Weekly Highlights:

- Influenza activity in the DON is normal and within expected levels. Laboratory-positive cases continued to increase in Week 44; however, dispensed AVs decreased slightly from the prior week.
- Severity indicators are low, with no inpatient laboratory-positive cases and three dispensed antivirals from an inpatient setting during Week 44.
- NH Jacksonville had the most laboratory-positive cases (n=12), while the largest percentage of ILI visits occurred at James A Lovell FHCC (5.8%).

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>Normal</td>
</tr>
<tr>
<td>Dispensed Antivirals</td>
<td>↓</td>
<td>Normal</td>
</tr>
<tr>
<td>ILI Outpatient Visits</td>
<td>↑</td>
<td>Low</td>
</tr>
<tr>
<td>Inpatient Laboratory Cases</td>
<td>↓</td>
<td>Low</td>
</tr>
<tr>
<td>Inpatient Dispensed Antivirals</td>
<td>↓</td>
<td>Low</td>
</tr>
<tr>
<td>Active Duty Laboratory Cases</td>
<td>↓</td>
<td>Low</td>
</tr>
<tr>
<td>Active Duty Dispensed Antivirals</td>
<td>↑</td>
<td>Low</td>
</tr>
<tr>
<td>Recruit Laboratory Cases</td>
<td>↑</td>
<td>Normal</td>
</tr>
<tr>
<td>Recruit Dispensed Antivirals</td>
<td>↑</td>
<td>Normal</td>
</tr>
</tbody>
</table>

Overall Burden (Data Lagged, Week 43)

DON Total Influenza Cases from Laboratory, Pharmacy and Encounter Data

Supporting Surveillance

- DOD Global Laboratory-based Influenza Surveillance (USAFSAM). Week 41-42 highlights:
  - Twelve positive influenza A specimens (1 H1N1, 4 H3N2)
  - Three positive influenza B specimens.
  - Access the full report here.

  02 Nov 2017 report highlights:
  - 20 positive FRI specimens among military recruits.
  - Access the most recent NHRC OID Surveillance reports here.
Laboratory Surveillance

- **Burden:** Laboratory-positive cases (n=41) are above baseline levels but within expected values. For the sixth week in a row, the number of cases increased over the prior week with an increase of 24%.
- **Specimens:** Overall percent positivity is 7.7%, with 65.9% of cases identified as influenza Type A.
- **Severity:** No inpatient laboratory-positive cases were identified this week.
- **Age:** Children ages 0-4 years had the highest rate of laboratory-positive influenza cases (n=4). 16 cases were identified for ages 18-44, and those ages 45+ had 13 cases.
- **Location:** NH Jacksonville (n=12), NH Pensacola (n=6), and NMC San Diego (n=6), had the highest number of laboratory-positive influenza cases for the week.

Data sources: HL7-formatted CHCS chemistry and microbiology databases. Denominators for

---

**DON Inpatient Laboratory Cases (Severity)**

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

- **Burden:** Laboratory-positive cases (n=41) are above baseline levels but within expected values. For the sixth week in a row, the number of cases increased over the prior week with an increase of 24%.
- **Specimens:** Overall percent positivity is 7.7%, with 65.9% of cases identified as influenza Type A.
- **Severity:** No inpatient laboratory-positive cases were identified this week.
- **Age:** Children ages 0-4 years had the highest rate of laboratory-positive influenza cases (n=4). 16 cases were identified for ages 18-44, and those ages 45+ had 13 cases.
- **Location:** NH Jacksonville (n=12), NH Pensacola (n=6), and NMC San Diego (n=6), had the highest number of laboratory-positive influenza cases for the week.

Data sources: HL7-formatted CHCS chemistry and microbiology databases. Denominators for

---

**DON Inpatient Laboratory Cases (Severity)**

**DON Laboratory-Positive, Seasonal Comparison, 2012-2017**

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

**DON Laboratory-Positive Case Rates by Age Group**

Note: Season counts are since Week 37.
Antiviral Surveillance

- **Burden**: Dispensed AVs (n=50) are above baseline levels but within expected values. The number of dispensed AVs decreased over the prior week with a decrease of 3.8%.
- **Severity**: Three inpatient AVs were dispensed this week. Two AVs were dispensed to Marine Corps recruits, and one AV was dispensed to a family member.
- **Types**: All influenza AVs dispensed were Oseltamivir.
- **Location**: NH Pensacola (n=12), NH Jacksonville (n=11), and NMC San Diego (n=7), had the highest number of dispensed AVs for the week.

**Top MTFs, Dispensed Antivirals, Week 44**

- NH Pensacola: 12
- NH Jacksonville: 11
- NMC San Diego: 7
- AMC Tripler-Shafter: 5
- NH Camp Lejeune: 3
- NH Guam Agana: 2
- NMC Hawaii: 2

**Top MTFs, Dispensed Antivirals, Season**

- NH Jacksonville: 50
- NH Pensacola: 41
- NMC San Diego: 34
- AMC Tripler-Shafter: 15
- NH Camp Pendleton: 9
- NH Guam Agana: 9
- Walter Reed Natl ML MED CTR: 9

*Note: Season counts are since Week 37.

Influenza-Like Illness (Data Lagged, Week 43)

- **All outpatient**: The percentage of outpatient medical encounters due to ILI increased from the week prior to 3.1%. ILI activity remains low, and the ILI % is comparable to the seasonal baseline.
- **Location**: ILI activity was the highest at James A Lovell FHCC (5.8%), followed by NH Guam-Agana (4.7%), NHC Corpus Christi (4.3%), and NH Jacksonville (4.2%).

*Data source: CAPER*

Outpatient Medical Encounters due to ILI, Week 43

- **ILI, 2017 - 2018**: 2017 - 2018 Season
- **Baseline**: 2017 - 2018 Season

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

- **AD Laboratory cases**: Four laboratory-positive cases among Sailors (n=2) and Marines (n=2).
- **AD Dispensed Antivirals**: Seven AVs dispensed among Sailors and three AVs dispensed to Marines.
- **Recruits**: Two laboratory-positive cases and two dispensed AVs to Marine Corps recruits.
- **Location**: Laboratory-positive cases occurred at NMC San Diego (n=3), NH Jacksonville (n=1), NH Okinawa (n=1), and NH Pensacola (n=1). AVs were most frequently dispensed at NMC San Diego (n=3), NH Pensacola (n=2), and NHC Hawaii (n=2).
- **Vaccination Status**: One AD laboratory-positive case 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

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 44</td>
<td>Season</td>
</tr>
<tr>
<td>Total Cases</td>
<td>6</td>
<td>23</td>
</tr>
<tr>
<td>Navy AD</td>
<td>2</td>
<td>14</td>
</tr>
<tr>
<td>Marine Corps AD</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Navy Recruit</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Marine Corps Recruit</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

|                     | Week 44    | Season        |
| Total Cases         | 12         | 56            |
| Navy AD             | 7          | 37            |
| Marine Corps AD     | 3          | 14            |
| Navy Recruit        | 0          | 0             |
| Marine Corps Recruit| 2          | 5             |

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 44</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Season</td>
<td>6</td>
<td>1</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**: 4.1% of laboratory-positive influenza cases had a bacterial coinfection identified this season.
- **Upper-respiratory**: Five upper respiratory infections have been identified, all *Streptococcus*.
- **Lower-respiratory**: One lower respiratory infection has been identified as *Staphylococcus*.

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></td>
<td>Upper (N)</td>
</tr>
<tr>
<td>Current Season</td>
<td>5</td>
</tr>
<tr>
<td>Baseline</td>
<td>1</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.
- ILI threshold is calculated based on the off-season percentage outpatient visits for the past three seasons 2014-2015, 2015-2016 and 2016-2017 seasons, plus two standard deviations.
- 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 08 Nov 2017.

In the News

- The CDC reports that influenza activity is low in the U.S. [Details](#).
- A new study examining the vaccine effectiveness (VE) of the live attenuated vaccine (LAIV) among children in the United Kingdom found a VE of 65.8% for the 2016-2017 influenza season. LAIV is currently not recommended for use in the United States due to reduced VE observed in the 2015-2016 influenza season. [Details](#).