

## ECDC EXECUTIVE UPDATE

# Pandemic influenza A(H1N1) 2009

Issue 12  
Monday, 28 September 2009

## Meetings and events

### ***21 September: Friends of the presidency meeting in Brussels***

Professor Angus Nicoll, influenza coordinator for ECDC, gave an update of the current situation regarding the pandemic H1N1 2009.

This meeting is part of a series of meetings to be held in Brussels by the Swedish EU Presidency to develop Council conclusions on influenza and the pandemic for the formal EPSCO Council Meetings in the autumn.

### ***22–23 September: Advisory Forum meeting***

During the Advisory Forum meeting, which took place at ECDC last week, ECDC received advice on its actions in dealing with the pandemic and was given insight and information regarding the pandemic from the most affected EU Member States.

### ***24–25 September: Mathematical modelling meeting at ECDC***

ECDC hosted a meeting on mathematical modelling with the aim to communicate early results from the ECDC H1N1 modelling working group members and modelling experts from Australia, USA, Canada and China. The meeting especially highlighted data needs for modelling, non-pharmaceutical interventions (with special emphasis on school closures) and vaccination strategies. Updates from modelling activities in European countries that do modelling were also given.



*Mathematical modelling meeting at ECDC*

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Stockholm, 2009

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# Weekly digest on pandemic influenza A(H1N1) 2009 from ECDC's Daily Updates

## *Weekend Daily Updates discontinued*

ECDC will now discontinue producing Daily Updates on the weekends until further needs arise.

## *Daily Updates produced by 09.00hrs CEST*

Starting from Monday, the ECDC Daily Updates will be produced by 09.00hrs every morning from Monday–Friday and will include information on pandemic H1N1 2009 epidemiology in EU and EFTA countries (also from the weekend). The following statistics are from EU and EFTA countries as of 28 September 2009:

- Cumulative case number of confirmed cases: 54 667
- Cumulative number of deaths reported among confirmed cases: 174

Disclaimer: Several countries have now announced recommendations on treatment on clinical signs only and focused laboratory testing only for specific population groups or in outbreaks. For these countries, the reported numbers of cases presented in this report will severely underestimate the true incidence in the country and will not be comparable to countries still recommending laboratory tests of all suspected influenza cases.

## 28 September 2009

### *Possible first fatal case in Germany*

Robert Koch Institute of Germany reported that a fatal case of pneumonia and multiple organ failure in a 36-year-old woman was possibly related to influenza A(H1N1)v. This death in a patient with pre-existing respiratory illness would be the first fatal influenza A(H1N1)v case recorded in Germany.

### *Weekly overview of selected non-EU countries*

The [daily update](#) included the weekly overview of selected non-EU countries, including Chile, Brazil, Australia, New Zealand and South Africa.

## 25 September 2009

### *Addition of the pandemic strain recommended for the 2010 Southern Hemisphere season*

Yesterday WHO reported on the outcome of its vaccine strain selection meeting for the next Southern Hemisphere influenza season which will take place in what is the European Summer of 2010. WHO has recommended two changes: incorporation of an antigen representing the new pandemic strain A(H1N1) 2009 (an A/California/7/2009 (H1N1)-like virus) replacing the previous seasonal influenza A(H1N1) and a change to a new A(H3N2) antigen (an A/Perth/16/2009 (H3N2)-like virus) because of some drift in the circulating A(H3N2) viruses. There is no change in the recommended B virus component a B/Brisbane/60/2008-like virus.

Hence, the three components are:

- an A/California/7/2009 (H1N1)-like virus;
- an A/Perth/16/2009 (H3N2)-like virus;
- a B/Brisbane/60/2008-like virus.

A fuller description and comment on the report will follow next week in the ECDC public health developments series. These recommendations will not necessarily be included in those for the following European season (winter 2010–2011). WHO will make recommendations on that following its regular Northern Hemisphere meeting that will take place in early 2010.

Full WHO recommendations available at:

<http://www.who.int/csr/disease/influenza/recommendations2010south/en/index.html>

The ECDC Weekly Influenza Surveillance Overview will be published this afternoon and will be available at:

[http://www.ecdc.europa.eu/en/activities/surveillance/EISN/Pages/EISN\\_Bulletin.aspx](http://www.ecdc.europa.eu/en/activities/surveillance/EISN/Pages/EISN_Bulletin.aspx)

## 24 September 2009

### ***Review on effectiveness of physical interventions published***

The British Medical Journal (BMJ) published a systematic review on the effectiveness of physical interventions to interrupt or delay the spread of respiratory viruses. The authors concluded that, despite the difficulty of implementing many measures in the long-term, there is evidence that many simple and low cost interventions reduce the transmission of epidemic respiratory viruses.

The full article can be found at: [http://www.bmj.com/cgi/content/abstract/339/sep21\\_1/b3675](http://www.bmj.com/cgi/content/abstract/339/sep21_1/b3675)

### ***A meta-analysis on the association with influenza with myocardial infarctions published***

Lancet Infectious Diseases published a meta-analysis on the evidence that influenza or influenza-like-illness (ILI) triggers acute myocardial infarctions or cardiovascular deaths. The authors conclude that consistent associations between influenza and myocardial infarctions have been shown; however, the evidence on association with cardiovascular deaths is weaker.

The full abstract can be found at: [http://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(09\)70233-6/abstract](http://www.thelancet.com/journals/laninf/article/PIIS1473-3099(09)70233-6/abstract)

## 23 September 2009

### ***Rap video wins US HHS H1N1 PSA contest***

A rap video made by New York doctor John Clark was chosen from 240 entries as the winner of the US 2009 H1N1 public service announcement (PSA) contest. Voters casting more than 50 000 votes on YouTube selected this one minute on-line video to be shown on national TV campaigns. The full video is available at:

[http://www.youtube.com/watch?v=\\_qwUdmPI0bU](http://www.youtube.com/watch?v=_qwUdmPI0bU)

## 22 September 2009

### ***NIAID study suggests one dose of pandemic vaccine protective and safe in 10–17 year olds***

Early, unpublished results from a US National Institute of Allergy and Infectious Diseases (NIAID) study suggest that a single 15-microgram dose of a non-adjuvanted pandemic influenza vaccine is safe and generates an immune response likely to be protective in 10–17-year-old children and adolescents. Younger children did not have equally robust responses. The vaccine used in the study is manufactured by Sanofi-Pasteur.

NIAID press release available at:

<http://www.nih.gov/news/health/sep2009/niaid-21.htm>

## This week's media highlights

Widely covered in all the media this week was the news that China had begun its vaccination strategy and that initial surveillance from the Chinese authorities suggested that there were no adverse reactions to the vaccine. How vaccines would be administered for the different risk groups in several countries has also been widely reported, in particular if one or two doses would be sufficient for young children.

How countries are preparing for their individual pandemic vaccination strategies has also been covered extensively in the media over the course of last week. In addition, many reports covered the probable start dates for other countries, notably Mexico, which will begin in October. However, there has also been broad media coverage on the WHO suggestion that worldwide vaccine production was currently less than expected and that the virus had not mutated in any way.

## Recent ECDC publications on A(H1N1)v influenza

### ***Weekly influenza surveillance overview published***

The [ECDC weekly influenza surveillance overview](#) was published on Friday 25 September.

### ***ECDC interim pandemic risk assessment updated***

ECDC regularly updates its risk assessment incorporating new information and analyses so as to better inform the European Union on what can be expected this autumn when pandemic waves are inevitable. An updated interim ECDC risk assessment on the pandemic H1N1 2009 was published on the ECDC web page on 25 September 2009.

This particular update draws especially on data and experience from the Southern Hemisphere's temperate countries during their winter season. Previous areas of uncertainty are improving rapidly. New information in this version (dated 25 September 2009) included the following:

- A conclusion from the Southern Hemisphere experience is that well prepared essential services should not be overly taxed by this pandemic in its current form;
- that the numbers of deaths did not seem to rise in the Southern Hemisphere countries above what is seen with seasonal influenza though the deaths were in different groups, notably younger people;
- that there will be pressures experienced by hospital services, especially intensive care units;
- the difference between the experience of most people who are infected by the pandemic virus (mild disease) and the few who experience very severe disease has become considerably more apparent;
- the most common severe disease, viral pneumonia causing Acute Respiratory Distress Syndrome (ARDS), is rarely seen with seasonal influenza and difficult for doctors to manage;
- planning assumptions (reasonable worst-case scenarios) for clinical attack, hospitalisation and case fatality rates have been reduced;
- there are a number of indications of there being significant numbers of asymptomatic infections.
- the additional individual risk of severe disease experienced by pregnant women because of infection with the A(H1N1)v influenza has now been roughly quantified as a four-fold increase in risk for the individual

At the same time the risk assessment continues to note that waves of pandemic viruses are inevitable this autumn in all EU/EEA Member States and transmission is already starting to pick up in some countries as mentioned in the weekly influenza surveillance overview.

However, there remain areas of uncertainty ('*known unknowns*') which ECDC will be working on with Member States, WHO and other international partners. In particular, these include the following: the mix of influenza and other viruses that will be circulating this coming autumn and winter in Europe, with the implications for use of seasonal vaccines; the exact timing and pattern of spread of the virus in Europe in the autumn and winter; shedding of the virus from infected persons, with the implications for infectivity; more precise parameters for modelling relative and attributable risk of more severe disease; pathological processes underlying severe disease and individual vulnerability; population level mortality attributable to the pandemic virus in Europe; the protective value of early treatment with antivirals; data and analyses concerning the likely patient numbers in hospitals and; information concerning the impact on children in general.

The full risk assessment is available at:

[http://www.ecdc.europa.eu/en/healthtopics/Documents/0908\\_Influenza\\_AH1N1\\_Risk\\_Assessment.pdf](http://www.ecdc.europa.eu/en/healthtopics/Documents/0908_Influenza_AH1N1_Risk_Assessment.pdf)

## Public health development

The European Medicines Agency (EMA) has recommended to the European Commission that two vaccines against influenza A(H1N1)v be granted marketing authorisation. To ensure that the authorised vaccines are available before the start of the flu season in the coming autumn and winter months, the Agency's Committee for Medicinal Products for Human Use (CHMP) expedited its assessment.

Another isolated case of probable transmission of oseltamivir resistant pandemic viruses has been reported in the USA. US CDC (Atlanta) and WHO guidelines emphasise the importance of sparing use of neuraminidase inhibitors for chemoprophylaxis but continuing to use them for treatment according to national and international guidelines.

See the [full review](#).

## Scientific advance

### *Use of neuraminidase inhibitors for the treatment of pandemic and seasonal influenza especially for preventing severe disease*

A recent paper from Thailand has reported how treatment with a neuraminidase inhibitor (oseltamivir) protected people with seasonal influenza against severe outcomes and death. These findings emphasise the importance of early treatment for cases of infection with the pandemic influenza as detailed in recent guidance from the US CDC.

To see the full ECDC comments [click here](#).

## Updates from Eurosurveillance

In this week's edition of Eurosurveillance, an article from Ireland describes the enhanced surveillance of the initial cases of pandemic H1N1 2009 influenza. From 28 April to 18 July 2009, there were 156 cases of pandemic H1N1 2009 influenza confirmed in Ireland. During this time, Ireland was in the containment phase, and detailed case-based epidemiological information was gathered on all cases presenting in the community and acute healthcare settings. Active case finding was performed among contacts of cases. Eighty per cent of the cases were in people under the age of 35 years and 86% of the cases were imported. The most frequent symptoms were fever, sore throat, myalgia and dry cough. Nine people were hospitalised, no fatalities occurred. On 18 July 2009, the strategy changed from containment to mitigation and detailed case based surveillance of all cases ceased.

<http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19337>

A report from France analyses oseltamivir susceptibility in south-western France during the 2007–8 and 2008–9 influenza epidemics and the ongoing influenza pandemic H1N1 2009. The authors state that the recent emergence of seasonal influenza A(H1N1) strains resistant to oseltamivir makes it necessary to carefully monitor the susceptibility of human influenza viruses to neuraminidase inhibitors. They report the prevalence of the oseltamivir resistance among influenza A viruses circulating in south-western France over the past three years: seasonal influenza A(H1N1), seasonal influenza A(H3N2), and the influenza A(H1N1)v viruses associated with the ongoing 2009 pandemic. The main result of the study is the absence of oseltamivir resistance in the pandemic H1N1 influenza strains studied so far.

<http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19334>

## Upcoming events

ECDC representatives will be attending a Swedish EU Presidency meeting in Stockholm on 1 October where Mrs. Zsuzsanna Jakab will also be addressing the participants.