Overall Summary
The number of positive laboratory cases decreased, while antiviral prescriptions continued to increase and are at the highest point for the season. Laboratory positive influenza cases, antiviral prescriptions, and ILI encounters were all above baseline this week.

Key Findings

Influenza Activity and Surveillance

Laboratory
127 laboratory positive influenza cases were identified during Week 7, slightly above baseline. Details

Antivirals (AVs)
276 AV medications were dispensed in Week 7, slightly above baseline. Details

Influenza-Like Illness (ILI)
Overall, 5.0% of outpatient medical encounters were due to ILI, above baseline. Details

Severity Indicators

Inpatient
This week, there were seven inpatient laboratory positive cases and 21 inpatient antiviral prescriptions. There were two influenza cases reported to DRSi; both were hospitalized. Details

Coinfections
There were seven bacterial coinfections identified among laboratory positive cases during Week 7. Details

Select Populations

Active Duty and Recruits
In Week 7, there were 12 laboratory positive cases and 49 AV prescriptions dispensed to active duty personnel. Among recruits, there were seven laboratory positive cases and six dispensed AV prescriptions. Details

Most current NHRC surveillance reports febrile respiratory illness rates were at or below expected values at MCRD San Diego, MCRD Parris Island, and NRTC Great Lakes. Details

Children
The number of influenza positive laboratory cases among children ages 5-17 decreased in Week 7. Details

Active Duty Vaccination Rates
Navy: 93.8%
Marine Corps: 95.2%
US Fleet Forces: 98.2%

View Table
Data source: MRRS, current as of 22 Feb 2016.

Prepared by the EpiData Center (email; web)
**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 7, there were 349 DON cases identified in one or more data sources; pharmacy captured the highest proportion of cases (77.9%). Fourteen cases were identified in all three sources.
- Since Week 40, there have been 2,336 DON cases identified in at least one of the three data sources.

**Laboratory Cases**
- 129 laboratory positive influenza cases were identified during Week 7 (89 type A, 37 type B, 3 type AB); slightly above baseline estimates.
- Most common facilities this week: NMC San Diego (31), NH Camp Pendleton (20), and NH Jacksonville (13).
- Since Week 40, 660 laboratory positive cases were identified among DON beneficiaries. Top facilities thus far: NMC San Diego (225), NH Camp Pendleton (52), NH Jacksonville (44), and NH Bremerton (40).

**Specimen Positivity**
- 21.9% of all influenza specimens tested during Week 7 were positive, higher than the same time last season (18.9%) and the highest so far this season.
- When grouped by parent facility, 13 (46.4%) locations tested more than ten specimens. NH Okinawa (60.0%), James A Lovell FHCC (36.4%), and NH Camp Pendleton (33.3%) experienced the highest positivity.

**Antiviral Prescriptions**
- 276 antiviral prescriptions were dispensed during Week 7, above slightly baseline.
- Most common facilities this week: NMC San Diego (108) and NH Camp Pendleton (22).
- Since Week 40, the majority (98.9%) of prescriptions were for Oseltamivir.

### Test Types among Positive Influenza Specimens, n (%)

<table>
<thead>
<tr>
<th></th>
<th>Rapid</th>
<th>Culture</th>
<th>PCR</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 5</td>
<td>66(58.9)</td>
<td>8(7.1)</td>
<td>38 (33.9)</td>
<td>112</td>
</tr>
<tr>
<td>Week 6</td>
<td>102(63.4)</td>
<td>5(3.1)</td>
<td>54(33.5)</td>
<td>161</td>
</tr>
<tr>
<td>Week 7</td>
<td>80(60.6)</td>
<td>2(1.5)</td>
<td>50(37.9)</td>
<td>132</td>
</tr>
<tr>
<td>Season</td>
<td>418 (57.5)</td>
<td>59(8.1)</td>
<td>250(34.4)</td>
<td>727</td>
</tr>
</tbody>
</table>

### Antiviral Medications Dispensed to DON Beneficiaries, n (%)

<table>
<thead>
<tr>
<th></th>
<th>Amantadine</th>
<th>Oseltamivir</th>
<th>Rimantadine</th>
<th>Zanamivir</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 7</td>
<td>1 (0.4)</td>
<td>275(99.6)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>276</td>
</tr>
<tr>
<td>Season</td>
<td>18(1.1)</td>
<td>1,554 (98.9)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>1,572</td>
</tr>
</tbody>
</table>
Influenza-Like Illness (ILI)
- The percent of medical encounters that included an ILI diagnosis during Week 6 (lagged due to data availability):
  - 5.0% of outpatient encounters (above baseline)
  - 14.9% of ER admissions (below baseline)
- When grouped by parent facility, 18 DON facilities (64.3%) experienced an increase in the proportion of outpatient ILI visits during Week 6; three facilities experienced an increase above 25% (NH Guantanamo Bay, NH Beaufort, and NH Yokosuka).

Severity Indicators

Inpatient Laboratory
- Seven influenza positive laboratory cases (5.4% of all laboratory cases) were identified in the inpatient setting during Week 7.
- Five cases were identified at NMC San Diego, one at NH Beaufort, and one at AMC Brooke-SAMMC Sam Houston. Four cases were family members, two were Marine Corps recruits, and one was a retiree. All were classified with Type A, except for one recruit (Type B).

Inpatient Pharmacy
- 21 influenza AVs (7.6% of all influenza AVs) were prescribed in the inpatient setting during Week 7, above baseline (6.4%) (seventh consecutive week above baseline).
- The inpatient cases were most frequently at NH Camp Lejeune (6) and NH Jacksonville (2). The inpatient cases were among active duty (1), recruits (3), spouses (9), children (4) and other:sponsor (4).

Influenza-Associated Hospitalization Reports
- Two influenza cases were reported to DRSi during Week 7. Both reports consisted of influenza-associated hospitalization.

Bacterial Coinfections
- Seven coinfections were identified during Week 7; three Streptococcus infections, one non-respiratory and two upper respiratory; three Staphylococcus infections, two non-respiratory and one upper respiratory; and one lower respiratory Escherichia infection. All were classified as outpatient. Details
- 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=27)</td>
<td>9 (33.3)</td>
</tr>
<tr>
<td>Cumulative Baseline (n=80.5)</td>
<td>29.8 (37.1)</td>
</tr>
</tbody>
</table>

* Cumulative baseline calculated as a weighted average over three years and may not represent whole numbers.
Active Duty
- 12 laboratory positive influenza cases were identified among active duty Navy (10) and Marine Corps (2) service members during Week 7 (10 type A, 2 type B). These were identified at NMC San Diego (2), NH Yokosuka (2), and eight other different facilities (1 each).
- 49 active duty service members (36 Navy, 13 Marines) were dispensed AVs (48 oseltamivir, 1 amantadine) during Week 7.

Recruits
- Seven laboratory positive influenza case among Navy (2) and Marine Corps (5) recruits during Week 7 at NMC San Diego (4), James A Lovell FHCC (2), and NH Beaufort (1).
- Six AVs (all oseltamivir) were dispensed to recruits during 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 Positive</td>
<td>64</td>
<td>17</td>
<td>12</td>
</tr>
<tr>
<td>AV Prescriptions</td>
<td>231</td>
<td>88</td>
<td>8</td>
</tr>
</tbody>
</table>

Children
- The rate of laboratory positive influenza cases (per 100,000) has seen an increase among children ages 0-4 years (15.2) and a decrease among children ages 5-17 (13.6).
- The rate of AV prescriptions (per 100,000) is highest among children 0-4 years (7.7), followed by children 5-17 years (5.4).
- 58 laboratory positive influenza cases were identified among children during Week 7, below baseline estimates and a decrease over the week prior.
  - One case was identified from an inpatient setting; all others were identified from outpatient settings in 17 different facilities, most frequently NH Camp Pendleton (13). There were 19 cases among children ages 0-4 and 39 among children ages 5-17.
  - There were 91 AVs dispensed to children during Week 7, above baseline estimates for children.
  - This week’s cases (all oseltamivir) include 35 children ages 0-4 year and 56 children ages 5-17 years. NMC San Diego (43) dispensed the most AVs. Four were dispensed in an inpatient setting.

In the News
- A study published on February 21, 2016 in Clinical Infectious Diseases reported that the high-dose flu vaccine is more protective among seniors than the standard dose vaccine. Details
- The CDC reported that during Week 6, the proportion of outpatient visits for ILI was 3.1%, above the national baseline of 2.1%. Details