Columbia/Boone County Public Health and Human Services **2015-2016** Boone County, Missouri Flu Season Report

(September 27, 2015 to May 21, 2016)



Columbia/Boone County Department of Public Health and Human Services 2015-16 Boone County Influenza Report

Influenza is a reportable disease in Missouri. Laboratories and providers are expected to report positive influenza lab tests weekly, by type (influenza A, B, or untyped) and by age group. The total numbers used in this report are the numbers reported to the Columbia/Boone County Public Health & Human Services during the 2015-2016 flu season. For this report, the 2015-2016 flu season began on September 27, 2015, and ended on May 21, 2016. Although cases identified outside of this time frame are to be reported to the local health agency and are important to help identify an unusual occurrence of flu cases, they tend to be sporadic and not counted as part of the flu season. Most outbreaks of influenza occur during the identified flu seasons.

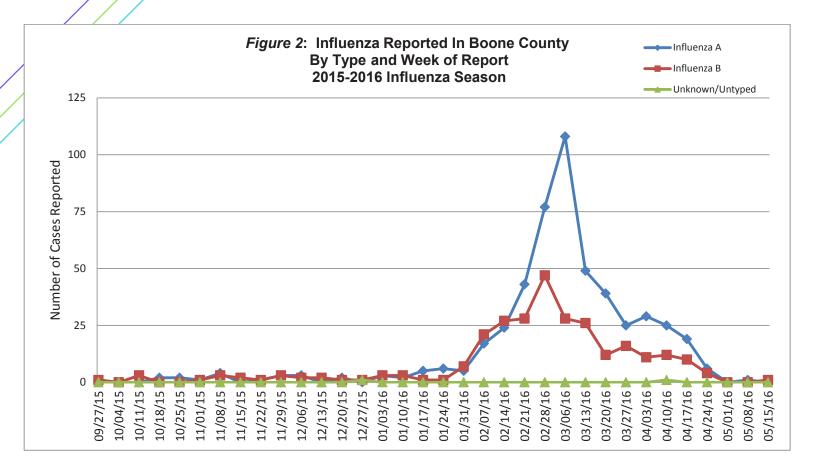
While reading this report, it is important to remember the number of influenza cases reported annually may not be the actual numbers of flu cases that occurred during that time period. Not every patient with influenza seeks medical care, and not everyone who does is tested for the flu. However, these reported numbers remain important for public health since they reflect the trends and the burden of illness being seen during the flu season, helping to identify those at highest risk for hospitalization and complications from the flu.

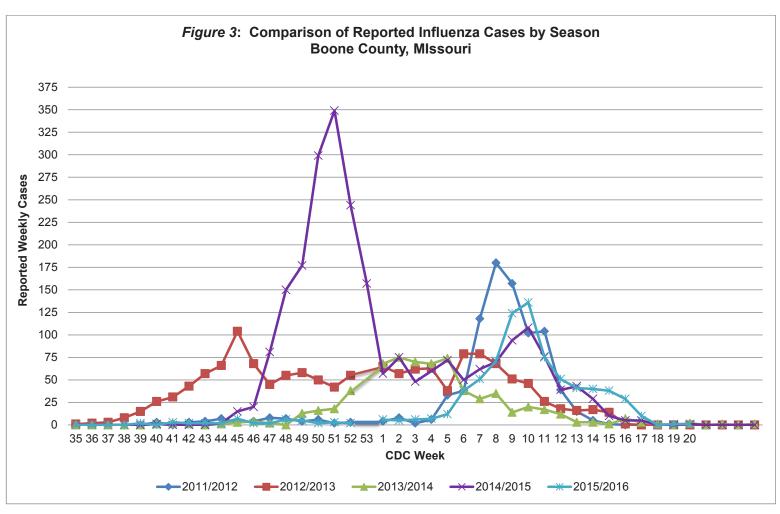
A total of 782 lab positive cases of influenza were reported in Boone County during the 2015-2016 influenza season (Figure 1). Of those 782 cases, 502 (64%) were influenza A and 278 (36%) were influenza B. The 2015-2016 season was a milder season compared to the previous (2014-2015) season (Figure 3), and milder than the 2011-2012 and 2012-2013 seasons. Only the 2013-2014 season saw lower influenza activity in Boone County with 649 lab confirmed cases reported. According to the Centers for Disease Control and Prevention (CDC), influenza A (H1N1) predominated overall, with influenza A (H3N2) more commonly identified from October to early December, and influenza B also commonly identified from mid-April through mid-May. For those lab confirmed cases reported in Boone County, sub-typing was not available.

During this season there were no influenza outbreaks reported and no school closings or pediatric deaths due to the flu in Boone County.

The 2015-2016 influenza season peaked later in Boone County (Figures 2 & 3) than the previous four seasons. The peak reporting occurring during the week beginning March 6, 2016 (CDC Week 10), followed by a smaller peak in numbers during the week beginning April 3, 2016 (CDC Week 14). A total of 136 reported cases occurred during CDC Week 10, with 108 type A and 28 type B. Type B peaked during CDC Week 9 (week beginning February 28, 2016) with 47 reported cases.

Figure 1: Reported Influenza in Boone County by Type and Age Group 2015-16 Season						
Age Group in Years	Influenza A	Influenza B	Unknown/Untyped	Total	Percent of Total	
0-1	20	12	0	32	4.1%	
2-4	50	23	0	73	9.3%	
5-14	69	46	1	116	14.8%	
15-24	88	54	1	143	18.3%	
25-49	164	74	0	238	30.4%	
50-60	70	42	0	112	14.3%	
65+	41	27	0	68	8.7	
Total	502	278	2	782	100%	





In Boone County, the 25-49 year age group had the highest number of reported cases with 238 (30.4% of all reported cases). However, the 0-4 year age group had the highest incidence rate of reported flu cases with 958 per 100,000 children in that same age group (Figure 4). Due to the lower population numbers of the 0-4 age group, they experienced the highest burden of reported flu cases compared to the other age groups. Influenza trends in Boone County were similar to state-wide trends. At the state-level, there were a total of 20,101 reported cases, with the highest number of cases occurring in the 15-64 year age group (10,297 reported cases). Figure 4 below compares incidence rates between Boone County and Missouri.

Figure 4: Incidence Rate per 100,000 by Age Group*					
Age Group	Boone County	Missouri			
0-4	958	1,001			
5-14	626	547			
15-64	402	259			
65+	416	192			
Cumulative Incidence Rate	464	222			
* using 2012 estimated population	464	333			

Summary

The 2015-2016 was a mild flu season in Boone County with only 782 cases reported. It was also a late peak flu season, with the peak of activity occurring during the first full week of March. Both of these trends seen in Boone County were also reflected both state-wide and nationally.

Of the cases reported in Boone County, residents aged 25-49 represented the highest number of lab confirmed flu cases reported.

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