

Influenza

Weekly Surveillance Bulletin

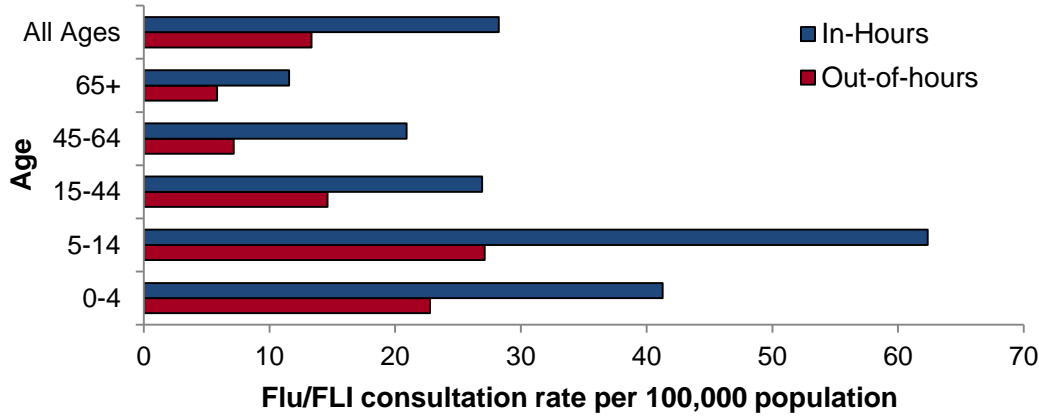
Week 48 (25 November – 1 December 2019)

Community Activity

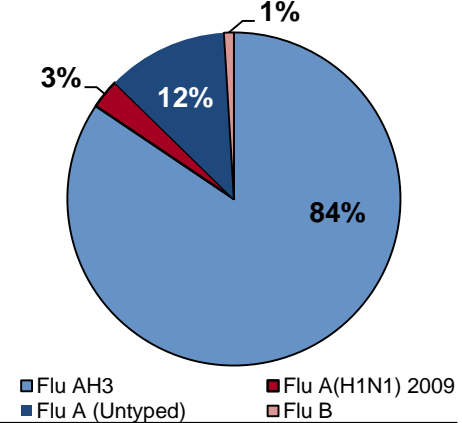
Flu Intensity: Baseline Low Medium High Very High

	October					November				December				January					February				March				April				May		
Week	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2019/20																																	
2018/19																																	

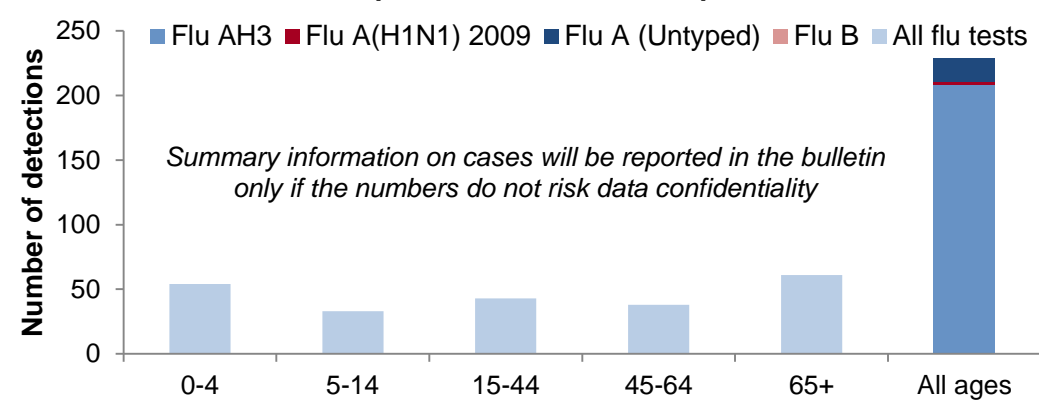
GP consultation rates for 'flu/flu-like-illness' ('flu/FLI') (25 Nov – 1 Dec 2019)



Circulating strains this season to date



Number of hospital cases with confirmed flu (25 Nov – 1 Dec 2019)



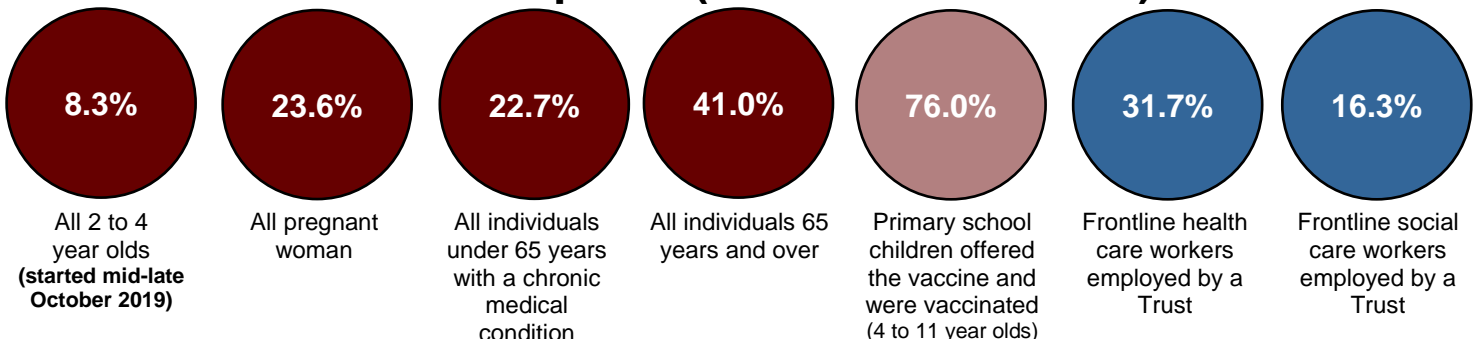
Respiratory Outbreaks this Week (25 Nov – 1 Dec 2019)

0

To date there have been two flu outbreaks; both in a Care Home setting

To date there have been 15 admissions to ICU with confirmed influenza

Vaccine Uptake (to 31 October 2019)



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

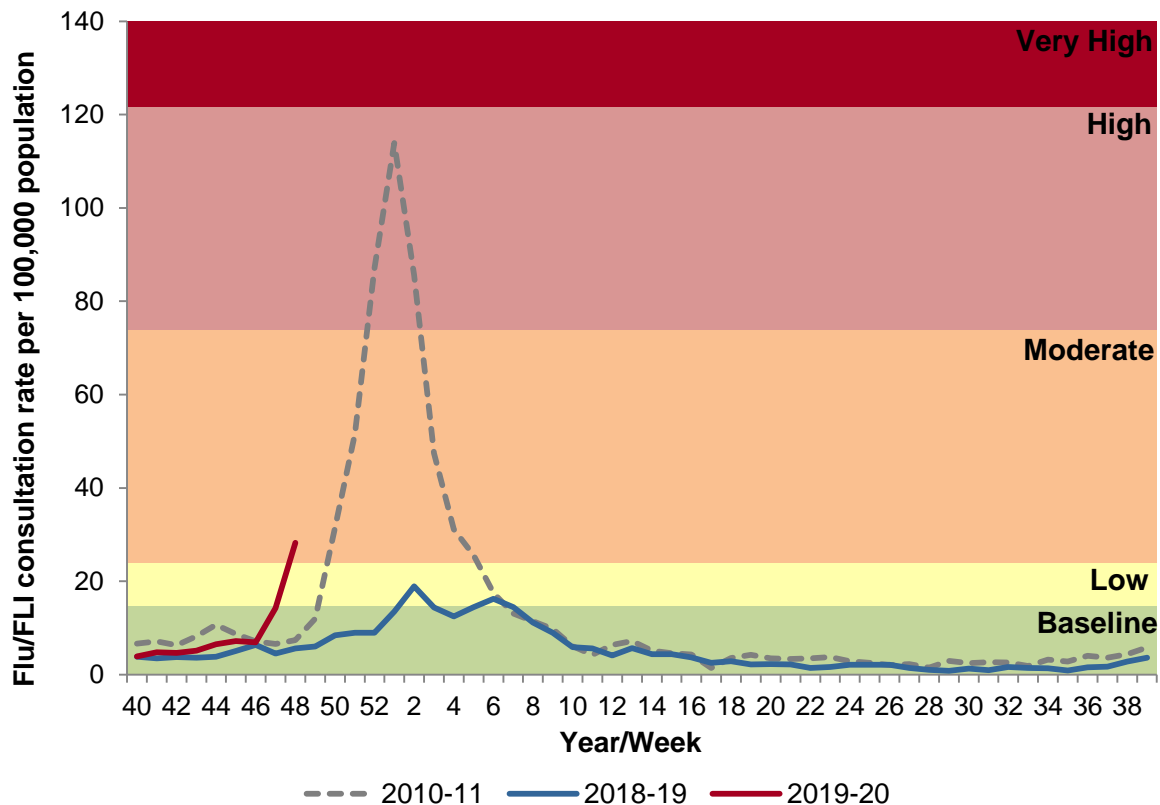


Figure 1. Northern Ireland GP consultation rates for ‘flu/FLI’ 2018/19 – 2019/20, 2010/11 for comparison

The baseline MEM threshold for Northern Ireland is 14.7 per 100,000 population for 2019-20. Low activity is 14.7 to <23.9, moderate activity 23.9 to <73.9, high activity 73.9 to <121.7 and very high activity is >121.7

Comment

The GP flu/FLI consultation rate during week 48, 2019 was 28.2 per 100,000 population, an increase from week 47, 2019 (14.2 per 100,000). This is higher than the same time last year (5.6 per 100,000). Activity has now risen above the moderate threshold for Northern Ireland (23.9 to <73.9 per 100,000) (Figure 1).

Flu/FLI consultation rates increased in week 48 compared to week 47 in all age groups, with the highest rate being observed in those aged 5-14 years (62.4 per 100,000 population). Rates are higher in all age groups compared to the same period last year (week 48, 2018-19).

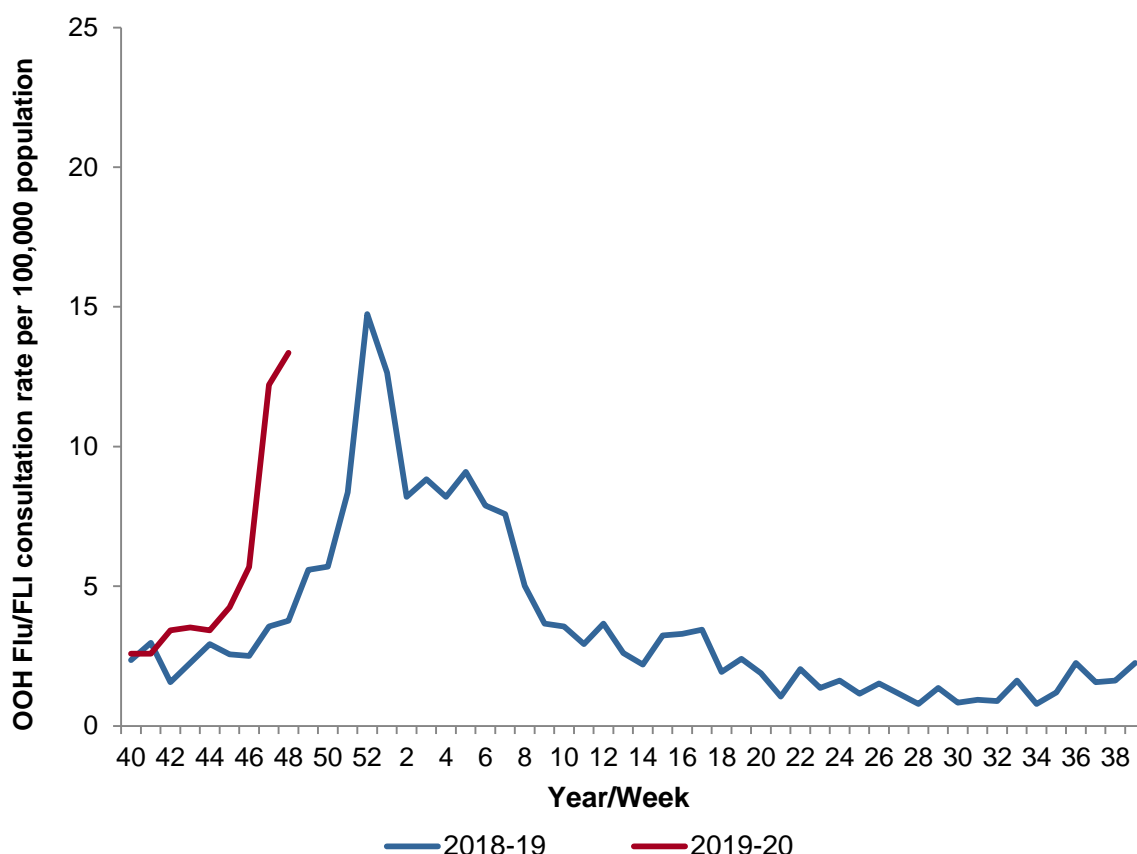


Figure 2. Northern Ireland Out of Hours (OOH) consultation rates for 'flu/FLI' 2018/19 – 2019/20

Comment

The flu/FLI consultation rate in Primary Care Out-of-Hours (OOH) Centres during week 48 was 13.4 per 100,000 population. This is higher than the same time last year (3.8 per 100,000).

In week 48 the percentage of calls to an OOH Centre due to flu/FLI increased to 2.1%. This is an increase from week 47 (1.7%) and the same period last year (0.6%).

Rates were highest in those aged 5-14 years in week 48 (27.1 per 100,000 population). Rates are higher in all age groups compared to the same period last year (week 48, 2018-19).

Virology

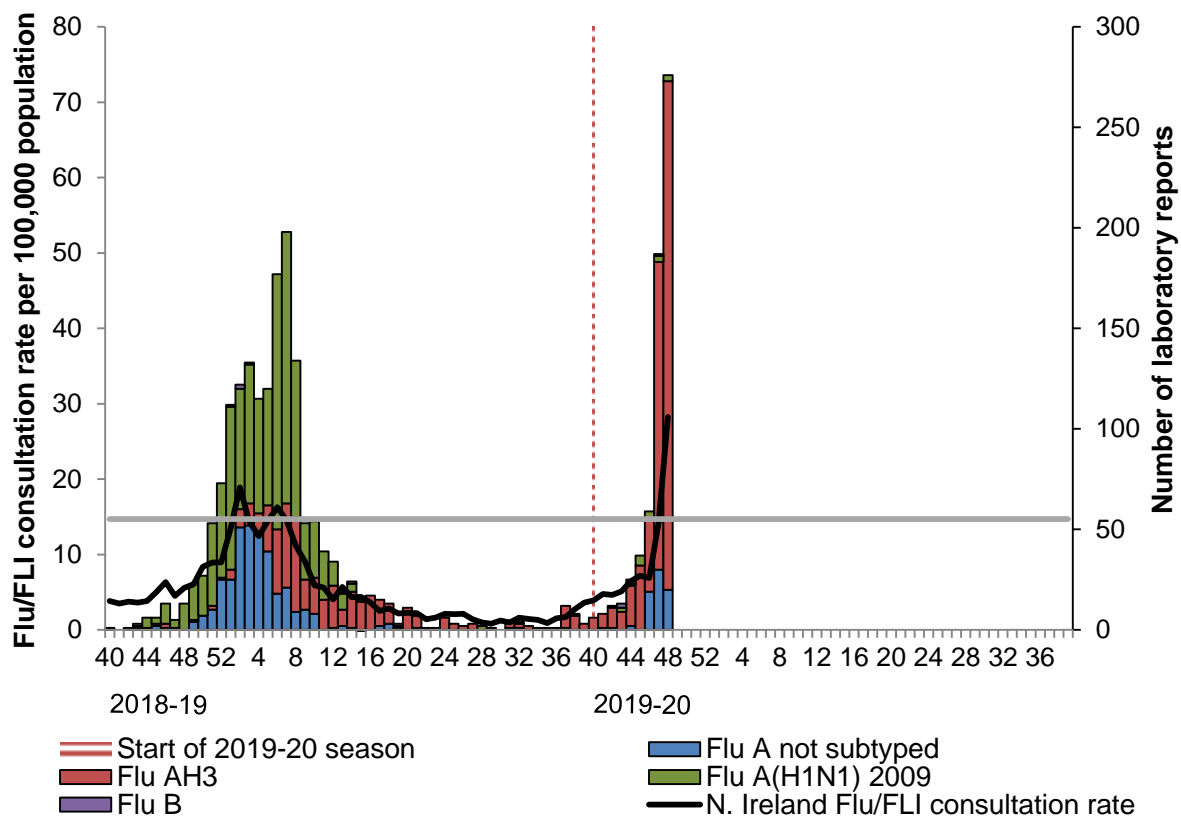


Figure 3. Weekly number of flu laboratory reports from week 40, 2018 with weekly GP consultation rates for ‘flu/FLI’

Table 1. Virus activity in Northern Ireland by source, Week 48, 2019-20

Source	Specimens tested	Flu AH3	Flu A(H1N1) 2009	Flu A (Untyped)	Flu B	RSV	Total Influenza Positive	% Influenza Positive
Sentinel	26	18	0	0	0	2	18	69%
Non-sentinel	671	235	3	20	0	90	258	38%
Total	697	253	3	20	0	92	276	40%

Table 2. Cumulative virus activity from all sources by age group, Week 40 - 48, 2019-20

Age Group	Flu AH3	Flu A(H1N1) 2009	Flu A (Untyped)	Flu B	Total Influenza	RSV
0-4	86	5	6	2	99	315
5-14	86	1	18	1	106	16
15-64	215	9	31	3	258	72
65+	139	3	18	0	160	81
Unknown	0	0	0	0	0	0
All ages	526	18	73	6	623	484

Table 3. Cumulative virus activity by age group and source, Week 40 - Week 48, 2019-20

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	6	0	0	0	6	0	80	5	6	2	93	315
5-14	13	0	1	0	14	0	73	1	17	1	92	16
15-64	26	2	1	1	30	6	189	7	30	2	228	66
65+	2	0	0	0	2	1	137	3	18	0	158	80
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
All ages	47	2	2	1	52	7	479	16	71	5	571	477

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 RSV. Cumulative reports of influenza A (untyped) may vary from week to week as these may be subsequently typed in later reports.

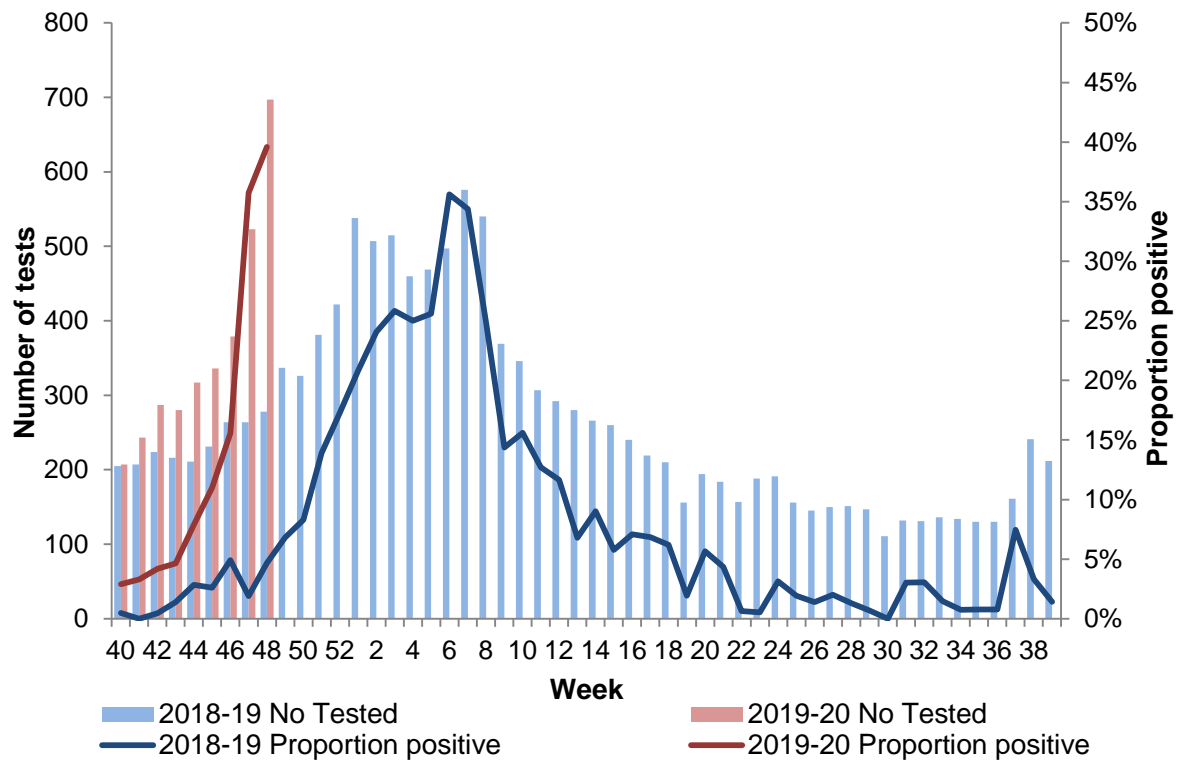


Figure 4. Number of samples tested for influenza and proportion positive, 2018/19 – 2019/20, all sources

Comment

In week 48, 276 samples were positive for flu (253 Flu A(H3), three Flu A(H1N1), 20 Flu A(untyped)) from 697 submitted for testing in laboratories across Northern Ireland.

Positivity for week 48 (40%) is higher than this time last year (5%).

18 of the 26 samples submitted by the GP based sentinel scheme were positive for flu (18 Flu A(H3); 69% positivity) (Figures 3 and 4; Tables 1, 2 and 3).

Respiratory Syncytial Virus (RSV)

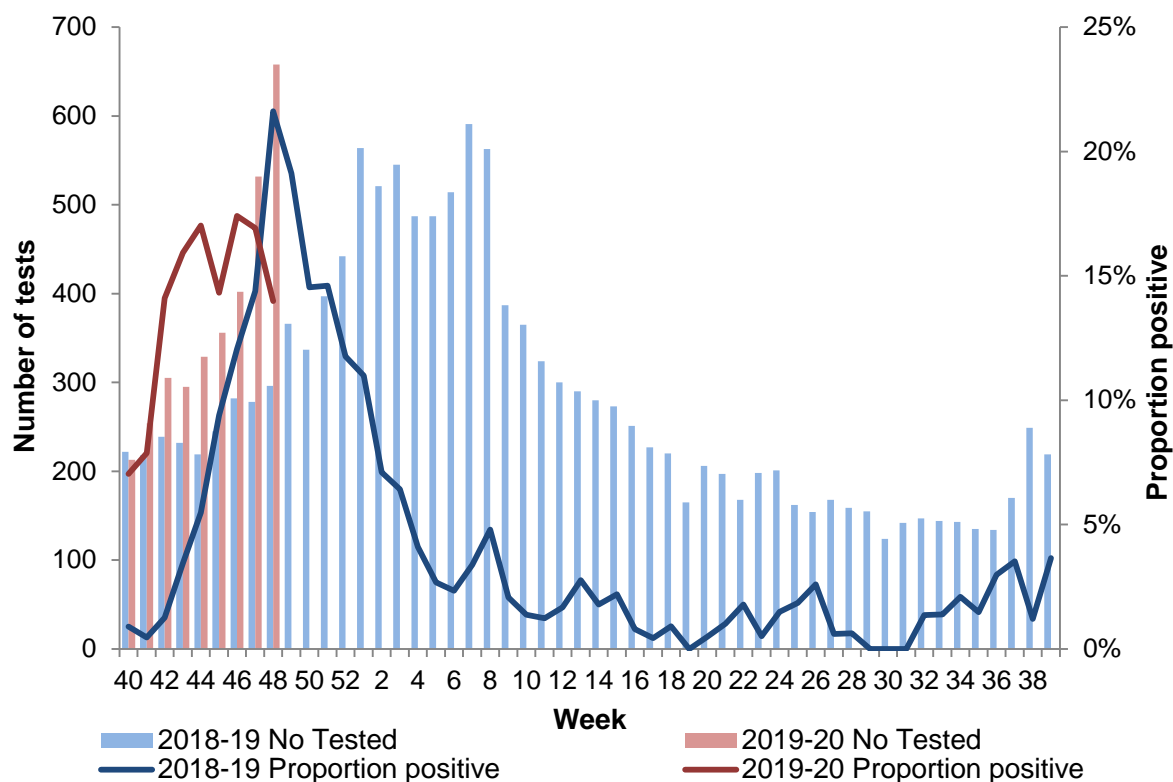


Figure 5. Number of samples tested for RSV and proportion positive, 2018/19 – 2019/20, all sources

Comment

In week 48, 92 samples were positive for RSV, with positivity (14%) lower than the same period last season (22%).

The majority (65%) of cases since week 40 have occurred in children aged 0-4 years (Table 2 and Figure 5).

Hospital Surveillance (Non-ICU/HDU)

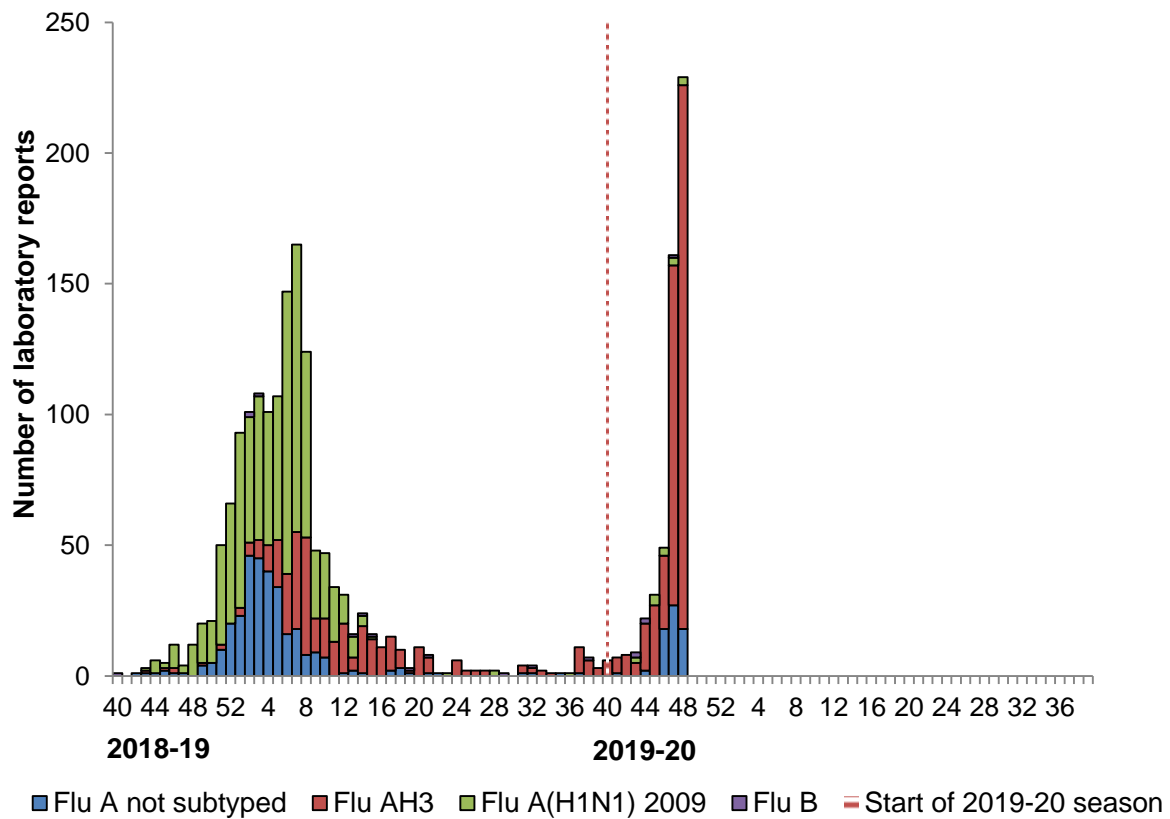


Figure 6. Weekly number of hospitalisations testing positive for influenza by week of specimen, 2018/19 – 2019/20

Comment

In week 48, 229 hospitalisations tested positive for flu (208 Flu A(H3), three Flu A(H1N1) and 18 Flu A(untyped)). This is an increase compared to the same time last year (Figure 6).

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

ICU/HDU Surveillance

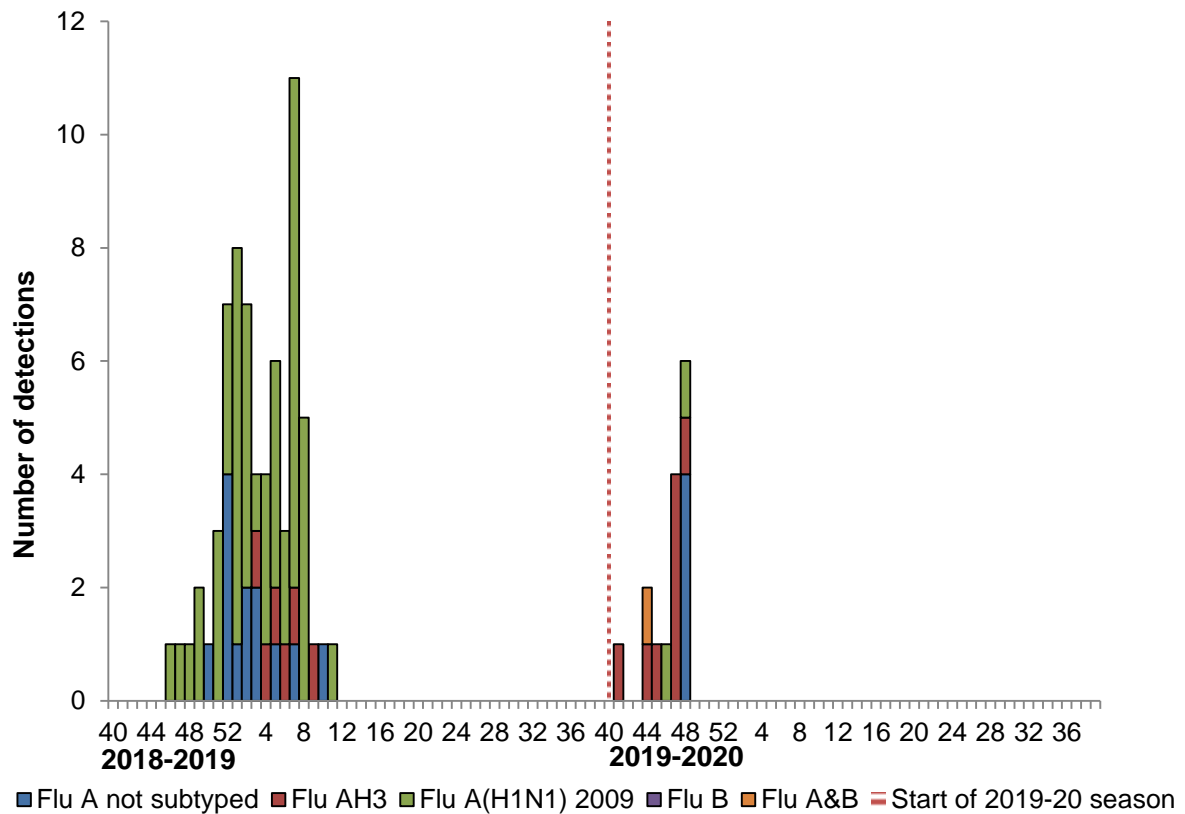


Figure 7. Confirmed ICU/HDU influenza cases by week of specimen, 2018/19 – 2019/20

Comment

Data are collected on laboratory confirmed influenza patients and deaths in critical care (level 2 and level 3). There were six new admissions to ICU with confirmed influenza reported to the Public Health Agency (PHA) during week 48. So far this season there has been 15 admissions to ICU with confirmed influenza (eight Flu A(H3), two Flu A(H1N1), four Flu A(untyped) and one Flu A&B) reported to the PHA (Figure 7).

Of the 15 admissions to ICU, 53% (n=8) were male. The ages ranged from 2 years to 83 years, with a median age of 59 years and a mean age of 50 years. 67% (n=10) had a co-morbidity, of which 90% (n=9) were classed as being in a vaccine risk group. Of these, <5 were vaccinated this season.

Outbreaks

During week 48 there were no confirmed respiratory outbreaks reported to the PHA Health Protection acute response duty room. To date, there has been a total of two confirmed respiratory outbreaks reported, both in a Care Home setting (two Flu A(untyped)).

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.

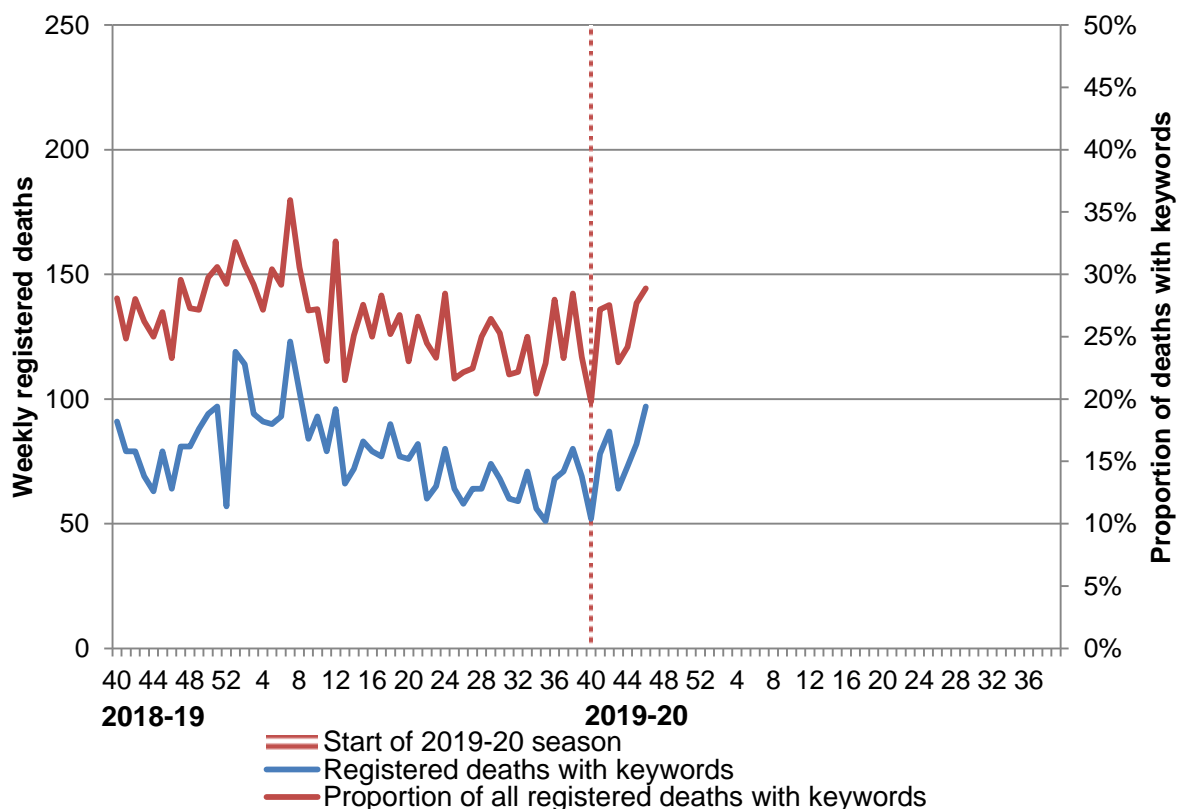


Figure 8. Weekly registered deaths and proportion of all deaths with keywords, by week of registration from week 40, 2018

Comment

Mortality data for weeks 47 and 48 was unavailable at the time of publication. So far this season, trends are broadly the same as the same period in 2018/19 (Figure 8).

EuroMOMO

Mortality data for week 47 and 48 was unavailable at the time of publication. There was no excess all-cause mortality reported in Northern Ireland to date this season.

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 Public Health England. 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

The 2019-20 seasonal flu vaccine programme officially commenced on 1st October 2019.

This year the children’s flu vaccine programme delivered in primary care started in mid to late October.

Figures overleaf represent the first figures collected up to 31st October and so only reflect one month or less of data depending on the eligible group.

	2019/20 (to 31 Oct)	2018/19 (to 31 Oct)
All 2 to 4 year olds	8.3%	32.9%
All pregnant women	23.6%	35.2%
All individuals under 65 years with a chronic medical condition	22.7%	29.6%
All individuals 65 years and over	41.0%	28.3%
Primary school children (4 to 11 year olds)**	76.0%	75.5%
Frontline health care workers employed by a Trust***	31.7%	31.6%
Frontline social care workers employed by a Trust	16.3%	16.5%

* Public vaccination figures are based on GP practice returns which are lower for the reporting period but will be more representative of the public uptake figures in the next update later in the season.

** Proportion of primary school children who were offered the vaccine and were vaccinated (up to 31 October 2019).

*** Uptake data was not available for NIAS therefore figures for Northern Ireland (up to 31 October 2019) are based on the five HSC Trusts only.

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 [PHE Weekly National Flu Report](#)

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

Wales [Public Health Wales Influenza Surveillance Report](#)

Republic of Ireland [HPSC Seasonal Influenza Surveillance Reports](#)

International updates

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

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

USA (CDC) [Weekly U.S. Influenza Surveillance Report](#)

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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