



# Influenza Situation Report: 2015-2016 Season

Department of the Navy

Week 10 (6 March to 12 March 2016)

## Overall Summary

The number of laboratory positive cases and antiviral prescriptions remain above seasonal baselines but are decreased from the week prior. The rates of influenza cases among children remain above baseline.

## Key Findings

### Influenza Activity and Surveillance

#### Laboratory

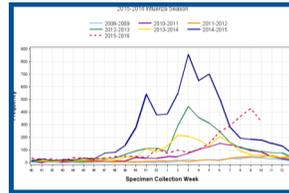
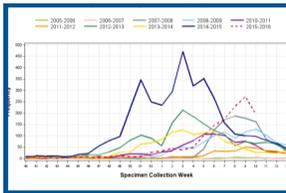
194 laboratory positive influenza cases were identified during Week 10, substantially above baseline. [Details](#)

#### Antivirals (AVs)

327 AV medications were dispensed in Week 10, substantially above baseline. [Details](#)

#### Influenza-Like Illness (ILI)

Overall, 5.0% of outpatient medical encounters were due to ILI, above baseline. [Details](#)



### Severity Indicators

#### Inpatient

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

#### Coinfections

There were 16 bacterial coinfections identified among laboratory positive cases during Week 10. [Details](#)

### Select Populations

#### Active Duty and Recruits

In Week 10, there were 27 laboratory positive cases and 50 AV prescriptions dispensed to active duty personnel. Among recruits, there was one laboratory positive case. None were dispensed AV prescriptions. [Details](#)

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

#### Children

The number of influenza positive laboratory cases among children was nearly two standard deviations above baseline during Week 10. [Details](#)

### Active Duty Vaccination Rates

Navy: 94.1%  
Marine Corps: 96.2%  
US Fleet Forces: 98.6%

#### [View Table](#)

Data source: MRRS, current as of 14 Mar 2016.

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

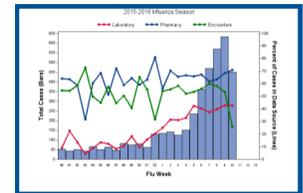
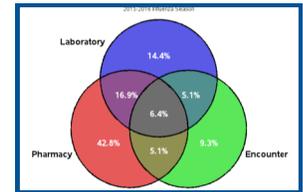


# Influenza Activity and Surveillance

## Overall Burden

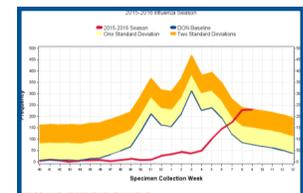
The estimated burden of influenza across the DON combines three major sources of data: certified laboratory results, antiviral pharmacy transactions, and medical encounters with influenza-specific diagnoses.

- During Week 10, there were 451 DON cases identified in one or more data sources; pharmacy captured the highest proportion of cases (71.2%). Twenty-nine cases were identified in all three sources.
- Since Week 40, there have been 4,129 DON cases identified in at least one of the three data sources.



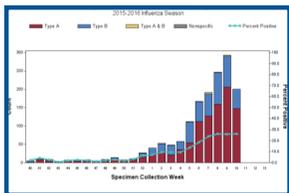
## Laboratory Cases

- 194 laboratory positive influenza cases were identified during Week 10 (142 type A, 51 type B, 1 type A & B); surpassing one standard deviation above baseline but fewer than the week prior.
- Most common facilities this week: NH Jacksonville (27), NH Yokosuka (16), NH Camp Lejeune (14), and NH Bremerton (14).
- Since Week 40, 1,402 laboratory positive cases were identified among DON beneficiaries. Top facilities thus far: NMC San Diego (353), NH Jacksonville (133), and NH Camp Pendleton (122).



## Specimen Positivity

- 26.4% of all influenza specimens tested during Week 10 were positive, higher than the same time last season (15.6%).
- When grouped by parent facility, 16 (57.1%) locations tested more than ten specimens. James A Lovell FHCC (50.0%) and NH Yokosuka (47.1%) experienced the highest positivity.

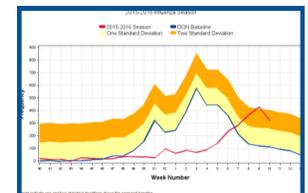


Test Types among Positive Influenza Specimens, n (%)				
	Rapid	Culture	PCR	Total
<b>Week 8</b>	136 (55.1)	19 (7.7)	92 (37.2)	247
<b>Week 9</b>	182 (62.1)	23 (7.8)	88 (30.0)	293
<b>Week 10</b>	151 (75.1)	10 (5.0)	40 (19.9)	201
<b>Season</b>	892 (58.1)	125 (8.1)	517 (33.7)	1,534

## Antiviral Prescriptions

- 327 antiviral prescriptions (325 oseltamivir, 2 amantadine) were dispensed during Week 10, surpassing one standard deviation above baseline but fewer than the week prior.
- Most common facilities this week: NMC San Diego (44) and NH Jacksonville (38).
- Since Week 40, the majority (99.2%) of prescriptions were for oseltamivir.

Antiviral Medications Dispensed to DON Beneficiaries, n (%)					
	Amantadine	Oseltamivir	Rimantadine	Zanamivir	Total
<b>Week 10</b>	2 (0.6)	325 (99.4)	0 (0.0)	0 (0.0)	327
<b>Season</b>	23 (0.8)	2,686 (99.2)	0 (0.0)	0 (0.0)	2,709



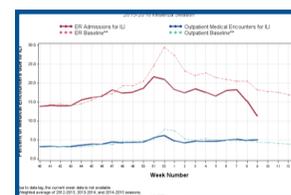
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# Syndromic Surveillance

## Influenza-Like Illness (ILI)

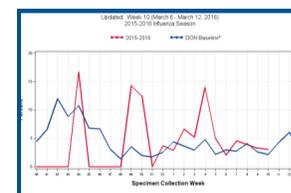
- The percent of medical encounters that included an ILI diagnosis during Week 9 (lagged due to data availability):
  - 5.0% of outpatient encounters (above baseline)
  - 11.4% of ER admissions (below baseline)
- When grouped by parent facility, 15 DON facilities (53.6%) experienced an increase in the proportion of outpatient ILI visits during Week 9; six experienced an increase above 25%; NH Beaufort (72.5%) experienced the highest increase.



## Severity Indicators

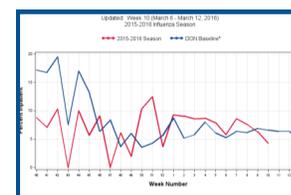
### Inpatient Laboratory

- Six influenza positive laboratory cases (3.1% of all laboratory cases) were identified in the inpatient setting during Week 10.
- Cases were identified at NMC San Diego (2), NMC Portsmouth (2), AMC Brooke-SAMMC-Sam Houston (1), and AMC Madigan-Lewis (1). Cases consisted of retirees (3), family members (2), and active duty (1). Four cases were classified with Type A and two with Type B.



### Inpatient Pharmacy

- 14 influenza AVs (4.3% of all influenza AVs) were prescribed in the inpatient setting during Week 10, below baseline (6.6%).
- The inpatient cases were most frequently at NMC Portsmouth and NMC San Diego with 4 cases each. The inpatient cases were among other sponsors (6), spouses (4), children (2), and active duty (2).



### Influenza-Associated Hospitalization Reports

- Four influenza cases were reported to DRSi during Week 10. All were for influenza-associated hospitalizations.

## Bacterial Coinfections

- 16 coinfections were identified during Week 10; among respiratory coinfections, all nine were *Streptococcus* infections. [Details](#)
- Overall coinfection case counts remain below baseline.

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=63)</b>	24 (38.1)	8 (12.7)	31 (49.2)	4.5
<b>Cumulative Baseline (n=92)</b>	34.5 (37.5)	8 (8.7)	49.5 (53.8)	3.8

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

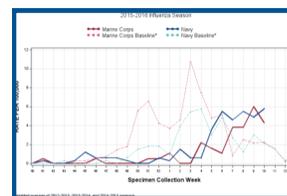
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## Select Populations

### Active Duty

- 27 laboratory positive influenza cases were identified among active duty Navy (19) and Marine Corps (8) service members during Week 10 (25 type A, 2 type B). Cases were identified at NMC San Diego (4), NHC Quantico (3), NH Camp Lejeune (3), and 13 other facilities (1 or 2 each).
- 50 active duty service members (37 Navy, 13 Marines) were dispensed AVs (all oseltamivir) during Week 10.



Status	Immunity Status	Vaccine Type				Total	Percent
		LAIV	IV	LAIV & IV	None		
Active Duty	Vaccinated, immune	39	65	1	-	105	76.6%
	Vaccinated, not immune	6	6	-	-	12	8.8%
	No vaccination record	-	-	-	20	20	14.6%
<b>Total</b>		<b>45</b>	<b>71</b>	<b>1</b>	<b>20</b>	<b>137</b>	-
Recruit	Vaccinated, immune	19	22	-	-	41	71.9%
	Vaccinated, not immune	15	1	-	-	16	28.1%
	Total	<b>34</b>	<b>23</b>	-	-	<b>57</b>	-

LAIV: Live-attenuated influenza vaccine (intranasal); IV: Inactivated influenza vaccine (injection)  
 Vaccinated, immune: Vaccinated more than 14 days prior to infection

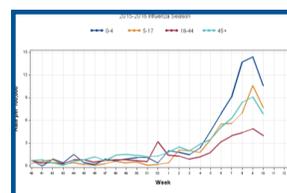
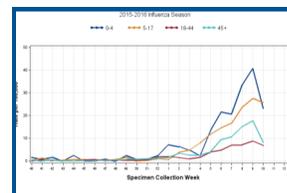
### Recruits

- One laboratory positive influenza case was identified among recruits during Week 10 at James A Lovell FHCC.
- There were no AVs dispensed to recruits during Week 10.

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	123	48	18	40	229
AV Prescriptions	351	130	8	85	574

### Children

- The rate of laboratory positive influenza cases (per 100,000) among children was 23.2 for ages 0-4 years and 25.9 for ages 5-17.
- 103 laboratory positive influenza cases were identified among children during Week 10, approaching two standard deviations above baseline estimates.
  - One case was identified from an inpatient setting at NMC Portsmouth; all others were identified from outpatient settings at 33 different facilities, most frequently NH Jacksonville (16), NH Yokosuka (13), and NH Bremerton (11). There were 29 cases among children ages 0-4 and 74 among children ages 5-17.
- The rate of AV prescriptions (per 100,000) is highest among children 0-4 years (10.6), followed by children 5-17 years (7.7).
- There were 128 AVs dispensed to children during Week 10, nearly three times the baseline estimates.
  - This week's cases (1 amantadine, 127 oseltamivir) include 48 children ages 0-4 year and 80 children ages 5-17 years. NMC San Diego (16) dispensed the most AVs. Two were dispensed in inpatient settings.



## In the News

- During Week 9, all 10 US regions reported outpatient visits for influenza-like illness at or above region-specific baseline levels. [Details](#)

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