pH1N1 Flu Virus (Human Swine Influenza)
Information Resources
Current as of September 9, 2009 at 4pm

Highlights

"Know what to do about the flu" webcast series:
- Parents and Child Care Providers was today's topic. Click to view the episode long with the option of seeing it captioned.
- All episodes are archived for later viewing/discussion/sharing

PHAC’s most recent FluWatch: FluWatch findings for Week 34 (week ending Aug 29)
- The overall trend of influenza activity has slightly decreased this week compared to last week. In fact, the ILI consultation rate is nearly within the range of expected level at this time of the year. The peak period of Pandemic (H1N1) 2009 occurred between weeks 22 to 24 (May 31, 2009 and June 20, 2009).
- The intensity of Pandemic (H1N1) infection 2009 in the population is low with only a small number of hospitalizations (n=13) and one death reported this week. As of August 29, 2009, a total of 1,454 hospitalized cases, 283 cases admitted to an intensive care unit (ICU) and 72 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 AB, MB and ON 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 hospitalizations and greater risk of severe outcomes (ICU admissions and deaths). 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.

Journal Literature:
- Swine influenza (H1N1): Diagnostic dilemmas early in the pandemic. *

- Que sera, sera: evolution of the swine H1N1 influenza A virus.

- Swine flu agitates the adjuvant debate *
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 Prevention (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
  Research Articles
  Clinical and Public Health Practice Tools
  Historical Resources
  Travel Advisories
Events

Current / Upcoming

[SEP 9] Know what to do about the flu webcast series: Parents and Child Care Providers

[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 the home health care sector, particularly in the face of a potential H1N1 pandemic, AHRQ will host a Web conference, Planning for an Influenza Pandemic in the Home Health Care Sector, on September 23, 2009.

Emergency preparedness planners and providers, as well as Federal, State, and local community health and home care planners, are all invited to attend. 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

[ONGOING] Know what to do about the flu: webcast series
- August 27: Pregnant women and new moms
- August 20: Business guidance
- August 04: H1N1 Response status update

[SEP 2-3] Severe H1N1 Disease: Preventing Cases, Reducing Mortality
Winnipeg, Manitoba, Canada

Ministry of Health and Long-Term Care (MOHLTC)

For the surveillance period of August 23 to August 29, 2009:
- Overall, influenza activity in Ontario was similar compared the previous week.
• However, the rate of influenza-like illness (ILI) in patients seen by sentinel physicians is above what is expected for this time of year, particularly for those less than 19 years of age.
• Slightly fewer patients reporting influenza-like symptoms consulted sentinel physicians this week than the previous week.
• All the health regions reported sporadic activity.
• There are 4,062 confirmed cases of H1N1 flu virus reported through the integrated Public Health System (iPHIS) as of August 29, 2009.

As of September 3:
• 23 deaths have been reported among confirmed H1N1 cases.
• 19 people who have the H1N1 flu virus were in hospital as of 8:30 a.m. on September 3, a number of whom have underlying medical conditions. 347 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 was reported this week.

The H1N1 Flu in Ontario: A Report by Ontario’s Chief Medical Officer of Health
See also: Media release about the report

Previous MOHLTC updates and news conference video footage

Important Health Notices
Last H1N1 update was August 18

Ontario Agency for Health Protection and Promotion (OAHPP)
Weekly Synthesis of Surveillance Information, Literature & Government Updates (week ending Aug 28, 2009)

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.

Deaths associated with H1N1 flu virus in Canada
One death in Alberta, of an out-of-country resident, reported since the 4/09 update. The cumulative total of H1N1 deaths is 73 as of September 8.

FluWatch findings for Week 34 (week ending Aug 29)
• The overall trend of influenza activity has slightly decreased this week compared to last week. In fact, the ILI consultation rate is nearly within the range of expected level at this time of the year. The peak period of Pandemic (H1N1) 2009 occurred between weeks 22 to 24 (May 31, 2009 and June 20, 2009).
• The intensity of Pandemic (H1N1) infection 2009 in the population is low with only a small number of hospitalizations (n=13) and one death reported this
week. As of August 29, 2009, a total of 1,454 hospitalized cases, 283 cases admitted to an intensive care unit (ICU) and 72 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 AB, MB and ON 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 hospitalizations and greater risk of severe outcomes (ICU admissions and deaths). 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 2] News release: Canada well-positioned to provide flu vaccines on time

[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 8] Interim Guidance for State and Local Health Departments for Reporting Influenza-Associated Hospitalizations and Deaths for the 2009-2010 Season

[SEP 8] Updated Interim Recommendations for the Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010 Season

[SEP 8] Q&A: Revised Recommendations for the Use of Influenza Antiviral Drugs

[SEP 4] Preparing for the Flu: A Communication Toolkit for Child Care and Early Childhood Programs

[SEP 3] CDC Media Briefing: Update on 2009 H1N1 Flu

In a media briefing, CDC director Thomas Frieden made the following points:

- The children’s underlying conditions were primarily cerebral palsy, muscular dystrophy, or longstanding respiratory or cardiac disease.
- Some children without underlying conditions suffered bacterial coinfection, prompting Frieden to urge clinicians to suspect bacterial infection in children who return with high fever after apparently getting better.
- People with underlying conditions (e.g., heart or lung disease, diabetes, or pregnancy) should be seen promptly if they get a fever.
- It’s “very likely,” Frieden says, that kids will require two shots for 2009 H1N1.
Technical Report for State and Local Public Health Officials and Child Care and Early Childhood Providers on CDC Guidance on Helping Child Care and Early Childhood Programs Respond to Influenza during the 2009-2010 Influenza Season

This Technical Report provides explanations of the strategies presented in the CDC Guidance on Helping Child Care and Early Childhood Programs Respond to Influenza during the 2009-2010 Influenza Season and suggestions on how to use these strategies. The guidance is designed to decrease exposure to seasonal flu and 2009 H1N1 flu and limit the disruption of the essential service early childhood provides to families.

CDC Guidance on Helping Child Care and Early Childhood Programs Respond to Influenza during the 2009-2010 Influenza Season

This document provides guidance to help decrease the spread of influenza (flu) among children in early childhood programs and among early childhood providers during the 2009-2010 flu season.

2009 H1N1 Flu: U.S. Situation Update

As of 11:00 AM ET on September 4, 2009, CDC is reporting 9,079 hospitalized cases and 59 deaths in 53 states and territories (including the District of Columbia, American Samoa, Guam, Puerto Rico and the U.S. Virgin Islands).

2009 H1N1 Flu: International Situation Update

This situation report provides an update to the international situation as of August 28, 2009. As of August 23, the World Health Organization (WHO) regions have reported over 209,438 laboratory-confirmed cases of 2009 H1N1 influenza virus (2009 H1N1) with at least 2,185 deaths.

Weekly FluView Map and Surveillance Report for Week Ending August 29, 2009

During week 34 (August 22-29, 2009), influenza activity remained stable in the United States; however, there were still higher levels of influenza-like illness than is normal for this time of year. 97% of all subtyped influenza A viruses being reported to CDC were 2009 influenza A (H1N1) viruses.

Podcast: 2009 H1N1 ACIP Vaccination Recommendations

Previous CDC documents and updates

Other US Sources

Institute of Medicine of the National Academies: Respiratory protection for healthcare workers in the workplace against novel H1N1 Influenza A

Assessment of the of the 2009 Influenza A (H1N1) Outbreak on Selected Countries in the Southern Hemisphere
Center for Infectious Disease Research and Policy

**[SEP 9]** China reports flu rise, predicts vaccine shortage
China's health minister Chen Zhu today called the country's pandemic flu situation "grim," due to a surge in cases and clusters in the wake of schools resuming, Agence France-Presse (AFP) reported. Chen cited worries over a national holiday next month, which will prompt gatherings and travel, and the limited ability of China's flu vaccine company to supply enough pandemic H1N1 vaccine to meet demand. China has confirmed 5,592 cases, but has reported no deaths.

**[SEP 9]** Report says job questions among top pandemic-related legal issues
Questions related to employment are among the most significant legal issues raised by an influenza pandemic, the Congressional Research Service (CRS) said in a recent report on pandemic-related legal issues. Compliance with public health measures such as isolation and quarantine are likely to suffer if workers fear pay cuts or firing, the report says. It says workers may have some protection under the Family and Medical Leave Act.

**[SEP 9]** New York nurses group advocates N95 respirators
In an open letter, the New York State Nurses Association (NYSNA) called on the state health department to recommend the use of fit-tested N95 respirators to protect nurses who care for pandemic H1N1 flu patients. The Sep 4 letter said the state's current guidelines, which call for the use of surgical masks, are not adequate. A health department spokeswoman defended the current guidelines and said nurses would be protected by mandatory vaccinations, the New York Daily News reported.

**[SEP 9]** Production delay slows vaccine delivery to Holland
The Dutch health ministry said today a delivery of 18 million doses of pandemic H1N1 vaccine from Novartis slated for the end of October will be late, Dow Jones news reported today. Novartis attributed the delay to "disappointing production result." The country, now expecting 6 to 10 million doses from the company by the end of next month, expects 2 million more from GlaxoSmithKline. Novartis said it hopes to boost yield by using a new seed strain it received from the World Health Organization.

**[SEP 9]** Flu fatal for Ecuador's security chief
Ecuador's presidential security chief, John Merino, died on Sep 6 from a pandemic H1N1 infection, AFP reported today. He was first diagnosed with the novel flu strain.
on Aug 10. The virus has struck a host of other South American government officials over the past few weeks, including the presidents of Costa Rica and Colombia

[SEP 8] **Pandemic puts damper on French cheek kiss**
To help curb the spread of the pandemic H1N1 virus, French health officials, as well as some companies and schools, are advising people to avoid greeting other with "la bise," the country's traditional cheek-to-cheek kiss, the Associated Press (AP) reported yesterday. The health ministry's phone hotline recommends avoiding close contact, such as shaking hands or kissing.

[SEP 4] **Britain scales back flu death projection**
**CIDRAP Summary:** The British government scaled back its projection of how many novel H1N1 deaths could occur, The Times of London reported today. In July it predicted 65,000 fatalities in a worst-case-scenario, but now the National Health Service (NHS) says fatalities could range between 3,000 and 19,000. Officials lowered the estimate because symptoms of the virus are mild for most patients. The NHS's chief medical officer said case numbers have not risen in Scotland, where school resumed 3 weeks ago.

[ARCHIVED] **Current overview and older updates from CIDRAP**

**Health Protection Agency (UK)**

[SEP 4] **Weekly international summary:** This update summarizes information published by the World Health Organization WHO) about the latest global situation.

[SEP 3] **HPA weekly pandemic flu media update**
- This week there has been a further reduction in the rates of flu-like illness and related activity.
- Weekly GP consultation rates continued to decrease over the last week in England.
- The majority of cases continue to be mild. There is no sign that the virus is changing. It is not becoming more severe or developing resistance to anti-virals.
- 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 4,500 new cases in England last week (range 2,500 to 10,000). There has been a decrease in estimated number of cases in all age groups and in all regions. *This estimate incorporates data from National Pandemic Flu Service and GP consultations.*

[ARCHIVED] **Swine Influenza page**

**Department of Health (UK)**

[SEP 8] **Pandemic Influenza Paediatric Clinical Pathways: Information for Health Care Professionals Working in Hospitals**

[SEP 3] **Swine flu: UK planning assumptions**
See also: “Dear Colleague” letter outlining the above
ECDC Situation Report for Sep 8
- US ACIP recommendations for seasonal influenza vaccination reviewed;
- CDC updated the recommendations for antiviral treatment;
- Sweden published a benefit-risk analysis of using pandemic vaccine for children and pregnant women;
- 431 new cases reported in the EU and EFTA countries, reaching a total of 49,543 cases.

European Influenza Surveillance Network: Weekly electronic bulletin
Week 35: 24 August 2009 - 30 August 2009
Summary: Sweden is currently the only European country reporting widespread influenza activity at medium level with an increasing trend. In Ireland and the UK (England and Northern Ireland), influenza activity continues to decline, while all other countries are reporting low local activity at most.

First report of transmission of the pandemic A(H1N1) 2009 influenza virus from humans to birds

Maps, surveillance summaries and previous ECDC updates

European Union
Regular coordination meetings with member states

Dutch researchers create swine flu videogame

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.

Pandemic (H1N1) 2009 - update 64
In its weekly pandemic update today, the World Health Organization (WHO) said flu activity is widespread and increasing in many tropical regions of South and Southeast Asia as well as South America. Though flu activity is past its seasonal peak in some parts of the southern hemisphere, parts of Australia and South America are seeing sustained circulation. Japan is experiencing an early start to its flu season. The global number of deaths is at least 2,837, mostly from WHO’s Americas-region count.

Weekly Epidemiological Record on Pandemic H1N1 2009
From the current issue of the Bulletin of the World Health Organization: 
WHO supports fair access to influenza A (H1N1) vaccine (an interview with Dr Marie-Paule Kieny, Director of the Initiative for Vaccine Research at the WHO)

See also: Reuters Press Release Summary 
WHO expert says no doubt H1N1 vaccines will work

Pandemic (H1N1) 2009 briefing note 9: Preparing for the second wave: lessons from current outbreaks

Pan-American Health Organization (PAHO)

Regional Update for Sep 4: Pandemic (H1N1) 2009
As of 4th September 2009, a total of 120,653 confirmed cases have been notified in all 35 countries in the Americas Region. A total of 2,467 deaths have been reported among the confirmed cases in 22 countries of the Region.

Australia and New Zealand

Australia National H1N1 Influenza 09 Update
• At noon today Australia has 35,775 confirmed cases of pandemic (H1N1) 2009.
• The number of deaths associated with pandemic (H1N1) 2009 continues to increase. As of 9 September, 162 people have died. Of these deaths, four were pregnant women and 20 (12.5%) were Indigenous.
• There are currently 334 people in hospital around Australia with pandemic (H1N1) 2009. Of these, 21 of the people in hospital are Indigenous Australians.
• There are 65 people in Intensive Care Units at present.
• The total number of hospitalisations in Australia since pandemic (H1N1) 2009 is identified at 4,596.

New Zealand Pandemic Influenza (H1N1) 09 Swine Flu - Update 149
• The number of deaths from Pandemic Influenza (H1N1) 09 swine flu is 17.
• There are a total of 3150 confirmed cases of Pandemic Influenza (H1N1) 09 swine flu, up from 3146 on 8 September.
• There is one person in hospital with pH1N1 or its complications
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.

Medline literature search on H1N1 (current as of today)

[SEP 9] Views and Reviews: Personal View: Should I have an H1N1 flu vaccination after Guillain-Barré syndrome?
BMJ 2009;339:b3577

[SEP 9] Swine influenza (H1N1): Diagnostic dilemmas early in the pandemic.*

[SEP 9] Que sera, sera: evolution of the swine H1N1 influenza A virus.

[SEP 9] Swine flu agitates the adjuvant debate *

[SEP 8] The State's role and health – swine flu as a case study*

[SEP 8] Editorial: Tamiflu – the wrong message?*
Drug Ther Bull. 2009 Sep;47(9):97.

[SEP 8] Protecting Children During Disasters: The Federal View*

[SEP 8] Challenges Facing Pediatric Preparedness*

[SEP 8] Pediatric Disaster Readiness: How Far Have We Come? *

[SEP 8] An early 'classical' swine H1N1 influenza virus shows similar pathogenicity to the 1918 pandemic virus in ferrets and mice*

[SEP 8] Detection of an oseltamivir-resistant pandemic influenza A/H1N1 virus in Hong Kong*

[SEP 8] Letter: Antiviral drugs: distinguish treatment from prophylaxis
**SEP 8**

**News: Australia’s swine flu vaccination plans come under fire**

**SEP 8**

**A Model-based Assessment of Oseltamivir Prophylaxis Strategies to Prevent Influenza in Nursing Homes**

**SEP 8**

**Poor Clinical Sensitivity of Rapid Antigen Test for Influenza A Pandemic (H1N1) 2009 Virus**

**SEP 3**

**Calibrated response to emerging infections**
Doshi P. BMJ. 2009 Sep 3;339:b3471.

**SEP 3**

**Assessment of secondary attack rate and effectiveness of antiviral prophylaxis among household contacts in an influenza A(H1N1)v outbreak in Kobe, Japan, May–June 2009**

**SEP 3**

**Epidemiological analysis of the influenza A(H1N1)v outbreak in Bolivia, May-August 2009**

**SEP 2**

**Design and Validation of Real-Time RT-PCR assays for detection of pandemic (H1N1) 2009 virus**

**SEP 4**

**Flu vaccination campaign poses monitoring difficulties**
CMAJ

**SEP 3**

**Flu pandemic prompts other vaccination delays**
CMAJ

**SEP 3**

**Rapid Antigen Tests for Diagnosis of Pandemic (Swine) Influenza A/H1N1**

**SEP 3**

**What Is a Pandemic?**

**SEP 3**

**Lack of airborne transmission during outbreak of pandemic (H1N1) 2009 among tour group members, China, June 2009.**
Do dentists have a role in fighting the latest H1N1 pandemic? *
Glick M. J Am Dent Assoc. 2009 Sep;140(9):1072, 1074.

H1N1 after action review: learning from the unexpected, the success and the fear.

Changing seasons herald a new phase in the H1N1 pandemic*
Priya Shetty The Lancet Infectious Diseases, 9(9) Page 529, September 2009
As the northern hemisphere gears up for a new influenza season, the looming question is whether or not there will be a vaccine available by autumn. The issue has taken on a new urgency with the realisation that the spread of the pandemic means that attempts at containment are pointless and that there have been cases of drug resistance to oseltamivir (tamiflu), one of the key anti-H1N1 drugs.

Surveillance for Pediatric Deaths Associated with 2009 Pandemic Influenza A (H1N1) Virus Infection --- United States, April--August 2009 MMWR September 4, 2009 / 58(34);941-947

Pandemic flu: from the front lines
Researchers describe the scientific and public-health challenges they face in battling the H1N1 virus. Published online 2 September 2009 | Nature 461, 20-21 (2009) |

Reconstructing the initial global spread of a human influenza pandemic: A Bayesian spatial-temporal model for the global spread of H1N1pdm
Lemey P, Suchard M, Rambaut A. Reconstructing the initial global spread of a human influenza pandemic: A Bayesian spatial-temporal model for the global spread of H1N1pdm. 2 Sep 2009. PLOS Currents. [Epub ahead of print]

Spatiotemporal dynamics in the early stages of the 2009 A/H1N1 influenza pandemic
Jombart T, Eggo RM, Balloux F, Dodd P. Spatiotemporal dynamics in the early stages of the 2009 A/H1N1 influenza pandemic. 1 Sep 2009. PLOS Currents. [Epub ahead of print]

Top-hits for H1N1pdm Identified by Virtual Screening Using Ensemble-based Docking
Nguyen HT, Truong TN, Le L. Top-hits for H1N1pdm Identified by Virtual Screening Using Ensemble-based Docking. 1 Sep 2009. PLOS Currents. [Epub ahead of print]

Adjuvant is necessary for a robust immune response to a single dose of H1N1 pandemic flu vaccine in mice
Dormitzer PR, Rappuoli R, Casini D et al. Adjuvant is necessary for a robust immune response to a single dose of H1N1 pandemic flu vaccine in mice. 1 Sep 2009. PLOS Currents. [Epub ahead of print]
Business Resources

Harvard Health Publications

[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


Historical Perspective — Emergence of Influenza A (H1N1) Viruses. New England Journal of Medicine

Nonpharmaceutical Interventions Implemented by US Cities During the 1918-1919 Influenza Pandemic

The Swine Flu Affair: Decision-Making on a Slippery Disease

Travel Advisories

Travel Health Notice: Human Swine Influenza in United States

Travel Health Notice: Swine Flu in California and Texas

Public Health Agency of Canada no longer recommends Canadians postpone elective or non-essential travel to Mexico