Influenza Surveillance and Outbreaks in the U.S. Department of Veterans Affairs (VA):
2017-2018 Season
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INTRODUCTION
VA conducts ongoing annual surveillance for seasonal influenza, which is associated with significant morbidity and mortality and puts VA large elderly population at risk. Here we summarize 2017-2018 national influenza activity and vaccination data as well as reported influenza outbreaks occurring throughout the VA system.

METHODS
Influenza-coded (ICD-10: J09-J11) hospitalizations, outpatient visits, %ILI (Influenza-like Illness) telephone triage, influenza testing, and arrivals were obtained from VA data sources (10/1/17 – 3/31/18) and compared to prior seasons back to 2012-13. Vaccines were captured Aug. 1st through July 31st each year from 3 sources: 1) outpatient CPT procedure codes, 2) inpatient bar coded medication administration (BCMA) data; and 3) verified retail pharmacy vaccinations from the VA Choice Program Manager/Chief Business Office Purchase Care (2014-15 through 2017-18 seasons only). Vaccination percentage was calculated based on VA unique users for each fiscal year. Outbreak data was collected from VA Issue Briefs and email survey of facility Infection Preventionists.

RESULTS

- The 2017-2018 season was the most severe VA influenza season on record since routine surveillance was initiated by our office in 2009. VA influenza data continues to align well with CDC data. Activity rose early (late November) with a period of high activity during January-February and remaining elevated through March, leading to a particularly long and severe season, similar to national trends.
- HD vaccines increased over the seasons evaluated, but overall vaccination levels were stable.
- Nearly 90% of those with LCI had no VA-documented vaccination this season, although some may have received vaccine outside VA.
- Hospitalization rate for Veterans with LCI was high (22%). Vaccination did not reduce the likelihood of being hospitalized with influenza, however HD vaccine may have afforded some additional protection compared to standard dose.

REFERENCES
1. CDC. FluView National and Regional Level Outpatient Illness and Viral Surveillance. From: http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html

CONCLUSIONS
- Surveillance metrics for 6 seasons are presented (Table). In 2017-18, vaccination rate remained stable, but high-dose (HD) vaccine increased to 20% of total vaccine given.
- 2017-18 influenza season activity was higher than any of the 5 prior seasons based on most indicators. Activity rose early with an extended peak of high activity from late December through mid-February (data not shown).
- During the season, %ILI ranged from 0.5%-2.2% for all outpatient settings and from 1.1-4.3% in primary and urgent care settings. Reports of 48 distinct outbreaks at 36 different VA hospitals were received this season. (Figure).
- Influenza A viruses predominated through mid-February, influenza B predominated from late-Feb onward. This was similar to CDC national viral surveillance data.
- Total influenza-coded hospitalizations for the 2017-18 season: 8,785
- Outpatient vaccination data was based on procedure codes, which may be subject to miscoding errors. BCMA inpatient influenza vaccination data was not available for 14 VA facilities. Vaccination data included VA Retail Pharmacy program data, but not other non-VA settings.
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- VA laboratory testing for influenza-related issue briefs and VA IPs who responded to an email survey. Reported outbreaks were not verified and not VA facilities communicated whether they did or did not have any outbreaks during the season.

Note: Data for the 2017-18 season is through 3/31/18 (Epi Week 13).
*Percentage calculated based on the total number of VA users reported each fiscal year.
†Deaths during an influenza-coded hospitalization (record reviews were not performed to assess whether influenza was documented as a principal or contributing cause of death).
2.377 Influenza A
12.8% of 21,548 Flu A + Test Results
Vaccine High Dose (26%), Standard Dose (54%; 86%)