Overall Summary
Laboratory, pharmacy, and influenza-like-illness trends are below baseline. Impact for active duty personnel remains minimal and vaccination continues to increase week to week.

Key Findings

Influenza Activity and Surveillance

Laboratory
Ten laboratory positive influenza cases were identified during Week 49, below baseline. Details

Antivirals (AVs)
54 AV medications were dispensed in Week 49, below baseline. Details

Influenza-Like Illness (ILI)
Overall, 4.3% of outpatient medical encounters were due to ILI, below baseline. Details

Severity Indicators

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

Coinfections
Three bacterial coinfections have been identified among laboratory-positive cases this season. Details

Select Populations

Active Duty and Recruits
In Week 49, one laboratory positive case and 13 dispensed AV prescriptions were among active duty personnel. There was one AV prescription dispensed to recruits. Details

NHRC reports febrile respiratory illness (FRI) rates were at or below expected value during Week 48 at MCRD San Diego, MCRD Parris Island, and NRTC Great Lakes. Details

Children
The rate of influenza positive laboratory cases and influenza specific AV prescriptions in children remains low. Details

Active Duty Vaccination Rates
Navy: 87.3%
Marine Corps: 82.9%
US Fleet Forces: 92.4%

View Table
Data source: MRRS, current as of 16 Dec 2015.

Prepared by the EpiData Center (email; web)
Estimated Burden
The overall burden of influenza in the DON is estimated by combining three major sources of data: certified laboratory results, antiviral pharmacy transactions, and medical encounters with influenza-specific diagnoses.
- This week, there were an estimated 64 DON cases identified in one or more data sources; pharmacy captured the highest proportion of cases (84.4%). No cases from this week were identified in all three sources.
- Since Week 40, there have been 546 DON cases identified in at least one of the three data sources.

Laboratory Cases
- Ten laboratory positive influenza cases were identified during Week 49 (five type A, four type B, one A&B), below baseline estimates.
- Five cases during Week 49 were identified at NMC San Diego and one each at NH Pensacola, AMC Eisenhower-Ft. Gordon, 99th Med Group-O’Callaghan Hospital, NH Camp Lejeune and AMC Madigan-Lewis.
- Since Week 40, 68 laboratory positive cases were identified among DON beneficiaries. Top facilities thus far: NMC San Diego (11), NH Lemoore (10), NH Camp Lejeune (8), and NHC Hawaii (7).

Specimen Positivity
- 2.4% of all influenza specimens tested during Week 49 were positive, lower than last season (18.3%).
- When grouped by parent facility, 8 (28.6%) locations tested more than ten specimens; three of these facilities testing more than ten specimens reported positive results (NMC San Diego, NH Pensacola, and NH Camp Lejeune).

<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 47</td>
<td>2 (50.0)</td>
<td>1 (25.0)</td>
<td>1 (25.0)</td>
<td>4</td>
</tr>
<tr>
<td>Week 48</td>
<td>9 (100.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>9</td>
</tr>
<tr>
<td>Week 49</td>
<td>3 (30.0)</td>
<td>0 (0.0)</td>
<td>7 (70.0)</td>
<td>10</td>
</tr>
<tr>
<td>Season</td>
<td>49 (67.1)</td>
<td>12 (16.4)</td>
<td>12 (16.4)</td>
<td>73</td>
</tr>
</tbody>
</table>

Antiviral Prescriptions
- 54 antiviral prescriptions were dispensed during Week 49, below baseline estimates.
- Most common facilities this week: NMC San Diego (12), NH Pensacola (6), NH Twentynine Palms (5), and NMC Portsmouth (5).
- Since Week 40, the majority (98.3%) of prescriptions were for Oseltamivir.

<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>Week 49</td>
<td>0 (0.0)</td>
<td>54 (100.0)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>54</td>
</tr>
<tr>
<td>Season</td>
<td>6 (1.7)</td>
<td>347 (98.3)</td>
<td>0 (0.0)</td>
<td>0 (0.0)</td>
<td>353</td>
</tr>
</tbody>
</table>

* Cumulative baseline calculated as a weighted average over three years and may not represent whole numbers.
Influenza-Like Illness (ILI)
- The percent of medical encounters that included an ILI diagnosis during Week 48 (lagged due to data availability):
  - 4.3% of outpatient (below baseline)
  - 13.8% of ER (below baseline).
- When grouped by parent facility, 10 DON facilities (35.7%) experienced an increase in the proportion of outpatient ILI visits during Week 48; one facility experienced an increase above 25% (NH Sigonella).

Severity Indicators

Inpatient Laboratory
- One (10%) laboratory case during Week 49 was in the inpatient setting.
- This week’s inpatient case was over the age of 45 years, identified as Type B positive at NMC San Diego.

Inpatient Pharmacy
- One (1.9%) AV prescription during Week 49 was in the inpatient setting (below baseline).
- This week’s inpatient case was over the age of 45 and dispensed oseltamivir at NMC San Diego.

Influenza-AssOCIated Hospitalization Reports
- The inpatient laboratory case this week was not reported to DRSi; only one influenza-associated hospitalization has been reported this season during Week 44.

Bacterial Coinfections
- Three bacterial coinfections have been identified since Week 40, accounting for 4.4% of all laboratory positive cases.
- No coinfections were identified during Week 49.

<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=3)</td>
<td>1 (33.3)</td>
</tr>
<tr>
<td>Cumulative Baseline (n=7.8)</td>
<td>2.0 (25.5)</td>
</tr>
</tbody>
</table>

* Cumulative baseline calculated as a weighted average over three years and may not represent whole numbers.
Active Duty
- One laboratory positive influenza case was identified among active duty Navy service members during Week 49 in the outpatient setting at AMC Madigan-Lewis (type A).
  - No vaccination record was available for this service member.
- Fourteen active duty service members (11 Navy, 3 Marines) were dispensed oseltamivir during Week 49; three of these were at NMC San Diego.

Recruits
- There were no laboratory positive influenza cases among recruits in Week 49.

Children
- The rate of laboratory positive influenza cases and AV prescriptions remains low for all age groups.
- Five laboratory positive influenza cases were identified among children during Week 49, below baseline estimates for children.
  - One child was between the ages 0-4 in an outpatient setting at NH Camp Lejeune. Four children were between the ages of 5-17 in an outpatient setting at NMC San Diego.
- There were 11 AVs dispensed to children during Week 49, below baseline estimates for children.
  - This week’s cases were all dispensed oseltamivir in outpatient settings with four children ages 0-4 and seven ages 5-17; three of these cases were from NH Twentynine Palms.

In the News
- The CDC reports that US flu activity increased slightly last week although flu markers at the national level are below baseline. Details
- H5N6 avian flu outbreaks have been reported in China and Vietnam while two new outbreaks have been reported in France, impacting the country’s foie gras industry. Details