Week 31 (July 29 - August 4, 2018)

Weekly Highlights

- Overall influenza activity in the DON is normal.
- Laboratory-positive cases and dispensed antivirals are normal; the percent of outpatient visits for ILI is low.
- Inpatient laboratory activity is low.

Active Duty Vaccination Rates

Not Available

Influenza Surveillance Indicators

**OVERVIEW**

<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>
</tbody>
</table>

**SEVERITY**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Trend</th>
<th>Activity Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Laboratory Cases</td>
<td>↔</td>
<td>Low</td>
</tr>
<tr>
<td>Inpatient Dispensed Antivirals</td>
<td>↔</td>
<td>Low</td>
</tr>
</tbody>
</table>

**ACTIVE DUTY AND RECRUITS**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Trend</th>
<th>Activity Level</th>
</tr>
</thead>
<tbody>
<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>Low</td>
</tr>
<tr>
<td>Recruit Dispensed Antivirals</td>
<td>↔</td>
<td>Normal</td>
</tr>
</tbody>
</table>

**Overall Burden (Data Lagged, Week 30)**

**DON Total Influenza Cases from Laboratory, Pharmacy and Encounter Data**

Supporting Surveillance

**DOD Global Laboratory-based Influenza Surveillance (USAFSAM)**

Weeks 28-30 highlights:
- One specimen was positive for influenza A(H1N1)pdm09.
- Access the full report here.

**Operational Infectious Diseases (OID) Weekly Surveillance Report (NHRC)**

02 AUG 18 report highlights:
- NHRC influenza typing for the 2017-2018 season is detailed in the report
- Access the full report here.
Laboratory Surveillance

- **Burden:** Laboratory-positive influenza cases (N=8) are normal and at baseline levels.
- **Specimens:** Overall percent positivity is 6.5%, with all cases identified as influenza A.
- **Severity:** 1 inpatient laboratory cases were identified in a child.
- **Age:** Children ages 0-4 had the highest rate of laboratory-positive influenza cases at 0.9 cases per 100,000 persons, while adults ages 18-44 had the second highest rate at 0.6 cases per 100,000 persons.
- **Location:** NH Camp Lejeune (N=4), NH Jacksonville (N=2), AMC Tripler-Shafter (N=1), and NH Lemoore (N=1) had the highest number of laboratory-positive 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)**

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

**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=6) are normal and at baseline levels.
- **Severity:** 1 inpatient AV was dispensed this week.
- **Types:** All dispensed AVs were for Oseltamivir.
- **Location:** NH Jacksonville (N=3), NH Camp Lejeune (N=1), NH Camp Pendleton (N=1), and NH Pensacola (N=1) had the highest number of dispensed antivirals for the week.

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

Top MTFs, Dispensed Antivirals, Week 31

- NH Jacksonville: 3
- NH Camp Lejeune: 1
- NH Camp Pendleton: 1
- NH Pensacola: 1

Top MTFs, Dispensed Antivirals, Season 2017 - 2018

- NH Pensacola: 2173
- NMC San Diego: 1513
- NMC Portsmouth: 1419
- NH Jacksonville: 1182
- NH Camp Pendleton: 859
- Walter Reed Natl. ML Med Ctrl: 708
- NH Camp Lejeune: 636

Note: Season counts are since Week 37.

Influenza-Like Illness (Data Lagged, Week 30)

- **All outpatient:** ILI activity is low. The percentage of outpatient medical encounters due to ILI was 2.3% in Week 30, below the surveillance threshold of 4.8%.
- **Location:** ILI activity was the highest at NHC Annapolis (6.7%), James A Lovell FHCC (5.3%), and NH Naples (3.7%).

Data source: CAPER

Top DON MTFs, Percentage of Outpatient ILI, Week 30

- NHC Annapolis: 6.7%
- James A Lovell FHCC: 5.3%
- NH Naples: 3.7%
- NH Guantamano: 3.3%
- NMC San Diego: 3.3%
- NH Beaufort: 3.3%
- NH Sigonella: 2.7%

*Data lagged by one week.
Active Duty and Recruits

- AD Laboratory Cases: 4 laboratory-positive cases identified among AD Sailors (N=2) and Marines (N=2).
- AD Dispensed Antivirals: 1 AVs dispensed among an AD Sailor.
- Recruits: No laboratory-positive cases or dispensed antivirals among recruits.
- Location: Laboratory-positive cases occurred most frequently at NH Camp Lejeune (N=2), AMC Tripler-Shafter (N=1), NH Lemoore (N=1).
- Vaccination Status: 4 AD laboratory-positive cases (100%) 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

<table>
<thead>
<tr>
<th>Week 31</th>
<th>Season</th>
<th>Week 31</th>
<th>Season</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cases</td>
<td>4</td>
<td>1,394</td>
<td>1</td>
</tr>
<tr>
<td>Navy AD</td>
<td>2</td>
<td>891</td>
<td>1</td>
</tr>
<tr>
<td>Marine Corps AD</td>
<td>2</td>
<td>366</td>
<td>0</td>
</tr>
<tr>
<td>Navy Recruit</td>
<td>0</td>
<td>84</td>
<td>0</td>
</tr>
<tr>
<td>Marine Corps Recruit</td>
<td>0</td>
<td>53</td>
<td>0</td>
</tr>
</tbody>
</table>

Merits: 1,394, 1, 2,472, 1, 1,792, 1, 562, 0, 0, 0, 0, 0

Note: Season counts are since Week 37.

Medical Event Reports (MER)

MERs for Influenza-Associated Hospitalizations

<table>
<thead>
<tr>
<th>MER</th>
<th>Match to Surveillance Data</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Week 31</td>
<td>0</td>
</tr>
<tr>
<td>Season</td>
<td>102</td>
</tr>
</tbody>
</table>

*Indicates MERs that matched to cases from laboratory or pharmacy surveillance data.
Data Source: DIRs.
Note: Season counts are since Week 37.

Bacterial Coinfections

- Summary: 3.8% of laboratory-positive influenza cases had a bacterial coinfection identified this season.
- Upper-respiratory: 281 upper-respiratory infections have been identified among 271 cases, as *Streptococcus* (N=276), *Staphylococcus* (N=4), *Haemophilus* (N=1).
- Lower-respiratory: 35 lower respiratory infections have been identified as *Staphylococcus* (N=10), *Haemophilus* (N=4), *Stenotrophomonas* (N=3), *Serratia* (N=3), *Streptococcus* (N=3), *Pseudomonas* (N=2), *Corynebacterium* (N=2), *Enterococcus* (N=2), *Enterobacter* (N=1), *Klebsiella* (N=1), *Escherichia* (N=1), *Acinetobacter* (N=1), *Pantoea* (N=1), and *Neisseria* (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>Current Season</td>
<td>271</td>
</tr>
<tr>
<td>Baseline</td>
<td>143</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 08AUG18.

In the News

- An National Institutes of Health funded study found that the duration of influenza A viral shedding was longer in obese adults compared to non-obese adults, possibly due to chronic inflammation. [Details](#).