Overall Summary

Influenza activity continues to increase; laboratory-positive cases and dispensed antivirals exceeded two standard deviations above baseline levels. Laboratory-positive cases among children also exceeded two standard deviations above baseline during Week 7.

Key Findings

Influenza Activity and Surveillance

Laboratory
- Laboratory-positive influenza cases were above baseline.
- 386 laboratory cases identified. Details

Antivirals (AVs)
- Dispensed AVs were above baseline.
- 570 AVs dispensed. Details

Influenza-Like Illness (ILI)
- ILI encounters were at baseline at 5.0% of outpatient medical encounters. Details

Severity Indicators

Inpatient
- Four inpatient laboratory-positive cases identified.
- 17 inpatient AVs dispensed, below baseline.
- Four influenza cases reported to DRSi. Details

Coinfections
- 15 bacterial coinfections among laboratory-positive cases were identified from upper respiratory (10) and non-respiratory (5) specimens.
- 15 positive rapid strep tests were identified among influenza cases. Details

Select Populations

Active Duty
- 27 laboratory-positive cases identified.
- 66 AVs dispensed. Details

Recruits
- One laboratory-positive case identified.
- No AVs dispensed. Details
- Febrile respiratory illness rates were elevated at Fort Jackson, MCRD Parris Island, and NRTC Great Lakes. NHRC Report

Children
- Laboratory cases among children exceeded two standard deviations above baseline levels with 252 laboratory-positive cases identified. Details

Active Duty Vaccination Rates

Navy ....................... 94.2%
Marine Corps ............ 95.4%
US Fleet Forces .......... 96.9%

View Table
Data source: MRRS, current as of 21 Feb 2017.
Overall Burden*
- The weekly burden of influenza in the DON was 778 cases, identified in one or more data sources.
- Pharmacy captured the highest proportion of cases (73.3%).
- 62 cases were identified in all three sources.
- 4,848 DON cases identified since Week 40.

*Note: The estimated burden of influenza across the DON combines three major sources of data: certified laboratory results, antiviral pharmacy transactions, and medical encounters with influenza-specific diagnoses.

Laboratory Cases
- Laboratory-positive cases were higher than the prior week and exceeded baseline levels with 386 cases.
- Influenza case types: A (306), B (70), AB (3).
- Facilities with the greatest number of cases:
  - Current week: NH Camp Lejeune (85), NH Jacksonville (32), NMC San Diego (28), Ft. Belvoir Community Hosp-FBC (28).
  - Season: NH Camp Lejeune (270), NMC San Diego (210), NH Camp Pendleton (126).

Specimen Positivity
- 26.5% of all influenza specimens tested during Week 7 were positive, above last season (23.8%).
- When grouped by parent facility, 18 (64.3%) locations tested more than ten specimens.

| Test Types among Positive Influenza Specimens, n (%) |
|-----------------|----------|----------|----------|----------|
|                 | Rapid    | Culture  | PCR      | Total    |
| Week 5          | 182(70.3)| 7(2.7)   | 70(27.0) | 259      |
| Week 6          | 170(58.6)| 19(6.6)  | 101(34.8)| 290      |
| Week 7          | 307(78.3)| 6(1.5)   | 79(20.2) | 392      |
| Season          | 1,321(66.2)| 158(7.9)| 517(25.9)| 1,996    |

Antiviral Prescriptions
- 570 AVs were dispensed (above baseline levels).
- AVs dispensed: Amantadine (1), and Oseltamivir (569).
- Facilities dispensing most AVs this week: NH Camp Lejeune (81), NH Pensacola (52), and NMC San Diego (49).
Syndromic Surveillance

Influenza-Like Illness (ILI) *
- The percentage of medical encounters that included an ILI diagnosis:
  - 5.0% of outpatient encounters (at baseline).
  - 16.5% of ER encounters (below baseline).
- 21 DON facilities (75.0%) reported an increase in the proportion of outpatient ILI visits from the prior week.
  - Four facilities had an increase of 25% or higher.
  - NHC Annapolis had the greatest increase (31.9%) in the percent of ILI visits.
*For Week 6, lagged due to data availability.

Severity Indicators

Inpatient Laboratory
- Four inpatient laboratory cases were identified, above baseline.
- The cases were among children (1) and spouses (3).
- Cases were all identified at NMC San Diego (4).

Inpatient Pharmacy
- The percentage of inpatient AVs (3.0% of all influenza AVs) was below baseline; 17 inpatient AVs were dispensed.
- AVs were most frequently dispensed at NMC San Diego (10) and NMC Portsmouth (3).
- AVs were dispensed to spouses (7), children (6), and non-active duty sponsors (4).

Influenza-Associated Hospitalization Reports
- Four influenza-associated hospitalizations were reported to DRSi. All four cases were also identified through laboratory-positive records and three cases were dispensed AVs.

Bacterial Coinfections
- Fifteen coinfections were identified; ten Streptococcus (upper respiratory) and five other non-respiratory. Details.
- Fifteen positive rapid strep tests were identified among influenza cases.

<table>
<thead>
<tr>
<th>Bacterial Coinfections by Specimen Source and as a Percent of Laboratory Cases, 2016-2017 Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coinfections by Specimen Source, n (%)</td>
</tr>
<tr>
<td>--------------------------------------</td>
</tr>
<tr>
<td>Upper Respiratory</td>
</tr>
<tr>
<td>Current Season (n=81)</td>
</tr>
<tr>
<td>Cumulative Baseline* (n=62.8)</td>
</tr>
</tbody>
</table>

* Cumulative baseline calculated as a weighted average over three years and may not represent whole numbers.
Note: Table does not include Group A Streptococcus identified from rapid diagnostic tests.

Prepared by the EpiData Center (email; web)
Navy and Marine Corps Public Health Center
Active Duty
- 27 laboratory-positive influenza cases were identified among active duty service members, 18 Navy and 9 Marine Corps (25 Type A, 2 Type B).
- Facilities with the greatest number of active duty cases identified: NH Beaufort (5), NMC San Diego (4), and NH Camp Pendleton (3).
- 66 active duty service members (44 Navy, 22 Marine Corps) were dispensed AVs (all Oseltamivir).

Recruits
- One laboratory-positive influenza case was identified among Navy recruits.
- No AVs were dispensed to a recruit in Week 7.

<table>
<thead>
<tr>
<th>Case Type</th>
<th>Active Duty</th>
<th>Recruits</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Navy</td>
<td>Marine Corps</td>
<td>Navy</td>
</tr>
<tr>
<td>Laboratory</td>
<td>164</td>
<td>65</td>
<td>4</td>
</tr>
<tr>
<td>Antiviral</td>
<td>313</td>
<td>114</td>
<td>3</td>
</tr>
</tbody>
</table>

Children
- Laboratory cases exceeded two standard deviation above baseline levels; 252 laboratory-positive influenza cases were identified.
  - Facilities with the greatest number of outpatient cases identified: NH Camp Lejeune (75), Ft Belvoir Community Hosp-FBC (21), and NH Jacksonville (18).
  - No cases were identified from an inpatient setting.
- AVs dispensed to children were above baseline levels; 263 AVs were dispensed (all Oseltamivir).
  - Locations with most AVs dispensed: NH Camp Lejeune (54), Ft Belvoir Community Hosp-FBC (23), and NH Pensacola (21).
  - Three AVs were dispensed in the inpatient setting.

In the News
- The CDC released an interim report of the effectiveness of the 2016-17 seasonal influenza vaccine. Overall vaccine effectiveness against influenza A and influenza B virus infection associated with medically attended acute respiratory illness is estimated to be 48%. Details