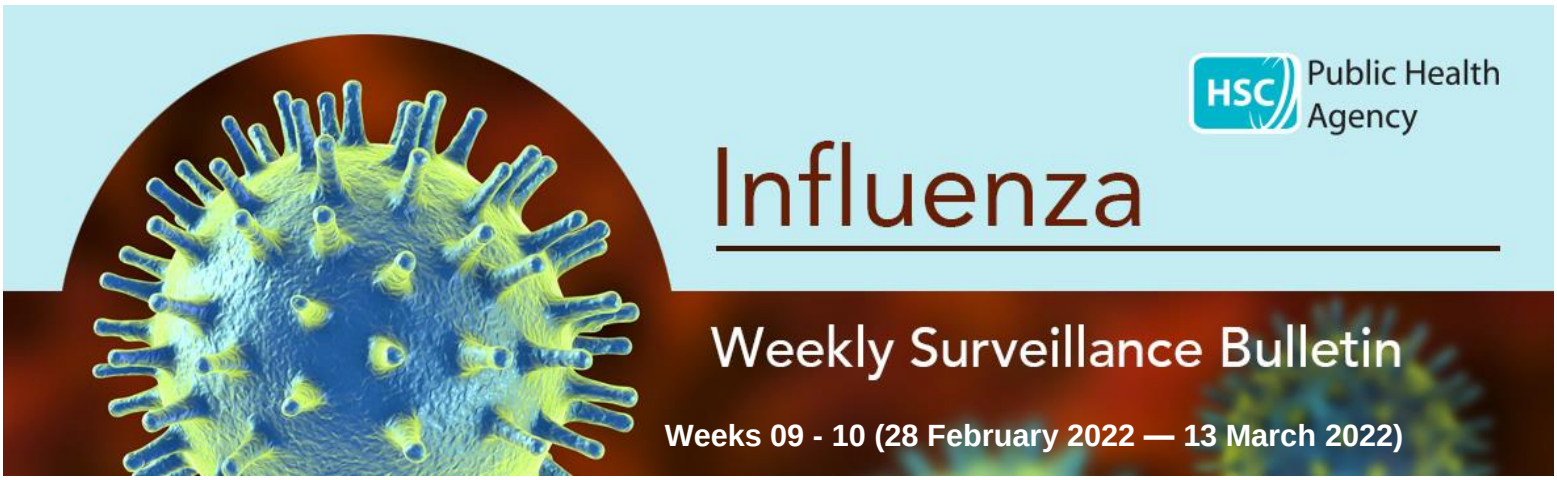


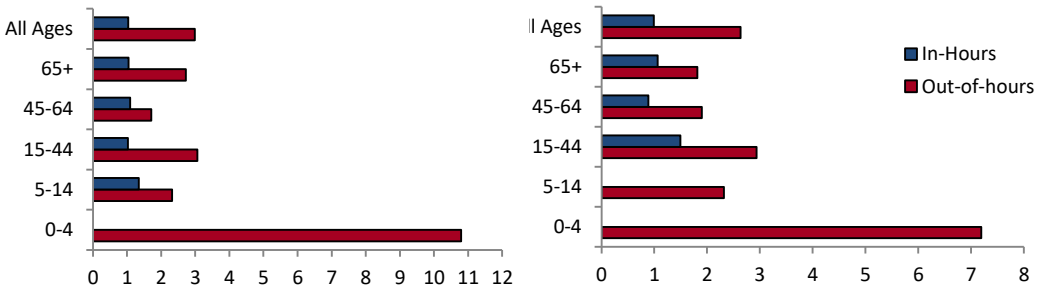
Community Activity

Flu Intensity:	Baseline	Low	Medium	High	Very High

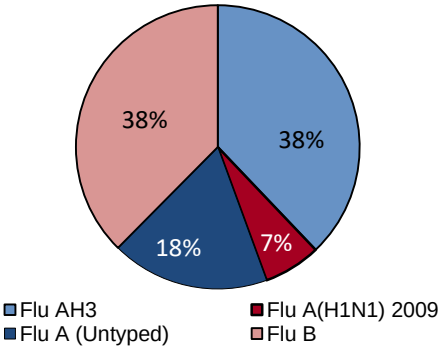
	October					November				December					January					February				March				April				May		
Week	40	41	42	43	44	45	46	47	48	49	50	51	52	53	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2021/22																																		
2020/21																																		
2019/20																																		

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

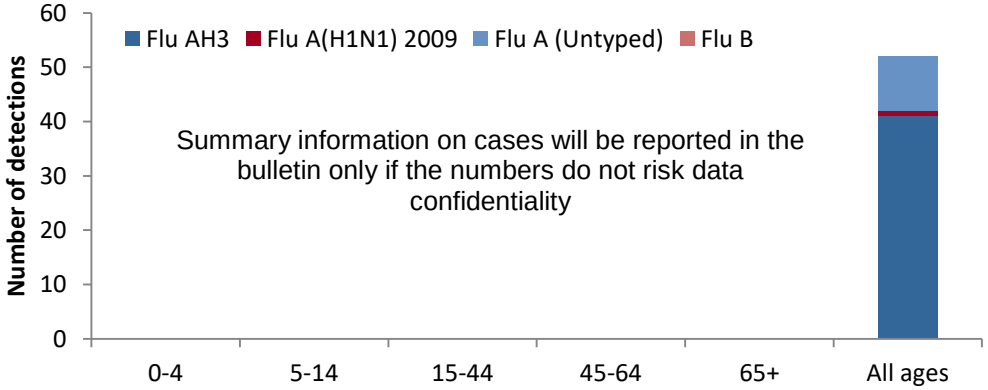
(Wk 09: 28 Feb - 06 Mar 2022) **(Wk 10: 07 Mar - 13 Mar 2022)**



Circulating strains this season to date



Number of hospital cases with confirmed flu
(28 Feb 2022 - 13 Mar 2022)



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

Influenza Outbreaks
(28 Feb 2022 - 13 Mar 2022)

0

To date there have been four flu outbreaks reported in total to date this season

Influenza vaccine uptake 2021/22

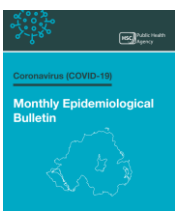
Vaccine uptake rates for 2021/22 will appear here later in the season

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')

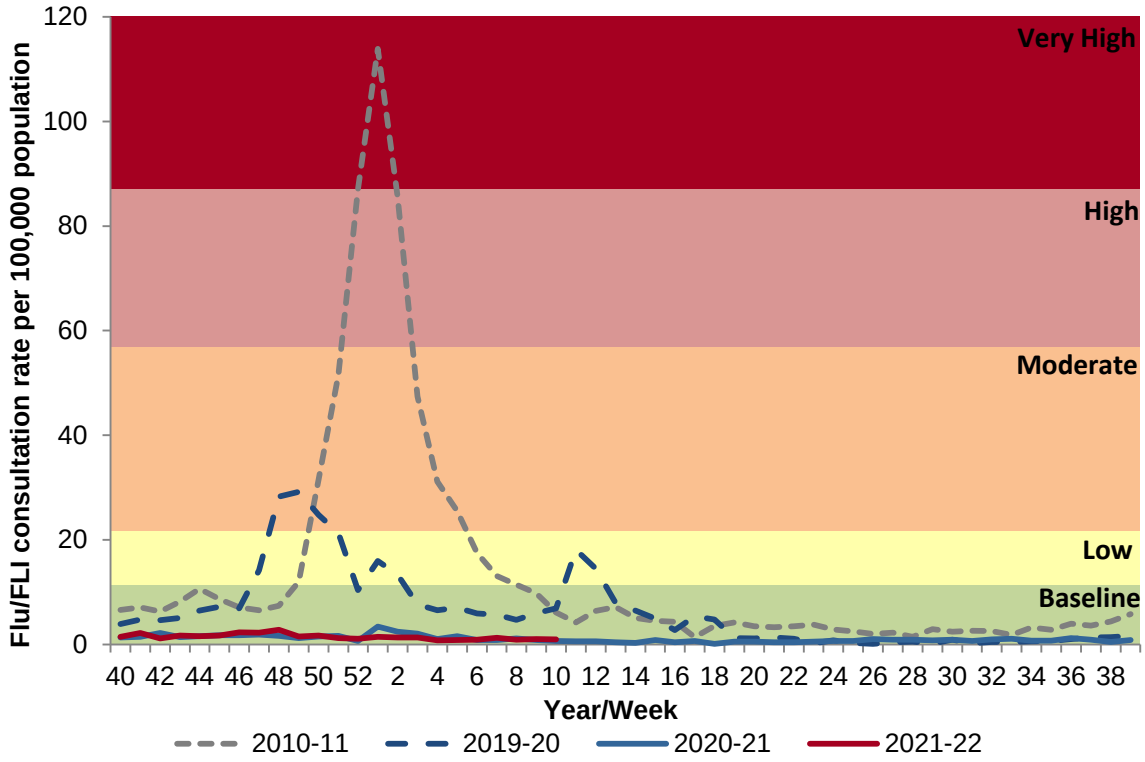


Figure 1. Northern Ireland GP consultation rates for 'flu/FLI' 2019/20 – 2021/22, 2010/11 for comparison

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 1.0 per 100,000 population in both week 9 and 10, which is lower than the same time in 2019-20 (6.9 per 100,000 in week 10). Activity remains below the baseline threshold for Northern Ireland (<11.3 per 100,000) (Figure 1).

Flu/FLI consultation rates were highest in 5-14 year olds in week 9 and in 15-44 year olds in week 10 (1.3 and 1.5 per 100,000, respectively). Rates are lower in all age groups compared to the same time in 2019-20 (week 10).

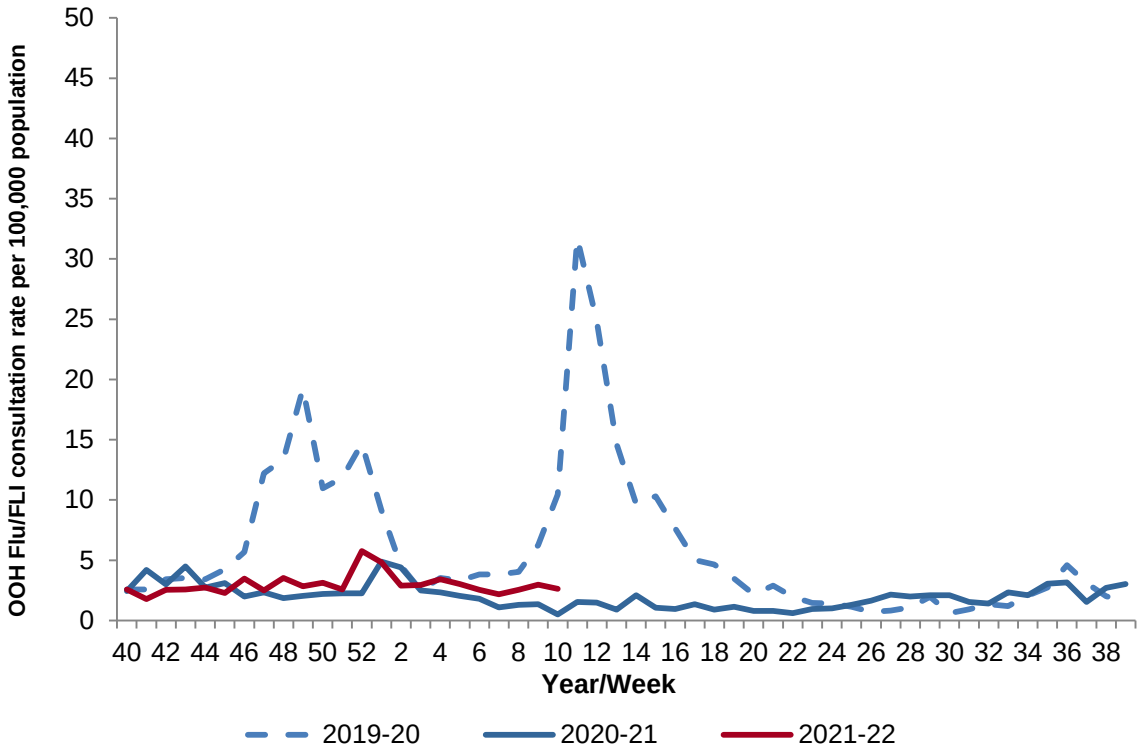


Figure 2. Northern Ireland Out of Hours (OOH) consultation rates for 'flu/FLI' 2019/20 – 2021/22

Flu/FLI consultation rates in Primary Care Out-of-Hours (OOH) Centres were 3.0 per 100,000 population in week 9 and 2.6 per 100,000 in week 10. This is lower than the same time in 2019-20 (10.5 per 100,000 in week 10) (Figure 2).

In weeks 9 and 10 the percentage of calls to an OOH Centre due to flu/FLI was 0.6%. This is lower than week 10 in 2019-20 (1.9%).

Rates were highest in those aged in those aged 0-4 years in weeks 9 and 10 (10.8 and 7.2 per 100,000 population, respectively). In comparison to week 10, 2019-20, consultation rates in 2021-22 were lower in all age groups, except those aged 0-4 years.

Virology

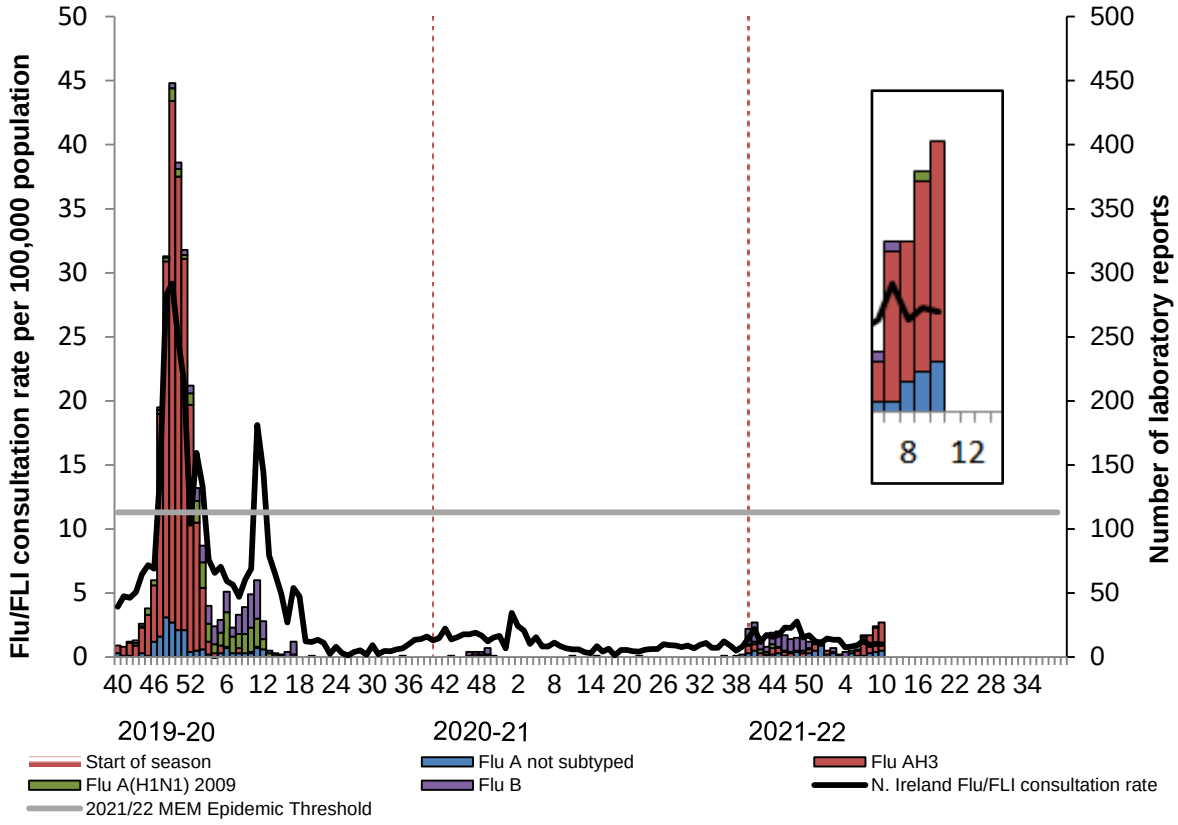


Figure 3. Weekly number of flu laboratory reports from week 40, 2019 with weekly GP consultation rates for 'flu/FLI'

Table 1. Virus activity in Northern Ireland by source, Weeks 9-10, 2021-22								
Source	**Specimens tested**	**Flu AH3**	**Flu A(H1N1) 2009)**	**Flu A (Untyped)**	**Flu B**	**RSV**	**Total Influenza Positive**	**% Influenza Positive**
Sentinel	41	1	0	0	0	0	1	2.4%
Non-sentinel	11233	40	1	9	0	1	50	0.4%
Total	**11274**	**41**	**1**	**9**	**0**	**1**	**51**	**0.5%**

Table 2. Cumulative virus activity from all sources by age group, Week 40 - 10, 2021-22						
Age Group	**Flu AH3**	**Flu A(H1N1) 2009**	**Flu A (Untyped)**	**Flu B**	**Total Influenza**	**RSV**
0-4	16	8	2	38	64	524
5-14	17	8	14	61	100	52
15-64	66	5	35	16	122	161
65+	23	0	7	6	36	114
Unknown	0	0	0	0	0	0
All ages	**122**	**21**	**58**	**121**	**322**	**851**

Table 3. Cumulative virus activity by age group and source, Week 40 - 10, 2021-22												
	Sentinel						**Non-sentinel**					
Age Group	**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	16	8	2	38	64	524
5-14	0	0	0	0	0	1	17	8	14	61	100	51
15-64	1	0	0	0	1	0	65	5	35	16	121	161
65+	0	0	0	0	0	0	23	0	7	6	36	114
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
All ages	**1**	**0**	**0**	**0**	**1**	**1**	**121**	**21**	**58**	**121**	**321**	**850**

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

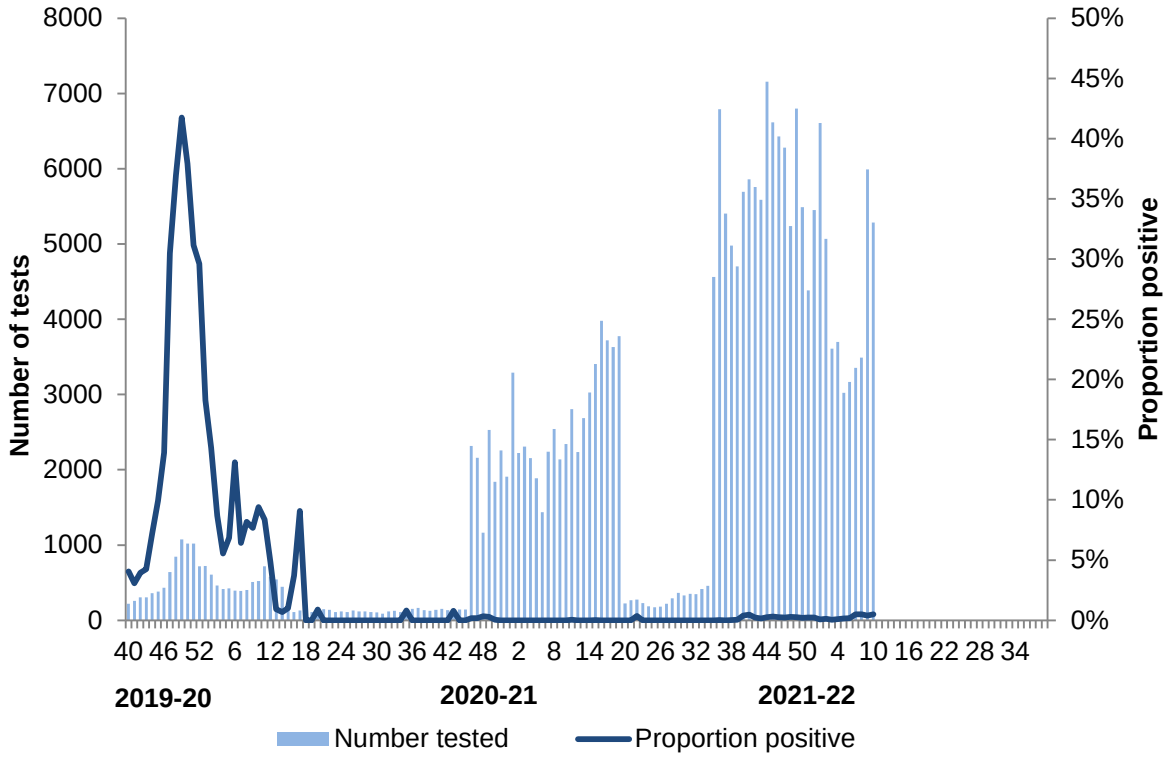


Figure 4. Number of samples tested for influenza and proportion positive, 2019/20 and 2021/22, all sources*

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 9 and 10, 51 samples were positive for flu (41 Flu A(H3), one Flu A(H1N1) and nine Flu A(untyped), from 11,274 samples submitted for testing in laboratories across Northern Ireland. Positivity for weeks 9 and 10 combined (0.5%) is lower when compared to this time in 2019-20 (8.5% combined positivity for weeks 9 and 10). 51% 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. Multiplex testing was commenced at remaining local HSCT laboratories as the season progressed.

Respiratory Syncytial Virus (RSV)

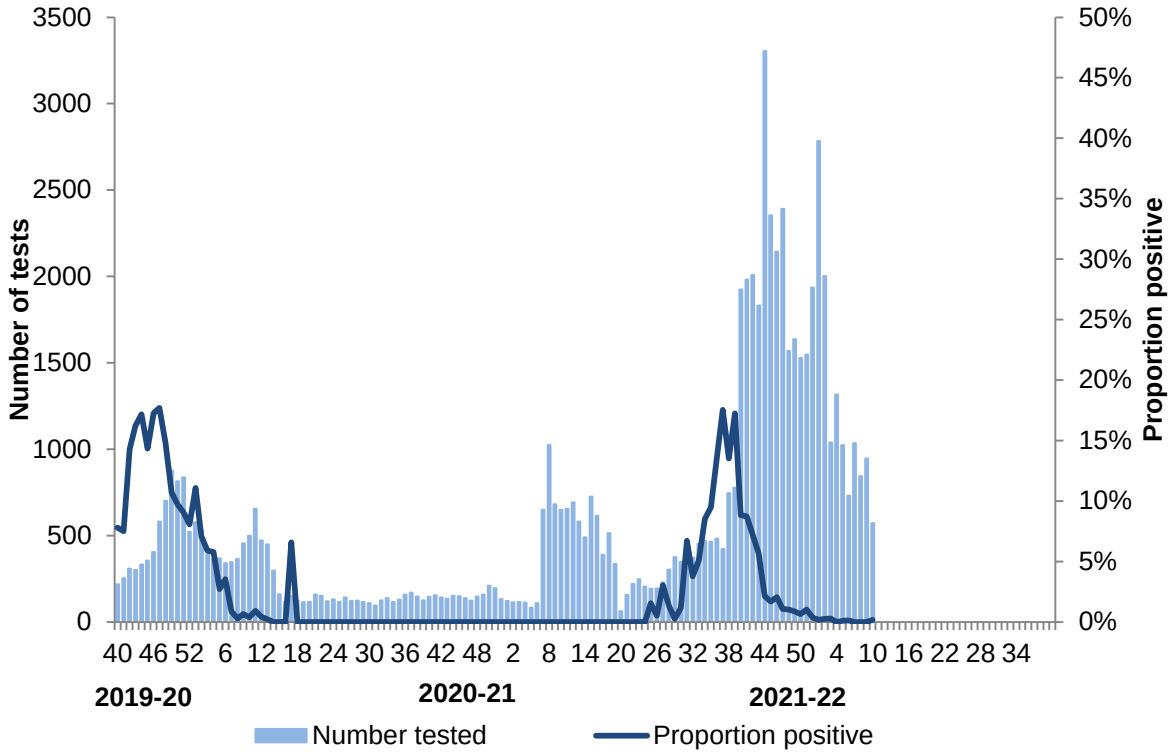


Figure 5. Number of samples tested for RSV and proportion positive, 2019/20 – 2021/22, all sources**

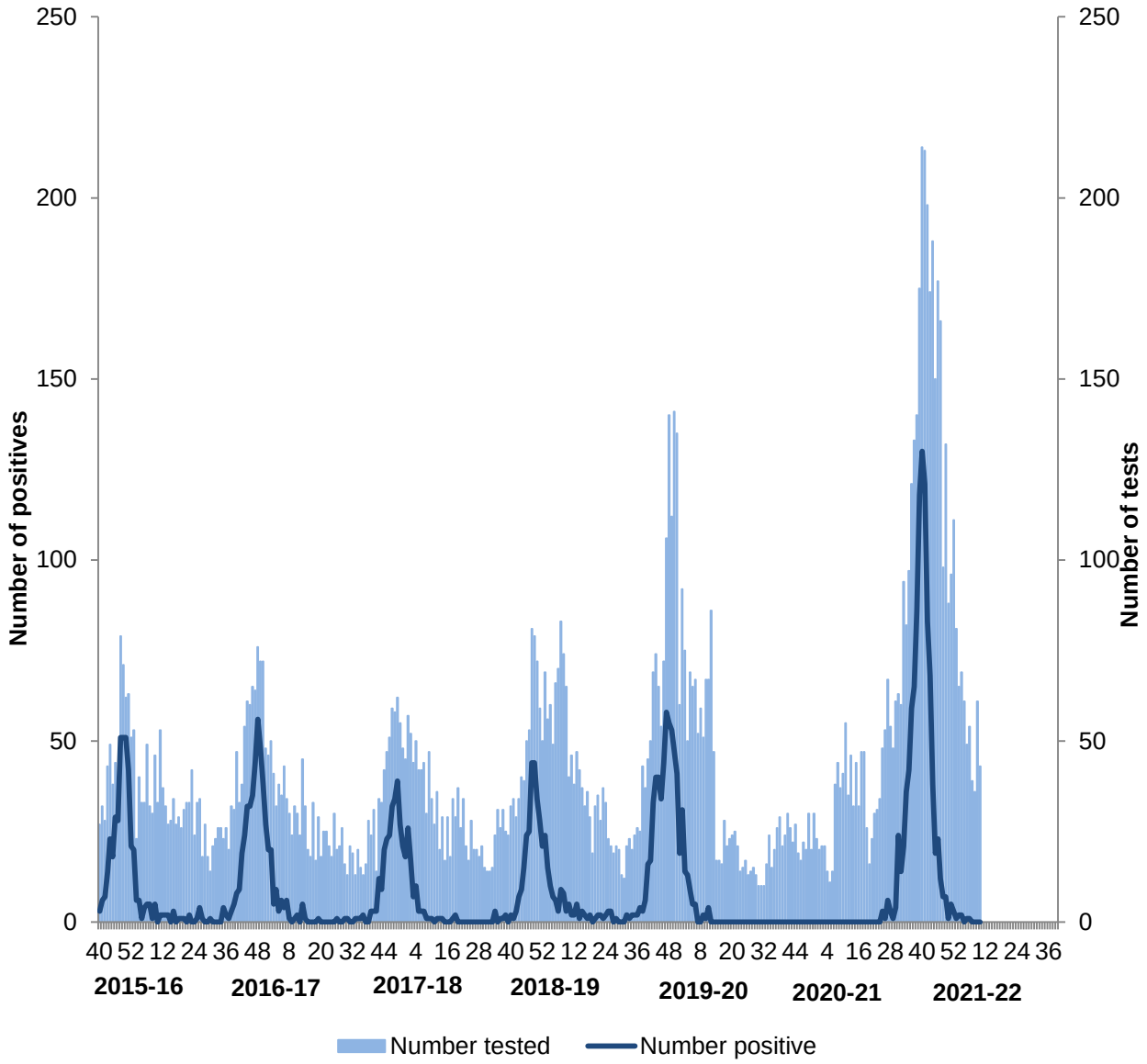


Figure 6. Number of samples tested for RSV and number of positive samples in children under 5 years, 2015/16 – 2021/22, all sources**

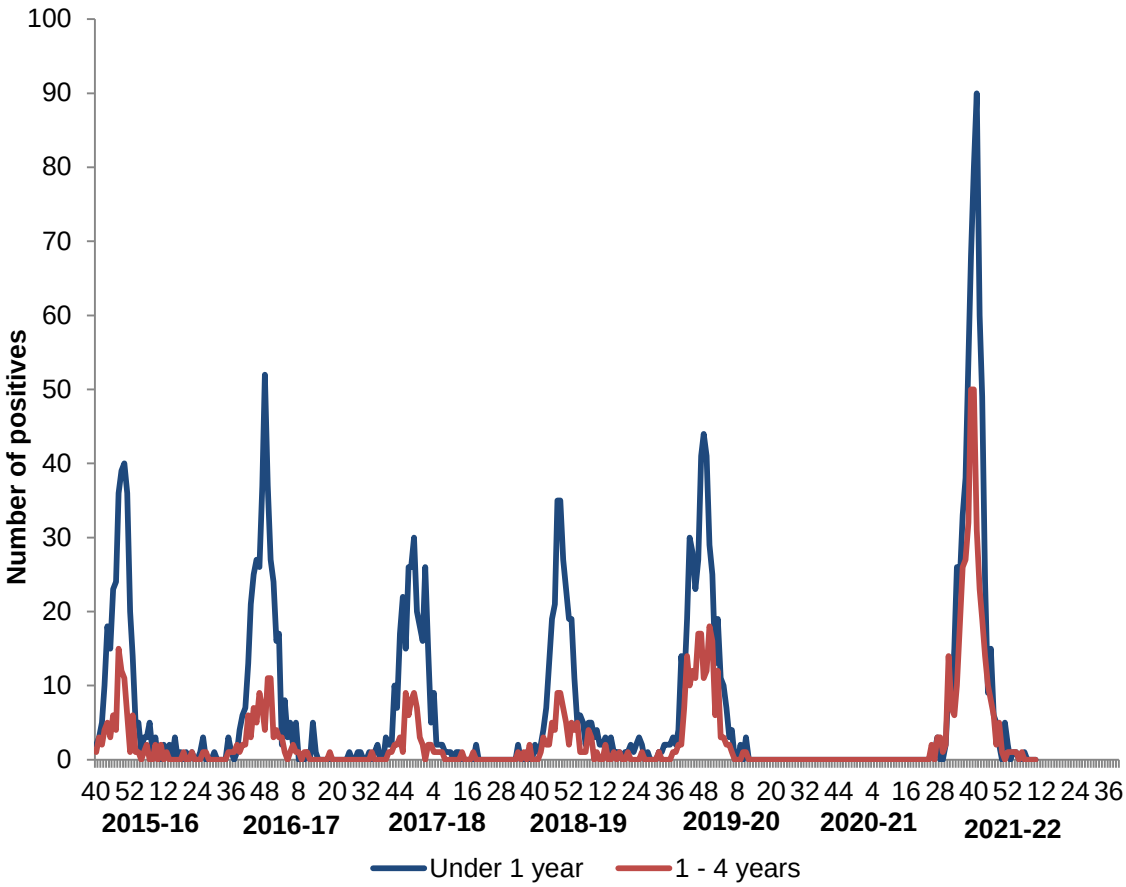


Figure 7. Number of positive tests for RSV in children under 1 year and 1-4 years, 2015/16 – 2021/22, all sources**

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 9 and 10, one sample tested positive for RSV. The increase in testing in local HSCT laboratories should also be noted.**

The majority (62%) 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. Multiplex testing was commenced at remaining local HSCT laboratories

as the season progressed.
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)

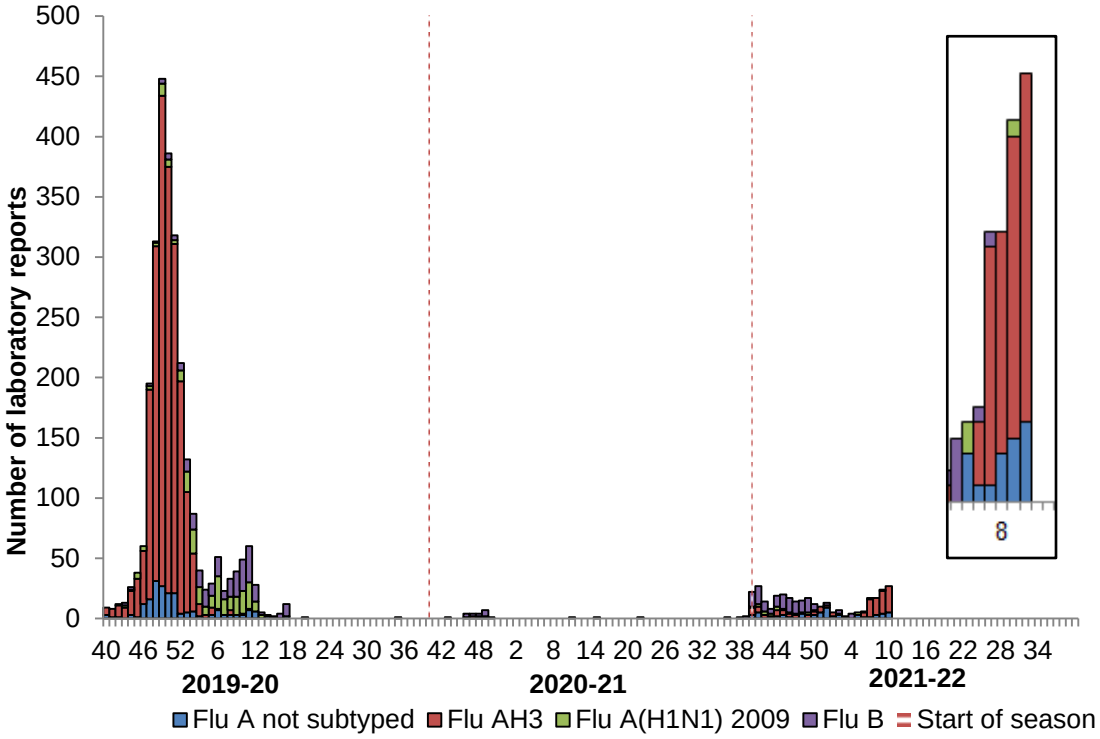


Figure 8. Weekly number of hospitalisations testing positive for influenza by week of specimen, 2019/20 – 2021/22***

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 9 and 10, 50 samples were positive for flu (40 Flu A(H3), one Flu A (H1N1) and nine Flu A(untyped). This is lower than the number of hospitalisations which tested positive for flu at the same time in 2019-20 (88 in weeks 9 and 10 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. Multiplex testing was commenced at remaining local HSCT laboratories as the season progressed.***

ICU/HDU Surveillance

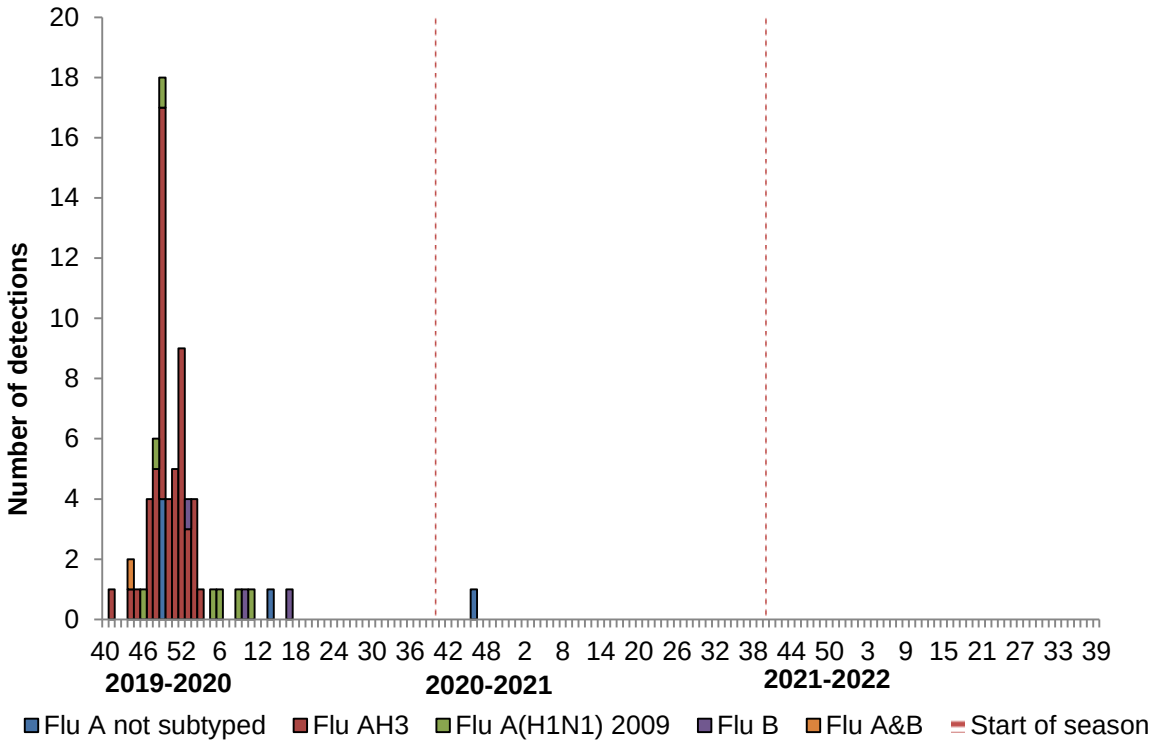


Figure 9. Confirmed ICU/HDU influenza cases by week of specimen, 2019/20 – 2021/22*

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) up to week 48 (Figure 9).

Please note there is no critical care data available for week 49 to date.

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

Outbreaks

Comment

During weeks 9 and 10 there were no confirmed influenza outbreaks reported to the PHA Health Protection acute response duty room.

To date, there have been four confirmed influenza outbreaks reported; one in a care home setting and three in a hospital setting (two Flu A(untyped) and two Flu type unknown).

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.

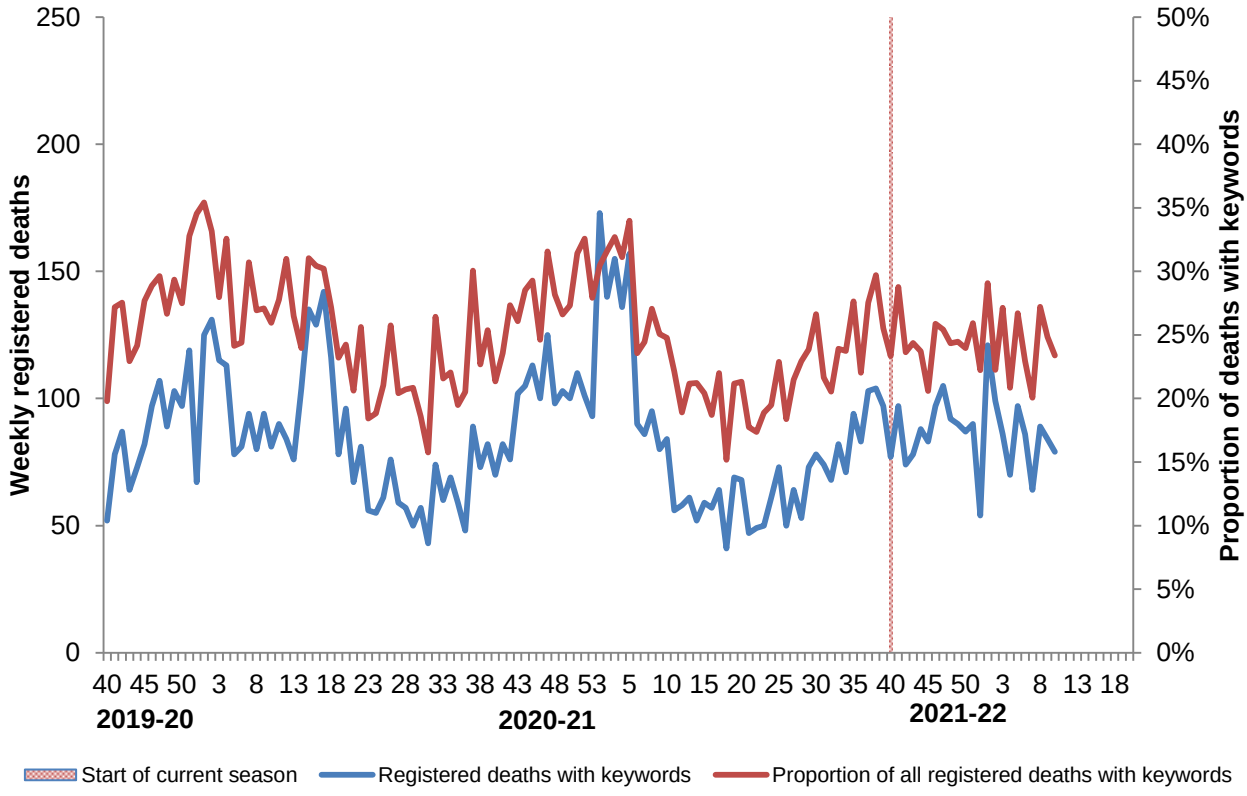


Figure 10. Weekly registered deaths and proportion of all deaths with keywords, by week of registration from week 40, 2019*

Comment

In week 9, 84 respiratory associated deaths out of 338 all-cause deaths were reported (25%), with 23% in week 10. This is similar to that observed in the same period in 2019/20 (26% in week 10) (Figure 10).

EuroMOMO

There was no excess all-cause mortality reported in Northern Ireland in week 9 or week 10. Excess all-cause mortality was reported for two weeks in Northern Ireland to date this season (week 48 and week 7). 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.

Table 4. Influenza vaccine uptake rates (Public Programme), 2020-21 and 2019-20

	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

Table 5. Influenza vaccine uptake rates (Frontline HSCWs), 2020-21 and 2019-20

	% 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 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.

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