

ECDC DAILY UPDATE

2009 influenza A (H1N1) pandemic

17 December 2009
9.00 CEST

Main developments in the past 24 hours

- ECDC issues the 7th version of its Risk Assessment for the 2009 Pandemic
- A total of 1 470 fatal cases in Europe and EFTA countries and 10 279 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 17 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.

ECDC Pandemic Risk Assessment updated

This 7th update (dated December 16th) is informed by the experience this autumn in Europe and North America as well as further analyses from the Southern Hemisphere's temperate countries during their winter season.

It includes as new features:

- The first 'synthesis' from a European country looking at the epidemiological findings from the experience of the UK from April to September 2009.
- An analysis of a number of studies which on balance conclude there is little or no effect of seasonal influenza immunisation on the risk of infection or disease from the 2009 pandemic A(H1N1) virus.
- A table comparing and contrasting the recent experience of seasonal influenza and 2009 pandemic influenza A(H1N1).
- An initial report of the D222G mutation in the haemagglutinin gene though noting that these spontaneous mutations have been observed since the start of pandemic.
- The first reports of transmission of oseltamivir-resistant viruses in Europe in a special setting (a ward with immunocompromised patients).
- The first published report of deaths from the pandemic virus in the EU including an indication of the percentage of these that occurred among people who are and are not in a risk group.
- One report from the United States of increased invasive pneumococcal disease associated with the pandemic infection.

- Discussion of the fact that although infection rates are declining in the countries first affected in the EU (western and northern countries), infection rates are still high and rising in some eastern European countries where access to pharmaceutical countermeasures is likely to be more difficult.
- Note of the risks for the holiday period (Christmas and New Year) when people travelling may be at heightened risk of acquiring infection and also some primary care services may be reduced, thereby putting more pressure on hospital services.

There remains a number of important areas where our information is lacking and questions remain unanswered and again these are highlighted:

- The number and proportions of the population that have been infected and so the Likely timing and pattern of spread of the virus in Europe in the winter and spring of 2010
- The mix of influenza and other viruses that will be circulating this winter in Europe
- Shedding the virus and infectivity
- 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
- Protective value of early treatment with antivirals
- Data and analyses concerning patient numbers in hospitals and information on children

The risk assessment will be available later today at: [http://ecdc.europa.eu/en/healthtopics/Pages/Influenza_A\(H1N1\)_Outbreak.aspx](http://ecdc.europa.eu/en/healthtopics/Pages/Influenza_A(H1N1)_Outbreak.aspx) (look for most recently updated)

Epidemiologic update

All 27 EU and 4 EFTA countries are reporting cases of pandemic (H1N1) 2009 influenza. A total of 1 470 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. 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 of 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 2009 pandemic influenza A(H1N1) cases admitted to hospitals and intensive care, by country, as of 17 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 (13.12)	-	-	-	-
Cyprus(23.11)	-	-	-	6
Czech Republic (16.12.)	-	-	-	-
Denmark (16.12.)	-	-	-	-
Estonia (16.12.)	-	-	-	-
Finland (15.12.)	14	-	9	-
France (15.12.)	-	-	237	804
Germany (11.12.)	-	-	-	-
Greece (09.12.)	-	-	-	-
Hungary (13.12.)	-	-	-	-
Iceland (10.12.)	3	180	1	20
Ireland (10.12.)	161	1003	9	84
Italy (15.12.)	-	811	-	439
Latvia (14.12.)	-	-	-	-
Liechtenstein (09.12.)	-	-	-	-
Lithuania (30.11.)	-	-	-	-
Luxembourg (16.11.)	-	-	0	0
Malta (04.09.)	-	46	-	1
Netherlands (11.12.)	104	2068	9	196
Norway (14.12.)	14	1298	5	170
Poland (07.12.)	-	-	-	-
Portugal (13.12.)	133	-	25	-
Romania (16.12.)	-	-	-	-
Slovakia (02.12.)	38	81	8	31
Slovenia (10.12.)	95	-	9	-
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 2009 pandemic influenza A(H1N1) cases in EU and EFTA countries, as 17 December 2009, 9.00 CEST, and in the rest of the world by country, as of 16 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	4	38
Denmark	5	21
Estonia	2	7
Finland	-	36
France	4	181 [*]
Germany	25	119
Greece	-	36
Hungary	13	36
Iceland	-	2
Ireland	-	20
Italy	-	149
Latvia	-	17
Lithuania	-	12
Luxembourg	-	2
Malta	-	3
Netherlands	-	50
Norway	2	29
Poland	-	67
Portugal	1	45
Romania	2	27
Slovakia	18	21
Slovenia	-	8
Spain	-	208
Sweden	1	20
Switzerland	-	8
United Kingdom	-	284
Total	77	1470
Other European countries and central Asia		
Albania	-	3
Armenia	-	2
Belarus	-	20
Bosnia and Herzegovina	-	7
Croatia	-	22
Former Yugoslav Republic of Macedonia	-	14
Georgia	1	4
Kosovo	-	10
Moldova	-	15
Montenegro	-	2
Russia	-	19
Serbia	-	34
Ukraine	161	202
Total	162	354
Mediterranean and Middle-East		
Algeria	5	24
Bahrain	-	7
Egypt	3	64
Iran	-	147
Iraq	-	34
Israel	-	67
Jordan	-	14
Kuwait	-	27

Country	Number of new fatal cases since previous national update	Cumulative number of fatal cases
Lebanon	-	3
Libya	-	1
Morocco	-	23
Occupied Palestinian Territory	-	17
Oman	-	30
Qatar	-	8
Saudi Arabia	-	97
Syria	-	103
Tunisia	-	6
Turkey	-	415
United Arab Emirates	-	6
Yemen	-	22
Total	8	1115
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	17	390
Mexico	38	770
USA	109	2038
Total	164	3198
Central America and Caribbean		
Bahamas	-	4
Barbados	-	3
Cayman Islands	-	1
Costa Rica	-	41
Cuba	-	32
Dominican Republic	-	23
El Salvador	-	31
Guatemala	-	18
Honduras	-	16
Jamaica	-	6
Nicaragua	-	11
Panama	-	11
Saint Kitts and Nevis	-	2
Saint Lucia	-	1
Suriname	-	2
Trinidad-Tobago	-	5
Total	-	207
South America		
Argentina	-	616
Bolivia	-	58
Brazil	-	1632
Chile	-	150
Colombia	7	190
Ecuador	-	96
Paraguay	-	52
Peru	3	203
Uruguay	-	33
Venezuela	-	116
Total	10	3146
North-East and South Asia		

Country	Number of new fatal cases since previous national update	Cumulative number of fatal cases
Afghanistan	-	17
Bangladesh	-	6
China (Mainland)	116	442
Hong Kong SAR China	-	45
India	23	748
Japan	-	73
Macao SAR China	-	2
Maldives	-	1
Mongolia	-	26
Pakistan	-	1
South Korea	-	132
Sri Lanka	-	23
Taiwan	-	35
Total	139	1551
South-East Asia		
Brunei Darussalam	-	1
Cambodia	-	5
Indonesia	-	10
Laos Peoples Democratic Republic	-	1
Malaysia	-	77
Philippines	-	30
Singapore	-	19
Thailand	1	190
Vietnam	-	47
Total	1	380
Australia and Pacific		
Australia	-	191
Cook Islands	-	1
Marshall Islands	-	1
New Zealand	-	20
Samoa	-	2
Solomon Islands	-	1
Tonga	-	1
Total	-	217
TOTAL	561	11749

* 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 150 in mainland France.

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

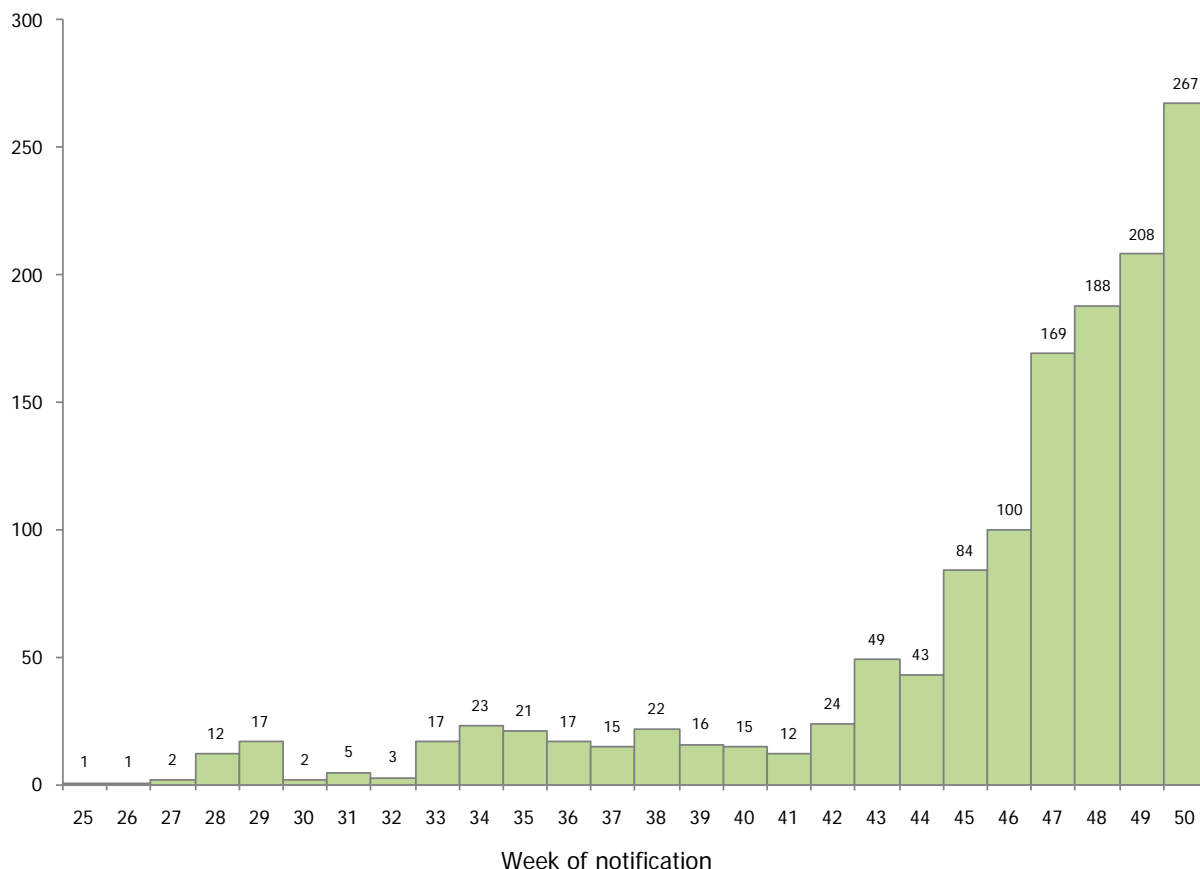
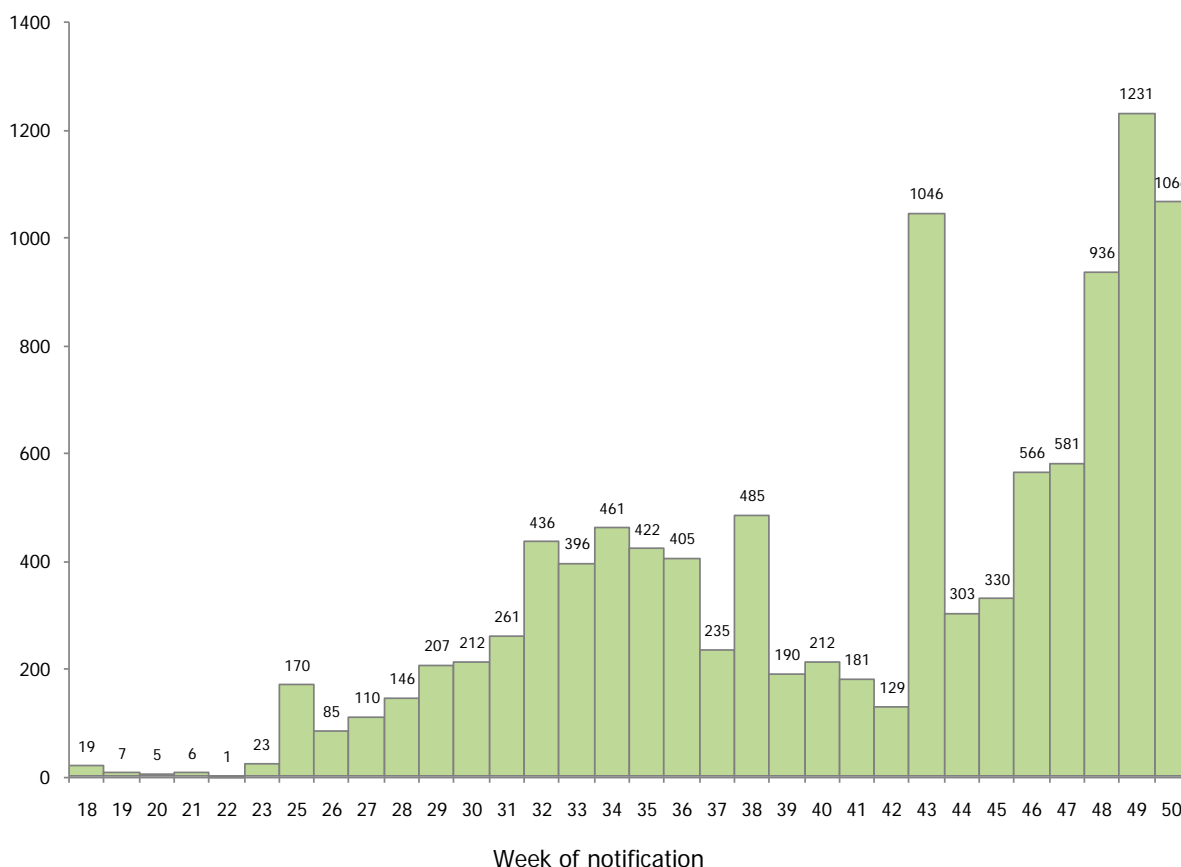


Figure 2. Number of confirmed deaths among 2009 pandemic influenza A(H1N1) 2009 influenza cases by week of notification in the rest of the world*.



* 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 2009 pandemic influenza A(H1N1) in EU and EFTA countries, as of 17 December 2009, 9.00 CEST, 9.00 CEST

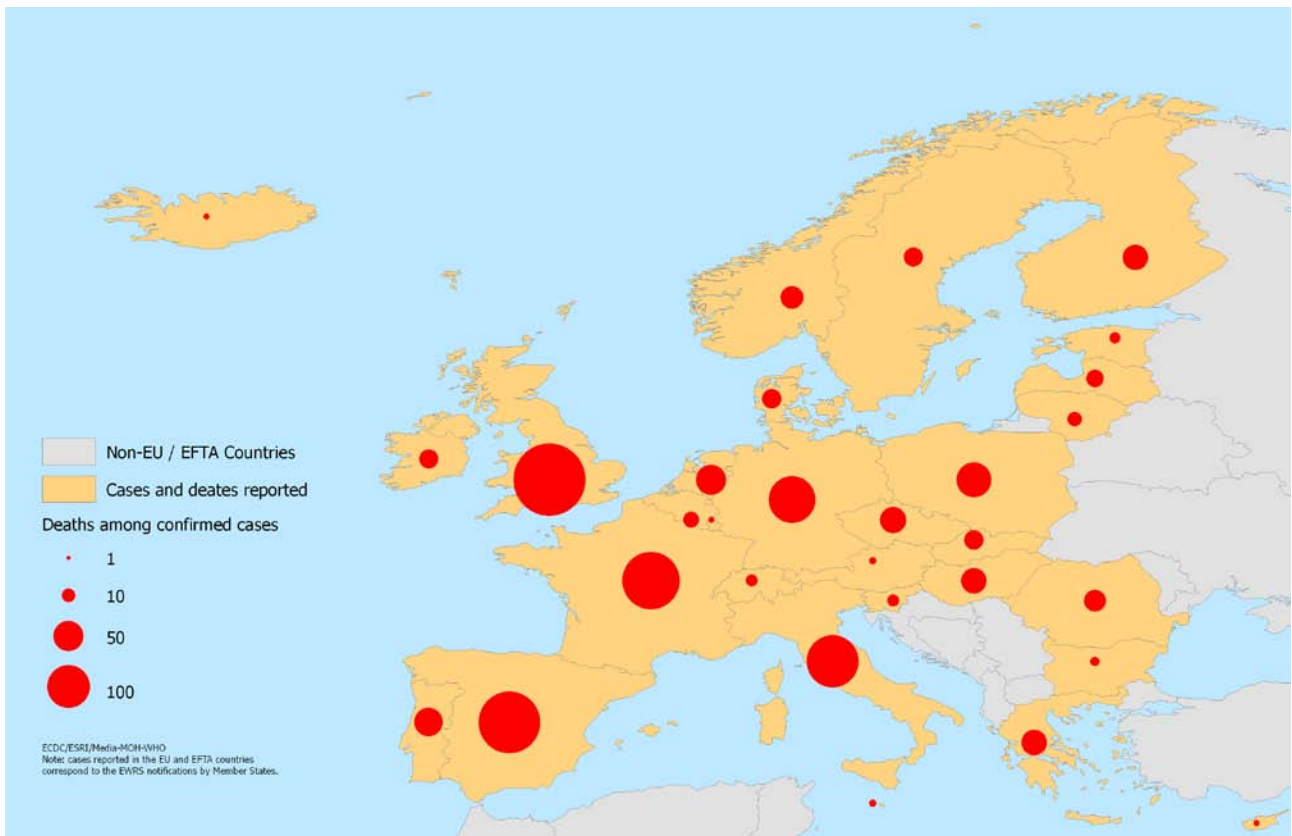


Figure 4. Reported cumulative number of confirmed fatal cases of 2009 pandemic influenza A(H1N1) and country status, by country, as of 16 December 2009, 9.00 CEST, 16.00 CEST

