

**WEEKLY SYNTHESIS OF SURVEILLANCE INFORMATION, LITERATURE &
 GOVERNMENT UPDATES
 (WEEK 25- ENDING IN JUNE 26, 2009)**

CASE COUNTS:

As of June 29, 2009, over 95 countries have officially reported 70,893 cases of influenza A (H1N1) infection, including 311 deaths. Please see hyperlinks in table for most up to date case counts.

Countries/Provinces	Case counts	Deaths	Hospitalizations
CANADA (PHAC)	7,983	25	547
- BC	270	0	6
- AB	880	1	34
- SK	739	2	9
- MB	599	2	83
- ON	3154	9*	147*
- QC	1834	11	247
- NB	9	0	0
- NS	138	0	1
- PEI	3	0	0
- NL	32	0	0
- Yukon	1	0	0
- NWT	7	0	0
- Nunavut	310	0	20
U.S. (CDC)	27,717	127	
E.U. and EFTA (ECDC)	6173	2	
Mexico	8279	116	
Chile	5186	7	
Australia	4038	7	
New Zealand	587	-	
TOTAL (WHO)	70,893	311	

Note: PHAC numbers updated last at 3:00pm (EST) on June 29; CDC numbers updated last at 11:00 am on June 26; ECDC numbers updated last at 5:00pm (CEST) on June 29; WHO numbers updated last 7:00am (GMT) on June 29.

NOTE: Testing parameters are influenced by the most current knowledge of the H1N1 virus and risk groups. Therefore, the frequency of laboratory tests conducted and the risk groups that are being tested may change over time.

***Source: MOHLTC as of June 29 2009**

CURRENT HOSPITALIZATIONS AMONG NOVEL H1N1 INFLEUNZA A VIRUS CASES IN ONTARIO, AS OF JUNE 29, 2009

As of June 29, 2009 in Ontario:

- 147 confirmed cases have been hospitalized to date
- Of these, 99 cases have been discharged.
- The average length of stay was 4.5 days, ranging from under 24 hours to 20 days.
- Among cases that are currently or have previously been hospitalized, a number of complex medical conditions have been reported (for example, COPD, kidney disease, heart disease diabetes, etc).
- Of the 48 cases that are currently hospitalized

Hospitalization Status	Total
Number of Currently Hospitalized	48
Number of Hospitalized and Discharged	99

Source: MOHLTC Daily Summary, iPHIS data as of 8:30 am, June 25, 2009.

Government Updates

Centre for Disease Control (CDC)

[Weekly Flu View Map and Surveillance Report for Week Ending June 20th, 2009](#)

Map includes both seasonal flu and H1N1 flu activity. During week 24, (June 14- June 20 2009), influenza activity decreased in the US, however there are still higher levels of ILI than is normal for this time of year. Approximately 99% of all influenza A subtyped viruses being reported to CDC this week are influenza A H1N1 virus. Five influenza-associated pediatric deaths were reported and four of the five deaths were associated with pandemic influenza A (H1N1) virus infection. The proportion of outpatient visits for influenza-like illness (ILI) was below the national baseline. Two of the 10 surveillance regions reported ILI above their region-specific baseline.

[General Business and Workplace Guidance for the Prevention of Novel Influenza A \(H1N1\) Flu in Workers.](#)

This guidance has been updated as of Jun 25, 2009 to state that a worker who has been exposed to a person with pandemic influenza A (H1N1) may continue to go to work unless he/she becomes ill.

[CDC: Strategy to enhance influenza surveillance worldwide.](#) Ortiz, JR, Sotomayor, V., Uez, OC, et al. Full text available online. August 2009. The article describes a sentinel surveillance system that could enhance the quality of influenza epidemiologic and laboratory data and strengthen a country's

capacity for seasonal, novel, and pandemic influenza detection and prevention. Hospital-based sentinel surveillance is explained as the most efficient way to collect clinical data and laboratory specimens from persons with a prevalent and severe infectious disease.

B.C. Centre for Disease Control (BC CDC)

[June 30 2009 News Alert](#): H1N1 continues to be transmitted throughout the province, and in recent weeks BC has seen an increase in the number of lab confirmed cases of H1N1, as well as an increase in doctor visits by patients experiencing influenza-like illness. BC is working closely with health professionals and camp organizers across the province to draft guidelines on reducing the spread of influenza in summer camps.

Public Health Agency of Canada (PHAC)

[FluWatch Week 24 \(June 14 to June 20 2009\)](#)

There is an increase in transmission, however, the illness from the H1N1 flu virus has been mild thus far. Of those hospitalized cases, more than 35% were reported this week. Children less than 10 years were particularly affected, accounting for almost a third of the hospitalized cases. Cases with known information provided have at least one or more underlying medical condition.

World Health Organization (WHO)

[WHO Influenza A\(H1N1\) - update 54 -- As of 07:00 GMT, 29 June 2009](#)

The breakdown of the number of laboratory-confirmed cases by country is given in the following table and map.

European Centre for Disease Prevention & Control (ECDC)

[The Influenza A \(H1N1\) ECDC situation report from June 29, 2009](#). Cumulative number of cases in EU and EFTA countries are now 6118, including two deaths. The majority of all cases have been found in Spain and the UK.

[ECDC Director speech "Strengthening Europe's defences against influenza and other infectious diseases"](#) from June 24 2009. Speech to International Conference on Strengthening Cooperation in the European Union against Infectious Diseases, Warsaw, 24 June

HEALTH/SURVEILLANCE BULLETINS:

SOUTHERN HEMISPHERE

Australia

June 29 2009: Seven Australian deaths have been recorded to date. Five have been in Victoria, one in South Australia and one in West Australia. All deaths had underlying medical conditions as well as testing positive to H1N1 Influenza.

June 29 2009: Total confirmed cases as of 1700 AEST are 4038; National breakdown includes: Australian Capital Territory 161, New South Wales 908, Northern Territory 160, Queensland 588, South Australia 311, Tasmania 82, Victoria 1599 and Western Australia 229.

Currently 50 people in hospital around Australia with H1N1 Influenza and 18 of these are in intensive care units. The total number of hospitalizations in Australia since H1N1 Influenza was identified is 200.

June 25 2009: Indigenous Australians recognized in H1N1 Influenza Health Response
Australia's Chief Medical Officer has today reiterated that Indigenous Australians living in remote communities are being targeted in this new health management phase, PROTECT, with responses that are flexible to meet the individual circumstances in communities The Commonwealth has made Tamiflu available to various regions in Australia from the National Medical Stockpile for pre-deployment in communities. The use of Tamiflu will be judged clinically on a case by case basis, depending on the risk of influenza to vulnerable individuals.

June 17 2009: Australia has developed a new response phase to manage the outbreak of H1N1 Influenza 09 called [PROTECT \(see link\)](#).

PROTECT is a measured, reasonable and proportionate health response to the risk that the infection poses to the Australian community. It is consistent with the message from the WHO when changed its pandemic alert from 5 to 6 that countries will need to adjust their responses to accommodate the knowledge about the disease.

South America & the Americas

As of June 26 2009: In Chile, children between 5-19yrs have been most affected, constituting 61% of cases. Chile has 5, 186 confirmed cases and 7 deaths. Age range of cases: 1-93yrs, Median: 13yrs. In Brazil, of 271 confirmed cases, 50% have been under 27yrs. Age range: 1-65yrs. (Based on national and regional data reported June 23-26, 2009.) Argentina has 1, 488 confirmed cases and 23 deaths.

[Argentina: Health Minister Resigns Over Handling of Flu Cases](#)

June 29 2009: Argentina's health minister, Graciela Ocana, resigned yesterday, citing differences with the government on the handling of pandemic flu and a previous dengue fever outbreak. Meanwhile, a crisis committee will meet today to discuss raising the response level, according to a local media report, which could close schools and other public places and curb mass gatherings.

As of 26 June 2009, 53,685 confirmed cases of Influenza A H1N1 2009 infection, including **302 deaths**, have been notified **in 28 countries of the Americas**. [See PAHO link](#).

June 25 2008: Interactive Map of confirmed H1N1 cases can be seen [here](#). The map illustrates the number of H1N1 confirmed cases by county and regions with most number of cases. Chile represents the country with the highest number of confirmed cases in South America.

OTHER:

[Saudi Arabia asks high-risk groups to skip hajj](#)

June 30 2009: Saudi Arabian health officials who just concluded a 4-day meeting with international health experts to discuss pandemic flu risks related to the hajj today advised that children, pregnant women, elderly people, and those with chronic health conditions avoid the annual pilgrimage. The 4-day hajj starts in late November this year and is expected to attract about 3 million pilgrims.

[Indonesia to ask foreign visitors to wear masks](#)

June 30 2009: Indonesia's health minister that visitors arriving at the country's airports from nations hit by novel flu will be asked to wear a mask for 3 days. The masks are a precautionary measure to reduce human-to-human transmission. The masks will be handed out to international visitors as soon as funding for them comes through; however, those who don't wear them will not be penalized.

Center for Infectious Disease Research and Policy (CIDRAP)

June 29 2009: Novel H1N1 flu can cause severe respiratory illness

Novel H1N1 influenza can cause severe respiratory illness, profound lung damage, and death even in patients with no underlying conditions to make them vulnerable, a team of physicians from Mexico report in a rush article published online today by the *New England Journal of Medicine (NEJM)*.

June 26, 2009: CDC: Flu activity picks up pace, hits summer camps

An official from the US Centers for Disease Control and Prevention (CDC) said today that the nation just saw its largest weekly increase in cases since the beginning of the novel flu outbreak and that the virus has so far been detected at 34 summer camps in 16 states.

June 26, 2009: Texas program aims for Web-based school flu surveillance

A web-based system that permits school nurses to submit daily reports on absenteeism and ILI directly to the health department. The same system allows public health to analyze the data in a more automated fashion and to provide abundant information to school nurses via the web.

June 25 2009: Pandemic reveals strengths of new flu database

The Global Initiative on Sharing All Influenza Data (GISAID), a nonprofit foundation based in Washington, DC, that was formed to share genetic data from H5N1 and other influenza viruses. The database, which contains both human and animal influenza sequences as well as epidemiologic and clinical data, plays a vital role in sharing and archiving influenza viruses. GISAID's EpiFlu database provides a more complete picture of the flu data. It includes some flu sequences that have not been made available to the public and permits scientists to submit extra information, such as clinical features, when they upload sequences.

June 25, 2009: CDC updates advice on antiviral treatment for flu

According to the CDC update, only patients who test positive for influenza A/H3N2, pandemic H1N1, or B should receive oseltamivir. Zanamivir (Relenza) is preferred for patients who test positive for seasonal H1N1 influenza.

PROMED

1) INFLUENZA A (H1N1) - TAMIFLU RESISTANCE, DENMARK

Date: June 29 2009

Source: BBC News [edited]

<http://news.bbc.co.uk/1/hi/health/8124987.stm>

2) Canada - Ontario: institutional respiratory outbreaks

Date: Wed 24 Jun 2009

From: Jonathan Gubbay

Respiratory infection outbreaks in institutions during the novel influenza A H1N1 virus pandemic in Ontario

3) US Department of Health and Human Services (HHS)

HHS Announces Advanced Development Contract for New Way to Make Flu Vaccine

Journals scanned:

- American Journal of Public Health
 - British Medical Journal
 - Clinical Infectious Diseases
 - Emerging Infectious Diseases
 - Eurosurveillance
 - Journal of Clinical Virology
 - Journal of Infectious Diseases
 - Lancet
 - MMWR
 - Nature
 - New England Journal of Medicine
 - PLoS One
 - Science
-

American Journal of Public Health

Nothing new since June 18

British Medical Journal (BMJ)

1) Podcast: Swine flu: update interview with the HPA

June 23 09 Birte Twisselmann

This podcast is an update on “Swine flu ” and discusses the move from containment to mitigation. This podcast is also available as a BMJ Learning module. As the status of the pandemic, and the official guidance for health professionals, is subject to change, UK GPs should refer directly to the Health Protection Agency (HPA) website (HPA .org.uk) for the most up to date information.

Clinical Infectious Diseases

1) A Quantitative Assessment of the Efficacy of Surgical and N95 Masks to Filter Influenza Virus in Patients with Acute Influenza Infection

D. F. Johnson, J. D. Druce, C. Birch, and M. L. Grayson, 2009; 49:275–277

The study assessed the in vivo efficacy of surgical and N95 (respirator) masks to filter reverse transcription-polymerase chain reaction (RT-PCR) detectable virus when worn correctly by patients with laboratory-confirmed acute influenza. Of 26 patients with a clinical diagnosis of influenza, 19 had the diagnosis confirmed by RT-PCR, and 9 went on to complete the study. Surgical and N95 masks were equally effective in short periods in preventing the spread of PCR-detectable influenza.

2) Emerging Infections: Human Infection with Highly Pathogenic Avian Influenza A (H5N1) Virus: Review of Clinical Issues

Timothy M. Uyeki, 2009;49:279–290

This article provides an updated review of the clinical issues related to human infection with highly pathogenic avian influenza A (H5N1) virus. The clinical data available to date are presented, as well as recent findings on the pathogenesis of and antiviral treatment and immunotherapy for H5N1 virus infection in humans and animal models.

Emerging Infectious Diseases

1) Use of Revised International Health Regulations during Influenza A (H1N1) Epidemic, 2009

R. Katz et al. August 2009, Full text available online free

This report describes a timeline of events that led to the determination of the epidemic as a public health emergency of international concern, following the agreed upon procedures of the International Health Regulations. These events illustrate the need for sound international health agreements and should be a call to action for all nations to implement these agreements to the best of their abilities.

2) Reproducibility of Serologic Assays for Influenza Virus A (H5N1)

I. Stephenson et al. August 2009, Full text available online free

Hemagglutination-inhibition (HI) and neutralization are used to evaluate vaccines against influenza virus A (H5N1). Having effective vaccines against influenza virus A (H5N1) is a public health priority. However, interlaboratory assay variation limits comparison of vaccine strategies without direct comparative studies. This study compared the reproducibility of hHI and neutralization against a candidate standard.

Eurosurveillance

Nothing new since June 17

Journal of Infectious Diseases

Nothing new since June 18

Journal of Clinical Virology

1) [Evaluation of multiple test methods for the detection of the novel 2009 influenza A \(H1N1\) during the New York City outbreak.](#) June 16 2009

Little was known about the performance of the assays for the detection of novel H1N1 in the background of seasonal H1N1, H3N2 and other circulating respiratory viruses. This study analyzed the performances of the BinaxNOW Influenza A&B test, the 3M Rapid Detection Flu A + B test (3MA + B), direct immunofluorescence, R-Mix culture and the Luminex xTAG Respiratory Virus Panel (RVP). nRapid antigen tests, DFA, R-Mix culture and the xTAG RVP test all detected the novel H1N1 strain, but with highly varied sensitivity. The RVP test provided the best diagnostic option as RVP demonstrated superior sensitivity for the detection of all influenza strains, including the novel H1N1, provided accurate influenza A subtyping and identified a significant number of additional respiratory pathogens.

Lancet

1) [Prepared for a pandemic? I don't think so](#) Baker, S., Early Online Publication, 19 June 2009,

This is a commentary on the experience of a British physician when her child's school confirms its first H1N1 case.

2) [Avoiding Panic in a Pandemic](#), Editorial

This editorial explains that countries should tailor their pandemic plans to the severity of an influenza A (H1N1) outbreak in their populations. But the authors explain that countries must also remain vigilant and be prepared for the situation to worsen.

Lancet Infectious Diseases

1) [Reacting to the emergence swine-origin influenza A H1N1](#) Ong, Catherine et al., [Volume 9, Issue 7](#), Pages 397 - 398, July 2009

The initial perception of high mortality among young Mexicans coupled with its rapid spread worldwide raised the spectre of the devastating severe acute respiratory syndrome (SARS) epidemic of 2003. Influenza A H1N1 is virologically and epidemiologically a different virus from SARS. It remains to be seen if the measures taken by previously SARS-affected countries will be cost-effective in the control of pandemic influenza. The authors suggest a crucial need for well designed prospective quasiexperimental studies to evaluate these responses.

Morbidity and Mortality Report (MMWR)

Nothing new since last week.

Nature

1) Origins and evolutionary genomics of the 2009 swine-origin H1N1 influenza A epidemic

Gavin J. D. Smith, et al. 1122-1125 (25 June 2009) Letter

Results highlight the need for systematic surveillance of influenza in swine, and provide evidence that the mixing of new genetic elements in swine can result in the emergence of viruses with pandemic potential in humans. The results suggest that transmission to humans may have occurred several months before recognition of the current outbreak

2) Infectious diseases: Swine flu origin unwrapped

Felix Cheung (24 June 2009) Research Highlights

The authors describe using evolutionary analyses to estimate the timescale of the origins and the early development of the epidemic. The results of their analyses showed a well-established swine influenza lineage in H1N1. However, this lineage is possible only if the virus had been circulating in swine for 10 years or more before the outbreak.

3) Science journalism: The Arab boom

Nadia El-Awady 1057-1057 (24 June 2009)

Before a single H1N1 case had hit the country, to help limit infection Egypt's Minister of Health called for prayers and university exams to be held in open spaces rather than in mosques or enclosed rooms. Egyptian newspapers reported that the Ministry of Agriculture had banned all imports of pig gut and hair used in the manufacture of surgical threads and shaving brushes. Uncritical reporting of these policies by Egypt's media led to unnecessary panic among the general population. A lack of scientific sources in Arabic, limits available information and participation in international events.

4) miRNAs target the flu

Tim Fulmer , (18 June 2009)

Mount Sinai researchers have used microRNA to generate influenza strains that are attenuated in humans but not in chicken eggs. The strategy could potentially lead to safe and effective live attenuated influenza vaccines with high manufacturing yields.

New England Journal of Medicine (NEJM)

1) Severe Respiratory Disease Concurrent with the Circulation of H1N1 Influenza

Chowell, G., Bertozzi, SM, Colchero, MA, Lopez-Gatell H., Alpuche-Aranda, C., Hernandez, M., & Miller, MA.

In the spring of 2009, an outbreak of severe pneumonia was reported in conjunction with the concurrent isolation of a novel swine-origin influenza A (H1N1) virus (S-OIV) in Mexico. During the study period, 87% of deaths and 71% of cases of severe pneumonia involved patients between the ages of 5 and 59 years, as compared with average rates of 17% and 32%, respectively, in that age group during the referent periods. Features of this epidemic were

similar to those of past influenza pandemics in that circulation of the new influenza virus was associated with an off-season wave of disease affecting a younger population. During the early phase of the pandemic, there was a sudden increase in the rate of severe pneumonia and a shift in the age distribution of patients with such illness, which was similar to past pandemics. This also suggests relative protection for persons who were exposed to H1N1 strains during childhood before the 1957 pandemic. These findings suggest a rationale for focusing prevention efforts on younger populations.

2) Pneumonia and Respiratory Failure from Swine-Origin Influenza A (H1N1) in Mexico

Perez-Padilla,R., Rosa-Zamboni,D., Ponce de Leon,S., Hernandez, M., Quiñones-Falconi, F., Bautista,E., Ramirez-Venegas, A.,Rojas-Serrano,J., et al.

In late March 2009, an outbreak of a respiratory illness later proved to be caused by novel swine-origin influenza A (H1N1) virus (S-OIV) was identified in Mexico. This study describes the clinical and epidemiologic characteristics of persons hospitalized for pneumonia at the national tertiary hospital for respiratory illnesses in Mexico City who had laboratory-confirmed S-OIV infection. A total of 18 cases of pneumonia and confirmed S-OIV infection were identified among 98 patients hospitalized for acute respiratory illness. Over 50% of the 18 case patients were between 13 and 47 years of age, and only 8 had preexisting medical conditions. Twelve patients required mechanical ventilation, and seven died. S-OIV infection can cause severe illness, the acute respiratory distress syndrome, and death in previously healthy persons who are young to middle-aged.

3) Historical Perspective — Emergence of Influenza A (H1N1) Viruses

Shanta M. Zimmer,, and Donald S. Burke

The study reviews the series of evolutionary and epidemiologic events, starting in 1918, that led to the emergence of the current swine-origin influenza A (H1N1) strain (S-OIV). This article is one of two historical articles on influenza A (H1N1) viruses in this issue of the NEMJ. This articles focuses on the key steps that characterize this viral evolution.

4) The Persistent Legacy of the 1918 Influenza Virus

Morens, DM, Taubenberger,JK, and Fauci, AS

This article reviews the complex epidemiological history of the novel influenza A H1N1 virus. The current international pandemic caused by a novel influenza A (H1N1) virus derived from two unrelated swine viruses, one of them a derivative of the 1918 human virus, adds to the complexity surrounding this persistent progenitor virus, its descendants, and its several lineages. The authors describe the viruses' historical features of genetic mixing both within human viruses and between avian and swine adapted influenza viruses, and evolution in response to the selection pressures of herd immunity in various populations at various points in time

5) Spread of a Novel Influenza A (H1N1) Virus via Global Airline Transportation

Khan, K. et al.

International air travelers departing from Mexico were unknowingly transporting a novel influenza A (H1N1) virus to cities around the world throughout March and April 2009. Flight itineraries for all passengers departing from commercial airports in Mexico between March and April 2008 were analyzed using data from the International Air Transport Association (IATA). The researchers compared the international destinations of travelers departing from Mexico with confirmed H1N1 importations associated with travel to Mexico, and found a strong degree of correlation. Of the 20 countries worldwide with the highest volumes of international passengers arriving from Mexico, 16 had confirmed importations associated with travel to Mexico. International air travel and H1N1 importation revealed that countries receiving more than 1400 passengers from Mexico were at a significantly elevated risk for importation of H1N1.

6) Rapid-Test Sensitivity for Novel Swine-Origin Influenza A (H1N1) Virus in Humans

Faix, D. et al.

The Naval Health Research Center serves as the Navy hub for the Department of Defense's Global Emerging Infections Surveillance and Response System (GEIS), in which it monitors influenza-like illness among recruit trainees of all military service members. The first two human cases of novel swine-origin influenza A (H1N1) virus in the United States were detected through these programs. The centre processed 3066 specimens with the use of a real-time reverse-transcriptase-PCR (RT-PCR) assay. The study findings suggest that rapid-test sensitivity may vary according to the influenza A subtype. Further investigation is needed to confirm this finding and evaluate possible explanations.

PLoS One

1) Severe Human Influenza Infections in Thailand: Oseltamivir Treatment and Risk Factors for Fatal Outcome / Wanna Hanshaoworakul et al. June 25, 2009

Thailand's National Avian Influenza Surveillance (NAIS) system was used to describe the epidemiology of laboratory-confirmed severe and fatal human influenza infections. A retrospective medical record review conducted on all fatal cases with laboratory confirmed influenza and a sample of hospitalized cases revealed the following risk factors for fatal outcome from human influenza infection: current or former smoking, advanced age, hypertension and underlying cardiovascular, pulmonary or endocrine disease. Treatment with Oseltamivir was statistically associated with survival after controlling for age.

2) A Trivalent Virus-Like Particle Vaccine Elicits Protective Immune Responses against Seasonal Influenza Strains in Mice and Ferrets / Ted M. Ross et al., June 24, 2009

U.S. researchers have engineered an influenza virus-like particle (VLP) as a new generation vaccine candidate. A seasonal trivalent VLP vaccine (TVV) formulation, composed of influenza A H1N1 and H3N2 and influenza B VLPs, was evaluated in mice and ferrets. The trivalent VLP vaccine was found to elicit a broad array of immune response that protected against influenza virus challenge.

Science

Only 1 blog entry JUNE 26, 2009

1) [Swine Flu Strikes Hog Farm in Argentina](#)

An outbreak of swine influenza A (H1N1) on a pig farm in Buenos Aires was reported on Wednesday by SENASA, Argentina's food safety agency. Five animals have tested positive. It is believed that the pigs were infected by a human, as no pigs were introduced to the farm for at least 60 days. This marks the second known instance of the pandemic virus infecting pigs after a reported infection on an Alberta farm.

NEWS CLIPS

The Ottawa Sun, June 30 2009

Patients left in dark by lack of flu testing "We've been taking these swabs and they haven't been testing."

The Toronto Star

When viruses book a flight; Toronto doctor's system of analyzing air traffic to map potential hotbeds first tested with swine flu

The Ottawa Citizen

Pregnant women warned of flu risk; Those with underlying conditions also particularly vulnerable

The Hamilton Spectator

H1N1's severity in healthy people under 20 concerns officials

The Canadian Press, June 29 2009

Danish patient has first reported case of Tamiflu-resistant swine flu, health officials say

Dreading your flu shot? Get ready for triple dose

The Toronto Star, June 29 2009

Employers quietly hoard anti-flu drugs

The Toronto Star, June 27, 2009

Nursing grads to help Manitoba reserves in swine flu crisis; U of T program sending six students to hard-hit northern communities

The Thunder Bay Chronicle- Journal, June 27, 2009

Ontario hopes to bring lab testing of H1N1 virus in line with rest of country

The Ottawa Citizen, June 29 2009

Pandemic planning not priority for business; Private sector more concerned about economy than H1N1 virus

The Ottawa Citizen, June 27 2009

At least one million in US infected by H1N1 virus: official

Daily Miner News, June 27 2009

NAN chief calls for cohesive action on H1N1 outbreak

The Toronto Sun, June 29 2009

Swine flu not so mild, experts warn

Reuters, June 25 2009

WHO chief states that H1N1 is stable

- WHO says that the H1N1 virus is stable and there are no sign of it mixing with avian flu or other influenza viruses

Reuters, June 24 2009

Argentina reinforces hospital capacity as flu strikes hard

- 21 confirmed deaths from the new strain of the virus is putting Argentina third after Mexico and the US in the number of fatal cases.