Influenza Activity and Surveillance

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

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

**Influenza-Like Illness (ILI)**
- ILI outpatient encounters were below baseline at 2.9% of outpatient medical encounters. [Details]

Severity Indicators

**Inpatient**
- One inpatient laboratory-positive case identified.
- Two inpatient AVs dispensed.
- No influenza cases reported to DRSi. [Details]

**Coinfections**
- Five bacterial coinfections among laboratory-positive cases were identified; one lower-respiratory, two upper-respiratory and one non-respiratory.
- No positive rapid strep tests were identified among influenza cases. [Details]

Select Populations

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

**Recruits**
- No laboratory-positive cases identified.
- No AVs dispensed. [Details]

**Children**
- Laboratory cases among children were below baseline levels with 1 laboratory-positive case identified. [Details]

Overall Summary

Influenza activity in the DON is minimal. Laboratory positive cases and dispensed antivirals are below baseline levels. Type B was the most prevalent influenza strain identified.
Overall Burden*

- The weekly burden of influenza in the DON was 13 cases, identified in one or more data sources.
- Pharmacy captured the highest proportion of cases (61.5%).
- No cases were identified in all three sources.
- 9,833 DON cases have been 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 levels with 6 cases.
- Influenza case types: A (2), B (4), and type unknown (0).
- Facilities with the greatest number of cases:
  - Current week: NMC San Diego (3), NH Jacksonville (2) and 56th Med Grp-Luke (1).
  - Season: NH Camp Lejeune (593), NH Jacksonville (334), and NMC San Diego (308).

Specimen Positivity

- 2.9% of all influenza specimens tested during Week 22 were positive, below last season (8.0%).
- When grouped by parent facility, 4 (14.3%) 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 20</td>
<td>12(54.5)</td>
<td>8(36.4)</td>
<td>2(9.1)</td>
<td>22</td>
</tr>
<tr>
<td>Week 21</td>
<td>8(57.1)</td>
<td>3(21.4)</td>
<td>3(21.4)</td>
<td>14</td>
</tr>
<tr>
<td>Week 22</td>
<td>3(50.0)</td>
<td>0(0.0)</td>
<td>3(50.0)</td>
<td>6</td>
</tr>
<tr>
<td>Season</td>
<td>2,943(69.0)</td>
<td>351(8.2)</td>
<td>972(22.8)</td>
<td>4,266</td>
</tr>
</tbody>
</table>

Antiviral Prescriptions

- 8 AVs were dispensed (below baseline).
- AVs dispensed: All Oseltamivir.
- Facilities dispensing the most AVs this week: NMC San Diego (2) and 6 other facilities with 1 AV each.

<table>
<thead>
<tr>
<th>Antiviral Medications Dispensed to DON Beneficiaries, n (%)</th>
<th>Amantadine</th>
<th>Oseltamivir</th>
<th>Rimantadine</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 20</td>
<td>2(5.3)</td>
<td>36(94.7)</td>
<td>0(0.0)</td>
<td>38</td>
</tr>
<tr>
<td>Week 21</td>
<td>0(0.0)</td>
<td>25(100.0)</td>
<td>0(0.0)</td>
<td>25</td>
</tr>
<tr>
<td>Week 22</td>
<td>0(0.0)</td>
<td>8(100.0)</td>
<td>0(0.0)</td>
<td>8</td>
</tr>
<tr>
<td>Season</td>
<td>44(0.8)</td>
<td>5,761(99.2)</td>
<td>1(0.0)</td>
<td>5,806</td>
</tr>
</tbody>
</table>
Influenza-Like Illness (ILI) *
- The percentage of medical encounters that included an ILI diagnosis:
  - 2.9% of outpatient encounters (slightly below baseline).
  - 10.1% of ER encounters (below baseline).
- 11 DON facilities (39.3%) reported an increase in the proportion of outpatient ILI visits from the prior week.
  - No facilities had an increase of 25% or higher.
  - NHC Annapolis had the greatest increase (21.9%) in the percentage of ILI visits.

*For Week 21, lagged due to data availability.

Severity Indicators

Inpatient Laboratory
- 1 inpatient laboratory case was identified in a spouse at NH Jacksonville.

Inpatient Pharmacy
- Two inpatient AVs were dispensed to a spouse and a non-active duty sponsor at NH Jacksonville and NMC San Diego.

Influenza-Associated Hospitalization Reports
- No influenza-associated hospitalizations were reported to DRSi.

Bacterial Coinfections
- 5 coinfections were identified; 2 Streptococcus (upper respiratory), 1 Pseudomonas (lower respiratory) and 2 non-respiratory infections. Details.
- No positive rapid strep tests were identified among influenza cases.

<table>
<thead>
<tr>
<th>Bacterial Coinfections by Specimen Source and as a Percent of Laboratory Cases, 2016-2017 Season</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coinfections by Specimen Source, n (%)</strong></td>
</tr>
<tr>
<td>Upper Respiratory</td>
</tr>
<tr>
<td>Current Season (n=183)</td>
</tr>
<tr>
<td>Cumulative Baseline* (n=111)</td>
</tr>
</tbody>
</table>

* 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
- 2 laboratory-positive influenza cases were identified among active duty service members, both Navy and Type B.
- 2 active duty service members (1 Navy, 1 Marine Corps) were dispensed AVs (all Oseltamivir).

Recruits
- No laboratory-positive influenza cases were identified among recruits.
- No AVs were identified among recruits.

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### 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></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Navy</td>
<td>Marine Corps</td>
<td>Navy</td>
<td>Marine Corps</td>
<td></td>
</tr>
<tr>
<td>Laboratory</td>
<td>355</td>
<td>137</td>
<td>5</td>
<td>12</td>
<td>509</td>
</tr>
<tr>
<td>Antiviral</td>
<td>619</td>
<td>213</td>
<td>8</td>
<td>15</td>
<td>855</td>
</tr>
</tbody>
</table>

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Children
- Laboratory cases among children were below baseline levels; 1 laboratory-positive influenza case was identified.
  - Facility with the greatest number of outpatient cases identified: 56th Med Grp-Luke (1).
  - All cases were identified from an outpatient setting.
- AVs dispensed to children were below baseline levels; 1 AV was dispensed (Oseltamivir).
  - Locations with the most AVs dispensed: NH Pensacola (1).
  - The AV was dispensed in the outpatient setting.

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### Number of Influenza Laboratory Cases and AV Cases, DON Children

<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>0</td>
<td>0.0</td>
</tr>
<tr>
<td>5-17 years</td>
<td>1</td>
<td>0.4</td>
</tr>
</tbody>
</table>

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In the News
- According to a survey of US healthcare workers from the 2014-2015 influenza season, over 40% with an influenza-like-illness worked while sick. These findings highlight an important area for education and intervention. The results are published in the *American Journal of Infection Control*. Details