

# Influenza Pandemic Preparedness Update

HPA Pandemic Influenza Office

June 2010 Issue 1



## Breaking News Reports.....

### **Pandemic influenza office bulletin re-launched**

In response to the ongoing need to update and inform colleagues of the latest news and developments in relation to seasonal, avian and pandemic influenza, *Influenza Preparedness Updates* have been launched and will be issued on a 4-6 weekly basis. If you would like to contribute or have a particular issue that you feel needs addressing please, contact Kate Higham: 0208 327 7924 or e-mail: [Kathryn.Higham@HPA.org.uk](mailto:Kathryn.Higham@HPA.org.uk)

### **The Review of the Government response to the 2009 H1N1 pandemic**

Earlier this year the government announced an independent review of the national UK response to the 2009 pandemic. The group is chaired by Dame Deirdre Hine and during April and May 2010 the group have been hearing and reviewing the evidence that has been presented to them. It is anticipated that the report, due to be published in early July, will provide an overview of the response and list a number of recommendations aimed at improving UK pandemic preparedness and response.

### **National Framework for responding to an influenza pandemic**

Since the publication in 2007 of "Pandemic Influenza: A national framework for responding to an influenza pandemic" by the Cabinet Office and Department of Health, the World Health Organization has revised its global pandemic plan and a considerable amount was learned about the response to a pandemic during the summer of 2009. Work has therefore started on reviewing the Framework and it is hope that the final document will be available towards the end of 2010.

### **The WHO Review of the functioning of the International Health Regulations (2005) in relation to the 2009 (H1N1) Pandemic**

The WHO has convened an international committee to review the way in which the WHO responded to the 2009 influenza pandemic. The committee has been asked to:

1. Assess the functioning of the IHR committee in relation to the H1N1 pandemic.
2. To review the scope, appropriateness, effectiveness, responsiveness and global actions of the WHO secretariat in relation to supporting pandemic preparedness, alert and response.
3. To identify and review major lessons learned from the global response.

The first meeting of the committee was held from 12-14 April 2010 and the report can be accessed at: [http://www.who.int/ihr/r\\_c\\_meeting\\_report\\_1\\_en.pdf](http://www.who.int/ihr/r_c_meeting_report_1_en.pdf)

### **The UK influenza immunisation programme for the 2010/11 influenza season announced**

On 28 May 2010 the Department of Health issued a letter from the interim Chief Medical Officer, Dame Sally Davies, outlining the annual seasonal influenza immunisation programme for winter 2010/11, including influenza immunisation for at-risk groups, frontline health and social care staff, and the poultry worker immunisation programme. A key issue in the guidance is the use of H1N1 influenza vaccine and inclusion of pregnant women in the programme. The letter can be accessed at:

[http://www.dh.gov.uk/en/Publicationsandstatistics/Lettersandcirculars/Professionalletters/Chiefmedicalofficerletters/DH\\_116507](http://www.dh.gov.uk/en/Publicationsandstatistics/Lettersandcirculars/Professionalletters/Chiefmedicalofficerletters/DH_116507)

### **HPA International conference on pandemic influenza – London 21-22 June 2010-06-10**

The HPA has organised an international conference, "H1N1: The world responds to a 21st century pandemic" in London on 21-22 June 2010. The event will bring together eminent flu researchers, scientists and clinicians to examine the wealth of scientific knowledge gained over the last year - and how it can be used to prepare for future pandemic response. Places are still available and it is possible to register at: [www.hpa-events.org.uk/H1N1](http://www.hpa-events.org.uk/H1N1)

## Influenza news

### **Pandemic Influenza alert phase change**

Following the 8<sup>th</sup> meeting of the WHO Emergency committee, the Director General announced that the committee had expressed the view that from a global perspective the pandemic is post-peak and the period of most intense pandemic activity appears likely to have passed for many parts of the world. However, pandemic disease is expected to continue to occur and continued vigilance is needed in terms of surveillance and prevention. Details of the meeting can be accessed: [http://www.who.int/csr/disease/swineflu/8th\\_meeting\\_ihr/en/index.html](http://www.who.int/csr/disease/swineflu/8th_meeting_ihr/en/index.html)

### **Global influenza situation**

- As of 30<sup>th</sup> May, worldwide, more than 214 countries and overseas territories or communities have reported laboratory confirmed cases of pandemic influenza H1N1 2009, including over 18,138 deaths.
- The most active areas of pandemic influenza virus transmission are currently in tropical areas, primarily in parts of the Caribbean and Southeast Asia. These areas are now experiencing a low resurgence of cases after experiencing more intense activity during July 2009.
- Respiratory Syncytial virus (RSV) is widely circulating in South America.
- Pandemic influenza activity across the African continent is declining and now low or sporadic.
- In temperate zones of the Southern Hemisphere, countries are not reporting increases in influenza activity above epidemic thresholds, or unusually early influenza activity.
- Seasonal influenza B viruses are currently the predominant type of influenza virus circulating globally.
- During the later part of May 2010, low but significant levels of H3N2 viruses were detected in several countries of East Africa.

### **UK influenza situation**

- Pandemic influenza activity is stable and very low across the UK and below the baseline.
- No pandemic influenza cases have been reported as admitted to hospital in recent weeks.
- Since the start of the pandemic, there have been 474 deaths reported due to pandemic (H1N1)2009 in the UK.
- 45 or 6,379 pandemic viruses tested have been confirmed to carry a mutation which confers resistance to the antiviral drug Oseltamivir: 15 of the 40 viruses have been tested and confirmed to be phenotypically resistant to the drug but retain sensitivity to zanamivir. Latest updates can be accessed at:

<http://www.hpa.org.uk/web/HPAweb&Page&HPAwebAutoListName/Page/1243928258560>

## **Avian influenza**

### **WHO update on human cases**

Two new cases of human avian flu were reported in Indonesia in May - one of whom has died. One case handled dead chickens; the other was infected from an undefined source. 136 of 165 cases reported from Indonesia have been fatal.

One fatal case of H5N1 was reported from Cambodia this month. The case had prepared and eaten infected poultry. Eight of the 10 cases of H5N1 reported in Cambodia have been fatal. For further information on both cases access:

[WHO situation report](#)

### **Confirmed human cases of avian influenza A (H5N1) reported to WHO**

[Total number of lab-confirmed cases (deaths)], all dates refer to onset of illness. Updated 30 March 2009.

**6 May 2010**

Country	2003		2004		2005		2006		2007		2008		2009		2010		Total	
	cases	Deaths	cases	deaths	cases	deaths	cases	deaths	cases	deaths	cases	deaths	cases	deaths	cases	deaths	cases	deaths
Azerbaijan	0	0	0	0	0	0	8	5	0	0	0	0	0	0	0	0	8	5
Bangladesh	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
Cambodia	0	0	0	0	4	4	2	2	1	1	1	0	1	0	1	1	10	8
China	1	1	0	0	8	5	13	8	5	3	4	4	7	4	0	0	38	25
Djibouti	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
Egypt	0	0	0	0	0	0	18	10	25	9	8	4	39	4	19	7	109	34
Indonesia	0	0	0	0	20	13	55	45	42	37	24	20	21	19	3	2	165	136
Iraq	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	3	2
Lao - People's Democratic Republic	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	2	2

Myanmar	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Nigeria	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1
Pakistan	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	3	1
Thailand	0	0	17	12	5	2	3	3	0	0	0	0	0	0	0	0	25	17
Turkey	0	0	0	0	0	0	12	4	0	0	0	0	0	0	0	0	12	4
Viet Nam	3	3	29	20	61	19	0	0	8	5	6	5	5	5	7	2	119	59
Total	4	4	46	32	98	43	115	79	88	59	44	33	73	32	30	12	498	294

Total number of cases includes number of deaths.

WHO reports only laboratory-confirmed cases.

All dates refer to onset of illness.

Indonesia numbers indicate cumulative total of sporadic cases and deaths which occurred during 2009.

### IRVPB meeting, 02 March 2010

It was agreed that the IRVPB will be continuing for at least another year to continue to coordinate pandemic preparedness activities. In the immediate future, the focus will be on reviewing the response and preparing for the next season. It was felt it would be important for the Pandemic Influenza Implementation Group (or similar) to be reactivated for response-planning purposes over the next year.

#### Surveillance

- The weekly pandemic Influenza reports will continue to be published on Thursdays.
- ECDC now leads the European surveillance of flu in a scheme called EISN (European Influenza Surveillance Network). The annual meeting with all EU countries will take place in Bulgaria in June 2010.
- Plans are being made to implement lessons learned from a survey of surveillance of the pandemic. The surveillance survey had a good response from mainly health care professionals and overall, satisfaction was high.
- More information was requested on epidemiology, particularly in the containment phase and in the areas of schools, residential accommodation, nursing homes and travel advice.
- There is the potential for developing hospital surveillance and a paper is being prepared for the DH.

#### Lessons learned

- The board is considering whether they will oversee the implementation of lessons learned from the swine flu reflections day or whether it would be more appropriate for the Emergency response development group (ERDG) to take over this role.

#### Publications

- Scientific reviews are currently being prepared to support the review of the UK Pandemic Influenza Framework. The papers include a review on the use of face masks, the use of antivirals, school closures and mass gatherings/travel restrictions.
- Papers on vaccine effectiveness and the interpretation of mortality figures are also due to be published.

#### Future developments

- The board felt that it would be important to keep the swine, seasonal, pandemic and avian influenza sections of the website separate from the vaccine pages and a review of the content started.

### Reviews

**The role of the Health Protection Agency in the 'containment' phase during the first wave of pandemic influenza in England 2009.** Published 25 May 2010: [http://www.hpa.org.uk/web/HPAwebFile/HPAweb\\_C/1274088320581](http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1274088320581)

In the early stages of the H1N1 pandemic in April 2009, the HPA advised a programme of measures to contain transmission of the virus until effective measures for prevention and treatment could be established. The efficacy of these measures has been reviewed to inform strategies for future pandemics.

Evidence to date, would suggest that containment measures were effective in reducing transmission in households and some other settings where they were applied and had some effect in slowing transmission. However, transmission in the community was sustained and so treatment-only measures were introduced as the number of cases rose in June 2009. There is insufficient information to make a comprehensive assessment of containment measures at present but further review will determine the value of committing resources to implement them to slow transmission in future pandemics.

## Recent publications of note

Writing Committee of the WHO Consultation on Clinical Aspects of Pandemic (H1N1) 2009 Influenza. *Clinical aspects of Pandemic 2009 Influenza A(H1N1) Virus infection*. **NEJM** 2010; 362 (18): 1708-1719. Published online May 6, 2010 <http://content.nejm.org/cgi/content/full/362/18/1708?query=TOC>

### Abstract

During the spring of 2009, a novel influenza A (H1N1) virus of swine origin caused human infection and acute respiratory illness in Mexico. After initially spreading among persons in the United States and Canada, the virus spread globally, resulting in the first influenza pandemic since 1968 with circulation outside the usual influenza season in the Northern Hemisphere. As of March 2010, almost all countries had reported cases, and more than 17,700 deaths among laboratory-confirmed cases had been reported to the World Health Organization (WHO). The number of laboratory-confirmed cases significantly underestimates the pandemic's impact. In the United States, an estimated 59 million illnesses, 265,000 hospitalizations, and 12,000 deaths had been caused by the 2009 H1N1 virus as of mid-February 2010. This article reviews virological, epidemiological, and clinical data on 2009 H1N1 virus infections and summarizes key issues for clinicians worldwide.

Pebody RG et al *Pandemic Influenza A (H1N1) 2009 and mortality in the United Kingdom: risk factors for death, April 2009 to March 2010*. **Eurosurveillance** 2010; 15 (20). Published online May 20 2010:

<http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19571>

### Abstract

This paper describes the epidemiology of fatal pandemic influenza A(H1N1) cases in the United Kingdom (UK) since April 2009 and in particular, risk factors associated with death. A fatal case was defined as, a UK resident who died between 27 April 2009 and 12 March 2010, in whom pandemic influenza A(H1N1) infection was laboratory-confirmed or recorded on the death certificate. Case fatality ratios (CFR) were calculated using an estimated cumulative number of clinical cases as the denominator. The relative risk of death was estimated by comparing the population mortality rate in each risk group, with those not in a risk group. Across the UK, 440 fatal cases were identified. In England, fatal cases were mainly seen in young adults (median age 43 years, 85% under 65 years), unlike for seasonal influenza. The majority (77%) of cases for whom data were available (n=308) had underlying risk factors for severe disease. The CFR in those aged 65 years or over was nine per 1,000 clinical cases (range 3–26) compared to 0.4 (range 0.2 to 0.9) for those aged six months to 64 years. In the age group between six month and 64 years, the relative risk for fatal illness for those in a risk group was 18. The population attributable fractions in this age group were highest for chronic neurological disease (24%), immunosuppression (16%) and respiratory disease (15%). The results highlight the importance of early targeted effective intervention programmes.

Cohen D, Carter P. *WHO and the pandemic flu 'conspiracies'*. **BMJ**. 2010; 340:c2912. Published 3 June 2010:

[http://www.bmj.com/cgi/content/full/340/jun03\\_4/c2912](http://www.bmj.com/cgi/content/full/340/jun03_4/c2912)

### Abstract

Journalists investigate the validity of allegations of 'conflict of interest' which have been directed at key scientists who had been employed by pharmaceutical companies before advising WHO on pandemic flu strategies and conclude that greater clarification is needed if the credibility of the WHO is to be maintained.

## Forthcoming conferences

**H1N1: The world responds to a 21st century pandemic**, 21-22 June 2010 - London. This international conference will bring together scientists, academics and public health professionals to examine what we have learned since the appearance of H1N1 in April 2009, and how the knowledge gained from the global effort can be used in preparing for future pandemic response. For further details and to submit an abstract for consideration for poster presentation please visit [www.hpa-events.org.uk/H1N1](http://www.hpa-events.org.uk/H1N1).

**The International Forum on Pandemic Influenza 2010** July 24-25 2010. Qingdao, China.

The *IFPI Forum 2010* will gather world-leading experts from WHO, the US CDC, the European CDC and leading research institutions to discuss from response strategies and pandemic surveillance to vaccination strategies and lesson learnt in 2009 H1N1 pandemic. <http://www.ifpi2010.com/>

**Options for the control of influenza VII**, 3-7 Sept 2010, Hong Kong SAR, China.

This conference will provide comprehensive scientific guidance for all disciplines involved in influenza prevention, control and treatment, including seasonal and pandemic planning. There are presentations from international experts and workshops over the 5 days. <http://www.controlinfluenza.com/home/index.cfm>

## Other resources

### HPA RMN and Regional Flu Leads

Yorkshire & Humber North East	Rosy McNaught Kirsty Foster	<a href="mailto:rosy.mcnaught@hpa.org.uk">rosy.mcnaught@hpa.org.uk</a> <a href="mailto:kirsty.foster@hpa.org.uk">kirsty.foster@hpa.org.uk</a>
North West East of England East Midlands	Steve Gee Hamid Mahgoub Lindsey Abbott	<a href="mailto:steven.gee@hpa.org.uk">steven.gee@hpa.org.uk</a> <a href="mailto:hamid.mahgoub@norfolk-pct.nhs.uk">hamid.mahgoub@norfolk-pct.nhs.uk</a> or <a href="mailto:hamid.mahgoub@smhp.nhs.uk">hamid.mahgoub@smhp.nhs.uk</a> <a href="mailto:Lindsey.abbott@hpa.or.uk">Lindsey.abbott@hpa.or.uk</a>
West Midlands South East London South West	Robert Gajraj David Hagen Vivien Cleary Toyin Ejidokun	<a href="mailto:roger.gajraj@hpa.or.uk">roger.gajraj@hpa.or.uk</a> <a href="mailto:david.hagen@hpa.org.uk">david.hagen@hpa.org.uk</a> <a href="mailto:vivien.cleary@hpa.org.uk">vivien.cleary@hpa.org.uk</a> <a href="mailto:toyin.ejidokun@hpa.org.uk">toyin.ejidokun@hpa.org.uk</a>
RMN	Tim Wreghitt	<a href="mailto:tim.wreghitt@hpa.org.uk">tim.wreghitt@hpa.org.uk</a>

### HPA Pandemic Flu Office

There are opportunities for a short or long term secondment with the Pandemic Flu Office. Back fill costs, subsistence and travel related costs will be re-imbursed. If you are interested please contact Dr Nick Phin in the first instance, 0208 327 6661, ensuring you have the support of your line manager. This opportunity is not limited to CCDCs, we will consider anyone who can join the team and work with us to deliver our goals.

### Questions – Comments – Suggestions

We always look forward to receiving comments and suggestions. We endeavour to answer queries as soon as possible.

Please contact Maureen Carroll in the first instance who will direct your query to the most appropriate member of the team. E-mail address [Maureen.Carroll@hpa.org.uk](mailto:Maureen.Carroll@hpa.org.uk)

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