

H1N1 Flu Virus (Human Swine Influenza)

Information Resources

(last updated July 6, 2009 at 5pm)

Overview

- Confirmed cases in Ontario as of **July 3**: 3,494
- Confirmed cases in Canada as of **July 3**: 8,883 (incl. 29 deaths)
- Confirmed cases worldwide as of **July 6**: 94,512 (incl. 429 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

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Events

Current / Upcoming

H1N1 Preparedness Summit - Thursday July 9

Secretaries Kathleen Sebelius (HHS), Janet Napolitano (DHS), and Arne Duncan (ED), along with Homeland Security Advisor John Brennan, will host an all-day H1N1 Flu Preparedness Summit with states 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.

Archived

- [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.
- [JUNE 30] The Henry J. Kaiser Family Foundation: [Learning to live in a world with the H1N1 pandemic](#)
- [JUNE 24] The Ontario Hospital Association presents [The Pandemic Influenza: Where are we now?](#)

Ministry of Health and Long-Term Care (MOHLTC)

The MOHLTC now posts case count updates on Friday only

- [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

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)



[JULY 2] International meeting advances global response to H1N1 Canada continues to play a leadership role

http://www.phac-aspc.gc.ca/media/nr-rp/2009/2009_0702-eng.php

[JULY 3] Epidemiological Update As of 3 July, 2009 15:00 EDT, a total of 8,883 laboratory-confirmed cases of Pandemic H1N1 2009 virus, including 663 hospitalizations and 29 deaths, have been reported in Canada from all provinces and territories.

<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.

[JULY 2] Cases: 33,902 Deaths: 170

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

[ARCHIVE] Previous CDC documents and updates available from:

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

Center for Infectious Disease Research and Policy

[JULY 2] Studies: Novel H1N1 affects deep lung tissue, transmits fairly well

<http://www.cidrap.umn.edu/cidrap/content/influenza/swineflu/news/jul0209h1n1.html>

[ARCHIVE] Older updates from CIDRAP available at:

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

Health Protection Agency (UK)



[JULY 2] Changes to HPA pandemic flu media updates

The government announced on July 2nd that the UK was moving to the phase of containment in the current pandemic.

The HPA will, therefore, no longer be providing a daily update of the numbers of cases confirmed through laboratory tests. There will be a weekly media alert.

http://www.hpa.org.uk/servlet/Satellite?c=HPAweb_C&childpagename=HPAweb%2FHPAwebStandard&cid=1246607819501&p=1231252394302&pagename=HPAwebWrapper

[JULY 3] Pregnancy and Swine Flu
http://www.hpa.org.uk/servlet/Satellite?c=HPAweb_C&cid=1246607834101&pagename=HPAweb%2FHPAwebStandard

[JULY 2] Treatment approach announced for pandemic flu
http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1246519368102

[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



[JULY 6] Situation report: Cumulative number of cases in the EU and EFTA countries is now 10,342, including four deaths.

Main developments:

82 new confirmed cases reported from the EU and EFTA countries, reaching a total of 10,342;
493 new cases reported from non-EU and EFTA countries, reaching a total of 85,482;
Croatia confirmed its first case;
Denmark announces changing its response strategy to “mitigation”.

http://www.ecdc.europa.eu/en/files/pdf/Health_topics/Situation_Report_090706_1700hrs.pdf



[JULY 6] Influenza A (H1N1)v detections across the European Union continue but influenza activity in the community remains at baseline levels apart from in the UK. [European Influenza Surveillance Network Weekly electronic bulletin Week 26: 22 June 2009 - 28 June 2009]
http://www.ecdc.europa.eu/en/Activities/Surveillance/EISN/Newsletter/SUN_EISN_INFL_Bulletin_2009week26.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 6] **Pandemic (H1N1) 2009** Update 58: Cumulative total number of cases worldwide: 94,512 (incl. 429 deaths)

http://www.who.int/csr/don/2009_07_06/en/index.html

[JULY 2] Influenza A(H1N1): lessons learned and preparedness

http://www.who.int/dg/speeches/2009/influenza_h1n1_lessons_20090702/en/

[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 3] Influenza A (H1N1) Regional Report

As of 3 July 2009, a total of **65,925 confirmed cases** of the pandemic H1N1 2009, including **387 deaths**, have been notified in **29 countries of the Americas**.

The following overseas territories have confirmed cases of pandemic H1N1 2009: Puerto Rico, U.S. Overseas Territory (18); Virgin Islands, U.S. Overseas Territory (1); Bermuda, UK Overseas Territory (1); Cayman Islands, UK Overseas Territory (14); British Virgin Islands, UK Overseas Territory (2); Martinique, French Overseas Community (2); Netherlands Antilles, Curaçao: (8)a; Netherlands Antilles, Aruba (5); and Netherlands Antilles, St. Maarten (7).

http://new.paho.org/hq/index.php?option=com_content&task=view&id=1568&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

Australia

As of 17 June 2009, phase: PROTECT



[JULY 5] Update bulletin

Case count: 5298

Deaths: 12

[http://www.healthemergency.gov.au/internet/healthemergency/publishing.nsf/Content/02FA8190C9BD9B01CA2575E2002A77EE/\\$File/H1N1%20Influenza%202009%20noon%2005%20July.pdf](http://www.healthemergency.gov.au/internet/healthemergency/publishing.nsf/Content/02FA8190C9BD9B01CA2575E2002A77EE/$File/H1N1%20Influenza%202009%20noon%2005%20July.pdf)

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



[JULY 2] Pathogenesis and Transmission of Swine-Origin 2009 A(H1N1) Influenza Virus **in Ferrets**. Munster VJ, de Wit E, van den Brand JM, Herfst S, Schrauwen EJ, Bestebroer TM, et al. Science. 2009 Jul 2. [Epub ahead of print]. Abstract only.

<http://www.sciencemag.org/cgi/content/abstract/1177127>



[JULY 2] Transmission and Pathogenesis of Swine-Origin 2009 A(H1N1) Influenza Viruses **in Ferrets and Mice**. Maines TR, Jayaraman A, Belser JA, Wadford DA, Pappas C, Zeng H, et al. Science. 2009

Jul 2. [Epub ahead of print]. Abstract only.

<http://www.sciencemag.org/cgi/content/abstract/1177238v1>



[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>

[JULY 2] Swine flu reaches into the lungs and gut

<http://www.nature.com/news/2009/090702/full/news.2009.617.html>

[JUNE 30] 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>

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

<http://content.nejm.org/cgi/reprint/NEJMra0904322.pdf>

[JUNE 29] The Persistent Legacy of the 1918 Influenza Virus. New England Journal of Medicine.

<http://content.nejm.org/cgi/reprint/NEJMp0904819.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 19] Comment: Patient-oriented pandemic influenza research. Lancet.
[Abstract only.](#)
- [JUNE 19] Editorial: Avoiding panic in a pandemic. Lancet.
[Abstract only.](#)
- [JUNE 19] Letter: H1N1, public health security, bioethics, and human rights. Lancet.
[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>
- [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

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

[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>