

Influenza Situation Report: 2017-2018 Season

Department of the Navy

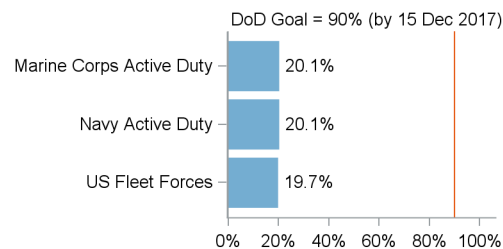


Week 40 (01 Oct - 07 Oct 2017)

Weekly Highlights:

- * Influenza activity in the DON is **normal** and within expected values. Laboratory, AV and ILI indicators are all at baseline levels.
- * Severity indicators are **normal** and within expected values, with no inpatient laboratory-positive cases and 2 dispensed antivirals identified during Week 40.
- * The percentage of outpatient ILI is **below** the surveillance threshold.
- * NH Jacksonville had the most laboratory-positive cases (n=5), while the largest percentage of ILI visits was at James A Lovell FHCC (6.6%).

Active Duty Vaccination Rates, 10 Oct 2017

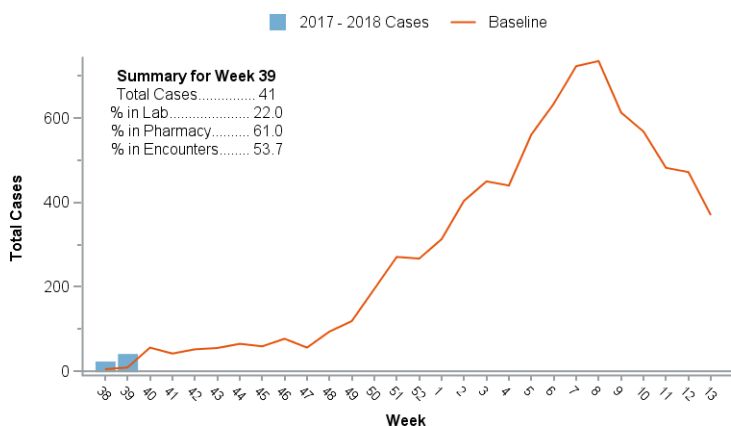


Influenza Surveillance Indicators

OVERVIEW				Trend	Baseline Comparison
Laboratory Cases	N	11		↑	Normal
Dispensed Antivirals	N	34		↑	Normal
ILI Outpatient Visits	%	3.1		↔	Below (Threshold)
SEVERITY				Trend	Baseline Comparison
Inpatient Laboratory Cases	N	0		↔	Normal
Inpatient Dispensed Antivirals	N	2		↓	Normal
ACTIVE DUTY AND RECRUITS				Trend	Baseline Comparison
Active Duty Laboratory Cases	N	4		↑	-
Active Duty Dispensed Antivirals	N	8		↓	-
Recruit Laboratory Cases	N	0		↔	-
Recruit Dispensed Antivirals	N	1		↔	-

Overall Burden (Data Lagged, Week 39)

DON Total Influenza Cases from Laboratory, Pharmacy and Encounter Data



Supporting Surveillance

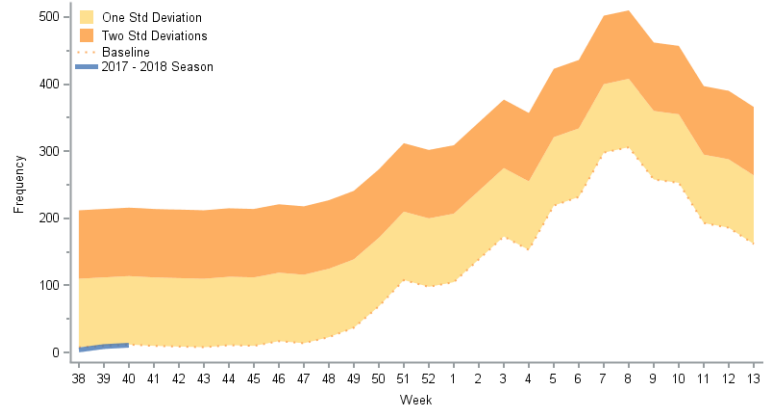
- * **DOD Global Laboratory-based Influenza Surveillance (USAFSAM).**
No 2017-2018 reports available at this time.
 - * Access the most recent report [here](#).
- * **Operational Infectious Diseases (OID) Weekly Surveillance Report (NHRC).**
12OCT2017 report highlights:
 - * Elevated FRI rates at MCRD San Diego due to influenza A/H3
 - * All cases among unvaccinated recruits.
 - * Access the most recent OID report [here](#).

Laboratory Surveillance

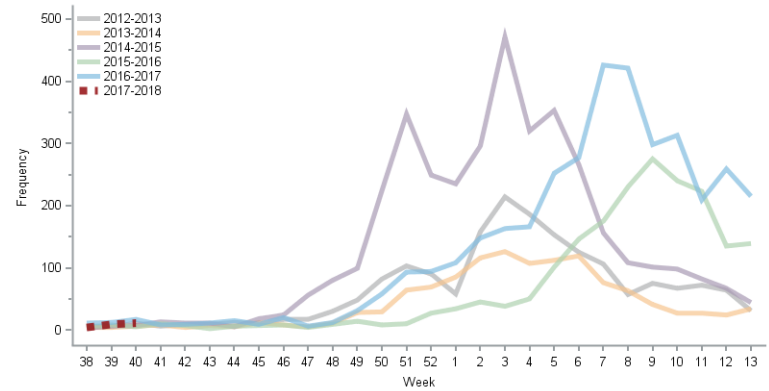
- * **Burden:** Laboratory cases (n=11) are at baseline levels. The number of cases increased slightly over the prior week
- * **Specimens:** Overall percent positivity is 3.3%, with 72% of cases identified as influenza Type A.
- * **Severity :** No inpatient laboratory-positive cases were reported.
- * **Age:** Children aged 0-4 years had the highest rate of laboratory-positive influenza cases. Two cases were identified among children aged 0-4 years and three cases were identified among children 5-17.
- * **Location:** NH Jacksonville had 5 laboratory-positive cases, NH Pensacola had 2 cases, and 4 other facilities had one case each. NMC San Diego has had the most cases so far this season (n=11), followed by NH Jacksonville (n= 10).

Data sources: HL7-formatted CHCS chemistry and microbiology databases. Denominators for rates are from M2 enrollment records.

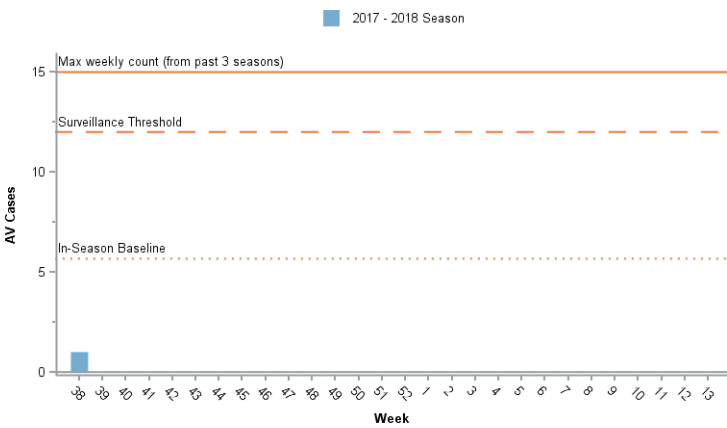
DON Laboratory-Positive Influenza Cases and Seasonal Baseline, 2017-2018 Season



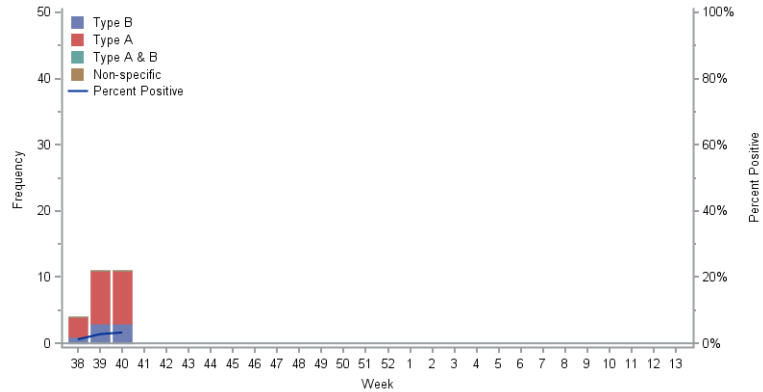
DON Laboratory-Positive, Seasonal Comparison, 2013-2017



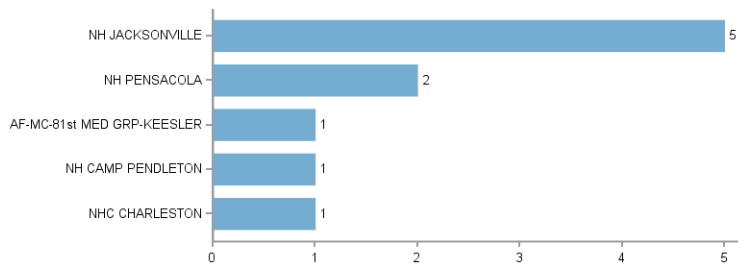
DON Inpatient Laboratory Cases (Severity)



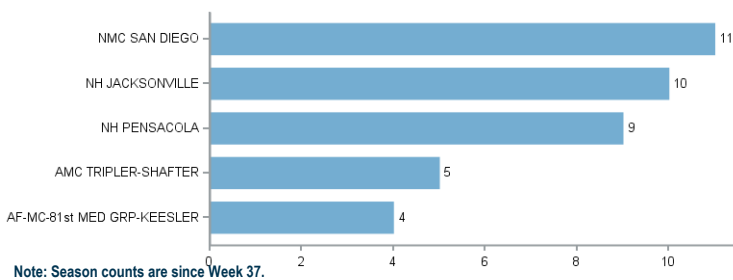
DON Laboratory-Positive Influenza Specimens, by Type



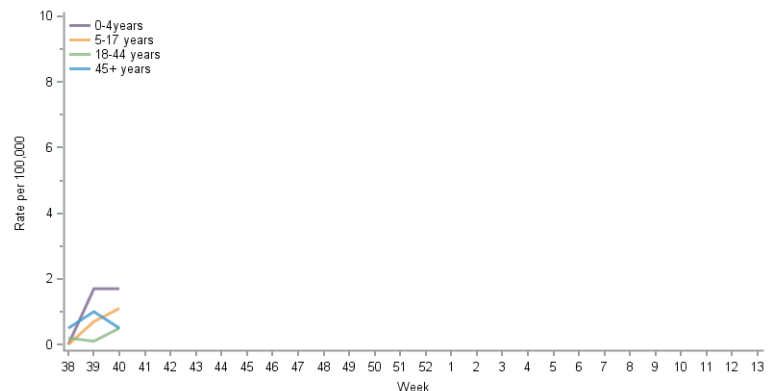
Top 5 MTFs , Laboratory-Positive Cases, Week 40



Top 5 MTFs , Laboratory-Positive Cases, 2017-2018 Season



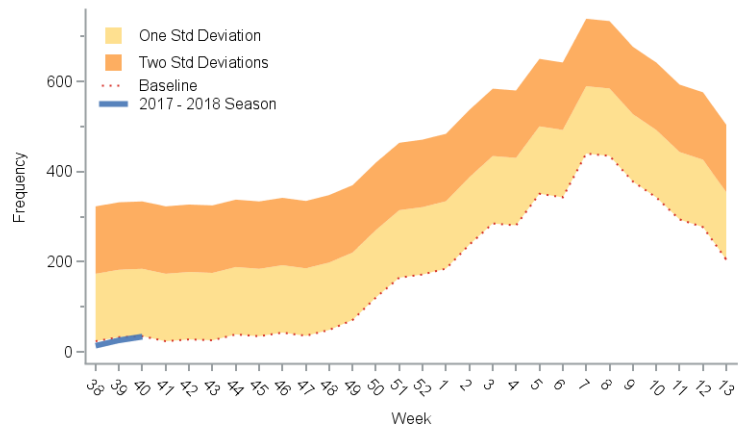
DON Laboratory-Positive Case Rates by Age Group



Antiviral Surveillance

- * **Burden:** Dispensed antivirals (n=34) are increasing from the prior week and are at baseline levels.
- * **Severity:** Two inpatient antivirals were dispensed this week among retirees.
- * **Types:** 94% of influenza antivirals dispensed were Oseltamivir.
- * **Location:** NMC San Diego (n=5), NH Jacksonville (n=10) and NH Pensacola (n=9) have the highest number of dispensed AVs so far this season (n= 5).

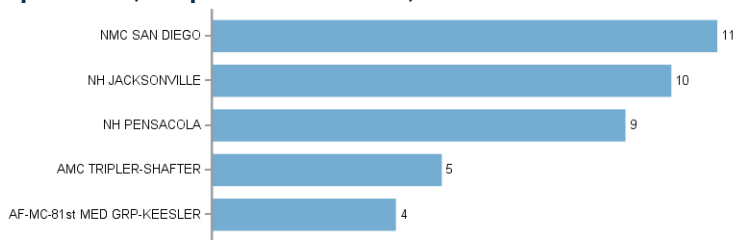
DON Influenza Specific Antiviral Prescriptions and Seasonal Baseline, 2017-2018 Season



Antiviral Medications Dispensed to DON Beneficiaries, n (%)

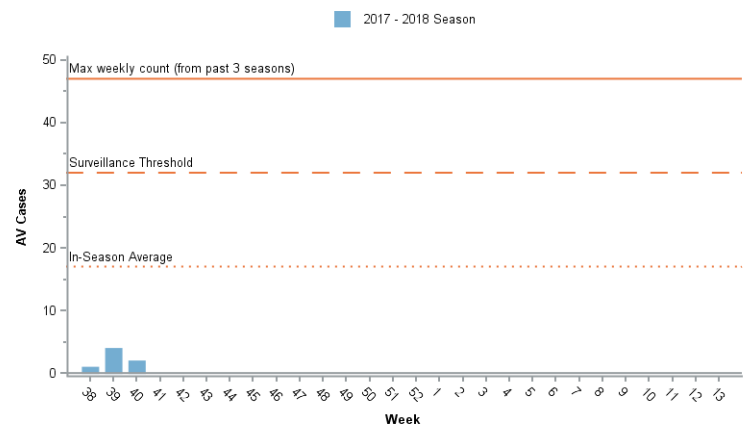
	Oseltamivir	Amantadine	Total
Week 38	14 (100.0%)	0 (0.0%)	14
Week 39	25 (96.2%)	1 (3.8%)	26
Week 40	32 (94.1%)	2 (5.9%)	34
Season	83 (96.5%)	3 (3.5%)	86

Top 5 MTFs, Dispensed Antivirals, 2017-2018 Season



Note: Season counts are since Week 37.

DON Inpatient Dispensed Antivirals (Severity)

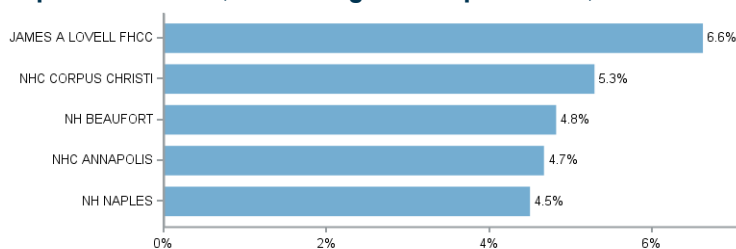


Influenza-Like Illness (Data Lagged, Week 39)

- * **Outpatient ILI** The percentage of outpatient medical encounters due to ILI was the same from the week prior at 3.1%. The ILL percent is equal to the seasonal baseline and below the surveillance threshold.
- * **Location:** ILI activity was the highest at James A Lovell FHCC at 6.6%, followed by NH Corpus Christi (5.3%) and NH Beaufort (4.8%).

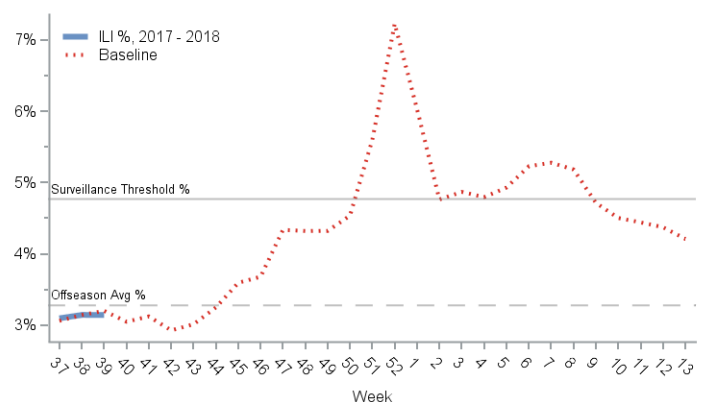
Data source: CAPER

Top 5 DON MTFs , Percentage of Outpatient ILI, Week 39



*Data lagged by one week.

Outpatient Medical Encounters due to ILI, Week 39



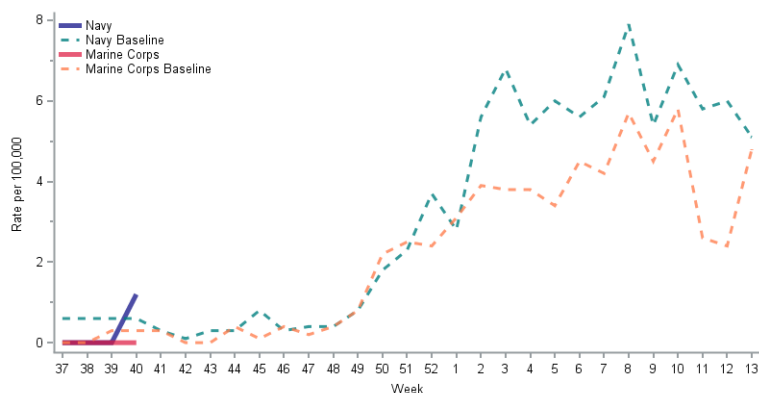
*Data lagged by one week.

Active Duty and Recruits

- * **AD Laboratory cases:** 4 laboratory-positive cases among AD sailors.
- * **AD Dispensed Antivirals:** 8 AVs were dispensed among AD sailors.
- * **Recruits:** No laboratory-positive cases; one dispensed AV to a Marine recruit.
- * **Location:** Laboratory-positive cases identified for AD sailors at NH Jacksonville, NH Pensacola, and NHC Charleston. Antivirals were dispensed at NH Jacksonville (n=3), NH Pensacola (n=3) and 3 other facilities (1 each).
- * **Vaccination Status:** No vaccination records among the 4 laboratory-positive AD cases

Data Sources: HL7-formatted CHCS chemistry, microbiology and pharmacy databases, MRSS

Laboratory-Positive Cases Among Active Duty Service Members, 2017-2018



Summary of Active Duty and Recruit Cases

	Laboratory		Dispensed AVs	
	Week 40	Season	Week 40	Season
Total Cases	4	4	9	25
Navy AD	4	4	8	17
Marine Corps AD	0	0	0	6
Navy Recruit	0	0	0	0
Marine Corps Recruit	0	0	1	2

Note: Season counts are since Week 37.

In the News

- * The CDC reports that the 2017-2018 influenza vaccine is a good match for circulating influenza strains. [Details](#)
- * The FDA has approved peramivir injections for use in children with influenza. [Details](#)
- * The CDC reports that Maryland is experiencing an outbreak of novel influenza A(H3N2) infections related to agricultural fairs. [Details](#)

Medical Event Reports (MER)

MERs for Influenza-Associated Hospitalizations

	MER	Match to Surveillance Data	
	N	N	%
Week 40	0	-	-
Season	6	1	16.7%

*Indicates MERs that matched to cases from laboratory or pharmacy surveillance data. Datasource: DRSi

Bacterial Coinfections

- * **Summary:** 6.5% of laboratory-positive influenza cases had a bacterial coinfection identified this season.
- * **Upper-respiratory:** Two upper respiratory infections have been identified, both *Streptococcus*.
- * **Lower-respiratory:** No lower respiratory infections have been identified.

Data Sources: HL7-formatted CHCS chemistry and microbiology databases

Bacterial Coinfections as a Percent of Laboratory Cases

	Coinfections			Lab Cases w/ Coinfection
	Upper (N)	Lower (N)	Total Resp (N)	%
Current Season	2	0	2	6.5%
Baseline	0	0	0	0.0%

Methods and Data Sources

The Influenza SITREP methods can be found [here](#).

- * HL7 formatted CHCS data from microbiology and chemistry data are available from 2004 to present. HL7 formatted CHCS data from pharmacy databases are available from 2006 to present.
- * At this time, data from NH Oak Harbor, NH Bremerton and Fairchild Air Force Base are not captured due to the transition to MHS GENESIS.
- * Laboratory-positive and AV baselines are calculated as a weighted average of the 2014-2015, 2015-2016 and 2016-2017 seasons.
- * ILI threshold is calculated based on the off-season percentage outpatient visits for the past three seasons 2014-2015, 2015-2016 and 2016-2017 seasons, plus two standard deviations.
- * The "Overall Burden" and ILI figures are lagged one week due to encounter data availability.
- * All figures prepared by the EpiData Center on 11 Oct 2017.