

Tarrant County Influenza Surveillance Activity Summary

October 2018 - May 2019

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What was the 2018-2019 flu season like?

Tarrant County influenza activity in the 2018-2019 influenza season peaked in late December followed by a second, smaller peak in early February, which was also when the 2017-2018 season peaked. During the 2018-2019 season, activity was at or above the Tarrant County baseline for eighteen consecutive weeks, which is longer than the twelve weeks above baseline in the 2017-2018 season. The first week that influenza activity was at or above the Tarrant County baseline week that influenza activity was at or above the Tarrant County baseline week that influenza activity was at or above the Tarrant County baseline was CDC Week 47 (November 18-24, 2018) and the last week was CDC Week 12 (March 17-23, 2019).

When did the 2018-2019 flu season peak?

Tarrant County influenza activity first peaked during CDC Week 52 (December 23-29, 2018). There was a second, smaller peak during CDC Week 6 (February 3-9, 2019). Texas influenza activity also peaked twice during CDC Weeks 52 and 6. However, the second peak during CDC Week 6 was the larger peak for influenza activity in Texas, unlike for County. Tarrant Student absenteeism due to influenzalike illness (ILI) in Tarrant County also peaked twice during the season: during CDC Week 51 (December 16-22, 2018) and during CDC Week 6 (February 3-9, 2019).





What age groups had the highest reported ILI numbers this season?

Throughout the 2018-2019 influenza season, the number of reported ILI was generally highest among 5-24 year olds. Individuals 5 to 24 years of age accounted for the majority of ILI in December, February, April, and May (39%, 41%, 33%, 32%) (Figure 2). The number of reported ILI among individuals 65 years and older was consistently lower than that of other age groups. Reported ILI first peaked in December with over 1,900 influenza-like illnesses in CDC Week 52, of which people 5 to 24 years of age comprised the greatest proportion of ILI (35%). During CDC week 6, the second peak in ILI activity, 5 to 24 year olds again accounted for the majority of reported ILI (43%). In October, January, and March, the majority of ILI was reported in those 25-64 years of age (36%, 42%, 34%).

What viruses circulated this season?

Of the 301 specimens submitted during the 2018-2019 season for testing to the North Texas Regional Laboratory (NTRL), approximately 62% were positive for at least one of the tested respiratory viruses. Among specimens testing positive for influenza (131), the majority subtyped as influenza A/H3N2 (52%) followed by influenza A/H1N1 (27%) and influenza B (21%). Unlike Tarrant County and Texas which overall had more positive H3N2 compared to the other influenza viruses in the 2018-2019 season, some other parts of the United States had a predominantly H1N1 positive season. For Tarrant County, in October and November other respiratory viruses were more common than influenza, especially rhinovirus and RSV. Throughout 2018-2019 season, more specimens were positive for influenza A than B each month (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 including influenza-like illness surveillance in schools and syndromic 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 <u>flu.tarrantcounty.com</u>. If your facility would like to partner with our program as a sentinel provider site or weekly data reporter, contact Laura Lockwood, MPH, *Tarrant County Public Health Influenza Surveillance Specialist*, at (817) 321-4726.

What can be expected for the 2019-2020 influenza season?

The week beginning September 29, 2019, marks the beginning of the 2019-2020 influenza season. Predicting the exact timing of influenza activity and which strains will dominate remains challenging. In February 2019, experts from the World Health Organization released their selection of proposed 2019-2020 northern hemisphere vaccine strains for the H1N1 strain and both B components based on national and global surveillance. The selection of the H3N2 component was delayed until March to allow more time for monitoring virus circulation and characterization of potential vaccine viruses. 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/Brisbane/02/2018 (H1N1)pdm09-like virus
- an A/Kansas/14/2017 (H3N2)-like virus
- a B/Colorado/06/2017-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}

^{1. &}quot;Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices — United States, 2019–20 Influenza Season." *MMWR*. Centers for Disease Control and Prevention, 23 August 2019. Web. 20 September 2019.

^{2. &}quot;Upcoming 2019-2020 Flu Season." Influenza (FLU). Centers for Disease Control and Prevention, 29 August 2019. Web. 20 September 2019.

What are the influenza vaccination recommendations for the 2019-2020 season?

The Advisory Committee on Immunization Practices (ACIP) released updated influenza vaccination recommendations for the 2019-2020 influenza season on the CDC MMWR webpage on August 23, 2019.

Influenza Vaccination recommendation summary:

- Annual vaccination with an age-appropriate flu vaccine is recommended for people 6 months of age or older with rare exception. Vaccine options include injectable flu vaccines and live attenuated flu vaccines or nasal spray.¹
- Children 6 months to 8 years of age should receive 2 doses, at least 4 weeks apart, during their first season of vaccination.¹
- 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
 - o People who are residents of nursing homes and other chronic-care facilities
 - American Indians/Alaska Natives
 - People who are morbidly obese (body-mass index is 40 or greater)
 - Health care personnel, including all paid and unpaid persons working in health-care settings who have the potential for exposure to patients and/or to infectious materials. These personnel might include (but are not limited to) physicians, nurses, nursing assistants, nurse practitioners, physician assistants, therapists, technicians, emergency medical service personnel, dental personnel, pharmacists, laboratory personnel, autopsy personnel, students and trainees, contractual staff, and other persons not directly involved in patient care but who can potentially be exposed to infectious agents (e.g., clerical, dietary, housekeeping, laundry, security, maintenance, administrative, billing, and volunteers)
 - Household contacts (including children) and caregivers of children aged ≤59 months (i.e., aged <5 years) and adults aged ≥50 years, particularly contacts of children aged <6 months
 - Household contacts (including children) and caregivers of persons with medical conditions that put them at higher risk for severe complications from influenza.¹
- Vaccination is currently NOT recommended for some people:
 - 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 information¹
 - There are certain flu shots that have different age indications
- Some people should talk to their doctor before getting the flu shot: (<u>https://www.cdc.gov/flu/protect/vaccine/vaccines.htm</u>)
 - \circ $\,$ People with an allergy to eggs or any of the ingredients in the vaccine
 - People that have ever had Guillain-Barré Syndrome
 - People that are not feeling well¹

For detailed recommendations and 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 <u>LBLockwood@tarrantcounty.com</u>.

Current guidelines for the use of antiviral agents for the treatment and chemoprophylaxis of influenza can be found at https://www.cdc.gov/flu/professionals/antivirals/summary-clinicians.htm.

1. "Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices — United States, 2019–20

Influenza Season." MMWR. Centers for Disease Control and Prevention, 23 August 2019. Web. 20 September 2019.

^{2. &}quot;Upcoming 2019-2020 Flu Season." Influenza (FLU). Centers for Disease Control and Prevention, 29 August 2019. Web. 20 September 2019.