pH1N1 Flu Virus (Human Swine Influenza)  
Information Resources  
Current as of May 7, 2010 at 12 pm

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Current / Upcoming

[JUN 21-22] H1N1: The world responds to a 21st century pandemic (London, UK)
This international conference will bring together scientists, academics and public health professionals to examine what we have learned since the appearance of H1N1 in April 2009, and the knowledge gained from the global effort can be used in preparing for future pandemic response.

Archived

[ARCHIVED] "H1N1 and Pregnancy: Key Considerations for Vaccination and Management": Online learning program for health professionals
To access the program, go to:
www.mdBriefCase.com (for physicians)
www.rxBriefCase.com (for pharmacists)
www.AdvancingIn.com (for nurses and other healthcare professionals)

[ARCHIVED] COCA conference calls

[ARCHIVED] U.S. DHHS H1N1 Video Briefing archive

[ARCHIVED] Know what to do about the flu: webcast series from the U.S flu.gov

Lessons Learned: Jurisdictional Scan [back to top]

H1N1 LESSONS LEARNED [Part I]: Pandemic underscored influenza's unpredictability

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H1N1 LESSONS LEARNED [Part III]: Vaccination campaign weathered rough road, paid dividends

Australia probes seasonal flu vaccine reactions in children
Australia's chief medical officer asked providers to stop giving children under age 5 the seasonal flu vaccine made by CSL Ltd after receiving reports of fever and convulsions in kids in Western Australia who had recently been immunized.

1976 'swine flu' vaccine may offer pandemic H1N1 protection
The long-derided "swine flu" vaccination campaign of 1976, infamous for its association with cases of paralyzing Guillain-Barre syndrome, may have had a benefit that went undetected for more than 30 years. According to work published Apr 23, it may have protected recipients against the 2009 pandemic strain of flu.

Researchers find lessons in first NYC H1N1 deaths
In the early days of the H1N1 flu pandemic, a large outbreak at a New York City high school sent a strong signal of the virus's wide reach beyond southwestern states, and a review of the first several deaths in that city shows which patients were most at risk and how early antiviral treatment was vital.

**ERs felt pandemic flu fear before flu itself**
Two newly released studies conducted at the University of Utah confirm what many physicians suspected: The news of the start of the H1N1 pandemic in late April 2009 caused panicked parents to bring children to emergency departments in droves -- but what was driving those ER visits was not flu symptoms, but rather the fear of flu.

**WHO panel offers clinical profile of H1N1**
A panel of experts assembled by the World Health Organization (WHO) has published a clinical profile of pandemic H1N1 influenza, using data from scores of studies to fill in details of the broad picture that has emerged over the past year.

**CDC joins WHO push for better hand hygiene in healthcare**
A day before the May 5 call to action from the World Health Organization (WHO) to improve hand hygiene practices in healthcare workers, the Centers for Disease Control and Prevention (CDC) held a clinicians teleconference on the topic and said it would unveil a new online resource tomorrow as part of the day’s events.

**The social distancing law project template: a method for jurisdictions to assess understanding of relevant legal authorities**

**Letter:** Risk of fatal adverse events after H1N1 influenza vaccination

**Rapid Testing for Pandemic Influenza A (H1N1): Diagnostic Test Utility and Specimen Source**

**Modeling the economic impact of pandemic influenza: a case study in Turkey**

**Strengthening community partnerships with local public health through regional pandemic influenza exercises**

**Shedding and Transmission of Novel Influenza Virus A/H1N1 Infection in Households--Germany, 2009.**

**An audit of pandemic (H1N1) 2009 influenza vaccine wastage in general practice.**
Preparing for pandemic influenza and its aftermath: mental health issues considered.

Ministry of Health and Long-Term Care
Ontario Influenza Bulletin: SURVEILLANCE WEEK 16 (April 18, 2010 – April 24, 2010)
- Influenza activity in Ontario was similar compared to the previous reporting period (April 11 to April 17, 2010).
- Slightly more patients reporting influenza-like symptoms consulted sentinel physicians during this week than during last week.
- The rate of influenza-like illness (ILI) in patients seen by sentinel physicians is lower than what is expected based on the average rate at this time of year for past seasons.
- No health units reported localized or sporadic influenza activity for the current reporting period. 31 health units reported no influenza activity. The remaining five health units did not report.
- Between April 1, 2009 and April 19, 2010, there were 8,761 laboratory confirmed cases of H1N1 flu virus reported in Ontario, through the integrated Public Health Information System (iPHIS).

Ontario Agency for Health Protection and Promotion
OAHPP public health laboratories pandemic H1N1 surveillance reports
- May 3, 2010
- April 26, 2010

Public Health Agency of Canada (PHAC)
No items of interest this week.

Centers for Disease Control and Prevention (CDC) & US Department of Health and Human Services
UPDATE: Weekly FluView Map and Surveillance Report for Week Ending May 1, 2010
During week 17 (April 24 - May 1, 2010), influenza activity decreased in the U.S. 16 (0.9%) specimens tested by U.S. World Health Organization (WHO) and National Respiratory and Enteric
Virus Surveillance System (NREVSS) collaborating laboratories and reported to CDC/Influenza Division were positive for influenza.

UPDATE: Questions and Answers about Updating Guidance on Infection Control Measures for Influenza in Healthcare Settings
CDC is updating the Interim Guidance on Infection Control Measures for 2009 H1N1 Influenza in Healthcare Settings, Including Protection of Healthcare Personnel. Circumstances have changed significantly with respect to availability of a safe and effective vaccine, and in terms of what we know about the health impact of the novel H1N1 influenza strain. The guidance is being updated to reflect newer information.

Center for Infectious Disease Research and Policy [back to top]

Pandemic may force UK primary-care cuts (2010-05-06)
The cost borne by primary care practices in England to combat pandemic H1N1 flu may lead to cuts in services, The Guardian reported today. A survey of 107 primary care practices found that each practice paid an average of $512,000 (US) to fight novel H1N1. This may lead one in six of the practices to cut other services, and some have already made cuts. A British Medical Association official said the government should foot the pandemic bill rather than individual practices.

New Zealand sees increase in flu-like illness (2010-05-06)
As New Zealand heads into its traditional flu season, its Ministry of Health (MOH) said today that surveillance data from physicians' offices and the national Healthline hotline show a continued increase in those reporting influenza-like illness. Though numbers are still below baseline, they are higher than at this time last year. The MOH, which advised people to get vaccinated and to be treated at the first signs of symptoms, said the increase could signal higher pandemic flu activity.

Swap-meet clinics bring vaccine to Hispanics (2010-05-06)
California has devised a unique way to reach Hispanics, who have been hit particularly hard by pandemic flu. Public health officials are setting up clinics at popular weekend swap meets such as the Kern County Fairgrounds meet in Bakersfield. Nurses with the Kern County Public Health Department administer free H1N1 vaccine amid the food booths and discount merchandise. One nurse said, "We're using up a lot more vaccines than we would've if we had them just coming in to our clinics."

Most key US flu indicators decline (2010-04-23)
In its weekly update, the CDC reports that most key US flu indicators declined slightly from the previous week and overall flu activity is low. Doctor visits and hospitalizations for H1N1 are at low levels, and no pediatric deaths were reported for the week ending Apr 17. The proportion of deaths for pneumonia and influenza was up slightly, but not higher than expected. For the first time since the week ending Dec 13, 2008, no states are reporting widespread or regional flu activity.

H1N1 can lead to respiratory failure in pregnant women (2010-04-23)
A report in Obstetrics & Gynecology describes three H1N1-infected pregnant women, two of whom had no underlying conditions, who experienced acute respiratory failure but delivered healthy babies—twins for one woman and triplets for another. None of the patients tested positive for pandemic flu initially, but early oseltamivir was administered because of their clinical presentation. All required respiratory support and were discharged in good condition 12 to 77 days after hospitalization.
H1N1 far deadlier than seasonal flu in pregnancy (2010-04-23)
Another Obstetrics & Gynecology study determined that novel H1N1 causes far more deaths than seasonal flu in pregnant women. Researchers found that, between 1998 and 2005, 78 pregnant women died from influenza or pneumonia, according to CDC data, and 40 of these deaths occurred during flu season, for a rate of 5 flu-related deaths per year. This compares with 28 lab-confirmed H1N1 deaths in pregnant women for the first 4 months of the pandemic alone.

Australia's number of suspected vaccine reactions grows (2010-04-26)
The number of children in West Australia who had convulsions or fever and vomiting after receiving a seasonal flu vaccine that covers the pandemic strain has grown to 251, the Australian Broadcasting Corporation (ABC) reported today. Officials say the immunizations likely came from multiple batches. Queensland is also investigating the possibility of adverse reactions in children, and police in Brisbane are probing the death of a recently vaccinated 2-year-old, according to other ABC reports.

HHS vaccine advisors to probe GBS-vaccine findings (2010-04-26)
The vaccine advisory group of the US Department of Health and Human Services voted unanimously to explore recent findings that may suggest a Guillain-Barre syndrome link to the pandemic vaccine, the Washington Post reported. A member of the National Vaccine Advisory Committee said the possible link would likely disappear with further analysis and that no other safety monitoring systems detected such a link. The initial GBS findings were presented at a neurology meeting in mid April.

Cuba reports rise in flu infections (2010-04-26)
Cuba's number of pandemic H1N1 infections continues to grow for the fifth week in a row, with 93 new cases reported to the country's national flu lab, Cuban News Agency (ACN) reported. The rising infections prompted a warning from national health authorities for the public to follow hygiene measures and seek medical care at the first sign of flu-like symptoms. Cuba recently launched its pandemic vaccination campaign, and health workers have so far immunized 981,130 people from high-risk groups.

Clues elusive in Australian kids' apparent reactions to flu vaccine (2010-04-27)
In the latest developments surrounding suspected adverse reactions to the seasonal flu vaccine in Australian children, an autopsy revealed no clear link to immunization in the death of a 2-year-old, and vaccine maker CSL said it has found no evidence of a bad batch connected to cases reported so far.

Australia widens probe into flu-vaccine events (2010-04-28)
Australia's Therapeutic Goods Administration has widened its probe into CSL's seasonal flu vaccine, which includes the pandemic strain, after children receiving the shot had fevers and convulsions, according to Bloomberg News. The agency asked all states and territories to examine all reports of fever in children under 5 for evidence of any pattern. Also, New Zealand reported today that five children experienced convulsions after flu vaccinations, according to news reports in that country.

Standard case definition might not fit mild H1N1 (2010-04-28)
Researchers found that the commonly used CDC case definition may not work for detecting mild pandemic H1N1 flu. They reviewed medical records of 44 patients with lab-confirmed H1N1 who were hospitalized in early summer 2009 and found that many of them had no fever. They found cough to be a more sensitive H1N1 indicator. The authors conclude that "the standard case definition for 2009 H1N1 influenza has low sensitivity for mild influenza infection."

Seasonal flu vaccine uptake rose in 2009-10 (2010-04-29)
Seasonal influenza vaccination coverage for the 2009-10 season surged in children and rose
moderately in healthy young adults, perhaps because of increased awareness triggered by the H1N1 flu pandemic, the Centers for Disease Control and Prevention (CDC) reported today.

**CDC: Flu subsides across US** (2010-04-30)
Visit to doctors for flu-like illness, hospitalizations for lab-confirmed flu, and the proportion of deaths attributable to pneumonia and influenza all continue to decline in the United States or have leveled off, the Centers for Disease Control and Prevention (CDC) said today. No flu-related deaths among children were reported in the past week. No states are experiencing widespread or regional flu, and only two have enough reports of illness to qualify as having "local" flu activity.

**Australia: No contamination in flu vaccine** (2010-04-30)
Australian health authorities said today they have found no abnormalities in their current flu vaccine, despite the apparent spike in fever and convulsions among young children recently vaccinated against flu. Tests by manufacturers, a government body, and independent experts have found no contamination. Authorities said the cases may be a statistical artifact of many more shots being given than in past years; Western Australia, where the cases have occurred, has administered 2 million doses.

**Researchers profile kidney injury in severe flu infections** (2010-04-30)
In a report on acute kidney injury (AKI) in severe pandemic H1N1 infections, researchers at a hospital in Australia said that 8 of 13 patients admitted to the intensive care unit had AKI. Three patients met kidney-failure criteria and received renal replacement therapy. The findings were reported in the Apr 20 issue of *Contributions to Nephrology*. Mortality in the AKI patients was about 25%. Histology from one of the patients showed typical acute tubular necrosis.

**Australian study finds waste with multidose vaccine vials** (2010-05-03)
To gauge Australian doctors' use of pandemic flu vaccine in multidose vials, not routinely used in that country, researchers polled general practices in Sydney and found that about 42% of vaccine was wasted in the first month of the campaign. Less waste occurred with 10-dose vials than with 20-dose vials. There was no difference between solo and group practices. The group concluded that the vials are inefficient for general practice use and that greater use of 10-dose vials could reduce waste.

**US has 71 million vaccine doses left** (2010-05-04)
The US has 71 million doses of H1N1 vaccine remaining, according to the Department of Health and Human Services (HHS). States should keep offering doses until the seasonal flu vaccine, which will contain the pandemic strain, is available this fall, HHS spokesman Bill Hall said. Sen. Chuck Grassley, R-Iowa, has asked HHS Secretary Kathleen Sebelius how much vaccine is left and when it will expire. Hall said the remaining doses "have varying expiration dates, some as long as early 2011."

**H1N1 hospitalized older kids, those with underlying conditions** (2010-05-04)
Children hospitalized with pandemic H1N1 in 2009 were older and more likely to have underlying conditions than children hospitalized with seasonal flu in past years, according to a study presented today at the Pediatric Academic Societies (PAS) annual meeting. From surveillance data from 10 states, researchers found the median age of hospitalized children to be 5 years for pandemic flu and 1 year for seasonal flu, and H1N1 patients were more likely to have underlying medical conditions.

**Czechs used only one-seventh of vaccine** (2010-05-04)
Czechs used only about 100,000 doses of H1N1 vaccine of the 700,000 doses ordered, according to the Czech News Agency. Only about 66,000 people in the country of more than 10 million were vaccinated. Health officials confirmed 102 deaths in the country and estimated that 100,000 people were infected.
Web surveillance allowed early H1N1 tracking (2010-05-05)
Web-based syndromic surveillance of the 2009 H1N1 pandemic allowed earlier detection of regional outbreaks and permitted tracking of disease spread around the world, according to a report today. The HealthMap system, which collected data primarily from Internet news sources, showed confirmed or suspected outbreaks in 32 countries by Apr 28, 2009, with early spread being fastest in the Americas and Europe. The data also showed that wealthier nations had shorter delays in confirming cases.

[ARCHIVED] Current overview and older updates from CIDRAP

United Kingdom [back to top]
Due to low influenza activity the National Influenza Report will be published fortnightly, with a short summary of activity provided in alternate weeks. Should activity increase again the report will return to a weekly schedule.

Weekly Epidemiological Update Summary for 06 May 2010 (Week 18)
• Pandemic influenza activity is very low and stable across the UK.

[ARCHIVED] Health Protection Agency swine influenza page
[ARCHIVED] Department of Health pandemic flu site

Europe [back to top]
Information from Member States, Candidates, EEA and EFTA countries
(Interactive map)

• All reporting countries experienced low intensity influenza activity for the ninth consecutive week and, at most, reported sporadic or local activity.
• Only 16 influenza viruses were detected by sentinel and non-sentinel sources and half of these were influenza B viruses.
• To date, only 2.5% of tested 2009 pandemic influenza A(H1N1) viruses have shown resistance to oseltamivir and none were resistant to zanamivir. All tested 2009 pandemic viruses have been resistant to M2 inhibitors.
• None of the severe acute respiratory infections (SARI) reported in week 17/2010 were associated with influenza
• Influenza activity caused by the 2009 pandemic influenza A(H1N1) virus is well past its winter peak in EU/EEA countries but sporadic cases of confirmed infections continue to occur. The majority of influenza-like illness cases are not due to influenza virus infection. Globally, the world remains in pandemic Phase 6

• All reporting countries experienced low intensity influenza activity for the eighth consecutive week and reported sporadic activity at most.
• Influenza activity caused by the 2009 pandemic influenza A(H1N1) virus is well past its winter peak in EU/EEA countries. However, sporadic cases of confirmed infections continue to occur
though most cases of influenza-like illness are not due to influenza virus infection. Globally, the world remains in pandemic Phase 6.

[ARCHIVE] Maps, surveillance summaries and previous ECDC updates

[ARCHIVE] European Union Influenza H1N1 page

Australia and New Zealand [back to top]

New Zealand: Pandemic Influenza H1N1 2009 (swine flu) – Special Update 184: 6 May 2010
Surveillance data from GP practices and Healthline for the week ending 30 April shows a continued increase in both the number of people calling healthline for free health advice on influenza-like illness, and visiting the doctor with an influenza-like illness. While numbers are still below baseline, this continued increase could signal the start of a higher level of pandemic influenza activity in New Zealand.

Pandemic Influenza H1N1 2009 (swine flu) – Special Update 183: 28 April 2010

Pandemic Influenza H1N1 2009 (swine flu) – Special Update 182: 28 April 2010

Australia: Influenza Surveillance Report No. 16 for the week ending 23 April 2010
• In 2010, as at 23 April, there have been 60 confirmed cases of pandemic (H1N1) 2009 influenza reported in Australia, bringing the total of confirmed cases to 37,696 since May 2009. There have been no new confirmed cases of pandemic (H1N1) 2009 influenza reported in Australia during this reporting period.
• Of the 448 confirmed cases of influenza diagnosed during 2010 up to 23 April, 13% have been sub-typed as pandemic (H1N1) 2009, 72% as type A not sub-typed and 0.9% as A/H3N2. A further 11% have been characterised as type B.
• Sentinel hospitals have reported no hospitalisations associated with pandemic (H1N1) 2009 influenza this reporting period.
• Levels of influenza-like illness (ILI) in the community remain relatively low and reporting from laboratories indicates that little of this ILI is due to influenza. Respiratory syncytial virus was the most common respiratory virus diagnosed by NSW and WA sentinel laboratories in the last reporting period.
• Pandemic (H1N1) 2009 influenza accounted for 79.9% of all influenza A viruses subtyped globally in the last reporting week. Seasonal Influenza B viruses are predominant across East Asia, Central Africa and Northern and Eastern Europe.
• In China, Influenza B accounted for more than 88.7% of all influenza viruses detected in the week to 11 April 2010. From 1 September 2009 to 11 April 2010, 90.3% of antigenically characterised influenza B viruses were B/Victoria and 9.7% were B/Yamagata viruses. Of the B/Victoria viruses, 47.7% were related to B/Brisbane/60/2008, which is included in the 2010 Southern Hemisphere seasonal influenza vaccine, and 52.3% were related to B/Malaysia/2506/2004-like.
• As at 18 April 2010, the WHO Regional Offices reported over 17,853 deaths associated with pandemic (H1N1) 2009 influenza worldwide. In the Northern Hemisphere the areas of highest transmission are West and Central Africa.

[ARCHIVED] New Zealand’s H1N1 page

[ARCHIVED] Australia’s H1N1 Update Bulletins
No items of interest this update.

[ARCHIVED] PAHO Influenza A (H1N1) Portal

World Health Organization (WHO) [back to top]

Pandemic (H1N1) 2009 – Update 98

Pandemic (H1N1) 2009 – Update 99

[ARCHIVED] WHO H1N1 Guidance Documents

[ARCHIVED] Older WHO Updates

Research Articles [back to top]

What's new today, plus a one week backfile. Articles with an asterisk (*) indicate that a subscription is required to view the full text. Contact your library for access to full text articles.

Medline literature search on H1N1 (current as of today)

2009 Pandemic Influenza A (H1N1) in Pregnant Women Requiring Intensive Care —New York City, 2009
JAMA. 2010;303(17):1688-90.

Unseasonal Transmission of H3N2 Influenza A Virus During the Swine-Origin H1N1 Pandemic

Development and Preliminary Evaluation of a Rapid Oligochromatographic Assay for Specific Detection of New Human Influenza A H1N1 Virus

Understanding influenza virus-specific epidemiological properties by analysis of experimental human infections. *

Pandemic Influenza A (H1N1) 2009 breakthrough infections and estimates of vaccine effectiveness in Germany 2009-2010.

Co-infection with Dengue Virus and Pandemic (H1N1) 2009 Virus.
Cross-Reactive Antibodies to Pandemic (H1N1) 2009 Virus, Singapore.

Possible Transmission of Pandemic (H1N1) 2009 Virus with Oseltamivir Resistance.

Rapid Influenza Antigen Test for Diagnosis of Pandemic (H1N1) 2009

Contagious Period for Pandemic (H1N1) 2009

Enteric absorption and pharmacokinetics of oseltamivir in critically ill patients with pandemic (H1N1) influenza.

Risk of severe outcomes among patients admitted to hospital with pandemic (H1N1) influenza.
Alexia Campbell, MHSc, Rachel Rodin, MD MPH, Rhonda Kropp, BScN MPH, Yang Mao, PhD, Zhiyong Hong, MD DrPH, Julie Vachon, BSc, John Spika, MD and Louise Pelletier, MD MPH; CMAJ Mar 9, 2010; 182 (4): doi:10.1503/cmaj.091823.

Influenza Vaccination and Vitamin K Antagonist Treatment: A Placebo-Controlled, Randomized, Double-blind Crossover Study.

Letter: Zinc Intake and Resistance to H1N1 Influenza

Information technology and global surveillance of cases of 2009 H1N1 influenza.

Clinical Aspects of Pandemic 2009 Influenza A (H1N1) Virus Infection.

Attenuated Bordetella pertussis protects against highly pathogenic influenza A viruses by dampening the cytokine storm.
Factors in vaccination intention against the pandemic influenza A/H1N1. *

Rapid Differentiation of Seasonal and Pandemic H1N1 Influenza through Proteotyping of Viral Neuraminidase with Mass Spectrometry. *

Letter: As mass media evolves into "masses of media", what are the implications for our health?

Information Technology and Global Surveillance of Cases of 2009 H1N1 Influenza

Clinical Aspects of Pandemic 2009 Influenza A (H1N1) Virus Infection
Hayden FG; WHO Writing Committee; NEJM 2010 May 6; 362(18): 1708-19.

Student Behavior during a School Closure Caused by Pandemic Influenza A/H1N1

A Candidate H1N1 Pandemic Influenza Vaccine Elicits Protective Immunity in Mice

Geographical Spread of Highly Pathogenic Avian Influenza Virus H5N1 during the 2006 Outbreak in Austria *

Rapid Genotypic Assay for Detection of Oseltamivir-Resistant Influenza A (H1N1) Viruses

Diagnostic accuracy of a rapid influenza test for pandemic influenza A H1N1.

New director of European disease centre defends its role in flu pandemic. *
Watson R. BMJ. 2010 May 4;340:c2430. doi: 10.1136/bmj.c2430. (extract)

WTW--an algorithm for identifying "who transmits to whom" in outbreaks of interhuman transmitted infectious agents. *

Postreassortment amino acid substitutions in influenza A viruses. *
Respiratory failure caused by 2009 novel influenza A/H1N1 in a hematopoietic stem-cell transplant recipient: Detection of extrapulmonary H1N1 RNA and use of intravenous peramivir.

Co-infection with pandemic H1N1 and seasonal H3N2 influenza viruses.

Shedding and Transmission of Novel Influenza Virus A/H1N1 Infection in Households--Germany, 2009. *

Intranasal administration of Lactobacillus rhamnosus GG protects mice from H1N1 influenza virus infection by regulating respiratory immune responses. *

Oral administration of lactobacilli from human intestinal tract protects mice against influenza virus infection. *

An audit of pandemic (H1N1) 2009 influenza vaccine wastage in general practice.

Pandemic influenza testing at the coalface: time for reassessment?

Preparing for pandemic influenza and its aftermath: mental health issues considered. *

Fever, cough, and hypoxia in a pregnant woman.

Evaluation of the efficacy of a specific hyperimmune serum in experimental influenza infection in mice. *

Stimulation of naive CD8+ T cells by a variant viral epitope induces activation and enhanced apoptosis. *

Age-associated decrease in TLR function in primary human dendritic cells predicts...
**Influenza vaccine response.**


**H1N1 vaccine in children--one dose seems to provide some protection . . . .**


**Prophylactic oseltamivir treatment for prevention of donor-recipient influenza A H1N1 virus transmission does not compromise stem cell mobilization or engraftment.**


**Pneumonia in pregnancy.**


**Genotyping assay for the identification of 2009-2010 pandemic and seasonal H1N1 influenza virus reassortants.**


**Evolutionary dynamics of the N1 neuraminidases of the main lineages of influenza A viruses.**


**Will the community nurse continue to function during H1N1 influenza pandemic: a cross-sectional study of Hong Kong community nurses?**

Wong EL, Wong SY, Kung K, Cheung AW, Gao TT, Griffiths S. BMC Health Serv Res. 2010 Apr 30;10(1):107. [Epub ahead of print]

**Willingness of university nursing students to volunteer during a pandemic.**


**The Nebraska experience in biocontainment patient care.**


**Influenza virus-induced glucocorticoids compromise innate host defense against a secondary bacterial infection.**


**Comparative distribution of human and avian type sialic acid influenza receptors in the pig.**


**Jab fears.**

An audit of pandemic (H1N1) 2009 influenza vaccine wastage in general practice

Analysis of avian influenza with special focus on Pakistan. *

H1N1 in allogeneic stem cell recipients: courses of infection and influence of vaccination on graft-versus-host-disease (GVHD).


Readability of H1N1 Information From the CDC Web Site. *

Time for T?: Thoughts about the 2009 novel H1N1 influenza outbreak and the role of T cell epitopes in the next generation of influenza vaccines.

GSK chief defends profits made on back of swine flu crisis. *

Inactivation of influenza A virus H1N1 by disinfection process. *
Jeong EK, Bae JE, Kim IS. Am J Infect Control. 2010 Apr 27. [Epub ahead of print]

Echocardiographic manifestations of pandemic 2009 (h1n1) influenza a virus infection.

Occurrence of haemagglutinin mutation D222G in pandemic influenza A(H1N1) infected patients in the West of Scotland, United Kingdom, 2009-10.

Facilitating patient self-management through telephony and web technologies in seasonal influenza. *

Age groups and spread of influenza: implications for vaccination strategy.
Hsieh YH. BMC Infect Dis. 2010 Apr 30;10(1):106. [Epub ahead of print]

Antiviral pandemic risk assessment for urban receiving waters. *
Letter: When is rapid testing for influenza useful?

Letter: Pre-analytical errors in rapid influenza testing

Acute Motor Axonal Neuropathy Associated with Pandemic H1N1 Influenza A Infection. *
Kutleša M, Santini M, Krajinović V, Raffanelli D, Baršić B. Neurocrit Care. 2010 Apr 29. [Epub ahead of print]

Guillain-Barré syndrome related to pandemic influenza A (H1N1) infection.

The risk of acquiring the new influenza A(H1N1) for Brazilian travelers to Chile, Argentina and the USA. *


Acute Kidney Injury and 2009 H1N1 Influenza-Related Critical Illness. *


External committee is to look at criticisms of WHO's management of H1N1 pandemic. *

Potential drug-like inhibitors of Group 1 influenza neuraminidase identified through computer-aided drug design. *
Durrant JD, McCammon JA. Comput Biol Chem. 2010 Apr 3. [Epub ahead of print]

Protective effects of recombinant human granulocyte macrophage colony stimulating factor on H1N1 influenza virus-induced pneumonia in mice. *

Equine and canine influenza: a review of current events. *

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Avian influenza pandemic preparedness: developing pre-pandemic and pandemic vaccines against a moving target. *

Severe influenza A virus (H1N1) infection in pregnancy. *

Diagnostic dilemmas in a pregnant woman with influenza A (H1N1) infection. *

Effects of influenza immunization on humoral and cellular alloreactivity in humans*

Sneezing in times of a flu pandemic: public sneezing increases perception of unrelated risks and shifts preferences for federal spending.*

Plasmacytoid dendritic cells delineate immunogenicity of influenza vaccine subtypes. *

Current Advances in Anti-Influenza Therapy. *

Safety and Cross-Reactive Immunogenicity of Candidate AS03-Adjuvanted Pre-pandemic H5N1 Influenza Vaccines: A Randomized Controlled Phase 1/2 Trial in Adults. *

Swine flu outbreak: is Pakistan prepared?

Recombinant immunotherapeutics: current state and perspectives regarding the feasibility and market. *

Potent immunity to low doses of influenza vaccine by probabilistic guided micro-targeted skin delivery in a mouse model.
Low acceptability of A/H1N1 pandemic vaccination in French adult population: did public health policy fuel public dissonance?

Efficacy, immunogenicity and stability of a novel intranasal nanoemulsion-adjuvanted influenza vaccine in a murine model. *

Transmissibility and geographic spread of the 1889 influenza pandemic. *

Patients with humoral primary immunodeficiency do not develop protective anti-influenza antibody titers after vaccination with trivalent subunit influenza vaccine. *

Novel H1N1 Influenza A Viral Infection Complicated by Alveolar Hemorrhage. *

Influenza A (H1N1) 2009: Impact on Frankfurt in due consideration of health care and public health.

Fatalities Associated with the 2009 H1N1 Influenza A Virus in New York City.

Clinical Attack Rate and Presentation of Pandemic H1N1 Influenza versus Seasonal Influenza A and B in a Pediatric Cohort in Nicaragua. *

H1N1 2009 in Karachi: a situational analysis.


H1N1 Vaccinations, Fall 2009: Model School-Located Vaccination Clinics. *

Historical Review of Pandemic Influenza A in Taiwan, 2009.

Pandemic influenza on Reunion Island and school closure.
No abstract available.

 Reactivation of Crohn's disease after pandemic aH1N1 and seasonal flu vaccinations. *

A simple approach for preparing real-time PCR positive reaction controls for rare or emerging viruses. *

Mild form of 2009 H1N1 influenza infection detected by active surveillance: Implications for infection control. *

Cytokine profiles of suction pulmonary secretions from children infected with pandemic influenza A(H1N1) 2009.

Outbreak of Influenza A (H1N1) Virus Infection in a Nursing School in Hong Kong. * (citation)

Use of Intravenous Zanamivir after Development of Oseltamivir Resistance in a Critically Ill Immunosuppressed Child Infected with 2009 Pandemic Influenza A (H1N1) Virus. *

A Large Q Fever Outbreak in an Urban School in Central Israel. *

Recipients of Vaccine against the 1976 "Swine Flu" Have Enhanced Neutralization Responses to the 2009 Novel H1N1 Influenza Virus. *
Reducing the impact of the next influenza pandemic using household-based public health interventions.

Administration of influenza vaccines to patients with egg allergy.

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