



This report is published weekly on the [website](#). For further information on the surveillance schemes mentioned in this report, please see the [website](#) and the [related links](#) at the end of this document.

Report contents:

| [Summary](#) | [GP consultation rates](#) | [Community surveillance](#) | [Microbiological surveillance](#) | [Hospitalisations](#) | [All-cause mortality](#) | [Vaccination](#) | [International](#) | [Acknowledgements](#) | [Related links](#) |

Summary

In week 18, influenza activity is at low levels.

- Overall weekly influenza GP consultation rates across the UK
 - In week 18 (ending 4 May 2014), overall weekly influenza GP consultations remained low in England (1.5 per 100,000), Wales (1.3 per 100,000), Scotland (2.8 per 100,000) and Northern Ireland (15.3 per 100,000).
 - In week 18, syndromic surveillance indicators for influenza remained low.
 - Two new acute respiratory outbreak have been reported in the past seven days across the UK in care homes (one influenza A(H3) and one not tested).
- Virology
 - In week 18 2014, 37 influenza positive detections were recorded through the DataMart scheme (10 A(H1N1)pdm09, six A(H3), 10 A(not subtyped) and 11 B, a positivity of 6.2% compared to 3.5% in week 17), with the highest positivity reported in 45-64 year olds (8.3%).
 - No samples were positive for influenza through the English GP sentinel schemes.
- Disease severity and mortality
 - Seven new admissions to ICU/HDU with confirmed influenza (five A(H1N1)pdm09 and two A(H3N2)) and no confirmed influenza deaths were reported through the USISS mandatory ICU surveillance scheme across the UK (121 Trusts in England) in week 18.
 - 11 new hospitalised confirmed influenza cases were reported through the USISS sentinel hospital network across England (23 Trusts).
 - In week 16 2014, no excess all-cause mortality by week of death was seen across the UK through the EuroMOMO algorithm.
- Vaccination
 - In the final monthly collection up to 31 January 2014, provisional cumulative seasonal influenza vaccine uptake from 99.8% of GP practices was 73.2% in 65 years and over (73.4% in 2012/13), 52.3% in under 65 year olds at risk (51.3% in 2012/13), 39.8% in all pregnant women (40.3% in 2012/13), 42.6% in all 2 year olds and 39.6% in all 3 year olds.
 - Provisional data from the final monthly collection of influenza vaccine uptake by frontline healthcare workers show 54.8% were vaccinated by 31 January 2014 from 99.3% of Trusts, compared to 45.9% in 2012/13.
 - WHO has published recommendations for the [composition](#) of influenza virus vaccines for use in the 2014/15 northern hemisphere influenza season.
- International situation
 - Overall influenza activity in North America continues to decrease.
 - Across Europe, overall influenza activity is declining in reporting countries.

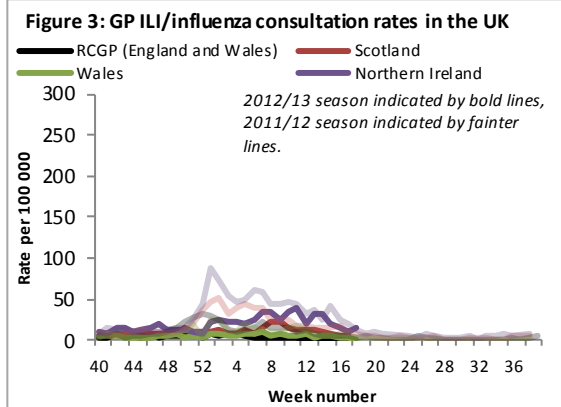
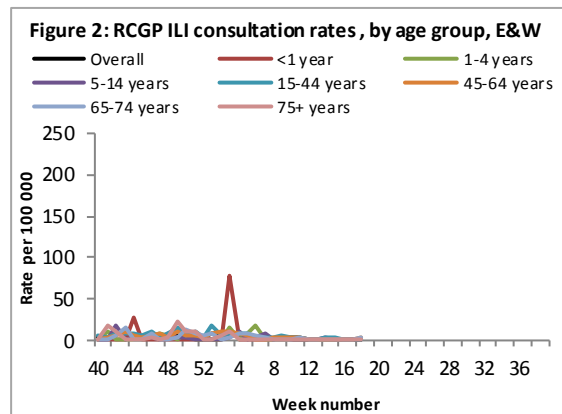
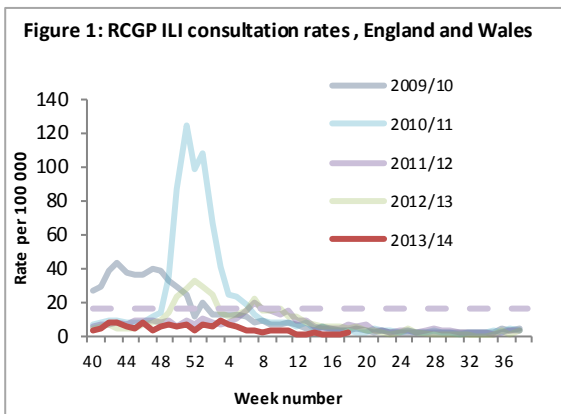
In week 18 (ending 4 May 2014), overall weekly influenza GP consultations remained low in England, Wales, Scotland and Northern Ireland.

- Influenza/Influenza-Like-Illness (ILI)

RCGP (England and Wales)

-The overall ILI consultation rate from RCGP for England and Wales remained stable at 1.5 per 100,000 in week 18 (Figure 1*). ILI rates remained stable in the North at 1.3 per 100,000, Central at 2.5 per 100,000 and South region at 0.8 per 100,000.

-In week 18 2014, highest ILI consultations rates were seen in 45-64 year olds (2.5 per 100,000) and 65-74 year olds (4.1 per 100,000).



Northern Ireland

-The Northern Ireland influenza rate increased from 10.7 per 100,000 in week 17 to 15.3 per 100,000 in week 18 (Figure 3).

-In week 18 2014, highest ILI consultations rates were seen in 15-44 year olds (22.6 per 100,000) and 45-64 year olds (16.0 per 100,000).

Wales

-The Welsh influenza rate remained stable at 1.3 per 100,000 in week 18 (Figure 3).

-In week 18 2014, ILI consultations were reported in 15-44 year olds (0.8 per 100,000), 45-64 year olds (2.4 per 100,000) and 65-74 year olds (3.0 per 100,000).

Scotland

-The Scottish ILI rate decreased from 6.1 per 100,000 in week 17 to 2.8 per 100,000 in week 18 (Figure 3).

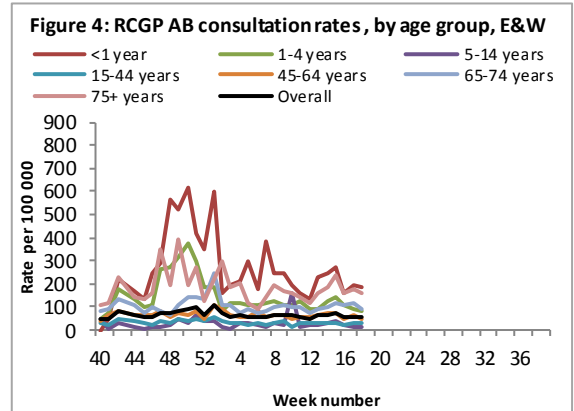
-The highest rates were seen in 15-44 year olds (3.8 per 100,000) 45-64 year olds (2.9 per 100,000) and 75+ year olds (2.9 per 100,000).

*The Moving Epidemic Method has been adopted by the European Centre for Disease Prevention and Control to calculate thresholds for GP ILI consultations for the start of influenza activity in a standardised approach across Europe. The threshold calculated for RCGP ILI consultation rates for 2013/14 is 15.6 per 100,000.

- Other respiratory indicators

Acute bronchitis (AB)

The overall weekly consultation rate for acute bronchitis (AB) in England and Wales through the RCGP scheme decreased from 60.4 per 100,000 in week 17 to 53.7 per 100,000 in week 18 (Figure 4). The highest rates were seen in <1 year olds (185.7 per 100,000) and 75+ year olds (160.1 per 100,000).



Community surveillance | [Back to top](#)

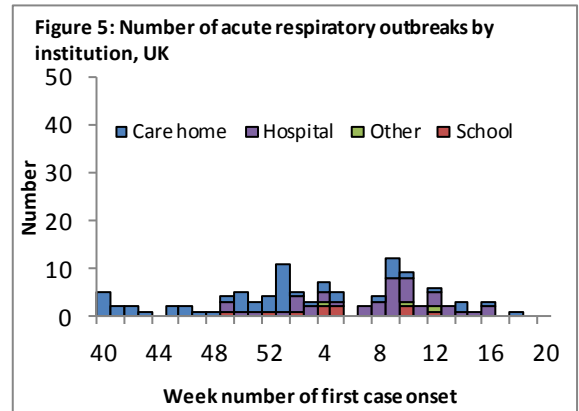
In week 18 influenza syndromic indicators remained low and two new acute respiratory outbreaks have been reported in the last seven days.

- PHE Real-time Syndromic Surveillance

-In week 18 syndromic surveillance indicators for influenza remained low.
 -For further information, please see the syndromic surveillance [webpage](#).

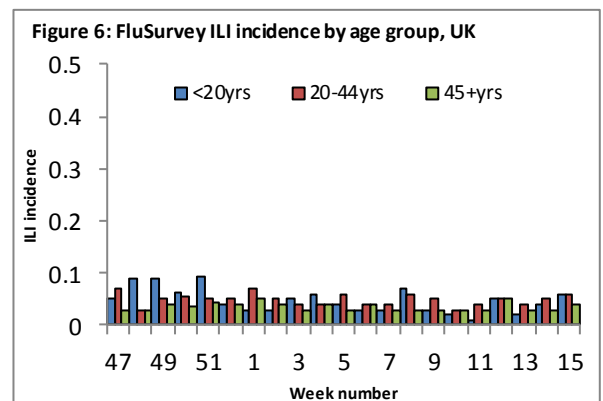
- Acute respiratory disease outbreaks

-Two new acute respiratory outbreaks were reported in the last seven days from care homes in the North of England (not tested) and the South of England (influenza A(H3)). So far this season, 54 outbreaks have been reported in care homes, 43 in hospitals, 10 in schools and three in other settings (where tested, 26 influenza A(H1N1)pdm09, 21 influenza A(not subtyped), six influenza A(H3), nine RSV, nine rhinovirus, three parainfluenza, and seven mixed infections of various pathogens).
 -Outbreaks should be recorded on HPZone and reported to the local Health Protection Teams and Respcidsc@phe.gov.uk.



- FluSurvey

-Internet-based surveillance of influenza in the general population is undertaken through the FluSurvey project (<http://flusurvey.org.uk>) run by the London School of Hygiene and Tropical Medicine.
 -FluSurvey have finished reporting for the 2013/14 influenza season. In week 15, the last week of reporting, the incidence of ILI reports was low across age groups (Figure 6).



In week 18 2014, 37 influenza positive detections were recorded through the DataMart scheme (10 A(H1N1)pdm09, six A(H3), 10 A(not subtyped) and 11 B), with the highest positivity reported in 45-64 year olds. No samples were positive for influenza through the English sentinel schemes.

• Respiratory DataMart System (England)

In week 18 2014, out of the 597 respiratory specimens reported through the Respiratory Datamart System, 10 (1.7%) were positive for flu A (H1N1) pdm09, six (1.0%) were positive for influenza A(H3), 10 (1.7%) were positive for flu A(not subtyped) and 11 samples were positive for influenza B (Figure 7), with the highest influenza positivity in 45-64 year olds (8.3%, Figure 8). The overall positivity for RSV remained low (0.3%) in week 18 (Figure 9). Positivity for rhinovirus decreased (from 12.4% to 9.1%) and other respiratory viruses remained stable (adenovirus 5.5%, parainfluenza 6.3% and hMPV 4.3%).

Figure 7: DataMart samples positive for influenza, England

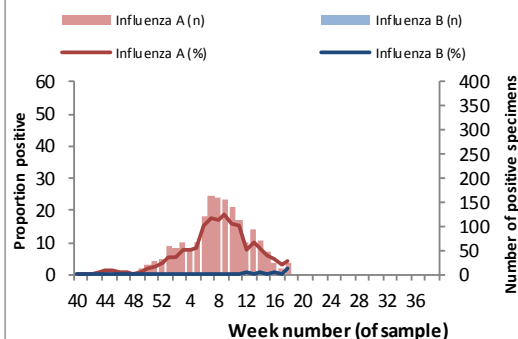


Figure 8: Datamart % positive for influenza by age, England

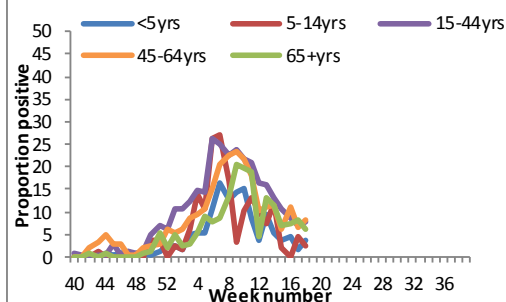
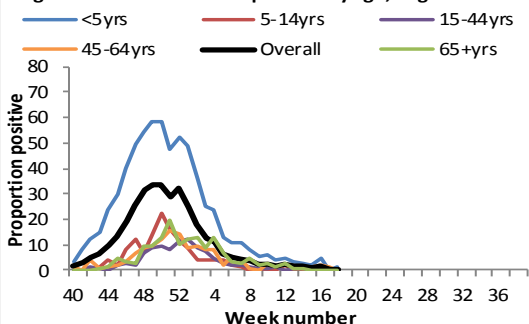


Figure 9: Datamart % RSV positive by age, England



• Sentinel swabbing schemes in England (RCGP/SMN) and the Devolved Administrations

-In week 18, no samples from England, Scotland, Northern Ireland and the Welsh schemes were positive for influenza (Table 1).

Table 1: Sentinel influenza surveillance in the UK

Week	England	Scotland	Northern Ireland	Wales
15	1/23 (4.3%)	2/21 (9.5%)	0/7 (-)	2/4 (-)
16	2/9 (-)	3/17 (17.6%)	1/5 (-)	2/3 (-)
17	0/10 (-)	0/13 (-)	0/1 (-)	0/1 (-)
18	0/6 (-)	0/9 (-)	0/4 (-)	0/0 (-)

NB. Proportion positive omitted when fewer than 10 specimens tested

• Virus characterisation

Since week 40 2013, the PHE Respiratory Virus Unit (RVU) has isolated and antigenically characterised 59 influenza A(H3N2) viruses, all similar to the A/Texas/50/2012 H3N2 2013/14 vaccine strain, and 193 influenza A(H1N1)pdm09 viruses similar to the A/California/07/2009 vaccine strain for 2013/14. Of the few influenza B viruses isolated and characterised, 4 belong to the B-Yamagata lineage as does the 2013/14 influenza B vaccine strain, whilst 6 belong to the B-Victoria lineage.

• Antiviral susceptibility

Since week 40 2013, 934 and 184 influenza viruses have been tested for Osetamivir and Zanamivir susceptibility, respectively, in the UK. 21 (2.4%) of 866 flu A(H1N1)pdm09 and one (1.7%) of 58 flu A(H3) viruses have been found to be resistant to Osetamivir. No viruses were found to be resistant to Zanamivir.

• Antimicrobial susceptibility

-In the 12 weeks up to 27 April 2014, 85% or greater of all lower respiratory tract isolates of *Staphylococcus aureus*, *Streptococcus pneumoniae* and *Haemophilus influenzae* reported as tested were susceptible to the antibiotics tetracycline and co-amoxiclav (Table 2). There have been no significant changes in susceptibility in recent years.

Table 2: Antimicrobial susceptibility surveillance in lower respiratory tract isolates, 23 weeks up to 27 April 2014, E&W

Organism	Tetracyclines		Co-amoxiclav	
	Specimens tested (N)	Specimens susceptible (%)	Specimens tested (N)	Specimens susceptible (%)
<i>S. aureus</i>	3,165	92	224	86
<i>S. pneumoniae</i>	2,567	85	2730*	92*
<i>H. influenzae</i>	10,789	99	10,282	94

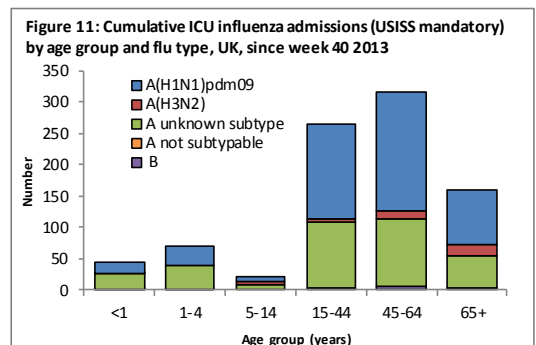
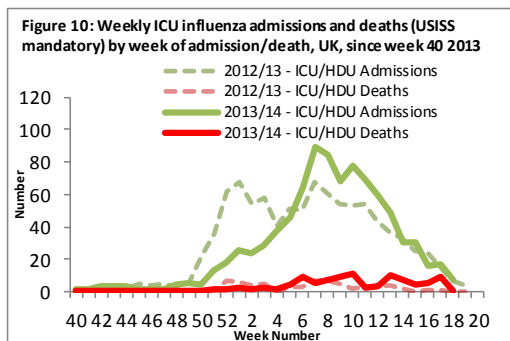
* *S. pneumoniae* isolates are not routinely tested for susceptibility to co-amoxiclav, however laboratory results for benzyl-penicillin are extrapolated to determine sensitivity to other beta-lactams such as co-amoxiclav.

In week 18, seven new admissions of confirmed influenza cases to ICU/HDU (five A(H1N1)pdm09 and two A(H3N2)) and no confirmed influenza deaths in ICU/HDU have been reported through the national USISS mandatory ICU scheme across the UK (121 Trusts in England). 11 new hospitalised confirmed influenza cases have been reported through the USISS sentinel hospital network across England (23 Trusts).

A national mandatory collection (USISS mandatory ICU scheme) is operating in cooperation with the Department of Health to report the number of confirmed influenza cases admitted to Intensive Care Units (ICU) and High Dependency Units (HDU) and number of confirmed influenza deaths in ICU/HDU across the UK. A confirmed case is defined as an individual with a laboratory confirmed influenza infection admitted to ICU/HDU. In addition a sentinel network (USISS sentinel hospital network) of acute NHS trusts has been established in England to report weekly laboratory confirmed hospital admissions. Further information on these systems is available through the [website](#). Please note data in previously reported weeks are updated and so may vary by week of reporting.

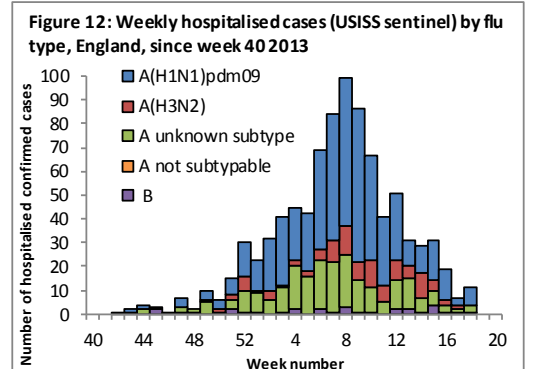
- Number of new admissions and fatal confirmed influenza cases in ICU/HDU (USISS mandatory ICU scheme), UK (week 18)

- In week 18, seven new admissions to ICU/HDU with confirmed influenza infection (five A(H1N1)pdm09 and two A(H3N2)) were reported across the UK (121/156 Trusts in England) through the USISS mandatory ICU scheme (Figures 10 and 11) compared to 17 in week 17. No new confirmed influenza deaths were reported in week 18 2014. A total of 878 admissions (488 A(H1N1)pdm09, 336 A(unknown), 40 A(H3N2) and 14 B) and 93 confirmed influenza deaths have been reported since week 40 2013.



- USISS sentinel weekly hospitalised confirmed influenza cases, England (week 18)

-In week 18, 11 new hospitalised confirmed influenza case were reported through the USISS sentinel hospital network from 23 NHS Trusts across England (Figure 12) compared to seven in week 17. A total of 889 hospitalised confirmed influenza admissions (533 A(H1N1)pdm09, 219 A unknown, 106 A(H3N2) and 31 B) have been reported since week 40 2013



In week 16 2014, no excess all-cause mortality by week of death was seen in England through the EuroMOMO algorithm and none has been reported since week 40 2013.

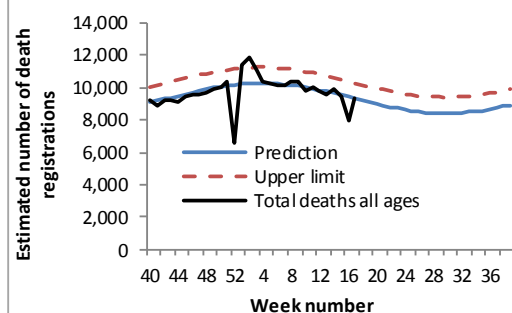
Seasonal mortality is seen each year in the UK, with a higher number of deaths in winter months compared to the summer. Additionally, peaks of mortality above this expected higher level typically occur in winter, most commonly the result of factors such as cold snaps and increased circulation of respiratory viruses, in particular influenza. Weekly mortality surveillance presented here aims to detect and report acute significant weekly excess mortality above normal seasonal levels in a timely fashion. Excess mortality is defined as a significant number of deaths reported over that expected for a given point in the year, allowing for weekly variation in the number of deaths. The aim is not to assess general mortality trends or precisely estimate the

excess attributable to different factors, although some end-of-winter estimates and more in-depth analyses (by age, geography etc.) are undertaken.

- Excess overall all-cause mortality, England and Wales

-In week 17 2014, an estimated 9,359 all-cause deaths were registered in England and Wales (source: Office for National Statistics). This is more than the 8,000 estimated death registrations in week 16 but remains below the 95% upper limit of expected death registrations for this time of year as calculated by PHE (Figure 13). The sharp drops in number of deaths corresponds to weeks when there were bank holidays and fewer days when deaths were registered and so is likely to be artificial.

Figure 13: Observed & predicted all-cause death registrations, E&W



- Excess all-cause mortality by age group and PHE region, England, Wales, Scotland and Northern Ireland

-In week 16 2014, no excess mortality by date of death above the upper 2 z-score threshold was seen in 65+ year olds in England after correcting ONS disaggregate data for reporting delay with the standardised EuroMOMO algorithm (Figure 14, Table 3), in other age groups or subnationally. This data is provisional due to the time delay in registration; numbers may vary from week to week.

-No excess mortality above the threshold through the same standardised algorithm was seen across Wales, Scotland or Northern Ireland in week 16 (Table 4).

Table 3: Excess mortality by age group, England*

Age group (years)	Excess detected in week 16 2014?	Weeks with excess in 2013/14
<5	x	NA
5-14	x	NA
15-64	x	NA
65+	x	NA

* Excess mortality is calculated as the observed minus the expected number of deaths in weeks above threshold

Figure 14: Excess mortality in 65+ year olds by week of death, EuroMOMO, England

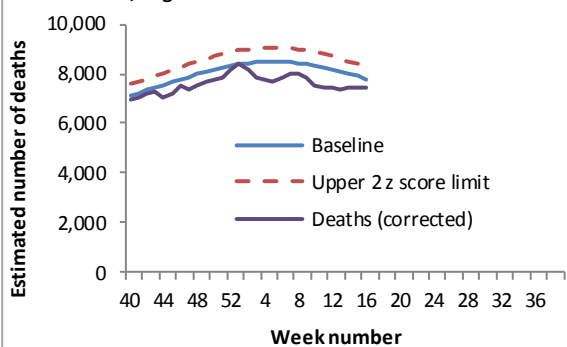


Table 4: Excess mortality by UK country*

Country	Excess detected in week 16 2014?	Weeks with excess in 2013/14
England	x	NA
Wales	x	NA
Scotland	x	NA
Northern Ireland	x	NA

* Excess mortality is calculated as the observed minus the expected number of deaths in weeks above threshold

NB. Separate total and age-specific models are run for England which may lead to discrepancies between Tables 3 + 4

Vaccination

[Back to top](#)

- In the final monthly collection up to 31 January 2014, provisional cumulative seasonal influenza vaccine uptake from 99.8% of GP practices was 73.2% in 65 years and over (73.4% in 2012/13), 52.3% in under 65 year olds at risk (51.3% in 2012/13), 39.8% in all pregnant women (40.3% in 2012/13), 42.6% in all 2 year olds and 39.6% in all 3 year olds. The [report](#) provides uptake to Area Team level, CCG level and in key targeted groups.
- Provisional data from the final monthly collection of influenza vaccine uptake by frontline healthcare workers show 54.8% were vaccinated by 31 January 2014 from 99.3% of Trusts, compared to 45.9% in 2012/13. The [report](#) provides uptake to Trust level.
- WHO has recommended the composition of influenza virus vaccines for use in the 2014/15 northern hemisphere influenza season. The same viruses are recommended as for the 2013-2014 northern hemisphere influenza season and 2014 southern hemisphere season (an A/California/7/2009 (H1N1)pdm09-like virus; an A/Texas/50/2012 (H3N2)-like virus; a B/Massachusetts/2/2012-like virus

(Yamagata lineage) and for quadrivalent vaccines containing two influenza B viruses, to additionally include a B/Brisbane/60/2008-like virus (Victoria lineage). For further information, please see the [full report](#).

International Situation

[Back to top](#)

Overall influenza activity in North America continues to decrease. Across Europe, overall influenza activity is declining in reporting countries.

- [Europe](#) 2 May 2014 (European Centre for Disease Prevention and Control report)

For week 17/2014, clinical data were reported by 24 countries and all reported low intensity of influenza activity. Geographic patterns of influenza activity varied across Europe: local or sporadic activity was reported by 16 countries while eight countries (Bulgaria, Cyprus, the Czech Republic, Hungary, Italy, Malta, Portugal and Romania) reported no activity. Stable or decreasing trends were reported by 24 countries.

For week 17/2014, 93 sentinel specimens were tested across 15 countries, 15 (16%) were positive for influenza virus, a decrease on the previous week with half as many samples tested. Of the influenza virus positive specimens, 14 (93%) were type A and one (7%) was type B. Of ten type A viruses subtyped, seven were A(H3) and three were A(H1)pdm09.

Since week 40/2013, of 7 014 sentinel specimens testing positive for influenza virus, 6 846 (98%) were type A and 168 (2%) were type B. Of the 6 344 subtyped influenza viruses, 3 399 (54%) were A(H1)pdm09 and 2 945 (46%) were A(H3). Countries have reported variable patterns of A(H1)pdm09 and A(H3) being the dominant subtype. Since week 40/2013, 1 028 A(H1)pdm09, 346 A(H3) and 57 type B viruses have been tested for susceptibility to the neuraminidase inhibitors oseltamivir and zanamivir by genetic and/or phenotypic methods. Fifteen A(H1N1)pdm09 viruses carried the NA-H275Y amino acid substitution associated with highly reduced inhibition by oseltamivir. One of these viruses showed highly reduced inhibition by oseltamivir and normal inhibition by zanamivir. However, in 11 of the 15 cases, virus carrying the NA-H275Y substitution was detected, mixed with NA-275H oseltamivir normal inhibited wild type virus in the clinical specimen. The median proportion of NA-H275Y was 35% (range 18–80%). One A(H3N2) virus carrying the NA-E119V amino acid substitution showed reduced inhibition by oseltamivir in phenotypic testing and normal inhibition by zanamivir.

For week 17/2014, 12 countries reported 142 respiratory syncytial virus detections, a return to levels usually seen outside the epidemic period.

For week 17/2014, 15 hospitalised laboratory-confirmed influenza cases were reported by two countries (Ireland and the UK). All 15 patients were infected by influenza A viruses and 14 were admitted to intensive care units (ICU).

Since week 40/2013, eight countries have reported 4 689 hospitalised, laboratory-confirmed influenza cases: 4 633 (99%) were related to influenza type A and 56 (1%) to influenza type B virus infections (Table 5). Of 3 175 subtyped influenza A viruses, 2 350 (74%) were A(H1)pdm09 and 825 (26%) were A(H3). A higher proportion of A(H1)pdm09 viruses has been detected in patients in ICUs, 1 373 (85%) of 1 606 subtyped compared to 977 (62%) of 1 569 subtyped viruses in patients in regular wards.

Of the 3 798 hospitalised cases with reported age, 1 412 (37%) were 40–64 years old and 1 405 (37%) were over 64 years of age, proportions that have been seen throughout the season.

Five countries reported a total of 394 fatal cases (Table 6); 391 (99%) were associated with influenza type A and three (1%) with influenza type B virus infections. Of 285 influenza A viruses subtyped from fatal cases, 230 (81%) were A(H1)pdm09 and 55 (19%) were A(H3). Patient age was reported for 390 of the fatal cases: 208 (53%) were 65 years or older.

- [United States of America](#) 2 May 2014 (Centre for Disease Control report)

During week 17 (April 20-26, 2014), influenza activity continued to decrease in the United States.

Nationwide during week 17, 1.5% of patient visits reported through the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) were due to influenza-like illness (ILI). This percentage is below the national baseline of 2.0%.

During week 17, 6.8% of all deaths reported through the 122 Cities Mortality Reporting System were due to P&I. This percentage was below the epidemic threshold of 7.1% for week 17. Two influenza-associated pediatric deaths were reported to CDC during week 17. One death was associated with an influenza A (H3) virus and occurred during week 15 (week ending April 12, 2014) and one death was associated with an influenza A virus and for which no subtyping was performed and occurred during week 16 (week ending April

19, 2014). A total of 91 influenza-associated pediatric deaths have been reported during the 2013-2014 season from Chicago [1], New York City [4] and 30 states (AR [4]; AZ [1]; CA [8]; FL [4]; GA [1]; IA [1]; IL [1]; KS [2]; KY [1]; LA [6]; MA [2]; MD [1]; ME [1]; MI [2]; MS [1]; NC [6]; NE [1]; NJ [2]; NV [1]; NY [1]; OK [2]; OR [1]; PA [3]; SC [2]; TN [4]; TX [18]; UT [2]; VA [3]; WI [2]; and WV [2]).

Of 4,031 specimens tested and reported during week 17 by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories, 500 (12.4%) were positive for influenza. By type, 223 (44.6%) were influenza A (8 (3.6%) A(H1N1)pdm09, 123 subtyping not performed and 92 (41.3%) A(H3)) and 277 (55.4%) were influenza B.

- [Canada](#) 2 May 2014 (Public Health Agency report)

In week 17, no region reported widespread activity and six regions (MB(1) and ON(5)) reported localized activity. The national influenza-like-illness (ILI) consultation rate decreased from 23.5 consultations per 1,000 patient visits in week 16 to 21.8 / 1,000 in week 17; which was within the expected range for week 17. In week 17, nine new laboratory-confirmed influenza-associated paediatric (≤ 16 years of age) hospitalizations were reported by the Immunization Monitoring Program Active (IMPACT) network, compared to 11 in week 16. Six cases reported in week 17 had influenza B, and the remaining cases had influenza A(undetected). A greater proportion of cases with influenza B this season have been children between 2 and 10 years of age compared to A(H1N1)pdm09. No ICU admissions or deaths were reported in week 17.

- [Global influenza update](#) 5 2014 (WHO website)

Globally, the northern hemisphere influenza season approached inter-seasonal levels in most countries. Influenza B continued to comprise the majority of late season detections in most regions, with the exception of Europe which reported consistently low influenza B activity.

In North America, influenza levels slowly declined.

In Europe, influenza activity continued to decrease, and most countries either approached or reached interseasonal levels. Influenza A(H3N2) was the predominant virus, followed by A(H1N1)pdm09 and very low detections of influenza B. In eastern Europe, influenza activity declined but remained slightly elevated compared to southwest and northern Europe, which peaked earlier in the season.

In Eastern Asia, influenza activity approached interseasonal levels in most countries, and influenza B comprised the majority of influenza detections.

In Tropical Asia, influenza activity continued to decline in most countries, although some variability was seen.

In Northern Africa and Western Asia, influenza activity remained low in most countries, with influenza B the predominant virus detected.

In the Southern Hemisphere, influenza activity was still low and influenza detections were sporadic.

- [Avian Influenza](#) 1 May 2014 (WHO website)

Influenza A(H7N9)

In the past week, three new hospitalised cases of human infection with influenza A(H7N9) in China have been reported by [WHO](#). The source of infection is still under investigation. So far, there is no evidence of sustained human-to-human transmission. WHO does not advise special screening at points of entry with regard to this event, nor does it currently recommend any travel or trade restrictions.

Influenza A(H5N1)

From 2003 through to 20 December 2013, 649 human cases of H5N1 avian influenza have been officially reported to [WHO](#) from 15 countries, of which 385 (59%) died.

- Novel coronavirus 5 May 2014

Up to 8 May 2014, a total of four cases of Middle East respiratory syndrome coronavirus, MERS-CoV, (two imported and two linked cases) have been confirmed in England. On-going surveillance has identified 165 suspect cases in the UK that have been investigated for MERS-CoV and tested negative. A further 492 confirmed cases have been reported internationally. This results in a current global total of [496 cases](#). Further information on management and guidance of possible cases is available [online](#).

Acknowledgements

[| Back to top |](#)

This report was prepared by the Influenza section, Respiratory Diseases Department, Centre for Infectious Disease Surveillance and Control, Public Health England. We are grateful to all who provided data for this report including the RCGP Research and Surveillance Centre, the PHE Real-time Syndromic Surveillance team, the PHE Respiratory Virus Unit, the PHE Modelling and Statistics unit, the PHE Dept. of Healthcare Associated Infection & Antimicrobial Resistance, PHE regional microbiology laboratories, NHS Direct, Office for National Statistics, the Department of Health, Health Protection Scotland, National Public Health Service (Wales), the Public Health Agency Northern Ireland, the Northern Ireland Statistics and Research Agency, QSurveillance[®] and EMIS and EMIS practices contributing to the QSurveillance[®] database.

Related links

[| Back to top |](#)

Weekly consultation rates in national sentinel schemes

- [Sentinel schemes operating across the UK](#)
- [RCGP scheme](#)
- Northern Ireland surveillance ([Public Health Agency](#))
- Scotland surveillance ([Health Protection Scotland](#))
- Wales surveillance ([Public Health Wales](#))
- [Real time syndromic surveillance](#)
- [MEM threshold paper](#)

Community surveillance

- [Outbreak reporting](#)
- [FluSurvey](#)
- [MOSA](#)

Disease severity and mortality data

- [USISS](#) system
- [EuroMOMO](#) mortality project

Vaccination

- 2013/14 seasonal influenza vaccine programme ([Department of Health Book](#))
- Childhood flu programme Q&A for healthcare professionals ([Public Health England](#))
- 2013/14 Northern Hemisphere seasonal influenza vaccine recommendations ([WHO](#))