



WEEKLY INFLUENZA SURVEILLANCE ACTIVITY
DOUGLAS COUNTY, NEBRASKA
 INFLUENZA SEASON 2017-2018
 January 16, 2018

Key Points:

- High levels of influenza activity continued last week, with type A(H3N2) continuing to dominate and type B increasing.
- Four adult deaths have been confirmed due to influenza, all over the age of 65.
- Fourteen influenza outbreaks have been reported in long-term care facilities this season.

Douglas County:

Last week the Douglas County Health Department (DCHD) received 414 positive influenza test results (of which 236 were PCR tests) compared to 404 reported in the previous week (of which 202 were PCR tests). The percentage of hospital admissions with influenza-like illness (ILI) increased compared to the previous week. The percentage of outpatient visits and emergency department visits with ILI slightly decreased, but remained elevated. The percentage of children absent from school due to illness remained stable compared to levels prior to the holiday break.

A total of 1584 laboratory-confirmed cases of influenza have been reported this season (since October 1, 2017), with 414 cases reported last week (Table 1, Figure 1 in full report). A total of 644 cases were rapid influenza diagnostic test (RIDT) influenza type A, 736 were PCR-confirmed influenza type A (188 of the 736 were sub-typed as A H3 and three were subtyped as influenza A H1N1), 88 were RIDT influenza type B, 105 were PCR-confirmed influenza type B, and 11 were influenza type A/B (RIDT).

This season, fourteen confirmed influenza outbreaks have been reported in Douglas County long-term care facilities. It is very important to protect vulnerable populations such as these by ensuring all caregivers and close contacts are vaccinated.

Resources for Long-Term Care Facilities:

- Nebraska DHHS Flow Chart for Prevention and Control of Influenza in LTC Facilities:
<http://www.douglascountyhealth.com/images/stories/disease/flu/LTC%20Flu%20Recommendations.pdf>
- CDC Influenza Outbreak Management in LTC Facilities
<https://www.cdc.gov/flu/professionals/infectioncontrol/ltc-facility-guidance.htm>

Douglas County Health Department has received four reports of adult deaths due to influenza (all over 65 years with co-morbid conditions). Influenza-associated adult deaths are not reportable by law and may be underreported. No pediatric deaths due to influenza have been reported this season in Douglas County.

Nineteen positive respiratory syncytial virus (RSV) tests were reported (of 130 tested) last week.

TABLE 1. LABORATORY-CONFIRMED INFLUENZA CASES ¹ Douglas County, Nebraska			
INFLUENZA TYPE	TIME PERIOD		
	WEEK ENDING 01/13/2018	WEEK ENDING 01/06/2018	FLU SEASON ²
Rapid - A (Not sub-typed)	152	176	644
PCR - A	165	125	545
PCR - A H1N1	1	1	3
PCR - A (H3) - Seasonal	33	44	188
Rapid - B	26	25	88
PCR - B	37	32	105
Rapid A/B ⁴ (Not typed)	0	1	11
TOTAL	414	404	1584

¹Table reflects all reported positive influenza tests.

²Since October 1, 2017

Figure 1: Number of Positive Influenza Laboratory Reports in Douglas County Residents by Flu Type, 2017-18 Season

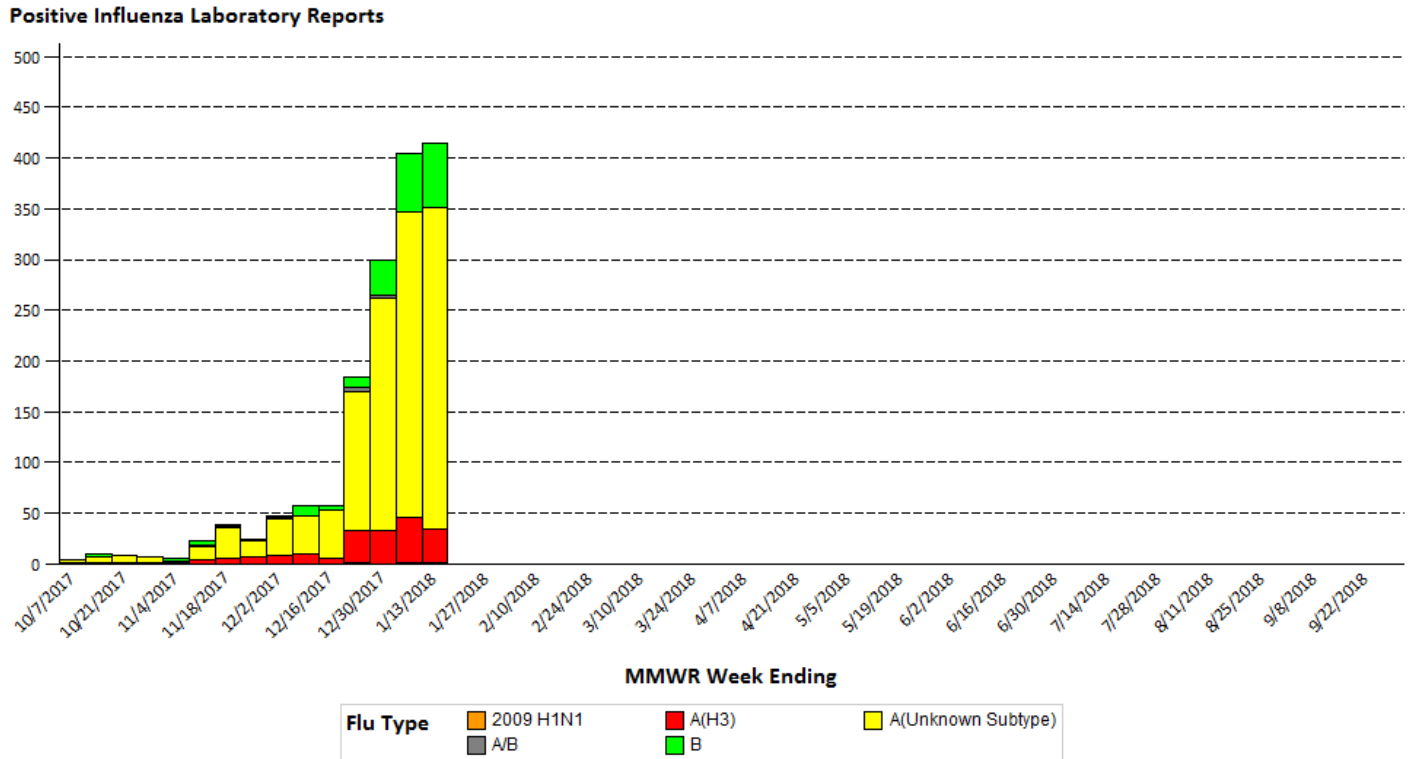


Figure 2: Number and Percentage of Positive Influenza Laboratory Reports in Douglas County Residents by Age Group and Flu Type, Cumulative Total, 2017-18 Season

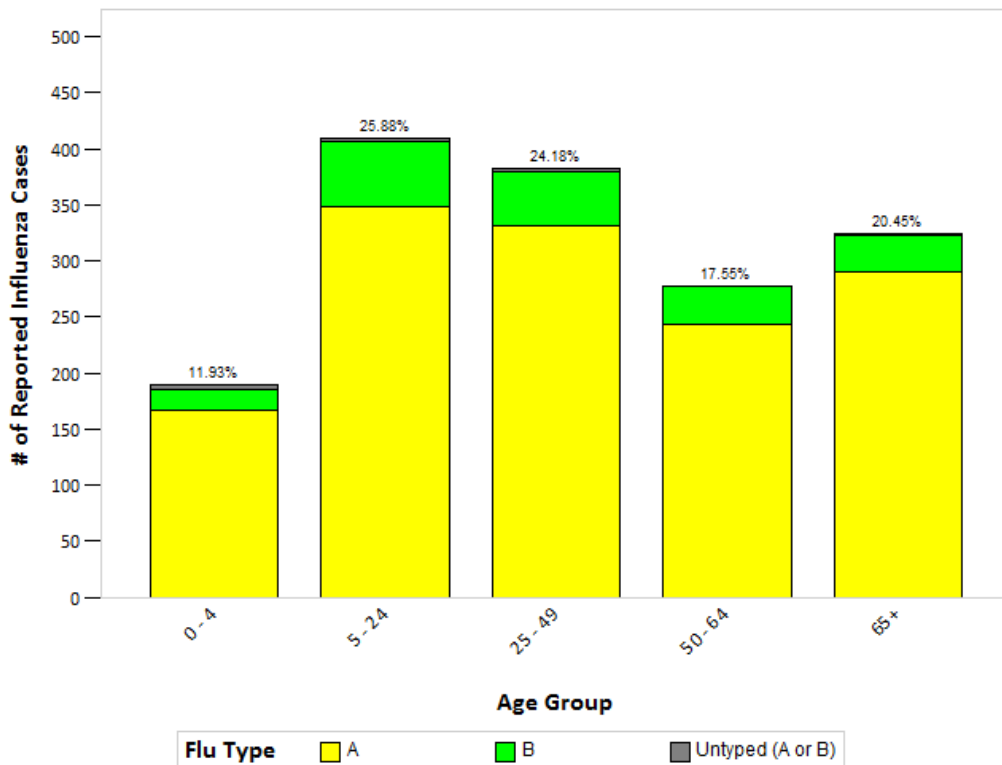


Figure 3: Number and Percentage of Hospital Admissions with Influenza Like Illness in Douglas County Residents by Age Group, Cumulative Total, 2017-18 Season

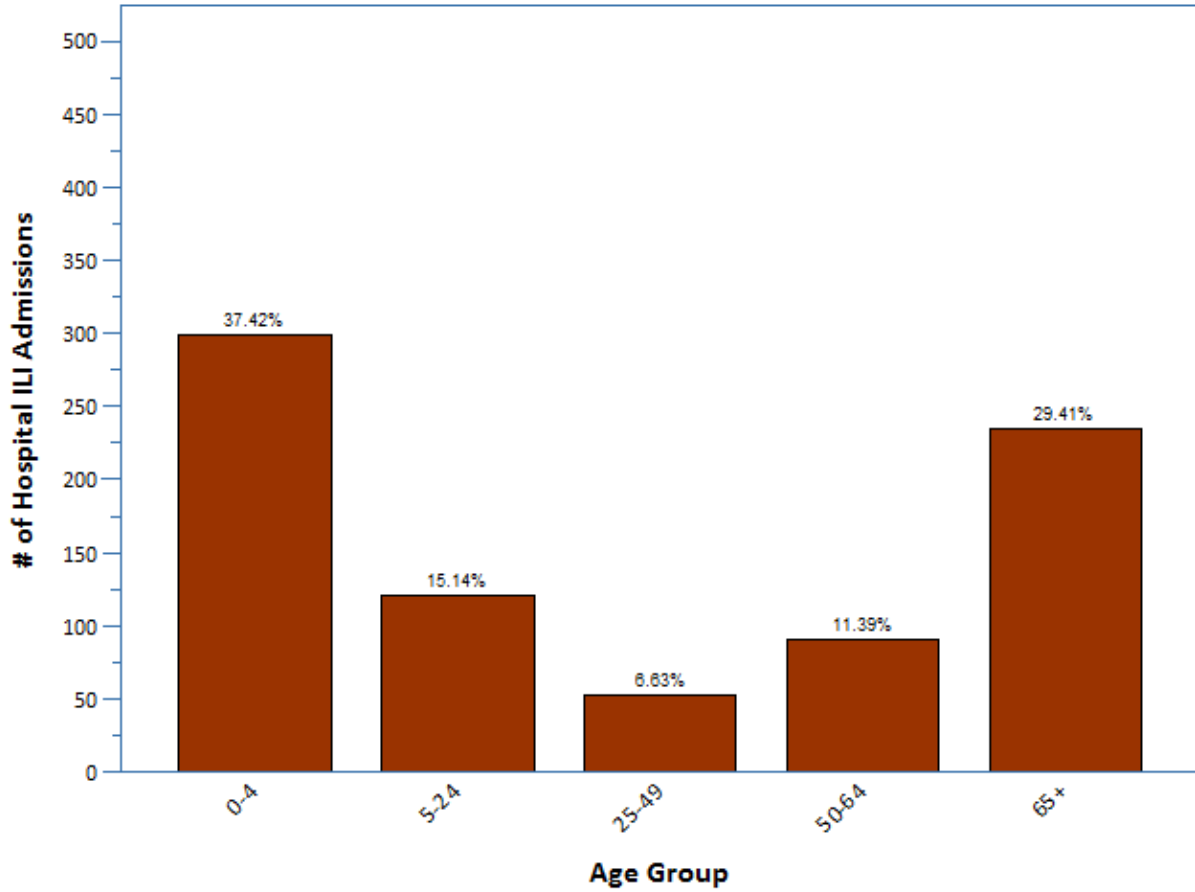


TABLE 2. INFLUENZA SURVEILLANCE STATS

SURVEILLANCE DESCRIPTION	MOST RECENT WEEK	PREVIOUS WEEK
% Percent of outpatient visits with influenza-like illness (ILI) ^{1,2}	1.2%	1.9%
% Percent of emergency department visits with ILI ³	6.6%	8.0%
% Percent of hospitalizations with ILI ²	7.2%	5.9%
# Number of hospitalizations on ventilators with ILI ²	16	16
% Percent Pneumonia & Influenza Deaths (EDRS) ^{2,4}	11.0%	6.3%
# Number of Laboratory-confirmed influenza pediatric deaths ^{2,5}	0	0
% Percent of school absenteeism due to illness ³	2.0	-
% Percent of RSV tests positive (positives/total tests) ³	14.6% (19/130)	20.2% (26/129)

¹ILI: Influenza-like Illness is defined as a fever of $\geq 100^{\circ}$ F as well as cough and/or sore throat.

²As of 01/06/2018

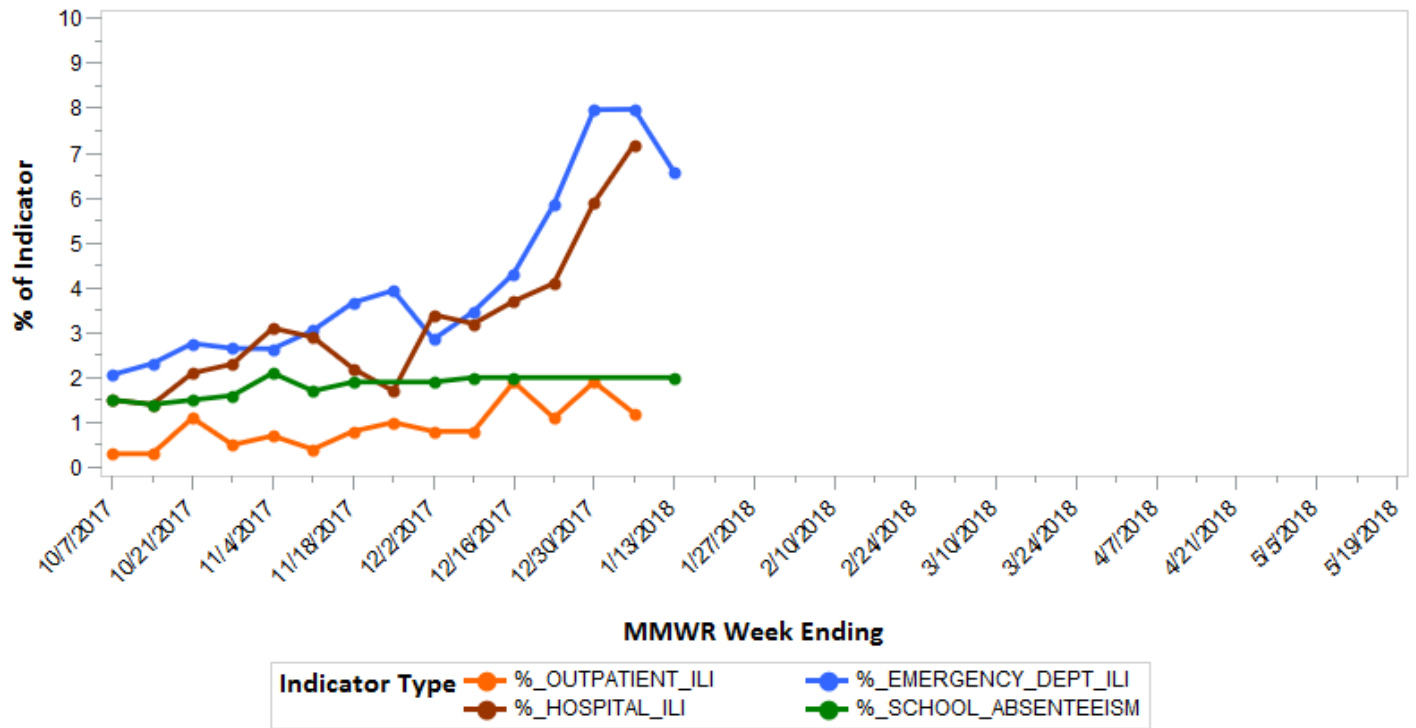
³As of 01/13/2018

⁴Nebraska Electronic Death Records

⁵Laboratory-confirmed or cause of death related to influenza

-Holiday Break

Figure 4: Percent of Influenza Surveillance Indicators by MMWR Week Ending and Indicator Type, 2017-18 Season



*Influenza-Like-Illness (ILI) is defined as a fever of ≥ 100 degrees Fahrenheit as well as cough and/or sore throat.

TABLE 3. REPORTED INFLUENZA CASES BY FLU SEASON AND MONTH
Douglas County, Nebraska

MONTH	FLU SEASON											Total (ALL) N
	2017-2018 N	2016-2017 N	2015-2016 N	2014-2015 N	2013-2014 N	2012-2013 N	2011-2012 N	2010-2011 N	2009-2010 N	2008-2009 N	2007-2008 N	
October	31	3	33	23	3	9	0	1	570	1	2	676
November	128	14	14	44	44	19	2	5	171	3	0	444
December	607	113	63	847	291	385	32	7	19	4	2	2370
January	818	955	126	1035	423	1167	64	111	2	15	104	4820
February	-	1593	335	603	238	449	99	269	5	59	945	4595
March	-	780	750	742	152	74	117	185	6	261	288	3355
April	-	183	505	228	147	12	19	20	4	100	45	1263
May	-	26	94	33	35	1	2	1	1	73	1	267
June	-	3	18	6	4	0	1	0	1	56	8	97
July	-	6	4	1	1	0	0	0	0	87	0	99
August	-	2	4	1	1	0	1	0	1	125	0	135
September	-	4	4	5	1	0	0	0	0	312	0	326
Total	1584	3682	1950	3568	1340	2116	337	599	780	1096	1395	18447

Links to local graphs, and state and national reports:

Graphs of Current Flu Activity Surveillance (Douglas County, NE)
http://www.douglascountyhealth.com/images/stories/disease/flu/Web_Flu.pdf

Nebraska Weekly Surveillance Activity
http://dhhs.ne.gov/publichealth/Pages/flu_report.aspx

U.S. Weekly Surveillance Activity
<http://www.cdc.gov/flu/weekly/>