

# Influenza

## Weekly Surveillance Bulletin

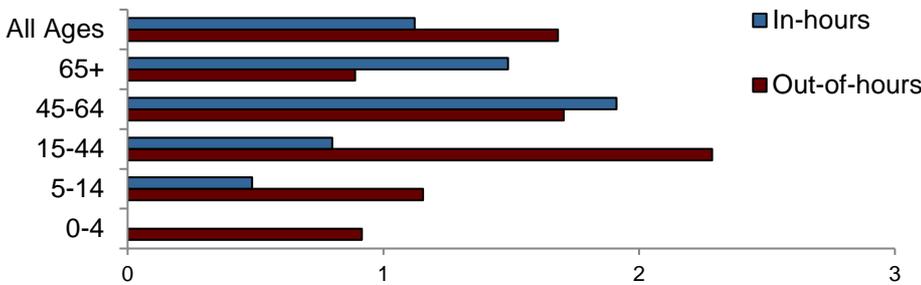
Week 18 (01 May — 07 May 2023)

### Community Activity



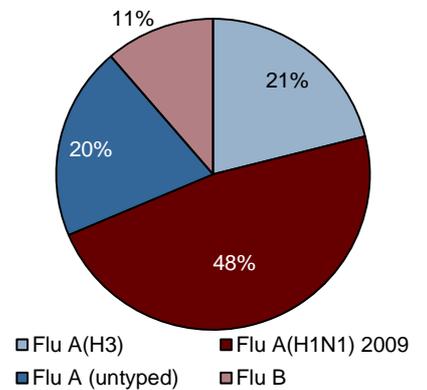
Week	October					November				December					January					February				March				April				May			
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
2022/23																																			
2021/22																																			
2020/21																																			

### GP consultation rates for 'flu/flu-like-illness' ('flu/FLI') (01 May — 07 May 2023)

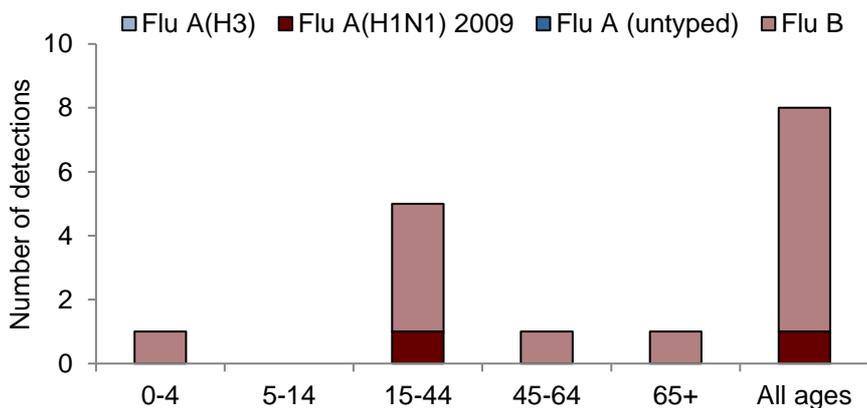


Flu/FLI consultation rate per 100,000 population

### Circulating strains this season to date



### Number of hospital samples with confirmed flu



### Respiratory outbreaks (01 May — 07 May 2023)

0

To date there have been 32 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](#).

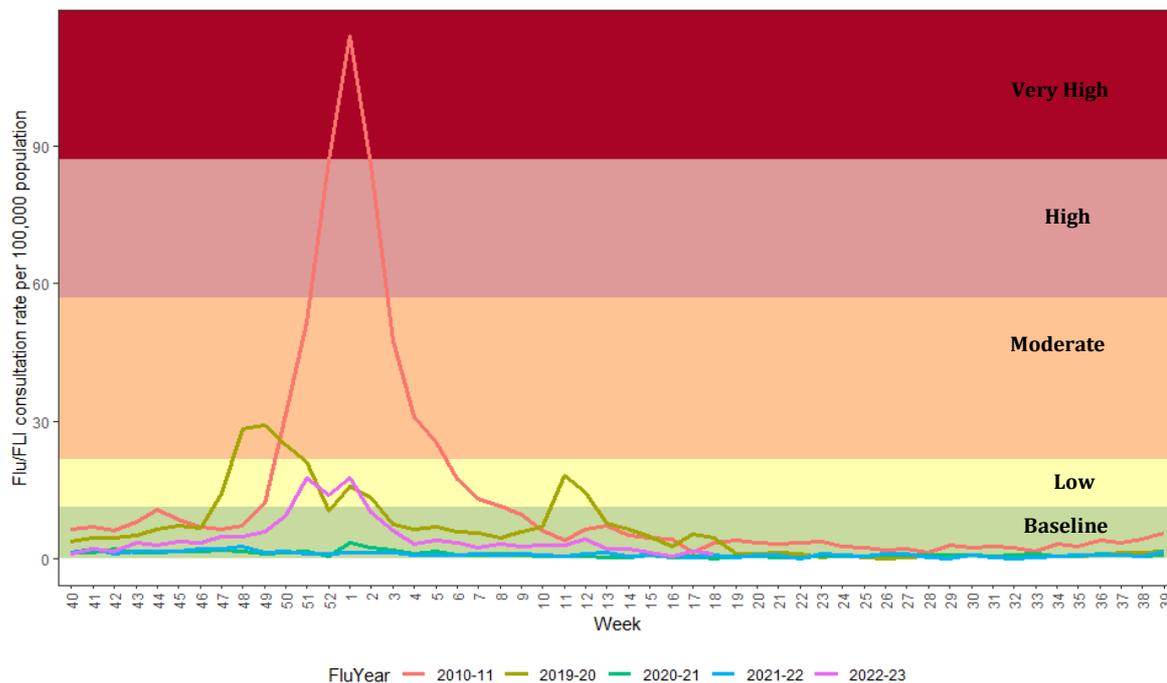
### COVID-19 Epidemiological Bulletin

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')



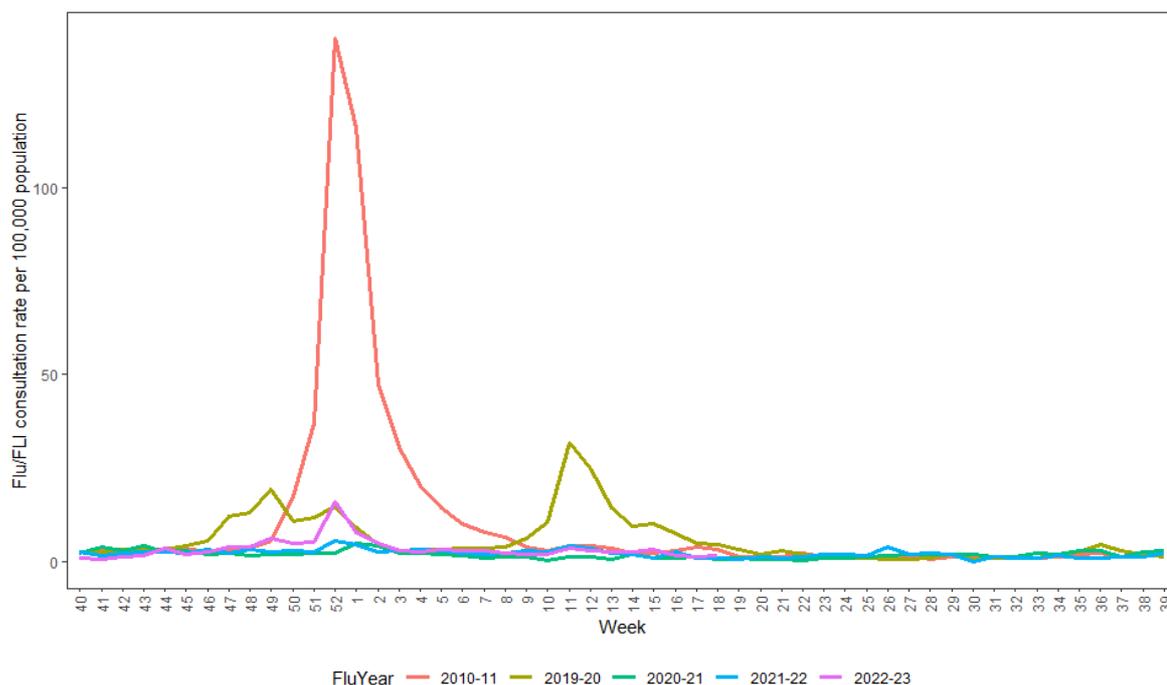
**Figure 1. Northern Ireland GP consultation rates for ‘flu/FLI’ 2010/11 and 2019/20 – 2022/23**

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 18 was 1.1 per 100,000 population. This is lower than week 17 (1.6 per 100,000) but similar to the same period in 2021-22 (1.0 per 100,000). Activity remains at baseline activity levels ( $\leq 11.3$  per 100,000), after increasing above the baseline threshold between weeks 51-1.

Rates were highest in the 45-64 year old age group in week 18 (1.9 per 100,000 population). Rates were higher in the 5-14, 45-64 and 65+ age categories, but similar, or lower in the 0-4 and 15-44 age ranges respectively 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 1.7 per 100,000 population in week 18. This is higher than week 17 (1.3 per 100,000) and also higher than the same period in 2021-22 (1.0 per 100,000) (Figure 2).

In week 18 the percentage of calls to an OOH Centre due to flu/FLI was 0.2%. This is similar to the previous week (0.2%) and also the same period in 2021-22 (0.2%).

Rates were highest in the 15-44 year old age group in week 18 (2.3 per 100,000 population). Rates were higher in the 5-14, 15-44 and 45-64 year old age ranges, but lower in the 0-4 and 65+ age ranges when compared with the same period in 2021-22.

## Virology

**Table 1. Virus activity in Northern Ireland by source, week 18, 2022-23**

Source	Specimens tested	Flu A(H3)	Flu A(H1N1)	Flu A (untyped)	Flu B	Total Influenza Positive	% Influenza Positive	RSV
Sentinel	1	0	0	0	0	0	0.0	0
Non-sentinel	580	0	1	0	8	9	1.6	1
Total	581	0	1	0	8	9	1.5	1

**Table 2. Cumulative virus activity from all sources by age group, weeks 40-18, 2022-23**

Age Group	Flu A(H3)	Flu A(H1N1)	Flu A (untyped)	Flu B	Total Influenza Positive	RSV
0-4	61	94	35	51	241	582
5-14	17	42	10	14	83	36
15-64	187	496	212	167	1062	141
65+	220	462	205	28	915	191
Unknown	0	0	0	0	0	0
All ages	485	1094	462	260	2301	950

**Table 3. Cumulative virus activity by source and age group, weeks 40-18, 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	51	241	582
	5-14	17	41	10	12	80	36
	15-64	177	484	211	156	1028	139
	65+	220	459	205	28	912	191
	Unknown	0	0	0	0	0	0
	All ages	475	1078	461	247	2261	948

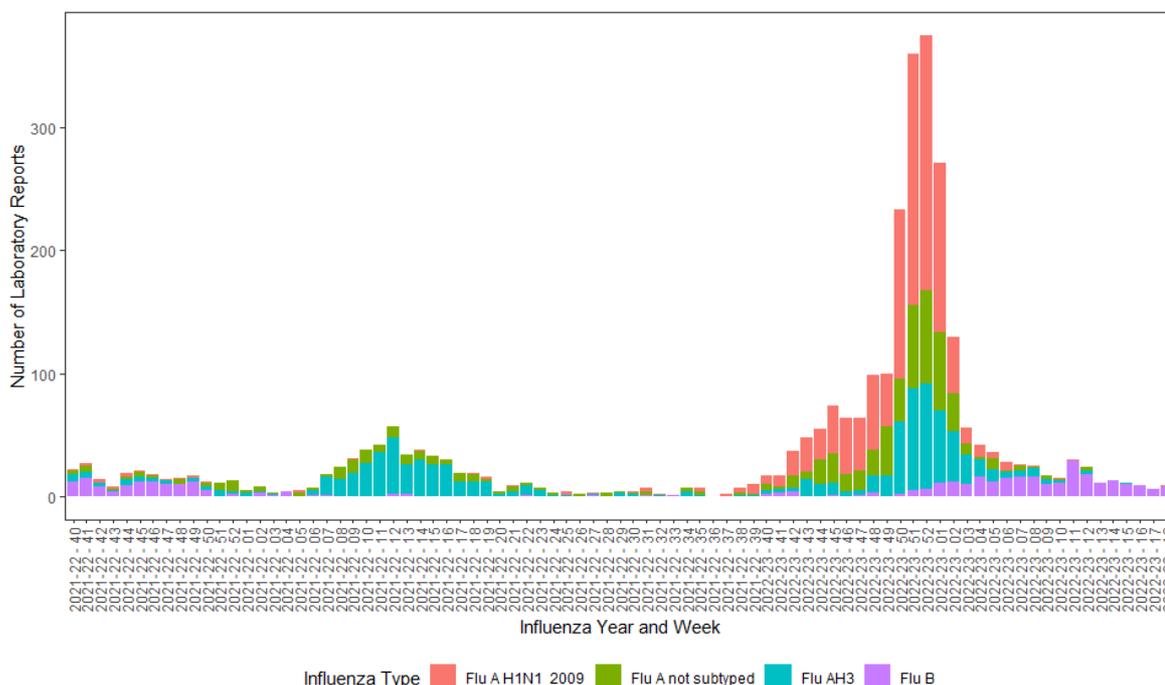
## Note

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.



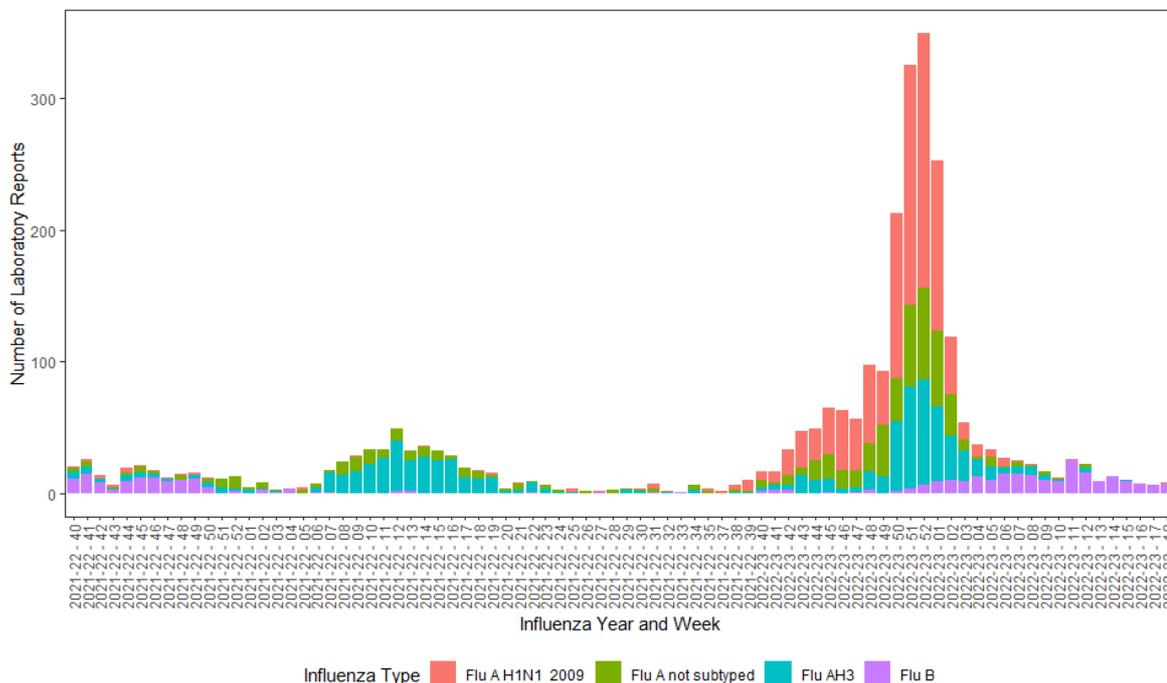
**Figure 3. Weekly number of positive influenza laboratory reports, 2021/22 – 2022/23**

**Comment**

In week 18, nine samples were positive for flu (one Flu A(H1N1) and eight Flu B) from 581 samples submitted for testing in laboratories across Northern Ireland (Figure 3). The positivity rate for week 18 was 1.5%. 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 18. 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 18, eight samples were positive for flu (one Flu A(H1N1) and seven Flu B) from 581 samples submitted for testing in laboratories across Northern Ireland (Figure 4).

## Outbreaks

### Comment

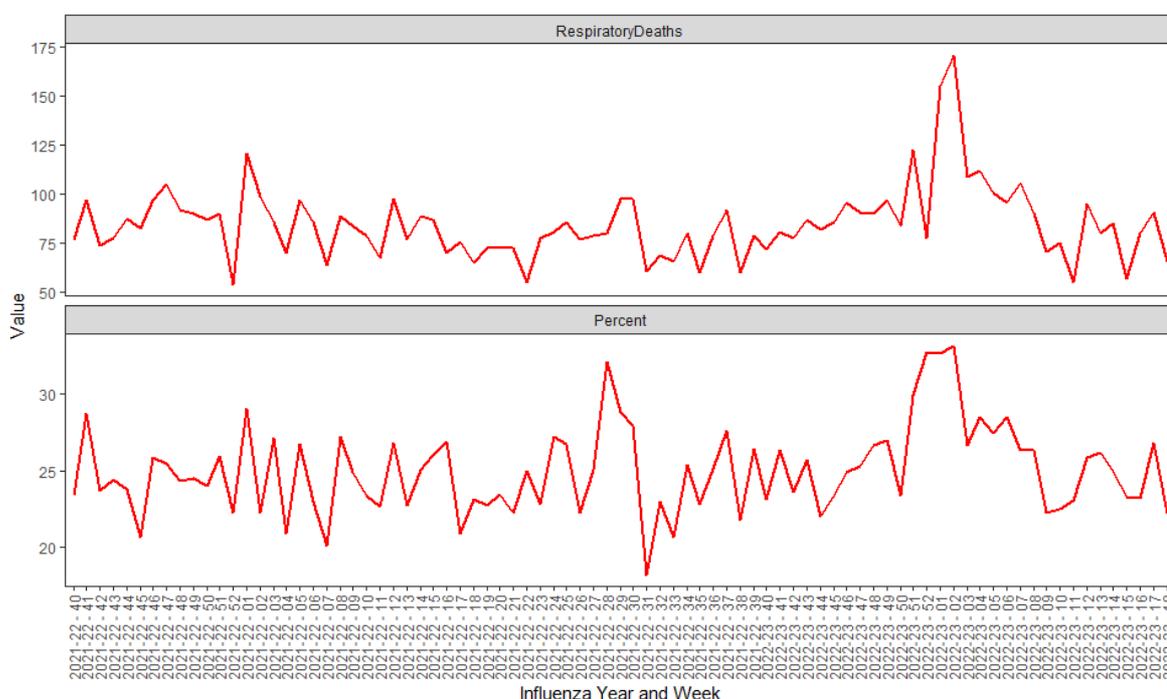
In week 18, there have been no confirmed respiratory outbreaks reported to the PHA Health Protection acute response duty room.

To date, in 2022-23, there have been a total of 32 confirmed influenza outbreaks reported (15 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.



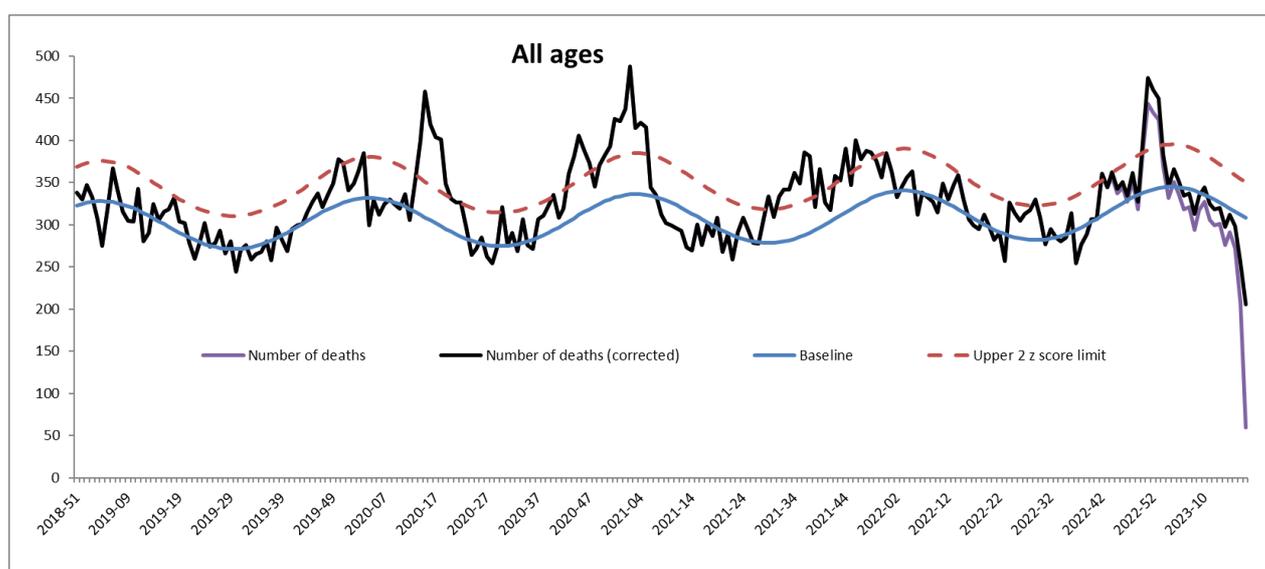
**Figure 5. Weekly count of registered deaths and percent of all deaths with respiratory keywords, by week of registration from week 40, 2021**

## Comment

In week 18, 66 respiratory associated deaths out of 298 all-cause deaths were reported (22%). This is slightly lower than the same period in 2021-22 (65 respiratory deaths out of 281 all-cause deaths, 23%).

## EuroMOMO

In 2022, based on NISRA death registrations and the EuroMOMO model, excess deaths were reported in weeks 50-1, 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 51, 2018 – week 18, 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 19<sup>th</sup> September 2022 and ended on 31<sup>st</sup> March 2023. 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. The methods of recording and extracting data from the VMS will be continually revised and updated as new deployments take place.

**Table 4. End of Season Influenza vaccine uptake rates (Public Programme), 2022-23**

	2022/23 <sup>1</sup>
All individuals 65 years and over	83.0%
All individuals 50-64 years	51.4%
Under 50 years 'at risk' (count only/denominator not available)	14,103
Pregnant women/mothers who delivered during the 2022/23 influenza season	29.8%
Preschool children (2-4 years)	33.0%
Primary school children (1-7 years)	70.6%
Post primary school children (8-12 years)	60.2%

<sup>1</sup>Data extracted and accurate to 20/04/2023

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.

**Table 5. End of Season Influenza vaccine uptake rates (Health and Social Care Worker Programme), 2022-23**

	% of frontline health and social care workers employed by a Trust
	2022/23 <sup>1</sup>
Belfast HSCT	41.8%
South Eastern HSCT	50.0%
Northern HSCT	33.3%
Southern HSCT	34.0%
Western HSCT	25.2%
NIAS <sup>2</sup>	34.5%
Northern Ireland	37.5%

<sup>1</sup> For surveillance purposes; frontline is defined as the following groups recorded in VMS; Medical & Dental, Nursing & Midwifery, Professional & Technical, Support Services, Social Services. Employer Trust recorded as one of the 5 HSCTs or NIAS. The denominator for the health and social care worker programme was determined using data from the HSC Workforce Census, March 2022. The number of trainee doctors working at each HSCT on the census date were provided by NIMDTA and have been incorporated into Trust denominators.

<sup>2</sup> NIAS numerator (ambulance) is all frontline staff groups listed above, as ambulance was not an available option to record on VMS in 2022/23.

## 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](mailto:flusurveillance@hscni.net)