



Influenza Situation Report: 2015-2016 Season

Department of the Navy

Week 8 (21 February to 27 February 2016)

Overall Summary

The number of laboratory positive cases and antiviral prescriptions remain above seasonal baselines. Laboratory specimen positivity is the highest so far this season. The rates of influenza cases among children continue to increase.

Key Findings

Influenza Activity and Surveillance

Laboratory

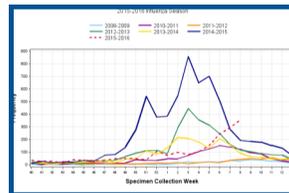
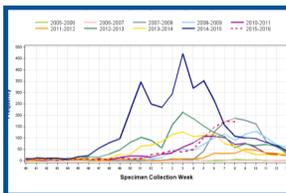
172 laboratory positive influenza cases were identified during Week 8, above baseline. [Details](#)

Antivirals (AVs)

356 AV medications were dispensed in Week 8, above baseline. [Details](#)

Influenza-Like Illness (ILI)

Overall, 5.5% of outpatient medical encounters were due to ILI, slightly above baseline. [Details](#)



Severity Indicators

Inpatient

This week, there were nine inpatient laboratory positive cases and 27 inpatient antiviral prescriptions. There were five influenza cases reported to DRSi; four were hospitalized. [Details](#)

Coinfections

There were seven bacterial coinfections identified among laboratory positive cases during Week 8. [Details](#)

Select Populations

Active Duty and Recruits

In Week 8, there were 16 laboratory positive cases and 54 AV prescriptions dispensed to active duty personnel. Among recruits, there were two laboratory positive cases. None were 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 among children surpassed one standard deviation during Week 8. [Details](#)

Active Duty Vaccination Rates

Navy: 93.9%
Marine Corps: 95.5%
US Fleet Forces: 98.3%

[View Table](#)

Data source: MRRS, current as of 29 Feb 2016.

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

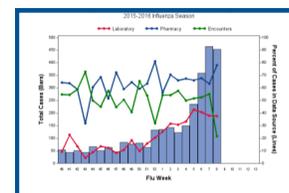
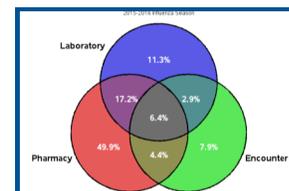


Influenza Activity and Surveillance

Overall Burden

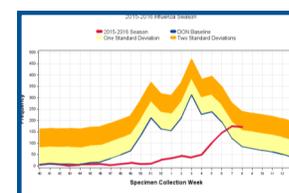
The estimated burden of influenza across the DON combines three major sources of data: certified laboratory results, antiviral pharmacy transactions, and medical encounters with influenza-specific diagnoses.

- During Week 8, there were 453 DON cases identified in one or more data sources; pharmacy captured the highest proportion of cases (77.9%). 29 cases were identified in all three sources.
- Since Week 40, there have been 2,917 DON cases identified in at least one of the three data sources.



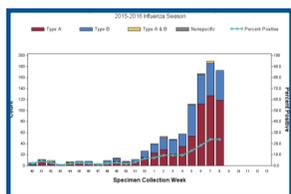
Laboratory Cases

- 172 laboratory positive influenza cases were identified during Week 8 (117 type A, 54 type B, 1 types A & B); surpassing one standard deviation above baseline.
- Most common facilities this week: NH Jacksonville (26), NMC San Diego (16), and NH Camp Pendleton (11).
- Since Week 40, 878 laboratory positive cases were identified among DON beneficiaries. Top facilities thus far: NMC San Diego (266), NH Camp Pendleton (77), NH Jacksonville (70), and NH Bremerton (50).



Specimen Positivity

- 23.8% of all influenza specimens tested during Week 8 were positive, higher than the same time last season (16.2%) and the highest so far this season.
- When grouped by parent facility, 15 (53.6%) locations tested more than ten specimens. NHC New England (41.7%) and NH Yokosuka (41.2%) experienced the highest positivity.

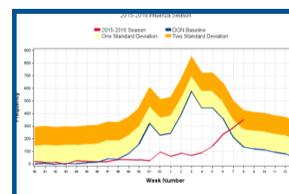


Test Types among Positive Influenza Specimens, n (%)				
	Rapid	Culture	PCR	Total
Week 6	102 (61.1)	12 (7.2)	53 (31.7)	167
Week 7	85 (44.7)	7 (3.7)	98 (51.6)	190
Week 8	130 (74.7)	4 (2.3)	40 (23.0)	174
Season	553 (57.3)	75 (7.8)	337 (34.9)	965

Antiviral Prescriptions

- 356 antiviral prescriptions were dispensed during Week 8, surpassing one standard deviation above baseline.
- Most common facilities this week: NMC San Diego (110) and NH Jacksonville (34).
- Since Week 40, the majority (99.0%) of prescriptions were for oseltamivir.

Antiviral Medications Dispensed to DON Beneficiaries, n (%)					
	Amantadine	Oseltamivir	Rimantadine	Zanamivir	Total
Week 8	1 (0.3)	355 (99.7)	0 (0.0)	0 (0.0)	356
Season	20 (1.0)	1,925 (99.0)	0 (0.0)	0 (0.0)	1,945



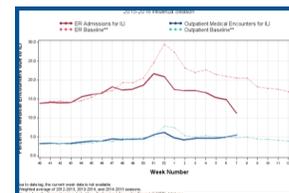
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Syndromic Surveillance

Influenza-Like Illness (ILI)

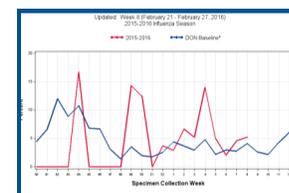
- The percent of medical encounters that included an ILI diagnosis during Week 7 (lagged due to data availability):
 - 5.5% of outpatient encounters (above baseline)
 - 11.3% of ER admissions (below baseline)
- When grouped by parent facility, 19 DON facilities (67.9%) experienced an increase in the proportion of outpatient ILI visits during Week 7; 11 facilities experienced an increase above 25%, led by NH Camp Pendleton (100.3%), NH Twentynine Palms (96.9%), and James A Lovell FHCC (96.4%).



Severity Indicators

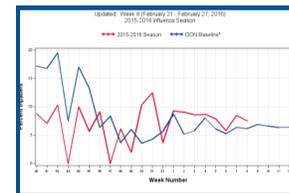
Inpatient Laboratory

- Nine influenza positive laboratory cases (5.2% of all laboratory cases) were identified in the inpatient setting during Week 8.
- Five cases were identified at NMC San Diego, one each at four other facilities. Five cases were family members and two were retirees. Six were classified with Type B and three with Type A.



Inpatient Pharmacy

- 27 influenza AVs (7.6% of all influenza AVs) were prescribed in the inpatient setting during Week 8, above baseline (6.2%) (eighth consecutive week above baseline).
- The inpatient cases were most frequently at NMC San Diego (11) and NH Jacksonville (5). The inpatient cases were among active duty service members (3), spouses (11), children (5) and other sponsors (8).



Influenza-Associated Hospitalization Reports

- Five influenza cases were reported to DRSi during Week 8. Four reports consisted of influenza-associated hospitalization.

Bacterial Coinfections

- Seven coinfections were identified during Week 8; among respiratory coinfections, there were two *Streptococcus* and one *Staphylococcus* infections. All were classified as outpatient. [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	
Current Season (n=34)	11 (32.4)	6 (17.6)	17 (50.0)	3.9
Cumulative Baseline (n=86.7)	31.5 (36.3)	7.8 (9.0)	47.3 (54.6)	3.8

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

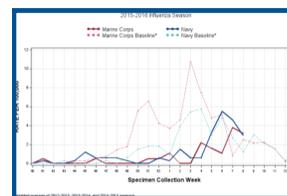
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Select Populations

Active Duty

- 16 laboratory positive influenza cases were identified among active duty Navy (10) and Marine Corps (6) service members during Week 8 (14 type A, 2 type B). These were identified at NHC Quantico (5) and eight other facilities (1 or 2 each).
- 54 active duty service members (44 Navy, 10 Marines) were dispensed AVs (all oseltamivir) during Week 8.



Status	Immunity Status	LAIV	IVV	LAIV & IVV	None	Total	Percent
Active Duty	Vaccinated, immune	30	51	1	-	82	76.6%
	Vaccinated, not immune	6	6	-	-	12	11.2%
	No vaccination record	-	-	-	13	13	12.1%
Total		36	57	1	13	107	-
Recruit	Vaccinated, immune	14	23	-	-	37	74.0%
	Vaccinated, not immune	13	-	-	-	13	26.0%
Total		27	23	-	-	50	-

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

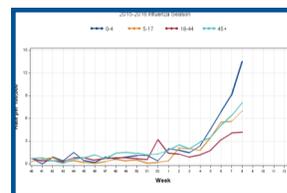
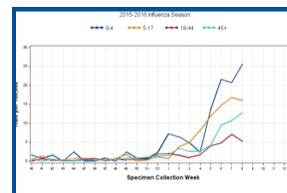
Recruits

- Two laboratory positive influenza cases were identified among Navy recruits during Week 8 at James A Lovell FHCC.
- There were no AVs dispensed to recruits during Week 8.

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	79	28	14	36	157
AV Prescriptions	274	99	8	82	463

Children

- The rate of laboratory positive influenza cases (per 100,000) saw an increase among children ages 0-4 years (25.6) and children ages 5-17 (16.1).
- The rate of AV prescriptions (per 100,000) is highest among children 0-4 years (7.7), followed by children 5-17 years (5.4).
- 78 laboratory positive influenza cases were identified among children during Week 8, surpassing one standard deviation above baseline estimates.
 - One case was identified from an inpatient setting at NMC San Diego; all others were identified from outpatient settings in 28 different facilities, most frequently NH Jacksonville (11). There were 32 cases among children ages 0-4 and 46 among children ages 5-17.
- There were 133 AVs dispensed to children during Week 8, more than twice the baseline estimates for children.
 - This week's cases (all oseltamivir) include 60 children ages 0-4 year and 73 children ages 5-17 years. NMC San Diego (41) dispensed the most AVs. Five were dispensed in an inpatient setting.



In the News

- CDC early estimate finds this year's flu vaccine 59% effective. [Details](#)
- All 10 US regions reported outpatient visits for influenza-like illness are at or above region-specific baseline levels during Week 7. [Details](#)

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