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

Week 15 (08 Apr – 14 Apr 2018)

Weekly Highlights:

* Overall influenza activity in the DON is normal and close to baseline levels.
* Laboratory-positive cases, dispensed AVs, and the percent of ILI outpatient visits are all normal and have decreased over the prior week.
* Inpatient laboratory-positive cases and dispensed antivirals are both below surveillance thresholds.

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 46</td>
<td>↓ Normal</td>
</tr>
<tr>
<td>Dispensed Antivirals</td>
<td>N 101</td>
<td>↓ Normal</td>
</tr>
<tr>
<td>ILI Outpatient Visits</td>
<td>% 3.6</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 1</td>
<td>↓ Low</td>
</tr>
<tr>
<td>Inpatient Dispensed Antivirals</td>
<td>N 4</td>
<td>↓ Low</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 11</td>
<td>↓ Low</td>
</tr>
<tr>
<td>Active Duty Dispensed Antivirals</td>
<td>N 22</td>
<td>↓ Normal</td>
</tr>
<tr>
<td>Recruit Laboratory Cases</td>
<td>N 0</td>
<td>↓ Low</td>
</tr>
<tr>
<td>Recruit Dispensed Antivirals</td>
<td>N 0</td>
<td>↓ Normal</td>
</tr>
</tbody>
</table>

Overall Burden (Data Lagged, Week 14)

DON Total Influenza Cases from Laboratory, Pharmacy and Encounter Data

Supporting Surveillance

* DOD Global Respiratory Pathogen Surveillance (USAFSAM).
* Week 13 & 14 highlights:
  * 96 positive influenza A specimens (67 H3N2, 25 H1N1, 4 no subtype) and 50 positive influenza B specimens.
  * Access the full report here.
* DOD Seasonal Influenza Surveillance Summary (AFHSB).
  * Access the full report here.
  * Access the most recent NHRC OID Surveillance reports here.
DON Laboratory-Positive Influenza Cases and Seasonal Baseline, 2017-2018 Season

DON Laboratory-Positive, Seasonal Comparison, 2012-2018

DON Laboratory-Positive Influenza Specimens, by Type

DON Laboratory-Positive Case Rates by Age Group

Laboratory Surveillance

- **Burden**: Laboratory-positive influenza cases are normal and decreasing. The number of laboratory-positive cases (N=46) decreased 57.4% from the prior week.
- **Specimens**: Overall percent positivity is 9.6%, with 60.4% of cases identified as influenza B.
- **Severity**: One inpatient laboratory-positive case was identified in a retiree at AF-G-673rd Elmendorf.
- **Age**: Children ages 0-4 had the highest rate of laboratory-positive influenza cases at 6.1 cases per 100,000 persons, while children ages 5-17 had the second highest rate at 4.0 cases per 100,000 persons.
- **Location**: James A. Lovell FHCC (N=12), NH Camp Lejeune (N=4), AHC McDonald-Eustis (N=3), NH Yokosuka (N=3), and NMC Portsmouth (N=3) had the highest number of laboratory-positive influenza cases for the week.

Data sources: HL7-formatted CHCS chemistry and microbiology databases. Denominators for rates are from M2 enrollment records.
Antiviral Surveillance

- **Burden:** Dispensed AVs (N=101) are normal and at baseline levels. Dispensed AVs have decreased for the tenth week in a row.
- **Severity:** Four inpatient AVs were dispensed this week to retirees (N=2), an AD service members (N=1), and a family member (N=1).
- **Location:** NMC Portsmouth (N=15), NH Camp Lejeune (N=10), James A. Lovell FHCC (N=8), and Jacksonville (N=8) had the highest weekly number of dispensed AVs.

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

### Top MTFs, Dispensed Antivirals, Week 15

- **NMC Portsmouth:** 15
- **NH Camp Lejeune:** 10
- **James A. Lovell FHCC:** 9
- **NH Jacksonville:** 8
- **NH Yokosuka:** 5
- **NH Camp Pendleton:** 4
- **NMC Patuxent River:** 4

### Top MTFs, Dispensed Antivirals, Season

- **NH Pensacola:** 1,477
- **NMC San Diego:** 1,304
- **NMC Portsmouth:** 1,161
- **NH Jacksonville:** 999
- **NH Camp Pendleton:** 691
- **Walter Reed Natl. Med. Ctr.:** 596
- **NH Camp Lejeune:** 506

*Note: Season counts are since Week 37.*

### Influenza-Like Illness (Data Lagged, Week 14)

- **All outpatient:** ILI activity is normal. The percentage of outpatient medical encounters due to ILI was 3.6% in Week 14, below the surveillance threshold of 4.8%.
- **Location:** ILI activity was highest at James A. Lovell FHCC (8.5%), followed by NHC Rota (5.3%), and NHC Corpus Christi (4.9%).

Data source: CAPER

### Outpatient Medical Encounters due to ILI, Week 14

- **ILI %, 2017 - 2018**
- **Baseline**

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

- **AD Laboratory cases:** Eleven laboratory-positive cases among AD Sailors (N=9) and Marines (N=2).
- **AD Dispensed Antivirals:** 22 AVs dispensed among AD Sailors (N=17) and Marines (N=5).
- **Recruits:** No laboratory-positive cases or AVs dispensed among recruits.
- **Location:** Laboratory-positive cases occurred most frequently at James A. Lovell FHCC (N=5); six other facilities had one case each.
- **Vaccination Status:** 10 AD laboratory-positive cases (90.9%) 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

![Laboratory-Positive Cases Among Active Duty Service Members, 2017-2018](image)

**Summary of Active Duty and Recruit Cases**

<table>
<thead>
<tr>
<th></th>
<th>Laboratory</th>
<th>Dispersed AVs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Week 15</td>
<td>Season</td>
</tr>
<tr>
<td>Total Cases</td>
<td>11</td>
<td>1,341</td>
</tr>
<tr>
<td>Navy AD</td>
<td>9</td>
<td>857</td>
</tr>
<tr>
<td>Marine Corps AD</td>
<td>2</td>
<td>352</td>
</tr>
<tr>
<td>Navy Recruit</td>
<td>0</td>
<td>80</td>
</tr>
<tr>
<td>Marine Corps Recruit</td>
<td>0</td>
<td>52</td>
</tr>
</tbody>
</table>

Note: Season counts are since Week 37.

Medical Event Reports (MER)

**MERs for Influenza-Associated Hospitalizations**

<table>
<thead>
<tr>
<th></th>
<th>MER</th>
<th>Match to Surveillance Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>Week 15</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Season</td>
<td>97</td>
<td>74</td>
</tr>
</tbody>
</table>

*Indicates MERs that matched to cases from laboratory or pharmacy surveillance data.

Note: Season counts are since Week 37.

**Bacterial Coinfections**

- **Summary:** 3.7% of laboratory-positive influenza cases had a bacterial coinfection identified this season.
- **Upper-respiratory:** 279 upper respiratory infections have been identified as *Streptococcus* (N=274), *Staphylococcus* (N=3), and *Haemophilus* (N=2).
- **Lower-respiratory:** 32 lower respiratory infections have been identified as *Staphylococcus* (N=10), *Haemophilus* (N=4), *Serratia* (N=3), *Corynebacterium* (N=2), *Enterococcus* (N=2), *Streptococcus* (N=2), *Stenotrophomonas* (N=2), *Pseudomonas* (N=2), *Enterobacter* (N=1), *Escherichia* (N=1), *Klebsiella* (N=1), *Neisseria* (N=1), and *Pantoea* (N=1).

Data Sources: HL7-formatted CHCS chemistry and microbiology databases.

**Bacterial Coinfections as a Percent of Laboratory Cases**

<table>
<thead>
<tr>
<th>Coinfections</th>
<th>Lab Cases w/ Coinfection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper (N)</td>
<td>Lower (N)</td>
</tr>
<tr>
<td>Current Season</td>
<td>258</td>
</tr>
<tr>
<td>Baseline</td>
<td>132</td>
</tr>
</tbody>
</table>

Note: Season counts are since Week 37.

**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 21 Feb 2018.

In the News

- The CDC reports that during Week 14 influenza activity continued to decline and was below national baseline levels, though widespread influenza activity was still reported by seven states. CDC data show that influenza activity peaked in Week 5. A total of 151 flu-related pediatric deaths have been reported to the CDC for this season. [Details](#).