



Iowa Infection Surveillance Network (IISN)

Influenza-like Illness (ILI) and Other Respiratory Viruses

Weekly Activity Report



For the week ending January 28, 2017 - Week 4

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	2.62% (baseline 1.8%)
Percent of influenza rapid test positive	23.80% (542/2277)
Percent of RSV rapid tests positive	34.49% (129/374)
Percent school absence due to illness ²	2.75%
Number of schools with ≥10% absence due to illness	15
Influenza-associated hospitalizations ³	83/6699 inpatients surveyed
Influenza-associated mortality -all ages (Cumulative) ⁴	25
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
⁴ Deaths in which influenza is listed on the death certificate. This is an underestimate of influenza-related deaths.
 Cumulative is 10/2/2016-current week.

Iowa Influenza Geographic Spread ⁵
No Activity
Sporadic
Local
Regional
Widespread

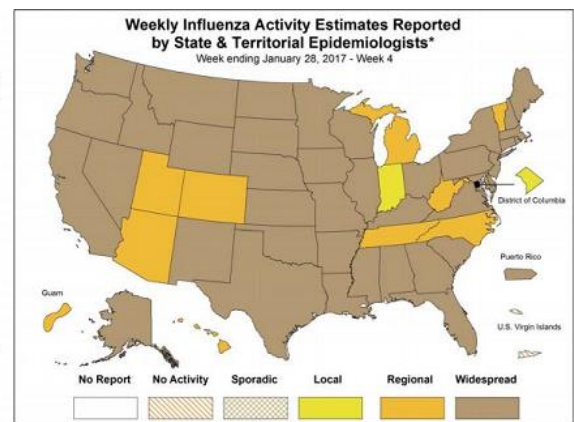
⁵This is based on CDC's activity estimates definition www.cdc.gov/flu/weekly/overview.htm

Iowa statewide activity summary:

Influenza activity in Iowa is widespread and continues to increase. Influenza activity has been identified in all six regions of the state. For this reporting week, the State Hygienic Laboratory confirmed 66 influenza A(H3), one influenza A(subtype pending), six influenza B(Victoria Lineage) and seven influenza B(Yamagata Lineage) viruses from submitted samples. 83 influenza-related hospitalizations were reported from sentinel hospitals during this reporting week. The proportion of outpatient visits due to influenza-like illness (ILI) was 2.62 percent, which is below the regional baseline of 1.8. In this reporting week, 13 adenovirus, eight parainfluenza virus type 2, 11 parainfluenza virus type 3, 35 rhinovirus/ enterovirus, 98 RSV, nine hMPV and 50 Coronavirus were detected from surveillance sites.

National activity summary - (CDC)-Last Updated in Week 4:

Influenza-Like Illness (ILI) Activity Level Indicator Determined by Data Reported to ILINet
 2016-17 Influenza Season Week 4 ending Jan 28, 2017



* This map indicates geographic spread & does not measure the severity of influenza activity

Synopsis: During week 4 (January 22-January 28, 2017), influenza activity increased in the United States.

Viral Surveillance: The most frequently identified influenza virus type reported by public health laboratories during week 4 was influenza A (H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories increased.

Pneumonia and Influenza Mortality: Due to data processing problems, the National Center for Health Statistics (NCHS) mortality surveillance data for the week ending January 14, 2015 (week 2) will not be published this week.

Influenza-associated Pediatric Deaths: Seven influenza-associated pediatric deaths were reported.

Outpatient Illness Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) was 3.9 percent, which is above the national baseline of 2.2 percent. All 10 regions reported ILI at or above their region-specific levels. New York City and 10 states experienced high ILI activity; Puerto Rico and 11 states experienced moderate ILI activity; 14 states experienced low ILI activity; 10 states experienced minimal ILI activity and the District of Columbia had insufficient data.

Geographic Spread of Influenza: The geographic spread of influenza in Puerto Rico and 40 states was reported as widespread; Guam and nine states were reported as regional; the District of Columbia and one state reported local activity; and the U.S. Virgin Islands reported no activity.

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

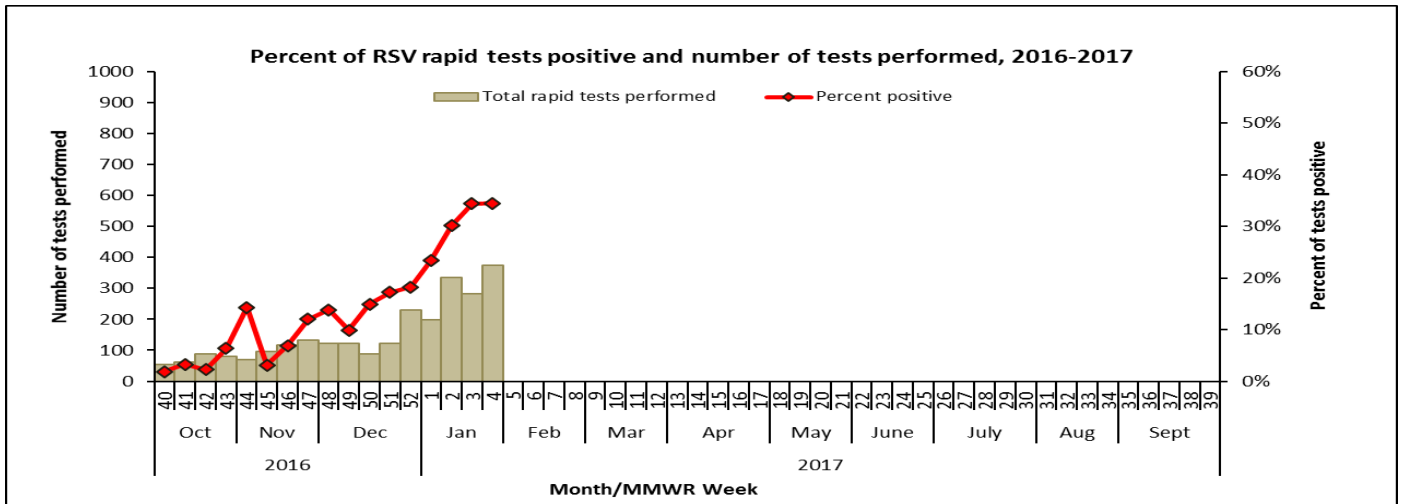
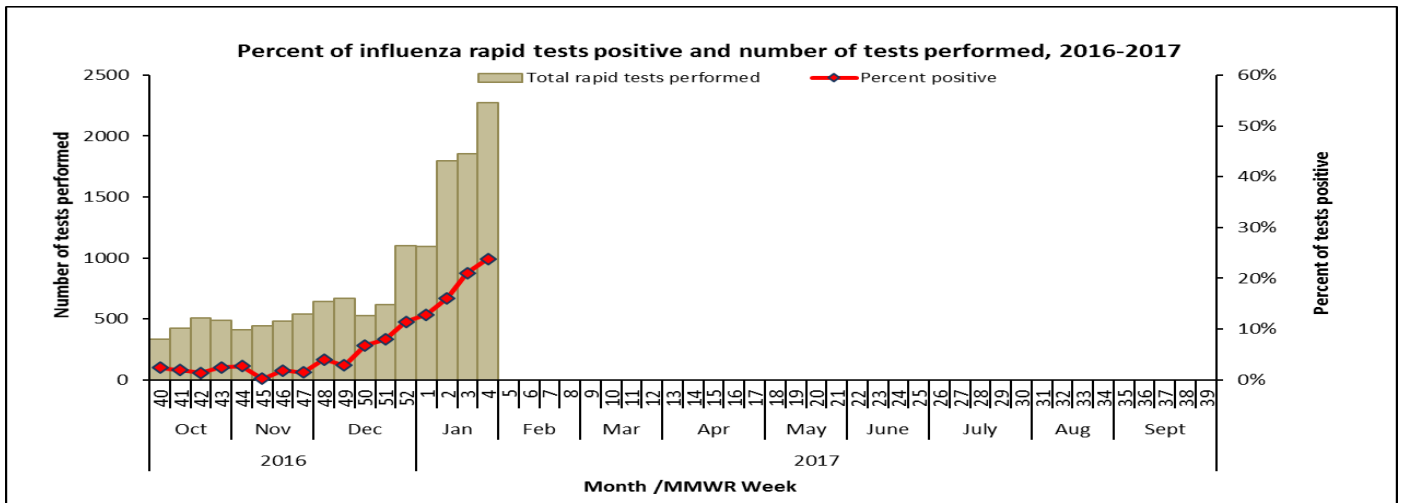
Rapid influenza and RSV test surveillance:

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)	491	133	2	27	34	12	35
Region 2 (NE)	172	45	2	27	31	7	23
Region 3 (NW)	299	52	10	21	98	38	39
Region 4 (SW)	193	39	4	22	22	12	55
Region 5 (SE)	269	49	7	21	52	12	23
Region 6 (Eastern)	853	190	9	23	137	48	35
Total	2277	508	34	24	374	129	34

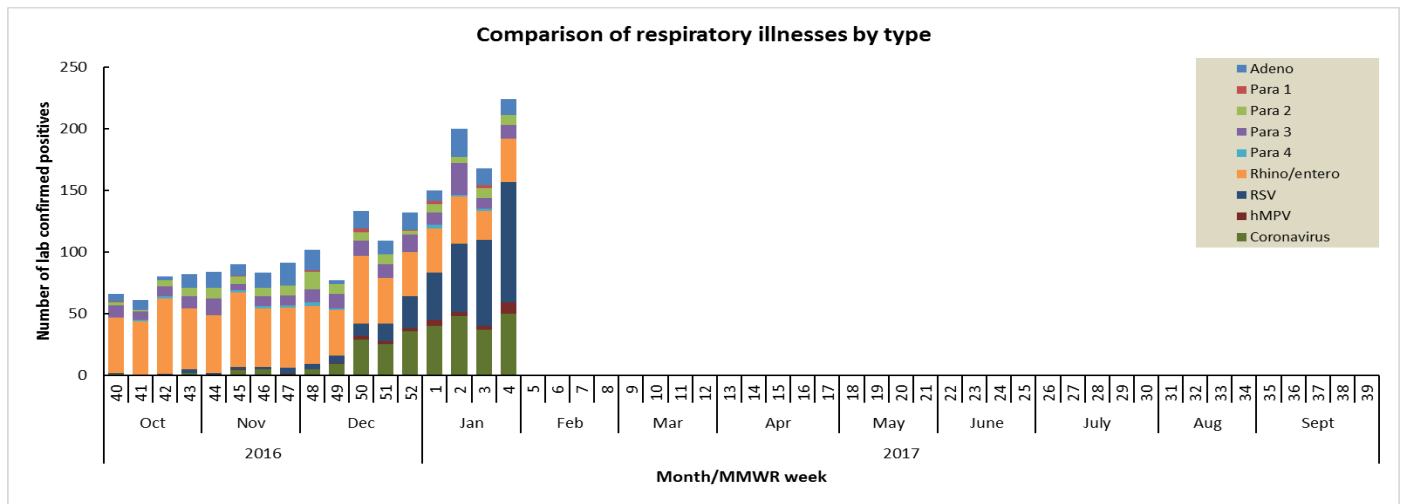
*Region 1- Boone, Calhoun, Carroll, Dallas, Greene, Grundy, Hamilton, Hardin, Jasper, Marshall, Polk, Poweshiek, Story, Tama, Warren, Webster; Region 2- Allamakee, Bremer, Butler, Cerro Gordo, Chickasaw, Emmet, Fayette, Floyd, Franklin, Hancock, Howard, Humboldt, Kossuth, Mitchell, Winnebago, Winneshiek, 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 viruses:

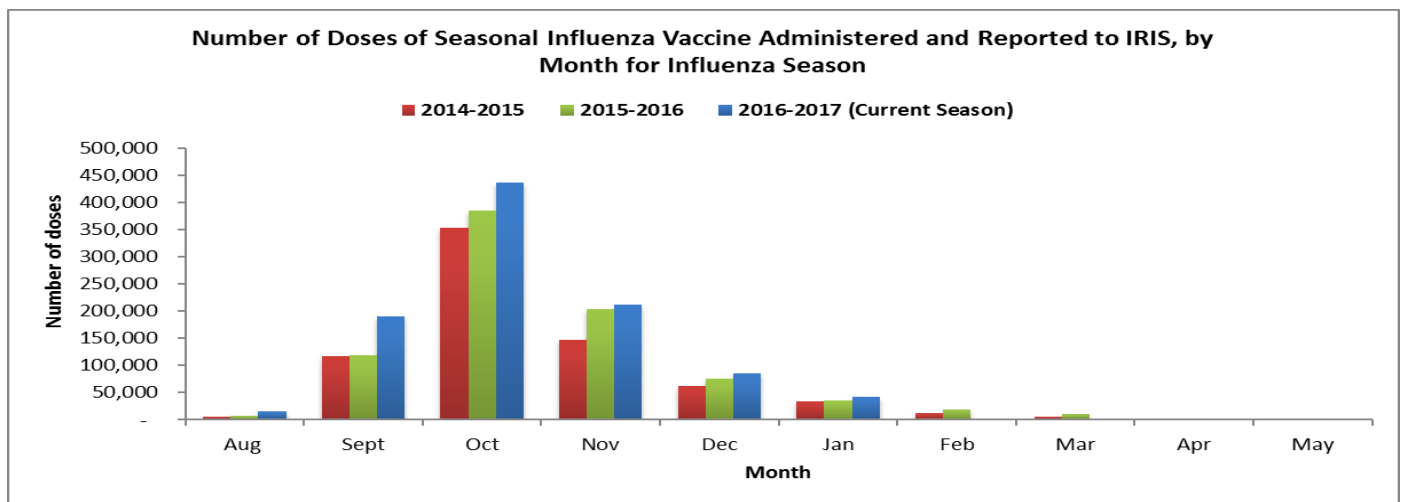
The State Hygienic Laboratory (SHL) runs a weekly web-based survey program where laboratorians report the number of positive tests for non-influenza respiratory viruses. This table also includes the positive non-influenza virus tests reported from the Dunes Medical Laboratories at Mercy Medical Center 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 (10/2/16 – CURRENT WEEK)
Adenovirus	13	198
Parainfluenza Virus Type 1	0	11
Parainfluenza Virus Type 2	8	113
Parainfluenza Virus Type 3	11	185
Parainfluenza Virus Type 4	0	19
Rhinovirus/Enterovirus	35	746
Respiratory syncytial virus (RSV)	98	338
Human metapneumovirus (hMPV)	9	31
Coronavirus	50	291
Total	224	1932



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 throughout 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.

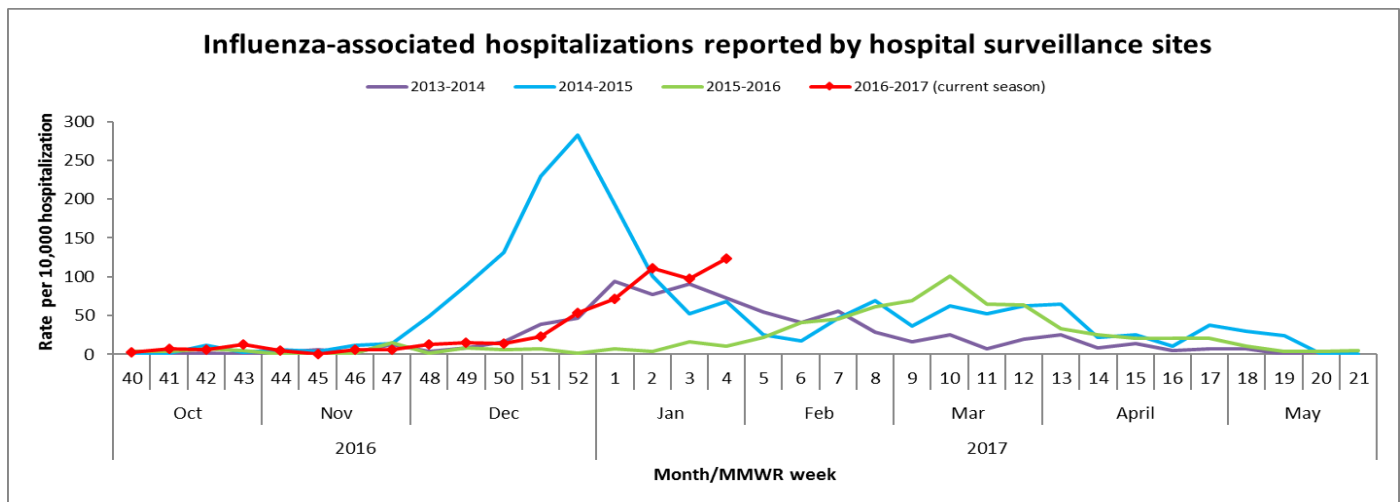
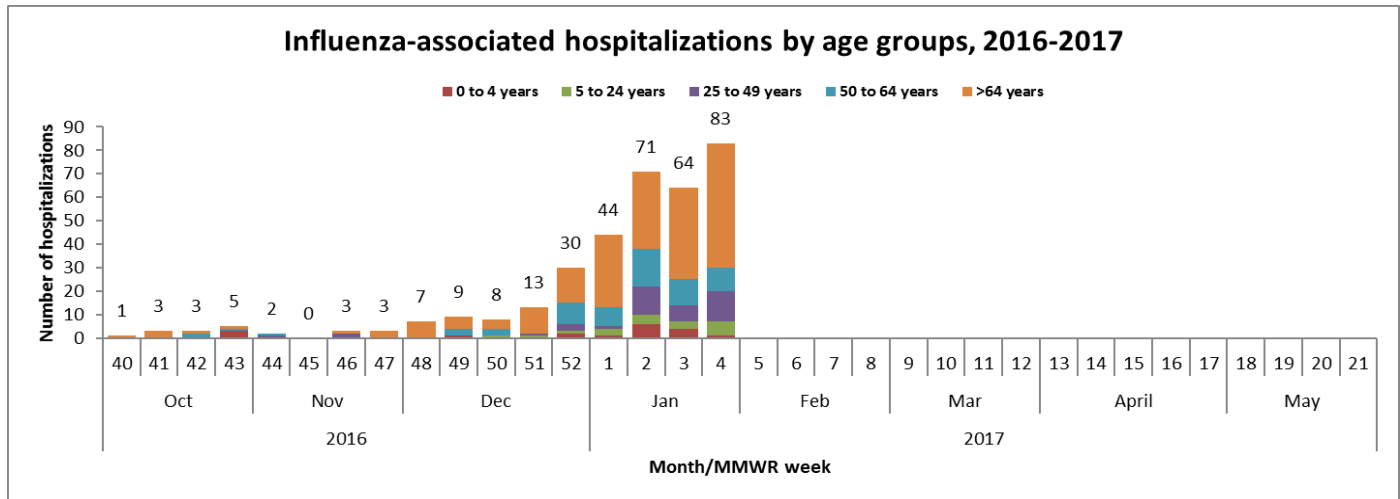


Note: The data for the 2016-2017 season is only up to the current week and there is a lag between the vaccine administration date and the date reported to the IRIS. The current season's data will be adjusted as additional data is received.

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. Of the 126 hospitals across the state of Iowa, 27 sentinel hospitals participate in weekly surveillance of influenza-associated hospitalizations for the IISN. Iowa hospitals interested in joining this surveillance program should contact Scott Seltrecht at 515-281-4985 or Scott.Seltrecht@idph.iowa.gov for more information.

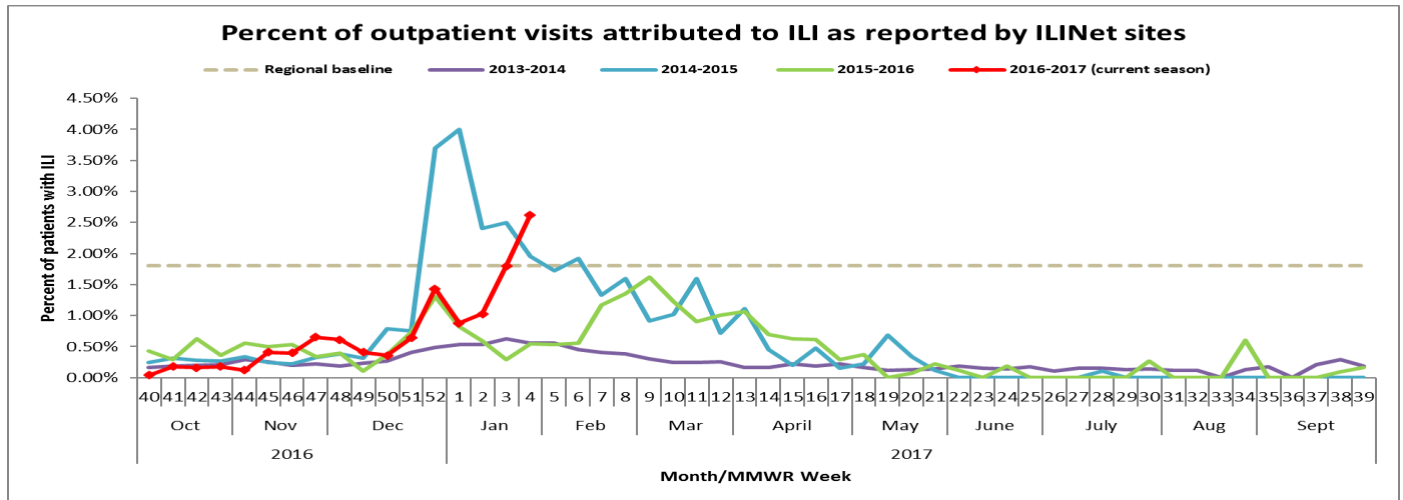
AGE	CURRENT WEEK	CUMULATIVE (10/2/16 – CURRENT WEEK)
Age 0-4	1	18
Age 5-24	6	19
Age 25-49	13	40
Age 50-64	10	64
Age >64	53	208
Total	83	349



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. Across the state, 17 providers, ranging from family medicine to student health centers, participate weekly in the ILINet program. Iowa health care providers interested in joining this surveillance program should contact Scott Seltrecht at 515-281-4985 or Scott.Seltrecht@idph.iowa.gov for more information.

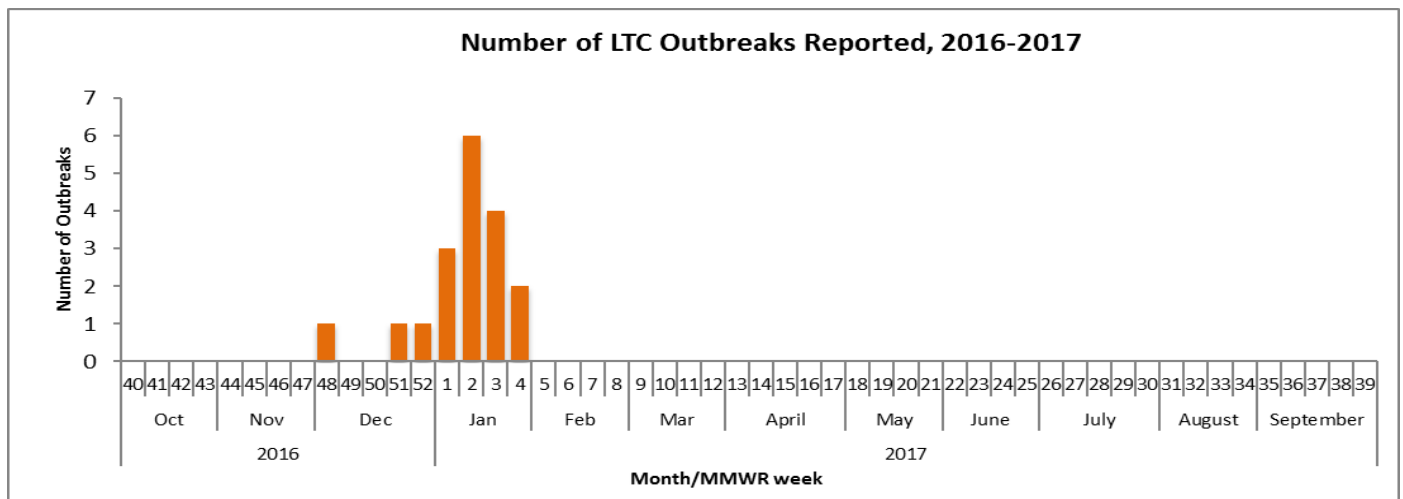
Week	%ILI	Total ILI	Age 0-4	Age 5-24	Age 25-49	Age 50-64	Age >64
Week 1, ending January 7	0.88	20	9	4	0	3	4
Week 2, ending January 14	1.03	27	7	11	4	3	2
Week 3, ending January 21	1.80	55	3	38	7	6	1
Week 4, ending January 28	2.62	89	2	73	10	2	2



Long-term Care Outbreaks:

REGION*	CURRENT WEEK	CUMULATIVE (10/2/16 – CURRENT WEEK)
Region 1 (Central)	0	3
Region 2 (NE)	1	3
Region 3 (NW)	1	1
Region 4 (SW)	0	4
Region 5 (SE)	0	5
Region 6 (Eastern)	0	2
Total	2	18

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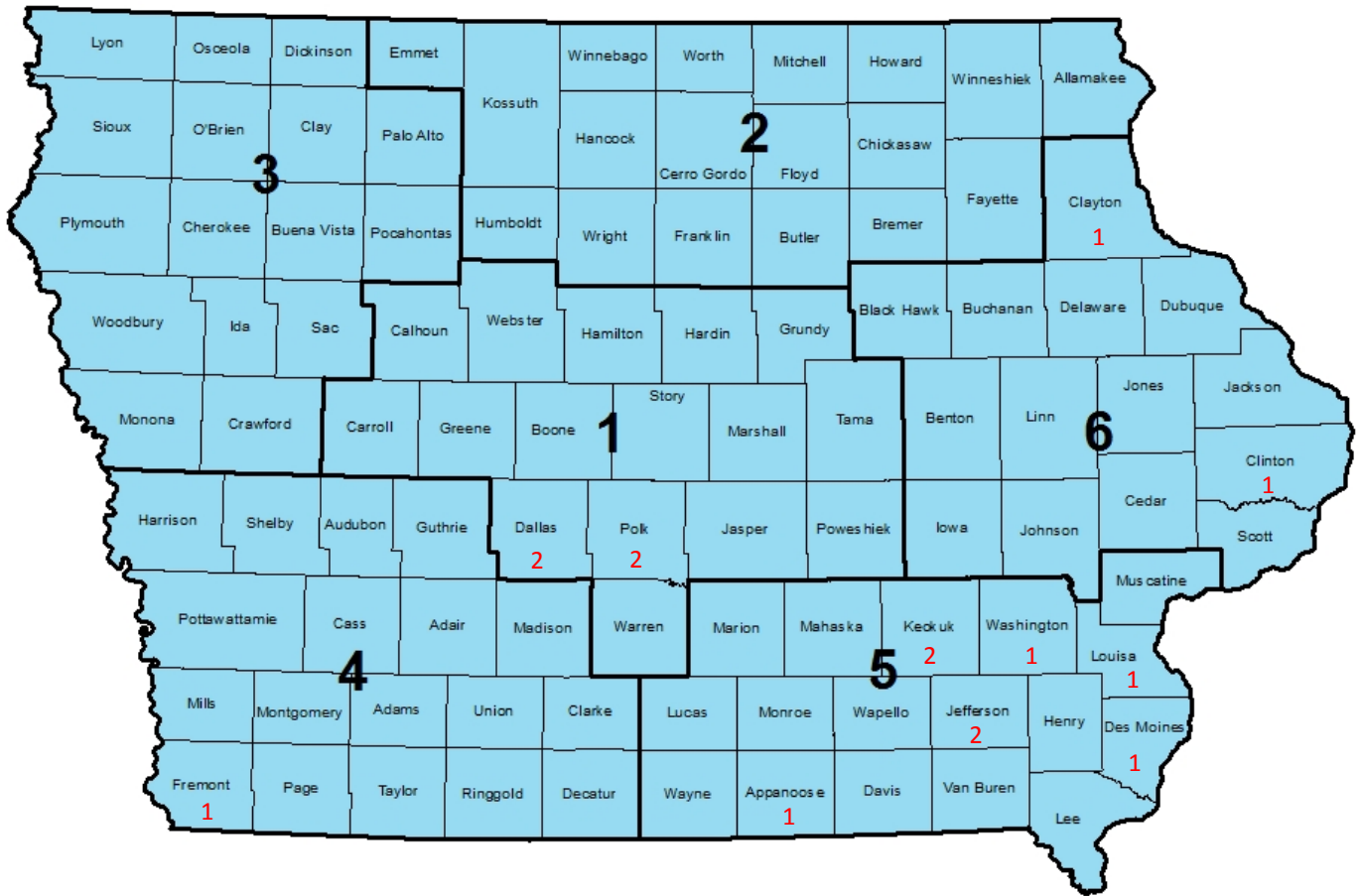


10 percent school absenteeism:

Schools (K-12) track and report outbreaks of influenza-like illness when the number of students absent with illness reaches or exceeds 10 percent of total student enrollment. Regional map with schools that have ≥10% absence due to illness for this current reporting week is displayed below (region numbers in black, number of reporting schools by county in red).

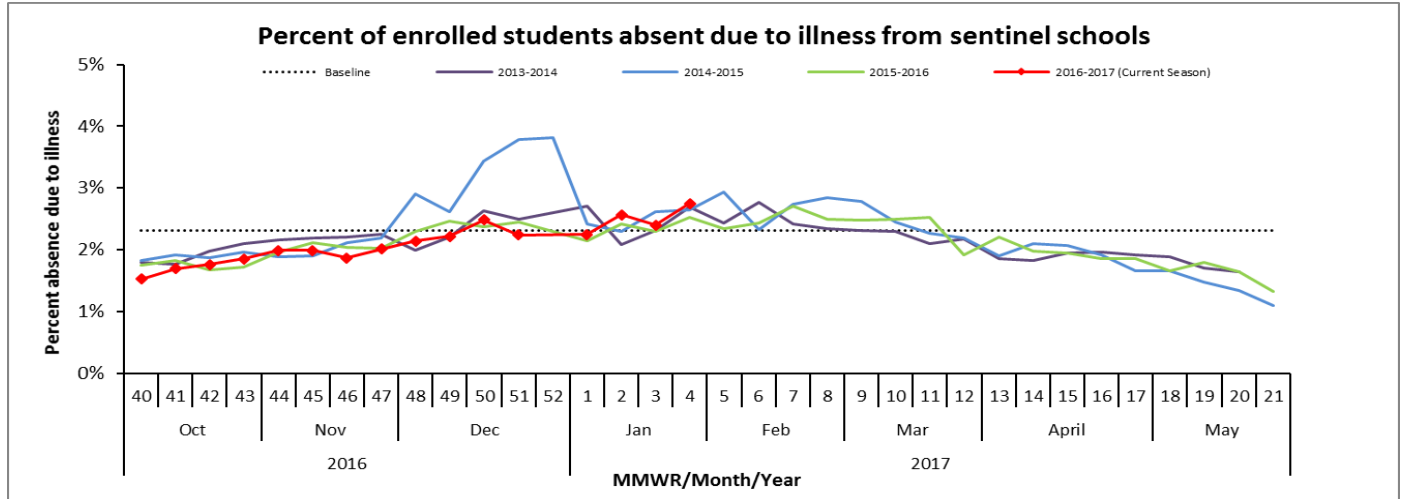
REGION*	CURRENT WEEK	CUMULATIVE (10/2/16 – CURRENT WEEK)
Region 1 (Central)	4	7
Region 2 (NE)	0	1
Region 3 (NW)	0	1
Region 4 (SW)	1	4
Region 5 (SE)	8	23
Region 6 (Eastern)	2	8
Total	15	44

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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.



Other resources:

Vaccine:

Influenza vaccine recommendation: idph.iowa.gov/immtb/immunization/vaccine

CDC vaccine information: www.cdc.gov/flu/fag/flu-vaccine-types.htm

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

Neighboring states' influenza information:

Illinois: www.dph.illinois.gov/topics-services/diseases-and-conditions/influenza/surveillance

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

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

South Dakota: doh.sd.gov/diseases/infectious/flu/

Wisconsin: www.dhs.wisconsin.gov/influenza/index.htm