

# pH1N1 Flu Virus (Human Swine Influenza) Information Resources

*Current as of June 4, 2010 at 12 pm*

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### **Other Resources**

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## Events

### Current / Upcoming

[JUN 21-22] [H1N1: The world responds to a 21st century pandemic](#) (London, UK)  
This international conference will bring together scientists, academics and public health professionals to examine what we have learned since the appearance of H1N1 in April 2009, and the knowledge gained from the global effort can be used in preparing for future pandemic response.

### Archived

[ARCHIVED] "H1N1 and Pregnancy: Key Considerations for Vaccination and Management": Online learning program for health professionals

To access the program, go to:

[www.mdBriefCase.com](http://www.mdBriefCase.com) (for physicians)

[www.rxBriefCase.com](http://www.rxBriefCase.com) (for pharmacists)

[www.AdvancingIn.com](http://www.AdvancingIn.com) (for nurses and other healthcare professionals)

[ARCHIVED] [COCA conference calls](#)

[ARCHIVED] U.S. DHHS [H1N1 Video Briefing archive](#)

[ARCHIVED] [Know what to do about the flu](#): webcast series from the U.S flu.gov

## Lessons Learned: Jurisdictional Scan

### [Ontario Responded Well To H1N1 Pandemic Says Chief Medical Officer Of Health](#)

- [The H1N1 Pandemic – How Ontario Fared : A Report by Ontario's Chief Medical Officer of Health](#)  
21 pages | 1.1 Mb | PDF format

### [BMJ, European group criticize WHO pandemic actions](#) (2010-06-04)

An article published by the *British Medical Journal* says three scientists who helped frame World Health Organization (WHO) guidance on pandemic influenza preparedness had consulted for pharmaceutical companies that stood to profit from the WHO guidance and that the WHO did not disclose the scientists' industry ties. [Read CIDRAP article...](#)

### [New Zealand infection rates surprise officials](#) (2010-06-04)

An estimated 18% of the population of New Zealand were infected by pandemic H1N1 from November 2009 through March 2010, including 1 in 3 children aged 5 to 19 years and 1 in 4 preschoolers.

### [One fifth of European vaccine used](#) (2010-06-04)

Only about a fifth of the more than 179 million doses of H1N1 vaccine distributed in Western Europe have been used, the European Medicines Agency (EMA) said in a report.

## **[Study helps explain spread of drug resistance in seasonal H1N1 flu](#)**

**(2010-06-03)**

Scientists say they have identified factors that helped enable antiviral-resistant seasonal H1N1 influenza viruses, which previously were regarded as evolutionary weaklings, to spread around the world starting in 2007. [Read CIDRAP article...](#)

## **[Group notes 6 challenges for next pandemic](#)** (2010-06-02)

An international committee released six public health policy challenges that it anticipates will continue for the next 12 to 18 months and will help shape and improve preparation for the next pandemic: measuring age-specific immunity to infection, accurately quantifying severity, improving treatment outcomes for severe cases, quantifying the effectiveness of interventions, capturing the full impact of the pandemic on mortality, and rapidly identifying and responding to antigenic variants. [\[Jun 1 PloS Med commentary\]](#)

## **[H1N1 in skunks suggests wildlife transmission](#)** (2010-06-02)

In perhaps the first documented pandemic H1N1 infection in wild animals, researchers from British Columbia confirmed the virus in two skunks found dead at a mink farm, they reported in *Emerging Infectious Diseases*.

## **[Melbourne attack rate lower than expected](#)** (2010-06-02)

Researchers who tested blood samples from 706 Melbourne residents from August to October found that 16% had antibodies to pandemic H1N1 flu.

## **[Australian flu-vaccine probe confirms increased reactions in small children](#)**

**(2010-06-01)**

Australia's chief medical officer today renewed his advice for clinicians to suspend seasonal flu vaccination for healthy children younger than 5 after national investigations confirmed higher-than-expected rates of fever and convulsions after immunization in that age-group.

[Read CIDRAP article...](#)

## **[Vaccine information didn't make a case for safety](#)** (2010-06-01)

A Rand Corp survey comparing vaccine uptake and attitudes about seasonal compared with pandemic flu vaccines revealed that though adults perceived pandemic flu to be more severe, they were less likely to be vaccinated against it than seasonal flu, according to a study in *Preventive Medicine*.

## **[China study details H1N1 deaths](#)** (2010-06-01)

A retrospective chart review of patients in Shenyang, China, hospitalized with 2009 H1N1 influenza in November and December showed that many were apparently healthy, nonelderly adults.

## **[Taiwan school vaccine campaign led to mass hysteria](#)** (2010-05-28)

Public officials in Taiwan yesterday described 23 clusters of mass psychogenic illness after pandemic flu vaccination in school children, who started receiving the vaccine at schools last November.

## **[Legal expert shares lessons from pandemic vaccine campaign](#)** (2010-05-26)

Legal issues that came into play during the H1N1 flu pandemic provided a useful look at how laws can help ease the availability of the vaccine, but in some instances can work against immunization efforts, according to a legal expert who has analyzed events that unfolded over the past year.

[Read CIDRAP article...](#)

## **[WHO: Pandemic showed limits of vaccine production capacity](#)** (2010-05-21)

Global production of the H1N1 influenza vaccine has made clear that the world still has a long way to go to meet pandemic production capacity goals set by the World Health Organization (WHO) 4

years ago, WHO experts said in a report released this week. [Read CIDRAP article...](#)

### [President's advisory group looks to speed up flu vaccine](#) (2010-05-21)

In the wake of a pandemic vaccine that came too little and too late to blunt the second wave of pandemic flu infections last fall, President Barack Obama's science advisory group today presented a set of recommendations on how to more quickly produce a vaccine in the face of another novel flu outbreak or other public health emergency. [Read CIDRAP article...](#)

### [H1N1 screening, travel limits were common at borders](#) (2010-05-21)

Surveys of actions taken at borders early in the pandemic showed that entry screening and travel restrictions were common early on, but steps changed as the outbreak evolved, according to a WHO study today.

### [Study finds little antiviral hoarding](#) (2010-05-21)

Researchers found no evidence of antiviral hoarding in the United States during the H1N1 pandemic, according to a new survey by Prime Therapeutics.

### [Underlying risk factors common in UK deaths](#) (2010-05-20)

A study published today found that 77% of Brits who died of pandemic flu last year had underlying risk factors such as low immunity or respiratory disease.

### [Polls traced declining interest in H1N1 vaccine](#) (2010-05-19)

### [Early flu spread linked to dance club](#) (2010-05-19)

## **Lessons Learned: Literature**

### [Mass psychogenic illness in nationwide in-school vaccination for pandemic influenza A\(H1N1\) 2009, Taiwan, November 2009-January 2010](#)

Huang WT, Hsu CC, Lee PI, Chuang JH. Euro Surveill. 2010;15(21):pii=19575.

### [Public health measures & individualized decision-making: The confluence of the H1N1 vaccine and Islamic bioethics](#)

Padela AI. Hum Vaccin. 2010 Sep 12;6(9). [Epub ahead of print]

### [The influenza A \(H1N1-2009\) experience at the inaugural Asian Youth Games Singapore 2009: mass gathering during a developing pandemic](#)

Lim HC, Cutter J, Lim WK, Ee A, Wong YC, Tay BK. Br J Sports Med. 2010 Jun; 44(7):528-32.

### [Studies needed to address public health challenges of the 2009 H1N1 influenza pandemic: insights from modeling](#)

Van Kerkhove MD, Asikainen T, Becker NG, et al. PLoS Med. 2010;7(6):e1000275. doi:10.1371/journal.pmed.1000275

### [Preliminary Results: Surveillance for Guillain-Barré Syndrome After Receipt of Influenza A \(H1N1\) 2009 Monovalent Vaccine---United States, 2009--2010](#)

MMWR. 2010 Jun 4;59(21);657-661.

[Public health measures taken at international borders during early stages of pandemic influenza A \(H1N1\) 2009: preliminary results](#)

Wkly Epidemiol Rec. 2010 May 21;85(21):186-95. English, French. No abstract available.

[Factors associated with death in hospitalized pneumonia patients with 2009 H1N1 influenza in Shenyang, China](#)

Cui W, Zhao H, Lu X, Wen Y, Zhou Y, Deng B, Wang Y, Wang W, Kang J, Liu P. BMC Infect Dis. 2010 May 31;10(1):145. [Epub ahead of print]

[The practical experience of managing the H1N1 2009 influenza pandemic in Australian and New Zealand intensive care units](#)

Harrigan PW, Webb SA, Seppelt IM, O'Leary M, Totaro R, Patterson D, Davies AR, Streat S. Crit Care Resusc. 2010 Jun;12(2):121-30. No abstract available.

[H1N1dsight is a wonderful thing](#)

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[Pandemic Influenza A \(H1N1\) 2009: Chest Radiographic Findings from 147 Proven Cases in the Montreal Area](#)

Semionov A, Tremblay C, Samson L, Chandonnet M, Chalaoui J, Chartrand-Lefebvre C. Can Assoc Radiol J. 2010 May 25. [Epub ahead of print]

[Influence of country of study on student responsiveness to the H1N1 pandemic](#)

Griffiths SM, Wong AH, Kim JH, Yung TK, Lau JT. Public Health. 2010 May 24. [Epub ahead of print]

[Perceived Seriousness of Seasonal and A\(H1N1\) Influenzas, Attitudes Toward Vaccination, and Vaccine Uptake Among U.S. Adults: Does the Source of Information Matter?](#)

Maurer J, Uscher-Pines L, Harris KM. Prev Med. 2010 May 24. [Epub ahead of print]

[Avoidance behaviors and negative psychological responses in the general population in the initial stage of the H1N1 pandemic in Hong Kong](#)

Lau JT, Griffiths S, Choi KC, Tsui HY. BMC Infect Dis. 2010 May 28;10(1):139. [Epub ahead of print]

[Evaluation of vaccination strategies to suppress a novel influenza pandemic using an individual-based model](#)

Morimoto T, Ishikawa H. Nippon Eiseigaku Zasshi. 2010 May;65(3):459-66.

[2009 Pandemic Influenza A \(H1N1\): Pathology and Pathogenesis of 100 Fatal](#)

[Cases in the United States](#)

Shieh WJ, Blau DM, Denison AM, et al. Am J Pathol. 2010 May 27. [Epub ahead of print]

[Safety and immunogenicity of AS03B adjuvanted split virion versus non-adjuvanted whole virion H1N1 influenza vaccine in UK children aged 6 months-12 years: open label, randomised, parallel group, multicentre study](#)

Waddington CS, Walker WT, Oeser C, et al. BMJ. 2010 May 27;340:c2649. doi: 10.1136/bmj.c2649.

[Original Antigenic Sin and Pandemic \(H1N1\) 2009](#)

Adalja AA, Henderson DA. Emerg Infect Dis. 2010 Jun;16(6):1028-9.

[Pandemic Influenza A \(H1N1\) 2009 and mortality in the United Kingdom: risk factors for death, April 2009 to March 2010](#)

Pebody R, McLean E, Zhao H, et al. Euro Surveill. 2010 May 20;15(20). pii: 19571.

[Differences in the epidemiological characteristics and clinical outcomes of pandemic \(H1N1\) 2009 influenza, compared with seasonal influenza](#)

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[Seasonal Influenza Vaccine and Protection against Pandemic \(H1N1\) 2009-Associated Illness among US Military Personnel](#)

Johns MC, Eick AA, Blazes DL, et al. PLoS One. 2010 May 19;5(5):e10722.

[Differences in the Epidemiological Characteristics and Clinical Outcomes of Pandemic \(H1N1\) 2009 Influenza, Compared with Seasonal Influenza](#)

Shiley KT, Nadolski G, Mickus T, Fishman NO, Lautenbach E. Infect Control Hosp Epidemiol. 2010 May 25. [Epub ahead of print]

[Hospital Triage System for Adult Patients Using an Influenza-Like Illness Scoring System during the 2009 Pandemic-Mexico](#)

Rodriguez-Noriega E, Gonzalez-Diaz E, Morfin-Otero R, et al. PLoS One. 2010 May 14;5(5):e10658.

[Differing Symptom Patterns in Early Pandemic vs Seasonal Influenza Infections](#)

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Brienen NC, Timen A, Wallinga J, van Steenbergen JE, Teunis PF. Risk Anal. 2010 May 20. [Epub ahead of print]

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Baker MG, Thornley CN, Mills C, Roberts S, Perera S, Peters J, Kelso A, Barr I, Wilson N. BMJ. 2010 May 21;340:c2424. doi: 10.1136/bmj.c2424.

[Pandemic \(H1N1\) 2009: Setting up a multi-agency regional response centre - a toolkit for other public health emergencies](#)

Cleary V, Balasegaram S, McCloskey B, Keeling D, Turbitt D. J Bus Contin Emer Plan. 2010 Mar;4(2):154-64.

[Pandemic response: Developing a mission-critical inventory and cross-training programme](#)

Rosenbluth JM. J Bus Contin Emer Plan. 2010 Mar;4(2):126-31.

[A rapid method for assessing social versus independent interest in health issues: A case study of 'bird flu' and 'swine flu'](#)

Bentley RA, Ormerod P. Soc Sci Med. 2010 Apr 24. [Epub ahead of print]

[The 2009 H1N1 Pandemic Adds to Our Knowledge of Influenza Pathogenesis](#)

Walker DH. Am J Pathol. 2010 May 20. [Epub ahead of print]

[Global production of seasonal and pandemic \(H1N1\) influenza vaccines in 2009-2010 and comparison with previous estimates and global action plan targets](#)

Partridge J, Kieny MP; the World Health Organization H1N1 influenza vaccine Task Force. Vaccine. 2010 May 17. [Epub ahead of print]

[The Public's Response to the 2009 H1N1 Influenza Pandemic](#)

Steelfisher GK, Blendon RJ, Bekheit MM, Lubell K. N Engl J Med. 2010 May 19. [Epub ahead of print] No abstract available.

[Experiences of giving oseltamivir to school children during the 2009 influenza A\(H1N1\) pandemic](#)

Giesecke J. Euro Surveill. 2010 May 13;15(19). pii: 19570. No abstract available.

[Adverse drug effects following oseltamivir mass treatment and prophylaxis in a school outbreak of 2009 pandemic influenza A\(H1N1\) in June 2009, Sheffield, United Kingdom](#)

Strong M, Burrows J, Stedman E, Redgrave P. Euro Surveill. 2010 May 13;15(19).

pii: 19565.

[Enhanced Diagnosis of Pandemic \(H1N1\) 2009 Influenza Infection Using Molecular and Serological Testing in Intensive Care Unit Patients with Suspected Influenza](#)

Iwasenko JM, Cretikos M, Paterson DL, Gibb R, Webb SA, Smith DW, Blyth CC, Dwyer DE, Shi JQ, Robertson P, Rawlinson WD. Clin Infect Dis. 2010 May 19. [Epub ahead of print]

[A lower than expected adult Victorian community attack rate for pandemic \(H1N1\) 2009](#)

Grills N, Piers LS, Barr I, et al. Aust NZ J Public Health. 2010;34(3):228-231.

[Moral panic and pandemics](#)

Gilman SL. Lancet. 2010 May 29;375(9729):1866-1867.

[The 2009 A \(H1N1\) influenza virus pandemic: a review](#)

Girard MP, Tam JS, Assossou OM, Kieny MP. Vaccine. 2010 May 27. [Epub ahead of print]

[Pandemic vaccines--the legal landscape](#)

Parmet WE. New Engl J Med. 2010 May 27;362(21):1949-1952.

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The PLoS Medicine Editors. PLoS Med. 2010;7(5):e1000282. doi: 10.1371/journal.pmed.1000282

## **Ministry of Health and Long-Term Care (MOHLTC)**

[Ontario Responded Well To H1N1 Pandemic Says Chief Medical Officer Of Health](#)

- [The H1N1 Pandemic – How Ontario Fared : A Report by Ontario's Chief Medical Officer of Health](#)  
21 pages | 1.1 Mb | PDF format

[Ontario Influenza Bulletin SURVEILLANCE WEEK 21 \(May 23, 2010– May 29, 2010\)](#)

[Ontario Influenza Bulletin SURVEILLANCE WEEK 20 \(May 16, 2010– May 22, 2010\)](#)

[Ontario Influenza Bulletin SURVEILLANCE WEEK 19 \(May 9, 2010– May 15, 2010\)](#)



[ARCHIVED] [Previous MOHLTC updates and news conference video footage](#)

## Ontario Agency for Health Protection and Promotion (OAHPP)

OAHPP public health laboratories pandemic H1N1 surveillance reports

- [May 22, 2010](#)
- [May 17, 2010](#)

[ARCHIVED] [Swine influenza outbreak page](#)

## Public Health Agency of Canada (PHAC)

*No items of interest this week.*

[ARCHIVED] [Previous PHAC documents and updates](#)

## Centers for Disease Control and Prevention (CDC) & US Department of Health and Human Services

[UPDATE: Weekly FluView Map and Surveillance Report for Week Ending May 22, 2010](#)

This is the final report of the 2009-2010 season. During week 20 ( May 16-22, 2010), influenza activity decreased in the U.S. Two (0.2%) specimens tested by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories and reported to CDC/Influenza Division were positive for influenza.

[UPDATE: 2009 H1N1 Flu International Situation Update](#)

This report provides an update to the international situation as of May 21, 2010. The World Health Organization (WHO) continues to report updated 2009 H1N1 flu-associated laboratory-confirmed cases and deaths on its Web page.

[UPDATE: Weekly FluView Map and Surveillance Report for Week Ending May 15, 2010](#)

During week 19 ( May 9 - 15, 2010), influenza activity decreased in the U.S. 14 (0.9%) specimens tested by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories and reported to CDC/Influenza Division were positive for influenza.

[ARCHIVED] [Previous CDC documents and updates](#)

## US Center for Infectious Disease Research and Policy

[BMJ, European group criticize WHO pandemic actions \(2010-06-04\)](#)

An article published by the *British Medical Journal* says three scientists who helped frame World Health Organization (WHO) guidance on pandemic influenza preparedness had consulted for

pharmaceutical companies that stood to profit from the WHO guidance and that the WHO did not disclose the scientists' industry ties. [Read CIDRAP article...](#)

### **[Global H1N1 activity continues decline \(2010-06-04\)](#)**

The World Health Organization (WHO) today reported "active but declining" pandemic H1N1 transmission in parts of the Caribbean and Southeast Asia, with much of the rest of the world remaining quiet. The WHO also said the Southern Hemisphere is showing no evidence of the onset of the winter flu season but mentioned limited, localized pandemic flu activity in Chile. It also specified low but significant levels of predominantly seasonal H3N2 flu in several countries of East Africa. [\[Jun 4 WHO update\]](#)

### **[New Zealand infection rates surprise officials \(2010-06-04\)](#)**

An estimated 18% of the population of New Zealand were infected by pandemic H1N1 from November 2009 through March 2010, including 1 in 3 children aged 5 to 19 years and 1 in 4 preschoolers. Results of the study, commissioned by the country's ministry of health, showed far higher rates than expected. About 45.2% of infected individuals had no symptoms. Age was found to be the most important risk factor. The current prevalence of H1N1 immunity in the New Zealand population is estimated at 29%. [\[Jun 4 New Zealand ministry of health release\]](#)

### **[One fifth of European vaccine used \(2010-06-04\)](#)**

Only about a fifth of the more than 179 million doses of H1N1 vaccine distributed in Western Europe have been used, the European Medicines Agency (EMA) said in a report. Three major drug companies accounted for the doses, with GlaxoSmithKline accounting for 131.7 million doses, Novartis with 36 million, and Baxter with 11.7 million. Safety concerns and milder-than-expected illness decreased demand for vaccine in some European countries, the report said. [\[Jun 3 EMA report\]](#)

### **[Diagnostic kit effective for novel H1N1 \(2010-06-04\)](#)**

A monoclonal antibody kit to detect the 2009 pandemic H1N1 virus by indirect immunofluorescence assay showed 100% agreement with the real-time polymerase chain reaction panel used by the Centers for Disease Control and Prevention. The kit, made by Diagnostic Hybrids, does not detect any of 14 seasonal H1N1 or H3N2 influenza prototype virus strains nor is it reactive with seven other respiratory viruses. [\[Jun 2 J Clin Microbiol abstract\]](#)

### **[WHO advisors again hold at current pandemic phase \(2010-06-03\)](#)**

Based on an assessment of outside experts, the World Health Organization (WHO) announced today that it is sticking with its current pandemic alert level, based on recurring but low-level activity in some parts of the globe and until it has more information on the Southern Hemisphere's flu season. [Read CIDRAP article...](#)

### **[Study helps explain spread of drug resistance in seasonal H1N1 flu \(2010-06-03\)](#)**

Scientists say they have identified factors that helped enable antiviral-resistant seasonal H1N1 influenza viruses, which previously were regarded as evolutionary weaklings, to spread around the world starting in 2007. [Read CIDRAP article...](#)

### **[CDC: GBS risk similar for H1N1 and seasonal flu vaccines \(2010-06-02\)](#)**

The risk for the paralytic condition called Guillain-Barre syndrome (GBS) in people who received pandemic H1N1 influenza vaccine was about the same as the risk among those who receive seasonal flu shots, according to preliminary findings released today by the US Centers for Disease Control and Prevention (CDC). [Read CIDRAP article...](#)

### **[Group notes 6 challenges for next pandemic \(2010-06-02\)](#)**

An international committee released six public health policy challenges that it anticipates will

continue for the next 12 to 18 months and will help shape and improve preparation for the next pandemic: measuring age-specific immunity to infection, accurately quantifying severity, improving treatment outcomes for severe cases, quantifying the effectiveness of interventions, capturing the full impact of the pandemic on mortality, and rapidly identifying and responding to antigenic variants. [\[Jun 1 PloS Med commentary\]](#)

### [H1N1 in skunks suggests wildlife transmission](#) (2010-06-02)

In perhaps the first documented pandemic H1N1 infection in wild animals, researchers from British Columbia confirmed the virus in two skunks found dead at a mink farm, they reported in *Emerging Infectious Diseases*. Some minks had respiratory symptoms, but no testing was done. Farm workers did not report flu-like illness but could have had asymptomatic infections. Researchers said skunks could play a role in interspecies transmission and should be included in wildlife flu surveillance. [\[June Emerg Infect Dis letter\]](#)

### [Test for H1N1, H5N1 could aid early diagnosis](#) (2010-06-02)

Researchers from Beijing developed a real-time polymerase chain reaction assay that can simultaneously detect pandemic H1N1 flu and H5N1 avian flu. In a *Virology Journal* report today, they said early symptoms for both influenzas are similar, and a test to detect both could be useful for diagnosis and surveillance. In tests on 236 clinical specimens, they found the duplex test was as sensitive as each single-target test, and was even more sensitive for H5N1. [\[Jun 2 Virol J study\]](#)

### [Ontario notes pluses, minuses of H1N1 response](#) (2010-06-02)

Ontario's chief medical officer reported today that the province responded well to pandemic flu but could benefit from better coordination to ensure services to all. Successes included getting vaccine to all who wanted it, reaching isolated villages, and collaboration between levels of government. Areas for improvement include better information on vaccine from the federal government, greater preparedness for mass immunization, and an ability to electronically track vaccine shipments and uptake. [\[Jun 2 Ontario Ministry of Health release\]](#)

### [Melbourne attack rate lower than expected](#) (2010-06-02)

Researchers who tested blood samples from 706 Melbourne residents from August to October found that 16% had antibodies to pandemic H1N1 flu. Assuming an estimated 6% prevalence rate of antibodies existing before the pandemic, they estimated a pandemic flu attack rate of 10% in adults. The authors concluded, "This community attack rate is lower than anticipated," and said the results underscore the importance of vaccination. [\[Jun 1 Aust NZ J Public Health abstract\]](#)

### [Australian flu-vaccine probe confirms increased reactions in small children](#) (2010-06-01)

Australia's chief medical officer today renewed his advice for clinicians to suspend seasonal flu vaccination for healthy children younger than 5 after national investigations confirmed higher-than-expected rates of fever and convulsions after immunization in that age-group. [Read CIDRAP article...](#)

### [WHO to make pandemic-phase announcement](#) (2010-06-01)

An emergency committee of experts set up to advise the World Health Organization (WHO) on its pandemic alert status met by teleconference for the eighth time today and is expected to release a statement tomorrow on whether to hold or lower the current status. At the last meeting on Feb 23 the group declined to move to a post-peak phase, because some countries were reporting new pandemic activity and some Southern Hemisphere countries were just entering their winter months. [\[WHO pandemic H1N1 page\]](#)

### [Vaccine information didn't make a case for safety](#) (2010-06-01)

A Rand Corp survey comparing vaccine uptake and attitudes about seasonal compared with pandemic flu vaccines revealed that though adults perceived pandemic flu to be more severe, they

were less likely to be vaccinated against it than seasonal flu, according to a study in *Preventive Medicine*. The 3,917 respondents relied on widely varied information sources. Researchers said pandemic flu communications didn't appear to reassure adults about the safety and value of the vaccine. [\[May 25 Prev Med survey\]](#)

### **[CDC suspends flu reports till fall \(2010-06-01\)](#)**

The US Centers for Disease Control and Prevention (CDC) said it is resuming its October-through-May schedule of publishing weekly flu surveillance reports, though surveillance activities will continue. Unusually high levels of flu activity last spring prompted the CDC to keep issuing weekly reports throughout summer and early fall. The CDC's final report for 2009-2010 showed continued low levels for all flu indicators. [\[CDC H1N1 flu update\]](#)

### **[China study details H1N1 deaths \(2010-06-01\)](#)**

A retrospective chart review of patients in Shenyang, China, hospitalized with 2009 H1N1 influenza in November and December showed that many were apparently healthy, nonelderly adults. Of the 68 patients, 30 (44%) were admitted to the ICU and 10 (14.7%) died. Median age was 41 years; only one patient was over 65. At least one underlying medical condition was present in 23 (34%), and obesity and lymphopenia not resolving with 5 days of treatment were associated with a poor outcome. [\[BMC Infect Dis article\]](#)

### **[Australian flu-vaccine probe confirms increased reactions in small children \(2010-06-01\)](#)**

Australia's chief medical officer today renewed his advice for clinicians to suspend seasonal flu vaccination for healthy children younger than 5 after national investigations confirmed higher-than-expected rates of fever and convulsions after immunization in that age-group. [Read CIDRAP article...](#)

### **[Age profile of H1N1 cases sparks discussion of 'original antigenic sin' \(2010-05-28\)](#)**

A letter and commentary published this week in *Emerging Infectious Diseases* explore the idea that "original antigenic sin -- the hypothesis that the first influenza A virus a person encounters in childhood strongly influences his or her immune responses to all related flu viruses encountered later -- may explain the partial protection that older people have against the pandemic H1N1 flu virus. [Read CIDRAP article...](#)

### **[Global, US H1N1 transmission very low \(2010-05-28\)](#)**

The World Health Organization (WHO) again reported only low global pandemic flu activity, with the most active areas in the Caribbean and Southeast Asia, which are experiencing "low-level circulation," notably in Cuba, Singapore, Malaysia, and Bangladesh. Except for localized areas in Chile, the temperate Southern Hemisphere is showing little evidence of H1N1 activity. Seasonal influenza strains continue to be detected at low levels globally. The CDC also reported very low US rates today. [\[May 28 WHO update\]](#)

### **[Adjuvanted split-virion vaccine performs well in kids \(2010-05-28\)](#)**

In a study of the two vaccines used in Britain during the pandemic, the split-virion version with an immune-boosting adjuvant produced a stronger immune response in children than did the whole-virion vaccine. The study, of 937 UK children 6 months to 12 years old, compared an adjuvanted, egg-based split-virion H1N1 vaccine with an unadjuvanted, cell-based whole-virion version. While the split-virion vaccine induced a stronger immune response, it also produced more adverse reactions. [\[May 27 BMJ abstract\]](#)

### **[Taiwan school vaccine campaign led to mass hysteria \(2010-05-28\)](#)**

Public officials in Taiwan yesterday described 23 clusters of mass psychogenic illness after pandemic flu vaccination in school children, who started receiving the vaccine at schools last

November. After the first cluster, officials looked for others. Ten involved 15 or more children, median age was 13, and 68% were girls. Researchers said intense media coverage and suspicion about the vaccine contributed to the events, which show a need for surveillance and communication strategies. [\[May 27 Eurosurveillance study\]](#)

#### [Study finds H1N1, seasonal flu differ subtly \(2010-05-28\)](#)

Researchers who compared patterns between patients with seasonal and pandemic flu at two Philadelphia hospitals found few clinical differences between the two groups, though pandemic flu patients tended to have more lower respiratory symptoms. They found that pregnancy was the only risk condition that was more common in the pandemic group, and those with pandemic flu were younger, with a median age of 29, compared with 59. [\[May 25 Infect Control Hosp Epidemiol study\]](#)

#### [Study: US flu strains may head south in spring \(2010-05-27\)](#)

The United States is a more important hub for the global circulation of seasonal flu strains than previously thought, a finding that may have practical public health implications for the best use of antivirals and vaccines, researchers reported today. [Read CIDRAP article...](#)

#### [Legal expert shares lessons from pandemic vaccine campaign \(2010-05-26\)](#)

Legal issues that came into play during the H1N1 flu pandemic provided a useful look at how laws can help ease the availability of the vaccine, but in some instances can work against immunization efforts, according to a legal expert who has analyzed events that unfolded over the past year. [Read CIDRAP article...](#)

May 25 – no news

#### [Study shows sepsis, fetal distress with H1N1 in pregnancy \(2010-05-24\)](#)

Among 18 pregnant women hospitalized with pandemic flu, 9 had gastrointestinal symptoms, 13 met sepsis criteria, 4 experienced fetal distress, 1 had a miscarriage, and 1 2-day-old baby died from sepsis. Among the mostly minority women, 5 had asthma, 2 had sickle cell disease, 1 had diabetes, and 1 was HIV-positive. All patients received oseltamivir (Tamiflu), which, the authors write, may have improved outcomes. All were released from the hospital with good outcomes. [\[May 24 Arch Intern Med abstract\]](#)

#### [Symptoms differ between H1N1, seasonal flu \(2010-05-24\)](#)

A study of hospital patients in Singapore in the first 3 months of the pandemic showed that H1N1 patients were younger but had fewer symptoms, on average, than those with seasonal flu. Of 547 patients with novel H1N1 flu, 42% were age 6 to 18, 35% were 19 to 35, and just 6% were 51 or older. In 193 patients who had seasonal flu, the respective numbers were 16%, 21%, and 23%. Fever was more common in those with seasonal flu, but cough, sore throat, and muscle aches were more common with H1N1. [\[May 24 Arch Intern Med abstract\]](#)

#### [H1N1 shedding, transmission akin to seasonal flu \(2010-05-24\)](#)

A study of pandemic flu virus shedding and transmission in German households found that most patients stopped shedding virus by 5 days, consistent with other studies, and that the secondary attack rate for contacts was 26%, somewhat higher than other studies. Investigators also found that nasal wash was the most sensitive specimen type. They concluded that the findings are similar to seasonal influenza patterns. [\[Jun 1 Am J Epidemiol abstract\]](#)

#### [FDA clears H1N1 diagnostic test \(2010-05-24\)](#)

The US Food and Drug Administration (FDA) said today it has approved the first diagnostic test for pandemic H1N1 flu through its normal regulatory pathway. The newly approved Simplexa influenza A H1N1 test was previously available through an emergency use authorization. The approval will allow clinicians to continue using the test even after the public health emergency expires, the FDA

said in a statement. The test is made by Focus Diagnostics, of Cypress, Calif. [\[May 24 FDA statement\]](#)

#### **[Brazil extends vaccine campaign \(2010-05-24\)](#)**

Brazil's Health Ministry last week announced plans to extend its H1N1 vaccination campaign by almost 2 weeks, to Jun 2, according to China's news agency Xinhua. Since March, the country has vaccinated more than 61 million people, about 70% of the campaign's goal. The ministry also decided to broaden vaccination to include children 2 to 5 years old, which will require almost 11 million additional doses. [\[May 21 Xinhua story\]](#)

#### **[WHO: Pandemic showed limits of vaccine production capacity \(2010-05-21\)](#)**

Global production of the H1N1 influenza vaccine has made clear that the world still has a long way to go to meet pandemic production capacity goals set by the World Health Organization (WHO) 4 years ago, WHO experts said in a report released this week. [Read CIDRAP article...](#)

#### **[President's advisory group looks to speed up flu vaccine \(2010-05-21\)](#)**

In the wake of a pandemic vaccine that came too little and too late to blunt the second wave of pandemic flu infections last fall, President Barack Obama's science advisory group today presented a set of recommendations on how to more quickly produce a vaccine in the face of another novel flu outbreak or other public health emergency. [Read CIDRAP article...](#)

#### **[Global H1N1 rate stays at low levels \(2010-05-21\)](#)**

The World Health Organization (WHO) reported today that global pandemic flu activity remains largely unchanged, with the most active areas of transmission in parts of the Caribbean and Southeast Asia. Activity in temperate regions remains low to sporadic. Central Africa has been seen increased transmission of seasonal influenza type B, which is accounting for 85% of all its flu isolates. Type B flu continues at low levels in parts of Asia, Europe, and Central America. [\[May 21 WHO update\]](#)

#### **[Flu-like illness remains quiet in US \(2010-05-21\)](#)**

Influenza activity in the United States continues to taper, the CDC reported today, with the proportion of deaths attributed to pneumonia and influenza remaining below the epidemic threshold for the week ending May 15. The proportion of outpatient visits for flu-like illness was 0.8%, down from 1.1% the week before. Of the four influenza A viruses subtyped by the CDC, all were novel H1N1. One state had local flu activity, and 19 states and Puerto Rico reported sporadic activity. [\[May 21 CDC update\]](#)

#### **[H1N1 can spread among air passengers \(2010-05-21\)](#)**

Sitting near H1N1-infected airline passengers may slightly raise infection risk, according to a new study. Scientists interviewed 97 of 102 passengers who shared the rear section of a Boeing 747-400 with 24 students and teachers during a long international flight from New Zealand. Nine members of the school group were determined to have pandemic flu during the flight, and 2 of the 57 passengers seated within two rows of those 9 became infected after the flight, implying a 3.5% risk of infection. [\[May 21 BMJ study\]](#)

#### **[H1N1 screening, travel limits were common at borders \(2010-05-21\)](#)**

Surveys of actions taken at borders early in the pandemic showed that entry screening and travel restrictions were common early on, but steps changed as the outbreak evolved, according to a WHO study today. Data were collected from 56 national public health officials (29% of WHO member states), as well as from 32 airports, 25 airlines, and 46 ports. Among the findings: 91% of nations gave travelers H1N1 info, 46% at first limited travel to outbreak areas, and 61% conducted entry screening. [\[May 21 Wkly Epidemiol Rec \(see p. 186\)\]](#)

#### **[Study finds little antiviral hoarding \(2010-05-21\)](#)**

Researchers found no evidence of antiviral hoarding in the United States during the H1N1 pandemic, according to a new survey by Prime Therapeutics. Researchers for Prime and one of its Blue Cross Blue Shield clients compared the use of antiviral flu drugs in 11 states during the pandemic with use during past seasonal flu outbreaks. They found regional variations in antiviral use but comparable pandemic-flu and seasonal-flu use overall and little indication of hoarding. [\[May 20 Prime Therapeutics news release\]](#)

### **[Underlying risk factors common in UK deaths](#) (2010-05-20)**

A study published today found that 77% of Brits who died of pandemic flu last year had underlying risk factors such as low immunity or respiratory disease. The study, which assessed data on 440 deaths, found fatalities were most common in young adults (median age 53, and 85% were under 65). The case-fatality rate was 0.9% in those 65 and older and 0.04% for those under 64. The authors state that the results point to the need for early, targeted intervention for pandemic flu. [\[May 20 Eurosurveillance study\]](#)

### **[Study: Seasonal flu vaccine offers some H1N1 protection](#) (2010-05-20)**

In a study of 1,205 military personnel who contracted pandemic H1N1 in 2009, researchers found that those who had received seasonal flu vaccine the year before had a 45% level of vaccine effectiveness (VE) against the novel virus. Those who had been vaccinated against seasonal flu as early as 2004 had 41% VE. The study also showed VE of 62% against severe disease, compared with 41% against milder outcomes. Shots appeared to grant a higher VE (44%) compared with the nasal-spray vaccine (24%). [\[May 19 PLoS One study\]](#)

### **[Severe H1N1 may warrant serum testing](#) (2010-05-20)**

Australian researchers determined that up to a third of severe cases of pandemic H1N1 may not be properly detected without serologic testing. The authors collected acute and convalescent blood specimens from 33 patients with severe H1N1 admitted to intensive care units. With hemagglutination inhibition of novel H1N1, 29 paired serum samples showed significant increases in specific antibody titers. Of these 29, only 18 had pandemic H1N1 RNA detected by routine nucleic acid testing. [\[May 19 Clin Infect Dis abstract\]](#)

### **[Cambodia announces second vaccine round](#) (2010-05-20)**

Cambodia's ministry of health announced plans to administer 1.5 million doses of pandemic H1N1 vaccine by the end of this month, according to the *Phnom Penh Post*. The new vaccine arrived recently from the World Health Organization. In March the country received 300,000 doses, which have been administered to high-risk groups. [\[May 19 Phnom Penh Post story\]](#)

### **[Polls traced declining interest in H1N1 vaccine](#) (2010-05-19)**

If the trajectory of public opinion during the H1N1 influenza pandemic is any guide, safety worries and doubts about the severity of the disease threat may cause a good share of the public to shun vaccination the next time a pandemic emerges, according to a review of 10 months' worth of polls. [Read CIDRAP article...](#)

### **[H1N1 review seeks confidential correspondence](#) (2010-05-19)**

The 29-member expert panel convened to conduct an independent review of the World Health Organization's (WHO's) pandemic response has asked to review confidential correspondence between the agency and vaccine manufacturers. Dr. Harvey Fineberg, chair of the committee and president of the Institute of Medicine, said reviewing all records is necessary to address claims that pharmaceutical companies benefited inappropriately from contracts for vaccines and antivirals that went unused. [\[May 19 Associated Press story\]](#)

### **[Early flu spread linked to dance club](#) (2010-05-19)**

One of the earliest outbreaks of H1N1 pandemic flu in Singapore arose from close contact in the

crowded confines of a dance club, researchers from that nation's Ministry of Health report. The outbreak's source was a 20-year-old woman who developed flu symptoms on Jun 16, 2009, after visiting Malaysia, and went to a giant dance club the next evening with 20 friends. The total toll was 48, including 3 of the friends, other club patrons and employees, and family members. [\[Ann Acad Med Singapore report\]](#)

### **[Spanish health workers decline vaccine \(2010-05-19\)](#)**

A survey of healthcare workers at a major Madrid hospital, taken during the H1N1 pandemic and published in *Vaccine*, shows that only 16.5% accepted the pandemic vaccine, though 49.7% received the seasonal vaccine that same year. The goal set by the WHO is 60%. The most common reasons for refusal of the pandemic vaccine were doubts about its efficacy, fear of adverse reactions, and lack of concern over contracting the pandemic virus. [\[May 14 Vaccine abstract\]](#)

### **[Severe H1N1 infection linked to loss of key immune cell \(2010-05-19\)](#)**

An analysis of three severe cases of H1N1 flu in the United Kingdom—two young adults who survived and a pregnant patient who died—shows that all three experienced loss of a particular class of blood cell. Researchers from several British institutions write that the unexpected sharp drop in NK cells, peripheral-blood lymphocytes that are a key component of the innate immune system, may provide a clue to the body's inability to control viral reproduction in severe cases of pandemic H1N1 flu. [\[May 18 PLoS One article\]](#)

[ARCHIVED] [Current overview and older updates from CIDRAP](#)

## **United Kingdom**

*Due to low influenza activity the National Influenza Report will be published fortnightly, with a short summary of activity provided in alternate weeks. Should activity increase again the report will return to a weekly schedule. The Department of Health Pandemic site has now been archived.*

[The role of the Health Protection Agency in the 'containment' phase during the first wave of pandemic influenza in England in 2009. Health Protection Agency March 2010](#)

[HPA Weekly National Influenza Report Summary of UK surveillance of influenza and other seasonal respiratory illnesses 03 June 2010 \(Week 22\)](#)

[ARCHIVED] [Health Protection Agency swine influenza page](#)

## **Europe**

[Information from Member States, Candidates, EEA and EFTA countries](#)  
(Interactive map)

[Weekly influenza surveillance overview. Main surveillance developments in week 21/2010 \(24 May 2010 – 30 May 2010\)](#)

- In many European countries, sentinel surveillance systems have stopped monitoring the rates of influenza-like illness or acute respiratory infection.
- Reports from countries where data are still available indicate that influenza activity in Europe has stabilised at low intensity with an absence of geographic spread.
- Two (3.9%) of the 51 patients presenting with influenza-like illness to a sentinel physician



- tested positive for influenza.
- Week 21/2010 was the first week since starting SARI surveillance during which no SARI cases were reported.
- Notwithstanding being in pandemic Phase 6 globally, epidemiological and virological indicators are consistent with the 2009/10 influenza season coming to an end in Europe.

[ARCHIVE] [Maps, surveillance summaries and previous ECDC updates](#)

[ARCHIVE] [European Union Influenza H1N1 page](#)

## Australia and New Zealand

New Zealand:

[Pandemic Influenza H1N1 2009 \(swine flu\) – Update 188](#)

A major new scientific study, estimates that 1.26 million or 29% of New Zealanders were immune to the pandemic influenza virus by March this year. But a large proportion of the population remain vulnerable.

[Pandemic Influenza H1N1 2009 \(swine flu\) – Update 187](#)

[Pandemic Influenza H1N1 2009 \(swine flu\) – Update 186](#)

Australia:

[Influenza Surveillance Report No. 20 for the week ending 21 May 2010 \(PDF 240 KB\)](#)

- Of the 741 confirmed cases of influenza diagnosed during 2010 up to 21 May, 9.4% have been sub-typed as pandemic (H1N1) 2009, 75.8% as type A not sub-typed (likely to be mostly pandemic influenza), 0.9% as A/H3N2 and 9.4% have been characterised as type B.
- Sentinel hospitals have reported no hospitalisations during this period, and ANZICS reported no ICU admissions for influenza A.
- In 2010, there have been 70 confirmed cases of pandemic (H1N1) 2009 influenza reported in Australia, bringing the total of confirmed cases to 37,706 since May 2009. There have been no new confirmed cases of pandemic (H1N1) 2009 influenza diagnosed and reported in Australia during this reporting period.

[ARCHIVED] [New Zealand's H1N1 page](#)

[ARCHIVED] [Australia's H1N1 Update Bulletins](#)

## Pan-American Health Organization (PAHO)

Regional Update, Pandemic (H1N1) 2009. (Published on June 1, 2010)

- In North America, acute respiratory disease activity remained stable and is lower than expected in most areas.
- In the Caribbean countries, Cuba and Jamaica reported unchanged trends in acute respiratory disease.
- In Central American countries, El Salvador and Honduras reported decreasing trends in acute respiratory disease while Panama reported an increasing trend.
- All South American countries reported decreasing or unchanged trends in acute respiratory disease.

- From EW 1 to 20, in Colombia, Cuba, Guatemala and Jamaica, the pandemic virus predominated. Argentina and Paraguay detected the predominance of respiratory syncytial virus.
- 9 new confirmed deaths in 3 countries were reported; in total there have been 8,410 cumulative confirmed deaths.

[ARCHIVED] [PAHO Influenza A \(H1N1\) Portal](#)

## World Health Organization (WHO)

In focus: pandemic disease expected to continue to occur

The most intense pandemic activity has passed, but pandemic disease is expected to continue, the Director-General determined following the advice of the Emergency Committee at its 1 June 2010 meeting. The situation will be reassessed in mid-July when information from the winter influenza season in the Southern Hemisphere will be available.

:: [Statement following the eighth Emergency Committee meeting](#)

[4 June 2010](#)

Pandemic (H1N1) 2009 - update 103

[28 May 2010](#)

Pandemic (H1N1) 2009 - update 102

[21 May 2010](#)

Pandemic (H1N1) 2009 - update 101

[ARCHIVED] [WHO H1N1 Guidance Documents](#)

[ARCHIVED] [Older WHO Updates](#)

## Research Articles (1 week backfile)

*What's new today, plus a one week backfile. Articles with an asterisk (\*) indicate that a subscription is required to view the full text. Contact your library for access to full text articles.*

[Medline literature search on H1N1](#) (current as of today)

[Mass psychogenic illness in nationwide in-school vaccination for pandemic influenza A\(H1N1\) 2009, Taiwan, November 2009-January 2010](#)

Huang WT, Hsu CC, Lee PI, Chuang JH. Euro Surveill. 2010;15(21):pii=19575.

[Compliance with a multilayered nonpharmaceutical intervention in an urban elementary school setting\\*](#)

Stebbins S, Stark JH, Vukotich CJ Jr. J Public Health Manag Pract. 2010 Jul-Aug; 16(4):316-24.

[Public health measures & individualized decision-making: The confluence of the H1N1 vaccine and Islamic bioethics](#)

Padela AI. Hum Vaccin. 2010 Sep 12;6(9). [Epub ahead of print]

[A Monoclonal Antibody Kit for Identification of the Novel 2009 H1N1 Influenza A Virus\\*](#)

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[A single immunization with CoVaccine HTTM-adjuvanted H5N1 influenza vaccine induces protective cellular and humoral immune responses in ferrets\\*](#)

Bodewes R, Kreijtz JH, van Amerongen G, et al. J Virol. 2010 Jun 2. [Epub ahead of print]

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Lim HC, Cutter J, Lim WK, Ee A, Wong YC, Tay BK. Br J Sports Med. 2010 Jun; 44(7):528-32.

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[Peramivir: An Intravenous Neuraminidase Inhibitor for the Treatment of 2009 H1N1 Influenza \(July/August\)\\*](#)  
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