

Introduction

Influenza (flu) is a contagious respiratory illness caused by Influenza A and B viruses. It can cause mild to severe illness. Serious outcomes of flu infection can result in hospitalization or death.

Every flu season is different, and influenza infection can affect people differently, but millions of people get the flu every year, hundreds of thousands of people are hospitalized and thousands or tens of thousands of people die from flu-related causes every year. Even healthy people can get very sick from the flu and spread it to others.

"Flu season" in the United States can begin as early as October and last as late as May, peaking during late December to early February. The Influenza activity becomes low during the summer months. An annual seasonal flu vaccine is the best way to reduce your risk of getting sick with seasonal flu and spreading it to others.

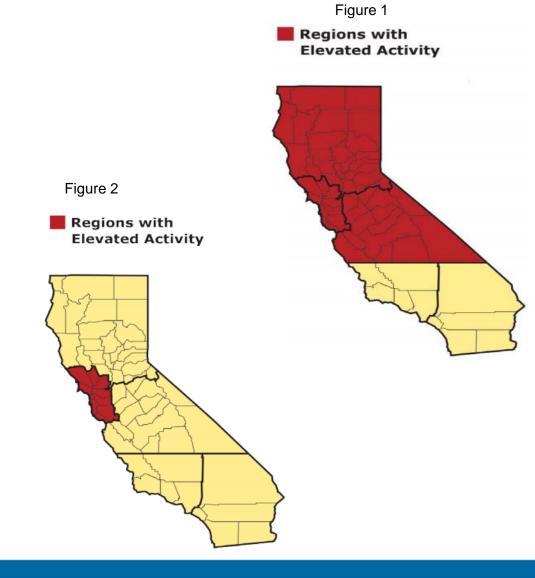
Some people, such as older people, young children, and people with certain health conditions, are at high risk of serious flu complications. It is recommended that such category of people be treated as a priority group to receive immunization

Overview of Northern California 2017-2018 Flu Season

- The seasonal flu vaccine protects against the influenza viruses that research indicates will be most common during the upcoming season. Traditional flu vaccines (called "trivalent" vaccines) are made to protect against three flu viruses; an influenza A (H1N1) virus, an influenza A (H3N2) virus, and an influenza B virus.
- ➤ However, two additional variant influenza A (H1N2v) infections were confirmed in California residents, with swine exposure.
- ➤ Center for Disease Control & Prevention (CDC) recommended use of injectable influenza vaccines (including inactivated influenza vaccines and recombinant influenza vaccines) during 2017-2018. The nasal spray flu vaccine (live attenuated influenza vaccine or LAIV) was recommended not to be used during 2017-2018.

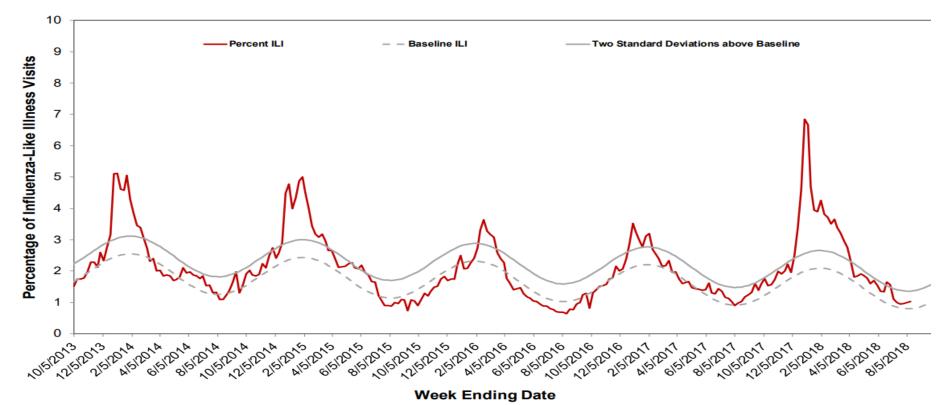
Overview of Northern California 2017-2018 Flu Season

- ➤ Figure 1 shows a weekly "snapshot" of influenza activity for the week of April 1 April 7, 2018 with more than half the regions of the state affected.
- Figure 2 shows a weekly "snapshot" of influenza activity for the week of April 22 April 28, 2018 with activity having decreased state-wide but still considerably elevated for the San Francisco Bay Area. In California the hardest hit months were December to April. During summer the Influenza activity was minimal.



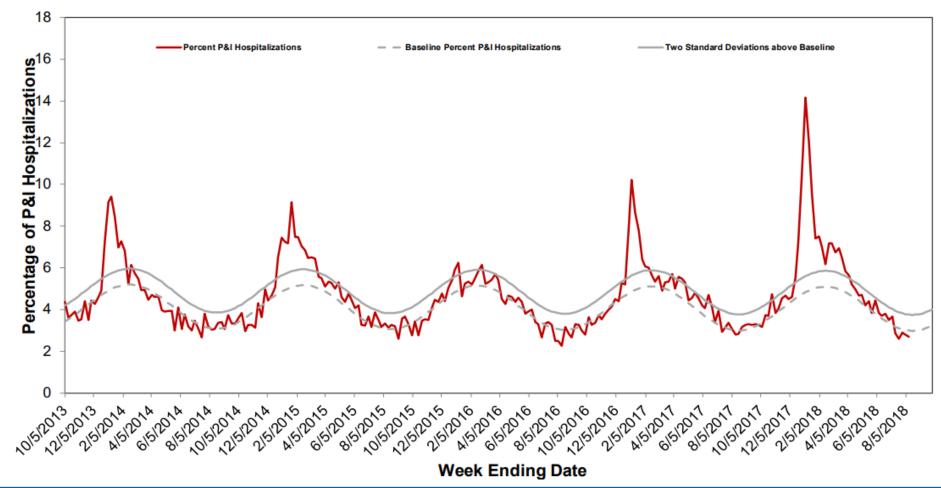
Northern California 2017-2018 Flu Season - Influenza-like illness (ILI) Visits

- California Department of Public Health (CDPH) obtains and analyzes clinical, and laboratory data year-round in order to determine the timing and impact of influenza activity, and to determine how well circulating strains of the virus match those used in the current influenza vaccines.
- CDPH compiles a weekly report of influenza surveillance or number of patients seen with ILI, from many sources.
- Figure shows a week by week percentage of ILI Visits in Northern California, that were at the highest in February, 2018, nearly doubling the percentages seen in February 2017 and February 2016.



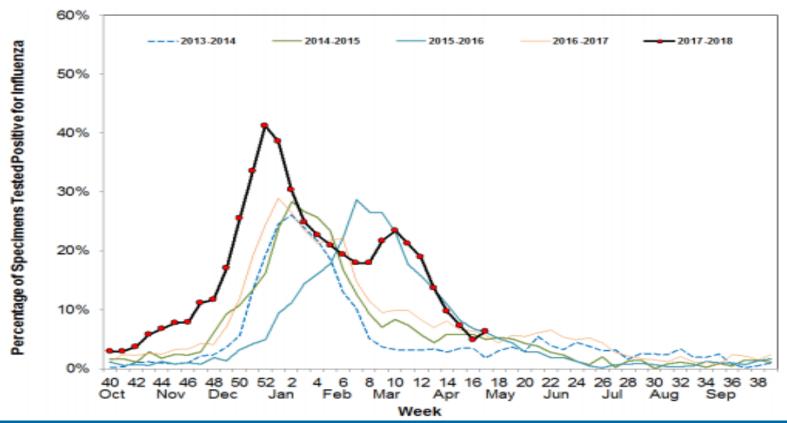
Northern California 2017-2018 Flu Season – Pneumonia and Influenza(P&I) Admits

- Inpatients with an admission diagnosis including the keywords "flu", "influenza", "pneumonia" or variants of the keywords are defined as P&I-related admissions.
- Figure shows a weekly trend of percentage of P&I Hospitalization in Northern California, that peeked around February 2018, significantly higher than over the prior seasons.



Northern California 2017-2018 Flu Season – Laboratory specimen tests

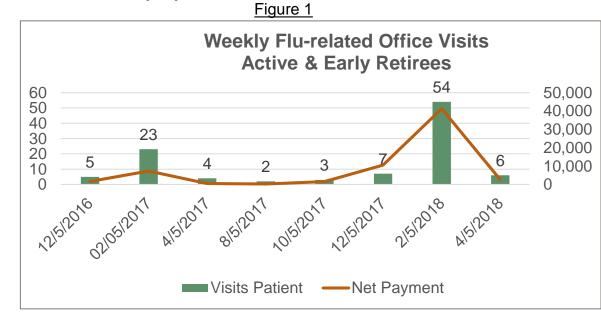
- Laboratory surveillance for influenza and other respiratory viruses involves the use of data from clinical laboratories and public health laboratories located throughout California. These laboratories report the number of laboratory-confirmed influenza and other respiratory virus detections and isolations on a weekly basis.
- Figure shows the weekly percentage of specimens tested positive for Influenza, peeking in the weeks between December 2017 and January 2018. The percentage of positive tests is significantly higher than in prior flu seasons.

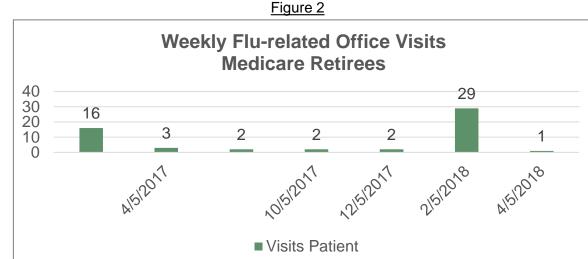


SFHSS population data – Influenza-like Illness (ILI) Visits

➤ Figure 1 is a weekly trend of ILI visits by SFHSS-CCSF population. It shows the number of visits doubled from 23 in February 2017 to 54 in February 2018. Additionally, total cost per patient more than doubled, from \$319.00 to \$764.00.

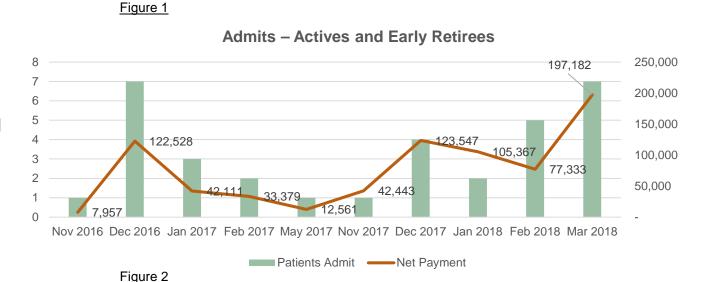
➤ Figure 2 is a weekly trend of ILI visits by SFHSS-CCSF Medicare Retiree population. It shows the number of visits doubled from 16 in February 2017 to 29 in February 2018 in keeping with a similar spike in Feb 2018 in Northern California activity. Financials are not available for the Medicare population.



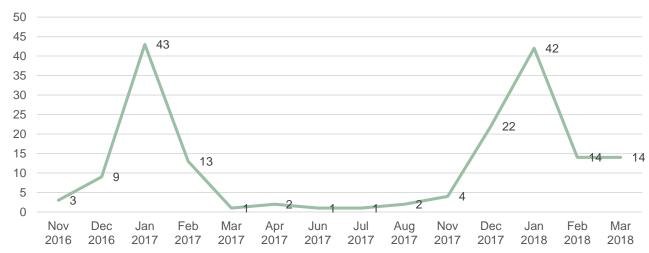


SFHSS Population data - Pneumonia & Influenza(P&I) Admits

- Admissions Include patients with a primary or secondary Flu diagnosis
- Figure 1 As defined by CDPH the admits have been restricted to using their guidelines. In March 2018, patients with both Sepsis and Flu contributed to 56% of the total cost.
- Figure 2 –Only utilization is reported for Medicare Retirees. January 2017 &n 2018 were the months with the highest admits @ 43 & 42.







SFHSS Population data – Laboratory (Lab) visits

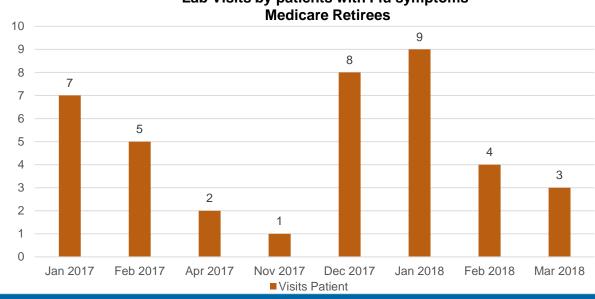
Figure 1 shows a monthly trend of Laboratory visits by patients with a symptom of Flu. The Lab tests spiked in the month of January 2018 @ 72 during the peak Flu season and tripled the number of visits from January 2017. The cost per patient increased from \$106 in 2017 to \$164

Figure 2 shows trend of Laboratory visits by Medicare Retirees. Lab tests spiked in the month of January 2018.

Figure 1
Lab visits by patients with Flu symptomsActives and Early Retirees

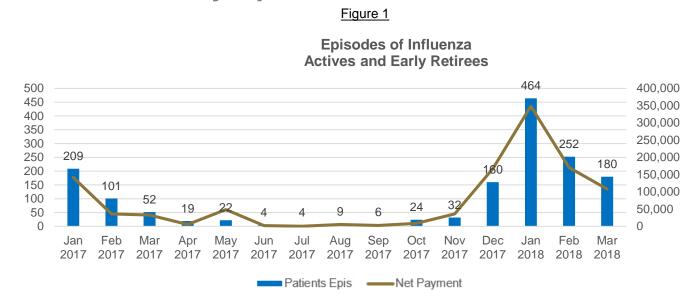


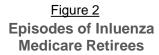
Figure 2
Lab Visits by patients with Flu symptoms-

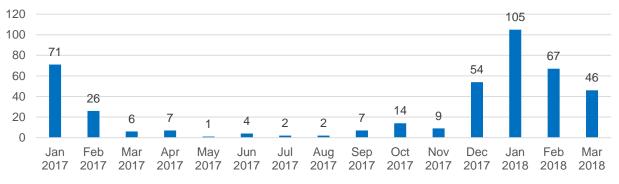


SFHSS Population data – Cost by Episode

- □ Figure 1 shows January 2018 was the worst month for Flu. SFHSS data recorded 464 episodes at a per episode cost of \$764, in comparison to January 2017 when there were 209 episodes at a cost of \$678 per episode. Total flu season Net Payments increased from \$299,655 in 2017 to \$838,027 in 2018
- Figure 2 shows the same trend for Medicare Retirees.
 January 2018 was the highest for episodes of Influenza @105, a 48% increase over previous flu season for that period.

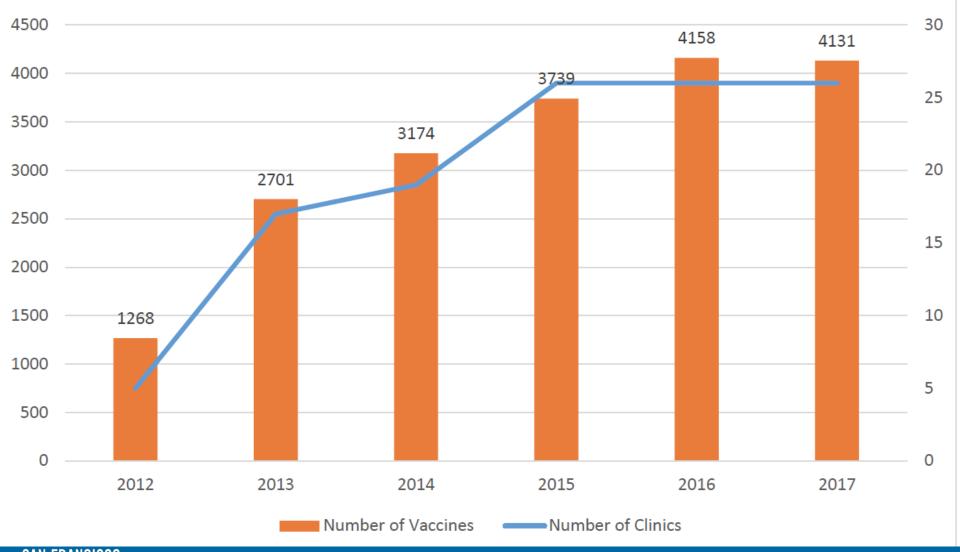






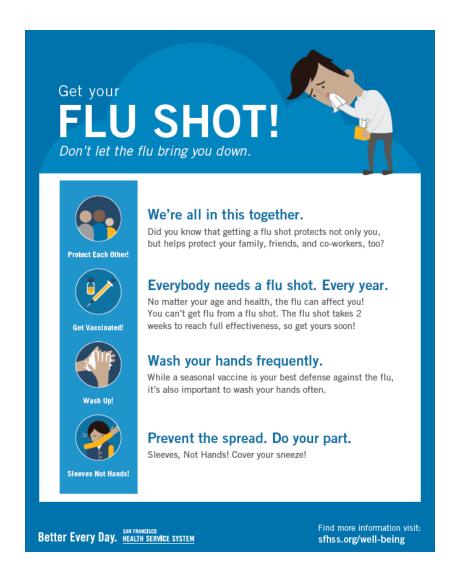
■ Patients Epis





SFHSS 2018-2019 Flu Shot Program

- Worksite and health fair flu shot clinics
 - 25 clinics between Oct. 1-Nov. 2
 - 4300 vaccinations expected, 164/clinic
 - Clinics are open to employees, retirees, and spouses/domestic partner of retirees where possible
- Worksite educational materials
 - Posters
 - Emails
 - Announcements by Champions
- ☐ Home mailing to Medicare retirees
 - General flu information for those 65+
 - Health plan information
- Webpages
 - Clinic schedule
 - FAQs about the shot
 - Health plan information



Summary

- 2017-2018 Flu season was more severe than the previous season. Utilization and costs increased for the SFHSS population. Net payment for flu season increased from \$299,655 in 2017 to \$838,027 in 2018 for the active population
- The most affected months for SFHSS population were January, February and March
- Fortunately there were no instances of flu-related deaths in the SFHSS population
- An annual seasonal flu vaccine is the best way to reduce the risk of getting sick with seasonal flu and spreading it to others
- SFHSS will be setting up 25 clinics at different locations between Oct 1 and Nov 2nd hopes to administer over 4300 flu shots in the 2018-2019 season
- Members not able to attend an SFHSS flu shot clinic should consider getting their flu shot from their doctor. In network vaccinations should be covered at no cost