

# H1N1 Flu Virus (Human Swine Influenza) Information Resources

(last updated June 19th, 2009 at 5pm)

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## Overview

- Confirmed cases in Ontario as of **June 19**: 2,528 (2 deaths)
- Confirmed cases in Canada as of **June 17**: 4,906 (incl. 12 deaths)
- Confirmed cases worldwide as of **June 19**: 44,287 (incl. 180 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](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

### Upcoming

[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](#)  
To register on-line: [Click here](#)

### Archived

[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 19] 264 New Confirmed Cases Of H1N1 Flu Virus In Ontario

Almost all of the cases reported to date have symptoms similar to those of seasonal influenza. The vast majority of these cases have recovered. To date, three people, who had the H1N1 virus and chronic medical conditions, have died. Twenty people who have the H1N1 flu virus were in hospital as of June 18, a number of whom have underlying medical conditions.

The Ontario cases involve 1,293 males and 1,225 females (the gender of 10 cases is unknown) with an age range of <1 to 80. The average age of the cases is 21.

The breakdown of the cases by health unit is as follows:

Health Unit	New Confirmed Cases	Total Confirmed Cases
Toronto	69	941
Peel Region	80	547
York Region	51	373
City of Ottawa	37	235
Halton	6	183

Durham Region	4	86
Simcoe Muskoka District	3	32
Northwestern	2	26
Hamilton	1	23
Wellington Dufferin Guelph	2	15
Haliburton, Kawartha, Pine Ridge	0	8
Waterloo Region	0	7
Middlesex-London	1	7
Niagara Region	1	6
Windsor Essex	1	6
Chatham Kent	0	3
Sudbury and District	1	5
Grey Bruce	0	3
Eastern Ontario	2	4
Haldimand Norfolk	0	2
Hastings and Prince Edward Counties	0	2
Kingston, Frontenac, Lennox and Addington	0	2
Leeds, Grenville & Lanark	2	4
Oxford County	1	2
Renfrew	0	1
Thunder Bay	0	1
Out of province (*)	0	4
<b>TOTAL</b>	<b>264</b>	<b>2,528</b>

(\*) – Visitors who were tested and confirmed in Ontario but do not reside in the province.

[http://www.health.gov.on.ca/english/media/news\\_releases/archives/nr\\_09/un/nr\\_20090619.html](http://www.health.gov.on.ca/english/media/news_releases/archives/nr_09/un/nr_20090619.html)

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

[http://www.health.gov.on.ca/english/public/updates/archives/hu\\_09/swine\\_flu.html](http://www.health.gov.on.ca/english/public/updates/archives/hu_09/swine_flu.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](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 17] As of June 17 2009, a total of 4,906 laboratory-confirmed cases of H1N1 flu virus have been reported in all provinces and territories in Canada except Newfoundland. To date, 284 hospitalizations and twelve deaths have been reported among laboratory-confirmed cases. The most recent date of symptom onset is June 8th, 2009.

Province / Territory	New Confirmed Cases	Total Confirmed Cases	Total Deaths
British Columbia	19	191	0
Alberta	137	401	1
Saskatchewan	54	381	0
Manitoba	106	260	2
Ontario	360	2267	2
Quebec	145	1116	7
New Brunswick	0	2	0
Nova Scotia	10	91	0
Prince Edward Island	0	3	0
Newfoundland	2	3	0
Yukon	0	1	0
Northwest Territories	2	4	0
Nunavut	21	185	0
<b>TOTAL</b>	<b>856</b>	<b>4905</b>	<b>12</b>

<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](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.**



[JUNE 19] Update: 21,449 confirmed and probable cases (incl. 87 deaths) in 53 states/territories as of 11am Friday June 19/09.

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

[JUNE 16] Questions and answers: novel H1N1 flu (swine flu) and you [updated]

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

[ARCHIVE] Previous CDC documents and updates available from:

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

## Center for Infectious Disease Research and Policy

**NEW**

[JUNE 18] H1N1 cases in health workers show need for protection

<http://www.cidrap.umn.edu/cidrap/content/influenza/swineflu/news/jun1809cdc-jw.html>

[ARCHIVE] Older updates from CIDRAP available at:

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

## Health Protection Agency (UK)

**NEW**

[JUNE 19] Update on confirmed swine flu cases. Cumulative laboratory confirmed cases to date: **1,984**

[http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb\\_C/1245398852156](http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1245398852156)

**NEW**

[JUNE 19] Daily epidemiological update

[http://www.hpa.org.uk/web/HPAwebFile/HPAweb\\_C/1245398860259](http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1245398860259)

[ARCHIVE] Swine Influenza page:

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

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

**NEW**

[JUNE 19] Situation report: **3,348** confirmed cases in EU/EFTA countries  
Main developments in past 24 hours:

- 348 new cases were reported in EU and EFTA countries;
- 2033 new cases were reported from non-EU and EFTA countries;
- 7 new countries and overseas territories reported cases for the first time: Laos Peoples Democratic Republic, Papua New Guinea,

Suriname, British Virgin Islands, Macao, Netherlands Antilles and Saint Martin;

- Australia and New Zealand developed a new response phase to manage the outbreak, reflecting the increased spread of the virus

[http://ecdc.europa.eu/en/files/pdf/Health\\_topics/Situation\\_Report\\_090619-1700hrs.pdf](http://ecdc.europa.eu/en/files/pdf/Health_topics/Situation_Report_090619-1700hrs.pdf)



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

[JUNE 17] Guide to public health measures to reduce the impact of influenza pandemics in Europe – ‘The ECDC Menu’

[http://www.ecdc.europa.eu/en/files/pdf/Health\\_topics/0906\\_TER\\_Public\\_Health\\_Measures\\_for\\_Influenza\\_Pandemics.pdf](http://www.ecdc.europa.eu/en/files/pdf/Health_topics/0906_TER_Public_Health_Measures_for_Influenza_Pandemics.pdf)

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

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

## World Health Organization (WHO)



[JUNE 19] Update 51: Cumulative total number of cases worldwide: 44,287 (incl. 180 deaths)

[http://www.who.int/csr/don/2009\\_06\\_19/en/index.html](http://www.who.int/csr/don/2009_06_19/en/index.html)

[JUNE 15] Influenza A(H1N1) patient care checklist

[http://www.who.int/csr/resources/publications/swineflu/patient\\_care\\_checklist/en/index.html](http://www.who.int/csr/resources/publications/swineflu/patient_care_checklist/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 18] Influenza A(H1N1) Regional Report

As of 18 June 2009, 36,046 confirmed cases of the Pandemic H1N1 2009 infection, including 179 deaths, have been notified in 27 countries of the Americas: Argentina, Bahamas, Barbados, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Jamaica, Mexico, Nicaragua, Paraguay,

Panama, Peru, Suriname, Trinidad and Tobago, United States, Uruguay and Venezuela.

[http://new.paho.org/hq/index.php?option=com\\_content&task=view&id=1515&Itemid=1167](http://new.paho.org/hq/index.php?option=com_content&task=view&id=1515&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](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](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](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](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](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 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](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](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](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>

