

# Influenza Situation Report: 2017-2018 Season

Department of the Navy

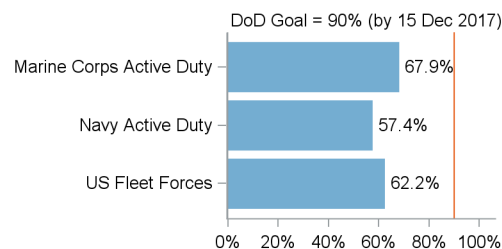


## Week 45 (05 Nov - 11 Nov 2017)

### Weekly Highlights:

- \* Influenza activity in the DON is **normal** and within expected levels. However, activity levels are increasing; laboratory-positive cases increased for the seventh straight week and dispensed AVs and the percent of ILI outpatient visits also increased.
- \* Recruit laboratory-positive influenza cases are **elevated**. Ten cases were identified among Marine recruits at NMC San Diego; one case was from an inpatient setting.
- \* NH Jacksonville had the most laboratory-positive cases (n=17), while the largest percentage of ILI visits occurred at James A Lovell FHCC (7.7%).

### Active Duty Vaccination Rates, 13 Nov 2017

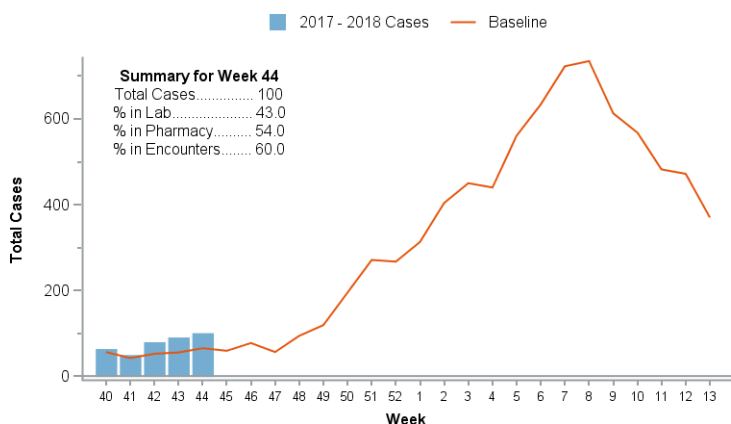


## Influenza Surveillance Indicators

OVERVIEW			Trend	Activity Level
Laboratory Cases	N	62	↑	Normal
Dispensed Antivirals	N	67	↑	Normal
ILI Outpatient Visits	%	3.3	↑	Normal
SEVERITY			Trend	Activity Level
Inpatient Laboratory Cases	N	4	↑	Normal
Inpatient Dispensed Antivirals	N	3	↔	Low
ACTIVE DUTY AND RECRUITS			Trend	Activity Level
Active Duty Laboratory Cases	N	6	↑	Low
Active Duty Dispensed Antivirals	N	9	↓	Low
Recruit Laboratory Cases	N	10	↑	Elevated
Recruit Dispensed Antivirals	N	2	↔	Normal

## Overall Burden (Data Lagged, Week 44)

### DON Total Influenza Cases from Laboratory, Pharmacy and Encounter Data



## Supporting Surveillance

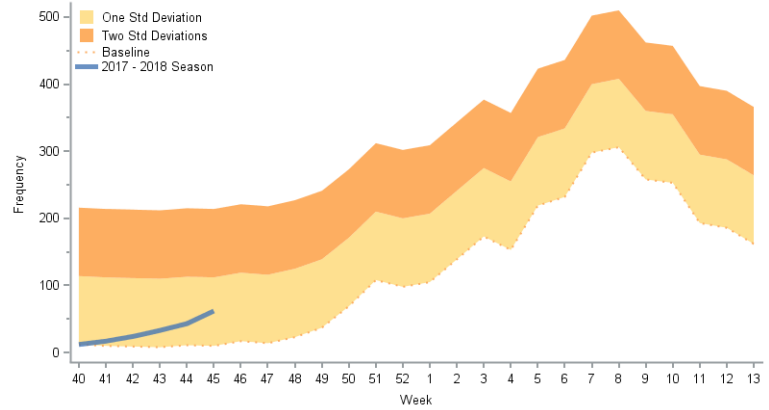
- \* **DOD Global Laboratory-based Influenza Surveillance (USAFSAM).**  
Week 43 highlights:
  - \* Twenty positive influenza A specimens (2 H1N1, 18 H3N2)
  - \* Four positive influenza B specimens .
  - \* Access the full report [here](#).
- \* **Operational Infectious Diseases (OID) Weekly Surveillance Report (NHRC).**  
09NOV2017 report highlights:
  - \* Five out of 23 samples tested among military recruits were positive for rhinovirus or adenovirus.
  - \* Access the most recent NHRC OID Surveillance reports [here](#).

# Laboratory Surveillance

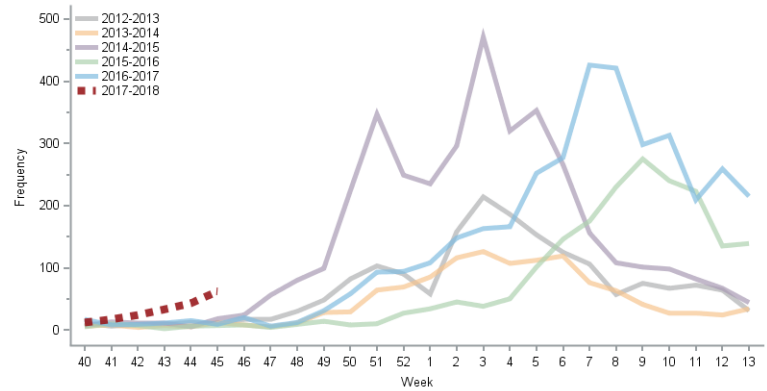
- \* **Burden:** Laboratory-positive cases (n=62) are above baseline and within expected levels. For the seventh week in a row, the number of cases increased over the prior week, with an increase of 46%.
- \* **Specimens:** Overall percent positivity is 10.6%, with 73% of specimens identified as influenza Type A.
- \* **Severity:** Four inpatient laboratory-positive cases were identified this week. Cases occurred among a Marine recruit (1), retirees (2) and a family member (1).
- \* **Age:** Children ages 0-4 years had the highest rate of laboratory-positive influenza cases (n=8). Twenty-two cases were identified for ages 18-44, 17 for those 5-17 years, and those ages 45+ had 15 cases.
- \* **Location:** NH Jacksonville (n=17), NMC San Diego (n=13), NH Pensacola (n=8), and NHC Hawaii (n=4) 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.

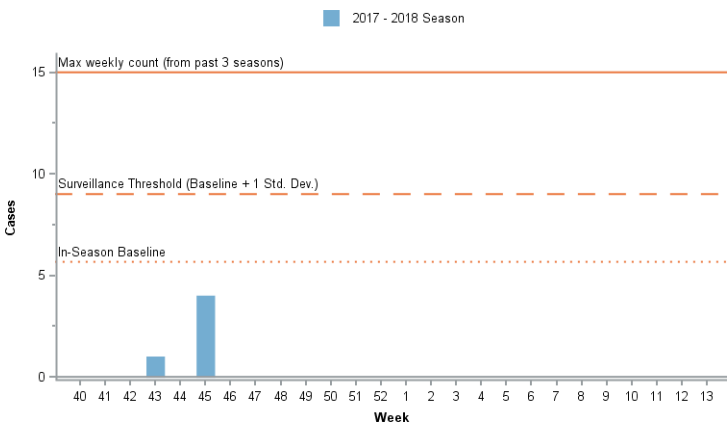
## DON Laboratory-Positive Influenza Cases and Seasonal Baseline, 2017-2018 Season



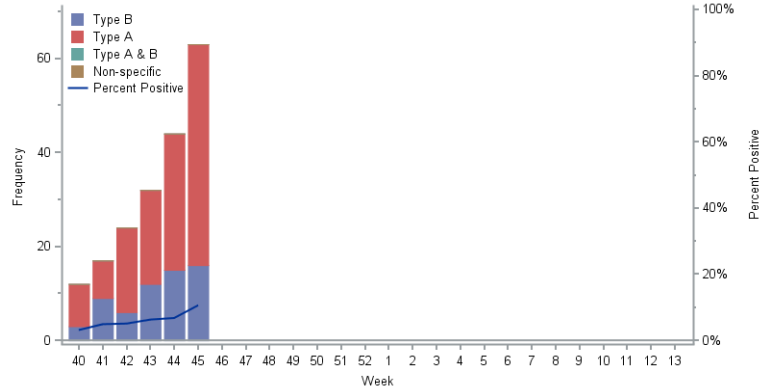
## DON Laboratory-Positive, Seasonal Comparison, 2012-2017



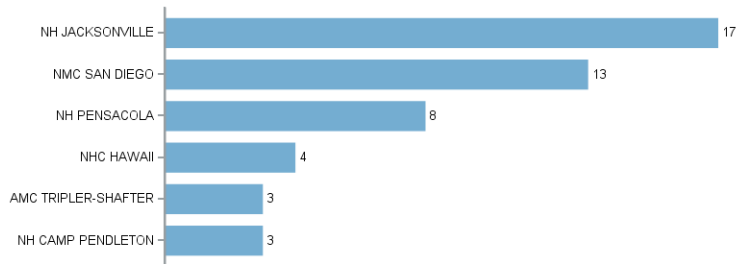
## DON Inpatient Laboratory Cases (Severity)



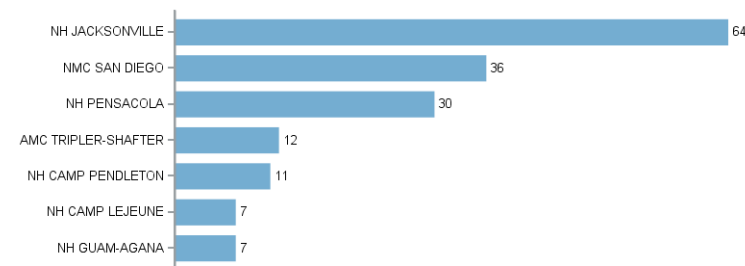
## DON Laboratory-Positive Influenza Specimens, by Type



## Top MTFs , Laboratory-Positive Cases, Week 45

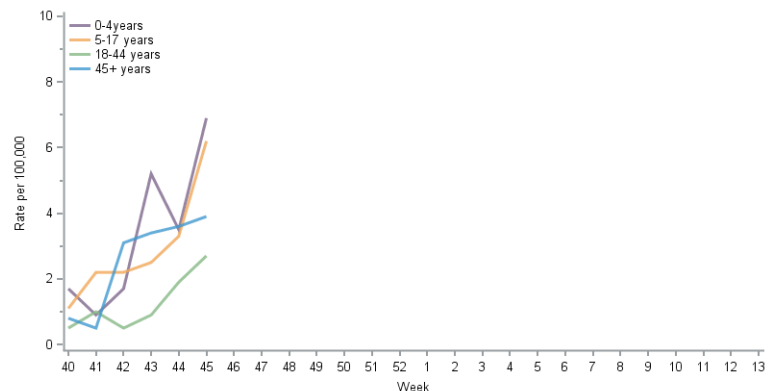


## Top MTFs , Laboratory-Positive Cases, 2017-2018 Season



Note: Season counts are since Week 37.

## DON Laboratory-Positive Case Rates by Age Group

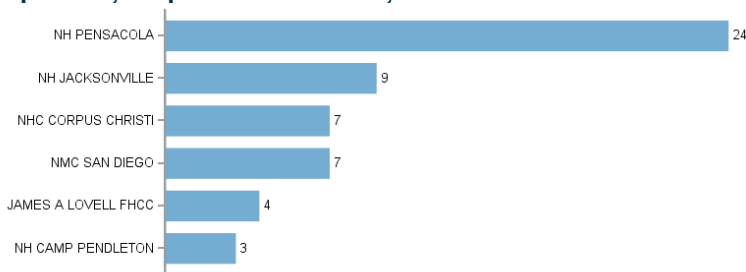


# Antiviral Surveillance

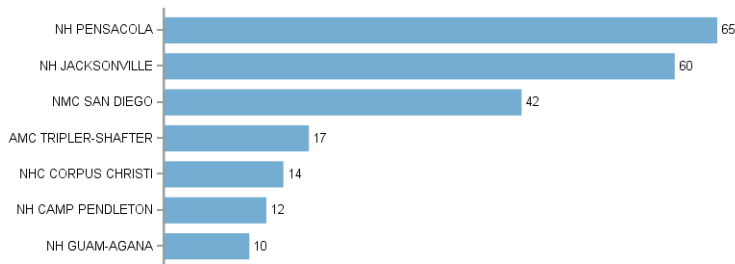
- \* **Burden:** Dispensed AVs (n=67) are above baseline levels but within expected values. The number of dispensed AVs increased over the prior week with an increase of 26%.
- \* **Severity:** Three inpatient AVs were dispensed this week to a family member, a recruit, and a retiree.
- \* **Types:** All influenza AVs dispensed were Oseltamivir.
- \* **Location:** NH Pensacola (n=24), NH Jacksonville (n=9), NHC Corpus Christi (n=7), and NMC San Diego (n=7) had the highest number of dispensed AVs for the week.

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

## Top MTFs, Dispensed Antivirals, Week 45

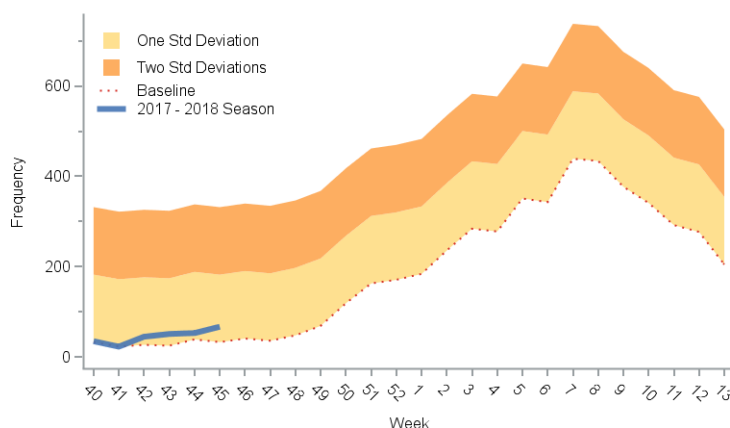


## Top MTFs, Dispensed Antivirals, Season

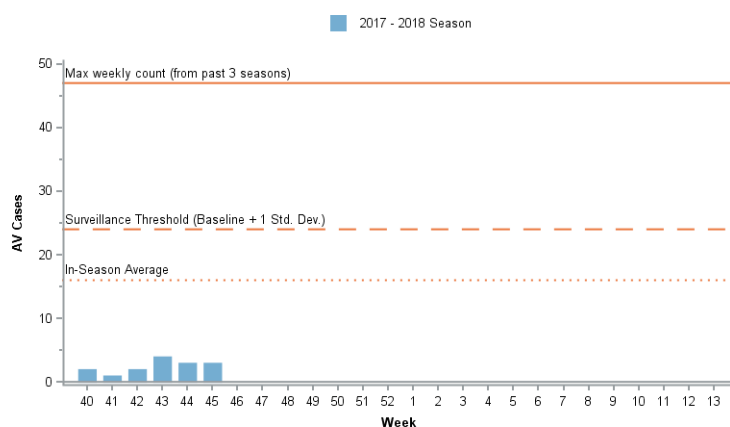


Note: Season counts are since Week 37.

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



## DON Inpatient Dispensed Antivirals (Severity)

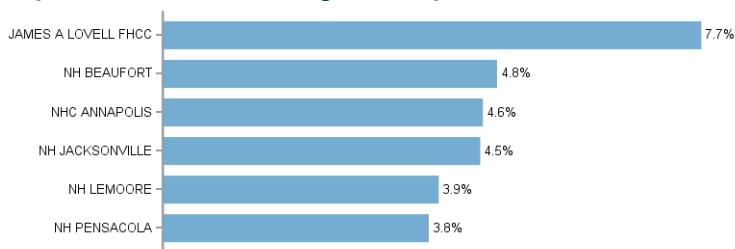


# Influenza-Like Illness (Data Lagged, Week 44)

- \* **All outpatient:** The percentage of outpatient medical encounters due to ILI increased from the week prior to 3.3%. ILI activity is normal and the ILI % is comparable to the seasonal baseline.
- \* **Location:** ILI activity was the highest at James A Lovell FHCC (7.7%), followed by NH Beaufort (4.8%), NHC Annapolis (4.6%), and NH Jacksonville (4.5%).

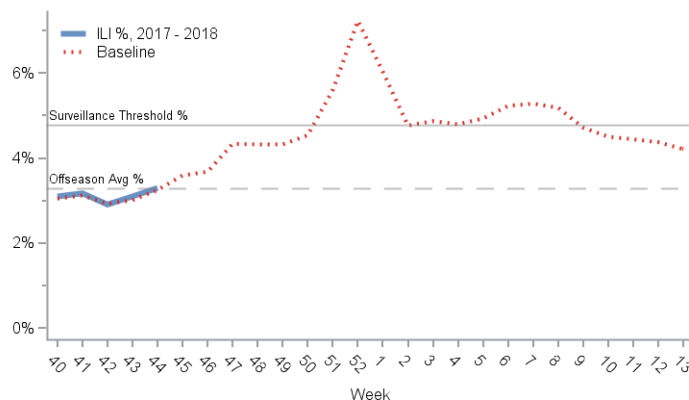
Data source: CAPER

## Top DON MTFs, Percentage of Outpatient ILI, Week 44



\*Data lagged by one week.

## Outpatient Medical Encounters due to ILI, Week 44



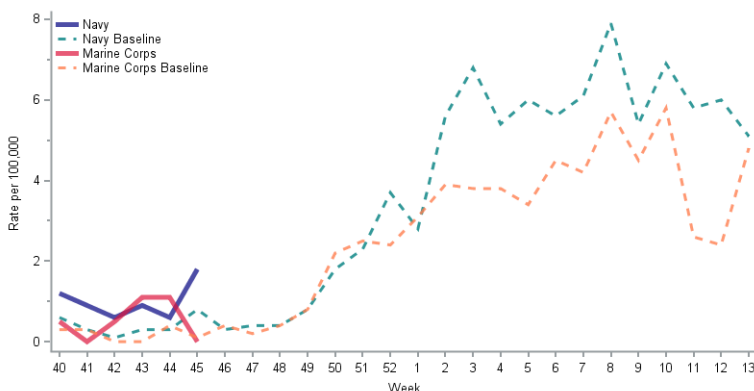
\*Data lagged by one week.

## Active Duty and Recruits

- \* **AD Laboratory cases:** Six laboratory-positive cases, all among Sailors.
- \* **AD Dispensed Antivirals:** Seven AVs dispensed among Sailors and two AVs dispensed to Marines.
- \* **Recruits:** Ten laboratory positive cases identified among Marine Corps recruits at NMC San Diego; one case from an inpatient setting. Two AVs dispensed to a Navy recruit and an inpatient Marine Corps Recruit
- \* **Location:** Laboratory-positive cases occurred at NMC San Diego (n=10), NH Pensacola (n=2), and four other facilities (one case each).
- \* **Vaccination Status:** Two of the ten recruit cases had a vaccination record; three of six the AD laboratory-positive cases had a vaccination record.

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 45	Season	Week 45	Season
<b>Total Cases</b>	16	39	11	66
<b>Navy AD</b>	6	20	7	43
<b>Marine Corps AD</b>	0	6	2	16
<b>Navy Recruit</b>	0	0	1	1
<b>Marine Corps Recruit</b>	10	13	1	6

Note: Season counts are since Week 37.

## In the News

- \* The CDC reports that influenza activity is low but increasing; Guam and 6 states are reporting regional activity and 13 states are reporting local activity. [Details](#)

## Medical Event Reports (MER)

### MERs for Influenza-Associated Hospitalizations

	MER	Match to Surveillance Data	
	N	N	%
<b>Week 45</b>	0	-	-
<b>Season</b>	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:** 3.8% of laboratory-positive influenza cases had a respiratory bacterial coinfection identified this season.
- \* **Upper-respiratory:** Seven 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)	%
<b>Current Season</b>	7	1	8	3.8%
<b>Baseline</b>	1	1	2	1.6%

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 08 Nov 2017.