Kentucky Fluview H1N1 Weekly Surveillance Report

This Week

- **Continuing Good News**: Although novel H1N1 influenza is still widespread and the incidence is much above the activity level normally seen this time of year; the current wave of H1N1 continues to decline.
- CDC warning regarding pneumococcal disease and who should seek the vaccine (page 3)

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8 ⁷		East
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2		
0 11/9/09	11/11/09 11/13/09 11/15/09 11/17/09 11/19/09 11/ Date	21/09 11/23/09

←School ILI absence rates (page 4 and 5), School closures (page 6).

Public Health Works: See how public health worked during a



successful mass vaccination clinic in Louisville where 19,079 doses where administered (page 10). Also, read about the H1N1 Summit held at the Eastern KY Exposition Center (page 11). increased to 770,800 doses ordered in Kentucky and 744,700 shipped. 968,400 doses have been allocated to Kentucky by CDC. (page 7) ↓

H1N1 vaccine distribution has



- H1N1 Hotline Continuing Service to the State: Close to 9,000 calls have been answered since the hotline opened in October (page 13)
- Novel H1N1 influenza subtype remains the predominant strain of influenza in Kentucky with >99.7% of all positive specimens typing out as H1N1 since August, 2009 (page 3)

Professional Guidance

The Kentucky Department for Public Health has prepared clinical guidance for many H1N1 topics. These documents are posted at the Health Alerts Website: http://healthalerts.ky.gov/Pages/ HealthProfessionalsInfo.aspx

- Vaccine Adverse Events Reporting System (VAERS) Guidelines
- Updated Clinician's Guidance Letter
- Novel H1N1 Influenza Key Points for Clinicians
- Updated Clinician's Guidance for Pediatric Prescription of Oseltamivir (Tamiflu) for H1N1 Treatment
- Novel H1N1 Vaccinator Recruitment Letter

A total of 35 **deaths** have been attributed to H1N1 influenza in Kentucky—29 had significant underlying

health conditions that contributed to the impact of H1N1 on the health of the patient (page 2) →



- Recommended Modifications of Existing CDC Recommendations for Infection Control in Healthcare Settings and for Facemask and N95 Respirator Use
- Updated Clinician H1N1 Testing and Treatment Algorithm
- H1N1 Provider Enrollment Packet
- Pharmacy Only H1N1 Pharmacy Provider Enrollment Form
- Facts About Facemasks Sheet

The page also has links to CDC guidance documents.

Inside this issue:

Deaths	2
Virus Sub-Type Surveillance	3
School Based Sur- veillance	4-6
Vaccine Allocation and Distribution	7-9
Public Health Works: Local Public Health	10- 11
Pregnant Women and H1N1	12
Public Hotline Stats	13
News	14



Publication Date 12/3/09 Issue # 5

Kentucky Fluview

When was this

uata upuateu :	
Item	Current as of:
KY Deaths	12/02/09
US deaths	11/30/09

Abbreviations and Acronyms

KDPH-Kentucky Department for Public Health

LHD—local health departments

CDC—Centers for Disease Control and Prevention

MMWR-

Mortality and Morbidity Weekly Report published by CDC

ILI—influenza like illness

KDE—Kentucky Department of Education

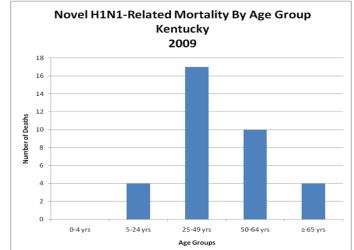
US Pediatric Deaths with Confirmed novel H1N1 influenza

Dates	Deaths
11/15- 11/21, 2009	27

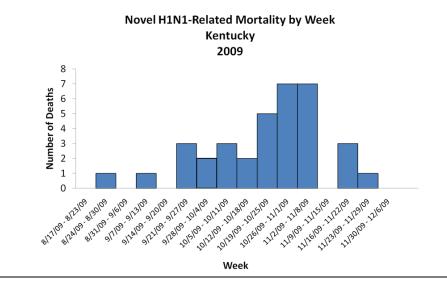
Since Aug. 140 30, 2009

Laboratory Confirmed Kentucky Deaths

Thirty-five deaths have occurred involving people with confirmed novel H1N1 influenza. Of these, twenty one were female, and fourteen were male. The median age was forty-seven, with a range of nine to eighty years. Of the thirty-five, twenty-nine had underlying medical conditions. Of the thirty-five, seven were not in the vaccine priority groups.







US Deaths As Reported by Centers for Disease Control

U.S. Influenza Deaths from 8/30 - 11/ 7/ 2009	Hospitalizations	Deaths
Influenza Laboratory Test Confirmed	29,348	1,224

This data was posted on www.cdc.gov/h1n1flu/updates/us/

Surveillance of Virus Subtypes

KDPH works in partnership with clinicians, local health departments, and the federal Centers for Disease Control and Prevention to conduct surveillance for influenza-like illness.

The information collected by Kentucky sentinel providers is combined with other influenza surveillance data on influenza-related hospitalizations, antiviral usage, severe pediatric influenza cases and positive laboratory detections from collaborating hospital, academic and public health laboratories throughout the state to monitor the timing, location, and impact of influenza viruses year-round.

A total of 3,761 specimens were submitted by providers to the state lab for testing between August 1, 2009 and November 30, 2009. Of those that tested positive for influenza, 99.77% were positive for novel H1N1 influenza.

The results of tests performed during the current month are summarized in the table below.

	August	September	October	November
Specimens Tested	327	769	1594	1071
Specimens positive for Flu	116	358	857	425
H1N1	114	358	855	425
Seasonal Flu subtype	2	0	2	0

CDC Warns About Rise in Serious Pneumococcal Disease

According to the CDC, increases in pneumococcal disease were seen during all three of the flu pandemics that occurred in the twentieth century. A key difference is that now we have two pneumococcal vaccines that may help to prevent these infections.

The Director of CDC's National Center for Immunization and Respiratory Diseases reports that the CDC is seeing an increasing number of invasive pneumococcal disease cases around the country. More pneumococcal disease is expected to be seen when seasonal flu circulates, and it typically affects people who are older than 65. Other high risk groups encouraged to seek pneumococcal vaccination are those without a spleen, infected with HIV/AIDS, having a malignancy, people with asthma, and smokers.

All children less than 5 years of age should receive the pneumococcal conjugate vaccine (PCV7). The vaccine should be given to all infants younger than 24 months at 2, 4, and 6 months of age, followed by a booster dose at 12-15 months of age. In addition, the 23-valent pneumococcal polysaccharide vaccine (PPSV) should be administered to all persons 2-64 years of age with high risk conditions and every-one 65 years and older.

Special emphasis should be placed on vaccinating adults under 65 years of age who have established high-risk conditions for pneumococcal disease; PPSV coverage among this group is low and this group may be more likely to develop secondary bacterial pneumonia after a flu infection.

Please contact your local health department or healthcare provider to inquire about your need for the vaccine and where the vaccine may be available.

When was this data updated?

ltem	Current as of:
Lab counts	11/30/09

News Item

Over the past 5 years, the Denver area saw an average of 20 cases of pneumococcal disease. However, this year the Denver area has already seen 58 pneumococcal cases – most of whom were ages 20-59 and had underlying medical conditions.

Throughout the past several months, CDC officials have urged healthcare workers to encourage highrisk groups to receive the pneumococcal vaccine.

The current pneumococcal availability nationwide is around 61.2 million doses. (Date: 25 Nov 2009; Source: http:// www.cidrap.umn.edu /cidrap/content/ influenza/swineflu/ news/ nov2509pneumonia.html

Page 3

When was this data updated? Item Current

as of: School 11/24/09 ILI Absences

News Item

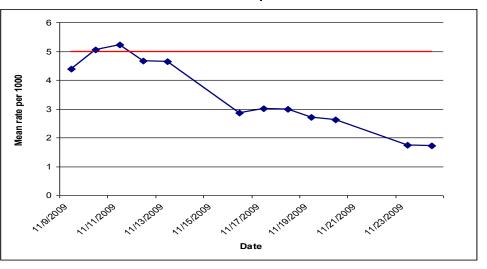
A European study suggests that closing schools during an infectious disease pandemic may play a significant role in reducing disease transmission. Children are important spreaders of close contact pathogens due to their general hygiene and frequent close social contact. School closures may serve as an important strategy when reducing disease transmission during a pandemic. Study researchers conclude if school closures resemble holiday breaks, disease transmission may be decreased by about 21%. The study also notes there are macroeconomic costs of school closures that need to be considered when making school closure decisions. (Date: 27 November 2009; Source: http:// www.sciencedaily.c om/ releases/2009/11/0 91127101042.htm

School Absenteeism Attributed to ILI

The KDPH, in collaboration with KDE, collects self-report data on school absences and school closures attributed to ILI from Kentucky public schools. School absenteeism data is continuously updated and may change as school census updates are provided.

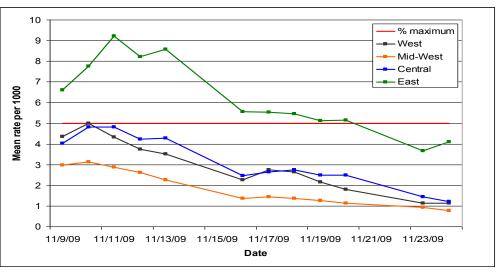
The chart below depicts the trend in mean rate of absences attributed to ILI per 1,000 children enrolled in Kentucky public schools from 11/09/2009 - 11/24/2009. The red line indicates the mean rate corresponding to half of the maximum rate seen statewide since KDPH began collecting absenteeism data on 09/14/2009. The maximum rate of ILI absenteeism that KY experienced in its schools was 10 per 1,000 students. The red line notes half of the maximum absenteeism rate showing that the overall absentee-ism rate for schools across KY has fallen far below half of the maximum rate at this point in time.

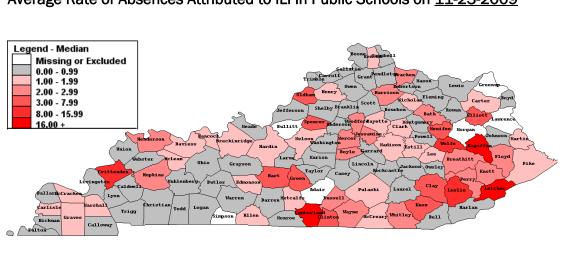
Mean rate of absences attributed to ILI per 1000 enrolled



The chart below represents the same summary measure of ILI absenteeism as the chart above with the rates stratified by region. The red line is half the maximum rate seen statewide. The maximum rate in each region varied (West-7.74 per 1000; Midwest-3.14 per 1,000; Central-6.06 per 1,000; Eastern-9.46 per 1000). Each region is seeing rates well below half of their respective maximum rates. The east shows the highest rates of absenteeism, but it has also dropped below half the statewide rate as of November 23, 2009.

Regional mean rate of absences attributed to ILI per 1,000 enrolled

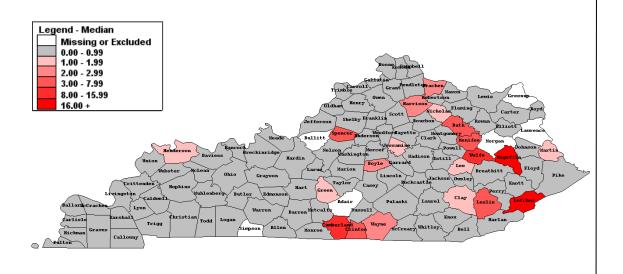




Average Rate of Absences Attributed to ILI in Public Schools on 11-23-2009

The map above presents the average rate of absences attributed to ILI. The average, or mean, can be distorted in a county where one school or a few schools have extreme values (for example, one school may have 85 absences per 1,000 students for ILI where most schools have only 15). Another way to present the data that avoids distortion due to extremely high rates for a few schools, is to use the median rate for each county. The median rate represents the midpoint of the various school absenteeism rates in each county (half the schools have a higher rate, and half of the schools have a lower rate); it is not influenced by extreme values in a few schools.

Median Rate of Absences Attributed to ILI in Public Schools on 11-23-2009



Kentucky Fluview

When was this data updated?	
ltem	Current as of:
Closures	11/30/09

School Closures

From August 1 to November 30, 302 schools from 54 districts closed one or more days due to influenza like illness. The first reported school closure was on August 18th.

This chart shows three peaks of school closures during the time period.

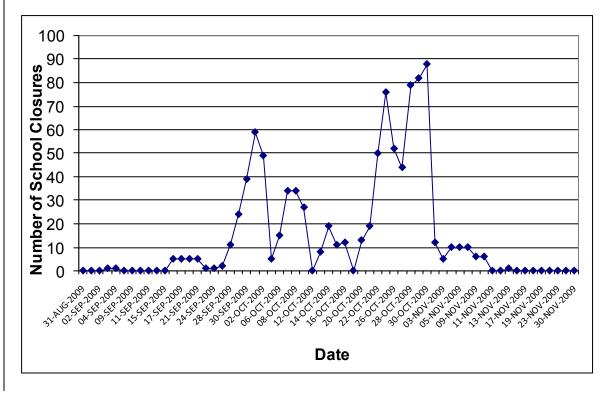
(Note: these are the number of schools that closed not school districts.)

- October 1: 59 schools •
- October 23: 76 schools
- October 30: 88 schools

Public School Closures Due to Influenza Like Illness by County August 1 - November 30, 2009

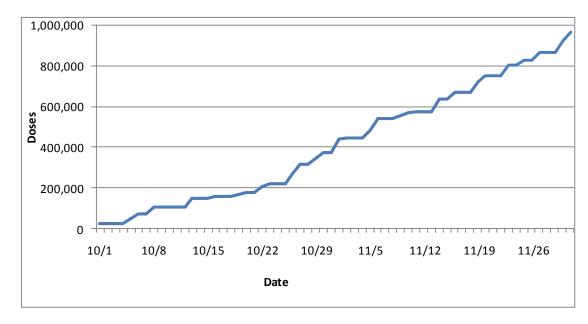


Number of Public Schools Closed Due to ILI by Date of School Closure August 31 – November 30, 2009



Vaccine Allocation

CDC sends states a weekly 2009 H1N1 allocation report which indicates how much of each formulation of 2009 H1N1 influenza vaccine Kentucky can order. CDC allocates vaccine based on the state's population. KDPH then sub-allocates vaccine to counties and health districts by population. CDC's vaccine distribution contractor ships vaccine to hospitals, clinics, doctor's offices, health departments, and other providers three or four times per week. The chart below shows the cumulative doses of vaccine allocated to Kentucky from the CDC. The total allocated to Kentucky to date is 968,400 doses.



Cumulative Allocation from CDC by Date

Transmission of Influenza A Virus Between Animals and People

The influenza A virus can infect many different animals, not just humans– but also ducks, chickens, pigs, horses and even whales! There are specific subtypes of influenza A virus that are specific to species. The only exception is birds, which are hosts to all known subtypes of influenza A. Influenza A viruses normally seen in one species sometimes can cross over and cause illness in another species. There are two ways that avian influenza A viruses may be transmitted from animals to humans: direct transmission from birds or through an intermediate host, such as a pig. Up until 1998, novel H1N1 influenza A viruses circulated widely in pigs in the U.S. However, the most recent pandemic is a mixture of two swine strains, one avian strain, and a human strain creating the novel H1N1 influenza A virus subtype.

A major change in the influenza A virus is called an antigenic shift, which results in a new influenza A subtype. Most people do not have immune protection against mutated subtypes, which poses a threat to the population.

For more information on Avian Influenza Infections in Humans, please refer to: http://www.cdc.gov/flu/avian/gen-info/avian-flu-humans.htm

When was this
data updated?ItemCurrent
as of:Allocation11/18/09Ordered /
Shipped11/18/09

News Item:

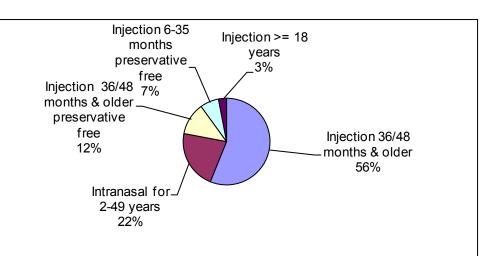
Viruses are small parasites that plant their genes into our cells. Once this foreign genetic material is recognized our bodies elicit an immune response. New research shows that sensors from our immune defenses that recognize foreign material from the flu virus also trigger the production of cytokines, another immune system molecule. Some researchers suggest that overproduction of cytokines may exaggerate viral symptoms. Medicines that prevent 'overproduction' of cytokines may also teach us more about how to alleviate the progress of the flu. (Date 24 Nov 2009; Source: http://

www.sciencedaily.com/ releases/2009/11/091116 103445.htm

When was this data updated?

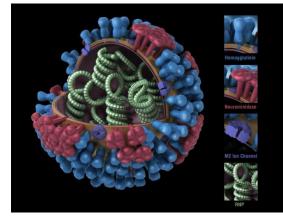
Item	Current as of:
Doses by type	12/2/09

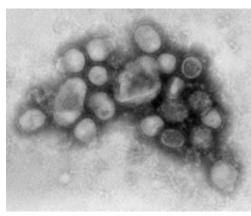
Doses Shipped by Type



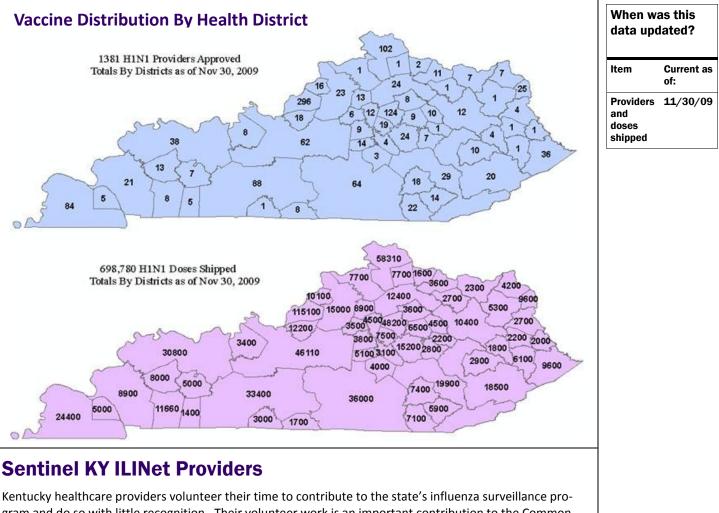
Type of Vaccine	Ordered	Shipped
Injection 36/48 months & older	432,600	404,100
Intranasal for 2-49 years	160,500	166,000
Injection 36/48 months & older preservative free	92,800	97,800
Injection 6-35 months preservative free	53,700	55,900
Injection >= 18 years	23,200	20,900
Total	770,800	744,700

Right: A 3D graphical representation of the biology structure of a generic influenza virus.





Left: An image of the newly identified novel H1N1 influenza A virus taken from the CDC Influenza Laboratory.



gram and do so with little recognition. Their volunteer work is an important contribution to the Commonwealth's influenza monitoring efforts and to recognize this contribution the KDPH is pleased to give a special thanks to the following contributing organizations. The organizations in **bold** have achieved 75% or better reporting compliance for the 2009-2010 flu season.

All Children Pediatrics All Star Pediatrics	Kentucky Mountain Health Alliance / Little Flower Clinic Lebanon Pediatrics
Asbury College Student Health Services	Lexington Clinic
Children's Health, PLLC	Lexington Clinic Richmond
	Lexington-Fayette County Health Department Primary
Comprehensive Care	Care
East Louisville Pediatrics, PSC	Louisville Area Pediatrics
Eastern Kentucky University Student Health	Morehead State University Counseling and Health Ser-
Services	vices
Family Medicine Associates of Western Ken-	
tucky, PLLC	Nicholasville Pediatrics
Family Practice Associates of Lexington, PSC	Riverview Clinic
Green County Primary Care	Saint Claire Family Medicine - Frenchburg
Health Plus PSC	UK North Fork Valley Community Health Center
Hometown Family Care	Union College Campus Health Center
Jessamine Medical Center	University of Kentucky Student Health Service
Kaplan Barron Pediatrics	University of Louisville Campus Health Services
Kentuckiana Pulmonary Association	Western Kentucky University Health Services

Public Health Works

The Ten Essential Services provide a working definition of public health and a guiding framework for the responsibilities of the public health system. Every day the state, district and local health departments in Kentucky put the essential services to work in their efforts to prevent, promote and protect. This H1N1

response story from the Louisville Metro Area shows how public health works.

Distribution and administration of novel H1N1 immunization has been a challenge for Kentucky's communities of all sizes. Ensuring access to vaccine by targeting high risk groups using methods that are reliable and accessible, while meeting the expectations of the commu-



nity, has been particularly difficult. On November 11-12, 2009, the Louisville Metro Department of Public Health and Wellness partnered with the University of Louisville in order to plan and implement a community-wide immunization event targeting those adults and children at highest risk for H1N1 illness and consequence. The event was held at the University of Louisville's Papa Johns Cardinal Stadium south lot parking area.

This two-day event was composed of a combination of walk-in and drive-through sites, with both providing injectable and intranasal vaccine to all age groups. The walk-in venue enabled individuals to enter the stadium area, then park in a designated area immediately adjacent to the walk-in tent. In addition, the Transit Authority of River City (TARC) provided continuous bus service from five government centers located in distinct sections of the Louisville metropolitan area. Individuals entered the walk-in tent and were directed to one of the fifteen immunization stations. Staff from the Louisville Metro Department of Public Health and Wellness, Medical Reserve Corps volunteers, and a number of other community agencies ensured that citizens at the walk-in portion received immunization in a timely manner.

For the drive-thru, vaccine recipients were able to remain in their vehicles and were routed to one of ten lanes leading to five immunization tents. Faculty, staff and students from the University of Louisville and Bellarmine University Schools of Nursing, faculty and staff from the University of Louisville School of Pub-



lic Health and Information Sciences and medical students from the University of Louisville School of Medicine provided immunization to individuals in their vehicles.

(story continued on next page)

Public Health Works (continued)

Planning was done using expertise from the University of Louisville's Department of Environmental Health and Safety. Simulation and modeling assistance provided by the University's Speed School of Engineering and the Logistics and Distribution Institute helped evaluate the drive-through processes and enabled planners to identify problematic flows and make corrections prior to and during the event.

The event was an unprecedented success with 12,613 doses (4310 in the walk-up tent and 8,303 via drivethrough) administered from 8am-7pm on the first day and 6,466 doses (2,130 in the walk-up tent and 4,336 via drive-through) administered from 8am-1pm on the second day. The two-day total of 19,079 is an apparent world record. A toolkit is currently being constructed containing the documents, schematics, and procedures used in the planning and implementation of this event. It was a great demonstration of partnerships working for the benefit of the community.

Managing the Emotional Response

Louisville Metro Department of Public Health Partners with KCCRB

On November 6, 2009, the Louisville Metro Department of Public Health contacted the Kentucky Community Crisis Response Board (KCCRB) with a request to provide critical incident stress management during Louisville's first mass H1N1 vaccine clinic held at Papa John's Cardinal Stadium. Twentyseven (27) Kentucky Community Crisis Response Team (KCCRT) members responded over the two-day event period where 19,079 flu vaccinations were distributed. Direct services were provided by KCCRT members in the form of educational contacts and psychological first aid to approximately 6,578 participants.



Contacts consisted of:

- 6,360 Educational Contacts: Participants were provided an educational brochure *Coping with a Public Health Emergency* along with brief information regarding the psychological and emotional response to a pandemic event.
- 218 One-on-One Brief Crisis Intervention Psychological First Aid encounters.

The public's emotional well-being is positively impacted by messages that provide information about physical safety and promote the use of natural support systems. Support systems include those such as family, friends and communities, neighborhoods and faith-based groups. Additionally, delivering uncomplicated and valid information that emphasizes the normal stress reactions and promotes self-care strategies can serve to normalize reactions and emphasize hope, resilience, and natural recovery. Through this educational outreach effort, KCCRB reinforced one of the agency's primary missions, not only to inform and prepare communities but also to enlist them as partners in the planning and final process.

H1N1 Summit at Eastern KY Exposition Center

An example of Public Health Essential Services of Education and Communication

Pike County Health Department (PCHD) partnered with the Pike County Judge Executives Office to provide an H1N1 Summit on September 29th at the Eastern KY Exposition Center. Dr. William Hacker, State Health Commissioner, was the guest speaker at the event. The PCHD provided general information about H1N1, protective measures the community can take, and about H1N1 in Pike County. The Summit concluded with a Panel Discussion provided by panelists from the Pike County Board of Education, Pike County Health Department, Pike County EM, the office of the Pike County Judge Executive, Pikeville Medical Center, Pikeville College School of Osteopathic Medicine, and Appalachian Regional Hospital. Over 200 people were in attendance. Clinicians are encouraged to report any pregnant woman or a woman up to six weeks postpartum who is hospitalized with influenza in Kentucky by calling our H1N1 Call Center at 877-826-7697. For additional support or questions about clinical treatment or CDC guidance and recommendations, clinicians can call CDC's pregnancy support line at 404-368-2133.

For more information about flu vaccine safety for pregnant women, visit: <u>http://</u> www.cdc.gov/ <u>h1n1flu/</u> vaccination/ <u>preg-</u> nant_ga.htm

For more resources about swine flu and pregnant women, visit: <u>http://</u> www.cdc.gov/ <u>h1n1flu/</u> pregnancy/

Pregnant Women and H1N1

Pregnancy and H1N1 A pregnant woman who gets any type of flu has a greater chance for serious health problems. Compared with people in general who get swine flu, pregnant women with swine flu are more likely to be admitted to hospitals and are also more likely to have serious illness and death from swine flu. Research has found that pregnant women who had a flu shot get sick less often with the flu than do pregnant women who did not get a flu shot. Babies born to mothers who had a flu shot in pregnancy also get sick with flu less often than do babies whose mothers did not get a flu shot.

Vaccines for Pregnant and Post-Partum Women Public health officials from CDC and the Kentucky Department for Public Health advise pregnant women to get flu shots either with or without thimerosal (a mercury preservative in vaccine that comes in multi-dose vials). There is no evidence that thimerosal is harmful to a pregnant woman or a fetus. However, because some women are concerned about thimerosal during pregnancy, vaccine companies are making preservative-free seasonal flu vaccine and swine flu vaccine in single-dose syringes for pregnant women and small children. There are no adjuvants (agents that are sometimes added to a vaccine to make it more effective) in any of the seasonal flu or swine flu vaccines. The nasal spray influenza vaccine is safe for women after they have delivered their baby, even if they are nursing. In addition, it is safe for a pregnant woman to be around a family member or another close contact who has received nasal spray flu vaccine.

Health care providers are encouraged to give the seasonal and novel H1N1 influenza A vaccinations to their patients who are pregnant. The seasonal flu shot has been given to millions of pregnant women over many years. Flu shots have not been shown to cause harm to pregnant women or their babies. The swine flu vaccine is being made in the same way and at the same manufacturing sites as the seasonal flu vaccine.

Influenza Surveillance in Pregnant Women Hospitalized due to the Influenza Virus

In Kentucky, we currently have 13 total confirmed hospitalizations of pregnant women due to influenza infection. However, no cases of pregnant women with H1N1 have been reported as ICU admissions. Participation of providers in this surveillance is voluntary and these cases are not mandated to be reported to the State Health Department under Kentucky law. Therefore, although we are utilizing both active and passive surveillance methods we cannot be sure that we are capturing all pregnant women hospitalized in Kentucky due to influenza infection.

The H1N1 Pregnant Women Surveillance Process

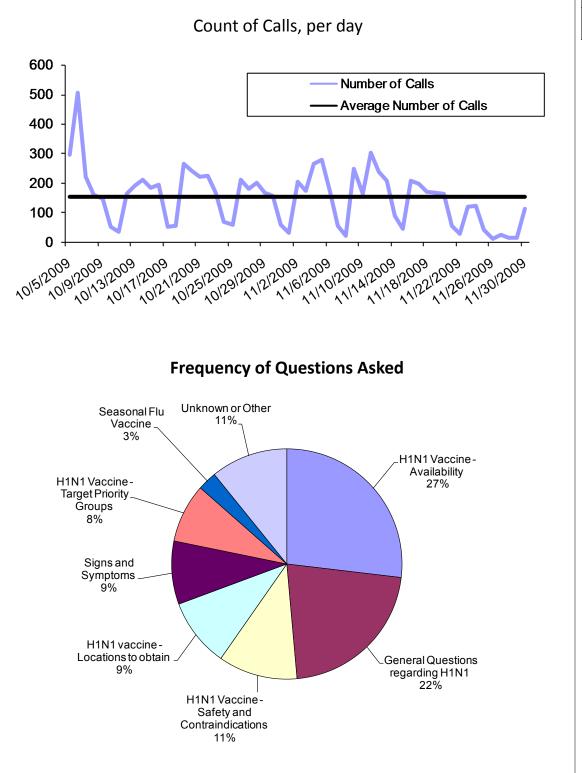
In October 2009, the Centers for Disease Control and Prevention (CDC) began a nationwide surveillance effort to collect data on pregnant women with severe illness due to laboratory confirmed influenza virus. The goal of the surveillance project was to "improve timeliness, completeness, accuracy, and level of detail in nationwide reporting of deaths and ICU admission due to influenza in pregnant women and women with symptom onset up to 6 weeks postpartum". The surveillance effort was prompted by the rising number of pediatric deaths due to the influenza virus. All states are currently being asked to participate in the surveillance project by reporting all ICU admissions and deaths among pregnant and postpartum women with a confirmed influenza virus infection indicated by **at least one** of the following laboratory tests:

- A positive rapid influenza test
- rRt-PCR (real-time reverse transcription-polymerase chain reaction) positive for influenza
- DFA and IFA (Direct and indirect immunoflourescence assays)
- Viral culture

In addition to the surveillance efforts initiated by the CDC, the Kentucky Department for Public Health has taken the surveillance effort one step further by collecting data on all pregnant women (and those women who are six weeks postpartum) who have been hospitalized due to a confirmed influenza infection. Regional Epidemiologists across the state of Kentucky are currently collecting retrospective and prospective data on hospitalizations in pregnant women due to influenza infection since August 21, 2009 and will continue collecting this data until further notice.

H1N1 Public Telephone Hotline

On October 5, 2009 KDPH established a telephone hotline to answer questions from the public. The hotline averages about 160 calls a day. As of 12/1/2009, it has received 8,832 calls. The most common questions are noted in the chart below. The flu hotline is staffed by nurses and administered by Kosair Children's Hospital, a part of Norton Healthcare. The flu hotline will be active through at least the end of December.



Note: data is up- dated dally.		
ltem	Current as of:	
Count	12/1/09	
Type of questions	12/1/09	

The hotline number is 1 (877) 843-7727. It is available from 8 a.m.-10 p.m. daily

Cabinet for Health and Family Services Department of Public Health Division of Epidemiology and Health Planning

275 E. Main St. HS2GWC Frankfort, KY 40621

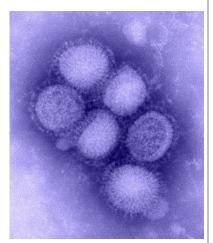
Phone: (502) 564-7243 Fax: (502) 564-0542

Dr. Kraig Humbaugh, Director

Dr. William Hacker, Commissioner

FOR THE LASTEST UPDATES ON H1N1, GO TO: WWW.HTTP:// HEALTHALERTS.KY.GOV

The H1N1 Virus



Announcements and News

Vaccine Adverse Event Reporting

As part of our public health surveillance system, healthcare providers help monitor the safety of all licensed vaccines--- including the novel H1N1 influenza vaccine--- by promptly and accurately reporting any clinically significant adverse events that follow vaccination. Reports of adverse events subsequent to any vaccination are reported to the Vaccine Adverse Event Reporting System (VAERS). VAERS is co-managed by the Centers for Disease Control and Prevention (CDC) and the Food and Drug Administration (FDA) and is the front-line monitoring system for collecting and analyzing voluntary reports of adverse events following vaccination. The CDC and FDA analyze VAERS reports to identify potential vaccine safety concerns that may warrant further study or public health action.

Clinically significant adverse events are those events that are of concern to providers or vaccinated patients or their caregivers, even if it is not clear that the vaccine caused the adverse event. Reporting to VAERS is open to anyone including medical providers, patients, and public health personnel. While anyone can report to VAERS, vaccinated patients or their caregivers are encouraged to seek the help of their health care provider in filling out a VAERS form.

There are three ways to report an adverse event to VAERS:

- 1) Submit online via a secure website at http://vaers.hhs.gov/esub/index
- 2) Fax a completed VAERS form to 877-721-0366, or
- 3) Mail a completed VAERS form to VAERS, P.O. Box 1100, Rockville, MD 20849-1100.

In addition, to ensure that the Kentucky Immunization Program is made aware of vaccine adverse events occurring in Kentucky, we ask that people reporting adverse events make a copy of the completed VAERS form and mail it to:

Kentucky Department for Public Health Immunization Program 275 East Main Street, HS2E-B Frankfort, KY 40621

The VAERS reporting form can be downloaded from the VAERS website at http://waers.hhs.gov/esub/index. Alternatively, a VAERS form may be requested by sending an email to info@vaers.org, by calling toll-free 800-822-7967, or by sending a faxed request to 877-721-0366.

For additional information on VAERS or vaccine safety, visit the VAERS website at vaers.hhs.gov/index or call 800-822-7967.