

HPA Weekly National Influenza Report

Summary of UK surveillance of influenza and other seasonal respiratory illnesses

14 October 2010



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A full report will be published fortnightly with a shorter summary every other week while influenza activity is low. Should activity increase, a full report will be published weekly.

For further information on the surveillance schemes mentioned in this report, please see the [HPA website](#). Figures (including all those found in this report) displaying data from these schemes are available to download in PowerPoint format from the HPA website.

Summary

- Influenza activity is very low across the UK.
- In week 40 (ending 10 October), the weekly influenza/influenza-like illness (ILI) consultation rate increased slightly in England and Wales while it decreased or remained stable in Northern Ireland and Scotland. All GP consultation rates are well below baseline levels. Consultation rates for acute bronchitis have increased slightly and those for pneumonia remain low.
- There has been no acute respiratory disease outbreaks reported since week 40.
- No specimens have been reported as positive for influenza through sentinel GP surveillance across the UK.
- Through non-sentinel surveillance in England, ten influenza-positive specimens were reported in week 40. The number of respiratory syncytial virus (RSV) detections is low while the proportion of specimens positive for rhinovirus is increasing.
- Influenza activity is decreasing and is at low levels in most parts of the temperate Southern Hemisphere. Despite sporadic virus isolations, influenza activity does not yet appear to have started in the temperate areas of the Northern Hemisphere. After several weeks of increasing detections in much of the world, influenza A(H3N2) is now the predominant influenza virus world wide (with the majority of strains detected being similar to the vaccine strain), but many areas still have active transmission of H1N1 (2009) influenza.

Weekly consultation rates in national sentinel schemes

Influenza/influenza-like illness

In week 40 (ending 10 October), the weekly influenza/influenza-like illness (ILI) consultation rate increased slightly in England and Wales while it decreased or remained stable in Northern Ireland and Scotland (figure 1).

The overall RCGP (England and Wales) ILI consultation rate increased slightly from 4.6 to 6.4 per 100,000. This rate remains well below the winter baseline activity threshold of 30 per 100,000 (figures 1 and 2).

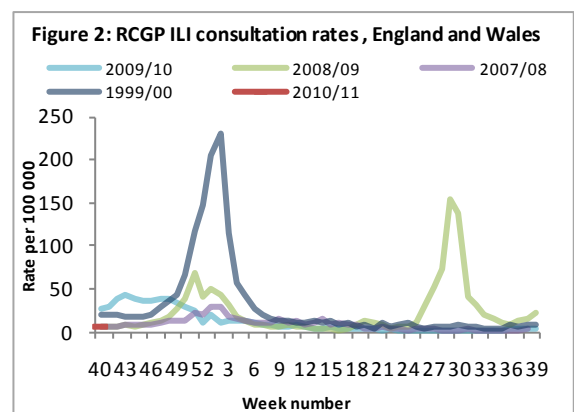
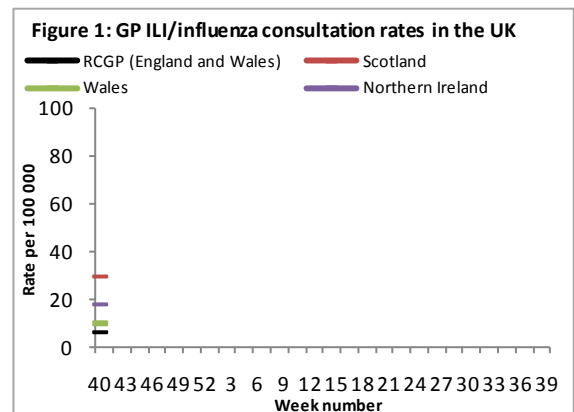
The rate increased in all regions from week 39 to week 40; in the north from 4.9 to 6.0 per 100,000, in the central region from 4.0 to 7.0 per 100,000 and in the south from 4.8 to 6.2 per 100,000.

The consultation rates in the RCGP scheme decreased or were stable in most age groups. The highest rate was in the 65-74 year age group (increased from 1.6 per 100,000 in week 39 to 10.1 per 100,000 in week 40) (figure 3).

For further information and data from this scheme please see the [RCGP website](#).

The combined influenza/ILI rate in Northern Ireland has decreased from 23.4 to 18.1 per 100,000, and remains below the threshold of 70 per 100,000 (figure 1).

In Northern Ireland in week 40, the rates were highest in the <1, 65-74 and 45-64 year age groups at 38.7, 27.2 and 23.9 per 100,000 respectively.



For further information and data from Northern Ireland please see the [Public Health Agency website](#).

The ILI rate in Scotland decreased slightly from 32.7 to 29.7 per 100,000 and remains below the baseline threshold of 50 per 100,000 (figure 1).

In Scotland in week 40, the rates were highest in the 1-4, 75+ and 5-14 year age groups at 75.3, 52.8 and 20.9 per 100,000 respectively.

For further information and data from Scotland please see the [Health Protection Scotland website](#).

The Welsh influenza rate increased from 7.0 to 10.0 per 100,000 but remains below the baseline threshold of 25 per 100,000 (figure 1). It should be noted that a change in the surveillance system used by Wales has led to an overall increase in reported rates.

For further information and data from Wales please see the [Public Health Wales website](#).

In the HPA/QSurveillance® scheme the overall rate increased from 5.8 to 7.0 per 100,000.

The HPA/QSurveillance® rates were also low and stable in all age groups. The highest rates were in people aged over 15, though all rates remained below 8.0 per 100,000.

The highest weekly ILI rates through QSurveillance® in week 40 were in the London (12.0 per 100,000) and West Midlands (8.7 per 100,000) SHAs; though all were at low levels (figure 4).

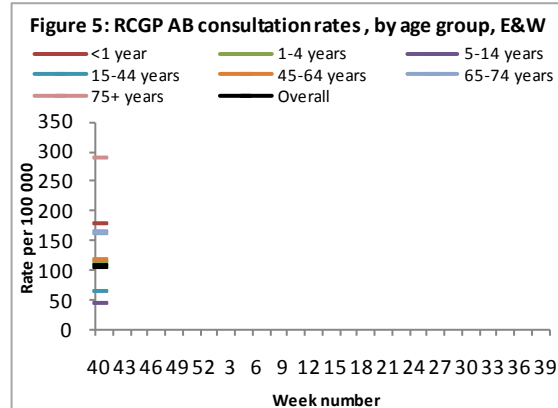
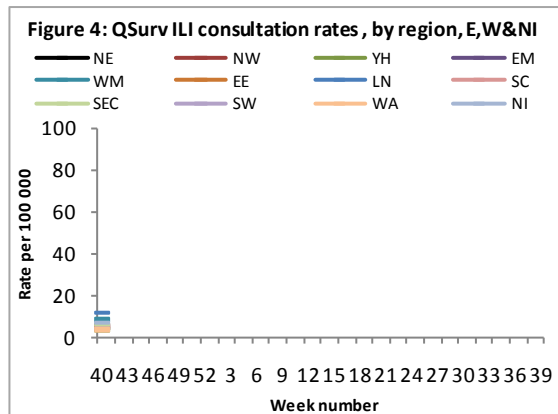
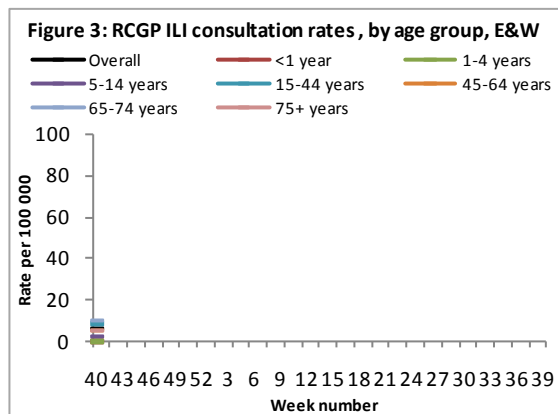
For further information and data from this scheme please see the Real-time Syndromic Surveillance page on the [HPA website](#).

Other respiratory indicators

The overall weekly consultation rate for acute bronchitis in England and Wales through the RCGP scheme increased slightly from 87.0 in week 39 to 107.3 per 100,000 in week 40.

The acute bronchitis rates were highest in the 75+ and <1 year groups at 290.0 and 179.0 per 100,000 respectively (figure 5).

The overall weekly consultation rate for pneumonia from the RCGP scheme was 0.7 per 100,000. This is similar compared to recent weeks and is within expected levels for this time of year.



Community surveillance

The overall call rate to NHS Direct in week 40 was 172.6 per 100,000.

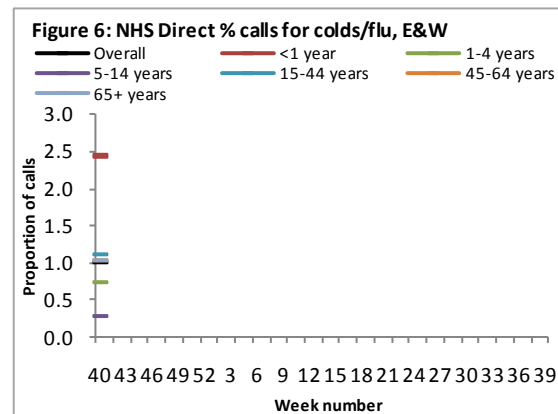
The overall proportion of calls for cold/flu was 1.0%, which is just below the threshold of 1.2%. By age group, the highest proportion is in the <1 year group at 2.5%, followed by the 15-44 year group at 1.1.% (figure 6).

The proportion of calls for fever in the 5-14 year age group was 5.4% which is below the threshold of 9%.

Regionally the cold/flu calls are highest at 1.4% in London and 1.2% in the South East.

For further information and data from this scheme please see the Real-time Syndromic Surveillance page on the [HPA website](#).

There have been no outbreaks of acute respiratory disease in institutions in the UK reported in the last week. Outbreaks should be reported to the local Health Protection Unit and Respcdsc@hpa.org.uk.



Microbiological surveillance

Six samples positive for influenza (three H1N1 (2009), and 3 influenza B) have been reported from English laboratories to Data Mart in week 40 (figure 7).

The proportion of samples positive for rhinovirus through Data Mart has remained high, while it remains low for parainfluenza virus and for adenovirus.

Of the 11 samples submitted via the two English GP-based sentinel schemes in week 40, none was positive for influenza (table 1).

No specimens have been tested since week 40 through GP schemes in Wales, Scotland and Northern Ireland (table 1).

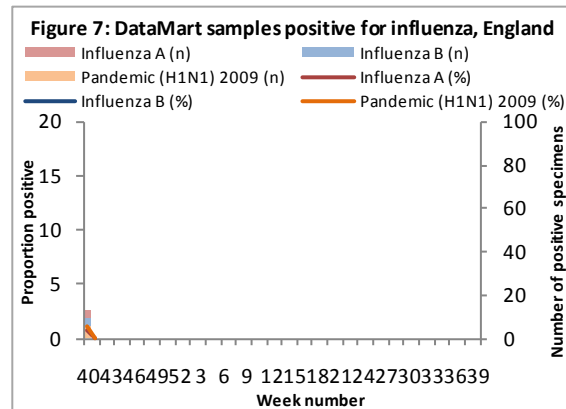


Table 1: Sentinel virological surveillance in the UK

Week	England	Scotland	Northern Ireland	Wales
40	0/11 (0%)	0/0 (0%)	0/0 (0%)	0/0 (0%)

Table 2: Antimicrobial susceptibility surveillance, E&W

Organism	Tetracyclines		Co-amoxiclav	
	Specimens tested (N)	Specimens susceptible (%)	Specimens tested (N)	Specimens susceptible (%)
<i>S. aureus</i>	2,387	94	241	88
<i>S. pneumoniae</i>	1,389	86	1465*	92*
<i>H. influenzae</i>	5,496	99	5,276	91

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

In the 12 weeks up to 3 October 2010, over 86% of all 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.

Disease severity and mortality data

HPA receives weekly death registrations from the Office for National Statistics. In week 39, an estimated 8,828 all-cause deaths were registered, which was a slight increase from 8,384 in week 38. This remains within expected levels for the time of year.

International Situation

[WHO influenza update](#) 8 October 2010

Influenza activity is decreasing and is at low levels in most parts of the temperate Southern Hemisphere. Despite sporadic virus isolations, influenza activity does not yet appear to have started in the temperate areas of the Northern Hemisphere. After several weeks of increasing detections in much of the world, influenza A(H3N2) is now the predominant influenza virus world wide (with the majority of strains detected being similar to the vaccine strain), but many areas still have active transmission of H1N1 (2009) influenza.

Southern hemisphere temperate countries: The winter influenza transmission season of the temperate countries of the southern hemisphere is now waning in most areas. The most common virus types associated with the influenza season of 2010 in the temperate southern hemisphere have varied greatly depending on the location. In Australia, influenza-like illness (ILI) activity, hospital, and intensive care unit admissions related to influenza in Australian sentinel hospitals have all decreased in the past week. The H1N1 (2009) influenza virus is still the most frequently detected virus in Australia, with a lower number of influenza type B and A (H3N2) viruses. Rates of ILI activity in New Zealand are below the baseline level for the second week with a low rate of influenza virus detection. The most common influenza virus found this season in New Zealand is H1N1 (2009) with very few other subtypes detected.

In Chile the seasonal outbreak arrived at a later time than normal and respiratory disease activity is still high but decreasing, indicating that the peak activity has passed. Reported cases of severe acute respiratory infections (SARI) caused by influenza have decreased the last week, and emergency consultations for pneumonia have also declined. Although some regions of the country have experienced higher ILI activity this year than during last year's outbreak of H1N1 (2009), at a national level overall activity has been much

lower. The most frequently detected virus in Chile this season has been A (H3N2) with co-circulation of smaller numbers of H1N1 (2009) and even fewer influenza type B viruses.

The influenza season in South Africa has peaked and is declining; influenza type B was the predominant virus of the season co-circulating with H1N1 (2009) and A (H3N2). The median age of influenza cases in South Africa was lower for those with H1N1 (2009) and influenza B infections than for those with influenza A (H3N2).

Tropical zone: While most tropical areas have seen recent peaks in transmission that are now decreasing in intensity, Southeast Asia is currently experiencing increasing levels of influenza activity. The viruses identified in tropical areas have varied even between neighbouring countries and co-circulation of multiple types has commonly been observed.

Influenza activity is decreasing in Central America. The influenza viruses detected have been a mixture of influenza A (H3N2), influenza H1N1 (2009), and influenza type B. Overall, influenza A(H3N2) is the most commonly detected but this is not uniformly true in every country. Among characterized influenza viruses in Costa Rica and Honduras in the last month, the large majority was A(H3N2), while Nicaragua has had predominantly influenza type B. Cuba had an outbreak of mainly H1N1 (2009) in April-May, but since August has detected much more influenza A(H3N2).

Mexico has detected an increase in ILI and acute respiratory disease (ARI) since August, particularly in the southern part of the country. This activity has coincided with an increased proportion of samples testing positive for influenza, but during September this proportion has again decreased. The majority of positive influenza samples have been influenza A (H3N2) viruses and a subset that was further characterized was all the A/Perth/16/2009-like strain, which is included in both the 2010-2011 Northern Hemisphere and the 2010 Southern Hemisphere influenza vaccine.

In south Asia, data from India indicates that the country-wide outbreak of H1N1 (2009) has peaked and a declining number of laboratory-confirmed cases has been reported the last weeks though activity is still quite high in some areas of the country. Bangladesh also has decreasing influenza activity, though with influenza A(H3N2) virus more commonly detected than H1N1 (2009).

Southeast Asia, in contrast, is experiencing increases in activity in some areas. Cambodia has reported increasing detections of influenza viruses for the last two weeks, with A (H3N2) the most frequent virus detected but with a high number of H1N1 (2009) detections and a few influenza B viruses. Neighbouring Thailand has reported on an increasing number of ILI cases and is experiencing local outbreaks of H1N1 (2009).

In Africa, Cameroon and Senegal continue to report a low number of circulating influenza B viruses, while the Eastern African countries Kenya, Tanzania and Madagascar have low circulation of predominantly A (H3N2).

Northern hemisphere temperate countries: In Asia, China is experiencing moderate circulation of influenza A (H3N2) virus with many fewer detections of influenza B. In Northern China, the proportion of outpatients with ILI in sentinel hospitals is increasing. In Hong Kong SAR, ILI activity in sentinel sites of general practitioners is decreasing but remains high and with a majority of influenza A (H3N2) viruses among the laboratory-confirmed cases.

In North America, both the United States and Canada are reporting low influenza activity with sporadic detections of A (H3N2) and influenza B in the US.

WHO Euro Region had low influenza activity in recent months; with Russia notably reporting increasing activity of ARI.

Avian influenza: Since 2003 a total of 505 human cases of H5N1 avian influenza have been reported to WHO from 15 countries. Of this 505, 300 (59%) have reportedly died (18 of 37, 49% in 2010). The latest cases were one 2 year-old female and one 33 year-old female from Egypt. Both are reported to have had exposure to sick or dead poultry and there is no epidemiological link between the two cases. The 33 year-old case died, bringing the total avian influenza deaths in Egypt to 36 of 122 cases (30%). For further information, see the [WHO website](#).

Acknowledgements

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