



INYO COUNTY PUBLIC HEALTH BRIEF

A Division of Health & Human Services
Richard O. Johnson, M.D., MPH
Public Health Officer, Inyo County
760-914-0496
drrickjohn@gmail.com



Public Health
Prevent. Promote. Protect.

December 2, 2009

Influenza Update – Eye of the hurricane or passing storm?

Current situational report:

NATIONAL INFLUENZA ACTIVITY

During week 46 (November 15-21, 2009), influenza activity continued to decrease in the U.S., with 32 states reporting widespread activity (down from a high of 48). 1,880 (20.5%) specimens tested and reported to the CDC were positive for influenza, with the usual rhinovirus, parainfluenza, and RSV starting to show up as expected for this time of year. Over 99% of all subtyped influenza A viruses being reported to the CDC were 2009 influenza A (H1N1) viruses. The proportion of deaths attributed to pneumonia and influenza was above the epidemic threshold for the eighth consecutive week. Thirty-five influenza-associated pediatric deaths were reported. The total so far is 198 pediatric deaths, with the previous high being 172 (with months to go in the flu season). The proportion of outpatient visits for influenza-like illness (ILI) was 4.3% which is above the national baseline of 2.3%. The basic reproductive # is in the range of 1.3 to 1.7 (the number of persons a contagious person will infect), and the overall case fatality rate is approx. 0.018% (for pregnant females it is 2.6% this year, in the 1918 Spanish flu it was 2% overall). Reports of Tamiflu resistance continue to increase, along with reports of mutations causing more severe disease. The significance of both are unclear at this time. A flock of breeder turkeys has tested positive in Virginia, but eating properly cooked turkey is not a risk. A cheetah in a zoo in California has tested positive, as well as farm and companion animals, including pigs, cats, dogs, and ferrets. It is a case of “seek and ye will find”, with animals at risk of illness from infected humans, not the other way around.

CALIFORNIA INFLUENZA ACTIVITY

During week 46 (November 15-21, 2009), overall influenza activity in California remained “widespread”, with almost all influenza still being the 2009 H1N1 virus. Laboratory detections and reports of ILI from sentinel providers have declined in recent weeks, but still remain high (see graph on the last page). Most indicators suggest that illness may be leveling off, although levels of illness remain above normal for this time of year. Reported cases of new hospitalizations are lower this week compared to last week and remain lower than the peak of several weeks ago. As in previous weeks, the rate of hospitalizations remains highest among children under one year of age. There have been 354 deaths so far, with 36 in the week ending Nov 21st. There have been 6,474 hospitalizations including 1,262 ICU admissions. 427 pregnant females have been hospitalized, with 13 deaths. 28 Health Departments and 6 Operational Areas (counties) have opened their Emergency Operations Centers, with 11 counties having local declarations of emergencies.

LOCAL INFLUENZA ACTIVITY

The Eastern Sierra continues to experience increased levels of respiratory illness, most of

which is presumed to be due to H1N1 infections. Indicators such as ER visits, clinic visits, hospitalizations, school absenteeism, and antiviral prescriptions have shown activity, which has probably peaked during the month of November. In Inyo County, there have been approx. 12 hospitalizations, with no deaths to date.

VACCINE AVAILABILITY

The H1N1 vaccine story continues to be both disappointing and frustrating. Limited amounts of vaccine have arrived, and are efficiently being distributed to the highest risk populations potentially affected by the H1N1 virus. Pregnant females, household members and caregivers for infants under 6 months of age, special needs children, infants and children starting at 6 months of age and older, and healthcare workers with face-to-face contact with potentially contagious persons all have been the target of our initial outreach. As more vaccine has arrived, we are now targeting young persons 18 and under, and adults with chronic medical conditions up to the age of 65. Eventually, as more vaccine becomes available, anyone who wishes to receive vaccine will be able to. Extensive surveillance has not picked up any significant adverse events following H1N1 vaccine up to this point in time.

For up-to-date information about vaccine available in Inyo County, please call the Health Department at 760-873-7868.

EYE OF THE HURRICANE OR PASSING STORM? (By Dr. Michael Osterholm)

"Expect the unexpected." I'm sticking with this mantra for the H1N1 influenza pandemic. I'd like to suggest you do, too—especially now.

It's hard to believe that less than a year ago, we were talking about pandemic planning fatigue. Now it's as if we're experiencing pandemic presence fatigue.

For some, the first influenza pandemic of the 21st century seems to be largely a "nonevent," particularly compared to what it would be like if we had a severe 1918-like pandemic. Others might tell you the experience has been a disaster, especially if they have lost loved ones, friends, or colleagues to H1N1 virus infection, seen actual workplace disruptions, or been unable to find a dose of vaccine for themselves or a "high-risk" family member. We'd all really like to know if the pandemic, or at least this wave, is on the wane.

Before I address that question, let me give you an analogy. Imagine you had just been through a bad storm. If you lived in the Midwest, watching the clouds move on could mean the storm was passing. But if you lived along the Gulf Coast, the passing clouds might just mean you were sitting in the eye of a hurricane and more bad weather was mere hours away. What if you had no idea which storm you were in?

So, where are we now?

In mid-August I predicted that we'd see the peak of the fall wave of illnesses in North America in mid- to late October. While it appears that H1N1 activity hasn't yet peaked all across the country, it looks to be only a matter of days before it does.

I would anticipate that by mid- to late December, H1N1 illness activity in North America will reach the same lows it did in late July.

Beyond that, we face a huge unknown. We're about to enter the realm of "expect the unexpected." Will we see a winter/early spring third wave of H1N1 infection in the Northern Hemisphere? Maybe. If we do, we could see anything from limited novel H1N1 activity like a mild, regular influenza winter season to a full-blown third wave that exceeds our experience of the last 3 months. We just don't know.

Now, if we add in the possibility of any significant mutational or reassortment change in the virus in the next few months, all bets are off about future disease. Remember, if even 35% to 40% of the population has already been infected or has antibodies from exposure decades ago, the remaining 60% to 65% of the population still might be susceptible to this virus.

So where does this leave us with H1N1 vaccine?

I surely don't need to tell you about the frustrating disconnect between the amount of vaccine promised throughout the summer and the much lower number of doses available as of today. Of note, all countries that ordered H1N1 vaccine are experiencing serious delays in receiving their orders; it's not just the US.

We remain at the mercy of a 1950s vaccine technology. No one person or organization is at fault for the poor vaccine virus production in chicken eggs. When Mother Nature, specifically the influenza virus, is in charge, we should anticipate production glitches.

While only 40 million doses of H1N1 vaccine have been delivered to date, this number will surely increase dramatically by the beginning of 2010. Given the potential for a serious winter wave of H1N1 infection, we need to convince our loved ones, friends, employees, and colleagues to get vaccinated. Of particular concern are people at high risk of developing severe complications. I know this could be a tough sell if there's little disease occurring, but vaccination will be critical to ensuring illness is minimized and that a potential winter wave does not cause a serious disruption in our organizations.

Also remember that most of the world will never have access to H1N1 vaccine. So if the virus does change or a serious winter wave develops, we may yet experience potential supply-chain disruptions or limits on travel in other countries around the world.

So what should we do now?

As fatigued as you and your organization may be, please don't let down your guard yet. Instead, I suggest you do the following:

- Keep the storm analogy in mind. Know that the possibility that we are in the eye of a hurricane is just as real as the possibility that the storm is passing. It's too early to take chances that might jeopardize the health of your family, your students, your employees or business. Keep your eyes on what's brewing around early winter.
- Learn from what you've experienced to date in your organization. The education we're getting now is invaluable. Look for the lessons from your organization's

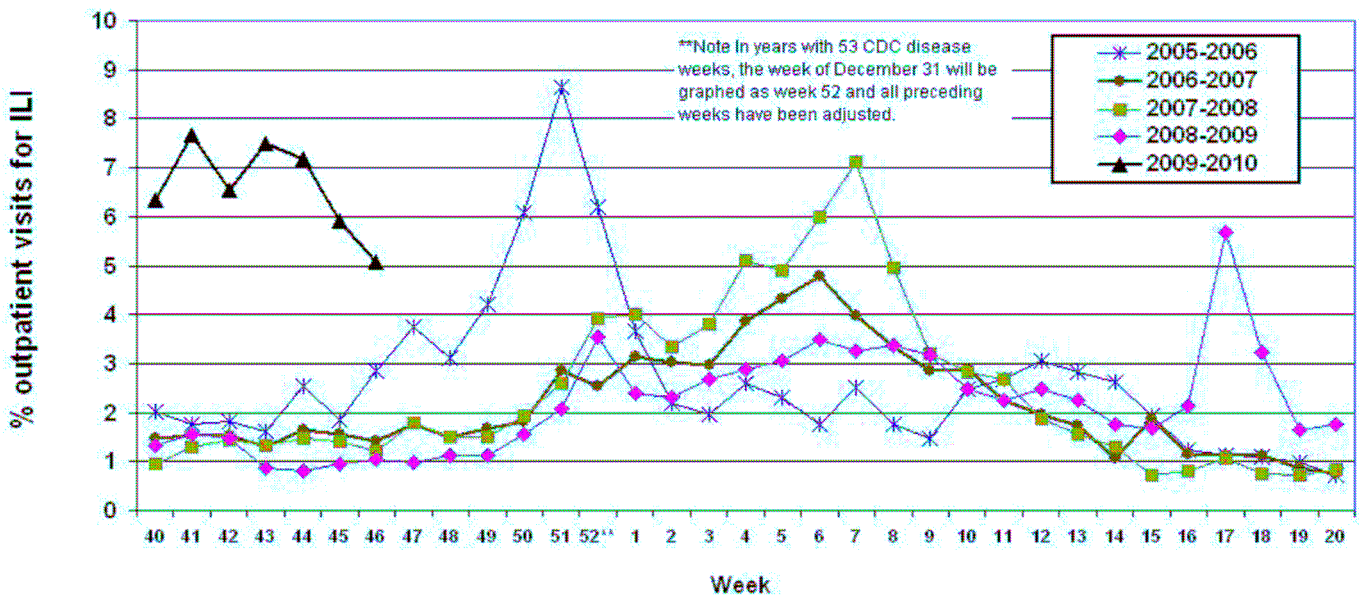
response to date, and apply them now. Remember, too, that we haven't seen the last of the H5N1 virus (bird flu).

- Remember the possible impact of seasonal influenza. We don't know what will happen with H1N1. We do know it has largely displaced seasonal influenza strains. But the flu season is not over. It still makes sense to get a seasonal flu shot, as the seasonal strains surely could return, so I encourage you to get one.
- Expect the unexpected. While no one could have been so prophetic in April as to have precisely described each and every aspect of what has unfolded, everything that has happened clearly should have been a possibility on planning tables. Even the current vaccine shortage experienced around the world—not just in the US—could have and should have been anticipated. Having said all this, there's surely another unexpected turn around the corner.

Bottom line:

You can expect to see signs that the pandemic is waning in the coming days and weeks. Don't let your guard down. Get vaccinated if you have not already, wash your hands, stay home if you are sick, etc. We have been lucky that this wave happened in the "shoulder season". But, the snow, followed by the tourists, will be arriving shortly, and may be bringing with them more than their dollars. Keep your pandemic "weather station" turned on. We need to stay alert in case we are in the eye of the hurricane.

**California Sentinel Providers
Influenza-like Illness Visits 2005 - 2010**



More information is available at:

Public Health – Inyo County: <http://www.inyocounty.us/publichealth/index.php>

760-873-7868 (English and Spanish)

U.S. Government www.flu.gov

Centers for Disease Control and Prevention (CDC): <http://www.cdc.gov/h1n1flu/>

California Department of Public Health:

<http://www.cdph.ca.gov/HealthInfo/discond/Pages/SwineInfluenza.aspx>