



Iowa Influenza Surveillance Network (IISN)

Influenza-like Illness (ILI) and Other Respiratory Viruses

Weekly Activity Report

For the week ending October 17, 2015 - Week 41



All data presented in this report are provisional and may change as additional reports are received

Quick Stats	
Percent of outpatient visits for ILI ¹	0.30% (baseline 1.7%)
Percent of influenza rapid test positive	2% (7/436)
Percent of RSV rapid tests positive	6% (6/103)
Percent school absence due to illness ²	1.83%
Number of schools with ≥10% absence due to illness	0
Influenza-associated hospitalizations ³	2/5,378 inpatients surveyed
Influenza-associated pediatric mortality (Cumulative)	0

¹ ILI: Influenza-like illness is defined as a fever of ≥100° F as well as cough and/or sore throat.
² Percent school absence due to illness are reported through a weekly survey of Iowa sentinel schools
³ Hospitalizations due to influenza are voluntarily reported through a weekly survey of Iowa sentinel hospitals

Iowa Influenza Geographic Spread ²
No Activity
Sporadic
Local
Regional
Widespread

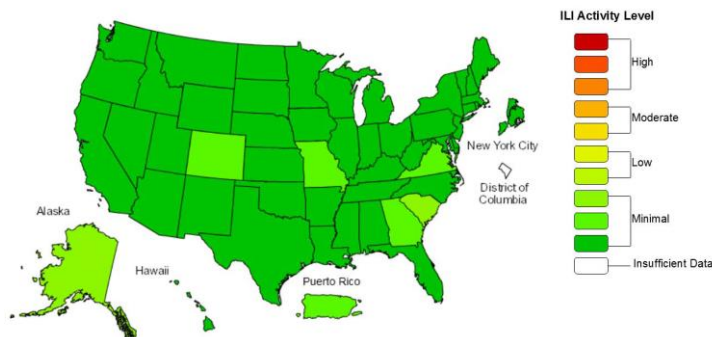
²This is based on CDC's activity estimates definition www.cdc.gov/flu/weekly/overview.htm

Iowa statewide activity summary:

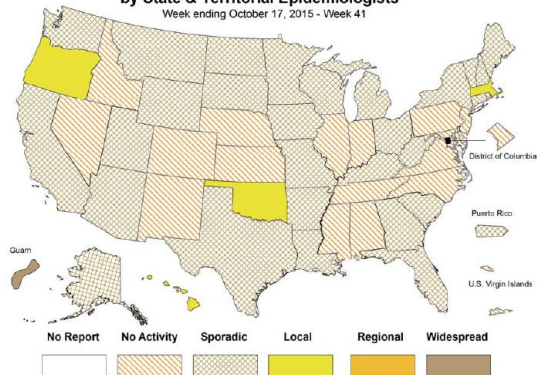
Influenza activity in Iowa is low. For this reporting week, the State Hygienic Laboratory confirmed two Influenza A (H3) cases. The proportion of outpatient visits due to influenza-like illness (ILI) was 0.30 percent which is well below the regional baseline. In this reporting week, eight adenovirus, 10 parainfluenza virus type 1, 10 parainfluenza virus type 4, one RSV, and 56 rhinovirus/enterovirus were detected from surveillance sites. Two influenza-associated hospitalizations were reported from sentinel hospitals. No schools reported 10 percent or greater absenteeism due to illness. No influenza outbreaks have been reported in Iowa long-term care facilities so far this influenza season.

National activity summary - (CDC):

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
2015-16 Influenza Season Week 41 ending Oct 17, 2015



Weekly Influenza Activity Estimates Reported by State & Territorial Epidemiologists*
Week ending October 17, 2015 - Week 41



Synopsis: During week 41 (October 11-17, 2015), influenza activity was low in the United States.

Viral Surveillance: The most frequently identified influenza virus type reported by public health laboratories in week 41 was influenza A viruses, with influenza A (H3) viruses predominating. The percentage of respiratory specimens testing positive for influenza in clinical laboratories is low.

Pneumonia and Influenza Mortality: The proportion of deaths attributed to pneumonia and influenza (P&I) was below their system-specific epidemic threshold in both the NCHS Mortality Surveillance System and the 122 Cities Mortality Reporting System.

Influenza-associated Pediatric Deaths: No influenza-associated pediatric deaths were reported.

Outpatient Illness Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) was 1.4 percent, which is below the national baseline of 2.1 percent. All 10 regions reported ILI below region-specific baseline levels. Puerto Rico, New York City and 50 states experienced minimal ILI activity and the District of Columbia had insufficient data.

Geographic Spread of Influenza: The geographic spread of influenza in Guam was reported as widespread; four states reported local activity; Puerto Rico and 29 states reported sporadic activity; and the District of Columbia, the U.S. Virgin Islands and 17 states reported no influenza activity.

Detailed information can be found online at www.cdc.gov/flu/weekly/.

International activity summary - (WHO):

Globally, influenza activity generally decreased or remained low in both hemispheres, with only a few countries reporting elevated respiratory illness levels. Detailed information can be found online at

www.who.int/influenza/surveillance_monitoring/updates/latest_update_GIP_surveillance/en/. It was last updated 10/19/2015.

Laboratory surveillance program:

The State Hygienic Laboratory (SHL) is the primary lab for influenza testing and reporting in Iowa. SHL reports the number of tests performed and the type and strain of positive tests to the influenza surveillance network several times every week. In addition, SHL surveys clinical and reference labs on a weekly basis for the number of rapid-antigen tests performed, the number positive and the positive non-influenza virus tests. This report also includes the positive non-influenza virus tests reported from the Dunes Medical Laboratories at Mercy Medical Center in Sioux City.

Table 1: Influenza A viruses detected by SHL by age group

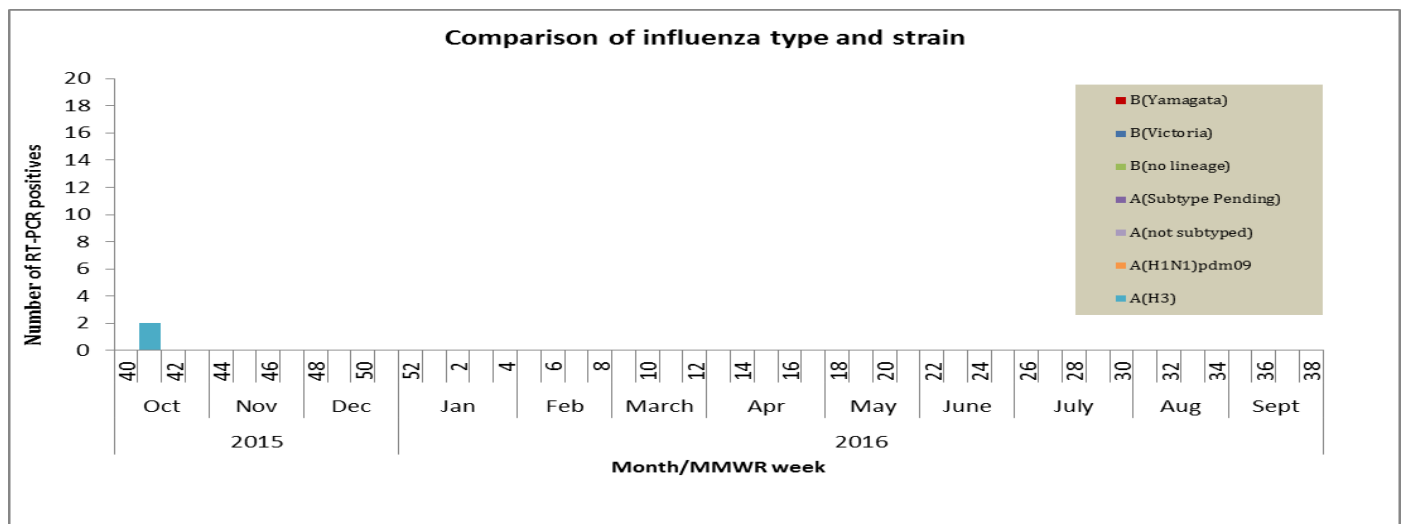
Age Group	CURRENT WEEK				YEAR TO DATE (10/4/15 – PRESENT WEEK)			
	Flu A				Flu A			
	A(H1N1)pdm09	A(H3)	Subtype Pending	Not subtyped	A(H1N1)pdm09	A(H3)	Subtype Pending	Not subtyped
0-4	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
5-17	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
18-24	0(0%)	2(100%)	0(0%)	0(0%)	0(0%)	2(100%)	0(0%)	0(0%)
25-49	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
50-64	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
>64	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
Total	0	2	0	0	0	2	0	0

*Counts of three or less are sometimes suppressed to protect confidentiality. Note that counts may not add up to the total due to missing age information
Only cases of Iowa residents are included
"Not subtyped" column is due to weak detections. This can be due to poor collection, timing of collection or stage of infection.

Table 2: Influenza B viruses detected by SHL by age group

Age Group	CURRENT WEEK			YEAR TO DATE (10/4/15 – PRESENT WEEK)		
	Flu B			Flu B		
	Victoria Lineage	Yamagata Lineage	Lineage Pending	Victoria Lineage	Yamagata Lineage	Lineage Pending
0-4	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
5-17	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
18-24	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
25-49	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
50-64	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
>64	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)
Total	0	0	0	0	0	0

*Counts of three or less are sometimes suppressed to protect confidentiality. Note that counts may not add up to the total due to missing age information
Only cases of Iowa residents are included



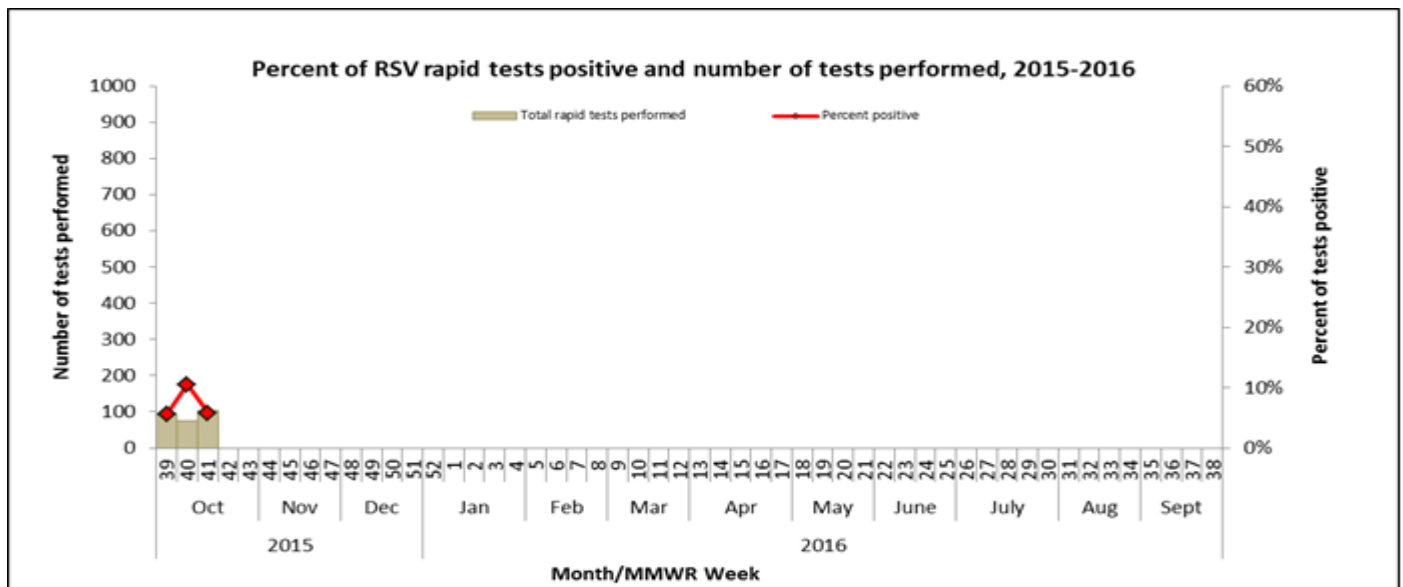
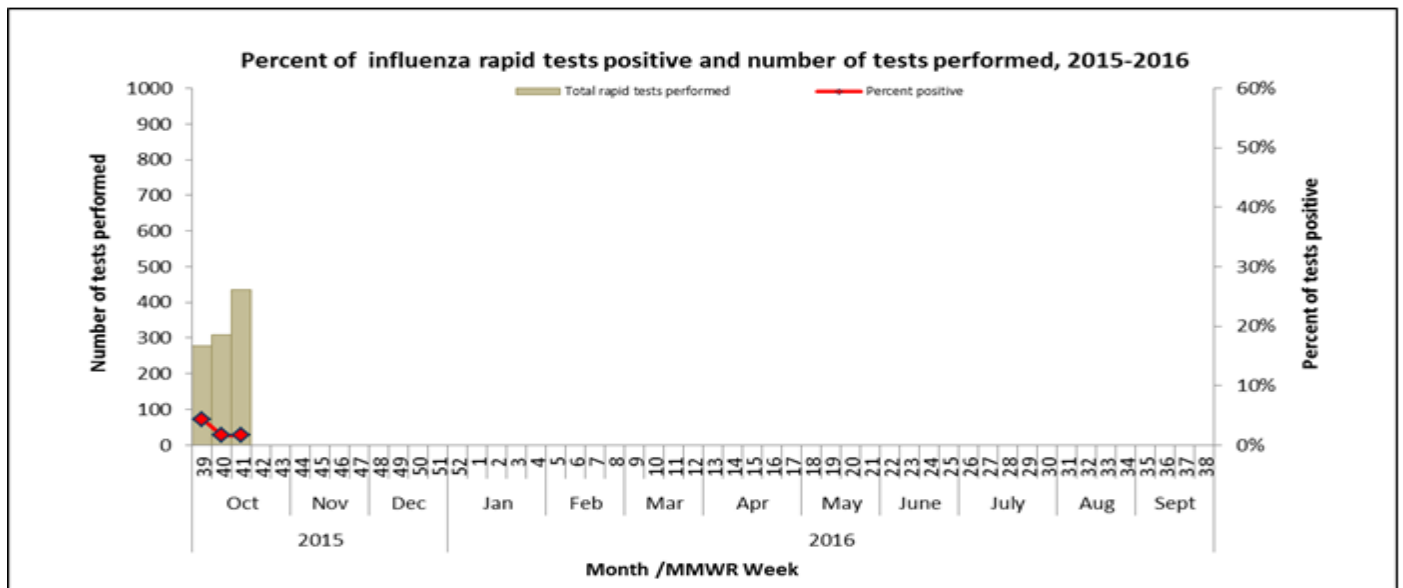
Rapid influenza and RSV test surveillance:

The State Hygienic Laboratory (SHL) runs a weekly web-based survey program where laboratorians report the number of influenza and respiratory syncytial virus (RSV) rapid tests performed and the number of tests positive. This table includes only the number of patients tested for influenza or RSV at laboratory surveillance sites throughout the state. This table does not provide case counts.

Table 2: Percent of influenza rapid tests positive and number of tests performed by region for the present week

REGION*	RAPID ANTIGEN INFLUENZA TESTS				RAPID ANTIGEN RSV TESTS		
	Tested	Flu A	Flu B	% Positive	Tested	Positive	% Positive
Region 1 (Central)	73	0	0	0	28	0	0
Region 2 (NE)	7	0	0	0	6	0	0
Region 3 (NW)	68	1	0	1	15	3	20
Region 4 (SW)	28	0	0	0	4	0	0
Region 5 (SE)	65	0	2	3	15	2	13
Region 6 (Eastern)	195	1	3	2	35	1	3
Total	436	2	5	2	103	6	6

*Region 1- Boone, Calhoun, Carroll, Dallas, Greene, Grundy, Hamilton, Hardin, Jasper, Marshall, Polk, Poweshiek, Story, Tama, Warren, Webster; Region 2- Allamakee, Bremer, Butler, Cerro Gordo, Chickasaw, Emmet, Fayette, Floyd, Franklin, Hancock, Howard, Humboldt, Kossuth, Mitchell, Winnebago, Winneshiek, Worth, Wright; Region 3- Buena Vista, Cherokee, Clay, Crawford, Dickinson, Ida, Lyon, Monona, O'Brien, Osceola, Palo Alto, Plymouth, Pocahontas, Sac, Sioux, Woodbury; Region 4- Adair, Adams, Audubon, Cass, Clarke, Decatur, Fremont, Guthrie, Harrison, Madison, Mills, Montgomery, Page, Pottawattamie, Ringgold, Shelby, Taylor, Union; Region 5- Appanoose, Davis, Des Moines, Henry, Jefferson, Keokuk, Lee, Louisa, Lucas, Mahaska, Marion, Monroe, Muscatine, Van Buren, Wapello, Washington, Wayne; Region 6- Benton, Black Hawk, Buchanan, Cedar, Clayton, Clinton, Delaware, Dubuque, Iowa, Jackson, Johnson, Jones, Linn, Scott.



Non-influenza respiratory virus:

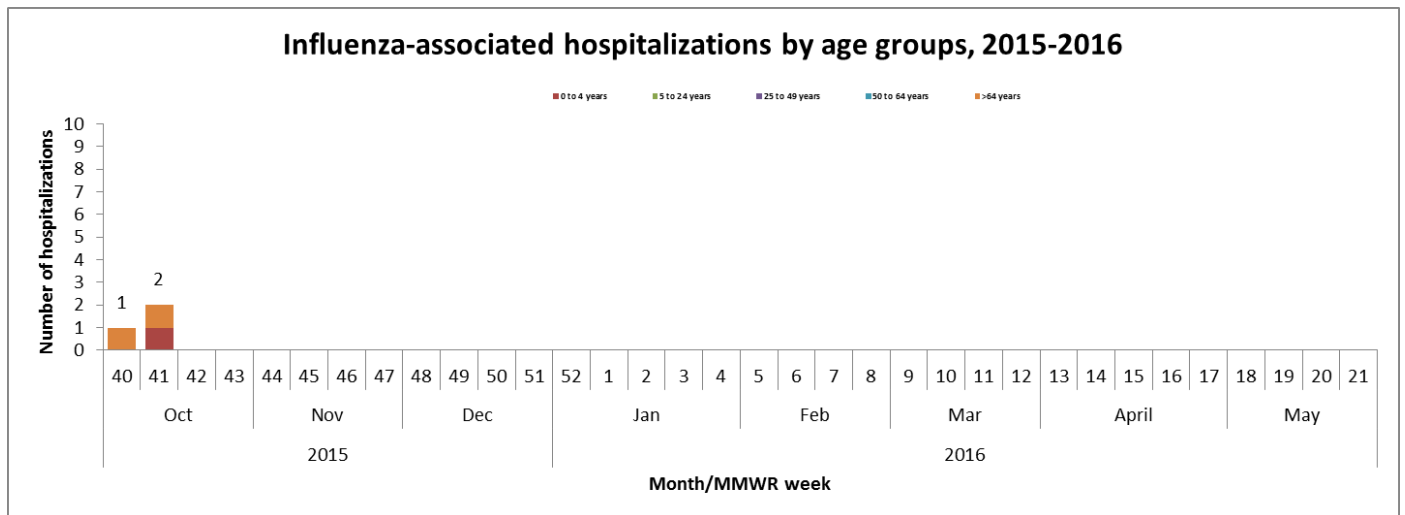
The State Hygienic Laboratory (SHL) runs a weekly web-based survey program where laboratorians report the number of positive tests for non-influenza respiratory viruses. This table also includes the positive non-influenza virus tests reported from the Dunes Medical Laboratories at Mercy Medical Center in Sioux City. The table includes only the number of positive tests at laboratory surveillance sites throughout the state. The table does not provide case counts.

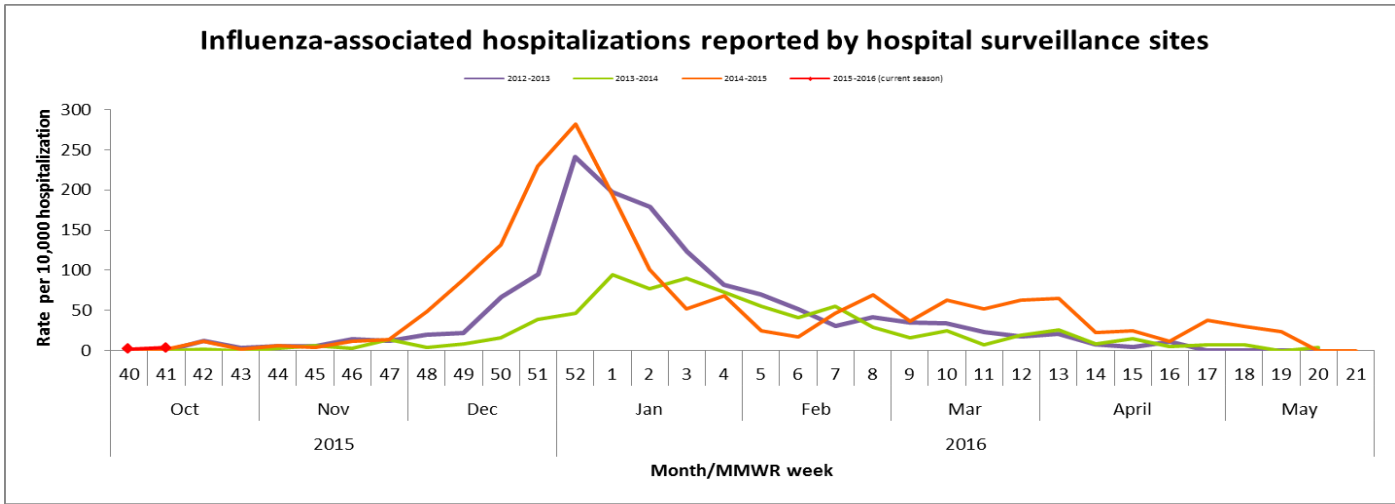
Viruses	CURRENT WEEK	CUMULATIVE (10/4/15 – PRESENT WEEK)
Adenovirus	8	18
Parainfluenza Virus Type 1	10	14
Parainfluenza Virus Type 2	0	0
Parainfluenza Virus Type 3	0	1
Parainfluenza Virus Type 4	10	16
Rhinovirus/Enterovirus	56	96
Respiratory syncytial virus (RSV)	1	1
Human metapneumovirus (hMPV)	0	1
Total	85	147

Influenza-associated hospitalizations:

Sentinel hospitals that participate in IISN voluntarily track and report the number of influenza-associated hospitalizations and the total number of inpatients each week.

AGE	CURRENT WEEK	CUMULATIVE (10/4/15 – PRESENT WEEK)
Age 0-4	1	1
Age 5-24	0	0
Age 25-49	0	0
Age 50-64	0	0
Age >64	1	2
Total	2	3



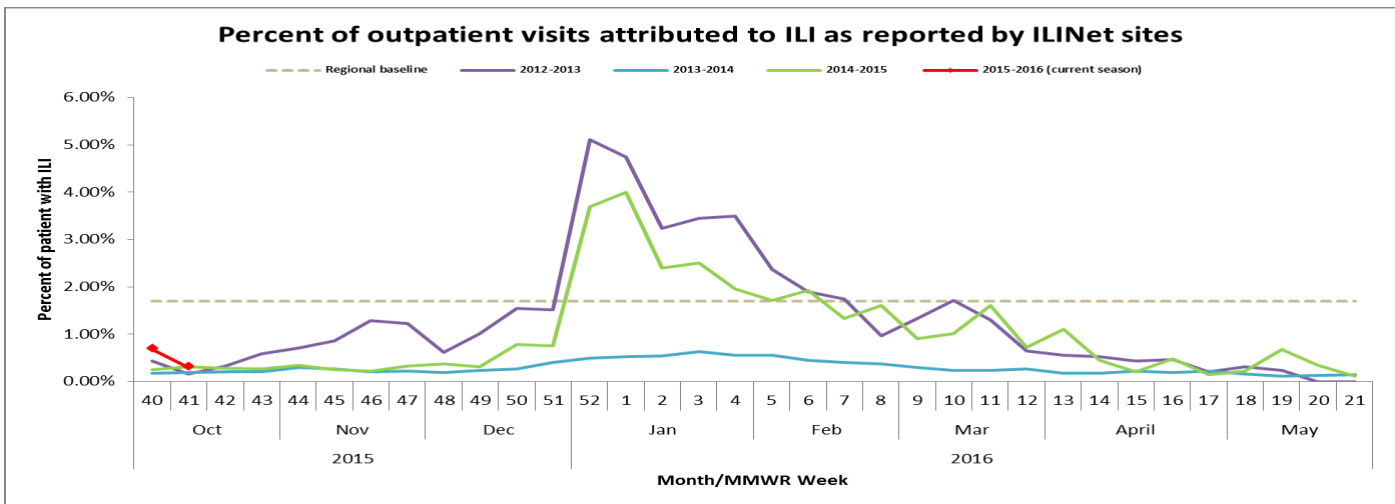


Outpatient health care provider surveillance program (ILINet):

Outpatient health care providers who participate in the ILINet (a national influenza surveillance program) report the number of patients seen with influenza-like illness and the total number of patient visits each week. This system is a key part of Iowa’s influenza surveillance. Iowa health care providers interested in joining this surveillance program should contact Julie Coughlin at 515-281-7134 or julie.coughlin@idph.iowa.gov for more information.

Table 6: Outpatient visits for influenza-like illness (ILI)

Week	%ILI	Total ILI	Age 0-4	Age 5-24	Age 25-49	Age 50-64	Age >64
Week 41, ending Oct 17	0.30	5	4	0	0	0	1
Week 40, ending Oct 10	0.68	6	1	1	1	1	2



*Database used to calculate this percentage has been modified to more accurately reflect what is occurring in acute care outpatient clinics in Iowa.

Long-term Care Outbreaks:

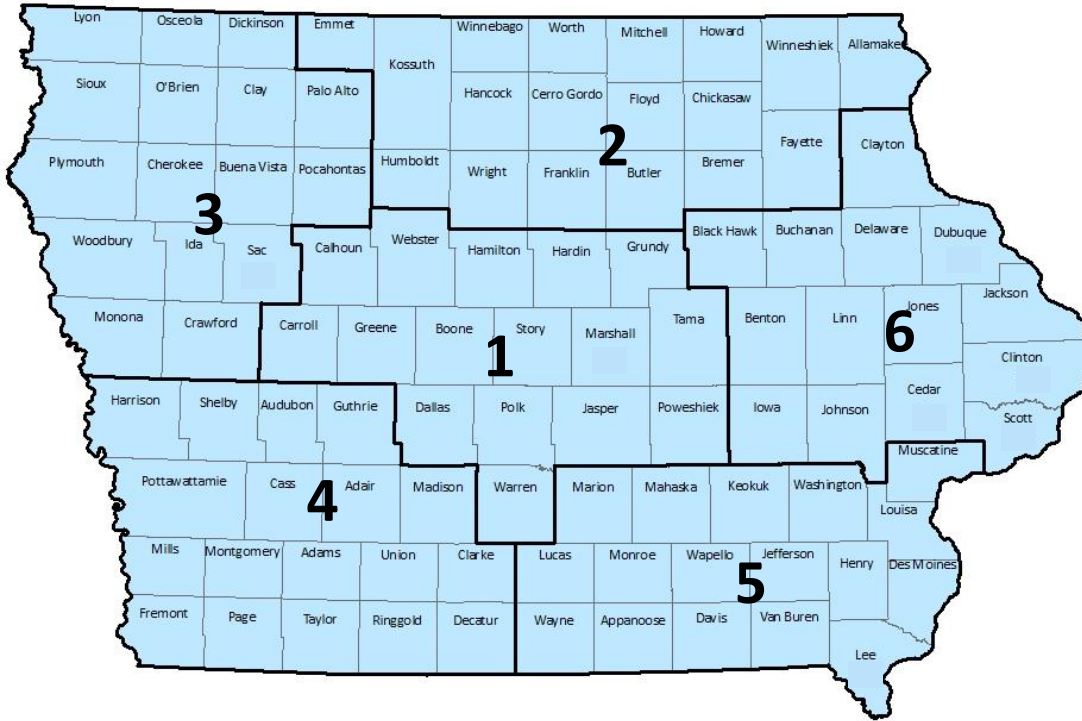
Table 7: Number of long-term care outbreaks investigated

REGION*	CURRENT WEEK	CUMULATIVE (10/4/15 – PRESENT WEEK)
Region 1 (Central)	0	0
Region 2 (NE)	0	0
Region 3 (NW)	0	0
Region 4 (SW)	0	0
Region 5 (SE)	0	0
Region 6 (Eastern)	0	0
Total	0	0

*Region 1- Boone, Calhoun, Carroll, Dallas, Greene, Grundy, Hamilton, Hardin, Jasper, Marshall, Polk, Poweshiek, Story, Tama, Warren, Webster; Region 2- Allamakee, Bremer, Butler, Cerro Gordo, Chickasaw, Emmet, Fayette, Floyd, Franklin, Hancock, Howard, Humboldt, Kossuth, Mitchell, Winnebago, Winneshiek, Worth, Wright; Region 3- Buena Vista, Cherokee, Clay, Crawford, Dickinson, Ida, Lyon, Monona, O'Brien, Osceola, Palo Alto, Plymouth, Pocahontas, Sac, Sioux, Woodbury; Region 4- Adair, Adams, Audubon, Cass, Clarke, Decatur, Fremont, Guthrie, Harrison, Madison, Mills, Montgomery, Page, Pottawattamie, Ringgold, Shelby, Taylor, Union; Region 5- Appanoose, Davis, Des Moines, Henry, Jefferson, Keokuk, Lee, Louisa, Lucas, Mahaska, Marion, Monroe, Muscatine, Van Buren, Wapello, Washington, Wayne; Region 6- Benton, Black Hawk, Buchanan, Cedar, Clayton, Clinton, Delaware, Dubuque, Iowa, Jackson, Johnson, Jones, Linn, Scott.

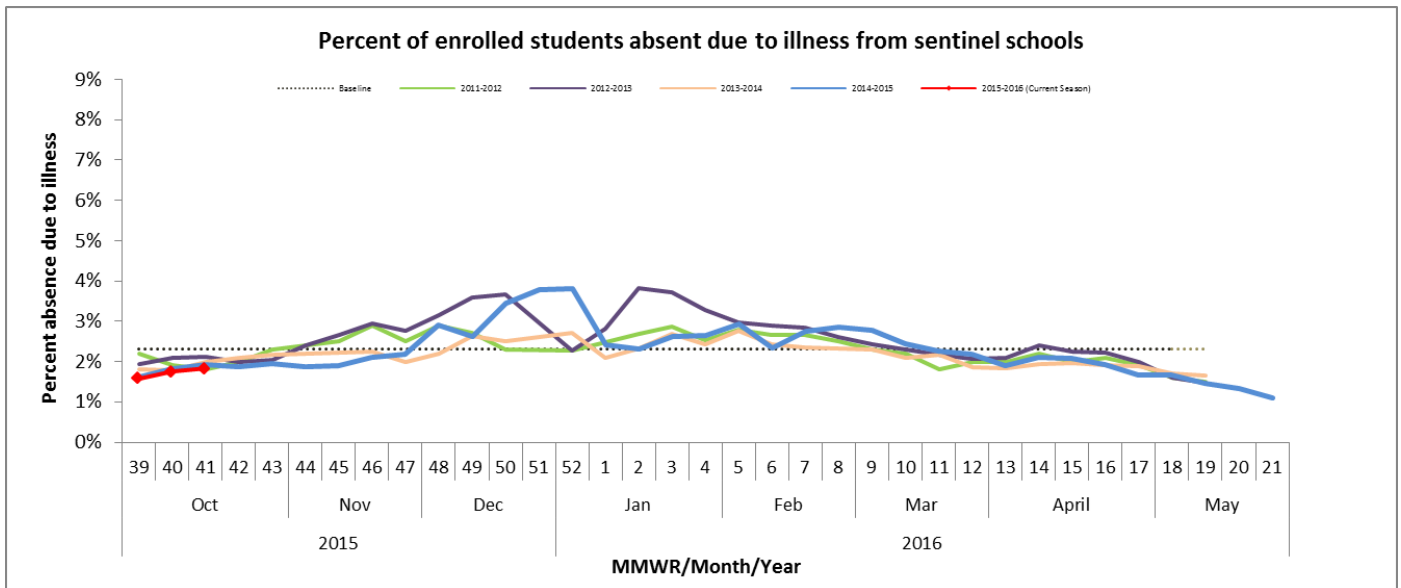
10 percent school absenteeism:

Schools (K-12) track and report when the number of students absent with illness reaches or exceeds 10 percent of total student enrollment. A regional map with schools that have ≥10% absence due to illness, which includes influenza-like illness, for this current reporting week is displayed below.



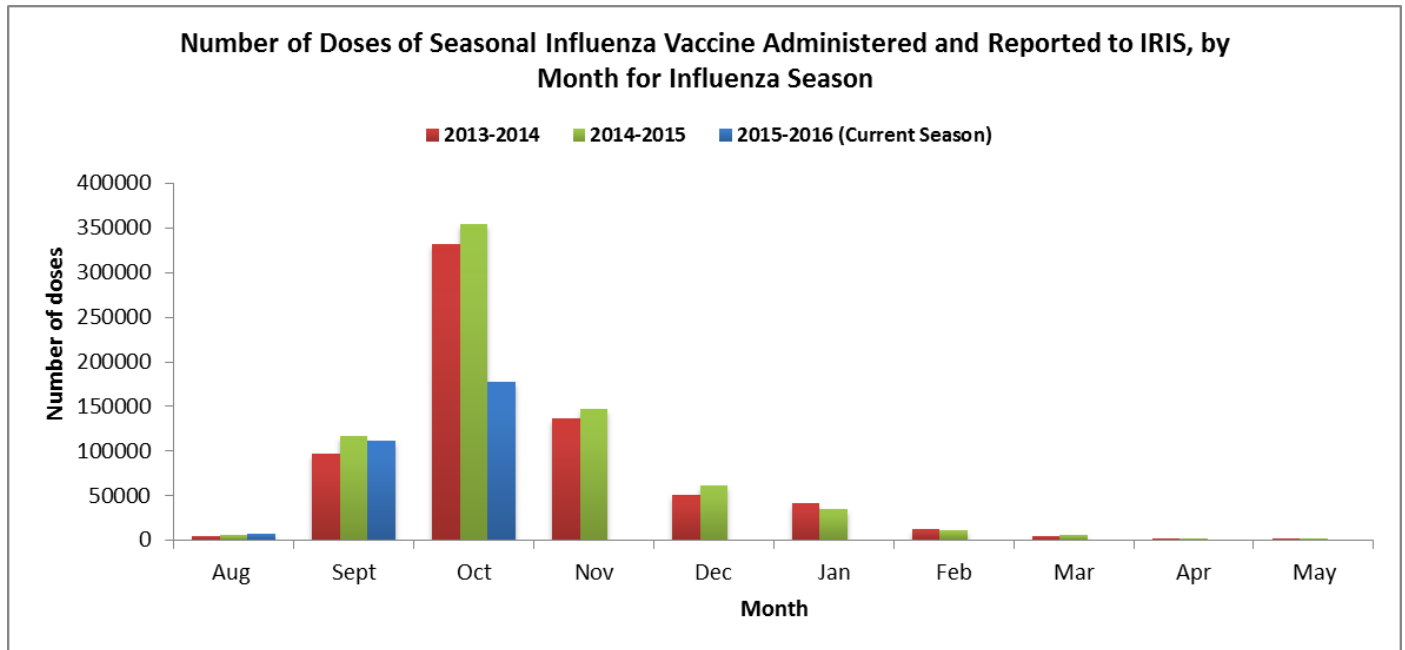
School surveillance program:

Sentinel schools that participate in IISN voluntarily track and report absence due to all illness (including non-influenza illnesses) and the total enrollment each week.



Seasonal influenza vaccination:

Seasonal influenza vaccination data in Iowa is based on doses reported to the Iowa Immunization Registry Information System (IRIS). IRIS is a confidential, computerized, population-based system that tracks immunization for children, adolescents and adults who are seen in a variety of public and private healthcare provider sites through the state of Iowa. For more information on the immunization data, contact Kim Tichy, IRIS coordinator at 515-281-4288 or kimberly.tichy@idph.iowa.gov



Note: The data for the 2015-2016 season is only up to the current week and there is a lag between the vaccine administration date and the date reported to the IRIS. The current season's data will be adjusted as additional data is received.

Other resources:

Vaccine:

Influenza vaccine recommendation: <http://idph.iowa.gov/immtb/immunization/vaccine>

CDC vaccine information: <http://www.cdc.gov/flu/faq/flu-vaccine-types.htm>

Vaccine finder: <http://vaccinefinder.org/>

Neighboring states' influenza information:

Illinois: <http://www.idph.state.il.us/flu/surveillance.htm>

Minnesota: <http://www.health.state.mn.us/divs/idepc/diseases/flu/stats/index.html>

Missouri: <http://health.mo.gov/living/healthcondiseases/communicable/influenza/reports.php>

South Dakota: <http://doh.sd.gov/diseases/infectious/flu/>

Wisconsin: <https://www.dhs.wisconsin.gov/influenza/index.htm>