

ECDC DAILY UPDATE

Pandemic (H1N1) 2009

11 December 2009
9.00 CEST

Main developments in the past 24 hours

- Weekly Influenza Surveillance Overview to be published today;
- Eurosurveillance updates published;
- A total of 1 227 fatal cases in Europe and EFTA countries and 9 340 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.

Reported number of confirmed Pandemic (H1N1) 2009 influenza cases admitted to hospitals and intensive care, by country, as of 11 December 2009, 9.00 CEST in EU and EFTA countries are in Table 1. An update on the number of confirmed fatal cases for the world and Europe is presented in Table 2.

Eurosurveillance update

Public perceptions in relation to intention to receive pandemic influenza vaccination in a random population sample: evidence from a cross-sectional telephone survey

A cross-sectional telephone survey on a nationally representative sample of 1,000 Greek households was performed to assess the acceptability of the pandemic influenza A(H1N1)v vaccine, factors associated with intention to decline and stated reasons for declining vaccination. The survey was initiated the last week of August 2009 (week 35) and is still ongoing (analysis up to week 44). The percentage of participants answering they would "probably not/definitely not" accept the vaccine increased from 47.1% in week 35 to 63.1% in week 44 (test for trend: $p < 0.001$). More than half of the people with chronic illnesses (53.3%) indicated "probably not/definitely not". Factors associated with intention to decline vaccination were female sex, age between 30-64 years, perception of low likelihood of getting infected or of low risk associated with influenza, and absence of household members suffering from chronic illnesses. For the majority of the respondents (59.8%), the main reason for intending to decline vaccination was the belief that the vaccine might not be safe. Promotion of vaccination programmes should be designed taking into account the attitudinal barriers to the pandemic vaccine.

Available from: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19437>

Behaviours regarding preventive measures against pandemic H1N1 influenza among Italian healthcare workers, October 2009

A survey on attitudes and behaviours towards preventive measures against pandemic H1N1 influenza 2009 was carried out during the month of October 2009 in Italy through an online questionnaire adapted to the Italian situation from a similar survey of the Harvard School of Public Health in the United States (US). Results show that the intention to get vaccinated against pandemic H1N1 influenza 2009 is generally low and that there are differences in attitudes and behaviours towards preventive measures against pandemic H1N1 influenza 2009 between physicians and nurses, especially concerning vaccination. Differences relate also to sex, region of residence and marital status.

Available from: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19432>

Behaviour of the pandemic H1N1 influenza virus in Andalusia, Spain, at the onset of the 2009-10 season

In Andalusia, Spain, the pandemic influenza A(H1N1)v virus has spread throughout the community, being the dominant influenza strain in the season so far. The current objective of the Andalusia Health Service is focussed on the mitigation of the health and social impact by appropriate care of the patients at home or in health centres. The 2009-10 seasonal influenza epidemic started early compared with to previous seasons. This article analyses the influenza A(H1N1)v situation in Andalusia until the week 39/2009.

Available from: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19433>

Prolonged shedding of influenza A(H1N1)v virus: two case reports from France 2009

We observed a prolonged shedding of virus 14 and 28 days after symptom onset in two patients with pandemic H1N1 influenza, who did not have immunodepression and were treated with neuraminidase inhibitor. This prolonged shedding was not associated with the emergence of resistance mutation H275Y in the viral neuraminidase gene.

Available from: <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19434>

SELECTED SCIENTIFIC PUBLICATIONS (4TH - 10TH Dec 2009)

Updated Interim Recommendations for the Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010 Season

Centers for Disease Control and Prevention (CDC), 7 December, 2009

Available from: <http://www.cdc.gov/h1n1flu/recommendations.htm>

US CDC has updated its recommendations on the use of antiviral agents for treatment and prophylaxis of influenza during the 2009-2010 influenza season. This focuses especially on a new drug peramivir that is not available in Europe

The Severity of Pandemic H1N1 Influenza in the United States, from April to July 2009: A Bayesian Analysis

Presanis AM, De Angelis D, Hagy A et al. PLoS Med 6(12): e1000207; 8 December, 2009

Available from: <http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1000207>

The authors of this study make estimates of the mortality, hospitalization and ICU admissions due to pandemic H1N1 in the United States in autumn and winter 2009/10 by combining data from multiple sources.

Clinical Features of the Initial Cases of 2009 Pandemic Influenza A (H1N1) Virus Infection in China

Bin Cao, M.D., Xing-Wang Li, M.D., Yu Mao, M.D. et al. New England Journal of Medicine; 9 December, 2009

Available from: <http://content.nejm.org/cgi/content/full/NEJMoa0906612>

This is the first substantial published account to the 2009 H1N1 virus in China. The period covered is May to June 2009 during China's first wave

Neuraminidase inhibitors for preventing and treating influenza in healthy adults: systematic review and meta-analysis

Jefferson T, Jones M, Doshi P et al. British Medical Journal; 339:b5106; 8 December, 2009

Available from: http://www.bmj.com/cgi/content/abstract/339/dec07_2/b5106

This update of a previous review concerns seasonal not pandemic influenza and is confined to randomised controlled trials. It's reanalysis concludes that these drugs provide no evidence of effectiveness against severe outcomes in healthy adults once a controversial industry sponsored analysis is excluded. A response pointing why these conclusions do not apply in general and specifically not for pandemic H1N1 2009 has been posted by ECDC and the United States CDC at http://www.bmj.com/cgi/eletters/339/dec07_2/b5106#227197

Mortality from pandemic A/H1N1 2009 influenza in England: public health surveillance study

Donaldson L, Rutter P, Ellis B et al. British Medical Journal; 339:b5213; 10 December 2009

Available from: http://www.bmj.com/cgi/content/abstract/339/dec10_1/b5213

This article reports the first results of a large (n = 138) investigation of all reported deaths related to pandemic H1N1 2009 in England. It finds that 36% had no, or only mild, pre-existing illness. Most patients 78% had eventually been prescribed antiviral drugs, but of these 76% did not receive them within the first 48 hours of illness. Two thirds would have been eligible for vaccination in the UK. The authors estimate an overall estimated case fatality rate of 26 (range 11-66) per 100 000. It was lowest for children aged 5-14 (11 (range 3-36) per 100 000) and highest for those aged ≥ 65 (980 (range 300-3200) per 100 000).

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. A total of 1 227 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, but with a slight increase in week 48, compared to the previous week. While the most deaths have to date been in Western Europe there are increasing numbers of deaths being reported from Central and Eastern Europe. The reported cumulative fatal pandemic (H1N1) cases in the world have now passed 10 000 cases (Table 2). However, because of lack of laboratory confirmation and underreporting among other factors, this is likely to be a gross underestimation of the true number fatalities associated with the pandemic. Available updates on hospital admissions, per Member State, can be found in Table 1.

Table 1. Reported number of confirmed Pandemic (H1N1) 2009 influenza cases admitted to hospitals and intensive care, by country, as of 11 December 2009, 9.00 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 (02.12.)	-	-	-	-
Belgium (10.12.)	-	-	-	-
Bulgaria (29.11)	-	-	-	-
Cyprus(23.11)	-	-	-	6
Czech Republic (09.12.)	-	-	-	-
Denmark (09.12.)	-	-	-	-
Estonia (09.12.)	-	-	-	-
Finland (09.12.)	9	-	6	-
France (07.12.)	-	-	201	630
Germany (08.12.)	-	-	-	-
Greece (09.12.)	-	-	-	-
Hungary (06.12.)	-	-	-	-
Iceland (10.12.)	3	180	1	20
Ireland (10.12.)	161	1003	9	84
Italy (09.12.)	-	764	-	410
Latvia (07.12.)	-	-	-	-
Liechtenstein (26.11.)	-	-	-	-
Lithuania (30.11.)	-	-	-	-
Luxembourg (16.11.)	-	-	0	0
Malta (04.09.)	-	46	-	1
Netherlands (04.12.)	227	1969	14	183
Norway (09.12.)	27	1283	15	169
Poland (30.11.)	-	-	-	-
Portugal (09.12.)	127	-	20	-
Romania (08.12.)	-	-	-	-
Slovakia (02.12.)	38	81	8	31
Slovenia (10.08.)	-	-	-	-
Spain (03.12.)	-	-	-	-
Sweden (10.12.)	39	1092	-	-
Switzerland (09.12.)	19	250	-	53
United Kingdom* (10.12.)	636	-	133	-

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 highlighted in gray. (-) denotes no information readily available in official sources.

* Data includes information for England only. Other cumulative hospitalisations are: Scotland (1344), Wales (429) and Northern Ireland (570).

Table 2. Reported number of new and cumulative confirmed fatal Pandemic (H1N1) 2009 influenza cases in EU and EFTA countries, as 11 December 2009, 9.00 CEST, and in the rest of the world by country, as of 10 December 2009, 16.00 CEST.

Country	Number of new fatal cases since previous national update	Cumulative number of fatal cases
EU and EFTA countries		
Austria	-	3
Belgium	-	14
Bulgaria	-	5
Cyprus	-	2
Czech Republic	2	34
Denmark	-	16
Estonia	-	5
Finland	-	17
France	-	158*
Germany	-	94
Greece	15	36
Hungary	15	23
Iceland	-	2
Ireland	2	20
Italy	23	137
Latvia	-	14
Lithuania	2	9
Luxembourg	-	2
Malta	-	3
Netherlands	-	42
Norway	-	27
Poland	-	24
Portugal	3	35
Romania	2	16
Slovakia	-	3
Slovenia	-	8
Spain	-	169
Sweden	2	18
Switzerland	1	8
United Kingdom	13	283
Total	80	1227
Other European countries and central Asia		
Albania	-	1
Belarus	-	20
Bosnia and Herzegovina	-	5
Croatia	-	22
Former Yugoslav Republic of Macedonia	-	7
Kosovo	-	10
Moldova	-	13
Montenegro	-	2
Russia	-	19
Serbia	1	32
Ukraine	-	41
Total	1	172
Mediterranean and Middle-East		
Algeria	6	16
Bahrain	-	7
Egypt	2	35
Iran	-	147
Iraq	-	34
Israel	-	67
Jordan	-	14
Kuwait	-	27
Lebanon	-	3
Libya	-	1

Country	Number of new fatal cases since previous national update	Cumulative number of fatal cases
Morocco	-	12
Occupied Palestinian Territory	-	9
Oman	-	27
Qatar	-	8
Saudi Arabia	-	81
Syria	-	50
Tunisia	-	5
Turkey	57	353
United Arab Emirates	-	6
Yemen	-	22
Total	65	924
Africa		
Ghana	-	1
Madagascar	-	3
Mauritius	-	8
Mozambique	-	2
Namibia	-	1
Sao Tome & Principe	-	2
South Africa	-	92
Sudan	-	1
Tanzania	-	1
Total	-	111
North America		
Canada	-	363
Mexico	-	713
USA	-	1929
Total	-	3005
Central America and Caribbean		
Bahamas	-	4
Barbados	-	3
Cayman Islands	-	1
Costa Rica	-	41
Cuba	-	32
Dominican Republic	-	23
El Salvador	-	30
Guatemala	-	18
Honduras	-	16
Jamaica	-	6
Nicaragua	-	11
Panama	-	11
Saint Kitts and Nevis	-	1
Saint Lucia	-	1
Suriname	-	2
Trinidad-Tobago	-	5
Total	-	205
South America		
Argentina	-	613
Bolivia	-	58
Brazil	-	1528
Chile	-	150
Colombia	-	183
Ecuador	-	96
Paraguay	-	52
Peru	-	200
Uruguay	-	33
Venezuela	1	116
Total	1	3029
North-East and South Asia		
Afghanistan	-	16
Bangladesh	-	6

Country	Number of new fatal cases since previous national update	Cumulative number of fatal cases
China (Mainland)	-	326
Hong Kong SAR China	1	45
India	12	655
Japan	-	65
Macao SAR China	-	2
Maldives	-	1
Mongolia	-	24
Pakistan	-	1
South Korea	-	117
Sri Lanka	5	10
Taiwan	-	33
Total	18	1301
South-East Asia		
Brunei Darussalam	-	1
Cambodia	-	5
Indonesia	-	10
Laos Peoples Democratic Republic	-	1
Malaysia	-	77
Philippines	-	30
Singapore	-	19
Thailand	-	189
Vietnam	-	44
Total	-	376
Australia and Pacific		
Australia	-	191
Cook Islands	-	1
Marshall Islands	-	1
New Zealand	-	20
Samoa	-	2
Solomon Islands	-	1
Tonga	-	1
Total	-	217
TOTAL	165	10567

* Deaths reported from France include 1 in Guyana, 9 in New Caledonia, 7 in the French Polynesia, 7 in La Réunion, 1 in Martinique, 2 in Mayotte, 5 in Guadeloupe and 126 in mainland France.

Figure 1. Number of confirmed deaths among pandemic (H1N1) 2009 influenza cases by week of notification in EU and EFTA countries

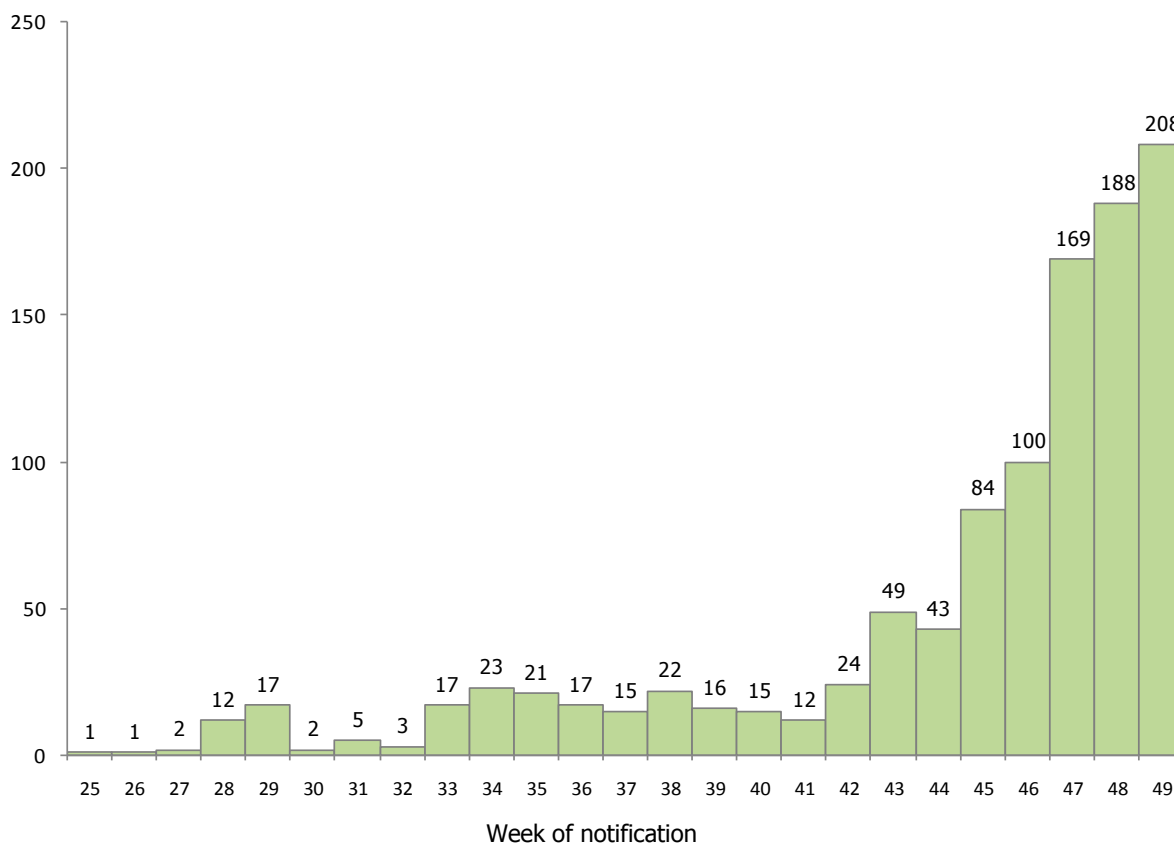
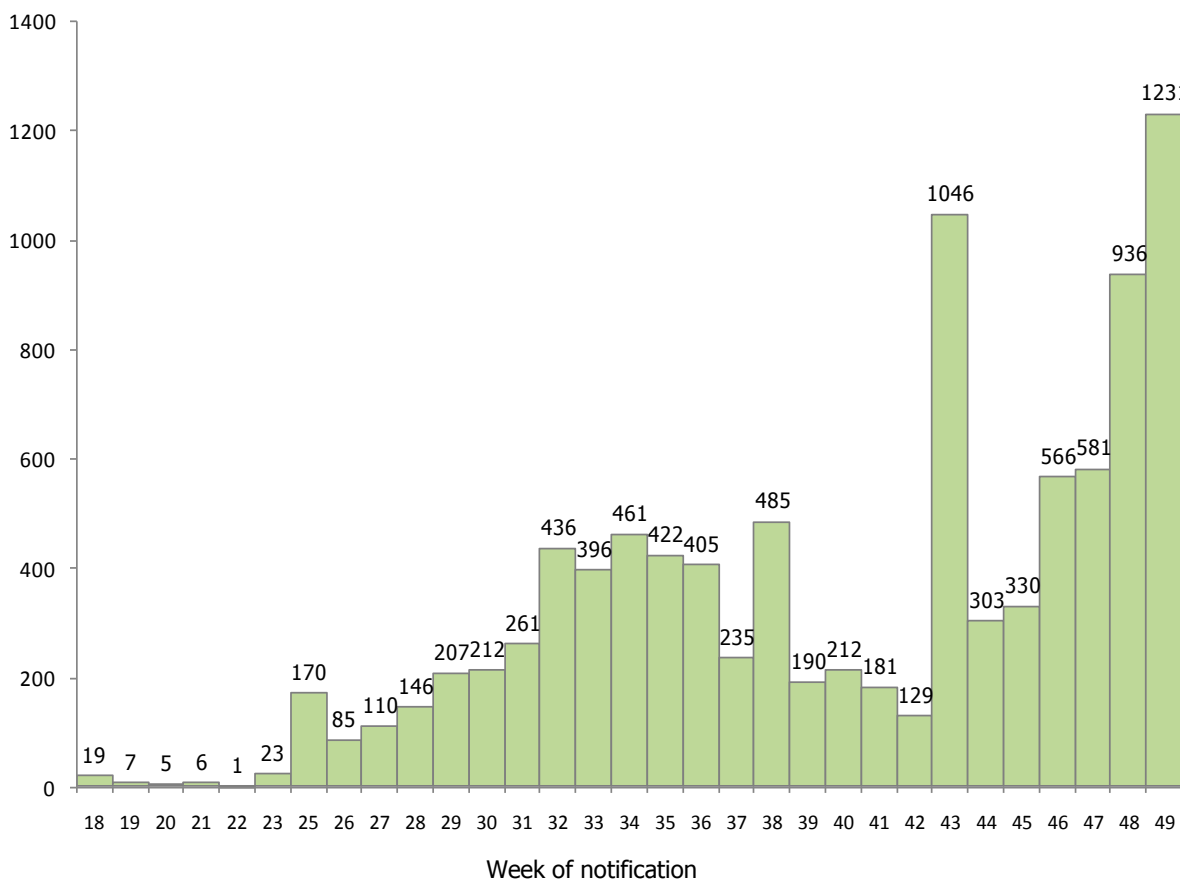


Figure 2. Number of confirmed deaths among pandemic (H1N1) 2009 influenza cases by week of notification in the rest of the world*.



* 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 1 August 2009.

Figure 3. Reported cumulative number of confirmed fatal cases of Pandemic (H1N1) 2009 influenza in EU and EFTA countries, as of 11 December 2009, 9.00 CEST, 9.00 CEST

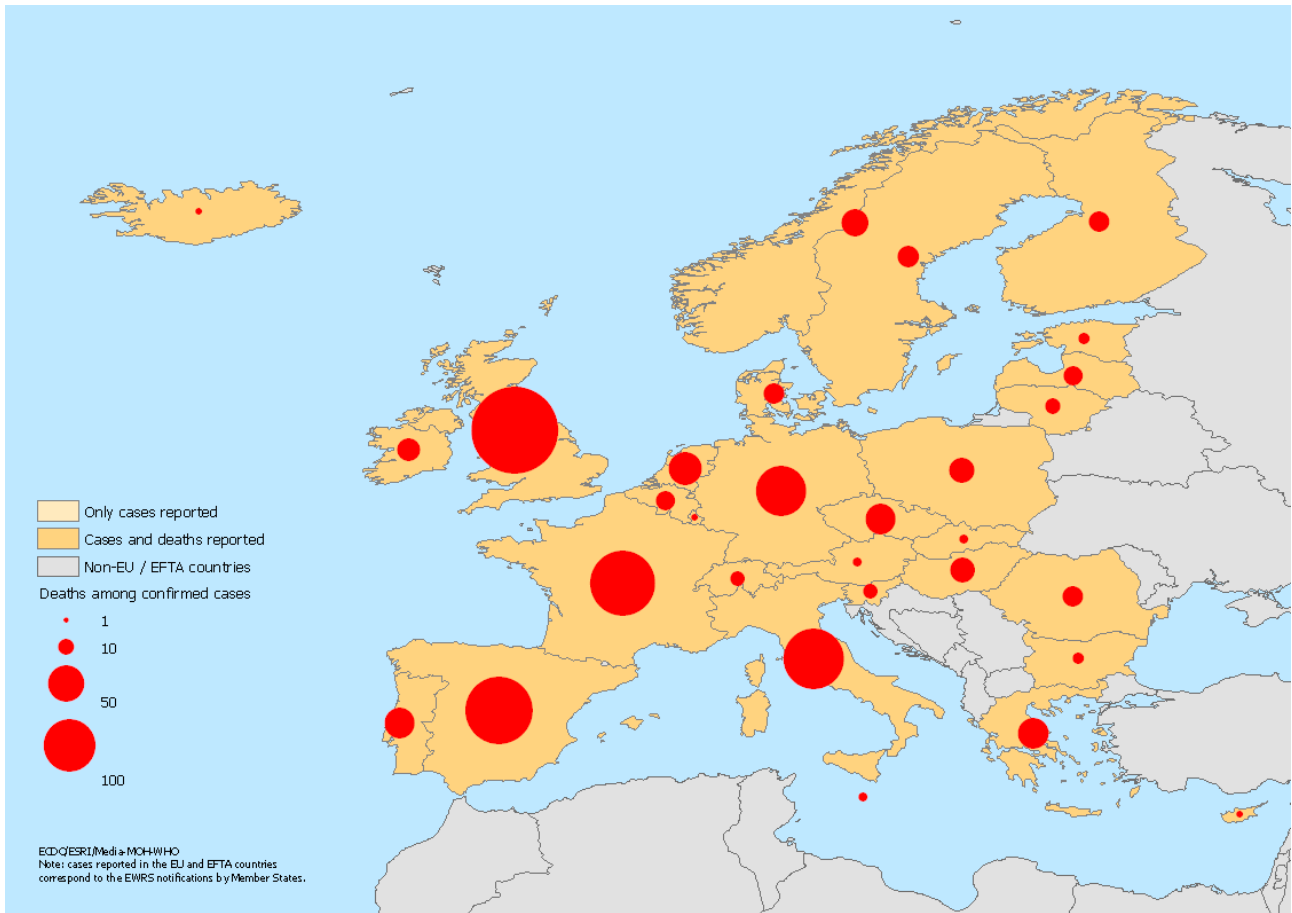


Figure 4. Reported cumulative number of confirmed fatal cases of Pandemic (H1N1) 2009 influenza and country status, by country, as of 10 December 2009, 9.00 CEST, 16.00 CEST

