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

Kyoo Shim, MPH, Epidemiology Surveillance Coordinator
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

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

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td><strong>Pediatric</strong></td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td><strong>Adult</strong></td>
<td>6</td>
<td>55</td>
<td>19</td>
<td>14</td>
<td>16</td>
<td>79</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Influenza Type</th>
<th>Total Deaths</th>
<th>N=83</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influenza A*</td>
<td>55</td>
<td>(66.3%)</td>
</tr>
<tr>
<td>Influenza B†</td>
<td>30</td>
<td>(36.1%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Total Deaths</th>
<th>N=83</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>44</td>
<td>(53.0%)</td>
</tr>
<tr>
<td>Male</td>
<td>39</td>
<td>(47.0%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Race</th>
<th>Total Deaths</th>
<th>N=83</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>16</td>
<td>(19.3%)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>18</td>
<td>(21.7%)</td>
</tr>
<tr>
<td>White</td>
<td>39</td>
<td>(47.0%)</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>(12.0%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Total Deaths</th>
<th>N=83</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 to 18</td>
<td>4</td>
<td>(4.8%)</td>
</tr>
<tr>
<td>&gt;18 to 65</td>
<td>23</td>
<td>(27.7%)</td>
</tr>
<tr>
<td>&gt;65</td>
<td>56</td>
<td>(67.5%)</td>
</tr>
</tbody>
</table>

| Presence of ≥ 1 underlying high risk medical conditions | Total Deaths | N=83 (94.0%) |

Kyoo Shim, MPH, Epidemiology Surveillance Coordinator
Flu Severity Signs and Symptoms

Dr. Christopher Perkins, Medical Director / Public Health Authority
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.

Chart: [https://www.dallascounty.org/department/hhs/episats.html](https://www.dallascounty.org/department/hhs/episats.html)
Dallas County Health and Human Services
2017–2018 Influenza Surveillance Report

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

<table>
<thead>
<tr>
<th>Week Ending</th>
<th>03/24</th>
<th>03/31</th>
<th>04/07</th>
<th>04/14</th>
<th>04/21</th>
<th>04/28</th>
<th>05/05</th>
<th>9/10/17 – Present</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDC Week</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16*</td>
<td>17*</td>
<td>18*</td>
<td></td>
</tr>
<tr>
<td>Influenza hospitalizations</td>
<td>27</td>
<td>19</td>
<td>2</td>
<td>6</td>
<td>7</td>
<td>3</td>
<td>N/A</td>
<td>2,956</td>
</tr>
<tr>
<td>Influenza ICU admissions</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>N/A</td>
<td>563</td>
</tr>
<tr>
<td>Confirmed pediatric deaths</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Confirmed adult deaths</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>79</td>
</tr>
<tr>
<td>Possible influenza-associated deaths</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
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Table 6. Confirmed Influenza-associated Pediatric and Adult Deaths, Dallas County: 2011–2018 Seasons

<table>
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Highest in recent years

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

Impact of Flu - Workplace Productivity and Economic Burden

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

- **200 thousand** → hospitalizations (annually)
  - [https://www.cdcfoundation.org/businesspulse/flu-prevention-infographic](https://www.cdcfoundation.org/businesspulse/flu-prevention-infographic)

- **230 million** → workdays missed (annually)

- **6.2 million** → business trips missed (annually)

- **$87 billion** → total economic burden (annually)
  - [https://www.cdcfoundation.org/businesspulse/flu-prevention-infographic](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
Flu Prevention Reminders

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.

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).
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.
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.
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.

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.

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

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
Q/A Session