

# H1N1 Flu Virus (Human Swine Influenza) Information Resources

(last updated July 17, 2009 at 5pm)

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## Overview

- Confirmed cases in Ontario as of **July 11**: 3,804
- Confirmed cases in Canada as of **July 15**: 10,156 (incl. 45 deaths)
- Confirmed cases worldwide\* as of **July 17**: 130,733 (incl. 702 deaths)
- Changes in reporting requirements for pandemic (H1N1) 2009 virus infection  
[http://www.who.int/csr/disease/swineflu/notes/h1n1\\_surveillance\\_2009\\_0710/en/index.html](http://www.who.int/csr/disease/swineflu/notes/h1n1_surveillance_2009_0710/en/index.html)
  - WHO will no longer issue the global tables showing the numbers of confirmed cases for all countries. However, as part of continued efforts to document the global spread of the H1N1 pandemic, regular updates will be provided describing the situation in the newly affected countries.
- Canada releases new H1N1 outbreak guidelines for closed facilities
  - News release: [http://www.phac-aspc.gc.ca/media/nr-rp/2009/2009\\_0717-eng.php](http://www.phac-aspc.gc.ca/media/nr-rp/2009/2009_0717-eng.php)
  - Guidelines: <http://www.phac-aspc.gc.ca/alert-alerte/swine-porcine/guidance-orientation-07-16-eng.php>
- MIT white paper on novel H1N1 written by John Barry (author of *The Great Influenza: The Epic Story of the Deadliest Plague In History*)  
<http://esd.mit.edu/WPS/2009/esd-wp-2009-07.pdf>

\* Global case totals obtained from the July 17 ECDC situation report, page 1:  
[http://www.ecdc.europa.eu/en/files/pdf/Health\\_topics/Situation\\_Report\\_090717\\_1700hrs.pdf](http://www.ecdc.europa.eu/en/files/pdf/Health_topics/Situation_Report_090717_1700hrs.pdf)

## **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](#)

##### **Europe**

[United Kingdom's Health Protection Agency \(HPA\)](#)  
[European Centre for Disease Control and Prevention \(ECDC\)](#)

##### **International**

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

#### Other Resources

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

## Events

### Current / Upcoming

- [JULY 29] Special Advisory Committee on Immunization Practices (ACIP) meeting on Novel Influenza A (H1N1).  
8:00a.m. - 3:00p.m (Atlanta, Georgia).  
Deadline for online registration for non-US Citizens: July 20, 2009  
<http://www.cdc.gov/vaccines/recs/acip/meetings.htm#register>



Agenda now available at:

<http://www.cdc.gov/vaccines/recs/acip/downloads/agenda-jul09.pdf>

### Archived

- [JULY 15] COCA Conference Call: H1N1 Vaccine  
Date: Wednesday, July 15, 2009  
Time: 3:00 PM - 4:00 PM ET  
Call-in number: 888-283-2960 (Passcode: 2822773)  
The PowerPoint Presentation available on the COCA website:  
<http://emergency.cdc.gov/coca/callinfo.asp>
- [JULY 9] H1N1 Preparedness Summit (Bethesda, Maryland)  
All-day H1N1 Flu Preparedness Summit to further prepare the nation for the possibility of a more severe outbreak of H1N1 flu in the fall. Federal, state and local officials, emergency managers, educators and others will discuss lessons learned during the spring and summer H1N1 wave, and discuss best practices and preparedness priorities.  
<http://www.pandemicflu.gov/>

## Ministry of Health and Long-Term Care (MOHLTC)

### The MOHLTC posts case count updates on Friday

- [JULY 16] Ontario Influenza Bulletin: Surveillance Week 27 (July 5, 2009– July 11, 2009). **Note: Death and hospitalization information among Novel H1N1 Influenza A virus confirmed cases is current as of July 16, 2009.**  
277 hospitalizations and 16 deaths in Ontario to date  
[http://www.health.gov.on.ca/english/providers/program/pubhealth/flu/flu\\_08/bulletins/flu\\_bul\\_01\\_20090711.pdf](http://www.health.gov.on.ca/english/providers/program/pubhealth/flu/flu_08/bulletins/flu_bul_01_20090711.pdf)
- [JULY 11] Current Influenza Bulletin  
[http://www.health.gov.on.ca/english/public/updates/archives/hu\\_09/sf\\_weekly\\_update.html#h1n1\\_map](http://www.health.gov.on.ca/english/public/updates/archives/hu_09/sf_weekly_update.html#h1n1_map)

[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

Last H1N1 update on June 11

## 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)

### PHAC posts case count updates on Monday, Wednesday, and Friday



[JULY 17] Canada releases new H1N1 outbreak guidelines for closed facilities

- News release: [http://www.phac-aspc.gc.ca/media/nr-rp/2009/2009\\_0717-eng.php](http://www.phac-aspc.gc.ca/media/nr-rp/2009/2009_0717-eng.php)
- Guidelines: <http://www.phac-aspc.gc.ca/alert-alerte/swine-porcine/guidance-orientation-07-16-eng.php>



[JULY 16] Interim Guidance for Ambulatory Care of Influenza-Like Illness in the context of H1N1 influenza virus  
<http://www.phac-aspc.gc.ca/alert-alerte/swine-porcine/guidance-orientation-amb-07-16-eng.php>



[JULY 15] As of 15 July, 2009, a total of 10,156 laboratory-confirmed cases of Pandemic (H1N1) 2009, including 1,115 hospitalizations and 45 deaths, have been reported in Canada from all provinces and territories.  
<http://www.phac-aspc.gc.ca/alert-alerte/swine-porcine/surveillance-eng.php>

[JULY 9] Interim Clinical Guidance for Pregnant and Breastfeeding Women with Influenza-Like Illness in the context of the Pandemic H1N1 2009 Virus  
<http://www.phac-aspc.gc.ca/alert-alerte/swine-porcine/guidance-orientation-07-09-eng.php>

[JULY 7] Government of Canada identifies new strain of influenza (not H1N1)  
[http://www.phac-aspc.gc.ca/media/nr-rp/2009/2009\\_0707-eng.php](http://www.phac-aspc.gc.ca/media/nr-rp/2009/2009_0707-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 posts case count updates on Friday.



[JULY 17] Novel H1N1 Flu Situation Update:  
**40, 617 probable cases**  
**263 deaths**

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



[JULY 16] Home Care Guidance: Physician Directions to Patient/Parent

[http://www.cdc.gov/h1n1flu/guidance\\_homecare\\_directions.htm](http://www.cdc.gov/h1n1flu/guidance_homecare_directions.htm)

[JULY 14] 10 Steps You Can Take: Actions for Novel H1N1 Influenza Planning and Response for Medical Offices and Outpatient Facilities

<http://www.cdc.gov/h1n1flu/10steps.htm>

[JULY 9] Obama Administration Calls on Nation to Begin Planning and Preparing for Fall Flu Season & the New H1N1 Virus

<http://www.hhs.gov/news/press/2009pres/07/20090709a.html>

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

## American College of Emergency Physicians

[JULY 6] National Strategic Plan for Emergency Department Management of Outbreaks of Novel H1N1 Influenza

<http://www.acep.org/WorkArea/DownloadAsset.aspx?id=45781>

## Center for Infectious Disease Research and Policy

[ARCHIVE] Current overview and older updates from CIDRAP available at:  
<http://www.cidrap.umn.edu/cidrap/content/influenza/swineflu/index.html>

## Health Protection Agency (UK)



[JULY 16] HPA Weekly National Influenza Report (Week 29)

[http://www.hpa.org.uk/web/HPAwebFile/HPAweb\\_C/1247728935374](http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1247728935374)


[JULY 8] Guidance on use of prophylaxis in the treatment phase of the H1N1Pandemic – Update  
[http://www.hpa.org.uk/web/HPAwebFile/HPAweb\\_C/1247038677052](http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1247038677052)

[ARCHIVE] Swine Influenza page:  
<http://www.hpa.org.uk/webw/HPAweb&Page&HPAwebAutoListName/Page/1240732817665?p=1240732817665>

## Department of Health (UK)


[JULY 2] UK Department of Health reports: *Swine flu pandemic: from containment to treatment*  
<http://www.dh.gov.uk/en/Publichealth/Flu/Swineflu/InformationandGuidance/index.htm>


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

 [JULY 17] ECDC Situation Report

- 30 EU/EFTA have reported a total of 15,890 confirmed cases, including 16 deaths.

[http://www.ecdc.europa.eu/en/files/pdf/Health\\_topics/Situation\\_Report\\_090717\\_1700hrs.pdf](http://www.ecdc.europa.eu/en/files/pdf/Health_topics/Situation_Report_090717_1700hrs.pdf)

 [JULY 17] Analysis of influenza A(H1N1)v individual case reports in EU and EEA countries  
[http://www.ecdc.europa.eu/en/files/pdf/Health\\_topics/090717\\_Influenza\\_A\(H1N1\)\\_Analysis\\_of\\_individual\\_data\\_EU\\_EEA-EFTA.pdf](http://www.ecdc.europa.eu/en/files/pdf/Health_topics/090717_Influenza_A(H1N1)_Analysis_of_individual_data_EU_EEA-EFTA.pdf)

 [JULY 17] Protocols for case-control studies to measure influenza vaccine effectiveness in the EU and EEA Member States  
[http://www.ecdc.europa.eu/en/files/pdf/Publications/Measuring\\_influenza\\_vaccine\\_effectiveness\\_Protocol\\_case\\_control\\_studies.pdf](http://www.ecdc.europa.eu/en/files/pdf/Publications/Measuring_influenza_vaccine_effectiveness_Protocol_case_control_studies.pdf)

 [JULY 17] Protocols for cohort database studies to measure influenza vaccine effectiveness in the EU and EEA Member States  
[http://www.ecdc.europa.eu/en/files/pdf/Publications/Measuring\\_influenza\\_vaccine\\_effectiveness\\_Protocol\\_cohort\\_database\\_studies.pdf](http://www.ecdc.europa.eu/en/files/pdf/Publications/Measuring_influenza_vaccine_effectiveness_Protocol_cohort_database_studies.pdf)

[JULY 14] Surveillance and Studies in a Pandemic: Background paper for the Working groups

[http://www.ecdc.europa.eu/en/files/pdf/Health\\_topics/0907\\_Surveillance\\_and\\_Studies\\_in\\_a\\_Pandemic\\_Background\\_Paper.pdf](http://www.ecdc.europa.eu/en/files/pdf/Health_topics/0907_Surveillance_and_Studies_in_a_Pandemic_Background_Paper.pdf)

[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)



[JULY 16] **Changes in reporting requirements for pandemic (H1N1) 2009 virus infection.**

WHO will no longer issue the global tables showing the numbers of confirmed cases for all countries. However, as part of continued efforts to document the global spread of the H1N1 pandemic, regular updates will be provided describing the situation in the newly affected countries.

[http://www.who.int/csr/disease/swineflu/notes/h1n1\\_surveillance\\_20090710/en/index.html](http://www.who.int/csr/disease/swineflu/notes/h1n1_surveillance_20090710/en/index.html)

[JULY 6] **Pandemic (H1N1) 2009 Update 58 (final update)**  
[http://www.who.int/csr/don/2009\\_07\\_06/en/index.html](http://www.who.int/csr/don/2009_07_06/en/index.html)

[JULY 13] Pandemic (H1N1) 2009 briefing note 2: WHO recommendations on pandemic (H1N1) 2009 vaccines  
[http://www.who.int/csr/disease/swineflu/notes/h1n1\\_vaccine\\_20090713/en/index.html](http://www.who.int/csr/disease/swineflu/notes/h1n1_vaccine_20090713/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)



[JULY 16] **Influenza A (H1N1) Regional Report**  
As of 16 July 2009, a total of 80,643 confirmed cases of the pandemic H1N1 2009, including 610 deaths, have been notified in 34 countries of the Americas.  
[http://new.paho.org/hq/index.php?option=com\\_content&task=view&id=1600&Itemid=1167](http://new.paho.org/hq/index.php?option=com_content&task=view&id=1600&Itemid=1167)

[JULY 14] Highlights from the High-Level Cancun Meeting  
[http://new.paho.org/hq/index.php?option=com\\_content&task=view&id=1577&Itemid=1](http://new.paho.org/hq/index.php?option=com_content&task=view&id=1577&Itemid=1)

[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)

## Australia



[JULY 17] Health Emergency Australia Pandemic (H1N1) 2009 Situation Update  
Cumulative totals: 11,962 cases, 1332 hospitalizations, 31 deaths  
<http://www.healthemergency.gov.au/internet/healthemergency/publishing.nsf/Content/updates-19july09.htm>

[JULY 8] Project Phase Annex to the Australian Health Management Plan for Pandemic Influenza.  
[http://www.healthemergency.gov.au/internet/healthemergency/publishing.nsf/Content/resources/\\$File/AHMPPI-PROTECTannex.pdf](http://www.healthemergency.gov.au/internet/healthemergency/publishing.nsf/Content/resources/$File/AHMPPI-PROTECTannex.pdf)

[ARCHIVE] New Pandemic Phase Project - PROTECT Guidelines/Updates  
<http://www.healthemergency.gov.au/internet/healthemergency/publishing.nsf/Content/home-1>

## 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)



## Consumer Health Information Resources

Krames Patient Education Handouts - H1N1 Flu Virus  
<http://www.krames.com/swine-flu.html>

MEDLINEplus - H1N1 Flu (Swine Flu)  
<http://www.nlm.nih.gov/medlineplus/h1n1fluswineflu.html>

Specialized Information Service - National Library of Medicine  
<http://sis.nlm.nih.gov/enviro/swineflu.html>.

Tufts University - (SPIRAL) Selected Patient Information in Asian Languages  
<http://spiral.tufts.edu/topic.shtml>

## Notable Research Articles

- [JULY 14] Itoh Y, Shinya K, Kiso M, et al. In vitro and in vivo characterization of new swine-origin H1N1 influenza viruses. *Nature* 2009 Jul 13 early online edition.  
<http://www.nature.com/nature/journal/vnfv/ncurrent/abs/nature08260.html>
- [JULY 14] Assessing the severity of the novel influenza A/H1N1 pandemic Garske et al. *BMJ*.2009; 339: b2840  
[http://www.bmj.com/cgi/content/citation/339/jul14\\_3/b2840](http://www.bmj.com/cgi/content/citation/339/jul14_3/b2840)
- [JULY 13] Gavin J. D. Smith, Justin Bahl, Dhanasekaran Vijaykrishna, Jinxia Zhang, Leo L. M. Poon, Honglin Chen, Robert G. Webster, J. S. Malik Peiris, and Yi Guan. Dating the emergence of pandemic influenza viruses. *PNAS* 2009 106:11709-11712; published online before print July 13, 2009, oi:10.1073/pnas.0904991106  
<http://www.pnas.org/content/106/28/11709.full.pdf+html?sid=4cb65271-8f82-4a39-8753-127b62db5e21>
- [JULY 13] Intensive-care patients with severe novel influenza A (H1N1) virus infection—Michigan, June 2009. *MMWR Dispatch* 2009 Jul 10;58:1-4.  
<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm58d0710a1.htm>
- [JULY 9] Lipsitch M, Riley S, Cauchemez S, Ghani AC, Ferguson NM. Managing and reducing uncertainty in an emerging influenza pandemic. *N Engl J Med*. 2009 Jul 9;361(2):112-5.  
<http://content.nejm.org/cgi/content/full/361/2/112>

- [JULY 9] Khan K, Arino J, Hu W, Raposo P, Sears J, Calderon F, Heidebrecht C, Macdonald M, Liauw J, Chan A, Gardam M. Spread of a novel influenza A (H1N1) virus via global airline transportation. *N Engl J Med*. 2009 Jul 9;361(2):212-4.  
<http://content.nejm.org/cgi/reprint/361/2/212.pdf>
- [JULY 9] Trifonov V, Khiabani H, Rabadan R. Geographic dependence, surveillance, and origins of the 2009 influenza A (H1N1) virus. *N Engl J Med*. 2009 Jul 9;361(2):115-9.  
<http://content.nejm.org/cgi/reprint/361/2/115.pdf>
- [JULY 8] Hampson A. The 'novel' influenza A(H1N1) enigma: is it a pandemic, how should we respond, what should we call it? *Influenza Other Respi Viruses*. 2009 ; 3(4):119-20.  
<http://www3.interscience.wiley.com/cgi-bin/fulltext/122455802/PDFSTART>
- [JULY 7] How well did health departments communicate about risk at the start of the Swine Flu epidemic in 2009? *Health Affairs*.  
<http://content.healthaffairs.org/cgi/reprint/hlthaff.28.4.w743v1.pdf>
- [JULY 2] Influenza A (H1N1) infections among healthcare workers: a cause for cautious optimism. Sng J, Koh D, Koh G. *Occup Environ Med*. 2009 Jul 1. [Epub ahead of print]. Abstract only.  
<http://www.ncbi.nlm.nih.gov/pubmed/19574241?dopt=Abstract>
- [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 4] 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>

## Other Scientific Resources



[JUNE 17] Barry J. White paper on novel H1N1. Engineering Systems Division Working Paper Series ESD-WP-2009-07. Massachusetts Institute of Technology (MIT) 2009. 19 pages.  
<http://esd.mit.edu/WPS/2009/esd-wp-2009-07.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

Swine flu of 1976: lessons from the past. An interview with Dr Harvey V Fineberg  
<http://www.pubmedcentral.nih.gov/articlerender.fcgi?tool=pubmed&pubmedid=19565118>

The Persistent Legacy of the 1918 Influenza Virus. *New England Journal of Medicine*.  
<http://content.nejm.org/cgi/reprint/NEJMp0904819.pdf>

Historical Perspective — Emergence of Influenza A (H1N1) Viruses. *New England Journal of Medicine*.  
<http://content.nejm.org/cgi/reprint/NEJMra0904322.pdf>

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.  
<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

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