

ECDC DAILY UPDATE

Pandemic (H1N1) 2009

Update 26 November 2009,
09:00 hours CEST

Main developments in past 24 hours

- Summary of experience from first wave in UK published;
- Total of 734 fatal cases in Europe and EFTA countries and 7 499 in the rest of the world have been reported up to date.

This report is based on official information provided by 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 25 November 2009 - 16:00 hours CEST, for the world, and 26 November 2009 - 09:00 hours CEST, for Europe.

The UK synthesis of the pandemic (H1N1) 2009 first wave

The Health Protection Agency (HPA) has published a 'synthesis' describes the epidemiology of the 'first wave' of the pandemic in the UK and the public health response to it.(1) There is an extensive description of the containment process which the UK health authorities undertook through April to the end of June but it is the epidemiology and impact which is now of more importance to the rest of Europe especially for countries now experiencing their own first wave. It needs to be remembered that both seasonal and pandemic influenza transmits more easily in the winter months.

The HPA report is only for England (population around 51.5 million). During the first wave the HPA estimated that between 144,000 and 670,000 people (mid-estimate of 320,000) fell ill. However, this varied considerably by age group and region. People aged 24 years and younger were many more times likely to become infected than adults >65 years. Using modelled estimates, London and the West Midlands accounted for 30% and 12%, respectively, of reported cases. Most people experienced a mild, typical influenza-like illness and the number of

deaths in the first wave was fewer than would be expected in a typical influenza season. However, severe cases occurred and the percentage of cases that ended up in hospital ranged from 1.3% to 2.5%. Risk of hospitalisation and death was much higher in the presence of one or more risk conditions, particularly chronic renal disease, immunosuppression and chronic neurological disease. Equally though a minority of those hospitalised and dying were without any risk factors. Among the different age groups rates were higher for infants (children less than one year of age) and adults >65 years, compared with other age groups. Focal investigations of the first cases and their household contacts during the containment phase found that the secondary household virologically confirmed attack rate was 7%. However, this rate was four times higher in children (less than 16 years) than adults and >90% lower among household contacts who received antiviral prophylaxis during the containment activities. Pandemic (H1N1) 2009 was the dominant influenza strain (there were hardly any other influenzas) and among more than 1000 pandemic viruses from patients only three patients had isolates resistant to oseltamivir. Perhaps the most interesting findings are from the initial serological studies which found that a many more people, especially children were infected with the pandemic virus than had been thought. The first results indicate that, overall, about 15% of children in England were infected during the first wave. In London and the West Midlands the estimated cumulative incidence of infection in children <15 years of age and young adults aged 15-24 years was about 25% and 21%, respectively. In one school outbreak up to a third of the children without symptoms whose serum was tested for signs of infection were found to have been silently infected.

The relevance of these finding for other countries in Europe is that they can be used to improve our risk assessment and to revise planning assumptions (2,3). ECDC has done the latter working with the UK and other EU countries as well as with the WHO (3). It is important to not that these represent a reasonable worse case scenarios. Specifically they do not represent a prediction. They UK experience also reinforces the ECDC advice that hospitals and especially intensive care will be the most burdened part of the health care sector. Finally the significant number of silent infections combined with the fact that many older people possess some residual immunity suggest that EU countries may only experience one major pandemic wave this winter (of course for countries like Spain and the UK that had a summer wave this will be their second wave).(2) Though that wave will be a tough one for the hospital health services in particular.

1. Health Protection Agency summary: http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1258560552857

2. ECDC Risk Assessment November 2009:
http://www.ecdc.europa.eu/en/healthtopics/Documents/0908_Influenza_AH1N1_Risk_Assessment.pdf

3. ECDC Revised Planning Assumptions for Europe:
[http://www.ecdc.europa.eu/en/healthtopics/Documents/091111_Pandemic_\(H1N1\)_2009_Planning_Assumptions_for_EU_EEA_countries.pdf](http://www.ecdc.europa.eu/en/healthtopics/Documents/091111_Pandemic_(H1N1)_2009_Planning_Assumptions_for_EU_EEA_countries.pdf)

Epidemiologic update

All 27 EU and 4 EFTA countries are reporting cases of pandemic (H1N1) 2009 influenza. A total of 734 deaths have been reported since April 2009 (Table 2). Since week 41 the numbers of deaths each has shown a steady increase almost doubling every fortnight over the last six weeks. While the most deaths have to date been in Western Europe there are increasing numbers of deaths being reported from Central and Eastern Europe. Latest new and confirmed fatal pandemic (H1N1) cases outside the EU/EFTA area are presented in Table 2 as well. Available updates on hospital admissions, per Member State, can be found in Table 1.

Other updates

ESCMID concerned that scepticism and deliberate misinformation is leading to low vaccine uptake

Whilst rates of pandemic influenza increase in intensity and geographical spread across Europe, the roll out of the vaccination campaigns is receiving mixed levels of uptake and opposition from anti-vaccine campaigners that puts at risk public health and lives, says the European Society of Clinical Microbiology and Infectious Diseases (ESCMID).

See full ESCMID press release at:

http://www.escmid.org/fileadmin/src/media/PDFs/2News_Discussions/Press_activities/H1N1_Vaccine_Release_ESCMID.pdf

Table 1: Reported number of confirmed Pandemic (H1N1) 2009 influenza cases admitted to hospitals and intensive care, by country, as of 26 November 2009, 09:00 hours (CEST) in 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 (18.11.)	-	-	-	-
Belgium (19.11.)	-	-	-	-
Bulgaria (22.11)	-	-	-	-
Cyprus(23.11)	-	-	-	6
Czech Republic (19.11.)	-	-	-	-
Denmark (25.11.)	-	-	-	-
Estonia (25.11.)	-	-	-	-
Finland (20.11.)	-	-	-	-
France (23.11.)	-	305	101	-
Germany (24.11.)	-	-	-	-
Greece (18.11.)	-	-	-	-
Hungary (18.11.)	2	-	-	-
Iceland (11.11.)	31	170	7	19
Ireland (18.11.)	182	857	20	72
Italy (25.11)	-	526	-	276
Latvia (24.11.)	-	-	-	-
Liechtenstein (18.11.)	-	-	-	-
Lithuania (04.11.)	-	-	-	-
Luxembourg (16.11.)	-	-	0	0
Malta (04.09.)	-	46	-	1
Netherlands (20.11.)	359	1270	38	134
Norway (23.11.)	60	1102	13	127
Poland (23.11.)	-	-	-	-
Portugal (25.11.)	148	-	20	-
Romania (23.11)	10	-	5	-
Slovakia (25.11.)	13	51	-	-
Slovenia (10.08.)	-	-	-	-
Spain (19.11.)	-	-	-	-
Sweden (19.11.)	167	570	-	-
Switzerland (18.11.)	13	84	-	16
United Kingdom ^a (19.11.)	783	-	180	-

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 (969 cumulative hospitalisations), Wales (377) and Northern Ireland (545).

Table 2. Reported number of new and cumulative confirmed fatal Pandemic (H1N1) 2009 influenza cases in EU and EFTA countries, as 26 November 2009, 09:00 hours CEST, and in the rest of the world by country, as of 25 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	-	3
Belgium	-	12
Bulgaria	-	5
Czech Republic	-	3
Denmark	-	5
Estonia	1	1
Finland	-	12
France	-	85 ^a
Germany	5	46
Greece	-	8
Hungary	-	7
Iceland	-	1
Ireland	-	16
Italy	3	85
Latvia	2	3
Lithuania	-	2
Luxembourg	-	2
Malta	-	3
Netherlands	-	28
Norway	2	25
Poland	2	15
Portugal	2	16
Romania	-	2
Slovakia	-	1
Slovenia	-	2
Spain	-	115
Sweden	-	11
Switzerland	-	1
United Kingdom	3	219
Total	20	734
OTHER EUROPEAN COUNTRIES & CENTRAL ASIA		
Azerbaijan	-	2
Belarus	-	20
Bosnia and Herzegovina	-	1
Croatia	6	11

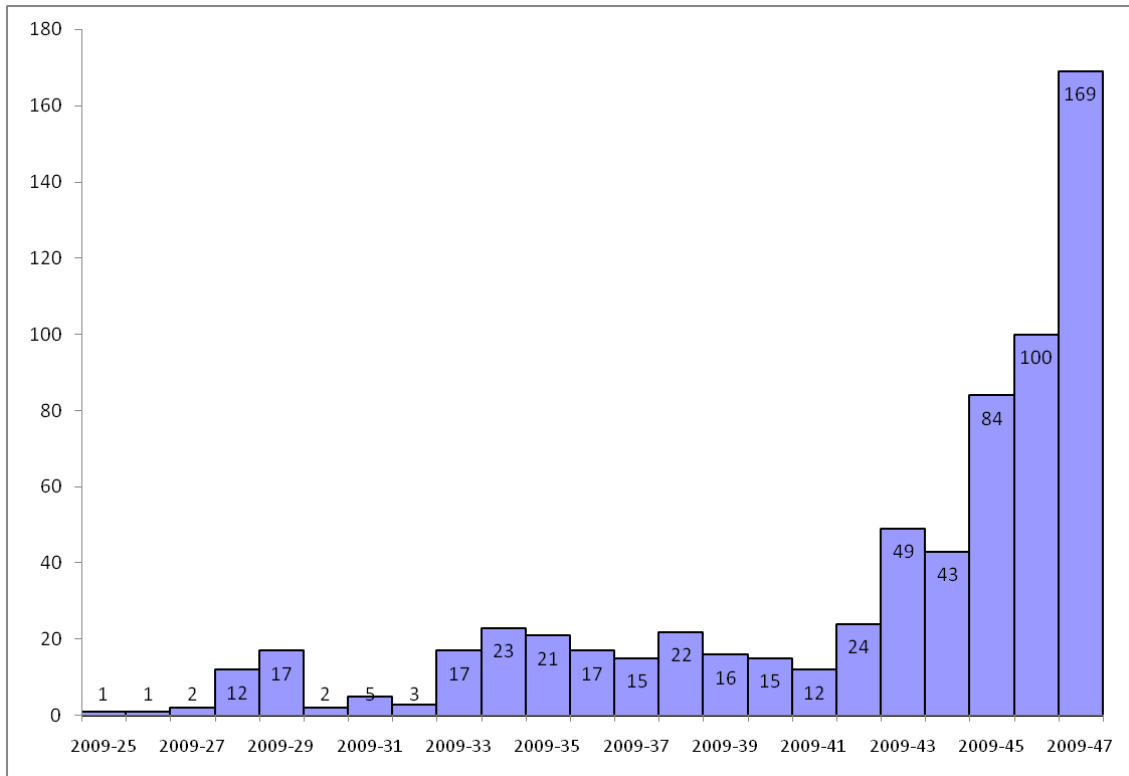
Former Yugoslav Republic of Macedonia	-	1
Kosovo	-	2
Moldova	-	10
Russia	-	19
Serbia	1	17
Ukraine	3	18
Total	10	101
MEDITERRANEAN AND MIDDLE-EAST		
Bahrain	-	7
Egypt	-	11
Iran	40	140
Iraq	-	10
Israel	-	52
Jordan	-	11
Kuwait	-	27
Lebanon	-	3
Morocco	-	1
Occupied Palestinian Territory	-	9
Oman	-	27
Qatar	-	8
Saudi Arabia	-	81
Syria	-	50
Tunisia	-	2
Turkey	-	112
United Arab Emirates	-	6
Yemen	-	22
Total	40	579
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	29	279

Mexico	16	589
USA	-	1265
Total	45	2133
CENTRAL AMERICA & CARIBBEAN		
Bahamas	-	4
Barbados	-	3
Cayman Islands	-	1
Costa Rica	-	40
Cuba	-	7
Dominican Republic	-	22
El Salvador	-	26
Guatemala	-	18
Honduras	-	16
Jamaica	-	6
Nicaragua	-	11
Panama	-	11
Saint Kitts and Nevis	-	1
Saint Lucia	-	1
Suriname	-	2
Trinidad-Tobago	-	5
Total	-	174
SOUTH AMERICA		
Argentina	-	600
Bolivia	-	57
Brazil	160	1528
Chile	8	148
Colombia	9	160
Ecuador	-	82
Paraguay	-	52
Peru	-	190
Uruguay	-	33
Venezuela	-	107
Total	177	2957
NORTH-EAST & SOUTH ASIA		
Afghanistan	-	14
Bangladesh	-	6
China (Mainland)	-	53
Hong Kong SAR China	-	40
India	5	560
Japan	-	28

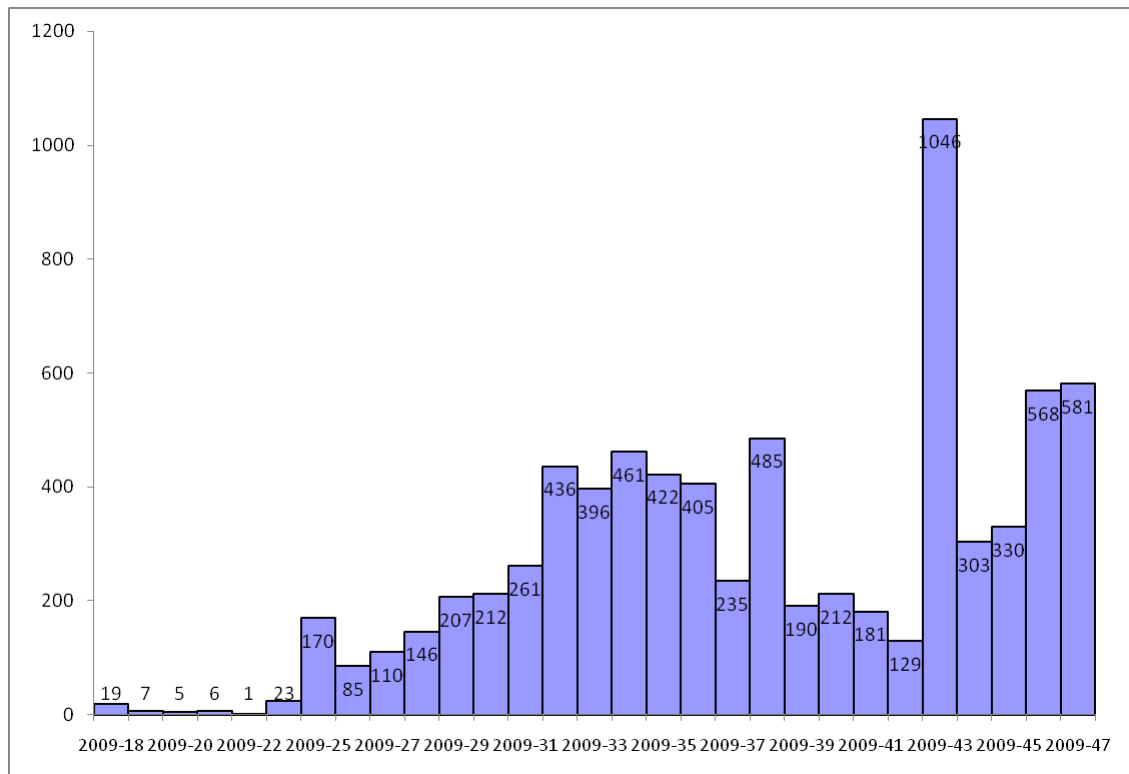
Macao SAR China	-	2
Maldives	-	1
Mongolia	1	18
Pakistan	-	1
South Korea	22	104
Sri Lanka	-	5
Taiwan	1	30
Total	29	862
SOUTH-EAST ASIA		
Brunei Darussalam	-	1
Cambodia	-	4
Indonesia	-	10
Laos Peoples Democratic Republic	-	1
Malaysia	-	77
Philippines	-	30
Singapore	-	18
Thailand	2	187
Vietnam	-	41
Total	2	369
AUSTRALIA & PACIFIC		
Australia	1	190
Cook Islands	-	1
Marshall Islands	-	1
New Zealand	-	20
Samoa	-	2
Solomon Islands	-	1
Tonga	-	1
Total	1	216
TOTAL	324	8233

^a Deaths reported from France include 1 in Guyana, 9 in New Caledonia, 7 in the French Polynesia, 7 in the Reunion, 1 in Martinique, 2 in Mayotte, 1 in Guadeloupe and 57 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 47, 2009) and world (lower panel^a, week 18 to week 47, 2009).



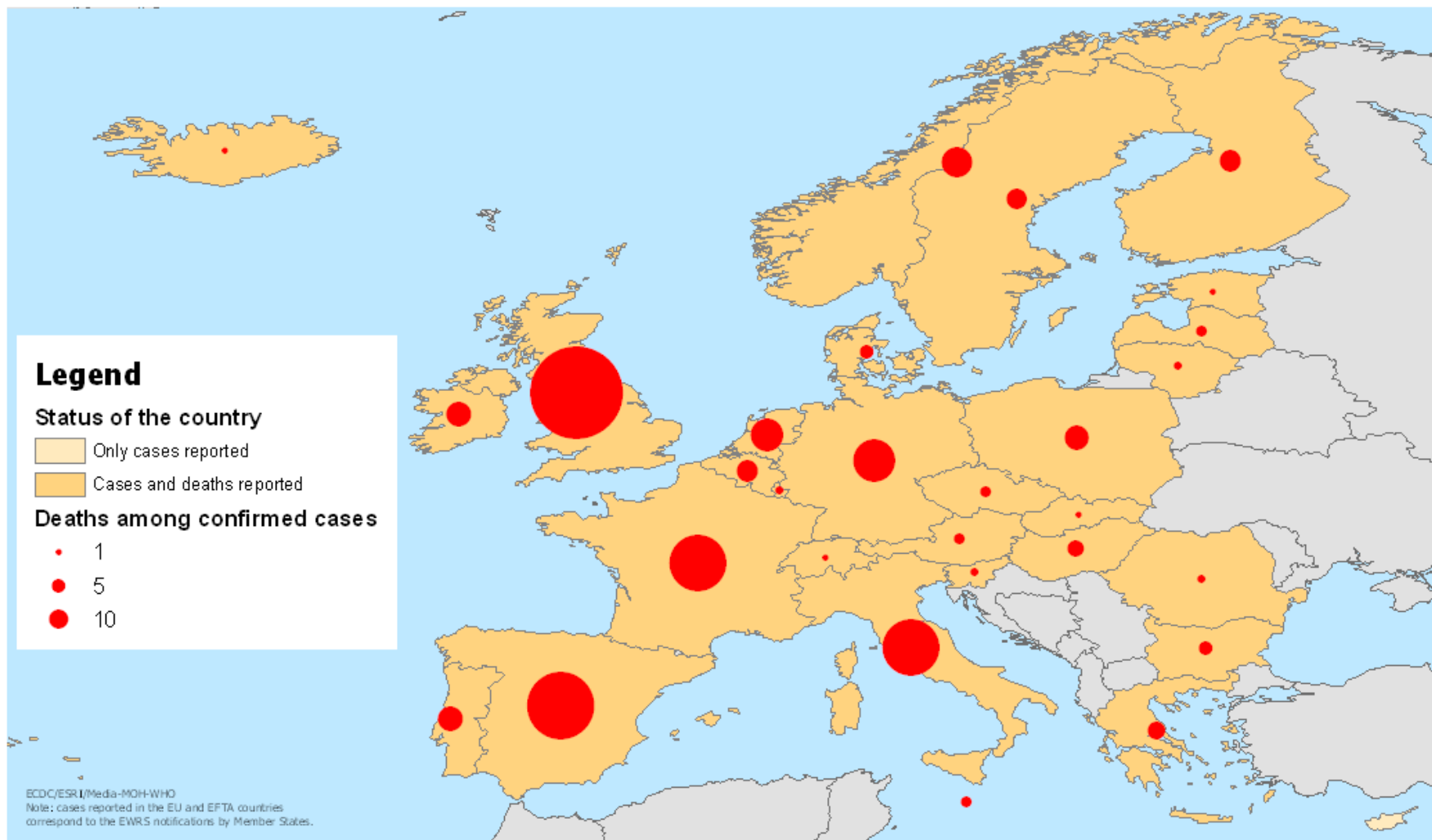
Notification Week



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 26 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 25 November 2009, 16:00 hours CEST

