Weekly Highlights

- Overall influenza activity in the DON is low.
- Laboratory-positive cases, dispensed antivirals, and the percent of outpatient visits for ILI are low and the trend has remained the same over the prior two weeks.
- Inpatient activity for both laboratory-positive cases (N=0) and inpatient dispensed antivirals (N=3) is low.

Influenza Surveillance Indicators

<table>
<thead>
<tr>
<th>Overview</th>
<th>Trend</th>
<th>Activity Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laboratory Cases</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Dispensed Antivirals</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>ILI Outpatient Visits</td>
<td>%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Severity</th>
<th>Trend</th>
<th>Activity Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient Laboratory Cases</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Inpatient Dispensed Antivirals</td>
<td>N</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Active Duty and Recruits</th>
<th>Trend</th>
<th>Activity Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Duty Laboratory Cases</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Active Duty Dispensed Antivirals</td>
<td>N</td>
<td>Normal</td>
</tr>
<tr>
<td>Recruit Laboratory Cases</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>Recruit Dispensed Antivirals</td>
<td>N</td>
<td></td>
</tr>
</tbody>
</table>

Overall Burden (Data Lagged, Week 40)

DON Total Influenza Cases from Laboratory, Pharmacy and Encounter Data

Supporting Surveillance

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

11 OCT 2018 report highlights:

- 76% of FY18 cases from US shipboard populations were positive for influenza A
- Access the full report here.
Laboratory Surveillance

- **Burden:** Laboratory-positive influenza cases (N=24) are low and below the seasonal threshold. The trend over the past two weeks has remained the same.
- **Specimens:** Overall percent positivity is 6.6%, with all cases identified as influenza A.
- **Severity:** No inpatient laboratory-positive cases were identified.
- **Age:** Children ages 0-4 had the highest rate of laboratory-positive influenza cases at 3.9 cases per 100,000 persons, while children ages 5-17 had the second highest rate at 2.7 cases per 100,000 persons.
- **Location:** NMC Camp Lejeune (N=10), NH Jacksonville (N=6), AF-ASU-59th MDW-WHASC-Lackland (N=3), and NH Guam-Agana (N=3) 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 eligibility records.

DON Laboratory-Positive Influenza Cases and Seasonal Baseline, 2018 - 2019 Season

DON Laboratory-Positive Cases, Seasonal Comparison, 2013-2018

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 antivirals (N=37) are low and below the seasonal threshold. The trend over the past two weeks has increased; the number of dispensed antivirals increased from the prior week by 8.8%.
- **Severity:** Three inpatient dispensed antivirals were identified among spouses (N=3)
- **Types:** All dispensed AVs were for Oseltamivir.
- **Location:** NH Jacksonville (N=6), NMC Camp Lejeune (N=5), and NH Guam-Agana (N=5) had the highest number of dispensed antivirals for the week.

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

### Top MTFs, Dispensed Antivirals, Week 41

- NH JACKSONVILLE: 5
- NH GUAM-AGANA: 3
- NMC CAMP LEJEUNE: 3
- NH PENSACOLA: 3
- NMC PORTSMOUTH: 3
- WALTER REED NATL MIL MED CNTR: 3

### Top MTFs, Dispensed Antivirals, Season 2018 - 2019

- NH JACKSONVILLE: 20
- NH PENSACOLA: 19
- NMC CAMP LEJEUNE: 11
- NMC SAN DIEGO: 11
- NMC PORTSMOUTH: 7
- NH CAMP PENDELTON: 6

### Medical Event Reports (MER)

- **Week 41:**
  - One MER for an influenza-associated hospitalization was reported to DRSI this week. The MER matched to either laboratory or pharmacy surveillance data.

### MERs for Influenza-Associated Hospitalizations

<table>
<thead>
<tr>
<th>Week 41</th>
<th>Match to Surveillance Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

### Notes:
- Season counts are since Week 37.
- All outpatient: Influenza-like illness (ILI) activity is low. The percentage of outpatient medical encounters due to ILI was 2.6% in Week 40, below the surveillance threshold of 4.5%.
- **Note:** ILI activity is used to indicate the burden of ILI on healthcare resources.

Data source: CAPER

### Outpatient Medical Encounters due to ILI, Week 40

- **ILI% 2018 - 2019:** 6%
- **Surveillance Threshold:** 4%

Data source: Disease Reporting System-internet

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DON Active Duty and Recruits

- **AD Laboratory Cases:** Four laboratory-positive cases were identified among AD Sailors (N=3) and Marines (N=1).
- **AD Dispensed Antivirals:** Six dispensed antivirals were identified among AD Sailors (N=4) and Marines (N=2).
- **Recruits:** One dispensed antiviral was identified among recruits. No laboratory-positive cases were identified among recruits.
- **Location (Active Duty):** Laboratory-positive cases among active duty Sailors or Marines occurred most frequently at NMC Camp Lejeune (N=2), AF-ASU-59th MDW-Whasc-Lackland (N=1), and NH Guam-Agana (N=1).
- **Location (Recruits):** No laboratory-positive cases occurred among recruit Sailors or Marines.
- **Vaccination Status:** None of the four AD laboratory-positive cases 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 DON Active Duty Service Members, 2018 - 2019

DON Active Duty and Recruit Cases

<table>
<thead>
<tr>
<th></th>
<th>Laboratory</th>
<th>Dispensed AVs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Week 41</td>
<td>Season</td>
</tr>
<tr>
<td><strong>Total Cases</strong></td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td><strong>Navy AD</strong></td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td><strong>Marine Corps AD</strong></td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td><strong>Navy Recruit</strong></td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Marine Corps Recruit</strong></td>
<td>0</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: Season counts are since Week 37.

In the News

- A study in *BMC Infectious Diseases* shows no association between negative birth outcomes after prenatal exposure to oseltamivir (Tamiflu), an antiviral used to shorten the duration of flu symptoms. [Details](#).
- The New York Times is reporting that the first influenza-related pediatric death was announced on Monday. [Details](#).

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 an average of the 2015-2016, 2016-2017, and 2017-2018 seasons.
- ILI threshold is calculated based on the off-season percentage outpatient visits for the 2015-2016, 2016-2017, and 2017-2018 seasons, plus two standard deviations.
- ILI encounters are defined as those where an ILI code, as defined by AFHSB, is found in any diagnostic position. The ICD-10-CM ILI in the AFHSB definition are: B97.89, H66.9, H66.90, H66.91, H66.92, H66.93, J00, J01.9, J01.90, J06.9, J09, J09.X, J09.X1, J09.X2, J09.X3, J09.X9, J10, J10.0, J10.00, J10.01, J10.08, J10.1, J10.2, J10.8, J10.81, J10.82, J10.83, J10.89, J11, J11.0, J11.00, J11.08, J11.1, J11.2, J11.8, J11.81, J11.82, J11.83, J11.89, J12.89, J12.9, J12.9, J18.1, J18.8, J18.9, J20.9, J40, R05, R50.9
- The “Overall Burden” and ILI figures are lagged one week due to encounter data availability.
- Prepared by the EpiData Center on 18OCT18.

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