

H1N1 Flu Virus (Human Swine Influenza) Information Resources

(last updated July 15, 2009 at 5pm)

Overview

- Confirmed cases in Ontario as of **July 13**: 3,636 (incl 14 deaths)
- Confirmed cases in Canada as of **July 13**: 9,855 (incl. 39 deaths)
- Confirmed cases worldwide as of **July 15**: 125,993 (incl. 667deaths)
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
 - The World Health Organization (WHO) is now referring to the current pandemic as “pandemic (H1N1) 2009”
- CDC. *10 Actions Steps for Medical Offices and Outpatient Facilities*.
<http://www.cdc.gov/h1n1flu/10steps.htm>
- OSHA requested to intervene after hospitals refuse to provide masks to nurses dealing with H1N1 patients
<http://www.calnurses.org/media-center/press-releases/2009/july/nurses-file-cal-osh-complaint-after-hospital-refuses-to-supply-swine-flu-masks-for-units-with-infected-patients.html>

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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>

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/>
- [JULY 1] Global Summit over Lessons Learned from Influenza (H1N1)
Health representatives from forty countries, the WHO, and the Pan American Health Organization and the highest level specialists will be in attendance, from July 1st to 3rd, 2009 in Cancun.

Ministry of Health and Long-Term Care (MOHLTC)

The MOHLTC posts case count updates on Friday

- [JULY 13] 3,636 cases

[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

Current Influenza Bulletin

http://www.health.gov.on.ca/english/public/updates/archives/hu_09/sf_weekly_update.html#h1n1_map

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 15] As of 13 July, 2009, a total of 9,855 laboratory-confirmed cases of Pandemic (H1N1) 2009, including 902 hospitalizations and 39 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

[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 posts case count updates on Friday.

[JULY 10] Cases: 37,246 Deaths: 211
<http://www.cdc.gov/h1n1flu/update.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>
- [JULY 9] CDC Health Alert Network (HAN) Info Service Message: Three Reports of Oseltamivir Resistant Novel Influenza A (H1N1) Viruses
<http://www.cdc.gov/h1n1flu/HAN/070909.htm>
- [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 9] HPA Weekly National Influenza Report (Week 28)
http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1247125493338
- [JULY 8] Guidance on use of prophylaxis in the treatment phase of the H1N1 Pandemic – Update
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



- NEW** [JULY 15] ECDC Situation Report
- Total of 14, 451 confirmed cases reported from the EU and EFTA countries;
http://www.ecdc.europa.eu/en/files/pdf/Health_topics/Situation_Report_090715_1700hrs.pdf
- NEW** [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
- [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)


- NEW** [JULY 6] **Pandemic (H1N1) 2009 Update 58:**
http://www.who.int/csr/don/2009_07_06/en/index.html
As of July 15 the most recent update on the WHO website is still Update 58. However ECDC reports cumulative world number of confirmed cases as 125993 (with 667 deaths).
- [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
- [JULY 10] Biocontainment requirements for vaccine production from and quality control of the reassortant candidate vaccine virus IVR-153.
http://www.who.int/csr/resources/publications/swineflu/ivr_153/en/index.html

- [JULY 10] Infection prevention and control in health care for confirmed or suspected cases of pandemic (H1N1) 2009 and influenza-like illnesses.
<http://www.who.int/csr/resources/publications/swineflu/swineinflcont/en/index.html>
- [JULY 8] Viruses resistant to oseltamivir (Tamiflu) identified
http://www.who.int/csr/disease/swineflu/newsbriefs/h1n1_antiviral_resistance_20090708/en/index.html
- [JULY 7] WHO to ask countries to ease novel H1N1 testing
Transcript of virtual press conference with Assistant Director-General and Interim for Health Security and Environment
http://www.who.int/mediacentre/Pandemic_h1n1_presstranscript_2009_07_07.pdf
- [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 14] Influenza A (H1N1) Regional Report
As of 14 July 2009, a total of **78,990 confirmed cases** of the pandemic H1N1 2009, including **539 deaths**, have been notified in **31 countries of the Americas**.
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
- [ARCHIVE] PAHO Influenza A (H1N1) Portal
http://new.paho.org/hq/index.php?option=com_content&task=blogcategory&id=805&Itemid=569&lang=en

Australia

-  [JULY 15] July 15 at noon 10 389 cases, 1095 hospitalizations, 21 deaths
[http://www.healthemergency.gov.au/internet/healthemergency/publishing.nsf/Content/7B04352952B0C0FCCA2575F200125149/\\$File/H1N1%20Influenza%2012pm%2015%20July.pdf](http://www.healthemergency.gov.au/internet/healthemergency/publishing.nsf/Content/7B04352952B0C0FCCA2575F200125149/$File/H1N1%20Influenza%2012pm%2015%20July.pdf)

- [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

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

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

- NEW** [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>
- NEW** [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>
- NEW** [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
- NEW** [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 8] Aeron C. Hurt, Chantal Baas, Yi-Mo Deng, Sally Roberts, Anne Kelso, Ian G. Barr Performance of influenza rapid point-of-care tests in the detection of swine lineage A(H1N1) influenza viruses. *Influenza Other Respi Viruses*. 2009 ; 3(4):171-6.
<http://www3.interscience.wiley.com/cgi-bin/fulltext/122421279/PDFSTART>
- [JULY 8] Heath Kelly, Kristina Grant, Simon Williams, David Smith. H1N1 swine origin influenza infection in the United States and Europe in 2009 may be similar to H1N1 seasonal influenza infection in two Australian states in 2007 and 2008. *Influenza Other Respi Viruses*. 2009; 3(4):183-88.
<http://www3.interscience.wiley.com/cgi-bin/fulltext/122443393/PDFSTART>
- [JULY 8] A rapid method to support the diagnosis of swine-origin influenza virus (S-OIV), by sequencing of real-time PCR amplicon from diagnostic assays. Hall RJ, Peacey M, Huang QS, Carter PE. *J Clin Microbiol*. 2009 Jul 8. [Epub ahead of print]
[Abstract](#)
- [JULY 8] Use of Northern Hemisphere Influenza Vaccines by Travelers to the Southern Hemisphere. *JAMA*.
<http://jama.ama-assn.org/cgi/reprint/302/2/140.pdf>
- [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 7] Patients and doctors are asked to report antivirals' side effects as swine flu spreads. *British Medical Journal Health Affairs*.
http://www.bmj.com/cgi/content/full/339/jul07_3/b2780?view=long&pmid=19584111
- [JULY 2] Public perceptions, anxiety, and behaviour change in relation to the swine flu outbreak: cross sectional telephone survey. Rubin GJ, Amlôt R, Page L, Wessely S. *BMJ*. 2009 Jul 2;339:b2651. doi: 10.1136/bmj.b2651.
http://www.bmj.com/cgi/content/full/339/jul02_3/b2651?view=long&pmid=19574308

- [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>
- [JULY 2] Modelling of the influenza A(H1N1)v outbreak in Mexico City, April-May 2009, with control sanitary measures. Cruz-Pacheco G, Duran L, Esteva L, Minzoni A, Lopez-Cervantes M, Panayotaros P, et al. *Euro Surveill*. 2009 Jul 2;14(26). pii: 19254.
<http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19254>
- [JUNE 29] Pneumonia and Respiratory Failure from Swine-Origin Influenza A (H1N1) in Mexico. *New England Journal of Medicine*.
<http://content.nejm.org/cgi/reprint/NEJMoa0904252.pdf>
Appendix:
<http://content.nejm.org/cgi/content/full/NEJMoa0904252/DC1>
- [JUNE 29] Severe Respiratory Disease Concurrent with the Circulation of H1N1 Influenza. *New England Journal of Medicine*.
<http://content.nejm.org/cgi/reprint/NEJMoa0904023.pdf>
- [JUNE 29] Spread of a Novel Influenza A (H1N1) Virus via Global Airline Transportation. *New England Journal of Medicine*.
<http://content.nejm.org/cgi/reprint/NEJMp0904819.pdf>
Appendix:
<http://content.nejm.org/cgi/content/full/NEJMc0904559/DC1>
- [JUNE 29] Rapid-Test Sensitivity for Novel Swine-Origin Influenza A (H1N1) Virus in Humans. *New England Journal of Medicine*.
<http://content.nejm.org/cgi/reprint/NEJMc0904264.pdf>
- [JUNE 29] Effects of Oseltamivir on Influenza-Related Complications in Children With Chronic Medical Conditions
[Abstract only.](#)
- [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 16] 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>
- [JUNE 11] Preliminary analysis of Influenza A (H1n1) Individual and aggregated case reports from EU and EFTA countries / ECDC Working Group on Influenza A (H1N1). *Eurosurveillance*,
<http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19238>
- [JUNE 11] 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/v459/n7250/full/nature08182.html>
- [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>

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

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>