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 mixed; the number of inpatient antivirals is elevated, while inpatient laboratory cases are normal.
* Active duty laboratory-positive cases and dispensed antivirals are elevated.

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>N</td>
<td>Elevated</td>
</tr>
<tr>
<td>Dispensed Antivirals</td>
<td>N</td>
<td>Elevated</td>
</tr>
<tr>
<td>ILI Outpatient Visits</td>
<td>%</td>
<td>Elevated</td>
</tr>
<tr>
<td>Inpatient Laboratory Cases</td>
<td>N</td>
<td>Normal</td>
</tr>
<tr>
<td>Inpatient Dispensed Antivirals</td>
<td>N</td>
<td>Elevated</td>
</tr>
<tr>
<td>Active Duty Laboratory Cases</td>
<td>N</td>
<td>Elevated</td>
</tr>
<tr>
<td>Active Duty Dispensed Antivirals</td>
<td>N</td>
<td>Elevated</td>
</tr>
<tr>
<td>Recruit Laboratory Cases</td>
<td>N</td>
<td>Elevated</td>
</tr>
<tr>
<td>Recruit Dispensed Antivirals</td>
<td>N</td>
<td>Normal</td>
</tr>
</tbody>
</table>

Active Duty Vaccination Rates, 22 Jan 2018

<table>
<thead>
<tr>
<th>Service</th>
<th>Activity Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marine Corps Active Duty</td>
<td>93.5%</td>
</tr>
<tr>
<td>Navy Active Duty</td>
<td>91.1%</td>
</tr>
<tr>
<td>US Fleet Forces</td>
<td>94.6%</td>
</tr>
</tbody>
</table>

Overall Burden (Data Lagged, Week 2)

DON Total Influenza Cases from Laboratory, Pharmacy and Encounter Data

Summary for Week 2
Total Cases 12485
% in Lab 37.3
% in Pharmacy 66.6
% in Encounters 52.0

Supporting Surveillance

* DOD Global Laboratory-based Influenza Surveillance (USAFSAM).
  Week 1 & 2 highlights:
  * 259 positive influenza A specimens (225 H3N2, 30 H1N1, and 4 not subtyped) and 33 positive influenza B specimens.
  * Access the full report here.
  18AN2018 report highlights:
  * Influenza A/H3 cases continued in large numbers at border surveillance sites in Imperial County, CA.
  * Increased influenza B activity in Imperial County, CA.
  * 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=540) decreased slightly over the prior week.
- **Specimens:** Overall percent positivity is 28.6%, with 80.6% of cases identified as influenza A.
- **Severity:** Eight inpatient laboratory-positive case were identified this week among retirees (N=4) and family members (N=4). Cases occurred at NMC San Diego, NMC Portsmouth, WRNMMC 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=149).
- **Location:** NH Jacksonville (N=55), NH Pensacola (N=51), and NMC San Diego (N=41) 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)**

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**Top MTFs, Laboratory-Positive Cases, Week 3**

- NH Jacksonville: 66
- NH Pensacola: 51
- NMC San Diego: 41
- NH Camp Pendleton: 39
- AMC BAMC-FSH: 34
- Walter Reed Natl ML Med Ctr: 31

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

- NMC San Diego: 903
- NH Camp Pendleton: 411
- NH Pensacola: 326
- NH Jacksonville: 309
- AMC BAMC-FSH: 168
- James A. Lovell FHCC: 122

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**DON Laboratory-Positive Influenza Cases and Seasonal Baseline, 2017-2018 Season**

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**DON Laboratory-Positive, Seasonal Comparison, 2012-2018**

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**DON Laboratory-Positive Influenza Specimens, by Type**

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**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=956) are elevated, exceeding two standard deviations above baseline levels. The number of dispensed AVs decreased 4.5% over the prior week.
- **Severity:** 50 inpatient AVs were dispensed this week to family members (N=33), retirees (N=15), and AD service members (N=2).
- **Types:** All AVs dispensed were Oseltamivir.
- **Location:** NH Pensacola (N=190), NMC San Diego (N=85), and NH Camp Pendleton (N=69) 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 3**

- NH Pensacola: 190
- NMC San Diego: 85
- NH Camp Pendleton: 69
- NH Jacksonville: 61
- Walter Reed Natl Mld Med Ctr: 60
- NMC Portsmouth: 53
- James A Lovell FHCC: 36

**Top MTFs, Dispensed Antivirals, Season**

- NMC San Diego: 990
- NH Pensacola: 783
- NH Camp Pendleton: 594
- NH Jacksonville: 207
- Walter Reed Natl Mld Med Ctr: 155
- AMC BAMC FISH: 146
- James A Lovell FHCC: 116

Note: Season counts are since Week 37.

**Influenza-Like Illness (Data Lagged, Week 2)**

- **All outpatient:** ILI activity is elevated. The percentage of outpatient medical encounters due to ILI was 5.2% in Week 2.
- **Location:** ILI activity was highest at James A Lovell FHCC (8.4%), followed by NHC Corpus Christi (8.2%), and NH Naples (8.4%).

Data source: CAPER

**Top DON MTFs, Percentage of Outpatient ILI, Week 2**

- James A Lovell FHCC: 8.4%
- NHC Corpus Christi: 8.2%
- NH Naples: 8.1%
- NH Pensacola: 7.7%
- NH San Antonio: 7.4%
- NH Jacksonville: 7.1%

*Data lagged by one week.
Active Duty and Recruits

* **AD Laboratory cases:** 98 laboratory-positive cases among AD Sailors (N=67) and Marines (N=31).
* **AD Dispensed Antivirals:** 120 AVs dispensed among Sailors and 45 AVs dispensed to Marines.
* **Recruits:** Eight laboratory-positive cases and ten AVs dispensed among recruits.
* **Location:** Laboratory-positive cases occurred most frequently at NH Pensacola (N=14), NHC Quantico (N=12), and James A Lovell FHCC (N=11).
* **Vaccination Status:** 80 AD laboratory-positive cases (81.6%) had a vaccination record more than fourteen days prior to infection.

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

Bacterial Coinfections

* **Summary:** 2.6% of laboratory-positive influenza cases had a bacterial coinfection identified this season.
* **Upper-respiratory:** 66 upper respiratory infections have been identified, all Strepoccus.
* **Lower-respiratory:** 26 lower respiratory infections have been identified as Staphylococcus (N=9), 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

In the News

* CDC reports increasing influenza activity in Week 2, with widespread flu activity in all states but Hawaii. Ten new flu-associated pediatric deaths reported this week. [Details]
* A Proceedings of the National Academy of Sciences study showed influenza can spread through virus aerosolization in exhaled breath. [Details]