pH1N1 Flu Virus (Human Swine Influenza)
Information Resources
Current as of February 5, 2010 at 12 pm

Highlights

Epidemiological updates from international public health authorities ------------------------

HPA:   HPA Global Health : Assessment of the Impact of Pandemic (H1N1) 2009 Influenza in sub-Saharan Africa  30 January 2010
DOH(UK):  4 February 2010: Written Ministerial Statement - National Pandemic Flu Service to stand down
WHO:    Pandemic (H1N1) 2009 Update 86

Literature  --------------------------------------------------------------------------------------------------

Emerg Infec Dis: Pandemic (H1N1) 2009 Risk for Nurses after Trivalent Vaccination
Emerg Infec Dis: Neurologic Manifestations of Pandemic (H1N1) 2009 Virus Infection
Vaccine: Positive attitudes of French general practitioners towards A/H1N1 influenza-pandemic vaccination: A missed opportunity to increase vaccination uptakes in the general public?*
PLoS One: Effectiveness of Common Household Cleaning Agents in Reducing the Viability of Human Influenza A/H1N1
BJPH:    Demographic and attitudinal determinants of protective behaviours during a pandemic: A review
JCHLP:   Incorporating explicit ethical reasoning into pandemic influenza policies.
Emerg Infec Dis: School Closure and Mitigation of Pandemic (H1N1) 2009, Hong Kong
Eurosorveillance: Update: Follow-up study showing post-pandemic decline in hand sanitiser use, New Zealand, December 2009.
Lancet Neurol: Surveillance of H1N1-related neurological complications.
CJIC: The H1N1 pandemic: doing what we do best--back to basics.
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Updates by Jurisdiction

Lessons Learned
  Jurisdictions
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Ontario
  Ontario Ministry of Health and Long-Term Care (MOHLTC)
  Ontario Agency for Health Promotion and Protection (OAHPP)

Canada
  Public Health Agency of Canada (PHAC)

United States
  Centers for Disease Control and Protection (CDC)
  Center for Infectious Disease Research & Policy
  Other US Sources

Europe
  United Kingdom’s Health Protection Agency (HPA)
  UK Department of Health
  European Centre for Disease Control and Prevention (ECDC)
  European Union

International
  Pan American Health Organization (PAHO)
  Australia and New Zealand
  World Health Organization (WHO)

Other Resources
  pH1N1 Clinical Information
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Current / Upcoming

[FEB 3-5] International Symposium on Neglected Influenza Viruses
February 3-5, 2010 | Amelia Island, Florida
Sponsor: International Society for Influenza and other Respiratory Virus Diseases
Contact:
Gregory C. Gray, MD, MPH | Phone: (319) 384-5008 | gregory-gray@uiowa.edu

[ONGOING] "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

Join experts from the U.S. Department of Health and Human Services and the former president of the American Medical Association answer your questions about the H1N1 virus and vaccine. Hosted by the U.S. Department of Health and Human Services, the show airs live on www.flu.gov.


[NOV 18] Clinical Laboratory Management Association: Review Epidemiology of Novel H1N1

[NOV 10] Assembly of First Nations and Health Canada to Co-host a Virtual Summit on H1N1 Preparedness November 10th, 2009

[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

CDC pediatric communications guidance to help avoid pandemic pitfalls
Fine-tuning pandemic communications strategies relating to children's issues can help avoid problems that doctors and hospitals experienced during surges of novel H1N1 flu, the US Centers for Disease Control and Prevention (CDC) said today in new guidance.

European hearing airs WHO pandemic response, critics' charges
Officials from the World Health Organization (WHO) and a vaccine-maker trade group at a public
hearing today defended themselves against allegations from some European politicians that they exaggerated the H1N1 pandemic threat to benefit drug companies.

See also Department of Health UK section

Literature

Lessons from the H1N1 influenza pandemic in French overseas territories and interim reports from metropolitan France.
de Lamballerie X. Clin Microbiol Infect. Published online ahead of print 2010 Jan 28. No abstract available.

Pearls About Swine How Emergency Departments Are Coping With the Surge of H1N1.

Statewide School-located Influenza Vaccination Program for Children 5-13 Years of Age, Hawaii, USA.

Cost-effectiveness of Pharmaceutical-based Pandemic Influenza Mitigation Strategies.

Infection control of pandemic (H1N1) 2009 influenza in hospitals -- a logistic challenge

Building an insurance against modern pandemics*

Rhinoviruses Delayed the Circulation of Pandemic Influenza A(H1N1) 2009 Virus in France
Casalegno JS. Clinical Microbiology and Infection. Published online ahead of print 2010 Jan 28.

Influenza outbreak during Sydney World Youth Day 2008: the utility of laboratory testing and case definitions on mass gathering outbreak containment.

Ministry of Health and Long-Term Care (MOHLTC)


- Influenza activity in Ontario was similar compared to the previous reporting period (Jan. 10, to Jan. 16, 2010).
- 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 slightly higher than what is expected based on the average rate at this time of year for past seasons. This may be due to an increase in respiratory syncytial virus (RSV)* activity at this time.
• No health units reported widespread influenza activity for the current reporting period. Two health units reported localized influenza activity, one reported sporadic influenza activity and 29 reported no influenza activity. The remaining health units did not report.
• There are 8,787 confirmed cases of H1N1 flu virus reported through the integrated Public Health System (iPHIS).
*RSV is a virus which causes infection in the lungs and breathing passages.

[ARCHIVED] Previous MOHLTC updates and news conference video footage

Important Health Notices / Avis de santé important
None on H1N1 since Nov 13, 2009.

Ontario Agency for Health Protection and Promotion (OAHPP)
[ARCHIVED] Swine influenza outbreak page

Public Health Agency of Canada (PHAC)
PHAC will no longer be producing a weekly report of deaths associated with the H1N1 flu virus. This information will now be captured in the weekly FluWatch report. This report is posted weekly on Fridays.

FluWatch January 17-23
Summary of FluWatch Findings for the Week ending January 23, 2010
• On January 27, 2010, the Public Health Agency of Canada announced that the second wave of pandemic H1N1 2009 has tapered off.
• During week 3, all influenza indicators continued to be either at baseline levels or considerably under the expected levels for this time of the year.
• Only 0.04% of the specimens tested were positive for influenza and the pandemic H1N1 2009 strain still accounted for 100% of the positive influenza A subtyped specimens this week. Only one specimen tested positive for influenza B.
• While influenza activity was very low, the respiratory syncitial virus transmission continued to increase.
• The three influenza outbreaks reported this week were all in schools and occurred in BC (1) and NB (2).
• Thirty-nine hospitalized cases, 14 ICU admissions and 3 deaths were reported during week 3. All deaths were from ON.

Vaccine Surveillance Report - Adverse Events following Immunization (modified 02-01-2010)

[ARCHIVED] Previous PHAC documents and updates
Centers for Disease Control and Prevention (CDC) and US Department of Health and Human Services

**UPDATE: Weekly FluView Map and Surveillance Report for Week Ending January 30, 2010**
During week 4 (January 24-30, 2010), influenza activity remained at approximately the same levels as last week in the U.S. 119 (3.2%) 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: Influenza and Pneumonia-Associated Hospitalizations and Deaths from August 30, 2009 to January 30, 2010**
FluView reports that for the week of January 24-30, 2010, flu activity in the United States remained about the same as during the previous week. Flu activity is relatively low at this time, with most flu continuing to be caused by 2009 H1N1. Flu activity, caused by either 2009 H1N1 or seasonal flu viruses, may rise and fall, but it is expected to continue for several more months.

**NEW: Shortened Expiration Period For Sanofi Pasteur 2009 H1N1 Vaccine In Pre-filled Syringes Questions & Answers**
All lots of monovalent 2009 H1N1 influenza vaccine in pre-filled syringes manufactured by Sanofi Pasteur, not included in the two earlier recalls, should now be administered by February 15, 2010 regardless of the expiration imprinted on the package.

**NEW: Non-Safety-Related Voluntary Recall Of Sanofi Pasteur 2009 H1N1 Flu Vaccine In Pre-filled Syringes Questions and Answers**
In recent testing of its influenza A (H1N1) monovalent vaccine, Sanofi Pasteur found five distributed lots of single-dose, pre-filled syringe pediatric (0.25 mL) vaccine and one distributed lot of single-dose pre-filled syringe for older children and adults (0.5 mL) vaccine had potency below pre-specified limits.

**CDC Health Alert Network (HAN) Info Service Message: Non-Safety-Related Voluntary Recall of Unused Doses from Certain Lots of Sanofi Pasteur H1N1 Vaccine in Pre-Filled Syringes**
As of January 7, 2010, the cumulative pro rata allocation is approximately 136 million doses of 2009 H1N1 vaccine. As of January 5, 2010, approximately 111 million doses have been shipped, so supplies of 2009 H1N1 vaccine available to be administered are ample. Although the 2009 H1N1 vaccine was initially prioritized to certain target groups, due to the increase in supply most jurisdictions are now making vaccine available for everyone who wishes to receive it.

**[ARCHIVED] Previous CDC documents and updates**

**Center for Infectious Disease Research and Policy**

**Feb 4**

**US H1N1 vaccine uptake estimated at 75 million**
A Centers for Disease Control and Prevention (CDC) official estimated today that more than 75 million Americans, or close to 25% of the population, have been vaccinated against the pandemic H1N1 virus. [Read CIDRAP article...](#)
Artificial insemination may spread flu in turkeys
The pandemic H1N1 virus can infect turkeys when sick workers artificially inseminate the birds, leading to a drop in egg production, according to a study in *Virology Journal*. Researchers have been unable to reproduce infections in turkeys through standard routes, but the new report details how the virus transmits during intrauterine inoculation. The finding suggests that protective measures during artificial insemination may help poultry farms prevent disease outbreaks.  

Hungary shuts H1N1 vaccine clinics
Hungary's health minister announced yesterday the closure of pandemic H1N1 vaccination centers, Xinhua reported. The country said it will reopen them if public demand rises, and the vaccine will still be available elsewhere. The centers delivered about 92,000 doses, and the total number of vaccinated Hungarians so far is 3 million, about a third of the population. The health minister said doctor's visits for flulike illnesses had increased slightly compared with the past 2 weeks.  

Gorillas get pandemic flu vaccine
Six Western Lowland gorillas at Boston's Franklin Park Zoo received the human H1N1 vaccine yesterday, the *Boston Globe* reported. The zoo usually immunizes the gorillas against seasonal flu each fall, but they will receive those doses next week. Area hospitals donated the vaccine. The zoo's director of veterinary services said gorillas are susceptible to human diseases and are often protected with human vaccines.  

Feb 3

CDC alert details shorter expiration for Sanofi pandemic vaccine doses
The US Centers for Disease Control and Prevention (CDC) yesterday notified healthcare providers that 50 lots of Sanofi Pasteur's pandemic H1N1 vaccine in prefilled syringes have a shorter shelf life than shown on the label. Read CIDRAP article...

Flu activity up slightly at some US colleges
Flu activity was up a bit at colleges last week, though the levels haven't changed significantly over the past 6 weeks, consistent with the decreasing national trend, the American College Health Association (ACHA) said today in its latest update. The attack rate was 2.6 per 10,000 students, about 15% higher than the previous week. No new deaths or hospitalizations were reported. Overall vaccine uptake remained at 9%, but rates were as high as 40% in some states.  

New Zealand begins H1N1 vaccination
New Zealand, which saw some of the earliest deaths from H1N1 influenza during its 2009 winter flu season, has received its first doses of H1N1 vaccine and is scheduling a national shot campaign. The first recipients of the 1 million doses will be health workers, pregnant women, young children, and the chronically ill. The Southern Hemisphere country is concerned that the virus may return from the Northern Hemisphere and trigger an earlier than usual flu season.  

Immunoglobulin deficiency may predict flu outcome
Australian researchers say they have identified an immune-system protein that may play a key role in determining the severity of H1N1 flu infection. Among patients hospitalized with H1N1 flu, there was a correlation between severity of symptoms and deficiency in immunoglobulin G2, which supports early response to infection. The authors say that may explain the seriousness of H1N1 flu in pregnant women, because pregnancy mutes immune responses, and may point to a predictive test or treatment.
Czech Republic health chief contracts flu
Michael Vit, chief health officer of the Czech Republic, told media in that country that he is home sick with a flu infection that is presumed to be H1N1 influenza, according to Reuters. Vit oversaw flu vaccinations for key members of the government but missed his own because of an overseas trip, the news service said. Vit’s ministry led recently abandoned plans for mandatory vaccination of the Czech armed forces.  [Feb 2 Reuters report]

CDC warns about flu at Vancouver Olympics
With the 2010 Olympic Winter Games set to begin in Vancouver, the US Centers for Disease Control and Prevention has issued a set of travel tips it calls “Stop, wash and go.” The agency recommends that attendees receive H1N1 flu vaccine before leaving, delay their departures if they feel unwell, cover coughs and sneezes, and wash their hands frequently. It also suggests taking a travel health kit containing hand sanitizer, tissues, and pain and fever medications.  [Feb 2 CDC travel advice]

Reduced potency prompts another H1N1 vaccine recall
The Centers for Disease Control and Prevention has notified state and local health departments of a recall of pre-filled syringes of H1N1 flu vaccine made by Sanofi Pasteur Inc because of a decrease in potency.  Read CIDRAP article...

Poor nations not receiving vaccine
Though many nations have surplus H1N1 vaccine, much of it is not getting to developing nations, according to a New York Times story. So far, only two countries, Azerbaijan and Mongolia, have received vaccine. Afghanistan is slated to be next. About a month ago, the World Health Organization said it hoped to have shipped vaccine to 14 countries by now, of 95 nations that need it. Some of these countries are still experiencing significant pandemic cases and deaths.  [Feb 1 New York Times article]

Summer camp containment efforts worked
A program of hand hygiene, surface cleaning, and targeted antiviral treatment contained H1N1 flu at a boys’ summer camp in July 2009, says a new journal article. The program was launched after 12 boys attending the third camp session contracted flu. During the fourth 2-week session, only 3 of 171 campers tested positive for flu, an attack rate of 1.8%, far lower than cited at other summer camps. However, 57% of staff and 31% of campers who took an antiviral reported side effects.  [Feb 1 Arch Pediatr Adolesc Med report]

Study: H1N1 can affect conjunctiva
Researchers in Hong Kong have found evidence that, although the pandemic H1N1 flu virus and seasonal flu viruses cause several comparable responses in the body, pandemic H1N1 has the distinct ability to replicate in the conjunctiva. The findings, published in the American Journal of Pathology, suggest subtle differences in H1N1’s receptor-binding profile in human hosts and demonstrate an additional route of infection.  [Jan 28 Am J Pathol abstract]

Ontario probing illness in 17 vaccinees
Ontario's health ministry is investigating 17 serious illnesses that occurred after people received H1N1 flu vaccine, the Toronto Sun reported today. There were four cases of Guillain-Barre syndrome (GBS) and 13 anaphylactic reactions. Two GBS cases were in adults who received the vaccine from the same physician's office in Markham, Ont., the report said. GlaxoSmithKline recalled 170,000 doses of vaccine in Canada in November because allergic reactions were more common than expected.  [Feb 2 Toronto Sun report]

UK to end pandemic hotline Feb 11
Because of waning flu activity, Britain's hotline for pandemic flu diagnosis and antiviral prescriptions...
will be shut down on Feb 11, Chief Medical Officer Sir Liam Donaldson announced in a letter to physicians. Donaldson said the service eased pressure on primary care physicians at the height of the pandemic, but flu-like illnesses and confirmed H1N1 cases now are less than half what they were before the service was launched. The service can be restored in 7 days if needed, he said.

Feb 1 ----------------------------------------------------------------------

Taiwan takes vaccine to airports, homes
To boost pandemic vaccination rates, health officials in Taiwan have unveiled two new tactics, immunization at airports and in homes, the Hong Kong Standard reported today. Four airports will offer the vaccines to citizens entering Taiwan. Home-based vaccinations are available to groups of at least 10 people in communities, companies, or institutions who make a reservation with the local health department. Vaccine safety concerns have slowed vaccine uptake, though 24% have received it.  [Feb 1 Standard story]

Jan 29 ----------------------------------------------------------------------

H1N1 still active in some global regions
Although pandemic flu has declined in most of the Northern Hemisphere, transmission remains active in some regions of North Africa, eastern and southeastern Europe, and South and East Asia, the World Health Organization (WHO) reported today. Global H1N1 deaths now total at least 14,711. Novel H1N1 remains dominant in most nations, according to a separate WHO update, but in China 49% of flu isolates are the seasonal B strain. Other countries are detecting some seasonal flu, too.  [Jan 29 WHO weekly update]

Flu down, vaccine availability up at colleges
Flu activity at US colleges declined again after leveling off the previous week, the American College Health Association (ACHA) reported. The attack rate was 2.3 per 10,000 students. Though the number of vaccinated students was around 9%, the ACHA reports some encouraging signs. Some institutions are reporting vaccine uptake rates exceeding 25% to 30%. Vaccine availability has improved, with 86% of campuses reporting that they have it.  [ACHA report for week ending Jan 22]

Vaccine from 1918, 1976 strains may fend off novel H1N1
In an experiment to learn more about pre-existing immunity, researchers found that mice vaccinated with 1918-like and classical (from 1976) swine flu vaccines had complete protection against pandemic H1N1, according to a study in PLoS Pathogens. In contrast, vaccines based on more recent seasonal H1N1 strains afforded only partial protection. The authors say their findings underscore the importance of having people under age 35 receive the pandemic vaccine.  [Jan 29 PLoS Pathog article]

China denies vaccine-miscarriage link
China's government denied a link between H1N1 vaccine and miscarriages after an official said "several" miscarriages occurred among 10,000 pregnant women who had been immunized, Agence France-Presse (AFP) reported today. The official added the miscarriages were coincidental and that most were seen in women in their first trimester. He emphasized that global experience so far shows the vaccine is safe and effective in pregnant women, who are at high risk for flu complications.  [Jan 29 AFP story]

[ARCHIVED]  Current overview and older updates from CIDRAP
Other US Sources

We heard the bells: the influenza of 1918
Throughout history, influenza viruses have mutated and caused pandemics or global epidemics. In 1918 and 1919, the worst influenza in recorded history killed an estimated 50 million people around the world. In the United States, the death toll reached 675,000 – five times the number of U.S. soldiers killed in World War I. The disease seemed to target young adults and pregnant women, leaving many young children without mothers or fathers. Where did the 1918 influenza come from? And why was it so lethal? What can be learned from those who survived the 1918 pandemic?

We Heard the Bells, narrated by award-winning actress S. Epatha Merkerson (Law & Order), explores the personal and family experiences of a diverse group of Americans during the influenza pandemic of 1918. History unfolds as survivors of the pandemic tell their stories. Their memories frame the key questions that still drive the search for answers to help us weather the current H1N1 pandemic and future flu pandemics.

Health Protection Agency (UK)

HPA Global Health : Assessment of the Impact of Pandemic (H1N1) 2009
Influenza in sub-Saharan Africa  30 January 2010

Weekly Epidemiological Update: 04 February 2010 (Week 5)

- Pandemic influenza activity is generally decreasing across the UK.
- In week 04 (ending 31 January), the weekly influenza/influenza-like illness (ILI) consultation rate decreased or remained stable in England, Wales and N. Ireland and increased slightly in Scotland.
- The National Pandemic Flu Service (NPFS) continues to issue antiviral drugs to people in England with an influenza-like illness who call or log onto the internet site. The number of assessments and antiviral collections through this service have decreased over the past week. This service will continue until 11 February 2010; from this date onwards, antivirals will be authorised via health care professionals.
- A decrease in respiratory syncytial virus detections has been observed recently though GP consultation rates for acute bronchitis have increased from week 03 to 04, mainly in people aged under 5 years and 65 years or over.
- The main influenza virus circulating in the UK continues to be the pandemic (H1N1) 2009 strain, with few influenza H1 (non-pandemic), H3 and B viruses detected. Thirty-eight of 5,174 pandemic viruses tested have been confirmed to carry a mutation which confers resistance to the antiviral drug oseltamivir; three are phenotypically resistant to the drug but retain sensitivity to zanamivir.
- The weekly number of pandemic influenza cases reported as admitted to hospital has decreased recently. There have been 411 deaths reported due to pandemic (H1N1) 2009 in the UK.
- The UK pandemic influenza vaccination programme continues for people at high risk for severe disease, health-care workers and healthy children aged between 6 months and 5 years. For further information see the Department of Health website.
- According to the World Health Organisation (29 January), virus transmission remains active in several later affected areas, particularly in North Africa, limited areas of eastern and south eastern Europe, and in parts of South and East Asia. Pandemic virus accounted for 54% of all influenza virus detections (decreased from 73% in the previous week) and influenza B accounted for 36%. The influenza B detections have mainly been reported from China, where they account for 49% of all detections.
NOTE: The Health Protection Agency (HPA) is no longer producing a weekly pandemic flu media update. Should the position change in relation to the course of the pandemic then the updates will be resumed.

[ARCHIVED]  Swine Influenza page

Department of Health (UK)

4 February 2010: Swine flu vaccine continues to provide vital protection says Chief Medical Officer
Swine flu cases remain near their lowest level since the early stages of the disease in the United Kingdom, according to a statistical bulletin from the Chief Medical Officer for England, published today.

- Swine flu vaccine continues to provide vital protection says Chief Medical Officer
- Download CMO Bulletin issue 2 Thursday 4 February 2010 (PDF, 92K)

4 February 2010: Written Ministerial Statement - National Pandemic Flu Service to stand down
Gillian Merron, the Minister of State for Public Health, informed Parliament that the National Pandemic Flu Service will stand down with effect from 1am on 11 February 2010.

- Written Ministerial Statement

[ARCHIVE]  DH Pandemic Flu site

European Centre for Disease Prevention and Control (ECDC)

Weekly Influenza Surveillance Overview : Main surveillance developments in week 4/2010 (25 January—31 January)

- The 2009 influenza A(H1N1) pandemic is well past its peak in EU/EEA countries and medium intensity transmission was confined to five countries, all in Eastern or South-eastern Europe. Elsewhere intensity was low.
- Transmission of the pandemic virus continues at low levels on a local or regional basis in another six countries
- Of the 816 specimens collected by sentinel physicians, 9% were found positive for influenza A virus.
- There is no indication of any increase in the incidence of non-pandemic influenza viruses since the beginning of the New Year. Overall since week 40/2009, 99% of all subtyped specimens were identified as pandemic virus.
- The number of reported SARI cases continued to decline. Of the 41 SARI cases for whom underlying conditions were noted, 11 (27%) had no known underlying condition.

[ARCHIVED]  Maps, surveillance summaries and previous ECDC updates

European Union

[ARCHIVE]  European Union Influenza H1N1 page
Pan-American Health Organization (PAHO)

Regional Update. Pandemic (H1N1) 2010 (Jan 25)

- In North America, acute respiratory disease activity continued to decrease and is lower than expected in most areas.
- In the Caribbean, all countries reported unchanged and decreasing trends in acute respiratory disease.
- Central American countries reported decreasing trends in acute respiratory disease except Guatemala, which reported an increasing trend.
- South American countries reported mostly decreasing or unchanged trends of acute respiratory disease.
- In North America, a median of 100% of subtyped influenza A viruses were pandemic (H1N1) 2009.
- 95 new confirmed deaths in 7 countries were reported; in total there have been 7,261 cumulative confirmed deaths.

[ARCHIVED] PAHO Influenza A (H1N1) Portal

Australia and New Zealand

All jurisdictions in Australia have ceased daily Pandemic (H1N1) 2009 data reporting.


- As at 22 January 2010, there have been 37,584 confirmed cases of pandemic (H1N1) 2009 and 191 deaths reported in Australia.
- National influenza activity remains low.
  - Influenza-like illness (ILI) presentation rates to General Practitioners at a national level are low and are below levels usually seen at this time of the year.
  - ILI presentations to emergency departments (EDs) remained steady, and slightly above background levels.
  - FluTracking surveillance for the week ending 22 January 2010 indicated that ILI activity remained at low levels in all participating jurisdictions.
  - Enquiries to the National Health Call Centre Network (NHCCN) regarding ILI remained stable and were at low levels.
  - Absenteeism rates remained similar to levels seen at the end of 2007 and 2008.
- As at 17 January 2010, the WHO Regional Offices reported at least 14,142 deaths associated with pandemic (H1N1) 2009 worldwide. The overall situation is largely unchanged since last week. Pandemic influenza transmission continues in many parts of the world though is declining and has passed its peak except in some focal areas. The most intense transmission of pandemic influenza virus continues to occur in North Africa, South Asia, and in limited areas of Eastern Europe. Overall pandemic influenza activity in the northern hemisphere peaked between late October and late November 2009 and has continued to decline since. In the southern hemisphere, sporadic cases of pandemic influenza continued to be reported without evidence of sustained community transmission. To date, WHO reported that 206 oseltamivir resistant pandemic (H1N1) 2009 viruses had been detected and characterised worldwide. All of these isolates showed the same H275Y mutation but all were sensitive to zanamivir.

New Zealand Pandemic Influenza (H1N1) 09 Swine Flu - Update 170

The overall situation in New Zealand is largely unchanged since last week. Sentinel surveillance data from the Institute of Environmental Science and Research show that visits to doctors for influenza-like illness (ILI) remained at very low levels during the week of 25-31 January 2010.
Whilst the continued low influenza activity is good news, it is important not to lose sight of the fact that the pandemic is not over. A possible second wave of pandemic influenza, for which we have been preparing, could occur anytime.

To help protect New Zealanders against the flu, the Ministry is currently making a monovalent (single viral strain) pandemic vaccine available through an early targeted immunisation programme. The Ministry recommends that those at highest risk of complications have this monovalent vaccine (followed by the seasonal influenza immunisation when it becomes available from early March). Those eligible to receive this monovalent pandemic vaccine are pregnant women, people under 65 years of age (including children) with certain conditions (as for seasonal influenza) or are morbidly obese, and all children aged from 6 months to their fifth birthday enrolled in designated practices that have high proportions of people who are Maori, Pacific and/or from high deprivation areas. It is being made available through clinics, and eligible people who are interested in receiving the early vaccine can get information about these clinics from their DHB.

The early immunisation will also be available to frontline healthcare workers, including staff in general practices, emergency departments, intensive care units and those who may have direct contact with at-risk patients.

[ARCHIVED] New Zealand’s H1N1 page

[ARCHIVED] Australia’s H1N1 Update Bulletins

World Health Organization (WHO)

WHO no longer issues the global tables showing the numbers of confirmed cases for all countries. Regular updates describing the situation in the newly affected countries are provided.

Pandemic (H1N1) 2009 Update 86

[ARCHIVED] WHO H1N1 Guidance Documents

[ARCHIVED] Older WHO Updates

pH1N1 Clinical Information

[ARCHIVED] Ebsco Influenza Portal

Due to Pandemic H1N1 Influenza and concerns about the 2009/2010 flu season, the EBSCO Publishing Medical and Nursing editors of DynaMed™, Nursing Reference Center™ (NRC) and Patient Education Reference Center™ (PERC) have made key influenza information from these resources freely available to health care providers worldwide. Contact your library for access.

Research Articles (1 week backfile)

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)
Reassortment between swine influenza A viruses increased their adaptation to humans in pandemic H1N1/09
Infection, Genetics and Evolution. Published online ahead of print 2010 Feb 1.

Comment: Unlicensed pandemic influenza A H1N1 vaccines

Case report: A life-threatening sore throat masquerading as swine flu

Impact of the Novel Influenza A (H1N1) during the 2009 Autumn-Winter Season in a Large Hospital Setting in Santiago, Chile
Torres JP et al. Clinical Infectious Diseases. Published online ahead of print 2010 Feb 5.

Editorial: Containing the Novel Influenza A (H1N1) Virus
Glezen WP. Clinical Infectious Diseases. Published online ahead of print 2010 Feb 5.

Replication, Pathogenesis and Transmission of Pandemic (H1N1) 2009 Virus in Non-Immune Pigs

High frequency of cross-reacting antibodies against 2009 pandemic influenza A(H1N1) virus among the elderly in Finland

Estimating the impact of the 2009 influenza A(H1N1) pandemic on mortality in the elderly in Navarre, Spain

Could a swine flu surge see a slump in targets?

An experience at an ambulatory pediatric clinic during the first week of a confirmed H1N1 influenza outbreak in Kobe, Japan.

Efficient simulation of the spatial transmission dynamics of influenza.

Public knowledge, attitude and behavioural changes in an Indian population during the Influenza A (H1N1) outbreak.


Influenza A/H1N1 09: Australia and New Zealand's Winter of Discontent.
Swine-origin Influenza Virus and the 2009 Pandemic.

Introduction of virulence markers in PB2 of pandemic swine-origin influenza virus does not result in enhanced virulence or transmission.

The Genetic Makeup of Amantadine-Resistant and Oseltamivir-Resistant Human Influenza A/H1N1 Viruses.

Radiology Resource Utilization During an H1N1 Influenza Outbreak.

H1N1 Influenza in Elderly Nursing Home Residents.

Surveillance of H1N1-related neurological complications.

Molecular cloning of the first human monoclonal antibodies neutralizing with high potency swine-origin influenza A pandemic virus (S-OIV).

Severe acute respiratory infection with influenza A (H1N1) during pregnancy.

The H1N1 pandemic: doing what we do best--back to basics.

Pandemic (H1N1) 2009 Risk for Nurses after Trivalent Vaccination
Loeb M et al. Emerging Infectious Diseases. Published online ahead of print 2010 Feb 4.

Neurologic Manifestations of Pandemic (H1N1) 2009 Virus Infection
Kitcharooen S et al. Emerging Infectious Diseases. Published online ahead of print 2010 Feb 4.

FluTE, a Publicly Available Stochastic Influenza Epidemic Simulation Model.

Host Dependent Evolutionary Patterns and the Origin of 2009 H1N1 Pandemic Influenza

[The pandemic - an afterthought.]

Targeted Antiviral Prophylaxis With Oseltamivir in a Summer Camp Setting.
Council of Europe launches investigation into H1N1 pandemic.

A new cause of cavitated bilateral pulmonary nodules: Influenza A (H1N1) virus.

Update: Follow-up study showing post-pandemic decline in hand sanitiser use.
New Zealand, December 2009.

Worst case: rethinking tertiary triage protocols in pandemics and other health emergencies.

Respiratory failure is the commonest cause of death in diabetic patients with swine flu.

Interim report on A/H1N1 Influenza Virus pandemic in Marseille, France, April-November 2009.

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