Influenza continues to circulate as evidenced by ongoing influenza-confirmed ICU/HDU and hospital admissions, with indicators suggesting activity is starting to decrease. A letter has been issued recommending the use of antivirals where appropriate.

- **Overall weekly influenza GP consultation rates across the UK**
  - In week 11 (ending 16 March 2014), overall weekly influenza GP consultations remained low in England (3.1 per 100,000), Wales (5.5 per 100,000), Scotland (12.7 per 100,000) and Northern Ireland (39.2 per 100,000).
  - In week 11 syndromic surveillance indicators for influenza remain stable and similar to seasonally expected levels.
  - Six new acute respiratory influenza outbreaks have been reported in the past seven days across the UK (four in hospitals (all A(H1N1)pdm09), one in a care home (A(not subtyped) and one in a travelling community).

- **Virology**
  - In week 11 2014, 117 influenza positive detections were recorded through the DataMart scheme (55 A(H1N1)pdm09, 16 A(H3), 43 A(not subtyped) and three B, a positivity of 15.7% compared to 16.1% in week 10), with the highest positivity reported in 45-64 year olds (20.5%).
  - 24 samples were positive for influenza through the English GP sentinel schemes (17 A(H1N1)pdm09, sic A(H3) and one B, positivity of 44%).

- **Disease severity and mortality**
  - 48 new admissions to ICU/HDU with confirmed influenza (27 A(H1N1)pdm09, three A(H3N2) and 18 A unknown subtype) and one confirmed influenza death were reported through the USISS mandatory ICU surveillance scheme across the UK (133 Trusts in England) in week 11. 20 new hospitalised confirmed influenza cases were reported through the USISS sentinel hospital network across England (22 Trusts).
  - In week 11 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.
  - Influenza transmission is continuing across the EU/EEA region with considerable variation between countries.
In week 11 (ending 16 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 3.1 per 100,000 in week 11 (Figure 1*). ILI rates remained stable in the North at 2.0 per 100,000, Central at 3.8 per 100,000) and South region at 3.0 per 100,000.

- In week 11 2014, ILI consultations were highest in 45-64 year olds (rate of 4.3 per 100,000 and 15-44 year olds (4.0 per 100,000).

**Northern Ireland**

- The Northern Ireland influenza rate increased from 35.0 per 100,000 in week 10 to 39.2 per 100,000 in week 11 (Figure 3).

- In week 11 2014, the highest rates were seen in 45-64 year olds (58.7 per 100,000), 65-74 year olds (39.3 per 100,000) and 15-44 year olds (38.1 per 100,000).

**Scotland**

- The Scottish ILI rate remained stable at 12.7 per 100,000 in week 11 (Figure 3).

- The highest rate was seen in 15-44 year olds (15.7 per 100,000) followed by 45-64 year olds (15.2 per 100,000).

**Wales**

- The Welsh influenza rate remained stable at 5.5 per 100,000 in week 11 (Figure 3).

- The highest rate was seen in 45-64 year olds (9.8 per 100,000) and 15-44 year olds (5.9 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 63.4 per 100,000 in week 10 to 59.5 per 100,000 in week 11 (Figure 4). The highest rates were seen in <1 year olds (161.7 per 100,000) and 75+ year olds (139.9 per 100,000).

**Community surveillance**

In week 11 influenza syndromic indicators remained stable and five new acute respiratory outbreak has been reported in the last seven days.

• PHE Real-time Syndromic Surveillance

- In week 11 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

- Six new acute respiratory outbreaks were reported in the last seven days. Three were reported from hospitals in Midlands and East of England (all influenza A(H1N1)pdm09), one in a care home in the South of England (influenza A(not subtyped)), one from a travelling community in the South of England (not tested) and one in a hospital in Northern Ireland (A(H1N1)pdm09). So far this season, 48 outbreaks have been reported in care homes, 31 in hospitals, nine in schools, one in a nursery and one in a travelling community (where tested, 21 influenza A(H1N1)pdm09, 14 influenza A (not subtyped), three influenza A(H3), nine RSV, nine rhinovirus, three parainfluenza, and five mixed infections of parainfluenza along with other viruses (one each of influenza A and influenza B, RSV, rhinovirus, hMPV and seasonal coronavirus).
- Outbreaks should be recorded on HPZone and reported to the local Health Protection Teams and Resp cidsc@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 11, the incidence of ILI reports was low across all age groups (Figure 6).
In week 11 2014, 117 influenza positive detections were recorded through the DataMart scheme (55 A(H1N1)pdm09, 16 A(H3), 43 A(not subtyped) and three B), with the highest positivity reported in 45-64 year olds. 24 samples were positive for influenza through the English sentinel schemes (17 A(H1N1)pdm09, six A(H3) and one B).

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

  - In week 11, 24 samples from England were positive for influenza (17 A(H1N1)pdm09, six A(H3) and one B). Twelve samples from Scotland were positive for influenza A(H1N1)pdm09, three samples from Northern Ireland were positive for influenza (two A(H1N1)pdm09 and one A(H3)) and no sample from Wales was positive for flu (Table 1).

- **Respiratory DataMart System (England)**

  In week 11 2014, out of the 747 respiratory specimens reported through the Respiratory Data Mart System, 55 (7.4%) were positive for A(H1N1)pdm09, 16 (2.1%) positive for A(H3), 43 (5.8%) positive for A (not subtyped) and three samples were positive for influenza B (Figure 7), with the highest influenza positivity in 45-64 year olds (20.5%, Figure 8). The overall positivity for RSV remained low (1.8%) in week 11 with the highest positivity remaining in the <5 years (4.2%, Figure 9). Rhinovirus and hMPV remained stable at 10.4% and 3.5% in week 11. Other respiratory viruses remained at low levels: adenovirus 4.5%, parainfluenza 2.3%.

- **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.

- **Antimicrobial susceptibility**

  - In the 12 weeks up to 9 March 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.

- **Antiviral susceptibility**

  Since week 40 2013, 638 and 87 influenza viruses have been tested for Oseltamivir and Zanamivir susceptibility, respectively, in the UK. Seven (1.1%) of 623 flu A(H1N1)pdm09 and one (5.0%) of 20 flu A(H3) viruses have been found to be resistant to Oseltamivir. No viruses were found to be resistant to Zanamivir.

---

**Table 1: Sentinel influenza surveillance in the UK**

<table>
<thead>
<tr>
<th>Week</th>
<th>England</th>
<th>Scotland</th>
<th>Northern Ireland</th>
<th>Wales</th>
</tr>
</thead>
<tbody>
<tr>
<td>08</td>
<td>21/70 (30%)</td>
<td>7/27 (25.9%)</td>
<td>1/4 (-)</td>
<td>1/1 (-)</td>
</tr>
<tr>
<td>09</td>
<td>19/67 (28.4%)</td>
<td>13/53 (24.5%)</td>
<td>2/5 (-)</td>
<td>2/3 (-)</td>
</tr>
<tr>
<td>10</td>
<td>18/42 (42.9%)</td>
<td>16/49 (32.7%)</td>
<td>7/10 (70%)</td>
<td>1/2 (-)</td>
</tr>
<tr>
<td>11</td>
<td>24/54 (44.4%)</td>
<td>12/25 (48%)</td>
<td>3/6 (-)</td>
<td>0/3 (-)</td>
</tr>
</tbody>
</table>

NB. Proportion positive omitted when fewer than 10 specimens tested

---

**Table 2: Antimicrobial susceptibility surveillance in lower respiratory tract isolates, 23 weeks up to 9 March 2014, E&W**

<table>
<thead>
<tr>
<th>Organism</th>
<th>Tetracyclines</th>
<th>Co-amoxiclav</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Specimens tested (N)</td>
<td>Specimens susceptible (%)</td>
</tr>
<tr>
<td><em>S. aureus</em></td>
<td>3,191</td>
<td>92 (29.9%)</td>
</tr>
<tr>
<td><em>S. pneumoniae</em></td>
<td>2,524</td>
<td>83 (32.9%)</td>
</tr>
</tbody>
</table>

* *S. pneumoniae* isolates are not routinely tested for susceptibility to co-amoxiclav, how ever laboratory results for benzyl-penicillin are extrapolated to determine sensitivity to other betalactams such as co-amoxiclav.
In week 11, 48 new admissions to ICU/HDU (27 A(H1N1)pdm09, three A(H3N2) and 18 A unknown subtype) and one confirmed influenza death in ICU/HDU have been reported through the national USISS mandatory ICU scheme across the UK (133 Trusts in England). 20 new hospitalised confirmed influenza cases have been reported through the USISS sentinel hospital network across England (22 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 11)

- In week 11, 48 new admissions to ICU/HDU with confirmed influenza infection (27 A(H1N1)pdm09, three A(H3N2) and 18 A unknown subtype) were reported across the UK (133/156 Trusts in England) through the USISS mandatory ICU scheme (Figures 10 and 11) compared to 69 in week 10. One new confirmed influenza death was reported in week 11 2014. A total of 637 admissions (339 A(H1N1)pdm09, 265 A(unknown), 21 A(H3N2) and 12 B) and 52 confirmed influenza deaths have been reported since week 40 2013.

- USISS sentinel weekly hospitalised confirmed influenza cases, England (week 11)

- In week 11, 20 new hospitalised confirmed influenza cases were reported through the USISS sentinel hospital network from 22 NHS Trusts across England (Figure 12) compared to 66 in week 10. A total of 685 hospitalised confirmed influenza admissions (425 A(H1N1)pdm09, 174 A unknown, 67 A(H3N2) and 19 B) have been reported since week 40 2013.

All-cause mortality data

In week 11 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 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 10 2014, an estimated 10,174 all-cause deaths were registered in England and Wales (source: Office for National Statistics). This is similar to the 10,208 estimated death registrations in week 9 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 Ireland

- In week 11 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 11 (Table 4).

<table>
<thead>
<tr>
<th>Table 3: Excess mortality by age group, England*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age group (years)</td>
</tr>
<tr>
<td>-------------------</td>
</tr>
<tr>
<td>&lt;5</td>
</tr>
<tr>
<td>5-14</td>
</tr>
<tr>
<td>15-64</td>
</tr>
<tr>
<td>65+</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Table 4: Excess mortality by UK country*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>England</td>
</tr>
<tr>
<td>Wales</td>
</tr>
<tr>
<td>Scotland</td>
</tr>
<tr>
<td>Northern Ireland</td>
</tr>
</tbody>
</table>

* 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**

- 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 continues to decrease. Influenza transmission is continuing across the EU/EEA region with considerable variation between countries.

- **Europe** 14 March 2014 (European Centre for Disease Prevention and Control report)

In terms of influenza activity, one country (Greece) reported high intensity, nine countries reported medium intensity and 18 reported low intensity, the lowest category of reporting. Belgium, Estonia, France, Iceland, Ireland and Sweden have been reporting medium intensity influenza activity for at least four consecutive weeks. Thirteen countries have been reporting low intensity throughout the season. Geographic patterns of influenza activity varied across Europe: widespread activity was reported by 12 countries; regional activity by Finland, Germany, Italy, the Netherlands, Slovenia and the UK (England and Scotland); local activity by Bulgaria, Norway and Romania; and sporadic activity by the Czech Republic, Latvia, Lithuania, Portugal, Slovakia, Spain and the UK (Northern Ireland, and Wales). Cyprus reported no influenza activity. Increasing trends were reported by Austria, Croatia, Estonia, the Netherlands, Romania and the UK (Northern Ireland). Ten countries and the UK (England and Scotland) reported decreasing trends. Belgium, Italy and Spain have been reporting decreasing trends for at least four consecutive weeks. The incidence of ILI rates has returned below epidemic threshold in Spain.

For week 10/2014, 899 sentinel specimens were tested across 22 countries, 288 (32%) were positive for influenza virus (Tables 1–2, Figures 1–2). Of these, 279 (97%) were type A and nine (3%) were type B. Since week 40/2013, of 5 779 sentinel specimen testing positive for influenza virus, 5 659 (98%) were type A and 120 (2%) were type B. Of the 5 231 subtyped influenza viruses, 2 961 (57%) were A(H1)pdm09 and 2 270 (43%) 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, 75% A(H1)pdm09 and 25% 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 seventh consecutive week after peaking in week 3/2014.

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 803 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 WHO CC Report, February 2014.

Since week 40/2013, 622 A(H1)pdm09, 133 A(H3) and 35 type B viruses have been tested for susceptibility to the neuraminidase inhibitors oseltamivir and zanamivir by genetic and/or phenotypic methods. Eight A(H1N1)pdm09 viruses carried the NA-H275Y amino acid substitution associated with highly reduced inhibition by oseltamivir and normal inhibition by zanamivir. One of these viruses showed phenotypic highly-reduced inhibition by oseltamivir and normal inhibition by zanamivir. One A(H3N2) virus carried the NA-E119V amino acid substitution and showed reduced inhibition by oseltamivir and normal inhibition by zanamivir.

For week 8/2014, 16 countries reported 460 respiratory syncytial virus detections, maintaining the downward trend and indicating that the epidemic peak for the reporting countries occurred in week 1/2014.

For week 10/2014, 206 hospitalised laboratory-confirmed influenza cases were reported by six countries (France, Ireland, Romania, Spain, Sweden and the UK) (Table 5). Two hundred and four cases tested positive for influenza A virus and two for influenza B virus (Table 5). Ninety-three cases were admitted to intensive care units (ICU).

Since week 40/2013, seven countries have reported 3 707 hospitalised, laboratory-confirmed influenza cases: 3 684 (99%) were related to influenza virus type A infection and 23 (1%) to type B virus infection (Tables 5 and 6). Of 2 496 subtyped influenza A viruses, 1 887 (76%) were A(H1)pdm09 and 609 (24%) were A(H3) (Table 5). Higher proportion of A(H1)pdm09 viruses has been detected in patients in ICU (1038 out of 1214 subtyped, 86%) than in patients in other wards (849 out of 1282 subtyped, 66%). The reasons behind the different distribution of (sub)types in different types of wards are currently unknown.

Of the 3 141 hospitalised cases with reported age, 1 197 (38%) were over 65 years of age. Five countries reported a total of 306 fatal cases (Table 6), and 303 (99%) cases were associated with influenza virus type A infection and three (1%) with type B virus. Of 237 influenza A viruses subtyped for fatal cases, 194 (82%) were A(H1)pdm09 and 43 (18%) were A(H3). The age was reported for 303 of the fatal cases: 166 (55%) were over 65 years of age.
During week 10 (March 2-8, 2014), influenza activity continued to decrease in the United States. Nationwide during week 10, 2.0% 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 at the national baseline of 2.0%.

During week 10, 6.9% of all deaths reported through the 122 Cities Mortality Reporting System were due to P&I. This percentage was below the epidemic threshold of 7.4% for week 10. Three influenza-associated pediatric deaths were reported to CDC during week 10. Two deaths were associated with a 2009 H1N1 virus and occurred during weeks 52 and 7 (weeks ending December 28, 2013 and February 15, 2014). One death was associated with an influenza A virus for which no subtyping was performed and occurred during week 6 (week ending February 1, 2014). A total of 68 influenza-associated pediatric deaths have been reported during the 2013-2014 season from Chicago [1], New York City [1] and 28 states (AR [4], AZ [1], CA [6]; FL [3], GA [1]; IA [1]; IL [1]; KS [2], KY [1]; LA [5]; MA [2]; MD [1]; ME [1]; MI [2], MS [1], NC [5]; NE [1], NV [1], OK [2]; OR [1], PA [1], SC [2], TN [4]; TX [11]; UT [2]; VA [1]; WI [1]; and WV [2]).

Of 6,372 specimens tested and reported during week 10 by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories, 535 (8.4%) were positive for influenza. By type, 362 (67.7%) were influenza A (153 (42.3%) A(H1N1)pdm09, 178 subtyping not performed and 31 (8.6%) A(H3)) and 173 (32.3%) were influenza B.

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

In week 10, influenza activity in Canada continues to decrease overall, and is consistent with activity at this time in past influenza seasons. In week 10, influenza activity levels continued to decline. No region reported widespread activity and eight regions (SK(1), ON(5), and QC(2)) reported localized activity. The national influenza-like-illness (ILI) consultation rate increased from 32.7/1,000 in week 09 to 39.8/1,000 in week 10; but is still within the expected range for this time of year. In week 10, 35 new laboratory-confirmed influenza-associated paediatric (≤16 years of age) hospitalizations were reported by the Immunization Monitoring Program Active (IMPACT) network, compared to 26 in week 09. In week 10, influenza A was reported in 23 cases and influenza B in 12 cases. A greater proportion of cases have been reported with influenza B cases in recent weeks, following the trend in laboratory detections (Figure 8a). Although the number of cases is small, 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. In week 10, one ICU admission was reported in a child 5-9 years of age with influenza B. No deaths were reported in week 10.

**Canada** 14 March 2014  (Public Health Agency report)

In North America, influenza activity continued to decrease overall, but remained elevated in some regions. Influenza A(H1N1)pdm09 continued as the predominant circulating virus, and influenza B detections increased slightly throughout the region. In Europe, influenza activity was variable between countries. Overall trends showed slight increases in activity in the northern and eastern regions, and decreases in the southwestern region. Influenza A(H1N1)pdm09 and A(H3N2) continued to circulate with variable predominance among countries.

In Eastern Asia, influenza A(H1N1)pdm09 remained predominant and trends were inconsistent. Influenza activity in China began to decrease while activity in Mongolia continued to increase.

In Tropical Asia, influenza activity was largely decreased, however Thailand reported increasing influenza A(H1N1)pdm09 activity.

In Northern Africa and Western Asia, influenza activity varied, with Egypt continuing to report high activity of influenza A(H1N1)pdm09.

Based on FluNet reporting (as of 4 March 2014, 12:15 UTC), during weeks 7 to 8 (9 February 2014 to 22 February 2014), National Influenza Centres (NICs) and other national influenza laboratories from 80 countries, areas or territories reported data. The WHO GISRS laboratories tested more than 80 809 specimens. 16 409 were positive for influenza viruses, of which 13 869 (84.5%) were typed as influenza A and 2540 (15.5%) as influenza B. Of the sub-typed influenza A viruses, 6283 (70.6%) were influenza A(H1N1)pdm09 and 2612 (29.4%) were influenza A(H3N2). Of the characterized B viruses, 124 (84.9%) belonged to the B-Yamagata lineage and 22 (15.1%) to the B-Victoria lineage.
Avian Influenza 17 March 2014 (WHO website)

**Influenza A(H7N9)**
In the past week, ten 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 17 March 2014**
Up to 12 March 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 185 confirmed cases have been reported internationally. This results in a current global total of 191 cases, 82 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**
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**
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
- 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)