Influenza Activity and Surveillance

**Laboratory**
- Laboratory-positive influenza cases were more than one standard deviation above baseline.
- 229 laboratory cases identified. [Details]

**Antivirals (AVs)**
- Dispensed AVs were above baseline.
- 290 AVs dispensed. [Details]

**Influenza-Like Illness (ILI)**
- ILI encounters were slightly below baseline for outpatient medical encounters. [Details]

Severity Indicators

**Inpatient**
- 5 inpatient laboratory-positive cases identified.
- 15 inpatient AVs dispensed, below baseline.
- 3 influenza cases reported to DRSi. [Details]

**Coinfections**
- 12 bacterial coinfections among laboratory-positive cases were identified from upper respiratory (4), lower respiratory (1) and non-respiratory (7) specimens.
- 12 positive rapid strep tests were identified among influenza cases. [Details]

Select Populations

**Active Duty**
- 22 laboratory-positive cases identified.
- 37 AVs dispensed. [Details]

**Recruits**
- 1 laboratory-positive case identified.
- 1 AV dispensed. [Details]
- Febrile respiratory illness rates were at or below expected values at NRTC Great Lakes, MCRD San Diego, and MCRD Parris Island. [NHRC Report]

**Children**
- Laboratory cases among children exceeded two standard deviations above baseline levels with 147 laboratory-positive cases identified. [Details]

Overall Summary

Influenza activity in the DON appears to have peaked during weeks 7 and 8; however, laboratory-positive cases and dispensed antivirals continue to exceed baseline levels.

Active Duty Vaccination Rates

Navy ....................... 95.1%
Marine Corps .......... 96.1%
US Fleet Forces ........ 97.6%

[View Table]
Data source: MRRS, current as of 13 Mar 2017.
Overall Burden*
- The weekly burden of influenza in the DON was 431 cases, identified in one or more data sources.
- Pharmacy captured the highest proportion of cases (66.4%).
- 36 cases were identified in all three sources.
- 7,040 DON cases identified since Week 40.

*Note: 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.

Laboratory Cases
- Laboratory-positive cases were less than the prior week, but exceeded one standard deviation above baseline levels with 229 cases.
- Influenza case types: A (164), B (61), AB (3), and unknown (1).
- Facilities with the greatest number of cases:
  - Current week: NH Camp Lejeune (51), NH Jacksonville (25), NH Pensacola, and Ft Belvoir Community Hosp-FBC (both with 17).
  - Season: NH Camp Lejeune (491), NMC San Diego (245), and NH Jacksonville (199).

Specimen Positivity
- 25.2% of all influenza specimens tested during Week 10 were positive, above last season (25.0%).
- When grouped by parent facility, 16 (57.1%) locations tested more than ten specimens.

<table>
<thead>
<tr>
<th>Test Types among Positive Influenza Specimens, n (%)</th>
<th>Rapid</th>
<th>Culture</th>
<th>PCR</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 8</td>
<td>337(76.9)</td>
<td>16(3.7)</td>
<td>85(19.4)</td>
<td>438</td>
</tr>
<tr>
<td>Week 9</td>
<td>225(70.8)</td>
<td>18(5.7)</td>
<td>75(23.6)</td>
<td>318</td>
</tr>
<tr>
<td>Week 10</td>
<td>196(82.0)</td>
<td>6(2.5)</td>
<td>37(15.5)</td>
<td>239</td>
</tr>
<tr>
<td>Season</td>
<td>2,101(68.5)</td>
<td>236(7.7)</td>
<td>730(23.8)</td>
<td>3,067</td>
</tr>
</tbody>
</table>

Antiviral Prescriptions
- 290 AVs were dispensed (above baseline levels).
- AVs dispensed: Amantadine (1), and Oseltamivir (289).
- Facilities dispensing the most AVs this week: NH Camp Lejeune (42), NH Pensacola (24), and NH Jacksonville (21).

<table>
<thead>
<tr>
<th>Antiviral Medications Dispensed to DON Beneficiaries, n (%)</th>
<th>Amantadine</th>
<th>Oseltamivir</th>
<th>Rimantadine</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 8</td>
<td>1(0.2)</td>
<td>564(99.8)</td>
<td>0(0.0)</td>
<td>565</td>
</tr>
<tr>
<td>Week 9</td>
<td>2(0.5)</td>
<td>414(99.5)</td>
<td>0(0.0)</td>
<td>416</td>
</tr>
<tr>
<td>Week 10</td>
<td>1(0.3)</td>
<td>289(99.7)</td>
<td>0(0.0)</td>
<td>290</td>
</tr>
<tr>
<td>Season</td>
<td>36(0.8)</td>
<td>4,240(99.1)</td>
<td>1(0.0)</td>
<td>4,277</td>
</tr>
</tbody>
</table>
Syndromic Surveillance

Influenza-Like Illness (ILI) *
- The percentage of medical encounters that included an ILI diagnosis:
  - 4.2% of outpatient encounters (slightly below baseline).
  - 14.2% of ER encounters (below baseline).
- 8 DON facilities (28.6%) reported an increase in the proportion of outpatient ILI visits from the prior week.
  - One facility had an increase of 25% or higher.
  - NHC Quantico had the greatest increase (37.1%) in the percent of ILI visits.

*For Week 9, lagged due to data availability.

Severity Indicators

Inpatient Laboratory
- Five inpatient laboratory cases were identified, below baseline.
- All cases were among children.
- Cases were identified at NMC Portsmouth (3) and WRNMMC (2).

Inpatient Pharmacy
- The percentage of inpatient AVs (5.2% of all influenza AVs) was slightly below baseline; 15 inpatient AVs were dispensed.
- AVs were most frequently dispensed at NMC Portsmouth (4), NMC San Diego (3) and WRNMMC (3).
- AVs were dispensed to children (6), non-active duty sponsors (4), spouses (2), active duty sponsors (2), and a recruit (1).

Influenza-Associated Hospitalization Reports
- Three influenza-associated hospitalizations were reported to DRSi. All cases were identified through three sources: laboratory-positive records, pharmacy records, and DRSi.

Bacterial Coinfections
- 12 coinfections were identified; 5 *Streptococcus* (4 upper respiratory, 1 non-respiratory), 1 *Klebsiella* (lower respiratory), and 6 other non-respiratory infections. Details.
- 12 cases of Group A *Streptococcus* identified from rapid diagnostic tests.

| Coinfections by Specimen Source and as a Percent of Laboratory Cases, 2016-2017 Season |
|-----------------------------------|---------------------------------|---------------------------------|---------------------------------|
|                                    | Upper Respiratory (%)           | Lower Respiratory (%)           | Non-Respiratory (%)             |
| Current Season (n=130)             | 57(43.8)                        | 12(9.2)                         | 61(46.9)                        |
| Cumulative Baseline* (n=87.8)      | 33.7(38.3)                      | 8.5(9.7)                        | 45.7(52)                        |

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

Note: Table does not include Group A *Streptococcus* identified from rapid diagnostic tests.

< Back to Key Findings
Active Duty
- 22 laboratory-positive influenza cases were identified among active duty service members, 13 Navy and 9 Marine Corps (18 Type A, 4 Type B).
- Facilities with the greatest number of active duty cases identified: NH Pensacola (7), and NMC San Diego (3).
- 37 active duty service members (26 Navy, 11 Marine Corps) were dispensed AVs (all Oseltamivir).

Recruits
- One laboratory-positive influenza case was identified among a Marine Corps recruit.
- One AV was dispensed to a Marine Corps recruit.

<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</td>
<td>238</td>
<td>97</td>
<td>4</td>
</tr>
<tr>
<td>Antiviral</td>
<td>440</td>
<td>154</td>
<td>3</td>
</tr>
</tbody>
</table>

Children
- Laboratory cases among children exceeded two standard deviations above baseline levels; 147 laboratory-positive influenza cases were identified.
  - Facilities with the greatest number of outpatient cases identified: NH Camp Lejeune (43), NH Jacksonville (15), and Ft Belvoir Community Hosp-FBC (12).
  - Five cases were identified from an inpatient setting.
- AVs dispensed to children were above baseline levels; 147 AVs were dispensed (146 Oseltamivir and 1 Amantadine).
  - Locations with most AVs dispensed: NH Camp Lejeune (31), NH Jacksonville (14), and WRNMMC (12).

<table>
<thead>
<tr>
<th>Age</th>
<th>Laboratory</th>
<th>Antiviral Prescriptions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cases</td>
<td>Rate (per 100,000)</td>
</tr>
<tr>
<td>0-4 years</td>
<td>50</td>
<td>48.3</td>
</tr>
<tr>
<td>5-17 years</td>
<td>98</td>
<td>35.1</td>
</tr>
</tbody>
</table>

In the News
- The CDC reports that although influenza activity is still elevated, the season likely has peaked. Influenza type A continues to be the predominant type in circulation. Eight influenza-associated pediatric deaths were reported. Details

Prepared by the EpiData Center (email: web)
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