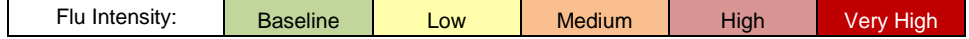


Influenza

Weekly Surveillance Bulletin

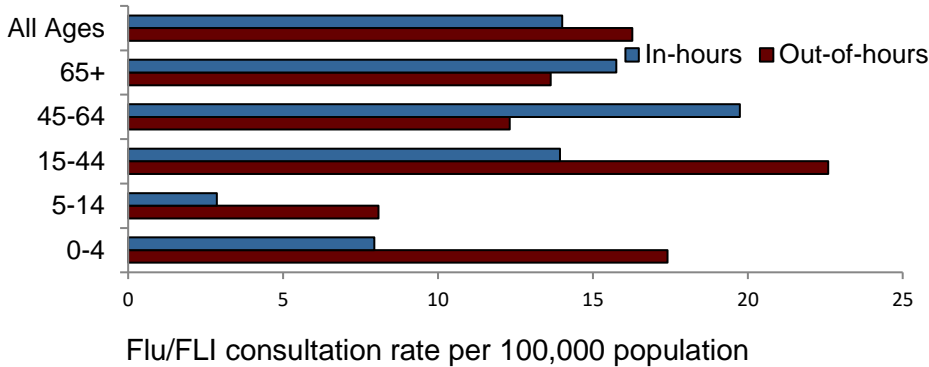
Week 52 (26 December 2022 — 01 January 2023)

Community Activity

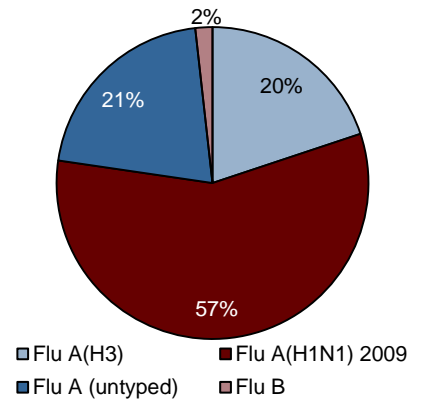


Week	October					November				December					January					February				March			April			May				
	40	41	42	43	44	45	46	47	48	49	50	51	52	53	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
2022/23																																		
2021/22																																		
2020/21																																		

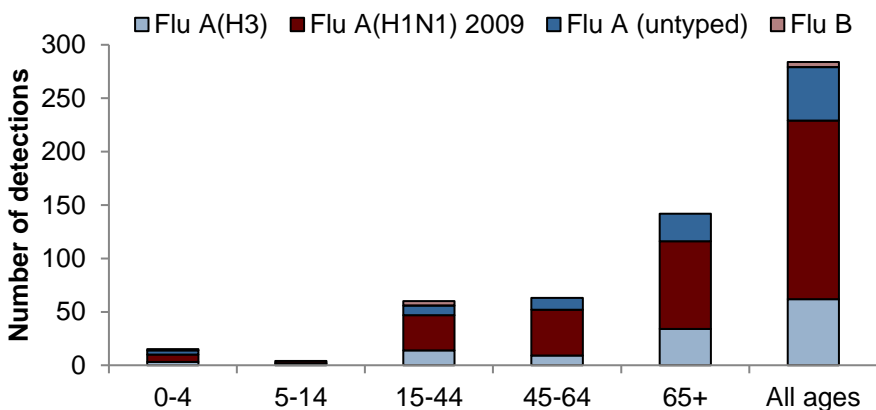
GP consultation rates for 'flu/flu-like-illness' ('flu/FLI') (26 December 2022 — 01 January 2023)



Circulating strains this season to date



Number of hospital samples with confirmed flu (26 December 2022 — 01 January 2023)



Respiratory outbreaks (26 Dec 2022 – 01 Jan 2023)

8

To date there have been 21 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')

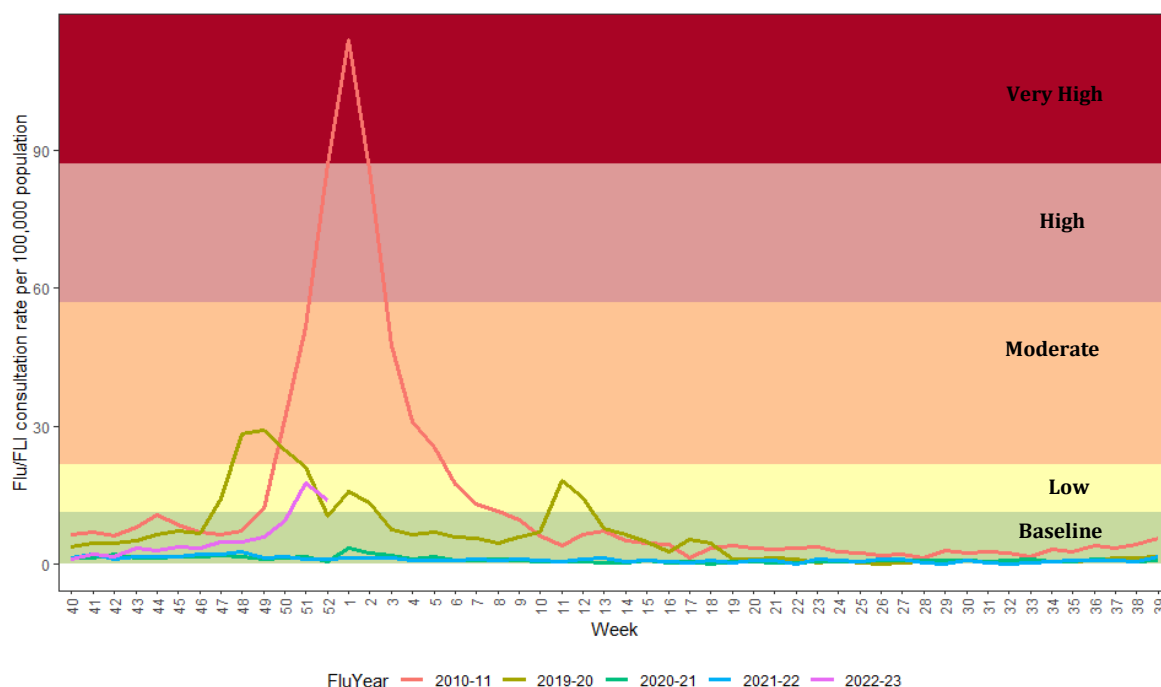


Figure 1. Northern Ireland GP consultation rates for ‘flu/FLI’ 2010/11 and 2019/20 – 2022/23

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 52 was 14.0 per 100,000 population. This is lower than week 51 (17.8 per 100,000) and higher than the same period in 2021-22 (1.1 per 100,000). Activity remains at low activity levels (between 11.3 and 21.8 per 100,000) in week 52 after increasing above the baseline threshold (11.3 per 100,000) in week 51. Please note, the GP flu/FLI consultation rate for week 52 may have been lower than expected owing to the bank holidays that week.

Flu/FLI consultation rates were highest in 45-64 year olds in week 52 at 19.7 per 100,000 population. Rates are higher in all age groups when compared to the same period in 2021-22.

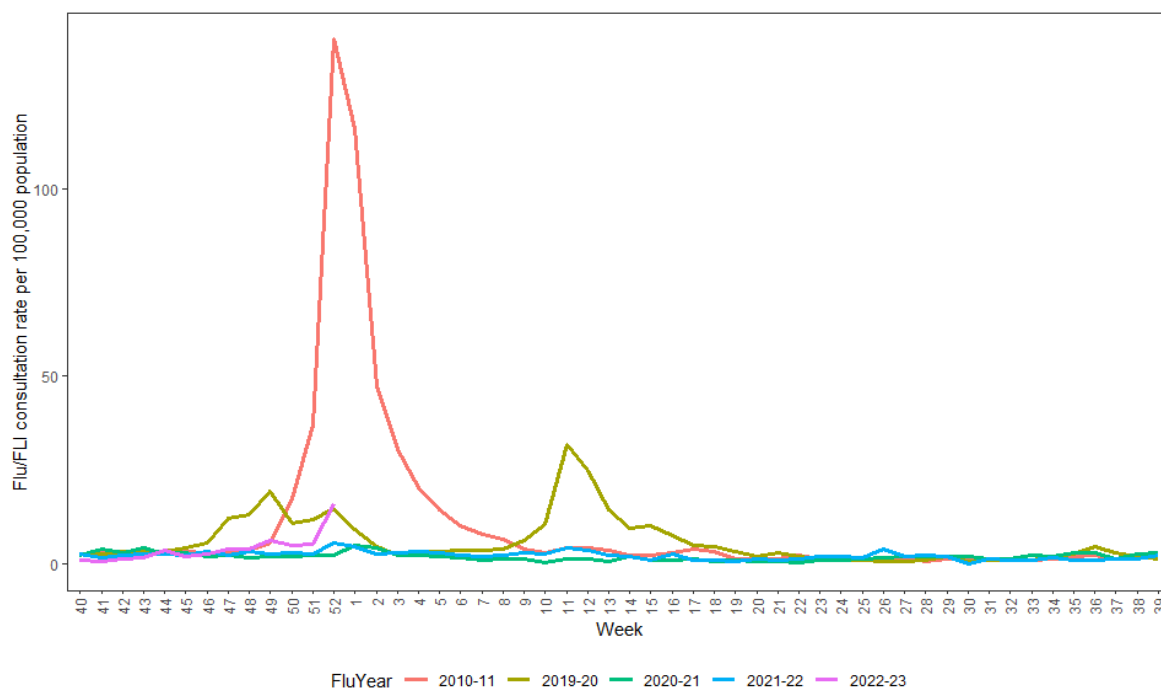


Figure 2. Northern Ireland Out-of-Hours (OOH) consultation rates for 'flu/FLI' 2010/11 and 2019/20 – 2022/23

Comment

The Flu/FLI consultation rate in Primary Care Out-of-Hours (OOH) Centres was 16.3 per 100,000 population in week 52. This is higher than week 51 (5.2 per 100,000) and higher than the same period in 2021-22 (5.8 per 100,000) (Figure 2).

In week 52 the percentage of calls to an OOH Centre due to flu/FLI was 1.93%. This is higher than the previous week (1.19% in week 51) and also higher when compared to the same period in 2021-22 (0.66% in week 52).

Rates were highest in those aged 15-44 years in week 52 (22.6 per 100,000 population). Rates were higher in all age categories when compared with the same period in 2021-22.

Virology

Table 1. Virus activity in Northern Ireland by source, week 52, 2022-23

Source	Specimens tested	Flu A(H3)	Flu A(H1N1)	Flu A (untyped)	Flu B	Total Influenza Positive	% Influenza Positive	RSV
Sentinel	17	2	2	0	0	4	23.5	0
Non-sentinel	1538	66	179	53	5	303	19.7	36
Total	1555	68	181	53	5	307	19.7	36

Table 2. Cumulative virus activity from all sources by age group, weeks 40-52, 2022-23

Age Group	Flu A(H3)	Flu A(H1N1)	Flu A (untyped)	Flu B	Total Influenza Positive	RSV
0-4	36	77	30	9	152	541
5-14	11	38	7	1	57	33
15-64	130	397	138	13	678	115
65+	115	331	132	3	581	157
Unknown	0	0	0	0	0	0
All ages	292	843	307	26	1468	846

Table 3. Cumulative virus activity by source and age group, weeks 40-52, 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	0	1	0
	15-64	7	7	0	1	15	2
	65+	0	2	0	0	2	0
	Unknown	0	0	0	0	0	0
	All ages	7	10	0	1	18	2
Non-sentinel	0-4	36	77	30	9	152	541
	5-14	11	37	7	1	56	33
	15-64	123	390	138	12	663	113
	65+	115	329	132	3	579	157
	Unknown	0	0	0	0	0	0
	All ages	285	833	307	25	1450	844

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.

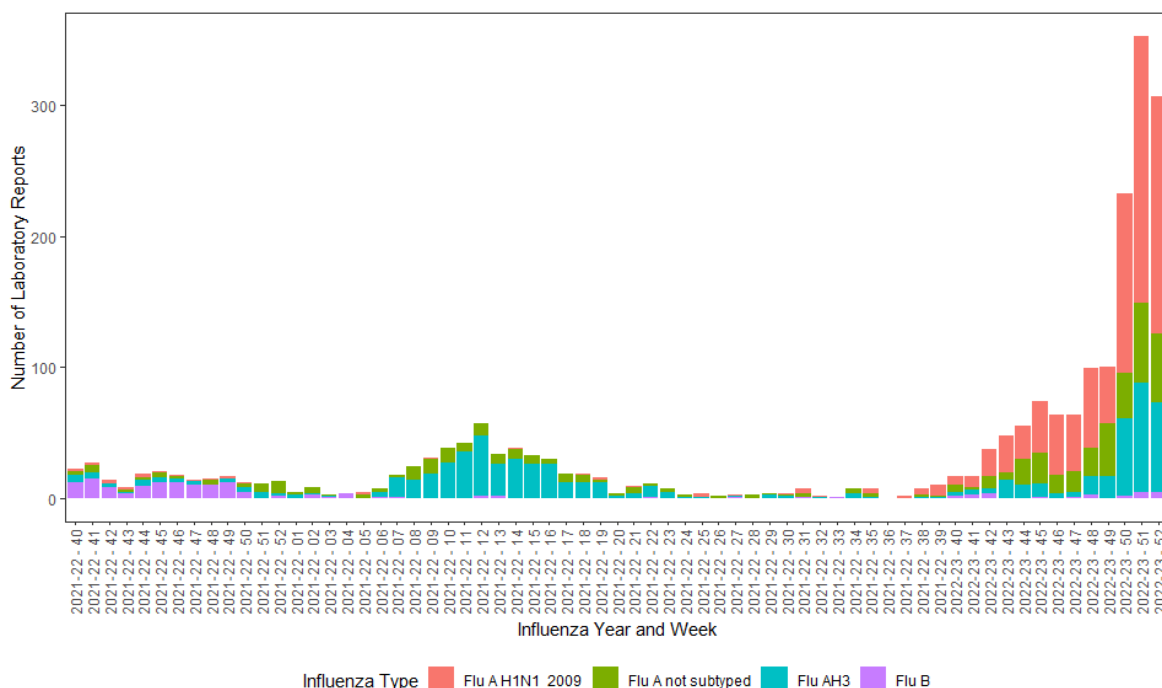


Figure 3. Weekly number of positive influenza laboratory reports, 2021/22 – 2022/23

Comment

In week 52, 307 samples were positive for flu (181 Flu A(H1N1), 53 Flu A(untyped), 68 Flu A(H3) and five Flu B from 1555 samples submitted for testing in laboratories across Northern Ireland (Figure 3). The positivity rate for week 52 was 19.7%. Since week 40, 46% of total influenza positive samples have occurred in individuals aged 15-64 years.

In week 52, 36 samples were positive for RSV. The majority (64%) of RSV positive samples since week 40 have occurred in children in the 0-4 age group (Table 2).

Hospital Surveillance

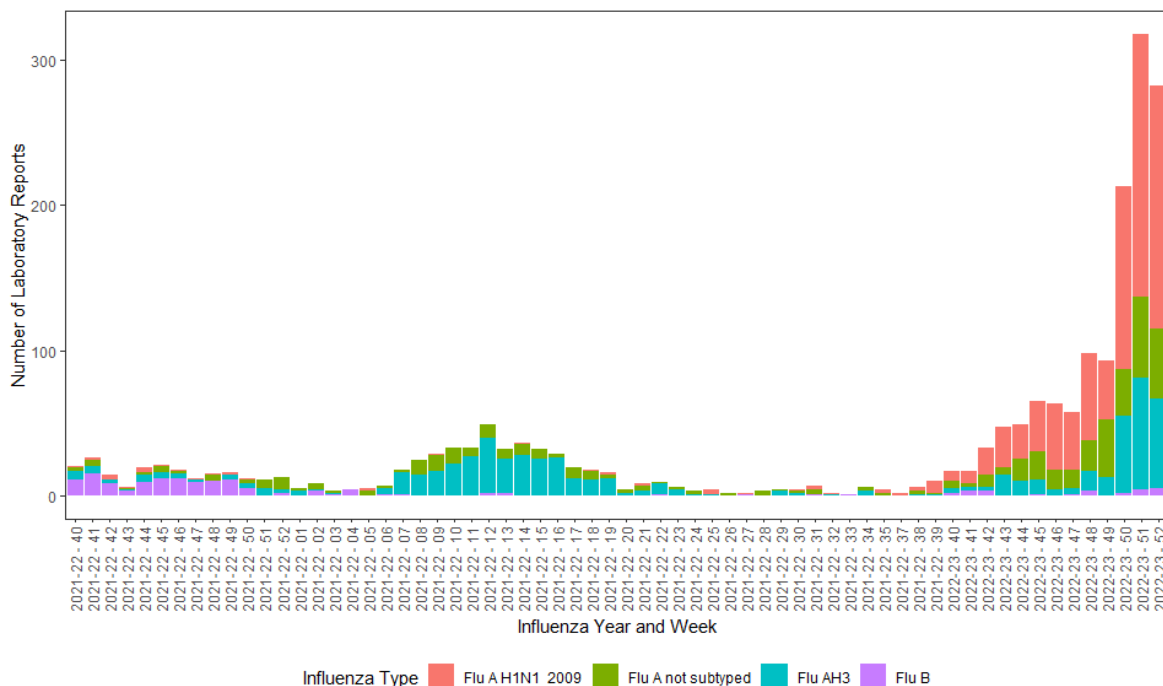


Figure 4. Weekly number of hospital samples testing positive for influenza by week of specimen, 2021/22 – 2022/23

Comment

In week 52, 282 hospital samples were positive for flu (167 Flu A(H1N1), 48 Flu A(untyped), 62 Flu A(H3) and five Flu B from 1555 samples submitted for testing in laboratories across Northern Ireland (Figure 4).

Outbreaks

Comment

There were eight respiratory outbreaks reported to the PHA Health Protection acute response duty room during week 52. These were all outbreaks of Flu A (untyped), all of which were reported in a care home setting.

To date, in 2022-23, there have been a total of 21 confirmed influenza outbreaks reported (11 in a care home setting, one in a supported living facility and nine 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.

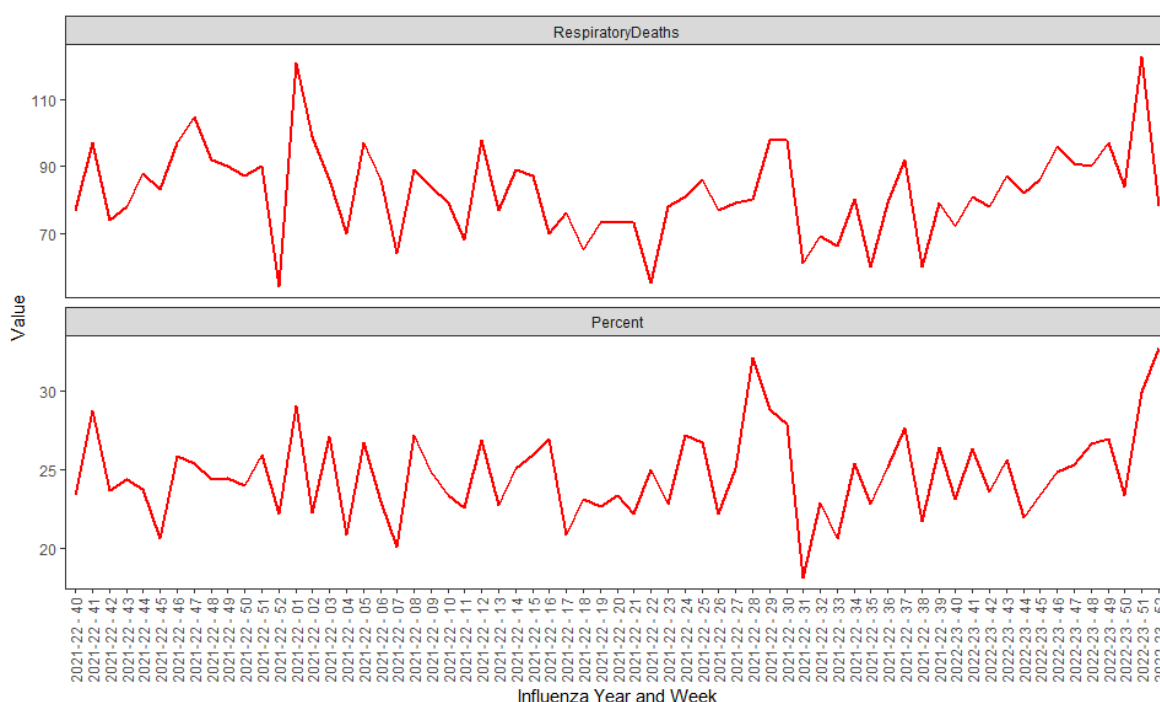


Figure 5. Weekly count of registered deaths and percent of all deaths with respiratory keywords, by week of registration from week 40, 2021

Comment

In week 52, 78 respiratory associated deaths out of 238 all-cause deaths were reported (33%). This is higher than the same period in 2021/22 (54 respiratory deaths out of 243 all-cause deaths, 22%).

EuroMOMO

In 2022, based on NISRA death registrations and the EuroMOMO model, excess deaths were reported in weeks 29, 42-46 and 48, 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.

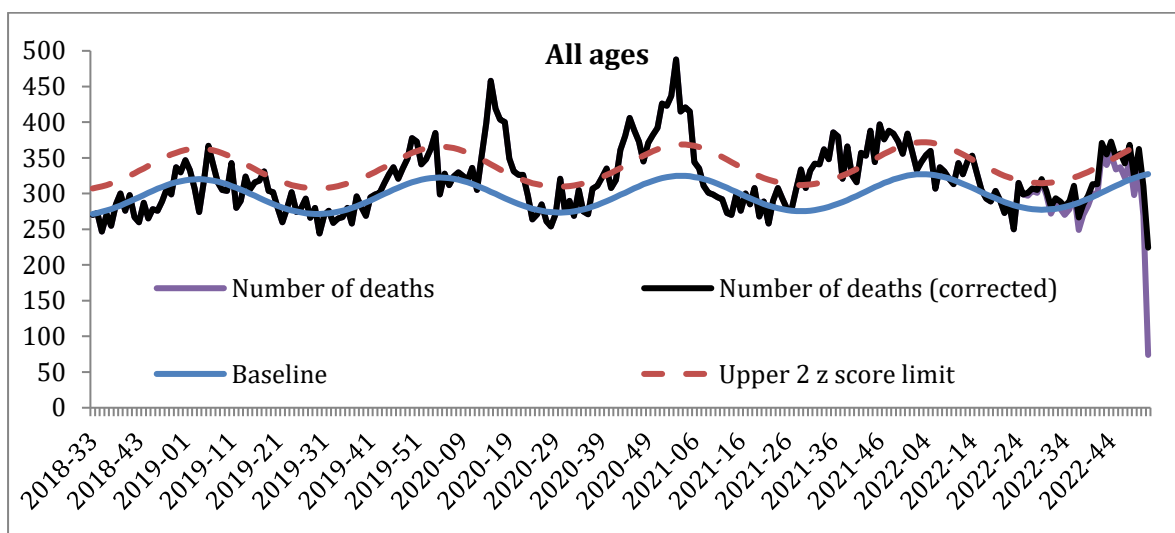


Figure 6. Weekly observed and expected number of all-cause deaths in all ages, week 33, 2018 – week 52, 2022

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>

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
All individuals 50-64 years	50.1%
All individuals 65 years and over	83.5%

¹Data extracted and accurate to 03/01/2023.

Flu vaccine uptake in additional eligible groups will be presented in future weeks following development and validation work.

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