

HPA Weekly National Influenza Report

Summary of UK surveillance of influenza and other seasonal respiratory illnesses
18 March 2010 (Week 11)



Summary

- Pandemic influenza activity is low and decreasing or stabilised across the UK.
- In week 10 (ending 14 March), the weekly influenza/influenza-like illness (ILI) consultation rate decreased or remained stable in England and Scotland and decreased slightly in Wales and Northern Ireland.
- A decrease in respiratory syncytial virus (RSV) detections has been observed recently, though GP consultation rates for acute bronchitis have increased slightly from week 09 to 10.
- The main influenza virus circulating in the UK continues to be the pandemic (H1N1) 2009 strain, with few influenza H1 (non-pandemic), H3 and B viruses detected. Forty of 5,629 pandemic viruses tested have been confirmed to carry a mutation which confers resistance to the antiviral drug oseltamivir; fifteen are phenotypically resistant to the drug but retain sensitivity to zanamivir.
- The weekly number of pandemic influenza cases reported as admitted to hospital has decreased recently. There have been 457 deaths reported due to pandemic (H1N1) 2009 in the UK.
- The UK pandemic influenza vaccination programme continues for people at high risk for severe disease, health-care workers and healthy children aged between 6 months and 5 years. For further information see the [Department of Health website](#).
- According to WHO on 12 March 2010, the most active areas of pandemic influenza transmission are currently in Southeast Asia, however, lower levels of pandemic virus circulation persist in other parts of Asia and in Eastern and South-eastern Europe. In West Africa, limited data suggest that pandemic influenza virus transmission may be increasing in region. Of note, seasonal influenza B viruses have been increasingly detected in Asia and appear to be spreading westward. Globally, 69.2% of all influenza virus detections were typed as influenza A and 30.8% as influenza B. Of all sub-typed influenza A viruses globally, 92.8% (426/456) were pandemic (H1N1) 2009. Hong Kong SAR China has reported increased influenza B activity in recent weeks accounting for 56.1% of all influenza detections in the reporting week, while in China it accounted for 83.5%.

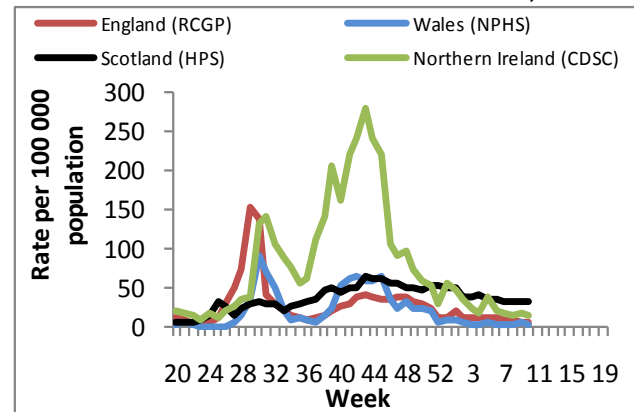
Weekly consultation rates in national sentinel influenza schemes

The National Pandemic Flu Service (NPFS) became operational in England on Thursday 23 July at 15.00 and ceased on 11 February 2010. The service issued antiviral drugs to people with an influenza-like illness who did not fall into a specified risk group (e.g. aged less than 1 year, pregnant or with a high-risk underlying medical condition). According to [FluSurvey](#), an internet-based monitoring system for influenza surveillance which relies on members of the public reporting their health status weekly, the proportion of participants with influenza-like illness who reported that they contacted their GP fell after NPFS was launched. This will have affected GP consultation rates from week 30/2009 to week 06/2010. NPFS was not operational in Northern Ireland, Scotland and Wales. For further information on the different schemes, including why differences are seen between the four countries, please see [Sources of UK flu data](#) on the HPA website.

In week 10 (ending 14 March), the weekly influenza/influenza-like illness (ILI) consultation rate decreased or remained stable in England and Scotland and decreased slightly in Wales and Northern Ireland (table 1, figures 1 and 2).

The overall RCGP (England and Wales) ILI consultation rate was stable at 6.2 per 100,000, which is below the winter baseline activity threshold of 30 per 100,000. The rate was stable in the north, increased slightly in the central region and decreased slightly in the southern region.

Figure 1: GP weekly consultation rates for influenza/ILI in the UK national sentinel influenza schemes, 2009/10.



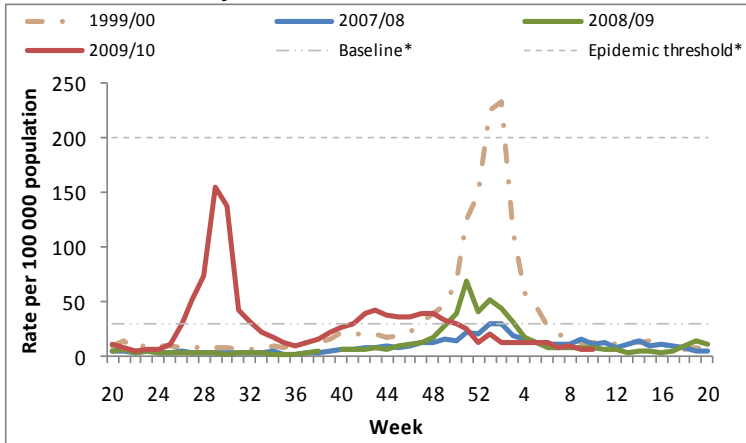
The combined influenza/ILI rate in Northern Ireland has decreased and remains below the threshold of 70 per 100,000. The ILI rate in Scotland was stable and remains below the baseline threshold of 50 per 100,000. The Welsh influenza rate decreased slightly, and stays below the baseline threshold of 25 per 100,000. The weekly ILI rate through QSurveillance® was stable.

Table 1: UK GP weekly consultation rates for influenza/ILI

Week Number	Clinical rate per 100,000				
	Baseline	7	8	9	10
Week-ending date	21-Feb	28-Feb	07-Mar	14-Mar	
RCGP (E & W)	30	8	9	6.3	6.2
RCGP North	30	7.1	6.5	3.5	3.4
RCGP Central	30	9.1	9.3	4.8	6.1
RCGP South	30	7.7	9.5	8.4	7.5
Northern Ireland	70*	17.2	14.3	18.5	13.8
Scotland	50	31.5	33.7	33.5	33.6
Wales	25	3.4	2.4	5.2	4.1
QSurveillance® (UK**)	N/A	8.8	8.9	6.9	6.5

*Provisional threshold defined in September 2009; ** based on data from 43% of England's population, 10% of the population in Wales, 17% in Northern Ireland and 0% in Scotland.

Figure 2: RCGP weekly consultation rate for influenza-like illness 2009/10 and recent years



* Baseline threshold: under 30 per 100,000; epidemic threshold: over 200 per 100,000. NB. As week 53 appears in 2009 but not in previous years the figure for week 52 in this graph is an average of week 52 and week 53 data.

In Wales, the rates were variable across the age groups. The rate in 25-34 year-olds increased from 6.3 in week 09 to 12.9 per 100,000 in week 10.

In Northern Ireland from week 09 to 10, the rates decreased in most age groups. An increase was observed in the 1-4 year group (0.0 to 11.4 per 100,000). The highest rate was in the 15-44 year group (18.2 per 100,000).

In Scotland, the rates were variable. The highest rate was in children aged 1-4 years (decreased from 201.5 to 189.9 per 100,000 in week 10) though small increases were seen in the 5-14 year group (28.2 to 32.1 per 100,000) and 45-64 year group (19.1 to 22.2 per 100,000).

Figure 3: RCGP weekly consultation rate for influenza-like illness (ILI) 2009/10, by age group

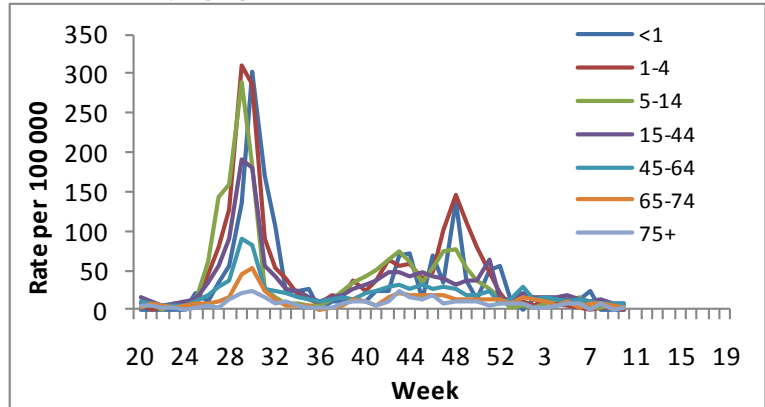
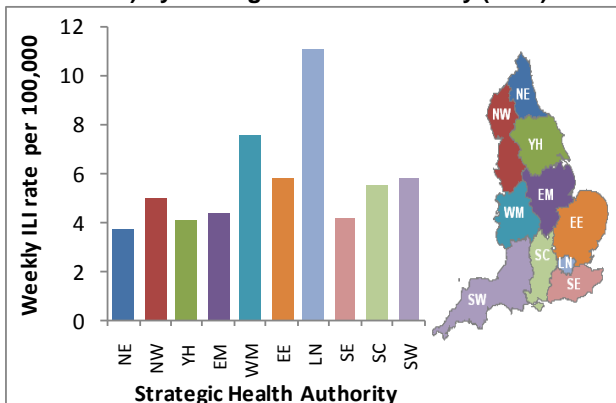


Figure 4: Weekly consultation rates for influenza-like illness (ILI) from QSurveillance®, Week 10 (ending 14 March 2010) by Strategic Health Authority (SHA)



The overall weekly consultation rate for acute bronchitis in England and Wales through the RCGP scheme increased slightly in week 09 to 10 from 81.3 to 90.9 per 100,000. The rates increased in children aged under 5 years (209.8 to 220.1 per 100,000) and in adults aged 65 years or over (from 155.0 to 215.0 per 100,000) (figure 5).

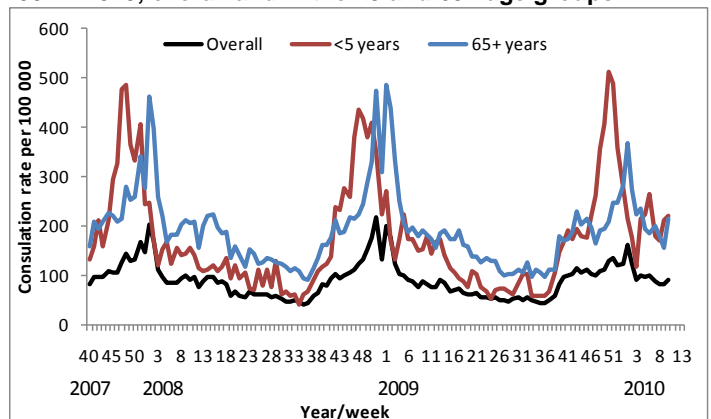
The consultation rates in the RCGP scheme were stable or decreased in most age groups. The highest rate was in the 5-14 year age group (stable at 7.4 in week 09 and 7.8 per 100,000 in week 10), followed by the 45-64 year group (stable at 7.1 per 100,000 in both weeks) (figure 3).

In the QSurveillance® scheme the rates were also stable or decreased in all age groups. The highest rates were in children aged under one year (10.0 per 100,000) and aged 1-4 years (8.4 per 100,000).

The highest weekly ILI rates through QSurveillance® in week 10, were in the North West, West Midlands and London SHAs (figure 4).

Weekly consultation rates for pneumonia from QSurveillance® are at similar levels compared to recent weeks and are within expected levels for this time of year.

Figure 5: RCGP weekly consultation rate for acute bronchitis 2007 – 2010, overall and in the <5 and 65+ age groups



Microbiological surveillance

The predominant influenza strain circulating is still pandemic (H1N1) 2009. Detection of respiratory syncytial virus (RSV) has decreased or remained stable recently (table 2). In the last two weeks, two other (non-influenza) viruses have been detected through the HPA/RMN GP-based sentinel surveillance scheme; both adenovirus.

Table 2: Number of other respiratory viruses reported from HPA and NHS laboratories in England and Wales by week of report

Week	7	8	9	10
Week-ending	15-Feb	16-Feb	07-Mar	14-Mar
Influenza B	1	1	4	2
Adenovirus	27	38	40	30
Parainfluenza	13	16	33	14
Rhinovirus	81	70	99	48
RSV	133	139	156	52

Table 3: Number of laboratory confirmed cases of pandemic influenza A (H1N1) 2009 in the UK

Country	Number of lab-confirmed cases
England	20,533
Scotland	6,598
Wales	662
Northern Ireland	1,369
Total UK	29,162

There have been no detections of seasonal influenza A (H3) or (H1) by the Respiratory Virus Unit (RVU) since week 52 2009. Eight influenza B viruses have been detected in the 2009/10 season (since week 40 2009), all between week 03 and week 10.

There have now been 29,162 laboratory confirmed cases of pandemic (H1N1) 2009 in the UK since the beginning of the pandemic (table 3).

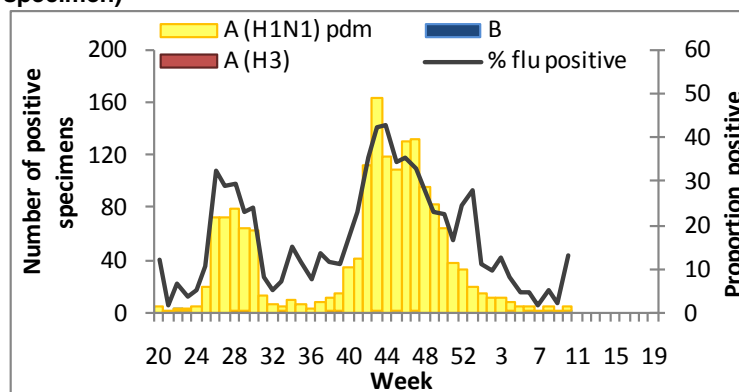
Enhanced Virological Community and Primary Care Surveillance

In England three schemes for virological surveillance of influenza are being used: two GP-based (RCGP/HPA and HPA/RMN) and one through NPFS (previous through NHS Direct). Schemes through primary care are also used in Wales, Scotland and Northern Ireland. It is important to note that samples taken in recent weeks may still be awaiting processing so these data should be treated with caution. More details on these schemes can be read at [Sources of UK flu data](#) on the HPA website.

Four of 31 (12.6%) samples submitted via the two English GP-based sentinel schemes were positive for influenza in week 10 (two influenza B and two pandemic (H1N1) 2009), which is an increase from one of 43 in week 09 (figure 7).

The pandemic positivity rate from the two English GP-based sentinel schemes increased slightly from week 09 to 10 but remains at low levels. No pandemic positive specimens have been reported in week 10 through the NHS-Direct scheme or GP schemes in Wales, Scotland and Northern Ireland (table 4).

Figure 7: The number of samples testing positive for influenza in the two GP-based English sentinel virological schemes by subtype and week, with the total percentage positive (week of specimen)



NB. Data for the most recent weeks are subject to change due to reporting lag; proportion positive omitted if fewer than 10 specimens tested in one week.

Table 4: Total number of samples tested and positive for pandemic influenza A (H1N1) 2009 from sentinel virological schemes in England (GP and NPFS), Wales, Scotland and Northern Ireland by week*

Week	England (GP)			England (NPFS)			Wales (GP)			Scotland (GP)			N. Ireland (GP)		
	Total tested	Pandemic n	%	Total tested	Pandemic n	%	Total tested	Pandemic n	%	Total tested	Pandemic n	%	Total tested	Pandemic n	%
1	136	15	11.0	460	23	5.0	0	0	—	80	5	6.3	5	0	—
2	114	11	9.6	743	24	3.2	0	0	—	74	8	10.8	4	1	—
3	96	12	12.5	707	29	4.1	1	0	—	70	8	11.4	0	0	—
4	98	7	7.1	644	12	1.9	2	0	—	52	1	1.9	7	0	—
5	109	5	4.6	449	9	2.0	1	0	—	53	1	1.9	4	0	—
6	87	2	2.3	402	4	1.0	2	0	—	38	1	2.6	5	0	—
7	62	1	1.6	69	0	0.0	2	0	—	27	0	0.0	6	0	—
8	80	3	3.8	177	0	0.0	4	0	—	14	1	7.1	5	0	—
9	43	1	2.3	117	1	0.9	1	0	—	22	0	0.0	4	0	—
10	31	2	6.5	48	0	0.0	2	0	—	29	0	0.0	6	0	—

* All data are based on week of specimen, except for Northern Ireland which is by week of report; proportion positive omitted if fewer than 10 specimens tested in one week; proportion positive omitted if fewer than 10 specimens tested in one week; sampling through NPFS stopped and restarted through NHS Direct in week 7.

Antiviral susceptibility

Testing for antiviral susceptibility is carried out at the Respiratory Virus Unit, Centre for Infections, Colindale. Since the beginning of the pandemic, a total of 5,629 pandemic influenza viruses have been analysed for the marker commonly associated with resistance to oseltamivir in seasonal influenza (H275Y); a total of 40 samples have been found to carry this mutation in the UK. Of these 5,629 viruses, 323 have been fully tested for susceptibility; 15 of the 40 viruses carrying the H275Y mutation have been confirmed to be phenotypically resistant to oseltamivir whilst retaining sensitivity to zanamivir. Information on medical history was available for 26 cases, 24 of whom had an underlying medical condition: 18 were immunosuppressed and six had another underlying illness. Probable person to person transmission occurred in an outbreak in a hospital ward in November 2009. Pandemic influenza samples have been tested for resistance from all regions and age groups in the UK (tables 5 and 6).

Table 5: Pandemic influenza tested for antiviral susceptibility at RVU, by test method, source and age group

Age Group	Samples tested for Resistance				Proportion resistant
	Screened for H275Y mutation		Fully tested		
	Hospital	Community	Hospital	Community	
<1	245	17	8	1	0%
1-4	414	95	16	1	0.79%
5-14	986	452	67	27	0%
15-44	837	246	61	9	0.28%
45-64	977	301	62	7	0.55%
65-74	620	109	39	4	1.78%
75+	131	8	7	0	4%
Unknown	189	2	13	1	1%
Total	4399	1230	273	50	0.71%

NB. Figures may fluctuate due to de-duplication and correction of database.

Table 6: Pandemic influenza samples tested for antiviral susceptibility at RVU, by test method, source and region

Region	Samples tested for Resistance				Proportion resistant
	Screened for H275Y mutation		Fully tested		
	Hospital	Community	Hospital	Community	
East of England	104	113	22	3	0%
East Midlands	569	91	17	4	0.91%
London	489	390	53	19	0.68%
North East	101	39	7	1	1%
North West	523	68	22	1	0.68%
South East	168	186	54	10	0%
South West	571	99	8	1	1%
West Midlands	137	172	42	7	0.32%
Yorkshire and Humber	647	49	16	1	0%
Ireland	8	0	7	0	0%
Northern Ireland	63	0	0	0	0%
Scotland	862	18	20	1	0.91%
Wales	46	0	3	0	17%
Unknown Region	111	5	2	2	0%
Total	4399	1230	273	50	0.71%

NB. Figures may fluctuate due to de-duplication and correction of the database.

Antimicrobial susceptibility

Bacterial susceptibility to antimicrobial agents is monitored by the HPA for lower respiratory tract isolates of *Staphylococcus aureus*, *Streptococcus pneumoniae* and *Haemophilus influenzae*. Guidelines for clinical management of patients with an influenza-like illness during an influenza pandemic (W S Lim, Thorax 2007;62;1-46, section 8.1.3) recommend co-amoxiclav or a tetracycline for treating bacterial pneumonia in a primary care setting. There have been no significant changes to susceptibility trends for these two antibiotics in recent years and no appreciable changes in resistant patterns in the twelve weeks before 07 March 2009. Over 90% of all isolates of the three organisms are susceptible to tetracyclines (table 7).

Table 7: Bacterial specimens tested for susceptibility to tetracyclines and co-amoxiclav in HPA/NHS labs in England, Wales and Northern Ireland for 12 weeks up to 07 March 2009

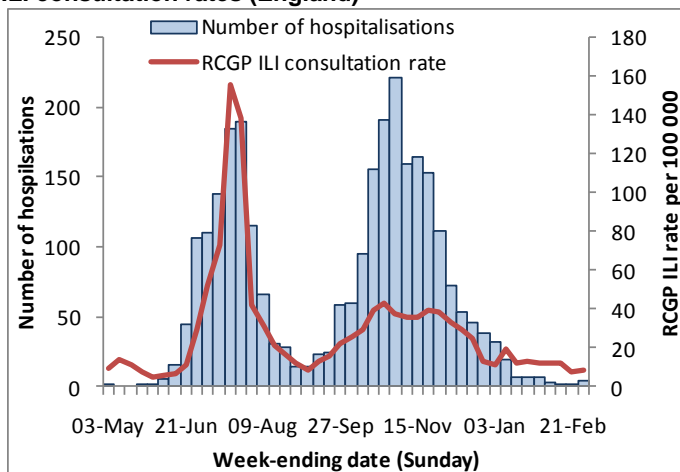
Organism	Tetracyclines		Co-amoxiclav	
	Specimens tested (N)	Specimens susceptible (%)	Specimens tested (N)	Specimens susceptible (%)
<i>S. aureus</i>	2,327	94	329	84
<i>S. pneumoniae</i>	1,786	90	1808*	94*
<i>H. influenzae</i>	6,346	99	6,037	94

* *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 β -lactams such as co-amoxiclav.

Disease severity and mortality data

A web-based surveillance system for confirmed cases of pandemic (H1N1) 2009 influenza in England was established by HPA/DH after the end of the first wave in August 2009 to collect data prospectively on all cases hospitalised with confirmed pandemic influenza. All cases reported during the first wave were also retrospectively added to the database. As this is a voluntary scheme, ascertainment of cases may not be complete. Data are also provided by the relevant bodies in Scotland, Wales and Northern Ireland.

Figure 8: Hospitalised cases with confirmed pandemic (H1N1) 2009 influenza infection by week of admission* and weekly GP ILI consultation rates (England)



* Most recent weeks omitted due to reporting lag

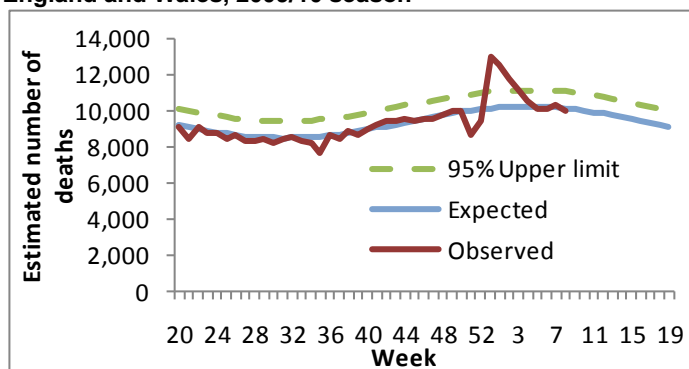
A total of 2,795 laboratory confirmed cases have been reported as hospitalised in England to 17 March 2010 (figure 8). The majority (59.5%) of cases were aged 5 to 44 years and 52.5% of cases were female.

In Scotland there have been 1,541 cumulative hospitalisations of patients with confirmed pandemic influenza, 449 in Wales and 580 in Northern Ireland.

Four hundred and fifty-seven deaths (342 in England, 69 in Scotland, 18 in Northern Ireland and 28 in Wales) have been reported in the UK in people with pandemic (H1N1) 2009 infection.

HPA receives weekly death registrations from the Office for National Statistics. In week 09, an estimated 9,981 all-cause deaths were registered, which was decreased from 10,295 in week 08 and is within the expected range for this time of year (figure 9). These deaths are due to all causes, and influenza infections are unlikely to have played a role in the excess seen in December and January as indicators were showing decreasing and low influenza activity.

Figure 9: Estimated weekly all-cause death registrations in England and Wales, 2009/10 season



International Situation

WHO reported on 12 March:

- The most active areas of pandemic influenza transmission are currently in Southeast Asia, however, lower levels of pandemic virus circulation persist in other parts of Asia and in Eastern and South-eastern Europe. In West Africa, limited data suggests that pandemic influenza virus transmission may be increasing in region. Of note, seasonal influenza B viruses have been increasingly detected in Asia and appear to be spreading westward.
- **North Africa and West Asia:** overall pandemic influenza activity remains low in most places, with the exception of Iraq and Afghanistan, both of which reported regional spread of influenza with an increasing trend in respiratory diseases activity. In Afghanistan, a moderate impact on the healthcare system was reported in association with increased respiratory diseases activity. Although overall influenza activity remains low in Iran, all recent influenza virus detection have been due to seasonal influenza B viruses.
- **Sub-Saharan Africa:** limited data suggests that on-going community transmission of pandemic influenza virus continues to increase in parts of West Africa, without clear evidence of a peak in activity. Increased detections of pandemic influenza virus have been observed among sentinel surveillance sites in several countries, including Senegal and Cote D'Ivoire, however, to date, data is limited regarding the spectrum of clinical severity of cases. Recent increases in influenza activity have also been reported in Rwanda. Much of eastern and southern Africa likely experienced an earlier peak in pandemic influenza activity during November 2009 and late summer 2009, respectively.

- South and Southeast Asia:** pandemic influenza virus circulation persist in most countries, however, overall transmission remains most active in Thailand, especially since mid January 2010. Approximately half of all provinces in Thailand reported that greater than 10% of all outpatients sought care for ILI, and approximately 25% of all patients with ILI at sentinel sites tested positive for influenza. The current increase in the number of cases in Thailand remains well below an earlier period of peak transmission during June through September 2009. In Bangladesh, an increasing trend in respiratory disease was reported, however, overall influenza activity remains low. In India, influenza virus transmission persist at lower levels in the western region of India, while activity in other regions has largely subsided.
- East Asia:** pandemic influenza activity continues to decrease or remain low as levels of ILI return to seasonal baselines in Japan and in the Republic of Korea. In Mongolia, a recent sharp increase in ILI activity was associated predominantly with a resurgence of circulation of seasonal influenza B viruses. In China, pandemic influenza activity has declined since peaking during November 2009, however, overall influenza activity remains elevated, largely due to an increase in the circulation of seasonal influenza B viruses.
- The Americas:** In the northern and the southern temperate zones of the Americas, overall pandemic influenza transmission remained low as influenza virus continued to circulate at low levels. In Central America, Nicaragua and Honduras, reported slight increases in respiratory diseases activity, possibly due to an increase in school outbreaks; however, it is unclear to what extent the increases are associated with circulation of pandemic influenza virus. In Brazil, an increasing trend of respiratory diseases with low overall intensity was reported in association with regional spread of influenza virus.

Figure 10: Trend of respiratory diseases activity compared to the previous week: Week 6, 2010 (22 – 28 February 2010)



Source:

[http://gamapserver.who.int/h1n1/qualitative_indicators/atlas.html?indicator=i1&date=Week%2008%20\(22-Feb-2010%20:%2028-Feb-2010\)](http://gamapserver.who.int/h1n1/qualitative_indicators/atlas.html?indicator=i1&date=Week%2008%20(22-Feb-2010%20:%2028-Feb-2010))

Source: WHO Pandemic (H1N1) 2009 - update 91 (http://www.who.int/csr/don/2010_03_12/en/index.html)

Europe

As of week 09 (01 – 07 March 2010), consultation rates have remained at low levels for most of the countries in Europe; 11 countries tested at least 20 sentinel specimens, but none reported influenza positivity rates over 20%. Most countries (N = 27) reported no dominant type of virus, indicating limited influenza activity. Eleven countries reported that pandemic (H1N1) 2009 was the dominant influenza virus in circulation. Influenza B was reported as dominant in Sweden, and as co-dominant with influenza A in the Russian Federation. Regional activity was reported in Armenia, Austria and Greece. The impact of influenza on health care services was low in 28 countries, while Armenia reported moderate impact.

Low numbers of severe acute respiratory infection (SARI) hospitalizations were reported in Armenia, Kazakhstan, Malta, the Republic of Moldova, Romania, Ukraine and Uzbekistan. A total of 4597 deaths associated with laboratory-confirmed pandemic (H1N1) 2009 has been reported in the Region since April 2009. Source: EuroFlu Weekly Electronic Bulletin, week 09 http://www.euroflu.org/cgi-files/bulletin_v2.cgi

Australia

Pandemic influenza activity remains low in Australia, however some indicators are showing increases or are at levels above those experienced at the same time in previous years.

Source:

<http://www.healthemergency.gov.au/internet/healthemergency/publishing.nsf/Content/ozflucurrent.htm>

VIROLOGY

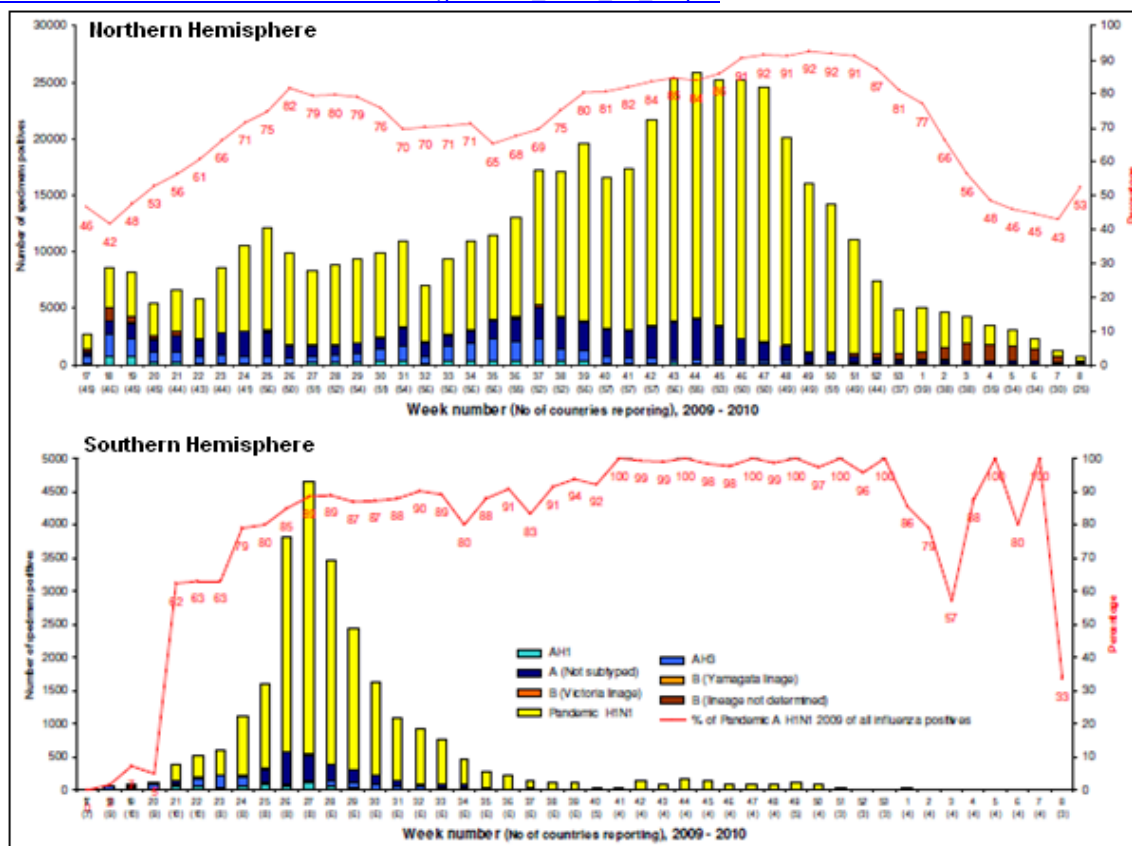
Circulating strains: A total of 28 countries reported to FluNet for the week 21 - 27 February 2010. Of the 813 specimens positive for influenza, 69.2% were typed as influenza A and 30.8% as influenza B. Of all sub-typed influenza A viruses globally, 92.8% (426/456) were pandemic (H1N1) 2009. Hong Kong SAR China has reported increased influenza B activity in recent weeks accounting for 56.1% of all influenza detections in the reporting week, while in China it accounted for 83.5%.

A reassortant influenza A(H1N1) virus of swine origin distinct from the pandemic A(H1N1) 2009 virus isolated from 3 patients in Saskatchewan, Canada has recently been reported (*Bastien N et al, 2010. Human Infection with a Triple-Reassortant Swine Influenza A(H1N1) Virus Containing the Hemagglutinin and Neuraminidase Genes of Seasonal Influenza Virus. JID 201:000 - 000*). All patients worked at the same large hog operation. The virus is from genetic reassortment between seasonal A(H1N1) and triple-reassortant influenza virus that emerged in North American swine during the late 1990s. The neuraminidase and haemagglutinin genes of these viruses were derived from human H1N1 virus and were closely related to those of the A/Brisbane/59/2007 vaccine virus. So far no there have been no further detections or transmission of this virus reported.

Resistance: Antiviral susceptibility testing continues to be conducted on pandemic A (H1N1) specimens and isolates from at least 91 countries and indicates that oseltamivir resistant pandemic (H1N1) viruses have been sporadic detections with rare onward transmission. For this reporting week (04 - 10 March 2010), no new sporadic cases of oseltamivir resistant pandemic influenza A (H1N1) 2009 viruses have been reported. The cumulative total is 264 so far of which 106 were reported in the WHO Western Pacific Region, 84 in the European region, 73 in the Pan-American Region and one in the Eastern Mediterranean Region. All have the H275Y substitution and are assumed to remain sensitive to zanamivir.

Source: Weekly update on oseltamivir resistance to pandemic influenza A (H1N1) 2009 viruses. <http://www.who.int/csr/disease/swineflu/Oseltamivirresistant20100312.pdf>

Figure 11: Circulation of influenza viruses in the northern and southern hemispheres: number of specimens positive for influenza by subtypes, weeks 17/2009 – 6/2010 (19 April 2009 to 27 February 2010).
http://www.who.int/csr/disease/swineflu/Virologicaldata_2010_03_12.pdf



Viral characterisation: The majority of pandemic A (H1N1) 2009 influenza viruses analysed to date have been antigenically and genetically closely related to the vaccine virus A/California/7/2009. The pandemic A (H1N1) 2009 viruses with D222G substitution have also been antigenically indistinguishable from the A/California/7/2009 (H1N1) vaccine virus.

Source: WHO http://www.who.int/csr/disease/swineflu/laboratory12_03_2010/en/index.html



Based on the reported antigenic characterization of 1836 influenza viruses from week 40/2009 to week 09/2010: 1815 were A(H1) pandemic A/California/7/2009 (H1N1)-like; 17 were A(H3) A/Perth/16/2009 (H3N2)-like; 1 was A(H1) A/Brisbane/59/2007 (H1N1)-like and 3 were B/Brisbane/60/2008-like (B/Victoria/2/87 lineage). Genetic characterizations were available for 1145 isolates; 1124 belonged to the A/California/7/2009 A(H1N1) pandemic group; 1 belonged to the A/Brisbane/10/2007 (H3) group; 12 to the A/Perth/16/2009 (H3N2) group; 5 to the A/Victoria/208/2009 (H3N2) group; and 3 to the B/England/393/2008 (Victoria lineage) group.

Source: EuroFlu Weekly Electronic Bulletin, week 9 http://www.euroflu.org/cgi-files/bulletin_v2.cgi

CONFIRMED GLOBAL DEATHS

As of 07 March 2010, more than 213 countries worldwide have reported laboratory confirmed cases of pandemic influenza H1N1 2009, including at least 16,713 deaths. This is an increase of 1.6% compared to the previous week (16,455 deaths reported as of 28 February 2010).

Source: WHO http://www.who.int/csr/don/2010_02_26/en/index.html

AVIAN INFLUENZA

Humans

Since 2003 a total of 489 human cases of H5N1 avian influenza have been reported to WHO from 15 countries. Of this 489, 289 (59%) have reportedly died. In 2010 so far, 21 cases have been reported; 16 (with 5 deaths) from Egypt, one (who died) from Indonesia and four (with one death) from Viet Nam.

Source: http://www.who.int/csr/disease/avian_influenza/country/cases_table_2010_03_16/en/index.html

Poultry

An outbreak of H5N1 influenza has been identified in a poultry farm in Romania, close to Ukraine. A 20 km wide surveillance zone around the farm has been enforced and all birds on the farm will be slaughtered.

Source: http://www.oie.int/wahis/public.php?page=single_report&pop=1&reportid=9047

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