Influenza Activity and Surveillance

**Laboratory**
- Laboratory-positive influenza cases were below baseline.
- 82 laboratory cases identified. [Details]

**Antivirals (AVs)**
- Dispensed AVs were below baseline levels.
- 140 AVs dispensed. [Details]

**Influenza-Like Illness (ILI)**
- ILI outpatient encounters were slightly below baseline at 5.0% of outpatient medical encounters. [Details]

Severity Indicators

**Inpatient**
- 5 inpatient laboratory-positive cases identified.
- 12 inpatient AVs dispensed.
- No influenza cases reported to DRSi. [Details]

**Coinfections**
- 7 bacterial coinfections among laboratory-positive cases were identified; 2 are from respiratory specimens.
- One rapid strep test was identified among influenza cases. [Details]

Select Populations

**Active Duty**
- 16 laboratory-positive cases identified.
- 28 AVs dispensed. [Details]

**Recruits**
- No laboratory-positive cases identified.
- One AV dispensed. [Details]
- Febrile respiratory illness rate elevated at MCRD Parris Island during Week 51. [NHRC Report]

**Children**
- Laboratory cases among children were below baseline levels; 25 laboratory-positive cases among children were identified. [Details]

Active Duty Vaccination Rates

Navy ....................... 91.7%
Marine Corps ............ 91.8%
US Fleet Forces .......... 94.6%

View Table
Data source: MRRS, current as of 02 Jan 2017.

Overall Summary

Influenza activity for overall laboratory-positive cases and dispensed antivirals remains below baseline levels. However, both inpatient laboratory-identified cases and inpatient dispensed antivirals are above baseline levels.

Key Findings

Influenza Situation Report: 2016-2017 Season
Department of the Navy
Week 52 (25 December to 31 December 2016)
Influenza Activity and Surveillance

Overall Burden*
- The weekly burden of influenza in the DON was 167 cases, identified in one or more data sources.
- Pharmacy captured the highest proportion of cases (82.6%). Eight cases were identified in all three sources.
- 1,166 DON cases identified since Week 40.

*Note: 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.

Laboratory Cases
- Laboratory-positive cases were below baseline with 82 cases.
- Influenza case types: A(72), B(8), A and B (1), and unknown (1).
- Facilities with the greatest number of cases:
  - Current week: NH Bremerton (12), NMC San Diego (9), and NH Camp Pendleton (8).
  - Season: NMC San Diego (51), NH Bremerton (39), and NH Camp Lejeune (32).

Specimen Positivity
- 15.0% of all influenza specimens tested during Week 52 were positive, above last season (6.5%).
- When grouped by parent facility, 11 (39.3%) locations tested more than ten specimens.

<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 50</td>
<td>33(50.0)</td>
<td>6(9.1)</td>
<td>27(40.9)</td>
<td>66</td>
</tr>
<tr>
<td>Week 51</td>
<td>59(63.4)</td>
<td>7(7.5)</td>
<td>27(29.0)</td>
<td>93</td>
</tr>
<tr>
<td>Week 52</td>
<td>57(67.9)</td>
<td>8(9.5)</td>
<td>19(22.6)</td>
<td>84</td>
</tr>
<tr>
<td>Season</td>
<td>250(64.3)</td>
<td>33(8.5)</td>
<td>106(27.2)</td>
<td>389</td>
</tr>
</tbody>
</table>

Antiviral Prescriptions
- 140 AVs were dispensed during Week 52, below baseline levels.
- AVs dispensed: Amantadine (2), and Oseltamivir (138).
- Facilities dispensing most AVs this week: NH Bremerton (25), NH San Diego (18), and NH Pensacola (13).
Syndromic Surveillance

Influenza-Like Illness (ILI) *
- The percentage of medical encounters that included an ILI diagnosis:
  - 5.0% of outpatient encounters (slightly below baseline).
  - 14.1% of ER admissions (below baseline).
- 24 DON facilities (85.7%) reported an increase in the proportion of outpatient ILI visits from the prior week:
  - 11 facilities had an increase of 25% or higher.
  - NH Guantanamo Bay (184.0%) had the greatest increase in the percent of ILI visits from 0.45% last week to 1.27% this week.

*For Week 51, lagged due to data availability

Severity Indicators

Inpatient Laboratory
- 5 inpatient laboratory cases were identified (6.1% of all laboratory cases), above baseline levels.
- This week’s laboratory cases were for sponsors (4) and a dependent over the age of 18(1), all at NMC San Diego.

Inpatient Pharmacy
- The percentage of inpatient AVs (8.6% of all influenza AVs) was above baseline (4.6%); 12 inpatient AVs were dispensed.
- AVs were most frequently dispensed at NMC San Diego (7), WRNMMC (3) and 60th Med Grp- Travis (2).
- AVs were dispensed to non-active duty sponsors (7), spouses (3), active duty service members (2).

Influenza-Associated Hospitalization Reports
- No inpatient laboratory cases were reported to DRSi this week.

Bacterial Coinfections
- Seven coinfections were identified during the week.
- Two coinfections were from respiratory specimens; Coccidioides and Streptococcus. Details
- One positive rapid strep test was identified among influenza cases.

| Bacterial Coinfections by Specimen Source and as a Percent of Laboratory Cases, 2016-2017 Season |
|-----------------------------------|----------------|----------------|----------------|----------------|
|                                   | Coinfections by Specimen Source, n (%) | Lab Cases with Bacterial Coinfection (%) |
|                                   | Upper Respiratory | Lower Respiratory | Non-Respiratory |                  |
| Current Season (n=15)             | 3(20.0)           | 3(20.0)          | 9(60.0)         | 3.8             |
| Cumulative Baseline* (n=16.2)     | 6(37.1)           | 1.7(10.3)        | 8.5(52.6)       | 3.4             |

* Cumulative baseline calculated as a weighted average over three years and may not represent whole numbers.
Note: Table does not include Group A Streptococcus identified from rapid diagnostic tests.

< Back to Key Findings
Prepared by the EpiData Center (email; web)
Navy and Marine Corps Public Health Center
NMCPHC-EDC-TR-3-2017
Week 52: Page 3 of 4
Active Duty
- 16 laboratory-positive influenza cases were identified among active duty service members, 12 Navy and 4 Marine Corps (13 Type A, 1 Type B, 1 unknown type).
  - Vaccination records were available for eleven of these service members.
  - The cases were identified at NH Bremerton (5), AMC Tripler-Shafter (2) and 9 other facilities with one case each.
  - 28 active duty service members (23 Navy, 5 Marine Corps) were dispensed AVs (all Oseltamivir).

Recruits
- No laboratory-positive influenza cases were identified among recruits.
- One AV (Oseltamivir) was dispensed to a Navy recruit at James A Lovell FHCC.

Number of DON Active Duty and Recruit Cases since Week 40, 2016-2017 Season

<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</td>
<td>32</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Antiviral</td>
<td>93</td>
<td>33</td>
<td>1</td>
</tr>
</tbody>
</table>

Children
- Laboratory cases were below baseline levels; 25 laboratory-positive influenza cases were identified.
  - No cases were identified from an inpatient setting.
  - Outpatient cases were identified most frequently at AMC Tripler-Shafter (4), NH Bremerton (4), and NH Camp Pendleton (4).
  - AVs dispensed to children were below baseline levels; 35 AVs were dispensed (all Oseltamivir).
  - One AV was dispensed in the inpatient setting.
  - Locations with most AVs dispensed: NH Bremerton (9), NMC San Diego (5) and NH Camp Pendleton (4).

In the News
- The CDC reports that during week 51 flu activity continues to rise in the United States and outpatient encounters for influenza-like illness (ILI) remained above baseline. [Details]
- Seasonal influenza is estimated to have an annual economic burden of $1.2 billion for the Department of Veteran’s Affairs (VA) population, according to a study published in PLOS ONE. [Details]