

PHE Weekly National Influenza Report

Summary of UK surveillance of influenza and other seasonal respiratory illnesses

20 February 2014 – Week 8 report (up to week 7 data)

This report is published weekly on the <u>website</u>. For further information on the surveillance schemes mentioned in this report, please see the <u>website</u> and the <u>related links</u> at the end of this document.

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Summary

Although community influenza indicators remain low, there has been a continued rise in the number of influenza-confirmed ICU/HDU and hospital admissions. A <u>letter</u> has been issued recommending the use of antivirals where appropriate.

- Overall weekly influenza GP consultation rates across the UK
 - In week 7 (ending 16 February 2014), overall weekly influenza GP consultations remained low in England (3.4 per 100,000), Wales (9.4 per 100,000), Scotland (15.2 per 100,000) and Northern Ireland (35.3 per 100,000)).
 - There have been further minor increases in influenza syndromic indicators in week 7 but levels remain below seasonally expected levels.
 - Three new acute respiratory outbreaks have been reported in the past seven days across the UK (two in hospitals and one in a care home). Where tested, two were positive for influenza A(H1N1)pdm09 (both in hospitals) and one parainfluenza/seasonal coronavirus (care home).
- Virology
 - o In week 7 2014, 167 influenza positive detections were recorded through the DataMart scheme (102 A(H1N1)pdm09, 13 A(H3), 48 A(not subtyped) and four B, a positivity of 17.7% compared to 15.7% in week 6), with the highest positivity reported in 5-14 year olds (27.3%).
 - o 36 samples were positive for influenza through the English GP sentinel schemes (24 A(H1N1)pdm09, six A(H3), three A(unsubtyped) and three Flu B), positivity of 42%).
- Disease severity and mortality
 - o 78 new admissions to ICU/HDU with confirmed influenza (35 A(H1N1)pdm09, 39 A unknown subtype, three A(H3N2) and one B) and three confirmed influenza deaths were reported through the USISS mandatory ICU surveillance scheme across the UK (139 Trusts in England) in week 7. 74 new hospitalised confirmed influenza cases were reported through the USISS sentinel hospital network across England (26 Trusts).
 - In week 7 2014, no excess all-cause mortality by week of death was seen across the UK through the EuroMOMO algorithm.
- Vaccination
 - Up to week 4 2014 in 71.3% of GP practices reporting weekly to Immform, the provisional proportion of people in England who had received the 2013/14 influenza vaccine in targeted groups was as follows: 42.6% in all 2 year olds, 39.3% in all 3 year olds, 51.3% in under 65 years in a clinical risk group, 39.6% in all pregnant women and 72.9% in 65+ year olds.
 - Provisional data from the third monthly collection of influenza vaccine uptake in health care workers show 53.1% were vaccinated by 31 December 2013 from 95.2% of Trusts, compared to 44.0% vaccinated the previous season by 30 December 2012.
- International situation
 - Overall influenza activity in North America remains high but is decreasing.
 - Influenza transmission is continuing across the EU/EEA region, with activity appearing to decline in some countries.

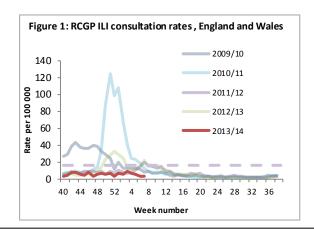
In week 7 (ending 16 February 2014), overall weekly influenza GP consultations remained low in England, Wales, Scotland and Northern Ireland.

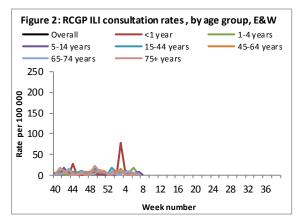
Influenza/Influenza-Like-Illness (ILI)

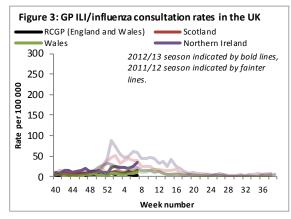
RCGP (England and Wales)

-The overall ILI consultation rate from RCGP for England and Wales remained stable at 3.4 per 100,000 in week 7 (Figure 1*). ILI rates remained stable in all three regions, North (at 1.9 per 100,000) Central (at 2.4 per 100,000) and South region (at 4.9 per 100,000).

-In week 7 2014, the highest ILI consultations were reported in 5-14 year olds (rate of 7.6 per 100,000), 65-74 year olds (4.4 per 100,000) and 15-44 year olds (4.2 per 100,000).







Northern Ireland

- -The Northern Ireland influenza rate increased from 25.0 per 100,000 in week 6 to 35.3 per 100,000 in week 7 (Figure 3).
- -In week 7 2014, the highest rates were seen in 65-74 year olds (64.0 per 100,000) and 15-44 year olds (40.8 per 100,000).

Wales

- -The Welsh influenza rate remained stable at 9.4 per 100,000 in week 7 (Figure 3).
- -The highest rate was seen in 15-44 year olds (13.0 per 100,000), 65-74 year olds (9.7 per 100,000) and 45-64 year olds (9.1 per 100,000).

Scotland

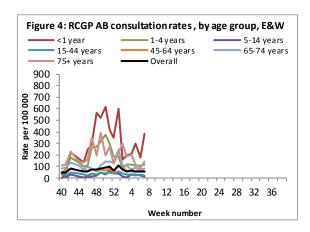
- -The Scottish ILI rate increased from 8.0 per 100,000 in week 6 to 15.2 per 100,000 in week 7 (Figure 3).
- -The highest rate was seen in 45-64 year olds (19.2 per 100,000) followed by 15-44 year olds (18.0 per 100,000).

^{*}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 57.8 per 100,000 in week 6 to 53.3 per 100,000 in week 7 (Figure 4). The highest rates were seen in <1 year olds (383.8 per 100,000) and 75+ year olds (144.0 per 100,000).



Community surveillance

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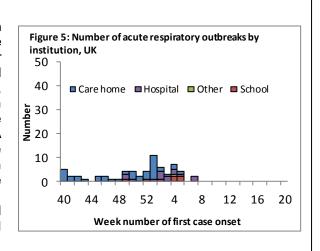
In week 7 there were further minor increases in influenza syndromic indicators and three new acute respiratory outbreaks have been reported in the last seven days.

- PHE Real-time Syndromic Surveillance
- -There have been further minor increases in influenza syndromic indicators in week 7 but levels remain below seasonally expected levels.
- -For further information, please see the syndromic surveillance webpage.

Acute respiratory disease outbreaks

-Three new acute respiratory outbreaks were reported in the last 7 days from two hospitals in London and the Midlands and East of England (both positive for A(H1N1)pdm09) and one in a care home in Scotland (parainfluenza/seasonal coronavirus). So far this season, 42 outbreaks have been reported in care homes, 15 in hospitals, seven in schools and one in a nursery (where tested, seven influenza A(H1N1)pdm09, eight influenza A (not subtyped), one influenza A(H3), nine RSV, nine rhinovirus, three parainfluenza, and four mixed infection of parainfluenza along with other viruses (one RSV, one rhinovirus, one hMPV and one seasonal coronavirus).

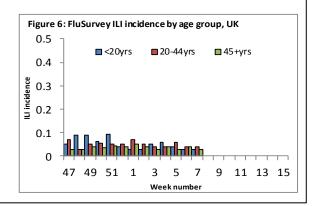
-Outbreaks should be recorded on HPZone and reported to the local Health Protection Teams and Respoidsc@phe.gov.uk.



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.

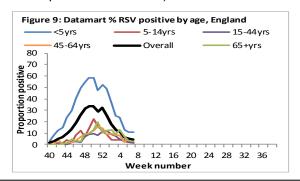
In week 7, the incidence of ILI reports was low across all age groups (Figure 6).

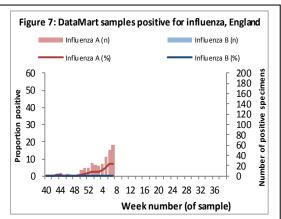


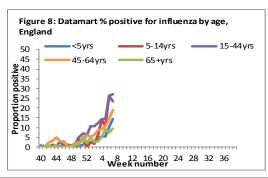
In week 7 2014, 167 influenza positive detections were recorded through the DataMart scheme (102 A(H1N1)pdm09, 13 A(H3), 48 A(not subtyped) and four B), with the highest positivity reported in 5-14 year olds. 36 samples were positive for influenza through the English sentinel schemes (24 A(H1N1)pdm09, six A(H3) and three B).

Respiratory DataMart System (England)

In week 7 2014, out of the 942 respiratory specimens reported through the Respiratory Datamart System, 102 (10.8%) were positive for flu A(H1N1)pdm09, 13 (1.4%) positive for influenza A(H3), 48 (5.1%) positive for flu A(not subtyped) and four samples were positive for influenza B (Figure 7), with the highest influenza positivity in 5-14 year olds (27.3%, Figure 8). The overall positivity for RSV remained at low levels (4.6%) in week 7, with the highest positivity in the <5 years (11.0%, Figure 9). hMPV positivity increased slightly (from 2.5% to 3.7% in week 7), rhinovirus positivity decreased (from 13.3% to 11.3% in week 7) and other respiratory viruses remained at low levels (adenovirus 2.6% and parainfluenza 1.8%).







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

-In week 7, 36 samples from England were positive for influenza (24 A(H1N1)pdm09, six A(H3), three A(unsubtyped) and three Flu B). Six samples from Scotland were positive for A(H1N1)pdm09, one sample from Northern Ireland was positive for A(H3) and no samples were received through the Welsh scheme (Table 1).

Table 1: Sentinel influenza surveillance in the UK

| Week | England | Scotland | Northern Ireland | Wales |
|------|---------------|--------------|------------------|---------|
| 04 | 10/63 (15.9%) | 4/56 (7.1%) | 7/15 (46.7%) | 0/4 (-) |
| 05 | 11/67 (16.4%) | 8/37 (21.6%) | 1/7 (-) | 1/5 (-) |
| 06 | 28/78 (35.9%) | 9/52 (17.3%) | 0/3 (-) | 2/9 (-) |
| 07 | 36/85 (42.4%) | 6/39 (15.4%) | 1/5 (-) | 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 36 influenza A(H3N2) viruses, all similar to the A/Texas/50/2012 H3N2 2013/14 vaccine strain, and 71 influenza A(H1N1)pdm09 viruses similar to the A/California/07/2009 vaccine strain for 2013/14. Three influenza B isolates, belonging to the B-Yamagata lineage have been characterised, and one from the B-Victoria lineage.

Antiviral susceptibility
Since week 40 2013, 352 and 69 influenza viruses have been tested for Osetamivir and Zanamivir susceptibility, respectively, in the UK. Two (0.6%) of 331 flu A(H1N1)pdm09 and one (5.3%) of 19 flu A(H3) viruses have been found to be resistant to Oseltamivir. No viruses were found to be resistant to Zanamivir.

· Antimicrobial susceptibility

-In the 12 weeks up to 9 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, 12 weeks up to 9 Feb 2014, E&W

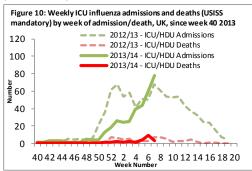
| | Tetracyclines | | Co-amoxiclav | | |
|---|----------------------|---------------------------------|----------------------|---------------------------------|--|
| Organism | Specimens tested (N) | Specimens susceptible (%) | Specimens tested (N) | Specimens susceptible (%) | |
| S. aureus | 3,193 | 92 | 232 | 90 | |
| S. pneumoniae | 2,418 | 83 | 2557* | 91* | |
| H. influenzae | 9,601 | 99 | 9,179 | 93 | |
| * S. pneumoniae isolates are not routinely tested for susceptibility to co-amoxiclav, however | | | | | |

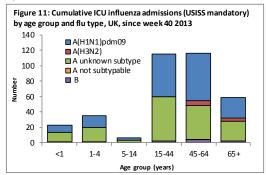
*S. pneumoniae isolates are not routinely tested for susceptibility to co-amoxiclav, how eve laboratory results for benzyl-penicillin are extrapolated to determine sensitivity to other betalactams such as co-amoxiclav. In week 7, 78 new admissions of confirmed influenza cases to ICU/HDU (35 A(H1N1)pdm09, 39 A unknown subtype, three A(H3N2) and one B) and three confirmed influenza deaths in ICU/HDU have been reported through the national USISS mandatory ICU scheme across the UK (139 Trusts in England). 74 new hospitalised confirmed influenza cases have been reported through the USISS sentinel hospital network across England (26 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 7)

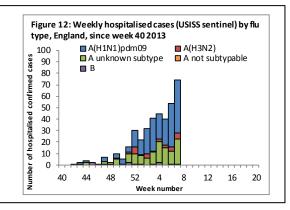
-In week 7, 78 new admissions to ICU/HDU with confirmed influenza infection (35 A(H1N1)pdm09, 39 A unknown subtype, three A(H3N2) and one B) were reported across the UK (139/156 Trusts in England) through the USISS mandatory ICU scheme (Figures 10 and 11) compared to an updated figure of 60 in week 6. Three new confirmed influenza deaths were reported in week 6 2014. A total of 354 admissions (170 A(H1N1)pdm09, 163 A(unknown), 11 A(H3N2) and 10 B) and 24 confirmed influenza deaths have been reported since week 40 2013.





 USISS sentinel weekly hospitalised confirmed influenza cases, England (week 7)

-In week 7, 74 new hospitalised confirmed influenza case were reported through the USISS sentinel hospital network from 26 NHS Trusts across England (Figure 12) compared to 54 in week 6. A total of 388 hospitalised confirmed influenza admissions (228 A(H1N1)pdm09, 117 A unknown, 30 A(H3N2) and 13 B) have been reported since week 40 2013.



All-cause mortality data

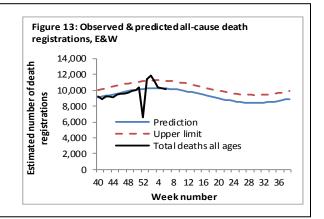
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In week 6 2014, no excess all-cause mortality by week of death was seen in England through the EuroMOMO algorithm and none has been reported since week 40 2013.

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 6 2014, an estimated 10,147 all-cause deaths were registered in England and Wales (source: Office for National Statistics). This is slightly less than the 10,258 estimated death registrations in week 5 and 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

-In week 7 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 *Excess mortality is calculated as the observed minus the standardised algorithm was seen across Wales, Scotland or expected number of deaths in weeks above threshold Northern Ireland (Table 4).

Table 3: Excess mortality by age group, England*

| Age group (years) | Excess detected in week 7 2014? | Weeks with excess in 2013/14 |
|-------------------|---------------------------------|------------------------------|
| <5 | × | NA |
| 5-14 | × | NA |
| 15-64 | × | NA |
| 65+ | × | NA |

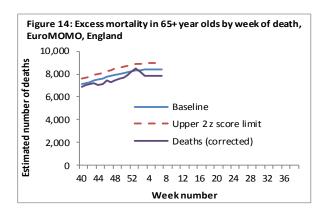


Table 4: Excess mortality by UK country*

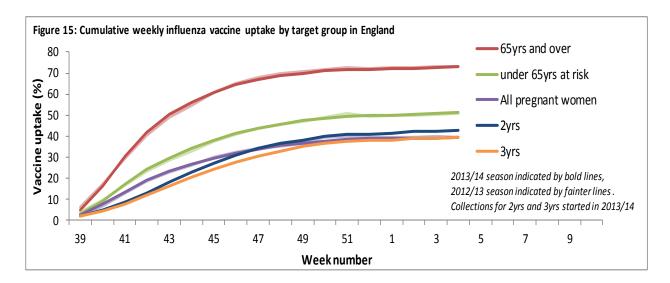
| Country | Excess detected | Weeks with excess in |
|------------------|-----------------|----------------------|
| Country | in week 7 2014? | 2013/14 |
| England | × | NA |
| Wales | × | NA |
| Scotland | × | NA |
| Northern Ireland | * | NA |

* 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 I Back to top I

- Up to week 4 2014 in 71.3% of GP practices reporting weekly to Immform, the provisional proportion of people in England who had received the 2013/14 influenza vaccine in targeted groups was as follows (Figure 15):
 - 42.6% in all 2 year olds
 - 39.3% in all 3 year olds
 - 51.3% in under 65 years in a clinical risk group
 - 39.6% in all pregnant women
 - 72.9% in 65+ year olds



- In the third monthly collection up to 31 December 2013, provisional cumulative seasonal influenza vaccine uptake from 98.5% of GP practices was 72.0% in 65 years and over, 50.2% in under 65 year olds at risk, 38.9% in all pregnant women, 41.2% in all 2 year olds and 38.1% in all 3 year olds. The report provides uptake to Area Team level, CCG level and in key targeted groups.
- Provisional data from the third monthly collection of influenza vaccine uptake by frontline healthcare workers show 53.1% were vaccinated by 31 December 2013 from 95.2% of Trusts, compared to 44.0% vaccinated the previous season by 31 December 2012. The <u>report</u> provides uptake to Trust level.

International Situation | Back to top

Overall influenza activity in North America remains high but is decreasing. Influenza transmission is continuing across the EU/EEA region, with activity appearing to decline in some countries.

Europe 14 February 2014 (European Centre for Disease Prevention and Control report)

In terms of influenza activity, Greece reported high intensity, eight countries reported medium intensity and another 19reported low intensity, the lowest category of reporting. Bulgaria, Greece, Portugal, and Spain have been reporting medium or high-intensity influenza activity for at least five consecutive weeks. Geographic patterns of influenza activity were reported as widespread by 11 countries. Increasing trends were reported by 16 countries and the UK (Northern Ireland and Wales). After seeing increasing trends over the last two weeks, Portugal and Romania reported decreasing trends for the first time this season, while Bulgaria has now been reporting decreasing trends for two consecutive weeks. The decline in influenza activity in Bulgaria, Portugal and Spain which began in week 5/2014, is continuing.

For week 6/2014, 27 countries tested 1 495 sentinel specimens, 495 (33%) of which were positive for influenza virus. Of these, 481 (97%) were type A and 14 (3%) were type B. Since week 40/2013, of 3 523 sentinel specimens positive for influenza virus, 3 461 (98%) were type A and 62 (2%) were type B. Of the 3 151 subtyped influenza viruses, 1 859 (59%) were A(H1)pdm09 and 1 292 (41%) were A(H3). The proportion of sentinel specimens testing positive for influenza virus decreased for the second 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 295 antigenically characterised viruses have differed substantially 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.

Since week 40/2013, 327 A(H1)pdm09, 85 A(H3) and 23 type B viruses have been tested for susceptibility to the neuraminidase inhibitors oseltamivir and zanamivir by genetic and/or phenotypic methods. All but three viruses showed no 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. For week 6/2014, 14 countries reported 907 respiratory syncytial virus detections, maintaining the downward trend and indicating that the peak for Europe as a whole this season appears to have occurred in week 1/2014.

For week 6/2014, 165 hospitalised, laboratory-confirmed influenza cases were reported by five countries (France, Ireland, Romania, Spain and Sweden) including 53 cases admitted to intensive care units (ICU).

Since week 40/2013, six countries have reported 1 941 hospitalised, laboratory-confirmed influenza cases: 1 920 (99%) were related to influenza virus type A infection and 21 (1%) to type B virus infection (Tables 5 and 6). A total of 1 322 influenza A viruses have been subtyped, 1 054 (80%) were A(H1)pdm09 and 268 (20%) were A(H3). This distribution was similar in cases admitted to ICU and cases admitted to other wards.

Five countries reported a total of 158 fatal cases (Table 6). All fatal cases were associated with influenza virus type A infection and 117 of them were subtyped: 94 (80%) as A(H1)pdm09 and 23 (20%) as A(H3). Of the 156 fatal cases with known age, 88 (56%) were over 65 years.

United States of America 14 February 2014 (Centre for Disease Control report)

During week 6 (February 2-8, 2014), influenza activity decreased, but remained high in the United States.

Nationwide during week 6, 3.0% 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 1.6% to 4.5% during week 6. All 10 regions reported a proportion of outpatient visits for ILI above their region-specific baseline level.

During week 6, 8.4% of all deaths reported through the 122 Cities Mortality Reporting System were due to P&I. This percentage was above the epidemic threshold of 7.3% for week 6. Ten influenza-associated pediatric deaths were reported to CDC during week 6. Six deaths were associated with a 2009 H1N1 virus and occurred during weeks 4 and 5 (weeks ending January 25 and February 1, 2014). Four deaths were associated with an influenza A virus for which no subtyping was performed and occurred during weeks 2, 3, 4, and 5 (weeks ending January 11, January 18, January 25, and February 1, 2014). A total of 50 influenza-associated pediatric deaths have been reported during the 2013-2014 season from New York City [1] and 24 states (AR [3], AZ [1], CA [4]; FL [3], GA [1]; IA [1]; KS [1], KY [1]; LA [4]; MA [1]; MI [2], MS [1], NC [3]; NE [1], NV [1], OK [2]; OR [1], PA [1], TN [4]; TX [9]; UT [1]; VA [1]; WI [1]; and WV [1]).

Of 7,562 specimens tested and reported during week 6 by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories, 1,268 (16.8%) were positive for influenza. By type, 1,154 (91.0%) were influenza A (708 (61.4%) A(H1N1)pdm09, 401 subtyping not performed and 45 (3.9%) A(H3)) and 114 (9.0%) were influenza B.

Canada 14 February 2014 (Public Health Agency report)

In week 06, overall influenza activity continued to decrease in Canada, with the exception of ongoing activity in the more eastern provinces which experienced a later start to the influenza season. In week 06, one region in Manitoba reported widespread activity, and 11 regions (in BC(1), AB(1), ON(6), QC(2) and NS(1)) reported localized activity. Influenza activity levels are declining, with fewer regions reporting widespread or localized activity. The national influenza-like-illness (ILI) consultation rate continued to decrease from 32.5/1,000 in week 05 to 27.2/1,000 in week 06; which is within the expected range for week 06. In week 06, 32 new laboratory-confirmed influenza-associated paediatric (≤16 years of age) hospitalizations were reported by the Immunization Monitoring Program Active (IMPACT) network, compared to 55 in week 05, indicating that the number of new cases may be starting to decline. In week 06, influenza A was reported in 28 cases and influenza B in four cases. Twenty-two (69%) of the cases were <5 years of age. Four ICU admissions were reported in week 06, one child under 6 months of age, one 6-23 months of age, one 2-4 years of age, and one 5-9 years of age; all with influenza A. No deaths were reported.

• Global influenza update 10 February 2014 (WHO website)

In North America, influenza activity decreased in the United States of America and Canada, and increased in Mexico with A(H1N1)pdm09 virus predominating. In Europe influenza activity continued to increase, particularly in the south with both influenza A viruses circulating. In eastern Asia influenza activity remained high with influenza A(H1N1)pdm09 predominating, with increases observed in some countries. In western Asia influenza activity was increasing with mainly A(H3N2), while Egypt reported high activity of influenza A(H1N1)pdm09.

In countries of tropical areas variable influenza activity was reported.

In the southern hemisphere influenza activity remained low. Based on FluNet reporting (as of 6 February 2014, 12:30 UTC), during weeks 3 to 4 (12 January 2014 to 25 January 2014), National Influenza Centres (NICs) and other national influenza laboratories from 97 countries, areas or territories reported data. The WHO GISRS laboratories tested more than 68 458 specimens. 19 547 were positive for influenza viruses, of

which 17 992 (92%) were typed as influenza A and 1555 (8%) as influenza B. Of the sub-typed influenza A viruses, 8257 (79.75%) were influenza A(H1N1)pdm09, 2096 (20.24%) were influenza A(H3N2) and 1 (0.01%) was influenza A(H5N1). Of the characterized B viruses, 200 (69.7%) belong to the B-Yamagata lineage and 87 (30.3%) to the B-Victoria lineage.

Avian Influenza 18 February 2014 (WHO website)

Influenza A(H7N9)

Since 10 February 2014, 136 hospitalised cases of human infection with influenza A(H7N9) in China have been reported by WHO, including 11 deaths, compared to 114 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 7 February 2014

Up to 7 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 108 suspect cases in the UK that have been investigated for MERS-CoV and tested negative. A further 178 confirmed cases have been reported internationally. This results in a current global total of 182 cases, 79 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.

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Weekly consultation rates in national sentinel schemes

- Sentinel schemes operating across the UK
- RCGP scheme
- Northern Ireland surveillance (<u>Public Health Agency</u>)
- Scotland surveillance (<u>Health Protection Scotland</u>)
- Wales surveillance (<u>Public Health Wales</u>)
- Real time syndromic surveillance
- MEM threshold paper

Community surveillance

- Outbreak reporting
- FluSurvey
- MOSA

Disease severity and mortality data

- <u>USISS</u> system
- <u>EuroMOMO</u> 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)