



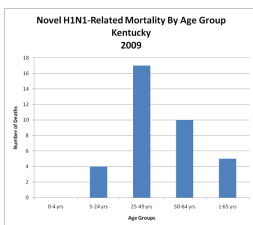
# Kentucky Fluview H1N1 Weekly Surveillance Report

**Please note this is the last issue of Fluview until the new year. The newsletter will resume every other week starting the first week in January.**

Publication Date  
**12/18/09**  
Issue # 7

## This Week

Novel H1N1-related deaths remain at 36 individuals. Of the thirty-six, thirty had underlying medical conditions. (page 2) →



**Information on the non-safety related vaccine recall (page 3)**  
Approximately 800,000 doses of H1N1 vaccine in .25 mL pre-filled syringes for children 6 – 35 months of age were recalled this week due to a slightly reduced potency found in secondary testing. Kentucky had received 21,800 doses of the implicated doses.



### Inside this issue:

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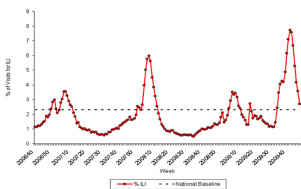
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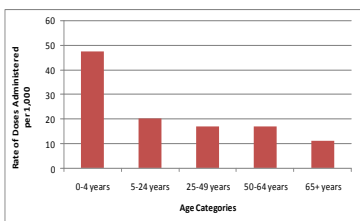
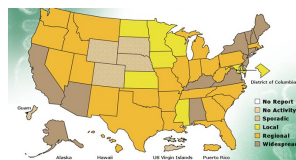


At this time, there is only *one* county reporting a median rate of school absenteeism 16+ per 1,000. (page 5) ←

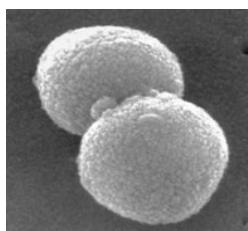
Outpatient visits for ILI continues to decline nationally and is approaching the national baseline. (page 7) →



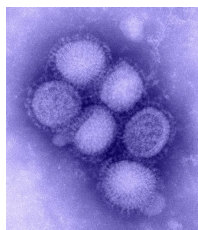
Kentucky is one of fourteen states reporting widespread Influenza activity. (page 6) →



Rates of doses administered indicate that young children are the most heavily vaccinated age group. (page 8) ←

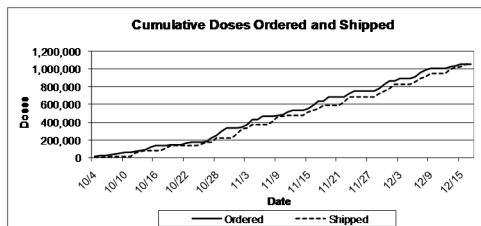


CDC warns individuals 65+ about the risks of pneumococcal infections. ← (page 9)



An image of novel H1N1 influenza A virus taken from the CDC Influenza Laboratory. ←

Doses ordered and shipped both rise to over 1,000,000. (page 11) →



### Other highlights in this issue:

- The online survey assessing the availability of the H1N1 vaccine closes this Saturday on 12/19/09. (page 6)
- Public Health Works stories from Northern Kentucky, Knox Co., Monroe Co., and Lexington-Fayette Health Dept. (page 12-14)
- Medical history of 13 deaths reported to VAERS system (page 16)

For previous issues of KY Fluview, find them at Kentucky Health Alerts: <http://healthalerts.ky.gov/Pages/KentuckyFluView.aspx>





## Non-Safety Related H1N1 Vaccine Recall

In the past week, Sanofi Pasteur announced a voluntary recall of approximately 800,000 doses of H1N1 vaccine in .25 mL pre-filled syringes for children 6 – 35 months of age due to a slightly reduced potency found in secondary testing. It is important to note that this was **not due to any safety concerns** about the vaccine. As part of an ongoing quality assurance program conducted by the vaccine manufacturer, routine testing of the vaccine is performed immediately after each batch of vaccine is produced and then several weeks later to assess the strength, or potency (antigen) level of the vaccine over time to make sure it continues to meet FDA specifications. On December 7, Sanofi Pasteur notified the Centers for Disease Control and Prevention (CDC) and the Food and Drug Administration (FDA) that the potency of one batch of pediatric syringes that had already been distributed was found upon this secondary testing to have dropped slightly below the FDA specifications. Subsequently, three other batches, (also referred to as “lots”), were found to be slightly below the potency specifications also.

Out of 46,300 doses of this formulation that had been allocated to Kentucky before the recall, only 21,800 had actually been shipped to local health departments and providers in the Commonwealth. Although much of the implicated vaccine has probably already been administered, the Kentucky Department for Public Health immediately identified all locations that received the implicated doses of vaccine and notified the local health departments in those counties so that they could find and collect any of the vaccine that was unused based on specific lot numbers.

The CDC and FDA both agree that the small decrease in strength is unlikely to result in a clinically significant reduction in immune response among those who have received the vaccine. Thus, *there is no indication to revaccinate children who received vaccine from these lots, and there are no safety risks to children who received a dose of the affected vaccine.* Parents of children who received a dose from the recalled lots do not need to take any action, other than to complete the two-dose immunization series if not already complete. CDC recommends that children less than ten years old receive two doses of the H1N1 vaccine approximately one month apart for optimal immune response. Children should receive both of their vaccine doses in the same form (i.e., two injectable doses or two intranasal doses).

If you are a provider and are concerned that you might have doses from an implicated lot, you can check the lot number of your .25 mL pre-filled syringes. The indicated lot numbers are: UT023DA, UT028DA, UT028CB (all 10 packs, NDC #: 49281-650-25) and UT030CA (25 packs NDC #: 49281-650-70). If you find that you have doses remaining, please contact your local health department to report this and to get instruction on how to dispose of the vaccine. No doses have been shipped since last Thursday (12/10/09) and the manufacturer will not be replacing unused doses. In order to continue to vaccinate children in this age group, .25 mL doses can be drawn from multi-dose vials. One difference of note is that the pre-filled syringes were free of the preservative thimerosal while the other formulations contain trace amounts of thimerosal to protect the vaccine from contamination. Children over two years (24 months), can be administered the nasal form of the H1N1 vaccine (sometimes referred to as “LAIV”) which is free of thimerosal.

**For more recall information visit the CDC website at:**  
[http://www.cdc.gov/h1n1flu/vaccination/syringes\\_ga.htm](http://www.cdc.gov/h1n1flu/vaccination/syringes_ga.htm)

## 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.

A total of 4,137 specimens were submitted by providers to the state lab for testing between August 1, 2009 and December 17, 2009. Of those that tested positive for influenza, 99.8% were positive for novel H1N1 influenza. The lab has received specimens from all 120 counties in Kentucky. Out of the specimens submitted, 114 counties have had at least one positive H1N1 case. The results of tests performed by the Kentucky State Lab since August 2009 by month are summarized in the table. Note that tests for December do not represent a full month and are current up to 12/17/09.

	Aug.	Sept.	Oct.	Nov.	Dec. *
<b>Specimens Tested</b>	<b>327</b>	<b>769</b>	<b>1594</b>	<b>1106</b>	<b>341</b>
<b>Specimens positive for Flu</b>	<b>116</b>	<b>358</b>	<b>857</b>	<b>430</b>	<b>145</b>
<b>H1N1</b>	<b>114</b>	<b>358</b>	<b>855</b>	<b>430</b>	<b>145</b>
<b>Seasonal Flu subtype</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>

\*Note tests for December do not represent a full month.

<b>When was this data updated?</b>	
<b>Item</b>	<b>Current as of:</b>
<b>Lab counts</b>	<b>12/17/09</b>

**When was this data updated?**

Item	Current as of:
School Absenteeism	12/16/09

School Absenteeism

**Attitudes about Pandemic H1N1 Influenza Prevention Differ in Italy**

A survey was conducted in Italy during the month of October 2009 regarding attitudes and behaviors towards preventive measures against pandemic H1N1 influenza.

Researchers found 70.4% of the 1,360 females sampled would not get vaccinated against pandemic H1N1 influenza, while 49.2% of the 600 males would get vaccinated ( $p < 0.001$ ). The main difference for the same question was related to occupation: 67% of physicians and 31% of nurses would get vaccinated against pandemic H1N1 influenza ( $p < 0.001$ ). In contrast, nurses were more prone (79.5%) than physicians (64.7%) to wash their hands or use hand sanitizers in response to reports of pandemic influenza ( $p < 0.001$ ).

**Source: Eurosurveillance Vol. 14 (49)** <http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19432>

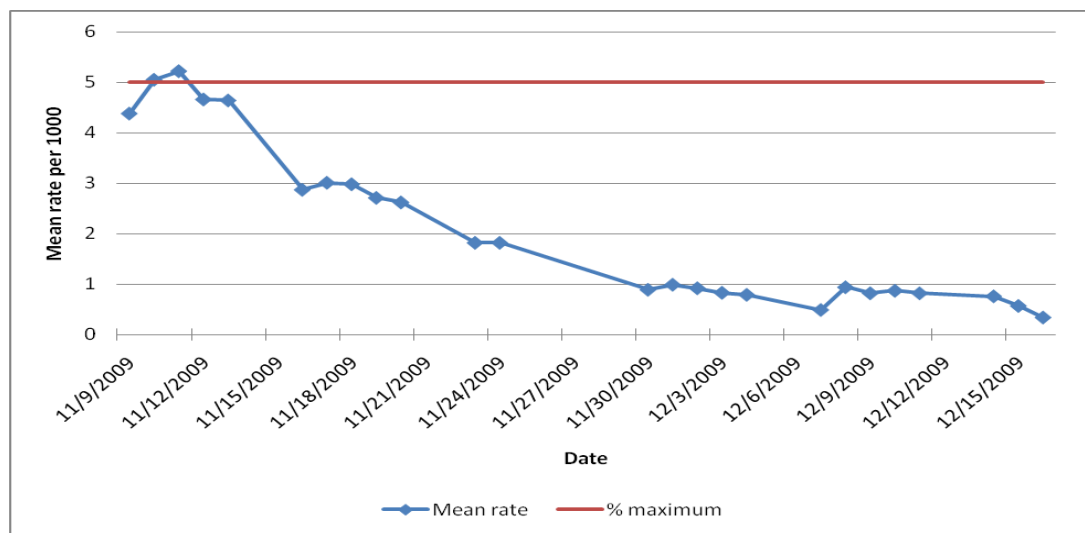
**Date accessed: 10 December 2009**

**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.

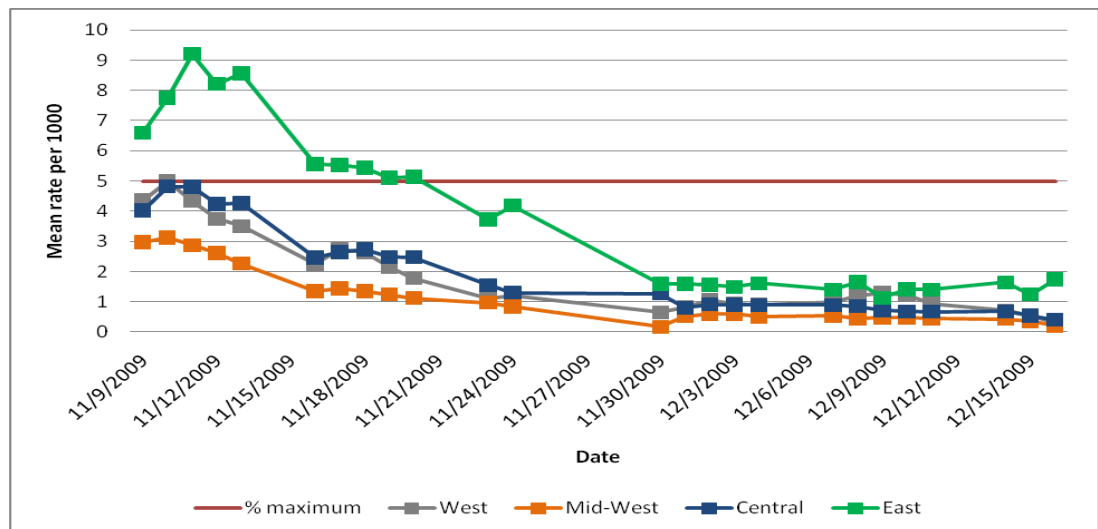
The chart below depicts the trend in mean rate of absences attributed to ILI per 1,000 children enrolled in Kentucky public schools from 11/09/2009 – 12/16/2009. The red line indicates the mean rate corresponding to half of the maximum rate seen statewide since KDPH began collecting absenteeism data on 09/14/2009. The maximum rate of ILI absenteeism that KY experienced in its schools was 10 per 1,000 students. This figure shows that the overall absenteeism rate for schools across KY continues to fall far below half of the maximum rate as the school semester comes to an end.

**Mean rate of absences attributed to ILI per 1000 enrolled**

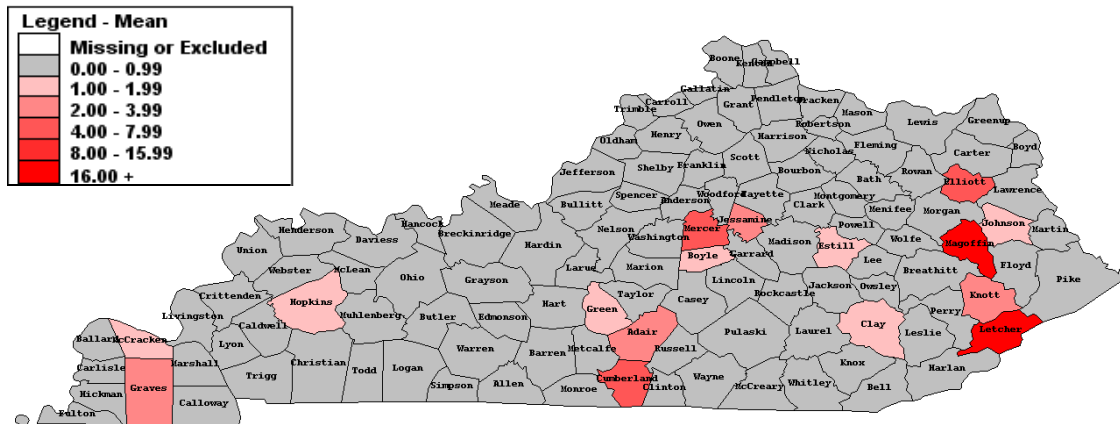


The chart below represents the same summary measure of ILI absenteeism as the chart above with the rates stratified by region. The red line is half the maximum rate seen statewide. Each region is seeing rates well below half of their respective maximum rates. The east shows the highest rates of absenteeism and has seen a slight increase in ILI absenteeism this past week, but it also continues to be below the maximum rate seen statewide 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 12-14-2009



When was this data updated?	
Item	Current as of:
ILI Attributed Absences	12/14/09

### Pandemic H1N1 Influenza Virus in Andalusia, Spain

Most cases of influenza caused by H1N1 virus presented with a mild clinical picture similar to seasonal influenza. The majority of cases occurred in children of school age and in adults under 65 years of age, with the highest frequency of severe and fatal cases found in young adults. A significant proportion of those presented risk factors such as chronic pulmonary pathologies, cardiopathy, diabetes, and morbid obesity. Similar results were observed in rest of Spain in the same time period. It was observed that a delay in the start of treatment increased the severity of the cases.

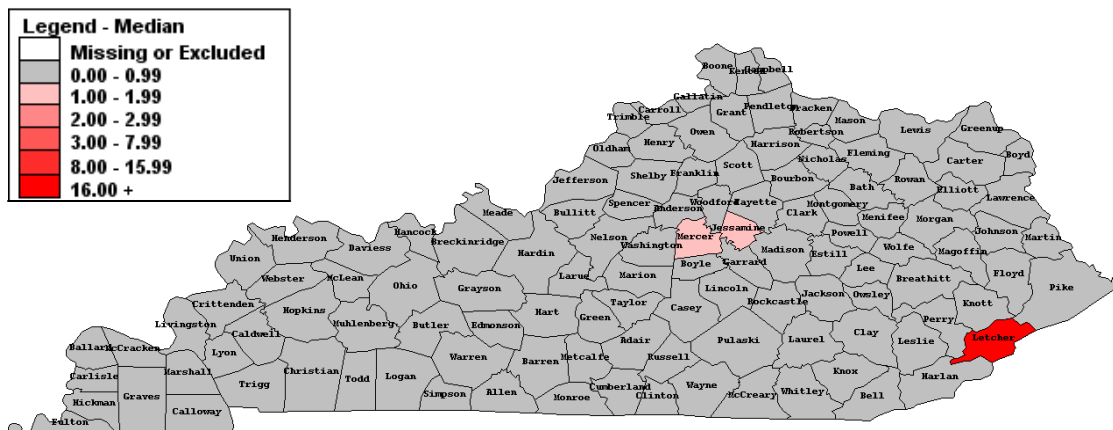
### Source: Eurosurveillance Vol. 14(49)

<http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19433>

Date accessed: 10 December 2009

The map above presents the average rate of absences per 1,000 students 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. The map below shows the median rate of school absences attributed to ILI. As of 12/14/09, the rate of absences attributed to ILI data for every county in Kentucky is included. At this time, there are only *two* counties with a mean rate of absenteeism of 16+ per 1,000 students; and only *one* of those counties has a median rate of absenteeism 16+ per 1,000.

### Median Rate of Absences Attributed to ILI in Public Schools on 12-14-2009



## Obesity and H1N1

People who are obese but otherwise healthy may be at special risk of severe complications and death from novel H1N1 virus. In a Michigan hospital, 10 patients were so ill with H1N1 virus they had to be put on ventilators. Three died. Nine of the 10 were obese, seven were severely obese, including two of the three who died.

This study was not designed to determine if obesity or other health conditions else poses a special risk factor for flu. But the researchers were surprised to find that seven of 10 patients were extremely obese.

**Source: Reuters website:**  
<http://www.reuters.com/article/idUSN10537105>

**Date accessed:**  
**24 November 2009**

## Still Time to Take Survey Assessing H1N1 Vaccine Availability

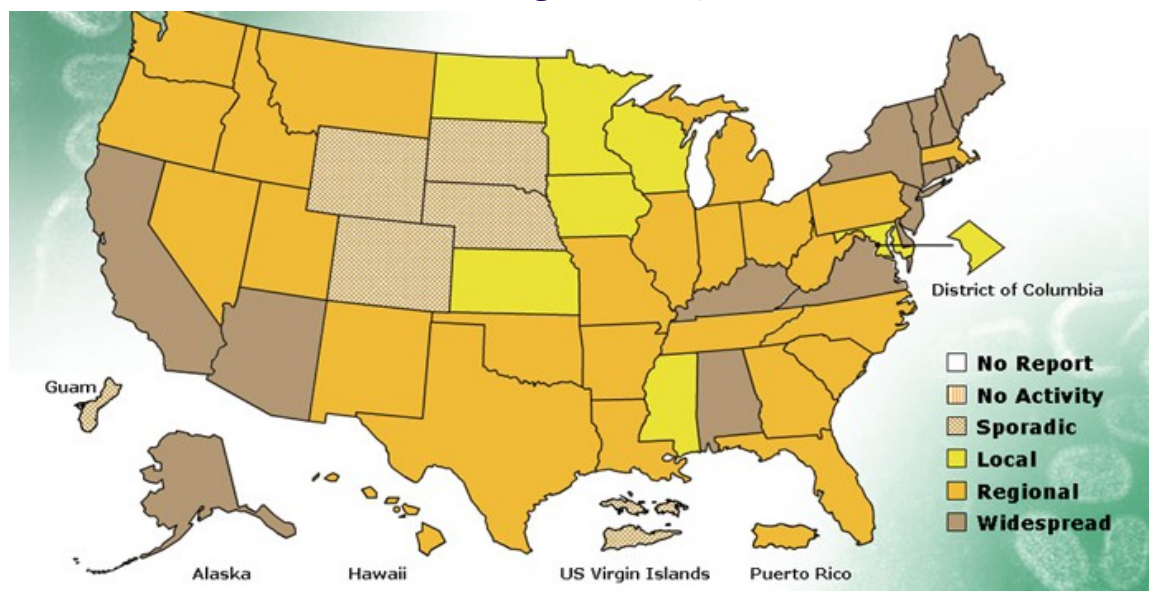
The Kentucky Department for Public Health (KDPH) is asking that Kentucky residents take a new online survey about availability and related issues involving the H1N1 vaccine. The survey is anonymous and will be available through this Saturday, December 19, 2009. It will be used to help measure the extent to which target group populations in Kentucky have been able to access and obtain the H1N1 vaccine and the projected percentage of Kentuckians in the target groups who have received it or wish to receive it. The target groups identified for the survey include: pregnant women; women who gave birth within the past six weeks; people who live with or care for children younger than 6 months; young adults from 18 to 24 years of age; and people with chronic health conditions that include asthma, neurological conditions, chronic lung and heart disease, and disorders of the kidney, liver, endocrine system and blood.

"We will be using this survey as a tool to measure the saturation of available H1N1 vaccine in communities across the state, specifically for the target groups identified for being at higher risk for developing complications from flu," said KDPH Commissioner William Hacker. "We especially ask that families, college students, and other young adults, pregnant women and those with chronic health conditions take time to respond to this survey." A telephone survey is also being conducted simultaneously with the online survey. The preliminary results of the survey are expected to be available at the beginning of the new year. Funding for the survey is provided through a federal grant from the Centers for Disease Control and Prevention (CDC).

The survey can be accessed at <http://healthalerts.ky.gov/Pages/H1N1AvailabilitySurvey.aspx>

## Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists\*

Week Ending December 5, 2009



\*This map indicates geographic spread and does not measure the severity of influenza activity

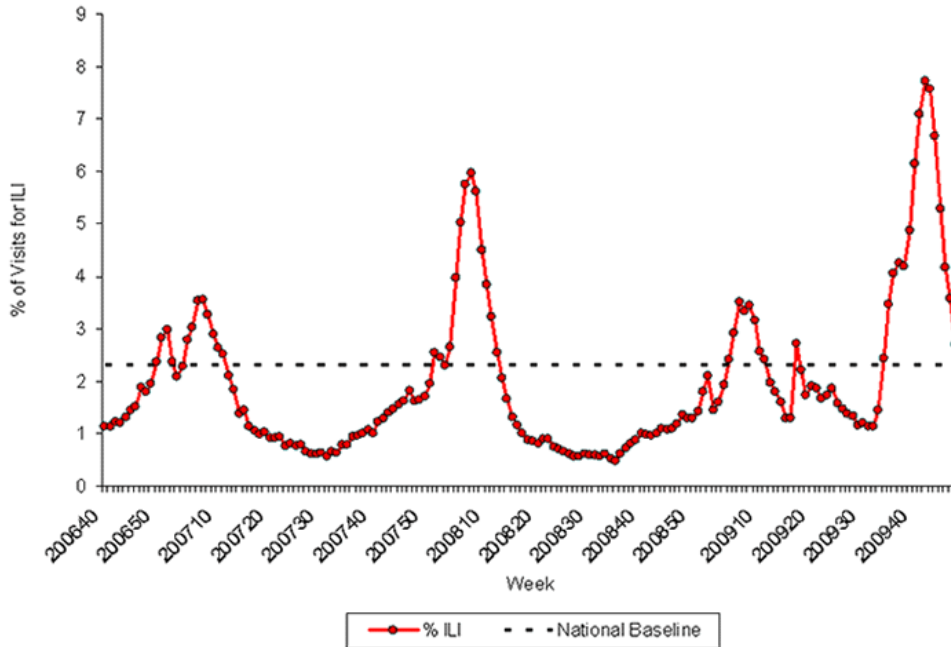
At this time, Kentucky is one of fourteen states that is experiencing widespread influenza activity. The majority of the U.S. is still experiencing regional influenza activity.

## Flu-Like Illness Trends

Influenza-like illness (ILI) is a medical diagnosis of possible influenza or other illness causing a set of common symptoms. Symptoms commonly include fever, shivering, chills, malaise, dry cough, loss of appetite, body aches and nausea, typically in connection with a sudden onset of illness. The Centers for Disease Control and Prevention (CDC) tracks ILI and reports ILI by week of the year.

**Percentage of Visits for Influenza-like Illness (ILI) Reported by the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, National Summary 2008-2009 and Previous Two Seasons: Oct. 1, 2006 –December 5, 2009.**

(Note the steep decline in incidence nationally in recent weeks).



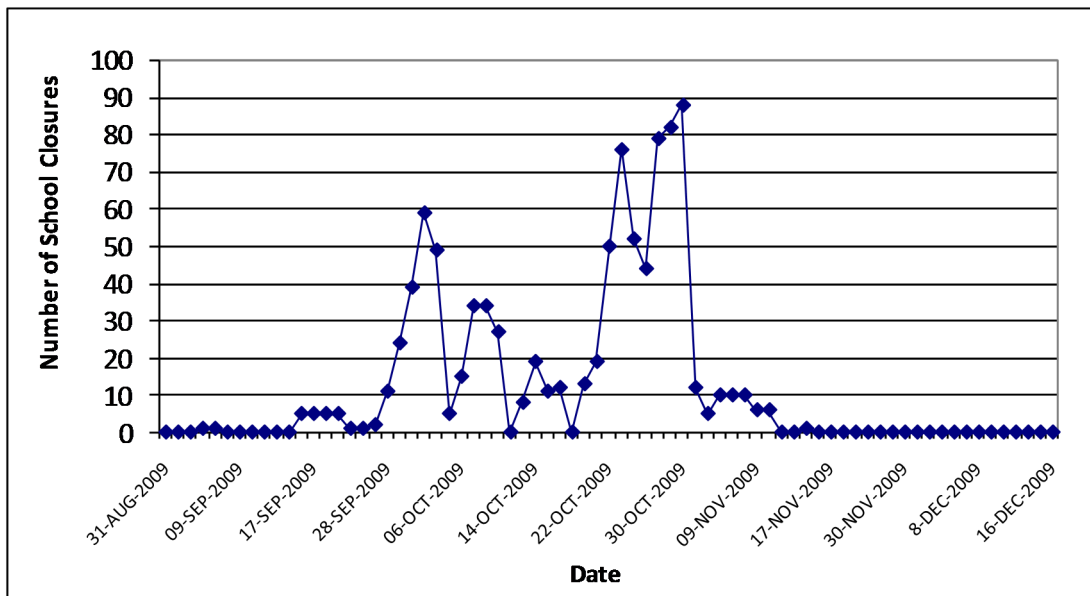
When was this data updated?	
Item	Current as of:
ILI outpatient visits	12/5/09
School Closures	12/16/09

### School Closure Surveillance

From August 1 to December 16, 2009, 302 schools from 54 districts closed one or more days due to influenza like illness. The first reported school closure was on August 18<sup>th</sup>.

After several peaks of ILI-related school closures between September and mid-November, there have been no school closings due to ILI in Kentucky since November 13, 2009.

**Number of Public Schools Closed Due to ILI by Date of School Closure August 31 – December 16, 2009**



**Key Clinical Research Needs to better understand pandemic H1N1 virus:**

- Risk factors contributing to severe disease outcomes
- Viral load and immunological parameters in pandemic H1N1 versus seasonal influenza
- Mechanisms to protect 65+ age group from infection
- Autopsy studies on fatal influenza to define virus tropism and host responses

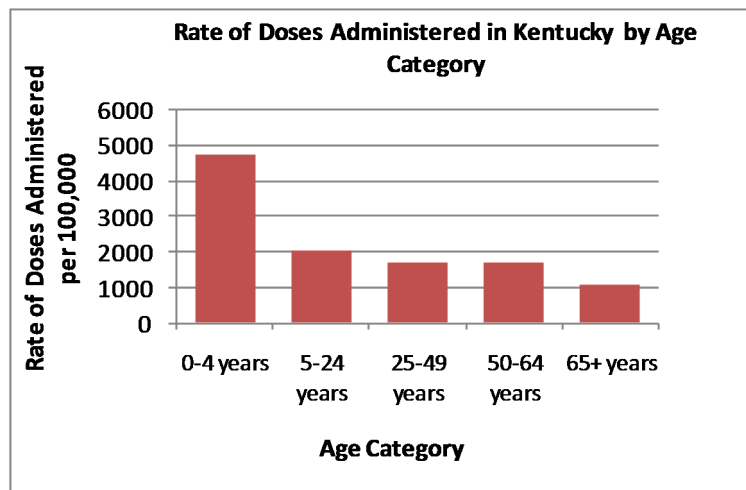
**Source:**  
**Peiris et al. (2009). A Novel H1N1 virus causes the first pandemic of 21st century. *European Journal of Immunology*. Volume (39):2946-2954**

## H1N1 Vaccination Coverage Rates by Age in Kentucky

The CDC no longer requires states to submit data about doses administered by age group. The KY Department of Public Health is asking LHDs and providers to complete data submission only for doses given before December 1st.

In previous issues of Fluview, the number of doses of H1N1 vaccine administered by age group have been presented. Because the age groups are not uniform in population size or the number of years covered, this doesn't give a true picture of vaccination coverage rates in each of the age groups. In order to get a snapshot of coverage rates, the number of doses reported to have been administered was divided by the population size of each age group in Kentucky and then multiplied by 100,000 to get the rate per 100,000 people per age group. The figure below presents the rates of doses administered in Kentucky by age category.

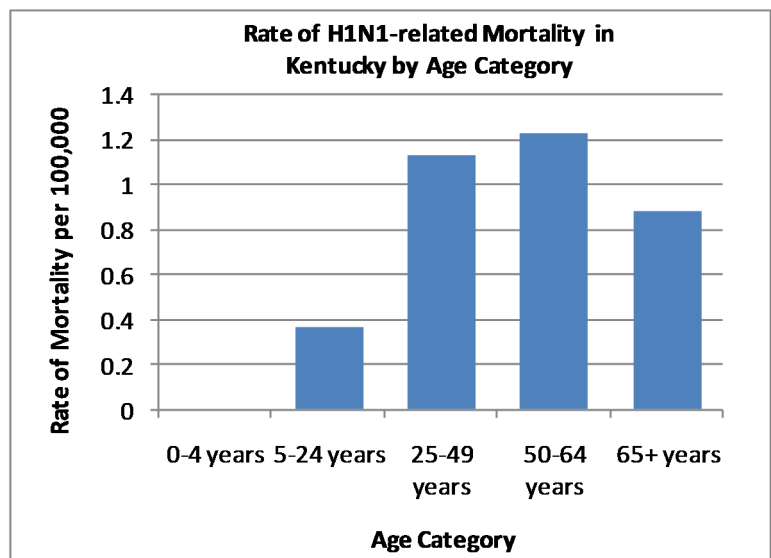
It is important to note that the rates presented are minimum rates, well below the true rates. This is because many doses that were administered may not have been reported, and as noted above, doses administered after December 1<sup>st</sup> are not included. Thus, the chart does not present the rate of doses administered in its entirety, but it illustrates the comparative distribution of vaccination coverage between age groups. As can be seen, the 0-4 year age group has the highest coverage rate so far.



The doses administered data was collected by asking LHD's and providers to fill in a table on the 'Order and Activity Worksheet' with the number of doses given to each age group the prior week at the time they order vaccines. When the LHD or provider did not order more vaccine for a particular week, they were still encouraged to fill out the table to report doses administered for each age group. Because the data is submitted voluntarily, complete accuracy of reporting cannot be assured.

It is equally important to examine the rate of H1N1-related mortality by age group and compare this to our vaccination coverage rates to answer the question, "Are we targeting those most at risk in the population?" To obtain mortality rates, the number of deaths in each age group was divided by the respective population figures for those age groups and multiplied by 100,000 to get the rate per 100,000. As can be seen, the 0-4 year age group has the lowest mortality rate (0/100,000) while the 50-64 year age group has the highest mortality rate (1.2/100,000).

This indicates that in order to prevent or reduce further mortality should an additional wave of H1N1 influenza arise, people in the 25-49 and 50-64 year age groups should be targeted more aggressively for vaccination.





## CDC Warns About Serious Pneumococcal Disease

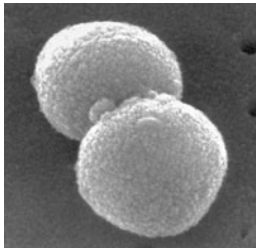
The Director of CDC’s National Center for Immunization and Respiratory Diseases reports that the CDC is seeing an increasing number of invasive pneumococcal disease cases around the country. More pneumococcal disease is expected to be seen when seasonal flu circulates, and it typically affects people 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.

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.

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 everyone 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.



**Left:  
Pneumococcal  
bacteria**

[www.pneumococcal.org/images/main.jpg](http://www.pneumococcal.org/images/main.jpg)

### *Window of Opportunity*

We continue to see a decline in disease while the 2009 H1N1 vaccine supply continues to increase, presenting us with a “window of opportunity.” However, there is still a lot of disease across the country and the 2009 H1N1 virus, like any influenza virus, is an unpredictable enemy. Vaccination remains our best protection against the flu. Many people who have waited for the 2009 H1N1 vaccine will no longer need to wait. This window of opportunity is a great time to get vaccinated.

### **From CDC Key Points**

**Date: 7 December 2009**

## Preventable Diseases: Missed Opportunities for Protection

The chart below displays the number of deaths in the U.S. from diseases that can be prevented with vaccination. The vaccine success describes how effective the vaccine is in protecting against the infection. The percentage of vaccine success represents the percentage of people vaccinated that do not become infected with the disease. Annual preventable deaths represents the number of individuals who die each year from one of the diseases that can be prevented with vaccine.

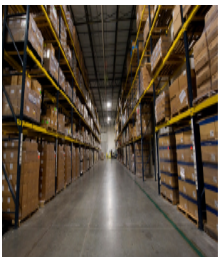
Disease	Annual Deaths	Vaccine Success (%)	Annual preventable deaths
Pneumococcal	40,000	60	21,000
Influenza	20,000	70	10,000
Hepatitis B	5,000	90	4,000
MMR (measles, mumps, rubella)	30	95	30
Tetanus-diphtheria	25	99	15

**When was this data updated?**

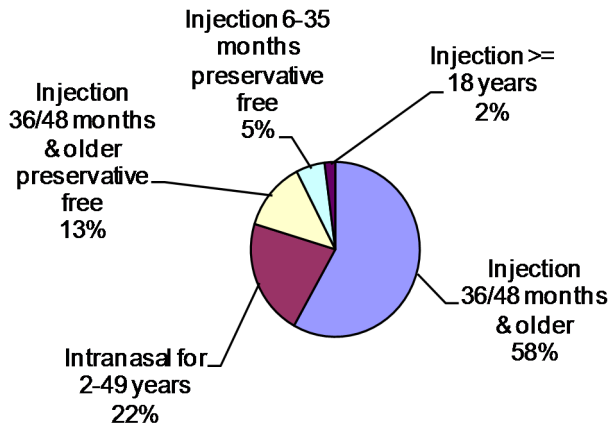
Item	Current as of:
Doses by type	12/17/09
Providers Approved	12/15/09
Doses shipped	12/15/09

**Strategic National Stockpile, (SNS)**

The Strategic National Stockpile, or SNS, refers to a supply of pharmaceuticals, PPE, and N95 masks (among other medical supplies) on standby in the case of a public health emergency like pandemic influenza. Below are pictures of what SNS refers to – large warehouses stocked with healthcare supplies.

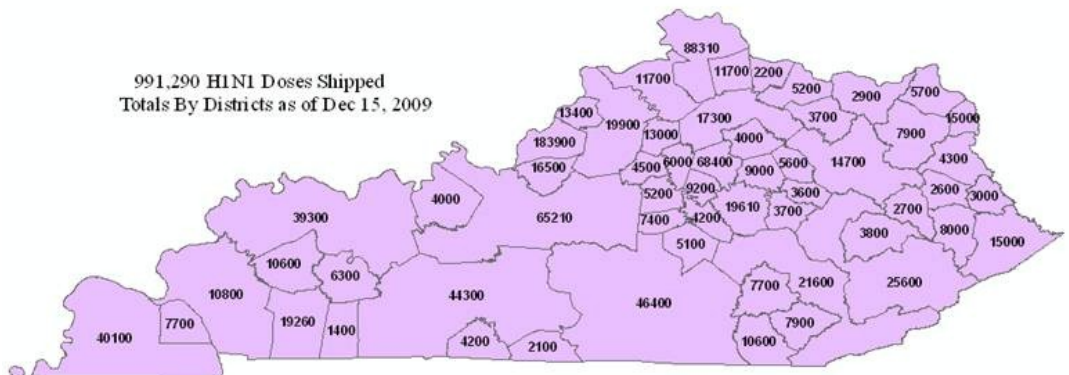
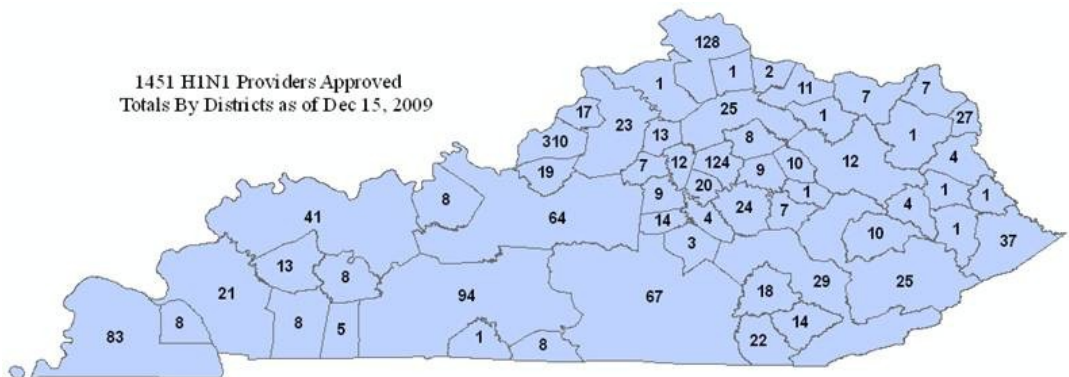


**Doses Shipped by Type**



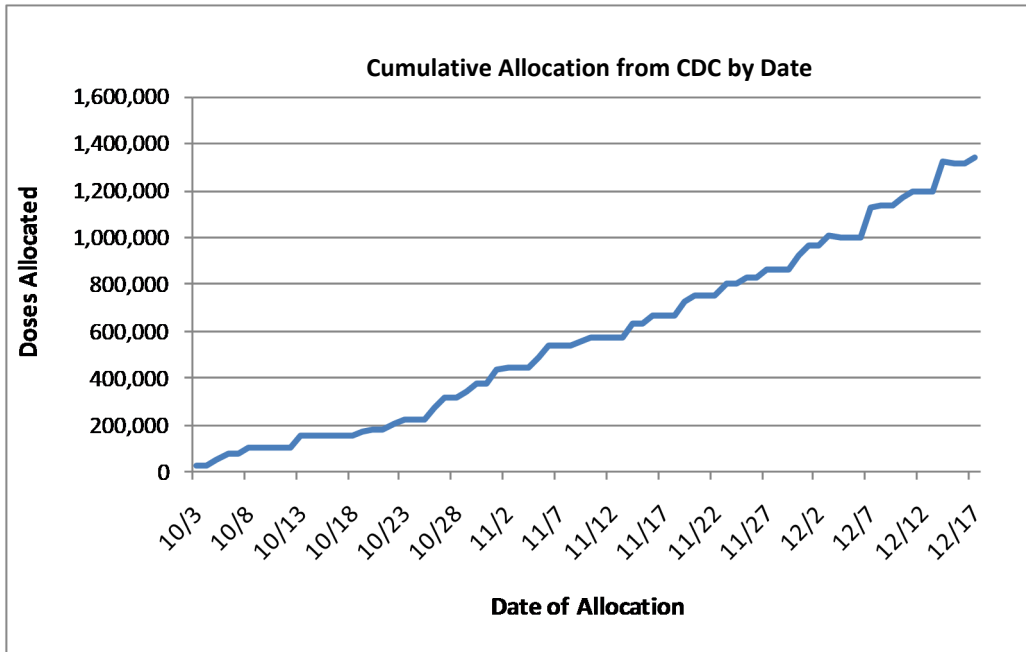
Type of Vaccine	Ordered	Shipped
Injection 36/48 months & older	617,000	604,000
Intranasal for 2-49 years	217,400	224,100
Injection 36/48 months & older preservative free	132,500	132,500
Injection 6-35 months preservative free	57,100	57,100
Injection >= 18 years	24,000	21,300
<b>Total</b>	<b>1,048,000</b>	<b>1,039,000</b>

**Vaccine Distribution By Health District**



## 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 1,343,100 doses.

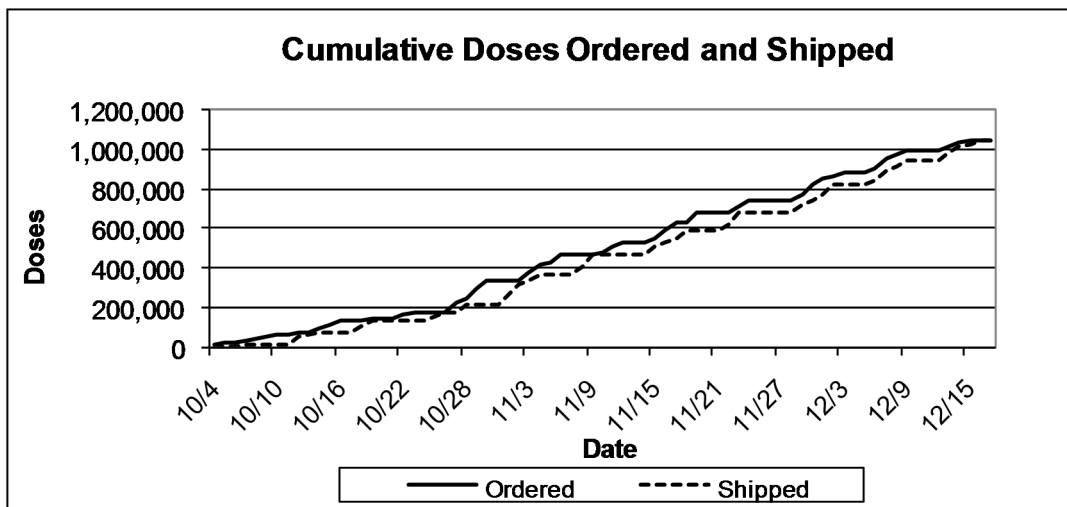


When was this data updated?	
Item	Current as of:
Providers and doses shipped	12/17/09

## Vaccine Safety

The safety record of the 2009 H1N1 flu vaccine is similar to seasonal flu vaccine. CDC and FDA continue to track reports of adverse events following vaccination using multiple systems including the Vaccine Adverse Events Reporting System (VAERS). No new or unusual events or pattern of adverse events have emerged.

See VAERS article on page 16 for more information.



The total number of doses ordered through 12/17/09 was 1,048,000. For more information about the types of vaccines ordered and shipped see page 10.

## Public Health Works

### Northern Kentucky District Health Department Uses Two-Pronged Approach to Distribute Vaccine in their Communities

From the start of the swine flu vaccine campaign, the Northern Kentucky Independent District Health Department (NKIDHD) chose to use a two pronged approach to get the vaccine out to their population. While the health department ordered vaccine for use in planned mass vaccination clinics and school clinics, a portion of most vaccine allotments was designated for direct shipment to their enrolled H1N1 vaccine providers. Early on, while they were planning for the swine flu vaccination clinics, the majority of Northern Kentucky's October and early November allotments were shipped directly to more than 50 enrolled hospital, pediatrician, OB/GYN and family practice providers in the four counties served by NKIDHD.

After holding four mass vaccination clinics in each of their counties and the majority of their school clinics in November and early December, the NKIDHD is again providing the bulk of their allotments to their H1N1 vaccine providers including: home health, long term care, specialty practices, dialysis units and others. Once the decision is made to provide vaccine to individuals outside the initial target groups, Northern Kentucky is prepared to expand the direct shipment of vaccine to more than 35 enrolled pharmacies and pharmacy walk-in clinics.

The process of allocating H1N1 vaccine to their enrolled providers throughout the past months has offered Northern Kentucky residents in the priority groups multiple options for accessing the vaccine. Open and frequent communication with providers through e-mail distribution groups and phone calls has allowed the Health Department to fine tune provider requests and to focus on pediatricians, hospitals and other targeted providers serving larger populations of staff and patients in the priority groups.

Early on, the NKIDHD set up a system for tracking and tallying the vaccine distribution to local providers. The NKIDHD continues to enroll new providers on a weekly basis and has expanded the variety of provider types receiving vaccine. Having ready access to provider information and shipment history assists in the communication process not only for providers but also for calls from the general public asking for information on where vaccine is available.

According to Jean Caudill from the Northern Kentucky District Health Department, "Overall, the Health Department has received very positive feedback on this dual approach used to provide vaccine to our community in a safe and effective manner."

### Public Health Works in Rural Knox County

Knox County, comprised of 32,000 residents is spread across two cities, Barbourville and Corbin. The Knox County Health Department (KCHD) began their vaccination campaign by focusing on vaccinating healthcare providers. They distributed vaccine to local healthcare agencies that wanted to vaccinate their employees and also offered an after-hours clinic for health care workers who were not vaccinated by their employer. The hospital in Knox County vaccinated their staff as well as Emergency Medical Service (EMS) and Paramedic workers in the county. KCHD focused on reaching children by sending vaccination permission forms to all schools in the county (including preschools, daycares and private schools), and provided an after-hours clinic on each side of the county for preschools and daycares.



Picture: Becky Davidson, RN giving an Emergency Services Worker a Vaccine at one of the vaccination clinics held in Knox County

(story continued on next page)

Every day the state, district, and local health departments in Kentucky conduct essential services in their efforts to prevent disease, promote health, and protect the citizens of Kentucky. These stories highlight how **public health works** in Kentucky.

## Public Health Works

### Rural Knox County (continued)

They distributed vaccine to elementary and high schools through the nurses located in the schools, and called all of the pregnant moms served by Knox County’s HANDS and WIC programs to offer them vaccination by appointment. Since pregnant women and children are a target group, Knox County chose to share vaccine with adjoining Whitley County to increase capacity at a large pediatrician’s practice that serves Knox County residents and an OB/GYN practice in Whitley County that serves the majority of pregnant women from Knox County. In the upcoming weeks, Knox County will focus efforts on distributing larger amounts of vaccine to healthcare providers and pharmacies as well as offering a weekly Friday vaccine clinic from 8:00 a.m. to 12:00 p.m. for the general population and individuals in the target groups. According to Rita Miracle, from the Knox County Health Department, “One thing I like about the rural areas is that we may not have a lot of resources, but when we have an event, everyone comes together to take care of each other. I will personally say that the Kentucky Department for Public Health has done a wonderful job in supporting the local health departments in this effort and I can’t say enough about our local partners and our staff here at the health department who have supported us throughout.”

### Monroe County Holds Summit about H1N1 to Keep Citizens Informed about the Evolving H1N1 Situation

Monroe County kept their community aware of the evolving H1N1 situation through local health summits. Participating in the summits were: The Monroe County Health Department; Monroe County Board of Education; Monroe County Medical Center; and a local physician and Chair of Monroe Co. School Board. The summits were taped and broadcasted on the local Monroe County Schools Network. Several thousand Monroe county citizens were reached during the three summits. Throughout the summits, community members were kept apprised of the current H1N1 situation including updates on school absenteeism and steps the school system was taking for infection control and disease prevention. The local hospital gave updates on their current census, number of individuals presenting with influenza-like illness (ILI), and updated recommendations on hospital visitation. Other items discussed were H1N1 and seasonal influenza viruses (signs and symptoms, prevention, control) and the availability of H1N1 vaccine. Special emphasis was placed on communicating about the target groups. The health summits were marketed through the school system’s “one-call” program that transmits messages via telephone to parents and/or caregivers of school children. According to Jill Ford of the Monroe County Health Department, “The health summits were a huge success because a united message from local health care providers, the school system, hospital and health department was conveyed to the citizens of



Above: Monroe County Summit

Monroe County and therefore helped to alleviate panic and confusion.” The Monroe County Health Department plans on continuing health summits in the future when a health-related topic needs to be addressed in the community.

### H1N1 influenza pandemic of 2009 and indigenous people

In October 2009, Arizona and New Mexico observed a disproportionate number of deaths related to H1N1 among American Indian/Alaska Natives (AI/ANs). These observations, plus incomplete reporting of race/ethnicity at the national level, led to formation of a multidisciplinary workgroup. The workgroup assessed the burden of H1N1 influenza deaths in the AI/AN population by compiling surveillance data from the states and comparing death rates. The results indicated that, during 4/15/09 to 11/13/09, AI/ANs in the 12 participating states had a pandemic H1N1 mortality rate 4 times higher than persons in all other racial/ethnic populations combined.

*(article continued on left-hand margin of page 14)*

(continued from right-hand margin on page 13)

Reasons for this disparity in death rates are unknown and need further investigation; however, they might include a high prevalence of chronic health conditions (e.g., diabetes and asthma) among AI/ANs that predisposes them to influenza complications, poverty (e.g., poor living conditions), and delayed access to care. Efforts are needed to increase awareness among AI/ANs and their health-care providers of the potential severity of influenza and current recommendations regarding the timely use of antiviral medications and the importance of vaccination.

**Source:**  
**Source: MMWR Weekly 58 (48);1341-1344, 2009 [edited]**  
<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5848a1.htm>

**Date: Fri 11 Dec 2009**

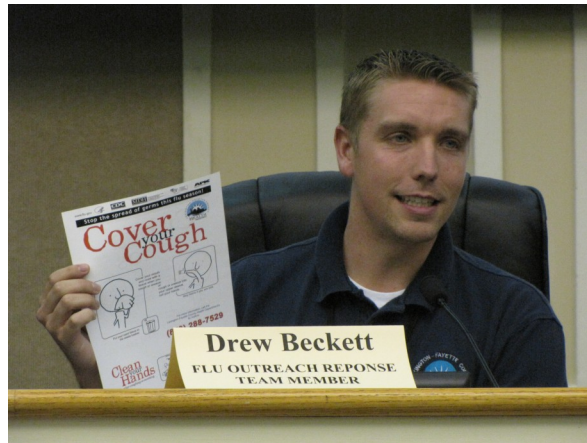
## Public Health Works

### Lexington Fayette County Health Department's Planning and Preparation Useful in H1N1 Response

Since opening the doors to its first H1N1 vaccination clinic on Oct. 31, the Lexington-Fayette County Health Department (LFCHD) has provided more than 16,000 vaccinations to the community at vaccination clinics and provided 32,000 doses to providers.

The work, though, began long before that day with weeks of planning and preparation.

To help educate the community about all things H1N1, the department created the Flu Outreach Response Team, or FORT, which was designed to speak to groups of 10 or more. FORT members spoke to community groups, businesses and school classes about H1N1, providing a short presentation followed by a Q&A session. The goal was to provide honest, direct answers about the flu through face-to-face meetings. Since starting in mid-August, FORT conducted almost 100 meetings and spoke to more than 2,600 people, making it a successful way to educate Lexington residents about H1N1.



Above: Drew Beckett, Flu Outreach Response Team Member

The department also worked with a Lexington ad agency to create a special flu-related website, [www.LexFluCrew.com](http://www.LexFluCrew.com). This site was branded as the definitive spot for the Lexington community to get everything it needed to know about H1N1. The site included a list of the H1N1 clinics (and links to a map of the locations), a Frequently Asked Questions section, information on volunteering and an e-mail link to submit questions.

The large-scale mass vaccination clinics, which were held Oct. 31, Nov. 7, Nov. 21, and Dec. 5, allowed the department the chance to provide a large amount of shots in a short amount of time. One of the primary things the department wanted to avoid was the possibility that a person could

wait in line for an hour or more, only to find out no more shots were available. To combat this, each person in line was provided a card guaranteeing a shot. At each location, the number of cards provided would match the number of shots available, and health department staff used the cards as a way to count the number of people in line and keep track of the inventory. The card-counting system proved effective, as those in line remained patient since they knew they would definitely be receiving a vaccine at the end of the wait.

Many people receiving the shots took the time to send their thanks, in the form of letters, e-mails and comments on the LFCHD's Facebook page: "The entire process was organized and the staff seemed to know exactly what to do and for whom," one lady wrote. "I was extremely impressed by the staff and volunteers for the health department. I am thankful for the quickness of this entire process. As it turned out, my anxiety for the last several days was totally unwarranted. The health department did a wonderful job in helping those medically compromised like me. It would have been impossible for me to stand in that long line. The health department did the best they could for those who attended this clinic and there were thousands of people there!"



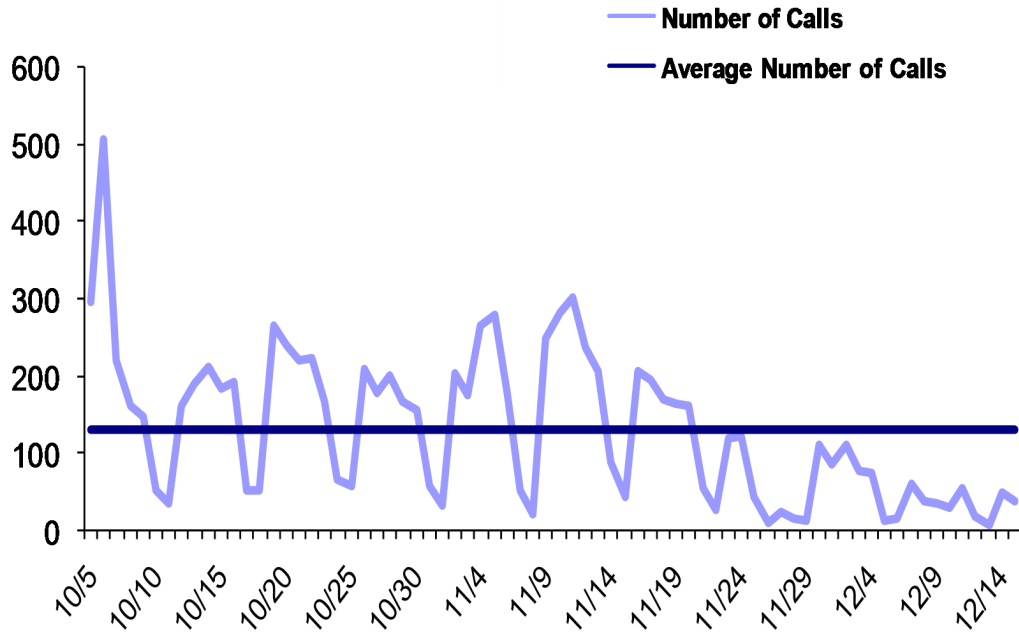
When the vaccination clinic was opened up to individuals outside of the target groups, Dr. William Hacker, Commissioner for the Kentucky Department for Public Health, received his H1N1 flu shot.

## H1N1 Public Telephone Hotline

On October 5, 2009 KDPH established a telephone hotline to answer questions from the public. The hotline now averages about 39 calls a day. As of 12/16/2009, it has received 9,477 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 January.

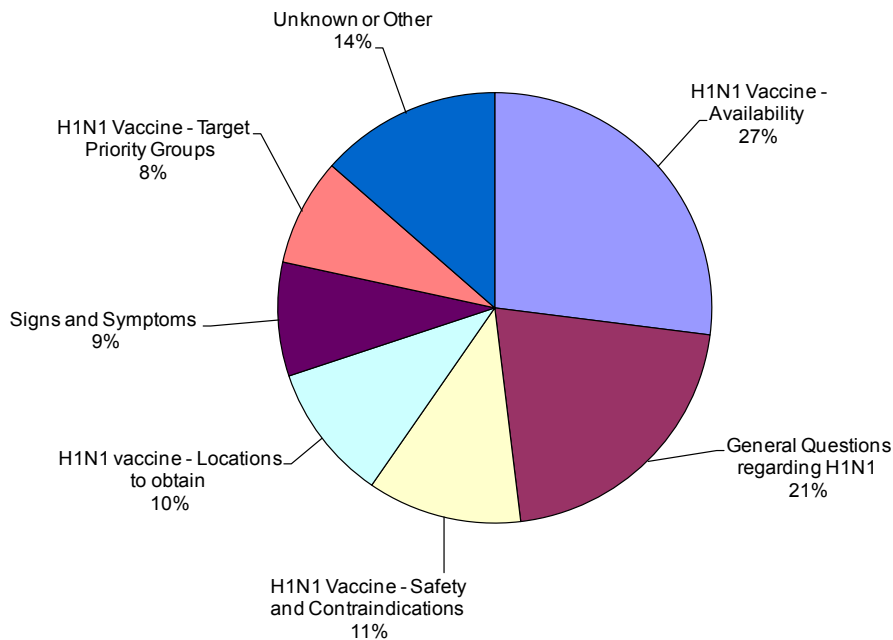
<b>Note: data is updated daily.</b>	
<b>Item</b>	<b>Current as of:</b>
<b>Count</b>	<b>12/16/09</b>
<b>Type of questions</b>	<b>12/16/09</b>

Count of Calls, per day



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

Frequency of Questions Asked



**Cabinet for  
Health and Family  
Services  
Department for  
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

## Vaccine Adverse Event Reporting System (VAERS)

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). Some of the VAERS results are listed below.

An adverse event reported to VAERS might occur by chance after vaccination or might be causally related to the vaccination. VAERS generally does not determine whether a vaccine caused an adverse event. Since the introduction of the H1N1 influenza vaccine, a total of 13 people have died within a short time (range, 0-19 days) after receiving the H1N1 vaccine. The chart below displays demographic and clinical information about the 13 deaths that have occurred as of November 24, 2009. Many of the H1N1 vaccine recipients had serious underlying conditions prior to the vaccination and most of the deaths appear unrelated to complications of receiving the H1N1 vaccination.

### Patient age, sex, and clinical characteristics regarding the 13 reported deaths after receiving the H1N1 2009 monovalent vaccine –VAERS Reporting System, United States, 2009\*

Age (yrs)	Sex	**Onset (days)	Medical History	Autopsy Results
1	M	1	Febrile seizures	Sudden death, no evidence of trauma
2	F	0	Encephalopathy, traumatic brain damage	Sudden Cardiopulmonary arrest
9	F	6	Trisomy 21, leukemia	Pneumococcal pneumonia/H1N1 virus
18	M	0	No sig. history, enlarged heart	Massive aspiration, cardiopulmonary arrest
19	F	9	Rett Syndrome, phy. disability	Bilateral pneumonia, respiratory failure
35	F	3	Hereditary spherocytosis	Pneumococcal sepsis
38	M	19	Immunocompromised	Respiratory failure/under review
46	F	2	Hypertension, hyperlipidemia	Pulmonary embolus/Neg. for H1N1 virus
49	F	3	Type II diabetes, strokes, COPD	Suspected cardiovascular event
53	F	5	End-stage renal disease	Under review
56	F	0	Motor vehicle accident leaving clinic	Trauma
61	M	13	Hypertension, diabetes	Cardiac/respiratory arrest
77	M	2	Lung cancer, deep venous thrombosis	Suspected myocardial infarction

\*As of November 24, 2009

\*\*Time of vaccination to onset

Note that medical history and autopsy report listed may not include all details.

For more information see: Morbidity and Mortality Weekly Report Vol. 58, Number 48 [www.cdc.gov/mmwr](http://www.cdc.gov/mmwr)

FOR THE  
LATEST  
UPDATES ON  
H1N1, GO TO:  
[WWW.HTTP://  
HEALTHALERTS  
.KY.GOV](http://WWW.HTTP://HEALTHALERTS.KY.GOV)

### 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>