



Influenza Situation Report: 2015-2016 Season

Department of the Navy

Week 16(17 April to 23 April 2016)

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.

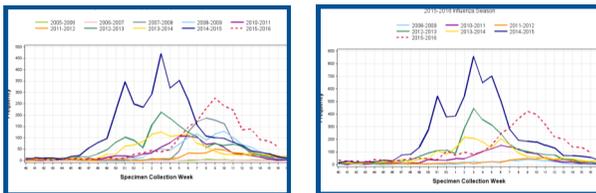
[Details](#)

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.

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

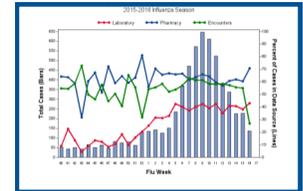
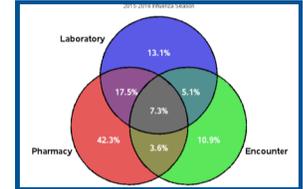


Influenza Activity and Surveillance

Overall Burden

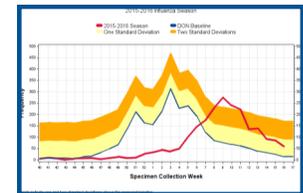
The estimated burden of influenza across the DON combines three major sources of data: certified laboratory results, antiviral pharmacy transactions, and medical encounters with influenza-specific diagnoses.

- During Week 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.



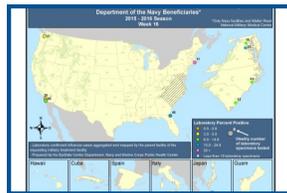
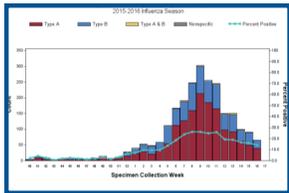
Laboratory Cases

- 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%).

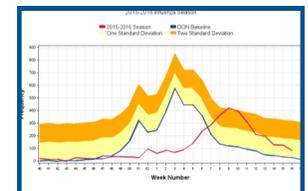


Test Types among Positive Influenza Specimens, n (%)				
	Rapid	Culture	PCR	Total
Week 14	65(65.0)	16(16.0)	19(19.0)	100
Week 15	57(62.6)	15(16.5)	19(20.9)	91
Week 16	46(70.8)	8(12.3)	11(16.9)	65
Season	1,403(58.4)	266(11.1)	734(30.5)	2,403

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.

Antiviral Medications Dispensed to DON Beneficiaries, n (%)					
	Amantadine	Oseltamivir	Rimantadine	Zanamivir	Total
Week 16	2(2.1)	95(97.9)	0 (0.0)	0 (0.0)	97
Season	32(0.8)	3,854 (99.2)	0 (0.0)	0 (0.0)	3,886



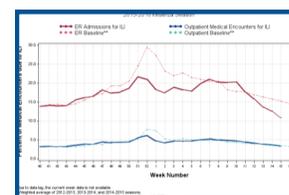
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Syndromic Surveillance

Influenza-Like Illness (ILI)

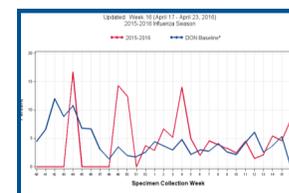
- The percent of medical encounters that included an ILI diagnosis during Week 15 (lagged due to data availability):
 - 3.4% of outpatient encounters (below baseline)
 - 10.9% of ER admissions (below baseline)
- When grouped by parent facility, 8 DON facilities (28.6%) experienced an increase in the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



Severity Indicators

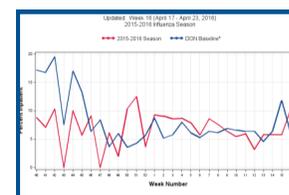
Inpatient Laboratory

- 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](#)

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	
Current Season (n=93)	35 (37.6)	12 (12.9)	46 (49.5)	4.3
Cumulative Baseline (n=100.5)	38 (37.8)	9.2 (9.1)	53.3 (53.1)	3.8

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

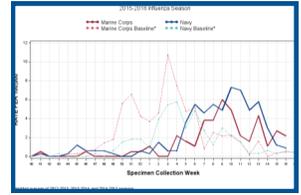
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Select Populations

Active Duty

- 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.



Status	Immunity Status	Vaccine type				Total	Percent
		LAIV	IV	LAIV & IV	None		
Active Duty	Vaccinated, immune	77	144	5	-	226	80.7%
	Vaccinated, not immune	7	11	-	-	18	6.4%
	No vaccination record	-	-	-	36	36	12.9%
Total		84	155	5	36	280	-
Recruit	Vaccinated, immune	22	23	-	-	45	63.6%
	Vaccinated, not immune	18	8	-	-	26	36.6%
Total		40	31	-	-	71	-

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

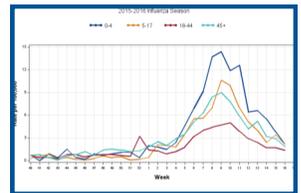
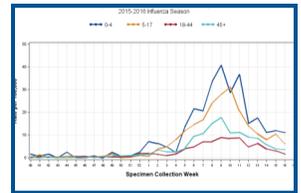
Recruits

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

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	205	75	50	21	351
AV Prescriptions	488	173	9	91	761

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](#)

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