# SURVEILLANCE REPORT

## Weekly influenza surveillance overview

21 January 2011

# Main surveillance developments in week 2/2011 (10 Jan 2011–16 Jan 2011)

*This first page contains the main developments of this week and can be printed separately or together with the following more detailed information.*

- Most countries are now reporting regional or widespread influenza activity, with medium to very high influenza-like illness/acute respiratory infection (ILI/ARI) consultation rates and increasing trends. This is more prominent in Western European countries.
- Forty-three per cent of sentinel swabs tested positive for influenza: 74% were type A, and of the type A viruses subtyped, 99% were A(H1N1) 2009.
- Since week 40/2010, 1711 severe acute respiratory infection (SARI) cases, including 73 fatal cases, have been reported by eight countries.
- The number of severe influenza cases in hospital requiring intensive care is now declining in the UK but are increasing in some other countries.

**Sentinel surveillance of influenza-like illness (ILI)/acute respiratory infection (ARI)**: Twenty of the 27 reporting countries and the UK (England and Scotland) experienced medium or higher influenza activity intensity. Twenty three countries and the UK (England, Scotland and Wales) reported local or wider geographic spread. Twenty five countries reported stable or increasing trends. For more information, **click here.**

**Virological surveillance:** Sentinel physicians collected 2428 specimens, 1048 (43%) of which tested positive for influenza. For more information, **click here.**

**Hospital surveillance of severe acute respiratory infection (SARI):** At least 35% of the reported SARI cases were admitted to intensive care, and 16% required ventilatory support. For more information, **click here.**

# Sentinel surveillance (ILI/ARI)

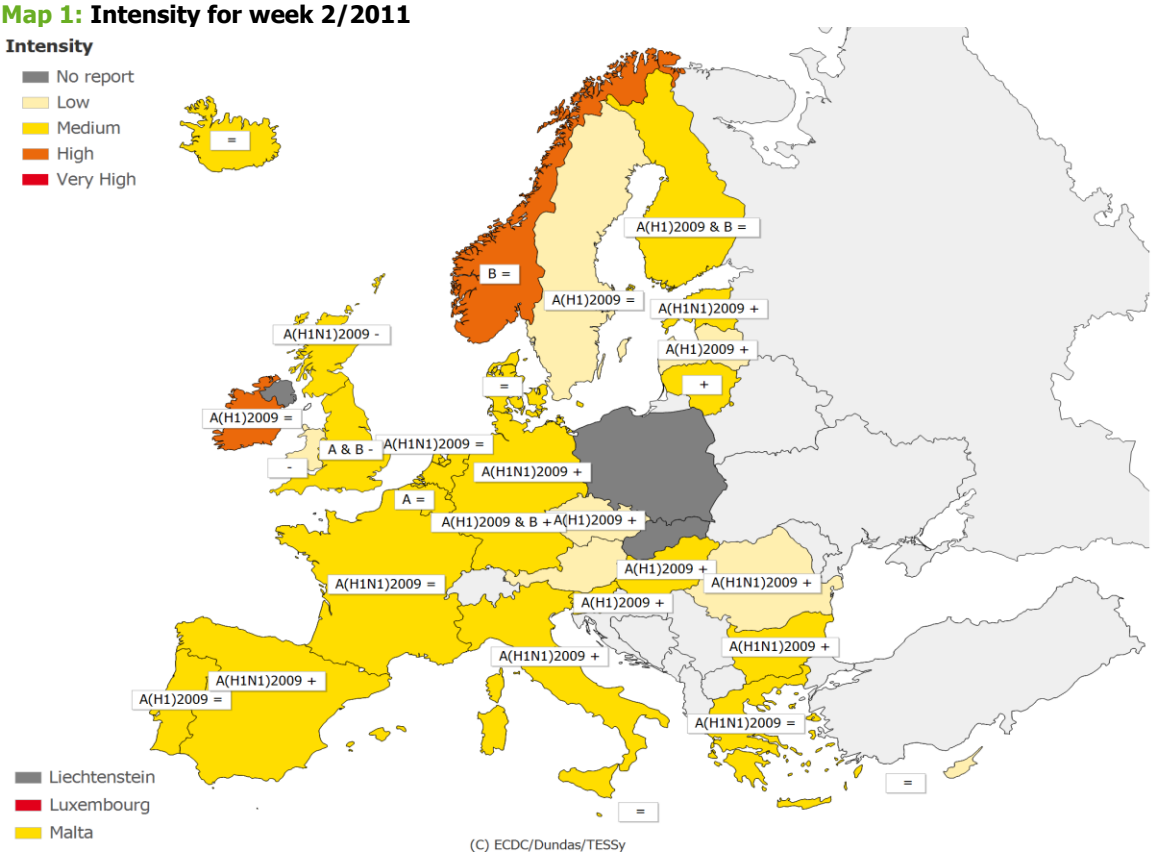
## Weekly analysis – epidemiology

In week 2/2011, 27 countries reported on intensity of influenza activity (Table 1, Map 1). Luxembourg reported very high intensity; Ireland and Norway reported high intensity. Medium intensity was reported by Belgium, Bulgaria, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Lithuania, Malta, the Netherlands Portugal, Slovenia, Spain and the UK (England and Scotland). The remaining six countries continued to report low intensity.

In week 2/2011, 27 countries reported on the geographic spread of influenza (Table 1, Map 2). Widespread activity continued to be seen in Belgium, Denmark, Estonia, France, Ireland, Luxembourg, the Netherlands, Norway, Portugal and the UK (England, Scotland and Wales). Regional activity was still observed in Finland, Italy and Lithuania, and now in Bulgaria, Germany and Latvia. Eight countries reported sporadic or local activity. Austria was the only country still reporting no activity.

The trend indicator was reported by 26 countries with increasing or stable trends in 25 countries. The UK (England, Scotland and Wales) reported a decreasing trend (Table 1, Map 2).

**Map 1: Intensity for week 2/2011**




(C) ECDC/Dundas/TESSy

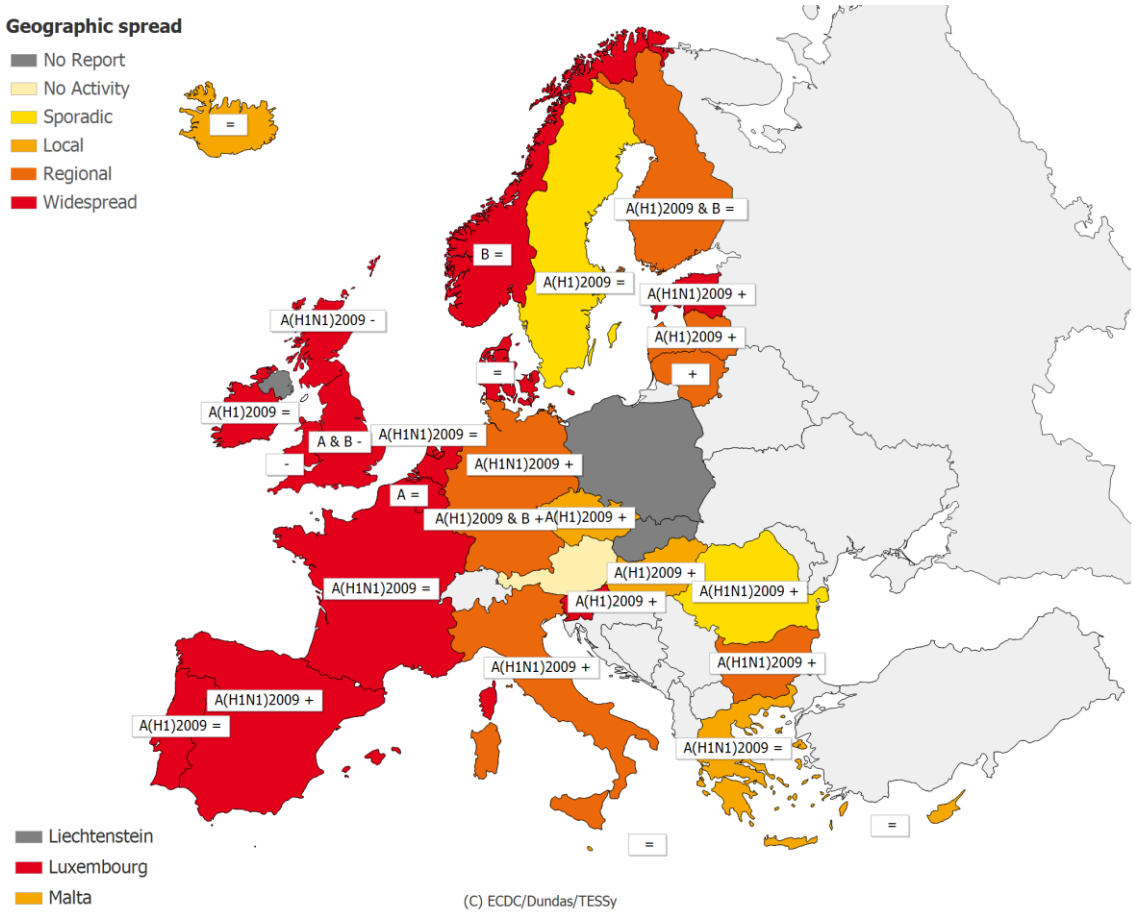
* A type/subtype is reported as dominant when > 40 % of all samples are positive for the type/subtype.

Legend:

| | |
|---|---|
| **Low** | No influenza activity or influenza at baseline levels |
| **Medium** | Usual levels of influenza activity |
| **High** | Higher than usual levels of influenza activity |
| **Very high** | Particularly severe levels of influenza activity |

| | |
|---|---|
| **-** | Decreasing clinical activity |
| **+** | Increasing clinical activity |
| **=** | Stable clinical activity |
| **A** | Type A |
| **A & B** | Type A and B |
| **A(H1)2009** | Type A, Subtype (H1)2009 |
| **A(H1)2009 & B** | Type B and Type A, Subtype (H1)2009 |
| **A(H1N1) 2009** | Type A, Subtype (H1N1)2009 |
| **B** | Type B |

## Map 2: Geographic spread for week 2/2011




* A type/subtype is reported as dominant when at least ten samples have been detected as influenza positive in the country and of those > 40 % are positive for the type/subtype.

Legend:

| | |
|---|---|
| **No activity** | No evidence of influenza virus activity (clinical activity remains at baseline levels) |
| **Sporadic** | Isolated cases of laboratory confirmed influenza infection |
| **Local outbreak** | Increased influenza activity in local areas (e.g. a city) within a region, or outbreaks in two or more institutions (e.g. schools) within a region (laboratory confirmed) |
| **Regional activity** | Influenza activity above baseline levels in one or more regions with a population comprising less than 50% of the country's total population (laboratory confirmed) |
| **Widespread** | Influenza activity above baseline levels in one or more regions with a population comprising 50% or more of the country's population (laboratory confirmed) |

| | |
|---|---|
| **-** | Decreasing clinical activity |
| **+** | Increasing clinical activity |
| **=** | Stable clinical activity |
| **A** | Type A |
| **A & B** | Type A and B |
| **A(H1)2009** | Type A, Subtype (H1)2009 |
| **A(H1)2009 & B** | Type B and Type A, Subtype (H1)2009 |
| **A(H1N1) 2009** | Type A, Subtype (H1N1)2009 |
| **B** | Type B |

**Table 1: Epidemiological and virological overview by country, week 2/2011**

| Country | Intensity | Geographic spread | Trend | No. of sentinel swabs | Dominant type | Percentage positive* | ILI per 100.000 | ARI per 100.000 | Epidemiological overview | Virological overview |
|---|---|---|---|---|---|---|---|---|---|---|
| Austria | Low | No activity | Unknown (no information available) | 39 | None | 35.9 | 4.8 | 34.1 | Graphs | Graphs |
| Belgium | Medium | Widespread | Stable | 74 | A | 67.6 | 441.7 | 1691.8 | Graphs | Graphs |
| Bulgaria | Medium | Regional | Increasing | 13 | A(H1)2009 | 46.2 | - | 1529.4 | Graphs | Graphs |
| Cyprus | Low | Local | Stable | - | - | 0.0 | -* | -* | Graphs | Graphs |
| Czech Republic | Low | Local | Increasing | 19 | A(H1)2009 | 36.8 | 41.4 | 1017.2 | Graphs | Graphs |
| Denmark | Medium | Widespread | Stable | 27 | None | 55.6 | - | - | Graphs | Graphs |
| Estonia | Medium | Widespread | Increasing | 59 | A(H1)2009 | 50.8 | 17.9 | 387.8 | Graphs | Graphs |
| Finland | Medium | Regional | Stable | 50 | B, A(H1)2009 | 54.0 | - | - | Graphs | Graphs |
| France | Medium | Widespread | Stable | 157 | A(H1)2009 | 56.1 | - | 2489.0 | Graphs | Graphs |
| Germany | Medium | Regional | Increasing | 200 | A(H1)2009 | 53.5 | - | 1179.6 | Graphs | Graphs |
| Greece | Medium | Local | Stable | 14 | A(H1)2009 | 35.7 | 147.3 | - | Graphs | Graphs |
| Hungary | Medium | Local | Increasing | 102 | A(H1)2009 | 23.5 | 184.0 | - | Graphs | Graphs |
| Iceland | Medium | Local | Stable | - | - | 0.0 | 14.2 | - | Graphs | Graphs |
| Ireland | High | Widespread | Stable | 120 | A(H1)2009 | 20.8 | 173.0 | - | Graphs | Graphs |
| Italy | Medium | Regional | Increasing | 94 | A(H1)2009 | 41.5 | 582.3 | - | Graphs | Graphs |
| Latvia | Low | Regional | Increasing | 0 | A(H1)2009 | 0.0 | 41.0 | 1212.2 | Graphs | Graphs |
| Lithuania | Medium | Regional | Increasing | - | - | 0.0 | 79.6 | 712.8 | Graphs | Graphs |
| Luxembourg | Very High | Widespread | Increasing | 59 | B, A(H1)2009 | 130.5 | -* | -* | Graphs | Graphs |
| Malta | Medium | Local | Stable | - | - | 0.0 | -* | -* | Graphs | Graphs |
| Netherlands | Medium | Widespread | Stable | 40 | A(H1)2009 | 52.5 | 70.8 | - | Graphs | Graphs |
| Norway | High | Widespread | Stable | 15 | B | 66.7 | 181.5 | - | Graphs | Graphs |
| Poland | | | | - | - | 0.0 | - | - | | |
| Portugal | Medium | Widespread | Stable | 21 | A(H1)2009 | 14.3 | 68.8 | - | Graphs | Graphs |
| Romania | Low | Sporadic | Increasing | 51 | A(H1)2009 | 11.8 | 19.7 | 783.6 | Graphs | Graphs |
| Slovakia | | | | 1 | None | 0.0 | - | - | Graphs | Graphs |
| Slovenia | Medium | Widespread | Increasing | 70 | A(H1)2009 | 58.6 | 55.3 | 1664.8 | Graphs | Graphs |
| Spain | Medium | Widespread | Increasing | 522 | A(H1)2009 | 44.1 | 237.0 | - | Graphs | Graphs |
| Sweden | Low | Sporadic | Stable | 81 | A(H1)2009 | 25.9 | 25.8 | - | Graphs | Graphs |
| UK - England | Medium | Widespread | Decreasing | 541 | AB | 27.7 | 66.5 | 530.4 | Graphs | Graphs |
| UK - Northern Ireland | | | | - | - | 0.0 | - | - | | |
| UK - Scotland | Medium | Widespread | Decreasing | 59 | A(H1)2009 | 88.1 | 19.3 | 326.6 | Graphs | Graphs |
| UK - Wales | Low | Widespread | Decreasing | - | - | 0.0 | 51.5 | - | Graphs | Graphs |
| Europe | | | | 2428 | | 43.2 | | | | Graphs |

**Incidence per 100 000 is not calculated for these countries as no population denominator is provided.*
*Note: Liechtenstein is not reporting to the European Influenza Surveillance Network*

## Description of the system

This surveillance is based on nationally organized sentinel networks of physicians, mostly general practitioners (GPs), covering at least 1–5% of the population in their countries. All EU/EEA Member States (except Liechtenstein) are participating. Depending on their country's choice, each sentinel physician reports the weekly number of patients seen with influenza-like illness (ILI), acute respiratory infection (ARI) or both to a national focal point. From the national level, both numerator and denominator data are then reported to the European Surveillance System (TESSy) database. Additional semi-quantitative indicators of intensity, geographic spread and trend of influenza activity at the national level are also reported.

# Virological surveillance

## Weekly analysis – virology

In week 2/2011, 23 countries reported virological data. Sentinel physicians collected 2428 specimens, 1048 (43%) of which tested positive for influenza (Tables 1 and 2). This represents the second decrease after the peak reached in week 52/2010 (Figure 3). However, proportions of influenza-positive sentinel samples of more than 60% were reported by Belgium, Norway, the UK (Scotland), and Portugal, followed by proportions ≥ 50% in Denmark, Estonia, Finland, France, Germany, Greece, the Netherlands and Slovenia (Table 1). In addition, 3623 non-sentinel source specimens (i.e. specimens collected for diagnostic purpose in hospitals) were reported positive for influenza virus.

Of the 4671 influenza viruses detected during week 2/2011, 3351 (71.7%) were type A and 1320 (28.3%) were type B. Of the 685 sentinel influenza A viruses that were subtyped, 679 (99.1%) were A(H1N1) 2009 and six (0.9%) were A(H3) viruses (Table 2).

Since week 40/2010, 13 914 (72.5%) of the 19 177 influenza virus detections in sentinel and non-sentinel specimens, were type A and 5263 (27.5%) were type B. Of the 3085 sentinel influenza A viruses subtyped, 2971 (96.3%) were A(H1N1) 2009, 113 (3.7%) were A(H3) and one, detected in Poland in week 50/2010, was A(H1) (Table 2). Trends of virological detections since week 40/2010 are shown in Figures 1–3.

Since week 40/2010, 559 influenza viruses from sentinel and non-sentinel specimens have been characterised antigenically (Figure 4): 320 (57.2%) as A/California/7/2009 (H1N1)-like; 56 (10.0%) as A/Perth/16/2009 (H3N2)-like; 172 (30.8%) as B/Brisbane/60/2008-like (Victoria lineage); and 11 (2.0%) as B/Florida/4/2006-like (Yamagata lineage).

In terms of antiviral resistance, since week 40/2010, a total of 681 influenza A(H1N1) 2009 viruses and 59 influenza B viruses have been tested for neuraminidase inhibitor susceptibility . Twenty-six (3.8%) influenza A(H1N1) 2009 viruses were resistant to oseltamivir but remained sensitive for zanamivir. All the resistant viruses carried the H275Y mutation.

Data are from single (e.g. H275Y only) or multiple location mutation analysis (full sequencing) and/or phenotypic characterisation (IC50 determination) and therefore data should be interpreted in this context.

More details on circulating viruses can be found in the December report prepared by the Community Network of Reference Laboratories (CNRL) coordination team. Also, a detailed analysis of the viruses isolated in the UK was published in Eurosurveillance indicating no evidence of any antigenic changes in the A(H1N1) 2009 and type B viruses in that country and a good match with the seasonal vaccine viruses.

In week 2/2011, 17 countries reported 1253 respiratory syncytial virus detections, a number that has decreased for the second consecutive week (Figure 5).

**Table 2: Weekly and cumulative influenza virus detections by type, subtype and surveillance system, weeks 40/2010–2/2011**

| | Current Period | | Season | |
|---|---|---|---|---|
| Virus type/subtype | Sentinel | Non-sentinel | Sentinel | Non-sentinel |
| Influenza A | 774 | 2577 | 3363 | 10551 |
| A(H1)2009 | 679 | 1339 | 2971 | 4834 |
| A (subtyping not performed) | 89 | 1210 | 278 | 5582 |
| A (not subtypable) | 0 | 0 | 0 | 0 |
| A (H3) | 6 | 28 | 113 | 135 |
| A (H1) | 0 | 0 | 1 | 0 |
| Influenza B | 274 | 1046 | 1254 | 4009 |
| **Total Influenza** | **1048** | **3623** | **4617** | **14560** |

*Note:* A(H1)2009, A(H3) and A(H1) includes both N-subtyped and non-N-subtyped viruses

**Figure 1: Number of sentinel specimens positive for influenza, by type, subtype and by week of report, weeks 40/2010–2/2011**

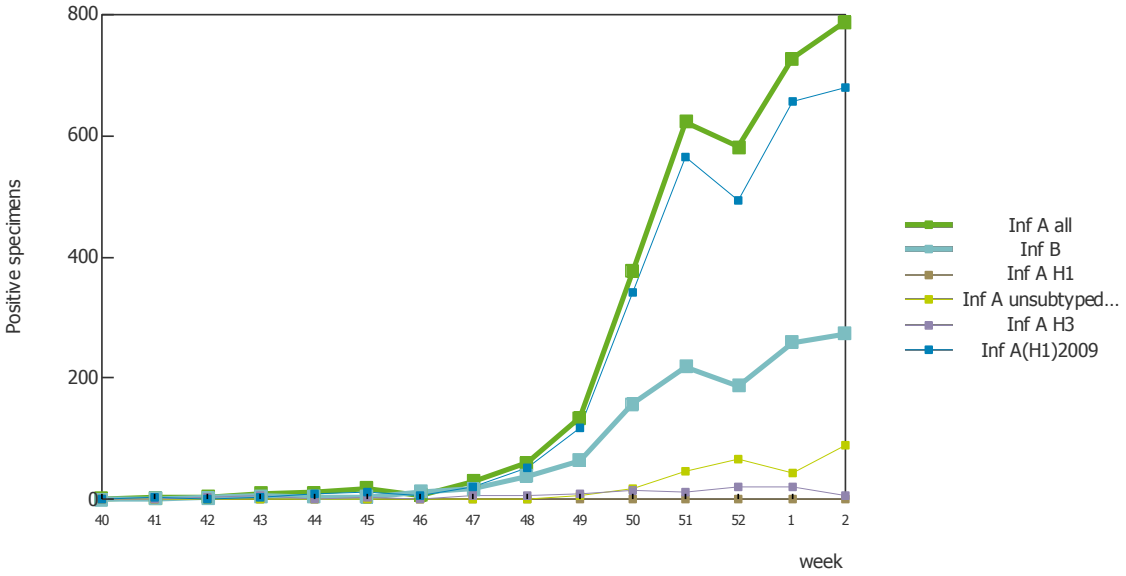



**Figure 2: Number of non-sentinel specimens positive for influenza by type, subtype and week of report, weeks 40/2010–2/2011**

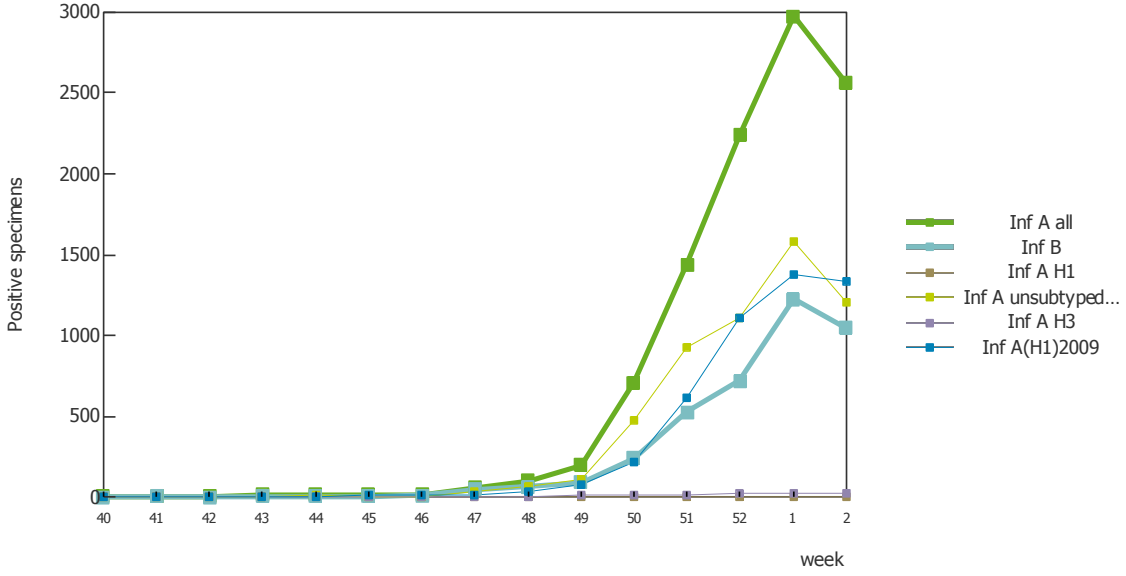


**Figure 3: Proportion of sentinel samples positive for influenza, weeks 40/2010–2/2011**

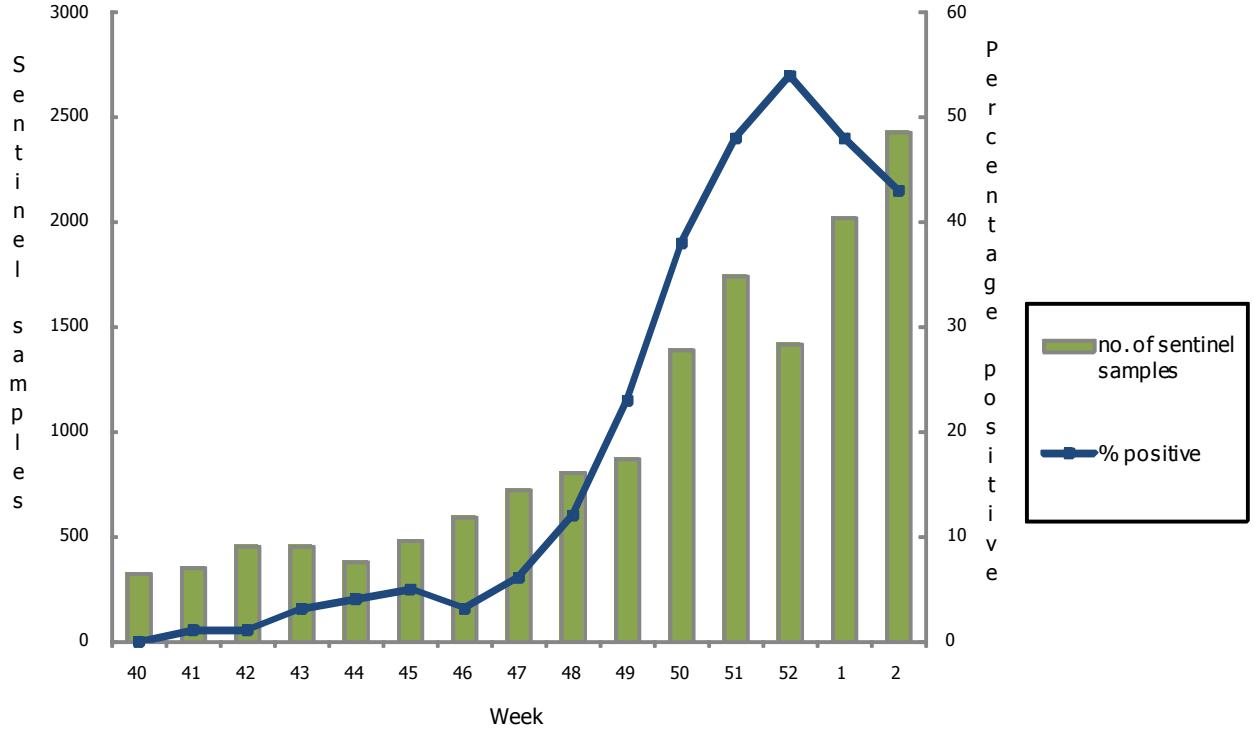



**Figure 4: Results of antigenic characterisations of sentinel and non-sentinel influenza virus isolates, weeks 40/2010–2/2011**

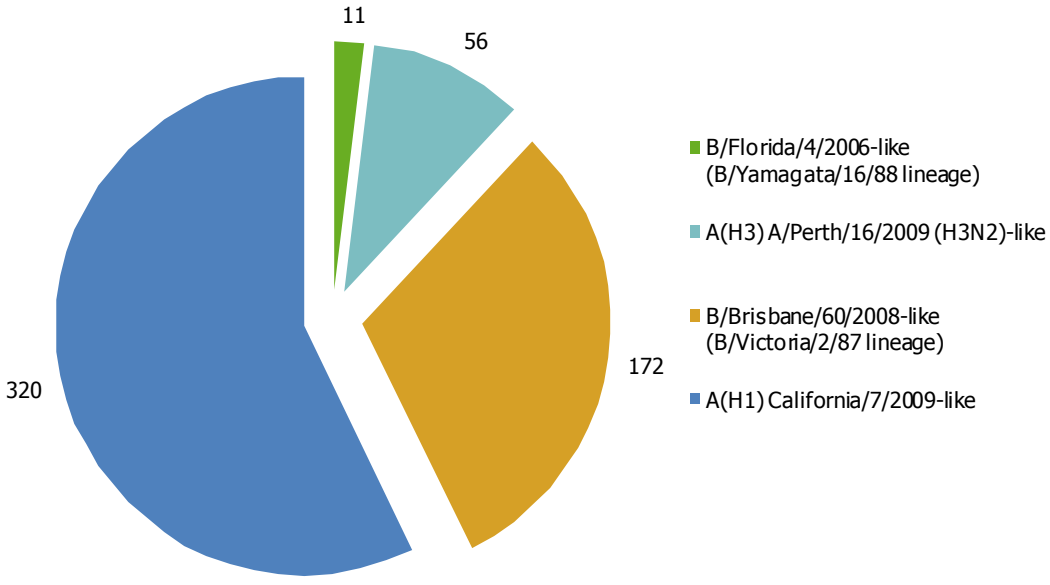
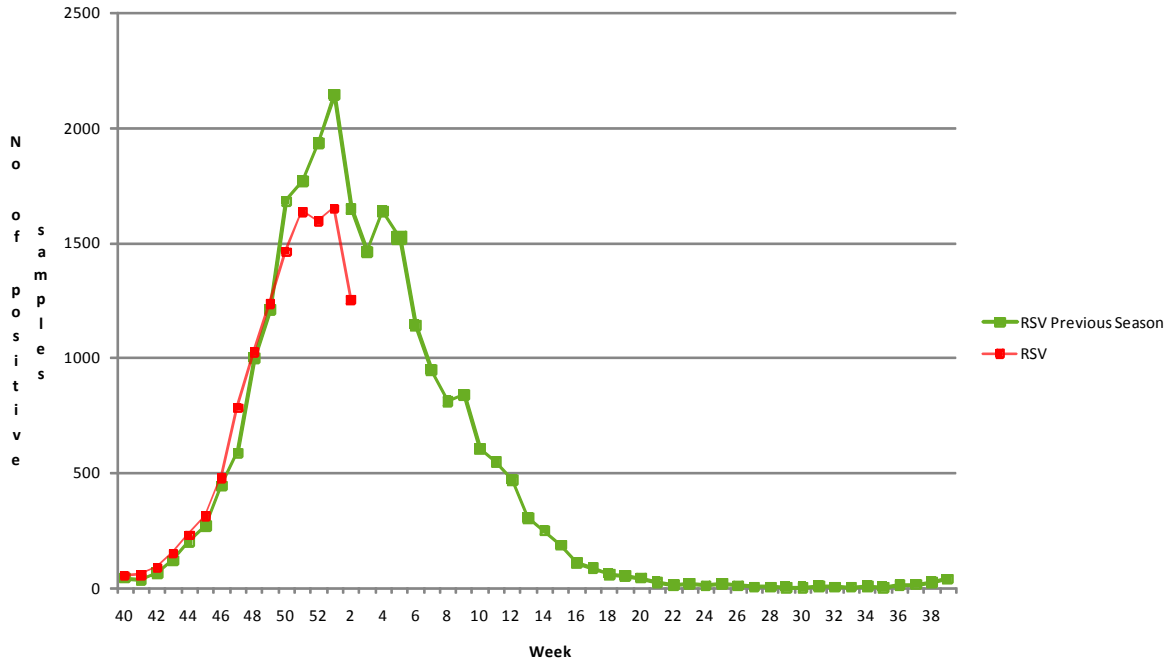


**Table 3: Antiviral resistance by influenza virus type and subtype, weeks 40/2010–2/2011**

| Virus type and subtype | Resistance to neuraminidase inhibitors | | | | Resistance to M2 inhibitors | |
|---|---|---|---|---|---|---|
| | Oseltamivir | | Zanamivir | | Isolates tested | Resistant n (%) |
| | Isolates tested | Resistant n (%) | Isolates tested | Resistant n (%) | | |
| A(H3) | 0 | 0 | 0 | 0 | 0 | 0 |
| A(H1) | 0 | 0 | 0 | 0 | 0 | 0 |
| A(H1)2009 | 681 | 26 (3.8) | 681 | 0 | 0 | 0 |
| B | 59 | 0 | 59 | 0 | NA* | NA* |

** NA - not applicable, as M2 inhibitors do not act against influenza B viruses*

**Figure 5: Respiratory syncytial virus detections, sentinel and non-sentinel, weeks 40/2010–2/2011**




## Country comments

**Latvia:** The first death cases (two) have been confirmed. Both were associated with A(H1N1)2009.

**United Kingdom:** A small number of B cases and H3 cases were also identified. Severe acute respiratory infection cases continue to be reported, most of which are associated with influenza A(2009) H1N1

## Description of the system

According to the nationally defined sampling strategy, sentinel physicians take nasal or pharyngeal swabs from patients with influenza-like illness (ILI), acute respiratory infection (ARI) or both and send the specimens to influenza-specific reference laboratories for virus detection, (sub-)typing, antigenic or genetic characterisation and antiviral susceptibility testing.

For details on the current virus strains recommended by WHO for vaccine preparation click here.

# Hospital surveillance – severe acute respiratory infection (SARI)

## Weekly analysis – SARI

Since week 40/2010, 1711 SARI cases—including 73 fatal cases—have been reported by eight countries (Table 4). Only three countries—Belgium, Romania and Slovakia—are collecting syndromic SARI cases. The remaining countries are reporting laboratory-confirmed hospitalised influenza cases or severe influenza cases admitted to intensive care, as in Ireland and France.

During week 2/2011, 323 SARI cases were reported. Males and females were equally affected (Table 5). The number of SARI cases by week of onset appears to be increasing as there is a reporting delay of about two weeks (Figure 6). However, these increases may simply reflect a new system and new countries, few of which have baselines for these data.

Of the 129 cases that tested positive for influenza reported in week 2/2011, 127 (98.4%) were infected by type A and two (1.6%) by type B viruses (Table 6). All of the 120 type A viruses subtyped were A(H1) 2009. Since week 40/2010, 922 (96.5%) of 955 influenza viruses detected were type A, and 880 (98.1%) of 897 type A viruses subtyped were A(H1) 2009.

Of the 1711 reported cases since week 40/2010, at least 710 (41.5) were admitted to intensive care with 337 (19.7%) requiring ventilatory support (Table 8).

**Table 4: Cumulative number of SARI cases, weeks 40/2010—week 2/2011**

| Country | Number of cases | Incidence of SARI cases per 100,000 population | Number of fatal cases reported | Incidence of fatal cases per 100,000 population | Estimated population covered |
|---|---|---|---|---|---|
| Austria | 33 | | 3 | | |
| Belgium | 562 | | | | |
| Spain | 570 | | 24 | | |
| France | 289 | | 29 | | |
| Ireland | 82 | | 5 | | |
| Portugal | 79 | | 6 | | |
| Romania | 91 | 1.42 | 6 | 0.09 | 6413821 |
| Slovakia | 5 | | | | |
| Total | 1711 | | 73 | | 6413823 |

**Figure 6: Number of SARI cases by week of onset, weeks 40/2010—week 2/2011**

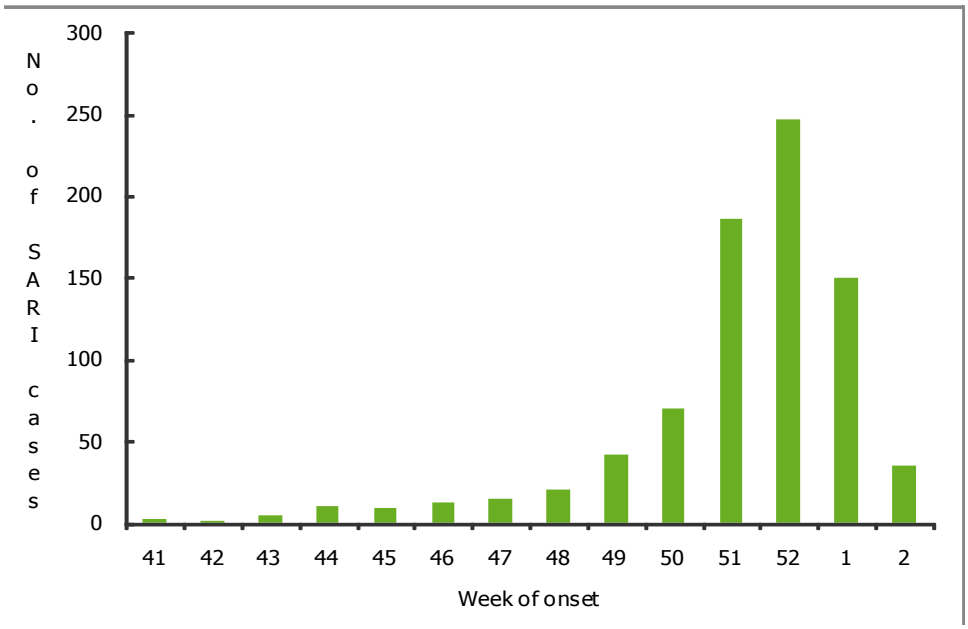



**Table 5: Number of SARI cases by age and gender, weeks 40/2010–2/2011**

| Age groups | Male | Female | Unknown |
|---|---|---|---|
| Under 2 | 115 | 180 | 4 |
| 2-17 | 109 | 146 | 2 |
| 18-44 | 194 | 202 | |
| 45-59 | 161 | 236 | 2 |
| >=60 | 149 | 201 | 1 |
| Unk | 3 | 6 | |
| Total | 731 | 971 | 9 |

**Table 6: Number of SARI cases by influenza type and subtype, week 2/2011**

| Virus type/subtype | Number of cases during current week | Cumulative number of cases since the start of the season |
|---|---|---|
| Influenza A | 127 | 922 |
| A(H1)2009 | 120 | 880 |
| A(subtyping not performed) | 7 | 36 |
| A(H1) | | |
| A(H3) | | 6 |
| A(H5) | | |
| Influenza B | 2 | 17 |
| Other Pathogen | | 33 |
| Unknown | 67 | 739 |
| Total | 323 | 1711 |

**Table 7: Number of SARI cases by antiviral treatment, weeks 40/2010–2/2011**

| Antiviral treatment | Number of patients who received prophylaxis | Number of patients who received anti-viral treatment |
|---|---|---|
| Oseltamivir | 1 | 546 |
| Zanamivir | | 10 |
| Other (or combinations with other) | 3 | 4 |
| Unknown | 1504 | 1072 |
| None | 203 | 79 |
| Total | 1711 | 1711 |

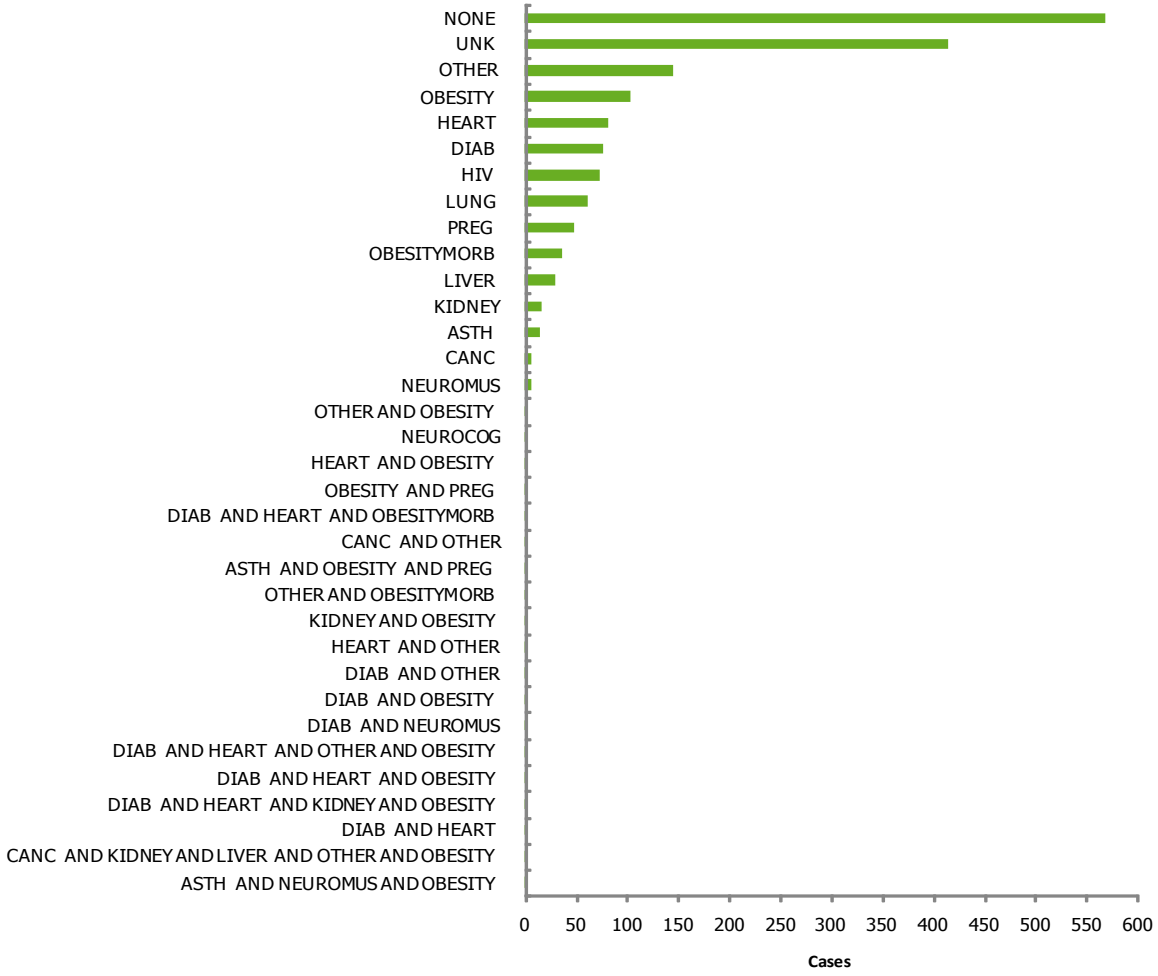
**Table 8: Number of SARI cases by level of care and respiratory support, weeks 40/2010–2/2011**

| Respiratory support | ICU | Inpatient ward | Other | Unknown |
|---|---|---|---|---|
| No respiratory support available | | 1 | | |
| No respiratory support necessary | 67 | 59 | 268 | |
| Oxygen therapy | 43 | 44 | 233 | |
| Respiratory support given unknown | 263 | 15 | 256 | 114 |
| Ventilator | 337 | 5 | 5 | 1 |

**Table 9: Number of SARI cases by vaccination status, weeks 40/2010–2/2011**

| Vaccination Status | Number Of Cases | Percentage of cases |
|---|---|---|
| Both, monovalent 2009 pandemic H1N1 and seasonal 2010 vaccination | 36 | 2.1 |
| Monovalent 2009 pandemic H1N1 vaccinati | 13 | 1 |
| Not vaccinated | 599 | 35 |
| Seasonal 2010 vaccination | 84 | 5 |
| Unknown | 979 | 57.2 |
| TOTAL | 1711 | |

**Figure 7: Number of SARI cases by underlying condition, weeks 40/2010–2/2011**




*Note: Other (O) represents any underlying condition other than: asthma(ASTH), cancer(CANC), diabetes(DIAB), chronic heart disease(HEART), HIV/other immune deficiency(HIV), kidney-related conditions(KIDNEY), liver-related conditions(LIVER), chronic lung disease(LUNG), neurocognitive disorder (including seizure)(NEUROCOG), neuromuscular disorder(NEUROMUS), obesity (BMI between 30 and 40)(OBESITY), morbid obesity (BMI above 40)(OBESITYMORB), pregnancy(PREG). NONE is reported if there were no underlying conditions and UNK when the underlying conditions were unknown.*

**Table 10: Number of underlying conditions in SARI cases by age group, weeks 40/2010–2/2011**

| Underlying condition/risk factor | 0-11 months | 1-4 years | 5y-14 | 15-24 | 25-64 | >=65 |
|---|---|---|---|---|---|---|
| Asthma | | 1 | 2 | 1 | 12 | 1 |
| Cancer | | 1 | | | 7 | 2 |
| Diabetes | | | 1 | | 61 | 24 |
| Chronic heart disease | 4 | 1 | 1 | 2 | 50 | 33 |
| HIV/other immune deficiency | | 3 | 1 | 3 | 45 | 21 |
| Chronic lung disease | 2 | 1 | 1 | 2 | 36 | 19 |
| Obesity (BMI between 30 and 40) | | | | 1 | 106 | 12 |
| Pregnancy | | | | 8 | 45 | |
| No underlying condition | 205 | 152 | 42 | 11 | 137 | 22 |
| Underlying condition unknown | 32 | 44 | 20 | 15 | 250 | 53 |
| Other (including all other conditions) | 19 | 12 | 11 | 4 | 124 | 85 |

**Table 11: Additional clinical complications in SARI cases by age group, weeks 40/2010–2/2011**

| Additional clinical complications | 0-11 months | 1-4 years | 5y-14 | 15-24 | 25-64 | >=65 |
|---|---|---|---|---|---|---|
| Acute respiratory distress syndrome | 27 | 29 | 9 | 14 | 204 | 39 |
| Bronchiolitis | 1 | | | | 1 | |
| None | 4 | 4 | | 5 | 22 | 9 |
| Other (please specify separately) | | 2 | 1 | | 13 | 4 |
| Pneumonia (secondary bacterial infection | 15 | 28 | 7 | 15 | 317 | 73 |
| Sepsis/Multi-organ failure | | | | | 7 | 4 |
| Unknown | 215 | 153 | 62 | 13 | 290 | 141 |

# Country comments

**Czech Republic:** Last week, three additional SARI cases with laboratory-confirmed pandemic strain were reported; all males (56, 57 and 60 years old) with underlying conditions.

**Denmark Statens Serum Institut:** Until 17 January 2011, a total of 39 Influenza patients have been reported by intensive care units (ICUs) in Denmark: 14 women and 25 men. The median age was 55 years (range 15–83 years).

Of the 39 patients, 11 were newly admitted to ICU in week 2/2011. The number of new cases did not increase compared to last week. There is, however, an increasing pressure on the wards, reflected by the increasing proportion of ICU beds used for influenza patients. On Monday 17 January 2011 at 8:00 am, 24 influenza patients were in ICUs, corresponding with 7.5% of the total number of occupied ICU beds in the country and 13.0% in the Central Region. Thirty-three patients had influenza A, eleven of whom were further subtyped and had subtype H1N1. Six patients had influenza B. Four patients with influenza A died. Six patients were previously healthy people. For 26 patients one or more underlying conditions were reported. Chronic obstructive lung disease, chronic lymphatic leukemia, alcoholism, obesity and hypertension were mentioned several times. Other underlying conditions were Wegener's granulomatosis, kidney failure, asthma and immunosuppressive treatment. There were no pregnant women among the reported patients. Four patients received Extracorporeal membrane oxygenation treatment.

**Ireland Health Protection Surveillance Centre:** So far for the 2010/2011 season, 82 influenza cases have been admitted to intensive care in Ireland: 81 A(H1N1) 2009 and one A H3. Six influenza associated deaths have been reported to HPSC this season: 5 A(H1N1) 2009 (all admitted to ICU) and one influenza B death (not admitted to ICU). During week 2/2011, the number of hospitalised cases of influenza has continued to increase, with 573 cases hospitalised to date this season (as of January 19th 2011) and reports of 90 cases admitted to ICU. Enhanced surveillance information is available for 82 cases, 73 of whom are adults and nine are paediatric cases. Fifty-two (63.4%) of the 82 cases are currently in ICU. Sixty of the 82 (73.1%) cases have underlying medical conditions: 54 adults and six paediatric cases. The underlying medical conditions include chronic respiratory disease, chronic heart disease, immunosuppression, pregnancy, metabolic disorders and morbid obesity. The Health Protection Surveillance Centre has been informed of six influenza associated deaths to date this season, five influenza A (H1N1) 2009 and one influenza B. One death was in a patient in the 0–4 year age group, two patients were in the 15–64 year age group and three patients were aged 65 years or older. Five deaths occurred in patients with underlying medical conditions. One death occurred in week 52/2010, one in week 1/2011 and four in week 2/2011.For further data and analyses, see the HSPC Report here.

**The Netherlands RIVM:** Since the start of October 2010 and as of October 20th, a total of 288 hospital admissions due to a reported laboratory-confirmed infection with influenza A (H1N1) in 2009 has taken place in the Netherlands. There were also 11 deaths with a laboratory-confirmed infection with influenza A(H1N1) reported. The number of hospital admissions due to influenza A(H1N1) in 2009 has continued to rise since last week. For more detail see the RIVM Report here.

**Spain**: In Spain, information on severe illness due to influenza infection admitted to hospitals comes from a surveillance system developed during the 2009/2010 pandemic season for reporting severe hospitalised confirmed influenza cases. Since week 40/2010 and up to week 02/2011, there have been 517 severe hospitalised confirmed influenza cases reported (including 24 fatal cases). Severely affected cases are mostly in the 15–64 age group (69%) some without underlying conditions (22%). Most of the severe cases and deaths have been associated with A (H1N1)2009 and have not previously been vaccinated.

**United Kingdom:** The number of patients in England with confirmed or suspected influenza in critical care beds have declined from a peak of nearly 800 two weeks ago (equivalent to 1.4 per $10^5$ population) to around 400cases on January 20 2011. Over 80% of these are in the 16–64 year age group. For further information, click here.

Up until 19 January 2011, 254 fatal influenza cases from across the UK were reported to the HPA, including 165 cases from England. Further epidemiological information on cases is available on 214 of these cases. One hundred and ninety-five (91%) of these cases were associated with H1N1 (2009) infection, three with untyped influenza A and 16 (7%) with influenza B infection. Reported deaths have been mainly in younger adults and children. Among the 210 cases with information on age, seven (3%) have been younger than 5 years, 11 (5%) in the 5–14 year age group, 137 (65%) from 15 to 64 years and 55 (26%) were older than 64 years of age. One hundred and twenty-eight of 159 fatal cases with available information (81%) were in one of the clinical risk groups for vaccination, which includes pregnant women. The leading reported clinical risk factors for those with information were underlying respiratory disease, including asthma (n=29) and neurological disease (n=15). Conversely, 19% of the deaths were in healthy people outside these risk groups (click here for report). For further information, click here.

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