2017-2018 Flu Season Summary (October 2017-May 2018)

DSHS PUBLIC HEALTH REGION 7, STATE, AND NATIONAL TRENDS
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Texas Department of State Health Services

2017-2018 Texas Department of State Health Services (DSHS) Public Health Region (PHR) 7 Flu Season

This flu season summary includes data submitted to DSHS Public Health Region (PHR) 7 between October 2017 and May 2018. Influenza activity reports were submitted directly to DSHS PHR 7 by various local health department, school, hospital, and clinic reporters distributed throughout the 30 counties within the region. The highest number of counties represented in the surveillance data was 30 out of 30 (100%). Overall, the percentage of counties represented in the surveillance data (as a result of submitted reports) during October through March ranged between 83-100%, with an average of ~94%. From March to May, the percentage of counties represented in the surveillance data ranged between 63%-97% with an average of ~83%. Over the past 3 months, the number of counties reporting flu activity has been decreasing while the number of counties reporting influenza-like illness (ILI) activity only has been increasing (Figure 1). The opposite trend was seen during the time period between October and March. Figure 1 displays weekly reporter activity trends such as the number of counties that had at least one ILI or lab-confirmed flu case submitted to DSHS PHR 7. Reported cases of confirmed flu are displayed in Table 1. Approximately 110 flu outbreaks or clusters were reported to DSHS PHR 7. This number represents outbreaks/clusters reported by 25 counties. The majority of outbreaks were caused by flu A viruses. Although flu A viruses were most prevalent in DSHS PHR 7 between the end of November and early February, flu B viruses have been dominating since the end of February. Rapid testing was the primary method used to identify cases this season (Figure 2).

Total # of Counties (N=30)	2017-2018 Reporting Activity Yearly Trend (Oct. 2017-May 2018)
Counties that Submitted Reports	
Counties Reporting Flu Activity*	
Counties Reporting ILI Activity only	

Figure 1. 2017-2018 Reporting Activity

Table 1. Confirmed Flu Activity Totals for Oct. 2017 - May 2018		
MMWR Week	Total Flu	Change from Previous Week
Week 40	91	1
Week 41	69	•
Week 42	131	1
Week 43	151	
Week 44	319	1
Week 45	431	1
Week 46	535	•
Week 47	515	•
Week 48	776	
Week 49	1100	•
Week 50	2751	
Week 51	4665	1
Week 52	4161	•
Week 1	4227	1
Week 2	5559	1
Week 3	5450	•
Week 4	6761	1
Week 5	6748	•
Week 6	4371	•
Week 7	4104	•
Week 8	2588	•
Week 9	1239	•
Week 10	430	•
Week 11	336	•
Week 12	307	+
Week 13	101	-
Week 14	101 59	+
Week 15	50	-
Week 16	50 29 27 25	+
Week 17 Week 18	27	+
Week 18		+
Week 19	18	-

Table 1. Confirmed Flu Case Counts

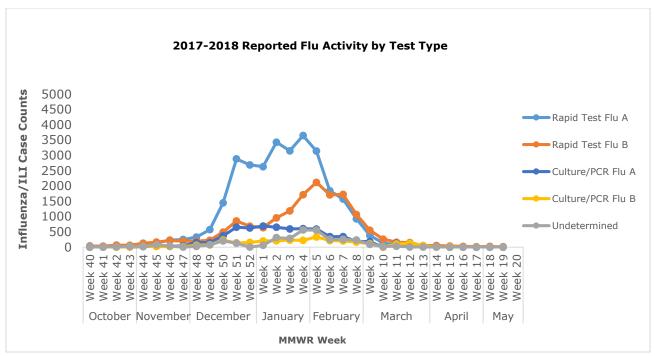


Figure 2. 2017-2018 Reported Flu Activity by Test Type

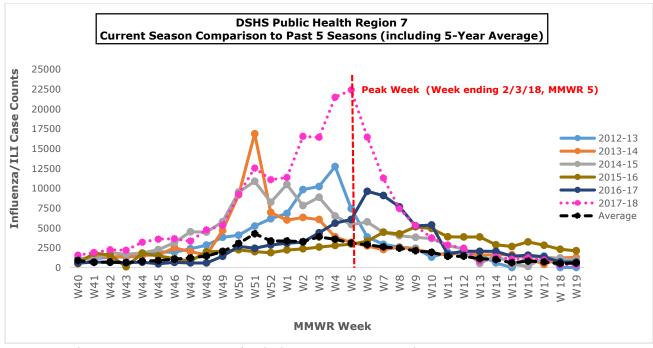


Figure 3. Flu Season Comparisons (including 5-Year Average)

2017-2018 Texas Flu Season

According to the <u>Texas Influenza Surveillance Report for the 2017–2018 Season</u> produced on 5/18/2018, twenty-three percent of all specimen that were submitted to hospital laboratories this season were positive for flu. Additionally, fifty-nine percent of specimen submitted to public health laboratories this season were positive for flu. Since mid-February, flu B viruses have made up the majority of flu viruses circulating in Texas. The percentage of outpatient visits due to influenza-like illness reported by Texas Outpatient Influenza-like Illness Surveillance Network (ILINet) participants has remained below baseline (6.41%) since Week 9 and has been steadily decreasing.

15 influenza-associated pediatric deaths were reported in Texas this season.

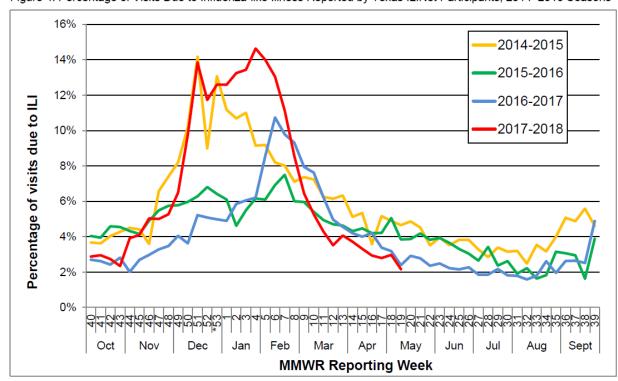


Figure 4: Percentage of Visits Due to Influenza-like Illness Reported by Texas ILINet Participants, 2014–2018 Seasons*

Figure 4. Percentage of Visits for Influenza-like Illness (ILI), Texas 2017-2018

^{*}There was a week 53 in the 2014-2015 influenza season, but there is not a week 53 for the 2017-2018 influenza season or the other previous seasons; therefore, the week 53 data point for those seasons is an average of week 52 and 1.

2017-2018 Flu Activity in the United States

Although flu activity was low at the start of the season in October, it started increasing in November and began to decrease in early February. Peak flu activity generally occurs during December-February. This season, A(H3N2) viruses were most commonly reported by public health laboratories (72%). Vaccine effectiveness estimates were released in February. Overall, the flu vaccine reduced the risk of overall illness from flu A or flu B viruses by 36%, illness due to A(H3N2) by 25%, illness due to A(H1N1) by 67%, and illness due to flu B viruses by 42%. This data is comparable to last year's vaccine effectiveness (~30%) and better than 2017-2018 preliminary estimates for Australia and Canada.

Outpatient Illness Surveillance:

Nationwide during week 19, 1.2% of patient visits reported through the U.S. <u>Outpatient Influenza-like Illness Surveillance Network (ILINet)</u> were due to influenza-like illness (ILI). This percentage is below the national baseline of 2.2%. (ILI is defined as fever (temperature of 100°F [37.8°C] or greater) and cough and/or sore throat.)

Additional ILINet data, including national, regional and select state-level data, are available at http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html.

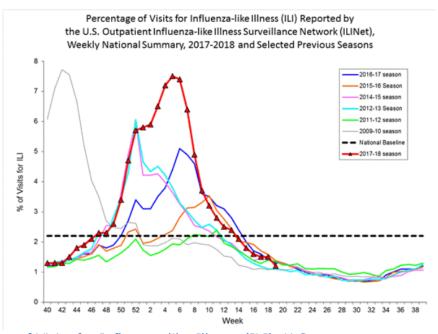


Figure 5. Percentage of Visits for Influenza-like Illness (ILI), U.S.