**Weekly Highlights**

- Overall influenza activity in the DON is *elevated*.
- Laboratory-positive cases are *elevated* and the trend has increased over the prior two weeks. Dispensed antivirals and the percent of outpatient visits for ILI are *normal* and the trend for ILI has remained the same over the prior weeks.
- Inpatient activity for both laboratory-positive cases (N=5) and inpatient dispensed antivirals (N=20) is *normal*.
- The previous flu season (2017-2018 season) already peaked by Week 6.

### 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>
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</tr>
<tr>
<td>Dispensed Antivirals</td>
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<tr>
<td>ILI Outpatient Visits</td>
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#### Severity

<table>
<thead>
<tr>
<th>Indicator</th>
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<tbody>
<tr>
<td>Inpatient Laboratory Cases</td>
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<tr>
<td>Inpatient Dispensed Antivirals</td>
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</table>

#### Active Duty and Recruits

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

### Overall Burden (Data Lagged, Week 5)

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

[Detailed chart showing the data]

### Supporting Surveillance

#### DOD Seasonal Influenza Surveillance Summary (AFHSB)

**Week 5 highlights:**
- NORTHCOM reports increased influenza activity, and high activity in 5 states.
- Access the full report [here](#).

#### Febrile Respiratory Illness Surveillance Report (NHRC)

**07 FEB 2019 report highlights:**
- One influenza A H1 positive sample was identified in military recruits.
- Access the full report [here](#).
Laboratory Surveillance

- **Burden:** Laboratory-positive influenza cases (N=536) are elevated and above the seasonal threshold. The trend over the past two weeks has increased, and the number of laboratory-positive cases increased from the prior week by 17.8%.

- **Specimens:** Overall percent positivity is 31.9%, with 97.3% of cases identified as influenza A.

- **Severity:** 5 inpatient laboratory-positive cases were identified in sponsors (N=3), children (N=1), and spouses (N=1).

- **Age:** Children ages 5-17 had the highest rate of laboratory-positive influenza cases at 62.5 cases per 100,000 persons, while children ages 1-4 had the second highest rate at 45.8 cases per 100,000 persons.

- **Location:** NH Jacksonville (N=75), NMC Camp Lejeune (N=60), NH Yokosuka (N=51), NH Pensacola (N=41), and NMC Portsmouth (N=31) 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 Inpatient Laboratory Cases (Severity)

[Graph showing severity distribution over weeks]

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

- NH Jacksonville: 75
- NMC Camp Lejeune: 60
- NH Yokosuka: 51
- NH Pensacola: 41
- NMC Portsmouth: 31
- AF-MC-III Medgrp-Keesler: 20
- NH Camp Pendleton: 18

### Top MTFs, Laboratory-Positive Cases, 2018 - 2019 Season

- NMC Camp Lejeune: 104
- NH Jacksonville: 98
- NH Yokosuka: 74
- NMC San Diego: 51
- NH Camp Pendleton: 40
- NH Pensacola: 31
- NMC Portsmouth: 24

Note: Season counts are since Week 37.
Antiviral Surveillance

- **Burden:** Dispensed antivirals (N=741) are normal and above the seasonal threshold. The trend over the past two weeks has increased, and the number of dispensed antivirals increased from the prior week by 27.1%.
- **Severity:** 20 inpatient dispensed antivirals were identified in spouses (N=8), sponsors (N=8), and children (N=4).
- **Types:** All dispensed AVs were for oseltamivir.
- **Location:** NH Pensacola (N=138), NMC Portsmouth (N=108), NH Jacksonville (N=57), NMC Camp Lejeune (N=47), and NH Yokosuka (N=35) had the highest number of dispensed antivirals for the week.

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

### DON Influenza Specific Antiviral Prescriptions and Seasonal Baseline, 2018 - 2019 Season

![Graph showing seasonal baseline and 2018-2019 season compared to the number of antiviral prescriptions dispensed over time.](image)

### DON Inpatient Dispensed Antivirals (Severity)

![Bar chart showing the number of inpatient dispensed antivirals by facility for the season 2018-2019.](image)

Top MTFs, Dispensed Antivirals, Week 6

- NH Pensacola (138)
- NMC Portsmouth (108)
- NH Jacksonville (57)
- NMC Camp Lejeune (47)
- NH Yokosuka (35)

Top MTFs, Dispensed Antivirals, Season 2018 - 2019

- NH Pensacola (416)
- NMC Portsmouth (344)
- NH Jacksonville (248)
- NMC Camp Lejeune (217)
- NH Yokosuka (208)

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

- **All outpatient:** Influenza-like illness (ILI) activity is normal. The percentage of outpatient medical encounters due to ILI was 4.3% in Week 5, below the surveillance threshold of 4.5%.
- **Note:** ILI activity is used to indicate the burden of ILI on healthcare resources.

Data source: CAPER

### Medical Event Reports (MER)

- **17 MERs** for an influenza-associated hospitalization were reported to DRSI this week. Fifteen (88.2%) matched to either laboratory or pharmacy surveillance data.
- **Note:** An influenza-associated hospitalization for an individual 65 or younger is a reportable medical event.

Data source: Disease Reporting System-internet

### MERs for Influenza-Associated Hospitalizations

<table>
<thead>
<tr>
<th>MER</th>
<th>N</th>
<th>Match to Surveillance Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 6</td>
<td>17</td>
<td>15</td>
</tr>
<tr>
<td>Season</td>
<td>82</td>
<td>75</td>
</tr>
</tbody>
</table>

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

![Graph showing the percentage of outpatient medical encounters due to ILI from Week 4 to Week 13.](image)
DON Active Duty and Recruits

- **AD Laboratory Cases:** 95 laboratory-positive cases were identified among AD Sailors (N=70) and Marines (N=25).
- **AD Dispensed Antivirals:** 129 dispensed antivirals were identified among AD Sailors (N=108) and Marines (N=21).
- **Recruits:** 2 laboratory-positive cases and 4 dispensed antivirals were identified among recruits.
- **Location (Active Duty):** Laboratory-positive cases among active duty Sailors or Marines occurred most frequently at NH Yokosuka (N=10), NH Okinawa (N=9), NMC Camp Lejeune (N=8), NH Pensacola (N=6), and AF-Mc-81st Medgrp-Keesler (N=5).
- **Location (Recruits):** Laboratory-positive cases among recruit Sailors or Marines occurred most frequently at NH Beaufort (N=1), and NH Camp Pendleton (N=1).
- **Vaccination Status:** 87 AD laboratory-positive cases (91.6%) had a vaccination record more than fourteen days prior to infection in Week 6.

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 6</td>
<td>Season</td>
</tr>
<tr>
<td>Total Cases</td>
<td>97</td>
<td>548</td>
</tr>
<tr>
<td>Navy AD</td>
<td>70</td>
<td>356</td>
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<tr>
<td>Marine Corps AD</td>
<td>25</td>
<td>167</td>
</tr>
<tr>
<td>Navy Recruit</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Marine Corps Recruit</td>
<td>2</td>
<td>18</td>
</tr>
</tbody>
</table>

#### In the News

- The CDC is reporting elevated flu activity nationally. The most recent surveillance update states that there have been between 13 to 15 million influenza cases from 01 OCT 2018 through 02 FEB 2019. [Details.](#)
- The findings from a recently published report in *Birth Defects Research* show an association between H1N1 2009 pandemic influenza infections among pregnant women and subsequent birth complications and adverse outcomes for newborns. [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 ICD-10-CM code, per AFHSB, is found in any diagnostic position. The ICD-10-CM codes in the AFHSB definition include: B97.89, H66.9, H66.90, H66.91, H66.92, H6693, 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, J18, 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 12FEB19.