



WEEKLY INFLUENZA SURVEILLANCE ACTIVITY
DOUGLAS COUNTY, NEBRASKA
 INFLUENZA SEASON 2019-2020
 February 11, 2020

Key Points:

- Influenza activity remains elevated with an increase in the number of laboratory confirmed influenza B test results.
- Influenza B/Victoria is now the predominant virus in Douglas County.
- Two pediatric influenza deaths in Douglas County have been reported.
- High levels of influenza-like illness (ILI) activity is occurring nationwide and Nebraska is one of 48 states experiencing widespread influenza activity.
- Nine outbreaks in long-term care (LTC) facilities and one outbreak in a correctional facility have been reported.
- It's not too late to get vaccinated. Influenza vaccination is the best way to reduce the risk from flu and its potentially serious complications. Antiviral medications are an important adjunct to flu vaccine in the control of influenza.

Douglas County: Flu activity remains elevated in Douglas County. The number of reported cases slightly increased last week. It is important to remember that laboratory testing may also decrease as clinical diagnoses increase because testing is not always needed when influenza activity is known to be high. The percentage of outpatient visits with influenza-like illness (ILI), percentage of emergency department visits with ILI, percentage of hospital admissions with ILI, and percentage of children absent from school due to illness all remain elevated (Table 2 and Figure 4).

A total of 5,375 laboratory-confirmed cases of influenza have been reported this season (since September 29, 2019), with 342 cases reported last week (Table 1, Figure 1 in full report). A total of 1,079 cases were rapid influenza diagnostic test (RIDT) influenza type A, 2,071 were PCR-confirmed influenza type A (203 as A H1N1, and two as A H3), 818 were RIDT influenza type B, and 1,406 were PCR-confirmed influenza type B.

The Douglas County Health Department has received two reports of pediatric deaths due to influenza this season. Nine influenza-related adult deaths in individuals over 65 years of age have also been reported. Influenza-associated adult deaths are not reportable by law and may be underreported. Eight outbreaks in long-term care (LTC) facilities have been reported (CDC guidance for LTC: <https://www.cdc.gov/flu/professionals/infectioncontrol/ltc-facility-guidance.htm>).

A total of 88 positive respiratory syncytial virus (RSV) tests were reported (of 448 tested) last week.

TABLE 1. LABORATORY-CONFIRMED INFLUENZA CASES ¹ Douglas County, Nebraska			
INFLUENZA TYPE	TIME PERIOD		
	WEEK ENDING 02/08/2020	WEEK ENDING 02/01/2020	FLU SEASON ²
Rapid - A (Not sub-typed)	19	20	1079
PCR - A	101	62	1866
PCR - A (H1N1)	6	4	203
PCR - A (H3) - Seasonal	0	1	2
Rapid - B	69	64	818
PCR - B	249	191	1406
Rapid A/B ⁴ (Not typed)	0	1	1
TOTAL	444	343	5375

¹Table reflects all reported positive influenza tests. When influenza activity is low in the community, positive rapid influenza test results have a greater likelihood of being "false positive".

²Since September 29, 2019

Figure 1: Number of Positive Influenza Laboratory Reports in Douglas County Residents by Flu Type, 2019-20 Season

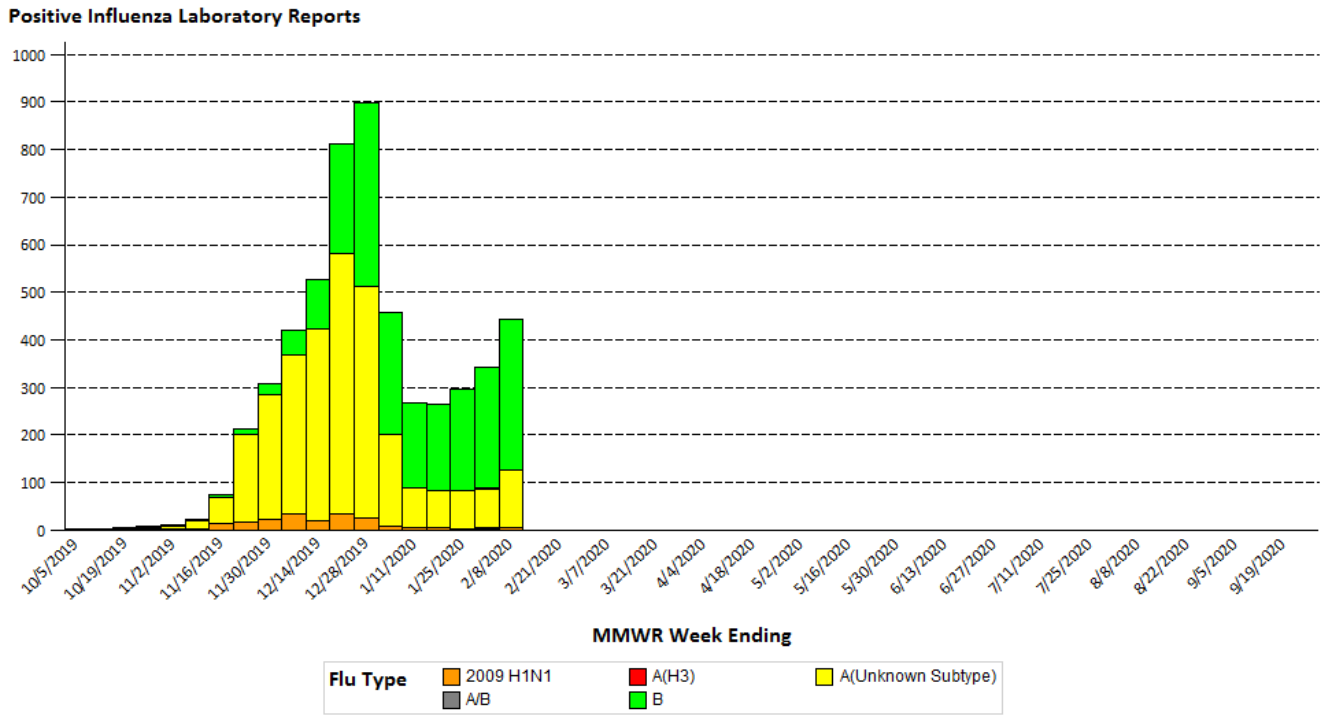


Figure 2: Number and Percentage of Positive Influenza Laboratory Reports in Douglas County Residents by Age Group and Flu Type, Cumulative Total, 2019-20 Season

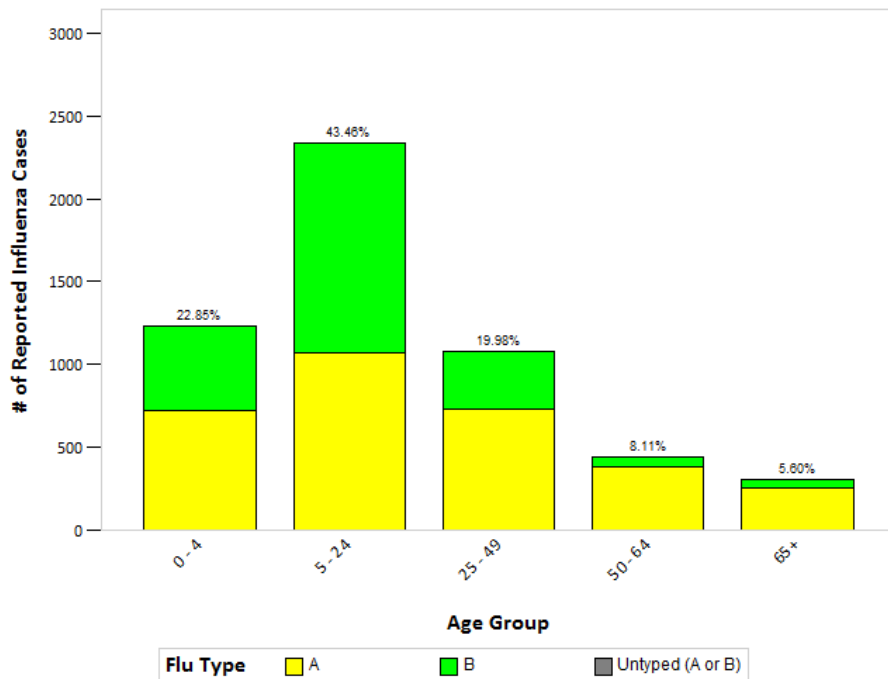


Figure 3: Number and Percentage of Hospital Admissions with Influenza Like Illness in Douglas County Residents by Age Group, Cumulative Total, 2019-20 Season

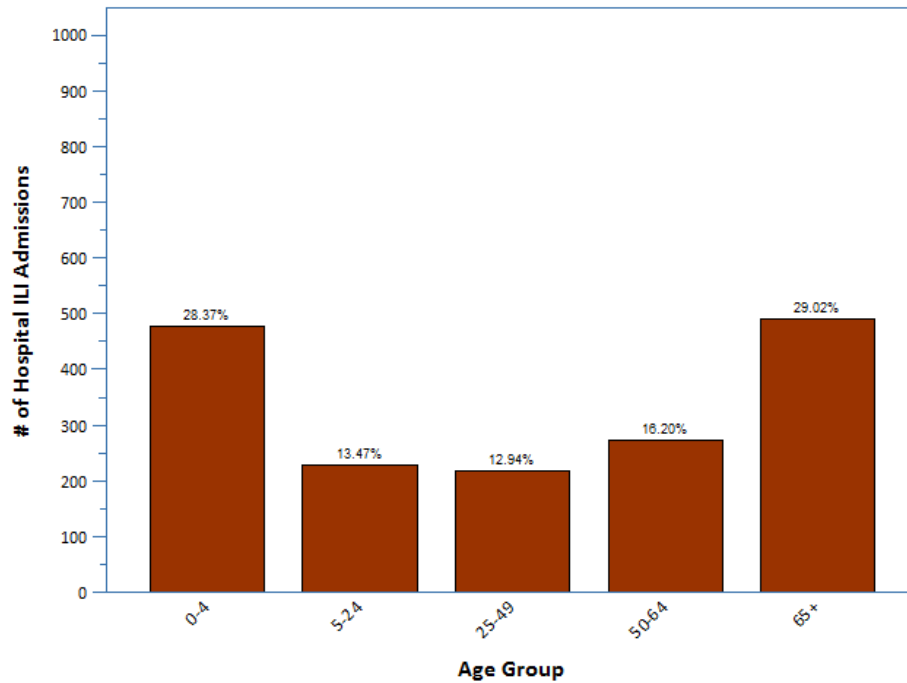


TABLE 2. INFLUENZA SURVEILLANCE STATS

SURVEILLANCE DESCRIPTION	MOST RECENT WEEK	PREVIOUS WEEK
% Percent of outpatient visits with influenza-like illness (ILI) ^{1,2}	1.5%	1.4%
% Percent of emergency department visits with ILI ³	5.6%	5.5%
% Percent of hospitalizations with ILI ²	3.8%	3.8%
# Number of hospitalizations on ventilators with ILI ²	16	14
% Percent Pneumonia & Influenza Deaths (EDRS) ^{2,4}	11.1%	15.4%
# Number of Laboratory-confirmed influenza pediatric deaths ^{2,5}	0	0
% Percent of school absenteeism due to illness ³	2.5%	2.6%
% Percent of RSV tests positive (positives/total tests) ³	19.6% (88/448)	15.7% (127/809)

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

²As of 02/01/2020

³As of 02/08/2020

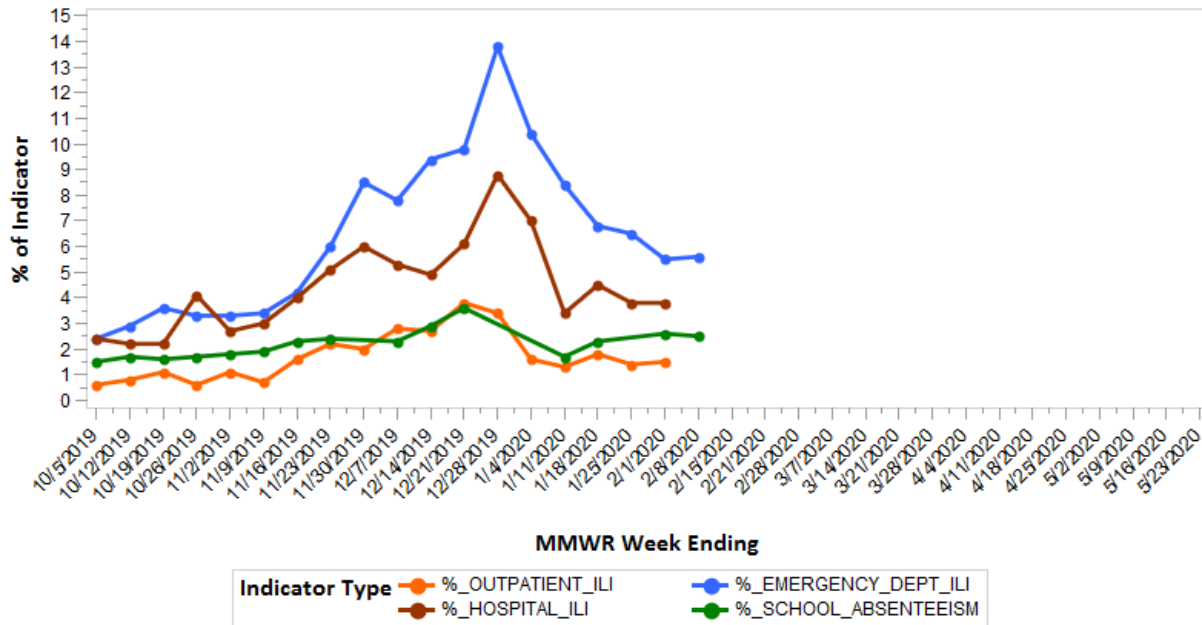
⁴Nebraska Electronic Death Records

⁵Laboratory-confirmed or cause of death related to influenza

⁶Data not available

⁷No school due to inclement weather

Figure 4: Percent of Influenza Surveillance Indicator by MMWR Week Ending and Indicator Type, 2019-20 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
	2019-2020 N	2018-2019 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	
October	24	8	30	3	33	23	3	9	0	1	570	704
November	620	12	127	14	14	44	44	19	2	5	171	1072
December	2853	826	606	113	63	847	291	385	32	7	19	6042
January	1390	1649	1917	955	126	1035	423	1167	64	111	2	8839
February	488	986	2012	1593	335	603	238	449	99	269	5	6633
March	-	325	1078	780	750	742	152	74	117	185	6	4653
April	-	63	227	183	505	228	147	12	19	20	4	1408
May	-	25	29	26	94	33	35	1	2	1	1	247
June	-	3	2	3	18	6	4	0	1	0	1	38
July	-	8	2	6	4	1	1	0	0	0	0	22
August	-	3	0	2	4	1	1	0	1	0	1	13
September	-	3	2	4	4	5	1	0	0	0	0	19
Total	5375	3911	6032	3682	1950	3568	1340	2116	337	599	780	29692

Links to local graphs, and state and national reports:

Graphs of Current Flu Activity Surveillance (Douglas County, NE)
<https://www.douglascountyhealth.com/infectious-disease/diseases-and-conditions/influenza#Fluactivity>

Nebraska Weekly Surveillance Activity
<http://dhhs.ne.gov/Pages/Flu-Activity.aspx>

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