

Influenza Surveillance in Ireland – Weekly Report

Influenza Week 12 2013 (18th – 24th March 2013)



Summary

- **Influenza activity in Ireland decreased during week 12 2013; however influenza-associated hospitalisations and outbreaks continue to be reported.**
- Influenza activity in the Eastern region remained at elevated levels, associated with continuing influenza/ILI outbreaks.
- The sentinel GP influenza-like illness (ILI) consultation rate was 19.5 per 100,000 population in week 12 2013, a decrease compared to the updated rate of 23.7 per 100,000 during week 11 2013.
 - ♦ ILI rates are now below the Irish baseline threshold (21.0 per 100,000 population).
 - ♦ ILI age specific rates were highest in those aged 65 years or older during week 12 2013.
- The proportion of influenza-related calls to GP Out-of-Hours services increased slightly during week 12 2013, compared to the previous week. This increase was likely associated with the bank holiday that fell during week 12 2013.
- Influenza positivity decreased during week 12 2013 to 19.8%, compared to 23.7% during the previous week. Thirty-one influenza A(H3), 9 influenza A(H1)pdm09, 8 influenza A (unsubtyped) and 11 influenza B positive specimens were reported from the NVRL for week 12 2013.
 - Influenza A(H3) was the predominant influenza virus circulating during week 12 2013.
- Positivity levels for parainfluenza virus type 3 have increased each week for three consecutive weeks since week 9 2013.
- Respiratory syncytial virus (RSV) positivity has remained at low levels for the last 9 weeks.
- Positivity levels for adenovirus and human metapneumovirus have remained at low levels this season.
- During week 12 2013, 20 confirmed influenza cases were reported as hospitalised, 11 associated with influenza A and 9 with influenza B. To date this season, 313 confirmed influenza cases were reported as hospitalised, 61.7% were associated with influenza B.
- Twenty adult and ten paediatric confirmed influenza cases have been admitted to critical care to date this season. Of these 30 cases, 16 were associated with influenza B, nine with influenza A (H1)pdm09, two influenza A (H3) and three with influenza A (unsubtyped). Thirty-two RSV*paediatric cases were also admitted to critical care this season.
- To date this season, four confirmed influenza associated deaths have been reported to HPSC, one associated with influenza A (H1)pdm2009 and three associated with influenza B.
- Two acute respiratory outbreaks were reported to HPSC during week 12 2013. To date this season, 42 acute respiratory outbreaks were reported to HPSC.
- In Europe, influenza activity continued to decline or return to baseline levels during week 11 2013. After more than three months of active transmission, the 2012/2013 influenza season is waning and slowly moving towards its close.

*The majority of these RSV admissions to critical care were admitted during November and December 2012.

1. GP sentinel surveillance system

Clinical Data

During week 12 2013, 40 influenza-like illness (ILI) cases were reported from sentinel GPs, corresponding to an ILI consultation rate of 19.5 per 100,000 population, a decrease compared to the updated rate of 23.7 per 100,000 in week 11 2013. Forty-seven of 60 (78.3%) sentinel general practices provided data during week 12 2013, with 17 practices (36.2%) reporting ILI cases. The ILI consultation rate decreased below the Irish baseline threshold (21.0 per 100,000 population)[†] during week 12 2013, after 14 continuous weeks above baseline levels. Figure 1 shows the ILI consultation rates, the baseline threshold rate and the number of positive specimens detected by the NVRL.

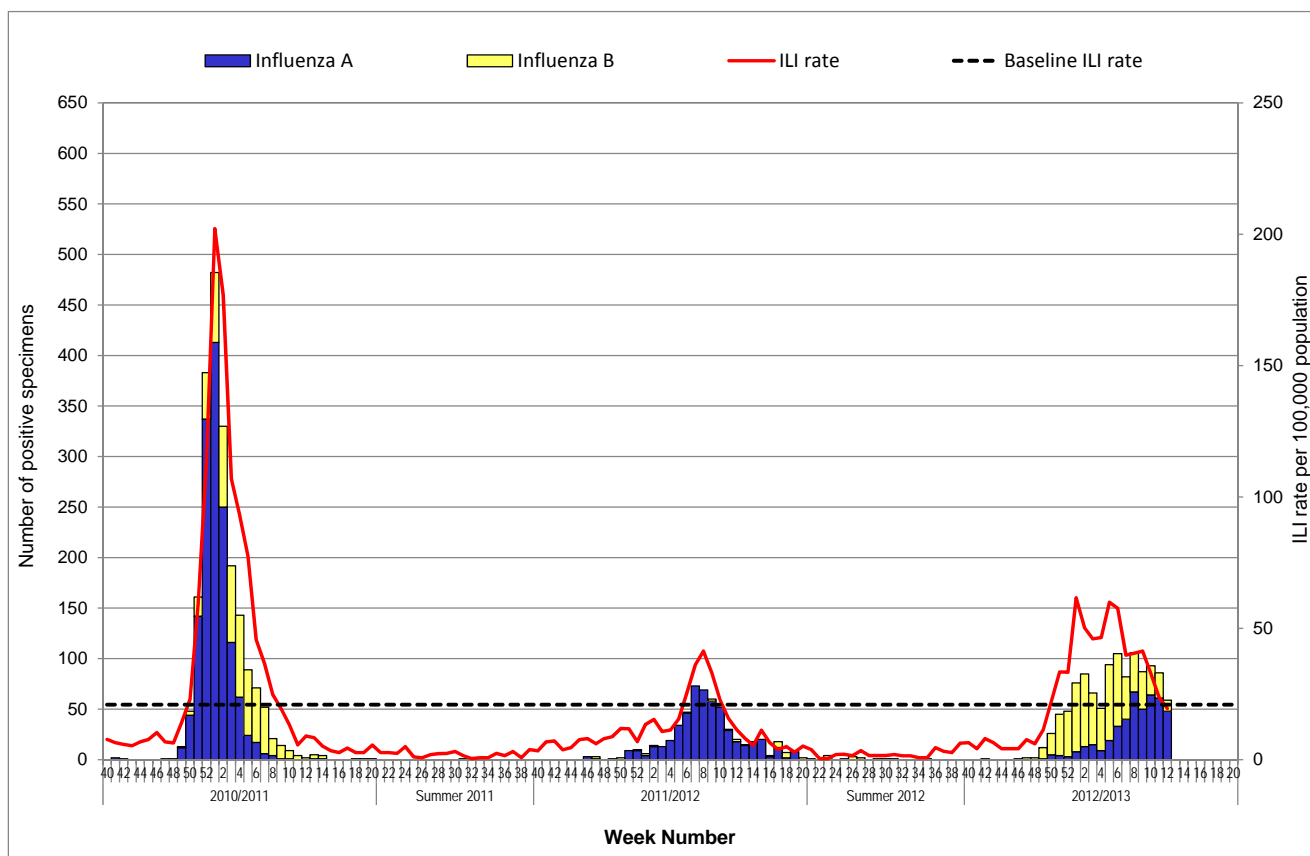


Figure 1. ILI sentinel GP consultation rates per 100,000 population, baseline ILI threshold rate, and number of positive influenza A and B specimens tested by the NVRL, by influenza week and season.

Source: Clinical ILI data from ICGPand virological data from the NVRL[‡]

ILI age specific rates were highest in those aged 65 years or older during week 12 2013. During week 12 2013, one ILI case was reported in the 0-4 year age group (6.3 per 100,000), 5 ILI cases were reported in the 5-14 year age group (18.1 per 100,000), 28 cases in the 15-64 year age group (20.6 per 100,000) and 6 ILI cases were reported in those aged 65 years and older (25.3 per 100,000) (figure 2).

[†] HPSC in consultation with the European Centre for Disease Prevention and Control (ECDC) have revised the Irish baseline threshold for the 2012/2013 influenza season to 21.0 per 100,000 population.

[‡] Sentinel GP consultations and virological data are updated on an ongoing basis, ILI rates and virological data are adjusted accordingly.

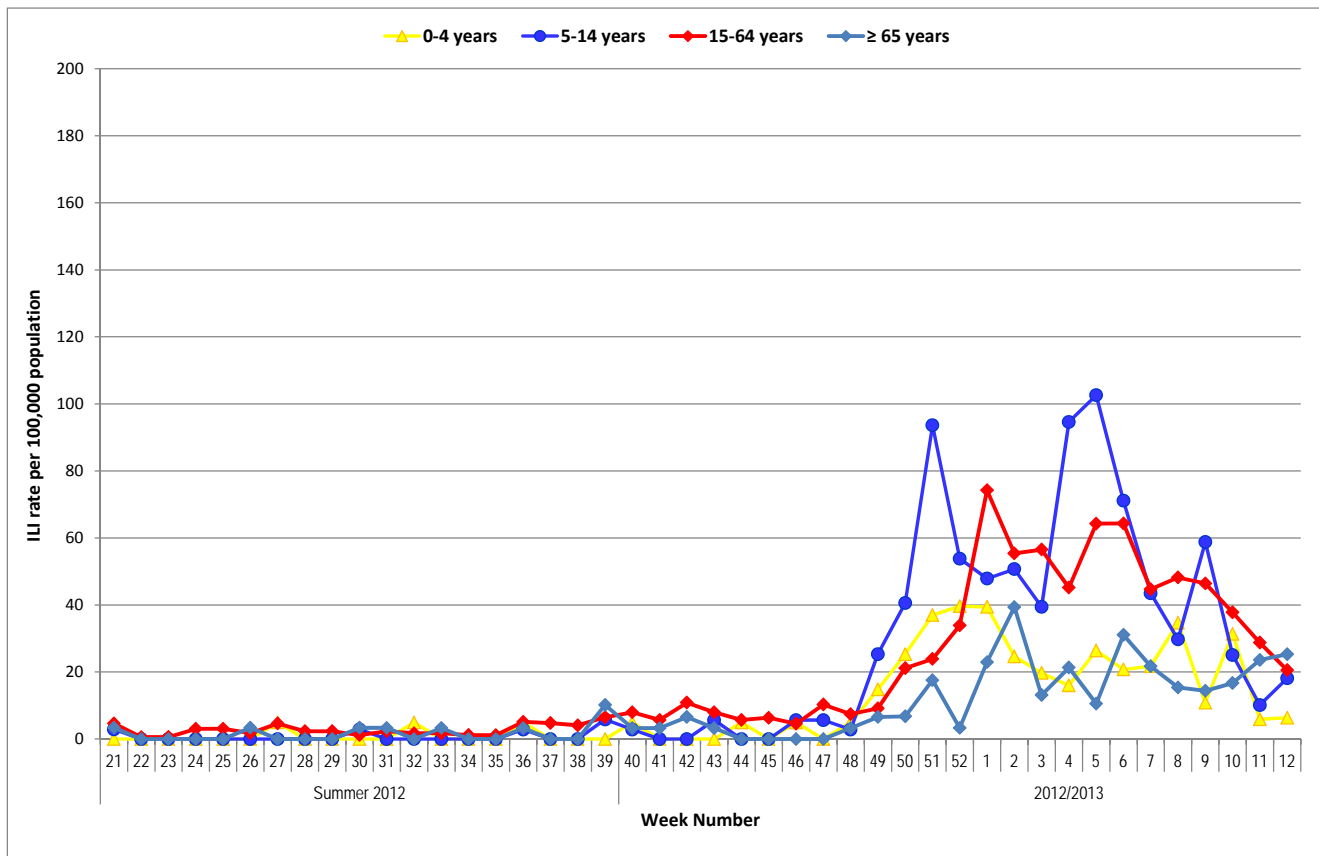


Figure 2: Age specific sentinel GP ILI consultation rate per 100,000 population by week during the summer of 2012 and the 2012/2013 influenza season to date. Source: ICGP ILI clinical data

2. Influenza and Other Respiratory Virus Detections - National Virus Reference Laboratory

The data reported in this section for the 2012/2013 influenza season refers to specimens tested by the National Virus Reference Laboratory (NVRL). The NVRL are now testing all sentinel and non-sentinel specimens for a panel of respiratory viruses: influenza A and B, respiratory syncytial virus (RSV), adenovirus, parainfluenza viruses types 1, 2, and 3 (PIV-1, -2 & -3) and human metapneumovirus.

During week 12 2013, a total of 298 specimens (17 sentinel and 281 non-sentinel[§] specimens) were tested by the NVRL. Fifty-nine (59/298; 19.8%) sentinel and non-sentinel specimens tested positive for influenza virus during week 12 2013: 31 A(H3), 9 A(H1)pdm09, 8 A (unsubtyped) and 11 B. Seven (7/17; 41.2%) sentinel specimens tested positive for influenza virus during week 12 2013: 2 A(H3), 2 A(H1)pdm09 and 3 B. Fifty-two (52/281; 18.5%) non-sentinel specimens tested positive for influenza virus during week 12 2013: 29 A(H3), 7 A(H1)pdm09, 8 A (unsubtyped) and 8 B (tables 1 & 2). During week 12 2013, influenza A positivity (81.4%) from sentinel and non-sentinel specimens positive for influenza was higher than influenza B positivity (18.6%). Influenza A(H3) was the predominant influenza virus circulating during week 12 2013 (figures 3 & 4).

[§]Please note that non-sentinel specimens relate to specimens referred to the NVRL (other than sentinel specimens) and may include more than one specimen from each case.

Influenza Virus Characterisation

Influenza B viruses have dominated the 2012/2013 influenza season in Ireland, although influenza A(H3N2) and influenza A(H1N1)pdm09 viruses have also been circulating. The National Virus Reference Laboratory (NVRL) has genetically characterised 32 influenza viruses this season. Of twenty-four influenza B viruses analysed, twenty-one (87.5%) belong to the B/Yamagata lineage (which is included in the 2012/2013 influenza vaccine) and three (12.5%) belong to the B/Victoria lineage. Seven influenza A(H3N2) viruses were genetically characterised and were similar to the vaccine strain A/Victoria/361/2011. Sequence analysis of one influenza A(H1N1)pdm09 virus identified it was related to the vaccine strain A/California/07/2009. As part of the WHO Global influenza surveillance programme, a proportion of influenza viruses are submitted to the WHO Collaborating Centre for Reference and Research on Influenza (Mill Hill, London) for characterisation of influenza strains. These viruses have been submitted for further antigenic characterisation and confirmatory testing.

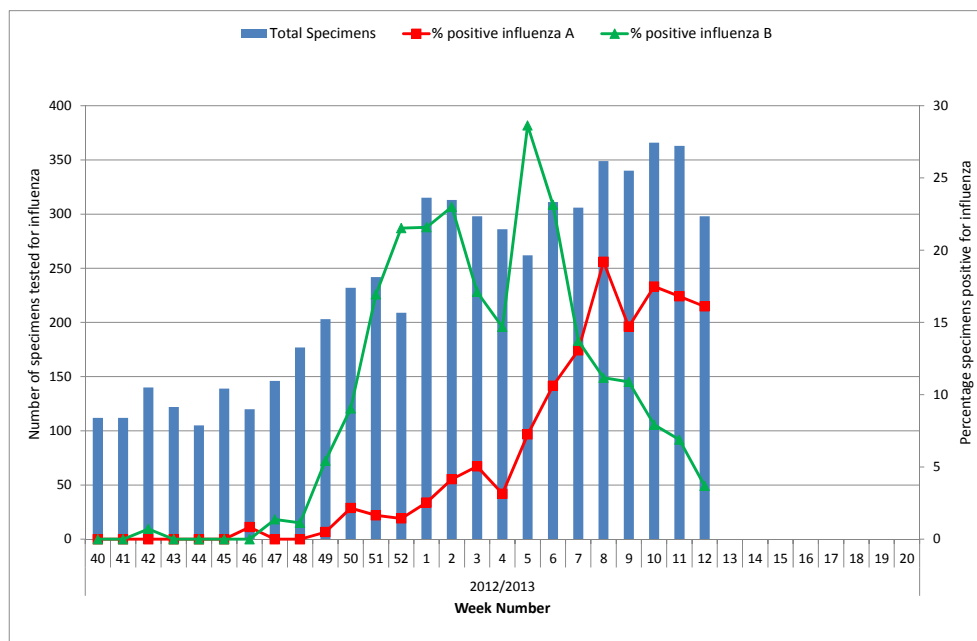


Figure 3: Number of sentinel and non-sentinel specimens tested for influenza and percentage influenza positive by week for the 2012/2013 influenza season. Source: NVRL

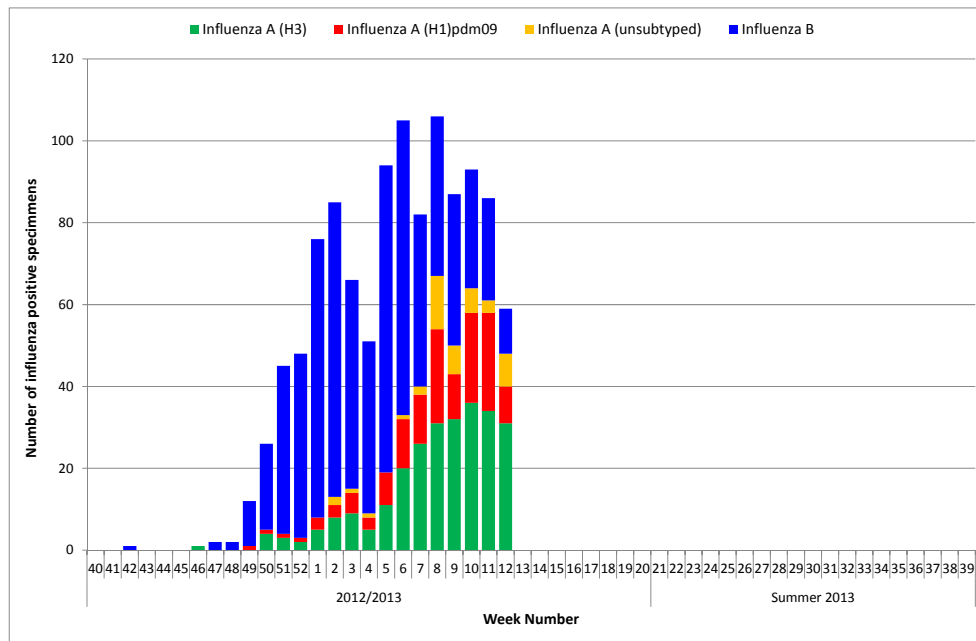


Figure 4: Number of positive influenza specimens by influenza type/subtype from sentinel and non-sentinel sources tested by the NVRL, by week for the 2012/2013 influenza season. Source: NVRL

Respiratory Syncytial Virus (RSV)

Respiratory syncytial virus (RSV) positivity reported from the NVRL (non-sentinel sources) remained at low levels at 1.1% (3/281) during week 12 2013. RSV positivity peaked at 36.7% during week 51 2012 (figure 5). Sporadic cases of RSV have been detected this season from sentinel GP sources (table 2).

RSV was made notifiable in Ireland on 1st January 2012. During week 12 2013, 24 laboratory notifications of RSV were reported on Ireland’s Computerised Infectious Disease Reporting System (CIDR). Laboratory notifications of RSV are reported in more detail in the [Weekly Infectious Disease Report for Ireland](#).

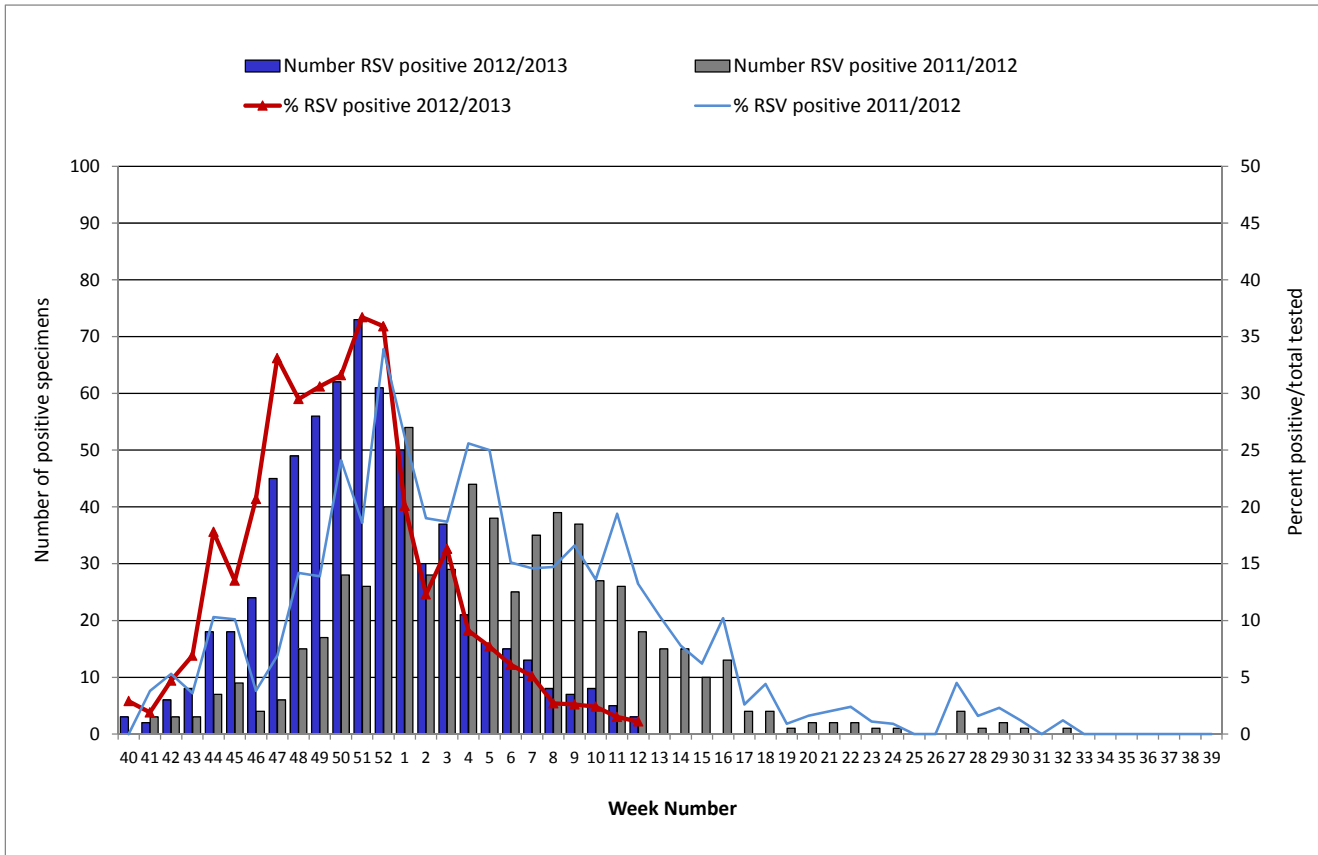


Figure 5: Number and percentage of non-sentinel RSV positive specimens detected by the NVRL during the 2012/2013 season, compared to the 2011/2012 season. Source: NVRL

Other Respiratory Viruses

Five adenovirus, 18 parainfluenza virus (PIV) type 3 and nine human metapneumovirus positive specimens from non-sentinel sources and one hMPV positive specimen from sentinel sources were reported from the NVRL during week 12 2013. No adenovirus or parainfluenza virus positive detections were reported from the NVRL from sentinel GP sources during week 12 2013 (table 2). Positivity levels for PIV-3 have increased each week for three consecutive weeks since week 9 2013.

Table 1: Number of sentinel and non-sentinel respiratory specimens tested by the NVRL and positive influenza results, for week 12 2013 and the 2012/2013 season to date. Source: NVRL**

Week	Specimen type	Total tested	Number influenza positive	% Influenza positive	Influenza A				Influenza B
					A (H1)pdm09	A (H3)	A (unsubtyped)	Total influenza A	
12 2013	Sentinel	17	7	41.2	2	2	0	4	3
	Non-sentinel	281	52	18.5	7	29	8	44	8
	Total	298	59	19.8	9	31	8	48	11
2012/2013	Sentinel	830	463	55.8	42	66	2	110	353
	Non-sentinel	5036	664	13.2	97	192	42	331	333
	Total	5866	1127	19.2	139	258	44	441	686

Table 2: Number of sentinel and non-sentinel specimens tested by the NVRL for other respiratory viruses and positive results, for week 12 2013 and the 2012/2013 season to date. Source: NVRL

Week	Specimen type	Total tested	RSV	% RSV	Adenovirus	% Adenovirus	PIV-1	% PIV-1	PIV-2	% PIV-2	PIV-3	% PIV-3	hMPV	% hMPV
12 2013	Sentinel	17	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	1	5.9
	Non-sentinel	281	3	1.1	5	1.8	0	0.0	0	0.0	18	6.4	9	3.2
	Total	298	3	1.0	5	1.7	0	0.0	0	0.0	18	6.0	10	3.4
2012/2013	Sentinel	830	14	1.7	23	2.8	1	0.1	0	0.0	2	0.2	11	1.3
	Non-sentinel	5036	638	12.7	87	1.7	2	0.0	3	0.1	92	1.8	89	1.8
	Total	5866	652	11.1	110	1.9	3	0.1	3	0.1	94	1.6	100	1.7

** Please note that non-sentinel specimens relate to specimens referred to the NVRL (other than sentinel specimens) and may include more than one specimen from each case.

3. Regional Influenza Activity by HSE-Area

Influenza activity is reported on a weekly basis for each HSE area. Influenza activity is based on sentinel GP ILI consultation rates, laboratory confirmed influenza cases and ILI/influenza outbreaks.

Widespread influenza activity was reported from HSE-E and sporadic influenza activity was reported from all other HSE-Areas (HSE-M, -MW, -NE, -NW, -S, -SE and -W) during week 12 2013 (figure 6). The widespread influenza activity reported in HSE-E was mainly associated with ongoing influenza/ILI outbreaks in residential institutions/hospitals.

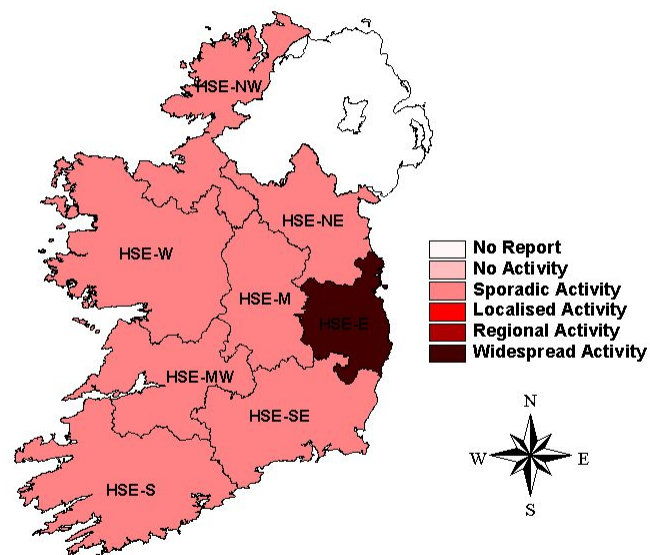


Figure 6: Map of provisional influenza activity by HSE-Area during week 12 2013

Sentinel Hospitals – Admissions Data

The Departments of Public Health have established at least one sentinel hospital in each HSE-Area, to report data on total hospital admissions, total emergency admissions and total respiratory admissions by age group on a weekly basis. Hospital admissions data act as a crude indicator for influenza activity.

Overall, the total number of respiratory admissions reported from sentinel hospitals was 253 during week 12 2013, a decrease compared to 315 during week 11 2013. To date this season, hospital respiratory admissions peaked at 413 during week 50 2012 (figure 7).

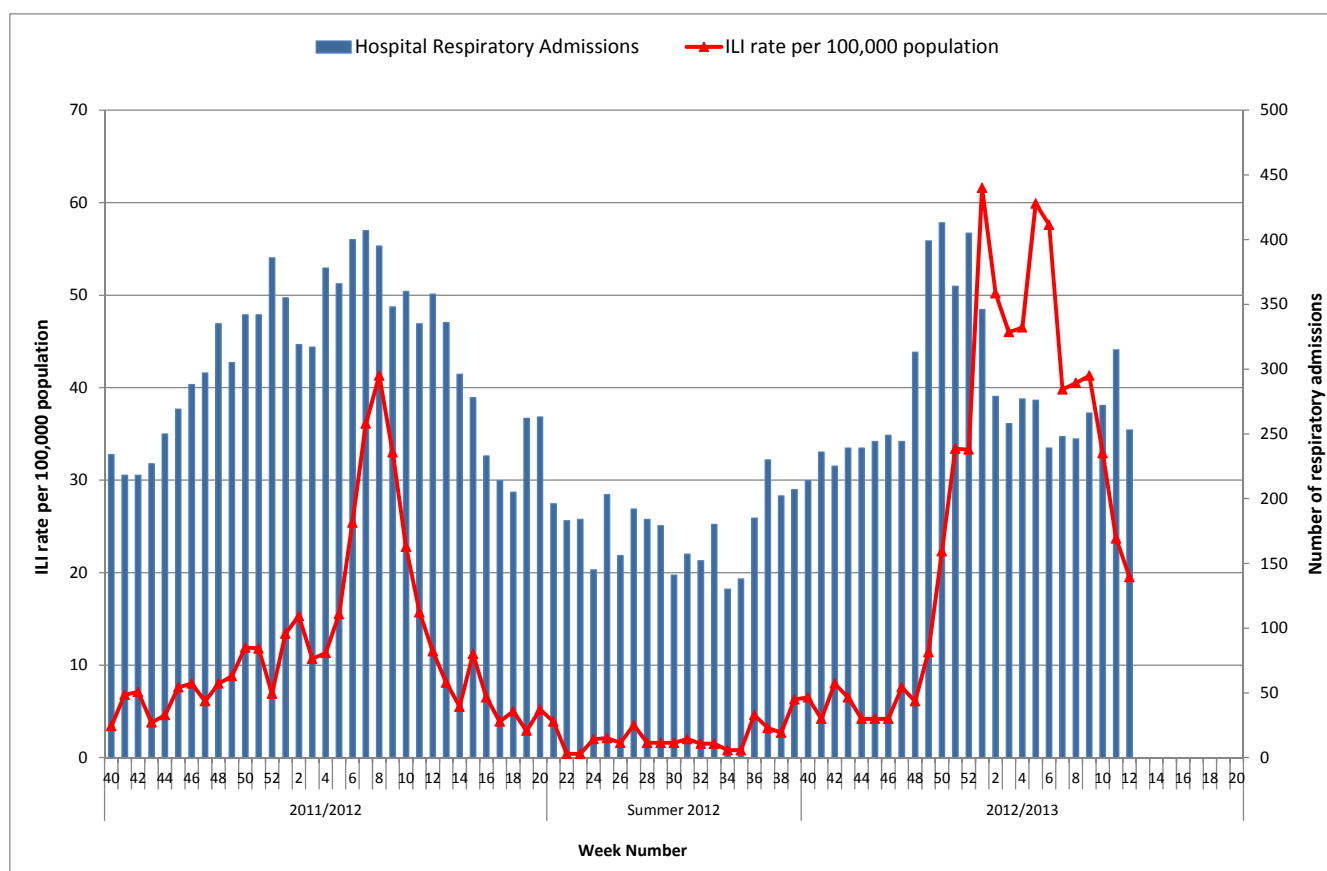


Figure 7: Number of respiratory admissions reported from sentinel hospitals and national sentinel GP ILI consultation rate per 100,000 population by week for the 2011/2012 season, summer 2012 and the 2012/2013 season to date.
 Source: Departments of Public Health - Sentinel Hospitals & ICGP.

4. GP Out-Of-Hours services surveillance

The Department of Public Health in HSE-NE is collating national data on calls to nine of thirteen GP Out-of-Hours services in Ireland. Clinical details from all calls are recorded. Records with clinical symptoms reported as flu or influenza are extracted for analysis. This information may act as an early indicator of increased ILI activity. However, data are self-reported by callers and are not based on coded influenza diagnoses.

The proportion of influenza-related calls to GP Out-of-Hours services during week 12 2013 increased slightly to 3.3%, compared to the updated proportion of 2.7% in the previous week. Five GP Out-of-Hours services reported during week 12 2013. The increase in calls to GP OOHs services during week 12 2013 was likely due to the bank holiday which fell on 18th March 2013, when most GP surgeries were closed. To date this season, the proportion of influenza-related calls to GP Out-of-Hours services peaked at 6.0% during week 1 2013 (figure 8).

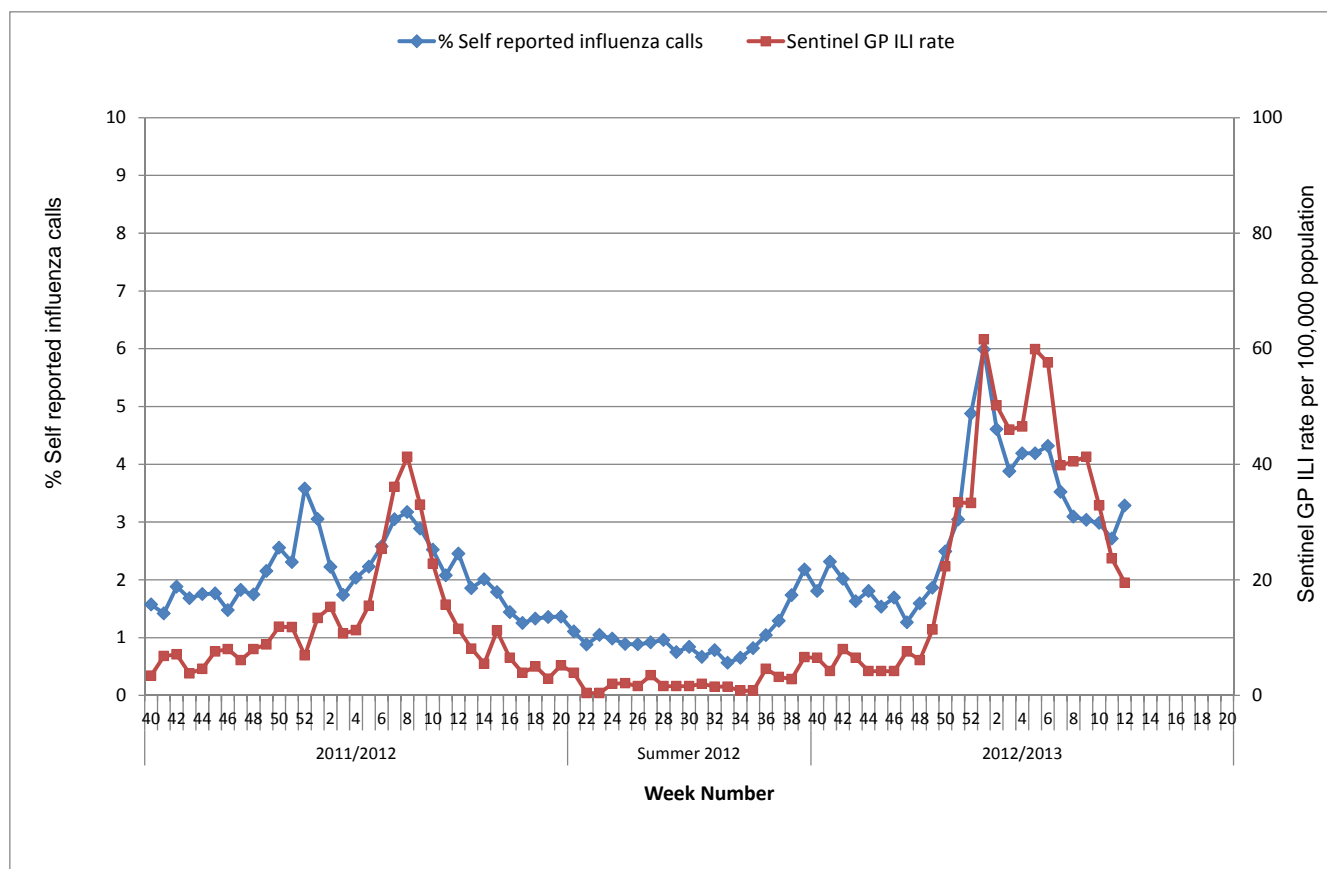


Figure 8: Self-reported influenza-related calls as a proportion of total calls to Out-of-Hours GP Co-ops and national sentinel GP ILI consultation rate per 100,000 population by week for the 2011/2012 and 2012/2013 seasons

Source: GP Out-Of-Hours services in Ireland (collated by HSE-NE) & ICGP.

5. Influenza notifications and hospitalisation status

Laboratory confirmed influenza cases notified on Ireland's Computerised Infectious Disease Reporting System (CIDR) include all positive influenza specimens reported from all laboratories testing for influenza and reporting to CIDR. Currently, the NVRL is the only laboratory subtyping positive influenza A specimens for *all* influenza A subtypes.

Ninety-six laboratory confirmed influenza cases were notified during week 12 2013, an increase compared to 70 notifications during week 11 2013. Of the 96 cases reported during week 12 2013, 68 were associated with influenza A (13 A(H3), 20 A(H1)pdm09 & 35 A(unsubtyped)) and 28 with influenza B.

The number of confirmed influenza cases reported as hospitalised during week 12 2013 was 20, compared to 28 during week 11 2013. Of the 20 cases reported as hospitalised during week 12 2013, 11 were associated with influenza A (4 A(H3), 5 A(H1)pdm09 & 2 A(unsubtyped)) and 9 were associated with influenza B. To date this season, 313 confirmed influenza cases (193 influenza B, 53 influenza A (H3), 43 A (H1)pdm09 and 24 influenza A (unsubtyped)) have been reported as hospitalised, 61.7% of these cases were associated with influenza B.

6. Critical care surveillance

The Intensive Care Society of Ireland (ICSI) are continuing with the enhanced surveillance system set up during the 2009 pandemic, on all critical care patients with confirmed influenza. A study on severe acute respiratory infections (SARI) in critical care at two pilot ICU sites which commenced during the 2011/2012 season will

continue during the 2012/2013 season. HPSC process and report on this information on behalf of the regional Directors of Public Health/Medical Officers of Health and ICSI.

To date this season, 20 adult and 10 paediatric confirmed influenza cases have been admitted to critical care. Of these 30 cases, 16 were associated with influenza B, nine with influenza A (H1)pdm09, two influenza A (H3) and three with influenza A (unsubtyped). Thirty-two RSV paediatric cases were also admitted to critical care this season. The majority (90.6%) of these reported RSV admissions to critical care were admitted during November and December 2012.

7. Mortality surveillance

To date this season, four confirmed influenza associated deaths have been reported to HPSC, one associated with influenza A (H1)pdm2009 and three associated with influenza B. Influenza-associated deaths include all deaths where influenza is reported as the primary/main cause of death by the physician or if influenza is listed anywhere on the death certificate as the cause of death. HPSC receives daily mortality data from the General Register Office (GRO) on all deaths from all causes registered in Ireland. These data have been used to monitor excess all-cause and influenza and pneumonia deaths as part of the influenza surveillance system and the European Mortality Monitoring Project (Euro MoMo). During week 12 2013, no excess all-cause mortality was reported in Ireland after correcting GRO data for reporting delays with the standardised EuroMOMO algorithm. However, during weeks 50 and 52 2012 and weeks 1, 4, 5, 6, 9, 10 and 11 2013, excess all-cause mortality was reported. These data are provisional due to the time delay in deaths' registration in Ireland. <http://www.euromomo.eu/>

8. Outbreak surveillance

Two new acute respiratory outbreaks were reported to HPSC during week 12 2013, both in residential institutions/long stay units. Of the two outbreaks, one was in HSE-NE associated with both influenza A and B, and one ILI outbreak was in HSE-NW. To date this influenza season, 42 acute respiratory outbreaks have been reported to HPSC, one outbreak was associated with both influenza A(H1)pdm09 and influenza B, one associated with influenza A (unsubtyped) and influenza B, ten were associated with influenza A(H3), ten influenza B, one influenza A(H1)pdm09, three influenza A (unsubtyped), one RSV, one hMPV and 14 associated with unidentified pathogens. The majority of these outbreaks have been associated with residential care facilities/long stay units for the elderly. It should be noted that family outbreaks are not recorded in this report.

9. International summary

United Kingdom

Indicators of influenza activity across England were decreasing however continued to show influenza was circulating during week 12 2013. In week 12 2013, overall weekly influenza GP consultations remained stable in England (11.6 per 100,000) and Scotland (18.1 per 100,000) and decreased in Wales (14.2 per 100,000) and Northern Ireland (32.1 per 100,000). In week 12 2013, the weekly proportion of NHS Direct calls for colds/influenza and fever (in 5-14 year olds) remained below their respective influenza thresholds of 1.6% and 11.7%. Sixteen new acute respiratory disease outbreaks were reported during week 12 2013, 11 of which had a virological result available: 7 influenza A (unsubtyped), 2 A(H3), one B/A(unsubtyped) and one B. 188 influenza positive detections (71 A subtype not known, 69 A(H3), 29 B and 19 A(H1N1)pdm09) were recorded through the DataMart scheme (overall positivity of 17.2% compared to 20.3% the previous week). The proportion of samples positive in DataMart (England) remained stable for adenovirus, parainfluenza, RSV, hMPV and rhinovirus. Nine influenza positive detections were recorded through the two English GP-based sentinel schemes in week 12 (5 A(H3), 2 B and 2 A(H1N1)pdm09), giving a positivity of 34.6% compared to 36.6% in week 11. 23 new admissions to ICU/HDU with confirmed influenza (nine A(subtype not known), seven A(H3N2), six B and one A(H1N1)pdm09) and were reported across the UK in week 12. Fifty-four new hospitalised confirmed influenza cases have been reported across England. In week 12 2013, excess all-cause mortality was reported in England and Northern Ireland through the EuroMOMO algorithm. These data are provisional due to

the time delay in death registration. Since week 40 2012, the HPA Respiratory Virus Unit (RVU) has isolated and antigenically characterised 256 influenza A(H3N2) viruses, all similar to the A/Victoria/361/2011 vaccine strain, and 59 influenza A(H1N1)pdm09 viruses similar to the A/California/07/2009 vaccine strain. Of 368 influenza B viruses isolated, 93% belong to the B-Yamagata lineage, and are antigenically related to the influenza B vaccine strain, B/Wisconsin/1/2010, and 7% belong to the B-Victoria lineage.

Europe

In Europe, influenza activity continued to decline or return to baseline levels during week 11 2013. After more than three months of active transmission, a long period compared to other years, the 2012/2013 influenza season is waning and slowly moving towards its close. Active influenza transmission began around week 49 2012 with ILI/ARI rates peaking in almost all countries between weeks 52 2012 and 8 2013. During week 11 2013, nine countries reported wide geographic spread with seven of them reporting medium intensity activity. Decreasing or stable trends were reported by almost all reporting countries. 45% of tested sentinel specimens were positive for influenza virus. This proportion has declined since week 5 2013, but still remained at a high level, consistent with continuing significant influenza activity. Since week 40 2012, 47% of sentinel surveillance specimens testing positive for influenza virus have been influenza A and 53% influenza B. Of the influenza A viruses subtyped, the proportion of A(H1N1)pdm09 viruses has been 63%. Of the 1781 antigenic characterisations of influenza A viruses reported for sentinel and non-sentinel specimens since week 40 2012, the majority (66%) have been characterised as A/Victoria/361/2011(H3N2)-like. Of the 1805 antigenic characterisations of influenza B viruses reported, 1597 (88%) belonged to the B/Yamagata/16/88-lineage and 208 (12%) to the B/Victoria /2/87-lineage. For those of the B/Yamagata/16/88-lineage, 88 (55%) have been characterised as B/Estonia/55669/2011-like and 401 (25%) as B/Wisconsin/1/2010-like. ECDC published its [annual risk assessment](#) for seasonal influenza 2012/2013 based on data up to week 3 2013.

United States of America

During week 11 2013, influenza activity remained elevated in the United States, but decreased in most areas. The proportion of outpatient visits for ILI was 2.2%, which was at the national baseline of 2.2%. Of 5526 specimens tested and reported by collaborating laboratories, 899 (16.3%) were positive for influenza: 87 A(H3), 12 A(H1N1)pdm09, 154 A(untypable) and 646 B. The proportion of deaths attributed to pneumonia and influenza was above the epidemic threshold. A cumulative rate for the season of 40.6 laboratory-confirmed influenza-associated hospitalisations per 100,000 population was reported. Of reported hospitalisations, 51% were among adults 65 years and older. CDC has antigenically characterised 1695 influenza viruses to date this season: 138 (97.9%) influenza A(H1N1)pdm09 viruses were similar to the vaccine strain A/California/7/2009-like, 1008 (99.6%) (H3N2) viruses were similar to the vaccine strain A/Victoria/361/2011-like, 383 (70.7%) influenza B viruses were similar to the vaccine strain B/Wisconsin/1/2010-like and 159 (29.3%) influenza B viruses were similar to the B/Victoria lineage of viruses.

Canada

In Canada, overall detections of influenza continued to decline, however the proportion of influenza B detections increased during week 11 2013. The proportions of tests positive for other respiratory viruses increased. In week 11 2013, 62% of paediatric hospitalisations were associated with influenza B. Several indicators, including the number of regions reporting widespread or localised activity, the ILI consultation rate, and the proportion of prescriptions for antivirals decreased in week 11 2013. Similar to previous years, older adults (persons aged ≥ 65 years) are the most affected this season; with 45.0% of laboratory detections to date, 69.2% of adult hospitalisations reported, outbreaks in long-term care facilities, and the highest proportion of antiviral prescriptions. During the 2012/2013 season, the National Microbiology Laboratory (NML) has antigenically characterized 798 influenza viruses. The 470 influenza A(H3N2) viruses were antigenically similar to the vaccine strain A/Victoria/361/2011 and the 128 A(H1N1)pdm09 viruses were antigenically similar to the vaccine strain A/California/07/09. Among the influenza B viruses, 160 were antigenically similar to the vaccine strain B/Wisconsin/01/2010 (Yamagata lineage) and 40 were similar to B/Brisbane/60/2008 (Victoria lineage; component of the 2011-2012 seasonal influenza vaccine).

Worldwide

The WHO Global Influenza Programme monitors influenza activity worldwide and publishes an update every two weeks. The most recent update of 15th March 2013 stated that influenza activity in North America continued to decrease overall, although activity remained high in some areas. The proportion of influenza B has increased in the United States of America, however influenza A(H3N2) still remained the most commonly detected virus. The season in the USA has been more severe than any since 2003/2004 as reflected in numbers of pneumonia and influenza deaths but the impact has been greatest in individuals over the age of 65 years. Activity in Mexico has also decreased in recent weeks since peaking in mid to late January. Influenza activity remained high across Europe but an increasing number of countries reported declining transmission. The proportion of types and subtypes of viruses circulating was not uniform across the continent. Influenza B has been more commonly detected than A in some countries while, mainly in Eastern parts of Europe very little circulation of influenza B has been detected. Excess mortality in most countries has been moderate and most deaths occurred among people aged 65 and older. Influenza activity throughout the temperate region of Asia decreased overall except in Mongolia and the Republic of Korea where activity persists. Low levels of influenza activity were reported across the tropical regions of the world and activity in countries of the southern hemisphere remained at inter-seasonal levels. A couple of viruses with resistance to neuraminidase inhibitors have been detected in countries doing testing.

Human Avian Influenza and Novel Coronavirus Updates

Human Avian Influenza

WHO report monthly risk assessments on influenza at the human-animal interface (HAI). The latest summary on 12th March 2013, stated that 622 laboratory-confirmed human cases with avian influenza A(H5N1) virus infection have been officially reported to WHO since 2003 from 15 countries, of which 371 died.

Novel Coronavirus

To date, WHO has been informed of a global total of 17 confirmed cases of human infection with novel coronavirus (nCoV), including 11 deaths. Based on the current situation and available information, WHO encourages all Member States (MS) to continue their surveillance for severe acute respiratory infections (SARI) and to carefully review any unusual patterns. WHO is currently working with international experts and countries where cases have been reported to assess the situation and review recommendations for surveillance and monitoring. ECDC have issued an updated [risk assessment](#). Further information is available on the [WHO website](#) and [ECDC website](#).

2013/2014 seasonal influenza vaccine recommendations – WHO

The WHO Consultation on the Composition of Influenza Virus Vaccines for the Northern Hemisphere 2013/2014 took place on the 21st February 2013. It is recommended that vaccines for use in the 2013/2014 influenza season (northern hemisphere winter) contain the following:

- an A/California/7/2009 (H1N1)pdm09-like virus;
- an A(H3N2) virus antigenically like the cell-propagated prototype virus A/Victoria/361/2011;
- a B/Massachusetts/2/2012-like virus (Yamagata lineage).

Further details on these recommendations can be found [here](#).

Surveillance Systems

In order to monitor influenza activity in Ireland a number of surveillance systems are currently in place:

1. Irish College of General Practitioners (ICGP) GP sentinel surveillance system
2. Virological data from the National Virus Reference Laboratory (NVRL)
3. GP Out-of-Hours surveillance system
4. Influenza notifications reported on the Computerised Infectious Disease Reporting system (CIDR)
5. Enhanced surveillance of all hospitalised confirmed influenza cases aged 0-14 years
6. Intensive Care Society of Ireland (ICSI) enhanced surveillance of all critical care patients with confirmed influenza and enhanced surveillance of all severe acute respiratory infections (SARI) in two pilot ICU sites.
7. Outbreak reporting on CIDR
8. Network of sentinel hospitals reporting admission data

Further information on influenza in Ireland and internationally

Ireland	www.hpsc.ie
Northern Ireland	http://www.fluawareni.info/
Europe – ECDC	http://ecdc.europa.eu/

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