

ECDC DAILY UPDATE

Pandemic (H1N1) 2009

Update 10 December 2009,
09:00 hours CEST

Main developments in past 24 hours

- Draft WHO influenza global public health research agenda 2009-10 published
- A total of 1 147 fatal cases in Europe and EFTA countries and 9 255 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 10 December 2009, 09:00 hours (CEST) in EU and EFTA countries are in Table 1. An update on the number of confirmed fatal cases is presented in Table 2 - as of 09 December 2009 - 16:00 hours CEST, for the world, and 10 December 2009 - 09:00 hours CEST, for Europe.

WHO influenza global public health research agenda 2009-10

The [Global Influenza Programme \(GIP\)](#) of WHO is developing a *public health research agenda for influenza*. Its objective is to identify knowledge gaps and information essential for the development of evidence-based public health guidance and actions for the control of influenza. GIP organized a global consultation meeting in Geneva, 17 - 20 November to collect opinions from influenza experts on building the roadmaps for influenza research based on five streams of public health research needs:

- Stream 1.** Reducing the risk of emergence of a pandemic influenza
- Stream 2.** Limiting the spread of pandemic, zoonotic and seasonal epidemic influenza
- Stream 3.** Minimizing the impact of pandemic, zoonotic and seasonal epidemic influenza
- Stream 4.** Optimizing the treatment of patients
- Stream 5.** Promoting the development and application of modern public health tools

The technical meetings included public health decision makers, researchers and representatives from more than thirty countries who reviewed the draft version of the research agenda and exchanged their ideas on public health research topics related to influenza that should be prioritized over a medium- to long-term period. The review presentations from the final lessons learnt session have now been posted on the WHO website along with an interim draft document. WHO will now undertake a consultation process continue developing what is a global public health research agenda for influenza including a roadmap with key public health research topics for influenza relating to pandemic (H1N1) 2009, zoonotic infection with pandemic potential and seasonal epidemics along with a framework for monitoring the availability of research results that can fill information gaps essential for public health decision-making.

The Interim Draft Document can be found at: http://www.who.int/csr/disease/influenza/Research_Agenda_Document.pdf

The presentations can be found at:

[Lessons Learned Session - 20 November 2009 - Agenda \[pdf 202kb\]](#)

- ⌘ [Nancy Cox - Early warning signs of the H1N1 pandemic: importance of laboratory surveillance system \[pdf 4.30Mb\]](#)
- ⌘ [Ljubica Latinovic - Risk communication: the Mexico experience \[pdf 6.96Mb\]](#)
- ⌘ [Kevin Rooney - Clinical experience on care of severely ill patients with influenza infection \[pdf 6.11Mb\]](#)
- ⌘ [Charles Penn - Evidence-based development of guidelines: the WHO antiviral guideline \[pdf 1.05Mb\]](#)
- ⌘ [Malik Peiris / Richard Webby - From wild birds to human: the H5N1 experience \[pdf 5.58Mb\]](#)
- ⌘ [Marie-Paule Kieny - Vaccine development: experience from H5N1 to pandemic \(H1N1\) 2009 \[pdf 1.26Mb\]](#)
- ⌘ [Neil Ferguson - Application of modeling in public health decision making \[pdf 1.83Mb\]](#)
- ⌘ [Marc Guerrier - Ethics in public health policy development for influenza: experiences from developed and developing regions \[pdf 783kb\]](#)

Epidemiologic update

All 27 EU and 4 EFTA countries are reporting cases of pandemic (H1N1) 2009 influenza. A total of 1 147 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 10 December 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 (02.12.)	-	-	-	-
Belgium (03.12.)	-	-	-	-
Bulgaria (29.11)	-	-	-	-
Cyprus(23.11)	-	-	-	6
Czech Republic (03.12.)	-	-	-	-
Denmark (02.12.)	-	-	-	-
Estonia (09.12.)	-	-	-	-
Finland (08.12.)	29	-	10	-
France (07.12.)	-	-	201	630
Germany (01.12.)	-	-	-	-
Greece (02.12.)	-	-	-	-
Hungary (29.11.)	-	-	-	-
Iceland (26.11.)	5	180	1	20
Ireland (02.12.)	181	974	12	83
Italy (07.12)	-	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 (29.11.)	119	1014	-	-
Switzerland (03.12.)	26	195	-	49
United Kingdom ^a (03.12.)	747	-	161	-

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 (1 274 cumulative hospitalisations), Wales (423) and Northern Ireland (563).

Table 2. Reported number of new and cumulative confirmed fatal Pandemic (H1N1) 2009 influenza cases in EU and EFTA countries, as 10 December 2009, 09:00 hours CEST, and in the rest of the world by country, as of 09 December 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	-	14
Bulgaria	-	5
Cyprus	-	2
Czech Republic	10	32
Denmark	5	16
Estonia	1	5
Finland	-	17
France	8	158 ^a
Germany	28	94
Greece	-	21
Hungary	-	8
Iceland	-	2
Ireland	-	18
Italy	-	114
Latvia	-	14
Lithuania	-	7
Luxembourg	-	2
Malta	-	3
Netherlands	-	42
Norway	2	27
Poland	-	24
Portugal	9	32
Romania	-	14
Slovakia	-	3
Slovenia	-	8
Spain	-	169
Sweden	-	16
Switzerland	-	7
United Kingdom	-	270
Total	63	1147
OTHER EUROPEAN COUNTRIES & CENTRAL ASIA		
Albania	-	1
Belarus	-	20
Bosnia and Herzegovina	-	5

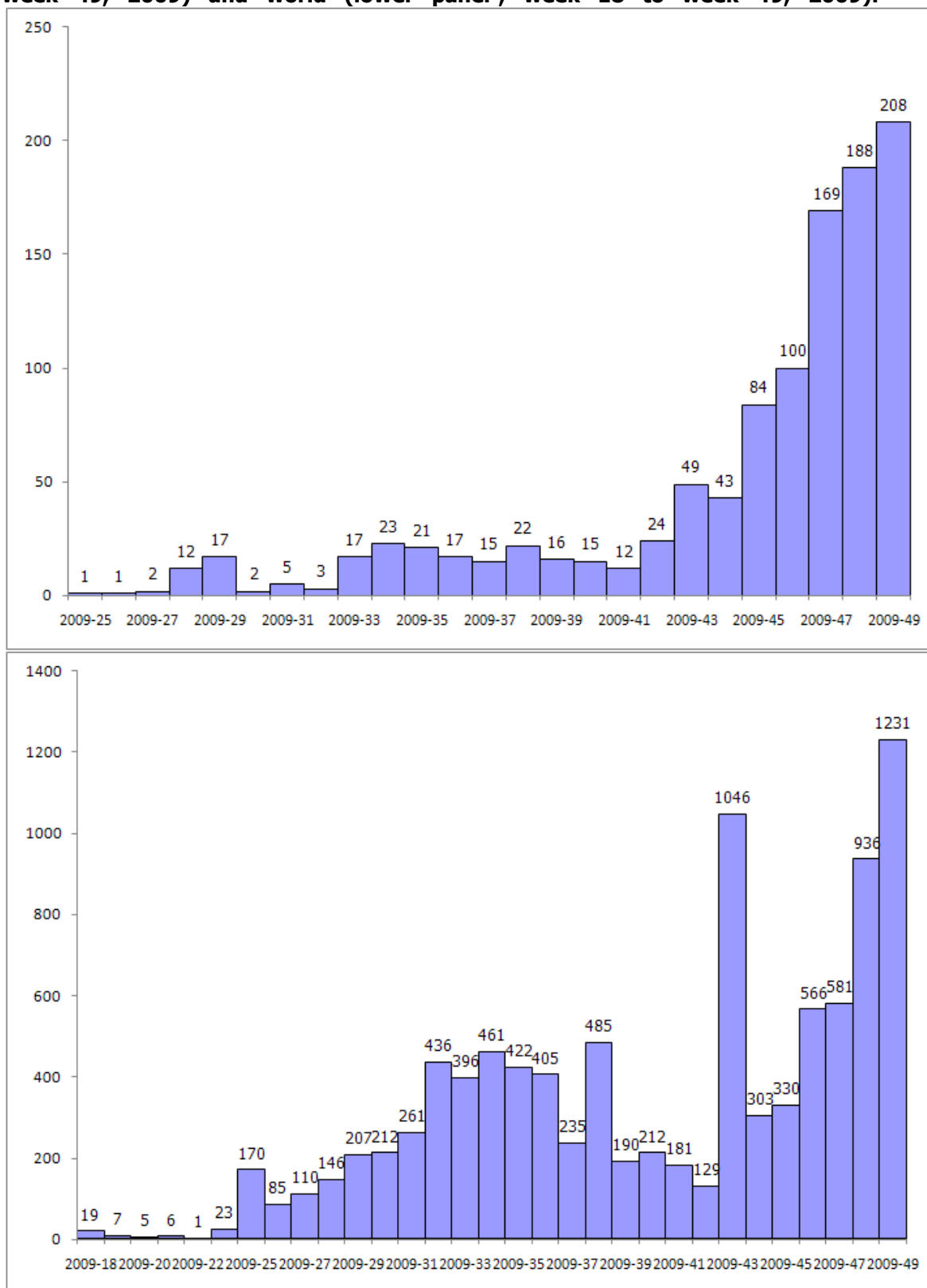
Croatia	3	22
Former Yugoslav Republic of Macedonia	-	7
Kosovo	-	10
Moldova	-	13
Montenegro	-	2
Russia	-	19
Serbia	5	31
Ukraine	-	41
Total	8	171
MEDITERRANEAN AND MIDDLE-EAST		
Algeria	-	10
Bahrain	-	7
Egypt	1	33
Iran	-	147
Iraq	1	34
Israel	-	67
Jordan	-	14
Kuwait	-	27
Lebanon	-	3
Libya	-	1
Morocco	7	12
Occupied Palestinian Territory	-	9
Oman	-	27
Qatar	-	8
Saudi Arabia	-	81
Syria	-	50
Tunisia	1	5
Turkey	-	296
United Arab Emirates	-	6
Yemen	-	22
Total	10	859
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	6	363
Mexico	42	713
USA	112	1929
Total	160	3005
CENTRAL AMERICA & CARIBBEAN		
Bahamas	-	4
Barbados	-	3
Cayman Islands	-	1
Costa Rica	-	41
Cuba	5	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	5	205
SOUTH AMERICA		
Argentina	-	613
Bolivia	-	58
Brazil	-	1528
Chile	-	150
Colombia	-	183
Ecuador	8	96
Paraguay	-	52
Peru	-	200
Uruguay	-	33
Venezuela	-	115
Total	8	3028
NORTH-EAST & SOUTH ASIA		
Afghanistan	-	16
Bangladesh	-	6
China (Mainland)	56	326

Hong Kong SAR China	-	44
India	16	643
Japan	-	65
Macao SAR China	-	2
Maldives	-	1
Mongolia	-	24
Pakistan	-	1
South Korea	-	117
Sri Lanka	-	5
Taiwan	-	33
Total	72	1283
SOUTH-EAST ASIA		
Brunei Darussalam	-	1
Cambodia	-	5
Indonesia	-	10
Laos Peoples Democratic Republic	-	1
Malaysia	-	77
Philippines	-	30
Singapore	-	19
Thailand	2	189
Vietnam	-	44
Total	2	376
AUSTRALIA & PACIFIC		
Australia	-	191
Cook Islands	-	1
Marshall Islands	-	1
New Zealand	-	20
Samoa	-	2
Solomon Islands	-	1
Tonga	-	1
Total	-	217
TOTAL	328	10402

^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, 5 in Guadeloupe and 126 in mainland France.

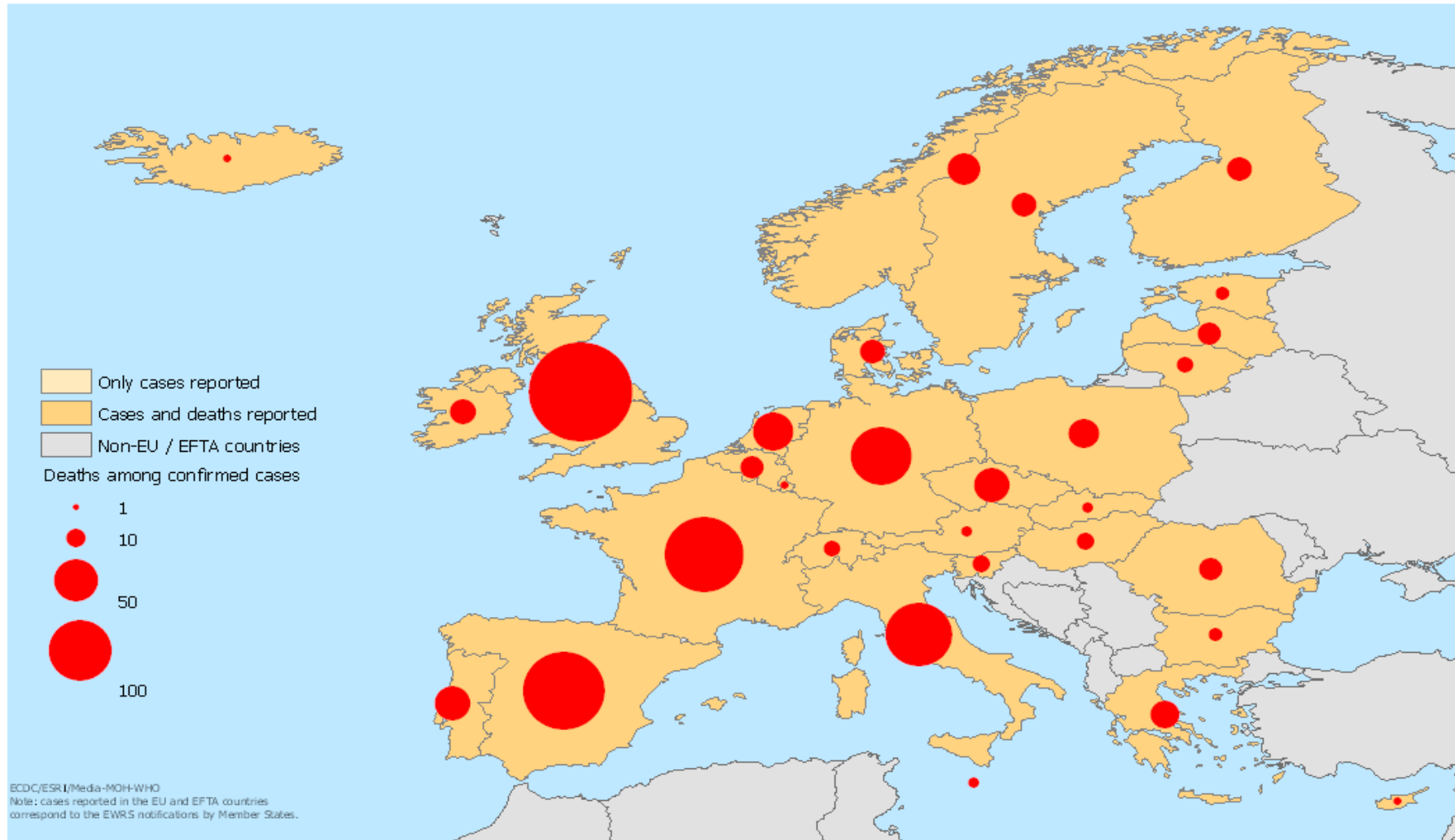
Figure 1: Number of confirmed deaths among pandemic (H1N1) 2009 influenza cases by week of notification. EU and EFTA countries (upper panel, week 25 to week 49, 2009) and world (lower panel^a, week 18 to week 49, 2009).



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 10 December 2009, 9.00 CEST





Reported cumulative number of confirmed fatal cases of influenza A(H1N1)v and country reporting status by country, as of 09 December 2009, 16.00 CEST

