

pH1N1 Flu Virus (Human Swine Influenza) Information Resources

Current as of September 23, 2009 at 4pm

Highlights

[Recommended composition of influenza virus vaccines for use in the 2010 southern hemisphere influenza season](#) :

It is recommended that vaccines for use in the 2010 influenza season (southern hemisphere winter) contain the following:

- an A/California/7/2009 (H1N1)-like virus;
- an A/Perth/16/2009 (H3N2)-like virus;
- a B/Brisbane/60/2008-like virus.

[Quebec may delay or cancel seasonal flu shots](#)

Quebec may delay or shelve its seasonal flu vaccination campaign and concentrate on vaccinating people against pandemic H1N1 instead, CBC News reported today. For now, seasonal flu shots are "on hold," said Karine White, a spokeswoman for the provincial health ministry. She said officials are considering delaying seasonal flu shots until after the pandemic vaccine is delivered, narrowing the effort to focus on those at highest risk, such as seniors, or even canceling the drive altogether.

[CDC launches H1N1 flu mobile texting update \[pilot\]](#)

CDC: [2009-2010 Influenza Season: Information for Pharmacists](#)

CDC: [Updated Interim Recommendations for the Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010 Season](#)

In the Literature

[First line of defense. Worries flare about H1N1 vaccinations for workers*](#)

[A/H1N1 influenza virus passes to birds.*](#)

[Why are oseltamivir and zanamivir effective against the newly emerged influenza A virus \(A/H1N1\)? *](#)

[Association Between School Closure and Subsequent Absenteeism during a Seasonal Influenza Epidemic.*](#)

[Q&A: What have we found out about the influenza A \(H1N1\) 2009 pandemic virus?](#)

[Influenza virus resistance to oseltamivir: what are the implications?*](#)

Contents

[Events](#)

Updates by Jurisdiction

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

[World Health Organization \(WHO\)](#)
[Pan American Health Organization \(PAHO\)](#)
[Australia and New Zealand](#)

Other Resources

[Consumer Health Information Resources](#)
[pH1N1 Clinical Information](#)
[Research Articles](#)
[Clinical and Public Health Practice Tools](#)
[Historical Resources](#)
[Travel Advisories](#)

Events

Current / Upcoming

[SEP 23] [Social Media and Technology Breakthroughs: H1N1 and Seasonal Flu Communication](#)

September 23, 2009 - 3:00 p.m. Eastern/12:00 Noon Pacific.

Free Webinar to Discuss Using Social Media to Plan and Communicate for Flu

[SEP 23] [Planning for an Influenza Pandemic in the Home Health Care Sector \(Web Conference\)](#)

To showcase resources that can support emergency preparedness planning within AHRQ will host a Web conference on September 23, 2009. This event will feature a panel discussion and insights from home health care emergency preparedness planners representing different perspectives: health system, government, health policy, and industry.

[SEP 22-23] [Keeping the World Working During the H1N1 Pandemic: Protecting Employee Health, Critical Operations, and Customer Relations \(Minneapolis, MN\)](#)

We're convening pandemic response experts in public and private sectors who know their business and are ready to act. By participating in this summit, you will:

- Interact with pressure-tested peers willing to share what's worked for them
- Get the straight story on vaccines, antiviral drugs, and infection control
- Benchmark pandemic HR policies on sick leave, pay, travel, & HIPAA
- Identify work-around tactics to deal with supply-chain shortages
- Turn guidance into actions that will keep you in business
- Go back to work with best-of-class knowledge and resources

Archived

[SEP 16] [COCA Conference Call: Pediatric issues related to the CDC Updated Interim Recommendations for the Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010 Season](#)

The purpose of the call is to discuss pediatric issues related to the CDC Updated Interim Recommendations for the Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010 Season found at

<http://www.cdc.gov/h1n1flu/recommendations.htm>

Audio:[MP3](#) (11.57 MB)

Slides: [PowerPoint](#) (5MB, 42 slides)

Summary:[Interim Transcript](#) (101 KB, 32 pages)

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

- September 8: Rear Admiral Anne Schuchat (CDC) gives a briefing on updated recommendations on the use of antivirals as well as an update on the H1N1 (swine) flu.

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

- September 9: Parents and Child Care Providers

Ministry of Health and Long-Term Care (MOHLTC)

[SEP 18] [Ontario Influenza Bulletin: Surveillance Week 36 \(Sep 6 – Sep 12\)](#)

- Overall, influenza activity in Ontario was similar compared to the previous week.
- Slightly fewer patients reporting influenza-like symptoms consulted sentinel physicians this week than the previous week.
- The rate of influenza-like illness (ILI) in patients seen by sentinel physicians was slightly above the average rate expected at this time of year.
- Health units reported either sporadic activity or no influenza activity for the current reporting week.
- There are 4,062 confirmed cases of H1N1 flu virus reported through the integrated Public Health System (iPHIS) as of September 12, 2009.

As of September 16 :

- 23 deaths have been reported among confirmed H1N1 cases.
- 17 people who have the H1N1 flu virus were in hospital as of 8:30 a.m. on September 16, a number of whom have underlying medical conditions. 353 other people have been hospitalized and have since been discharged.
- A fewer number of hospitalized cases were reported this week compared to last week. No new deaths among cases were reported this week.

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

Important Health Notices

[Last H1N1 update was August 18](#)

Ontario Agency for Health Protection and Promotion (OAHP)



[SEP 23] [Weekly Synthesis of Surveillance Information, Literature & Government Updates](#) (week ending Sep 18, 2009)

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

Public Health Agency of Canada (PHAC)

PHAC issues national updates on H1N1-associated deaths on Tuesdays and Thursdays at 4 pm, and will report regularly on any unusual outbreaks or clusters of illness.



[SEP 23] [Deaths Associated with H1N1 flu virus in Canada](#)
2 deaths reported since last update (British Columbia and Ontario), 78 deaths in total.



[SEP 23] [FluWatch findings for Week 36 \(week ending Sep 12\)](#)

- Week 35 marks the start of the 2009-2010 Influenza Season
- The overall trend of influenza activity remains similar to the previous week. However, the national ILI consultation rate increased to 23 consultations per 1,000 this week which is within the range of expected level at this time of the year.

The peak period of Pandemic (H1N1) 2009 occurred in the first three weeks of June.

- The intensity of Pandemic (H1N1) infection 2009 in the population is low to moderate with a small number of hospitalizations (n=15) and two deaths reported this week. As of September 12, 2009, a total of 1,459 hospitalized cases, 288 cases admitted to an intensive care unit (ICU) and 76 deaths had been reported since the beginning of the pandemic.
- While the Pandemic (H1N1) 2009 has spread to all provinces and territories, approximately 90% of hospitalized cases and more than 85% of deaths are reported from 4 provinces (AB, MB, ON, QC). Hospitalized cases were reported from BC, AB, ON, QC and NT this week.
- Children under 2 years of age, pregnant women, persons under 65 years of age with underlying medical conditions and Aboriginal populations have higher rates of hospitalization and greater risk of severe outcomes (ICU admission and death). Aboriginal communities have more pregnant women, young children, and underlying chronic disease than the general Canadian population, which may explain the disproportionate number of severe cases in this population.

[SEP 21] [Government of Canada Launches Television Advertising on Infection Prevention in Partnership with Provinces and Territories](#)

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

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

CDC reports the total number of H1N1 hospitalizations and deaths each Friday.



[SEP 23] [CDC launches H1N1 flu mobile texting update \[pilot\]](#)



[SEP 22] [2009-2010 Influenza Season: Information for Pharmacists](#)



[SEP 22] [Updated Interim Recommendations for the Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010 Season](#)

- [Questions & Answers: Antiviral Drugs, 2009-2010 Flu Season](#)

[SEP 21] [Updated: Questions & Answers Novel H1N1 Influenza Vaccine](#)

[SEP 21] [H1N1 Clinicians Questions and Answers](#)

[SEP 18] [Updated Interim Recommendations for Obstetric Health Care Providers Related to Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010 Season](#)

[SEP 18] [2009 H1N1 Flu: International Situation Update](#)

- The 2009 H1N1 influenza virus is the predominant influenza virus in circulation worldwide.

- The epidemiology of the disease caused by the 2009 H1N1 influenza virus in the Southern Hemisphere is very similar to that described in the United States this past spring.
- There have been no significant changes detected in the 2009 H1N1 influenza virus isolated from persons in the Southern Hemisphere as compared to viruses isolated from persons in the Northern Hemisphere.
- Worldwide, more than 10,000 isolates of 2009 H1N1 influenza have been tested and found to be sensitive to oseltamivir, an antiviral medicine used to treat influenza disease. Only 21 2009 H1N1 isolates tested have been found to be resistant to oseltamivir –10 of these were detected in the United States.

[SEP 18] [Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists](#)

August 30- September 12:

- Influenza and Pneumonia Syndrome: 3,534 hospitalized, 291 deaths
- Influenza Laboratory-tests: 1,035 hospitalized, 364 deaths

[SEP 18] [FluView: 2008-2009 Influenza Season: Week 36 ending September 12, 2009](#)

- 99% of all subtyped influenza A viruses being reported to CDC were 2009 influenza A (H1N1) viruses.
- The proportion of deaths attributed to pneumonia and influenza (P&I) was below the epidemic threshold.
- Two influenza-associated pediatric deaths were reported, and both were associated with 2009 influenza A (H1N1) virus infection.
- The proportion of outpatient visits for influenza-like illness (ILI) was above the national baseline. Regions 2, 4, 5, 6, 7, 9, and 10 reported ILI above region-specific baseline levels.
- Twenty-one states reported geographically widespread influenza activity, nine states and Puerto Rico reported regional influenza activity, 11 states and the District of Columbia reported local influenza activity, eight states and Guam reported sporadic influenza activity, one state reported no influenza activity, and the U.S. Virgin Islands did not report.
- The 2009-10 influenza season officially begins October 4, 2009.

[SEP 17] [Planning for 2009 H1N1 Influenza : A Preparedness Guide for Small Business](#) [CDC along with Department of Homeland Security and U.S. Small Business Administration]

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

Other US Sources

[SEP 21] [DHHS Office of Inspector General report on pandemic preparedness and medical surge](#)

[SEP 21] [DHHS Office of Inspector General report on pandemic preparedness and vaccine and antiviral distribution](#)

[SEP 21] National Institute of Allergy and Infectious Diseases -[Early Results: In Children, 2009 H1N1 Influenza Vaccine Works Like Seasonal Flu Vaccine](#)

Center for Infectious Disease Research and Policy



[SEP 23] [US orders 29 million more doses of H1N1 spray vaccine](#)

The US government has ordered another 29 million doses of nasal-spray pandemic H1N1 flu vaccine from MedImmune, the company announced this week. The government had previously ordered about 13 million doses. The government has now ordered a total of about 251 million doses of H1N1 vaccine from five firms. MedImmune said it has already made enough vaccine to fill its orders, and the Food and Drug Administration has released 3.4 million doses, which are expected to reach providers in early October.



[SEP 23] [Quebec may delay or cancel seasonal flu shots](#)

Quebec may delay or shelve its seasonal flu vaccination campaign and concentrate on vaccinating people against pandemic H1N1 instead, CBC News reported today. For now, seasonal flu shots are "on hold," said Karine White, a spokeswoman for the provincial health ministry. She said officials are considering delaying seasonal flu shots until after the pandemic vaccine is delivered, narrowing the effort to focus on those at highest risk, such as seniors, or even canceling the drive altogether.



[SEP 23] [Scientist: Russia underreporting pandemic flu cases](#)

One of Russia's leading virologists claims that the country is underestimating its number of pandemic H1N1 cases, the *Wall Street Journal* reported today. Dr Dmitry Lvov made the claims in a state TV interview on Sep 21 and said Russia had also confirmed its first novel flu death. The country's health ministry has disputed both of Lvov's claims.



[SEP 22] [BioCryst nets federal funding to further peramivir development](#)

BioCryst said it has received \$77.2 million from the US government to continue late-stage development of its intravenous antiviral medication peramivir, Reuters reported yesterday. The company said it has also received a request for proposal to supply the government with between 1,000 and 40,000 courses of the experimental drug, which, if an emergency use authorization is granted, could be used to treat critically ill flu patients.



[SEP 22] [Hospital sets up tents to handle flu surge](#)

Authorities at Dell Children's Medical Center in Austin, Tex., set up tents outside its emergency department to start triaging some patients with less severe flu-like illnesses today, the *Austin Statesman* reported. The hospital has seen a steady increase in flu patients, and daily numbers over some of the past few days have exceeded 300. The hospital made the decision on Sep 20 to open the tents after 343 patients swamped the hospital.



[SEP 22] [Survey finds businesses see flu risk but have planning gaps](#)

A survey of 400 companies by the British law firm DLA Piper revealed that about half of them believe they are at high or very high risk for disruptions caused by the next wave of pandemic flu, the *Financial Times* reported yesterday. About 80% said they were reviewing their continuity plans, but only slightly more than half had

communicated the strategies to employees, customers, or suppliers. About 75% said they had no plans to modify employee policies.

[SEP 21] [Updated: Novel H1N1 Influenza \(Swine Flu\)](#)

[SEP 21] [Feds see gaps in local plans for surge, vaccine distribution](#)

A federal review of state and local pandemic preparedness efforts identified some gaps in medical surge planning and said that, while states are typically prepared to distribute antivirals and vaccines, some cities hadn't addressed all of the recommended planning components.

[SEP 21] [Poll: Many workers feel pressure to work when ill](#)

More than 80% of workers feel pressure to come to work when sick, and 69% have received little direction from employers on pandemic H1N1, according to a recent survey. The poll of 1,028 employees by Mansfield Communications found that 84% of workers believe the recession creates more pressure to show up for work, even when they're feeling sick. Mansfield's Rob Ireland said that employers need to communicate clearly about extended sick-leave policies and how to minimize disease spread.

[SEP 21] [US orders 27.3 million more doses of Sanofi vaccine](#)

The US Department of Health and Human Services (HHS) has ordered another 27.3 million 15-microgram doses of pandemic H1N1 vaccine from Sanofi Pasteur, bringing the total government order of Sanofi vaccine to 75.3 million doses, the company announced today.

[SEP 21] [Sanofi projects mid October for US vaccine delivery](#)

An official from Sanofi said today that the company would begin delivering pandemic H1N1 flu vaccine to the United States by mid October, the Associated Press (AP) reported.

[SEP 21] [China begins immunizing students](#)

China today became the first country to start administering the pandemic H1N1 vaccine, Agence France-Presse (AFP) reported. Medical workers are vaccinating students who will take part in National Day celebrations.

[SEP 18] [WHO lowers pandemic vaccine estimate](#)

The WHO has scaled back its projection of how much pandemic H1N1 vaccine that will be produced globally, spokesman Gregory Hartl told the media today, according to the Associated Press (AP).

[SEP 18] [Australia approves CSL's H1N1 vaccine](#)

The Australian government has approved a pandemic H1N1 vaccine made by CSL Ltd. for use in adults, the Australian Associated Press (AAP) reported today.

[SEP 18] [Minnesota says to keep ill preschoolers home longer](#)

The Minnesota Department of Health (MDH) says that children up to age 5 who have flu should be kept home from day care and school for 7 days after they get sick or 24 hours after symptoms resolve, a more cautious approach than the federal one, the *Star Tribune* reported.

[SEP 17] [Business travel group advises curbing handshakes](#)

The Association of Corporate Travel Executives (ACTE) yesterday urged its members to temporarily suspend business handshakes until the threat of the pandemic H1N1 virus subsides.

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

Health Protection Agency (UK)

[SEP 17] [HPA Weekly National Influenza Report](#)

[SEP 17] [HPA weekly pandemic flu media update](#)

- The rates of flu-like illness and related activity have started to increase in England. The increase was mainly seen in school age children.
- Hospitalisations of people with suspected pandemic flu in England have levelled overall. The majority of cases continue to be mild.
- Two samples from UK patients have been shown to have the genetic change associated with oseltamivir resistance. Both were from immunocompromised patients. One has been shown to be resistant, the other is undergoing further tests to confirm resistance. Globally over 10,000 specimens have been tested and 23 have been shown to be resistant to oseltamivir.
- Interpretation of data to produce estimates on the number of new cases continues to be subject to a considerable amount of uncertainty. HPA modelling gives an estimate of 5,000 new cases in England last week (range 3,000 to 11,000).
This estimate incorporates data from National Pandemic Flu Service and GP consultations.

[ARCHIVED] [Swine Influenza page](#)

Department of Health (UK)

[SEP 17] [Managing influenza-like illness \(ILI\) in nursing and residential homes during the current influenza pandemic](#)

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

European Centre for Disease Prevention and Control (ECDC) and European Society for Clinical Microbiology and Infectious Diseases



[SEP 23] [ECDC Situation Report for Sep 23](#)

- Scientific Advance on the use of neuraminidase inhibitors published;
 - The full ECDC review and CDC comments are available at:
 - http://ecdc.europa.eu/en/activities/sciadvice/Lists/ECDC%20Reviews/ECDC_DispatchForm.aspx?ID==512

- 113 new cases reported in the EU and EFTA countries, reaching a total of 53 042 cases.

[SEP 18] [UPDATED ECDC issues revised planning assumptions for A\(H1N1\) 2009 pandemic in Europe](#)

[SEP 15] [ECDC Comment on first published trials of specific pandemic vaccines: Immune responses after one or two doses of monovalent unadjuvanted and adjuvanted influenza A \(H1N1\) 2009 vaccines](#)

[SEP 18] [European Influenza Surveillance Network: Weekly electronic bulletin Week 37](#)

- Only three of 20 countries reported ILI/ARI activity above their baseline levels.
- 96% of virus detections from sentinel physicians during week 37 were influenza A(H1N1) 2009
- Seven SARI cases were reported by the Netherlands

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

European Union

[SEP 22] [WHO Regional Committee for the Eastern Mediterranean - Special Session of the Regional Committee on Pandemic \(H1N1\) 2009](#)

[SEP 21] [Citizens' summary - Combating H1N1 flu pandemic in the EU - Commission communication](#)

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

World Health Organization (WHO)

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



[SEP 23] [Recommended composition of influenza virus vaccines for use in the 2010 southern hemisphere influenza season](#) :

It is recommended that vaccines for use in the 2010 influenza season (southern hemisphere winter) contain the following:

- an A/California/7/2009 (H1N1)-like virus;
- an A/Perth/16/2009 (H3N2)-like virus;
- a B/Brisbane/60/2008-like virus.

[SEP 21] [Margaret Chan: Remarks at the opening ceremony Regional Committee for Western Pacific \(60th session\)](#)

[SEP 18] [Pandemic \(H1N1\) 2009 - update 66](#)

- In the temperate regions* of the northern hemisphere, influenza activity remains widely variable. In North America, the United States is reporting increases in influenza-like-illness activity above the seasonal baseline, most

notably in the southern, southeastern, and parts of the northeastern United States.

- In Canada, influenza activity remains low. In Europe and Central Asia influenza activity remains low overall, except in France, which is reporting increases in influenza-like-illness activity (for week 37) above the seasonal epidemic threshold. Geographically localized influenza activity is being reported in several countries (Austria, Georgia, Ireland, Luxembourg, Norway, Portugal, the Czech Republic, Cyprus, and Israel). In Japan, influenza activity remains stably increased above the seasonal epidemic threshold with the most notable increases being reported on the southern island of Okinawa. [for details on other regions, refer to the update link]

[SEP 18] Statement by WHO Director-General Dr Margaret Chan 18 September 2009 :[Pandemic vaccine donations for the developing world](#)

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

[ARCHIVED] [Older WHO Updates](#)

Pan-American Health Organization (PAHO)

[SEP 18] [Regional Update for Sep 18: Pandemic \(H1N1\) 2009](#)

17 countries reported updated information to the Pan American Health Organization (PAHO) regarding the qualitative indicators to monitor pandemic (H1N1) 2009. Only those 17 countries were included in this analysis. Presently, 15 countries in the Region report having widespread geographical distribution of influenza virus. Brazil continues to report Regional activity and Dominica continues to report no activity. Honduras, Mexico, Peru, and the United States are the only countries reporting an increasing trend of respiratory disease and this represents change in these countries from last week. Argentina, Bolivia, Brazil, Costa Rica, El Salvador, Panama, and Venezuela, reported a decreasing trend. The other six countries reported an unchanged trend. Regarding the intensity of acute respiratory disease, Bolivia, El Salvador, and Mexico reported high intensity of acute respiratory disease. The remaining 14 countries reported low or moderate intensity. Eight countries (Bolivia, Brazil, Costa Rica, Ecuador, El Salvador, Mexico, United States, and Venezuela) reported moderate impact on health care services, while 8 countries reported low impact. In North America, Mexico and the United States are reporting widespread activity, increasing trend in respiratory disease activity, and moderate impact on healthcare services.

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

Australia and New Zealand



[SEP 23]

[Australia National H1N1 Influenza 09 Update](#)

- At noon today Australia has 36,454 confirmed cases of pandemic (H1N1) 2009.
- The number of deaths associated with pandemic (H1N1) 2009 continues to increase. As of 23 September, 177 people have died. Of these deaths, four were pregnant women and 24*(13.55%) were Indigenous.
- There are currently 290 people in hospital around Australia with pandemic (H1N1) 2009. Of these, 10 of the people in hospital are Indigenous Australians. There are 53 people in Intensive Care Units at present.
- The total number of hospitalisations in Australia since pandemic (H1N1) 2009 is identified at 4,759.



[SEP 23]

[New Zealand Pandemic Influenza \(H1N1\) 09 Swine Flu - Update 152](#)

- There are a total of 3161 confirmed cases of Pandemic Influenza (H1N1) 09 swine flu, compared with 3152 on 23 September.
- The number of deaths from Pandemic Influenza (H1N1) swine flu where swine flu was a primary cause remains at 17. Other deaths are being investigated by the Coroner's office.
- As at midday today, three people were reported to be in hospital with pandemic Influenza (H1N1) 09 or its complications.

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

[ARCHIVED] [New Pandemic Phase \(PROTECT\) Guidelines](#) [Australia]

pH1N1 Clinical Information

[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)



[SEP 23]

Swine flu. Immunisation choices risk creating local variations. PCTs decide on vaccine priority *
West D, Ford S. Health Serv J. 2009 Aug 20;119(6170):5. No abstract available.



[SEP 23] [First line of defense. Worries flare about H1N1 vaccinations for workers*](#)

Zigmond J. Mod Healthc. 2009 Aug 31;39(35):12. No abstract available.



[SEP 23] [A/H1N1 influenza virus passes to birds.*](#)

[No authors listed] Vet Rec. 2009 Aug 29;165(9):248. No abstract available.



[SEP 23] [Economic analysis of pandemic influenza vaccination strategies in Singapore.](#)

Lee VJ, Tok MY, Chow VT, Phua KH, Ooi EE, Tambyah PA, Chen MI. PLoS One. 2009 Sep 22;4(9):e7108



[SEP 23] [The feasibility of using high resolution genome sequencing of influenza a viruses to detect mixed infections and quasispecies.](#)

Ramakrishnan MA, Tu ZJ, Singh S, Chockalingam AK, Gramer MR, Wang P, et al. PLoS One. 2009 Sep 22;4(9):e7105.



[SEP 23] [Why are oseltamivir and zanamivir effective against the newly emerged influenza A virus \(A/H1N1\)? *](#)

Yu K, Luo C, Qin G, Xu Z, Li N, Liu H, et al. Cell Res. 2009 Sep 22. [Epub ahead of print] No abstract available.



[SEP 23] [Association Between School Closure and Subsequent Absenteeism During a Seasonal Influenza Epidemic.*](#)

Rodriguez CV, Rietberg K, Baer A, Kwan-Gett T, Duchin J. Epidemiology. 2009 Sep 15. [Epub ahead of print]



[SEP 23] [\[Initial characteristics of the novel A\(H1N1\) pandemic in Argentina.\]*](#)

Bonvehí PE. Medicina (B Aires). 2009;69(4):478-82. Spanish. No abstract available.



[SEP 23] [\[Influenza A\(H1N1\) epidemic in Argentina. Experience in a National General Hospital \(Hospital Nacional Alejandro Posadas\).\]*](#)

Comisión para la Contingencia de Influenza A (H1N1), Hospital Nacional Profesor Alejandro Posadas. Medicina (B Aires). 2009;69(4):393-423. Spanish.



[SEP 23] [Evolutionary complexities of swine flu H1N1 gene sequences of 2009.*](#)

Sinha NK, Roy A, Das B, Das S, Basak S. Biochem Biophys Res Commun. 2009 Sep 18. [Epub ahead of print]



[SEP 23] [Q&A: What have we found out about the influenza A \(H1N1\) 2009 pandemic virus?](#)

Turner SJ, Brown LE, Doherty PC, Kelso A. J Biol. 2009 Sep 18;8(8):69. [Epub ahead of print] No abstract available.



[SEP 23] [Influenza virus resistance to oseltamivir: what are the implications?*](#)
Fleming DM, Elliot AJ, Meijer A, Paget WJ. Eur J Public Health. 2009 Jun;19(3):238-9. Epub 2009 Feb 12. No abstract available.



[SEP 23] [No time for complacency.*](#)
Doherty L. Emerg Nurse. 2009 Jul;17(4):6-7. No abstract available.

[SEP 22] [Point of Care strategy for rapid diagnosis of novel A/H1N1 influenza virus.](#)
Nougairede A et al. PLoS Currents: Influenza published September 22, 2009.

[SEP 21] [Flu vaccination campaign poses monitoring difficulties](#)
Roger Collier. CMAJ published 21 September 2009, 10.1503/cmaj.109-3044.

[SEP 21] [Flu pandemic prompts other vaccination delays](#)
Roger Collier. CMAJ published 21 September 2009, 10.1503/cmaj.109-3043.

[SEP 21] [Swine flu breaks out on Vancouver Island](#)
Wayne Kondro. CMAJ published 21 September 2009, 10.1503/cmaj.109-3054

[SEP 21] [Improved flu screening needed at airports](#)
Paul Webster. CMAJ published 21 September 2009, 10.1503/cmaj.109-3053

[SEP 21] [Pandemic influenza: the new wave](#)
Lancet Inf Dis. 2009; 9(10):583

[SEP 21] [Influenza in the Asia-Pacific](#)
McConnell J. Lancet Inf Dis. 2009; 9(10):590-1.

[SEP 21] [H1N1 vaccine could staunch further financial loss](#)
Shetty P. Lancet Inf Dis. 2009; 9(10):592.

[SEP 21] [Influenza as a trigger for acute myocardial infarction or death from cardiovascular disease: a systematic review](#)
Warren-Gash C, Smeeth L, Hayward AC. Lancet Inf Dis. 2009; 9(10):601-10.

[SEP 21] [Does receipt of seasonal influenza vaccine predict intention to receive novel H1N1 vaccine: Evidence from a nationally representative survey of U.S. adults](#)
Maurer J, Harris KM, Parker A, Lurie N. Vaccine. 2009; 27(42):5732-5734.

[SEP 21] [Immunoinformatic comparison of T-cell epitopes contained in novel swine-origin influenza A \(H1N1\) virus with epitopes in 2008-2009 conventional influenza vaccine](#)
De Groot AS, Ardito M, McClaine EM, Moise L, Martin WD. Vaccine. 2009; 27(42): 5740-5747.

- [SEP 21] [Prioritization of pandemic influenza vaccine: rationale and strategy for decision making.*](#)
Schwartz B, Orenstein WA. Curr Top Microbiol Immunol. 2009;333:495-507.
- [SEP 21] [Strategies for broad global access to pandemic influenza vaccines*](#)
Edwards KM, Sabow A, Pasternak A, Boslego JW. Curr Top Microbiol Immunol. 2009;333:471-93.
- [SEP 21] [Considerations for licensure of influenza vaccines with pandemic and prepandemic indications.*](#)
Baylor NW, Houn F. Curr Top Microbiol Immunol. 2009;333:453-70.
- [SEP 21] [Vaccines for pandemic influenza: summary of recent clinical trials.*](#)
Keitel WA, Atmar RL. Curr Top Microbiol Immunol. 2009;333:431-51.
- [SEP 21] [Microneedle-based vaccines.*](#)
Prausnitz MR, Mikszta JA, Cormier M, Andrianov AK. Curr Top Microbiol Immunol. 2009;333:369-93.
- [SEP 21] [Adjuvants for pandemic influenza vaccines*.](#)
Atmar RL, Keitel WA. Curr Top Microbiol Immunol. 2009;333:323-44.
- [SEP 21] [Pandemic influenza vaccines.*](#)
Dimenna LJ, Ertl HC. Curr Top Microbiol Immunol. 2009;333:291-321.
- [SEP 21] [Influenza virus-like particles as pandemic vaccines.*](#)
Kang SM, Pushko P, Bright RA, Smith G, Compans RW. Curr Top Microbiol Immunol. 2009;333:269-89.
- [SEP 21] [Recombinant vectors as influenza vaccines.*](#)
Kopecky-Bromberg SA, Palese P. Curr Top Microbiol Immunol. 2009;333:243-67.
- [SEP 21] [Influenza neuraminidase as a vaccine antigen.*](#)
Sylte MJ, Suarez DL. Curr Top Microbiol Immunol. 2009;333:227-41.
- [SEP 21] [Designing vaccines for pandemic influenza.*](#)
Horimoto T, Kawaoka Y. Curr Top Microbiol Immunol. 2009;333:165-76.
- [SEP 21] [Development and application of avian influenza vaccines in china.*](#)
Chen H, Bu Z. Curr Top Microbiol Immunol. 2009;333:153-62.
- [SEP 21] [Live attenuated vaccines for pandemic influenza.*](#)
Chen GL, Subbarao K. Curr Top Microbiol Immunol. 2009;333:109-32.
- [SEP 21] [Generation and characterization of candidate vaccine viruses for prepandemic influenza vaccines.*](#)
O'Neill E, Donis RO. Curr Top Microbiol Immunol. 2009;333:83-108.
- [SEP 21] [Seasonal influenza vaccines.*](#)
Fiore AE, Bridges CB, Cox NJ. Curr Top Microbiol Immunol. 2009;333:43-82.
- [SEP 21] [Pandemic influenza as a current threat.*](#)
Yen HL, Webster RG. Curr Top Microbiol Immunol. 2009;333:3-24.

- [SEP 19] [Randomized Control Trial to Study the Efficacy of the Surgical Mask Versus the N95 Respirator to Prevent Influenza](#)
- [SEP 18] [Against the New H1N1 Influenza \(Swine Influenza\): Vaccinate or Don't Vaccinate \(All\)? That is Currently the Question!](#)
Doerr HW, Allwinn R, Cinatl J. *Infection*. 2009 Sep 18. [Epub ahead of print]
- [SEP 18] [An Influenza A H1N1 Virus Revival - Pandemic H1N1/09 Virus.*](#)
Michaelis M, Doerr HW, Cinatl J Jr. *Infection*. 2009 Sep 18. [Epub ahead of print]
- [SEP 16] [H1N1 influenza is here.](#)
Burns SM. *J Hosp Infect*. 2009 Sep 16. [Epub ahead of print]
- [SEP 15] [Influenza A \(H1N1\) 2009 monovalent vaccine: Laboratory confirmation of vaccine breakdowns.](#)
Arya SC, Nirmala A. *Vaccine*. 2009 Sep 15. [Epub ahead of print]
- [SEP 04] [Global influenza surveillance network: laboratory surveillance and response to pandemic H1N1 2009.](#)
[No authors listed] *Wkly Epidemiol Rec*. 2009 Sep 4;84(36):361-5.
- [SEP 21] [Seasonal transmission potential and activity peaks of the new influenza A\(H1N1\): a Monte Carlo likelihood analysis based on human mobility.](#)
Balcan D, Hu H, Goncalves B, Bajardi P, Poletto C, Ramasco JJ, *et al. BMC Med* 2009, **7**. doi: 10.1186/1741-7015-7-45.
- [SEP 21] [Study Details Pathways To Flu Virus Exposure, Validates Preventative Measures*](#)
ScienceDaily(Sep 21, 2009)
- [SEP 21] [Development of a Critical Care Triage Protocol for Pandemic Influenza: Integrating Ethics, Evidence and Effectiveness](#)
Frolic A, Kata A, Kraus P. *Healthcare Quarterly*. 2009. 12 (4) preprint.
- [SEP 21] [ASID \(HICSIG\) position statement: infection control guidelines for patients with influenza-like illnesses, including pandemic \(H1N1\) influenza 2009, in Australian health care facilities -](#)
Ferguson JK, Stuart RL, Cheng AC, Marshall CL. *eMJA - Rapid Online Publication* 21 September 2009
- [SEP 19] [H1N1 pneumonitis treated with intravenous zanamivir.](#)
Kidd M, Down J, Nastouli E, Shulman R, Grant PR, Howell DC, Singer M. *Lancet*. 2009; 374(9694): 1036.
- [SEP 19] [A/H1N1 flu pandemic: Should flu have at least one respiratory symptom?*](#)
Sharvill NJ. *BMJ* 2009;339(7722):b3757.
- [SEP 19] [Two Parameters Characterizing 2009 H1N1 Swine Influenza Epidemic in Different Countries/Regions of the World.](#)

Yoshikura H. Jpn J Infect Dis. 2009 Sep;62(5):411-2.

- [SEP 18] [Flu's unexpected bonus.](#)*
Jack A. BMJ 2009;339:b3811. Published 18 September 2009, doi:10.1136/bmj.b3811.
- [SEP 18] [China First to Vaccinate Against Novel H1N1 Virus](#) *
Stone R. Science 2009; 325(5947):1482-1483.
- [SEP 18] [Q&A: What have we found out about the influenza A \(H1N1\) 2009 pandemic virus?](#)
Turner SJ, Brown Le, Doherty PC, Kelso A. *Journal of Biology* 2009, 8:69 (18 September 2009)
- [SEP 18] [Efficacy and economic assessment of conventional ventilatory support versus extracorporeal membrane oxygenation for severe adult respiratory failure \(CESAR\): a multicentre randomised controlled trial](#) *
The Lancet, Early Online Publication, 16 September 2009
- [SEP 18] News : [Chief medical officer warns that swine flu may be on the rise again](#)
Nayanah Siva BMJ 2009;339:b3863
- [SEP 18] CMAJ News: [Dispensing antivirals in remote communities](#)
- [SEP 18] [A Call for "Smart Surveillance": A Lesson Learned from H1N1.](#) *
Daszak P. Ecohealth. 2009 Sep 16. [Epub ahead of print]
- [SEP 18] [Swine flu vaccine is a "thousandfold" safer than the infection, say experts.](#)
Ellis O. BMJ. 2009 Sep 16;339:b3802. doi: 10.1136/bmj.b3802.
- [SEP 18] [Platelet dysfunction can be the hidden risk factor for death in new influenza A \(H1N1\).](#)*
Hernandez JM. Med Hypotheses. 2009 Sep 14. [Epub ahead of print]
- [SEP 18] [Influenza A\(H1N1\) and infection control guidelines for optometrists.](#)*
Kiely PM, Lian KY, Napper G, Lakkis C. Clin Exp Optom. 2009 Sep 15. [Epub ahead of print]
- [SEP 17] [Antiviral drug treatment for emerging swine flu.](#)*
Wiwanitkit V. Clin Ter. 2009 May-Jun;160(3):243-5.
- [SEP 17] [Altered Standards of Care During an Influenza Pandemic: Identifying Ethical, Legal, and Practical Principles to Guide Decision Making.](#)*
Levin D, Cadigan RO, Biddinger PD, Condon S, Koh HK; on behalf of the Joint Massachusetts Department of Public Health-Harvard Altered Standards of Care Working Group. Disaster Med Public Health Prep. 2009 Sep 14. [Epub ahead of print]

- [SEP 17] [Real-time case fatality analysis points to emerging evidence of increasing severity of pandemic \(H1N1\) 2009.*](#)
Glinsky GV. Cell Cycle. 2009 Oct 16;8(19). [Epub ahead of print] No abstract available.
- [SEP 17] [Strategies for mitigating an influenza pandemic with pre-pandemic H5N1 vaccines.*](#)
Milne G, Kelso J, Kelly H. J R Soc Interface. 2009 Sep 15. [Epub ahead of print]
- [SEP 17] [Pandemic influenza communication: views from a deliberative forum.*](#)
Rogers WA, Street JM, Braunack-Mayer AJ, Hiller JE; FluViews Team. Health Expect. 2009 Sep;12(3):331-42.
- [SEP 17] [Managing risk around influenza A \(H1N1\) \(swine flu\)--what employers should know.*](#)
McFadden J, Frelick K. Health Law Can. 2009 Aug;29(4):76-8. No abstract available.
- [SEP 17] [H1N1 warns of public-health deficiencies.*](#)
Becker SJ. MLO Med Lab Obs. 2009 Aug;41(8):48. No abstract available.
- [SEP 17] [Poverty, Wealth, and Access to Pandemic Influenza Vaccines](#)
Yamada T. NEJM. 2009 Sep;361:1129-1131.
- [SEP 17] CMAJ News: [Swine flu breaks out on Vancouver Island](#)
- [SEP 17] CMAJ News: [Improved flu screening needed at airports](#)
- [SEP 17] [Economic consequences to society of pandemic H1N1 influenza 2009 – preliminary results for Sweden.](#)
Brouwers L, Cakici B, Camitz M, Tegnell A, Boman M. Euro Surveill. 2009;14(37):pii=19333
- [SEP 17] [Sub-optimal hand sanitiser usage in a hospital entrance during an influenza pandemic, New Zealand, August 2009.](#)
Murray R, Chandler C, Clarkson Y, Wilson N, Baker M, Cunningham R, on behalf of the Wellington Respiratory and Hand Hygiene Study Group. Euro Surveill. 2009;14(37):pii=19331

Business Resources

- [SEP 17] [Planning for 2009 H1N1 Influenza : A Preparedness Guide for Small Business](#) [CDC along with Department of Homeland Security and U.S. Small Business Administration]
- [ARCHIVED] [Business Preparedness for Pandemic: Executive Briefing for Corporate and Governmental Decision-makers](#)
- [ARCHIVED] [Link to report from U.S. Government Accountability Office re Pandemic Planning and funding](#)

Canadian Business

[ARCHIVED] [H1N1 virus: A Plan for the Worst](#)

Consumer Health Information Resources

[ARCHIVED] [Krames Patient Education Handouts - H1N1 Flu Virus](#)

[ARCHIVED] [MEDLINEplus - H1N1 Flu \(Swine Flu\)](#)

[ARCHIVED] [Specialized Information Service - National Library of Medicine](#)

[ARCHIVED] [Tufts University - \(SPIRAL\) Selected Patient Information in Asian Languages](#)

Clinical and Public Health Practice Tools

[AUG 18] [Infectious Disease Outbreaks: Tools and Strategies for Front-line Clinicians](#)

Created in consultation with front-line clinicians and infectious disease experts from across Canada, this course is evidence-based and focuses on the coordination between clinical care, public health and the laboratory.

[JUNE 15] [Algorithms from 18 US States to Assist in Decisions Regarding Testing and Treatment of H1N1](#)

Historical Resources

[AUG 17] [A comparative study of the 1918-1920 influenza pandemic in Japan, USA and UK: mortality impact and implications for pandemic planning.](#)
Richard SA, Sugaya N, Simonsen L, Miller MA, Viboud C. Epidemiol Infect. 2009 Aug;137(8):1062-72.

[JUN 30] [Swine flu of 1976: lessons from the past. An interview with Dr Harvey V Fineberg](#)
Fineberg HV. Swine flu of 1976: lessons from the past. An interview with Dr Harvey V Fineberg. Bull World Health Organ. 2009 Jun;87(6):414-5.

[JUN 29] [The Persistent Legacy of the 1918 Influenza Virus. New England Journal of Medicine.](#)
Morens DM, Taubenberger JK, Fauci AS. The persistent legacy of the 1918 influenza virus. N Engl J Med. 2009 Jul 16;361(3):225-9. Epub 2009 Jun 29.

[JUN 29] [Historical Perspective — Emergence of Influenza A \(H1N1\) Viruses. New England Journal of Medicine](#)
Zimmer SM, Burke DS. Historical perspective--Emergence of influenza A (H1N1) viruses. N Engl J Med. 2009 Jul 16;361(3):279-85. Epub 2009 Jun 29.

[ARCHIVED] [Nonpharmaceutical Interventions Implemented by US Cities During the 1918-1919 Influenza Pandemic](#)

Markel H, Lipman HB, Navarro JA, et al. Nonpharmaceutical interventions implemented by US cities during the 1918-1919 influenza pandemic. JAMA. 2007;298(6):644-654.

[ARCHIVED] [The Swine Flu Affair: Decision-Making on a Slippery Disease](#)

Neustadt RE, Fineberg HV. The Swine Flu Affair: Decision-Making on a Slippery Disease. Washington: US Department of Health, Education, and Welfare; 1978. Online book.

Travel Advisories

[AUG 28] [Travel Health Notice: Human Swine Influenza in United States](#)

[AUG 28] [Travel Health Notice: Swine Flu in California and Texas](#)

[MAY 19] [Public Health Agency of Canada no longer recommends Canadians postpone elective or non-essential travel to Mexico](#)