# Influenza Situation Report: 2016-2017 Season

Department of the Navy

**Week 42 (16 October to 22 October 2016)**

## Overall Summary

Overall influenza activity is low. AVs are slightly above baseline and laboratory-identified cases are at baseline levels.

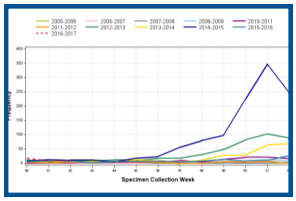
## Key Findings

### Influenza Activity and Surveillance

#### Laboratory

- Laboratory-positive influenza cases were at baseline.
- 8 laboratory cases identified. **Details**

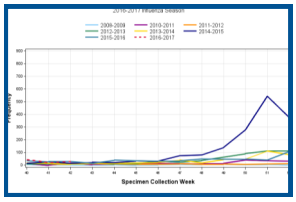
Lab Cases and Past Seasons



#### Antivirals (AVs)

- Dispensed AVs were slightly above baseline.
- 29 AVs dispensed. **Details**

AV Cases and Past Seasons



#### Influenza-Like Illness (ILI)

- ILI outpatient encounters were below baseline at 2.9% of outpatient medical encounters. **Details**

### Active Duty Vaccination Rates

Navy …….. 45.1%
Marine Corps …….44.4%
US Fleet Forces ……. 44.2%

**View Table**

Data source: MRRS, current as of 24 Oct 2016.

### Severity Indicators

#### Inpatient

- No inpatient laboratory-positive cases identified.
- 3 inpatient AVs dispensed.
- One influenza case reported to DRSi. **Details**

#### Coinfections

- No bacterial coinfections among laboratory-positive cases were identified. **Details**

### Select Populations

#### Active Duty

- No laboratory-positive cases identified.
- 8 AVs dispensed. **Details**

#### Recruits

- No laboratory-positive case identified.
- No AVs dispensed. **Details**
- Febrile respiratory illness at or below expected values. **NHRC Report**

#### Children

- Laboratory cases among children were at baseline. **Details**

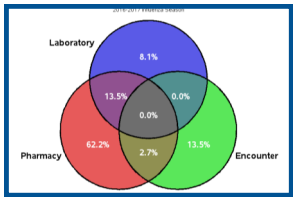
# Influenza Activity and Surveillance

## Overall Burden*

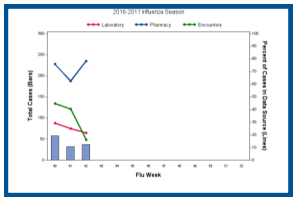
- The weekly burden of influenza in the DON was 37 cases, identified in one or more data sources.
- Pharmacy captured the highest proportion of cases (78.4%). No cases were identified in all three sources.
- 127 DON cases identified since Week 40.

*Note: The estimated burden of influenza across the DON combines three major sources of data: certified laboratory results, antiviral pharmacy transactions, and medical encounters with influenza-specific diagnoses.

**Cases by Source**



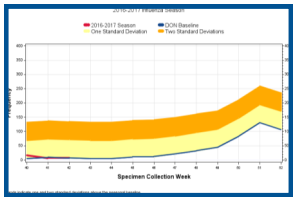

**Cases by Source and Week**



## Laboratory Cases

- Laboratory-positive cases were at baseline with 8 cases; the case count was equal to the count of the previous week.
- Influenza types: A (6), B (2), and A and B (0).
- Facilities with the greatest number of cases:
  - Current week: NH Guam-Agana (4), NH Jacksonville (1) NH Camp Lejeune (1), NH Okinawa (1), and NH Yokosuka (1).
  - Season: NH Guam-Agana (9), NH Camp Lejeune (7), and NH Yokosuka (3).

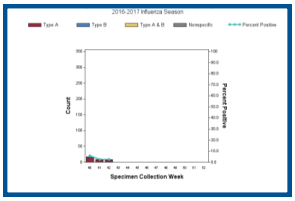
**Lab Cases and Baseline**



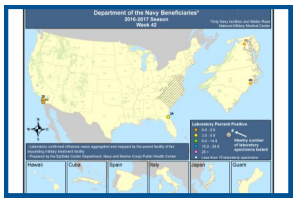
## Specimen Positivity

- 2.6% of all influenza specimens tested; about the same as last season (2.7%).
- Facilities testing more than 10 specimens: 5 (17.9%).

**Pos. Specimens and Type**



**% Pos. Specimens by MTF**



**Test Types among Positive Influenza Specimens, n (%)**

| | Rapid | Culture | PCR | Total |
|---|---|---|---|---|
| **Week 40** | 14(82.4) | 2(11.8) | 1 (5.9) | 17 |
| **Week 41** | 7(87.5) | 1 (12.5) | 0(0.0) | 8 |
| **Week 42** | 8 (100.0) | 0 (0.0) | 0(0.0) | 8 |
| **Season** | 29(87.9) | 3(9.1) | 1 (3.0) | 33 |

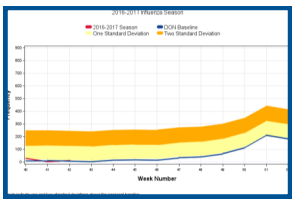
## Antiviral Prescriptions

- AVs dispensed were above baseline; AVs increased slightly from the prior week.
- 29 AVs (27 oseltamivir, 2 amantadine) were dispensed.
- Facilities dispensing most AVs this week: NH Guam-Agana (6) and NH Camp Lejeune (4) .
- The majority (92.5%) of prescriptions for the season have been for oseltamivir.

**Antiviral Medications Dispensed to DON Beneficiaries, n (%)**

| | Amantadine | Oseltamivir | Total |
|---|---|---|---|
| **Week 42** | 2(6.9) | 27 (93.1) | 29 |
| **Season** | 7(7.5) | 86 (92.5) | 93 |

**AV Cases and Baseline**



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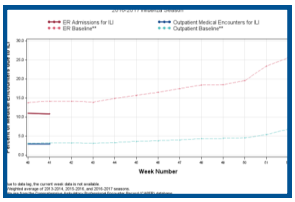
# Syndromic Surveillance

## Influenza-Like Illness (ILI) *

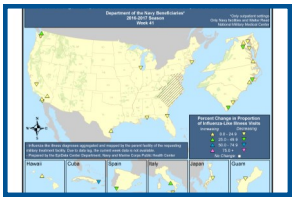
- The percentage of medical encounters that included an ILI diagnosis:
  - 2.9% of outpatient encounters (below baseline).
  - 10.9% of ER admissions (below baseline).
- 9 DON facilities (32.1%) reported an increase in the proportion of outpatient ILI visits from the prior week.
  - Two facilities had an increase above 25% .
  - NH Oak Harbor (27.6%) had the greatest increase in the percent of ILI visits.

*For Week 41, lagged due to data availability

ILI and Baseline



ILI Percent Change

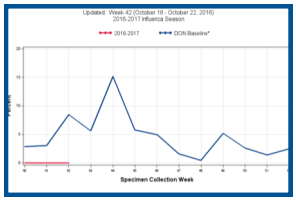


# Severity Indicators

## Inpatient Laboratory

- No inpatient laboratory cases were identified.

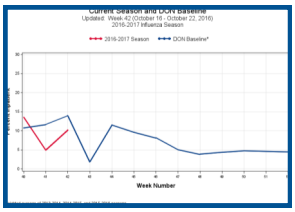
Inpatient Lab Cases



## Inpatient Pharmacy

- The percentage of inpatient AVs (10.3% of all influenza AVs) was below baseline (14.0%).
- AVs were dispensed at NH Guam-Agana (1), AMC Tripler-Shafter (1) and AMC Brooke-SAMMC-Sam Houston (1)
- AVs were dispensed to spouses (2) and a non-active duty sponsor (1).

Inpatient AV Cases



## Influenza-Associated Hospitalization Reports

- One influenza case was reported to DRSi for influenza-associated hospitalization for an active duty service member.

## Bacterial Coinfections

- No coinfections were identified during the week.
- No positive rapid strep tests were identified among influenza cases.

**Bacterial Coinfections by Specimen Source and as a Percent of Laboratory Cases, 2016-2017 Season**

| | Coinfections by Specimen Source, n (%) | | | Lab Cases with Bacterial Coinfection (%) |
|---|---|---|---|---|
| | Upper Respiratory | Lower Respiratory | Non-Respiratory | |
| **Current Season (n=1)** | 0(0.0) | 0 (0.0) | 1(100.0) | 3.0 |
| **Cumulative Baseline* (n=1.2)** | 0 (0.0) | 0.5(42.9) | 0.7 (57.1) | 4.8 |

* Cumulative baseline calculated as a weighted average over three years and may not represent whole numbers.

Note: Table does not include Group A *Streptococcus* identified from rapid diagnostic tests.

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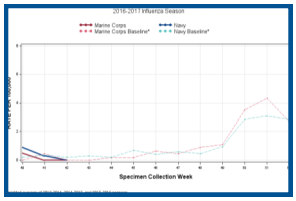
# Select Populations

## Active Duty

- No laboratory-positive influenza cases were identified among active duty service members.
- 8 active duty service members (7 Navy, 1 Marine) were dispensed AVs (all oseltamivir).

AD Lab Case Rates



## Recruits

- No laboratory-positive influenza cases were identified among recruits.
- No AVs were dispensed to recruits.

**Number of DON Active Duty and Recruit Cases since Week 40, 2016-2017 Season**

| Case Type | Active Duty | | Recruits | | Total |
|---|---|---|---|---|---|
| | Navy | Marine Corps | Navy | Marine Corps | |
| **Laboratory** | 4 | 1 | 0 | 0 | 5 |
| **Antiviral** | 16 | 4 | 0 | 0 | 20 |

AD Influenza Lab Case Vaccination Status

Vaccination Status of DON Active Duty and Recruit Influenza Cases, 2016 - 2017 Season

| | | Vaccine Type | | | |
|---|---|---|---|---|---|
| Status | Immunity Status | IIV | None | Total | Percent |
| Active Duty | Vaccinated; immune | 1 | - | 1 | 20.0% |
| | Vaccinated; not immune | 3 | - | 3 | 60.0% |
| | No vaccination record | - | 1 | 1 | 20.0% |
| Total | | 4 | 1 | 5 | - |

LAIV=live-attenuated influenza vaccine (intranasal), IIV=inactive influenza vaccine (injection)
Vaccinated; immune: Vaccinated more than 14 days prior to infection.
Vaccinated; not immune: Vaccinated less than 14 days prior to infection or after infection.
Prepared by EpiData Center Department, Navy and Marine Corps Public Health Center, 25 Oct 2016

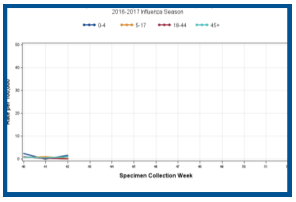
## Children

- Laboratory cases were at baseline; 3 laboratory-positive influenza cases were identified.
  - No cases were identified from an inpatient setting.
  - Outpatient cases identified at 3 different facilities, NH Camp Lejeune, NH Guam-Agana, and NH Yokosuka.
- AVs dispensed to children were above baseline estimates; 8 AVs were dispensed.
  - No AVs were dispensed in inpatient settings.
  - Location with most AVs dispensed: NH Camp Lejeune (3).

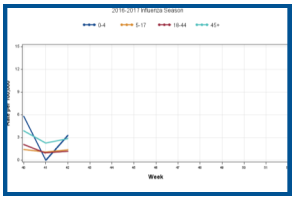
**Number of Influenza Laboratory Cases and AV Cases, DON Children**

| Age | Laboratory | | Antiviral Prescriptions | |
|---|---|---|---|---|
| | Cases | Rate (per 100,000) | Count | Rate (per 100,000) |
| 0-4 years | 2 | 1.66 | 4 | 3.3 |
| 5-17 years | 1 | 0.36 | 4 | 1.4 |

Lab Case Rates By Age



AV Case Rates By Age



# In the News

- US influenza activity is low; however, widespread influenza activity continues in Guam. **Details**
- The FDA approved a high-dose quadrivalent influenza vaccine for adults of any age which will be available in 2017. **Details**

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