Weekly Highlights:

* Overall influenza activity in the DON remains elevated. Laboratory-positive cases, dispensed AVs, and the percent of ILI outpatient visits are all elevated.
* Severity indicators are normal and trending downward; the number of inpatient antivirals and laboratory cases are normal.
* Active duty laboratory-positive cases and dispensed antivirals are elevated. Recruit laboratory cases are elevated. Recruit dispensed antivirals are normal.

Influenza Surveillance Indicators

**OVERVIEW**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Total</th>
<th>Activity Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory Cases</td>
<td>652</td>
<td>Elevated</td>
</tr>
<tr>
<td>Dispensed Antivirals</td>
<td>1537</td>
<td>Elevated</td>
</tr>
<tr>
<td>ILI Outpatient Visits</td>
<td>5.3</td>
<td>Elevated</td>
</tr>
</tbody>
</table>

**SEVERITY**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Total</th>
<th>Activity Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Laboratory Cases</td>
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<td>Normal</td>
</tr>
<tr>
<td>Inpatient Dispensed Antivirals</td>
<td>24</td>
<td>Normal</td>
</tr>
</tbody>
</table>

**ACTIVE DUTY AND RECRUITS**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Total</th>
<th>Activity Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Duty Laboratory Cases</td>
<td>130</td>
<td>Elevated</td>
</tr>
<tr>
<td>Active Duty Dispensed Antivirals</td>
<td>270</td>
<td>Elevated</td>
</tr>
<tr>
<td>Recruit Laboratory Cases</td>
<td>9</td>
<td>Elevated</td>
</tr>
<tr>
<td>Recruit Dispensed Antivirals</td>
<td>9</td>
<td>Normal</td>
</tr>
</tbody>
</table>

Overall Burden (Data Lagged, Week 3)

DON Total Influenza Cases from Laboratory, Pharmacy and Encounter Data

Supporting Surveillance

* DOD Global Laboratory-based Influenza Surveillance (AFHSB).
  Week 3 highlights:
  * Percentage of positive lab test are stable at 24.7% for service members, but increased to 33.3% for other beneficiaries
  * Access the full report [here](#).

  25JAN2018 report highlights:
  * Overall FRI cases are decreasing, but showing more pathogen diversity.
  * AGE rates at basic training centers are currently low.
  * Access the most recent NHRC OID Surveillance reports [here](#).
**Burden:** Laboratory activity is elevated, exceeding two standard deviations above baseline levels. The number of laboratory-positive cases (N=652) increased over the prior week.

**Specimens:** Overall percent positivity is 24.8%, with 72.4% of cases identified as influenza A.

**Severity:** Five inpatient laboratory-positive case were identified this week among family members (N=4) and AD (N=1). Cases occurred at NMC San Diego, NH Camp Lejeune, and AMC BAMC-FSH.

**Age:** Children ages 0-4 had the highest rate of laboratory-positive influenza cases (N=95). Children ages 5-17 had the second highest rate (N=224).

**Location:** NH Jacksonville (N=84), NH Pensacola (N=63), and NH Camp Lejeune (N=44) 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.

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**DON Inpatient Laboratory Cases (Severity)**

**Top MTFs, Laboratory-Positive Cases, Week 4**

- NH Jacksonville: 84
- NH Pensacola: 63
- NH Camp Lejeune: 44
- FT Belvoir Community Hospital: 40
- AMC Fort Shafter: 33
- Walter Reed Natl ML MedCtr: 30
- James A. Lovell FHCC: 30

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

- NMC San Diego: 980
- NH Camp Pendleton: 445
- NH Pensacola: 365
- NH Jacksonville: 363
- AMC BAMC-FSH: 195
- James A. Lovell FHCC: 158
- NH Camp Lejeune: 140

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**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**

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Prepared by the EpiData Center | email | web
Navy and Marine Corps Public Health Center
Antiviral Surveillance

- **Burden:** Dispensed AVs (N=1537) are elevated, exceeding two standard deviations above baseline levels. The number of dispensed AVs increased 53.4% over the prior week.
- **Severity:** 23 inpatient AVs were dispensed this week to family members (N=12), retirees (N=5), AD service members (N=4), and recruits (N=2).
- **Types:** Zanamivir was dispensed once, all other AVs dispensed were Oseltamivir.
- **Location:** NH Pensacola (N=320), NH Jacksonville (N=146), NMC Portsmouth (N=129), and WRNMMC (N=111) 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 4

- NH Pensacola: 320
- NH Jacksonville: 146
- NMC Portsmouth: 129
- Walter Reed Natl ML Med Ctr: 111
- Ft Belvoir Community Hosp: 68
- NMC San Diego: 59
- NH Beaufort: 55

Top MTFs, Dispensed Antivirals, Season

- NH Pensacola: 1113
- NMC San Diego: 1048
- NH Camp Pendleton: 565
- NH Jacksonville: 459
- Walter Reed Natl ML Med Ctr: 318
- NMC Portsmouth: 254

Note: Season counts are since Week 47.

Influenza-Like Illness (Data Lagged, Week 3)

- **All outpatient:** ILI activity is elevated. The percentage of outpatient medical encounters due to ILI was 5.3% in Week 3.
- **Location:** ILI activity was highest at James A Lovell FHCC (10.7%), followed by NH Pensacola (8.4%), and NH Naples (8.3%).

Data source: CAPER

Top DON MTFs, Percentage of Outpatient ILI, Week 3

- James A Lovell FHCC: 10.7%
- NH Pensacola: 8.4%
- NH Naples: 8.3%
- NH Jacksonville: 7.3%
- NMC Corpus Christi: 6.0%
- NMC Annapolis: 4.4%
- NH Beaufort: 5.3%

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

- **AD Laboratory cases:** 130 laboratory-positive cases among AD Sailors (N=89) and Marines (N=41).
- **AD Dispensed Antivirals:** 198 AVs dispensed among Sailors and 72 AVs dispensed to Marines.
- **Recruits:** nine laboratory-positive cases and nine AVs dispensed among recruits.
- **Location:** Laboratory-positive cases occurred most frequently at NH Jacksonville (N=84), NH Pensacola (N=63), and NH Camp Lejeune (N=44).
- **Vaccination Status:** 107 AD laboratory-positive cases (82.3%) had a vaccination record more than fourteen days prior to infection.

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

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**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 4</td>
<td>24</td>
<td>22</td>
</tr>
<tr>
<td>Season</td>
<td>61</td>
<td>52</td>
</tr>
</tbody>
</table>

*Indicates MERs that matched to cases from laboratory or pharmacy surveillance data. (Inpatient, 2017).

Note: Season counts are since Week 47.

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**Bacterial Coinfections**

- **Summary:** 2.6% of laboratory-positive influenza cases had a bacterial coinfection identified this season.
- **Upper-respiratory:** 94 upper respiratory infections have been identified, all *Streptococcus*.
- **Lower-respiratory:** 27 lower respiratory infections have been identified as *Staphylococcus* (N=10), *Corynebacterium* (N=2), *Enterococcus* (N=2), *Escherichia* (N=1), *Enterobacter* (N=1), *Haemophilus* (N=3), *Klebsiella* (N=1), *Neisseria* (N=1), *Pantoea* (N=1), *Pseudomonas* (N=1), *Stenotrophomonas* (N=2), and *Streptococcus* (N=2).

Data Sources: HL7-formatted CHCS chemistry and microbiology databases

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**In the News**

- CDC reports elevated influenza activity in Week 3, with widespread flu activity in all states but Hawaii and Washington D.C. Seven new flu-associated pediatric deaths reported this week. [Details](#).
- A study in the New England Journal of Medicine found a significant association between respiratory infections, especially influenza, and acute myocardial infarction. [Details](#).

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 30 Jan 2018.