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# WEEKLY SYNTHESIS OF SURVEILLANCE INFORMATION, LITERATURE & GOVERNMENT UPDATES

## (WEEK 29- ENDING IN JULY 31, 2009)

### HOSPITALIZATION & DEATH COUNTS:

The WHO will no longer issue the global tables showing the numbers of confirmed cases for all countries. Thus, the reported cases presented in this table will severely underestimate the true incidence in the country and will not be comparable to counties still recommending laboratory tests of all suspected influenza cases. The following table provides global updates on H1N1-associated deaths. Please see hyperlinks in table for most up to date counts.

| COUNTRIES/PROVINCES | DEATHS | HOSPITALIZATIONS* |
|---|---|---|
| **CANADA (PHAC)** | **59** | **1271** |
| - BC | 2 | 25 |
| - AB | 5 | 114 |
| - SK | 4 | 22 |
| - MB | 7 | 201 |
| **- ON**** | **19** | **326** |
| - QC | 20 | 564 |
| - NB | 0 | 1 |
| - NS | 1 | 10 |
| - PEI | 0 | 1 |
| - NL | 0 | 1 |
| - Yukon | 0 | 0 |
| - NWT | 0 | 0 |
| - Nunavut | 1 | 42 |
| **U.S. (CDC)** | **353** | **5514** |
| **E.U. and EFTA (ECDC)** | 39 | 889† |
| **Mexico** | 146 | |
| **Chile** | 79 | |
| **Argentina** | 165 | |
| **Australia** | 61 | 2525 |
| **New Zealand** | 13 | |
| **TOTAL** | **1,148** | |

*Note: PHAC numbers updated last at 4:00pm (EST) on July 30; CDC numbers updated last at 11:00 am on July 30; ECDC numbers updated last at 5:00 pm (CEST) on July 31 2009.*
** Source: PHAC Flu Watch, Week 29 ending July 25 2009.*
*** Source: Ontario Flu Bulletin as of July 29, 2009.*
† Source: ECDC as of July 31, 2009.

## DEATHS AMONG NOVEL H1N1 INFLUENZA A VIRUS, APRIL 13-JULY 29, 2009

- 19 deaths have been reported, representing a population-based mortality rate of 0.1 deaths per 100,000 population.
- Almost all of these fatalities were hospitalized prior to death (84%).
- Age of fatal cases ranged from 6 to 81 years of age; median is 58 years and the average age is 56 years.
- Among confirmed cases that have died, 14 or 74% had underlying chronic medical conditions compared to 57% of hospitalized cases.

## HOSPITALIZATIONS AMONG NOVEL H1N1 INFLUENZA A VIRUS CASES

As of July 29, 2009 in Ontario:

- 326 confirmed cases have been hospitalized to date, also representing a population-based hospitalization rate of 2.5 hospital admissions per 100,000 population in Ontario.
- Of these, 277 cases have been discharged.
- The average length of stay was less than 24 hours to 67 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).
- 88% of cases that were discharged had a length of stay of at least 2 days
- Of the 49 cases are currently hospitalized, a total of 27 were placed on a ventilator and/or were admitted to ICU.

| HOSPITALIZATION STATUS | VENTILATOR AND/OR ICU | NOT IN ICU AND NOT ON VENTILATOR | TOTAL |
|---|---|---|---|
| Number of Currently Hospitalized | 27 | 22 | 49 |
| Number of Hospitalized and Discharged | 33 | 243 | 276 |
| Total hospitalized to date | 60 | 265 | 325* |

Source: MOHLTC Ontario Influenza Bulletin, iPHIS data as of 8:30 am, July 29, 2009.
***** Excludes case with a length of stay of less than 24 hours

| HOSPITALIZATION STATUS | HOSPITALIZED CASES* | NON-HOSPITALIZED CASES | TOTAL CASES |
|---|---|---|---|
| Less than 20 years | 156 | 2192 | 2348 |
| Greater than or equal to 20 years | 169 | 1410 | 1579 |
| Total | 325 | 3602 | 3927 |

Source: MOHLTC, iPHIS data as of 8:30 am, July 29, 2009. Age was unknown for 11 cases

## GOVERNMENT UPDATES

### CENTRE FOR DISEASE CONTROL (CDC)

**July 31, 2009: CDC H1N1 Flu Surveillance Update.**
http://www.cdc.gov/h1n1flu/update.htm

**Weekly Flu View Map and Surveillance Report for Week Ending July 25, 2009**. Map includes both seasonal flu and H1N1 flu activity. During week 29, (July 19—July 25 2009), influenza activity decreased in the US, however there are still higher levels of ILI than is normal for this time of year. Approximately 98% of all influenza A subtyped viruses being reported to CDC this week are influenza A H1N1 virus. The proportion of deaths attributed to pneumonia and influenza (P&I) was below the epidemic threshold. Two influenza-associated pediatric deaths were reported and both were associated with novel influenza A (H1N1) virus infection. The proportion of outpatient visits for influenza-like illness (ILI) was below national and region-specific baseline levels.
http://www.cdc.gov/flu/weekly/

**July 30, 2009: Managing Calls and Call Centers during a Large-Scale Influenza Outbreak: Implementation Tool.**
During a response to a large-scale influenza outbreak such as the current H1N1 outbreak, a community's 9-1-1 and healthcare systems may experience a surge in calls or walk-in visits for care, advice, and information. This implementation tool provides a step-by-step approach to achieving this objective by focusing on alternative call center resources.
http://www.cdc.gov/h1n1flu/callcenters.htm

**July 30, 2009: Novel H1N1 Vaccination Recommendations**
With the new H1N1 virus continuing to cause illness, hospitalizations and deaths in the US during the normally flu-free summer months and some uncertainty and about what the upcoming flu season might bring, CDC's Advisory Committee on Immunization Practices has taken an important step in preparations for a voluntary novel H1N1 vaccination effort to counter a possibly severe upcoming flu season.
http://www.cdc.gov/h1n1flu/vaccination/acip.htm

**July 29, 2009: Interim Guidance for the Detection of Novel Influenza A Virus Using Rapid Influenza Diagnostic Tests.**
This interim guidance provides an overview of the sensitivities of rapid influenza diagnostic tests (RIDT) in detecting novel influenza A (H1N1) virus in order to help guide the reporting and interpretation of test results.
http://www.cdc.gov/h1n1flu/guidance/rapid_testing.htm

**July 24, 2009: Novel H1N1 Vaccination Guidance for State, Local, Tribal and Territorial Health Officials**- information for vaccine planners.
http://www.cdc.gov/h1n1flu/vaccination/statelocal/

### PUBLIC HEALTH AGENCY OF CANADA (PHAC)

**FluWatch Week 29 (July 19–25, 2009)**
The overall influenza activity increased slightly this week ; the national ILI consultation rate (19 consultations per 1,000 visits vs. 21) and long-term care facilities (0 vs. 2) are lower compared to the last week. However, the proportion of influenza positive tests

decreased for the fifth consecutive week. In addition, the proportion of influenza positive tests decreased for the sixth consecutive week. Approximately 90% of all hospitalized cases and 85% of deaths have been reported in 4 provinces (QC, ON, MB, AB). The first Canadian case of oseltamivir resistance was reported on 21 July, 2009 in Quebec.
http://www.phac-aspc.gc.ca/fluwatch/08-09/w29_09/index-eng.php

**July 30, 2009: Deaths Associated with H1N1 Flu Virus in Canada**
The Public Health Agency of Canada (PHAC) is committed to sharing information about the impact of the H1N1 flu virus in Canada. Every Tuesday and Thursday at 4 p.m., the Agency will issue national updates on H1N1-associated deaths. In addition, PHAC will issue special reports on any unusual cases or clusters.
http://www.phac-aspc.gc.ca/alert-alerte/swine-porcine/surveillance-eng.php

**July 29, 2009:** Canadian government guidance on H1N1 prevention and control
http://www.phac-aspc.gc.ca/media/nr-rp/2009/2009_0729-eng.php

**July 29, 2009:** Workers in Long-Term Care facilities - Infection Control
http://www.phac-aspc.gc.ca/alert-alerte/swine-porcine/hp-ps/prevention-eng.php

**July 28, 2009**: Workers in Acute Care facilities - Infection Control
http://www.phac-aspc.gc.ca/alert-alerte/swine-porcine/hp-ps/ig_acf-ld_esa-eng.php

**July 28, 2009:** Interim Guidance on Infection Control in PreHospital Care
http://www.phac-aspc.gc.ca/alert-alerte/swine-porcine/hp-ps/pc-sp-eng.php

## WORLD HEALTH ORGANIZATION (WHO)

**July 27, 2009:** WHO offices issue pandemic flu surveillance updates. The World Health Organization (WHO) recently posted surveillance and status updates for regions where the pandemic H1N1 is just gaining a foothold, including the Mideast, Africa, and parts of Asia and the Pacific, which showed Southeast Asia as the hardest hit of those areas.
http://www.who.int/csr/don/2009_07_27/en/index.html

**July 31, 2009:** Pandemic influenza in pregnant women.
http://www.who.int/csr/disease/swineflu/notes/h1n1_pregnancy_20090731/en/index.html

## EUROPEAN CENTRE FOR DISEASE PREVENTION & CONTROL (ECDC)

**July 31, 2009: Planning assumptions for the First Wave of Pandemic A (H1N1) 2009 in Europe.**
As it is summer in Europe the 2009 pandemic has yet to really accelerate in EU countries but the experience in temperate Southern Hemisphere countries suggests it is inevitable that Europe will be affected by a major first A (H1N1) 2009 pandemic wave in the autumn and winter.
http://ecdc.europa.eu/en/health_content/phdev/090729_ph.aspx

**July 31, 2009: ECDC situation report (daily surveillance report).**
http://www.ecdc.europa.eu/en/files/pdf/Health_topics/Situation_Report_090730_1700hrs.pdf

## HEALTH/SURVEILLANCE BULLETINS:

Countries reporting first case(s) of pandemic H1N1

**July 30, 2009**: *Moldova* - Moldova's health ministry reported the country's first pandemic H1N1 case, in a 24-year-old woman who had recently taken a 2-week trip in Europe. In other developments, Azerbaijan reported its first two novel flu cases, in a 14-year-old boy and a woman. Both were returning from European countries and were screened and identified at the airport as they returned home.
http://www.dailymail.com/ap/ApWorld/200907300226

Southern Hemisphere

**Australia**

**July 31, 2009:** Total confirmed cases as of 1200 AEST are 21,668; Total deaths associated with pandemic H1N1 influenza is 61. Currently, there are 416 hospitalized cases of pandemic H1N1 and 108 of these are in ICUs. The total number of hospitalizations in Australia since H1N1 Influenza was identified is 2525.

**July 25, 2009:** Concerns about spread of Pandemic (H1N1) 2009 influenza on return to school. With the reopening of schools after the school holidays across Australia parents and schools need to follow simple measures to reduce the transmission of H1N1 Influenza 09 in the school community. For example, if children develop influenza-like symptoms, it is important that parents keep them away from school until they are well.

**Australia, New South Wales: Weekly Summary (as of July 29, 2009)**
http://www.emergency.health.nsw.gov.au/swineflu/resources/pdf/case_statistics_290709.pdf

**New Zealand**

**July 27, 2009:** New Zealand now has 2662 laboratory-confirmed cases. The level of illness would be much higher than the number of laboratory-confirmed cases reported daily. Testing is now done only in the management of severe cases.
http://www.moh.govt.nz/moh.nsf/indexmh/influenza-a-h1n1-update-116-270709

**New Zealand: Weekly Summary (July 20-26, 2009)**
There has been a slightly decrease in consultations for influenza-like illness through sentinel surveillance in week 30 (20-26 July 2009). However, the weekly ILI consultation rate is still higher than previous years for the same week. The highest weekly ILI rates were reported from Hutt, Otago and Canterbury health districts. So far, the highest ILI consultation rates have been reported among children and teenagers aged 0 to 19 years.
http://www.surv.esr.cri.nz/PDF_surveillance/Virology/FluWeekRpt/2009/FluWeekRpt200930.pdf

**South America & the Americas**

**July 31, 2009**: Argentina's pandemic H1N1 cases have peaked, and so far the death rate from the disease seems to be less than for seasonal flu, said public health experts. Quoted in a July 31st Associated Press (AP) report. However, one official said the

disease has had its greatest impact on young people. With more than a month left of the country's flu season, scientists report that viruses isolated in Argentina are nearly identical to those circulating in North America.
http://www.reflector.com/news/world/argentina-experts-see-no-swine-flu-mutation-_-yet-749798.html

**July 27, 2009:** El Salvador extends school vacation to battle pandemic. El Salvador announced it will extend a scheduled school vacation to 2 weeks to fight the spread of the H1N1 flu. School vacations that began yesterday and last from 2 days to a week, depending on the region, will be extended until Aug 10. The action will affect nearly 2 million students. The country has had 545 confirmed cases of H1N1 flu, including seven fatal ones.
http://news.yahoo.com/s/ap/20090728/ap_on_re_la_am_ca/lt_salvador_swine_flu

## CENTER FOR INFECTIOUS DISEASE RESEARCH AND POLICY (CIDRAP)

**July 30, 2009:** Packaging, not yield, may be problem for nasal-spray H1N1 vaccine.
http://www.cidrap.umn.edu/cidrap/content/influenza/swineflu/news/jul3009medimmune.html

**July 30, 2009:** Canadian officials hold off on flu vaccine priority list. Canadian health officials said yesterday that they would wait until at least September to finalize pandemic H1N1 vaccine priorities, Canwest News Service reported today. Dr. David Butler-Jones, chief public health officer, said authorities still have time to assess developments, such as the southern hemisphere's evolving flu season. Yesterday US officials recommended five priority groups to receive the vaccine, with pregnant women topping the list.

**July 29, 2009:** Japan finds two more Tamiflu-resistant H1N1 cases. Japan has detected two more cases of Tamiflu-resistant pandemic H1N1 flu, Alexander Klimov, PhD, of the CDC's flu surveillance branch, revealed at the CDC's vaccine advisory committee today. He also said that Chinese officials revealed during a World Health Organization conference call that they may have one more antiviral-resistant case. Klimov said all cases so far have been linked to Tamiflu prophylaxis or treatment, except for one involving an American girl who was diagnosed in Hong Kong.

**July 29, 2009:** Study on pandemic flu risks in pregnancy finds antiviral treatment delays. Pregnant women who have pandemic H1N1 influenza infection appear to be at greater risk of complications, but some healthcare providers have been hesitant to treat them early with antivirals despite recommendations to do so, researchers from the US Centers for Disease Control and Prevention (CDC) reported today.
http://www.cidrap.umn.edu/cidrap/content/influenza/swineflu/news/jul2909pregnancy.html

**July 28, 2009:** Pregnant women bear disproportionate share of flu deaths. About 6% of pandemic H1N1 deaths in the United States have occurred in pregnant women, though they make up just 1% of the population. The numbers are based on 266 detailed death reports that the Centers for Disease Control and Prevention (CDC) has received. Fifteen deaths occurred in pregnant women. The CDC's vaccine advisory committee meets tomorrow and is expected to list pregnant women among the high-priority groups to receive the pandemic H1N1 vaccine.
http://www.google.com/hostednews/ap/article/ALeqM5jgQXxHCPrh-RrvL-bJ_wMc4Q5NVgD99NCHIO1

**July 28, 2009:** Chinese officials say policy of quarantining foreigners is working. Chinese authorities assert that their aggressive quarantine policy to prevent foreign visitors from spreading H1N1 flu has worked well. Officials say China has had few cases and proudly note that no deaths have been reported. But the newspaper tells the story of an American woman who said her surgery for appendicitis was delayed because of the quarantine policy. More than 1,800 Americans have been quarantined in China since the start of the pandemic.

**July 28, 2009:** Canadian cities group says national pandemic plan is lacking. The head of the Federation of Canadian Cities has charged that Canada has no national plan for protecting critical frontline workers such as police, firefighters, and transit workers. In an open letter to federal Health Minister Leona Aglukkaq, Basil Stewart said Canada's pandemic plan does not say who will have priority access to vaccines and antivirals. A spokesman for Aglukkaq said ongoing epidemiologic studies will guide vaccine allocation.

**July 28 2009:** WHO to probe antiviral use patterns. A World Health Organization (WHO) spokeswoman said today that the agency will host a technical teleconference soon to discuss antiviral use during the H1N1 pandemic and the risks of antiviral resistance, Agence France-Presse reported. Countries vary in their use of oseltamivir (Tamiflu). Some use it widely for prevention and treatment of mild cases, while others are reserving it for infections in high-risk groups and for severe cases. So far, five antiviral-resistant cases have been identified

## JOURNALS SCANNED:

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

## AMERICAN JOURNAL OF PUBLIC HEALTH

- Nothing new on H1N1 this week

## BRITISH MEDICAL JOURNAL

1) Doctors call for guidance on how to prioritise critically ill patients in swine flu pandemic *(Rebecca Coombes, July 29, 2009)*
http://www.bmj.com/cgi/content/full/339/jul29_3/b3092?q=w_pandemic_flu

Pressure is expected on critical care beds this autumn, as the A/H1N1 influenza pandemic is set to enter a severe phase. However, the Department of Health has yet to

clarify how it plans to meet demand, according to a House of Lords report this week. The House of Lords Science and Technology Committee heard in May that strategies would be introduced to boost intensive care capacity. Some health workers have raised concerns about ethical issue regarding the provision of services if the capacity for critical care is exceeded.

2) Tom Nolan: Critical care and panic pandemic *(Juliet Walker, July 27, 2009)*
http://blogs.bmj.com/bmj/2009/07/27/critical-care-and-the-pandemic-panic/?q=w_pandemic_flu

A "panic pandemic" is worsening the crisis in the UK said health ministers over the weekend. People who are not sick are becoming anxious regarding influenza A H1N1 are overwhelming health services in Britain. Opposition parties blame the government for launching the national flu pandemic service too late. The government says that they were advised by doctors to wait as long as they did. The writer points to a study that modeled outcomes from the pandemic in London. While the estimates for hospital admissions may not be completely accurate, there is a possibility that the critical care capacity will be exceeded.

3) EU Prepares new guidelines for monitoring swine flu *(Rory Watson, July 24, 2009)*
http://www.bmj.com/cgi/content/full/339/jul24_1/b3012

The European Centre for Disease Prevention and Control is planning to issue new surveillance advice to national authorities of the A/H1N1 influenza pandemic. The suggest that countries that have become overwhelmed with monitoring all cases of influenza A H1N1 limit reporting to only the most severe cases. This is in line with advice from the WHO, which has said that if the caseload becomes too high, governments should work on qualitative indicators that provide an overall impression of the situation. These would cover geographical spread, trends and intensity of the pandemic, and its overall impact on a country's health system.

4) Swine flu website inundated as cases in England double in a week *(Nayanah Siva, July 24, 2009)*
http://www.bmj.com/cgi/content/full/339/jul24_2/b3029

The Department of Health for England said that the number of cases of influenza A/H1N1 has almost doubled, increasing to 100,000, from about 55,000 a week ago. This led to more people trying to access the government's new flu website. The website was overwhelmed with 9.3 million hits per hour. The website capacity was increased fourfold in order to accommodate all viewers. It is hoped that this service will help relieve some of the pressure on physicians, as people with mild symptoms can consult the website and not their GP.

5) Predicting and preparing for pandemic flu *(Fiona Godlee, July 24, 2009)*
http://www.bmj.com/cgi/content/full/339/jul23_1/b2988

This editorial stresses the importance of accurate forecasting in the influenza A(H1N1) pandemic in order to plan for the coming months.

6) A/H1N1 influenza virus: the basics *(Geoff Watts, July 24, 2009)*
http://www.bmj.com/cgi/content/full/339/jul24_2/b3046

Do you know your H1N1s from your H2N2s? Journalist Geoff Watts explains the basic science of the influenza virus. He includes topics such as genetic variants of influenza, antigenic 'shift' and 'drift', and evolution and cross-species movements. He also gives reasons to remain optimistic throughout the pandemic.

7) A/H1N1 Influenza Update *(Adrian O'Dowd, July 23, 2009)*
http://www.bmj.com/cgi/content/full/339/jul23_1/b2977

Journalist Adrian O'Dowd reports on the most up to date information regarding pandemic influenza A (H1N1). He answers such questions as: 'What more do we know about A/H1N1 compared with two months ago?' 'What are the latest predictions on how serious this virus is?' And 'What are the likely arrangements for distribution of the A/H1N1 vaccine?'

## CLINICAL INFECTIOUS DISEASES

- Nothing new on H1N1 this week

## EMERGING INFECTIOUS DISEASES

1) Policy Review: Strategy to Enhance Influenza Surveillance Worldwide *(Justin R. Ortiz)*
http://www.cdc.gov/eid/content/15/8/1271.htm

This review 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. This system would 1) provide data for a better understanding of the epidemiology and extent of seasonal influenza, 2) provide a platform for the study of other acute febrile respiratory illnesses, 3) provide virus isolates for the development of vaccines, 4) inform local pandemic planning and vaccine policy, 5) monitor influenza epidemics and pandemics, and 6) provide infrastructure for an early warning system for outbreaks of new virus subtypes.

2) Perspective: Use of Revised International Health Regulations during Influenza A (H1N1) Epidemic, 2009 *(Rebecca Katz)*
http://www.cdc.gov/eid/content/15/8/1165.htm

Strong international health agreements and good planning created a structure and common procedure for nations involved in detection and evaluation of the emergence of influenza A (H1N1). 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.

3) More Diseases Tracked by Using Google Trends *(Camille Pelat et al.)*
http://www.cdc.gov/eid/content/15/8/1327.htm

The ability of Internet search-engine query data to predict influenza in the United States presented by Ginsberg et al. appears to have a broader application for surveillance of other infectious diseases in other countries. The authors looked at Google search queries for 3 diseases (influenza-like-illness, gastroenteritis and chicken pox) over a period of 5 years. They found that their queries were highly correlated with disease incidence, based on French surveillance data.

## EUROSURVEILLANCE

1) Oseltamivir adherence and side effects among children in three London schools affected by influenza A(H1N1)v, May 2009 – an internet-based cross-sectional survey *(A Kitching. et al., July 30, 2009)*
http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19287

This report describes the results of a survey on adherence to, and side effects from oseltamivir for prophylaxis for pupils from schools with confirmed cases of influenza A(H1N1)v in London in April-May 2009. Less than half (48%) of primary schoolchildren completed a full course, compared to three-quarters (76%) of secondary schoolchildren. More than half (53%) of all schoolchildren taking prophylactic oseltamivir reported one or more side effects. Gastrointestinal symptoms were reported by 40% of children and 18% reported a mild neuropsychiatric side effect. The results confirmed anecdotal evidence of poor adherence, provided information to assist decision-making, and formed part of the body of evidence that contributed to policy changes to restrict widespread use of prophylaxis for school contacts of confirmed cases of influenza A(H1N1)v.

2) Compliance and side effects of prophylactic oseltamivir treatment in a school in South West England *(A Wallensten and D. Olivier., July 30, 2009)*
http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19285

The authors evaluated the protective effect, compliance with and side effects of oseltamivir chemoprophylactic treatment with a ten-day course given to 11-12-year-old pupils in one school year in a secondary school in South West England. Compliance with chemoprophylaxis was high, 77% took the full course, 91% took at least seven days. Fifty-one percent experienced symptoms such as feeling sick (31.2%), headaches (24.3%) and stomach ache (21.1%). Compliance with oseltamivir chemoprophylaxis was high, although likely side effects were common. The burden of side effects needs to be considered when deciding on mass oseltamivir chemoprophylaxis in children especially given that the symptoms of A(H1N1)v influenza are generally mild.

3) Pandemic influenza A(H1N1)v viruses currently circulating in New Zealand are sensitive to oseltamivir *(R J Hall, et al., July 30, 2009)*
http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19282

New Zealand, like other southern hemisphere countries with a temperate climate, has been in the winter period with seasonal influenza activity. New Zealand has also experienced a dramatic increase in the number of cases of pandemic influenza A(H1N1)v virus. Early reports from the northern hemisphere at the beginning of the pandemic showed that the virus was sensitive to the antiviral drug oseltamivir. In this study we report that pandemic influenza A(H1N1)v viruses currently circulating in New Zealand are sensitive to oseltamivir, but seasonal influenza A(H1N1) viruses – the co-circulating predominant seasonal strain, is resistant to oseltamivir.

4) Epidemiologic analysis of the laboratory-confirmed cases of influenza A(H1N1)v in Colombia *(M Á Castro-Jiménez et al., 30 July 2009)*
http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19284

From 2 May to 16 July 2009, a total of 183 laboratory-confirmed cases of influenza A(H1N1)v were reported in Colombia, 117 (63.9%) of these had travelled outside the country. Hospital admission was necessary in 26 (14.21%) cases and seven patients

died (fatality-case ratio: 3.8%). The infection affected younger age-groups and the symptoms most frequently reported were cough, fever and sore throat. Our findings are consistent with recent reports from other countries.

5) How the media reported the first days of the pandemic (H1N1) 2009: results of EU-wide media analysis *(B Duncan, July 30, 2009)*
http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19286

The European Centre for Disease Prevention and Control (ECDC) commissioned an in-depth review of European media coverage of the opening days of the pandemic (H1N1) 2009. A total of 3,979 articles were collected from 31 European countries in the period 27 April until 3 May 2009. National and international public health authorities were by far the leading source of information on the new virus. They were identified as the main source of information in 75% of the articles analyzed. 94% of the articles were either neutral, relaying factual information (70%), or expressing support for the authorities' handling of the situation (24%). These results seem to vindicate the communication strategy adopted by the public health authorities.

## JOURNAL OF INFECTIOUS DISEASES

1) Editorial Commentary: Influenza in Hospitalized Adults: Gaining Insight into a Significant Problem *(Michael G. Ison, August 15, 2009)*
http://www.journals.uchicago.edu/doi/full/10.1086/600384

The author summarizes the Lee et al. study in this issue of Journal of Infectious Diseases and compares it to other similar retrospective studies regarding influenza among hospitalized adults. Taken together all of these studies help to understand differences between clinical presentation and course of influenza in ambulatory and hospitalized adults.

2) Viral Loads and Duration of Viral Shedding in Adult Patients Hospitalized with Influenza *(Nelson Lee, August 15, 2009)*
http://www.journals.uchicago.edu/doi/full/10.1086/600383

Study investigators measured viral RNA concentrations prospectively in 147 hospitalized patients with influenza A (H3N2), to determine factors associated with viral loads and viral shedding. Major co morbidities, advanced age and systemic corticosteroid use were associated with persistent viral RNA detection. Treatment with antiviral medication within the first 4 days of symptoms shortened the duration of viral RNA detection. Viral RNA clearance was associated with a shorter hospital stay.

## LANCET

1) H1N1 2009 influenza virus infection during pregnancy in the USA *(Denise J Jamieson et al., 29 July 2009)*
http://www.lancet.com/journals/lancet/article/PIIS0140-6736(09)61304-0/fulltext

The authors summarized cases of pandemic H1N1 virus in pregnant women identified in the USA during the first month of the present outbreak, and deaths associated with the virus during the first 2 months of the outbreak. The Centers for Disease Control and Prevention (CDC) systematically collected additional information about cases and deaths in pregnant women with pandemic H1N1 infection as part of enhanced

surveillance.The estimated rate of admission to hospital for influenza a H1N1 infection in pregnant women during the first month of the outbreak was higher than it was in the general population. These data lend support to the present recommendation to promptly treat pregnant women with H1N1 influenza infection with anti-viral drugs.

## THE LANCET INFECTIOUS DISEASES

-Nothing new on H1N1 this week

## MORBIDITY AND MORTALITY WEEKLY REPORT (MMWR)

1) Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices (ACIP), 2009 *(Anthony E. Fiore et al., July 31, 2009*)
http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5808a1.htm?s_cid=rr5808a1_x

This report updates the 2008 recommendations by CDC's Advisory Committee on Immunization Practices (ACIP) regarding the use of influenza vaccine for the prevention and control of seasonal influenza. Information on vaccination issues related to the recently identified novel influenza A H1N1 virus will be published later in 2009. Vaccination efforts should begin as soon as vaccine is available and continue through the influenza season. Approximately 83% of the United States population is specifically recommended for annual vaccination against seasonal influenza; however, <40% of the U.S. population received the 2008--09 influenza vaccine.

## NATURE

1) U.S. puts flu vaccines on trial *(Declan Butler, July 28, 2009)*
http://www.nature.com/news/2009/090728/full/460562a.html?s=news_rss

The US National Institute of Allergy and Infectious Diseases (NIAID) announced last week that it will begin five clinical trials for two pandemic H1N1 influenza vaccines in early August. These trials will help inform a likely US mass-vaccination campaign beginning in September. NIAID director Anthony Fauci talks about what vaccines were chosen, and why.

## NEW ENGLAND JOURNAL OF MEDICINE

- Nothing new on H1N1 this week.

## PLOS ONE

1) 2009 Swine-origin Influenza A (1=H1N1) resembles previous influenza isolates *(Carl Kingsford, Niranjan Nagarajan, Steven L. Salzberg, July 29 2009)*
http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0006402

The study investigators conducted a comprehensive computational search of all available sequences of the surface proteins of H1N1 swine influenza isolates and found that a similar strain to S-OIV appeared in Thailand in 2000. Their main result is that no other sequenced examples of this triple-reassortant swine influenza A pattern besides the discussed Thai isolates could be found. Among publicly available sequences these isolates represent the complete catalog of such events. The collection shows that this has happened at least twice within the past ten years and that all previous such sequenced reassortments were collected in Thailand.

2) Assessment of Local Public Health Workers' Willingness to Respond to Pandemic Influenza through Application of the Extended Parallel Process Model *(Daniel J. Barnett et al., July 29, 2009)*
http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0006365

The authors used Witte's Extended Parallel Process Model (EPPM) as a lens for examining the influences of perceived threat and efficacy on local public health workers' response willingness to pandemic influenza.. Reported unwillingness to respond by approximately 1 in 6 means that additional efforts are required to increase and sustain the proportion of local health department employees willing to respond. Our data indicate that 'concerned and confident' local public health employees are most likely to be willing to respond to an influenza pandemic. This finding may allow public health agencies to design, implement, and evaluate training programs focused on emergency response willingness in health departments.

## SCIENCE

1) Laurie Garrett Interview: U.S. Global Health Leader MIA on Swine Flu *(Helen Branswell, July 28, 2009)*
http://blogs.sciencemag.org/scienceinsider/2009/07/laurie-garrett.html

In an interview with *Science*Insider last week, Laurie Garrett, a senior fellow for global health at the Council on Foreign Relations (CFR) in New York City, decried the Obama Administration's failure to appoint a head for the little known Office of Global Health Affairs within the Department of Health and Human Services (HHS). This failure, she argues, has far-reaching consequences for the H1N1 pandemic and international relations in general. She particularly worried that the Administration has not squarely addressed the issue of H1N1 vaccine supply for the world, and urges the government to see the central role the United States could play in assuring that equity prevails.