Overall Summary

Although influenza activity has decreased from a season high during Week 7, laboratory-positive cases remained one standard deviation above baseline and dispensed antivirals were above baseline during Week 9. Laboratory-positive cases among children also continued to exceed two standard deviations above baseline levels during the current report week.

Key Findings

### Influenza Activity and Surveillance

#### Laboratory
- Laboratory-positive influenza cases were more than one standard deviation above baseline.
- 273 laboratory cases identified. [Details](#)

#### Antivirals (AVs)
- Dispensed AVs were above baseline.
- 389 AVs dispensed. [Details](#)

#### Influenza-Like Illness (ILI)
- ILI encounters were slightly below baseline for outpatient medical encounters. [Details](#)

### Severity Indicators

#### Inpatient
- Five inpatient laboratory-positive cases identified.
- Twelve inpatient AVs dispensed, below baseline.
- Three influenza cases reported to DRSi. [Details](#)

#### Coinfections
- Sixteen bacterial coinfections among laboratory-positive cases were identified from upper respiratory (10) and non-respiratory (6) specimens.
- Ten positive rapid strep tests were identified among influenza cases. [Details](#)

### Select Populations

#### Active Duty
- Twenty-eight laboratory-positive cases identified.
- Fifty AVs dispensed. [Details](#)

#### Recruits
- One laboratory-positive case identified.
- One AV dispensed. [Details](#)
- Febrile respiratory illness rates were elevated at NRTC Great Lakes and MCRD Parris Island. [NHRC Report](#)

#### Children
- Laboratory cases among children exceeded two standard deviations above baseline levels with 178 laboratory-positive cases identified. [Details](#)

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**Active Duty Vaccination Rates**

<table>
<thead>
<tr>
<th>Service</th>
<th>Vaccination Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navy</td>
<td>94.8%</td>
</tr>
<tr>
<td>Marine Corps</td>
<td>96.0%</td>
</tr>
<tr>
<td>US Fleet Forces</td>
<td>97.4%</td>
</tr>
</tbody>
</table>

[View Table](#)

Data source: MRRS, current as of 6 Mar 2017.
Overall Burden*
- The weekly burden of influenza in the DON was 564 cases, identified in one or more data sources.
- Pharmacy captured the highest proportion of cases (68.3%).
- 32 cases were identified in all three sources.
- 6,466 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 less than the prior week, but exceeded one standard deviation above baseline levels with 273 cases.
- Influenza case types: A (203), B (61), AB (3), and unknown (6).
- Facilities with the greatest number of cases:
  - Current week: NH Camp Lejeune (57), NH Jacksonville (28), NH Pensacola, and Ft Belvoir Community Hosp-FBC (both with 16).
  - Season: NH Camp Lejeune (436), NMC San Diego (236), and NH Jacksonville (174).

Specimen Positivity
- 24.6% of all influenza specimens tested during Week 9 were positive, below last season (26.3%).
- When grouped by parent facility, 19 (67.9%) locations tested more than ten specimens.

<table>
<thead>
<tr>
<th>Test Types among Positive Influenza Specimens, n (%)</th>
<th>Rapid</th>
<th>Culture</th>
<th>PCR</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 7</td>
<td>329(75.3)</td>
<td>19(4.3)</td>
<td>89(20.4)</td>
<td>437</td>
</tr>
<tr>
<td>Week 8</td>
<td>337(77.1)</td>
<td>15(3.4)</td>
<td>85(19.5)</td>
<td>437</td>
</tr>
<tr>
<td>Week 9</td>
<td>213(74.7)</td>
<td>8(2.8)</td>
<td>64(22.5)</td>
<td>285</td>
</tr>
<tr>
<td>Season</td>
<td>1,893(67.8)</td>
<td>219(7.8)</td>
<td>682(24.4)</td>
<td>2,794</td>
</tr>
</tbody>
</table>

Antiviral Prescriptions
- 389 AVs were dispensed (above baseline levels).
- AVs dispensed: Amantadine (2), and Oseltamivir (387).
- Facilities dispensing most AVs this week: NH Camp Lejeune (58), NH Pensacola (46), and NH Jacksonville (30).

<table>
<thead>
<tr>
<th>Antiviral Medications Dispensed to DON Beneficiaries, n (%)</th>
<th>Amantadine</th>
<th>Oseltamivir</th>
<th>Rimantadine</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 7</td>
<td>1(0.2)</td>
<td>596(99.8)</td>
<td>0(0.0)</td>
<td>597</td>
</tr>
<tr>
<td>Week 8</td>
<td>1(0.2)</td>
<td>566(99.8)</td>
<td>0(0.0)</td>
<td>567</td>
</tr>
<tr>
<td>Week 9</td>
<td>2(0.5)</td>
<td>387(99.5)</td>
<td>0(0.0)</td>
<td>389</td>
</tr>
<tr>
<td>Season</td>
<td>35(0.9)</td>
<td>3,929(99.1)</td>
<td>1(0.0)</td>
<td>3,965</td>
</tr>
</tbody>
</table>
Syndromic Surveillance

Influenza-Like Illness (ILI) *

- The percentage of medical encounters that included an ILI diagnosis:
  - 4.8% of outpatient encounters (slightly below baseline).
  - 16.3% of ER encounters (below baseline).
- 13 DON facilities (46.4%) reported an increase in the proportion of outpatient ILI visits from the prior week.
  - No facilities had an increase of 25% or higher.
  - NH Twenty-nine Palms had the greatest increase (20.9%) in the percent of ILI visits.

*For Week 8, lagged due to data availability.

Severity Indicators

Inpatient Laboratory

- Five inpatient laboratory cases were identified, below baseline.
- The cases were among children (3) and spouses (2).
- Cases were all identified at NMC Portsmouth (2), WRNMMC (2), and NH Pensacola (1).

Inpatient Pharmacy

- The percentage of inpatient AVs (3.1% of all influenza AVs) was below baseline; 12 inpatient AVs were dispensed.
- AVs were most frequently dispensed at NMC Portsmouth (3), AMC Brooke-SAMMC-Sam Houston (2), WRNMMC (2), and 5 others with 1 AV dispensed at each.
- AVs were dispensed to children (5), spouses (4), active duty sponsors (2), and non-active duty sponsors (1).

Influenza-Associated Hospitalization Reports

- Three influenza-associated hospitalizations were reported to DRSi. All cases were identified through three sources: laboratory-positive records, pharmacy records, and DRSi.

Bacterial Coinfections

- 16 coinfections were identified; 12 *Streptococcus* (10 upper respiratory, 2 non-respiratory) and four non-respiratory infections identified. **Details**
- 10 cases of Group A *Streptococcus* identified from rapid diagnostic tests.

| Bacterial Coinfections by Specimen Source and as a Percent of Laboratory Cases, 2016-2017 Season |
|-------------------------------------------------------------------------------------|---------------------------------------------|------------------------------------------|
|                                                                                      | Upper Respiratory | Lower Respiratory | Non-Respiratory | Lab Cases with Bacterial Coinfection (%) |
| Current Season (n=120)                                                             | 53 (44.2)         | 11 (9.2)          | 56 (46.7)       | 4.1                                      |
| Cumulative Baseline* (n=78.2)                                                     | 29.5 (37.7)       | 8 (10.2)          | 40.7 (52)       | 4.0                                      |

* 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.
Active Duty
- 28 laboratory-positive influenza cases were identified among active duty service members, 22 Navy and 6 Marine Corps (26 Type A, 2 Type B).
- Facilities with the greatest number of active duty cases identified: NH Camp Lejeune (6), and NH Pensacola (3).
- 50 active duty service members (44 Navy, 6 Marine Corps) were dispensed AVs (49 Oseltamivir and 1 Amantadine).

Recruits
- One laboratory-positive influenza case was identified among Marine Corps recruits.
- One AV was dispensed to a Marine Corps recruit during Week 9.

Children
- Laboratory cases exceeded two standard deviations above baseline levels; 178 laboratory-positive influenza cases were identified.
  - Facilities with the greatest number of outpatient cases identified: NH Camp Lejeune (47), NH Jacksonville (15), Ft Belvoir Community Hosp-FBC and and NHC Cherry Point (both with 10).
  - Three cases were identified from an inpatient setting.
- AVs dispensed to children were above baseline levels; 194 AVs were dispensed (193 Oseltamivir and one Amantadine).
  - Locations with most AVs dispensed: NH Camp Lejeune (40), NH Jacksonville (18), and NH Pensacola (16).

In the News
- The CDC reports that influenza activity remains elevated in the U.S. A total of 40 influenza-associated deaths have been reported during the 2016-2017 season. Details
- A highly pathogenic H7 avian influenza was identified at a commercial chicken farm in Tennessee. Later in the week, a strain of less pathogenic H5N2 was identified in a flock of turkeys in Wisconsin. Details