

ECDC DAILY UPDATE

Pandemic (H1N1) 2009

Update 13 November 2009,
09:00 hours CEST

Main developments in past 24 hours

- Weekly Influenza Surveillance Overview to be published today;
- Eurosurveillance updates published;
- Situation update – Ukraine;
- CDC estimates number of cases infected with H1N1;
- Two studies on effectiveness of seasonal influenza vaccine against pandemic influenza published;
- Total of 474 fatal cases in Europe and EFTA countries and 6 294 in the rest of the world have been reported up to date.

This report is based on official information provided by the national public health websites or through other official communication channels. An update on the number of confirmed fatal cases is presented in Table 2 - as of 12 November 2009 -16:00 hours CEST, for the world, and 13 November 2009 - 09:00 hours CEST, for Europe.

Weekly Influenza Surveillance Overview

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

Epidemiologic update

All 27 EU and 4 EFTA countries are reporting cases of pandemic (H1N1) 2009 influenza. Since April 2009, a total 474 deaths have been reported (Table 2) and the number of deaths by week has been clearly increasing over the last 3 weeks.

The latest available updates as of November 12, 2009, at 16:00, on new and on confirmed fatal pandemic A(H1N1) cases outside the EU/EFTA area by country, are also presented in Table 2.

The latest available updates on hospital admissions per Member State are presented in Table 1.

Other Updates

Situation in Ukraine

From 18 October to 12 November, the Ministry of Health has reported a total of 1,253,558 cases of acute respiratory illness and 239 deaths. The majority of cases is concentrated in the Western oblasts in Ukraine, but spreads to Kyiv and other parts of the country. Influenza A(H1N1) has been identified in a number of samples in national laboratories and confirmed by the WHO's reference laboratory in London. The last official number of laboratory confirmed A(H1N1) cases in Ukraine was 32 (data from 06/11/09).

CDC estimates number of cases infected with H1N1

CDC estimated that between 14 million and 34 million cases of influenza A(H1N1)v occurred between April and October 2009. The methods are described in detail in the attached documents and are based on laboratory surveillance, published hospitalization estimates and multipliers derived from previously published prevalence estimates.

The full CDC document is available at: http://www.cdc.gov/h1n1flu/estimates_2009_h1n1.htm

Mexican study shows protective effect of seasonal influenza vaccine

A study published in the Lancet describes the first 63 479 notified pandemic influenza cases in Mexico up to 31st July, 2009 and analyzes risk and protective factors for infection, hospitalisation and fatal outcome. According to this study the risk of infection with influenza A(H1N1), verified mainly by rapid tests, was lower among people vaccinated for seasonal influenza.

The full article can be found at:

[http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(09\)61638-X/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)61638-X/fulltext)

A CDC study finds no protective effect of seasonal influenza vaccine

The CDC Mortality and Morbidity Weekly Report (MMWR) published an analysis on the effectiveness of the 2008-09 trivalent seasonal influenza vaccine against pandemic influenza H1N1. This case-cohort analysis was based on notifications data and did not show any vaccine effectiveness.

The full CDC report can be found at:

http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5844a5.htm?s_cid=mm5844a5_e

Eurosurveillance update

In their paper H Nishiura et al. present a study comparing the risk of clinical attack rates between one- and two-dose vaccination schemes. They demonstrate that if the efficacies do not greatly vary between one- and two-dose schemes, a one-dose vaccination scheme may well be supported. Nevertheless, two-dose vaccination is shown to result in less morbidity if the vaccine efficacies are greatly diminished by reducing the dose. From the results the authors conclude that as long as the detailed efficacy estimates rest on theoretical assumptions, single-dose vaccination may only be sufficiently justified in a specific setting where the number of vaccines is extremely limited.

<http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19396>

A second paper in yesterday's Eurosurveillance issue reports about an ongoing outbreak in pigs of infections with pandemic influenza A(H1N1)v virus in Norway. According to M Hofshagen et al. the first herd was confirmed positive on 10 October 2009 and as of 26 October, a total of 23 herds have been diagnosed as positive. The majority of the herds seem to have been infected by humans. Sequence analysis of pig viruses from the index farm shows that they are identical or virtually identical to human viruses from the same geographical region. Currently further investigations are being carried out to clarify the extent of the outbreaks in the rest of Norway and studies are underway to evaluate risk factors for the infection at farm level.

<http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19406>

A third paper by Columbier et al. reports on a notable surge in messages communicated through the Early Warning and Response System (EWRS) for the prevention and control of communicable diseases in the European Union recorded since the start of 2009 H1N1 influenza pandemic. In order to measure the impact of this increase on the reporting of other events, the authors compared the messages posted in the EWRS since April 2009 with those posted in the previous years (2004-2008). The analysis revealed that a ten-fold increase in messages was recorded during the pandemic period, from April to September 2009, and that the reporting of other threats dropped to a significantly low rate. They authors conclude that their results suggest an important impact on the notification process of events in case of a situation requiring extensive mobilisation of public health resources and emphasise the importance of keeping an appropriate balancing of resources during sustained emergencies, in particular in view of a possible second wave of pandemic influenza cases, to ensure prompt detection and reporting of potential concomitant emerging threats.

<http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19397>

Table 1: Reported number of confirmed Pandemic (H1N1) 2009 influenza cases admitted to hospitals and intensive care by country as of 13 November 2009, 09:00 hours (CEST) in the EU and EFTA countries

Country (date of report)	Number of cases currently hospitalised	Cumulative number of cases admitted in hospitals	Number of cases currently in intensive care	Cumulative number of cases admitted to intensive care
Austria (11.11.)	-	-	-	-
Belgium (12.11.)	-	-	-	-
Bulgaria (04.11)	-	-	-	-
Cyprus(01.11)	-	-	-	4
Czech Republic (12.11.)	-	-	-	-
Denmark (11.11.)	-	-	-	-
Estonia (23.10.)	-	11	-	-
Finland (11.11.)	-	-	-	-
France (12.11.)	-	-	71	188
Germany (10.11.)	-	-	-	-
Greece (11.11.)	-	-	-	-
Hungary (01.11.)	-	68	-	-
Iceland (11.11.)	-	170	-	19
Ireland (12.11.)	191	785	22	65
Italy (11.11)	-	264	-	116
Latvia (12.11.)	-	1	-	-
Liechtenstein (11.11.)	-	-	-	-
Lithuania (04.11.)	-	-	-	-
Luxembourg (21.10.)	-	-	0	0
Malta (04.09.)	-	46	-	1
Netherlands (06.11.)	273	611	28	69
Norway (11.11.)	86	623	13	75
Poland (10.11.)	-	-	-	-
Portugal (11.11.)	121	-	17	-
Romania (11.11)	-	-	-	-
Slovakia (12.08.)	2	33	0	0
Slovenia (10.08.)	-	-	-	-
Spain (05.11.)	-	-	-	-
Sweden (01.11.)	51	241	-	-
Switzerland (11.11.)	15	48	-	11
United Kingdom ^a (12.11.)	785	-	173	-

Note: Data for the EU and EFTA countries correspond to the Ministry of Health or surveillance centre websites. New updates with changes in figures are shaded in yellow. (-) denotes no information readily available in official sources.

^aData includes all probable cases for England only. Does not include Scotland (841 cumulative hospitalisations), Wales (327) and Northern Ireland (527).

Table 2. Reported number of new and cumulative confirmed fatal Pandemic (H1N1) 2009 influenza cases in EU and EFTA countries, as 13 November 2009, 09:00 hours CEST, and in the rest of the world by country, as of 12 November 2009, 16:00 hours CEST.

Country	Number of new fatal cases since previous national update	Cumulative number of fatal cases
EU AND EFTA COUNTRIES		
Austria	-	1
Belgium	-	8
Bulgaria	-	5
Czech Republic	-	1
Finland	-	6
France	2	59 ^a
Germany	1	13
Greece	-	5
Hungary	-	5
Iceland	-	1
Ireland	1	15
Italy	-	38
Latvia	-	1
Luxembourg	-	1
Malta	-	3
Netherlands	-	17
Norway	-	16
Portugal	-	5
Slovakia	-	1
Spain	15	88
Sweden	2	5
United Kingdom	23	180
Total	44	474
OTHER EUROPEAN COUNTRIES & CENTRAL ASIA		
Azerbaijan	-	2
Belarus	-	7
Croatia	1	3
Moldova	-	4
Russia	-	16
Serbia	1	8
Ukraine	-	14
Total	2	54
MEDITERRANEAN AND MIDDLE-EAST		
Bahrain	-	6

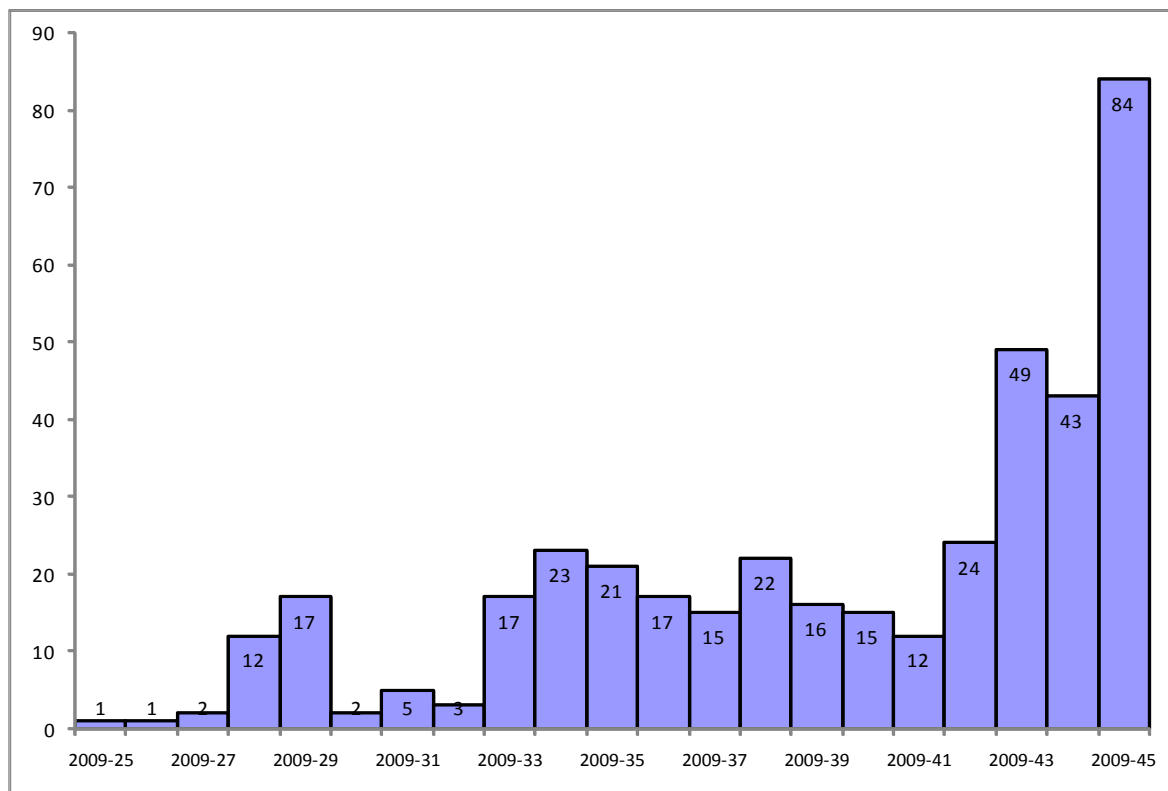
Egypt	-	6
Iran	-	58
Iraq	-	7
Israel	-	39
Jordan	-	7
Kuwait	-	26
Lebanon	-	3
Occupied Palestinian Territory	-	2
Oman	-	25
Qatar	-	5
Saudi Arabia	-	66
Syria	-	7
Turkey	4	40
United Arab Emirates	-	6
Yemen	-	17
Total	4	320
AFRICA		
Ghana	-	1
Madagascar	-	1
Mauritius	-	8
Mozambique	-	2
Namibia	-	1
Sao Tome & Principe	-	2
South Africa	-	91
Sudan	-	1
Tanzania	-	1
Total	-	108
NORTH AMERICA		
Canada	-	135
Mexico	-	452
USA	-	1004
Total	-	1591
CENTRAL AMERICA & CARIBBEAN		
Bahamas	-	4
Barbados	-	3
Cayman Islands	-	1
Costa Rica	-	38
Cuba	-	7
Dominican Republic	-	22
El Salvador	-	23

Guatemala	-	18
Honduras	-	16
Jamaica	-	5
Nicaragua	-	11
Panama	-	11
Saint Kitts and Nevis	-	1
Saint Lucia	-	1
Suriname	-	2
Trinidad-Tobago	-	5
Total	-	168
SOUTH AMERICA		
Argentina	-	600
Bolivia	-	56
Brazil	-	1368
Chile	-	140
Colombia	-	141
Ecuador	-	82
Paraguay	-	52
Peru	-	183
Uruguay	-	33
Venezuela	2	103
Total	2	2758
NORTH-EAST & SOUTH ASIA		
Afghanistan	-	11
Bangladesh	-	6
China (Mainland)	6	36
Hong Kong SAR China	-	39
India	3	508
Japan	-	28
Macao SAR China	-	2
Mongolia	-	8
South Korea	-	52
Sri Lanka	-	1
Taiwan	-	27
Total	9	718
SOUTH-EAST ASIA		
Brunei Darussalam	-	1
Cambodia	-	4
Indonesia	-	10
Laos Peoples Democratic Republic	-	1

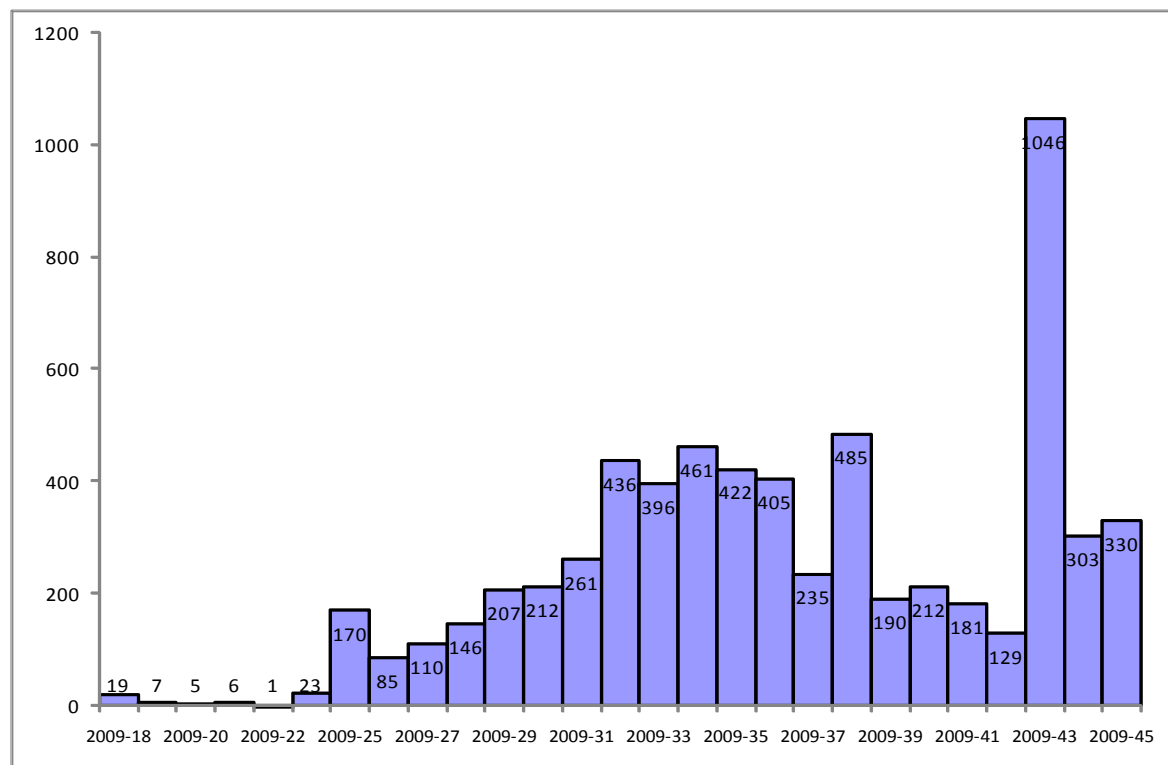
Malaysia	-	77
Philippines	-	30
Singapore	-	18
Thailand	-	184
Vietnam	-	40
Total	-	365
AUSTRALIA & PACIFIC		
Australia	-	187
Cook Islands	-	1
Marshall Islands	-	1
New Zealand	-	19
Samoa	-	2
Solomon Islands	-	1
Tonga	-	1
Total	-	212
TOTAL	61	6768

^a Deaths reported from France include 1 in Guyana, 9 in New Caledonia, 7 in the French Polynesia, 6 in the Reunion, 1 in Martinique, 2 in Mayotte, 1 in Guadeloupe and 32 in mainland France.

Figure 1: Number of confirmed deaths among pandemic (H1N1) 2009 influenza cases by week of notification. EU and EFTA countries (upper panel, week 25 to week 45, 2009) and world (lower panel^a, week 18 to week 45, 2009).



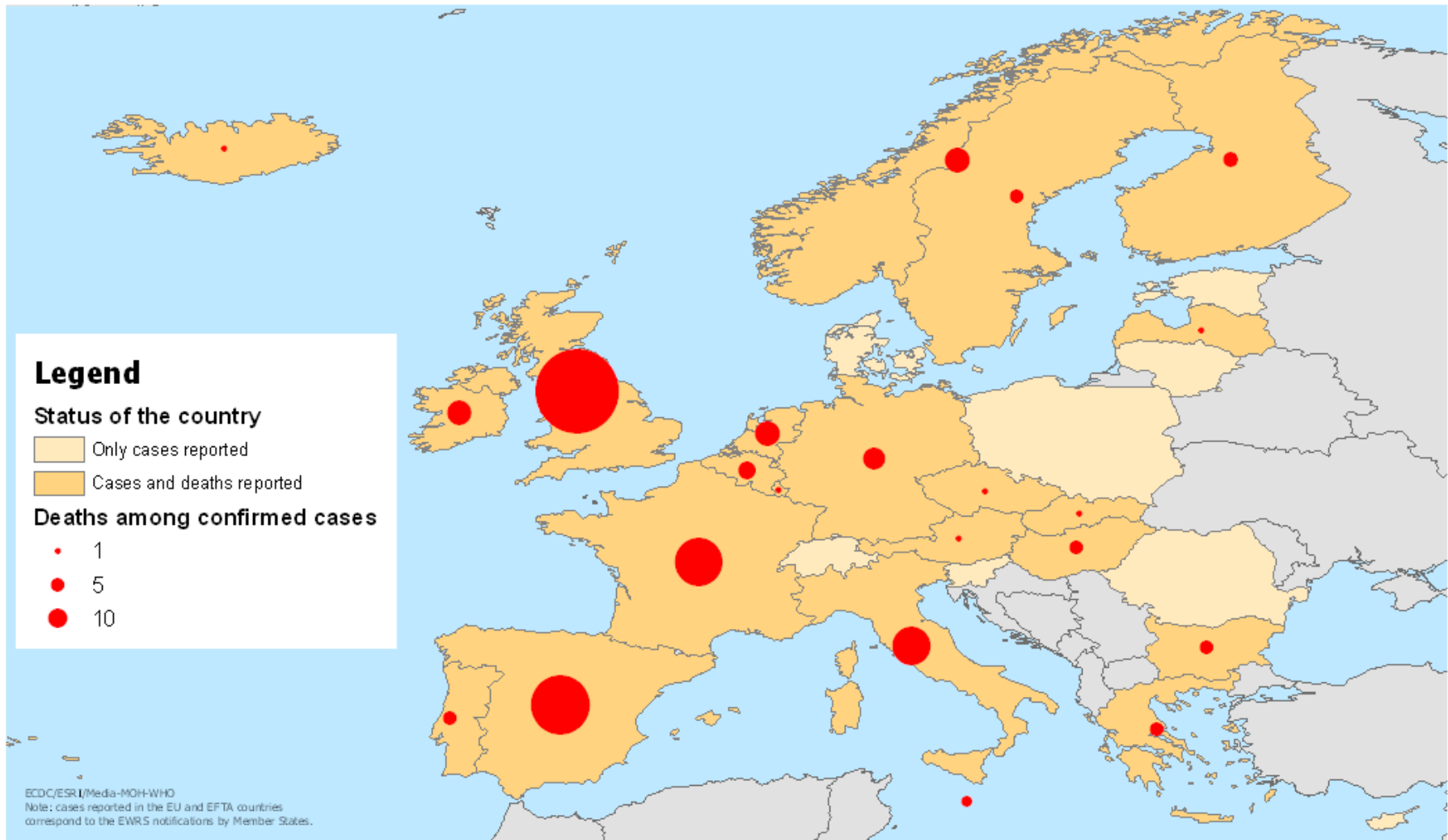
Notification week



Notification week

^a The apparent increase in the number of deaths in week 43 is due to the aggregate reporting of fatal cases from Brazil from weeks 37 to 40 and to our batch report of US fatal cases since August 1st.

Reported cumulative number of confirmed fatal cases of influenza A(H1N1)v in EU and EFTA countries, as of 13 November 2009, 09:00 hours CEST



Reported cumulative number of confirmed fatal cases of influenza A(H1N1)v and country reporting status by country, as of 12 November 2009, 16:00 hours CEST

