HSC Public Health Agency

Influenza

Weekly Surveillance Bulletin

Week 16 (17 April — 23 April 2023)

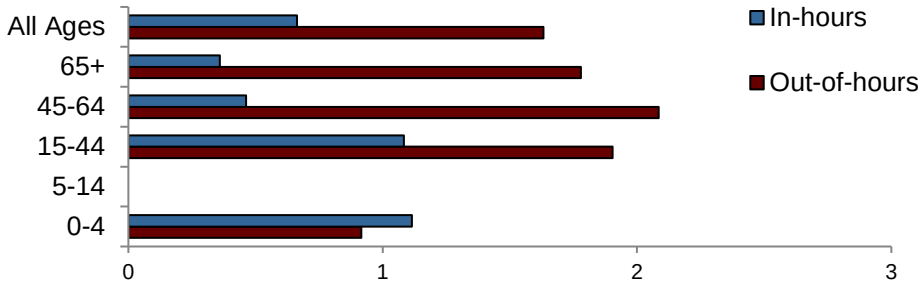
Community Activity

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																																		

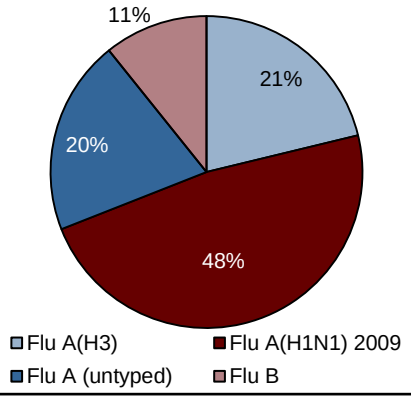
GP consultation rates for 'flu/flu-like-illness' ('flu/FLI')

(17 April — 23 April 2023)

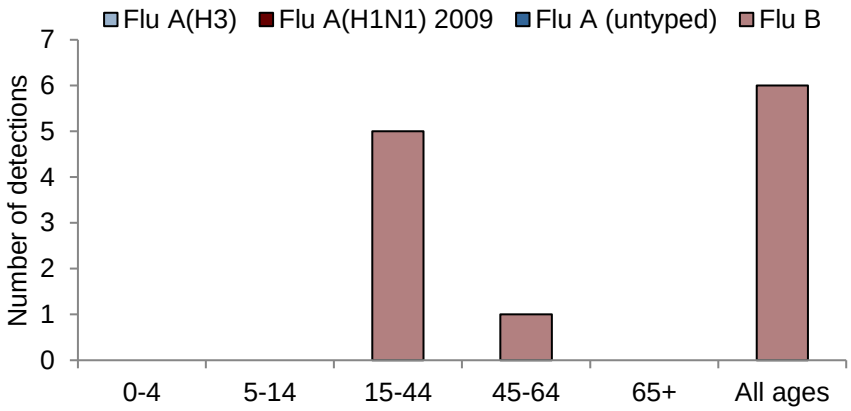


Flu/FLI consultation rate per 100,000 population

Circulating strains this season to date



Number of hospital samples with confirmed flu



Respiratory outbreaks

(17 April — 23 April 2023)

0

To date there have been 33 flu outbreaks and one RSV outbreak reported this season.

Influenza vaccine uptake 2022/23

Vaccine uptake rates for 2022/23 have been included in this bulletin.

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')

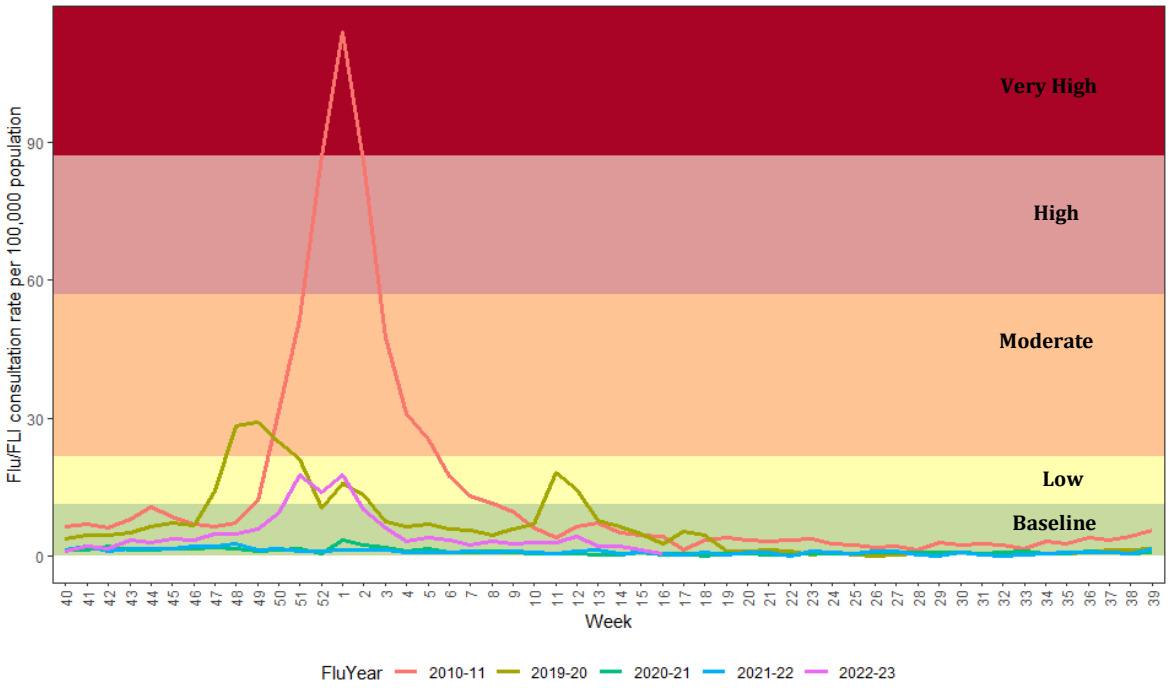


Figure 1. Northern Ireland GP consultation rates for 'flu/FLI' 2010/11 and 2019/20 – 2022/23

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

The GP flu/FLI consultation rate during week 16 was 0.7 per 100,000 population. This is lower than week 15 (1.5 per 100,000) but similar to the same period in 2021-22 (0.5 per 100,000). Activity remains at baseline activity levels (≤11.3 per 100,000), after increasing above the baseline threshold between weeks 51-1.

Rates were highest in the 0-4 and 15-44 year age groups in week 16 (both 1.1 per 100,000 population). Rates were higher in the 15-44 and 65+ year age groups, but similar, or lower, in the 0-4, 5-14 and 45-64 age groups when compared with the same period in 2021-22.

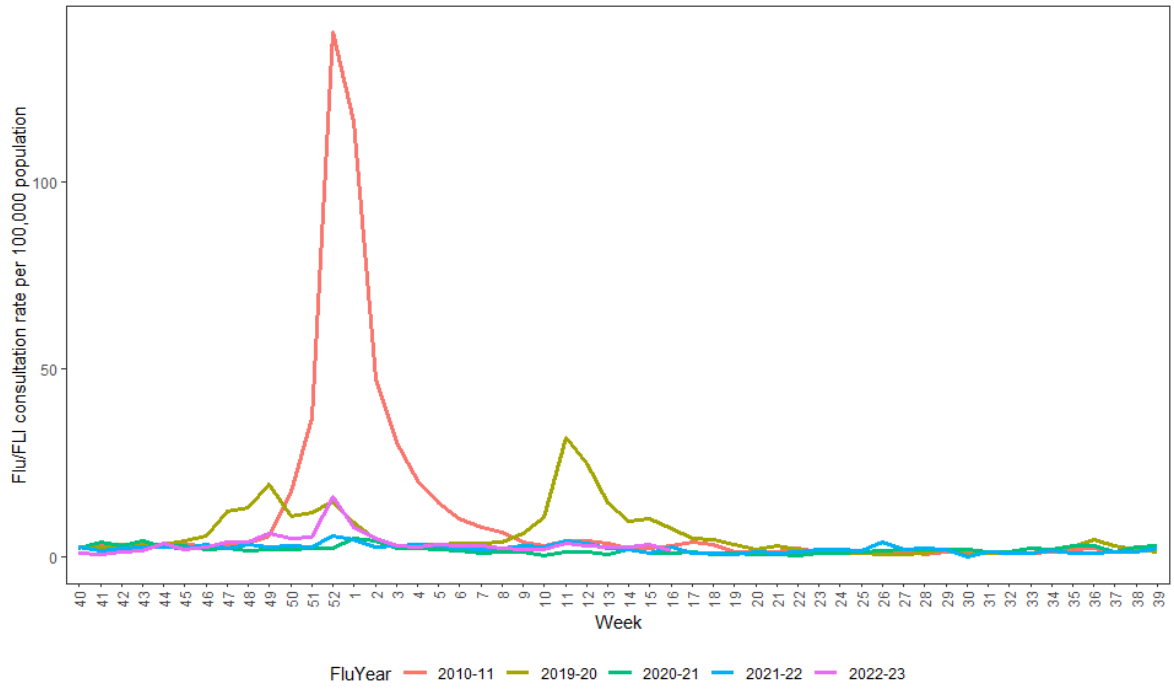


Figure 2. Northern Ireland Out-of-Hours (OOH) consultation rates for 'flu/FLI' 2010/11 and 2019/20 – 2022/23

Comment

The Flu/FLI consultation rate in Primary Care Out-of-Hours (OOH) Centres was 1.6 per 100,000 population in week 16. This is lower than week 15 (3.3 per 100,000) and also lower than the same period in 2021-22 (2.6 per 100,000) (Figure 2).

In week 16 the percentage of calls to an OOH Centre due to flu/FLI was 0.3%. This is slightly lower than the previous week (0.4%) and lower than the same period in 2021-22 (0.5%).

Rates were highest in the 45-64 year age group in week 16 (2.1 per 100,000 population). Rates were lower in all age groups, except 15-44 years, when compared with the same period in 2021-22.

Virology

Table 1. Virus activity in Northern Ireland by source, week 16, 2022-23

Source	Specimens tested	Flu A(H3)	Flu A(H1N1)	Flu A (untyped)	Flu B	Total Influenza Positive	% Influenza Positive	RSV
Sentinel	4	0	0	0	1	1	25.0	0
Non-sentinel	709	0	0	0	8	8	1.1	1
Total	713	0	0	0	9	9	1.3	1

Table 2. Cumulative virus activity from all sources by age group, weeks 40-16, 2022-23

Age Group	Flu A(H3)	Flu A(H1N1)	Flu A (untyped)	Flu B	Total Influenza Positive	RSV
0-4	61	94	35	48	238	580
5-14	17	42	10	14	83	36
15-64	187	495	212	159	1053	141
65+	220	462	205	25	912	191
Unknown	0	0	0	0	0	0
All ages	485	1093	462	246	2286	948

Table 3. Cumulative virus activity by source and age group, weeks 40-16, 2022-23

Source	Age Group	Flu A(H3)	Flu A(H1N1)	Flu A (untyped)	Flu B	Total Influenza Positive	RSV
Sentinel	0-4	0	0	0	0	0	0
	5-14	0	1	0	2	3	0
	15-64	10	12	1	11	34	2
	65+	0	3	0	0	3	0
	Unknown	0	0	0	0	0	0
	All ages	10	16	1	13	40	2
Non-sentinel	0-4	61	94	35	48	238	580
	5-14	17	41	10	12	80	36
	15-64	177	483	211	148	1019	139
	65+	220	459	205	25	909	191
	Unknown	0	0	0	0	0	0
	All ages	475	1077	461	233	2246	946

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.

Virology data from week 47 of 2022 includes point of care tests from RVL.

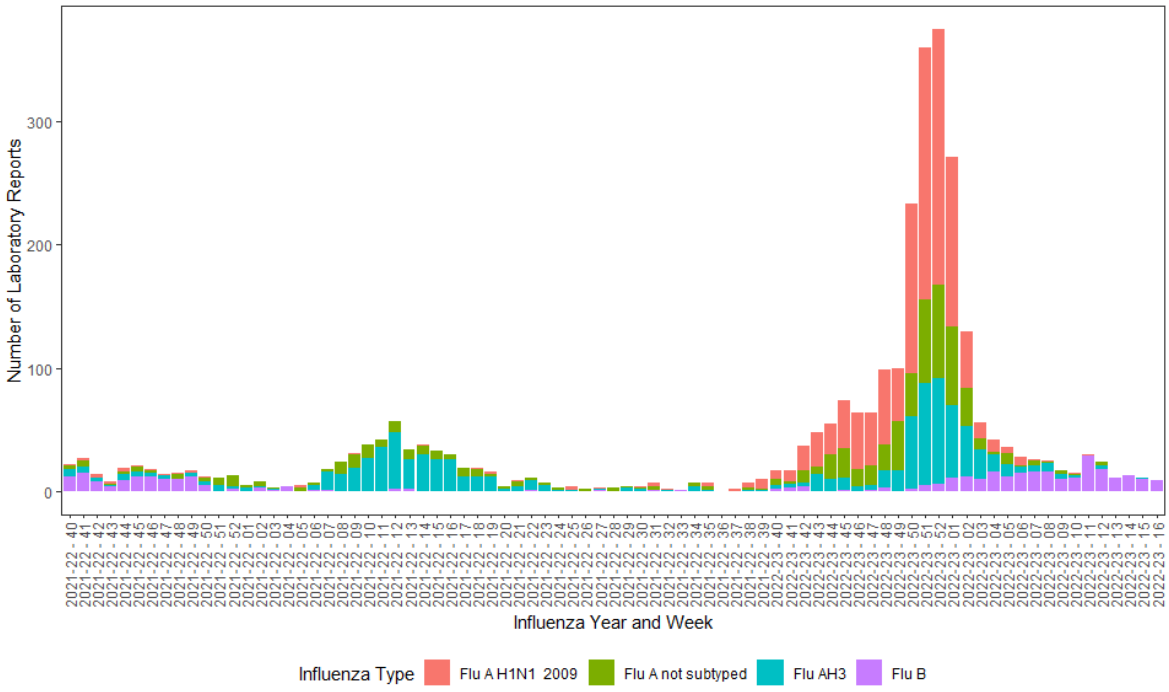


Figure 3. Weekly number of positive influenza laboratory reports, 2021/22 – 2022/23

Comment

In week 16, nine samples were positive for flu (nine Flu B) from 713 samples submitted for testing in laboratories across Northern Ireland (Figure 3). The positivity rate for week 16 was 1.3%. Since week 40, 46% and 40% of total influenza positive samples have occurred in individuals aged 15-64 and 65+ years, respectively.

There was one positive sample for RSV in week 16. The majority (61%) of RSV positive samples since week 40 have occurred in children in the 0-4 age group (Table 2).

Hospital Surveillance

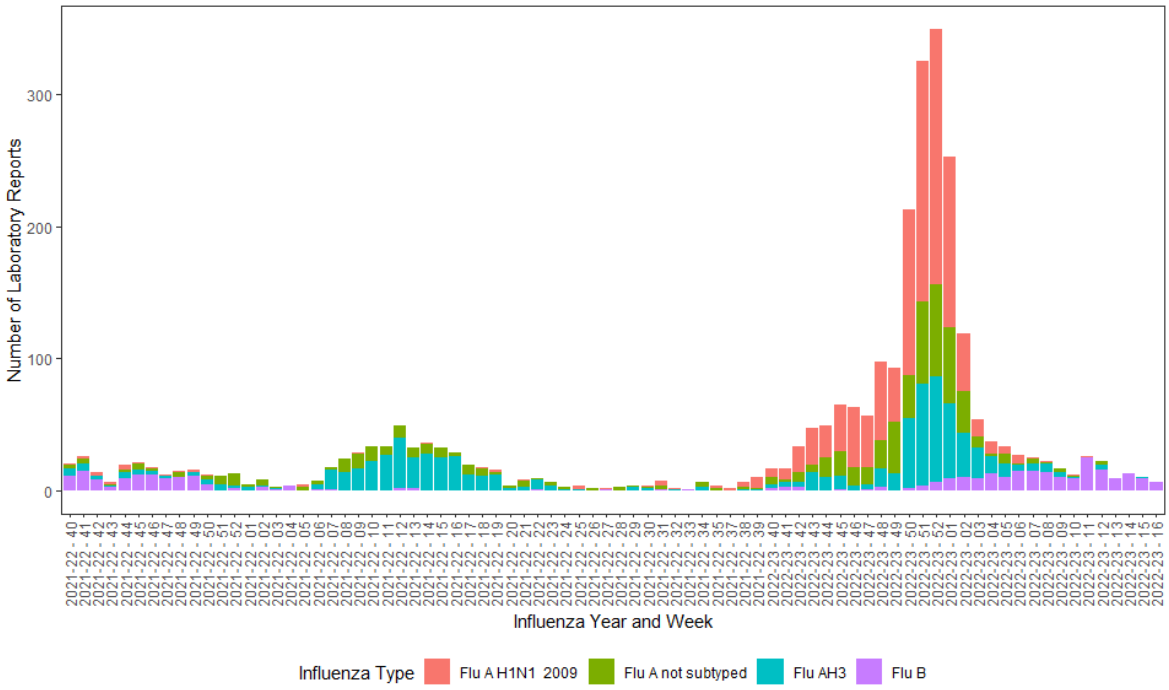


Figure 4. Weekly number of hospital samples testing positive for influenza by week of specimen, 2021/22 – 2022/23

Comment

In week 16, six samples were positive for flu (six Flu B) from 713 samples submitted for testing in laboratories across Northern Ireland (Figure 4).

Outbreaks

Comment

In week 16, there have been no confirmed respiratory outbreaks reported to the PHA Health Protection acute response duty room.

To date, in 2022-23, there have been a total of 33 confirmed influenza outbreaks reported (16 in a care home setting, one in a supported living facility and 16 in a hospital) and one RSV outbreak (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.

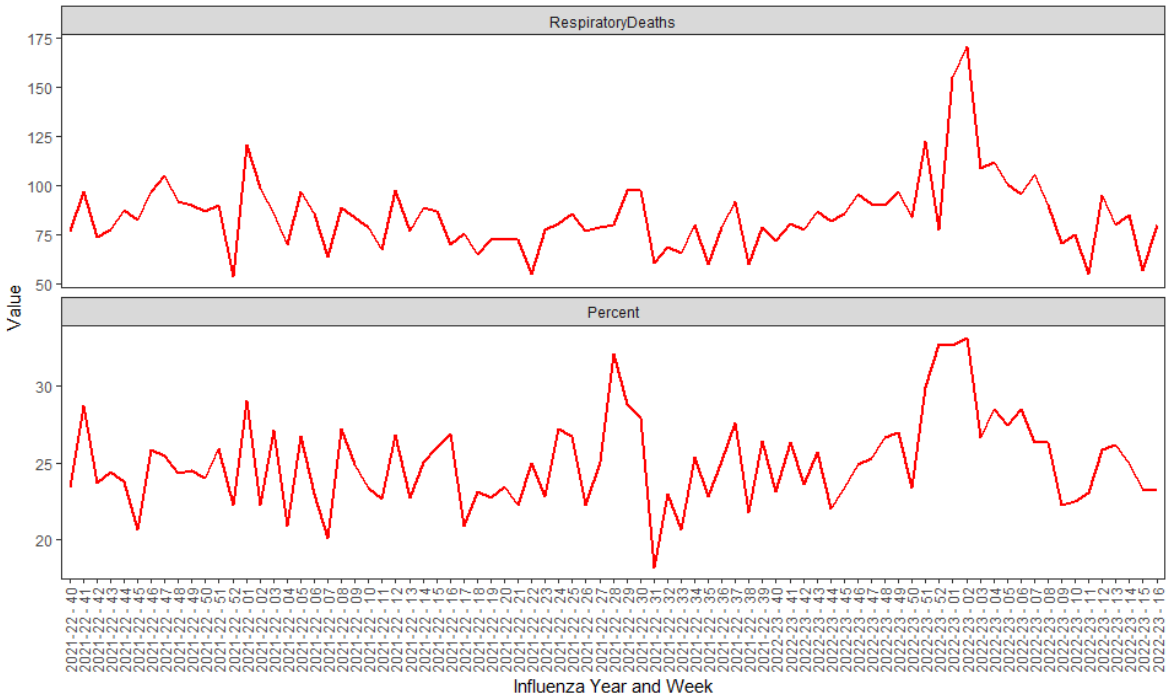


Figure 5. Weekly count of registered deaths and percent of all deaths with respiratory keywords, by week of registration from week 40, 2021

Comment

In week 16, 80 respiratory associated deaths out of 345 all-cause deaths were reported (23%). This is lower than the same period in 2021-22 (70 respiratory deaths out of 260 all-cause deaths, 27%).

EuroMOMO

In 2022, based on NISRA death registrations and the EuroMOMO model, excess deaths were reported in weeks 44 and 50-2, particularly in those aged 65+. 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.

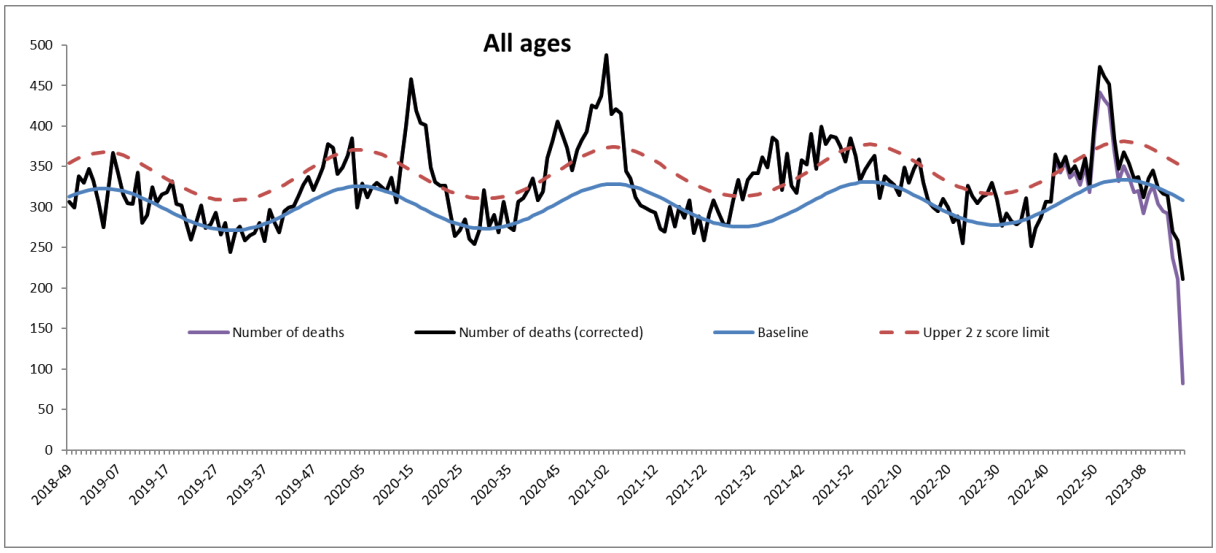


Figure 6. Weekly observed and expected number of all-cause deaths in all ages, week 49, 2018 – week 16, 2023

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

Every year the seasonal flu vaccine programme officially commences early Autumn and is delivered by primary care, the Trust School Nursing Service (in school) and the Trust Health and Social Care Worker (HSCW) flu campaign. This year the flu vaccination programme began on 19th September. Influenza vaccine uptake for the current and previous season has been determined using data extracted from the regional Immunisation Information System developed by the Department of Health (DoH) Digital team; known as the Vaccine Management System (VMS). Influenza vaccination was introduced into the VMS in August 2021.

Caution should be used when considering the 2021-22 and 2022-23 influenza vaccine uptake rates in comparison to previous seasons, due to the introduction of the VMS involving new methods of recording and extracting influenza vaccine data.

Table 4. Influenza vaccine uptake rates (Public Programme), 2022-23

	2022/23[1]
Preschool children (2-4 years)	33.0%
All individuals 50-64 years	51.4%
All individuals 65 years and over	83.0%

[1]Data extracted and accurate to 26/04/2023

From week 12, the flu vaccine uptake rates in the 50-64 and 65+ age ranges have been updated to reflect a new denominator value (transitioning from utilising 2020 to 2021 mid-year population estimates). As a result of this alteration, the data may show a slight decrease in uptake when compared with the previous weeks' reporting.

The seasonal influenza campaign finished on the 31st March 2023. Final vaccination uptake figures will be circulated following validation.

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