

Week 43: October 21-27, 2013

ILLINOIS DEPARTMENT OF PUBLIC HEALTH



Illinois Influenza Surveillance Report

Week 43: Week Ending Saturday, October 27, 2012

Division of Infectious Diseases Immunization Section

11/2/2012

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Summary

- During CDC surveillance week 43, the proportion of outpatient visits for influenza-like illness (ILI)¹ was 1.4 % compared with 1.3 % for week 42.
- Based on CDC criteria, influenza activity is classified as **no activity** (see CDC FLU View Section) for week 43.
- Febrile Respiratory Illness (FRI) surveillance² at Naval Recruit Training Command, Great Lakes was **at or below expected value** for week ending October 27, 2012.
- During week 43, no specimen was tested for influenza by Illinois Department of Public Health Laboratory.
- One influenza-associated Intensive Care Unit (ICU) admissions³ was reported for week 43.
- No influenza-associated pediatric deaths were reported for week 43.
- During week 43, no influenza outbreaks were reported in a long-term care facility.

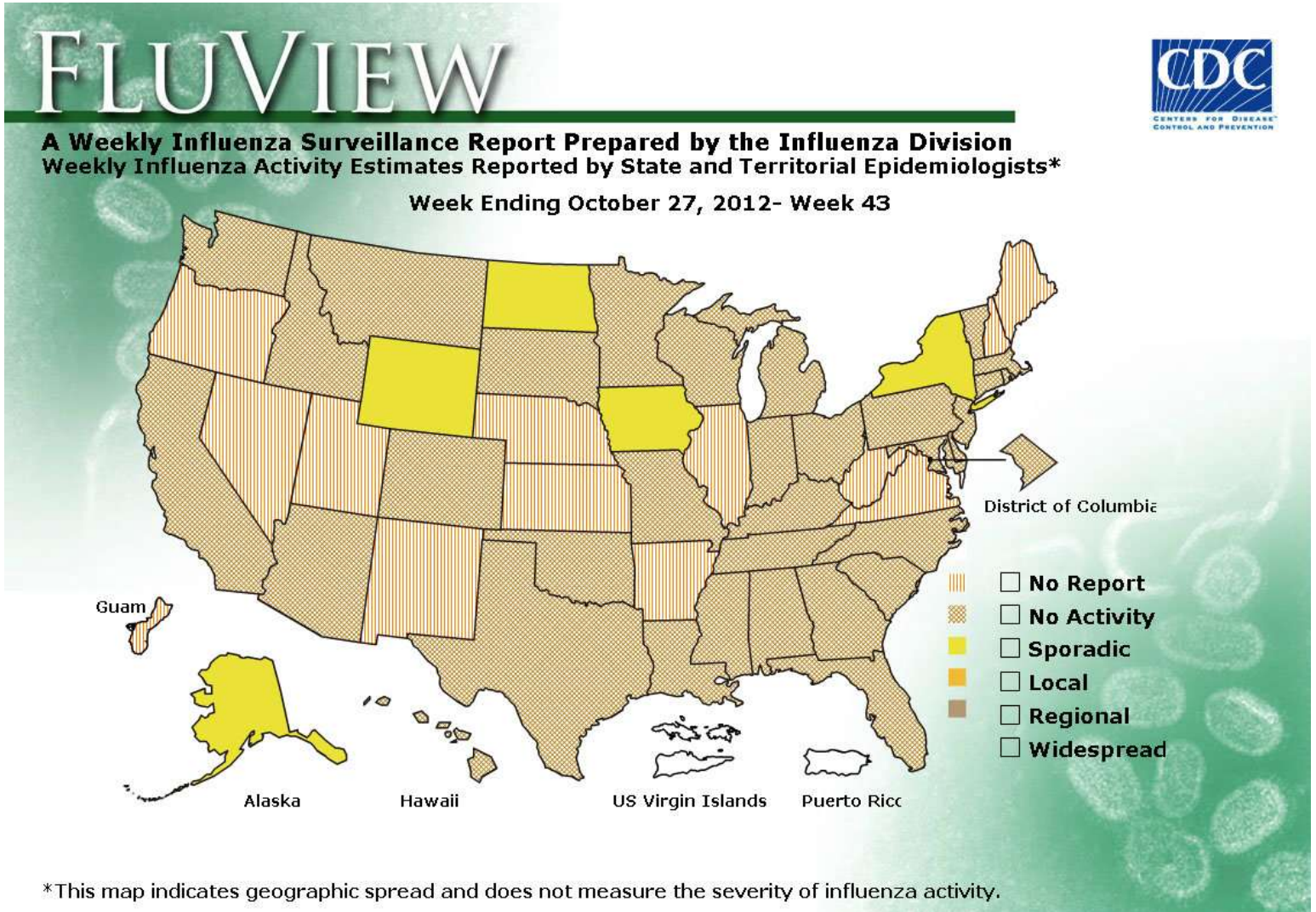
¹ ILI "Influenza like Illness" is defined as fever $\geq 100^{\circ}\text{F}$ and cough and/or sore throat.

² FRI surveillance is ongoing at 8 U.S. military basic training centers, representing all service branches. FRI Rate Status is classified into one of 3 categories:

1. At or below expected value (expected value shown as dashed line)
2. Moderately elevated
3. Substantially elevated

³ For the purpose of diagnosis, influenza can be diagnosed by using the following test: reverse transcription polymerase chain reaction RT-PCR], viral culture, Immunofluorescence [Direct Fluorescent Antibody (DFA) or Indirect Fluorescent Antibody (IFA) Staining], Enzyme Immuno Assay (EIA) or any rapid diagnostic test. Sensitivities of rapid diagnostic tests are approximately 50-70% when compared with viral culture or reverse transcription polymerase chain reaction (RT-PCR), and specificities of rapid diagnostic tests for influenza are approximately 90-95%. False-positive (and true-negative) results are more likely to occur when disease prevalence in the community is low, which is generally at the beginning and end of the influenza seasons. False-negative (and true-positive) results are more likely to occur when disease prevalence is high in the community, which is typically at the height of the influenza season.

CDC Flu View



No activity: No laboratory confirmed cases of influenza and no reported increase in cases of influenza like illness (ILI).

Sporadic: Small numbers of laboratory confirmed influenza cases or a single laboratory confirmed influenza in a single region of the state.

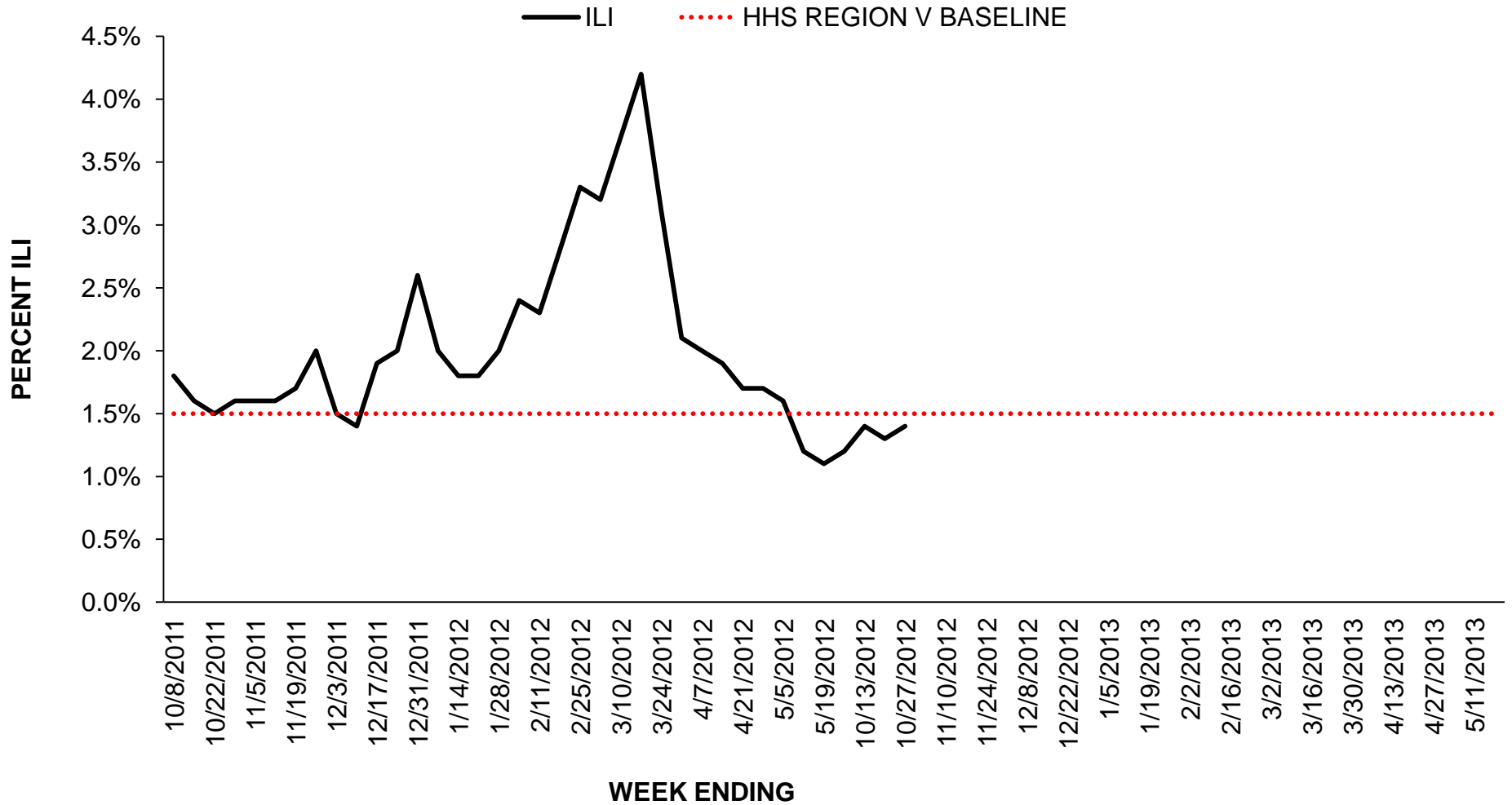
Local: Outbreaks of influenza or increases in ILI and recent laboratory confirmed influenza in a single region of the state.

Regional: Outbreaks of influenza or increases in ILI and recent laboratory confirmed influenza in at least two but less than half the regions of the state.

Widespread: Outbreaks of influenza or increases in ILI cases and recent laboratory confirmed influenza in at least half the regions in the state.

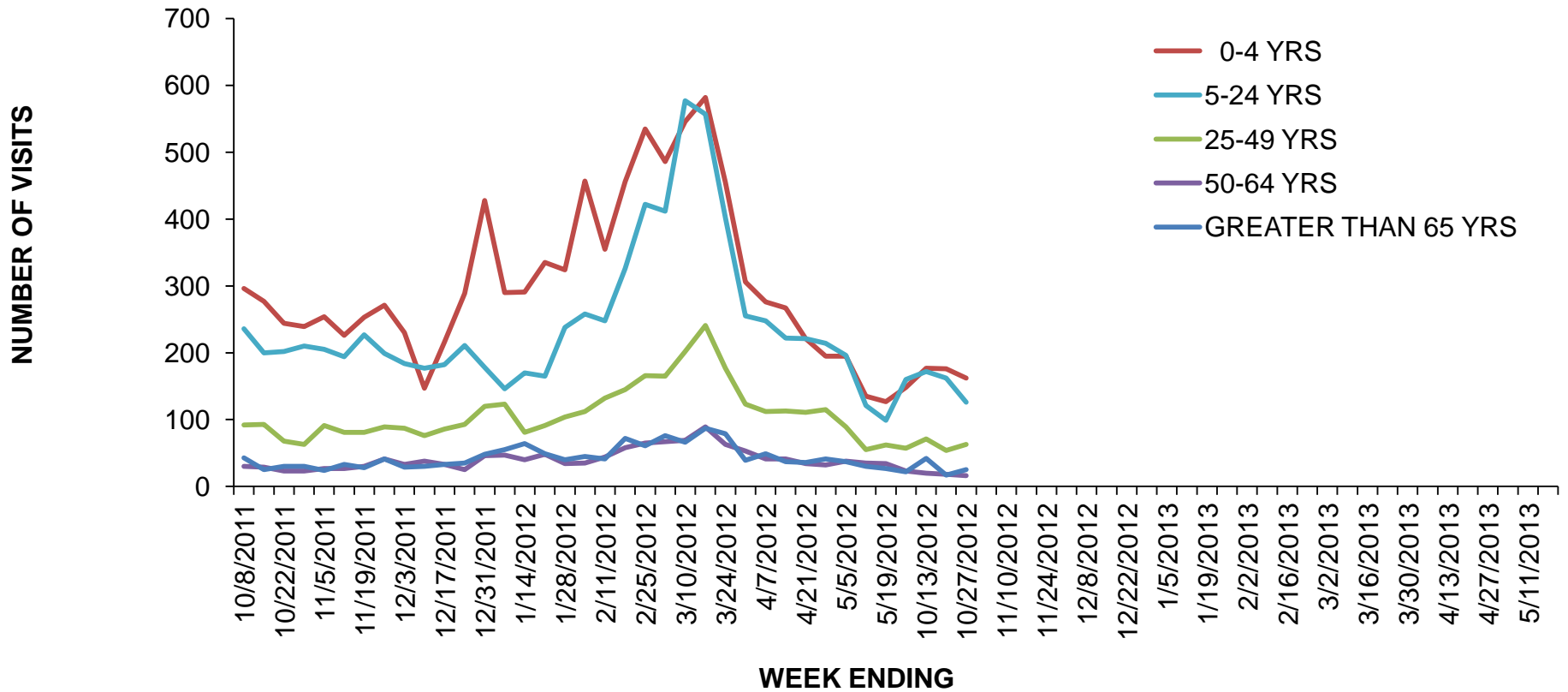
ILI Net Provider Surveillance

Influenza Like Illness Outpatient Surveillance 2011-2013



ILI Visits by Age Group

2011-13 INFLUENZA SEASON PROPORTION OF ILI OFFICE VISITS BY AGE GROUP



Great Lakes Naval Recruit Influenza Surveillance

Febrile Respiratory Illness (FRI) surveillance⁴ at Naval Recruit Training Command, Great Lakes was **at or below expected value** for week ending October 27, 2012. For more information visit

<http://www.med.navy.mil/sites/nhrc/geis/Pages/default.aspx>

Influenza Intensive Care Unit Admissions and Deaths

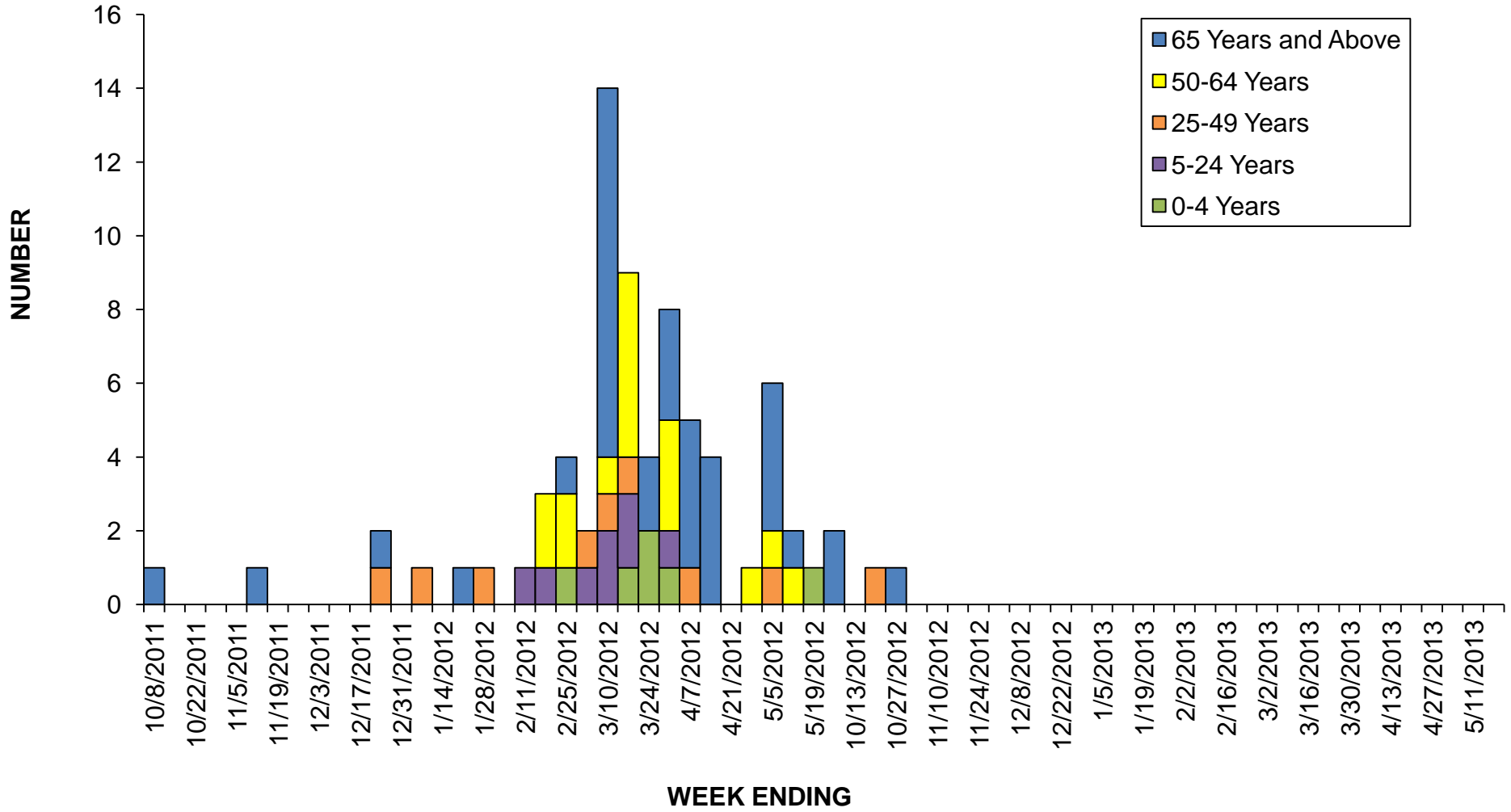
There were no influenza related ICU admissions or deaths reported for week ending October 27, 2012.

Year	Week No	Admissions No	Deaths
2012	40	2	0
2012	41	0	0
2012	42	1	0
2012	43	1	0

⁴ FRI surveillance is ongoing at 8 U.S. military basic training centers, representing all service branches. FRI Rate Status is classified into one of 3 categories:

4. At or below expected value (expected value shown as dashed line)
5. Moderately elevated
6. Substantially elevated

Influenza Related ICU Admissions by Age Group



Laboratory Surveillance

During week 43, no specimen was tested for Influenza by Illinois Department of Public Health Laboratory.

Year	Week	A (H1)	2009(A)H1N1	A (H3)	A(Unable to subtype)	A(Sub typing not performed)	B	Total # Tested	% Positive
2012	40	0	0	0	0	0	0	2	0%
2012	41	0	0	0	1	0	0	1	0%
2012	42	0	0	0	0	0	0	0	0%
2012	43	0	0	0	0	0	0	0	0%

Viral Resistance

The majority of currently circulating influenza viruses are susceptible to the neuraminidase inhibitor antiviral medications oseltamivir and zanamivir; however, rare sporadic cases of oseltamivir resistant 2009 influenza A (H1N1) and A (H3N2) viruses have been detected worldwide.

Neuraminidase Inhibitor Resistance Testing Results on Samples Collected Since October 1, 2012				
	Oseltamivir		Zanamivir	
	Virus Samples tested (n)	Resistant Viruses, Number (%)	Virus Samples tested (n)	Resistant Viruses, Number (%)
Influenza A (H3N2)	23	0 (0.0)	23	0 (0.0)
Influenza B	29	0 (0.0)	29	0 (0.0)
2009 H1N1	1	0 (0.0)	1	0 (0.0)

High levels of resistance to the adamantanes (amantadine and rimantadine) persist among 2009 H1N1 and A (H3N2) viruses (the adamantanes do not have activity against influenza B viruses). Antiviral treatment as early as possible with oseltamivir or zanamivir is recommended for patients with confirmed or suspected influenza who have severe, complicated, or progressive illness; who require hospitalization; or who are at greater risk for influenza-related complications. Additional information treatment and chemoprophylaxis of influenza virus infection with antiviral agents is available at <http://www.cdc.gov/flu/antivirals/index.htm>.

Influenza Outbreaks Reported in Long-Term Facilities (LTC) and Nursing Homes (NH)

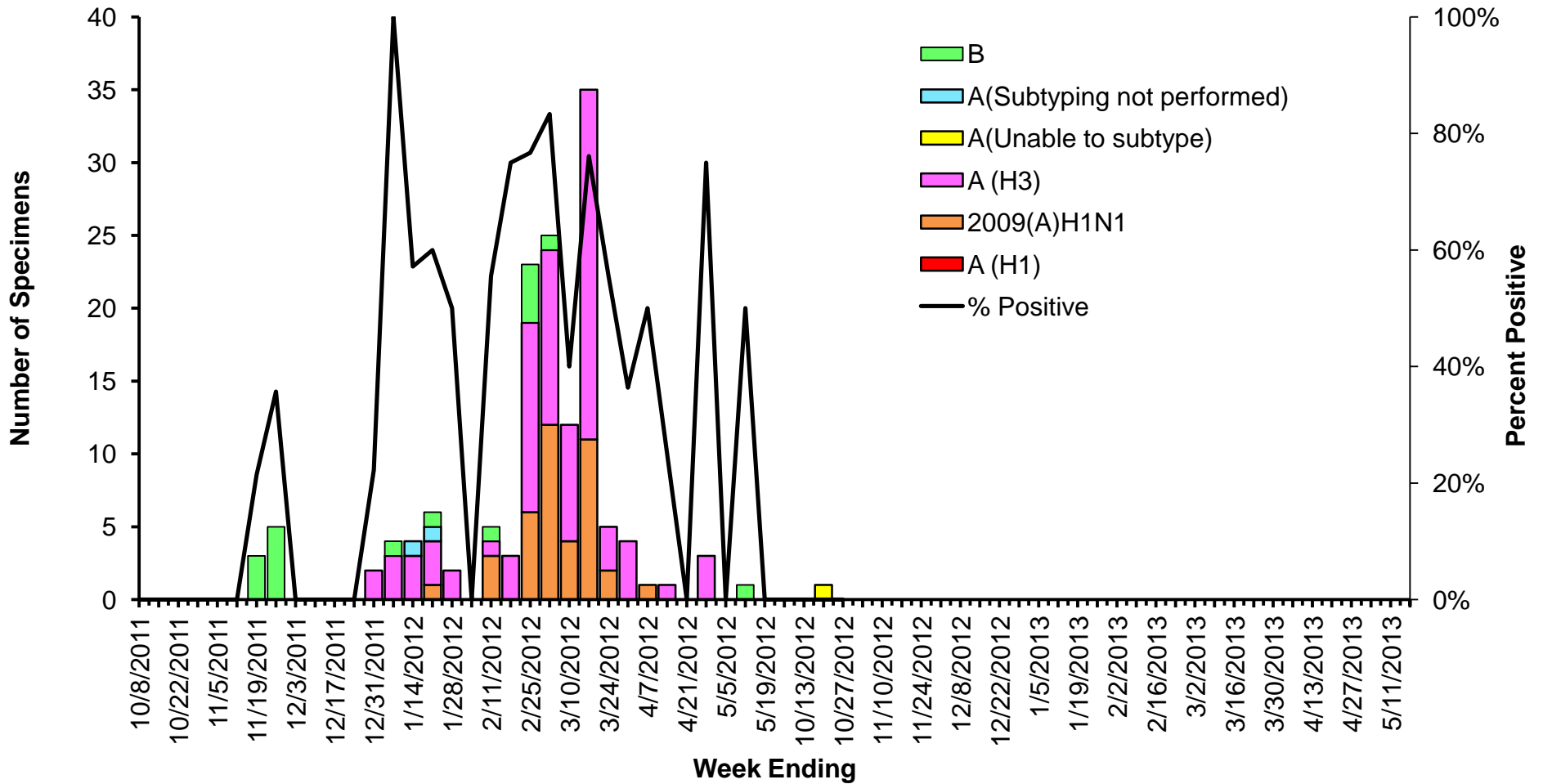
No influenza outbreaks were reported in long-term care facilities within Illinois for week ending October 20, 2012.

IDPH, Immunization Section Regional Map



Weekly Viral Subtype

Influenza Isolates from Illinois Reported by WHO/NREVSS Collaborating Laboratories 2011-2013



Resources

- Centers for Disease Control and Prevention Influenza Website: <http://www.cdc.gov/flu/>
- Immunization Action Coalition Website: <http://immunize.org/>
- IDPH Website: <http://www.idph.state.il.us/flu/surveillance.htm>
- ACL Clinical Laboratory Respiratory Panel: <http://www.acllaboratories.com/>
- St Louis Children's Hospital Clinical Laboratory Respiratory Panel:
<http://www.stlouischildrens.org/health-care-professionals/clinical-laboratories>