

Influenza Situation Report: 2017-2018 Season

Department of the Navy

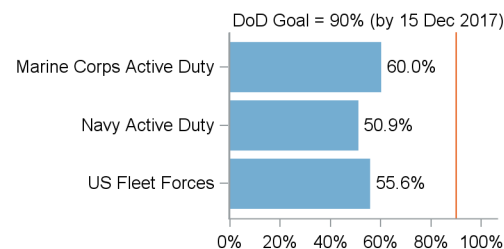


Week 44 (29 Oct - 04 Nov 2017)

Weekly Highlights:

- * Influenza activity in the DON is **normal** and within expected levels. Laboratory-positive cases continued to increase in Week 44; however, dispensed AVs decreased slightly from the prior week.
- * Severity indicators are **low**, with no inpatient laboratory-positive cases and three dispensed antivirals from an inpatient setting during Week 44.
- * NH Jacksonville had the most laboratory-positive cases (n=12), while the largest percentage of ILI visits occurred at James A Lovell FHCC (5.8%).

Active Duty Vaccination Rates, 06 Nov 2017

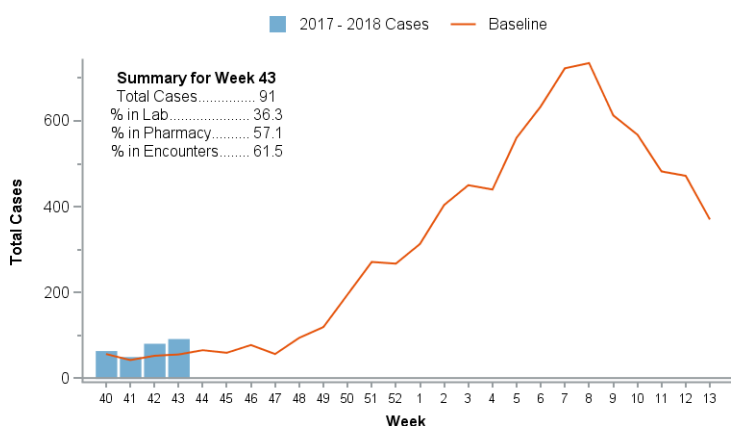


Influenza Surveillance Indicators

OVERVIEW			Trend	Activity Level
Laboratory Cases	N	41	↑	Normal
Dispensed Antivirals	N	50	↓	Normal
ILI Outpatient Visits	%	3.1	↑	Low
SEVERITY			Trend	Activity Level
Inpatient Laboratory Cases	N	0	↓	Low
Inpatient Dispensed Antivirals	N	3	↓	Low
ACTIVE DUTY AND RECRUITS			Trend	Activity Level
Active Duty Laboratory Cases	N	4	↓	Low
Active Duty Dispensed Antivirals	N	10	↑	Low
Recruit Laboratory Cases	N	2	↑	Normal
Recruit Dispensed Antivirals	N	2	↑	Normal

Overall Burden (Data Lagged, Week 43)

DON Total Influenza Cases from Laboratory, Pharmacy and Encounter Data



Supporting Surveillance

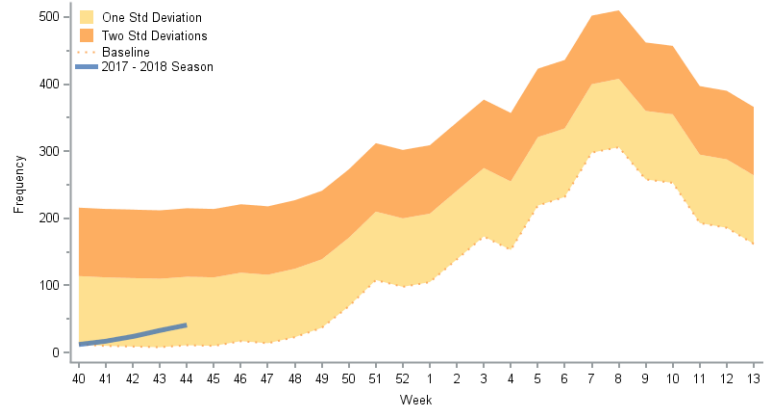
- * **DOD Global Laboratory-based Influenza Surveillance (USAFSAM).**
Week 41-42 highlights:
 - * Twelve positive influenza A specimens (1 H1N1, 4 H3N2)
 - * Three positive influenza B specimens.
 - * Access the full report [here](#).
- * **Operational Infectious Diseases (OID) Weekly Surveillance Report (NHRC).**
02 Nov 2017 report highlights:
 - * 20 positive FRI specimens among military recruits.
 - * Access the most recent NHRC OID Surveillance reports [here](#).

Laboratory Surveillance

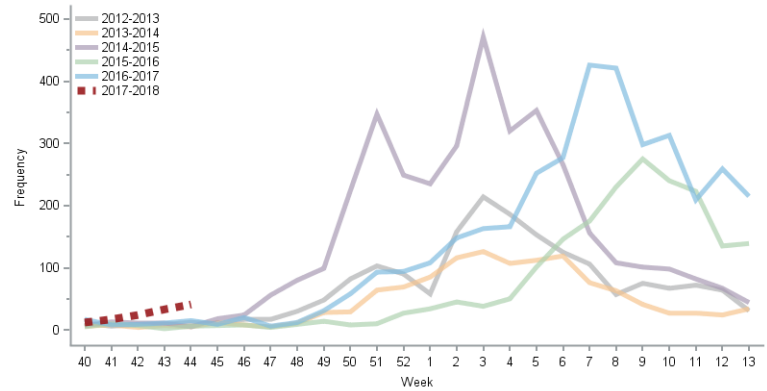
- * **Burden:** Laboratory-positive cases (n=41) are above baseline levels but within expected values. For the sixth week in a row, the number of cases increased over the prior week with an increase of 24%.
- * **Specimens:** Overall percent positivity is 7.7%, with 65.9% of cases identified as influenza 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=4). 16 cases were identified for ages 18-44, and those ages 45+ had 13 cases.
- * **Location:** NH Jacksonville (n=12), NH Pensacola (n=6), and NMC San Diego (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

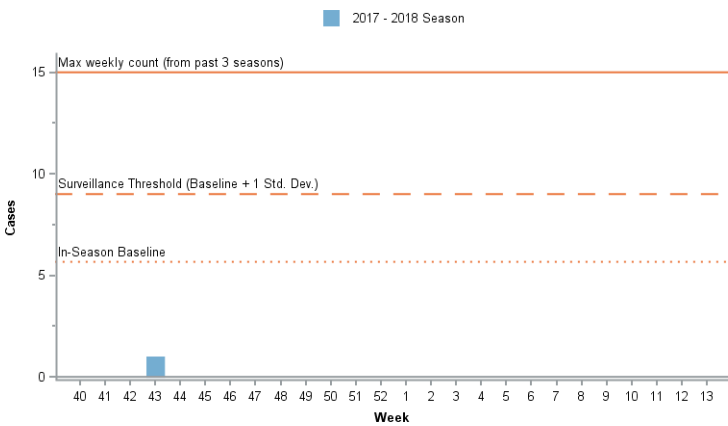
DON Laboratory-Positive Influenza Cases and Seasonal Baseline, 2017-2018 Season



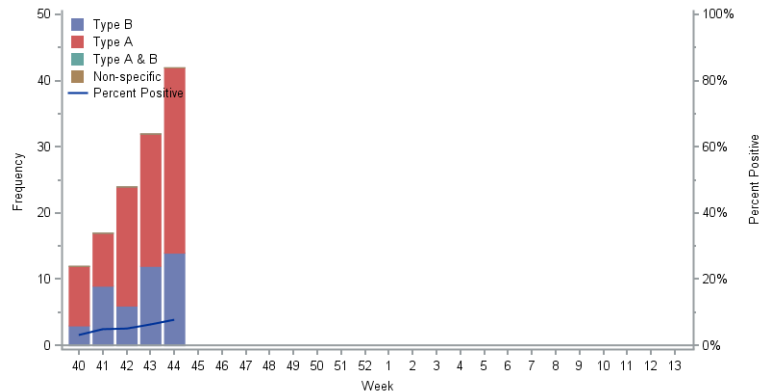
DON Laboratory-Positive, Seasonal Comparison, 2012-2017



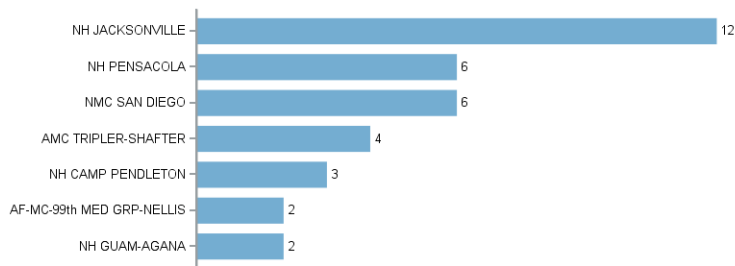
DON Inpatient Laboratory Cases (Severity)



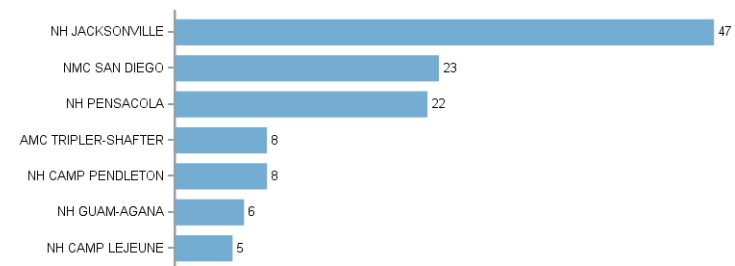
DON Laboratory-Positive Influenza Specimens, by Type



Top MTFs , Laboratory-Positive Cases, Week 44

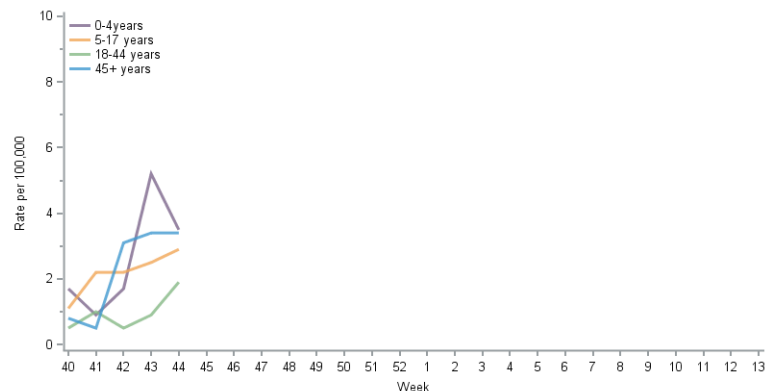


Top MTFs , Laboratory-Positive Cases, 2017-2018 Season



Note: Season counts are since Week 37.

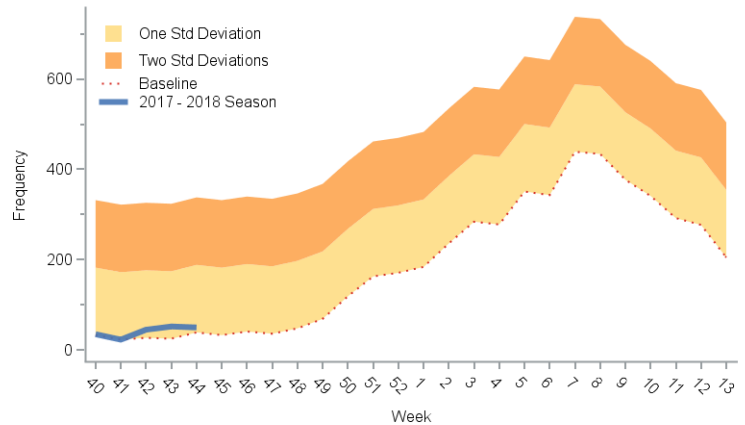
DON Laboratory-Positive Case Rates by Age Group



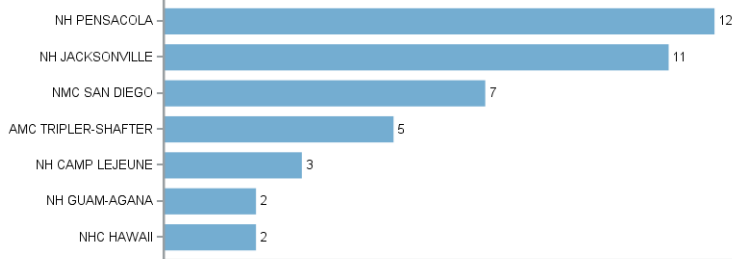
Antiviral Surveillance

- * **Burden:** Dispensed AVs (n=50) are above baseline levels but within expected values. The number of dispensed AVs decreased over the prior week with a decrease of 3.8%.
- * **Severity:** Three inpatient AVs were dispensed this week. Two AVs were dispensed to Marine Corps recruits, and one AV was dispensed to a family member.
- * **Types:** All influenza AVs dispensed were Oseltamivir.
- * **Location:** NH Pensacola (n=12), NH Jacksonville (n=11), and NMC San Diego (n=7), had the highest number of dispensed AVs for the week.

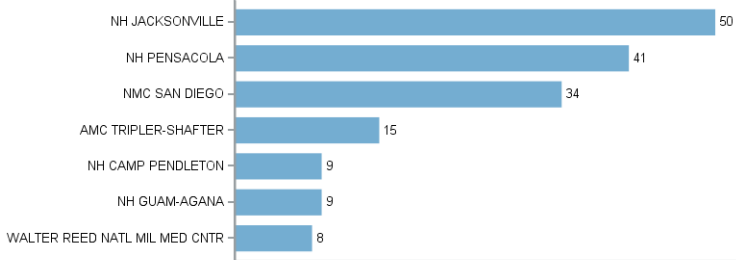
DON Influenza Specific Antiviral Prescriptions and Seasonal Baseline, 2017-2018 Season



Top MTFs, Dispensed Antivirals, Week 44

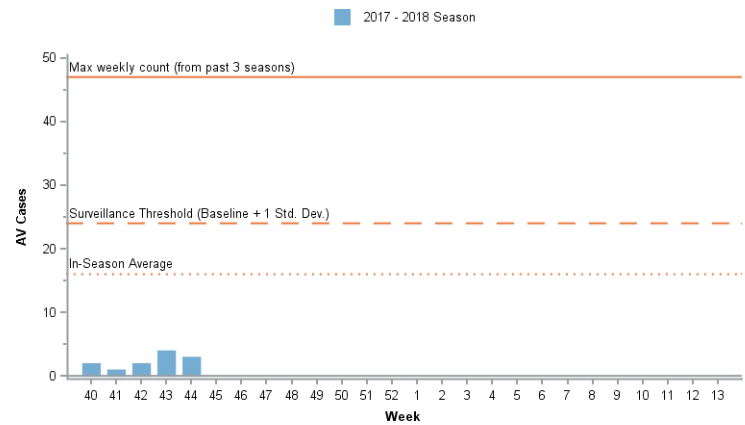


Top MTFs, Dispensed Antivirals, Season



Note: Season counts are since Week 37.

DON Inpatient Dispensed Antivirals (Severity)

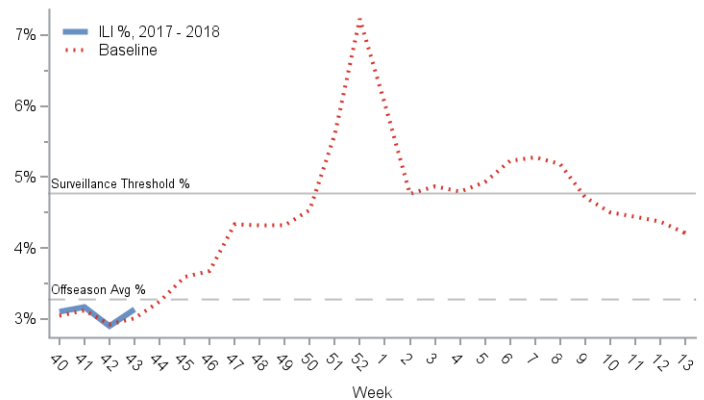


Influenza-Like Illness (Data Lagged, Week 43)

- * **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 (5.8%), followed by NH Guam-Agana (4.7%), NHC Corpus Christi (4.3%), and NH Jacksonville (4.2%).

Data source: CAPER

Outpatient Medical Encounters due to ILI, Week 43



*Data lagged by one week.

Top DON MTFs, Percentage of Outpatient ILI, Week 43



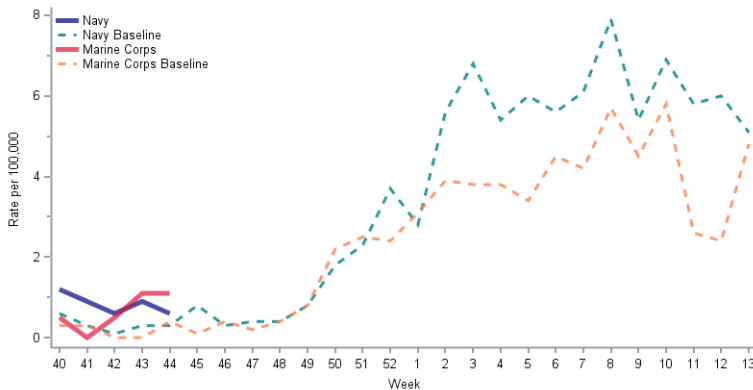
*Data lagged by one week.

Active Duty and Recruits

- * **AD Laboratory cases:** Four laboratory-positive cases among Sailors (n=2) and Marines (n=2).
- * **AD Dispensed Antivirals:** Seven AVs dispensed among Sailors and three AVs dispensed to Marines.
- * **Recruits:** Two laboratory-positive cases and two dispensed AVs to Marine Corps recruits.
- * **Location:** Laboratory-positive cases occurred at NMC San Diego (n=3), NH Jacksonville (n=1), NH Okinawa (n=1), and NH Pensacola (n=1). AVs were most frequently dispensed at NMC San Diego (n=3), NH Pensacola (n=2), and NHC Hawaii (n=2).
- * **Vaccination Status:** One 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 44	Season	Week 44	Season
Total Cases	6	23	12	56
Navy AD	2	14	7	37
Marine Corps AD	2	6	3	14
Navy Recruit	0	0	0	0
Marine Corps Recruit	2	3	2	5

Note: Season counts are since Week 37.

In the News

- * The CDC reports that influenza activity is low in the U.S. [Details](#)
- * A new study examining the vaccine effectiveness (VE) of the live attenuated vaccine (LAIV) among children in the United Kingdom found a VE of 65.8% for the 2016-2017 influenza season. LAIV is currently not recommended for use in the United States due to reduced VE observed in the 2015-2016 influenza season. [Details](#)

Medical Event Reports (MER)

MERs for Influenza-Associated Hospitalizations

	MER	Match to Surveillance Data	
	N	N	%
Week 44	0	-	-
Season	6	1	16.7%

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

Datasource: DRISi

Note: Season counts are since Week 37.

Bacterial Coinfections

- * **Summary:** 4.1% 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:** 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	5	1	6	4.1%
Baseline	1	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 08 Nov 2017.