Overall Summary
The number of laboratory positive cases and antiviral prescriptions remain above seasonal baselines, but have peaked and continue to decrease. The rates of influenza cases among children remain above baseline.

Key Findings

Influenza Activity and Surveillance

Laboratory
60 laboratory positive influenza cases were identified during Week 16, slightly above baseline. Details

Antivirals (AVs)
97 AV medications were dispensed in Week 16, slightly above baseline. Details

Influenza-Like Illness (ILI)
Overall, 3.4% of outpatient medical encounters were due to ILI, below baseline. Details

Severity Indicators

Inpatient
This week, there were five inpatient laboratory positive cases and ten inpatient antiviral prescriptions. No inpatient influenza case reports were identified in DRSi. Details

Coinfections
Three bacterial coinfections were identified among laboratory positive cases during Week 16. Details

Select Populations

Active Duty and Recruits
In Week 16, there were seven laboratory positive cases and 16 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 substantially elevated at MCRD San Diego and at or below expected values at MCRD Parris Island and NRTC Great Lakes for Week 15. Details

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

Active Duty Vaccination Rates
Navy: 95.6%
Marine Corps: 96.8%
US Fleet Forces: 99.5%

View Table
Data source: MRRS, current as of 24Apr 2016.
Influenza Activity and Surveillance

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 16, there were 137 DON cases identified in one or more data sources; pharmacy captured the highest proportion of cases (63.2%). Ten cases were identified in all three sources.
- Since Week 40, there have been 6,145 DON cases identified in at least one of the three data sources.

Laboratory Cases
- 60 laboratory positive influenza cases were identified during Week 16 (35 type A, 24 type B, one type unspecified) slightly above baseline.
  - Top three facilities this week: NH Jacksonville (9), NH Camp Lejeune (7), NMC San Diego (6).
- Since Week 40, 2,186 laboratory positive cases were identified among DON beneficiaries. Top three facilities thus far: NMC San Diego (441), NH Jacksonville (220), NH Camp Pendleton (168).

Specimen Positivity
- 14.2% of all influenza specimens tested during Week 16 were positive, exceeding the percentage for the same time last season (5.6%).
- When grouped by parent facility, 10 locations (35.7%) tested more than ten specimens. The facilities with the highest specimen positivity were NHC New England (27.3%) and NHC Quantico (24.0%).

Antiviral Prescriptions
- 97 antiviral prescriptions (95 oseltamivir, 2 amantadine) were dispensed during Week 16. AV prescriptions remain above baseline, with a continued declining trend.
- Top three facilities this week: NH Camp Lejeune (12), NMC San Diego (12), NH Jacksonville (8).
- Since Week 40, the majority (99.2%) of prescriptions were for oseltamivir.
Syndromic Surveillance

Influenza-Like Illness (ILI)
- The percent of medical encounters that included an ILI diagnosis during Week 15 (lagged due to data availability):
  - 3.4% of outpatient encounters (below baseline)
  - 10.9% of ER admissions (below baseline)
- When grouped by parent facility, 8 DON facilities (28.6%) experienced an increase in the proportion of outpatient ILI visits during Week 15. One experienced an increase above 25%; NHC Annapolis (31.2%) experienced the highest increase.

Severity Indicators

Inpatient Laboratory
- Five influenza positive laboratory cases (8.3% of all laboratory cases) were identified in the inpatient setting during Week 16.
- This week’s cases were three family members, one active duty, and one retiree (all Navy). Cases were identified at NMC San Diego (3), NH Jacksonville (1), and NMC Portsmouth Houston (1). All cases were type A positive.

Inpatient Pharmacy
- Ten influenza AVs (10.3% of all influenza AVs) were prescribed in the inpatient setting during Week 15, above baseline (6.0%).
- NMC San Diego dispensed 7 AVs, NH Jacksonville dispensed 2 and NMC Portsmouth dispensed one AV in the inpatient setting. This week’s AVs were dispensed to spouses (3), active duty (3), children (2), and a non-active duty sponsors (2).

Influenza-Associated Hospitalization Reports
- No influenza cases were reported to DRSi during Week 16.

Bacterial Coinfections
- Three coinfections identified during Week 16, one upper respiratory (Streptococcus) and two non-respiratory (both Streptococcus).
- Overall coinfection case counts are below 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>
</tr>
</thead>
<tbody>
<tr>
<td>Coinfections by Respiratory Source, n (%)</td>
</tr>
<tr>
<td>Upper Respiratory</td>
</tr>
<tr>
<td>Current Season (n=93)</td>
</tr>
<tr>
<td>Cumulative Baseline (n=100.5)</td>
</tr>
</tbody>
</table>

* Cumulative baseline calculated as a weighted average over three years and may not represent whole numbers.
Active Duty

- Seven laboratory positive influenza cases were identified among active duty Navy (3) and Marine Corps (4) service members during Week 16 (6 type A and 1 type B). Top facilities this week: NHC Quantico and NHC Annapolis with two each and three other facilities with one case each.
- 16 active duty service members (11 Navy, 5 Marines) were dispensed AVs (15 oseltamivir, 1 amantadine) during Week 16.

Recruits

- No laboratory positive influenza cases were identified among recruits during Week 16.
- No AVs were dispensed to recruits during Week 16.

<table>
<thead>
<tr>
<th>Case Type</th>
<th>Active Duty</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Navy</td>
<td>Marine Corps</td>
<td>Navy</td>
<td>Marine Corps</td>
</tr>
<tr>
<td>Laboratory Positive</td>
<td>205</td>
<td>75</td>
<td>50</td>
<td>21</td>
</tr>
<tr>
<td>AV Prescriptions</td>
<td>488</td>
<td>173</td>
<td>9</td>
<td>91</td>
</tr>
</tbody>
</table>

Children

- The rate of laboratory positive influenza cases (per 100,000) among children was 11.2 for ages 0-4 years and 6.3 for ages 5-17.
- 32 laboratory positive influenza cases were identified among children during Week 16, less than one standard deviation above baseline.
  - There were 14 cases among children ages 0-4 and 18 among children ages 5-17.
- The rate of AV prescriptions (per 100,000) was equal among children 0-4 years and children 5-17 years at 2.2 per 100,000.
- There were 33 AVs dispensed to children during Week 16, over four times baseline estimates.
  - This week’s cases (all oseltamivir) include 10 children ages 0-4 years old and 23 children ages 5-17 years old. NH Camp Lejeune (7) dispensed the most AVs. Two AVs were dispensed in the inpatient setting.

In the News

- Influenza activity continues to decline; however activity is expected to continue for weeks and is widespread in some areas. Additionally, 6 pediatric deaths were reported. Details