Overall Summary

Influenza activity continues to increase from the previous weeks. Overall laboratory-positive cases and dispensed antivirals, however, remain below baseline levels. Of note this week, inpatient dispensed antivirals were above baseline levels.

Key Findings

Influenza Activity and Surveillance

Laboratory
- Laboratory-positive influenza cases were below baseline.
- 77 laboratory cases identified. Details

Antivirals (AVs)
- Dispensed AVs were below baseline levels.
- 107 AVs dispensed. Details

Influenza-Like Illness (ILI)
- ILI outpatient encounters were slightly below baseline at 4.4% of outpatient medical encounters. Details

Severity Indicators

Inpatient
- One inpatient laboratory-positive case identified.
- Nine inpatient AVs dispensed.
- No influenza cases reported to DRSi. Details

Coinfections
- Two bacterial coinfections among laboratory-positive cases were identified.
- One rapid strep test was identified among influenza cases. Details

Select Populations

Active Duty
- Seven laboratory-positive cases identified.
- 11 AVs dispensed. Details

Recruits
- No laboratory-positive cases identified.
- One AV dispensed. Details
- Febrile respiratory illness rate elevated at MCRD Parris Island. NHRC Report

Children
- Laboratory cases among children were below baseline levels; 33 laboratory-positive cases among children were identified. Details

Active Duty Vaccination Rates

Navy ...................... 91.1%
Marine Corps .......... 91.2%
US Fleet Forces ....... 94.0%

View Table
Data source: MRRS, current as of 27 Dec 2016.
Overall Burden*
- The weekly burden of influenza in the DON was 156 cases, identified in one or more data sources.
- Pharmacy captured the highest proportion of cases (68.6%). Eight cases were identified in all three sources.
- 954 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 77 cases.
- Influenza case types: A(69), B(7), A and B (1).
- Facilities with the greatest number of cases:
  - Current week: NH Bremerton (16), NMC San Diego (11), NH Camp Lejeune (5), NMC Portsmouth (5), and NH Oak Harbor (5).
  - Season: NMC San Diego (41), NH Camp Lejeune (29), and NH Bremerton (26).

Specimen Positivity
- 13.4% of all influenza specimens tested during Week 51 were positive, above last season (3.3%).
- When grouped by parent facility, 12 (42.9%) 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 49</td>
<td>18(52.9)</td>
<td>3(8.8)</td>
<td>13(38.2)</td>
<td>34</td>
</tr>
<tr>
<td>Week 50</td>
<td>33(50.8)</td>
<td>5(7.7)</td>
<td>27(41.5)</td>
<td>65</td>
</tr>
<tr>
<td>Week 51</td>
<td>54(50.8)</td>
<td>4(5.1)</td>
<td>21(26.6)</td>
<td>79</td>
</tr>
<tr>
<td>Season</td>
<td>188(64.8)</td>
<td>19(6.6)</td>
<td>83(28.6)</td>
<td>290</td>
</tr>
</tbody>
</table>

Antiviral Prescriptions
- 107 AVs were dispensed during Week 51, below baseline levels.
- AVs dispensed: Amantadine (1), and Oseltamivir (104).
- Facilities dispensing most AVs this week: NH Bremerton (19), NH Oak Harbor (12), NMC Portsmouth (10), NMC San Diego (9), and NH Pensacola (8).
Influenza-Like Illness (ILI) *

- The percentage of medical encounters that included an ILI diagnosis:
  - 4.4% of outpatient encounters (slightly below baseline).
  - 12.9% of ER admissions (below baseline).
- 18 DON facilities (64.3%) reported an increase in the proportion of outpatient ILI visits from the prior week.
  - Five facilities had an increase of 25% or higher.
  - Naval Health Clinic New England (35.2%) had the greatest increase in the percent of ILI visits.

*For Week 50, lagged due to data availability

Severity Indicators

Inpatient Laboratory

- One inpatient laboratory case was identified (1.3% of all laboratory cases).
- This week’s laboratory case was over the age of 45, a Navy retiree, identified as Type A positive at 81st Med Grp—Kessler.

Inpatient Pharmacy

- The percentage of inpatient AVs (8.4% of all influenza AVs) was above baseline (4.7%).
- AVs were most frequently dispensed at NMC San Diego (3), and NH Camp Pendleton (2).
- AVs were dispensed to spouses (4), active duty service members (2), non-active duty sponsors (2), and a child (1).

Influenza-Associated Hospitalization Reports

- The inpatient laboratory case this week was not reported to DRSi.

Bacterial Coinfections

- Two coinfections were identified during the week.
- Coinfections were from non-respiratory specimens; Enterococcus (1), and Staphylococcus (1). Details
- One positive rapid strep test from 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 BacterialCoinfection (%) |
| Upper Respiratory | Lower Respiratory | Non-Respiratory |
| Current Season (n=8) | 2(25.0) | 2(25.0) | 4(50.0) | 2.6 |
| Cumulative Baseline* (n=12.2) | 4.7(38.4) | 1.3(11.0) | 6.2(50.7) | 3.2 |

* 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.
Active Duty
- Seven laboratory-positive influenza cases were identified among active duty service members, six Navy and one Marine Corps (6 Type A and 1 Type B).
  - Vaccination records were available for five of these service members.
- The cases were identified at NMC San Diego (2), AMC Brooke-SAMMC-Sam Houston (1), Ft Belvoir Community Hosp-FBC (1), NH Jacksonville (1), NH Okinawa (1), and NMC Portsmouth (1).
- 11 active duty service members (7 Navy, 4 Marine Corps) were dispensed AVs (1 Amantadine, 10 Oseltamivir).

Recruits
- No laboratory-positive influenza cases were identified among recruits.
- One AV (Oseltamivir) was dispensed to a Marine Corps recruit at NH Beaufort.

<table>
<thead>
<tr>
<th>Case Type</th>
<th>Active Duty</th>
<th>Navy</th>
<th>Marine Corps</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Laboratory</td>
<td></td>
<td>20</td>
<td>6</td>
<td>26</td>
</tr>
<tr>
<td>Antiviral</td>
<td></td>
<td>68</td>
<td>28</td>
<td>99</td>
</tr>
</tbody>
</table>

Children
- Laboratory cases were below baseline levels; 33 laboratory-positive influenza cases were identified.
  - No cases were identified from an inpatient setting.
  - Outpatient cases were identified most frequently at NH Bremerton (10), NH Camp Lejeune (4), and NH Oak Harbor (3).
- AVs dispensed to children were below baseline levels; 37 AVs were dispensed (all Oseltamivir).
  - One AV was dispensed in the inpatient setting.
  - Locations with most AVs dispensed: NH Bremerton (12), NH Oak Harbor (5) and NMC Portsmouth (4).

<table>
<thead>
<tr>
<th>Age</th>
<th>Laboratory</th>
<th>Antiviral Prescriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cases</td>
<td>Rate (per 100,000)</td>
</tr>
<tr>
<td>0-4 years</td>
<td>11</td>
<td>9.2</td>
</tr>
<tr>
<td>5-17 years</td>
<td>22</td>
<td>7.9</td>
</tr>
</tbody>
</table>

In the News
- CDC reports that flu activity continues to rise slowly in the United States, with outpatient encounters for influenza-like illness (ILI) climbing above baseline. Details