Influenza

Weekly Surveillance Bulletin

Weeks 42 - 43 (17 October — 30 October 2022)

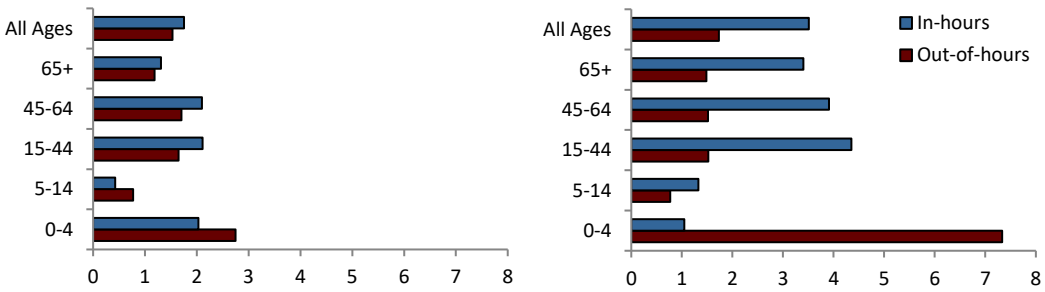
Community Activity

Flu Intensity:	Baseline	Low	Medium	High	Very High

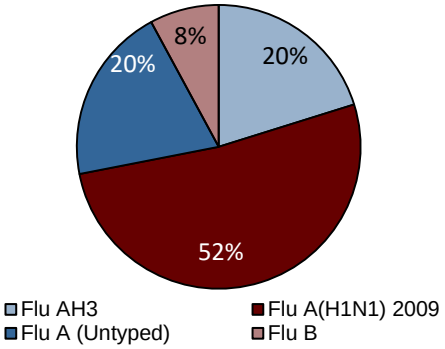
	October					November				December					January					February				March				April				May		
Week	40	41	42	43	44	45	46	47	48	49	50	51	52	53	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2022/23																																		
2021/22																																		
2020/21																																		

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

(Wk 42: 17 Oct - 23 Oct 2022) **(Wk 43: 24 Oct - 30 Oct 2022)**

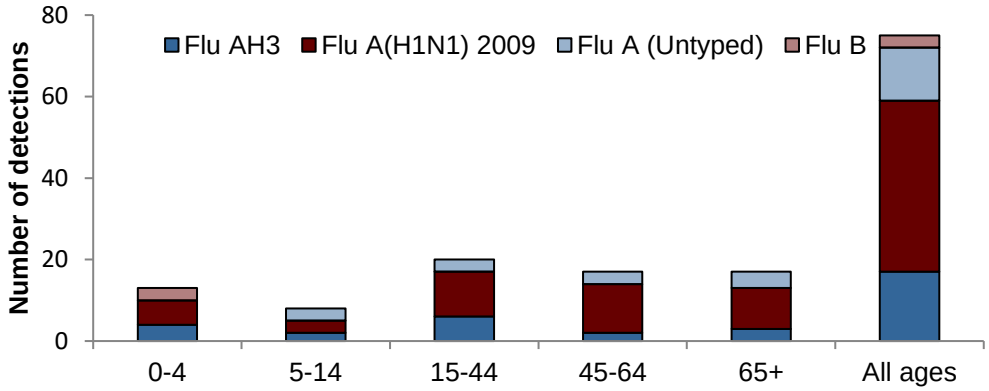


Circulating strains this season to date



Number of hospital cases with confirmed flu

(17 Oct - 30 Oct 2022)



Influenza Outbreaks

(17 Oct – 30 Oct 2022)

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To date there has been one flu outbreak reported this season.

Influenza vaccine uptake 2022/23

Vaccine uptake rates for 2022/23 will be available later in the season.

COVID-19 Epidemiological Bulletin

The weekly report outlining the recent epidemiology of COVID-19 disease in Northern Ireland is available to download here.

Note

It is important to note that the influenza surveillance data contained within this report should be interpreted with caution due to the impact of the COVID-19 pandemic. This is true not only for the early stages of the pandemic in Northern Ireland from March 2020 (when there was an increase in the use of influenza-like illness (ILI) codes), but also when in making comparisons between different influenza seasons. Interpretation of data from week 10 (March), 2020 onwards should consider the implementation of episodic COVID-19 control measures. These include, but are not limited to, the wearing of face masks, hand hygiene practices, social and physical distancing measures, national lockdowns and travel restrictions. Changes in both health-seeking behaviours (including patient access to GP services) and in testing practices (including the introduction of laboratory multiplex testing for SARS-CoV/Flu/RSV in 2021) should also be considered.

Consultation rates for influenza or influenza-like-illness ('flu/FLI')

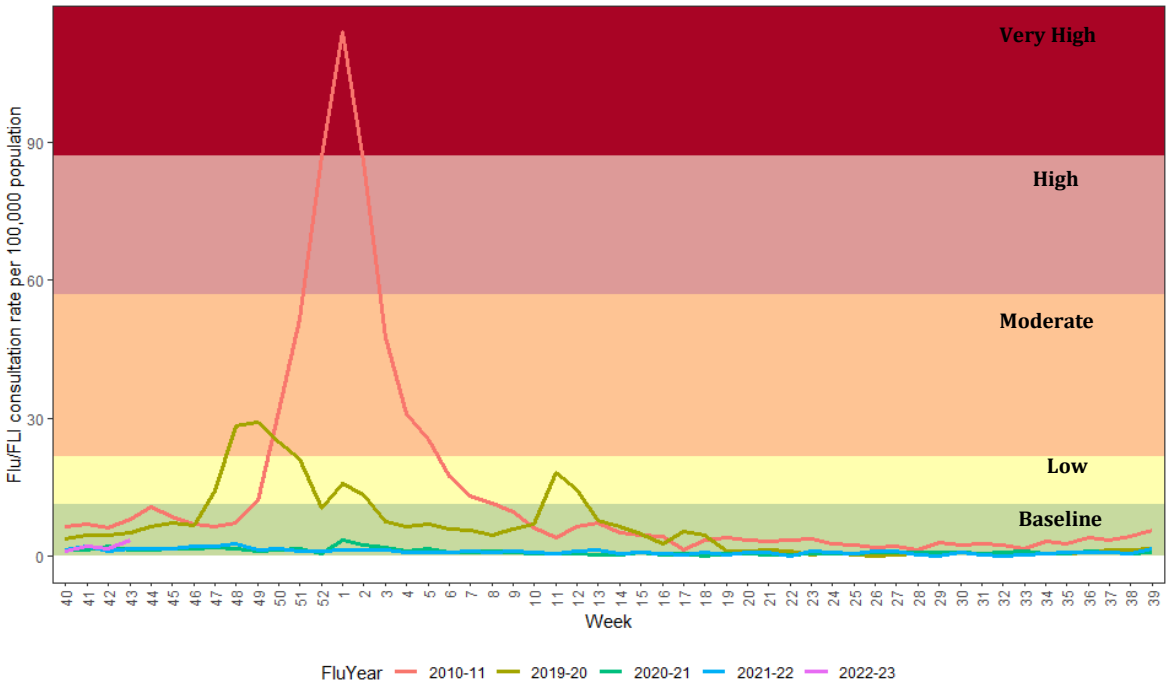

Figure 1. Northern Ireland GP consultation rates for 'flu/FLI' 2010/11 and 2019/20 – 2022/23

The baseline MEM threshold for Northern Ireland is 11.3 per 100,000 population for 2022-23. 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 1.8 per 100,000 population in week 42 and 3.5 per 100,000 population in week 43. This is higher compared with the same period in 2021-22 (1.2/100,000 in week 42 and 1.7/100,000 in week 43). Activity remains below the baseline threshold for Northern Ireland (<11.3 per 100,000) (Figure 1).

Flu/FLI consultation rates were highest in the 15-44 and 45-64 year old age groups in week 42 and in 15-44 year olds in week 43 (2.1 and 4.4 per 100,000, in weeks 42 and 43 respectively). Rates are generally higher in all age groups for weeks 42 and 43, except for those in one age group (65+) in week 42 and two age groups in week 43 (0-4 and 65+) which were lower than the same period in 2021-22.

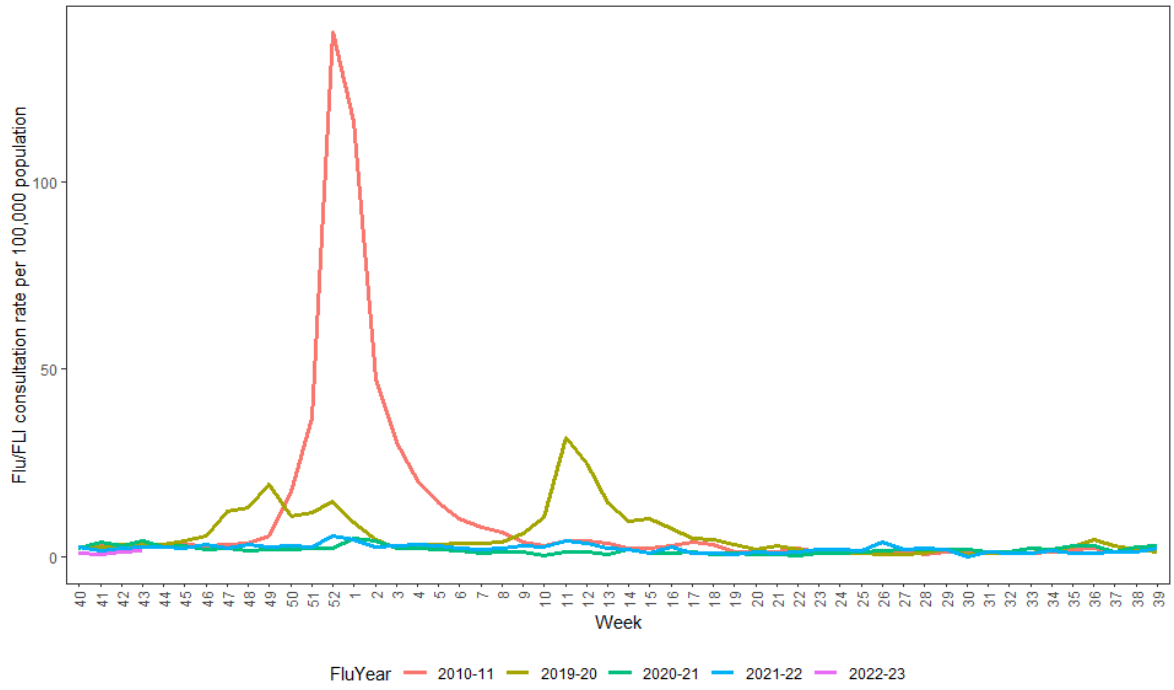

Figure 2. Northern Ireland Out of Hours (OOH) consultation rates for 'flu/FLI' 2010/11 and 2019/20 – 2022/23

Comment

Flu/FLI consultation rates in Primary Care Out-of-Hours (OOH) Centres were 1.5/100,000 population in week 42 and 1.7/100,000 in week 43. This is lower than the same period last year (2.5 and 2.6/100,000 respectively).

In weeks 42 and 43 the percentage of calls to an OOH Centre due to flu/FLI was 0.45% and 0.58% respectively, slightly higher when compared with the same period last year (0.43% in week 42 and 0.46% in week 43).

Rates were highest in those aged 0-4 years in week 42 and week 43 (2.7/100,000 population, and 7.3/100,000, respectively). In comparison to the same period in 2021-22, consultation rates were lower (or the same) in all age groups.

Virology

Table 1. Virus activity in Northern Ireland by source, weeks 42-43, 2022-23

Source	Specimens tested	Flu A (H3)	Flu A (H1N1)	Flu A (Untyped)	Flu B	RSV	Total Influenza Positive	% Influenza Positive
Sentinel	8	0	0	0	0	0	0	0.0
Non-sentinel	3628	17	43	16	4	176	80	2.2
Total	3636	17	43	16	4	176	80	2.2

Table 2. Cumulative virus activity from all sources by age group, week 40-43, 2022-23

Age Group	Flu A(H3)	Flu A(H1N1)	Flu A (Untyped)	Flu B	Total Influenza	RSV
0-4	7	8	2	6	23	276
5-14	2	3	4	0	9	15
15-64	9	29	8	1	47	38
65+	5	19	9	2	35	31
Unknown	0	0	0	0	0	0
All ages	23	59	23	9	114	360

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. Cumulative reports of influenza types may vary from week to week as untyped specimens may be subsequently typed at the time of later reports.

Positive influenza results (dual positive influenza A and influenza 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). The number of positive influenza results should therefore be interpreted with caution.

Since week 34 of 2021, laboratories have used a mixture of multiplex and standard testing for SARS-CoV-2/Flu/RSV. As a result, positivity is not directly comparable between seasons.

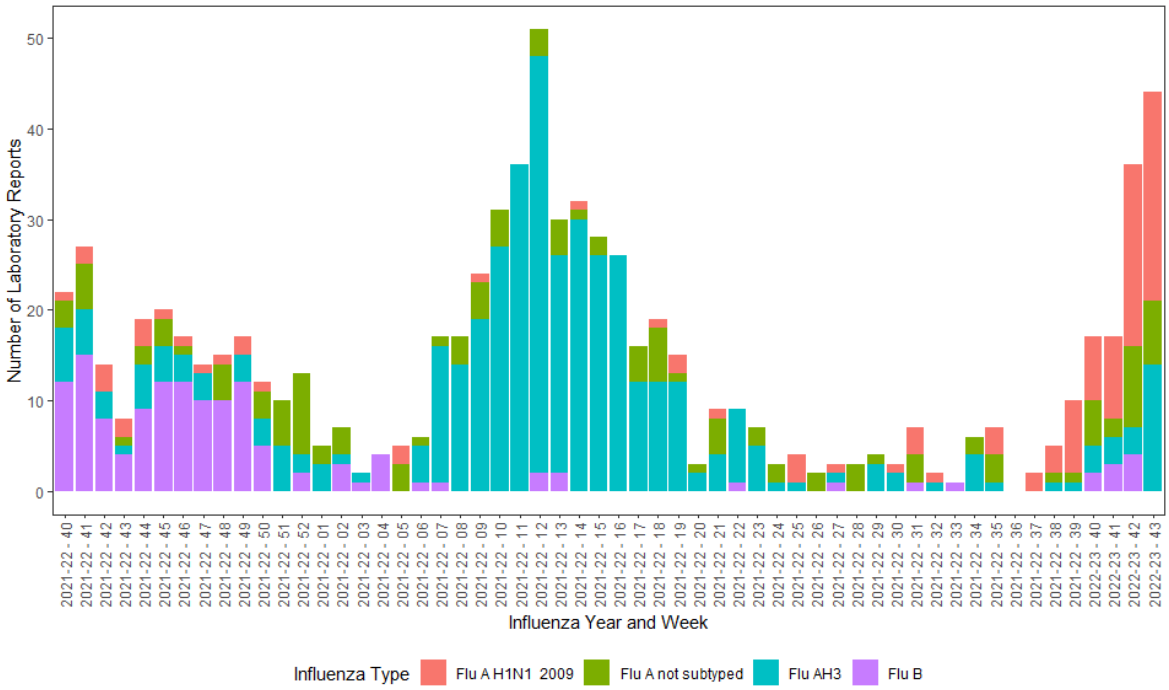

Figure 3. Weekly number of positive influenza laboratory reports, 2021/22 – 2022/23

Comment

In weeks 42 and 43, 80 samples were positive for flu (43 Flu A(H1N1), 16 Flu A(untyped), 17 Flu A(H3), and 4 Flu B) from 3636 samples submitted for testing in laboratories across Northern Ireland. The combined positivity for weeks 42-43 was 2.2%. Since week 40, 41% of total influenza samples have occurred in individuals aged between 15-64.

In weeks 42 and 43, 176 samples were positive for RSV (108 positives from week 42 and 68 from week 43). The majority (77%) of RSV positive samples since week 40 have occurred in children in the 0-4 age group category.

Hospital Surveillance

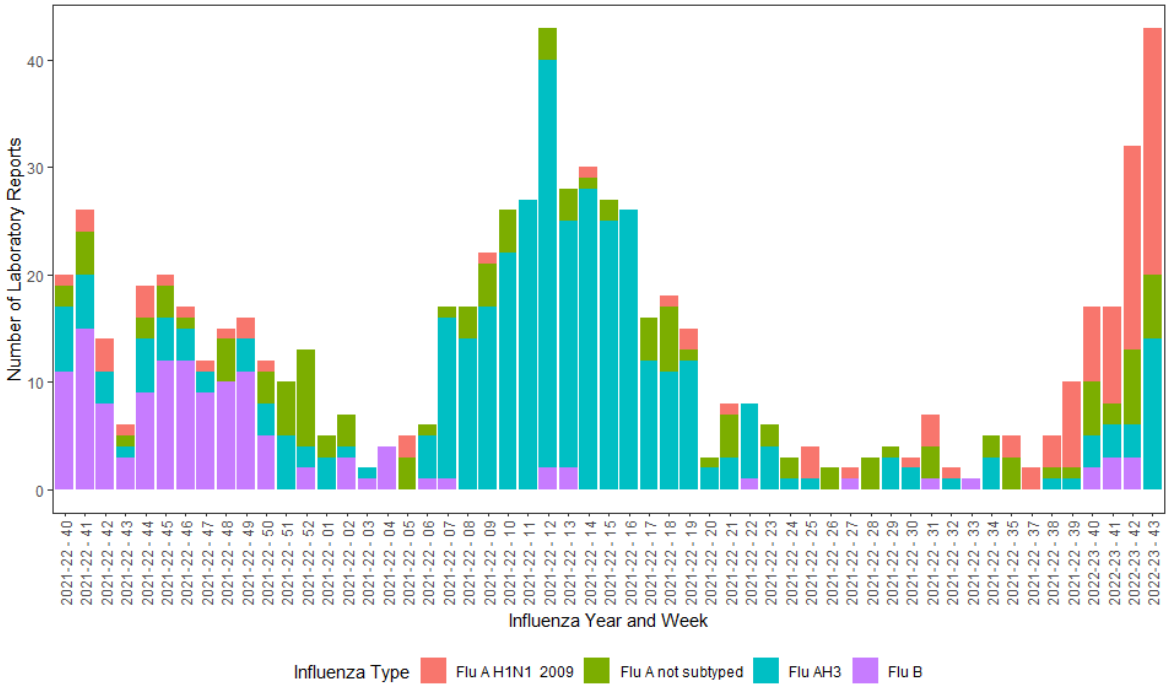

Figure 4. Weekly number of hospital samples testing positive for influenza by week of specimen, 2021/22 – 2022/23

Comment

In weeks 42 and 43, 72 hospital samples were positive for flu (42 Flu A(H1N1), 10 Flu A (untyped), 17 Flu A(H3), and 3 Flu B) from 3636 samples submitted for testing in laboratories across Northern Ireland.

Outbreaks

Comment

There have been no respiratory outbreaks reported to the PHA Health Protection acute response duty room during weeks 42-43.

To date, in 2022-23, there has been one confirmed influenza outbreak reported in a care home setting.

Mortality

The Northern Ireland Statistics and Research Agency (NISRA) provides the weekly number of respiratory-associated deaths and the proportion of all-cause registered deaths (by week of death registration, not by week of death).

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.

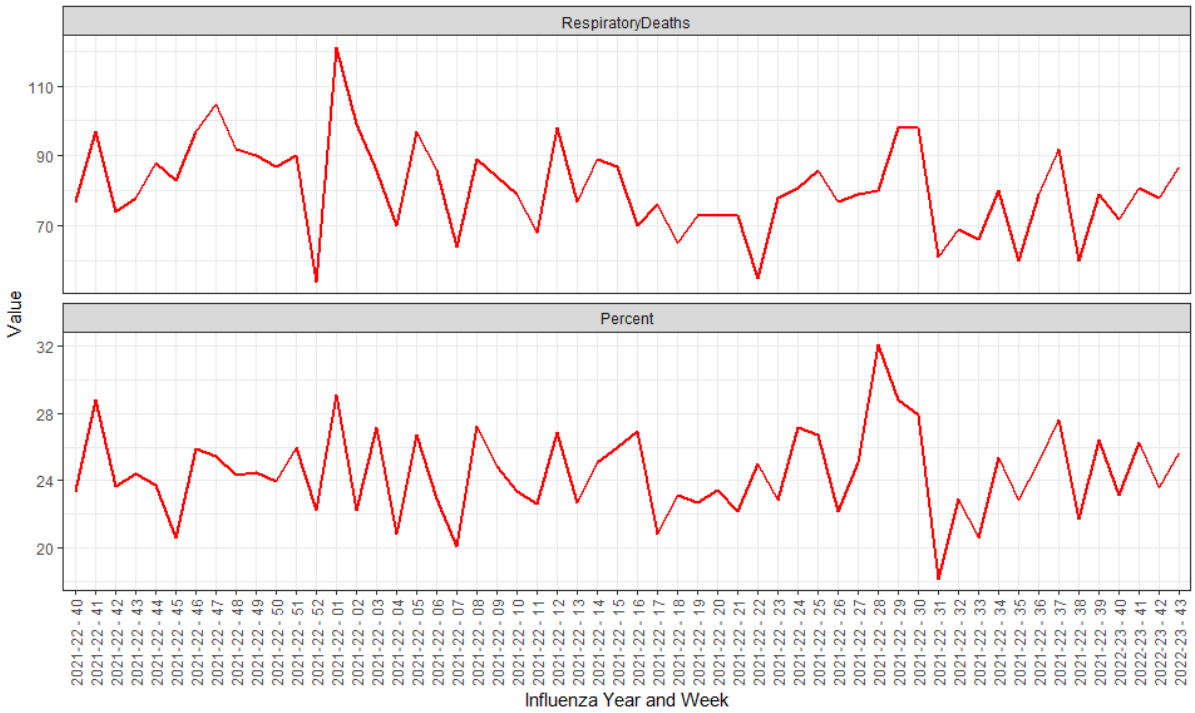

Figure 5. Weekly count of registered deaths and percent of all deaths with respiratory keywords, by week of registration from week 40, 2021

Comment

In week 42, 78 respiratory associated deaths out of 331 all-cause deaths were reported (24%). In week 43, 87 respiratory associated deaths out of 339 all-cause deaths were reported (26%). These trends are broadly similar to 2021/22 (24% in weeks 42 and 43).

EuroMOMO

In 2022, based on NISRA death registrations and the EuroMOMO model, excess deaths were reported in week 29. Despite delay correction, reported mortality data are still provisional due to the time delay in registration and observations which can vary from week to week; not all registrations for the current week will have been included this bulletin.

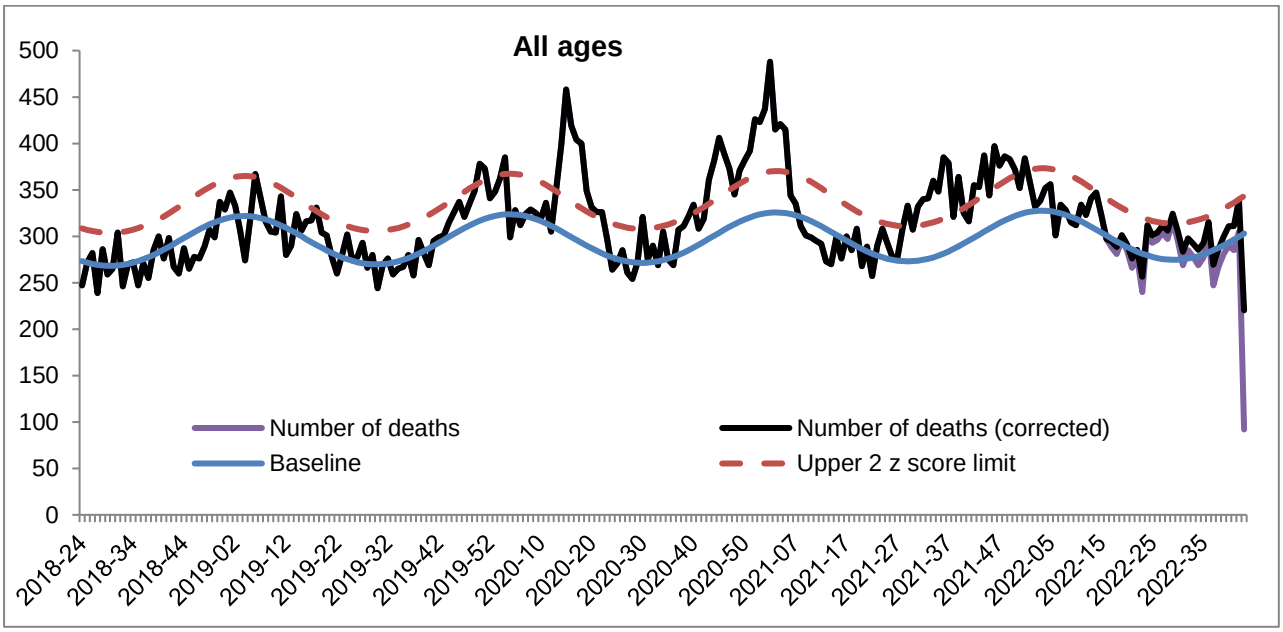

Figure 6. Weekly observed and expected number of all-cause deaths in all ages, week 24, 2018 – week 43, 2022

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

Further Information and International/National Updates

Further information on influenza is available at the following websites:

PHA Seasonal Influenza

nidirect Flu Vaccination

UKHSA Seasonal Influenza Guidance - Data and Analysis

Influenza (seasonal) (who.int)

ECDC Seasonal Influenza

National updates

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

England UKHSA 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

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, and, the Regional Virus Laboratory. Their work is greatly appreciated and their support vital in the production of this bulletin.

We acknowledge 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: **Email:** flusurveillance@hscni.net