

# EPI-GAZETTE



January 2012, Issue 137



Seminole County Health Department  
WWW.SEMINOLECOHEALTH.COM

## Recent Novel Influenza Viruses Detected in the United States

*Compiled from CDC and Florida Department of Health sources*

From August 17 to December 23, 2011, human infections with a novel strain of influenza A H3N2 have been identified in 12 people across 5 states: West Virginia (2), Indiana (2), Pennsylvania (3), Maine (2), and Iowa (3).<sup>1</sup> Three of the 12 patients were hospitalized, and all have recovered fully. The virus has been given the designation "influenza A (H3N2)v", and resulted from the reassortment of swine influenza A (H3N2) virus with the pandemic influenza A (H1N1) 2009 virus. Most human infections with viruses that circulate in swine (but not humans) have been associated with swine exposure, but limited person-to-person transmission is thought to have occurred, as six of the 12 patients had no identified recent exposure to swine. Influenza has not been shown to be transmissible to people through eating properly handled and prepared pork or other products derived from pigs however.

The novel influenza A (H3N2)v virus is substantially different from currently circulating seasonal (human) influenza A H3N2 viruses, and they are distantly related to human influenza viruses that circulated among people in the 1990s. For that reason, it appears that children elementary age and younger may have a higher likelihood of contracting this strain than older individuals who may have some existing partial immunity, and might help explain why 11 of the cases that have been detected have occurred in children.

The other case of novel influenza A virus infection was reported in Minnesota, and is associated with a different influenza virus; an influenza A (H1N2) virus that circulates in swine in the United States, but does not normally infect or cause illness in humans. This case also was in a child. Again, no direct or indirect contact with swine has been reported with this case, implying that limited human-to-human transmission may have occurred in this instance as well.

### Detection of Swine Influenza Infections in Humans

Human infections with novel influenza A viruses normally found in swine are rare events. Recently, however, the frequency of detections has in-

#### Also in this issue:

- Current Flu Activity
- Increased Syphilis in Seminole County
- Monthly Reportable Disease Table

creased. This could be occurring for a number of reasons, including one or more of the following factors: First, laboratory methods for testing for these viruses in the United States were improved following the 2009 H1N1 pandemic. These improvements may be resulting in viruses being identified now that would have gone undetected previously. Second, this could be due to increased surveillance in the United States for influenza at this time of year. CDC has requested that states analyze, and then send, their first influenza virus specimens of the season for seasonal influenza surveillance purposes. Third, it is possible that the increased frequency of detection of novel influenza viruses represents a true increase in the number of such cases.<sup>2</sup>

### **Information for Clinicians**

Influenza A (H3N2)v viruses detected to date are susceptible to the antiviral drugs oseltamivir (Tamiflu) and zanamivir (Relenza). Clinicians who suspect variant influenza infection in a patient should consider treatment with these medications if clinically indicated.<sup>3</sup> The Florida Department of Health (FDOH) Bureau of Epidemiology is enhancing surveillance among registered influenza Sentinel Providers; more information on the influenza Sentinel Provider program can be found at [http://www.doh.state.fl.us/floridaflu/FSPIISN/influenza\\_sentinels.html](http://www.doh.state.fl.us/floridaflu/FSPIISN/influenza_sentinels.html).

### **References:**

1. CDC. Update: influenza A (H3N2)v transmission and guidelines — five states, 2011. MMWR 2011;60 (Early Release, December 23, 2011)
2. CDC. Have You Heard, December 9, 2011: CDC confirms two human infections with novel influenza viruses. Retrieved from [http://www.cdc.gov/media/haveyouheard/stories/novel\\_influenza.html](http://www.cdc.gov/media/haveyouheard/stories/novel_influenza.html)
3. CDC. Antiviral agents for the treatment and chemoprophylaxis of influenza: recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR 2011;60(No. RR-1).

### **Additional Resources:**

CDC Information on Variant Flu Viruses:

<http://www.cdc.gov/flu/swineflu/influenza-variant-viruses.htm>

CDC Confirms Detection of A Different Influenza A Variant Virus:

[http://www.cdc.gov/media/haveyouheard/stories/Influenza\\_A\\_Variant.html](http://www.cdc.gov/media/haveyouheard/stories/Influenza_A_Variant.html)

## **Influenza Activity in Florida as of December 31, 2011**

*Bureau of Epidemiology, Florida Department of Health*

The Florida Department of Health (FDOH) monitors multiple surveillance systems such as the Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) and Florida ILINet in order to track influenza activity in the state.

Florida is currently reporting Sporadic influenza activity statewide, due to low activity levels in all regions of Florida as shown in our influenza surveillance systems. This activity level represents the statewide spread of influenza, and is not a measure of flu intensity.

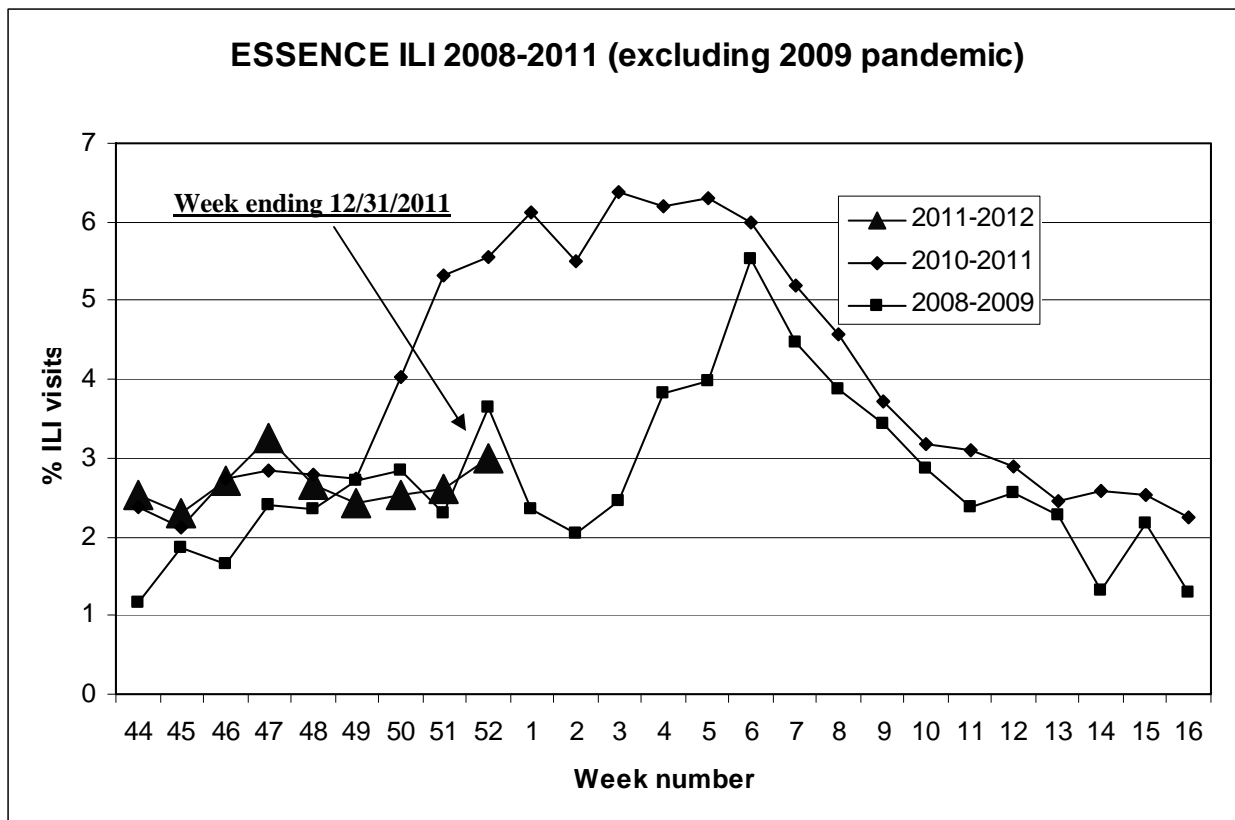
- Influenza and ILI activity in Florida is low in all FDOH surveillance systems. All reporting counties report low to no activity.
- No outbreaks of ILI or influenza were reported in week 52.
- Low numbers of influenza specimens have tested positive for seasonal influenza A H3 by the state lab this flu season. All flu identified has been due to seasonal influenza strains. No specimens have tested positive for novel influenza in Florida.
- In week 52, 2 specimens tested PCR-positive for influenza at the state lab. Other viruses known to be currently circulating, potentially causing ILI, include adenovirus, rhinovirus, parainfluenza, and respiratory syncytial virus (RSV).

For recent surveillance information, please visit:

[http://www.doh.state.fl.us/disease\\_ctrl/epi/swineflu/Reports/reports.htm](http://www.doh.state.fl.us/disease_ctrl/epi/swineflu/Reports/reports.htm)

## Influenza-Like Illness in Seminole County, through December 31, 2011

The graph below represents the percentage of local emergency department visits for ILI in Seminole County for the 2011-2012 season up to December 31 (Week 52) compared to the 2008-2009 and 2010-2011 season by patients' chief complaint, as measured by the ESSENCE syndromic surveillance system. Data from patient visits to Florida Hospital Centra Care locations in Seminole County are also included, beginning with the 2010-2011 season.



# Thank You For Your Participation!

The Epidemiology Program would like to thank the following healthcare providers for their diligence in timely reporting from Florida's "List of Reportable Diseases/Conditions":

**Joanne Barnett, RN, Central Florida Regional Hospital**  
**Veronica Butler, RN, Florida Hospital, Altamonte and Apopka**  
**Sandra Delahoz, RN, South Seminole Hospital**

For more information about Florida's List of Reportable Diseases/Conditions, please contact Gregory Danyluk, PhD at 407-665-3266.

Selected Diseases/Conditions Reported to the Seminole County Health Department	2011 through Week 48	2010 through Week 48	2009 through Week 48	2008-2010 Average through Week 48
AIDS*	36	43	55	43.7
<b>Animal Bite to Humans**</b>	<b>25</b>	17	24	<b>21.0</b>
Animal Rabies	5	4	6	5.7
<b>Campylobacteriosis</b>	<b>32</b>	12	12	<b>11.7</b>
<b>Chlamydia</b>	<b>1364</b>	1222	1123	<b>1087.7</b>
Cryptosporidiosis	2	3	7	6.0
Cyclosporiasis	1	2	3	2.0
Dengue	0	3	0	1.0
<b><i>E. coli</i> Shiga toxin-producing</b>	<b>8</b>	5	1	<b>2.0</b>
Giardiasis	13	32	22	27.7
Gonorrhea	251	322	343	321.3
<b><i>Haemophilus influenzae</i> (invasive)</b>	<b>4</b>	2	3	<b>2.0</b>
Hepatitis A	3	0	7	2.7
<b>Hepatitis B (acute and chronic)</b>	<b>92</b>	62	49	<b>58.0</b>
<b>Hepatitis C (acute and chronic)</b>	<b>306</b>	285	207	<b>244.7</b>
Hepatitis B in Pregnant Women	9	8	5	9.0
HIV*	60	56	64	64.3
Lead poisoning	2	4	4	3.7
Legionellosis	1	2	12	6.7
Lyme Disease	2	1	5	2.0
Meningococcal Disease	0	0	1	0.3
Pertussis	2	1	5	2.0
Salmonellosis	88	113	119	105.0
<b>Shigellosis</b>	<b>14</b>	10	2	<b>7.7</b>
<i>S. pneumoniae</i> – drug resistant	12	16	5	11.7
<b>Syphilis</b>	<b>41</b>	20	52	<b>35.3</b>
<b>Tuberculosis</b>	<b>14</b>	9	8	<b>8.0</b>
Varicella	16	23	18	23.7

\* HIV data includes those cases that have converted to AIDS. These HIV cases cannot be added with AIDS cases to get combined totals since the categories are not mutually exclusive. Current AIDS/HIV data are provisional at the county level.

\*\* Animal bite to humans by a potentially rabid animal resulting in a county health department or state health office recommendation for post-exposure prophylaxis (PEP), or a bite by a non-human primate.

Reported cases of diseases/conditions in **Bold** are >10% higher than the previous three year average for the same time period.

# Increase in Syphilis Cases Seminole County and Other Counties along the Interstate 4 Corridor

*Sandra Zow-Johnson, BA, Human Services Program Manager, STD/HIV Program  
Donna Walsh, RN, BSN, MPA, Community Health Director  
Seminole County Health Department*

The state of Florida has seen a rise in the number of infectious syphilis cases in 2011, especially in counties located along the I-4 corridor. When compared to the same time period last year (January through December 1), an increase of approximately 170% of primary and secondary syphilis cases have been reported in Seminole County. Many of the cases in Seminole County are co-infected with the Human Immunodeficiency Virus (HIV). Social networking and technology have contributed to the noted increase by facilitating “hookups”. In collaboration with the Department of Health Bureau of Sexually Transmitted Diseases (STD) Prevention and Control in Tallahassee, the Seminole County Health Department, as well as other affected counties, is participating in a marketing campaign to raise awareness of syphilis in the community and enhance surveillance and prevention activities.

Seminole County Health Department has been working through sustained increases of syphilis cases through the following activities:

- \* Media and communication efforts with the public and local providers to increase awareness about syphilis as a means to identify, treat, and reduce incidence of disease.
- \* Our local county health department and staff are working diligently to address these increases and protect the health of our local community.

When addressing infectious diseases like syphilis, it should be expected that we identify more cases of disease as a result of intervention and prevention efforts. Such increases are normally followed by decreases as the disease is contained, treated, and individuals are no longer infectious. Also important to note is that Florida ranks 13th in the nation for congenital syphilis with a rate of 7.9 per 100,000 live births as compared to the United States with a rate of 8.7 per 100,000 live births. The National 2020 target is 9.1 per 100,000 births.

For more information on the Seminole County Health Department’s Specialty Care Clinic services and resources, visit [www.seminolecohealth.com](http://www.seminolecohealth.com) or call (407) 665-3291.

## **Additional Resources:**

Syphilis - CDC Fact Sheet:  
<http://www.cdc.gov/std/syphilis/STDFact-Syphilis.htm>

Florida Department of Health, Bureau of Sexually Transmitted Diseases:  
[http://www.doh.state.fl.us/Disease\\_ctrl/std/index.html](http://www.doh.state.fl.us/Disease_ctrl/std/index.html)