

Tarrant County Influenza Surveillance Activity Summary October 2016 – May 2017

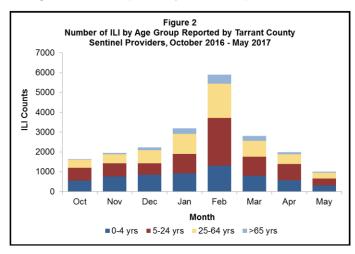
Laura Lockwood, MPH, CPH, Influenza Surveillance Specialist

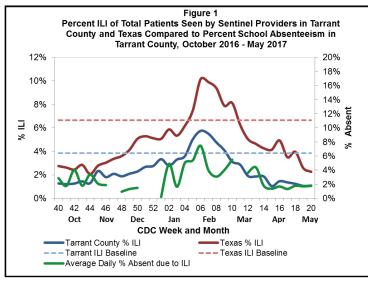
What was the 2016-2017 flu season like?

Tarrant County influenza activity in the 2016-2017 influenza season peaked in early February, which was earlier than the 2015-2016 season. During the 2016-2017 season, activity was at or above the Tarrant County baseline for five consecutive weeks, which is longer than the two weeks above baseline in the 2015-2016 season. The first week that influenza activity was above the Tarrant County baseline was January 29-February 4, 2017 and the last week was February 26-March 4, 2017.

When did the 2016-2017 flu season peak?

Influenza activity in the county peaked during CDC Week 6 (February 5-11, 2017), which was the same week statewide influenza activity peaked. Student absenteeism due to influenza-like illness (ILI) in Tarrant County also peaked during CDC Week 6 (February 5-11, 2017).



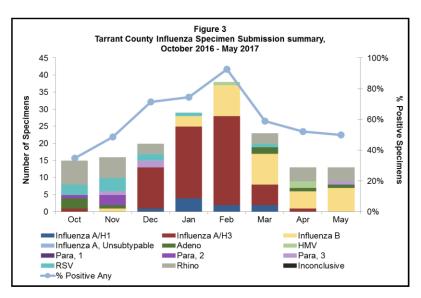


What age groups were most affected this season?

Throughout the 2016-2017 influenza season, the number of reported ILI was generally highest among 5-24 year olds. The number of reported ILI among individuals 65 years and older was consistently lower than that of other age groups. Reported ILI peaked in February with over 1,900 influenza-like illnesses in CDC Week 6, of which people 5 to 24 years of age comprised the greatest proportion of ILI (41%). In October, February, March, April, and May the majority of ILI was reported in those 5 to 24 years of age (39%, 41%, 35%, 41%, 35%). Individuals 0 to 4 years of age accounted for the majority of ILI in November and December (39%, 38%), and individuals 25 to 64 years of age accounted for the majority of ILI in January (32%) (Figure 2).

What viruses circulated this season?

Of the 274 specimens submitted during the 2016-2017 season for testing to the North Texas Regional Laboratory (NTRL), approximately 61 percent were positive for at least one of the tested respiratory viruses. Among specimens testing positive for influenza (110), the majority subtyped as influenza A/H3N2 (61%), followed by influenza B (31%) and influenza A/H1N1 (8%). In October and November, other respiratory viruses were more common than influenza, especially rhinovirus. The first specimen to test positive for influenza was an influenza A/H3N2 in October. The last specimen to test positive for influenza during the 2016-2017 flu season was an influenza B in May. Before the peak of flu activity in the 2016-2017 season, there were more specimens positive for influenza A than B, but that changed starting in March and influenza B remained the most common influenza strain for the rest of the season (Figure 3).



What ongoing program activities does Tarrant County conduct?

As in previous years, the Tarrant County Public Health Influenza Surveillance Program continues to conduct year-round influenza surveillance. Additionally, NTRL conducts tests on submitted specimens for influenza (by subtype) as well as for parainfluenza (types 1, 2, and 3), RSV, adenovirus, human metapneumovirus, and rhinovirus. To obtain updates on weekly influenza activity within Tarrant County, visit http://health.tarrantcounty.com/flu. If your facility would like to partner with our program as a sentinel provider site, contact Laura Lockwood, MPH, Tarrant County Public Health Influenza Surveillance Specialist, at (817) 321-4726 or LBLockwood@tarrantcounty.com.

What can be expected for the 2017-2018 influenza season?

The week of October 1, 2017 marks the beginning of the 2016-2017 influenza season. Predicting the exact timing of influenza activity and which strains will dominate remains challenging. In March 2017, experts from the World Health Organization released their selection of proposed 2017-2018 northern hemisphere vaccine strains based on national and global surveillance. The U.S. Food and Drug Administration (FDA) Vaccines and Related Biological Products Advisory Committee (VRBPAC) adopted the proposed vaccine strains for the trivalent vaccine:

- an A/Michigan/45/2015 (H1N1)pdm09-like virus
- an A/Hong Kong/4801/2014 (H3N2)-like virus
- a B/Brisbane/60/2008-like virus (Victoria lineage)

The committee also recommended that quadrivalent vaccines contain a B/Phuket/3073/2013-like virus (Yamagata lineage) in addition to the above mentioned virus strains. ^{1,2} To date, the CDC has not released changes to guidance for the use of antiviral agents for the treatment and chemoprophylaxis of influenza. Clinicians should continue to utilize guidelines previously released until new recommendations are made. The latest recommendations for antiviral use and the use of rapid influenza tests are available on the Tarrant County Public Health Influenza Surveillance website (http://access.tarrantcounty.com/en/public-health/epidemiology-and-health-information/influenza-surveillance.html).

What are the influenza vaccination recommendations for the 2017-2018 season?

The Advisory Committee on Immunization Practices (ACIP) released updated influenza vaccination recommendations for the 2016-2017 influenza season on the CDC MMWR webpage on August 25, 2017. These recommendations are available on the Tarrant County Public Health Influenza Surveillance website.

Influenza Vaccination recommendation summary:

- Annual vaccination with an injectable influenza vaccine is recommended for people 6 months of age or older with rare exception. The
 nasal spray influenza vaccine should not be used during the 2017-2018 season.¹
- Children 6 months to 8 years of age should receive 2 doses, at least 4 weeks apart, during their first season of vaccination²
- Recommendations are available for people with egg allergies, please see the CDC website for more information¹
- Target groups include people who are at high risk of developing serious complications and those who live with or care for those at high risk. Target priority groups for influenza vaccination include:
 - Children aged 6 months through 4 years (59 months)
 - People aged 50 years and older
 - People with chronic pulmonary (including asthma), cardiovascular (except hypertension), renal, hepatic, neurologic, hematologic, or metabolic disorders (including diabetes mellitus)
 - People who are immunosuppressed (including immunosuppression caused by medications or by human immunodeficiency virus)
 - Women who are or will be pregnant during the influenza season
 - People who are aged 6 months through 18 years and receiving aspirin- or salicylate- containing medications and who therefore might be at risk for experiencing Reye syndrome after influenza virus infection
 - People who are residents of nursing homes and other chronic-care facilities
 - American Indians/Alaska Natives
 - o People who are morbidly obese (body-mass index is 40 or greater)
 - Health care personnel in inpatient and outpatient care settings, medical emergency-response workers, employees of nursing home and long-term care facilities who have contact with patients or residents, and students in these professions who will have contact with patients
 - Household contacts and caregivers of children younger than 5 years and adults aged 50 years and older, with particular emphasis on vaccinating contacts of children aged younger than 6 months
 - Household contacts and caregivers of people who are in one of the high-risk categories listed above²
- Vaccination is currently NOT recommended for some people:
 - o Children younger than 6 months
 - People with severe, life-threatening allergies to flu vaccine or any ingredient in the vaccine. This might include gelatin, antibiotics, or other ingredients. See the CDC's website for more information³
 - There are certain flu shots that have different age indications: people younger than 65 years of age should not get the highdose flu shot and people who are younger than 18 years old or older than 64 years old should not get the intradermal flu shot
- Some people should talk to their doctor before getting the flu shot:
 - o People with an allergy to eggs or any of the ingredients in the vaccine
 - o People that have ever had Guillain-Barré Syndrome
 - People that are not feeling well³

For detailed information about the different influenza vaccines available and their specific recommendations and precautions, please visit the CDC influenza webpage or contact Laura Lockwood, *Tarrant County Public Health Influenza Surveillance Specialist* at LBLockwood@tarrantcounty.com.

^{1. &}quot;Frequently Asked Flu Questions 2017-2018 Influenza Season." Seasonal Influenza (FLU). Centers for Disease Control and Prevention, 14 September 2017. Web. 28 September 2017.

^{2. &}quot;Prevention and Control of Seasonal Influenza with Vaccines Recommendations of the Advisory Committee on Immunization Practices — United States, 2017–18 Influenza Season." MMWR. Centers for Disease Control and Prevention, 25 August 2017. Web. 15 September 2017.

 [&]quot;Who Should & Who Should NOT Get Vaccinated." Seasonal Influenza (Flu). Centers for Disease Control and Prevention, 11 September 2017. Web. 28 September 2017.