**Overall Summary**

PLEASE NOTE: Due to data delays, Week 4 trends are based on data through 27 January 2017 only. We anticipate updating all data in the Week 5 report. During Week 4, ILI outpatient encounters were below baseline levels, although the proportion of MTFs reporting an increase in ILI activity more than doubled from the prior week.

**Key Findings**

**Influenza Activity and Surveillance**

- **Laboratory**
  - Laboratory-positive influenza cases were below baseline.
  - 130 laboratory cases identified. [Details](#)

- **Antivirals (AVs)**
  - Dispensed AVs were below baseline levels; 220 AVs dispensed. [Details](#)

- **Influenza-Like Illness (ILI)**
  - ILI encounters were slightly below baseline at 4.3% of outpatient medical encounters. [Details](#)

**Severity Indicators**

- **Inpatient**
  - One inpatient laboratory-positive case was identified.
  - 6 inpatient AVs dispensed, below baseline.
  - No influenza cases reported to DRSi. [Details](#)

- **Coinfections**
  - Five bacterial coinfections among laboratory-positive cases were identified from respiratory specimens, two were identified from non-respiratory specimens.
  - Two rapid strep tests were identified among influenza cases. [Details](#)

**Select Populations**

- **Active Duty**
  - 27 laboratory-positive cases identified.
  - 33 AVs dispensed. [Details](#)

- **Recruits**
  - No laboratory-positive case identified.
  - No AVs dispensed. [Details](#)
  - Febrile respiratory illness rates were elevated at NRTC Great Lakes and MCRD Parris Island. [NHRC Report](#)

- **Children**
  - Laboratory cases among children were below baseline levels with 64 laboratory-positive cases among children identified. [Details](#)

**Active Duty Vaccination Rates**

- Navy ....................... 93.4%
- Marine Corps ........... 94.4%
- US Fleet Forces ........ 96.3%

[View Table](#)

Data source: MRRS, current as of 30 Jan 2017.
Overall Burden*
- The weekly burden of influenza in the DON was 304 cases, identified in one or more data sources.
- Pharmacy captured the highest proportion of cases (63.7%).
- 28 cases were identified in all three sources.
- 2,571 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 lower than the prior week and were below baseline with 130 cases.
- Influenza case types: A (117), B (12), and AB (1).
- Facilities with the greatest number of cases:
  - Current week: NH Camp Lejeune (21), NH Jacksonville (11), NMC San Diego (8).
  - Season: NMC San Diego (110), NH Camp Lejeune (89), and NH Bremerton (79).

Specimen Positivity
- 17.9% of all influenza specimens tested during Week 4 were positive, above last season (9.4%).
- When grouped by parent facility, 16 (57.1%) locations tested more than ten specimens.

<p>| Test Types among Positive Influenza Specimens, n (%) |
|-----------------|-----------------|-----------------|-----------------|-----------------|</p>
<table>
<thead>
<tr>
<th>Rapid</th>
<th>Culture</th>
<th>PCR</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 2</td>
<td>95(59.0)</td>
<td>21(13.0)</td>
<td>45(28.0)</td>
</tr>
<tr>
<td>Week 3</td>
<td>114(68.3)</td>
<td>14(8.4)</td>
<td>39(23.4)</td>
</tr>
<tr>
<td>Week 4</td>
<td>106(79.7)</td>
<td>8(6.0)</td>
<td>19(14.3)</td>
</tr>
<tr>
<td>Season</td>
<td>642(63.5)</td>
<td>112(11.1)</td>
<td>257(25.4)</td>
</tr>
</tbody>
</table>

Antiviral Prescriptions
- 220 AVs were dispensed (below baseline levels).
- AVs dispensed: Amantadine (2), and Oseltamivir (218).
- Facilities dispensing most AVs this week: NH Bremerton (35), NH Camp Lejeune (20), and NMC San Diego (15).

<p>| Antiviral Medications Dispensed to DON Beneficiaries, n (%) |
|-----------------|-----------------|-----------------|-----------------|</p>
<table>
<thead>
<tr>
<th></th>
<th>Amantadine</th>
<th>Oseltamivir</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 2</td>
<td>2(0.9)</td>
<td>228(99.1)</td>
<td>230</td>
</tr>
<tr>
<td>Week 3</td>
<td>1(0.4)</td>
<td>232(99.6)</td>
<td>233</td>
</tr>
<tr>
<td>Week 4</td>
<td>2(0.9)</td>
<td>218(99.1)</td>
<td>220</td>
</tr>
<tr>
<td>Season</td>
<td>30(1.8)</td>
<td>1,609(98.2)</td>
<td>1,639</td>
</tr>
</tbody>
</table>

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Syndromic Surveillance

Influenza-Like Illness (ILI) *
- The percentage of medical encounters that included an ILI diagnosis:
  - 4.3% of outpatient encounters (slightly below baseline).
  - 14.5% of ER admissions (below baseline).
- Thirteen DON facilities (46.4%) reported an increase in the proportion of outpatient ILI visits from the prior week.
  - One facility had an increase of 25% or higher.
  - NHC Quantico had the greatest increase (38.5%) in the percent of ILI visits.

*For Week 3, lagged due to data availability

Severity Indicators

Inpatient Laboratory
- One inpatient laboratory case was identified during Week 4, a Navy retiree over the age of 45, Type A.

Inpatient Pharmacy
- The percentage of inpatient AVs (2.7% of all influenza AVs) was below baseline (7.7%); 6 inpatient AVs were dispensed.
- AVs were most frequently dispensed at NMC San Diego (3); AMC Madigan-Lewis, NH Camp Pendleton, and NH Jacksonville (all with 1).
- AVs were dispensed to spouses (2) and non-active duty sponsors (3) all over the age of 45; and one child aged 0-4 years.

Influenza-Associated Hospitalization Reports
- There were no influenza cases reported to DRSi for influenza-associated hospitalizations during Week 4.

Bacterial Coinfections
- Seven coinfections were identified; five *Streptococcus* (upper respiratory), and two *Escherichia* (non-respiratory). Details
- Two 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><strong>Coinfections by Specimen Source, n (%)</strong></td>
</tr>
<tr>
<td>Upper Respiratory</td>
</tr>
<tr>
<td>Current Season  (n=49)</td>
</tr>
<tr>
<td>Cumulative Baseline* (n=43.7)</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.
Active Duty
- 27 laboratory-positive influenza cases were identified among active duty service members, 22 Navy and 5 Marine Corps (26 Type A, 1 Type B).
  - Vaccination records were available for 18 cases.
  - Facilities with the greatest number of active duty cases identified: NH Bremerton (6); NHC New England, NMC Portsmouth, NHC Quantico, and NH Yokosuka (all with 3).
- 33 active duty service members (28 Navy, 5 Marine Corps) were dispensed AVs (1 Amantadine, 32 Oseltamivir).

Recruits
- No laboratory-positive influenza cases were identified among recruits.
- No AVs were dispensed to recruits during Week 4.

<table>
<thead>
<tr>
<th>Number of DON Active Duty and Recruit Cases since Week 40, 2016-2017 Season</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Case Type</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Laboratory</td>
</tr>
<tr>
<td>Antiviral</td>
</tr>
</tbody>
</table>

Children
- Laboratory cases were below baseline levels; 64 laboratory-positive influenza cases were identified.
  - No cases were identified from an inpatient setting.
  - Facilities with the greatest number of outpatient cases identified: NH Camp Lejeune (18) and Ft Belvoir Community Hosp-FBC (5).
- AVs dispensed to children were below baseline levels; 89 AVs were dispensed (all Oseltamivir).
  - One AV was dispensed in the inpatient setting.
  - Locations with most AVs dispensed: NH Camp Lejeune (13); Ft Belvoir Community Hosp-FBC and NH Bremerton (both with 10).

<table>
<thead>
<tr>
<th>Number of Influenza Laboratory Cases and AV Cases, DON Children</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>0-4 years</td>
</tr>
<tr>
<td>5-17 years</td>
</tr>
</tbody>
</table>

In the News
- The CDC reports that ILI was above the national baseline during Week 3; ILI has been at or above baseline levels for six consecutive weeks. Details
- Three influenza-associated pediatric deaths were reported to the CDC during Week 3 for a total of eight influenza related pediatric deaths in the US during the 2016-2017 influenza season. Details