



Influenza Situation Report: 2015-2016 Season

Department of the Navy

Week 17 (24 April to 30 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

56 laboratory positive influenza cases were identified during Week 17, slightly above baseline.

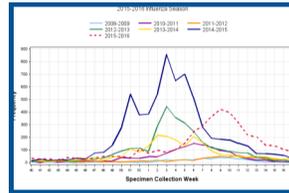
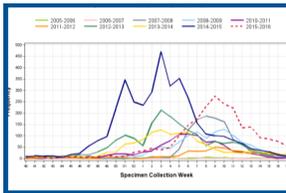
[Details](#)

Antivirals (AVs)

90 AV medications were dispensed in Week 17, slightly above baseline. [Details](#)

Influenza-Like Illness (ILI)

Overall, 3.4% of outpatient medical encounters were due to ILI, above baseline. [Details](#)



Severity Indicators

Inpatient

This week, there were four inpatient laboratory positive cases and eight inpatient antiviral prescriptions. One inpatient influenza case report was identified in DRSi. [Details](#)

Coinfections

Seven bacterial coinfections were identified among laboratory positive cases during Week 17. [Details](#)

Select Populations

Active Duty and Recruits

In Week 17, there were four laboratory positive cases and 11 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 at or below expected values at MCRD Parris Island, MCRD San Diego, and NRTC Great Lakes for Week 17. [Details](#)

Children

Influenza positive laboratory cases and AV prescriptions among children were above baseline. [Details](#)

Active Duty Vaccination Rates

Navy: 95.9%
Marine Corps: 96.9%
US Fleet Forces: 99.9%

[View Table](#)

Data source: MRRS, current as of 02 May 2016.

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

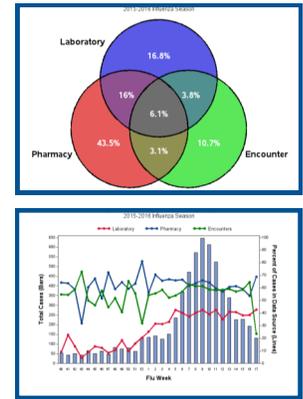


Influenza Activity and Surveillance

Overall Burden

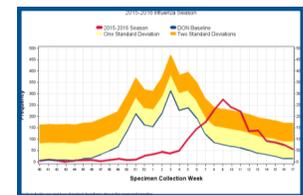
The estimated burden of influenza across the DON combines three major sources of data: certified laboratory results, antiviral pharmacy transactions, and medical encounters with influenza-specific diagnoses.

- During Week 17, there were 131 DON cases identified in one or more data sources; pharmacy captured the highest proportion of cases (68.7%). Eight cases were identified in all three sources.
- Since Week 40, there have been 6,333 DON cases identified in at least one of the three data sources.



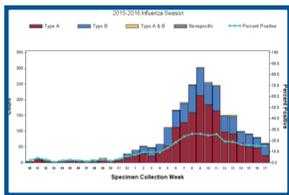
Laboratory Cases

- 56 laboratory positive influenza cases were identified during Week 17 (20 type A, 32 type B, four type unspecified) slightly above baseline.
 - Top three facilities this week: Ft. Belvoir Community Hospital-FBC (6), Walter Reed Natl Mil Med Cntr (5), NMC San Diego (4).
- Since Week 40, 2,257 laboratory positive cases were identified among DON beneficiaries. Top three facilities thus far: NMC San Diego (446), NH Jacksonville (223), NH Camp Pendleton (171).



Specimen Positivity

- 14.9% of all influenza specimens tested during Week 17 were positive, exceeding the percentage for the same time last season (5.7%).
- When grouped by parent facility, seven locations (25.0%) tested more than ten specimens. Of these facilities, the highest specimen positivity was reported by NH Bremerton (35.3%) and Walter Reed Natl Mil Med Cntr (30.0%).

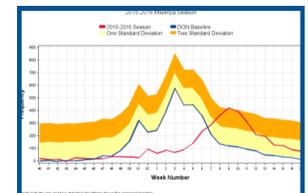


Test Types among Positive Influenza Specimens, n (%)				
	Rapid	Culture	PCR	Total
Week 15	57(62.0)	16(17.4)	19(20.7)	92
Week 16	52 (65.0)	18 (22.5)	10 (12.5)	80
Week 17	42 (67.7)	4 (6.5)	16 (25.8)	62
Season	1,451 (58.5)	281 (11.3)	749 (30.2)	2,481

Antiviral Prescriptions

- 90 antiviral prescriptions (89 oseltamivir, 1 amantadine) were dispensed during Week 17. AV prescriptions remain above baseline, with a continued declining trend.
- Top three facilities this week: Ft Belvoir Community Hosp_FBC (9), NH Camp Lejeune (9), NH Camp Pendleton (6).
- Since Week 40, the majority (99.2%) of prescriptions were for oseltamivir.

Antiviral Medications Dispensed to DON Beneficiaries, n (%)					
	Amantadine	Osetamivir	Rimantadine	Zanamivir	Total
Week 17	1(1.1)	89 (98.9)	0 (0.0)	0 (0.0)	90
Season	33(0.8)	3,945 (99.2)	0 (0.0)	0 (0.0)	3,978



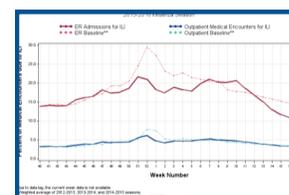
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Syndromic Surveillance

Influenza-Like Illness (ILI)

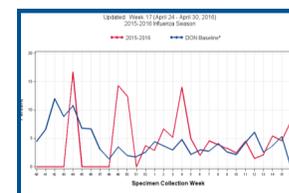
- The percent of medical encounters that included an ILI diagnosis during Week 16 (lagged due to data availability):
 - 3.4% of outpatient encounters (above baseline)
 - 10.9% of ER admissions (below baseline)
- When grouped by parent facility, 14 DON facilities (50.0%) experienced an increase in the proportion of outpatient ILI visits during Week 16. Three experienced an increase above 25%; NH Beaufort (29.8%) experienced the highest increase.



Severity Indicators

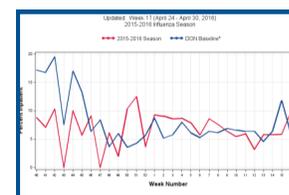
Inpatient Laboratory

- Four influenza positive laboratory cases (7.1% of all laboratory cases) were identified in the inpatient setting during Week 17.
- This week's cases were three family members and one retiree (all Navy). Cases were identified at AMC Madigan-Lewis (1), NMC San Diego (2), and Walter Reed Natl Mil Med Cntr (1). Two cases were type A positive and two were type B positive.



Inpatient Pharmacy

- Eight influenza AVs (8.9% of all influenza AVs) were prescribed in the inpatient setting during Week 17, below baseline (11.0%).
- NMC San Diego dispensed three AVs, AMC Madigan-Lewis, Ft. Belvoir Community Hosp-FBC, NH Camp Lejeune, and Walter Reed Natl Mil Med Cntr all dispensed one AV in the inpatient setting. This week's AVs were dispensed to spouses (4), children (2), and a non-active duty sponsors (2).



Influenza-Associated Hospitalization Reports

- One influenza case was reported to DRSi during Week 17.

Bacterial Coinfections

- Seven coinfections identified during Week 17, five upper respiratory (*Streptococcus*), one lower respiratory (*Streptococcus*), and one non-respiratory (*Staphylococcus*).
- Overall coinfection case counts are above 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=100)	40 (40.0)	13 (13.0)	47 (47.0)	4.4
Cumulative Baseline (n=101.2)	38 (37.9)	9.2 (9.1)	53.7 (53.0)	3.8

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

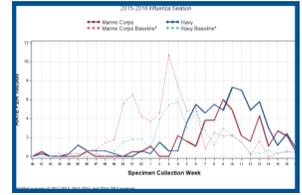
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Select Populations

Active Duty

- Four laboratory positive influenza cases were identified among active duty Navy (3) and Marine Corps (1) service members during Week 17 (3 type A and 1 type B). Cases were identified at NMC San Diego, NH Bremerton, NHC Annapolis, and NHC Quantico.
- 11 active duty service members (9 Navy, 2 Marines) were dispensed AVs (all oseltamivir) during Week 17.



Status	Immunity Status	LAIV	IV	LAIV & IV	None	Total	Percent
Active Duty	Vaccinated; immune	78	148	5	-	231	79.9%
	Vaccinated; not immune	7	11	-	-	18	6.2%
	No vaccination record	-	-	-	40	40	13.9%
Total		85	159	5	40	289	-
Recruit	Vaccinated; immune	22	23	-	-	45	63.4%
	Vaccinated; not immune	15	8	-	-	26	36.6%
	Total	40	31	-	-	71	-

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

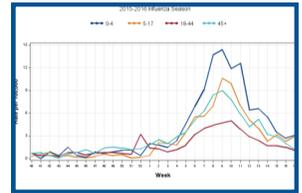
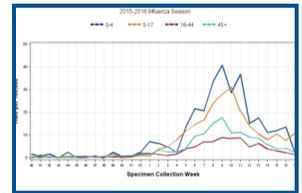
Recruits

- No laboratory positive influenza cases were identified among recruits during Week 17.
- No AVs were dispensed to recruits during Week 17.

Case Type	Number of DON Active Duty and Recruit Cases since Week 40, 2015-2016 Season				Total
	Active Duty		Recruits		
	Navy	Marine Corps	Navy	Marine Corps	
Laboratory Positive	213	76	50	21	360
AV Prescriptions	497	175	9	91	772

Children

- The rate of laboratory positive influenza cases (per 100,000) among children was 2.4 for ages 0-4 years and 10.8 for ages 5-17.
- 34 laboratory positive influenza cases were identified among children during Week 17, less than one standard deviation above baseline.
 - There were three cases among children ages 0-4 and 31 among children ages 5-17.
- The rate of AV prescriptions (per 100,000) was similar among children 0-4 years (3.1) and children 5-17 years (3.0).
- There were 45 AVs dispensed to children during Week 17, over four times baseline estimates.
 - This week's cases (all oseltamivir) include 14 children ages 0-4 years old and 31 children ages 5-17 years old. Ft Belvoir Community Hosp-FBC (7) dispensed the most AVs. Two AVs were dispensed in the inpatient setting.



In the News

- A study recently published in *Pediatrics* reported that maternal influenza vaccination during pregnancy was associated with a 70% lower risk of laboratory-confirmed influenza in infants under 6 months of age. [Details](#)

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