Influenza Activity and Surveillance

Laboratory
93 laboratory positive influenza cases were identified during Week 5, below baseline. Details

Antivirals (AVs)
145 AV medications were dispensed in Week 5, below baseline. Details

Influenza-Like Illness (ILI)
Overall, 4.6% of outpatient medical encounters were due to ILI, below baseline. Details

Severity Indicators

Inpatient
This week, there were five inpatient laboratory positive cases and 10 inpatient antiviral prescriptions. There were six influenza cases reported to DRSi; three were hospitalized. Details

Coinfections
There were four respiratory and two non-respiratory bacterial coinfections identified among laboratory positive cases during Week 5. Details

Select Populations

Active Duty and Recruits
In Week 5, there were 13 laboratory positive cases and 24 AV prescriptions dispensed to active duty personnel. Among recruits, there were five laboratory positive cases and two 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 and influenza specific AV prescriptions in children nearly doubled from the week prior. Details

Overall Summary
There was a notable increase in laboratory confirmed influenza cases, influenza-specific antiviral prescriptions, and bacterial coinfections during Week 5, especially at NMC San Diego and among children under 18 years. Six influenza cases were reported to DRSi during Week 5.

Active Duty Vaccination Rates
Navy: 93.6%
Marine Corps: 94.6%
US Fleet Forces: 98.3%

View Table
Data source: MRRS, current as of 08 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 5, there were 198 DON cases identified in one or more data sources; pharmacy captured the highest proportion of cases (73.2%). 11 cases were identified in all three sources.
- Since Week 40, there have been 1,591 DON cases identified in at least one of the three data sources.

**Laboratory Cases**
- 93 laboratory positive influenza cases were identified during Week 5 (46 type A, 46 type B; 1 type A & B); below baseline estimates.
- Most common facilities this week: NMC San Diego (32), NH Camp Pendleton (8), and NH Yokosuka (7).
- Since Week 40, 418 laboratory positive cases were identified among DON beneficiaries. Top facilities thus far: NMC San Diego (128), NH Bremerton (28), NH Lemoore (26), NH Camp Pendleton (26).

**Specimen Positivity**
- 15.0% of all influenza specimens tested during Week 5 were positive, lower than same time last season (24.3%) but the highest so far this season.
- When grouped by parent facility, 14 (50.0%) locations tested more than ten specimens. NH Yokosuka (30.4%), James A Lovell FHCC (28.6%), WRNMMC (28.6%) experienced the highest positivity.

**Antiviral Prescriptions**
- 145 antiviral prescriptions were dispensed during Week 5.
- Most common facilities this week: NMC San Diego (47) and NH Camp Pendleton (17).
- Since Week 40, the majority (98.6%) of prescriptions were for Oseltamivir.
Syndromic Surveillance

Influenza-Like Illness (ILI)
- The percent of medical encounters that included an ILI diagnosis during Week 4 (lagged due to data availability):
  - 4.6% of outpatient encounters (below baseline)
  - 13.8% of ER admissions (below baseline)
- When grouped by parent facility, 14 DON facilities (50.0%) experienced an increase in the proportion of outpatient ILI visits during Week 4; two facilities experienced an increase above 25% (NHC Quantico and NH Beaufort).

Inpatient Laboratory
- Five influenza positive laboratory cases (14.6% of all laboratory cases) were identified in the inpatient setting during Week 5.
- Four cases were identified at NMC San Diego and one at NH Camp Pendleton. There were two active duty cases, and one case, a retiree, with influenza type B.

Inpatient Pharmacy
- 10 influenza AVs (6.9% of all influenza AVs) were prescribed in the inpatient setting during Week 5, above baseline (6.1%) (fifth consecutive week above baseline).
- Eight inpatient cases were from NMC San Diego: one active duty service member; five family members, including three children; and four other sponsors.

Influenza-Associated Hospitalization Reports
- There were six influenza cases report to DRSi during Week 5. There were four reports of influenza-associated hospitalization, one of which was hospitalized, and two novel influenza, both hospitalized.

Bacterial Coinfections
- Six coinfections were identified during Week 5; three outpatient upper respiratory Streptococcus infections, one inpatient lower respiratory Staphylococcus infection, and two nonrespiratory infections (Escherichia and Prevotella). Details
- Though overall case counts remain low, the proportion of lower respiratory specimens is higher than expected.

<table>
<thead>
<tr>
<th>Proportion Bacterial Coinfections by Respiratory Source and Percent of Laboratory Positive Cases with a Bacterial Coinfections since Week 40, 2015-2016 Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coinfections by Respiratory Source, n (%)</td>
</tr>
<tr>
<td>Upper Respiratory</td>
</tr>
<tr>
<td>Current Season (n=16)</td>
</tr>
<tr>
<td>Cumulative Baseline (n=71.2)</td>
</tr>
</tbody>
</table>

* Cumulative baseline calculated as a weighted average over three years and may not represent whole numbers.
Active Duty
- 13 laboratory positive influenza cases were identified among active duty Navy (10) and Marine Corps (3) service members during Week 5; these were identified at NMC San Diego (4), NH, Camp Pendleton (2), AMC Brooke-SAMMC-Sam Houston (2), and five different facilities (1 each).
- 24 active duty service members (18 Navy, 6 Marines) were dispensed AVs (all oseltamivir) during Week 5.

Recruits
- Five laboratory positive influenza case among recruits (all Navy) during Week 5 at James A Lovell FHCC (4) and 81st Med Grp-Keesler (1).
- Two AVs (both oseltamivir) were dispensed to recruits during Week 5 at 81st Med Grp-Keesler.

<table>
<thead>
<tr>
<th>Case Type</th>
<th>Active Duty</th>
<th>Navy</th>
<th>Marine Corps</th>
<th>Recruits</th>
<th>Navy</th>
<th>Marine Corps</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory Positive</td>
<td></td>
<td>35</td>
<td>13</td>
<td>8</td>
<td>23</td>
<td>79</td>
<td></td>
</tr>
<tr>
<td>AV Prescriptions</td>
<td></td>
<td>154</td>
<td>69</td>
<td>6</td>
<td>72</td>
<td>201</td>
<td></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 (13.6) and 5-17 (11.2).
- The rate of AV prescriptions (per 100,000) is highest this week among children 0-4 years (4.4), followed by children 5-17 years (3.5) and adults 45+ (3.2).
- 48 laboratory positive influenza cases were identified among children during Week 5, below baseline estimates but nearly double the week prior.
  - All but one were identified from outpatient settings in 15 different facilities; the inpatient case was from NMC San Diego. There were 17 cases among children ages 0-4 and 31 among children ages 5-17.
  - There were 56 AVs dispensed to children during Week 5, below baseline estimates for children but nearly double the week prior.
  - This week’s cases (all oseltamivir) include 20 children ages 0-4 year and 36 children ages 5-17 years. NMC San Diego (18) dispensed the most AVs. Three were dispensed in inpatient settings.

In the News
- WHO issues a Risk Assessment for Seasonal Influenza A(H1N1) pdm09. Details
- Late start to Northern Hemisphere flu season feels strong H1N1 impact. Details