



Preparedness and Planning

Advice on Teaching Kids Kept Home by Flu

The U.S. Department of Education released a list of [distance-learning options and resources](#) that schools could use to maintain “continuity of learning” during flu outbreaks, ranging from hardcopy materials to webinars and online courses, along with practical issues and obstacles those options might entail. The recommendations suggest that teachers prepare take-home assignments in advance for distribution to affected students and use the Internet and telephones to post homework materials, conduct classes, and keep in touch with students and parents. The recommendations aim to help schools maintain studies for small groups of students who might be sent home because they are at high risk for flu complications or for large numbers affected by school dismissals.

First H1N1 Vaccine Trial Data Expected in Mid-September

Federal health [officials](#) said the first results of novel H1N1 vaccine trials—needed for determining the number and size of doses people will get—are expected in mid-September. Two trials in adult and elderly volunteers started August 7 and are now almost fully enrolled, said Dr. Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases (NIAID), at a press teleconference. “We expect first-dose data somewhere around mid-September, if all goes well . . . and second-dose data somewhere around mid-October,” he said . The trials will help determine the dose size—15 versus 30 micrograms (mcg)—and whether each person will need one or two doses to get a good immune response.

Vaccination Coverage among Children

Children living below poverty had lower coverage than children living at or above poverty for most vaccines. Sustaining high coverage levels and using effective methods of reducing disparities across states/local areas and income groups remains a priority to [fully protect children](#) and limit the incidence of vaccine-preventable diseases.

FEMA Research Provides Insights on Personal Preparedness

During the 2009 National Conference on Community Preparedness, the Federal Emergency Management Agency (FEMA) released a [new report](#) called “Personal Preparedness in America: Findings from the 2009 Citizen Corps National Survey” that offers comprehensive data on the public’s thoughts, perceptions, and behaviors related to preparedness and community safety for multiple types of hazards. The survey indicated that 30 percent of Americans have not prepared, because they think that emergency responders will help them and that over 60 percent expect to rely on emergency responders in the first 72 hours following a disaster. While government will execute its functions, communications to the public should convey a more realistic understanding of emergency response capacity and emphasize the importance of self-reliance.

News

H1N1 Vaccine Guidance

The CDC’s Advisory Committee on Immunization Practices (ACIP) released guidance regarding the use of vaccine against infection with novel influenza A (H1N1) virus. See [page 4](#) for full details.

Obama Prepared for H1N1?

A Presidential advisory group of the nation’s leading scientists and engineers released a new report assessing the Obama administration’s preparations for this fall’s expected resurgence of 2009-H1N1. See [page 5](#) for more information.

Pandemic Flu Video Game

In an effort to raise awareness, Dutch researchers have created a game that challenges players to control a new pandemic. In the “Great Flu Game” players pick a flu strain, and then monitor that strain’s spread around the world. See [page 6](#).

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Read the Next *Guardian* Issue!
September 11, 2009

Safety and Immunogenicity of a Novel Influenza Subunit Vaccine Produced in Mammalian Cell Culture

The *Journal of Infectious Diseases* published an article outlining a novel cell-culture-derived influenza vaccine. The study utilized 2654 Polish participants over 18 years of age between 2004 and 2005. Each participant received one intramuscular injection of either the novel vaccine or traditional egg-based vaccine. The study showed that the novel vaccine was as effective as traditional vaccine in all participants. The [full study](#) is available online.

Disabled People Left Out of Disaster Plans, Says Council

The National Council on Disability issued a report, "Effective Emergency Management: Making Improvements for Communities and People with Disabilities," which identifies a gap in community preparedness and response to the needs of people with disabilities in all types of disasters. [The report](#) offers information and advice to assist all levels of government, gives examples of effective community efforts with respect to people with disabilities, and evaluates many emergency preparedness, disaster relief, and homeland security program efforts deployed by both public and private sectors.

Surveillance

H1N1 and Seasonal Influenza Viruses New Zealand, 2009

[This report](#) determined that the number of viruses identified as 2009 pandemic influenza A (H1N1) rapidly overtook the number identified as seasonal influenza, and the peak weekly consultation rate for ILI was three times the peak rate in New Zealand during the same period in 2008.



Transmission of Influenza by Aerosol

Authors posted a knol, defined as a unit of knowledge, to the *PLOS Currents* Influenza edition beta site on the seasonality of influenza. The authors hypothesized that living in a temperate or tropical zone might influence how the influenza virus is transmitted. They used guinea pigs infected with influenza in different environments to model the transmission. Their [data suggests](#) that transmission in temperate climates is mostly by droplets and in tropical climates is mostly by contact. The full knol is available online.

Communications

CDC Updates and Expands Social Media Tools Site!

The Centers for Disease Control and Prevention (CDC) updated their [social media site](#)! The newly released site highlights several social media campaigns, provides information on all of the social media tools CDC uses, and showcases social media data and metrics. The site also equips partners and the public with a unified, easily accessible space to find information on CDC social media efforts and assists communicators in their planning, strategy, and evaluation. Keep up with the latest social media tools at CDC by exploring the revamped site today!

Pandemic Planning

Antiviral-Resistant H1N1 in Two Immunosuppressed Patients

On August 6, the Centers for Disease Control and Prevention detected evidence of resistance to the antiviral medication oseltamivir by pyrosequencing viral RNA from clinical specimens of two immunosuppressed patients with novel influenza A (H1N1) virus infection in Seattle, Washington. [This report](#) summarizes the case histories and resulting investigations and highlights the importance of 1) close monitoring for antiviral drug resistance among immunosuppressed patients receiving treatment for novel influenza A (H1N1) virus infection and 2) the implications for infection control.

New CDC H1N1 Flu Guidance for Schools

The Centers for Disease Control and Prevention (CDC) have updated the federal guidelines for state and local public health and school officials with a range of options for responding to 2009 H1N1 influenza in schools, depending on how severe the flu may be in their communities. [The guidance](#) says that officials should balance the risk of flu in their communities with the disruption that school dismissals will cause in education and the wider community.

What You Need to Know about Flu Viruses

It will be a long and confusing season, with two strains of influenza expected, so here is a cheat sheet about the flu and some tips for avoiding it this fall and winter. The [Detroit Free Press](#) provided this information to assist citizens.

- Question: What is seasonal flu? What is H1N1?
Answer: Seasonal flu is caused by multiple flu viruses unrelated to H1N1 and differs somewhat every year. H1N1 is an unusual off-season strain of influenza virus discovered last spring.
- Question: What are some of the symptoms of either flu?
Answer: For both, symptoms include fever, fatigue, runny or stuffy nose, body ache and sometimes headache, vomiting or diarrhea.
- Question: How can I avoid flu?
Answer: Health officials say frequent hand-washing and sneezing and coughing into a sleeve are the best ways to avoid flu. If you're feeling sick, stay at home.
- Question: When can I get a flu vaccine?
Answer: Health departments are rolling out seasonal flu vaccines early, in September. Public health department clinics, community clinics, doctor's offices and some pharmacy and retail chains will carry the single-dose vaccine, either a shot or nasal spray. The focus of seasonal flu vaccines are children, elderly people, and people with chronic illnesses. The two-dose H1N1 vaccine will be available by early November. Five priority groups will get them first: pregnant women, people who interact with children younger than 6 months, those ages: 6 months to 24 years, people with underlying high-risk conditions, such as asthma, diabetes, suppressed immune systems, heart disease and kidney disease, and health care workers.
- Question: How do doctors treat flu?
Answer: Doctors generally will treat H1N1 and seasonal flu the same way, with antivirals, which will be limited to prevent resistance. The most they will do is shorten illness, which generally resolves itself through rest, fluids and fever reducers such as ibuprofen. The same antiviral medications, such as Tamiflu, should work on H1N1 and seasonal flu viruses.

- Question: Which schools will vaccinate?
Answer: Wayne County and Detroit are talking to schools, including Plymouth-Canton schools, to set up clinics for children to get both flu shots, though details are not finalized. The Oakland County Health Division has vaccine clinics at select schools, such as James R. Geisler Middle School in Walled Lake. And the Macomb County Health Department is working through the Macomb Intermediate School District to set up vaccines.

Guidance for Businesses and Employers To Plan and Respond to the 2009 – 2010 Influenza Season

Federal officials issued [updated guidance](#) to help non-health care employers prepare for seasonal and 2009 H1N1 flu, and a toolkit to help them implement the recommendations. Employers should develop or review their pandemic flu plan and communication channels, develop flexible leave policies and encourage workers with flu-like symptoms to stay home until at least 24 hours after their fever ceases, the Centers for Disease Control and Prevention advises. Among other recommendations, businesses should plan how to continue with increased absences, encourage workers to get flu vaccinations, and promote good hygiene to prevent the spread of infection. If flu conditions worsen, employers should consider screening workers on arrival and alternative work environments for those at high risk for flu complications, the guidance states.

Use of Influenza A (H1N1) 2009 Monovalent Vaccine

[This report](#) provides recommendations by CDC's Advisory Committee on Immunization Practices (ACIP) regarding the use of vaccine against infection with novel influenza A (H1N1) virus. Licensed vaccine is expected to be available by mid-October 2009. Highlights of these recommendations include 1) the identification of five general population target groups for initial focus of vaccination efforts (pregnant women, persons who live with or provide care for infants aged <6 months, health-care and emergency medical services personnel, children and young adults aged 6 months-24 years, and persons aged 25-64 years who have medical conditions that put them at higher risk for influenza-related complications), 2) establishment of a priority for a subset of persons within the initial target groups in the event that initial vaccine availability is unable to meet demand, and 3) guidance on use of vaccine in other adult population groups as vaccine availability increases.



CDC Guidance for Responses to Influenza for Institutions of Higher Education during the 2009-2010 Academic Year

[The guidance](#) crafted by the scientists and doctors at the CDC is designed to help colleges and universities start planning and acting now for the impact that seasonal and 2009 H1N1 influenza could have this fall and winter on their students and faculty members, as well as other university employees. Government officials are especially concerned about the impact of H1N1 on schools because the virus appears to disproportionately affect young people. The CDC's Advisory Committee on Immunization Practices recently found that younger Americans, specifically those ages 6 months to 24 years, are one of the top priority groups when it comes to the new H1N1 vaccine.

IOM Hears Diverse Findings on PPE for Flu

The Institutes of Medicine (IOM) assembled a panel to determine how to protect healthcare workers against H1N1 by way of personal protective equipment (PPE). The [panel deduced](#) that both surgical masks and N-95 respirators

are useful tools. Since there is limited evidence on the clinical effectiveness of PPE, IOM has been charged with providing CDC and OSHA with recommendations on PPE usages by September.

Pharmacological Management of H1N1 and other Influenza Viruses

The purpose of this document is to provide a basis for advice to clinicians on the use of the currently available antivirals for patients presenting with illness due to influenza virus infection as well the potential use of the medicines for chemoprophylaxis. [The document](#) addresses specifically the two neuraminidase inhibitors oseltamivir and zanamivir, and the two M2 inhibitors amantadine and rimantadine.

Public Acceptance of Novel Vaccine during a Pandemic

A study published in *Emerging Health Threats Journal* focuses on whether or not the public will accept the novel influenza H1N1 vaccine. Eleven focus groups were conducted in Vancouver, Canada between 2006 and 2007. [The study](#) showed that the public was wary of using the new H1N1 vaccine because the perceived risk of infection was low compared the risk of taking the vaccine. They also found that the focus groups felt the vaccine was being rushed through the approval process too quickly and have fears that mistakes are being made in the production.

Influenza Vaccine Manufacture: Keeping Up with Change

Kathleen Neuzil and Rick Bright gave [editorial commentary](#) in the *Journal of Infectious Diseases* on the issues with influenza vaccine manufacture. They feel that we should work towards producing a vaccine that does not need to be updated every year. Until then, looking into cell-based technologies to help produce the vaccine faster should be considered. The full editorial is available online.

President's Council Releases Report Assessing H1N1 Preparations

A Presidential advisory group of the nation's leading scientists and engineers released a [new report](#) assessing the Obama administration's preparations for this fall's expected resurgence of 2009-H1N1 flu and outlining key steps officials can take in the coming weeks and months to minimize the disease's impact on the nation. The federal government's preparations for 2009-H1N1 flu have been well-organized and are scientifically grounded, according to the report by the President's Council of Advisors on Science and Technology. Some aspects of those preparations could and should be improved or accelerated, the group concluded.

Hospitals Urged to Take Survey on Ventilator Numbers

The U.S. Department of Health and Human Services contracted with the American Association of Respiratory Care to perform a [comprehensive inventory](#) of mechanical ventilators in every hospital in the country. A survey is being taken to gain an accurate account of the number of ventilators that would be available in the event of a nationwide pandemic. The Office of Preparedness and Response requested this inventory information.

Regional News

Region 8's Disastrous Success

On June 15, a transit authority bus and a tractor-trailer carrying diesel fuel collided in the City of Marquette. Two fire departments, one heavy rescue / hazmat agency, three EMS agencies, and one law enforcement department arrived to find thirteen injured and two fatally wounded patients. The incident ran exactly on time as this was an exercise for the Central Division of

Region 8, not a real event. Scene and hospital reviewers from throughout the Region participated. This exercise was the culmination of months of planning and meetings. Very positive feedback was received from all parties involved. But some items needed improvement:

1. ED staff to be trained on don/doffing Level C PPE.
2. Procedures and equipment to decontaminate patients in spinal motion restriction.
3. Communication devices for fire / EMS personnel so patients can understand them.
4. Eliminating radio dead zones in the ED.
5. Periodic educational reviews of ICS.
6. Personnel and resource accountability system.

Other News

H1N1 Flu Inspires New Video Game

Since H1N1 flu first emerged in April, it has sparked panic, vaccine production and now, a video game. In an effort to raise awareness, Dutch researchers have created a game that challenges players to control a new pandemic. In the "[Great Flu Game](#)" players pick a flu strain, and then monitor that strain's spread around the world. To fight the emerging outbreak, players use measures including setting up surveillance systems, stockpiling antivirals and vaccines, and closing schools and airports. Players also have a limited budget. A running tally of the numbers of people infected and those who have died sit above the budget. Newspaper stories about the deadly virus and the global response to it — like riots breaking out worldwide — pop up to help players monitor the outbreak. Messages from governments mirror the difficulties faced by international agencies like the World Health Organization.

MDCH Reports Increase in Whooping Cough

As Michigan continues to see a high level of reported pertussis (whooping cough) cases in 2009, health officials are reminding parents and doctors of the importance of vaccinating children, teens, and adults against this serious disease. [Pertussis](#) is a bacterial respiratory infection that can occur in all ages, but infants are the most severely affected. It is absolutely critical that children get all their vaccine doses on schedule to give them as much protection as possible. It's also important that family members of young babies get a pertussis vaccine booster so they are protected from illness, and don't pass the illness to infants. Infants should receive four doses of pertussis vaccine by the time they are 18 months old, and a routine booster dose is recommended for children before starting kindergarten. Another booster dose is recommended for adolescents, ideally at 11-12 years of age, and because vaccine protection for tetanus, diphtheria, and pertussis can fade with time, adults should also get a booster dose. A pertussis booster vaccine, known as Tdap, is now recommended.

Expanding the Pool of Flu Vaccine Administrators

State public health officials in Massachusetts signed emergency rules allowing dentists, pharmacists and paramedics to administer the vaccine. The Public Health Council held off on giving the same administrative ability to medical and nursing students. The decision to allow other healthcare workers to administer the vaccine is due to severe budget cuts.

Training and Education

Response to Disaster Surge for Public Health Nurses

Response to Disaster Surge for Public Health Nurses is the third course in a series of four online modules. The Public Health Nursing Surge Curriculum is a competency-based curriculum founded on the 25 Public Health Nursing Competencies Related to Surge Events. Each module is a stand-alone learning opportunity and can be completed as a separate unit, although completion of all four is suggested for a comprehensive understanding of the Public Health Nurses role and practice in disaster. This third module is designed to ensure that PHNs achieve competency and confidence in their knowledge of response for disaster scenarios. To register for this workshop, log on to the [MI-TRAIN website](#) and search by Course ID #1018818.

Date/Time	Event	Location
Aug. 30, 2009	Public Health Information Network (PHIN) Conference 2009 The seventh annual Public Health Information Network (PHIN) Conference features workgroups/ancillary meetings, informatics workshops/tutorials, and many opportunities for networking with informatics colleagues from the local, state, national, and international levels. Participants will also be able to provide input to CDC on how to implement the PHIN initiative in the context of the larger national Health IT Initiative.	Atlanta, GA
Aug. 30, 2009	The International <i>Bacillus</i> Conference The major mission of the conference is to promote stimulating and fruitful interactions between investigators involved in research related to the physiology, genetics, molecular biology, and pathogenicity of these bacteria and to the prevention and treatment of diseases they cause. Session will focus on topics such as bacterial development and structure, epidemiology and ecology, genomics, genetic regulation, toxins, bacteria-host interactions and vaccines/therapeutics.	Sante Fe, NM
Aug. 30, 2009	Alliance of Hazardous Materials Professionals National Conference This year's theme is "Environmental Health, Safety, Security—Steering a Course for Sustainability." Besides professional speakers and insider tours, the conference will offer an educational emergency response scenario involving bomb, chlorine spill, and sarin dispersion incidents at the USS Midway.	San Diego, CA
Sept. 2, 2009 2:00pm	RealOpt® POD Modeling Software The Division of Strategic National Stockpile (DSNS) will conduct a webinar on RealOpt® modeling and optimization software to assist in designing vaccination clinics that run more efficiently, and achieve desired throughput rates, all while operating with fewer staff.	Webinar
Sept. 14, 2009	Large Animal Handling Workshop This one-day workshop is intended for Michigan first responders, animal control officers, and other interested animal volunteers. The goal of the workshop is to help participants develop or reinforce skills and response capabilities used when dealing with cattle, horses, and other domestic livestock during emergencies or other response situations.	MSU Pavilion 4301 Farm Lane East Lansing, MI 48824

Date/Time	Event	Location
Sept. 14, 2009 12:00pm	<p>Clearing the Air: Smoke-Free Policies, Politics, and Promoting Evidence-Based Strategies</p> <p>Join us for this national live internet discussion. The Public Health Grand Rounds will provide a current look at tobacco control research, policies, and laws, and the role for public health practice.</p>	webcast and Ann Arbor, MI
Sept. 21, 2009	<p>Caring for the Community: Preparing for an Influenza Pandemic</p> <p>Breakout sessions will focus on topics such as legal and ethical concerns, integration and collaboration of state and local agencies, staffing and technology requirements, and pre-ED screening. The conference will also feature three prominent keynote speakers: John Barry (Author of <i>The Great Influenza</i>), Dr. Marc Siegel (Fox News Medical Correspondent), and Dr. Howard Markel (Professor of Historical Medicine, University of Michigan). To register, please visit the Spectrum Health website.</p>	Holiday Inn Hotel and Conference Center 1005 Perry Street Big Rapids, MI 49307
Sept. 21, 2009	<p>Wireless State of Technology Conference</p> <p>This free event will bring together both domestic and international stakeholders in a think tank environment to examine the potential of wireless communications technology for improving support and assistance for persons with disabilities before, during, and after a natural or manmade disaster. The target audience is the wireless industry, emergency management and public safety officials, broadcast and cable industry, individuals with disabilities, disability organizations, and researchers working on issues of emergency communications.</p>	Atlanta, GA
Sept. 21, 2009	<p>National After Action Workshop on H1N1 Epidemic Spring 2009</p> <p>Leaders from the Centers for Disease Control and Prevention, and state and local health departments will participate in this national dialogue that will give participants the unique opportunity to interact with colleagues from all levels of the response, and to participate in working sessions designed to help identify gaps to be addressed as we enter the fall influenza season. Updates will be given on the current status of the Novel Influenza A H1N1, both domestically and internationally, and what to expect as we enter the 2009-2010 influenza season.</p>	Los Angeles, CA
Sept. 22, 2009	<p>Frontline Disaster Planning Workshop</p> <p>This interactive workshop focuses on handling mass casualties and establishing alternative care sites and the processes involved in establishing organized systems to limit the loss of life: coordination, collaboration, and communication with police, fire, emergency medical services, hospitals, community emergency response teams, and other community resources. The workshop will identify planning, guidance, and tools needed to ensure an effective community agency, health, and medical care response.</p>	Arlington, VA

Date/Time	Event	Location
Sept. 24, 2009 9:00am	<p>Leadership Skills and Emotional Intelligence This one-day course explores the dimensions of emotional intelligence and how they relate to personal and leadership effectiveness. Emotional intelligence (EQ) is a term that describes a complex ability to regulate your impulses, empathize with others, and persist and be resilient in the face of obstacles. Emotionally intelligent people communicate effectively, form strong relationships, and create powerful coping strategies. The cost is \$199.00 per participant. All course materials and lunch will be provided. To register please visit the OH-TRAIN website and search for course ID #1018888. A repeat of this event will also be held on October 21.</p>	The Blackwell Hotel and Conference Center 2100 Tuttle Park Columbus, OH 43210
Sept. 27, 2009	<p>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.</p>	Amway Grand Plaza Hotel Grand Rapids, MI
Oct. 9, 2009 10:00pm	<p>Disparities Series: Unnatural Causes 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 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 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>Media Relations and You 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. 27, 2009	<p>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 Prevention's (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.</p>	<p>Atlanta, GA (404) 639-1786</p>



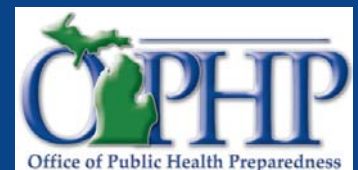
Photo by Tracey Warner



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