



# Influenza Situation Report: 2015-2016 Season

Department of the Navy

**Week 12 (20 March to 26 March 2016)**

## Overall Summary

The number of laboratory positive cases and antiviral prescriptions remain above seasonal baselines but with a continued decreasing trend. The rates of influenza cases among children remain above baseline.

## Key Findings

### Influenza Activity and Surveillance

#### Laboratory

119 laboratory positive influenza cases were identified during Week 12, slightly above baseline.

[Details](#)

#### Antivirals (AVs)

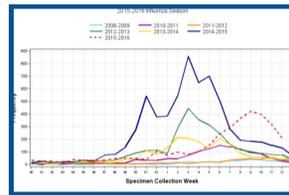
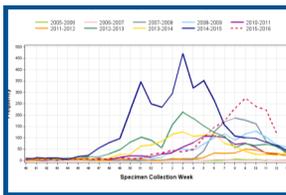
212 AV medications were dispensed in Week 12, slightly above baseline.

[Details](#)

#### Influenza-Like Illness (ILI)

Overall, 4.4% of outpatient medical encounters were due to ILI, comparable to baseline.

[Details](#)



### Severity Indicators

#### Inpatient

This week, there were two inpatient laboratory positive cases and six inpatient antiviral prescriptions. There were six hospitalized influenza cases reported to DRSi.

[Details](#)

#### Coinfections

There were eight bacterial coinfections identified among laboratory positive cases during Week 12.

[Details](#)

### Select Populations

#### Active Duty and Recruits

In Week 12, there were 15 laboratory positive cases and 31 AV prescriptions dispensed to active duty personnel. Among recruits, there were three laboratory positive cases and 4 were dispensed AV prescriptions.

[Details](#)

NHRC surveillance reports febrile respiratory illness rates were at or below expected values at MCRD Parris Island, MCRD San Diego, and NRTC Great Lakes for week 11.

[Details](#)

#### Children

The number of influenza positive laboratory cases and AVs dispensed to children was above baseline.

[Details](#)

### Active Duty Vaccination Rates

Navy: 94.4%

Marine Corps: 96.3%

US Fleet Forces: 98.9%

[View Table](#)

Data source: MRRS, current as of 28 Mar 2016.

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

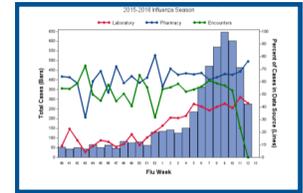
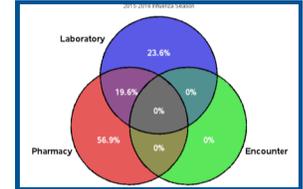


# Influenza Activity and Surveillance

## Overall Burden

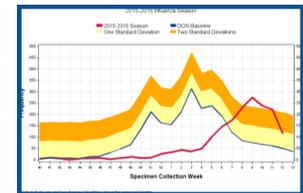
The estimated burden of influenza across the DON combines three major sources of data: certified laboratory results, antiviral pharmacy transactions, and medical encounters with influenza-specific diagnoses.

- During Week 12, there were 276 DON cases identified in one or more data sources; pharmacy captured the highest proportion of cases (65.6%). No cases were identified in all three sources.
- Since Week 40, there have been 5,036 DON cases identified in at least one of the three data sources.



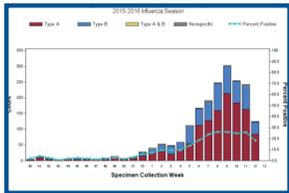
## Laboratory Cases

- 119 laboratory positive influenza cases were identified during Week 12 (80 type A, 37 type B, 1 type A & B, 1 non-specific); slightly above baseline.
  - Top three facilities this week: NH Jacksonville (15), NH Camp Pendleton (12), and NH Camp Lejeune (11).
- Since Week 40, 1,966 laboratory positive cases were identified among DON beneficiaries. Top three facilities thus far: NMC San Diego (407), NH Jacksonville (175), and NH Camp Pendleton (153).



## Specimen Positivity

- 18.5% of all influenza specimens tested during Week 12 were positive, higher than the same time last season (12.0%).
- When grouped by parent facility, 10 locations (53.6%) tested more than ten specimens. The facilities with the highest specimen positivity were NHC Hawaii (45.5%) and NH Pensacola (33.3%).

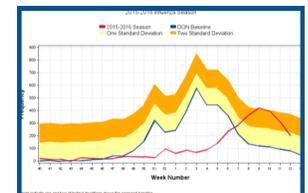


Test Types among Positive Influenza Specimens, n (%)				
	Rapid	Culture	PCR	Total
<b>Week 10</b>	168 (65.9)	27 (10.6)	60 (23.5)	255
<b>Week 11</b>	136 (56.2)	26 (10.7)	80 (33.1)	242
<b>Week 12</b>	85 (68.0)	12 (9.6)	28 (22.4)	125
<b>Season</b>	1,130 (57.5)	187 (9.5)	649 (33.0)	1,966

## Antiviral Prescriptions

- 212 antiviral prescriptions (306 oseltamivir, 2 amantadine) were dispensed during Week 12. AV prescriptions remain slightly above baseline, with a continuing declining trend.
- Top three facilities this week: NH Camp Lejeune (32), NMC San Diego (26) and WRNMMC (17).
- 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 12</b>	0 (0.0)	212 (100)	0 (0.0)	0 (0.0)	212
<b>Season</b>	27 (0.8)	3,277 (99.2)	0 (0.0)	0 (0.0)	3,304



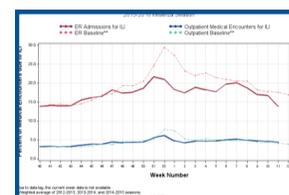
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# Syndromic Surveillance

## Influenza-Like Illness (ILI)

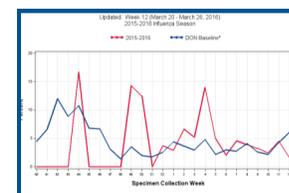
- The percent of medical encounters that included an ILI diagnosis during Week 11 (lagged due to data availability):
  - 4.4% of outpatient encounters (comparable to baseline)
  - 13.9% of ER admissions (below baseline)
- When grouped by parent facility, 9 DON facilities (32.1%) experienced an increase in the proportion of outpatient ILI visits during Week 11. Four experienced an increase above 25%; NH Beaufort (52.2%) experienced the highest increase.



## Severity Indicators

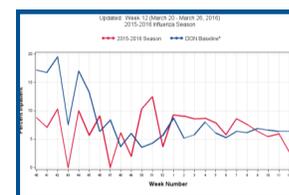
### Inpatient Laboratory

- Two influenza positive laboratory cases (1.7% of all laboratory cases) were identified in the inpatient setting during Week 12.
- This week's cases were a male Navy retired sponsor age 45+ type A positive by PCR at NMC San Diego and a male Marine Corps child age 5-17 type B positive by culture at WRNMMC.



### Inpatient Pharmacy

- Six influenza AVs (2.8% of all influenza AVs) were prescribed in the inpatient setting during Week 12, below baseline (6.4%).
- WRNMMC dispensed two AVs inpatient and four other facilities dispensed one AV each. This week's AVs were dispensed to spouses (2), children (2), an active duty service member, and a non-active duty sponsor.



### Influenza-Associated Hospitalization Reports

- Six influenza-associated hospitalizations were reported to DRSi during Week 12.

## Bacterial Coinfections

- Eight coinfections were identified during Week 12: *Streptococcus* (5), *Haemophilus* (1), *Pseudomonas* (1), *Staphylococcus* (1). [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=83)</b>	32 (38.6)	11 (13.3)	40 (48.2)	4.6
<b>Cumulative Baseline (n=95.8)</b>	37.5 (39.1)	8 (8.3)	50.3 (52.5)	3.8

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

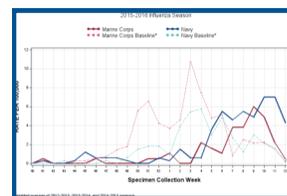
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## Select Populations

### Active Duty

- 15 laboratory positive influenza cases were identified among active duty Navy (14) and Marine Corps (1) service members during Week 12 (13 type A, 2 type B). Top facilities this week: NMC San Diego (3), NH Guam-Agana (2), NH Jacksonville (2), and WRNMMC (2).
- 31 active duty service members (25 Navy, 6 Marines) were dispensed AVs (all oseltamivir) during Week 12.



Status	Immunity Status	Vaccine Type				Total	Percent
		LAIV	IV	LAIV & IV	None		
Active Duty	Vaccinated, immune	62	110	5	-	175	79.5%
	Vaccinated, not immune	7	8	-	-	15	6.8%
	No vaccination record	-	-	-	30	30	13.6%
<b>Total</b>		<b>69</b>	<b>118</b>	<b>5</b>	<b>30</b>	<b>220</b>	-
Recruit	Vaccinated, immune	20	23	-	-	43	67.2%
	Vaccinated, not immune	17	4	-	-	21	32.8%
<b>Total</b>		<b>37</b>	<b>27</b>	-	-	<b>64</b>	-

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

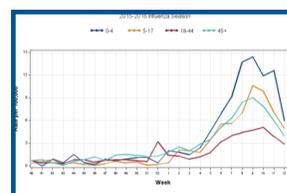
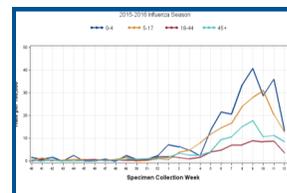
### Recruits

- Three laboratory positive influenza cases were identified among recruits during Week 12. All cases were type A positive Marine Corps recruits at NMC San Diego.
- Four AVs were dispensed to recruits during Week 12.

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	166	54	18	46	284
AV Prescriptions	428	8	143	91	670

### Children

- The rate of laboratory positive influenza cases (per 100,000) among children was 13.6 for ages 0-4 years and 12.9 for ages 5-17.
- 52 laboratory positive influenza cases were identified among children during Week 12, less than one standard deviation above baseline.
  - There was one case inpatient case this week (a 5-17 year old male type B positive by culture at WRNMMC). There were 17 cases among children ages 0-4 and 35 among children ages 5-17.
- The rate of AV prescriptions (per 100,000) is highest among children 0-4 years (6.0) followed by children 5-17 years (5.0).
- There were 78 AVs dispensed to children during Week 12, more than double baseline estimates.
  - This week's cases (all oseltamivir) include 27 children ages 0-4 years old and 51 children ages 5-17 years old. NMC San Diego (21) dispensed the most AVs. One was dispensed in the inpatient setting.



## In the News

- The CDC reports that during Week 11, influenza activity decreased slightly, but remained elevated in the United States. [Details](#)
- Study results showed that mothers who received TIV during pregnancy were significantly less likely to experience a stillbirth than unvaccinated mothers (*Clinical Infectious Diseases*). [Details](#)

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