

Influenza Situation Report: 2017-2018 Season

Department of the Navy

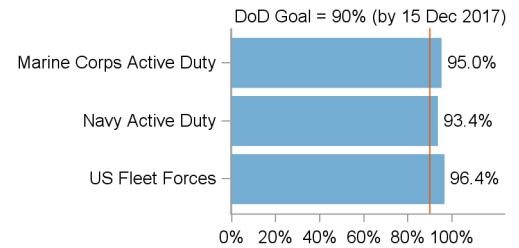


Week 7 (11 Feb – 17 Feb 2018)

Weekly Highlights:

- * Overall influenza activity in the DON remains **elevated**. Laboratory-positive cases, dispensed AVs, and the percent of ILI outpatient visits are all **elevated**. Both laboratory-positive cases and dispensed antivirals decreased over the prior week.
- * The number of inpatient dispensed antivirals is **elevated**.
- * The number of inpatient laboratory cases is **normal** and increased slightly over the prior week.
- * Active duty laboratory-positive cases and dispensed antivirals are **elevated**. Recruit laboratory cases and dispensed antivirals are **normal**.

Active Duty Vaccination Rates, 20 Feb 2018

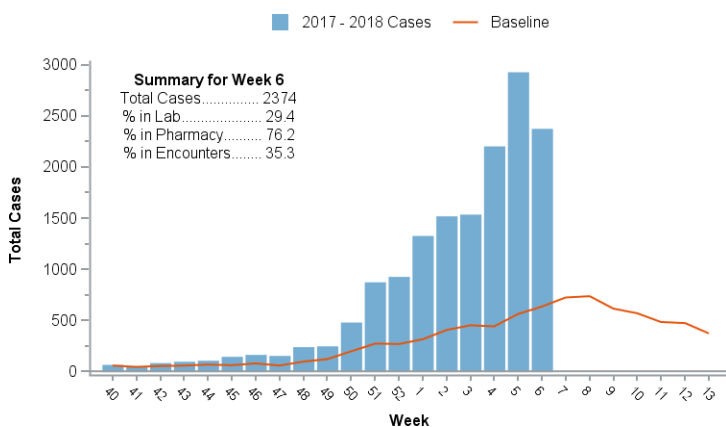


Influenza Surveillance Indicators

OVERVIEW				Trend	Activity Level
Laboratory Cases	N	566		↓	Elevated
Dispensed Antivirals	N	1420		↓	Elevated
ILI Outpatient Visits	%	5.6		↔	Elevated
SEVERITY				Trend	Activity Level
Inpatient Laboratory Cases	N	7		↑	Normal
Inpatient Dispensed Antivirals	N	26		↓	Elevated
ACTIVE DUTY AND RECRUITS				Trend	Activity Level
Active Duty Laboratory Cases	N	83		↓	Elevated
Active Duty Dispensed Antivirals	N	227		↓	Elevated
Recruit Laboratory Cases	N	1		↓	Normal
Recruit Dispensed Antivirals	N	6		↔	Normal

Overall Burden (Data Lagged, Week 6)

DON Total Influenza Cases from Laboratory, Pharmacy and Encounter Data



Supporting Surveillance

* DOD Seasonal Influenza Surveillance Summary (AFHSB).

Week 6 highlights:

- * The percentage of positive lab tests remained high, but continued to decrease to 16.3% for service members and 30.2% for other beneficiaries for Week 6.

* Access the full report [here](#).

* Operational Infectious Diseases (OID) Weekly Surveillance Report (NHRC).

15FEB2018 report highlights:

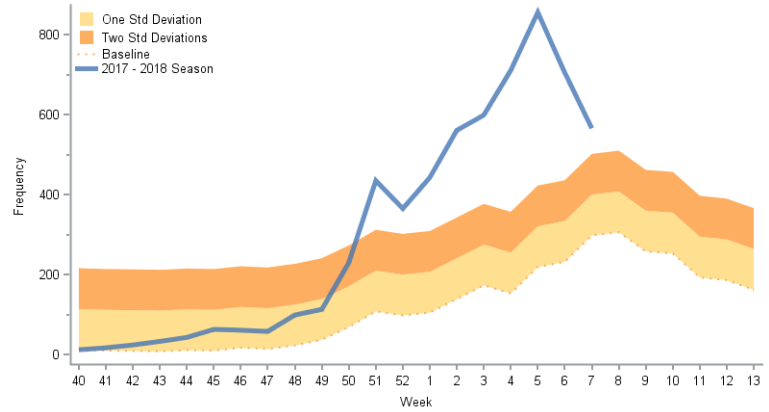
- * Clusters of influenza among trainees were seen at basic training centers in San Diego, New Jersey, and South Carolina.
- * Access the most recent NHRC OID Surveillance reports [here](#).

Laboratory Surveillance

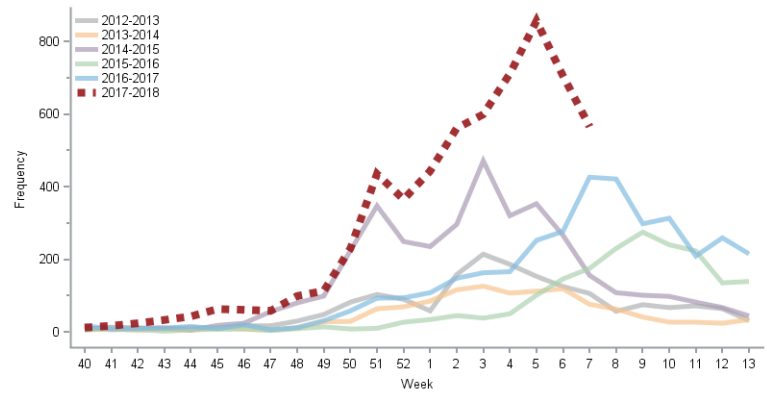
- * **Burden:** Laboratory activity remains elevated, but is beginning to trend downward. The number of laboratory-positive cases (N=566) decreased 19.7% from the prior week.
- * **Specimens:** Overall percent positivity is 27.0%, with 60.7% of cases identified as influenza A.
- * **Severity:** Seven inpatient laboratory-positive case were identified among family members (N=3), retirees (N=3), and an AD service member (N=1).
- * **Age:** Children ages 5-17 had the highest rate of laboratory-positive influenza cases at 86.1 cases per 100,000 persons, while children ages 0-4 had the second highest rate at 80.5 cases per 100,000 persons.
- * **Location:** NH Camp Lejeune (N=73), NMC Portsmouth (N=54), and Ft. Belvoir Community Hospital - FBCH (N=51) 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.

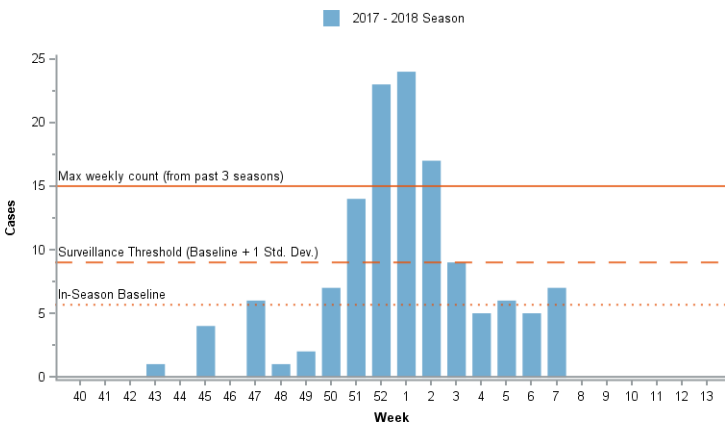
DON Laboratory-Positive Influenza Cases and Seasonal Baseline, 2017-2018 Season



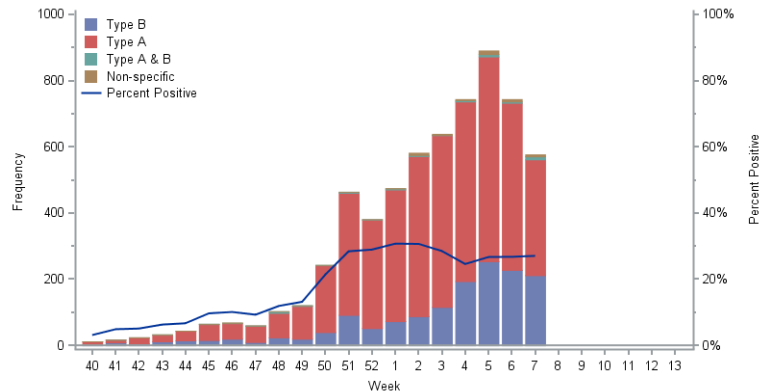
DON Laboratory-Positive, Seasonal Comparison, 2012-2018



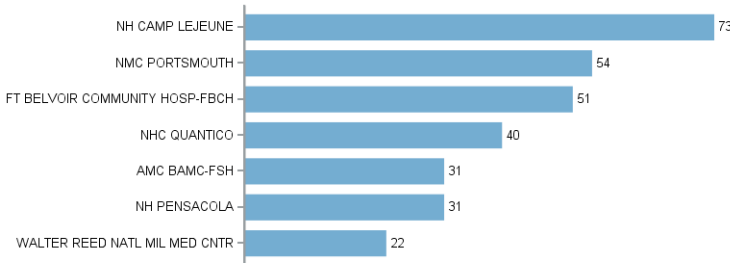
DON Inpatient Laboratory Cases (Severity)



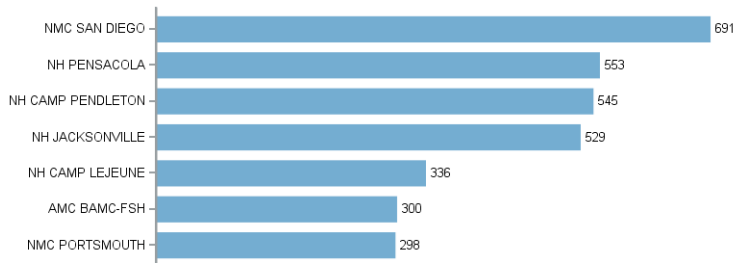
DON Laboratory-Positive Influenza Specimens, by Type



Top MTFs , Laboratory-Positive Cases, Week 7

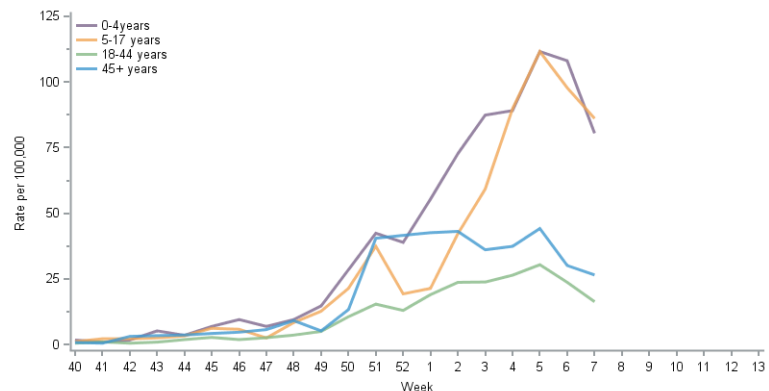


Top MTFs , Laboratory-Positive Cases, 2017-2018 Season



Note: Season counts are since Week 37.

DON Laboratory-Positive Case Rates by Age Group

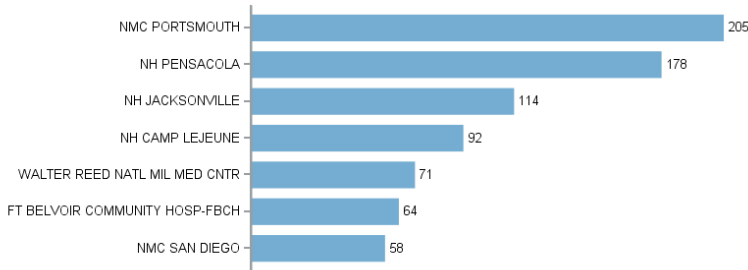


Antiviral Surveillance

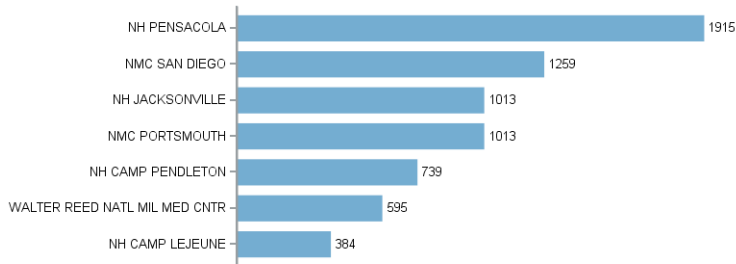
- * **Burden:** Dispensed AVs (N=1,422) are elevated, far exceeding baseline levels. However, the number of dispensed AVs is beginning to trend downward, decreasing 21.5% over the prior week.
- * **Severity:** Twenty-four inpatient AVs were dispensed this week to family members (N=13), retirees (N=6), AD service members (N=4), and a recruit (N=1).
- * **Types:** AVs dispensed this week were Oseltamivir (N=1,420), and Peramivir (N=2).
- * **Location:** NMC Portsmouth (N=205), NH Pensacola (N=178), and NH Jacksonville (N=114) had the highest weekly number of dispensed AVs.

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

Top MTFs, Dispensed Antivirals, Week 7

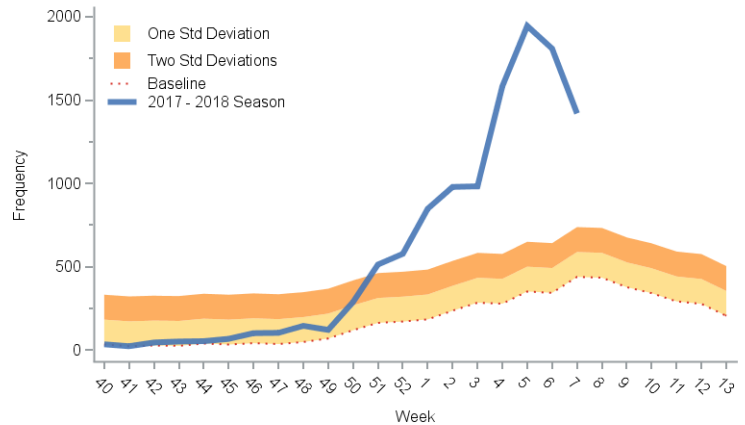


Top MTFs, Dispensed Antivirals, Season

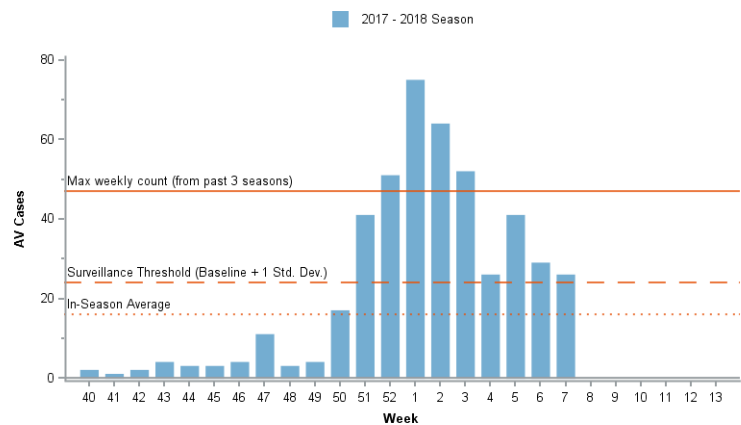


Note: Season counts are since Week 37.

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



DON Inpatient Dispensed Antivirals (Severity)



Influenza-Like Illness (Data Lagged, Week 6)

- * **All outpatient:** ILI activity is elevated. The percentage of outpatient medical encounters due to ILI was 5.6% in Week 6.
- * **Location:** ILI activity was highest at NHC Annapolis (12.0%), followed by NHC Charleston (9.6%), and NH Beaufort (8.7%).

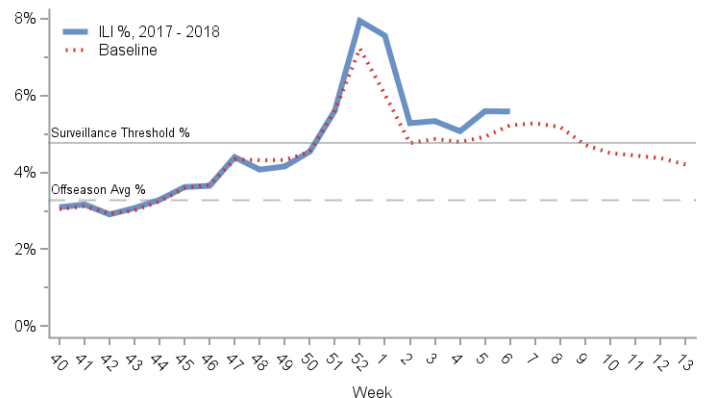
Data source: CAPER

Top DON MTFs, Percentage of Outpatient ILI, Week 6



*Data lagged by one week.

Outpatient Medical Encounters due to ILI, Week 6



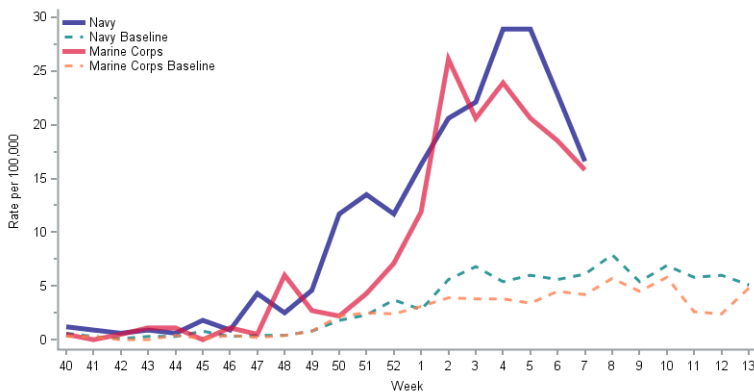
*Data lagged by one week.

Active Duty and Recruits

- * **AD Laboratory cases:** 83 laboratory-positive cases among AD Sailors (N=54) and Marines (N=29).
- * **AD Dispensed Antivirals:** 227 AVs dispensed among AD Sailors (N=173) and Marines (N=54).
- * **Recruits:** One laboratory-positive case and six AVs dispensed among recruits.
- * **Location:** Laboratory-positive cases occurred most frequently at NHC Quantico (N=9), NH Camp Lejeune (N=8), and NHC New England (N=7).
- * **Vaccination Status:** 67 AD laboratory-positive cases (80.7%) 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 Members, 2017-2018



Summary of Active Duty and Recruit Cases

	Laboratory		Dispensed AVs	
	Week 7	Season	Week 7	Season
Total Cases	84	1,091	233	1,933
Navy AD	54	688	173	1,388
Marine Corps AD	29	303	54	459
Navy Recruit	0	55	2	50
Marine Corps Recruit	1	45	4	36

Note: Season counts are since Week 37.

In the News

- * CDC released an interim report on vaccine effectiveness for the 2017-18 influenza season. The estimated effectiveness of the 2017-18 seasonal influenza vaccine is 36%. [Details](#)
- * CDC's Advisory Committee on Immunization Practices (ACIP) voted to return FluMist (intranasal vaccine) to the recommended product list for the upcoming 2018-19 influenza season. [Details](#)

Medical Event Reports (MER)

MERs for Influenza-Associated Hospitalizations

	MER	Match to Surveillance Data	
	N	N	%
Week 7	1	0	0.0%
Season	67	56	83.6%

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

Note: Season counts are since Week 37.

Bacterial Coinfections

- * **Summary:** 3.4% of laboratory-positive influenza cases had a bacterial coinfection identified this season.
- * **Upper-respiratory:** 200 upper respiratory infections have been identified among 186 cases, as *Streptococcus* (N=199) and *Staphylococcus* (N=1).
- * **Lower-respiratory:** 28 lower respiratory infections have been identified as *Staphylococcus* (N=10), *Haemophilus* (N=3), *Corynebacterium* (N=2), *Enterococcus* (N=2), *Streptococcus* (N=2), *Stenotrophomonas* (N=2), *Enterobacter* (N=1), *Escherichia* (N=1), *Klebsiella* (N=1), *Neisseria* (N=1), *Pantoea* (N=1), *Pseudomonas* (N=1), and *Serratia* (N=1).

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	186	28	206	3.4%
Baseline	61	9	70	3.9%

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 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 21 Feb 2018.