Influenza Situation Report: 2015-2016 Season
Department of the Navy
Week 48 (29 November to 5 December 2015)

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

Key Findings

Influenza Activity and Surveillance

Laboratory
Nine laboratory positive influenza cases were identified during Week 48, below baseline. Details

Antivirals (AVs)
50 AV medications were dispensed in Week 48, below baseline. Details

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

Severity Indicators

Inpatient
This week, zero inpatient laboratory positive cases and three inpatient antiviral prescriptions were 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 48, two laboratory positive cases and 10 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 47 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: 82.3%
Marine Corps: 66.9%
US Fleet Forces: 88.0%

View Table
Data source: MRRS, current as of 08 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 71 DON cases identified in one or more data sources; pharmacy captured the highest proportion of cases (62.1%). One case from this week was identified in all three sources.
- Since Week 40, there have been 485 DON cases identified in at least one of the three data sources.

**Laboratory Cases**
- Nine laboratory positive influenza cases were identified during Week 48 (four type A, five type B, one nonspecific), below baseline estimates.
- Three cases during Week 48 were identified at NH Lemoore and one each at NMC San Diego, NH Jacksonville, ACH Blanchfield, NH Camp Lejeune, Ft. Belvoir, and NH Sigonella.
- Since Week 40, 57 laboratory positive cases were identified among DON beneficiaries. Top facilities thus far: NH Lemoore (10), NH Camp Lejeune (7), NHC Hawaii (7) and NMC San Diego (6).

**Specimen Positivity**
- 2.3% of all influenza specimens tested during Week 48 were positive, lower than last season (20.8%).
- When grouped by parent facility, 11 (39.3%) locations tested more than ten specimens; three of these facilities testing more than ten specimens reported positive results (NMC San Diego, NH Camp Lejeune, and NMC San Diego).

**Antiviral Prescriptions**
- 50 antiviral prescriptions were dispensed during week 48, below baseline estimates.
- Most common facilities this week: NMC San Diego (9), NH Camp Pendleton (5), NHC Pensacola (3), and NHC Corpus Christi (3).
- Since Week 40, the majority (98.0%) of prescriptions were for Oseltamivir.

<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 46</td>
<td>6 (85.7)</td>
<td>1 (14.3)</td>
<td>0 (0.0)</td>
<td>7</td>
</tr>
<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>Season</td>
<td>46 (74.2)</td>
<td>11 (17.7)</td>
<td>5 (8.1)</td>
<td>62</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Antiviral Medications Dispensed to DON Beneficiaries, n (%)</th>
</tr>
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<tbody>
<tr>
<td>Amantadine</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Week 48</td>
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<tr>
<td>Season</td>
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</tbody>
</table>
Syndromic Surveillance

Influenza-Like Illness (ILI)
- The percent of medical encounters that included an ILI diagnosis during Week 47 (lagged due to data availability):
  - 4.3% of outpatient (slightly above baseline)
  - 13.7% of ER (below baseline).
- When grouped by parent facility, 25 DON facilities (89.3%) experienced an increase in the proportion of outpatient ILI visits during Week 47; three facilities experienced an increase above 50% (NH Naples, NH Beaufort, and James A Lovell FHCC).

Severity Indicators

Inpatient Laboratory
- None of the 29 specimens tested for influenza in the inpatient setting were positive this week.

Inpatient Pharmacy
- Three (6.0%) AV prescriptions during Week 48 were in the inpatient setting (above baseline).
- This week’s inpatient cases were dispensed oseltamivir; they include one recruit at NH Beaufort and two spouses between the ages of 18-44 at NH Camp Pendleton.

Influenza-Associated Hospitalization Reports
- There were no influenza-associated hospitalizations reported to DRSi this week; only one has been reported since Week 40.

Bacterial Coinfections
- Three bacterial coinfections have been identified since Week 40, accounting for approximately 5% of all laboratory positive cases.
- One coinfection was identified during Week 48 at NH Lemoore. View Table

<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=5.5)</td>
<td>1.5 (27.3)</td>
</tr>
</tbody>
</table>

* Cumulative baseline calculated as a weighted average over three years and may not represent whole numbers.
Active Duty
- Two laboratory positive influenza cases were identified among active duty Navy service members during Week 48 in the outpatient setting at NH Lemoore and NH Jacksonville (both Type B).
  - Both received an influenza vaccine more than 14 days prior to infection.
- Ten active duty service members (5 Navy, 5 Marines) were dispensed Oseltamivir during Week 48; 2 of these were at NH Camp Pendleton.

Recruits
- There were no laboratory positive influenza cases among recruits in Week 48.
- One AV was dispensed to a recruit during Week 48 at NH Beaufort.

<table>
<thead>
<tr>
<th>Number of DON Active Duty and Recruit Cases since Week 40, 2015-2016 Season</th>
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<tbody>
<tr>
<td>Case Type</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Laboratory Positive</td>
</tr>
<tr>
<td>AV Prescriptions</td>
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</tbody>
</table>

Children
- The rate of laboratory positive influenza cases and AV prescriptions remains low for all age groups.
- Two laboratory positive influenza cases were identified among children during Week 48, below baseline estimates for children.
  - Both children were between the ages 5-17 in outpatient settings at Ft. Belvoir and NH Lemoore.
- There were nine AVs dispensed to children during Week 48, below baseline estimates for children.
  - This week’s cases were all dispensed oseltamivir in outpatient settings with three children ages 0-4 and six ages 5-17; three of these cases were from NMC San Diego.

In the News
- For the third week in a row, US influenza activity increased slightly. Puerto Rico, Oklahoma, and South Carolina reported moderate ILI levels. [Details]
- Avian flu outbreaks have been identified in France, Germany, and Ghana; heightened US surveillance identified H5 genetic material in a duck in Oregon. [Details]
- New study finds preexisting flu antibodies impede broad immune response. [Details]