

pH1N1 Flu Virus (Human Swine Influenza) Information Resources

Current as of February 26, 2010 at 12 pm

Contents

[Events](#)

Updates by Jurisdiction

Lessons Learned

[Jurisdictions](#)

[Literature](#)

Ontario

[Ontario Ministry of Health and Long-Term Care \(MOHLTC\)](#)

[Ontario Agency for Health Promotion and Protection \(OAHPP\)](#)

Canada

[Public Health Agency of Canada \(PHAC\)](#)

United States

[Centers for Disease Control and Protection \(CDC\)](#)

[Center for Infectious Disease Research & Policy](#)

[Other US Sources](#)

Europe

[United Kingdom's Health Protection Agency \(HPA\)](#)

[UK Department of Health](#)

[European Centre for Disease Control and Prevention \(ECDC\)](#)

[European Union](#)

International

[Pan American Health Organization \(PAHO\)](#)

[Australia and New Zealand](#)

[World Health Organization \(WHO\)](#)

Other Resources

[pH1N1 Clinical Information](#)

[Research Articles](#)

[Travel Advisories](#)

Events

Current / Upcoming

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

To access the program, go to:

www.mdBriefCase.com (for physicians)

www.rxBriefCase.com (for pharmacists)

www.AdvancingIn.com (for nurses and other healthcare professionals)

Archived

[FEB 17] [GLOBAL HEALTH HISTORIES: Emerging issues of global public health importance: SARS: Learning from an Epidemic of Fear](#)

In the opening presentation of this new seminar series, health psychologist Professor George Bishop describes his studies of how ordinary people respond to illness threats. He focuses particularly on the impact of SARS in Singapore, public responses to the epidemic, and the lessons learned. Dr Cathy Roth, a WHO expert on the disease, explains the role of WHO in leading the struggle to contain this unprecedented threat.

[FEB 3-5] [International Symposium on Neglected Influenza Viruses](#)

[DEC 16] Topic: A Special Flu.Gov Webcast for Health Care Providers

Join experts from the U.S. Department of Health and Human Services and the former president of the American Medical Association answer your questions about the H1N1 virus and vaccine. Hosted by the U.S. Department of Health and Human Services, **the show airs live** on www.flu.gov.

[NOV 30] Webcast: [Planning for a Pandemic - Can History Inform Action?](#)

[NOV 18] [Clinical Laboratory Management Association: Review Epidemiology of Novel H1N1](#)

[NOV 10] [Assembly of First Nations and Health Canada to Co-host a Virtual Summit on H1N1 Preparedness November 10th, 2009](#)

[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

Public Health Preparedness Summit: [Opening remarks by Kathleen Sebelius](#), Secretary, US Department of Health and Human Services

[Swine flu wanes, but experts say pandemic strain could reemerge](#)

Literature

[Surgical Masks for Protection of Health Care Personnel against Pandemic Novel Swine-Origin Influenza A \(H1N1\)-2009: Results from an Observational Study.](#)

Ang B, Poh BF, Win MK, Chow A Clin Infect Dis. 2010 Feb 23. [Epub ahead of print]

[Pandemic \(H1N1\) 2009 Risk for Nurses after Trivalent Vaccination.](#)

M. Loeb et al. Emerg Infect Dis. 2010 Apr; [Epub ahead of print]

[Lessons from Queens.](#)

Lynfield R. The Journal of Infectious Diseases 2010;201:000–000. [Epub ahead of print] Feb 26, 2010.

[Why collect individual-level vaccination data?](#)

Writing team for the Public Health Agency of Canada/Canadian Institutes of Health Research Influenza Research Network Vaccine Coverage Theme Group. CMAJ 2010;182 273-275.

[Developing policy options for SARS and SARS-like diseases — a Delphi study.*](#)

Syed AM, Hjarne L, Krumkramp R, Reintjes R, Aro AR. Glob Public Health 2010.

[Disaster and flu: putting planning into practice. *](#)

Cusick C. Mater Manag Health Care. 2010 Jan;19(1):14-8.

[Influenza vaccines provide diminished protection but are cost-saving in older adults.](#)

Deans GD, Stiver HG, McElhaney JE. J Intern Med. 2010 Feb;267(2):220-7.

[YouTube As a Source of Information on the H1N1 Influenza Pandemic.*](#)

Pandey A, Patni N, Singh M, Sood A, Singh G. Am J Prev Med. 2010 Mar;38(3):e1-e3.

[An optimal control theory approach to non-pharmaceutical interventions.](#)

Lin F, Muthuraman K, Lawley M. BMC Infect Dis. 2010 Feb 19;10(1):32. [Epub ahead of print]

[Assessment of the Efficacy of Commercially Available and Candidate Vaccines against a Pandemic H1N1 2009 Virus.](#)

Kobinger GP, Meunier I, Patel A, Pillet S, Gren J, Stebner S, Leung A, Neufeld JL, Kobasa D, von Messling V. J Infect Dis. 2010 Feb 19. [Epub ahead of print]

[\[New Influenza A H1N1v: usefulness of immunization\] *](#)

Launay O. Presse Med. 2010 Jan;39(1):6-9. Epub 2009 Dec 10. French. No abstract available.

Ministry of Health and Long-Term Care (MOHLTC)

[Ontario Influenza Bulletin \(Week 6: Feb 7–13\)](#)

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

Important Health Notices / Avis de santé important

No IHNs related to H1N1 since Nov 13, 2009.

Ontario Agency for Health Protection and Promotion (OAHPP)

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

Public Health Agency of Canada (PHAC)

PHAC will no longer be producing a weekly report of deaths associated with the H1N1 flu virus. This information will now be captured in the weekly FluWatch report.

[Weekly Vaccine Surveillance Report](#)

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

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

Q&A: [Behavioral Risk Factor Surveillance System \(BRFSS\) 2009 H1N1 Flu Modules for Influenza-like Illness \(ILI\) and Vaccination](#)

The Behavioral Risk Factor Surveillance System (BRFSS) is a state-based system of health surveys that collects information on health risk behaviors, preventive health practices, and health care access primarily related to chronic disease and injury.

To help track influenza activity during the 2009-2010 influenza season, modules (an optional set of questions that are asked along with the standard set of BRFSS questions) related to influenza-like illness (defined as an illness with reported fever and a cough and/or sore throat for this survey), and seasonal and 2009 H1N1 vaccines have been added to the survey.

Q&A: [Information on 2009 H1N1 impact by Race and Ethnicity](#)

This page provides summary information about the impact of 2009 H1N1 across racial and ethnic groups in the United States. This information was reported to CDC through the Emerging Infections Program from April 15, 2009 through January 26, 2010, and through the Behavioral Risk Factor Surveillance System (BRFSS) 2009 H1N1 Flu Modules for Influenza-like Illness (ILI) from September 1 to December 31, 2009. Preliminary information about race/ethnicity and 2009 H1N1 was first reported at the Advisory Committee on Immunization Practices meeting of October 22, 2009

[Reduction of Inventory and Allocations at the McKesson 2009 H1N1 Vaccine/ Ancillary Supply Distribution Depots](#)

Inventory capacity at CDC's centralized distribution depots (McKesson) has been at 30 million doses of 2009 H1N1 vaccine (with comparable inventory capacity for ancillary supplies) since the program's inception. Based on the current stage of the distribution program, CDC will maintain lower inventories of 2009 H1N1 vaccine and ancillary supplies at its centralized distribution depots as of April 1, 2010. This means that, over the next two months, CDC will gradually need to reduce inventory at the depots by approximately 50%. The goal of the reduction will be to maintain a reasonable inventory of 2009 H1N1 vaccine at the depots which will be available for order with additional vaccine in storage that could be shipped to the depots if needed.

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

- According to WHO, the majority of 2009 H1N1 influenza isolates tested worldwide remain sensitive to oseltamivir, an antiviral medicine used to treat influenza disease. Among 2009 H1N1 isolates tested worldwide, 248 have been found to be resistant to oseltamivir – 60 of these isolates were detected in the United States.

- Seasonal A (H1N1) viruses continue to be sporadically detected in Asia. Low levels of seasonal influenza A (H3N2) and type B viruses are circulating in parts of Africa and Asia. Influenza B activity continues to increase in China, becoming the predominant virus circulating in the country, accounting for 82 % of all influenza detections.
 - As of February 18, 2010, WHO published recommendations for the composition of influenza virus vaccines for the upcoming season in the Northern Hemisphere (November 2010 - April 2011). The WHO is recommending a trivalent vaccine including a 2009 pandemic influenza A(H1N1) strain:
 - an A/California/7/2009 (H1N1)-like virus;
 - an A/Perth/16/2009 (H3N2)-like virus*;
 - a B/Brisbane/60/2008-like virus.
- * A/Wisconsin/15/2009 is an A/Perth/16/2009 (H3N2)-like virus and is a 2010 Southern Hemisphere vaccine virus.

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

Other US Sources

No items of interest this week.

Center for Infectious Disease Research and Policy

[Hospitalizations strongly linked to chronic conditions](#) (Feb 25)

Among patients hospitalized for pandemic H1N1, 85% of adults and 65% of children had one or more underlying medical conditions, according to the latest data from the US Centers for Disease Control and Prevention (CDC). The types of underlying conditions associated with H1N1 hospitalizations haven't changed much, with asthma as the most common condition in adults, followed by diabetes and cardiovascular disease. In children, asthma and neurodevelopmental conditions topped the list.

[Study: Early Tamiflu treatment shortens H1N1 shedding](#) (Feb 25)

In a study designed to track the response of pandemic flu to oseltamivir, researchers from Singapore followed a series of 70 hospitalized patients early in the outbreak with daily polymerase chain reaction tests. They reported their findings yesterday in *Clinical Infectious Diseases*. They found prolonged viral shedding in healthy young adults despite treatment, but those who received the drug within the first 3 days of illness had a shorter shedding duration.

[Bulgaria to start vaccinating risk groups](#) (Feb 25)

Bulgaria is set to launch its pandemic H1N1 vaccine campaign on Mar 1, targeting 80,000 doses to priority groups, including babies older than 6 months with certain medical conditions, pregnant women, and healthcare workers, Sofia News Agency reported. The start of the program comes about 3 months after flu activity subsided in Bulgaria. The health ministry is asking doctors to recommend the vaccine to patients at high risk for flu complications.

[U of Colorado urges vaccination before spring break](#) (Feb 25)

The student health service at the University of Colorado's Boulder campus is encouraging students to receive their pandemic H1N1 vaccine before traveling for spring break, the *Colorado Daily* student newspaper reported. The school is hosting a series of free vaccine clinics for students, staff, and faculty over the next week. To lure more students, health officials are offering a drawing for one of two iPod Nanos.

[ACIP recommends annual flu shots for almost all](#) (Feb 24)

In the wake of the H1N1 influenza pandemic, the US Advisory Committee on Immunization Practices (ACIP) today took the long-discussed step of recommending seasonal flu immunizations for nearly everyone, leaving out only small babies.

[Emergency departments see rise in flu-like illness](#) (Feb 24)

Some of the nation's emergency departments are noting increases in flu-like illness cases that appear to be pandemic H1N1, and colleges are reporting the first increase in flu-like illness since the end of November, but it's not clear if these are early signs of a third pandemic flu wave.

[WHO gains scientists' support for H1N1 response](#) (Feb 24)

Some have accused the World Health Organization (WHO) of hyping novel H1N1 flu, but scientists defended the agency in an Agence France-Presse (AFP) story today. They pointed out that the WHO acted appropriately, given the uncertain nature of the virus. One expert explained, "This virus is not dead yet. It is on a trajectory, and we don't know where it is going to end up," adding that H1N1 is still mutating. Another pointed out that in the last pandemic, 70% of deaths occurred in a third wave.

[Almost 30% of Americans now vaccinated](#) (Feb 24)

At today's meeting of the Advisory Committee for Immunization Practices (ACIP), Dr. James Singleton of the Centers for Disease Control and Prevention (CDC) said that, as of Feb 13, about 86 million Americans had received the pandemic vaccine, or about 29% of the population. Total vaccine doses administered had reached an estimated 97 million, or about 78% of the doses shipped.

[Defense Department invests in tobacco-based vaccine](#) (Feb 24)

A Texas-based consortium today announced funding for vaccine technology using tobacco plants instead of chicken eggs to produce H1N1 flu vaccine, according to a news release. The consortium, which comprises G-Con, LLC, and Texas A&M, designed Project GreenVax to eventually produce 100 million doses per month. According to a *Wall Street Journal* article today, the Defense Advanced Research Projects Agency is providing \$40 million of the \$61 million cost to produce 10 million initial doses.

[Czechs open vaccine to general public](#) (Feb 24)

This week Czech Republic officials opened up the country's estimated 700,000 doses of novel H1N1 vaccine to the general public free of charge. Although vaccine uptake has been low in that country, officials hope the announcement will spur vaccination, especially in children. The vaccine will be available in vaccination centers, not in doctors' offices.

[CDC will reduce H1N1 vaccine stockpiles](#) (Feb 23)

Over the next 2 months, the Centers for Disease Control and Prevention (CDC) plans to reduce by half the amount of H1N1 vaccine it has pre-positioned in distribution depots around the country managed by McKesson Corp. The CDC has maintained 30 million doses at the sites. The agency said the main strategy will be not replacing 3 million doses that have been recalled, along with 15.3 million doses that are reaching their expiration dates between March and June.

[Hong Kong probes possible flu-shot reactions](#) (Feb 23)

Hong Kong's Centre for Health Protection is studying illnesses in several residents that arose after they received the H1N1 influenza vaccine, the region's government said Tuesday. The cases include a 34-year-old man who experienced double vision, a 28-year-old pregnant woman whose fetus died, and paralysis in a 75-year-old woman and an 80-year-old man. The government was careful to say there are cases of paralysis and stillbirth in the territory every year.

[WHO to decide whether to stand down pandemic alert](#) (Feb 23)

The pandemic emergency committee of the World Health Organization (WHO) will announce Wednesday whether it plans to step down from its 9-month-old phase 6 pandemic alert. The committee was scheduled to reconsider the pandemic declaration in a confidential teleconference that was to be held today. By WHO protocol, any public announcement will be delayed until director-general Dr. Margaret Chan informs the 193 member states of the decision.

[Possibility of H1N1 third wave depends on many factors](#) (Feb 23)

Scientists on the alert for a possible third wave of H1N1 flu are evaluating the influence of many factors that could affect the virus's resurgence, the *Washington Post* reported today. They include how much of the population--particularly schoolchildren--is already immune, whether uninfected people are gathering in close quarters, and how much the virus is affected by winter temperatures and humidity. Even without a third wave, a variant of pandemic H1N1 is likely to circulate for years.

[Study: Seasonal vaccines would not have slowed H1N1](#) (Feb 23)

A ferret study suggests seasonal flu vaccines would not have contained novel H1N1, which emerged at the end of the 2008-09 flu season, but veterinary vaccines might have limited spread in pigs. A Canadian team administered two 2008-09 seasonal formulas, a veterinary vaccine and a newly developed H1N1 vaccine to ferrets, then infected the animals with a virulent strain of novel H1N1. The swine and H1N1 vaccines were at least partially protective, but the H1N1 would have required a second dose.

[Blacks overrepresented in Virginia flu deaths](#) (Feb 22)

About 30% of the 36 people who have died of H1N1 flu in Virginia were African-American, though African-Americans make up only 20% of the state population, Virginia Health Commissioner Karen Remley told the *Richmond Times-Dispatch*. She said Centers for Disease Control and Prevention (CDC) officials have speculated that higher rates of diabetes and asthma may help explain the increased rate of severe H1N1 cases in African-Americans.

[South Korea opens vaccine to all](#) (Feb 22)

Pandemic H1N1 flu vaccine is now available to everyone in South Korea, including foreigners, not just to high-risk groups, the Ministry of Health, Welfare and Family Affairs announced today, according to Arirang News. The ministry urged vaccinations, saying that about 500 daily H1N1 cases are being reported, although the number has been on the decline.

[No flu yet reported at Olympics](#) (Feb 22)

So far pandemic flu--as well as seasonal flu--has been held not only off the podium but entirely away from the Vancouver Olympic Games, according to the Canadian Press. Last week the British Columbia provincial laboratory didn't find a single influenza virus in samples it tested. "Boy, so far we are lucky," said Dr. Jack Taunton, chief medical officer for the Olympics. February often brings the peak of flu season.

[Lab study shows 3-antiviral combo effective](#) (Feb 22)

Researchers found that a combination of the antiviral drugs amantadine, ribavirin, and oseltamivir was effective against drug-resistant seasonal and novel H1N1 influenza. In testing in canine kidney cells, the authors found "that the triple combination was highly synergistic against drug-resistant viruses, and the synergy of the triple combination was significantly greater than the synergy of any double combination."

[ACIP to set vaccine guidelines for next season](#) (Feb 22)

The CDC's Advisory Committee for Immunization Practices (ACIP) will meet Feb 24 and 25 to discuss which groups should get flu shots for next season, along with other immunization issues. Among other things, the committee will consider whether to recommend that older people receive a

high-dose flu vaccine that was recently licensed by the Food and Drug Administration, according to the meeting agenda. The 2010-11 flu vaccine is expected to include the pandemic H1N1 virus.

[FDA selects pandemic H1N1 for 2010-11 seasonal flu vaccine \(Feb 22\)](#)

The US Food and Drug Administration's (FDA's) vaccines committee voted today to follow the World Health Organization's advice and fold the pandemic H1N1 influenza vaccine into the seasonal flu vaccine for next season.

[Seroprevalence study shows 21% H1N1 infection rate \(Feb 22\)](#)

At least 63 million Americans, 21% of the population, may have been infected by pandemic H1N1 influenza, Pittsburgh researchers estimate—creating enough population-wide immunity to potentially explain the lack of a third wave of H1N1 so far.

[Colleges see slight dip in flu cases \(Feb 19\)](#)

Reports of flu-like illnesses at college campuses for the week ending Feb 12 dropped by 7%, a decrease that the American College Health Association (ACHA) says doesn't reflect a significant change, consistent with the bigger national pattern. The attack rate at the nation's colleges was 2.7 cases per 10,000 students. No new hospitalizations or deaths were reported. The group said 85% of campuses have pandemic vaccine, but student uptake remains low, at about 8%.

[Influenza B activity up in China, Hong Kong \(Feb 19\)](#)

The World Health Organization (WHO) said today though pandemic activity hasn't changed much, influenza B now accounts for 82% of flu virus detections in China and nearly 35% in Hong Kong. Several countries in West Africa are reporting increasing pandemic flu cases, but the WHO said the uptick doesn't yet appear to reflect widespread transmission. Some countries, such as Thailand and Jamaica, are reporting increases in respiratory diseases, though the WHO said some may be other diseases.

[EU authority approves Sanofi pandemic vaccine \(Feb 19\)](#)

Sanofi today announced that Europe's drug regulatory agency has approved its adjuvanted pandemic H1N1 vaccine. The approval clears the vaccine for use in people age 6 months and older. Sanofi's vaccine contains its AF03 adjuvant. Clinical trials showed a single 3.8-mcg dose of the vaccine was safe and effective in all age-groups. The vaccine is manufactured in Sanofi's Val de Reuil, France, facility and is the fifth novel H1N1 vaccine that European regulators have cleared.

[Czech Republic cancels 30% of vaccine order \(Feb 19\)](#)

Because of low demand, the Czech Republic is reducing its H1N1 vaccine order with GlaxoSmithKline from 1 million doses to 700,000, its health minister told the Associated Press (AP) today. Health Minister Dana Juraskova said only about 64,000 citizens have decided to get vaccinated.

[CDC flu barometers show level activity \(Feb 19\)](#)

Pandemic flu activity in the United States stayed level for the fourth week in a row, though the US Centers for Disease Control and Prevention (CDC) reported slight increases in the number of outpatient visits for flu-like illnesses and deaths from pneumonia and influenza.

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

Health Protection Agency (UK)

[Weekly Epidemiological Update: 25 February 2010 \(Week 8\)](#)

Pandemic influenza activity is low and stable or decreasing across the UK.

[ARCHIVED] [Swine Influenza page](#)

Department of Health (UK)

No items of interest this week.

[ARCHIVE] [DH Pandemic Flu site](#)

European Centre for Disease Prevention and Control (ECDC)

[ECDC Executive Update: 2009 pandemic influenza A\(H1N1\)](#)

Issue 31: Monday, 22 February 2010

Weekly influenza surveillance overview highlights

- The 2009 influenza A(H1N1) pandemic is well past its winter peak in EU/EEA countries. In seven countries (the majority of which are in Eastern Europe), local or regional transmission of the pandemic virus continues at low to medium intensity.
- Sporadic transmission of the 2009 pandemic influenza virus was reported in the majority of the countries.
- Of the 684 specimens collected by sentinel physicians, 46 (6.7%) were positive for pandemic virus.
- In addition to the pandemic virus, there is currently no evidence of wide circulation of other influenza A viruses. A few influenza B viruses have been detected.
- The number of reported severe acute respiratory infection (SARI) cases also continues to decline. In week 06/2010, of the 20 SARI cases for whom underlying conditions were documented, six (30%) had no known underlying condition.

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

European Union

No items of interest this week.

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

Pan-American Health Organization (PAHO)

No items of interest this week.

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

Australia and New Zealand

[Australia: Influenza Surveillance Report No. 6 for the week ending 12 February 2010 \(PDF\)](#)

- As at 12 February 2010, there have been 37,713 confirmed cases of pandemic (H1N1) 2009 and 191 deaths reported in Australia.
- National influenza activity remains low and are at levels experienced at the same time in previous years as measured by:
 - ILI presentation rates to General Practitioners;

- ILI presentations to emergency departments (EDs) in New South Wales and Western Australia;
 - FluTracking surveillance of ILI;
 - Enquiries to the National Health Call Centre Network (NHCCN); and
 - Absenteeism rates.
- As at 7 February 2010, the WHO Regional Offices reported at least 15,292 deaths associated with pandemic (H1N1) 2009 worldwide. In Northern Hemisphere, overall pandemic influenza activity continues to decline in most countries. The most active areas of transmission continue to be in later peaking areas, particularly in Northern Africa, South Asia and East Asia.
 - Pandemic influenza (H1N1) 2009 virus continues to be the predominant influenza virus circulating worldwide. In addition to the increasing proportion of seasonal influenza type B viruses recently detected in China (accounting for 72% of all influenza detected in the reporting week), low levels of seasonal H3N2 and type B viruses are circulating in parts of Africa, East and Southeast Asia, and are being detected only sporadically on other continents.
 - The WHO Collaborating Centre in Melbourne has reported that from 1 January 2010 to 12 February 2010 no isolates have shown resistance to oseltamivir by enzyme inhibition assay (EIA) and two clinical specimens collected in Australia have shown the H275Y mutation known to confer resistance to oseltamivir.
 - To date, WHO reported that 245 oseltamivir resistant pandemic (H1N1) 2009 viruses had been detected and characterised worldwide. All of these isolates showed the same H275Y mutation but all were sensitive to zanamivir.

[New Zealand: 18 February 2010 Pandemic Influenza H1N1 2009 \(swine flu\) – Update 173](#)

- The Ministry of Health is currently making a monovalent (single viral strain) pandemic vaccine available through an early targeted immunisation programme.
- Those eligible to receive this single-strain pandemic vaccine are pregnant women, people under 65 years of age (including children) with certain conditions (as for seasonal influenza) or are morbidly obese, and all children aged from 6 months to their fifth birthday enrolled in designated practices that have high proportions of people who are Maori, Pacific and/or from high deprivation areas. It is being made available through clinics, and eligible people who are interested in receiving the early vaccine can get information about these clinics from their District Health Board.
- The early immunisation is also available to frontline healthcare workers, including staff in general practices, emergency departments, intensive care units and those who may have direct contact with at-risk patients.
- We are on track to start the seasonal influenza vaccination programme in March. We expect the seasonal influenza vaccine, which contains the current H1N1 viral strain and two other influenza strains, will help protect New Zealanders against the flu.
- During the week of 15-21 February 2010, overall influenza activity in New Zealand remained at the same low levels as in the previous week. Visits to doctors for influenza-like illness (ILI) nationally remained below baseline.

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

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

World Health Organization (WHO)

WHO no longer issues global tables showing the numbers of confirmed cases for all countries. Regular updates describing the situation in the newly affected countries are provided.

[Pandemic H1N1 \(2009\) – Update 89](#)

[Director-General statement following the seventh meeting of the Emergency Committee](#)

The Emergency Committee held its seventh meeting by teleconference on 23 February 2010. The Director-General sought the Committee's views on the determination of the pandemic status.

A detailed update was provided to the Committee on the global pandemic situation. After asking additional questions and reviewing the evidence and holding extensive discussion, the Committee was of the view that there was mixed evidence showing declining or low pandemic activity in many countries, but new community level transmission activity in West Africa. Moreover, they expressed concern that the winter months of the Southern Hemisphere had not yet started and there was uncertainty whether additional generalized waves of activity might occur and the need to not undermine preparations. The Committee advised that it was premature to conclude that all parts of the world have experienced peak transmission of the H1N1 pandemic influenza and that additional time and information was needed to provide expert advice on the status of the pandemic. The Committee accordingly suggested that the Committee be re-convened in a few weeks to review intervening developments and related epidemiological information.

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

[ARCHIVED] [Older WHO Updates](#)

pH1N1 Clinical Information

[ARCHIVED] [Ebsco Influenza Portal](#)

Due to Pandemic H1N1 Influenza and concerns about the 2009/2010 flu season, the EBSCO Publishing Medical and Nursing editors of *DynaMed™*, *Nursing Reference Center™* (NRC) and *Patient Education Reference Center™* (PERC) have made key influenza information from these resources freely available to health care providers worldwide. *Contact your library for access.*

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)

[Effects of Early Oseltamivir Therapy on Viral Shedding in 2009 Pandemic Influenza A \(H1N1\) Virus Infection.](#)

Ling Li et al. *Clinical Infectious Diseases* 2010;50:000–000. DOI: 10.1086/651083. [Epub ahead of print]

[Surgical Masks for Protection of Health Care Personnel against Pandemic Novel Swine-Origin Influenza A \(H1N1\)-2009: Results from an Observational Study.](#)

Ang B, Poh BF, Win MK, Chow A *Clin Infect Dis*. 2010 Feb 23. [Epub ahead of print]

[Pandemic \(H1N1\) 2009 Risk for Nurses after Trivalent Vaccination.](#)

M. Loeb et al. *Emerg Infect Dis*. 2010 Apr; [Epub ahead of print]

[Neurologic Manifestations of Pandemic \(H1N1\) 2009 Virus Infection.](#)

Kitcharoen et al. *Emerg Infect Dis*. 2010 March; [Epub ahead of print]

[Modelling seasonality and viral mutation to predict the course of an influenza pandemic.*](#)

P. Shi, P. Keskinocak, J. L. Swann And B. Y. Lee. Epidemiology and Infection 2010, Published online by Cambridge University Press 17 Feb 2010 doi:10.1017/S0950268810000300

[Household Transmission of 2009 Influenza A \(H1N1\) Virus after a School-Based Outbreak in New York City, April–May 2009.](#)

France AM et al. The Journal of Infectious Diseases 2010;201:000–000. [Epub ahead of print] Feb 26, 2010.

[Lessons from Queens.](#)

Lynfield R. The Journal of Infectious Diseases 2010;201:000–000. [Epub ahead of print] Feb 26, 2010.

[Performance of a Rapid Influenza Test in Children During the H1N1 2009 Influenza A Outbreak.](#)

Cruz AT et al. Pediatrics. 2010 Feb 15. [Epub ahead of print]

[Seroprevalence following the second wave of pandemic 2009 H1N1 influenza.](#)

Ross T, Zimmer S, Burke D, et al. PLoS Curr Influenza 2010 Feb 20:PMC2820309

[Absolute humidity and the seasonal onset of influenza in the continental United States.](#)

Shaman J, Pitzer VE, Viboud C, et al. PLoS Biology 2010 Feb 23;8(2).

[Preparing for infectious disease threats at mass gatherings: the case of the Vancouver 2010 Olympic Winter Games.](#)

Khan K, Freifeld CC, Wang J, Mekaru SR, Kossowsky D, Sonricker AL, Hu W, Sears J, Chan A, Brownstein JS. CMAJ. 2010 Feb 24. [Epub ahead of print]

[Rash associated with pandemic \(H1N1\) influenza.](#)

Morgan Rosenberg, Carolyn Tram, Ayelet Kuper, and Nick Daneman . CMAJ 2010;182 E146

[Correlates of severe disease in patients with 2009 pandemic influenza \(H1N1\) virus infection.](#)

Ryan Zarychanski, Tammy L. Stuart, Anand Kumar, Steve Doucette, Lawrence Elliott, Joel Kettner, and Frank Plummer . CMAJ 2010;182 257-264

[Why collect individual-level vaccination data?](#)

Writing team for the Public Health Agency of Canada/Canadian Institutes of Health Research Influenza Research Network Vaccine Coverage Theme Group. CMAJ 2010;182 273-275.

[Outbreak of 2009 Pandemic Influenza A \(H1N1\) on a Peruvian Navy Ship --- June-July 2009.](#)

Centers for Disease Control and Prevention (CDC). MMWR Morb Mortal Wkly Rep. 2010 Feb 19;59(6):162-5.

[Developing policy options for SARS and SARS-like diseases — a Delphi study.*](#)

Syed AM, Hjarnoe L, Krumkramp R, Reintjes R, Aro AR. Glob Public Health 2010.

[Influenza, anthropology, and global uncertainties.*](#)

Atlani-Duault L, Kendall C. Med Anthropol. 2009 Jul;28(3):207-11.

[Pathogens gone wild? Medical anthropology and the "swine flu" pandemic.*](#)

Singer M. Med Anthropol. 2009 Jul;28(3):199-206.

[Biocommunicability and the biopolitics of pandemic threats. *](#)

Briggs CL, Nichter M. Med Anthropol. 2009 Jul;28(3):189-98.

[Alternative live-attenuated influenza vaccines based on modifications in the polymerase genes protect against epidemic and pandemic flu.*](#)

Solórzano A, Ye J, Pérez DR. J Virol. 2010 Feb 24. [Epub ahead of print]

[The month of July: an early experience with pandemic influenza A \(H1N1\) in adults with cystic fibrosis.](#)

France MW, Tai S, Masel PJ, Moore VL, McMahon TL, Ritchie AJ, Bell SC. BMC Pulm Med. 2010 Feb 25;10(1):8. [Epub ahead of print]

[Selection for resistance to oseltamivir in seasonal and pandemic H1N1 influenza and widespread co-circulation of the lineages.](#)

Janies DA, Voronkin IO, Studer J, Hardman J, Alexandrov BB, Treseder TW, Valson C. Int J Health Geogr. 2010 Feb 24;9(1):13. [Epub ahead of print]

[Pandemic influenza A/H1N1 and organ donation*.](#)

Lattes R, Jacob N, de la Fuente J, Fragale G, Massari P. Transpl Infect Dis. 2010 Feb 17. [Epub ahead of print]

[Effects of Early Oseltamivir Therapy on Viral Shedding in 2009 Pandemic Influenza A \(H1N1\) Virus Infection.](#)

Ling LM, Chow AL, Lye DC, Tan AS, Krishnan P, Cui L, Win NN, Chan M, Lim PL, Lee CC, Leo YS. Clin Infect Dis. 2010 Feb 24. [Epub ahead of print]

[Triple Combination of Amantadine, Ribavirin, and Oseltamivir Is Highly Active and Synergistic against Drug Resistant Influenza Virus Strains In Vitro.](#)

Nguyen JT, Hoopes JD, Le MH, Smee DF, Patick AK, Faix DJ, Blair PJ, de Jong MD, Prichard MN, Went GT. PLoS One. 2010 Feb 22;5(2):e9332.

[Disaster and flu: putting planning into practice. *](#)

Cusick C. Mater Manag Health Care. 2010 Jan;19(1):14-8.

[Influenza vaccines provide diminished protection but are cost-saving in older adults.](#)

Deans GD, Stiver HG, McElhaney JE. J Intern Med. 2010 Feb;267(2):220-7.

[Immunization in pregnancy.](#)

Gruslin A, Steben M, Halperin S, Money DM, Yudin MH; Infectious Diseases Committee of the Society of Obstetricians and Gynaecologists of Canada. J Obstet Gynaecol Can. 2009 Nov;31(11):1085-101.

[H1N1 in pregnant women: a challenge overlooked?](#)

Money DM. J Obstet Gynaecol Can. 2009 Nov;31(11):1011-4.

[Point of Care Strategy for Rapid Diagnosis of Novel A/H1N1 Influenza Virus.](#)

Nougairède A, Ninove L, Zandotti C, de Lamballerie X, Gazin C, Drancourt M, La Scola B, Raoult D, Charrel RN. PLoS One. 2010 Feb 17;5(2):e9215.

[Novel Virus Influenza A \(H1N1sw\) in South-Eastern France, April-August 2009.](#)

Nougairède A, Ninove L, Zandotti C, Salez N, Mantey K, Resseguier N, Gazin C, Raoult D, Charrel RN, de Lamballerie X. PLoS One. 2010 Feb 17;5(2):e9214.

[Adolescent With Neuropsychiatric Symptoms Associated With Novel Influenza A \(H1n1\) Virus Infection.*](#)

German-Diaz M, Pavo-Garcia R, Diaz-Diaz J, Giangaspro-Corradi E, Negreira-Cepeda S. Pediatr Infect Dis J. 2010 Feb 18. [Epub ahead of print]

[Diet-Induced Obesity Impairs the T Cell Memory Response to Influenza Virus Infection.*](#)

Karlsson EA, Sheridan PA, Beck MA. J Immunol. 2010 Feb 19. [Epub ahead of print]

[Swine flu vaccine adjuvants and multiple sclerosis - Is there potential for harmful effect?](#)

Oztürk S. Med Hypotheses. 2010 Feb 18. [Epub ahead of print]

[Seroprevalence of Antibodies to Pandemic \(H1N1\) 2009 Influenza Virus Among Hospital Staff in a Medical Center in Taiwan.](#)

Chan YJ, Lee CL, Hwang SJ, Fung CP, Wang FD, Yen DH, Tsai CH, Chen YM, Lee SD. J Chin Med Assoc. 2010 Feb;73(2):62-66.

[Swine Influenza \(H1N1\) Pneumonia: Clinical Considerations*](#)

Cunha BA. Infect Dis Clin North Am. 2010 Mar;24(1):203-228.

[YouTube As a Source of Information on the H1N1 Influenza Pandemic.*](#)

Pandey A, Patni N, Singh M, Sood A, Singh G. Am J Prev Med. 2010 Mar;38(3):e1-e3.

[An optimal control theory approach to non-pharmaceutical interventions.](#)

Lin F, Muthuraman K, Lawley M. BMC Infect Dis. 2010 Feb 19;10(1):32. [Epub ahead of print]

[Sialidase-Based Anti-Influenza Virus Therapy Protects against Secondary Pneumococcal Infection.](#)

Hedlund M, Aschenbrenner LM, Jensen K, Larson JL, Fang F. J Infect Dis. 2010 Feb 19. [Epub ahead of print]

[Assessment of the Efficacy of Commercially Available and Candidate Vaccines against a Pandemic H1N1 2009 Virus.](#)

Kobinger GP, Meunier I, Patel A, Pillet S, Gren J, Stebner S, Leung A, Neufeld JL, Kobasa D, von Messling V. J Infect Dis. 2010 Feb 19. [Epub ahead of print]

[Impact of the Novel Influenza A \(H1N1\) during the 2009 Autumn-Winter Season in a Large Hospital Setting in Santiago, Chile.*](#)

Torres JP, O'Ryan M, Herve B, Espinoza R, Acuña G, Mañalich J, Chomalí M. Clin Infect Dis. 2010 Mar 15;50(6):860-8.

[\[New Influenza A H1N1v: usefulness of immunization\] *](#)

Launay O. Presse Med. 2010 Jan;39(1):6-9. Epub 2009 Dec 10. French. No abstract available.

Travel Advisories

[NOV 27] [WHO: Travel Safety](#)

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