



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.

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## Summary

**Influenza continues to circulate as evidenced by ongoing influenza-confirmed ICU/HDU and hospital admissions. A [letter](#) has been issued recommending the use of antivirals where appropriate.**

- Overall weekly influenza GP consultation rates across the UK
  - In week 9 (ending 2 March 2014), overall weekly influenza GP consultations remained low in England (3.7 per 100,000), Wales (6.8 per 100,000), Scotland (21.3 per 100,000) and Northern Ireland (24.1 per 100,000).
  - In week 9 syndromic surveillance indicators for influenza remain stable and similar to seasonally expected levels.
  - Ten new acute respiratory influenza outbreaks have been reported in the past seven days across the UK (two in care homes (one A(H3) and one A(not subtyped)), seven in hospitals (three A(H1N1)pdm09, three A(not subtyped) and one influenza A(H3)/parainfluenza) and one in a school (not tested).
- Virology
  - In week 9 2014, 156 influenza positive detections were recorded through the DataMart scheme (88 A(H1N1)pdm09, 35 A(H3), 32 A(not subtyped) and one B, a positivity of 18.9% compared to 17.4% in week 8), with the highest positivity reported in 45-64 year olds (25.3%).
  - 17 samples were positive for influenza through the English GP sentinel schemes (11 A(H1N1)pdm09 and six A(H3), positivity of 30%).
- Disease severity and mortality
  - 42 new admissions to ICU/HDU with confirmed influenza (26 A(H1N1)pdm09 and 16 A unknown subtype) and five confirmed influenza deaths were reported through the USSS mandatory ICU surveillance scheme across the UK (136 Trusts in England) in week 9. 69 new hospitalised confirmed influenza cases were reported through the USSS sentinel hospital network across England (27 Trusts).
  - In week 9 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 remains elevated but is decreasing.
  - Influenza transmission is continuing across the EU/EEA region with considerable variation between countries.

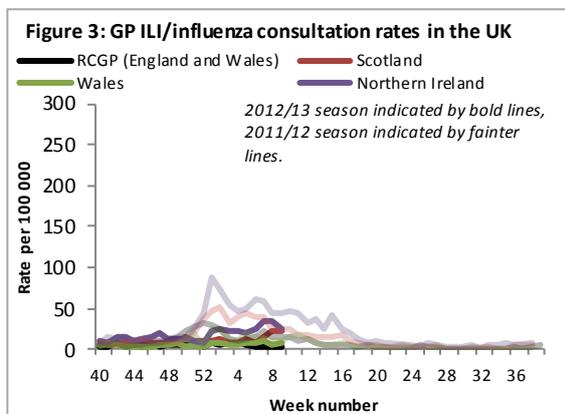
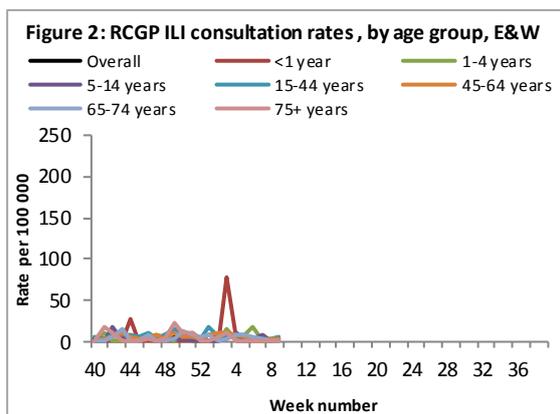
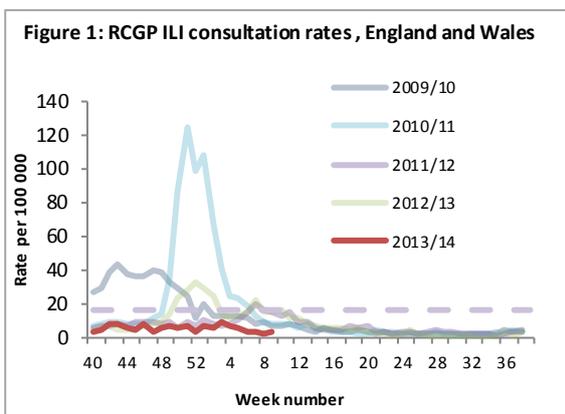
In week 9 (ending 2 March 2014), overall weekly influenza GP consultations remained low in England, Wales, Scotland and Northern Ireland.

- Influenza/Influenza-Like-Illness (ILI)

RCGP (England and Wales)

-The overall ILI consultation rate from RCGP for England and Wales remained stable at 3.7 per 100,000 in week 9 (Figure 1\*). ILI rates remained stable in the North (1.6 per 100,000) and South (2.5 per 100,000) and increased slightly in the Central region (from 3.6 to 6.5 per 100,000).

-In week 9 2014, ILI consultations were reported in 5-14 year olds (rate of 3.8 per 100,000), 15-44 year olds (5.3 per 100,000) and 45-64 year olds (4.3 per 100,000).



Northern Ireland

-The Northern Ireland influenza rate decreased from 33.9 per 100,000 in week 8 to 24.1 per 100,000 in week 9 (Figure 3).

-In week 9 2014, the highest rates were seen in <1 year olds (48.8 per 100,000), 65-74 year olds (31.6 per 100,000) and 1-4 year olds (30.5 per 100,000).

Wales

-The Welsh influenza rate remained stable at 6.8 per 100,000 in week 9 (Figure 3).

-The highest rate was seen in 45-64 year olds (10.6 per 100,000) and 15-44 year olds (8.8 per 100,000).

Scotland

-The Scottish ILI rate remained stable at 21.3 per 100,000 in week 9 (Figure 3).

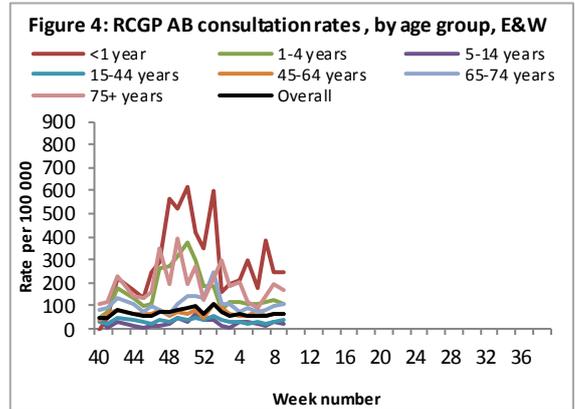
-The highest rate was seen in 45-64 year olds (28.1 per 100,000) followed by 15-44 year olds (27.9 per 100,000).

\*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 remained stable at 66.3 per 100,000 in week 9 (Figure 4). The highest rates were seen in <1 year olds (250.6 per 100,000) and 75+ year olds (165.8 per 100,000).



**Community surveillance** | [Back to top](#) |

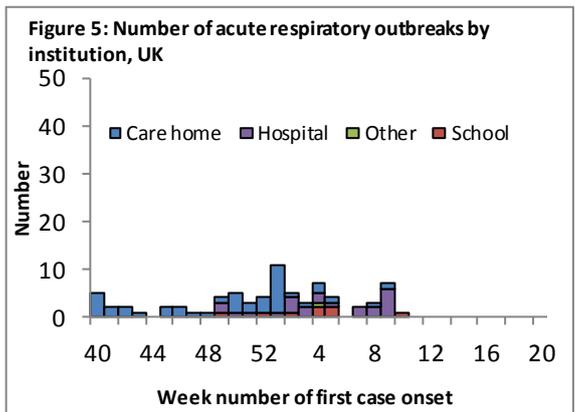
**In week 9 influenza syndromic indicators remained stable and ten new acute respiratory outbreak has been reported in the last seven days.**

- PHE Real-time Syndromic Surveillance

-In week 9 syndromic surveillance indicators for influenza remain stable and similar to seasonally expected levels.  
 -For further information, please see the syndromic surveillance [webpage](#).

- Acute respiratory disease outbreaks

- Ten new acute respiratory outbreaks were reported in the last seven days. Two of them were reported from the Midlands and East of England (one in a care home (influenza A(H3) and the other in a hospital (influenza A(H3)/parainfluenza), three from London (one in a care home (influenza A(not subtyped)) and two in hospitals (two influenza A(not subtyped)) and five in the South of England (four from hospitals (three flu A(H1N1)pdm09, one flu A(not subtyped)) and one in a school (not tested)). So far this season, 44 outbreaks have been reported in care homes, 23 in hospitals, eight in schools and one in a nursery (where tested, eleven influenza A(H1N1)pdm09, twelve influenza A (not subtyped), two influenza A(H3), nine RSV, nine rhinovirus, three parainfluenza, and five mixed infections of parainfluenza along with other viruses (one each of influenza A(H3), RSV, rhinovirus, hMPV and seasonal coronavirus).

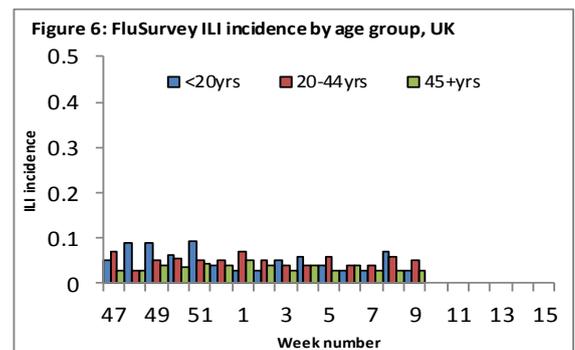


-Outbreaks should be recorded on HPZone and reported to the local Health Protection Teams and [Respcidsc@phe.gov.uk](mailto:Respcidsc@phe.gov.uk).

- 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. Please see the website for information on how to register.

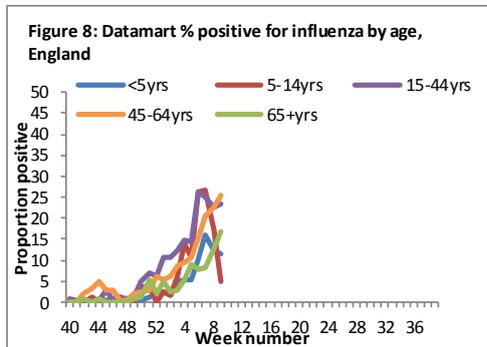
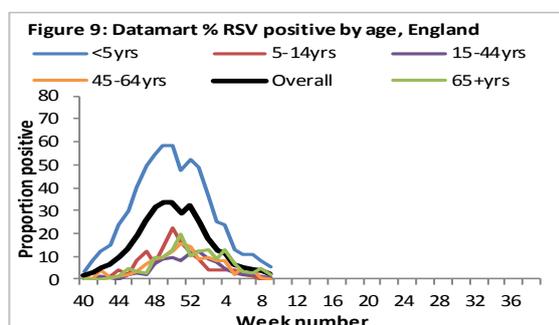
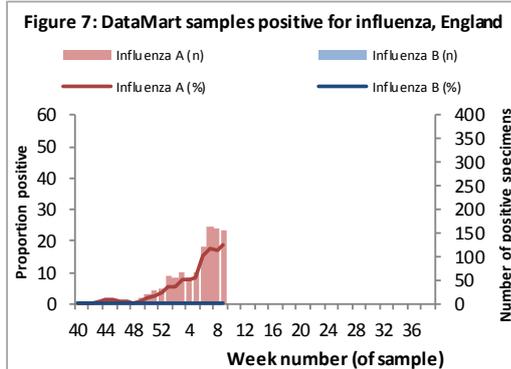
In week 9, the incidence of ILI reports was highest in 20-44 year olds (Figure 6).



In week 9 2014, 156 influenza positive detections were recorded through the DataMart scheme (88 A(H1N1)pdm09, 35 A(H3), 32 A(not subtyped) and one B), with the highest positivity reported in 45-64 year olds. 17 samples were positive for influenza through the English sentinel schemes (11 A(H1N1)pdm09 and six A(H3)).

• Respiratory DataMart System (England)

In week 9 2014, out of the 826 respiratory specimens reported through the Respiratory Datamart System, 88 (10.7%) were positive for flu A(H1N1) pdm09, 35 (4.2%) positive for influenza A(H3), 32 (3.9%) positive for flu A (not subtyped) and one sample was positive for influenza B (Figure 7), with the highest influenza positivity in 45-64 year olds (25.3%, Figure 8). The overall positivity for RSV remained low (2.0%) in week 9 with the highest positivity remaining in the <5 years (5.4%, Figure 9). Rhinovirus positivity decreased slightly (from 10.4% to 9.4% in week 9), hMPV positivity increased slightly (from 2.8% to 3.6% in week 9) and other respiratory viruses remained at low levels (adenovirus 3.8% and parainfluenza 1.6%).



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

-In week 9, 17 samples from England were positive for influenza (11 A(H1N1)pdm09 and six A(H3)). Eight samples from Scotland were positive for influenza A(H1N1)pdm09, one sample from Northern Ireland was positive for A(unsubtyped) and two sample from Wales was positive for A(H1N1)pdm09 (Table 1).

Table 1: Sentinel influenza surveillance in the UK

Week	England	Scotland	Northern Ireland	Wales
06	30/80 (37.5%)	9/53 (17%)	1/6 (0%)	2/12 (16.7%)
07	31/75 (41.3%)	10/56 (17.9%)	1/5 (0%)	2/9 (0%)
08	21/71 (29.6%)	7/27 (25.9%)	1/4 (0%)	1/1 (0%)
09	17/56 (30.4%)	8/37 (21.6%)	1/4 (0%)	2/3 (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. Four influenza B isolates belonging to the B-Yamagata lineage have been characterised, and six from the B-Victoria lineage.

• Antiviral susceptibility

Since week 40 2013, 483 and 84 influenza viruses have been tested for Osetamivir and Zanamivir susceptibility, respectively, in the UK. Five (1.1%) of 461 flu A(H1N1)pdm09 and one (5.3%) of 19 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 23 February 2014, 83% 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 16 Feb 2014, E&W

Organism	Tetracyclines		Co-amoxiclav	
	Specimens tested (N)	Specimens susceptible (%)	Specimens tested (N)	Specimens susceptible (%)
<i>S. aureus</i>	3,218	92	229	90
<i>S. pneumoniae</i>	2,481	83	2643*	91*
<i>H. influenzae</i>	9,942	99	9,510	94

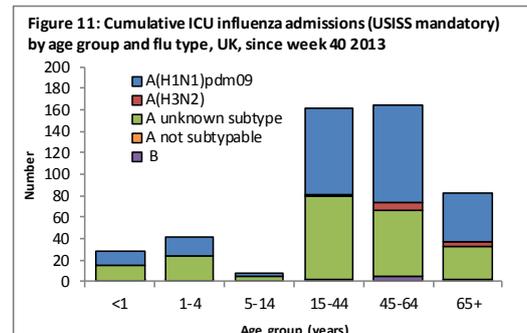
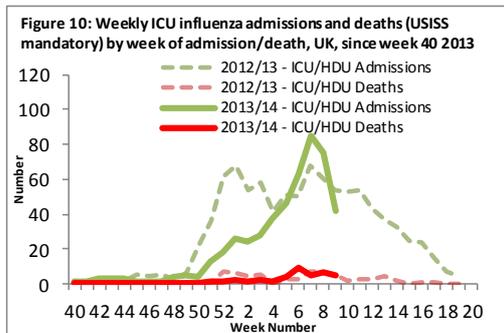
\* *S. pneumoniae* isolates are not routinely tested for susceptibility to co-amoxiclav, however laboratory results for benzyl-penicillin are extrapolated to determine sensitivity to other beta-lactams such as co-amoxiclav.

In week 9, 42 new admissions of confirmed influenza cases to ICU/HDU (26 A(H1N1)pdm09 and 16 A unknown subtype) and five confirmed influenza deaths in ICU/HDU have been reported through the national USISS mandatory ICU scheme across the UK (136 Trusts in England). 69 new hospitalised confirmed influenza cases have been reported through the USISS sentinel hospital network across England (27 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.

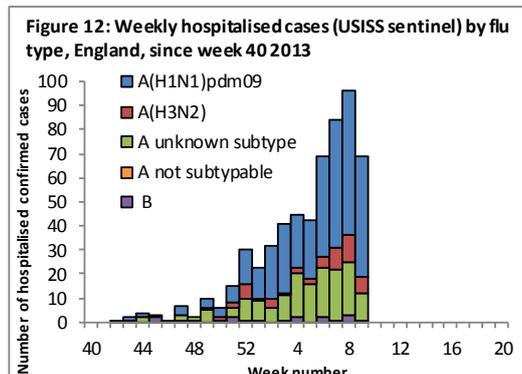
- Number of new admissions and fatal confirmed influenza cases in ICU/HDU (USISS mandatory ICU scheme), UK (week 9)

-In week 9, 42 new admissions to ICU/HDU with confirmed influenza infection (26 A(H1N1)pdm09 and 16 A unknown subtype) were reported across the UK (136/156 Trusts in England) through the USISS mandatory ICU scheme (Figures 10 and 11) compared to 65 in week 8. Five new confirmed influenza deaths were reported in week 9 2014. A total of 484 admissions (250 A(H1N1)pdm09, 210 A(unknown), 13 A(H3N2) and 11 B) and 38 confirmed influenza deaths have been reported since week 40 2013.



- USISS sentinel weekly hospitalised confirmed influenza cases, England (week 9)

-In week 9, 69 new hospitalised confirmed influenza case were reported through the USISS sentinel hospital network from 27 NHS Trusts across England (Figure 12) compared to 96 in week 8. A total of 582 hospitalised confirmed influenza admissions (353 A(H1N1)pdm09, 158 A unknown, 53 A(H3N2) and 18 B) have been reported since week 40 2013.

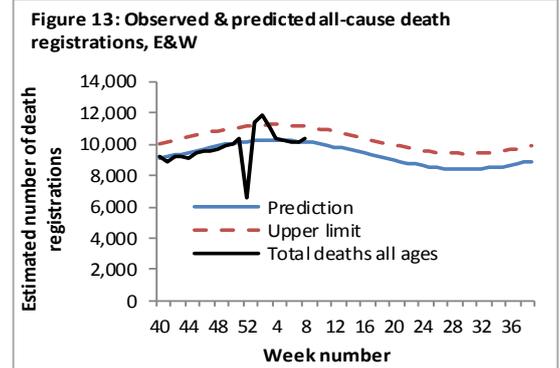


In week 9 2014, no excess all-cause mortality by week of death was seen in England through the EuroMOMO algorithm and none has been reported since week 40 2013.

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 8 2014, an estimated 10,427 all-cause deaths were registered in England and Wales (source: Office for National Statistics). This is slightly more than the 10,198 estimated death registrations in week 7 but remains below 95% upper limit of expected death registrations for this time of year as calculated by PHE (Figure 13). The sharp drop in number of deaths correspond to weeks when there were bank holidays and fewer days when deaths were registered and so is likely to be artificial.



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

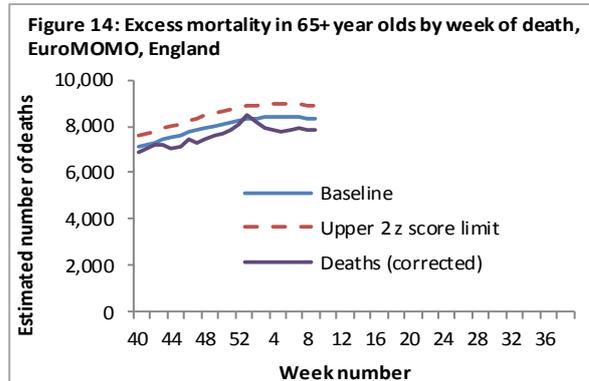
-In week 9 2014, no excess mortality by date of death above the upper 2 z-score threshold was seen in 65+ year olds in England after correcting ONS disaggregate data for reporting delay with the standardised EuroMOMO algorithm (Figure 14, Table 3), in other age groups or subnationally. This data is provisional 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 9 (Table 4).

**Table 3: Excess mortality by age group, England\***

Age group (years)	Excess detected in week 9 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



**Table 4: Excess mortality by UK country\***

Country	Excess detected in week 9 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

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- 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](#).

**Overall influenza activity in North America remains elevated but is decreasing. Influenza transmission is continuing across the EU/EEA region with considerable variation between countries.**

- [Europe](#) 28 February 2014 (European Centre for Disease Prevention and Control report)

In terms of influenza activity, Finland and Greece reported high intensity, ten countries reported medium intensity and 15 reported low intensity, the lowest category of reporting. Bulgaria, Greece and Spain have been reporting medium or high-intensity influenza activity for at least six consecutive weeks; Belgium, Finland, France, Iceland and Malta for at least four consecutive weeks. Geographic patterns of influenza activity varied across Europe: widespread activity was reported by 14 countries and the UK (England); regional activity by Bulgaria, Germany and the Netherlands; local activity by Norway, Poland and Spain; and sporadic activity by the Czech Republic, Latvia, Lithuania, Malta and the UK (Northern Ireland, Scotland and Wales). Cyprus and Slovakia reported no influenza activity. Increasing trends were reported by 11 countries and the UK (Scotland). Bulgaria, Portugal and Spain have been reporting decreasing trends for at least three consecutive weeks.

For week 8/2014, 25 countries tested 1 355 sentinel specimens, 441 (33%) of which were positive for influenza virus (Tables 1–2, Figures 1–2). Of these, 433 (98%) were type A and 8 (2%) were type B. Since week 40/2013, of 4 817 sentinel specimens positive for influenza virus, 4 730 (98%) were type A and 87 (2%) were type B. Of the 4 317 subtyped influenza viruses, 2 487 (58%) were A(H1)pdm09 and 1 830 (42%) were A(H3). Countries have reported variable patterns of A(H1)pdm09 and A(H3) as the dominant subtype. Non-sentinel virus detections are summarised in Table 2. The subtype distribution in non-sentinel type A virus detections, 76% A(H1)pdm09 and 24% A(H3), reflects the distribution seen in hospitalised laboratory-confirmed influenza cases. The proportion of sentinel specimens testing positive for influenza virus has decreased for the fourth consecutive week after peaking in weeks 3-4/2014.

The results of antigenic and genetic characterisation of sentinel and non-sentinel viruses are displayed in Tables 3 and 4. Since week 40/2013, none of the 493 antigenically characterised viruses have differed significantly from the current vaccine viruses recommended by WHO (Table 3). More details on viruses circulating since September 2013 can be found in the December virus characterisation report. WHO recommended that vaccine viruses for 2014–2015 are the same as the vaccine viruses for the 2013–2014 season.

Since week 40/2013, 397 A(H1)pdm09, 102 A(H3) and 25 type B viruses have been tested for susceptibility to the neuraminidase inhibitors oseltamivir and zanamivir by genetic and/or phenotypic methods. Only three viruses showed genetic or phenotypic (IC50) evidence of reduced inhibition. Two A(H1N1)pdm09 viruses carried the NA-H275Y amino acid substitution associated with highly-reduced inhibition by oseltamivir. One of these viruses showed phenotypic highly reduced inhibition by oseltamivir and normal inhibition by zanamivir. One A(H3N2) virus carried NA-E119V amino acid substitution and showed reduced inhibition by oseltamivir but normal inhibition by zanamivir.

For week 8/2014, 213 hospitalised, laboratory-confirmed influenza cases were reported by seven countries (Finland, France, Ireland, Romania, Spain, Sweden and the UK), including 112 cases admitted to intensive care units (ICU).

Since week 40/2013, seven countries have reported 3 024 hospitalised, laboratory-confirmed influenza cases: 2 997 (99%) were related to influenza virus type A infection and 27 (1%) to type B virus infection (Tables 5 and 6). A total of 2 013 influenza A viruses have been subtyped, 1 573 (78%) were A(H1)pdm09 and 440 (22%) were A(H3) (Table 5). Among cases with known subtype, infections with A(H1)pdm09 accounted for 85% of those admitted to ICU and 71% of those in other wards.

Seven countries reported a total of 254 fatal cases (Table 6). All fatal cases were associated with influenza virus type A infection and 191 of them were subtyped: 157 (82%) as A(H1)pdm09 and 34 (18%) as A(H3). Of the 251 fatal cases with known age, 136 (54%) were ≥65 years.

- [United States of America](#) 28 February 2014 (Centre for Disease Control report)

During week 8 (February 16-22, 2014), influenza activity decreased, but remained elevated in the United States.

Nationwide during week 8, 2.3% 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 above the national baseline of 2.0%. On a regional level, the percentage of outpatient visits for ILI ranged from 1.4% to 3.7%

during week 8. Eight of 10 regions reported a proportion of outpatient visits for ILI above their region-specific baseline level.

During week 8, 7.6% of all deaths reported through the 122 Cities Mortality Reporting System were due to P&I. This percentage was above the epidemic threshold of 7.4% for week 8. Nine influenza-associated pediatric deaths were reported to CDC during week 8. Five deaths were associated with a 2009 H1N1 virus and occurred during weeks 1, 3, 6, and 7 (weeks ending January 4, January 18, February 8, and February 15, 2014) and three deaths were associated with an influenza A virus for which no subtyping was performed and occurred during weeks 3 and 6 (weeks ending January 18 and February 8, 2014). One death was associated with an influenza B virus and occurred during week 8 (week ending February 22, 2014). A total of 61 influenza-associated pediatric deaths have been reported during the 2013-2014 season from New York City [1] and 25 states (AR [3], AZ [1], CA [6]; FL [3], GA [1]; IA [1]; KS [2], KY [1]; LA [4]; MA [2]; MI [2], MS [1], NC [5]; NE [1], NV [1], OK [2]; OR [1], PA [1], SC [2], TN [4]; TX [10]; UT [2]; VA [1]; WI [1]; and WV [2]).

Of 6,813 specimens tested and reported during week 8 by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories, 738 (10.8%) were positive for influenza. By type, 612 (82.9%) were influenza A (337 (55.1%) A(H1N1)pdm09, 250 subtyping not performed and 25 (4.1%) A(H3)) and 126 (17.1%) were influenza B.

- [Canada](#) 28 February 2014 (Public Health Agency report)

In week 08, overall influenza activity continued to decrease in Canada except in the eastern provinces which experienced a later start to the influenza season. In week 08, influenza activity levels continued to decline. No regions reported widespread activity and ten regions in eastern Canada (ON(5), QC(3) and NS(2)) reported localized activity. The national influenza-like-illness (ILI) consultation rate decreased from 45.4/1,000 in week 07 to 22.0/1,000 in week 08; which is below the expected range for week 08. In week 08, 28 new laboratory-confirmed influenza-associated paediatric ( $\leq 16$  years of age) hospitalizations were reported by the Immunization Monitoring Program Active (IMPACT) network, compared to 42 in week 07. In week 08, influenza A was reported in 17 cases and influenza B in 11 cases. An increasing number of influenza B cases have been reported in the past two weeks. Twenty-two (79%) of the cases in week 08 were  $\geq 2$  years of age. Two ICU admissions were reported in week 08, one 5-9 years of age and one 10-16 years of age. No deaths were reported.

- [Global influenza update](#) 24 February 2014 (WHO website)

In North America, influenza A(H1N1)pdm09 virus remained predominant. Influenza activity continued decreasing in Canada, Mexico and the United States of America, but remained at elevated levels.

In Europe, overall influenza activity remained elevated. Trends suggests the wave of influenza activity is moving from south to north overall, with both influenza A viruses circulating.

In Eastern Asia, influenza activity remained high with influenza A(H1N1)pdm09 predominant.

In Northern Africa and Western Asia, influenza activity was variable, with Egypt reporting high activity of influenza A(H1N1)pdm09 and increased number of severe cases.

Based on FluNet reporting (as of 24 February 2014, 08:20 UTC), during weeks 5 to 6 (26 January 2014 to 8 February 2014, National Influenza Centres (NICs) and other national influenza laboratories from 93 countries, areas or territories reported data. The WHO GISRS laboratories tested more than 87 378 specimens. 20 777 were positive for influenza viruses, of which 18 487 (89%) were typed as influenza A and 2290 (11%) as influenza B. Of the sub-typed influenza A viruses, 9141 (77%) were influenza A(H1N1)pdm09, 2735 (23%) were influenza A(H3N2) and 1 (0%) was influenza A(H5N1). Of the characterized B viruses, 127 (74.7%) belong to the B-Yamagata lineage and 43 (25.3%) to the B-Victoria lineage.

- [Avian Influenza](#) 3 March 2014 (WHO website)

### **Influenza A(H7N9)**

Since 3 March 2014, 159 hospitalised cases of human infection with influenza A(H7N9) in China have been reported by [WHO](#), including 11 deaths, compared to 145 the previous week. 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 28 February 2014

Up to 28 February 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 133 suspect cases in the UK that have been investigated for MERS-CoV and tested negative. A further 180 confirmed cases have been reported internationally. This results in a current global total of [184 cases](#), 80 of which have died (case fatality ratio=43%). Two recent fatal cases were reported from Saudi Arabia and Jordan, both with underlying health conditions. Further information on management and guidance of possible cases is available [online](#).

## Acknowledgements

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### Weekly consultation rates in national sentinel schemes

- [Sentinel schemes operating across the UK](#)
- [RCGP scheme](#)
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- 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

- 2012/13 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](#))