



# 2018 “Teach Flu a Lesson” (TFAL) School Located Flu Vaccination

# Agenda

**BACKGROUND AND OVERVIEW**

**TFAL IN OC, SD, BP ELEMENTARY SCHOOLS**

**TFAL 2015, 2016 & 2017 RESULTS**

**FUTURE OPPORTUNITIES WITH TFAL**

# TFAL: Background & Overview

## Background

- School-aged children are the most important vector for community transmission of influenza.
- The objective of this program is to reduce influenza-like illness to decrease school absenteeism by offering school located vaccination clinics.
- Free flu vaccines would be available to all interested students at participating schools regardless of insurance status.
- The goal is to create herd immunity in a vulnerable population and to close health disparity gaps in our communities.

# TFAL: Background & Overview

## About Influenza Among School-Age Children

- According to the Centers of Disease Control and Prevention, influenza is the leading cause of illness in America.
- School-age children have the highest annual flu rates – as high as 42% according to the American Academy of Pediatrics Committee on Infectious Diseases.
- Although it is recognized that the medical home is the primary site for influenza vaccine administration for children, SLV programs would have the potential to efficiently immunize larger numbers of school-aged children.
- School flu vaccination programs have resulted in a decrease in student absences relating to influenza-like illnesses.

\*Population-wide benefits of routine vaccination of children against influenza. Weycker D, Edlesberg J, Halloran ME, Longini IM jr, Nizam A, Ciruyla V, Oster G. Vaccine. 2005 Jan 26;23(10):1284-93

# RESULTS OF SCHOOL-BASED INFLUENZA VACCINATION: 2016, 2017\*

- School-located influenza vaccination program
  - Increased vaccination
  - Decreased school absences and hospitalizations related to flu
- Prospective study; 44 schools per district (n = 6,070) in 2017
- School absences and influenza hospitalizations gathered during time of immunization program
- 56.7% vaccination coverage in control district; 63.9% coverage in program school district
- Absences lower in participating schools (5.4 absences, 3.01 illness-related absences per 100 days)
  - Control schools: 6.68 absences, 3.60 illness-related absences
  - Differences noted were statistically significant

\*Research conducted by Dr. Jade Benjamin-Chung, PhD, epidemiologist at UC Berkeley; abstracted presented at IDWeek, Oct 3-7, 2018

# TFAL: Background & Overview

## Where It All Began – Los Angeles Unified School District Pilot (2013)

- LAUSD reached out to MedImmune to discuss the feasibility of a school-located vaccination (SLV) pilot project.
- A partnership between LA County Dept. of Public Health, LAUSD, and Kaiser Permanente was formed to work on the project.
- KP membership data (by zip code) was cross-walked with LAUSD schools in a geographic location where low flu vaccination uptake had been identified.
- 5 schools were identified; each school had 90 to 1,000 students.
- 732 students were vaccinated against the flu (15% overall).
- Several of these students had never received a flu vaccination previously.
- The LA County Medical Reserve Corp administered the vaccinations in the Los Angeles schools.

# TFAL: Background & Overview

## Expansion into Orange and San Bernardino Counties

- Internal risk mapping by Kaiser Permanente Southern California (KPSC) to identify below average flu vaccination rates in Kaiser Permanente (KP) membership
- KP target specific geographic locations in Orange and San Bernardino Counties as well as LA County.

# TFAL: 2015, 2016 & 2017 Results

OC: 4,658 flu shots

| County  | School District | School Counts |            |            | Flu Counts    |              |              | Flu Counts per School District |           |           |
|---|-----------------|---------------|------------|------------|---------------|--------------|--------------|--------------------------------|-----------|-----------|
|   |                 | CY 2015       | CY 2016    | CY 2017    | CY 2015       | CY 2016      | CY 2017      | CY 2015                        | CY 2016   | CY 2017   |
| Orange  | Anaheim         | 26            | 25         | 27         | 2,669         | 1,774        | 1,449        | 103                            | 71        | 54        |
| Orange  | Buena Park      | 6             | 6          | 6          | 562           | 417          | 445          | 94                             | 70        | 74        |
| Orange  | Santa Ana       | 36            | 34         | 36         | 4,313         | 2,748        | 2,477        | 120                            | 81        | 69        |
| Orange  | Savanna         | 4             | 4          | 4          | 305           | 235          | 287          | 76                             | 59        | 72        |
| San Diego   | San Diego       | 12            | 9          | 10         | 2,969         | 1,984        | 1,770        | 247                            | 220       | 177       |
| Los Angeles   | Baldwin Park    | 9             | 12         | 13         | 695           | 629          | 836          | 77                             | 52        | 64        |
| Tulare  | El Rancho       | 8             | 8          | 8          | 616           | 339          | 447          | 77                             | 42        | 56        |
| San Bernardino                                      | Yucaipa         | 9             | 9          | 9          | 693           | 464          | 470          | 77                             | 52        | 52        |
| Subtotal  |                 | <b>110</b>    | <b>107</b> | <b>113</b> | <b>12,822</b> | <b>8,590</b> | <b>8,181</b> | <b>117</b>                     | <b>80</b> | <b>72</b> |
| <b>School District Not Seen For 2016 &amp; 2017</b> |                 |               |            |            |               |              |              |                                |           |           |
| San Bernardino                                      | San Bernardino  | 19            |            |            | 1,042         |              |              | 55                             |           |           |
| San Diego   | JDUSD           | 3             |            |            | 80            |              |              | 27                             |           |           |
| Orange  | Garden Grove    | 19            |            |            | 2,303         |              |              | 121                            |           |           |
| Los Angeles   | El Monte        | 10            |            |            | 539           |              |              | 54                             |           |           |
|   |                 | 51            |            |            | 3,964         |              |              | 78                             |           |           |
| Total   |                 | <b>161</b>    |            |            | <b>16,786</b> |              |              | <b>104</b>                     |           |           |
| <b>Flu Breakout</b>                                 |                 |               |            |            |               |              |              |                                |           |           |
| Nasal   |                 |               |            |            | 15,532        | -            | -            |                                |           |           |
| Non-Nasal   |                 |               |            |            | 1,254         | 8,590        | 8,181        |                                |           |           |
| Total   |                 |               |            |            | <b>16,786</b> | <b>8,590</b> | <b>8,181</b> |                                |           |           |



# TFAL PLANNING: 2018 Calendar

## Summary

| # | Date     | Item  |
|---|----------|---|
| 1 | Feb 2018 | Notification Date & New School Districts Requirements   |
| 2 | Mar 2018 | Recap Meeting of the 2017 TFAL Program & Upcoming 2018<br>Finalize & Send Out Memorandum of Understanding |
| 3 | Apr 2018 | Baldwin Park/Orange County/San Diego 1 <sup>st</sup> Kickoff Meetings                                     |
| 4 | May 2018 | TFAL presentation at Academic Liaison Peer Group meeting<br>Finalize Elementary School Dates              |
| 5 | Jun 2018 | Finalize Nursing Programs   |
| 6 | Aug 2018 | Baldwin Park/Orange County/San Diego 2 <sup>nd</sup> Kick-Off Meetings<br>Recruit TFAL Project Manager    |
| 7 | Sep 2018 | Submit TFAL Vaccine Order<br>Project Managers Orientation   |
| 8 | Oct 2018 | TFAL Clinics  |

# TFAL PREPARATION

- **Oversight:** There must be a Clinical Instructor present during the entire duration of the flu clinic if there are any unlicensed students. The only time when a clinical instructor does not need to be present is if ALL students participating in a specific clinic are licensed and have their own malpractice insurance.
- **Training:** A month before the first clinic date, Nursing Students must complete 2 EZIZ online modules (<http://eziz.org/eziz-training/>) and provide completion certificates to their Clinical Instructor for proof of completion - 1) Preparing Vaccines and 2) Administering Vaccines.
- **Student Paperwork:** Nursing Students must complete and sign 5 KP forms (Drug-Free Workplace, Confidentiality, Child Abuse Reporting, KP Individual Student Orientation Verification Form, and Elder Abuse Reporting forms) if they have not already done so from previous KP clinical rotations.
- **Nursing Instructor Paperwork:** Each nursing instructor must complete the KP TFAL Clinical Profile form to confirm that participating nursing students are compliant with immunization requirements and background checks. Actual copies of immunization records and background checks do not need to be provided.
- **Minimum 6 Nursing Students:** Ideal for flu clinics with 100 + students

# Nursing Program Partnership

| #  | Nursing Programs              | Grand Total | Los Angeles, San Bernardino |           |         |       | Orange County |            |           |         |       | San Diego |
|----|-------------------------------|-------------|-----------------------------|-----------|---------|-------|---------------|------------|-----------|---------|-------|-----------|
|    |                               |             | Baldwin Park                | El Rancho | Yucaipa | Total | Anaheim       | Buena Park | Santa Ana | Savanna | Total | Total     |
| 1  | Azusa Pacific University      | 12          | 6                           | 4         |         | 10    |               |            | 2         |         | 2     |           |
| 2  | California Baptist University | 16          |                             |           |         | 0     | 4             |            | 8         | 4       | 16    |           |
| 3  | Concorde Career College       | 4           |                             |           |         | 0     |               | 2          | 2         |         | 4     |           |
| 4  | CSU Fullerton                 | 13          |                             |           | 3       | 3     | 2             | 6          | 2         |         | 10    |           |
| 5  | CSU Long Beach                | 6           |                             |           |         | 0     | 6             |            |           |         | 6     |           |
| 6  | Cypress College               | 8           |                             |           |         |       |               |            | 4         | 4       | 8     |           |
| 7  | El Camino Community College   | 15          |                             |           |         | 0     | 9             |            | 6         |         | 15    |           |
| 8  | Loma Linda University         | 6           |                             |           | 6       | 6     |               |            |           |         | 0     |           |
| 9  | Long Beach City College       | 8           |                             |           |         | 0     | 2             |            | 6         |         | 8     |           |
| 10 | National University           | 0           |                             |           |         | 0     |               |            |           |         | 0     |           |
| 11 | Rio Honda                     | 1           |                             |           |         | 0     |               |            | 1         |         | 1     |           |
| 12 | West Coast University         | 10          |                             |           |         | 0     |               |            | 10        |         | 10    |           |
| 13 | KP Staff                      | 22          | 7                           | 4         |         | 11    | 1             |            |           |         | 1     | 10        |

# 2018 PARTICIPATING ELEMENTARY SCHOOLS

| <u>County</u>  | <u>School District</u> | <u>2016</u> | <u>2017</u> | <u>2018</u> |
|----------------|------------------------|-------------|-------------|-------------|
| Orange         | Anaheim                | 25          | 27          | 26          |
| Orange         | Buena Park             | 6           | 6           | 6           |
| Orange         | Santa Ana              | 34          | 36          | 36          |
| Orange         | Savanna                | 4           | 4           | 4           |
| San Diego      | San Diego              | 9           | 10          | 10          |
| Los Angeles    | Baldwin Park           | 12          | 13          | 13          |
| Tulare         | El Rancho              | 8           | 8           | 8           |
| San Bernardino | Yucaipa                | 9           | 9           | 9           |
| Antelope       | Landcaster             |             |             | 4           |
| Riverside      | Riverside              |             |             | 2           |
| South Bay      | Torrance               |             |             | 4           |
|                | <b>Total</b>           | <b>107</b>  | <b>113</b>  | <b>122</b>  |

# TFAL 2018 FIVE WEEK SUMMARY

| <u>County</u>  | <u>School District</u> | <u>CY 2018</u> |               |
|----------------|------------------------|----------------|---------------|
| Orange         | Anahiem                | 1178           | } 2,538 shots |
| Orange         | Buena Park             | 552            |               |
| Orange         | Santa Ana              | 533            |               |
| Orange         | Savanna                | 275            |               |
| San Diego      | San Diego              | -              |               |
| Los Angeles    | Baldwin Park           | 783            |               |
| Tulare         | El Rancho              | 509            |               |
| San Bernardino | Yucaipa                | 493            |               |
| Antelope       | Landcaster             | 49             |               |
| Riverside      | Riverside              | 197            |               |
| South Bay      | Torrance               | 85             |               |
| Total          |                        | <b>4,654</b>   |               |

# Clinic Observations

- Flumist
  - Showing the tip with no needle helps with cooperation and assurance of no poking.
  - Having nervous students observe other students receiving the FluMist helps.
- Injection
  - Distraction with videos or conversation with students helps the process.
  - Holding a student's hand helps with nervousness.
  - Incentives worked for some students
- Other observations
  - Some students refused even the FluMist
  - Larger space needed to accommodate nursing programs with larger group of students

# FUTURE TFAL OPPORTUNITIES

- Expansion into other geographic locations, e.g., Inland Empire
- Infection control education with nursing students while elementary students wait for vaccination