

H1N1 Flu Virus (Human Swine Influenza) Information Resources

(last updated June 26, 2009 at 5pm)

Overview

- Confirmed cases in Ontario as of **June 26** 3,154 (7 deaths)
- Confirmed cases in Canada as of **June 24**: 6,732 (incl. 19 deaths)
- Confirmed cases worldwide as of **June 26**: 59,814 (incl. 263 deaths)
 - **WHO pandemic level: 6**
 - [JUNE 11] World now at the start of 2009 influenza pandemic
http://www.who.int/mediacentre/news/statements/2009/h1n1_pandemic_phase6_20090611/en/index.html
- Early evidence suggests that healthcare workers are not overrepresented among those who have come down with the H1N1 flu, the CDC said, but that they may not have been vigilant about infection control practices. [Read the MMWR article.](#)

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Events

Archived

[JUNE 24] The Ontario Hospital Association presents [The Pandemic Influenza: Where are we now?](#). The primary goal of this conference is to provide healthcare facilities with the tools and information they need to be able to recognize and manage an influenza pandemic. Chaired by Dr. Mary Vearncombe. Topics to include: H1N1 scientific update, ethics, occupational health issues, preparing for a pandemic vaccine response, risk communication, public health measures, and lessons learned. For brochure details and agenda: [Click here](#)

[JUNE 9] The American Bar Association's Health Law Section, the CDC Clinician Outreach and Communication Activity (COCA), and the CDC Public Health Law Program have collaborated to present a teleconference entitled ***Legal Issues Related to Novel Influenza A (H1N1)***. The PowerPoint Presentation will be available on the COCA website <http://emergency.cdc.gov/coca/callinfo.asp>

Ministry of Health and Long-Term Care (MOHLTC)



[JUNE 24] Seven Deaths Now Associated With H1N1 Flu Virus in Ontario

Dr. Arlene King, Ontario's Chief Medical Officer of Health, has confirmed three additional deaths associated with the H1N1 flu virus since Monday, bringing the total number of deaths in Ontario to seven.

A 17-year old male from the Ottawa region, a 52-year old woman from Eastern Ontario and a 68-year old man from the Durham region all tested positive for the H1N1 flu virus. All three individuals had underlying health conditions. It is not clear what role the H1N1 flu virus played in the fatalities.

The province is moving away from daily reporting of confirmed cases of the H1N1 flu virus to a new reporting approach similar to that used during the regular flu season. Health officials will continue to monitor H1N1 flu activity, but will focus resources on enhanced surveillance and follow-up of severe cases and outbreaks. A report on H1N1 and seasonal flu activity will be produced every Friday.

As of Monday, the total number of cases in the province is 2,665. Almost all of the cases reported to date have symptoms similar to those of seasonal influenza. The vast majority of these cases have recovered. Twenty-eight people who have the H1N1 flu virus were in hospital as of

June 23, a number of whom have underlying medical conditions.
http://www.health.gov.on.ca/en/news/release/2009/jun/nr_20090624_2.aspx



[JUNE 26] H1N1 Flu Virus: Ontario Influenza Bulletin

- There are 3,154 confirmed cases of H1N1 flu virus reported through the integrated Public Health System (iPHIS). Nearly all of the cases have symptoms similar to those of seasonal influenza.
- Seven deaths have been reported among confirmed H1N1 cases.
- 98 of the confirmed cases have been hospitalized to date. Of these 65 cases have been discharged.
- For additional information, please see this week's flu bulletin.

http://www.health.gov.on.ca/english/public/updates/archives/hu_09/sf_weekly_update.html

[ARCHIVE] Previous MOHLTC updates and news conference video footage available at:

http://www.health.gov.on.ca/english/public/updates/archives/hu_09/swineflu.html

Important Health Notices

[JUNE 11] H1N1 Update

The WHO has raised the global pandemic alert level from Phase 5 to Phase 6, signaling that a global pandemic is underway. This is based on trends in transmission globally, and does not reflect any change in severity of the circulating virus. Guidance to health care settings in Ontario remains unchanged.

http://www.health.gov.on.ca/english/providers/program/emu/health_notice_s/ihn_20090611.pdf

Ontario Agency for Health Protection and Promotion (OAHPP)

[ARCHIVE] Swine Influenza Outbreak page (no new resources since May 3)

<http://www.oahpp.ca/SRI%20Bulletin.php>

Public Health Agency of Canada (PHAC)



[JUNE 26] As of June 24, 2009, a total of 6,732 laboratory-confirmed cases of H1N1 flu virus have been reported in all provinces and territories in Canada (see Table 1 below). To date, 423 hospitalizations and nineteen deaths have been reported among laboratory-confirmed cases.

Province / Territory	New Confirmed Cases	Total Confirmed Cases	Total Deaths
British Columbia	22	243	0

Alberta	NR	605	1
Saskatchewan	49	517	0
Manitoba	146	517	2
Ontario	NR	2665	7
Quebec	NR	1660	9
New Brunswick	0	4	0
Nova Scotia	13	117	0
Prince Edward Island	0	3	0
Newfoundland	20	27	0
Yukon	0	1	0
Northwest Territories	1	6	0
Nunavut	24	258	0
TOTAL	275	6732	19

<http://www.phac-aspc.gc.ca/alert-alerte/swine-porcine/surveillance-eng.php>

[ARCHIVE] Previous PHAC documents and updates available from:
http://www.phac-aspc.gc.ca/alert-alerte/swine_200904-eng.php

Centers for Disease Control and Prevention (CDC)

The CDC now posts case count updates on Friday only.

NEW

[JUNE 26] Update: 27,717 confirmed and probable cases (incl. 127 deaths) in 53 states/territories as of 11am Friday June 26/09.

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

NEW

[JUNE 25] General Business and Workplace Guidance for the Prevention of Novel Influenza A (H1N1) Flu in Workers

<http://www.cdc.gov/h1n1flu/guidance/workplace.htm>

[JUNE 18] Press briefing transcript: Investigation of Human Cases of Novel Influenza A (H1N1)

<http://www.cdc.gov/media/transcripts/2009/t090618.htm>

[JUNE 16] Interim Guidance for Homeless and Emergency Shelters on the Novel Influenza A (H1N1) Virus

<http://www.cdc.gov/h1n1flu/guidance/homeless.htm>

[ARCHIVE] Previous CDC documents and updates available from:
<http://www.cdc.gov/h1n1flu/guidance/>

Center for Infectious Disease Research and Policy

NEW

[JUNE 25] News Scan

http://www.cidrap.umn.edu/cidrap/content/influenza/swineflu/news_scan/index.html



[JUNE 26] Novel H1N1 Influenza (Swine Flu)- Overview

<http://www.cidrap.umn.edu/cidrap/content/influenza/swineflu/biofacts/swinefluoverview.html>

[ARCHIVE] Older updates from CIDRAP available at:

<http://www.cidrap.umn.edu/cidrap/content/influenza/swineflu/index.html>

Health Protection Agency (UK)



[JUNE 26] Update on confirmed swine flu cases. Cumulative laboratory confirmed cases to date: **4,250**

http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1245914979722?p=1231252394302



[JUNE 26] Standard practical advice for investigating individuals with possible swine influenza infection (Update)

http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1241048770758



[JUNE 26] Algorithm P6 – Actions and post exposure prophylaxis for contacts of case(s) of influenza A/H1N1v for phase 6 (Update)

http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1240986160584



[JUNE 26] Summary of prescribing guidance for the treatment and prophylaxis of influenza-like illness: CONTAINMENT PHASE (Update)

http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1243581475043



[JUNE 26] Position of HPA on the need for ethical committee approval of field investigation and control of H1N1 influenza Flu (Update)

http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1243771213441



[JUNE 25] Updated case definition

<http://www.hpa.org.uk/web/HPAweb&Page&HPAwebAutoListName/Page/1242949541865>

[ARCHIVE] Swine Influenza page:

<http://www.hpa.org.uk/web/HPAweb&Page&HPAwebAutoListName/Page/1240732817665?p=1240732817665>

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



[JUNE 26] Situation report: **6,022** confirmed cases in EU/EFTA countries with 1 death

Main developments in past 24 hours:

- 1075 new cases were reported in EU and EFTA countries;
- Two new countries reported their first cases today: Lithuania (1) and Serbia (2)
- 48 new fatal cases have been reported by the USA (40), Guatemala (1) Argentina (6) and Australia (1) since yesterday.

http://ecdc.europa.eu/en/files/pdf/Health_topics/Situation_Report_090626_1700hrs.pdf

[JUNE 18] Evolution of the pandemic of A(H1N1)v influenza: lessons from past pandemics and the North American experience so far.

http://www.ecdc.europa.eu/en/Health%5Ftopics/Pandemic_Influenza/General_pandemic_2009_talk_090618.ppt

[ARCHIVE] Maps, surveillance summaries and previous ECDC updates available from:

<http://www.ecdc.europa.eu/en/Health%5Ftopics/novel%5Finfluenza%5Fvirus/2009%5FOutbreak/>

World Health Organization (WHO)



[JUNE 26] Update 54: Cumulative total number of cases worldwide: 59,814 (incl. 263 deaths)

http://www.who.int/csr/don/2009_06_26/en/index.html



[JUNE 24] Availability of a candidate reassortant vaccine virus for the novel influenza A (H1N1) vaccine development CBER-RG2.

http://www.who.int/csr/resources/publications/swineflu/cber_rg2/en/index.html

[ARCHIVE] WHO H1N1 Guidance documents available at:

<http://www.who.int/csr/disease/swineflu/guidance/en/index.html>

[ARCHIVE] Older WHO updates available at:

<http://www.who.int/csr/disease/swineflu/en/index.html>

Pan-American Health Organization (PAHO)



[JUNE 26] Influenza A(H1N1) Regional Report

As of 25 June 2009, **49,950 confirmed cases** of the Pandemic H1N1 2009 infection, including **258 deaths**, have been notified in **28 countries of the Americas**:

http://new.paho.org/hq/index.php?option=com_content&task=view&id=1540&Itemid=1167

[ARCHIVE] PAHO Influenza A(H1N1) Portal
http://new.paho.org/hq/index.php?option=com_content&task=blogcategory&id=805&Itemid=569&lang=en

Google News Search on Swine Flu

[JUNE 19] Results are refreshed each time you click on the link.
<http://www.google.com/cse?cx=014077570761466621685%3As7g-vqi-dmo&cof=FORID%3A11&q=swine+flu&sa=search+influenza+sites>

Mapping Resources

[JUNE 17] From Science Daily

A Warwick Business School professor and one of the founders of global risks specialist, Maplecroft, has released three new maps and indices revealing the countries most at risk from an influenza pandemic.

The Influenza Pandemic Risk Index (IPRI) consists of three categories:

- Risk of Emergence
- Risk of Spread
- Capacity to Contain

Each index generates a list of countries most at risk and which require a tailored policy response on the part of government and business.

Maplecroft's research focuses on global risks to business. **The map of Risk of Spread shows the UK most at risk to the spread of an influenza pandemic, ranking number 1 out of 213 countries.** The Netherlands, Germany, Italy, Russia, Canada and Japan are also categorised as extreme risk because of their high population density, urbanisation and busy airports.

<http://maps.maplecroft.com/panspread>

World Health Organization interactive timeline map of cases: view the number of cases reported on any given day since April 26, 2009

http://www.who.int/csr/disease/swineflu/history_map/InfluenzaAH1N1_maps.html

Pan-American Health Organization: Atlas to Confirmed Cases of Influenza A(H1N1)

<http://ais.paho.org/flu/sm/en/atlas.html>

HealthMap: Swine flu global disease alert map

<http://www.healthmap.org/en>

Google: Swine flu map

<http://maps.google.com/maps/ms?ie=UTF8&hl=en&t=p&msa=0&msid=106484775090296685271.0004681a37b713f6b5950&z=2>

Twitter Feeds, Weblogs, RSS Feeds, etc

World Health Organization News on Twitter

<http://twitter.com/whonews>

Health Map on Twitter

<http://twitter.com/healthmap>

Avian/Pandemic Influenza Daily Digest on Twitter

<http://twitter.com/AIDigest>

CDC swine flu updates on Twitter

<http://twitter.com/cdcemergency>

Avian/Pandemic Influenza Daily Digest Blog

<http://aidailydigest.blogspot.com/>

Avian/Pandemic Influenza Daily Digest RSS Feed

http://twitter.com/statuses/user_timeline/32957440.rss

Business Resources

Harvard Health Publications

Business Preparedness for Pandemic: Executive briefing for corporate and governmental decision-makers

https://www.health.harvard.edu/special_health_reports/Business-Preparedness-for-Pandemic?utm_source=twitter&utm_medium=tweet&utm_campaign=0526_tw

Link to report from U.S. Government Accountability Office re Pandemic Planning and funding

<http://www.gao.gov/new.items/d09760t.pdf>

Canadian Business

H1N1 virus: A plan for the worst

http://www.canadianbusiness.com/managing/strategy/article.jsp?content=20090615_10014_10014

Scientific Resources

American Journal of Epidemiology (AJE)

AJE H1N1 Collection (all articles freely available)

<http://aje.oxfordjournals.org/collections/>

American Society for Microbiology

Research Publications on Influenza A(H1N1)

<http://tinyurl.com/asmh1n1>.

BioMed Central

Influenza Gateway (all articles freely available)

<http://www.biomedcentral.com/gateways/influenza>

British Medical Journal

Podcast: Swine flu: planning

<http://podcasts.bmj.com/bmj/2009/05/26/swine-flu-planning/>

Centre for Agriculture and Biosciences International (CABI)

Global Health database: international coverage of all aspects of human health from the Centre for Agriculture and Biosciences International.

<http://217.154.120.6/GLOBALHEALTH/searchform-quicksearch.nsp>



Related: Swine flu **dashboard from CABI.org**

<http://www.netvibes.com/cabialerts>

DynaMed

Clinical summaries on Swine Flu & H1N1: free access courtesy of EBSCO

<http://www.ebscohost.com/dynamed/swineflu/> and

<http://www.ebscohost.com/dynamed/h1n1/>

Epidemiologic Reviews

H1N1 Collection (all articles freely available)

<http://epirev.oxfordjournals.org/collections/>

Epidemiology and Infection

In the light of recent global events and the ensuing public health issues, Cambridge Journals are giving you **FREE access** to articles which are related to the Influenza A H1N1 'swine flu' virus and which are published in Epidemiology and Infection. [Click here to access a special sample issue covering key research on influenza.](#)

Human/Swine A/H1N1 Influenza Origins and Evolution

<http://tree.bio.ed.ac.uk/groups/influenza/>

Lancet

H1N1 Flu Resource Centre (contains content from numerous Elsevier journals)

<http://www.TheLancet.com/H1N1-flu>

Medline

Medline literature search on H1N1 (current as of today). Click [here](#) to run a search.

Nature

Swine Flu Tracker

<http://www.nature.com/news/specials/swineflu/index.html>

New England Journal of Medicine (NEJM)

NEJM H1N1 Influenza Center

<http://h1n1.nejm.org/>

Science

Science Insider Swine Flu Archives

<http://blogs.sciencemag.org/scienceinsider/swine-flu/>

Thomson Reuters

Free H1N1 briefing (updated daily) from *Proux Science Integrity*® portal

<http://science.thomsonreuters.com/pharma/h1n1/>

New & Notable Research Articles



[JUNE 25] Strategy to enhance influenza surveillance worldwide / Ortiz JR, Sotomayor V, Uez OC, Oliva O, Bettels D, McCarron M, et al.

Emerg Infect Dis. 2009 Aug; [Epub ahead of print]

<http://www.cdc.gov/eid/content/15/8/pdfs/08-1422.pdf>



[JUNE 25] Rambault A. Origins and evolutionary genomics of the 2009 swine-origin H1N1 influenza A epidemic. *Nature* 2009; 459(7250): 1122-1125.

<http://www.nature.com/nature/journal/v459/n7250/full/nature08182.html>

[JUNE 19] Novel Influenza A (H1N1) Virus Infections Among Health-Care Personnel --- United States, April--May 2009. *Morbidity and Mortality Weekly Report (MMWR)*.

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5823a2.htm>

[JUNE 19] Comment: Patient-oriented pandemic influenza research. Lancet. <http://www.thelancet.com/journals/lancet/article/PIIS0140673609611314/fulltext?rss=yes>. Abstract only.

[JUNE 19] Editorial: Avoiding panic in a pandemic. Lancet. [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(09\)61130-2/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)61130-2/fulltext). Abstract only.

[JUNE 19] Letter: H1N1, public health security, bioethics, and human rights. Lancet. [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(09\)61143-0/fulltext](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)61143-0/fulltext). Abstract only.

[JUNE 18] Editorial: Influenza A(H1N1)v in the southern hemisphere - lessons to learn for Europe? Eurosurveillance. <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19246>

[JUNE 18] School closure is currently the main strategy to mitigate influenza A(H1N1)v: a modeling study Eurosurveillance. <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19240>

[JUNE 18] A variety of respiratory viruses found in symptomatic travellers returning from countries with ongoing spread of the new influenza A(H1N1)v virus strain. Eurosurveillance. <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19242>

Toshihiro Tanaka, Ken Nakajima, Atsuko Murashima, Facundo Garcia-Bournissen, Gideon Koren, and Shinya Ito. Safety of neuraminidase inhibitors against novel influenza A (H1N1) in pregnant and breastfeeding women. CMAJ published 16 June 2009, 10.1503/cmaj.090866 <http://www.cmaj.ca/cgi/rapidpdf/cmaj.090866v2>

Preliminary analysis of Influenza A (H1n1) Individual and aggregated case reports from EU and EFTA countries / ECDC Working Group on Influenza A (H1N1). *Eurosurveillance*, June 11, 2009 . <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19238>

Smith GJD, Vijaykrishna D, Bahl J, et al. Origins and evolutionary genomics of the 2009 swine-origin H1N1 influenza A epidemic. Nature 2009. http://www.nature.com/nature/journal/vnfv/ncurrent/pdf/nature08182.pdf?_xsl=/mobil/cms-common.xsl

Nava GM, Attene-Ramos MS, Ang JK, et al. Origins of the new influenza A (H1N1) virus: time to take action. Eurosurveillance 2009 Jun 4;14(22). <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19228>

Update: Novel Influenza (H1N1) virus infection, Mexico, March-May 2009.
MMWR: Vol. 58, no. 21 June 5, 2009
http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5821a2.htm?s_cid=mm5821a2_x

J.A. Belser et al. Past, Present, and Possible Future Human Infection with Influenza Virus A Subtype H7. *Emerging Infectious Diseases*. 2009 June;15(6):859-865.
<http://www.cdc.gov/eid/content/15/6/pdfs/859.pdf>

Clinical and Public Health Practice Tools

[JUNE 15] Algorithms from 18 US states to assist in decisions regarding testing and treatment of H1N1
<http://www.smh.com/sections/services-procedures/medlib/Pandemic/Algorithms/Algorithms.html>

Historical Resources

Howard Markel, MD, PhD; Harvey B. Lipman, PhD; J. Alexander Navarro, PhD; Alexandra Sloan, AB; Joseph R. Michalsen, BS; Alexandra Minna Stern, PhD; Martin S. Cetron, MD. Nonpharmaceutical Interventions Implemented by US Cities During the 1918-1919 Influenza Pandemic. *JAMA*. 2007;298(6):644-654.
<http://jama.ama-assn.org/cgi/content/full/298/6/644>

Interview: Swine flu of 1976: lessons from the past. Interview with Harvey V Fineberg (*WHO Bulletin* June 2009)
<http://www.who.int/bulletin/volumes/87/6/09-040609.pdf>

The Swine Flu Affair: Decision-Making on a Slippery Disease [1978]
http://www.nap.edu/catalog.php?record_id=12660&utm_medium=email&utm_source=National%20Academies%20Press&utm_campaign=Swine%20Flu%203&utm_content=Downloader&utm_term

Travel Advisories

Public Health Agency of Canada no longer recommends Canadians postpone elective or non-essential travel to Mexico [May 19]
<http://www.phac-aspc.gc.ca/tmp-pmv/2009/h1n1-mexico-090518-eng.php>