



Preparedness and Planning

IOM Provides Guidance on Standards of Health Care

In a new report to the U.S. Department of Health and Human Services, the Institute of Medicine (IOM) provides [guidance](#) for state and local health agencies and health care facilities regarding the standards of care that should apply during disaster situations. According to the committee that wrote the report, crisis standards of care, which involve substantial changes to health care operations and the level of care it is possible to deliver, are put into place out of necessity in response to a disaster situation. Under such circumstances, failing to adopt crisis standards of care -- which include guidance on conserving, substituting, adapting, and doing without resources -- is likely to result in greater death, injury, or illness. Crisis standards-of-care policies and protocols ensure the best health care possible, given the resources at hand.

MDCH PREP Act Fact Sheet

During a public health emergency, the Public Readiness and Emergency Preparedness Act ("PREP Act") gives immunity from lawsuits, for manufacturers, administrators and distributors of vaccines, as well as other qualified persons (i.e., healthcare and other providers) who prescribe, administer, or dispense countermeasures, unless they were acting with willful misconduct. Under PREP Act declarations, the United States Department of Health and Human Services (HHS) Secretary removes financial risk barriers for everyone in the "vaccination chain." Read this [fact sheet](#) for more information.

2009 H1N1 Influenza Vaccine and Seasonal Flu Vaccines Work Similarly

Early results from a trial testing a 2009 H1N1 influenza vaccine in children look promising, according to the trial sponsor, the National Institute of Allergy and Infectious Diseases (NIAID). [Preliminary analysis](#) of blood samples from a small group of trial participants shows that a single 15-microgram dose of a non-adjuvanted 2009 H1N1 influenza vaccine — the same dose that is in the seasonal flu vaccine — generates an immune response that is expected to be protective against 2009 H1N1 influenza virus in the majority of 10- to 17- year-olds eight to 10 days following vaccination. These results are similar to those recently reported in clinical trials of healthy adults. Younger children generally had a less robust early response to the vaccine

Vaccination Coverage among Adolescents

In recent years, the Advisory Committee on Immunization Practices (ACIP) has recommended three newly licensed vaccines: meningococcal conjugate vaccine (MCV4; 1 dose); tetanus, diphtheria, acellular pertussis vaccine (Tdap; 1 dose); and (for girls) quadrivalent human papillomavirus vaccine (HPV4; 3 doses). This report summarizes results from

News

Important H1N1 Updates

- FDA licenses four new vaccines - see page 3.
- Project Areas can place their orders for vaccine beginning September 30 - see page 3.
- First results of H1N1 vaccine's safety are released - see page 4.
- New guidance available for community and faith-based organizations, Ob/Gyn doctors, businesses, pharmacists, and others. See pages 4 and 5.
- Consistency and validity of diagnostic tests for H1N1 are released. See pages 6 and 7.

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Read the Next *Guardian* Issue!
October 9, 2009

the 2008 NIS-Teen and, for the first time, includes estimates for each of the 50 states and selected local areas.

Tornado Threat Increases as Gulf Hurricanes Get Larger

Tornadoes that occur from hurricanes moving inland from the Gulf Coast are increasing in frequency, according to researchers at the Georgia Institute of Technology. This increase seems to reflect the increase in size and frequency among large hurricanes that make landfall from the Gulf of Mexico. "As the size of hurricanes making landfall from the Gulf of Mexico increases, we're seeing more tornadoes than we did in the past that can occur up to two days and several hundred miles inland from the landfall location," said James Belanger, doctoral student in the School of Earth and Atmospheric Sciences at Georgia Tech and lead author of [the paper](#).

Surveillance

Human Strain of H1N1 Discovered in Irish Pig Herd



A pig herd in Northern Ireland has [tested positive](#) for the novel human form of swine flu, H1N1 influenza A. The herd is the first in Europe to be confirmed with the human form of the virus, after vets raised suspicions over a batch of piglets last week. A spokesperson for The Department of Agriculture and Rural Development (DARD) said: "Influenza viruses, including Influenza A, are present in all pig producing countries, including here and Great Britain and are considered endemic in the pig population. "Given that this virus is currently circulating in humans this finding is not unexpected." DARD also moved to assure consumers that humans cannot contract the virus from eating pork.

Communications

WIC Works Learning Center

The Special Supplemental Nutrition Program for Women, Infants, and Children - better known as the WIC Program - serves to safeguard the health of low-income women, infants, & children up to age 5 who are at nutritional risk by providing nutritious foods to supplement diets, information on healthy eating, and referrals to health care. [This website](#) has many useful flu resources available for the public.

Global Terrorism Database Available Online

The Global Terrorism Database (GTD) is an [open-source database](#) including information on terrorist events around the world from 1970 through 2007 (with annual updates planned for the future). Unlike many other event databases, the GTD includes systematic data on domestic as well as international terrorist incidents that have occurred during this time period and now includes more than 80,000 cases.

Families Fighting Flu PSA with Soccer Player Mia Hamm

The Immunization Action Coalition (IAC) features "Families Fighting Flu", a 30-second public service announcement (PSA) about influenza vaccination featuring soccer legend and mother, Mia Hamm. The PSA was developed by Families Fighting Flu in partnership with the American Youth Soccer Organization to encourage entire families to get vaccinated against seasonal influenza. The video

will be available on the home page of IAC's website through September 28.

"Take 3" Brochure Available in Spanish

The Spanish language version of the CDC tri-fold brochure "[Take 3](#)" To Fight Flu is now posted on the CDC website. This brochure emphasizes: the importance of vaccination, everyday preventative actions, and use of antiviral medications.

CDC Mobile Text Messaging

Sign up now to have important CDC information about H1N1 flu and other topics delivered directly to your mobile phone! In September 2009, CDC launched a three-month [text messaging](#) campaign pilot to share important, timely health information directly to users.

Pandemic Planning

FDA Licenses Four 2009 H1N1 Flu Vaccines

On September 15, the U.S. Food and Drug Administration (FDA) announced that it had [approved four vaccines](#) against the 2009 H1N1 influenza virus. The vaccines will be distributed nationally after the initial lots become available, which is expected within the next four weeks. The vaccines are made by CSL Limited, MedImmune LLC, Novartis Vaccines and Diagnostics Limited, and Sanofi Pasteur Inc. All four firms manufacture the H1N1 vaccines using the same processes, which have a long record of producing safe seasonal influenza vaccines. Based on preliminary data from adults participating in multiple clinical studies, the 2009 H1N1 vaccines induce a robust immune response in most healthy adults eight to 10 days after a single dose, as occurs with the seasonal influenza vaccine. People with severe or life-threatening allergies to chicken eggs, or to any other substance in the vaccine, should not be vaccinated.

CDC Vaccine Updates

The Centers for Disease Control and Prevention (CDC) anticipates Project Areas will be able to place their first orders for the 2009 H1N1 vaccine on September 30. At that time, CDC expects up to 3 million doses of LAIV to be available. Some injectable vaccine in 15 microgram pre-filled syringes licensed for use in children age 4 years and up may also be available for ordering at that time. During the first two weeks in October 2009, CDC anticipates Project Areas will be able to place orders for 15 microgram pre-filled syringes licensed for use in children age 4 and older, multidose vials, and as well as additional LAIV.

PHER Phase II funds can be used for vaccine implementation and awardees can use PHER Phase II funds for executing contracts with vaccination providers.

School-located vaccine (SLV) reference documents and consent forms are now posted on the CDC website. These documents provide information for planning and conducting school-located 2009 H1N1 influenza vaccination clinics that target school-aged children enrolled in school and potentially other groups in the community. Included among the resources are template letters to school officials and parents and template consent forms.

Early reports from NIH indicate that 2009 H1N1 influenza vaccines are well tolerated and induce a strong immune response in most healthy adults when administered in a single unadjuvanted 15-microgram dose.

CDC anticipates that LAIV (FluMist®) will be available earliest in the vaccination

campaign, followed by prefilled single dose syringes formulated for adults and older children -- it is anticipated that approximately 15 million doses of vaccine will be available in early October 2009 but exact delivery dates to McKesson are not yet known.

Prefilled single dose syringes for infants and young children and multi-dose vials are expected to become available by mid to late October with a total of approximately 42 million doses available for distribution by the middle of October and a total of 73 million doses by the end of October, 2009.

MedImmune (maker of LAIV) is requesting a waiver process bulk material in final dosage form. This effort is independent and separate from CDC's work with McKesson, and is being conducted by MedImmune.

First Clinical Trial of GSK's H1N1 Adjuvanted Vaccine

GlaxoSmithKline (GSK) announced [results](#) from its first clinical trial assessing use of its pandemic (H1N1) adjuvanted vaccine. The results demonstrate that after one dose the candidate vaccine can provide a strong immune response which exceeds the immunogenicity criteria as defined by international licensing authorities for a pandemic influenza vaccine.

H1N1 Vaccine Safety

- [General Questions and Answers on H1N1 Influenza A Vaccine Safety](#)
- [General Questions and Answers on Thimerosal](#)
- [General Questions and Answers on Guillain-Barré Syndrome \(GBS\)](#)

Vaccination of 70% of U.S. Population Could Control Pandemic

An aggressive vaccination program that first targets children and ultimately reaches 70% of the U.S. population would mitigate pandemic influenza H1N1 that is expected this fall, according to [computer modeling](#) and analysis of observational studies conducted by researchers at the Vaccine and Infectious Disease Institute at Fred Hutchinson Cancer Research Center. The researchers emphasized that a combination of factors – the availability of an effective vaccine to protect people against pandemic H1N1, coupled with the timing of the outbreak – will determine how quickly the pandemic can be slowed. The researchers estimate that to bring the pandemic under control aggressive vaccination of the population must begin at least a month before the epidemic peak, concentrating on children as much as possible.

School-Located Vaccination Planning Materials and Templates

[These documents](#) were designed to provide information for planning and conducting school-located 2009 H1N1 influenza vaccination clinics that target school-aged children enrolled in school and potentially other groups in the community. The targeted audience for these materials is primarily state and local public health department immunization and preparedness staff who are responsible for carrying out 2009 H1N1 influenza vaccination, but also education officials, school nurses, and others who are interested in planning and carrying out such activities.

Pandemic Influenza Vaccine Policy: Considering the Early Evidence

An [editorial piece](#), concerning early research and how it applies to pandemic vaccine policy, published in the *New England Journal of Medicine*, advocates for using the current research in creating dose-sparing strategies. The author further suggests consideration of the use of adjuvant to further stretch supply.

Updated H1N1 Guidance

- [Asthma Information for Patients and Parents of Patients](#)
- [H1N1 Flu and You \(now available as brochure\)](#)

- [Updated Questions & Answers: Antiviral Drugs, 2009-2010 Flu Season](#)
- Updated [Interim Recommendations](#) for the Use of Antiviral Medications in the Treatment and Prevention of Influenza for the 2009-2010 Season
- [2009-2010 Influenza Season: Information for Pharmacists](#)
- [Recommendations for Obstetric Providers and Antiviral Use](#)

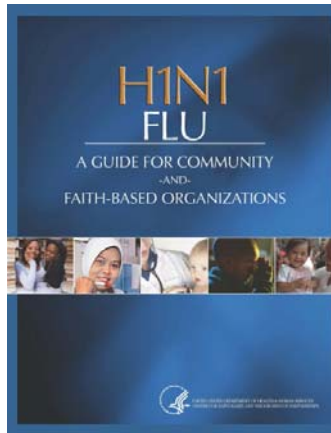
Partnerships between State Health Agencies and Pharmacies

On September 16, the Association of State and Territorial Health Officials (ASTHO) released the "[Operational Framework for Partnering with Pharmacies for Administration of 2009 H1N1 Vaccine](#)" document that serves as a guide for state and territorial health officials to establish effective partnerships with pharmacies to administer the H1N1 vaccine. This was created to assist bringing community pharmacies and the public health community together to help ensure the mass vaccination of the 2009 H1N1 influenza vaccine to the United States population.

H1N1 Flu: A Guide for Community and Faith-based Organizations

To help keep communities healthy during the upcoming flu season, it will take all of us—community and faith-based organizations, government, businesses, and schools—working together. The federal government alone cannot prepare for or respond to the challenge of the 2009-2010 flu season. In addition to providing information about 2009 H1N1 flu and current response activities, [this guide](#) provides specific action steps you can take to help keep your community healthy by:

- Communicating health information effectively;
- Supporting vaccination efforts;
- Linking vulnerable and hard-to-reach populations to vital information and resources; and
- Expanding and adjusting organizational activities to help people stay healthy.



Businesses Foresee Severe Problems Maintaining Operations during H1N1

In a [national survey](#) of businesses that looks at their preparations for a possible widespread 2009 H1N1 outbreak, the Harvard School of Public Health (HSPH) researchers found that only one-third believe they could sustain their business without severe operational problems if half their workforce were absent for two weeks due to 2009 H1N1 Flu. Just one-fifth believe they could avoid such problems for one month with half their employees out. The survey also found that while 74% of businesses offer paid sick leave for employees, only 35% of businesses offer paid leave that would allow employees to take care of sick family members, and even fewer would allow paid time off to care for children if schools/daycares were closed (21%).

2009 H1N1 Influenza: A Preparedness Guide for Small Business

Small businesses play a key role in protecting employees health and safety as well as limiting the impact to the economy and society during an influenza pandemic. [Advance planning](#) for pandemic influenza, a novel infectious disease that could occur in varying levels of severity, is critical. Companies that provide critical services, such as power and telecommunications, have a special responsibility to their community to plan for continued operations in a pandemic and should plan accordingly.

Pandemic Flu Can Infect Cells Deep in the Lungs

The 2009 H1N1 flu can infect cells deeper in the lungs than seasonal flu can, according to a [new study](#) published in *Nature Biotechnology*. The researchers, from Imperial College London, say this may explain why people infected with the pandemic strain of H1N1 influenza are more likely to suffer more severe symptoms than those infected with the seasonal strain of H1N1. They also suggest that scientists should monitor the current pandemic H1N1 influenza virus for changes in the way it infects cells that could make infections more serious.

CMS Offers Billing Guidance for the H1N1 Flu Vaccination

The Centers for Medicare & Medicaid Services (CMS) released [guidance](#) for billing for H1N1 influenza vaccination. This article explains Medicare coverage and reimbursement rules for the H1N1 vaccine. All providers administering this vaccine should review this article and be sure that their billing staffs are aware of this information.

Quick Antiviral Treatment for High-Risk Patients

The Centers for Disease Control and Prevention urges hospitals and physicians to consider [prescribing antiviral medications](#) to patients at high risk for complications from seasonal influenza or H1N1 ahead of time. The guidelines recommend that providers direct high-risk patients to begin immediate antiviral treatment within the first 48 hours after severe influenza symptoms—a bluish color of the skin, difficulty breathing or vomiting—emerge. Providers should not wait for influenza test results before authorizing the use of medication.

Adult Patients with H1N1-Related Severe Respiratory Failure

In the journal *Critical Care*, researchers studied ICU patients in Spain to study why they were admitted with H1N1 influenza. Thirty-two patients were studied over a five-week period each with a diagnosis of H1N1 influenza infection. [The research](#) showed that H1N1 had caused pulmonary complications in all patients especially in pregnant and obese patients. A total of 10 patients died during the study, 6 within 28 days and two towards the end of the study period. The message for clinicians is to be aware of sudden pulmonary complications in H1N1 patients.

ADA-Compliant Employer Preparedness For the H1N1 Flu Virus

The U.S. Equal Opportunity Employment Commission released technical assistance on how to make employer preparedness more compliant with the American Disabilities Act. This short [technical assistance document](#) answers basic questions about workplace preparation strategies for the 2009 H1N1 flu virus (swine flu) that are compliant with the Americans with Disabilities Act (ADA). Because this situation is rapidly evolving, employers should consult their local public health authorities and the Centers for Disease Control and Prevention (CDC).

OIG Reports on Pandemic Influenza Preparedness

On September 21, two reports from the Office of the Inspector General (OIG) were released. The first, [State and Local Pandemic Influenza Preparedness: Medical Surge](#), discusses to what extent selected states are prepared for a medical surge due to pandemic influenza. The second report, [Local Pandemic Influenza Preparedness: Vaccine and Antiviral Drug Distribution and Dispensing](#), discusses how states and local health departments are preparing to distribute vaccine and antivirals and what more can be done.

Poor Clinical Sensitivity of Rapid Antigen Test for H1N1

In a [recent study](#) cited by the Centers for Disease Control and Prevention, researchers from the Institute of Virology, Bonn, Germany noted pandemic 2009 H1N1 virus RNA was detected by reverse transcription-PCR in 144 clinical samples from Bonn, Germany. A common rapid antigen-based test detected the

virus in only 11.1% of these samples. The paramount feature of rapid test-positive samples was high virus concentration. Antigen-based rapid tests appear unsuitable for virologic diagnostics in the current pandemic.

RIDT Influenza Diagnostic Tests during Two School Outbreaks

During May 2009 outbreaks among students from two schools were detected in Greenwich, Connecticut. Staff members from Greenwich Hospital and the Connecticut Department of Public Health collected data on symptoms for 63 patients and submitted nasopharyngeal washings for testing using a rapid influenza diagnostic test (RIDT) for influenza A and B and real-time reverse transcription--polymerase chain reaction (rRT-PCR) assay, thereby affording an opportunity to assess the field performance of the RIDT. [This report](#) summarizes the findings from this performance assessment, which indicated that, compared with rRT-PCR, the sensitivity of the RIDT for detecting infection in patients with 2009 pandemic influenza A (H1N1) was 47%, and the specificity was 86%.

Other News

Massachusetts Seeking Forceful Quarantine Bill

A new proposed bill designed to combat the threat of the 2009 H1N1 virus would allow the state of Massachusetts to forcefully quarantine people in the event of a pandemic. Anyone who refuses to comply with the quarantine order could face jail time or a \$1000 per day fine. The ["Pandemic Response Bill"](#) would also force health providers to vaccinate people, authorize forcible entry into private homes, and impose fines or prison sentences on anyone not complying with isolation or quarantine orders. The bill was passed by the Massachusetts State Senate on April 28. The bill is now awaiting approval in the house.

Training and Education

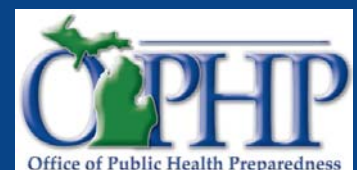
Date/Time	Event	Location
Sept. 27, 2009	Michigan Primary Care Association Annual Conference Save the Date! This conference offers a variety of sessions designed to address or improve health center programs and services. Sessions are tailored to meet the needs of administrators, board members, medical providers, executive directors, fiscal officers, clinical directors and others who work in the healthcare field.	Amway Grand Plaza Hotel Grand Rapids, MI
Sept. 29, 2008	Immunization Webcast Series Michigan State Medical Society and the Michigan Department of Community Health proudly present this brand new immunization series. Statewide experts will share best practices, and evidence based data on the importance and necessity of immunizations for all ages. Don't miss your dose of immunization education. For more information, including registration details, visit the MSMS website . The topics, by date, are as follows: <ul style="list-style-type: none"> • Sept 29: Influenza Update for 2009-2010 Seasonal and H1N1 Flu 	webcast

Date/Time	Event	Location
Sept. 29, 2009 12:00pm	<p>Innovative Solutions in Public Health Preparedness</p> <p>In April 2009, the Advanced Practice Centers (APC) Program, in conjunction with NACCHO, funded three local health departments (LHDs) to develop and implement public health preparedness projects within their community. Join the local health departments as they present their lessons learned and speak about how their tools can enhance your preparedness planning efforts.</p>	webinar
Oct. 9, 2009 10:00pm	<p>Disparities Series: Unnatural Causes</p> <p>The award-winning documentary: Unnatural Causes Is Equality Making Us Sick is set for national rebroadcast on PBS for Fridays at 10:00 p.m. October 9, 16, 27, 30. The series discusses popular conceptions linking health to medical care, lifestyles and genes to explore evidence of other more powerful determinants: the social conditions, in which we are born, live and work.</p>	Local PBS TV Station
Oct. 12, 2009	<p>Michigan Emergency Management Conference</p> <p>This three-day summit will be held at the Grand Traverse Resort in Acme. The cost for this conference is \$225. For more information, including registration details, please visit the MSP Emergency Management and Homeland Security website.</p>	Acme, MI
Oct. 18, 2009	<p>2009 NPHIC Annual Conference</p> <p>This year's National Public Health Information Coalition (NPHIC) conference attendees will participate in a special risk communication training by renowned expert Peter Sandman. Also, the CDC's Barbara Reynolds will lead a training in "RiskSmart", a program designed to enhance organizational credibility and stakeholder trust. Visit the NPHIC website for further details.</p>	Miami Beach, FL
Oct. 22, 2009	<p>Water Laboratory Alliance Security Summit</p> <p>The Water Laboratory Alliance (WLA) provides the water sector (drinking water and wastewater industries) with an integrated nationwide network of laboratories. This network provides the analytical capabilities and capacity in the event of natural, intentional, or unintentional water contamination involving chemical, biological, or radiochemical contaminants. The WLA Security Summit will actively engage a vast array of technical and leadership staff from the water, laboratory, and emergency response communities to learn about WLA Program elements, practice the WLA Response Plan (WLA-RP) for incident response, and provide hands-on experience with EPA security-related tools and resources. Please visit the EPA website for further details.</p>	Crowne Plaza City Center Philadelphia, PA
Oct. 22, 2009	<p>Media Relations and You</p> <p>This unique one-day conference focuses on how you can prepare for your moment in the lights, doing a great media interview, developing a crisis communication plan, writing for the media, and making the news. The conference will provide participants with proven public information tools and techniques that can be applied in a variety of crisis situations.</p>	Dow Event Center Saginaw, MI

Date/Time	Event	Location
Oct. 22, 2009 1pm	Mass Antibiotic Dispensing: Legal Ease The federal government has passed multiple pieces of legislation related to the distribution and dispensing of medical countermeasures during an emergency response. This broadcast will explore some of the legal issues facing state and local SNS planners as they prepare for a mass antibiotic dispensing campaign.	OPHP Large Training Room (517) 335-8150
Oct. 27, 2009	CDC RiskSmart System Organizations must have the public's trust to do their mission. An organization's credibility is based on a combination of its behavior and its communication about what it does or doesn't do. The Centers for Disease Control and Preventions' (CDC) RiskSmart™ system provides tools and training to enhance (measure, preserve and grow) stakeholder trust and safeguard (monitor, detect, assess, forestall) against threats to stakeholder trust. There is no fee for this course, but participants are responsible for their own travel arrangements and costs. For more information about this training event, please contact Ms. Lisa Williams by email at fki3@cdc.gov or by telephone at (404) 639-1786.	Atlanta, GA (404) 639-1786



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