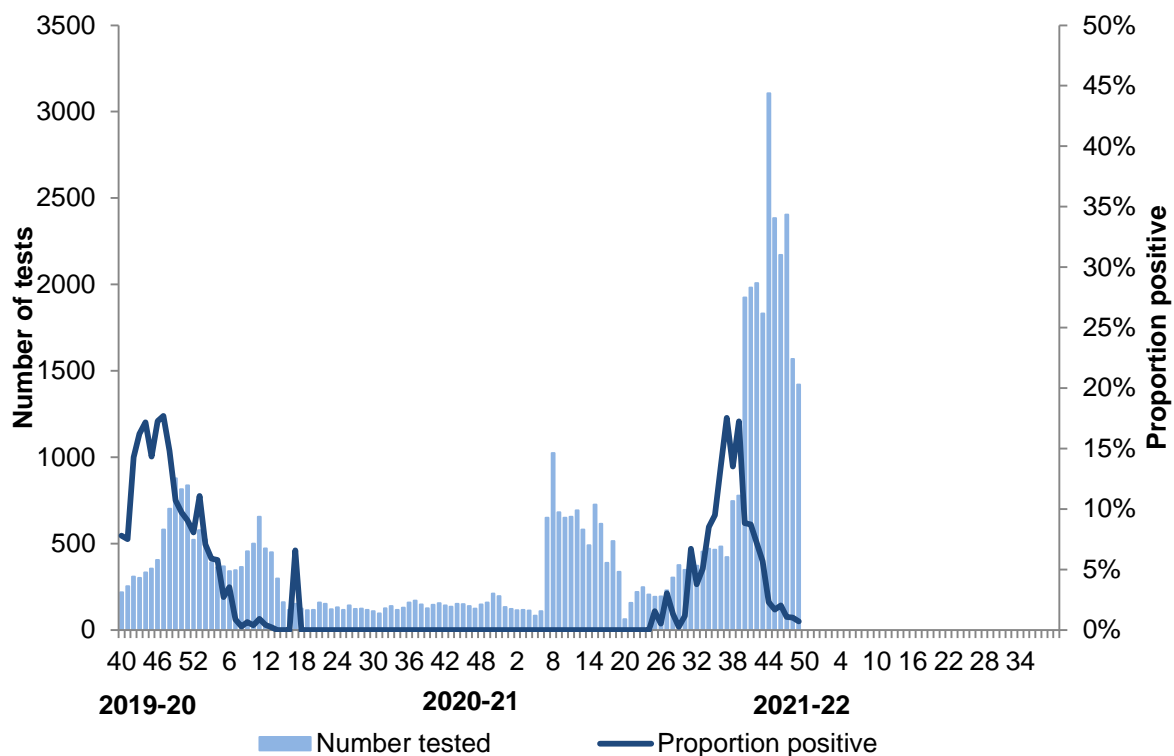


Figure 5. Number of samples tested for RSV and proportion positive, 2019/20 – 2021/22, all sources**

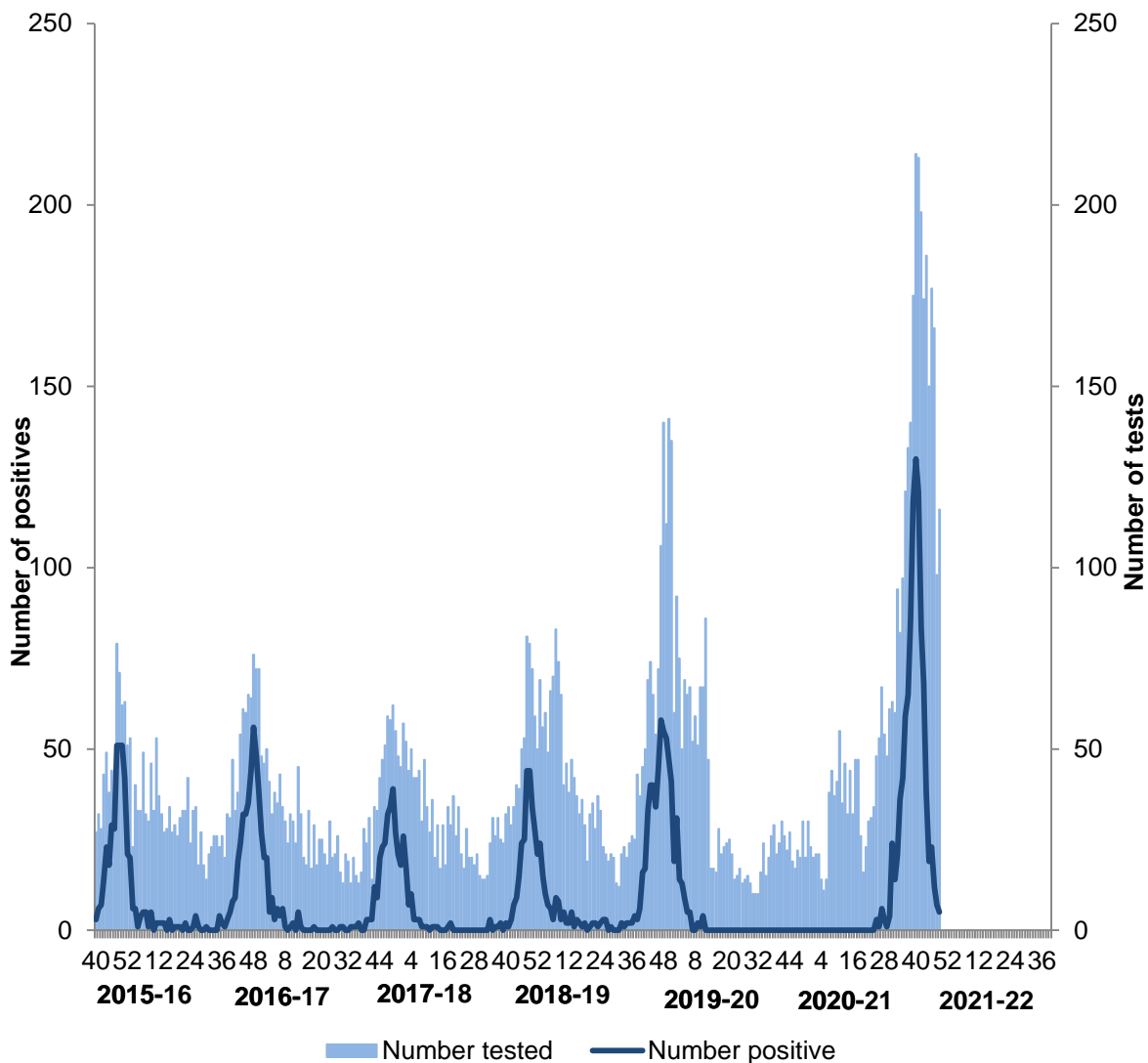


Figure 6. Number of samples tested for RSV and number of positive samples in children under 5 years, 2015/16 – 2021/22, all sources**

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)

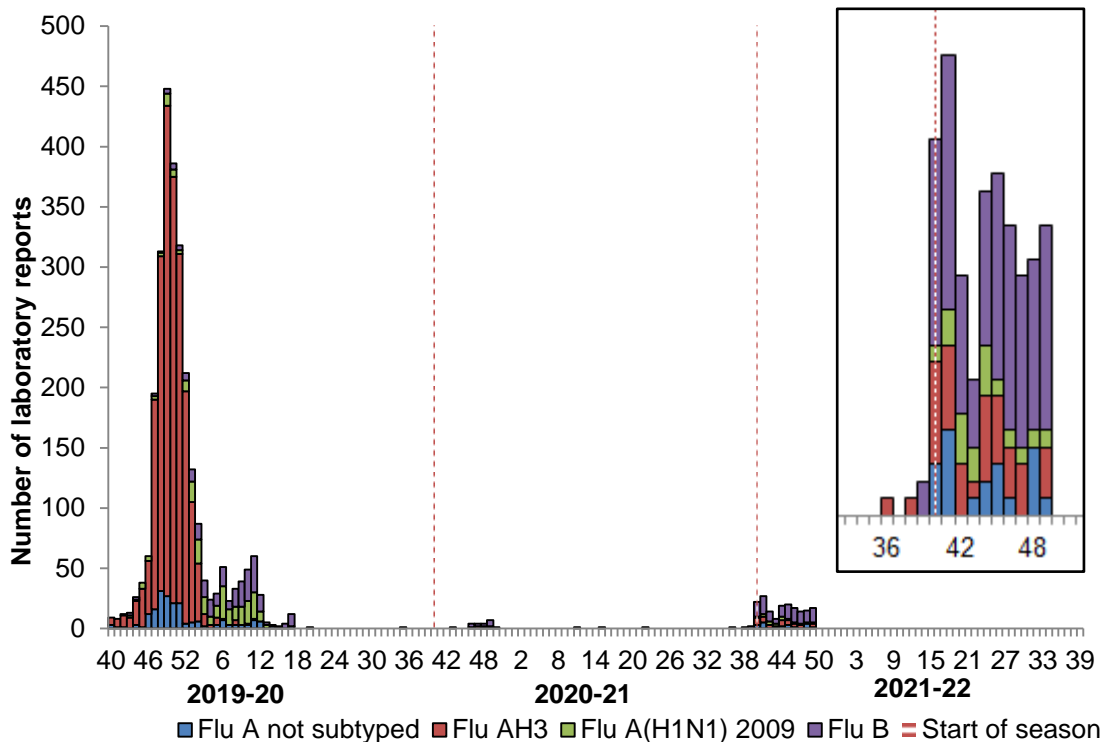


Figure 8. Weekly number of hospitalisations testing positive for influenza by week of specimen, 2019/20 – 2021/22***

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 week 49, 17 hospitalisations tested positive for flu (three Flu A(H3), one Flu A(H1N1), one Flu A (untyped), and 12 Flu B). This is lower than the number of hospitalisations which tested positive for flu at the same time in 2019-20 (448 in week 49 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

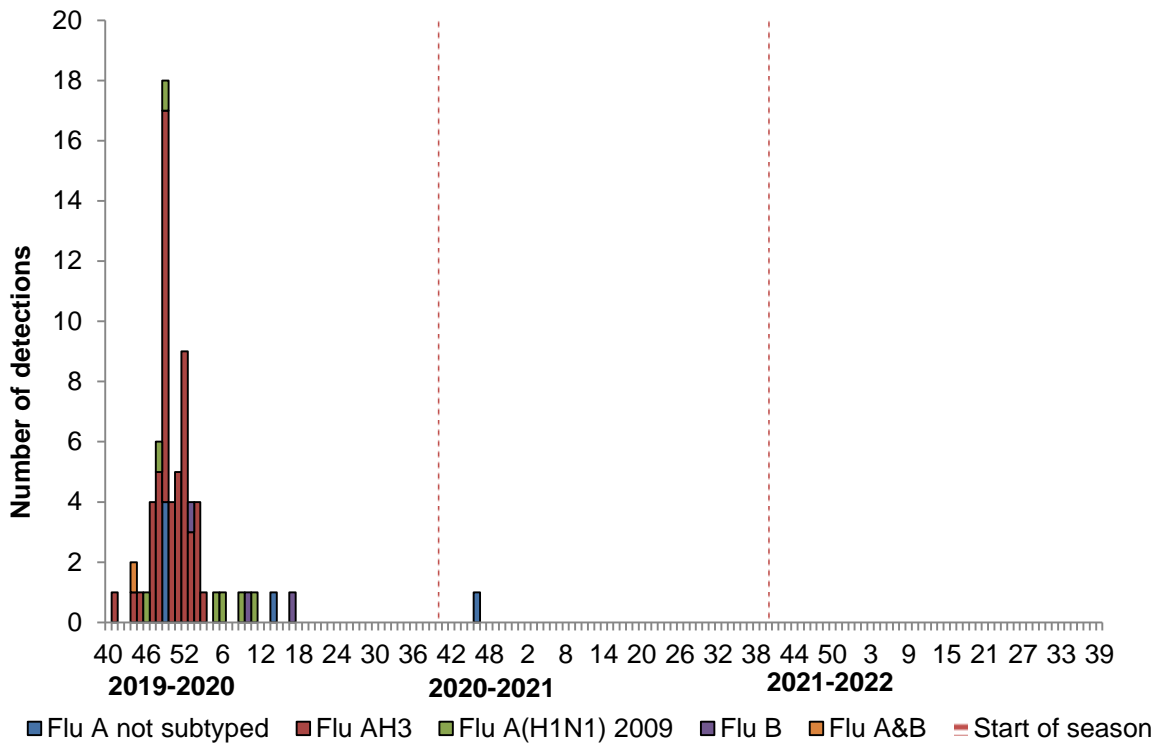


Figure 9. Confirmed ICU/HDU influenza cases by week of specimen, 2019/20 – 2021/22*

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 week 48 (Figure 9).

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

Outbreaks

Comment

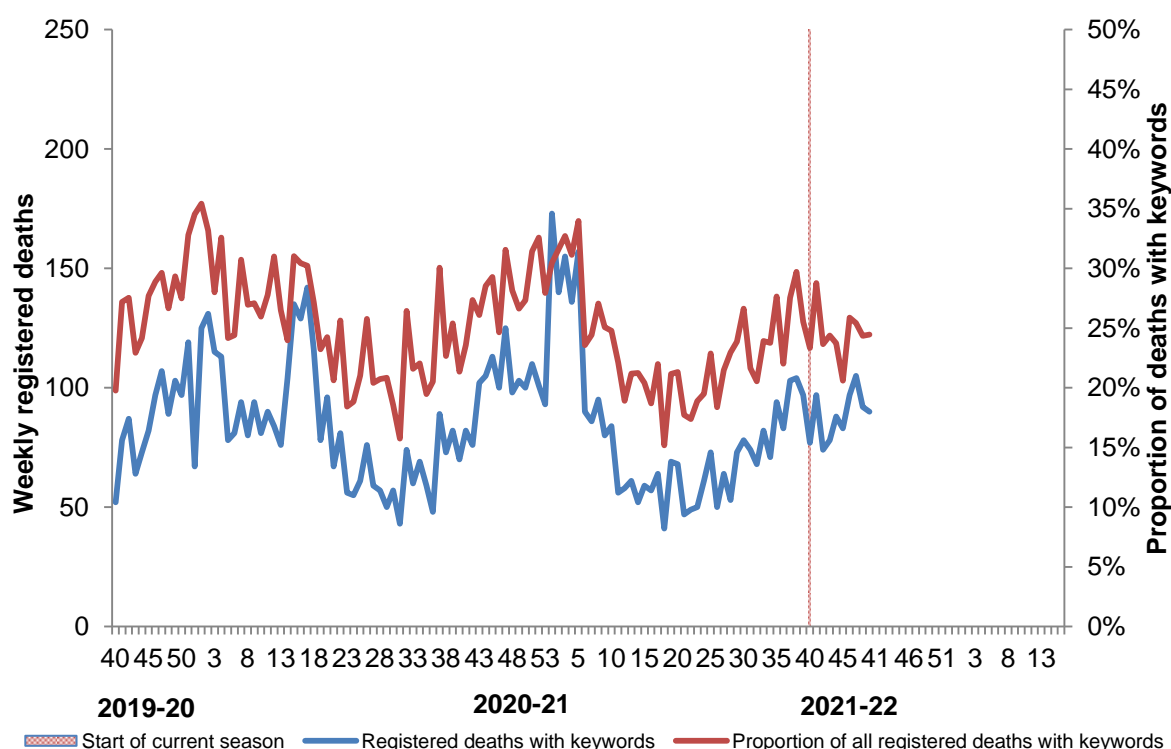
There have been no confirmed influenza outbreaks reported to the PHA Health Protection acute response duty room so far this season.

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.



EuroMOMO

There was no excess all-cause mortality reported in Northern Ireland in week 49. Excess all-cause mortality was reported for one week in Northern Ireland to date this season (week 48). This excess mortality was reported in those aged 65+ years.

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](#)

[UKHSA 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 UK Health Security Agency. 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.

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