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. Both laboratory-positive cases and dispensed antivirals decreased over the prior week.
* The number of inpatient laboratory cases is elevated.
* The number of inpatient laboratory cases is low and continues to trend downward.
* Active duty laboratory-positive cases and dispensed antivirals are elevated. Recruit laboratory cases are elevated. Recruit dispensed antivirals are normal.

Influenza Surveillance Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Trend</th>
<th>Activity Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory Cases</td>
<td>↓</td>
<td>Elevated</td>
</tr>
<tr>
<td>Dispensed Antivirals</td>
<td>↓</td>
<td>Elevated</td>
</tr>
<tr>
<td>ILI Outpatient Visits</td>
<td>↑</td>
<td>Elevated</td>
</tr>
<tr>
<td>Inpatient Laboratory Cases</td>
<td>↓</td>
<td>Low</td>
</tr>
<tr>
<td>Inpatient Dispensed Antivirals</td>
<td>↓</td>
<td>Elevated</td>
</tr>
<tr>
<td>Active Duty Laboratory Cases</td>
<td>↓</td>
<td>Elevated</td>
</tr>
<tr>
<td>Active Duty Dispensed Antivirals</td>
<td>↓</td>
<td>Elevated</td>
</tr>
<tr>
<td>Recruit Laboratory Cases</td>
<td>↑</td>
<td>Elevated</td>
</tr>
<tr>
<td>Recruit Dispensed Antivirals</td>
<td>↑</td>
<td>Normal</td>
</tr>
</tbody>
</table>

Overall Burden (Data Lagged, Week 5)

DON Total Influenza Cases from Laboratory, Pharmacy and Encounter Data

Summary for Week 5
Total Cases: 2937
% in Lab: 28.6
% in Pharmacy: 66.9
% in Encounters: 55.7

Supporting Surveillance

* DOD Seasonal Influenza Surveillance Summary (AFHSB). Week 5 highlights:
  * The percentage of positive lab tests are high at 20.0% for service members, and remained stable at 31.1% for other beneficiaries.
  * Access the full report here.


08FEB2018 report highlights:
* Clusters of influenza among trainees were seen at basic training centers in San Diego and New Jersey.
* Access the most recent NHRC OID Surveillance reports here.
Laboratory Surveillance

- **Burden:** Laboratory activity is elevated, exceeding two standard deviations above baseline levels. The number of laboratory-positive cases (N=648) decreased 23.3% from the prior week.
- **Specimens:** Overall percent positivity is 26.7%, with 68.3% of cases identified as influenza A.
- **Severity:** Two inpatient laboratory-positive case were identified among family members at NMC San Diego.
- **Age:** Children ages 0-4 had the highest rate of laboratory-positive influenza cases at 101.2 cases per 100,000 persons, while children ages 5-17 had the second highest rate at 90.5 cases per 100,000 persons.
- **Location:** NMC Portsmouth (N=75), NH Pensacola (N=759), and NH Camp Lejeune (N=47) 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.

### DON Inpatient Laboratory Cases (Severity)

- **Week 6:**

  - **Max weekly count from past 3 seasons:**
  - **Surveillance Threshold (Baseline + 1 Std. Dev.):**

### Top MTFs, Laboratory-Positive Cases, Week 6

- **NMC PORTSMOUTH:** 75 cases
- **NH PENSACOLA:** 59 cases
- **NH CAMP LEJEUNE:** 47 cases
- **FT BELVOIR COMMUNITY HOSPITAL:** 44 cases
- **WALTER REED NATL MIL MED CTR:** 42 cases
- **NMC SAN DIEGO:** 33 cases

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

- **NMC SAN DIEGO:** 659 cases
- **NH CAMP PENDLETON:** 639 cases
- **NH PENSACOLA:** 618 cases
- **NH JACKSONVILLE:** 515 cases
- **NMC BAYCAMP:** 267 cases
- **NH CAMP LEJEUNE:** 263 cases
- **NMC PORTSMOUTH:** 240 cases

Note
**Antiviral Surveillance**

- **Burden:** Dispensed AVs (N=1779) are elevated, far exceeding baseline levels. However, the number of dispensed AVs decreased 9.7% over the prior week.

- **Severity:** 29 inpatient AVs were dispensed this week to family members (N=18), retirees (N=5), AD service members (N=4), a former spouse (N=1), and a recruit (N=1).

- **Types:** All AVs dispensed this week were for Oseltamivir.

- **Location:** NMC Portsmouth (N=319), NH Pensacola (N=247), and NH Jacksonville (N=163) 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, Season**

- NMC Portsmouth (N=319)
- NH Pensacola (N=247)
- NH Jacksonville (N=163)
- Walter Reed Natl ML Med Ctr (N=122)
- NH Camp Lejeune (N=90)
- Ft Belvoir Community Hosp-FGH (N=87)
- NMC San Diego (N=76)

**Top MTFs, Dispensed Antivirals, Week 6**

- NMC Portsmouth: 319
- NH Pensacola: 163
- NH Jacksonville: 122
- Walter Reed Natl ML Med Ctr: 90
- NH Camp Lejeune: 87
- Ft Belvoir Community Hosp-FGH: 76

**Influenza-Like Illness (Data Lagged, Week 5)**

- **All outpatient:** ILI activity is elevated. The percentage of outpatient medical encounters due to ILI was 5.6% in Week 5.

- **Location:** ILI activity was highest at NH Naples (11.2%), followed by NH Jacksonville (8.9%), and NH Naples (8.7%).

**Outpatient Medical Encounters due to ILI, Week 5**

- Data source: CAPER
Active Duty and Recruits

- **AD Laboratory cases**: 97 laboratory-positive cases among AD Sailors (N=66) and Marines (N=31).
- **AD Dispersed Antivirals**: 196 AVs dispensed among AD Sailors and 62 AVs dispensed to Marines.
- **Recruits**: 11 laboratory-positive cases and four AVs dispensed among recruits.
- **Location**: Laboratory-positive cases occurred most frequently at NMC Portsmouth (N=11), NH Pensacola (N=11), and NHC Quantico (N=11).
- **Vaccination Status**: 81 AD laboratory-positive cases (83.5%) had a vaccination record more than fourteen days prior to infection.

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

Medical Event Reports (MER)

**MERs for Influenza-Associated Hospitalizations**

<table>
<thead>
<tr>
<th>Week</th>
<th>N</th>
<th>Match to Surveillance Data</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Season</td>
<td>68</td>
<td>56</td>
<td>84.8%</td>
</tr>
</tbody>
</table>

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

Note: Season counts are since Week 67.

Bacterial Coinfections

- **Summary**: 3.2% of laboratory-positive influenza cases had a bacterial coinfection identified this season.
- **Upper-respiratory**: 163 upper respiratory infections have been identified among 153 cases, all *Streptococcus*.
- **Lower-respiratory**: 28 lower respiratory infections have been identified as *Staphylococcus* (N=10), *Haemophilus* (N=3), *Corynebacterium* (N=2), *Enterococcus* (N=2), *Streptococcus* (N=2), *Stenotrophomonas* (N=2), *Enterobacter* (N=1), *Escherichia* (N=1), *Klebsiella* (N=1), *Neisseria* (N=1), *Pantoea* (N=1), *Pseudomonas* (N=1) and *Serratia* (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>Total Resp (N)</td>
</tr>
<tr>
<td>Baseline</td>
<td>153</td>
</tr>
<tr>
<td></td>
<td>46</td>
</tr>
</tbody>
</table>

Note: Season counts are since Week 67.

**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 07 Feb 2018.

**In the News**

- CDC reports elevated influenza activity in Week 5, with widespread flu activity in all states but Hawaii and Oregon. Ten new flu-associated pediatric deaths reported this week. Details
- A Nature scientific report shows far ultraviolet C light may be an effective tool for reducing the spread of airborne-mediated microbial diseases, including influenza. Details

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**Medical Event Reports (MER)**

**MERs for Influenza-Associated Hospitalizations**

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