

Influenza Situation Report: 2017-2018 Season

Department of the Navy

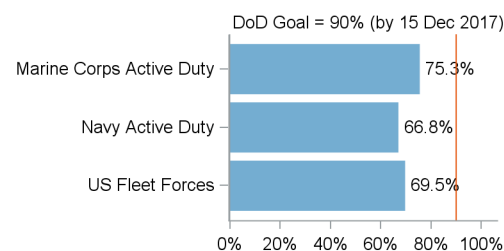


Week 46 (12 Nov - 18 Nov 2017)

Weekly Highlights:

- * Influenza activity in the DON is **normal** and within expected levels. Laboratory-positive cases decreased in Week 46; however, dispensed AVs increased slightly from the prior week.
- * Severity indicators are **low**, with no inpatient laboratory-positive cases and four dispensed antivirals from an inpatient setting during Week 46.
- * NH Jacksonville had the most laboratory-positive cases (n=21), while the largest percentage of ILI visits occurred at James A Lovell FHCC (8.9%).

Active Duty Vaccination Rates, 20 Nov 2017

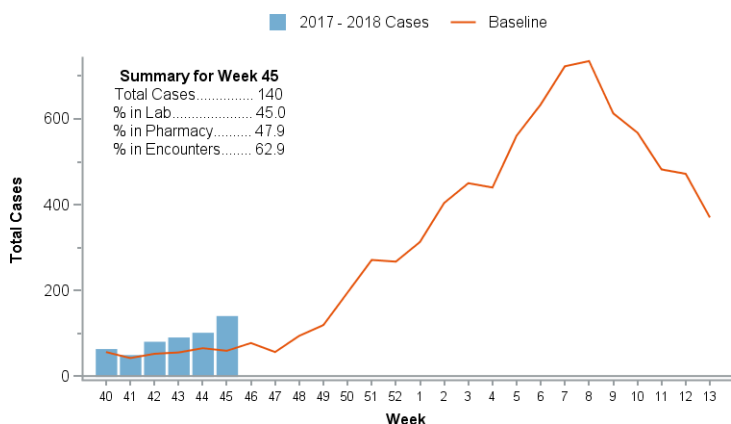


Influenza Surveillance Indicators

OVERVIEW			Trend	Activity Level
Laboratory Cases	N	55	↓	Normal
Dispensed Antivirals	N	98	↑	Normal
ILI Outpatient Visits	%	3.6	↑	Normal
SEVERITY			Trend	Activity Level
Inpatient Laboratory Cases	N	0	↓	Low
Inpatient Dispensed Antivirals	N	5	↑	Low
ACTIVE DUTY AND RECRUITS			Trend	Activity Level
Active Duty Laboratory Cases	N	3	↓	Low
Active Duty Dispensed Antivirals	N	13	↑	Low
Recruit Laboratory Cases	N	0	↓	Low
Recruit Dispensed Antivirals	N	0	↓	Normal

Overall Burden (Data Lagged, Week 45)

DON Total Influenza Cases from Laboratory, Pharmacy and Encounter Data



Supporting Surveillance

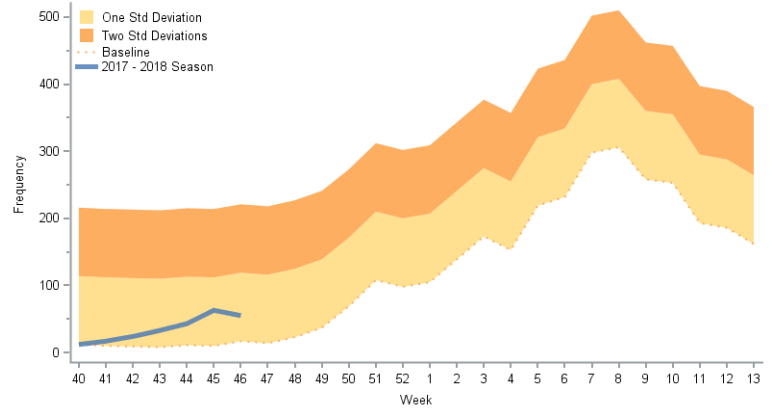
- * **DOD Global Laboratory-based Influenza Surveillance (USAFSAM).**
Week 44 highlights:
 - * Twenty positive influenza A specimens (2 H1N1, 18 H3N2)
 - * Four positive influenza B specimens .
 - * Access the full report [here](#).
- * **Operational Infectious Diseases (OID) Weekly Surveillance Report (NHRC).**
21NOV2017 report highlights:
 - * Sharp increase in Influenza A/H3 in Imperial County, CA
 - * AGE outbreak among recruits is abating
 - * Norovirus cases are increasing
 - * Access the most recent NHRC OID Surveillance reports [here](#).

Laboratory Surveillance

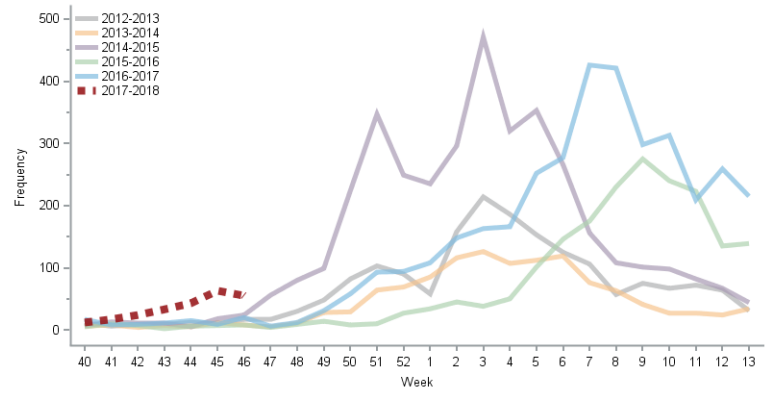
- * **Burden:** Laboratory-positive cases (n=55) are above baseline levels but within expected values. The number of cases decreased over the prior week by 12.6%.
- * **Specimens:** Overall percent positivity is 10.0%, with 64.5% of cases identified as influenza Type A.
- * **Severity:** No inpatient laboratory-positive cases were identified this week.
- * **Age:** Children ages 0-4 years had the highest rate of laboratory-positive influenza cases (n=11). 16 cases were identified for ages 5-17 and those ages 45+ had 16 cases.
- * **Location:** NH Jacksonville (n=21), NH Camp Pendleton (n=8), and NH Camp Lejeune (n=6), had the highest number of laboratory-positive influenza cases for the week.

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

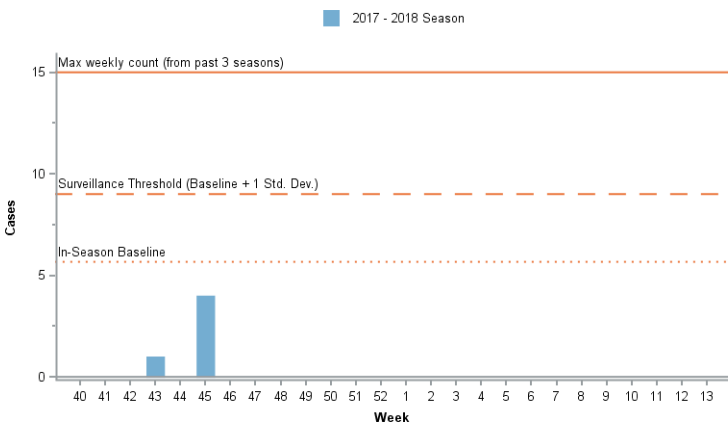
DON Laboratory-Positive Influenza Cases and Seasonal Baseline, 2017-2018 Season



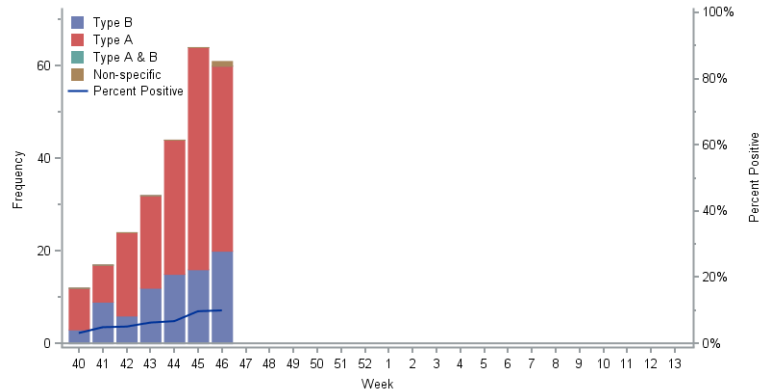
DON Laboratory-Positive, Seasonal Comparison, 2012-2018



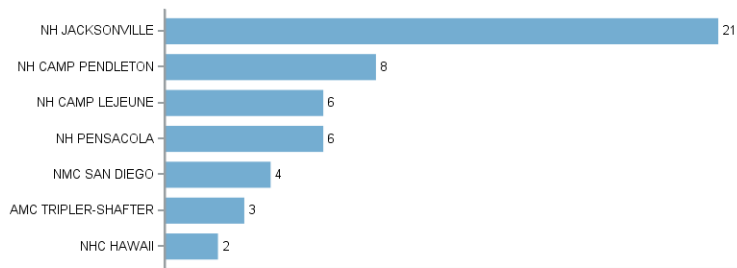
DON Inpatient Laboratory Cases (Severity)



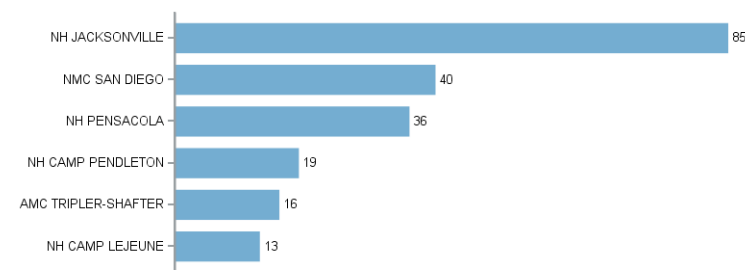
DON Laboratory-Positive Influenza Specimens, by Type



Top MTFs , Laboratory-Positive Cases, Week 46

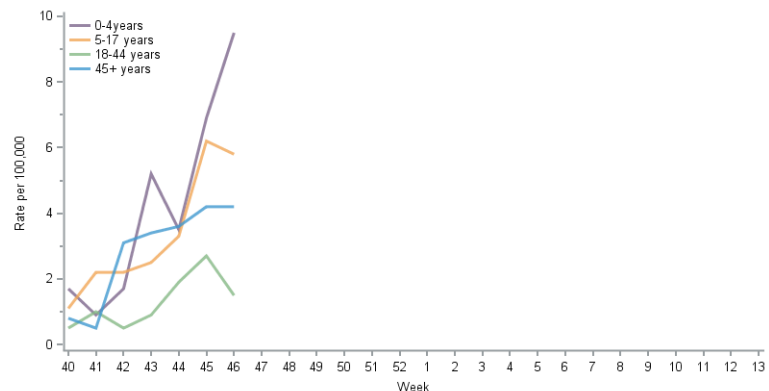


Top MTFs , Laboratory-Positive Cases, 2017-2018 Season



Note: Season counts are since Week 37.

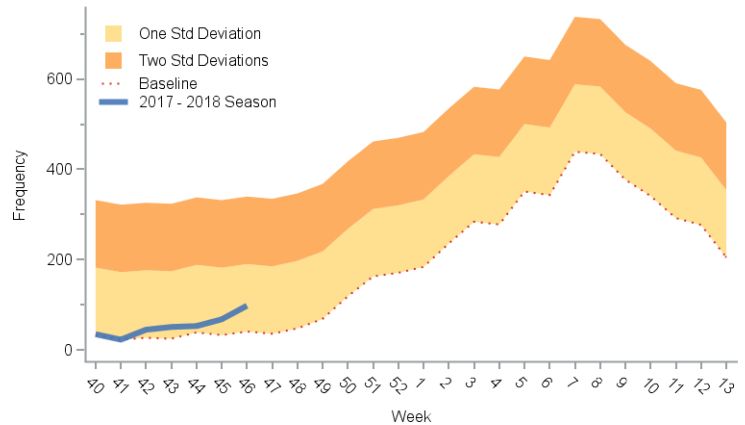
DON Laboratory-Positive Case Rates by Age Group



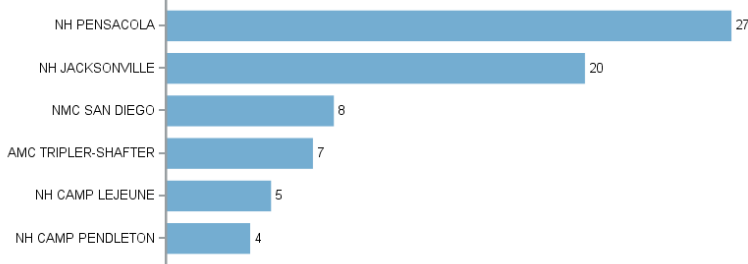
Antiviral Surveillance

- * **Burden:** Dispensed AVs (n=98) are above baseline levels but within expected values. The number of dispensed AVs increased over the prior week with an increase of 44%.
- * **Severity:** Four inpatient AVs were dispensed this week. One AV were dispensed to Navy active duty, two was dispensed to a family member, and one AV was dispensed to a retiree.
- * **Types:** All influenza AVs dispensed were Oseltamivir.
- * **Location:** NH Pensacola (n=27), NH Jacksonville (n=20), and NMC San Diego (n=8) had the highest number of dispensed AVs for the week.

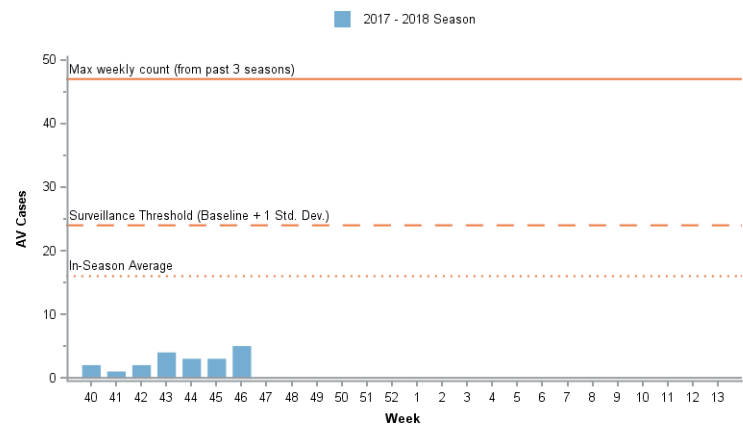
DON Influenza Specific Antiviral Prescriptions and Seasonal Baseline, 2017-2018 Season



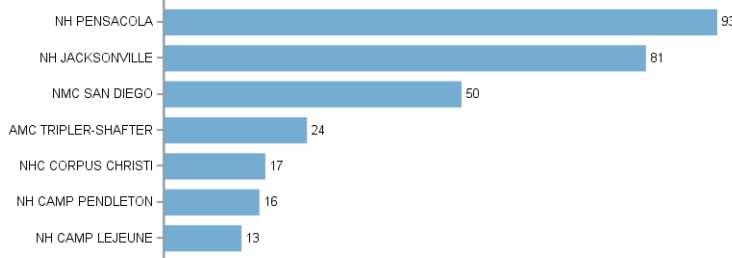
Top MTFs, Dispensed Antivirals, Week 46



DON Inpatient Dispensed Antivirals (Severity)



Top MTFs, Dispensed Antivirals, Season



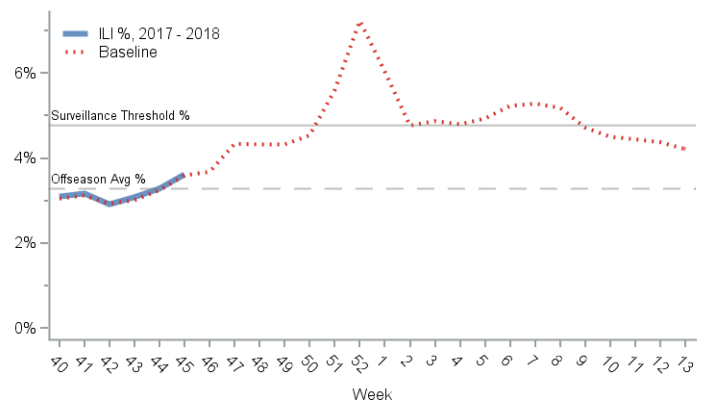
Note: Season counts are since Week 37.

Influenza-Like Illness (Data Lagged, Week 45)

- * **All outpatient:** The percentage of outpatient medical encounters due to ILI increased from the week prior to 3.1%. ILI activity remains low, and the ILI % is comparable to the seasonal baseline.
- * **Location:** ILI activity was the highest at James A Lovell FHCC (8.9%), followed by NH Guantanamo Bay (5.5%), NMC San Diego (4.9%), and NHC Corpus Christi (4.8%).

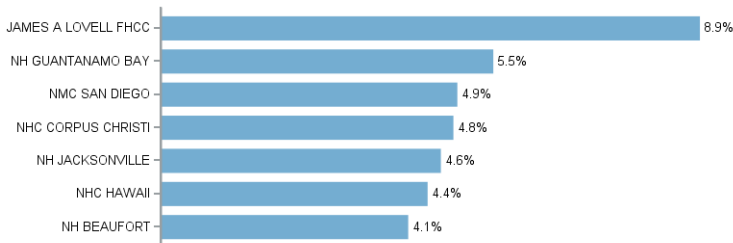
Data source: CAPER

Outpatient Medical Encounters due to ILI, Week 45



*Data lagged by one week.

Top DON MTFs, Percentage of Outpatient ILI, Week 45



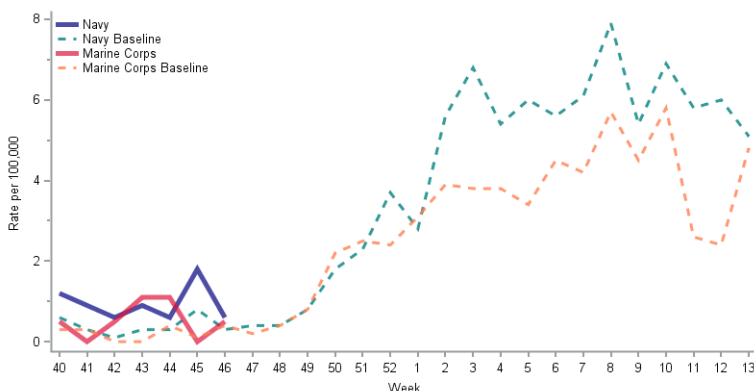
*Data lagged by one week.

Active Duty and Recruits

- * **AD Laboratory cases:** Three laboratory-positive cases among Sailors (n=2) and Marines (n=1).
- * **AD Dispensed Antivirals:** Ten AVs dispensed to Sailors and three AVs dispensed to Marines.
- * **Recruits:** There were no laboratory-positive cases and no dispensed AVs to recruits.
- * **Location:** Laboratory-positive cases occurred at NH Jacksonville (n=21), NH Camp Pendleton (n=8), NH Camp Lejeune (n=6), and NH Pensacola (n=6).
- * **Vaccination Status:** Two AD laboratory-positive case had a vaccination record more than fourteen days prior to infection.

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

Laboratory-Positive Cases Among Active Duty Service



Summary of Active Duty and Recruit Cases

	Laboratory		Dispensed AVs	
	Week 46	Season	Week 46	Season
Total Cases	3	42	13	79
Navy AD	2	22	10	53
Marine Corps AD	1	7	3	19
Navy Recruit	0	0	0	1
Marine Corps Recruit	0	13	0	6

Note: Season counts are since Week 37.

In the News

- * The CDC reports that influenza activity is increasing in the U.S. No influenza-associated pediatric deaths have been reported during the 2017-2018 season. [Details](#)
- * The European Centre for Disease Prevention and Control (ECDC) published a 20-page guide that addresses 12 key areas of pandemic preparedness based on lessons learned from the 2009 H1N1 event. [Details](#)

Medical Event Reports (MER)

MERs for Influenza-Associated Hospitalizations

	MER	Match to Surveillance Data	
	N	N	%
Week 46	0	-	-
Season	7	1	14.3%

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

Datasource: DRSi

Note: Season counts are since Week 37.

Bacterial Coinfections

- * **Summary:** 3.7% of laboratory-positive influenza cases had a bacterial coinfection identified this season.
- * **Upper-respiratory:** Nine upper respiratory infections have been identified, all *Streptococcus*.
- * **Lower-respiratory:** One lower respiratory infection has been identified as *Staphylococcus*.

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	9	1	10	3.7%
Baseline	2	1	2	1.8%

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.
- * AV surveillance no longer captures Amantadine as of 07 Nov 2017.
- * All figures prepared by the EpiData Center on 22 Nov 2017.