PUBLIC HEALTH CONNECTIONS
H1N1– WEEKLY EDITION

KANSAS.GOV

SEPTEMBER 8, 2009 - VOLUME 6

FROM THE STATE HEALTH OFFICER

Flu, Ferrets and the Furthering of Knowledge

submitted by Jason Eberhart-Philips, MD, MPH
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In only a few months, the new pandemic H1N1 virus has certainly proven itself a worthy adversary. Although it does not usually produce severe disease, its rapid global spread is clear testimony that it is remarkably well-adapted to its reluctant human hosts.

In fact, the virus is doing so well making a home in our respiratory tracts, that scientists now think it has a biological advantage over its seasonal flu cousins. If this is true, look for this bug to become the predominant flu virus on our planet for a good long while.

Some of the best evidence for this comes from a new study that shows how well the H1N1 virus outcompetes seasonal flu strains in a head-to-head competition, using laboratory ferrets. (Although ferrets have little else in common with humans, flu viruses can't seem tell our species apart, so they are good stand-ins for lab experiments.)

When researchers from the University of Maryland inoculated ferrets with both the novel H1N1 virus and either of the two main seasonal strains, the co-infected ferrets passed only the novel H1N1 virus to their uninfected cage-mates. It appears that once the ferrets were inoculated, the pandemic strain reproduced more quickly than the seasonal strains, and soon displaced them in the race to infect new hosts.

This suggests that the novel H1N1 virus will use its competitive edge and rack up the lion's share of disease this flu season, although no one can be sure. For now we have to assume that seasonal strains will be back as usual this flu season, along with the pandemic virus.

That means it is still a very good idea for Kansans to get the seasonal flu vaccine and be protected against those strains, especially if they are health care workers or members of groups at higher risk of flu complications. The seasonal vaccine is widely available now in most parts of the state, and we should all be encouraging our patients, friends, coworkers and neighbors to get it.

One piece of good news from the ferret study is that the H1N1 virus did not recombine with seasonal strains in any of the co-infected animals. There is a theoretical risk that genetic bits from the pandemic strain could mix and match with bits from other flu strains in a host infected with both viruses.

The result of that unholy marriage would be a reassorted virus that could be much nastier than the novel H1N1 we've already got. Fortunately, despite ample opportunities for reassortment in this study, such intermingling never materialized.

Scientific understanding of pandemic flu is growing every day – literally. Each day the picture of H1N1 gets clearer. Such knowledge is the single biggest competitive advantage we humans have got in beating this new foe.

PLANNING UPDATE

Billing for the Administration of the Influenza

submitted by Michael McNulty, Operations Director
Bureau of Public Health Preparedness, KDHE

MLN Matters

A new Special Edition Medical Learning Network (MLN) Matters article regarding Billing for the Administration of the Influenza A (H1N1) Vaccine is now available. This article explains Medicare coverage and reimbursement rules for the H1N1 vaccine and also addresses seasonal flu coverage and reimbursement.

Note that Medicare will pay for seasonal flu vaccinations even if the vaccinations are rendered earlier in the year than normal. We understand that such preparations are critical for the upcoming flu season, especially in planning for the influenza A (H1N1) vaccine.

Though Medicare typically pays for one vaccination per year, if more than one vaccination per year is medically necessary (i.e., the number of doses of a vaccine and/or type of influenza vaccine), then Medicare will pay for those additional vaccinations. The Medicare claims processing contractors have been notified to expect and prepare for earlier-than-usual seasonal flu claims and there should not be a problem in getting those claims paid. Furthermore, in the event that it is necessary for Medicare beneficiaries to receive both a seasonal flu vaccination and an influenza A (H1N1) vaccination, then Medicare will pay for both.

Please be advised that if either vaccine is provided free of charge to the health care provider, then Medicare will only pay for the vaccine's administration (not for the vaccine itself).

All providers administering flu vaccine should review this article and be sure that their billing personnel are aware of this information. For more information, click the MLN Matters logo above.

Resources

Previous Issues of H1N1 Public Health Connections
KDHE Website | CDC Website | Flu.gov
Public Health Connections | KSDE Website

OPERATION HIGHLIGHTS

2009 H1N1: Lessons Learned

submitted by Karl Milhon, Director of Policy and Planning Bureau of Disease Control and Prevention, KDHE

Data and information is now coming in from countries that appear to have already experienced the peak of their H1N1 first wave. We can use their experience to improve our own response. I am putting in quotes from specific articles addressing the experience of these other countries with links to the articles for those who might want to further delve into the information. These illustrate what we might be up against. The obvious limitations of this information is that Kansas is not one of those other places, however the information does come from other countries with similar social dynamics and similar levels of healthcare resources in general.

Preparing for the second wave: Lessons from current outbreaks World Health Organization (WHO) 2009 briefing note 9, (to view click on the WHO logo above).

"Perhaps most significantly, clinicians from around the world are reporting a very severe form of disease, also in young and otherwise healthy people, which is rarely seen during seasonal influenza infections. In these patients, the virus directly infects the lung, causing severe respiratory failure. Saving these lives depends on highly specialized and demanding care in intensive care units, usually with long and costly stays."

Other data and H1N1 reference sites:

Eurosurveillance, Volume 14, Issue 34, 27 Aug. 2009; Pandemic Influenza A (H1N1) in New Zealand: The Experience From April to Aug. 2009.

"All surveillance systems showed that the epidemic reached a peak within four to six weeks (during the weeks starting Mon. 27 Jun. to 12 Jul.)."

Association of Health Care Journalists (AHCJ): Hospital Space A Victim Of H1N1 In New Zealand, Aug. 26, 2009, Andrew Van Dam.

"While fewer than 0.5 percent of swine flu sufferers may need hospitalization, those who do can remain in intensive care for up to three weeks, occupying a bed that could be used for 15 heart bypass patients. Christchurch Hospital, the biggest on New Zealand's South Island, postponed non-emergency procedures requiring an ICU stay such as heart bypass as flu patients — three-quarters needing mechanical ventilation — filled up the 12-bed unit and nine other hastily created intensive-care beds, according to Shaw."

The ChronicleHerald.ca: The War Against H1N1 Likely To Be Fought In Intensive Care Units, Helen Branswell (Canadian Press) Monday, Aug. 31.

"The worst-hit hospitals talk of having been on the brink of not being able to cope. They describe nearly running out of specialized equipment and the skilled staff needed to monitor these highly unstable patients in their high-tech hospital beds."

In addition to the above, the Department of Health and Human Services released their own summary of the impact of 2009 H1N1 in the southern hemisphere on Sept. 3. That document can be found by clicking on the Flu.gov logo.

PUBLIC INFORMATION

Every Friday the Kansas Department of Health and Environment sponsors a "2009 H1N1 Influenza Pandemic, Briefing and Group Discussion" for local health departments and community partners. The call is scheduled for 10:00 - 11:30 a.m. The new conference call number is (866) 725-4463, code 28156826. Because of the large volume of callers we strongly encourage community partners to meet together for the conference call whenever possible in order to allow the maximum number of listeners through the system.

Calls are recorded and available one to 30 days following the call. Playback instructions via the Internet are as follows:

Click on the H1N1—1BADBUG logo, in this newsletter, or paste the entire URL into your browser: http://www2.eintercall.com/moderator/presentation/Playback?id=b0bcab5f-7545-45f5-882a-29973f24f4d5.rpm.

At the prompt, enter your name and email address.

Click "Submit." The playback will begin.

Updated Guidance for Child Care and Early Childhood Programs

CDC has released new guidance to help decrease the spread of influenza (flu) among children in early childhood programs and early childhood providers during the 2009–2010 influenza season. The new guidance expands upon earlier guidance documents by providing a menu of tools that health officials and early childhood providers can choose from based on conditions in their area. The new guidance recommends actions to take now, during the 2009–2010 flu season; suggests additional strategies to consider if CDC determines that flu is becoming more severe; and provides a checklist for decision-making at the local level. Based on the severity of 2009 H1N1 flu-related illness thus far, this guidance recommends that children and early childhood providers with influenza-like illness remain home until 24 hours after resolution of fever without the use of fever-reducing medications. Click the CDC logo to learn more.