

# H1N1 Flu Virus (Human Swine Influenza)

## Information Resources

(last updated May 21st, 2009, 5pm)

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### Overview

- Confirmed cases in Ontario as of **May 20, 3pm**: 272
  - All of the cases reported to date, with the exception of two, are considered mild. Two people, who have the H1N1 flu virus, have been hospitalized with a number of underlying medical conditions.
  - The Ontario cases involve 138 males and 130 females (further information still pending from four other cases) with an age range of 1 to 86.
- Confirmed cases in Canada as of **May 20, 3pm**: 719 (1 death in AB)
- Confirmed cases worldwide as of **May 21, 6am GMT**: 11 034 (incl. 85 deaths)
  - WHO pandemic level: 5

### 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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## Events

### Upcoming

Nothing of interest.

### Archived

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

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)



85 New Confirmed Cases of H1N1 Flu Virus In Ontario [May 20]  
**Total number of cases in Ontario as of May 15/09 at 5pm: 272**

All of the cases reported to date, with the exception of two, are considered mild. Two people, who have the H1N1 flu virus, have been hospitalized with a number of underlying medical conditions.

The Ontario cases involve 138 males and 130 females (further information still pending from four other cases) with an age range of 1 to 86. The breakdown by health unit is as follows:

Health Unit	New Confirmed Cases	Total Confirmed Cases
Toronto	37	110
Peel Region	18	41
York Region	11	38
Halton	10	34
City of Ottawa	6	13
Durham Region	0	10
Windsor Essex	0	5
Simcoe Muskoka District	2	4
Waterloo Region	0	3
Sudbury and District	0	3
Hamilton	0	3
Wellington Dufferin Guelph	1	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>85</b>	<b>272</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\\_20090520.html](http://www.health.gov.on.ca/english/media/news_releases/archives/nr_09/may/nr_20090520.html)

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

Information for Health Professionals: Update [May 19]

[http://www.health.gov.on.ca/english/providers/program/emu/health\\_notice\\_s/ihn\\_20090519.pdf](http://www.health.gov.on.ca/english/providers/program/emu/health_notice_s/ihn_20090519.pdf)

## Ontario Agency for Health Protection and Promotion (OAHPP)

Swine Influenza Outbreak page [no new resources since May 3]

<http://www.oahpp.ca/SRI%20Bulletin.php>

## Public Health Agency of Canada (PHAC)



As of May 20 2009, a total of 719 laboratory-confirmed cases (including 1 death) of H1N1 flu virus have been reported in 9 provinces and 1 territory in Canada [May 20]

As of May 19, 2009, half the cases are 33 years of age or younger (median: 33 years; range: <1 – 86 years). To date, 16 cases have been hospitalized and one death has been reported. The most recent date of symptom onset is May 15, 2009.

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	14	114
Alberta	19	86
Saskatchewan	30	49
Manitoba	2	6

Ontario	97	284
Quebec	59	106
New Brunswick	0	2
Nova Scotia	2	68
Prince Edward Island	0	3
Newfoundland	0	0
Yukon	0	1
Northwest Territories	0	0
Nunavut	0	0
TOTAL	<b>223</b>	<b>719</b>

<http://www.phac-aspc.gc.ca/alert-alerte/swine-porcine/surveillance-eng.php>

News release: Federal Government Provides Update on H1N1 Flu Virus [May 20]

[http://www.phac-aspc.gc.ca/media/nr-rp/2009/2009\\_0520\\_h1n1-eng.php](http://www.phac-aspc.gc.ca/media/nr-rp/2009/2009_0520_h1n1-eng.php)

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)



Confirmed and probable cases in the US [May 21, 11am]: 5,764 (9 deaths)  
Status: Public Health Emergency

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



Translations of the following guidance documents into Arabic, French, Russian and Simplified Chinese (note: most CDC resources on H1N1 are also available in Spanish).

H1N1 flu (swine flu): information for concerned parents and caregivers

Arabic: [http://www.cdc.gov/h1n1flu/Arabic/parents\\_AR.pdf](http://www.cdc.gov/h1n1flu/Arabic/parents_AR.pdf)

French: [http://www.cdc.gov/h1n1flu/Francais/parents\\_FR.pdf](http://www.cdc.gov/h1n1flu/Francais/parents_FR.pdf)

Russian: [http://www.cdc.gov/h1n1flu/Russian/parents\\_RU.pdf](http://www.cdc.gov/h1n1flu/Russian/parents_RU.pdf)

Simplified Chinese:

[http://www.cdc.gov/h1n1flu/Simplified\\_Chinese/parents\\_SCH.pdf](http://www.cdc.gov/h1n1flu/Simplified_Chinese/parents_SCH.pdf)

H1N1 flu (swine flu) and you:

Arabic: [http://www.cdc.gov/h1n1flu/Arabic/qa\\_AR.pdf](http://www.cdc.gov/h1n1flu/Arabic/qa_AR.pdf)

French: [http://www.cdc.gov/h1n1flu/Francais/qa\\_FR.pdf](http://www.cdc.gov/h1n1flu/Francais/qa_FR.pdf)

Russian: [http://www.cdc.gov/h1n1flu/Russian/qa\\_RU.pdf](http://www.cdc.gov/h1n1flu/Russian/qa_RU.pdf)

Simplified Chinese:

[http://www.cdc.gov/h1n1flu/Simplified\\_Chinese/qa\\_SCH.pdf](http://www.cdc.gov/h1n1flu/Simplified_Chinese/qa_SCH.pdf)

Questions and answers: key facts about swine influenza

Arabic: [http://www.cdc.gov/h1n1flu/Arabic/key\\_facts\\_AR.pdf](http://www.cdc.gov/h1n1flu/Arabic/key_facts_AR.pdf)  
French: [http://www.cdc.gov/h1n1flu/Francais/key\\_facts\\_FR.pdf](http://www.cdc.gov/h1n1flu/Francais/key_facts_FR.pdf)  
Russian: [http://www.cdc.gov/h1n1flu/Russian/key\\_facts\\_RU.pdf](http://www.cdc.gov/h1n1flu/Russian/key_facts_RU.pdf)  
Simplified Chinese:  
[http://www.cdc.gov/h1n1flu/Simplified\\_Chinese/key\\_facts\\_SCH.pdf](http://www.cdc.gov/h1n1flu/Simplified_Chinese/key_facts_SCH.pdf)

Hospitalized Patients with Novel Influenza A (H1N1) Virus Infection ---  
California, April--May, 2009, May 18, 2009 / 58(Early Release);1-5  
[http://www.cdc.gov/mmwr/preview/mmwrhtml/mm58e0518a1.htm?s\\_cid=r58e0518a1\\_e](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm58e0518a1.htm?s_cid=r58e0518a1_e)

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

## Center for Infectious Disease Research and Policy

Updated H1N1 Overview [May 20]  
<http://www.cidrap.umn.edu/cidrap/content/influenza/swineflu/biofacts/swinefluoverview.html>

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

## Health Protection Agency (UK)

**NEW** Update on confirmed swine flu cases in UK – 112 confirmed [May 21]  
[http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb\\_C/1242914489962](http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1242914489962)

**NEW** Swine flu: travel advice for the half-term break [May 21]  
"Around the world, 41 countries have reported more than 11,000 cases of swine flu. In many, the position is similar to that of the UK. However travellers should be aware that there is widespread community transmission in North America."  
[http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb\\_C/1242914497046](http://www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1242914497046)

**NEW** Mexico situation update [May 21]  
[http://www.hpa.org.uk/web/HPAwebFile/HPAweb\\_C/1242914495645](http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1242914495645)

Managing a flu-like illness in a boarding school during the current swine flu outbreak (WHO Phase 5; UK Containment Phase)  
[http://www.hpa.org.uk/web/HPAwebFile/HPAweb\\_C/1242549140578](http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1242549140578)

Classification of Swine Influenza Cases [May 20]  
[http://www.hpa.org.uk/web/HPAwebFile/HPAweb\\_C/1242804165710](http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1242804165710)



Managing influenza-like illness (ILI) in nursing and residential homes during the current swine influenza outbreak (WHO Phase 5; UK containment phase) [May 19]

[http://www.hpa.org.uk/web/HPAwebFile/HPAweb\\_C/1242804139580](http://www.hpa.org.uk/web/HPAwebFile/HPAweb_C/1242804139580)

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



Situation report [May 21 at 17:00]: **290** confirmed cases

Developments in the past 24 hours:

- 32% increase in confirmed cases reported by Japan in past 24 hours;
- Canada indicates A(H1N1) infections spreading in the communities very much like regular seasonal influenza;
- US media stressing challenges to respond in a balanced way to A(H1N1) infection.

[http://www.ecdc.europa.eu/en/files/pdf/Health\\_topics/Situation\\_Report\\_090521\\_1700hrs.pdf](http://www.ecdc.europa.eu/en/files/pdf/Health_topics/Situation_Report_090521_1700hrs.pdf)



European Society for Clinical Microbiology and Infectious Diseases Meeting, Helsinki Finland, May 17, 2009 KEYNOTE ADDRESS

<http://mediazone.brighttalk.com/comm/ReedElsevier/66684ac68f-13264-2891-13644>

Frequently asked questions on influenza A(H1N1) virus

[http://www.ecdc.europa.eu/en/files/pdf/Health\\_topics/0905\\_Influenza\\_AH1N1\\_FAQ.pdf](http://www.ecdc.europa.eu/en/files/pdf/Health_topics/0905_Influenza_AH1N1_FAQ.pdf)

Information for travellers regarding the new influenza A (H1N1)

[http://www.ecdc.europa.eu/en/files/pdf/Health\\_topics/090519\\_Influenza\\_A\(H1N1\)\\_Info\\_for\\_travellers.pdf](http://www.ecdc.europa.eu/en/files/pdf/Health_topics/090519_Influenza_A(H1N1)_Info_for_travellers.pdf)



Personal protective measures – in a many languages from EU countries

[http://www.ecdc.europa.eu/en/Health%5Ftopics/novel%5Finfluenza%5Fvirus/2009%5FOutbreak/Personal\\_protective\\_measures.aspx](http://www.ecdc.europa.eu/en/Health%5Ftopics/novel%5Finfluenza%5Fvirus/2009%5FOutbreak/Personal_protective_measures.aspx)

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)



Update 35 [May 21, 06:00 GMT]

41 countries have officially reported 11 034 cases of influenza A(H1N1) infection, including 85 deaths.

[http://www.who.int/csr/don/2009\\_05\\_21/en/index.html](http://www.who.int/csr/don/2009_05_21/en/index.html)



WHO Map for May 21

[http://www.who.int/csr/don/h1n1\\_20090521\\_0600.jpg](http://www.who.int/csr/don/h1n1_20090521_0600.jpg)

Recommendations of the Strategic Advisory Group of Experts (SAGE) on Influenza A (H1N1) vaccines [May 19]

[http://www.who.int/csr/resources/publications/swineflu/SAGEH1N1vaccine\\_recommendation2009\\_05\\_19.pdf](http://www.who.int/csr/resources/publications/swineflu/SAGEH1N1vaccine_recommendation2009_05_19.pdf)

WHO H1N1 Guidance documents:

<http://www.who.int/csr/disease/swineflu/guidance/en/index.html>

For older updates, see

<http://www.who.int/csr/disease/swineflu/en/index.html>

## Pan-American Health Organization (PAHO)



Influenza A(H1N1) Regional Report (Epidemiological) [May 18]

Up to 20 May 2009, **10,061 confirmed cases** of the new virus influenza A (H1N1) infection, including **84 deaths**, have been notified in **14 countries** of the Americas: Argentina, Brazil, Canada, Chile, Colombia, Costa Rica, Cuba, Ecuador, El Salvador, Guatemala, Mexico, Panama, Peru and the United States.

[http://new.paho.org/hq/index.php?option=com\\_content&task=view&id=1390&Itemid=1167](http://new.paho.org/hq/index.php?option=com_content&task=view&id=1390&Itemid=1167)

General recommendations for the organisation of health facilities in countries where cases of influenza A(H1N1) virus have not yet been reported [May 20]

[http://new.paho.org/hq/index.php?option=com\\_docman&task=doc\\_download&gid=1384&Itemid=](http://new.paho.org/hq/index.php?option=com_docman&task=doc_download&gid=1384&Itemid=)

General recommendations for clinical management of influenza A(H1N1) infection cases [May 20]

[http://new.paho.org/hq/index.php?option=com\\_docman&task=doc\\_download&gid=1529&Itemid=](http://new.paho.org/hq/index.php?option=com_docman&task=doc_download&gid=1529&Itemid=)

General recommendations for the organization of health care facilities for the care of influenza A(H1N1) cases [May 20]

[http://new.paho.org/hq/index.php?option=com\\_docman&task=doc\\_download&gid=1533&Itemid=](http://new.paho.org/hq/index.php?option=com_docman&task=doc_download&gid=1533&Itemid=)



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

<http://www.google.com/cse?cx=014077570761466621685%3As7g-vqi-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\\_map.html](http://www.who.int/csr/disease/swineflu/history_map/InfluenzaAH1N1_map.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>

Veratect on Twitter: tracking the swine influenza event with up-to-the-minute information about potential spread of the disease to aid in early response efforts

<http://twitter.com/Veratect>

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)

## 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>

### 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/>

### Lancet

H1N1 Flu Resource Centre [May 13]

Site 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>



Essay: Pandemics: avoiding the mistakes of 1918

<http://www.nature.com/nature/journal/v459/n7245/full/459324a.html>



Commentary: Pandemics: Good hygiene is not enough

<http://www.nature.com/nature/journal/v459/n7245/full/459322a.html>



Things to say when a pandemic seems imminent

[http://www.nature.com/nature/journal/v459/n7245/box/459322a\\_BX1.html](http://www.nature.com/nature/journal/v459/n7245/box/459322a_BX1.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

Makes Disease Briefing on Influenza Covering H1N1 (Swine Flu) Publicly Available

<http://science.thomsonreuters.com/pharma/h1n1/>

## New & Notable Research Articles



Brownstein JS, et al. Influenza A (H1N1) Virus, 2009 — Online Monitoring. NEJM. 2009 May; 360(21):2156.

<http://content.nejm.org/cgi/content/full/360/21/2156?query=TOC>

Cheng PKC, Leung TWC, Ho ECM, Leung PCK, Ng AYY, Lai MYY, et al. Oseltamivir- and amantadine-resistant influenza viruses A (H1N1). Emerg Infect Dis. 2009 Jun; [Epub ahead of print]

<http://www.cdc.gov/eid/content/15/6/pdfs/08-1357.pdf>

Novel Swine-Origin Influenza A (H1N1) Virus Investigation Team.  
Emergence of a Novel Swine-Origin Influenza A (H1N1) Virus in Humans  
N Engl J Med. 2009 May 7. [Epub ahead of print]  
<http://content.nejm.org/cgi/reprint/NEJMoa0903810.pdf>

Shinde V, Bridges CB, Uyeki TM, et al. Triple-Reassortant Swine Influenza A (H1) in Humans in the United States, 2005–2009. N Engl J Med. 2009 May 7. [Epub ahead of print].  
<http://content.nejm.org/cgi/reprint/NEJMoa0903812.pdf>

Fraser C. et al. Pandemic Potential of a Strain of Influenza A (H1N1) :  
Early Findings. Science. 2009 May 11. [Epub ahead of print]. [Abstract  
only].  
<http://www.sciencemag.org/cgi/content/abstract/sci;1176062v1?maxtoshow=&>

## 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>