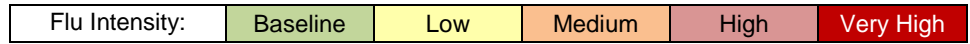


Influenza

Weekly Surveillance Bulletin

Weeks 40 - 41 (30 September—13 October 2019)

Community Activity

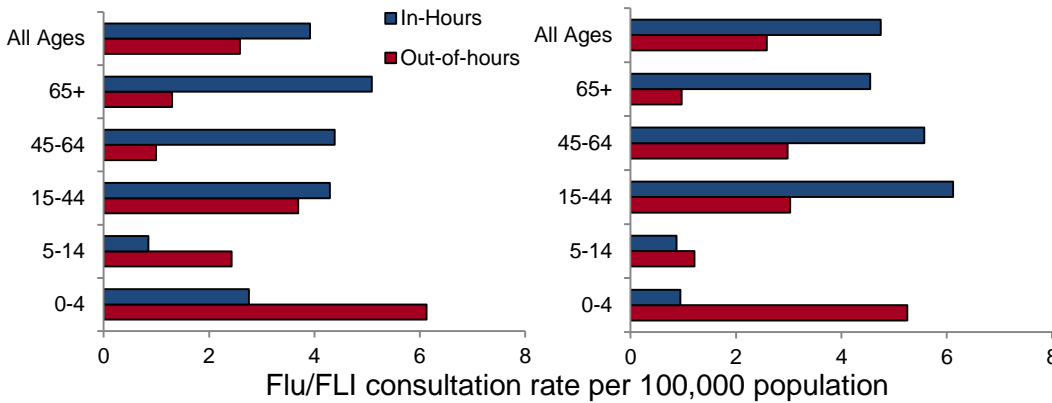


Week	October					November				December				January					February				March			April			May				
	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2019/20																																	
2018/19																																	

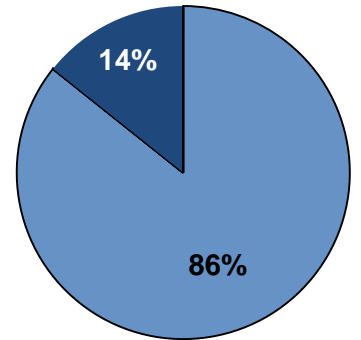
GP consultation rates for 'flu/flu-like-illness' ('flu/FLI')

(Wk 40: 30 Sept—06 Oct 2019)

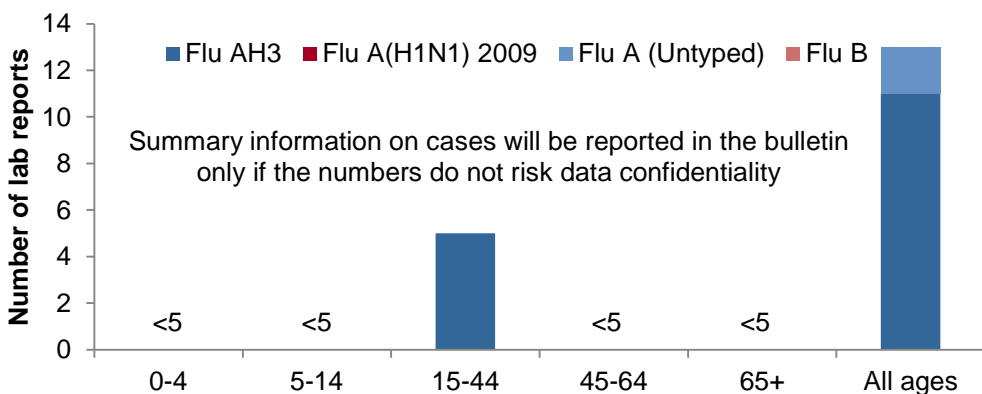
(Wk 41: 07 Oct—13 Oct 2019)



Circulating strains this season to date



Number of hospital cases with confirmed flu (30 Sept—13 Oct 2019)



To date there have been <5 admissions to ICU with confirmed influenza

Respiratory Outbreaks (30 Sept—13 Oct 2019)

0

To date there have been no flu outbreaks reported

Influenza vaccine uptake 2019-20

Vaccine uptake rates for 2019-20 will appear here later in the season

Annual Influenza Surveillance Report 2018-19

The end of season report, Surveillance of Influenza in Northern Ireland 2018-19 is now available to download [here](#)



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

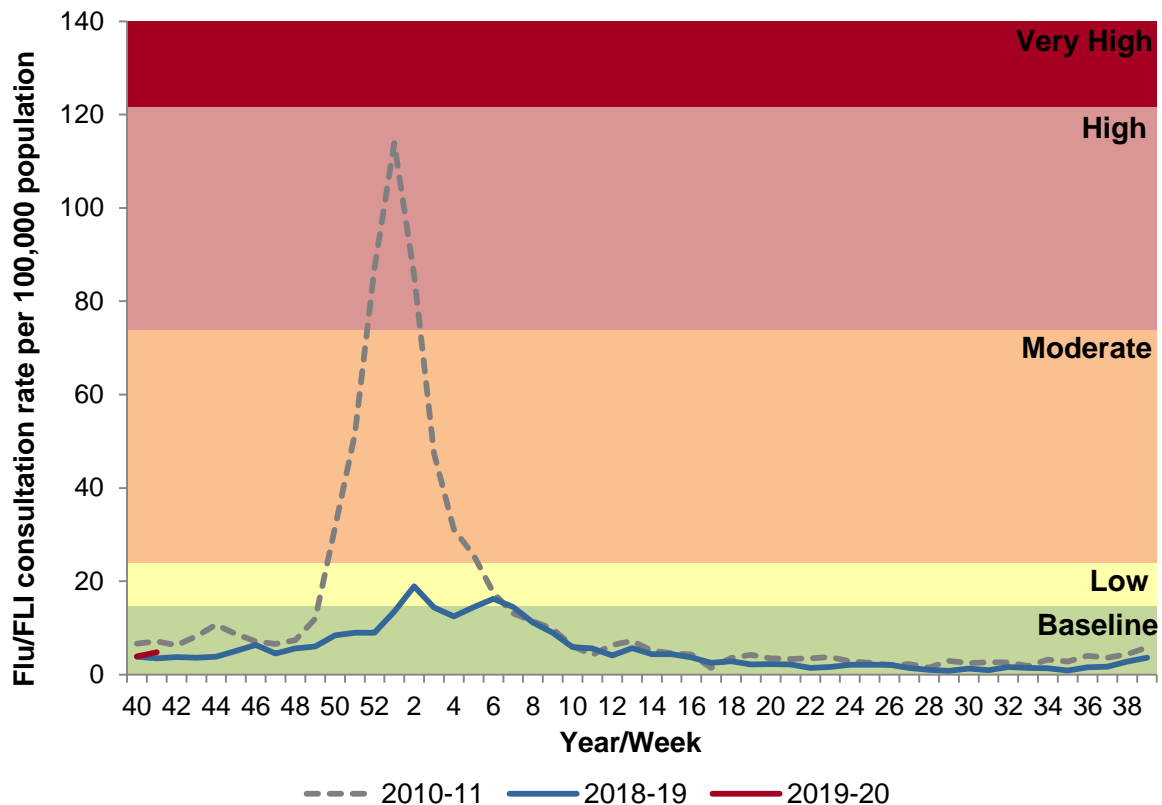


Figure 1. Northern Ireland GP consultation rates for ‘flu/FLI’ 2018/19 – 2019/20, 2010/11 for comparison

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

GP flu/FLI consultation rates were 3.9 per 100,000 population in week 40 and 4.8 per 100,000 in week 41, which is higher than the same time last year (3.8 and 3.5 per 100,000, respectively). Activity remains below the baseline threshold for Northern Ireland (<14.7 per 100,000) (Figure 1).

Flu/FLI consultation rates were highest in over 65 year olds in week 40 (5.1 per 100,000 population) and 15-44 year olds in week 41 (6.1 per 100,000). Rates are higher in all age groups, except 0-4 year olds, compared to the same time last year.

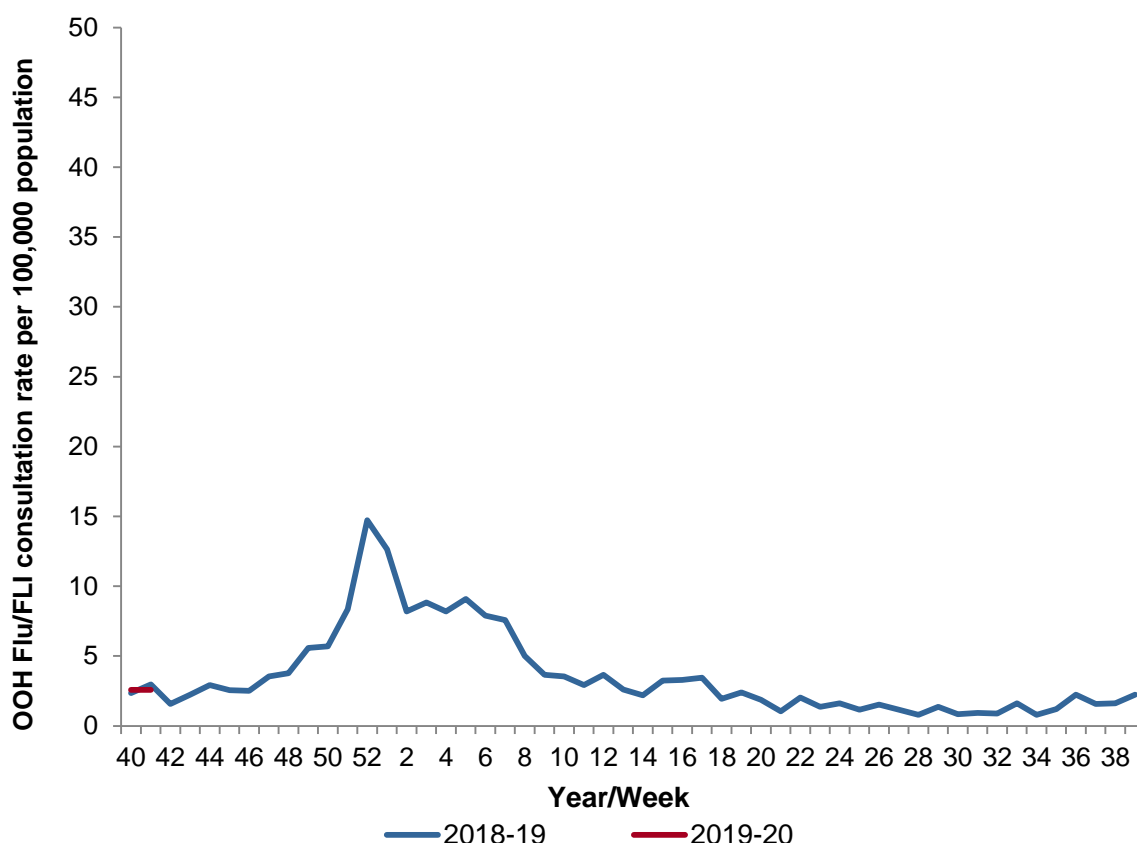


Figure 2. Northern Ireland Out of Hours (OOH) consultation rates for 'flu/FLI' 2018/19 – 2019/20

Comment

Flu/FLI consultation rates in Primary Care Out-of-Hours (OOH) Centres were 2.6 per 100,000 population in both weeks 40 and 41. This is generally similar to the same time last year (Figure 2).

In both weeks 40 and 41, only 0.5% of calls to an OOH Centre were due to flu/FLI, which is similar to the same time last year (0.6%).

Rates were highest for both weeks in those aged 0-4 years, 6.1 per 100,000 population and 5.3 per 100,000, respectively. In comparison to week 41, 2018-19, consultation rates were lower in all age groups, with the exception of 0-4 and 45-64 year olds.

Virology

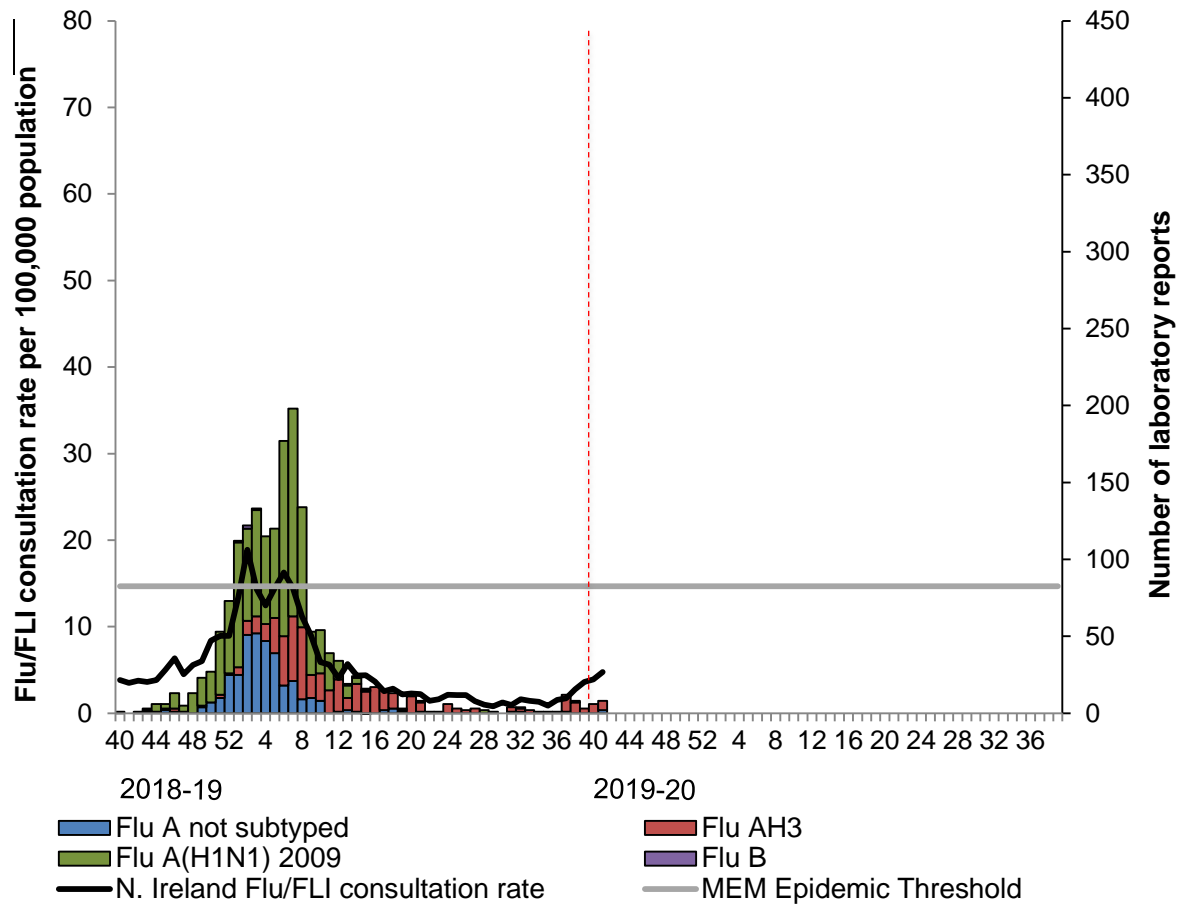


Figure 3. Weekly number of flu laboratory reports from week 40, 2018 with weekly GP consultation rates for ‘flu/FLI’

Table 1. Virus activity in Northern Ireland by source, Weeks 40-41, 2019-20

Source	Specimens tested	Flu AH3	Flu A(H1N1) 2009	Flu A (Untyped)	Flu B	RSV	Total Influenza Positive	% Influenza Positive
Sentinel	8	1	0	0	0	0	1	13%
Non-sentinel	430	11	0	2	0	31	13	3%
Total	438	12	0	2	0	31	14	3%

Table 2. Cumulative virus activity from all sources by age group, Week 40 - 41, 2019-20

Age Group	Flu AH3	Flu A(H1N1) 2009	Flu A (Untyped)	Flu B	Total Influenza	RSV
0-4	1	0	0	0	1	29
5-14	2	0	1	0	3	0
15-64	7	0	0	0	7	1
65+	2	0	1	0	3	1
Unknown	0	0	0	0	0	0
All ages	12	0	2	0	14	31

Table 3. Cumulative virus activity by age group and source, Week 40 - Week 41, 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	0	0	0	0	0	0	1	0	0	0	1	29
5-14	1	0	0	0	1	0	1	0	1	0	2	0
15-64	0	0	0	0	0	0	7	0	0	0	7	1
65+	0	0	0	0	0	0	2	0	1	0	3	1
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
All ages	1	0	0	0	1	0	11	0	2	0	13	31

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.

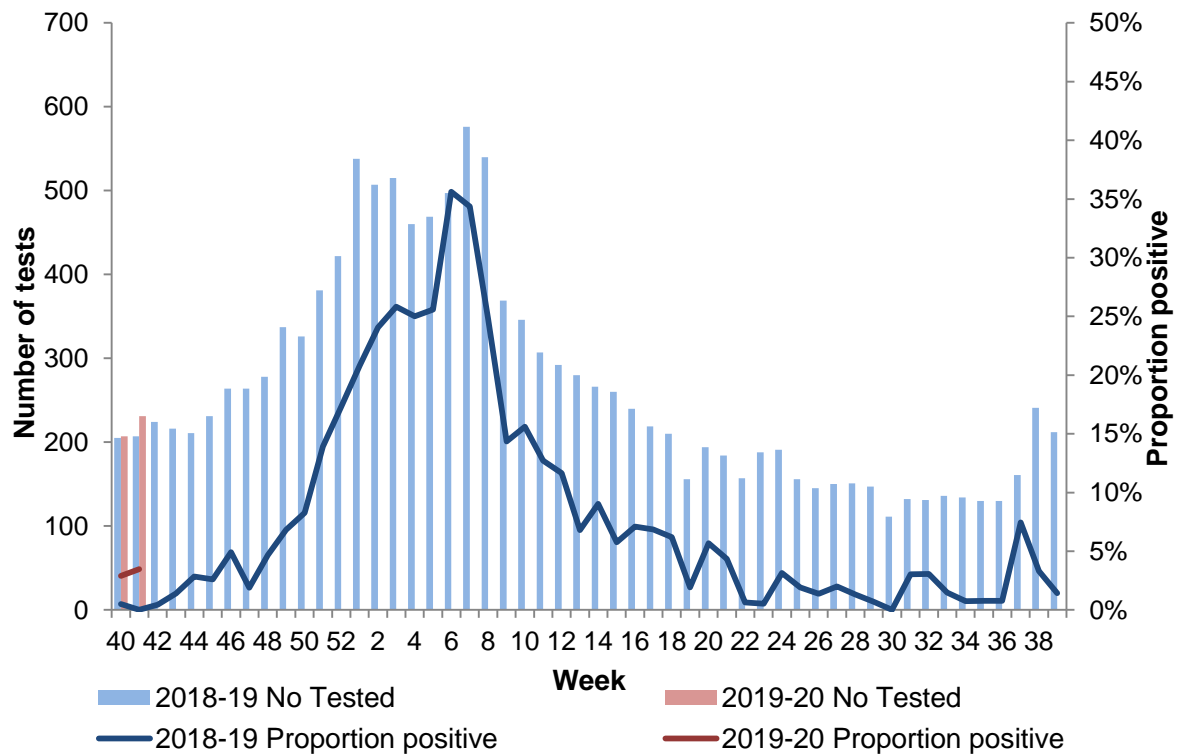


Figure 4. Number of samples tested for influenza and proportion positive, 2018/19 – 2019/20, all sources

Comment

In weeks 40 and 41, 14 samples were positive for flu (12 Flu A(H3), two Flu A (untyped)) from 438 submitted for testing in laboratories across Northern Ireland.

Overall positivity of 3% is higher than this time last year (0%).

One of the eight samples submitted by the GP based sentinel scheme was positive for flu (Flu A(H3)) (Figures 3 and 4; Tables 1, 2 and 3)).

Respiratory Syncytial Virus (RSV)

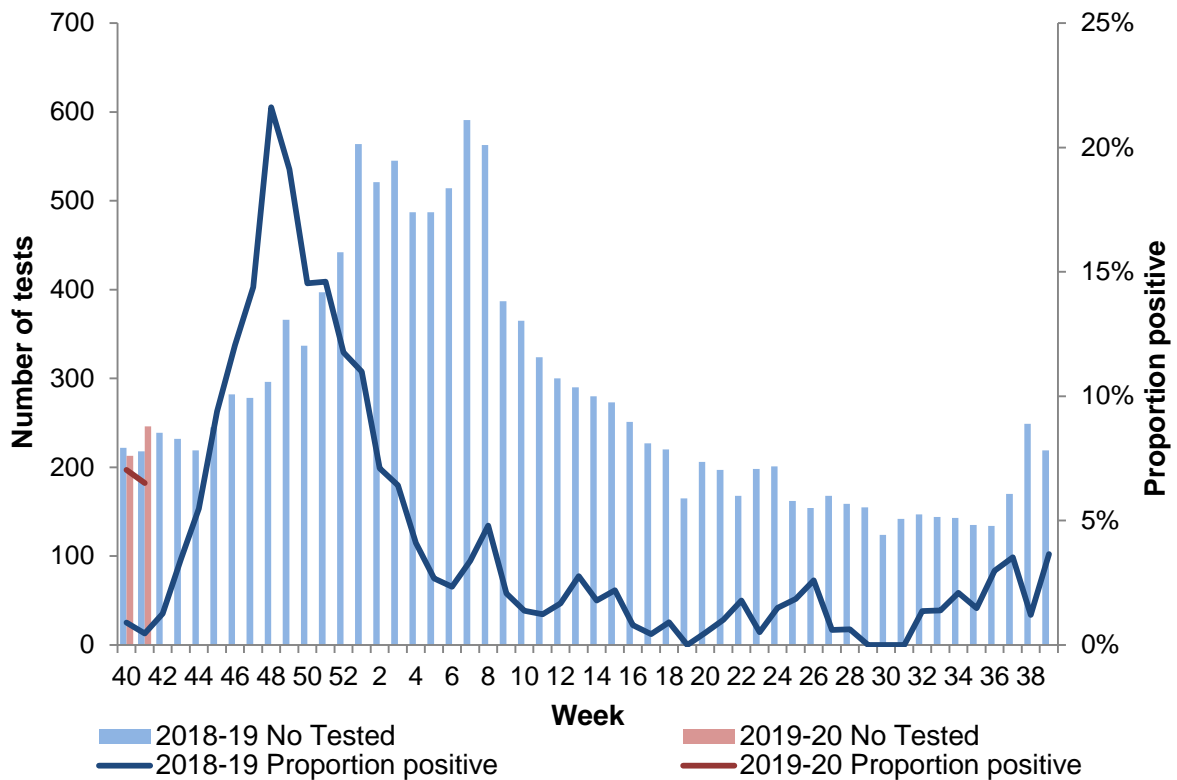


Figure 5. Number of samples tested for RSV and proportion positive, 2018/19 – 2019/20, all sources

Comment

In weeks 40 and 41, 31 samples were positive for RSV, with overall positivity in week 41 (7%) higher than the same time last season (0%).

The majority (94%) occurred in children aged 0-4 years (Table 2 and Figure 5).

Hospital Surveillance (Non-ICU/HDU)

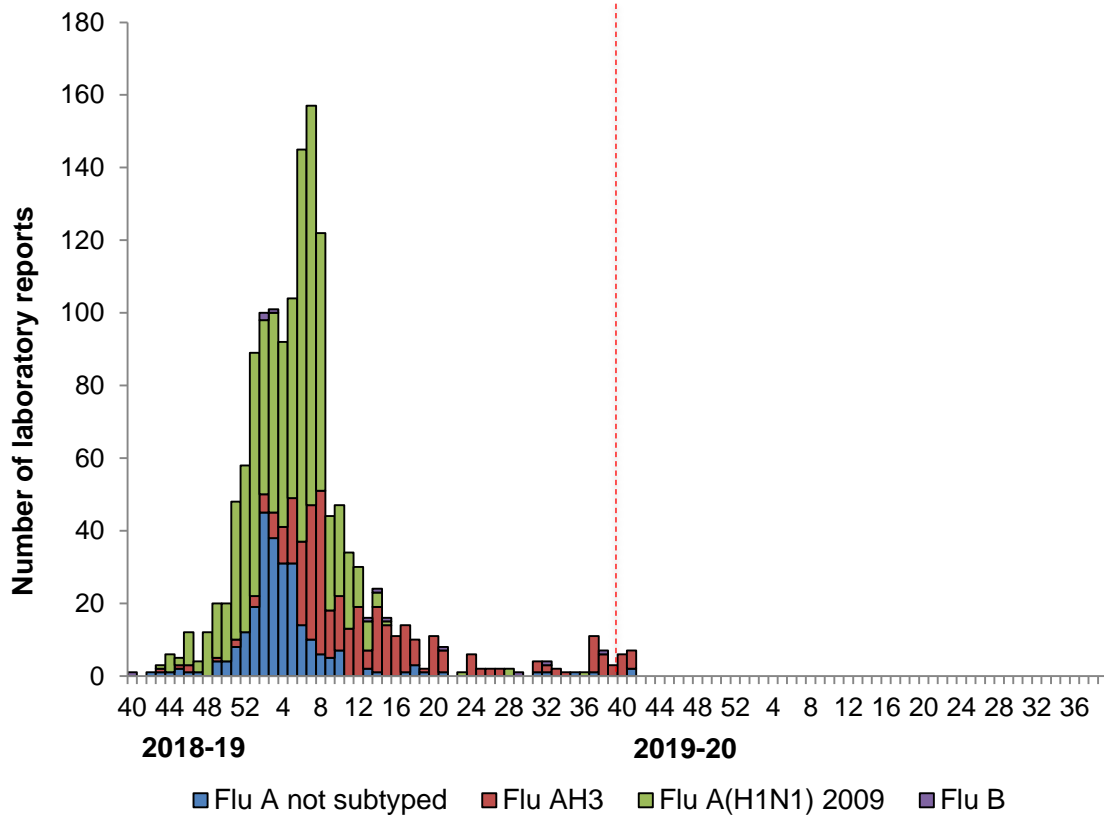


Figure 6. Weekly number of hospitalisations testing positive for influenza by week of specimen, 2018/19 – 2019/20

Comment

In weeks 40 and 41, 13 hospitalisations tested positive for flu (11 Flu A(H3) and two 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

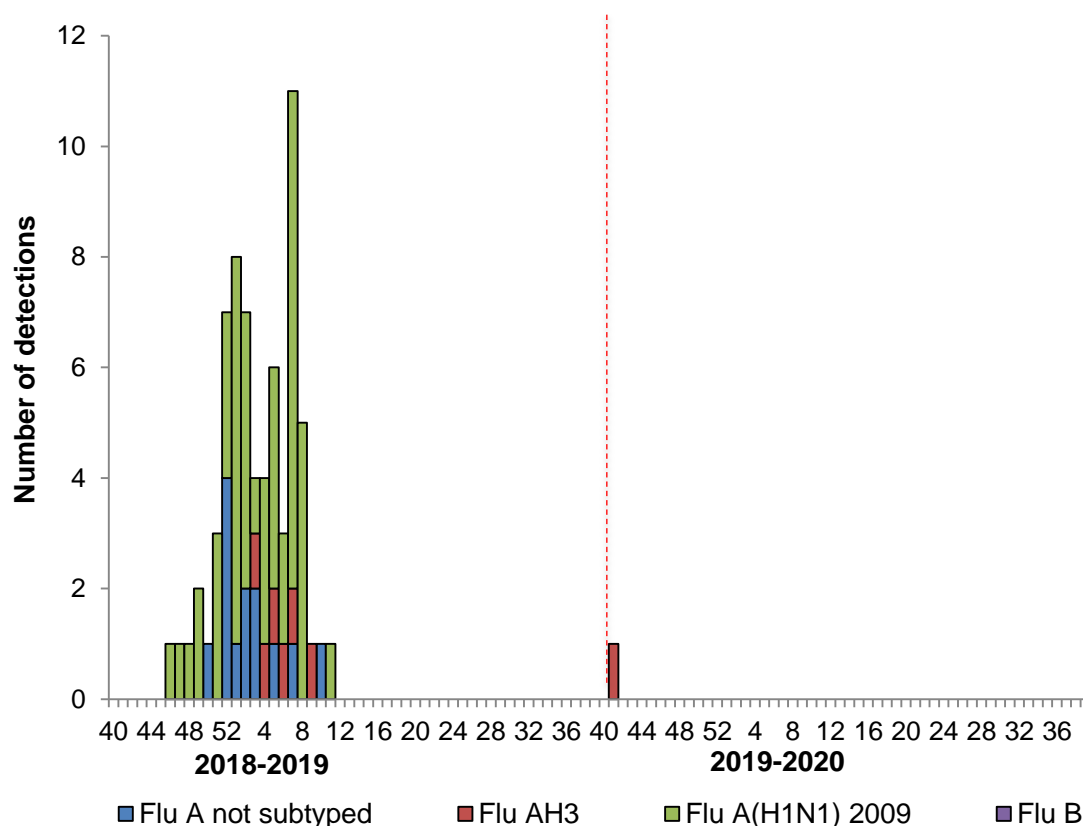


Figure 7. Confirmed ICU/HDU influenza cases by week of specimen, 2018/19 – 2019/20

Comment

Data are collected on laboratory confirmed influenza patients and deaths in critical care (level 2 and level 3). There was one new admission to ICU with confirmed influenza (Flu A(H3)) reported to the Public Health Agency (PHA) in week 41 (no new admissions reported in week 40) (Figure 7).

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

Outbreaks

In weeks 40 and 41, no respiratory outbreaks were reported to the PHA Health Protection acute response duty room.

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.

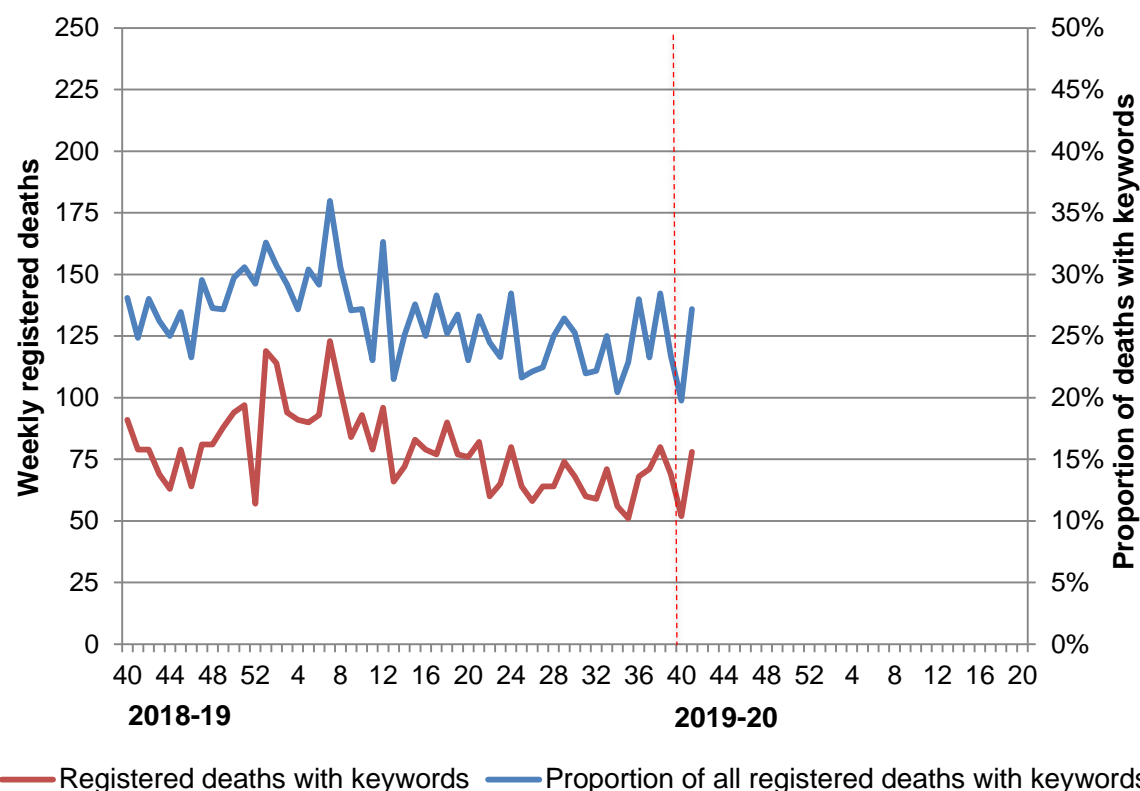


Figure 8. Weekly registered deaths and proportion of all deaths with keywords, by week of registration from week 40, 2018

Comment

In week 41, 78 respiratory associated deaths out of 287 all-cause deaths were reported (27%), with 20% in week 40. These trends are broadly the same as the same period in 2018/19 (Figure 8).

EuroMOMO

There was no excess all-cause mortality reported in Northern Ireland in weeks 40 and 41.

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

Vaccine uptake rates for 2019-20 will be reported in the bulletin later in the season. Uptake rates for the previous two seasons are shown below.

	2018/19 (to 31 March)	2017/18 (to 31 March)
All 2 to 4 year olds	47.6%	50.6%
All primary school children (4 to 11 year olds)	75.9%	76.5%
All pregnant women	44.3%	47.1%
Individuals under 65 years with a chronic medical condition	52.4%	56.0%
All individuals 65 years and over	70.0%	71.8%
Frontline health and social care workers employed by a Trust	35.4%	33.4%
Frontline health care workers employed by a Trust	39.5%	-
Frontline social care workers employed by a Trust	22.5%	-

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.

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:

Dr Mark O'Doherty
Senior Epidemiological Scientist
Public Health Agency

Ms Emma Dickson
Epidemiological Scientist
Public Health Agency

Ms Danielle McMichael
Surveillance Information Officer
Public Health Agency

Dr Jillian Johnston
Consultant in Health Protection
Public Health Agency

Email: flusurveillance@hscni.net