

# H1N1 Flu Virus (Human Swine Influenza)

## Information Resources

(last updated May 26th, 2009, 5pm)

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### Overview

- Confirmed cases in Ontario as of **May 25, 3pm**: 352
- Confirmed cases in Canada as of **May 25, 3pm**: 921 (incl. 1 death in AB – PHAC notes the following:
  - Ontario announced in a press release [May 25] that a person with H1N1 flu virus died on May 23, 2009. The case numbers officially reported by Ontario to PHAC today are current up to May 22 at 8:30 a.m. Therefore, the death reported [on May 25] is not currently reflected in the national case count [of May 25], but will be in the next update on May 27 after it is officially reported to PHAC.
- Confirmed cases worldwide as of **May 26, 6am GMT**: 12 954 (incl. 96 deaths)
  - WHO pandemic level: 5
- Today's PROMED postings:  
[http://www.promedmail.org/pls/otn/f?p=2400:1001:2310479613845511::NO::F2400\\_P1001\\_BACK\\_PAGE,F2400\\_P1001\\_PUB\\_MAIL\\_ID:100,77676](http://www.promedmail.org/pls/otn/f?p=2400:1001:2310479613845511::NO::F2400_P1001_BACK_PAGE,F2400_P1001_PUB_MAIL_ID:100,77676)

### MOHLTC Media lines

General Public: Info Line 1-866-532-3161

Media: Media line 416-314-6197 or 1-888-414-4774

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##### **Canada**

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[Center for Infectious Disease Research & Policy](#)

##### **Europe**

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[European Centre for Disease Control and Prevention \(ECDC\)](#)

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[World Health Organization \(WHO\)](#)  
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## Events

### Upcoming

Nothing of interest.

### Archived

[MAY 17] *The Lancet* co-hosted a session on influenza A H1N1 at the European Congress on Clinical Microbiology and Infectious Diseases (ECCMID) in Helsinki, Finland. Over 6,500 delegates from around the globe registered for the meeting. Speakers at the session were Albert Osterhaus (Rotterdam, Netherlands) and Javier Garau (Barcelona, Spain). Video highlights available at link below.

[www.TheLancet.com/H1N1-flu](http://www.TheLancet.com/H1N1-flu).

[MAY 8] Friday May 8, 8pm EST: "The Agenda" on TVO  
The science and politics of swine flu with guests Vivek Goel, Allison McGeer, Andrew Nikiforuk, and Peter Singer.

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



[MAY 25] Ontario Investigates Its First Fatality Associated With H1N1 Flu Virus

Total number of cases in Ontario as of May 25 at 3pm: 352

Dr. David Williams, Ontario's Acting Chief Medical Officer of Health, has confirmed that a person with H1N1 flu virus has died. A 44-year old Toronto man with a chronic pre-existing medical condition passed away on May 23rd. On May 24th laboratory testing confirmed a positive test for H1N1 in this individual. It is not clear what role the H1N1 virus played in the fatality which is now under investigation by the Office of the Chief Coroner. Two people, who have the H1N1 flu virus, are in hospital with a number of underlying medical conditions.

The Ontario cases involve 172 males and 178 females with an age range of <1 to 69. The breakdown by health unit is as follows:

Health Unit	New Confirmed Cases	Total Confirmed Cases
Toronto	32	156
York Region	11	54
Peel Region	7	47
Halton	6	44
City of Ottawa	0	13
Durham Region	1	11
Windsor Essex	0	5
Simcoe Muskoka District	0	5
Waterloo Region	0	2
Sudbury and District	0	3
Hamilton	1	4

Wellington Dufferin Guelph	0	2
Oxford County	0	1
Leeds, Grenville & Lanark	0	1
Middlesex-London	0	1
Hastings and Prince Edward Counties	0	1
Out of province (*)	0	2
<b>TOTAL</b>	<b>58</b>	<b>352</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/may/nr\\_20090525.html](http://www.health.gov.on.ca/english/media/news_releases/archives/nr_09/may/nr_20090525.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

No new H1N1 notices since May 19.

## 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 now updates confirmed case #s only on Mondays, Wednesdays, and Fridays.



As of May 25 2009, a total of 805 laboratory-confirmed cases of H1N1 flu virus have been reported in 9 provinces and 1 territory in Canada

Summary of laboratory-confirmed cases of H1N1 flu virus (Human Swine Flu) reported to the Public Health Agency of Canada, by the provinces and territories:

Province / Territory	New Confirmed Cases	Total Confirmed Cases
British Columbia	0	115
Alberta	2	94
Saskatchewan	14	77
Manitoba	N/R	6
Ontario	58	294
Quebec	42	143

New Brunswick	0	2
Nova Scotia	0	70
Prince Edward Island	0	3
Newfoundland	0	0
Yukon	0	1
Northwest Territories	0	0
Nunavut	0	0
<b>TOTAL</b>	<b>116</b>	<b>921</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)

[MAY 25, 11am] Confirmed and probable cases in the US: 6764 (incl. 10 deaths)

48 states affected. Updates are provided Mon, Wed, and Fri.

Status: Public Health Emergency

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



[MAY 26] DSAT Guidance on CDC Import Permits for Swine-Originated Flu  
<http://www.cdc.gov/h1n1flu/guidance/DSAT.htm>

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

## Center for Infectious Disease Research and Policy

[MAY 22] Comprehensive Overview: Novel H1N1 Influenza (Swine Flu)

<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)



[MAY 26] Confirmed swine flu cases in UK: **184**

[http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb\\_C/1243237495116?p=1231252394302](http://www.hpa.org.uk/webw/HPAweb&HPAwebStandard/HPAweb_C/1243237495116?p=1231252394302)



[MAY 26] Swine-lineage Influenza A H1N1: UK update  
[http://www.hpa.org.uk/web/HPAwebFile/HPAweb\\_C/1243322117077](http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1243322117077)

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

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



[MAY 26, 17:00] Situation report: **414** confirmed cases in EU/EFTA countries  
Developments in the past 24 hours:  
47 new cases in the UK, 44 of which associated with a school outbreak;  
Additional new cases in Ireland (1), Italy (4), Spain (2).  
[http://www.ecdc.europa.eu/en/files/pdf/Health\\_topics/Situation\\_Report\\_090526\\_1700hrs.pdf](http://www.ecdc.europa.eu/en/files/pdf/Health_topics/Situation_Report_090526_1700hrs.pdf)



[MAY 25, 17:00] Situation report: **360** confirmed cases in EU/EFTA countries  
Developments in the past 24 hours:  
First confirmed case reported from the Czech Republic;  
More military under observation in Spain;  
First confirmed cases reported from WHO Eastern Mediterranean Region.  
[http://www.ecdc.europa.eu/en/files/pdf/Health\\_topics/Situation\\_Report\\_090525\\_1700hrs.pdf](http://www.ecdc.europa.eu/en/files/pdf/Health_topics/Situation_Report_090525_1700hrs.pdf)



[MAY 24] Patients needing hospital care because of the new influenza A  
(H1N1) infection – implications for mitigation strategies  
[http://www.ecdc.europa.eu/en/health\\_content/sciadv/090524\\_sciadv.aspx](http://www.ecdc.europa.eu/en/health_content/sciadv/090524_sciadv.aspx)

[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)



[MAY 26] WHO Update 39: 46 countries have officially reported **12 954**  
cases of influenza A(H1N1) infection, including **96** deaths.  
[http://www.who.int/csr/don/2009\\_05\\_26/en/index.html](http://www.who.int/csr/don/2009_05_26/en/index.html)



[MAY 26] Today's WHO Outbreak Map  
[http://www.who.int/csr/don/GlobalSubnationalMaster\\_20090526\\_0800.jpg](http://www.who.int/csr/don/GlobalSubnationalMaster_20090526_0800.jpg)

[MAY 22] Summary report of a High-Level Consultation in Geneva on 18 May 2009: New influenza A (H1N1)  
[http://www.who.int/csr/resources/publications/swineflu/High\\_Level\\_Consultation\\_18\\_May\\_2009.pdf](http://www.who.int/csr/resources/publications/swineflu/High_Level_Consultation_18_May_2009.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)



[MAY 25] Influenza A(H1N1) Regional Report (Epidemiological)

Up to 25 May 2009, **12,014 confirmed cases** of the new virus influenza A (H1N1) infection, including **92 deaths**, have been notified in **15 countries** of the Americas: Argentina, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Honduras Mexico, Panama, Peru and the United States.

[http://new.paho.org/hq/index.php?option=com\\_docman&task=doc\\_download&gid=1727&Itemid=](http://new.paho.org/hq/index.php?option=com_docman&task=doc_download&gid=1727&Itemid=)

[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

[MAY 22] Results are refreshed each time you click on the link.  
<http://www.google.com/cse?cx=014077570761466621685%3As7g-vqj-dmo&cof=FORID%3A11&q=swine+flu&sa=search+influenza+sites>

## Mapping Resources

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)



### 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/>



## 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



Garten Rj et al. Antigenic and Genetic Characteristics of Swine-Origin 2009 A(H1N1) Influenza Viruses Circulating in Humans. Published Online May 22, 2009 *Science* DOI: 10.1126/science.1176225. Abstract only.

<http://www.sciencemag.org/cgi/content/abstract/1176225>

Hobday RA, Cason. The Open-Air Treatment of Pandemic Influenza. *Am J Public Health*. 2009 May 21. [Epub ahead of print]

<http://www.ajph.org/cgi/content/abstract/AJPH.2008.134627v1>

Serum Cross-Reactive Antibody Response to a Novel Influenza A (H1N1) Virus After Vaccination with Seasonal Influenza Vaccine. 2009 May 22;58(19):521-524.

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5819a1.htm>

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>

R. Proff et al. Case-based Surveillance of Influenza Hospitalizations during 2004–2008, Colorado, USA. 2009 June;15(6):892-898.

<http://www.cdc.gov/eid/content/15/6/pdfs/892.pdf>

P.K.C. Cheng et al. Oseltamivir- and Amantadine-Resistant Influenza Viruses A (H1N1). 2009 June;15(6):966-968.  
<http://www.cdc.gov/eid/content/15/6/pdfs/966.pdf>

L.J. Radonovich et al. Stockpiling Supplies for the Next Influenza Pandemic. 2009 June;15(6): online only.  
<http://www.cdc.gov/eid/content/15/6/e1.htm>

Shetty P. Preparation for a pandemic: influenza A H1N1. Lancet Infectious Diseases. 2009 June;9(6):339-340. Abstract only.  
[http://www.lancet.com/journals/laninf/article/PIIS1473-3099\(09\)70130-6/fulltext](http://www.lancet.com/journals/laninf/article/PIIS1473-3099(09)70130-6/fulltext)

Putting influenza A H1N1 in its place [editorial]. The Lancet Infectious Diseases. 2009 June;9(6):331. Abstract only.  
[http://www.thelancet.com/journals/laninf/article/PIIS1473-3099\(09\)70134-3/fulltext](http://www.thelancet.com/journals/laninf/article/PIIS1473-3099(09)70134-3/fulltext).

Cohen J. Past Pandemics Provide Mixed Clues to H1N1's Next Moves. Science. 2009 May 22;324:996-997. Abstract only.  
<http://tinyurl.com/scienceh1n1>

## Historical Resources

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>