

Week 40: September 30-October 6, 2013

ILLINOIS DEPARTMENT OF PUBLIC HEALTH



Illinois Influenza Surveillance Report

Week 40: Week Ending Saturday, October 6, 2012

Division of Infectious Diseases Immunizations Section

10/12/2012

Contents

Summary.....	3
CDC Flu View.....	4
ILI Net Provider Surveillance	5
ILI Visits by Age Group.....	6
Great Lakes Naval Recruit Influenza Surveillance	7
Influenza Intensive Care Unit Admissions and Deaths.....	7
Influenza Related ICU Admissions by Age Group.....	8
Laboratory Surveillance	9
Viral Resistance	10
Influenza Outbreaks Reported in Long-Term Facilities (LTC) and Nursing Homes (NH)	10
IDPH, Immunization Section Regional Map	11
Weekly Viral Subtype	12
Resources.....	13

Summary

- During CDC week 40, the proportion of outpatient visits for influenza-like illness (ILI)¹ was 1.6%.
- Based on CDC criteria, influenza activity is classified as **no activity** (see CDC FLU View Section) for week 40.
- Febrile Respiratory Illness (FRI) surveillance² at Naval Recruit Training Command, Great Lakes was **at or below expected value** for week ending October 6, 2012.
- During week 40, none of the two specimens tested by Illinois Department of Public Health Laboratory were positive for influenza.
- Two influenza-associated Intensive Care Unit (ICU) admissions³ were reported for week 40.
- No influenza-associated pediatric deaths were reported for week 40.
- During week 40, no influenza outbreaks were reported in a long-term care facility.

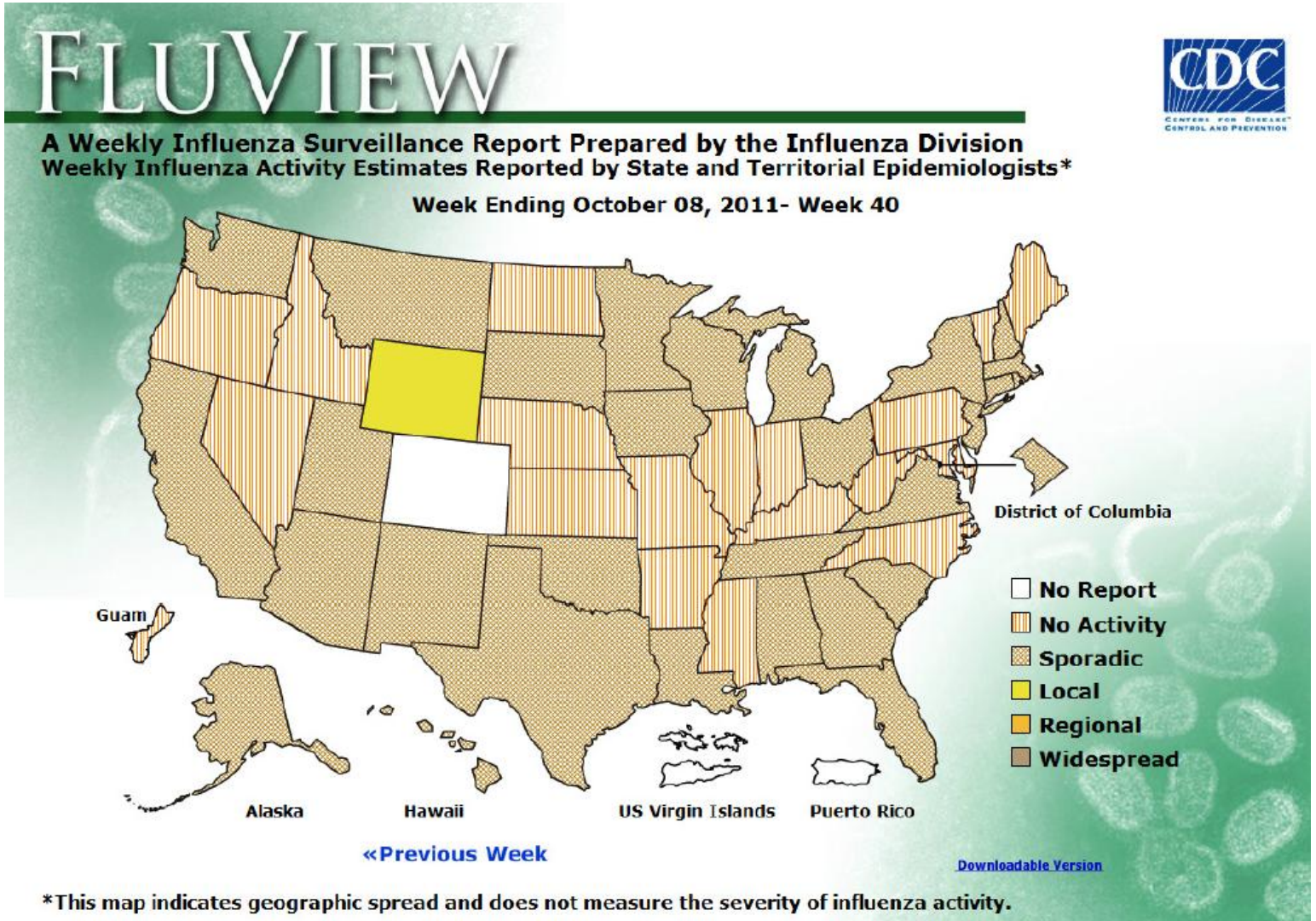
¹ ILI "Influenza like Illness" is defined as fever $\geq 100^{\circ}\text{F}$ and cough and/or sore throat.

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.

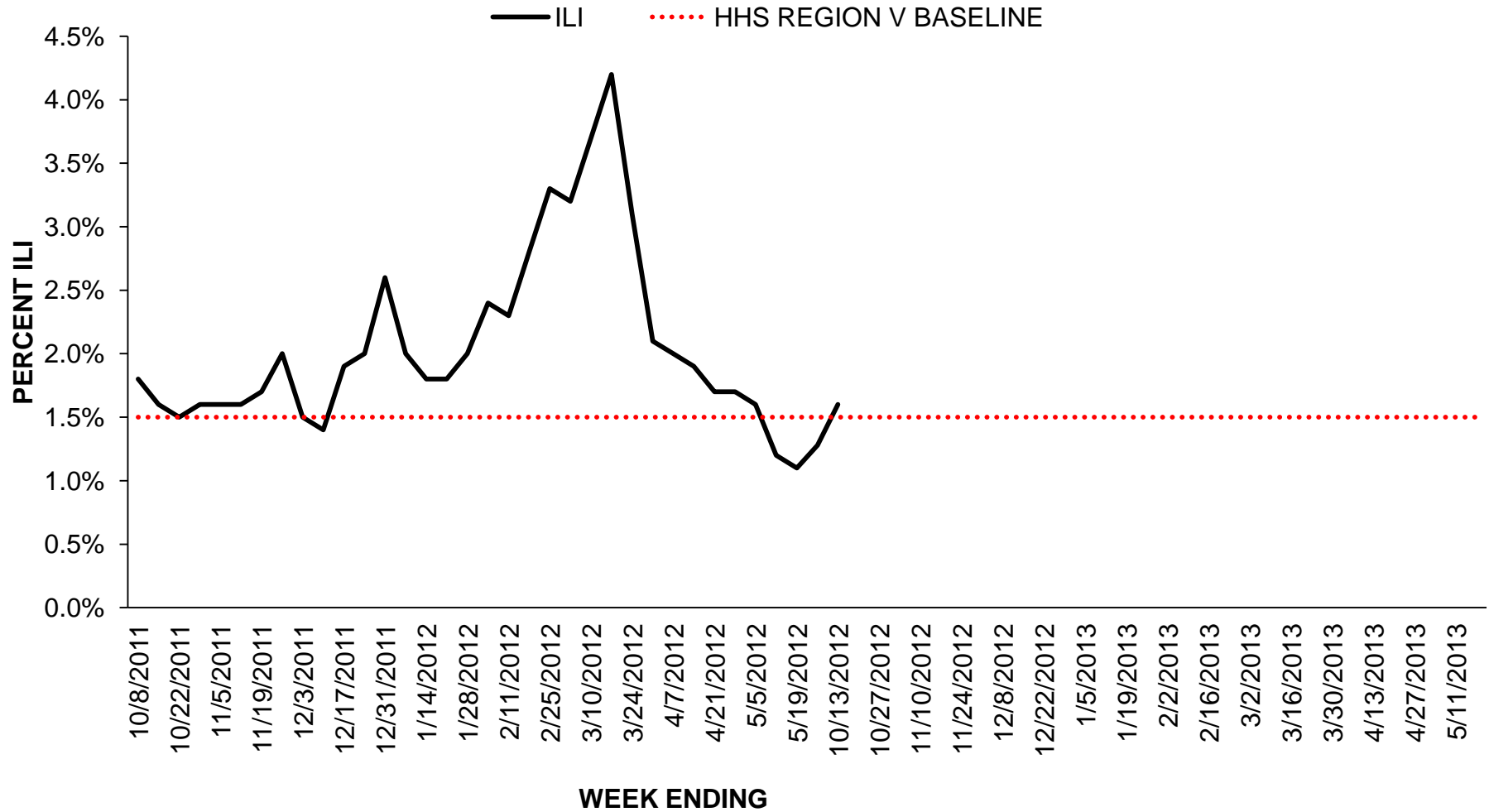
Local: Outbreaks of influenza or increases in ILI and recent laboratory confirmed influenza in a single region of the state.

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.

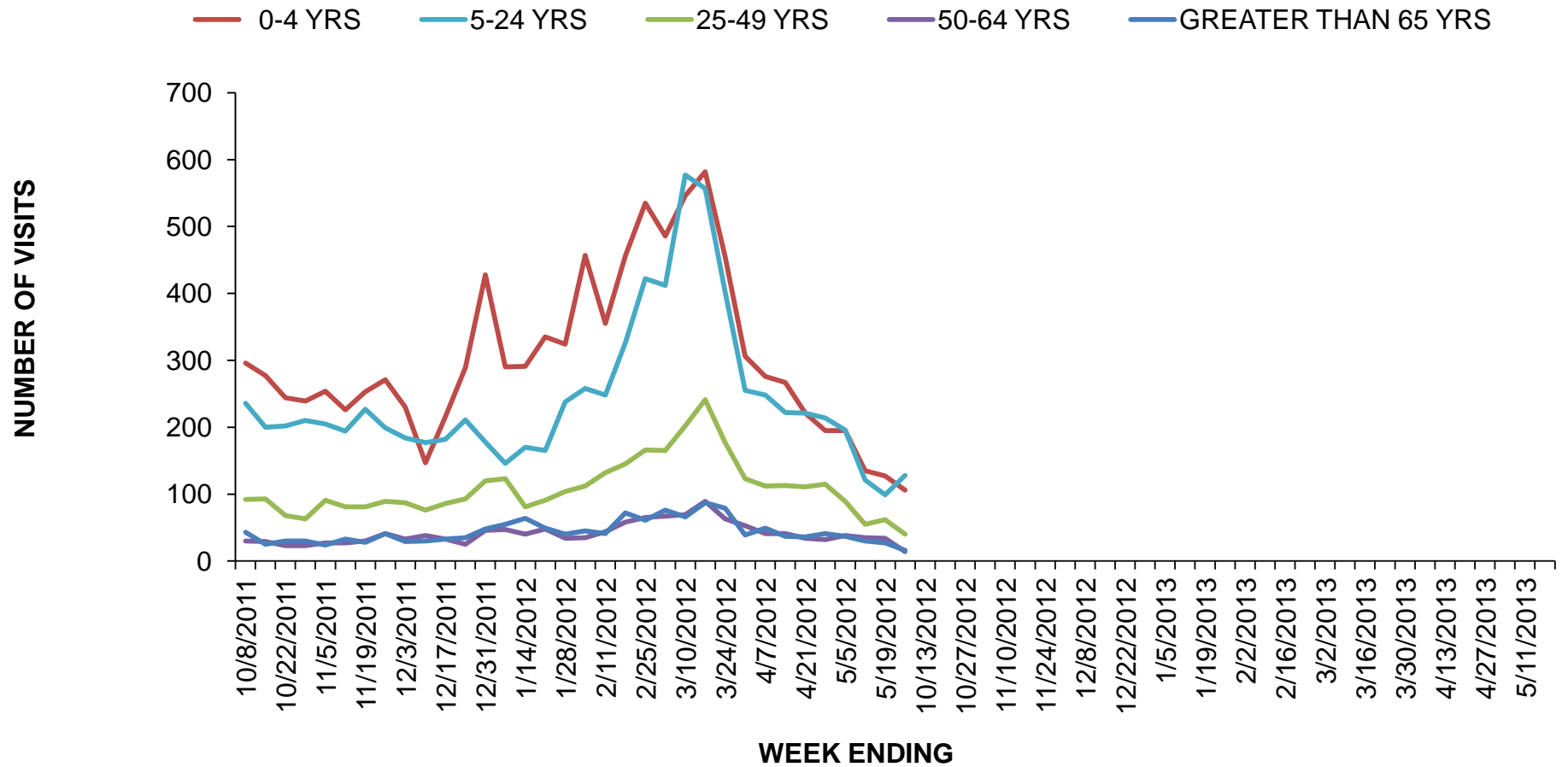
ILI Net Provider Surveillance

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 6, 2012. For more information visit <http://www.med.navy.mil/sites/nhrc/geis/Pages/default.aspx>

Influenza Intensive Care Unit Admissions and Deaths

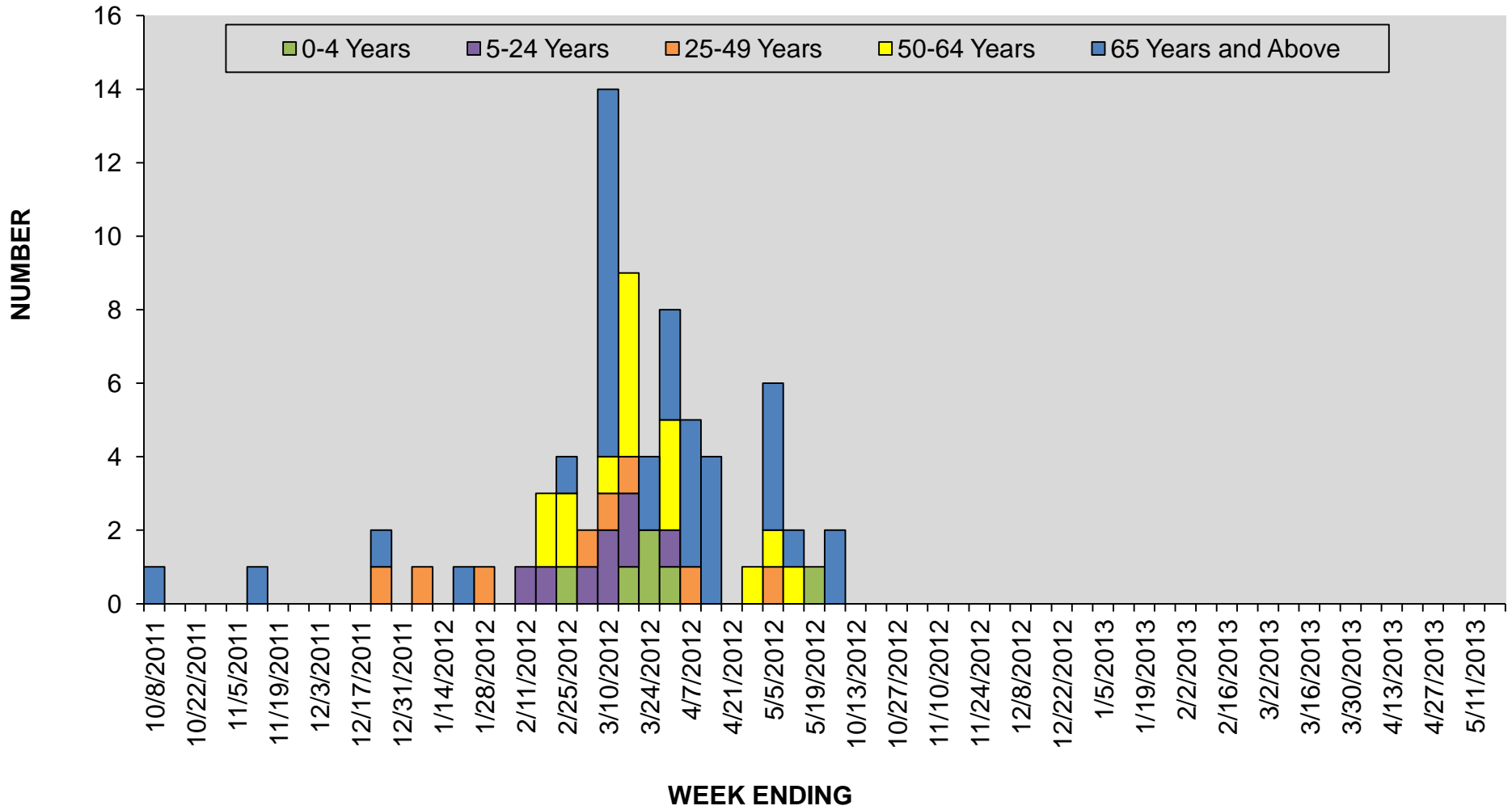
There were two influenza related ICU admissions and no deaths reported for week ending October 6, 2012.

Year	Week No	Admissions No	Deaths
2012	40	2	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 40, none of the two specimens tested by Illinois Department of Public Health Laboratory were positive for influenza.

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%

Viral Resistance

No antiviral resistance data is available for specimens collected after October 1, 2012. Of specimens collected between May and September 2012 and tested for susceptibility to the neuraminidase inhibitors (oseltamivir and zanamivir), only one virus, and a 2009 H1N1 virus, was found to be resistant to oseltamivir. This virus was sensitive to zanamivir.

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)

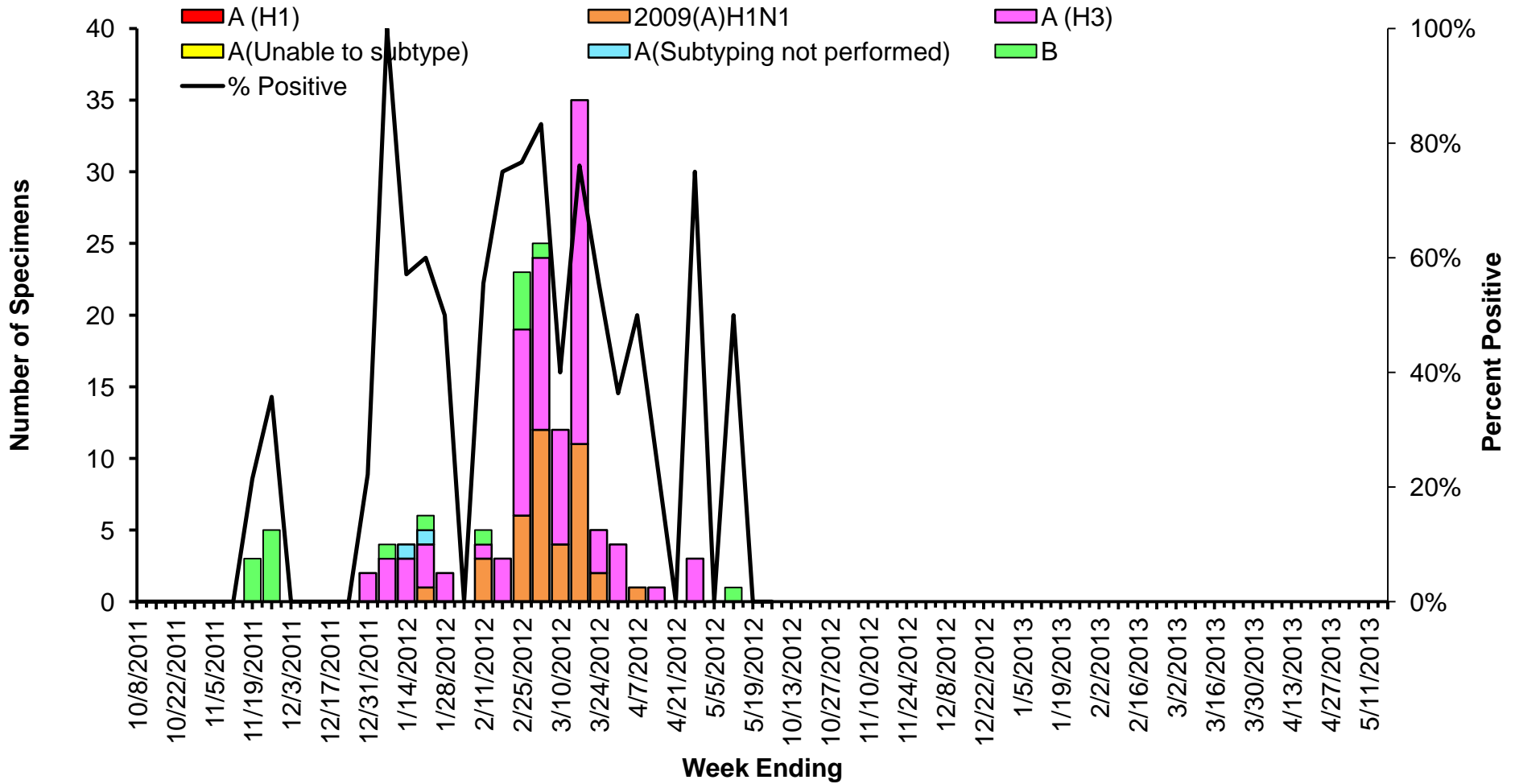
No influenza outbreaks were reported in long-term care facilities within Illinois.

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/content/ClinicalLaboratories.htm>