



# Texas Influenza Summer Surveillance Report 2014–2015 Season/2015 MMWR Week 21

(May 24, 2015 - May 30, 2015) Report produced on 6/05/2015

### Summary

Influenza activity remained low in Texas. The percentage of specimens positive for influenza marginally increased compared to last week. Influenza-like illness (ILI) activity slightly decreased compared to last week and remained below the 2014-2015 state ILINet baseline of 5.42%.

Table 1: Summary of Texas Influenza (Flu) and Influenza-like Illness (ILI) Activity for the Current Week

| Texas Surveillance Component  | Change from<br>Previous Week    | Current<br>Week | Previous<br>Week⁺         | Page of<br>Report |  |
|---|---------------------------------|-----------------|---------------------------|-------------------|--|
| Statewide influenza activity level reported to CDC (geographic spread of influenza)       | Not determined<br>during summer | N/A             | Local                     |                   |  |
| Statewide ILINet Activity Indicator assigned by CDC (intensity of influenza-like illness) | Not determined<br>during summer | N/A             | Minimal                   |                   |  |
| Percentage of specimens positive for influenza  | ▲0.21%                          | 0.71%           | 0.50%†                    | 1                 |  |
| Percentage of visits due to ILI (ILINet)  | ▼0.44%                          | 4.48%           | <b>4.92%</b> <sup>†</sup> | 2                 |  |
| Number of regions reporting increased flu/ILI activity                                    | No change                       | 0               | 0                         | 4                 |  |
| Number of regions reporting decreased flu/ILI activity                                    | ▼3                              | 1               | 4                         | 4                 |  |
| Number of variant/novel influenza infections  | No change                       | 0               | 0                         | 4                 |  |
| Number of ILI/influenza outbreaks   | No change                       | 0               | 0                         | 4                 |  |
| Number of pediatric influenza deaths  | No New Cases<br>Reported        | 0               | 0                         | 4                 |  |

†Data displayed have been updated since last week's flu report with any new reports received.

## Laboratory Results

### Influenza

Hospital laboratories across Texas voluntarily report influenza tests (antigen, culture, and PCR) to the National Respiratory and Enteric Virus Surveillance System (NREVSS). Providers throughout Texas also submit specimens for influenza testing (PCR) to Texas public health laboratories, including the Texas Department of State Health Services (DSHS) state laboratory in Austin and the nine Texas Laboratory Response Network (LRN) laboratories. The results reported by Texas NREVSS participants and public health laboratories for the current week is summarized in the table below. Additional influenza test results (rapid tests, culture, PCR) and ILI activity were reported from providers and public health departments throughout the state (see county map at the end of this report).

Table 2: Influenza Testing Performed by Texas Laboratories for the Current Week

|   | Week 21     |  |  |  |  |  |
|---|-------------|--|--|--|--|--|
| Number of labs reporting flu tests                          | 12          |  |  |  |  |  |
| Number of specimens tested                                  | 424         |  |  |  |  |  |
| Number of positive specimens $(\%)^{\dagger}$               | 3 (0.71%)   |  |  |  |  |  |
| Percentage of total tests that were antigen detection tests | 37.74%      |  |  |  |  |  |
| Positive specimens by type/subtype [n (%)]                  |             |  |  |  |  |  |
| Influenza A   | 0 (0.00%)   |  |  |  |  |  |
| Subtyping performed   | 0 (0.00%)   |  |  |  |  |  |
| A (H1N1)  | 0 (0.00%)   |  |  |  |  |  |
| A (H3N2)  | 0 (0.00%)   |  |  |  |  |  |
| Subtyping not performed                                     | 0 (0.00%)   |  |  |  |  |  |
| Influenza B   | 3 (100.00%) |  |  |  |  |  |

+Laboratory data in 2014-2015 season reports may not be comparable to reports from previous seasons because of the inclusion of DSHS and LRN laboratory data for the current season.

### Other Respiratory Viruses

The NREVSS system collects information on a variety of respiratory viruses in addition to influenza including parainfluenza virus, respiratory syncytial virus (RSV), rhinovirus, human metapneumovirus (HMPV), and respiratory adenovirus. The results for the current week are summarized below.

### Table 3: Non-Influenza Respiratory Virus Testing Performed by Texas NREVSS Laboratories for the Current Week

| Virus                    | Number of<br>Laboratories<br>Testing | Tests Positive Tests<br>Performed |    | Percentage of Tests<br>Positive |
|--------------------------|--------------------------------------|-----------------------------------|----|---------------------------------|
| Adenovirus (respiratory) | 6                                    | 276                               | 16 | 5.80%                           |
| HMPV                     | 5                                    | 245                               | 11 | 4.49%                           |
| Parainfluenza virus      | 6                                    | 271                               | 20 | 7.38%                           |
| Rhinovirus               | 4                                    | 177                               | 42 | 23.73%                          |
| RSV <sup>†^</sup>        | 10                                   | 305                               | 3  | 0.98%                           |

<sup>†</sup>RSV tests displayed in the table are antigen detection tests only. Some non-NREVSS reporters also contribute to the RSV data. ^Numbers and percentage may differ from the weekly RSV report. The weekly RSV report may be accessed at

https://www.dshs.state.tx.us/RSV/disease/rsv-Data.aspx.

# U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet)

Table 4: Texas ILINet Reporting and Patient Visit Summary for the Current Week

|  | Week 21     |
|--|-------------|
| Number of providers reporting <sup>†</sup>         | 100         |
| Number of providers reporting patient visits       | 98          |
| Number (%) of providers with at least one ILI case | 76 (77.55%) |
| Percentage of all visits due to ILI                | 4.48%       |
| Texas ILINet baseline <sup>‡</sup> , 2014–2015     | 5.42%       |

<sup>†</sup>Reporting providers include both ILINet and RVSP providers.

<sup>\*</sup>The baseline is the mean percentage of patient visits for ILI during non-influenza weeks for the previous

three seasons plus two standard deviations. A "non-influenza week" is defined as a week that accounted

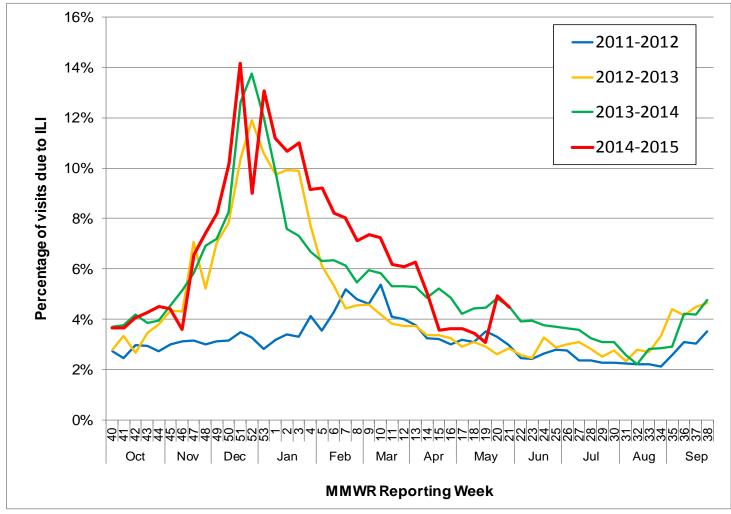
for less than 2% of the season's total number of specimens that tested positive for influenza

#### Table 5: Percentage of Visits for Influenza-like Illness Reported by Texas ILINet Providers (as of 6/4/28/2015 1:22 PM)

| Week   | Providers | ers Number of ILI Cases by Age Group (Years) |      |       |       |     | Total ILI  | Total    | % ILI           |
|--------|-----------|--|------|-------|-------|-----|------------|----------|-----------------|
| Week   | Reporting | 0-4  | 5-24 | 25-49 | 50-64 | 65+ | (all ages) | Patients | /0 I <b>∟</b> I |
| 201440 | 112       | 160  | 384  | 313   | 112   | 93  | 1062       | 28992    | 3.66%           |
| 201441 | 112       | 181  | 390  | 312   | 139   | 93  | 1115       | 30402    | 3.67%           |
| 201442 | 112       | 237  | 430  | 296   | 133   | 94  | 1190       | 29486    | 4.04%           |
| 201443 | 116       | 210  | 475  | 368   | 136   | 103 | 1292       | 30221    | 4.28%           |
| 201444 | 114       | 207  | 495  | 363   | 109   | 116 | 1290       | 28667    | 4.50%           |
| 201445 | 117       | 211  | 522  | 346   | 119   | 90  | 1288       | 29165    | 4.42%           |
| 201446 | 83        | 249  | 387  | 103   | 32    | 22  | 793        | 22064    | 3.59%           |
| 201447 | 110       | 294  | 858  | 426   | 109   | 31  | 1718       | 26133    | 6.57%           |
| 201448 | 111       | 260  | 702  | 472   | 108   | 45  | 1587       | 21456    | 7.40%           |
| 201449 | 117       | 380  | 1011 | 680   | 288   | 221 | 2580       | 31461    | 8.20%           |
| 201450 | 119       | 459  | 1576 | 677   | 268   | 209 | 3189       | 31306    | 10.19%          |
| 201451 | 100       | 556  | 1611 | 715   | 280   | 210 | 3372       | 23802    | 14.17%          |
| 201452 | 86        | 416  | 666  | 256   | 133   | 137 | 1608       | 17869    | 9.00%           |
| 201453 | 97        | 417  | 573  | 750   | 329   | 220 | 2289       | 17517    | 13.07%          |
| 201501 | 101       | 388  | 774  | 791   | 372   | 311 | 2636       | 23584    | 11.18%          |
| 201502 | 108       | 478  | 1361 | 923   | 279   | 94  | 3135       | 29338    | 10.69%          |
| 201503 | 109       | 511  | 1421 | 946   | 277   | 102 | 3257       | 29598    | 11.00%          |

| Week   | Providers<br>Reporting | Num | Number of ILI Cases by Age Group (Years) |     |     |     |      | Total<br>Patients | % ILI |
|--------|------------------------|-----|--|-----|-----|-----|------|-------------------|-------|
| 201504 | 115                    | 440 | 1247                                     | 815 | 253 | 94  | 2849 | 31140             | 9.15% |
| 201505 | 119                    | 409 | 1240                                     | 761 | 327 | 200 | 2937 | 31910             | 9.20% |
| 201506 | 117                    | 340 | 1049                                     | 737 | 302 | 193 | 2621 | 31934             | 8.21% |
| 201507 | 116                    | 354 | 907                                      | 692 | 330 | 225 | 2508 | 31210             | 8.04% |
| 201508 | 119                    | 275 | 828                                      | 583 | 245 | 189 | 2120 | 29807             | 7.11% |
| 201509 | 119                    | 323 | 931                                      | 625 | 256 | 181 | 2316 | 31410             | 7.37% |
| 201510 | 120                    | 310 | 733                                      | 615 | 282 | 189 | 2129 | 29371             | 7.25% |
| 201511 | 121                    | 289 | 559                                      | 553 | 225 | 166 | 1792 | 29009             | 6.18% |
| 201512 | 119                    | 263 | 605                                      | 573 | 237 | 197 | 1875 | 30871             | 6.07% |
| 201513 | 111                    | 230 | 578                                      | 457 | 230 | 199 | 1694 | 27073             | 6.26% |
| 201514 | 110                    | 226 | 476                                      | 349 | 255 | 162 | 1468 | 29167             | 5.03% |
| 201515 | 110                    | 189 | 369                                      | 183 | 138 | 148 | 1027 | 28919             | 3.55% |
| 201516 | 113                    | 196 | 302                                      | 230 | 142 | 162 | 1032 | 28510             | 3.62% |
| 201517 | 110                    | 152 | 340                                      | 206 | 140 | 155 | 993  | 27406             | 3.62% |
| 201518 | 110                    | 156 | 270                                      | 223 | 140 | 138 | 927  | 27033             | 3.43% |
| 201519 | 108                    | 115 | 246                                      | 140 | 137 | 136 | 774  | 25285             | 3.06% |
| 201520 | 104                    | 125 | 440                                      | 328 | 154 | 114 | 1161 | 23605             | 4.92% |
| 201521 | 100                    | 104 | 355                                      | 284 | 125 | 106 | 974  | 21748             | 4.48% |

Figure 1: Percentage of Visits Due to Influenza-like Illness Reported by Texas ILINet Participants, 2011–2015 Seasons



# **Reports from Health Service Regions**

Reports were received from six Health Service Regions (HSRs) during week 21. HSRs 2/3, 6/5S, 7, and 8 reported the same level of flu activity compared to week 20. HSR 1 reported a decreased level of flu activity compared to week 20. HSR 11 could not determine the level of flu activity compared to week 20.

### Variant Influenza Viruses

No variant or novel influenza viruses have been detected in Texas in 2014 or 2015.

### Institutional Outbreaks

No ILI or influenza-associated outbreaks were reported during week 21.

### Influenza-Associated Pediatric Mortality

No influenza-associated pediatric deaths were reported during week 21.

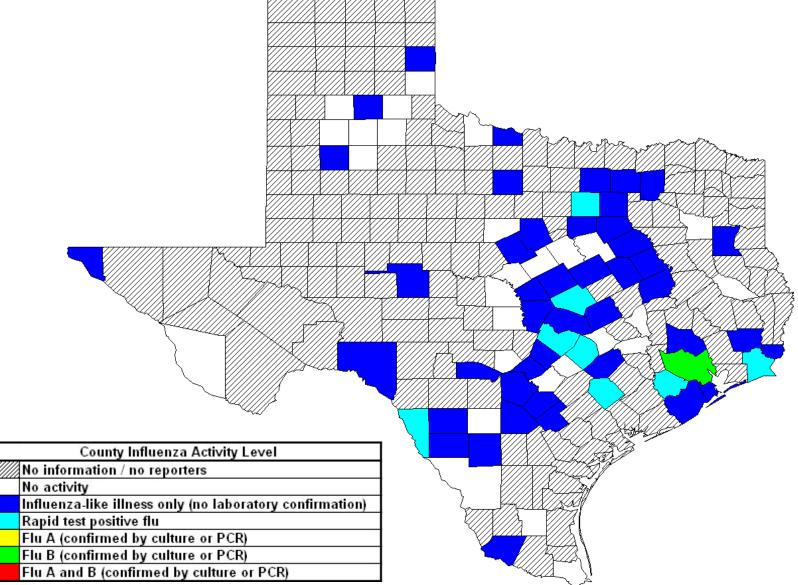
Sixteen influenza-associated pediatric deaths have been reported in Texas during the 2014-2015 influenza season. Cases of influenza-associated pediatric mortality (children <18 years of age) are reportable year-round and by law in Texas.

Table 7: Influenza-Associated Pediatric Deaths Reported in Texas During the 2014–2015 Season

| Month of<br>Pediatric<br>Death | Influenza<br>A (H1N1) | Influenza<br>A (H3N2) | Influenza<br>A (Not<br>Subtyped) | Influenza<br>B | Influenza, Not<br>Typed / Not<br>Differentiated | Influenza virus<br>co-infection: A<br>(not subtyped)<br>and B | Total, All<br>Influenza<br>Types /<br>Subtypes |
|--------------------------------|-----------------------|-----------------------|----------------------------------|----------------|---|---|--|
| 2014                           |                       |                       |                                  |                |   |   |  |
| October                        | 0                     | 0                     | 0                                | 0              | 0   | 0   | 0  |
| November                       | 0                     | 0                     | 0                                | 1              | 0   | 0   | 1  |
| December                       | 0                     | 1                     | 4                                | 2              | 0   | 0   | 7  |
| 2015                           |                       |                       |                                  |                |   |   |  |
| January                        | 0                     | 2                     | 2                                | 1              | 0   | 0   | 5  |
| February                       | 0                     | 0                     | 0                                | 0              | 0   | 0   | 0  |
| March                          | 0                     | 0                     | 1                                | 2              | 0   | 0   | 3  |
| April                          | 0                     | 0                     | 0                                | 0              | 0   | 0   | 0  |
| May                            | 0                     | 0                     | 0                                | 0              | 0   | 0   | 0  |
| Total                          | 0                     | 3                     | 7                                | 6              | 0   | 0   | 16   |

# Statewide Influenza Activity Map

Figure 4: Texas Map Displaying the Highest Level of Influenza or ILI Activity Reported by County for the Week Ending May 30, 2015 (MMWR Week 21)



Please note: The majority of influenza cases are not reportable by law in Texas. This map contains data from sentinel sites and only displays influenza and ILI cases that were reported to public health. Positive laboratory results are reported according to specimen collection date, or date received in the laboratory if the former is unknown.

### **Texas Influenza Surveillance Components and Measures**

Activity codes (see http://www.cdc.gov/flu/weekly/overview.htm)

### Statewide influenza activity level

A code reported weekly by states and territories to CDC indicating the geographic spread of influenza in the state. Levels are no activity, sporadic, local, regional, and widespread.

### **ILINet Activity Indicator**

A statewide level of influenza-like illness intensity (on a scale of 1-10, with 1 being the lowest level) assigned to each state weekly by CDC based on data reported through ILINet.

### Morbidity

Novel/variant influenza

Thorough investigations are performed on all cases of novel/variant influenza. This condition is reportable by law in Texas.

#### Texas ILINet

Providers voluntarily report weekly to CDC's ILINet system on the number of outpatient visits for ILI and total outpatient visits. Providers may submit up to 5 specimens per month for influenza testing. See <a href="http://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/ILINet/">http://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/ILINet/</a> for information on how to become an ILINet provider.

### Respiratory Virus Surveillance Project (RVSP)

Providers report weekly to ILINet and submit specimens on the first 10 patients seen with ILI each week. Specimens are tested for a variety of respiratory viruses.

### ILI activity

Non-ILINet providers report ILI or influenza data weekly to local or regional health departments.

### Outbreaks

Healthcare, schools, and childcare facilities report ILI and influenza outbreaks to health departments in Texas. *This condition is reportable by law in Texas.* 

### Mortality

Influenza-associated pediatric deaths

Deaths that are associated with influenza in children < 18 years of age are reported to health departments in Texas. *This condition is reportable by law in Texas*. <u>http://www.dshs.state.tx.us/idcu/disease/IAPM/</u>

### Laboratory

### **DSHS** Austin laboratory

Providers voluntarily submit specimens to the DSHS Austin laboratory for influenza PCR testing throughout the season. Providers sign up for this program through their local health departments.

Laboratory Response Network (LRN) laboratories

Providers voluntarily submit specimens to one of the 9 Texas LRNs for influenza PCR testing throughout the season. Providers sign up for this program through their local health departments.

#### **NREVSS**

Laboratories voluntarily report influenza and other respiratory virus data weekly through the CDC's online NREVSS reporting system. Laboratories sign up for this program by contacting DSHS. <a href="http://www.cdc.gov/surveillance/nrevss/">http://www.cdc.gov/surveillance/nrevss/</a>

### **Recommended Resources**

Texas Department of State Health Services

DSHS influenza page: http://www.texasflu.org/

Influenza surveillance data and reports: <u>http://www.dshs.state.tx.us/idcu/disease/influenza/surveillance/</u> Map of Texas Health Service Regions: <u>http://www.dshs.state.tx.us/regions/state.shtm</u>

Centers for Disease Control and Prevention

National FluView weekly flu report: <u>http://www.cdc.gov/flu/weekly/</u>

Variant and novel influenza viruses: <u>http://www.cdc.gov/flu/avianflu/index.htm</u>; <u>http://www.cdc.gov/flu/swineflu/index.htm</u> Infection Control in Healthcare Facilities: <u>http://www.cdc.gov/flu/professionals/infectioncontrol/</u> Seasonal Flu Information for Schools and Childcare Providers: <u>http://www.cdc.gov/flu/school/index.htm</u>

World Health Organization

Influenza page: <u>http://www.who.int/topics/influenza/en/</u> Disease Outbreak News: http://www.who.int/csr/don/en/