Overall Summary
Overall laboratory, pharmacy, and influenza-like-illness trends are below or equal to baseline. Impact among recruits increased this week, with laboratory and pharmacy surveillance indicating increased influenza activity for recruits at NMC San Diego.

Key Findings

Influenza Activity and Surveillance

Laboratory
24 laboratory positive influenza cases were identified during Week 52, below baseline. Details

Antivirals (AVs)
101 AV medications were dispensed in Week 52, below baseline. Details

Influenza-Like Illness (ILI)
Overall, 5.3% of outpatient medical encounters were due to ILI, equal to baseline. Details

Severity Indicators

Inpatient
This week, there was one inpatient laboratory positive cases and three inpatient antiviral prescriptions were identified. There were no inpatient cases reported to DRSi. Details

Coinfections
There were no bacterial coinfections identified among laboratory positive cases during Week 52. Details

Select Populations

Active Duty and Recruits
In Week 52, three laboratory positive cases and ten dispensed AV prescriptions were among active duty personnel. Among recruits, 11 laboratory positive cases and 66 dispensed AV prescriptions. Details

Children
The number of influenza positive laboratory cases and influenza specific AV prescriptions in children remain below baseline. Details

Active Duty Vaccination Rates
Navy: 91.3%
Marine Corps: 89.2%
US Fleet Forces: 96.9%

View Table
Data source: MRRS, current as of 04 Jan 2016.

Prepared by the EpiData Center (email; web)
**Influenza Activity and Surveillance**

**Overall Burden**
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.

- During Week 52, there were 114 DON cases identified in one or more data sources; pharmacy captured the highest proportion of cases (88.6%). Three cases were identified in all three sources.
- Since Week 40, there have been 828 DON cases identified in at least one of the three data sources.

**Laboratory Cases**
- 24 laboratory positive influenza cases were identified during Week 52 (14 type A, 9 type B, 1 type A&B); below baseline estimates.
- Most common facilities this week: NMC San Diego (12), NH Camp Pendleton (3), NH Lemoore (3).
- Since Week 40, 114 laboratory positive cases were identified among DON beneficiaries. Top facilities thus far: NMC San Diego (27), NH Lemoore (15), NH Camp Lejeune (12), and NHC Hawaii (7).

**Specimen Positivity**
- 6.6% of all influenza specimens tested during Week 52 were positive, lower than last season (26.5%).
- When grouped by parent facility, seven (25.0%) locations tested more than ten specimens. Two facilities had positive results; NH Camp Pendleton (15.8%) and NMC San Diego (11.7%).

<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><strong>Week 50</strong></td>
<td>6 (75.0)</td>
<td>0 (0.0)</td>
<td>2 (25.0)</td>
<td>8</td>
</tr>
<tr>
<td><strong>Week 51</strong></td>
<td>9 (81.8)</td>
<td>0 (0.0)</td>
<td>2 (18.2)</td>
<td>11</td>
</tr>
<tr>
<td><strong>Week 52</strong></td>
<td>15 (62.5)</td>
<td>1 (4.2)</td>
<td>8 (33.3)</td>
<td>24</td>
</tr>
<tr>
<td><strong>Season</strong></td>
<td>79 (65.8)</td>
<td>15 (12.5)</td>
<td>26 (21.7)</td>
<td>120</td>
</tr>
</tbody>
</table>

**Antiviral Prescriptions**
- 101 antiviral prescriptions were dispensed during Week 52, up from 40 prescriptions during Week 51 but still below baseline estimates.
- Most common facilities this week: NMC San Diego (68), NH Camp Pendleton (10), NH Camp Lejeune (3) and NMC Portsmouth (3).

<table>
<thead>
<tr>
<th>Antiviral Medications Dispensed to DON Beneficiaries, n (%)</th>
<th>Amantadine</th>
<th>Oseltamivir</th>
<th>Rimantadine</th>
<th>Zanamivir</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Week 52</strong></td>
<td>1 (1.0)</td>
<td>100 (99.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>101</td>
</tr>
<tr>
<td><strong>Season</strong></td>
<td>11 (2.0)</td>
<td>526 (98.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>537</td>
</tr>
</tbody>
</table>
Influenza-Like Illness (ILI)

- The percent of medical encounters that included an ILI diagnosis during Week 51 (lagged due to data availability):
  - 5.3% of outpatient (equal to baseline)
  - 15.7% of ER (below baseline)
- When grouped by parent facility, 21 DON facilities (75.0%) experienced an increase in the proportion of outpatient ILI visits during Week 51; one facility experienced an increase above 50% (James A Lovell FHCC).

Severity Indicators

Inpatient Laboratory

- One laboratory case (4.2%) was identified from an inpatient setting during Week 52.
- This case was a family member beneficiary over the age of 45, type B positive, at NMC San Diego.

Inpatient Pharmacy

- Three (3.0%) AV prescriptions were in the inpatient setting during Week 52.
- This week’s inpatient cases were all ages 45+ at AMC Madigan, Ft. Belvoir, and NH Camp Lejeune.

Influenza-Associated Hospitalization Reports

- There were no inpatient cases reported to DRSi this week.

Bacterial Coinfections

- No coinfections were identified during Week 52.
- Though overall case counts remain low, the proportion of lower respiratory specimens is higher than expected.

<table>
<thead>
<tr>
<th>Coinfections by Respiratory Source, n (%)</th>
<th>Lab Cases with Bacterial Coinfection (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper Respiratory</td>
<td>Lower Respiratory</td>
</tr>
<tr>
<td>Current Season (n=5)</td>
<td>2 (40.0)</td>
</tr>
<tr>
<td>Cumulative Baseline (n=21.8)</td>
<td>7.7 (35.1)</td>
</tr>
</tbody>
</table>

* Cumulative baseline calculated as a weighted average over three years and may not represent whole numbers.
Active Duty
- Three laboratory positive influenza cases were identified among active duty service members during Week 52; these cases were identified in outpatient settings at NH Lemoore, NH Pensacola, and NHC Annapolis.
- Ten active duty service members (7 Navy, 3 Marines) were dispensed AVs (all oseltamivir) during Week 52; two of these were at NH Camp Lejeune, two at NH Camp Pendleton, and others at six different facilities.

Recruits
- There were 11 laboratory positive influenza cases among recruits during Week 52, all type A positive from an outpatient setting at NMC San Diego.
- 66 AVs were dispensed to recruits during Week 52, all oseltamivir at NMC San Diego.

<table>
<thead>
<tr>
<th>Case Type</th>
<th>Active Duty</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Navy</td>
<td>Marine Corps</td>
<td>Navy</td>
<td>Marine Corps</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laboratory Positive</td>
<td>15</td>
<td>4</td>
<td>0</td>
<td>11</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AV Prescriptions</td>
<td>90</td>
<td>36</td>
<td>2</td>
<td>67</td>
<td>195</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Children
- The rate of laboratory positive influenza cases (per 100,000) is highest among children ages 0-4 years (2.4), followed by adults 18-44 (1.88).
- The rate of AV prescriptions (per 100,000) is low for children ages 0-4 (0.4) and 5-17 (0.0) in comparison to adults 18-44 (3.1), reflected by this week’s trends in prescriptions for recruits.
- Four laboratory positive influenza cases were identified among children during Week 52, below baseline estimates.
  - Three children ages 0-4 were identified at NH Lemoore, 779th Med Grp-Andrews and NH Sigonella; one child aged 5-17 was identified at AMC Tripler.
- There were two AVs dispensed to children during Week 52, below baseline estimates for children.
  - This week’s cases (both oseltamivir) were 0-4 year old children at NH Sigonella and NMC Portsmouth.

In the News
- Influenza activity in the United States is steadily rising, with six of the ten CDC regions registering above region-specific ILI baseline levels. [Details]
- Chinese health officials have confirmed the second case of H5N6 avian flu in a week, while also reporting a new case of H7N9 avian flu. [Details]