

Influenza Situation Report: 2017-2018 Season

Department of the Navy

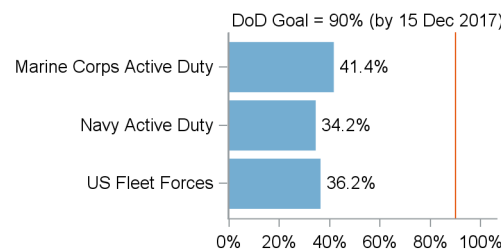


Week 42 (15 Oct - 21 Oct 2017)

Weekly Highlights:

- * Influenza activity in the DON is **normal** and within expected values; however, laboratory-positive cases increased for the fourth straight week.
- * Severity indicators are **normal** and within expected values, with no inpatient laboratory-positive cases and two dispensed antivirals from an inpatient setting during Week 42.
- * NH Jacksonville had the most laboratory-positive cases (n=8), while the largest percentage of ILI visits was at James A Lovell FHCC (7.0%).

Active Duty Vaccination Rates, 16 Oct 2017

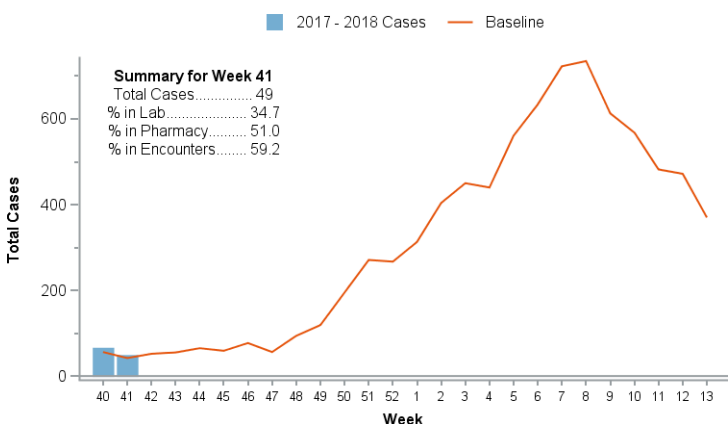


Influenza Surveillance Indicators

OVERVIEW				Trend	Baseline Comparison
Laboratory Cases	N	23		↑	Normal
Dispensed Antivirals	N	44		↑	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	3		↔	NA
Active Duty Dispensed Antivirals	N	9		↑	NA
Recruit Laboratory Cases	N	0		↔	NA
Recruit Dispensed Antivirals	N	1		↑	NA

Overall Burden (Data Lagged, Week 41)

DON Total Influenza Cases from Laboratory, Pharmacy and Encounter Data



Supporting Surveillance

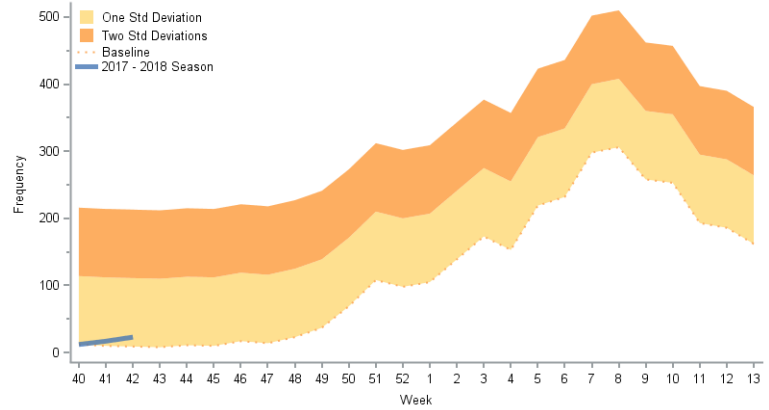
- * **DOD Global Laboratory-based Influenza Surveillance (USAFSAM).**
Week 41 highlights:
 - * Five positive influenza A specimens (1 H1N1, 4 H3N2)
 - * Two positive influenza B specimens .
 - * Access the full report [here](#).
- * **Operational Infectious Diseases (OID) Weekly Surveillance Report (NHRC).**
19OCT2017 report highlights:
 - * Elevated FRI rates at MCRD San Diego has subsided
 - * Access the most recent NHRC OID Surveillance reports [here](#).

Laboratory Surveillance

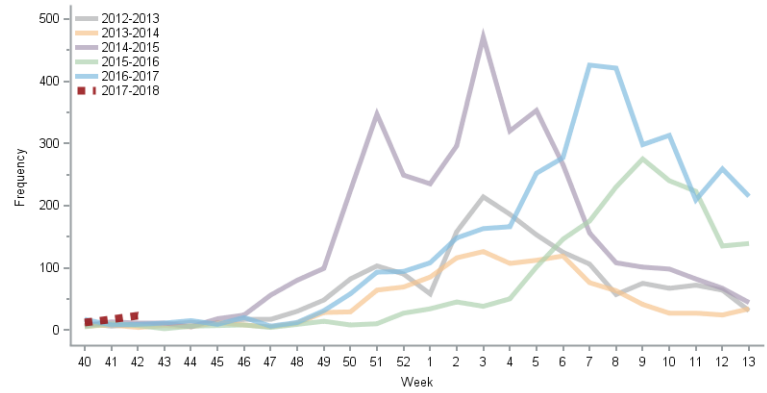
- * **Burden:** Laboratory-positive cases (n=23) are just above baseline levels but within expected values. For the fourth week in a row, the number of cases increased over the prior week with an increase of 35%.
- * **Specimens:** Overall percent positivity is 5.4%, with 78.3% of cases identified as influenza Type A.
- * **Severity:** No inpatient laboratory-positive cases were reported.
- * **Age:** Adults ages 45+ years had the highest rate of laboratory-positive influenza cases. Two cases were identified among children aged 0-4 years and those 5-17 years had six cases.
- * **Location:** NH Jacksonville had eight cases, NMC San Diego had five cases, NH Camp Lejeune and NH Guam-Agana each had two cases, and six other facilities had one case each.

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

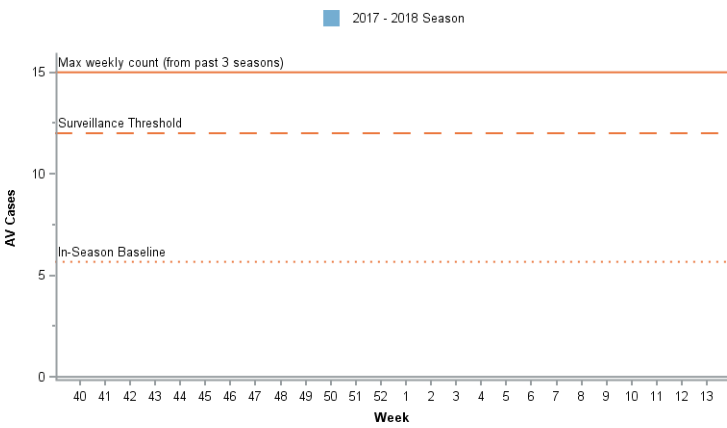
DON Laboratory-Positive Influenza Cases and Seasonal Baseline, 2017-2018 Season



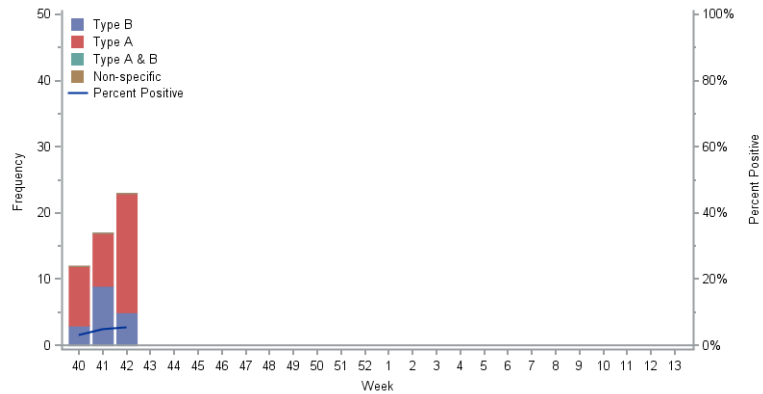
DON Laboratory-Positive, Seasonal Comparison, 2012-2017



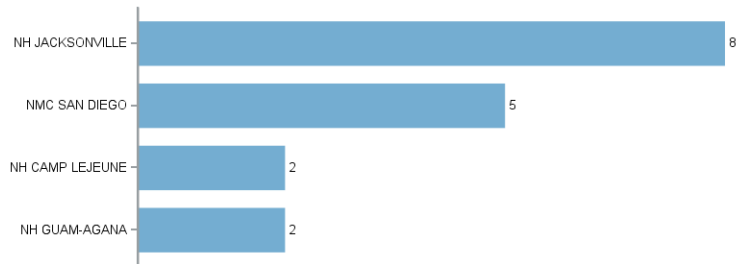
DON Inpatient Laboratory Cases (Severity)



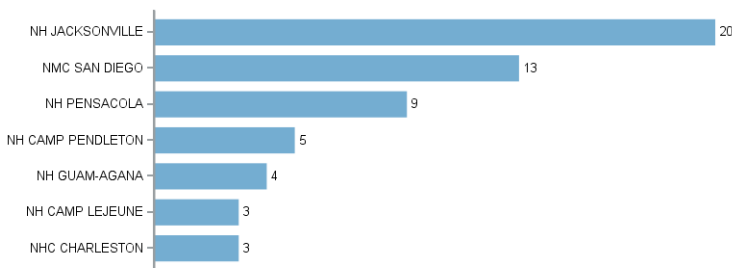
DON Laboratory-Positive Influenza Specimens, by Type



Top MTFs , Laboratory-Positive Cases, Week 42

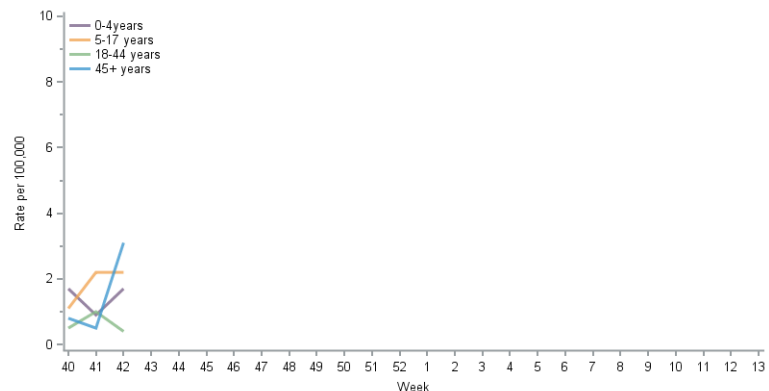


Top MTFs , Laboratory-Positive Cases, 2017-2018 Season



Note: Season counts are since Week 37.

DON Laboratory-Positive Case Rates by Age Group

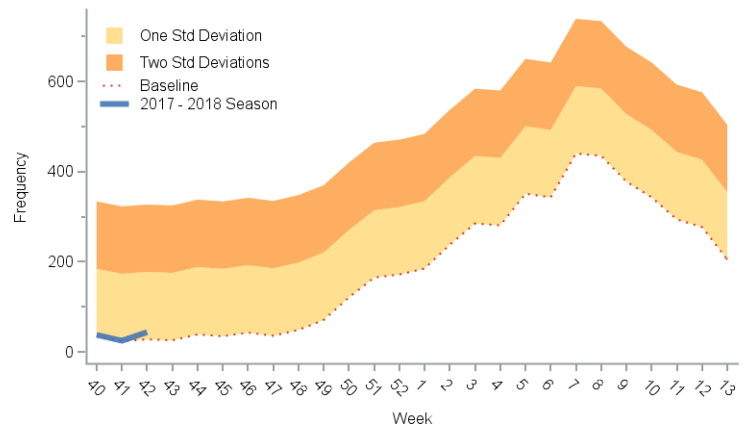


Antiviral Surveillance

- * **Burden:** Dispensed AVs (n=44) are increasing from the prior week and just above baseline levels but within expected values.
- * **Severity:** Two inpatient AVs were dispensed this week among a retiree, and a spouse.
- * **Types:** All influenza AVs dispensed were Oseltamivir.
- * **Location:** NMC San Diego (n=23), NH Jacksonville (n=21), and NH Pensacola (n=20) have the highest number of dispensed AVs for the season.

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

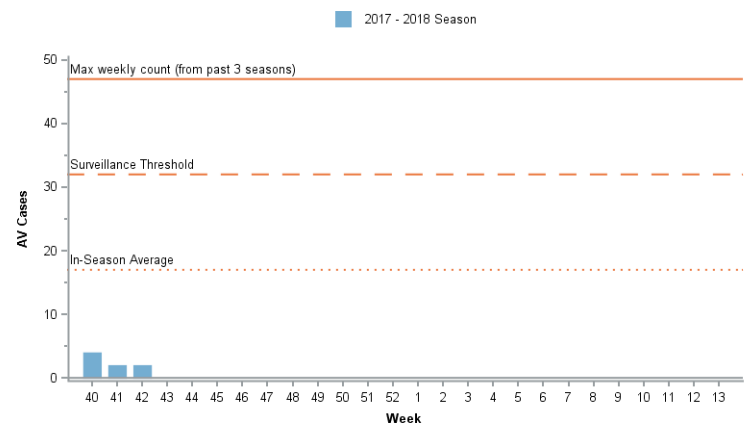
DON Influenza Specific Antiviral Prescriptions and Seasonal Baseline, 2017-2018 Season



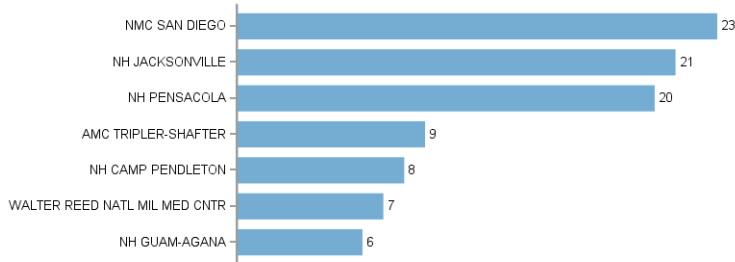
Antiviral Medications Dispensed to DON Beneficiaries, n(%)

	Oseltamivir	Amantadine	Total
Week 40	35 (92.1%)	3 (7.9%)	38
Week 41	24 (96.0%)	1 (4.0%)	25
Week 42	44 (100.0%)	0 (0.0%)	44
Season	154 (96.9%)	5 (3.1%)	159

DON Inpatient Dispensed Antivirals (Severity)



Top MTFs, Dispensed Antivirals, Season



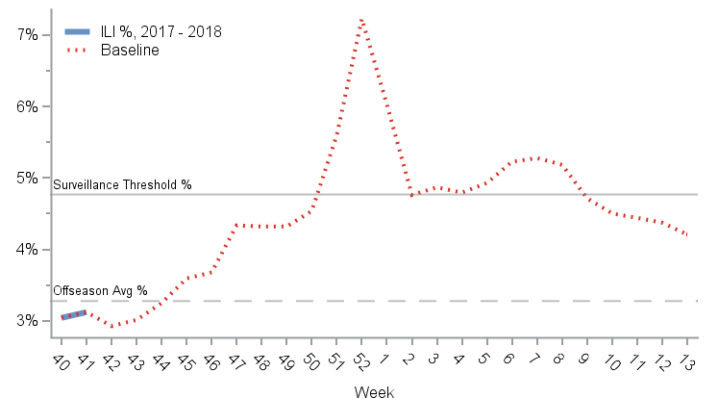
Note: Season counts are since Week 37.

Influenza-Like Illness (Data Lagged, Week 41)

- * **All outpatient:** The percentage of outpatient medical encounters due to ILI increased from the week prior to 3.1%. The ILI % is comparable to the seasonal baseline and below the surveillance threshold.
- * **Location:** ILI activity was the highest at James A Lovell FHCC (7.0%), followed by NH Naples (6.0%), NMC San Diego (4.1%) and NHC Annapolis (4.0%).

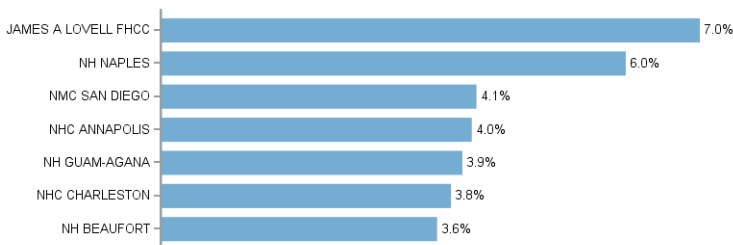
Data source: CAPER

Outpatient Medical Encounters due to ILI, Week 41



*Data lagged by one week.

Top DON MTFs, Percentage of Outpatient ILI, Week 41



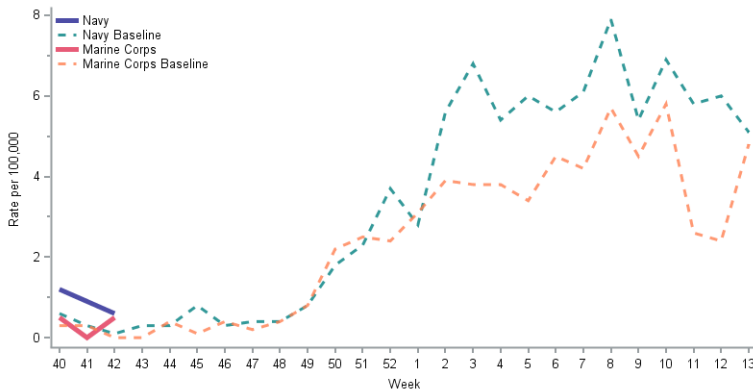
*Data lagged by one week.

Active Duty and Recruits

- * **AD Laboratory cases:** Three laboratory-positive cases among Sailors (n=2) and Marines (n=1).
- * **AD Dispensed Antivirals:** Six AVs dispensed among Sailors and three AV dispensed to Marines.
- * **Recruits:** One dispensed AV to a Marine recruit.
- * **Location:** For laboratory-positive cases, one occurred at NH Camp Pendleton (AD Marine) and two occurred at NMC San Diego (both AD Sailors). Two AVs were dispensed at NMC San Diego; eight other facilities dispensed one AV each.
- * **Vaccination Status:** One of three laboratory positive cases had a vaccination record within fourteen days of the laboratory case identification..

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

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



Summary of Active Duty and Recruit Cases

	Laboratory		Dispensed AVs	
	Week 42	Season	Week 42	Season
Total Cases	3	12	10	39
Navy AD	2	9	6	26
Marine Corps AD	1	2	3	10
Navy Recruit	0	0	0	0
Marine Corps Recruit	0	1	1	3

Note: Season counts are since Week 37.

In the News

- * The CDC reports that influenza activity is low in the U.S. No influenza-associated pediatric deaths have been reported during the 2017-2018 season. [Details](#)
- * A CDC led study revealed that antiviral drugs are prescribed to 15% of outpatients who have acute respiratory infections and a high risk for influenza. The authors said the data underscore a need to increase appropriate prescribing practices. [Details](#)

Medical Event Reports (MER)

MERs for Influenza-Associated Hospitalizations

	MER	Match to Surveillance Data	
	N	N	%
Week 42	0	-	-
Season	6	1	16.7%

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

Datasource: DRSi

Note: Season counts are since Week 37.

Bacterial Coinfections

- * **Summary:** 6.9% of laboratory-positive influenza cases had a bacterial coinfection identified this season.
- * **Upper-respiratory:** Five upper respiratory infections have been identified, all *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	5	0	5	6.9%
Baseline	1	1	1	1.5%

Note: Season counts are since Week 37.

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.
- * Data from NH Oak Harbor, NH Bremerton, AMC Madigan, and Fairchild AFB are not captured due to 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 23 Oct 2017.