Overall Summary
During Week 22, influenza activity was above baseline. Thirty cases of laboratory positive influenza cases among non-immunized recruits were identified during May 2016. These findings are consistent with an increase of positive influenza cases at NH Beaufort since March 2016.

Key Findings

**Influenza Activity and Surveillance**

**Laboratory**
Sixteen laboratory positive influenza cases were identified during Week 22, slightly above baseline. Details

**Antivirals (AVs)**
28 AV medications were dispensed in Week 22, slightly above baseline. Details

**Influenza-Like Illness (ILI)**
Overall, 3.1% of outpatient medical encounters were due to ILI, at baseline. Details

**Severity Indicators**

**Inpatient**
This week, there was one inpatient laboratory positive case and seven inpatient antiviral prescriptions. No inpatient influenza case reports were identified in DRSi. Details

**Coinfections**
One bacterial coinfection was identified among laboratory positive cases during Week 22. Details

**Select Populations**

**Active Duty and Recruits**
In Week 22, there was one laboratory positive case and seven AV prescriptions dispensed to active duty personnel. Among recruits, there were no laboratory positive cases and no AV prescriptions. Details

NHRC surveillance reports febrile respiratory illness rates were at elevated rates at MCRD Parris Island for Week 21. Details

**Children**
Influenza positive laboratory cases and AV prescriptions among children were above baseline. Details

Active Duty Vaccination Rates

Navy: 96.1%
Marine Corps: 97.5%
US Fleet Forces: 99.9%

View Table
Data source: MRRS, current as of 06 June 2016.

Prepared by the EpiData Center (email; web)
**Overall Burden**
The estimated burden of influenza across the DON combines three major sources of data: certified laboratory results, antiviral pharmacy transactions, and medical encounters with influenza-specific diagnoses.
- During Week 22, there were 34 DON cases identified in one or more data sources; pharmacy captured the highest proportion of cases (82.4%). Two cases were identified in all three sources.
- Since Week 40, there have been 6,771 DON cases identified in at least one of the three data sources.

**Laboratory Cases**
- Sixteen laboratory positive influenza cases were identified during Week 22 (seven Type A, eight Type B, one Type AB), above baseline.
  - Top three facilities this week: NH Beaufort (4), AMC Tripler-Shafter (3), NMC San Diego (2).
- Since Week 40, 2,675 laboratory positive cases were identified among DON beneficiaries. Top three facilities thus far: NMC San Diego (453), NH Jacksonville (238), NH Camp Pendleton (174).

**Specimen Positivity**
- 8.3% of all influenza specimens tested during Week 22 were positive, exceeding the percentage for the same time last season (3.4%).
- When grouped by parent facility, three locations (10.7%) tested more than ten specimens. Of these facilities, the highest specimen positivity was reported by NH Beaufort (13.8%) and NMC San Diego (4.8%).

<table>
<thead>
<tr>
<th>Test Types among Positive Influenza Specimens, n (%)</th>
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<tr>
<td></td>
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<tr>
<td>Week 20</td>
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<td>Week 21</td>
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<td>Week 22</td>
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<tr>
<td>Season</td>
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**Antiviral Prescriptions**
- 28 antiviral prescriptions (25 oseltamivir, 3 amantadine) were dispensed during Week 22. AV prescriptions remain above baseline.
- Top three facilities this week: NMC San Diego (5), NH Beaufort (4), AMC Tripler-Shafter (3).
- Since Week 40, the majority (99.1%) of prescriptions were for oseltamivir.

<table>
<thead>
<tr>
<th>Antiviral Medications Dispensed to DON Beneficiaries, n (%)</th>
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<tbody>
<tr>
<td>Amantadine</td>
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<tr>
<td>Week 22</td>
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<tr>
<td>Season</td>
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</table>
 Syndromic Surveillance

**Influenza-Like Illness (ILI)**
- The percent of medical encounters that included an ILI diagnosis during Week 21 (lagged due to data availability):
  - 3.1% of outpatient encounters (at baseline)
  - 9.9% of ER admissions (below baseline)
- When grouped by parent facility, 17 DON facilities (60.7%) experienced an increase in the proportion of outpatient ILI visits during Week 21. One experienced an increase above 25%, NHC Annapolis.

**Severity Indicators**

**Inpatient Laboratory**
- One influenza positive laboratory case (6.3% of all laboratory cases) was identified in the inpatient setting during Week 22.
- This week’s case was a family member (Marine Corps spouse) identified at NMC San Diego and was Type A positive.

**Inpatient Pharmacy**
- Seven influenza AVs (25.0% of all influenza AVs) were prescribed in the inpatient setting during Week 22, below baseline (27.5%).
- NMC San Diego dispensed three AVs, AMC Darnall-Hood, NH Bremerton, NH Camp Lejeune, and Walter Reed Natl Mil Med Cntr all dispensed one AV in the inpatient setting, This week’s AVs were dispensed to spouses (4), children (2), and a non-active duty sponsors (1).

**Influenza-Associated Hospitalization Reports**
- No influenza cases were reported to DRSi during Week 22.

**Bacterial Coinfections**
- One upper respiratory (*Streptococcus*) coinfection was identified during Week 22.
- Overall coinfection case counts are above baseline. Details

<table>
<thead>
<tr>
<th>Proportion Bacterial Coinfections by Respiratory Source and Percent of Laboratory Positive Cases with a Bacterial Coinfections since Week 40, 2015-2016 Season</th>
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</thead>
<tbody>
<tr>
<td>Coinfections by Respiratory Source, n (%)</td>
</tr>
<tr>
<td>Upper Respiratory</td>
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<tr>
<td>Current Season (n=106)</td>
</tr>
<tr>
<td>Cumulative Baseline (n=104.7)</td>
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</tbody>
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* Cumulative baseline calculated as a weighted average over three years and may not represent whole numbers.
Active Duty
- One laboratory positive influenza case was identified among active duty DON service members (Navy) during Week 22 (Type A Positive). This case was identified at NH Beaufort.
- Seven active duty service members (5 Navy, 2 Marines) were dispensed AVs (6 oseltamivir, 1 amantadine) during Week 22.

Recruits
- No laboratory positive influenza cases were identified among recruits during Week 22.
- No AVs were dispensed to recruits during Week 22.

<table>
<thead>
<tr>
<th>Case Type</th>
<th>Active Duty</th>
<th>Recruits</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Navy</td>
<td>Marine Corps</td>
<td>Navy</td>
</tr>
<tr>
<td>Laboratory Positive</td>
<td>227</td>
<td>81</td>
<td>82</td>
</tr>
<tr>
<td>AV Prescriptions</td>
<td>531</td>
<td>189</td>
<td>9</td>
</tr>
</tbody>
</table>

Children
- The rate of laboratory positive influenza cases (per 100,000) among children was 3.2 for ages 0-4 years and 1.2 for ages 5-17.
- Seven laboratory positive influenza cases were identified among children during Week 22, less than one standard deviation above baseline.
  - There were four cases among children ages 0-4 and three among children ages 5-17.
- The rate of AV prescriptions (per 100,000) was higher among children 0-4 years (1.1) than children 5-17 years (0.2).
- There were seven AVs dispensed to children during Week 22, above baseline estimates.
  - This week’s cases (all oseltamivir) include five children ages 0-4 years old and two children ages 5-17 years old. NHC New England and NH Beaufort dispensed the highest number of AV’s (2 each). Two AVs were dispensed in the inpatient setting.

In the News
- Four influenza-associated pediatric deaths were reported to the CDC during week 21. Two deaths were associated with an influenza A (H1N1)pdm09 virus; one death was associated with an influenza A virus with no subtyping; and one death was associated with an influenza B virus. [Details]