Dallas County Health and Human Services

Webinar

Flu Prevention and Education

2018-2019 Season

Presenters:

- Ganesh Shivaramaiyer, Interim Director
- Kyoo Shim, MPH, Epidemiology Surveillance Coordinator
- Dr. Christopher Perkins, Medical Director / Public Health Authority
- Marisa Gonzales, Public Health Educator

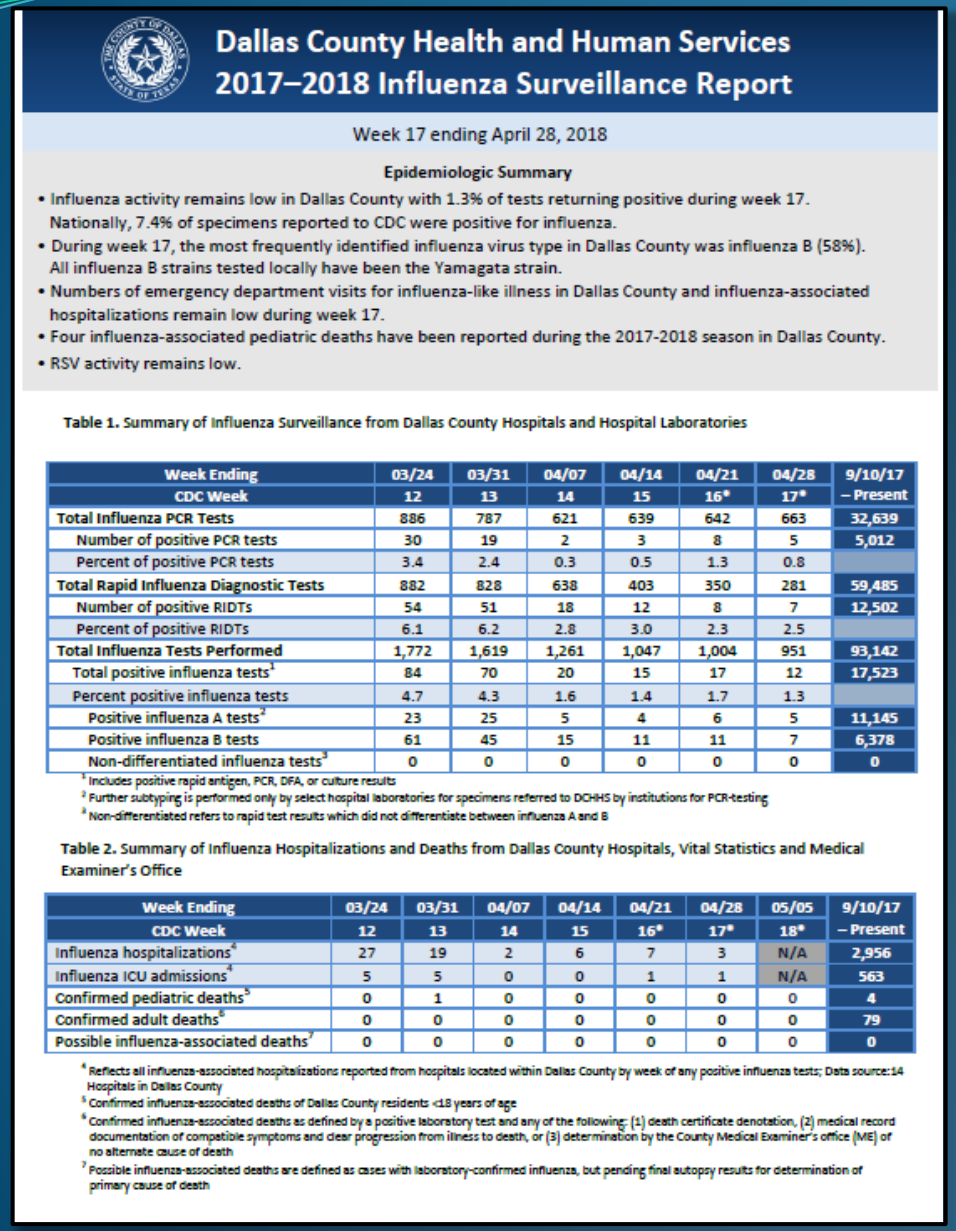
Welcome Message from Interim Director

Dallas County Flu Data

Kyoo Shim, MPH, Epidemiology Surveillance Coordinator

Kyoo Shim, MPH,
Epidemiology Surveillance Coordinator

DCHHS Influenza Summary Reports



Dallas County Health and Human Services
2017–2018 Influenza Surveillance Report

Week 17 ending April 28, 2018

Epidemiologic Summary

- Influenza activity remains low in Dallas County with 1.3% of tests returning positive during week 17. Nationally, 7.4% of specimens reported to CDC were positive for influenza.
- During week 17, the most frequently identified influenza virus type in Dallas County was influenza B (58%). All influenza B strains tested locally have been the Yamagata strain.
- Numbers of emergency department visits for influenza-like illness in Dallas County and influenza-associated hospitalizations remain low during week 17.
- Four influenza-associated pediatric deaths have been reported during the 2017-2018 season in Dallas County.
- RSV activity remains low.

Table 1. Summary of Influenza Surveillance from Dallas County Hospitals and Hospital Laboratories

Week Ending	03/24	03/31	04/07	04/14	04/21	04/28	9/10/17
CDC Week	12	13	14	15	16*	17*	– Present
Total Influenza PCR Tests	886	787	621	639	642	663	32,639
Number of positive PCR tests	30	19	2	3	8	5	5,012
Percent of positive PCR tests	3.4	2.4	0.3	0.5	1.3	0.8	
Total Rapid Influenza Diagnostic Tests	882	828	638	403	350	281	59,485
Number of positive RIDTs	54	51	18	12	8	7	12,502
Percent of positive RIDTs	6.1	6.2	2.8	3.0	2.3	2.5	
Total Influenza Tests Performed	1,772	1,619	1,261	1,047	1,004	951	93,142
Total positive influenza tests[1]	84	70	20	15	17	12	17,523
Percent positive influenza tests	4.7	4.3	1.6	1.4	1.7	1.3	
Positive influenza A tests[2]	23	25	5	4	6	5	11,145
Positive influenza B tests	61	45	15	11	11	7	6,378
Non-differentiated influenza tests[3]	0	0	0	0	0	0	0

[1] Includes positive rapid antigen, PCR, DFA, or culture results
[2] Further subtyping is performed only by select hospital laboratories for specimens referred to DCHHS by institutions for PCR-testing
[3] Non-differentiated refers to rapid test results which did not differentiate between influenza A and B

Table 2. Summary of Influenza Hospitalizations and Deaths from Dallas County Hospitals, Vital Statistics and Medical Examiner's Office

Week Ending	03/24	03/31	04/07	04/14	04/21	04/28	05/05	9/10/17
CDC Week	12	13	14	15	16*	17*	18*	– Present
Influenza hospitalizations[4]	27	19	2	6	7	3	N/A	2,956
Influenza ICU admissions[4]	5	5	0	0	1	1	N/A	563
Confirmed pediatric deaths[5]	0	1	0	0	0	0	0	4
Confirmed adult deaths[6]	0	0	0	0	0	0	0	79
Possible influenza-associated deaths[7]	0	0	0	0	0	0	0	0

[4] Reflects all influenza-associated hospitalizations reported from hospitals located within Dallas County by week of any positive influenza tests; Data source:14 Hospitals in Dallas County
[5] Confirmed influenza-associated deaths of Dallas County residents <18 years of age
[6] Confirmed influenza-associated deaths as defined by a positive laboratory test and any of the following: (1) death certificate denotation, (2) medical record documentation of compatible symptoms and clear progression from illness to death, or (3) determination by the County Medical Examiner's office (ME) of no alternate cause of death
[7] Possible influenza-associated deaths are defined as cases with laboratory-confirmed influenza, but pending final autopsy results for determination of primary cause of death

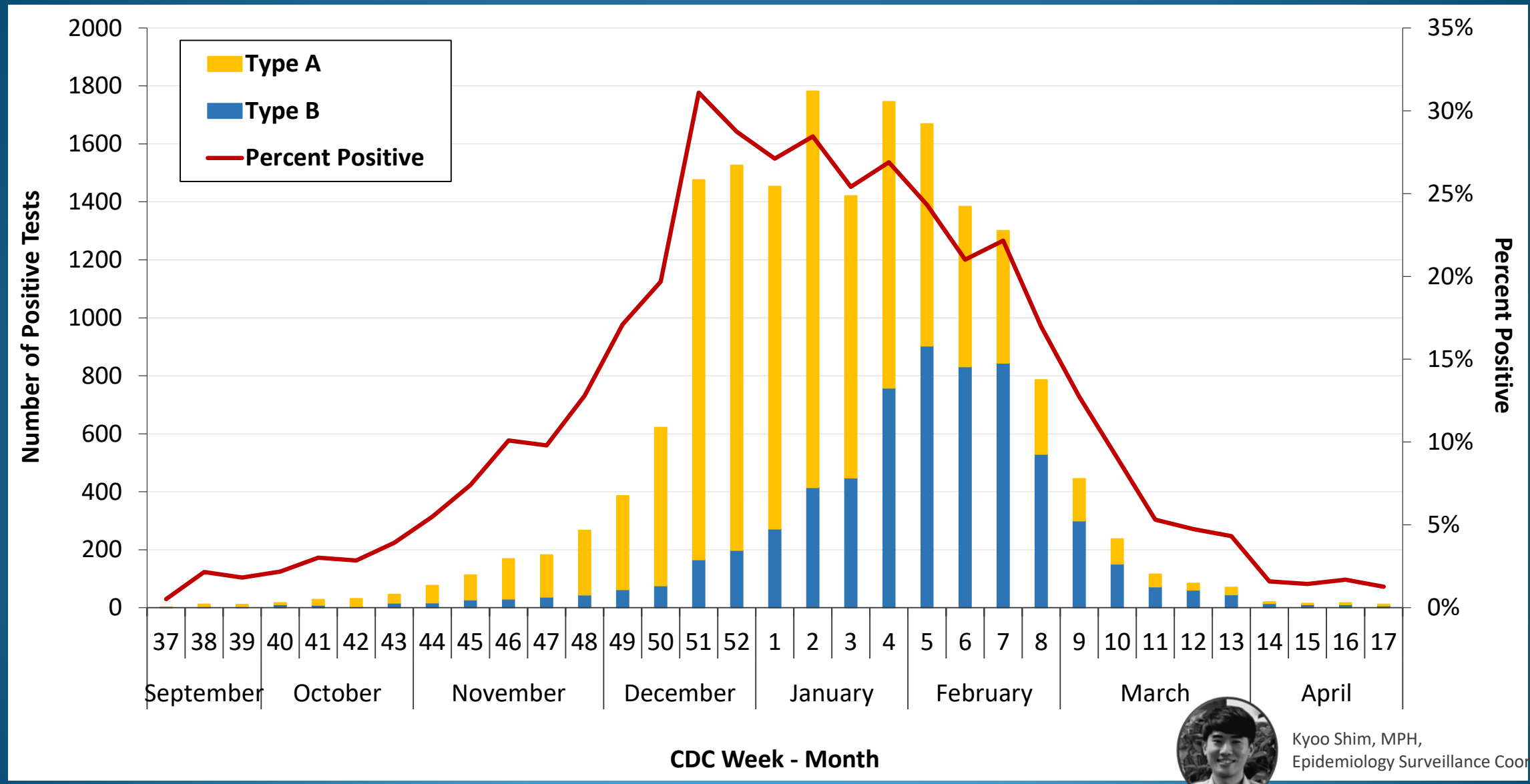
Dallas County Health & Human Services compiles a weekly summary of influenza activity during influenza season, which is posted on our website at: www.dallascounty.org/department/hhs/epistats.html

Surveillance Methods

- Virologic laboratory surveillance
  - Hospital Laboratories
  - DCHHS Laboratory Response Network
- Syndromic surveillance
  - Hospital Emergency Department visits
- Hospital and Medical Examiner's office surveillance
  - Intensive Care Unit admissions
  - Influenza-related deaths
- School surveillance
  - Total absenteeism
  - Absenteeism due to influenza-like illness

Kyoo Shim, MPH,
Epidemiology Surveillance Coordinator

Positive Influenza Tests Reported to DCHHS by Hospitals: 2017-2018 Season



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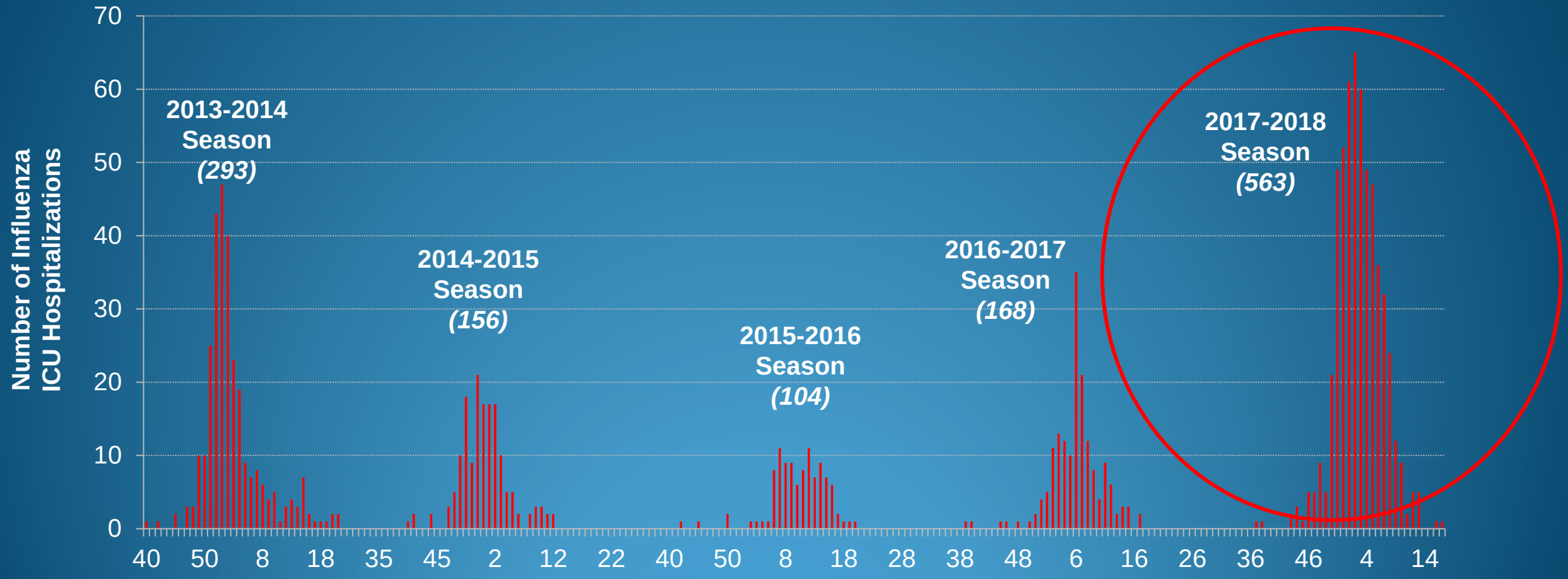
Influenza-associated Intensive Care Unit Hospitalizations for Influenza by Week of Admission, Dallas County: 2013-2018 Seasons



*(number) = Total ICU hospitalizations per season

Kyoo Shim, MPH,
Epidemiology Surveillance Coordinator

Confirmed Influenza-associated Deaths, Dallas County: 2012–2018 Seasons

Year	2012–2013	2013–2014	2014–2015	2015–2016	2016–2017	2017–2018
Pediatric	3	3	0	1	1	4
Adult	6	55	19	14	16	79

Characteristics of Influenza-Related Deaths , Dallas County : 2017–2018 Season

Total Deaths		N=83
Influenza Type	Influenza A*	55 (66.3%)
	Influenza B†	30 (36.1%)
Gender	Female	44 (53.0%)
	Male	39 (47.0%)
Race	Black	16 (19.3%)
	Hispanic	18 (21.7%)
	White	39 (47.0%)
	Other	10 (12.0%)
Age	0 to 18	4 (4.8%)
	>18 to 65	23 (27.7%)
	>65	56 (67.5%)
Presence of ≥ 1 underlying high risk medical conditions		78 (94.0%)

Kyoo Shim, MPH,
Epidemiology Surveillance Coordinator

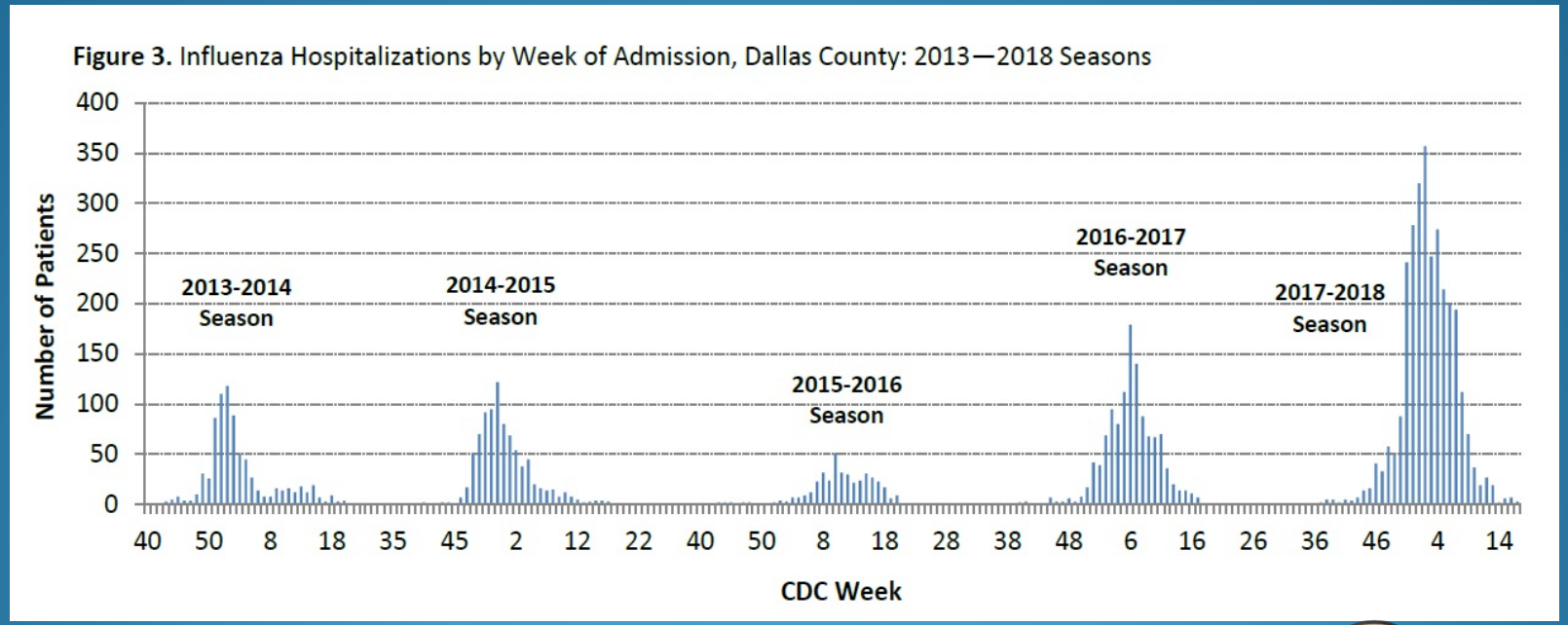
Flu Severity Signs and Symptoms

Dr. Christopher Perkins, Medical Director / Public Health Authority

Dr. Christopher Perkins,
Medical Director / Public Health Authority

2017/2018 - High Severity Flu Season

- The 2017-18 season was the first season to be classified by the CDC as a high severity across all age groups.
- During the 2017-2018 season, the percentage of deaths attributed to pneumonia and influenza (P&I) was at or above the epidemic threshold for 16 consecutive weeks.



Dr. Christopher Perkins,
Medical Director / Public Health Authority

Information: https://www.cdc.gov/flu/about/season/flu-season-2017-2018.htm
Chart: https://www.dallascounty.org/department/hhs/epistats.html

Dallas County Health and Human Services
2017–2018 Influenza Surveillance Report

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Table 6. Confirmed Influenza-associated Pediatric and Adult Deaths, Dallas County: 2011–2018 Seasons

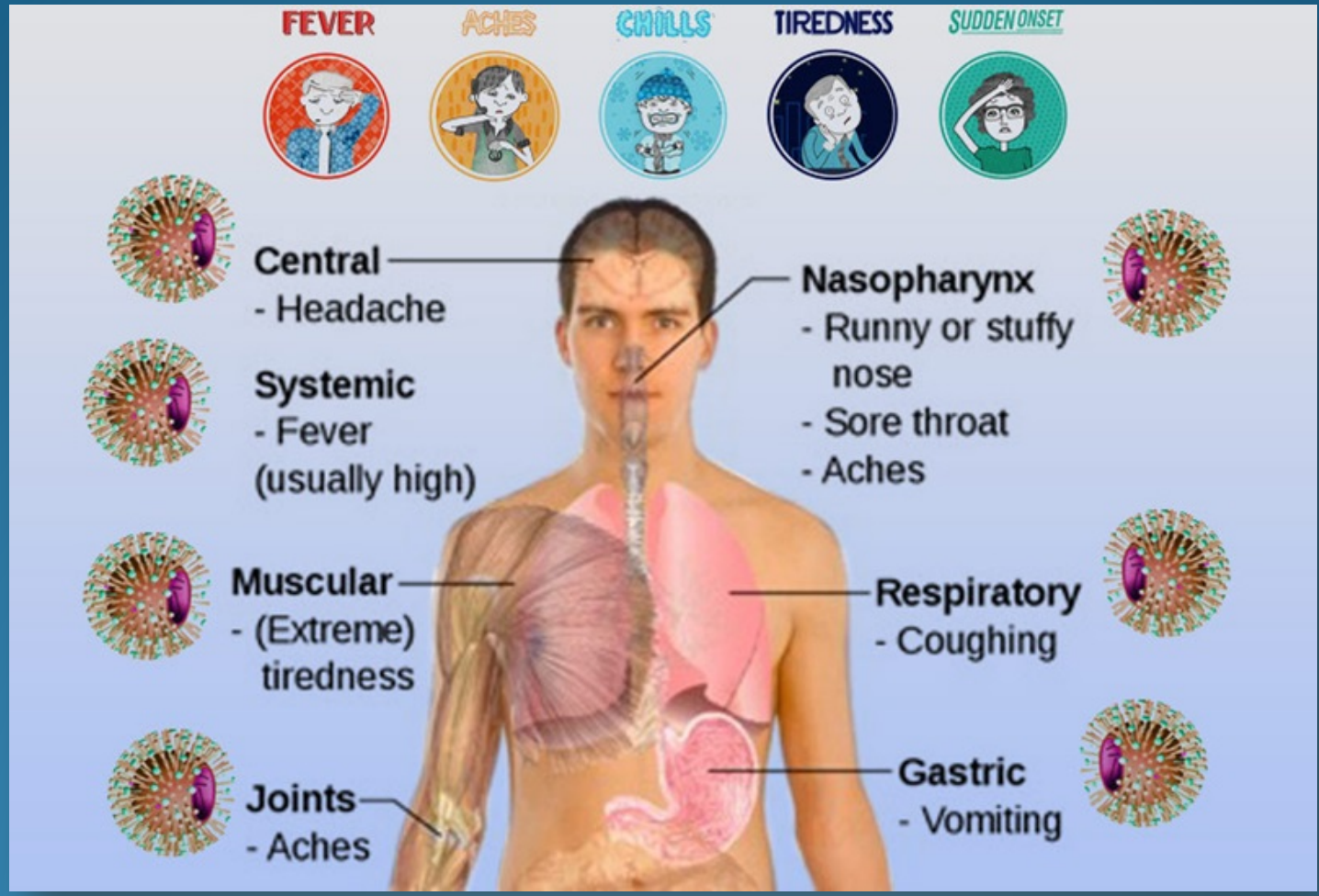
	2012–2013	2013–2014	2014–2015	2015–2016	2016–2017	2017–2018
Pediatric	3	3	0	1	1	4
Adult	6	55	19	14	16	79

Highest in recent years

Dr. Christopher Perkins,
Medical Director / Public Health Authority

https://www.dallascounty.org/department/hhs/epistats.html

Signs and Symptoms of Seasonal Flu



- Flu can cause mild to severe illness, and at times can lead to death.
- People with flu are most contagious in the first 3-4 days after their illness begins.
- Not everyone with flu will have a fever.

https://www.cdc.gov/flu/consumer/symptoms.htm

Dr. Christopher Perkins,
Medical Director / Public Health Authority

Flu Vaccine Recommendations

- Getting an annual flu vaccine is the first and best available way to protect yourself and your family from flu and its potentially serious complications.
- Flu vaccination can reduce flu illnesses, doctors' visits, missed work and school due to flu, as well as prevent flu-related hospitalizations.
- It takes about two weeks after vaccination for antibodies that protect against flu to develop in the body, so make plans to get vaccinated early in fall, before flu season begins.

Options this season include:

- Standard dose flu shots. Most are given into the muscle, usually with a needle, but two can be given to some people with a jet injector. (***Note** that no intradermal flu vaccine will be available during 2018-2019).
- A high-dose shot for people 65 and older.
- A shot made with adjuvant for people 65 and older.
- A shot made with virus grown in cell culture.
- A shot made using a vaccine production technology (recombinant vaccine) that does not require the use of flu virus or eggs.
- Live attenuated influenza vaccine (LAIV) – or the nasal spray vaccine – is also an option for use in otherwise healthy persons 2 through 49 years of age who are not pregnant.

Dr. Christopher Perkins,
Medical Director / Public Health Authority

https://www.cdc.gov/flu/about/season/flu-season-2018-2019.htm

Impact of Flu - Workplace Productivity and Economic Burden

Ganesh Shivaramaiyer, Interim Director

Ganesh Shivaramaiyer
Interim Director

Impact of Flu – Workplace Productivity and Economic Burden

31.4 million ⟶ **outpatient visits (annually)**

https://www.cdcfoundation.org/businesspulse/flu-prevention-infographic

200 thousand ⟶ **hospitalizations (annually)**

https://www.cdcfoundation.org/businesspulse/flu-prevention-infographic

230 million ⟶ **workdays missed (annually)**

https://www.pharmacytimes.com/market-news/the-impact-of-a-severe-flu-season-americans-missed-230-million-work-days-and-lost-85-billion-in-wages-in-2012-13-walgreens-flu-impact-report-suggests

6.2 million ⟶ **business trips missed (annually)**

Source: https://www.pharmacytimes.com/market-news/the-impact-of-a-severe-flu-season-americans-missed-230-million-work-days-and-lost-85-billion-in-wages-in-2012-13-walgreens-flu-impact-report-suggests

$87 billion ⟶ **total economic burden (annually)**

https://www.cdcfoundation.org/businesspulse/flu-prevention-infographic

What employers should do!

Encourage / offer flu shots to employees

Emphasize workplace hygiene

Communicate / policy - staying home/ sending employees home while experiencing symptoms

Adhere to sanitization standards

Educate employees about the flu

Ganesh Shivaramaiyer
Interim Director

Flu Prevention Reminders

Marisa Gonzales, Public Health Educator

Marisa Gonzales,
Public Health Educator

An ounce of prevention is worth a pound of CURE

CDC recommends a yearly flu vaccine as the first and most important step in protecting against influenza and potentially serious complications.

Marisa Gonzales,
Public Health Educator

https://www.cdc.gov/flu/consumer/vaccinations

Take Everyday Preventive Actions to Stop the Spread of Germs

- Avoid close contact with sick people.
- While sick, limit contact with others as much as possible.
- If you are sick stay home for at least 24 hours after your fever is gone (except to get medical care).

Marisa Gonzales,
Public Health Educator

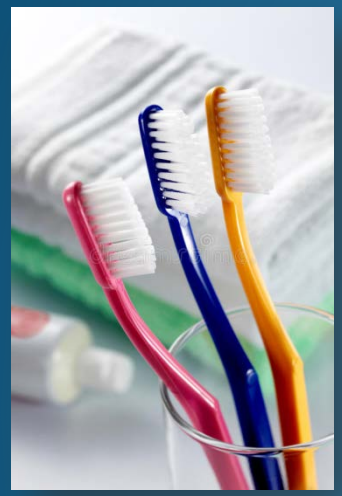
Stop the Spread of Germs

- Cough or sneeze with a tissue or in the bend of your elbow.
- Wash your hands frequently with warm water and soap for at least 20 seconds.
- If soap and water are not available use an alcohol-based hand sanitizer.

Marisa Gonzales,
Public Health Educator

https://www.cdc.gov/handwashing/when-how-handwashing.html

Stop the Spread of Germs (cont.)



- Avoid touching your eyes, nose or mouth. Germs spread this way.
- Don’t share personal objects like eating utensils, toothbrushes or towels while sick.
- Clean and disinfect surfaces and objects that may be contaminated with germs like flu.

Marisa Gonzales,
Public Health Educator

Antiviral Medications

- If you get sick with flu, antiviral drugs can be used to treat your illness.
- Antiviral medications shorten the duration of the flu symptoms making them milder.
- They may also prevent serious flu complications.
- This is particularly important for people who have chronic medical conditions such as asthma or diabetes.

Marisa Gonzales,
Public Health Educator

Treatment

- Get plenty of rest (stay home).
- Drink plenty of fluids to stay hydrated.
- Take OTC medication to reduce fever, aches and pains.
- See your doctor if symptoms worsen.

Marisa Gonzales,
Public Health Educator

https://www.cdc.gov/flu/treatment/index.html

Persons at Greater Risk of Severe Illness from Flu (1)

- Adults 65 years of age and older
  - Immune systems become weaker-high risk for flu-related complications.
  - 70-85% of flu related deaths in the US have occurred among people 65 years and older.
- 2 Vaccine Options
  - High dose flu vaccine-contains 4 times the amount of antigen as the regular flu shot, creates a stronger immune response.
  - Adjuvanted vaccine-standard flu dose.

Marisa Gonzales,
Public Health Educator

https://www.cdc.gov/flu/about/disease/high_risk.htm

Persons at Greater Risk of Severe Illness from Flu (2)

- Begin antiviral medication as soon as fever develops.
- People who have medical conditions such as:
  - Asthma
  - Chronic heart or lung disease
  - Blood disorders (such as sickle cell disease)
  - Diabetes
  - Weakened immune systems-HIV/AIDS or cancer patients
- Even if well managed, place people at high risk of serious flu complications.

Marisa Gonzales,
Public Health Educator

https://www.cdc.gov/flu/about/disease/high_risk.htm

Persons at Greater Risk for Severe Illness from Flu (3)

- Pregnant Women
  - More prone to severe illness from flu, including illness resulting in hospitalization.
  - Can be harmful for a pregnant woman's developing baby.
  - Getting vaccinated can also help protect a baby after birth from flu (mom passes antibodies onto the developing baby during pregnancy).

Marisa Gonzales,
Public Health Educator

https://www.cdc.gov/flu/protect/vaccine/pregnant.htm

“Take 3” Actions to Fight the Flu

1. Get a flu vaccine every year
2. Stop Germs
3. Antiviral Drugs if your doctor prescribes them

Marisa Gonzales,
Public Health Educator

Q/A Session

Thank You!

DCHHS
Safe families, healthy lives.
Dallas County Health and Human Services

Accredited Health Department
PHAB
Advancing public health performance
Public Health Accreditation Board