



# Influenza Situation Report: 2015-2016 Season

Department of the Navy

Week 6 (7 February to 13 February 2016)

## Overall Summary

Laboratory cases and antiviral prescriptions continue to increase and are at the highest for the season. However, with the exception of inpatient antiviral prescriptions, trends for laboratory, pharmacy and influenza-like-illness (ILI) remain below baseline this week.

## Key Findings

### Influenza Activity and Surveillance

#### Laboratory

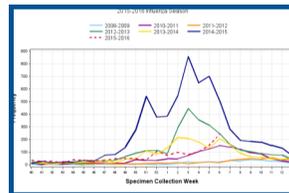
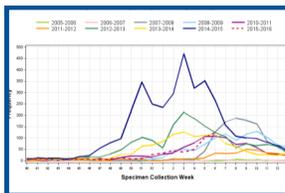
125 laboratory positive influenza cases were identified during Week 6, below baseline. [Details](#)

#### Antivirals (AVs)

242 AV medications were dispensed in Week 6, below baseline. [Details](#)

#### Influenza-Like Illness (ILI)

Overall, 4.7% of outpatient medical encounters were due to ILI, below baseline. [Details](#)



### Severity Indicators

#### Inpatient

This week, there were two inpatient laboratory positive cases and 14 inpatient antiviral prescriptions. There were three influenza cases reported to DRSi; all were hospitalized. [Details](#)

#### Coinfections

There were one respiratory and three non-respiratory bacterial coinfections identified among laboratory positive cases during Week 6. [Details](#)

### Select Populations

#### Active Duty and Recruits

In Week 6, there were 16 laboratory positive cases and 44 AV prescriptions dispensed to active duty personnel. Among recruits, there were five laboratory positive cases and six dispensed AV prescriptions. [Details](#)

Most current NHRC surveillance reports febrile respiratory illness rates were at or below expected values at MCRD San Diego, MCRD Parris Island, and NRTC Great Lakes. [Details](#)

#### Children

The number of influenza positive laboratory cases and influenza specific AV prescriptions in children continues to increase. [Details](#)

### Active Duty Vaccination Rates

Navy: 93.7%  
Marine Corps: 95.0%  
US Fleet Forces: 98.2%

#### [View Table](#)

Data source: MRRS, current as of 16 Feb 2016.

Prepared by the EpiData Center ([email](#); [web](#))

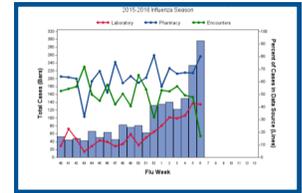
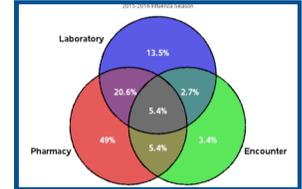


# Influenza Activity and Surveillance

## Overall Burden

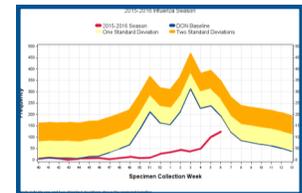
The estimated burden of influenza across the DON combines three major sources of data: certified laboratory results, antiviral pharmacy transactions, and medical encounters with influenza-specific diagnoses.

- During Week 6, there were 296 DON cases identified in one or more data sources; pharmacy captured the highest proportion of cases (80.4%). Sixteen cases were identified in all three sources.
- Since Week 40, there have been 1,927 DON cases identified in at least one of the three data sources.



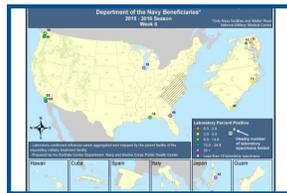
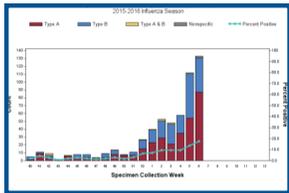
## Laboratory Cases

- 125 laboratory positive influenza cases were identified during Week 6 (80 type A, 43 type B); below baseline estimates.
- Most common facilities this week: NMC San Diego (44), NH Yokosuka (14), and NH Jacksonville (13).
- Since Week 40, 510 laboratory positive cases were identified among DON beneficiaries. Top facilities thus far: NMC San Diego (178), NH Bremerton (36), NH Camp Pendleton (33) and NH Lemoore (29).



## Specimen Positivity

- 17.7% of all influenza specimens tested during Week 6 were positive, lower than the same time last season (20.4%) but the highest so far this season.
- When grouped by parent facility, 13(46.4%) locations tested more than ten specimens. James A Lovell FHCC (33.3%), NH Yokosuka (33.3%), and NH Jacksonville (28.9%) experienced the highest positivity.

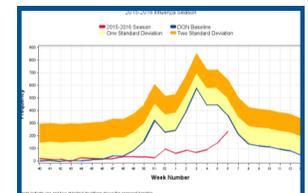


Test Types among Positive Influenza Specimens, n (%)				
	Rapid	Culture	PCR	Total
<b>Week 4</b>	30 (51.7)	8(13.8)	20 (34.5)	58
<b>Week 5</b>	66(58.9)	8(7.1)	38 (33.9)	112
<b>Week 6</b>	98 (73.7)	2(1.5)	33(24.9)	133
<b>Season</b>	334 (58.9)	54 (9.5)	179 (31.6)	567

## Antiviral Prescriptions

- 242 antiviral prescriptions were dispensed during Week 6.
- Most common facilities this week: NMC San Diego (70) and NH Camp Pendleton (28).
- Since Week 40, the majority (98.7%) of prescriptions were for Oseltamivir.

Antiviral Medications Dispensed to DON Beneficiaries, n (%)					
	Amantadine	Oseltamivir	Rimantadine	Zanamivir	Total
<b>Week 5</b>	2 (0.8)	240(99.2)	0 (0.0)	0 (0.0)	242
<b>Season</b>	17(1.3)	1,277 (98.7)	0 (0.0)	0 (0.0)	1,294



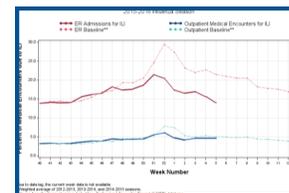
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# Syndromic Surveillance

## Influenza-Like Illness (ILI)

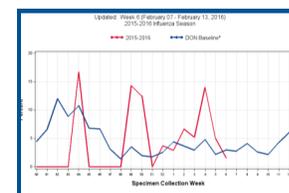
- The percent of medical encounters that included an ILI diagnosis during Week 5 (lagged due to data availability):
  - 4.7% of outpatient encounters (below baseline)
  - 14.0% of ER admissions (below baseline)
- When grouped by parent facility, 18 DON facilities (64.3%) experienced an increase in the proportion of outpatient ILI visits during Week 5; three facilities experienced an increase above 25% (James A Lovell FHCC, NH Guam-Agana, and NH Guantanamo Bay).



## Severity Indicators

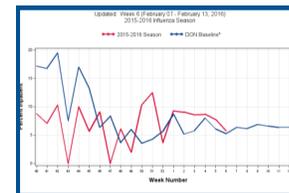
### Inpatient Laboratory

- Two influenza positive laboratory cases (1.6% of all laboratory cases) were identified in the inpatient setting during Week 6.
- One case was identified at 99th Med Grp-O'Callaghan Hosp and one at AMC Brooke-SAMMC Sam Houston. One case was a family member and one was a retiree, both with influenza type A.



### Inpatient Pharmacy

- 14 influenza AVs (5.8% of all influenza AVs) were prescribed in the inpatient setting during Week 6, above baseline (5.3%) (sixth consecutive week above baseline).
- The inpatient cases were most frequently at NH Camp Lejeune (5) and NMC San Diego(3). The inpatient cases were among active duty (1), spouses (6), children (1) and other: sponsor (6).



### Influenza-Associated Hospitalization Reports

- Three influenza cases were reported to DRSi during Week 6. The reports consisted of two for influenza-associated hospitalization (both of which was hospitalized) and one for a hospitalized novel influenza.

### Bacterial Coinfections

- Four coinfections were identified during Week 6; one non-respiratory *Streptococcus* infection, one inpatient lower respiratory *Pseudomonas* infection, two outpatient non-respiratory infections (*Escherichia* and *Klebsiella*). [Details](#)
- Though overall case counts remain low, the proportion of lower respiratory specimens is higher than expected.

Proportion Bacterial Coinfections by Respiratory Source and Percent of Laboratory Positive Cases with a Bacterial Coinfections since Week 40, 2015-2016 Season				
	Coinfections by Respiratory Source, n (%)			Lab Cases with Bacterial Coinfection (%)
	Upper Respiratory	Lower Respiratory	Non-Respiratory	
<b>Current Season (n=16)</b>	6 (30.0)	4(20.0)	10(50.0)	3.9
<b>Cumulative Baseline (n=71.2)</b>	28.3(36.6)	7.2 (9.3)	41.8 (54.1)	3.7

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



## Select Populations

### Active Duty

- 16 laboratory positive influenza cases were identified among active duty Navy (15) and Marine Corps (1) service members during Week 6; these were identified at NMC San Diego (7), James A Lovell FHCC (2), and seven other different facilities (1 each).
- 44 active duty service members (38 Navy, 6 Marines) were dispensed AVs (all oseltamivir) during Week 6.



Status	Immunity Status	Vaccine Type				Total	Percent
		LAV	IV	LAV & IV	None		
Active Duty	Vaccinated, immune	14	27	1	--	42	64.6%
	Vaccinated, not immune	5	6	--	--	11	16.9%
	No vaccination record	--	--	--	12	12	18.5%
<b>Total</b>		<b>19</b>	<b>33</b>	<b>1</b>	<b>12</b>	<b>65</b>	
Recruit	Vaccinated, immune	8	23	--	--	31	83.8%
	Vaccinated, not immune	6	--	--	--	6	16.2%
<b>Total</b>		<b>14</b>	<b>23</b>		<b>37</b>		

LAV=live-attenuated influenza vaccine (intranasal), IV=inactivated influenza vaccine (injection)  
Vaccinated, immune: Vaccinated more than 14 days prior to infection.

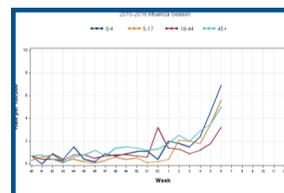
### Recruits

- Five laboratory positive influenza case among Navy (2) and Marine Corps (3) recruits during Week 6 at NH Beaufort (2), NMC San Diego (1), NH Camp Pendleton (1) and James A Lovell FHSS (1).
- Six AVs (all oseltamivir) were dispensed to recruits during Week 6.

Number of DON Active Duty and Recruit Cases since Week 40, 2015-2016 Season					
Case Type	Active Duty		Recruits		Total
	Navy	Marine Corps	Navy	Marine Corps	
Laboratory Positive	51	14	11	26	102
AV Prescriptions	194	75	7	76	352

### Children

- The rate of laboratory positive influenza cases (per 100,000) has seen an increase among children ages 0-4 years (17.6) and 5-17 (12.2).
- The rate of AV prescriptions (per 100,000) is highest among children 0-4 years (6.9), followed by children 5-17 years (5.6).
- 57 laboratory positive influenza cases were identified among children during Week 6, below baseline estimates but an increase over the week prior.
  - All cases were identified from outpatient settings in 14 different facilities; most frequently NMC San Diego (19) There were 22 cases among children ages 0-4 and 35 among children ages 5-17.
- There were 89 AVs dispensed to children during Week 6, below baseline estimates for children but an increase of 56.1% over the prior week.
  - This week's cases (88 oseltamivir and 1 amantadine) include 31 children ages 0-4 year and 58 children ages 5-17 years. NMC San Diego (27) dispensed the most AVs. One was dispensed in an inpatient setting.



## In the News

- CDC study shows association between poverty and flu-related hospitalizations. [Details](#)
- Flu activity increasing slightly in the US, with localized pockets of high activity. [Details](#)

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