Influenza Situation Report: 2017-2018 Season
Department of the Navy

Week 51 (17 Dec - 23 Dec 2017)

Weekly Highlights:

* Influenza activity in the DON is increasing. Laboratory-positive cases are elevated and increased 50% in Week 51. Dispensed AVs are elevated and increased 65.3% from the prior week.
* Severity indicators are elevated and above the surveillance threshold, with ten inpatient laboratory-positive cases and Thirty-five dispensed antivirals from an inpatient setting.
* Active duty laboratory-positive cases and dispensed AVs are elevated and increased from prior week.

Influenza Surveillance Indicators

<table>
<thead>
<tr>
<th>OVERVIEW</th>
<th>Trend</th>
<th>Activity Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory Cases</td>
<td>N 341</td>
<td>Elevated</td>
</tr>
<tr>
<td>Dispensed Antivirals</td>
<td>N 476</td>
<td>Elevated</td>
</tr>
<tr>
<td>ILI Outpatient Visits</td>
<td>% 4.5</td>
<td>Normal</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SEVERITY</th>
<th>Trend</th>
<th>Activity Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Laboratory Cases</td>
<td>N 10</td>
<td>Elevated</td>
</tr>
<tr>
<td>Inpatient Dispensed Antivirals</td>
<td>N 37</td>
<td>Elevated</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ACTIVE DUTY AND RECRUITS</th>
<th>Trend</th>
<th>Activity Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Duty Laboratory Cases</td>
<td>N 44</td>
<td>Elevated</td>
</tr>
<tr>
<td>Active Duty Dispensed Antivirals</td>
<td>N 71</td>
<td>Elevated</td>
</tr>
<tr>
<td>Recruit Laboratory Cases</td>
<td>N 6</td>
<td>Elevated</td>
</tr>
<tr>
<td>Recruit Dispensed Antivirals</td>
<td>N 4</td>
<td>Normal</td>
</tr>
</tbody>
</table>

Overall Burden (Data Lagged, Week 50)

DON Total Influenza Cases from Laboratory, Pharmacy and Encounter Data

Supporting Surveillance

* DOD Global Laboratory-based Influenza Surveillance (USAFSAM).
  Week 49 & 50 highlights:
  * Sixty-seven positive influenza A specimens (63 H3N2, 4 H1N1), thirteen positive influenza B specimens, and one positive influenza A and B co-infection specimen.
  * Access the full report [here](#).

  14DEC2017 report highlights:
  * Continued increase in influenza A/H3 cases at border sites in Imperial County, CA.
  * Access the most recent NHRC OID Surveillance reports [here](#).
Laboratory Surveillance

- **Burden:** Laboratory activity is elevated, exceeding two standard deviation above baseline levels. The number of laboratory-positive cases (n=341) increased 50% over the prior week.
- **Specimens:** Overall percent positivity is 26.0%, with 80% of cases identified as influenza A.
- **Severity:** Seven inpatient laboratory-positive case were identified this week among 3 family members, 5 retirees, and 2 AD at NMC San Diego. Two were identified at AMC BAMC-FSH (1 retiree and 1 family member) and one active duty was identified at NH Camp Pendleton
- **Age:** Adults ages 45+ years had the highest rate of laboratory-positive influenza cases (n=118). Children ages 5-17 had the second highest rate (n=84).
- **Location:** NMC San Diego (n=71), NH Camp Pendleton (n=51), and NH Jacksonville (n=42) had the highest number of laboratory-positive influenza cases for the week.

**DON Inpatient Laboratory Cases (Severity)**

**Top MTFs, Laboratory-Positive Cases, Week 51**

NMC San Diego: 71
NH Camp Pendleton: 42
NH Jacksonville: 38
NH Pensacola: 29
AMC BAMC-FSH: 23
AF-MC-Res MGRP-Keesler: 30

**Top MTFs, Laboratory-Positive Cases, 2017-2018 Season**

NMC San Diego: 307
NH Jacksonville: 192
NH Pensacola: 115
NH Camp Pendleton: 114
AMC BAMC-FSH: 62
AF-MC-Res MGRP-Keesler: 42
AMC Trifler Shafter: 40

Note: Season counts are since Week 37.
Antiviral Surveillance

- **Burden**: Dispensed AVs (n=476) are elevated, exceeding two standard deviation above baseline levels. The number of dispensed AVs increased 65.3% over the prior week.
- **Severity**: Thirty-two inpatient AVs were dispensed this week to family members (n=21), and retirees (n=11).
- **Types**: All influenza AVs dispensed were Oseltamivir.
- **Location**: NMC San Diego (n=95), NH Pensacola (n=88), and NH Jacksonville (n=45) had the highest number of dispensed AVs for the week.

Data sources: HL7-formatted CHCS pharmacy databases. Denominators for rates are from M2 enrollment records.

Top MTFs, Dispensed Antivirals, Week 51

- NMC San Diego (n=95)
- NH Pensacola (n=88)
- NH Jacksonville (n=45)
- NH Camp Pendleton (n=34)
- AMC BANCS (n=22)
- AF-MED MED GRD IV (n=19)
- NMC Corpus Christi (n=16)

Top MTFs, Dispensed Antivirals, Season

- NH Pensacola (n=273)
- NMC San Diego (n=256)
- NH Jacksonville (n=178)
- Walter Reed Natl Med Ctr (n=168)
- NH Camp Pendleton (n=74)
- AMC Tripler-Shaft (n=63)
- NMC Corpus Christi (n=60)

Note: Season counts are since Week 37.

Influenza-Like Illness (Data Lagged, Week 50)

- **All outpatient**: The percentage of outpatient medical encounters due to ILI increased to 4.5%. ILI activity is normal and within expected levels.
- **Location**: ILI activity was the highest at NH Lemoore (7.3%), followed by NHC Annapolis (5.9%) and NH Pensacola (5.6%).

Data source: CAPER

Outpatient Medical Encounters due to ILI, Week 50

Top DON MTFs, Percentage of Outpatient ILI, Week 50

- NH Lemoore (n=7.3%)
- NHC Annapolis (n=6.9%)
- NH Pensacola (n=5.6%)
- NH Patuxent River (n=5.6%)
- James A. Lovell FHOC (n=5.5%)
- NH Beaufort (n=5.5%)

*Data lagged by one week.*
**Active Duty and Recruits**

- **AD Laboratory cases:** Forty-four laboratory-positive cases among Sailors (n=37) and Marines (n=7).
- **AD Dispensed Antivirals:** Fifty-seven AVs dispensed among Sailors and fourteen AVs dispensed to Marines.
- **Recruits:** Six laboratory-positive cases among Navy (n=3) and Marine Corps (n=3) recruits.
- **Location:** Laboratory-positive cases occurred most frequently at NMC San Diego (n=11), AMC BAMC-FSH (n=6), and James A Lovell FHCC (n=5).
- **Vaccination Status:** Thirty-five AD laboratory-positive cases (79.5%) had a vaccination record more than fourteen days prior to infection.

Data Sources: HL7-formatted CHCS chemistry, microbiology and pharmacy databases, MRRS and ITS.

**Laboratory-Positive Cases Among Active Duty Service Members, 2017-2018**

**Summary of Active Duty and Recruit Cases**

<table>
<thead>
<tr>
<th>Laboratory Positive Cases</th>
<th>AD Laboratory cases</th>
<th>AD Dispensed Antivirals</th>
<th>Recruits</th>
<th>Location</th>
<th>Vaccination Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cases</td>
<td>50</td>
<td>75</td>
<td>288</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navy AD</td>
<td>37</td>
<td>57</td>
<td>212</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marine Corps AD</td>
<td>7</td>
<td>14</td>
<td>56</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navy Recruit</td>
<td>3</td>
<td>1</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marine Corps Recruit</td>
<td>3</td>
<td>3</td>
<td>12</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** Season counts are since Week 37.

**Bacterial Coinfections**

- **Summary:** 2.5% of laboratory-positive influenza cases had a bacterial coinfection identified this season.
- **Upper-respiratory:** Twenty-two upper respiratory infections have been identified, all *Streptococcus*.
- **Lower-respiratory:** Nine lower respiratory infections have been identified as *Staphylococcus* (n=3), *Enterococcus* (n=1), *Escherichia* (n=1), *Klebsiella* (n=1), *Pseudomonas* (n=1), *Corynebacterium* (n=1), and *Streptococcus* (n=1).

Data Sources: HL7-formatted CHCS chemistry and microbiology databases

**Methods and Data Sources**

The Influenza SITREP methods can be found [here](#).

- HL7 formatted CHCS data from microbiology and chemistry data are available from 2004 to present. HL7 formatted CHCS data from pharmacy databases are available from 2006 to present.
- Data from NH Oak Harbor, NH Bremerton, AMC Madigan, and Fairchild AFB are not captured due to transition to MHS GENESIS.
- Laboratory-positive and AV baselines are calculated as a weighted average of the 2014-2015, 2015-2016 and 2016-2017 seasons.
- The “Overall Burden” and ILI figures are lagged one week due to encounter data availability.
- AV surveillance no longer captures Amantadine as of 07 Nov 2017.
- All figures prepared by the EpiData Center on 26 Dec 2017.