



ECDC EXECUTIVE UPDATE

Pandemic influenza (H1N1) 2009

Issue 22

Monday, 7 December 2009

Weekly influenza surveillance overview (WISO) highlights

- Overall, 17 countries reported widespread activity in week 48/2009, while all reporting countries are still experiencing medium to very high influenza intensity.
- Eleven countries reported increasing activity, many of which are in Eastern and Southern Europe.
- Influenza intensity has been declining for at least two consecutive weeks in nine countries, many of which are located in Northern, Western and Central Europe.
- Oseltamivir resistance has been reported at very low levels in the EU.
- Seasonal influenza strains continue to be very rarely detected and more than 99% of subtyped viruses have been influenza A(H1N1)v.
- The percentage of samples from sentinel patients positive for influenza seen in primary care has declined since week 46. Nevertheless, the percentage is higher in countries reporting increasing trends.

The ECDC weekly influenza surveillance overview is published on Friday afternoons and is available at: http://www.ecdc.europa.eu/en/activities/surveillance/EISN/Pages/EISN_Bulletin.aspx

Weekly digest on pandemic influenza (H1N1) 2009 from ECDC Daily Updates

As of 6 December, the cumulative number of reported deaths since the beginning of the pandemic in EU/EEA Member States has totalled 1066.

7 December

- European Medicines Agency advises of risk of fever among young children following pandemic vaccination ([press release](#), [question and answers](#)).

4 December

- The first European Medicines Agency [weekly report](#) on the safety of centrally authorised pandemic vaccines and antivirals published.
- [WHO](#): Too early to judge if pandemic has peaked.

3 December

- [WHO update](#): Oseltamivir resistance in immunocompromised hospital patients.

[1 December](#)

- Updates from USA and Canada Regarding HIV-infection and pandemic influenza A(H1N1)v.

Scientific Advances

A number of epidemiological and serological studies indicate that trivalent influenza seasonal vaccination is unlikely to confer any protection against pandemic influenza A(H1N1)v 2009 infection

Hancock K, Veguilla V, Lu X, et al. [Cross-reactive antibody responses to the 2009 pandemic H1N1 influenza virus](#). N Engl J Med 2009 Nov 12;361(20):1945–52.

The above study is reviewed in [this week's Scientific Advance](#) together with evidence from four observational studies investigating the effects of seasonal influenza vaccination on the risk of infection with influenza A(H1N1)v.

Past meetings and events

30 November–1 December: ECDC vaccines expert, Kari Johansen, attended the Vaccine Working Party at EMEA, London.

1 December: At the EPSCO Council in Brussels, ECDC Director Zsuzsanna Jakab gave EU health ministers an update on the state of the (H1N1) influenza pandemic in the European Union (click [here](#) for the presentation).

3–4 December: ECDC attended a working meeting of the Influenza Virology Task Groups organised by the coordinators of the Community Network of Influenza Reference Laboratories, London.

Upcoming events

8–9 December: The twentieth Advisory Forum Meeting will be taking place at ECDC premises.

11 December: [Eurovaccine 2009](#), the first European conference on vaccination and immunisation, will be hosted by ECDC, Stockholm.

16–17 December: Health Security Committee Communicators' network meeting on vaccines and vaccination, Luxembourg.

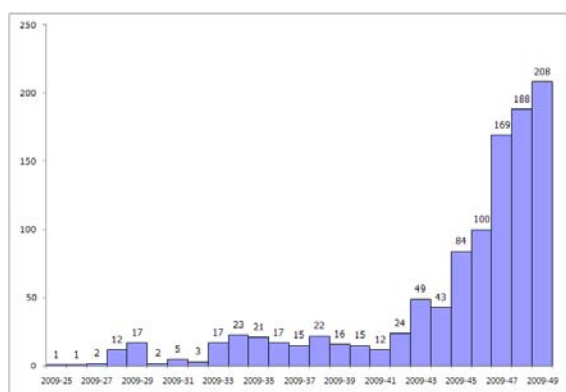
European epidemiology and key points

What is known, to date, about the pandemic and what is happening in Europe?

- Overall, 17 countries reported widespread activity in week 48/2009, while all reporting countries are still experiencing medium to very high influenza intensity.
- Eleven countries reported increasing activity, many of which are in Eastern and Southern Europe.
- Influenza intensity has been declining for at least two consecutive weeks in nine countries, many of which are located in Northern, Western and Central Europe.

With regards to epidemiology, it is more important to look at trends and distributions, such as those for deaths and cases in the community.

Deaths reported among pandemic (H1N1) 2009 influenza cases in EU and EFTA countries (week 25–49/2009)



This shows a weekly number of deaths from mid-October onwards. Fatalities have risen seven-fold since then.

Source: [ECDC Daily Update 7 December](#)

Geographic spread distribution map week 48/2009 (23–29th November)



This shows how widespread influenza activity was in most European countries during week 48.

Source: [ECDC Weekly influenza surveillance overview, 4 December](#)

Countries reporting community incidence in Week 48

Source: [ECDC Weekly influenza surveillance overview, 4 December](#)

Rising trend	Unchanged	Declining trend
Austria	Lithuania	Belgium
Czech Republic	Romania	Bulgaria
Estonia		Denmark
France		Germany
Greece		Iceland
Hungary		Ireland
Latvia		Norway
Luxembourg		Portugal
Malta		Slovakia
Poland		Spain
Slovenia		Sweden
		UK

Virological surveillance

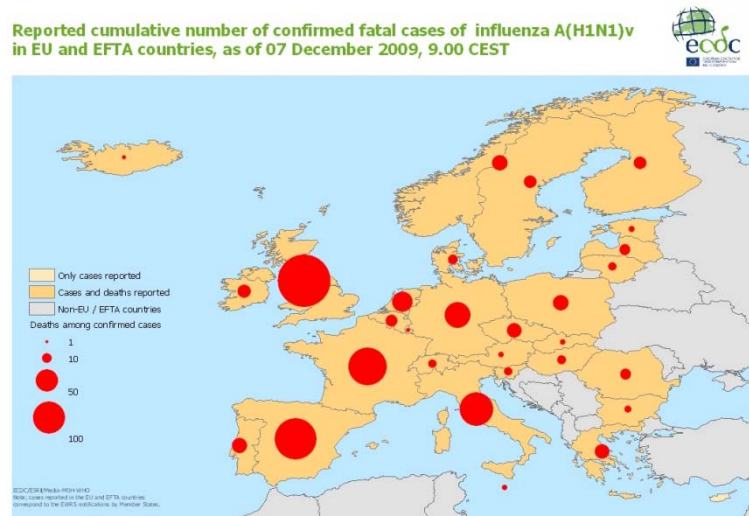
Source: [ECDC Weekly influenza surveillance overview, 4 December](#)

So far, the A(H1N1)v virus is very stable for an influenza virus, with few changes. Sparse oseltamivir resistance has been observed up to now. Currently, there is very little of the seasonal influenza virus circulating (the pandemic strain accounts for more than 99%). Nevertheless, seasonal flu usually appears after Christmas. Therefore, the possibility that seasonal influenza will appear in early 2010 cannot be ruled out. Additionally, other winter viruses may appear.

How does this compare with seasonal flu?

Experts have always been aware that pandemic (H1N1) 2009 is a significant threat to human health. Although most people will experience a mild form of the disease, those that develop severe disease are proving more difficult to treat than seasonal influenza cases. It is important to note that the majority of those with severe disease or who die are in recognised risk groups. Still, a significant minority—at least 30% of the deaths—are normal, healthy children and young adults; this is an important difference with seasonal influenza.

ECDC reported deaths reported in Europe



This map shows how countries in Western Europe have been affected. Numbers of deaths in Central, south-east and Eastern Europe are growing

Effective countermeasures: The usual hygiene and personal measures should continue to be promoted. These include regular hand-washing, using tissues and staying at home when sick. There is very little resistance to the drugs used against seasonal influenza (oseltamivir and zanamivir) and treatment with antivirals is working, especially if given early; however, the seasonal influenza vaccine gives little protection against influenza A(H1N1)v virus.

Vaccination: Vaccination is underway in many Member States and will be effective. Over sixty-five million doses of the new vaccines have already been used worldwide, with post-marketing surveillance undertaken by EU Member States and the European Medicines Agency based on more than 10 million doses (click [here](#) for more information). Apart from some children experiencing higher temperatures than expected with their second dose of Pandemrix (click [here](#) for the report), to date, no more significant reactions than those detailed in the marketing authorisation have been found. ECDC Director Zsuzsanna Jakab has advised all Europeans that have been offered the pandemic vaccine to take it.

Looking forward in the short-term: National and local pandemic waves may last about 15 weeks. They do not occur at the same time in different European countries nor do they occur at the same time in different parts of the same country. We can also expect local peaks to vary, e.g. to be higher or lower.

Soon, illnesses will peak in the countries that were first affected. However, hospitalisations and deaths will continue rising in those countries for a while as there are more hospitalisations after a peak in a country than before. Illnesses will continue to rise in the eastern, central and south-eastern countries of Europe. Some of these are considered vulnerable by ECDC because they have lower supplies of antivirals and few vaccines. In these countries, there may be particular pressures on hospitals at Christmas and around the New Year.

Stockholm, 2009

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