

# Retention of Infants and Children on SF WIC: Impact on Food Insecurity and Other Public Health Outcomes

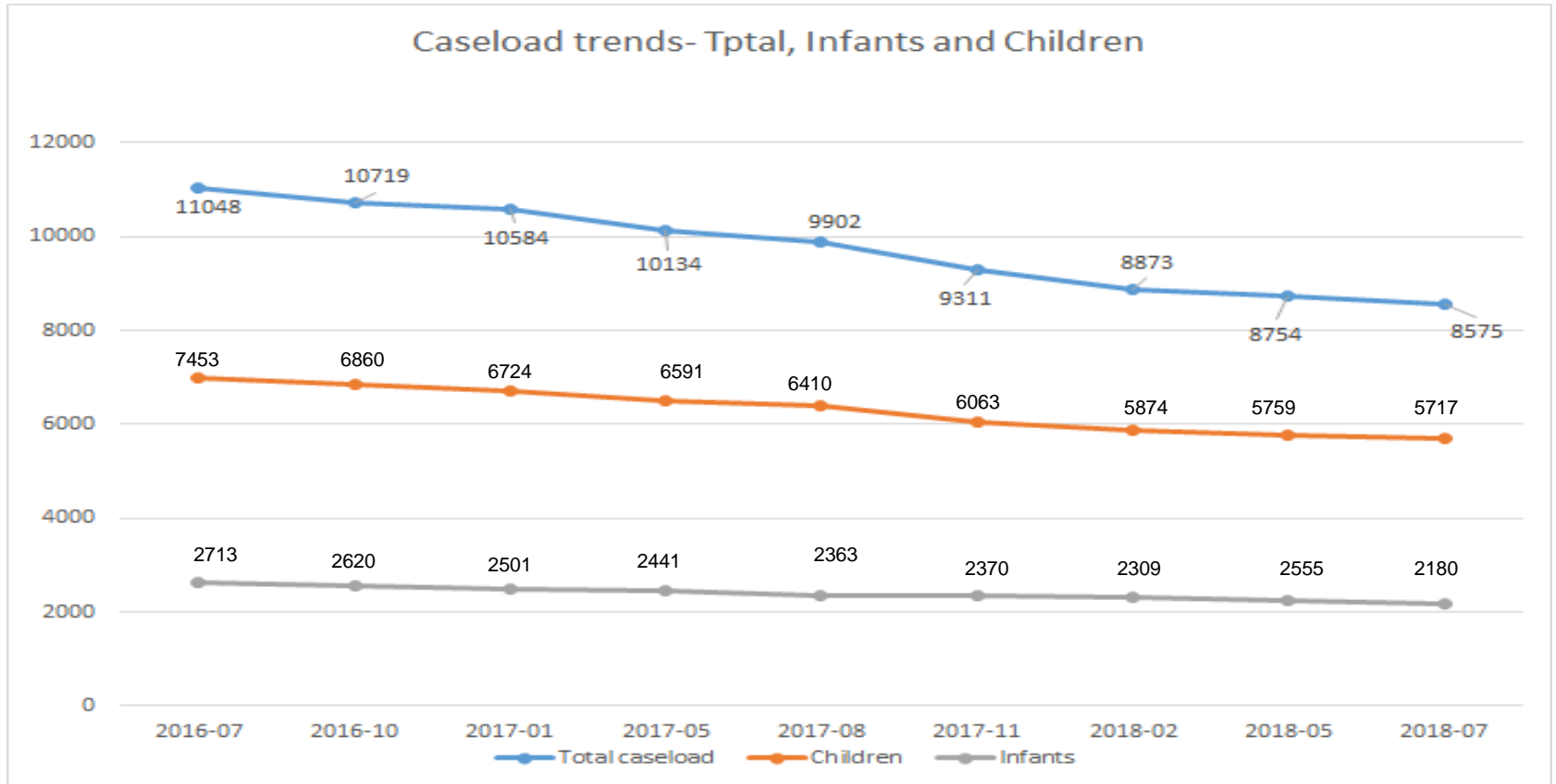
Presentation to the FSTF, September 5th, 2018  
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Director of Nutrition Services/WIC Director

# Presentation Agenda

- WIC caseload
- WIC caseload- 0- 5 years old
- Retention of children on WIC: Effects on food insecurity and other public health outcomes
- Collaboration with Mayor's Office of Civic Innovation- Data SF, Civic Bridge and Google to address declining participation trends among children in WIC
- Addressing food insecurity among prenatal women-EatSF partnership update
- Impact of food insecurity on infants and children that may not be qualified or choose not to participate on WIC

# Our Challenge

In recent years San Francisco's WIC program has experienced a significant decline in the participation rates, particularly of children over one year of age similar to the state and nationwide declining trend in participation.



# Impact of WIC participation on Children's Health

- Reduced fetal deaths and infant mortality.
- Improved growth of nutritionally at-risk infants and children.
- Decreased incidence of iron deficiency anemia in children and overall improved diets.
- Children enrolled in WIC are more likely to have a regular source of medical care and have more up to date immunizations.
- Children who receive WIC benefits demonstrate improved intellectual development and school readiness

<https://www.cbpp.org/research/food-assistance/wic-works-addressing-the-nutrition-and-health-needs-of-low-income-families>

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4703081/>

# Impact of Food Insecurity on Health Outcomes

- WIC reduces the prevalence of child food insecurity by at least 20% \*
- Children who are food insecure are sick more often, and more likely to have to be hospitalized and suffer growth impairment that precludes their reaching their full physical and cognitive potential.

\* <https://onlinelibrary.wiley.com/doi/pdf/10.1002/soej.12078>

# Impact declining WIC participation

|  |                 |                             |
|--|-----------------|-----------------------------|
| <b>Number lost WIC participants since 2015-09</b>  | 3421 (Total)    | 2307 (Infants and Children) |
| <b>Lost WIC Redemption Expenditures</b><br><i>(\$834.77 per ppt per year <math>\times</math> # participants disenrolled)</i>               | \$2,855,748.17  | \$1,925,814.39              |
| <b>Increase Health Care Expenditures*</b><br><i>(multiplier of 3.04 <math>\times</math> lost WIC Revenue and Redemption Expenditures )</i> | \$11,025,598.37 | \$7,435,269.05              |
| <b>Lost WIC Administrative Revenue</b><br><i>(\$225.40 per ppt per year <math>\times</math> # participants disenrolled)</i>                | \$771,093.4     | \$519,997.8                 |
| <b>Total Fiscal Impact</b><br><i>(lost revenue <u>plus</u> lost expenditures <u>plus</u> increased health care costs)</i>                  | \$14,652,439.94 | \$9,881,081.28              |

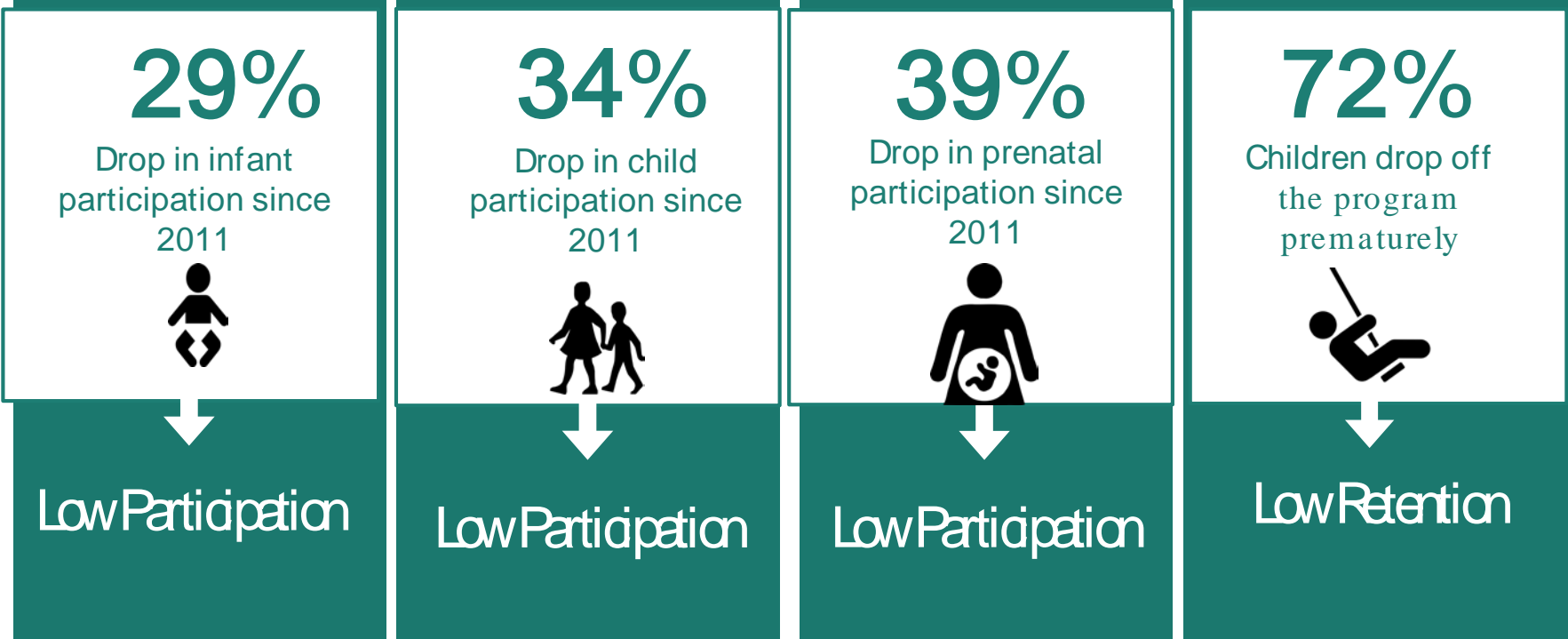
\*Estimated that every dollar spent on WIC program results in \$3.04 in health care cost savings. Refer the following study: Avruch, S, and A P Cackley. "Savings Achieved by Giving WIC Benefits to Women Prenatally." *Public Health Reports* 110, no. 1 (1995): 27–34.

# Partnership with Mayor's Office of Civic Innovation



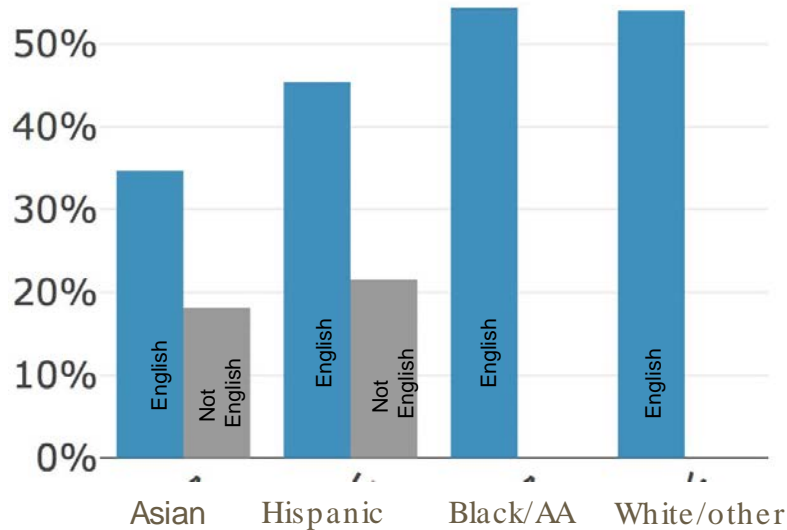
SF MAYOR'S OFFICE OF CIVIC INNOVATION

# DataSF Analysis: Participation & Retention trends- 2011- 2017





# DataSF Data Analysis- Participation and Retention Trends 2011-2017



- Babies who are exclusively formula fed are 50% more likely to drop out
- High levels of prenatal engagement are associated with higher retention
- English speakers are more likely to drop out regardless of their Race/Ethnicity

English speakers are 1.75 times as likely to drop out at 13 months

# Qualitative Data Analysis-WIC & Google Partnership

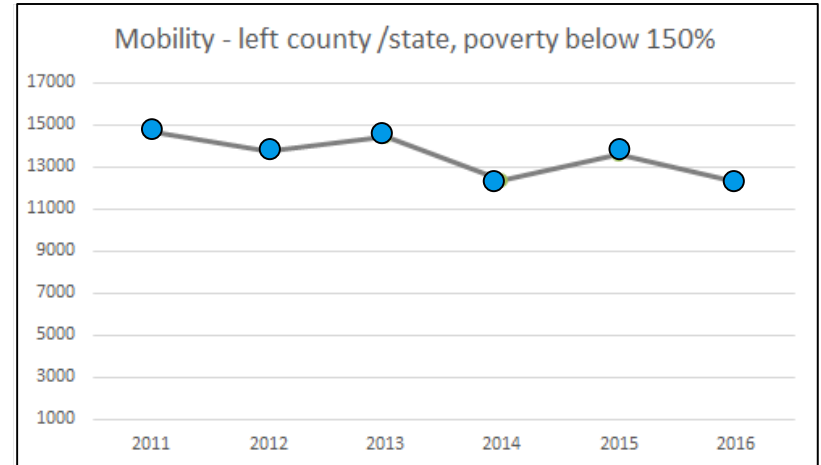
## Demographic data

Census data doesn't explain what's happening. SF's English speaking population is growing and fewer people are moving away.

The population of English speakers - the group with the highest drop off - is growing.

| Compound Annual Growth Rate<br>2013-2015 |                             |                       |
|--|-----------------------------|-----------------------|
|  | At or above<br>poverty line | Below<br>poverty line |
| Only English                             | 1.37%                       | 0.99%                 |
| Spanish                                  | -0.11%                      | -3.28%                |
| Other                                    | 0.86%                       | -0.37%                |

Mobility is down for individuals below 150% of poverty line.



# Qualitative Data Analysis-WIC & Google Partnership

9 participant interviews, 8 expert interviews, 9 staff interviews, WIC tech evaluation and clinic observations

## Shopping

- Steep learning curve around what to buy
- WIC-approved foods do not work for many families
- Embarrassment and shame around using WIC checks
- Transportation of groceries
- Sticker price of formula skews perception of value of other WIC benefits

## Clinic experience

- WIC technology does not meet participant expectations
- Appointment scheduling can be challenging
- WIC clinics feel like an extension of participant's chaotic lives
- Interactions with staff make or break the participant experience

## Awareness of program

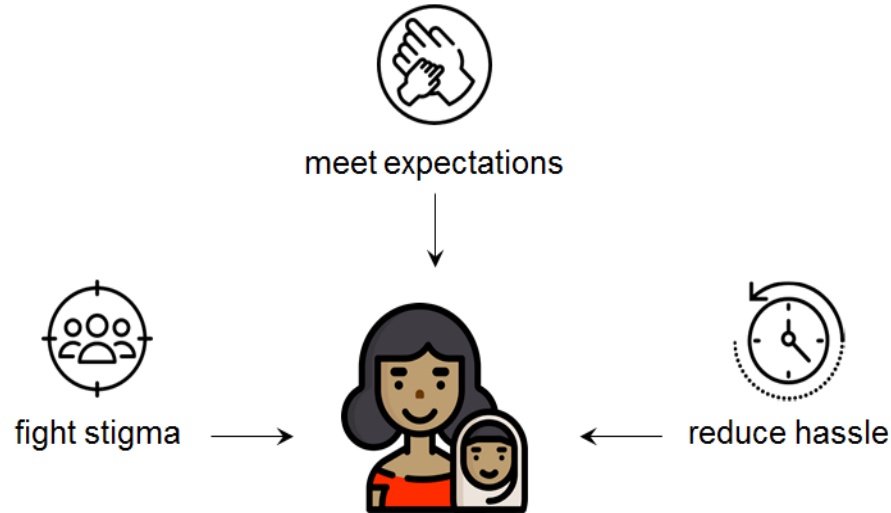
- Stigma around government programs
- Participants emphasize the benefits associated with infants (particularly formula)
- Enrollment process can be overwhelming.

## Staff Experience

- Staff is passionate
- Desire to focus on participants and less on administrative tasks
- Frustrated with differences in procedures between clinics
- Feedback mechanisms from staff to management are not as effective

# Hypothesis

Hassles, stigma, and expectations gaps are the primary drivers of the drop in retention, particularly among English speakers. Addressing these key factors can improve retention.



# Countermeasures

| Countermeasure  | Value added  | Status                  |
|---|--|-------------------------|
| Playbook for clinic workflow  | Meeting expectations, reducing hassel, Fighting stigma | Complete/Ongoing        |
| Office refresh  | Meets expectations fights stigma                       | 3 of 4 clinics complete |
| Communication strategy (for 1-5y.old)                                   | Fights stigma  | Complete                |
| Participant satisfaction surveys (2/yr)                                 | Meets expectations                                     | In progress/Ongoing     |
| Anonymous staff feedback & follow-up                                    | Meeting expectations, reducing hassel, Fighting stigma | In progress/Ongoing     |
| SF WIC website redesign   | Reduce hassle +meet expectation                        | In progress             |
| WIC marketing video (support project)                                   | Fights stigma  | In progress             |
| Automated check-in system; Online appointment scheduling; 2 way texting | Reduce hassle + meets expectations                     | State to implement      |



# Modernization of WIC New MIS and Electronic Benefit Transfer (EBT)

```

DISPLAY CUSTOMER INFORMATION          Acct # 810093

Credit Limit:$ 0  Finance Charge? Y  Area:      Sort Codes: 8

          BILLING                      SHIPPING
Name: A CLEAN WELL LIGHTED PLACE FOR  Name: A CLEAN WELL LIGHTED PLACE FOR
Address: 601 VAN NESS AVENUE          Address: 601 VAN NESS AVENUE
:                                     :
City: SAN FRANCISCO                   City: SAN FRANCISCO
State: CA                             State: CA
Zip: 94102                             Zip: 94102
Country: U.S.A                        Country:
Phone:                                Phone:

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New York WIC System

- CLINIC
- ADMIN
- STATE OFFICE
- VENDOR
- INVESTIGATIONS

New York State WIC Program

Last Login: 4/20/18 - 9:38 AM

| WIC/VEHICULAR NO. | PARTICIPANT / PARENT / GUARDIAN | FIRST DAY TO USE | LAST DAY TO USE | SERIAL NO. |
|-------------------|---------------------------------|------------------|-----------------|------------|
| 0000000000XX      | PATTY PARTICIPANT               | MAY 10 12        | JUN 8 12        | 269534015  |

**FOOD ITEM NUMBER: 2006**  
 Pay to the order of: WIC Authorized Vendor  
 700-269534015  
 EXACT PURCHASE PRICE: **\$10.00**  
 PARTICIPANT MAY PAY AMOUNT OVER \$10 (TEN DOLLARS)  
 State of California WIC Program  
 PATTY PARTICIPANT



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# EatSF and WIC Partnership to Improve Retention and Address Food Insecurity





# EatSF and WIC Partnership to Improve Retention and Address Food Insecurity

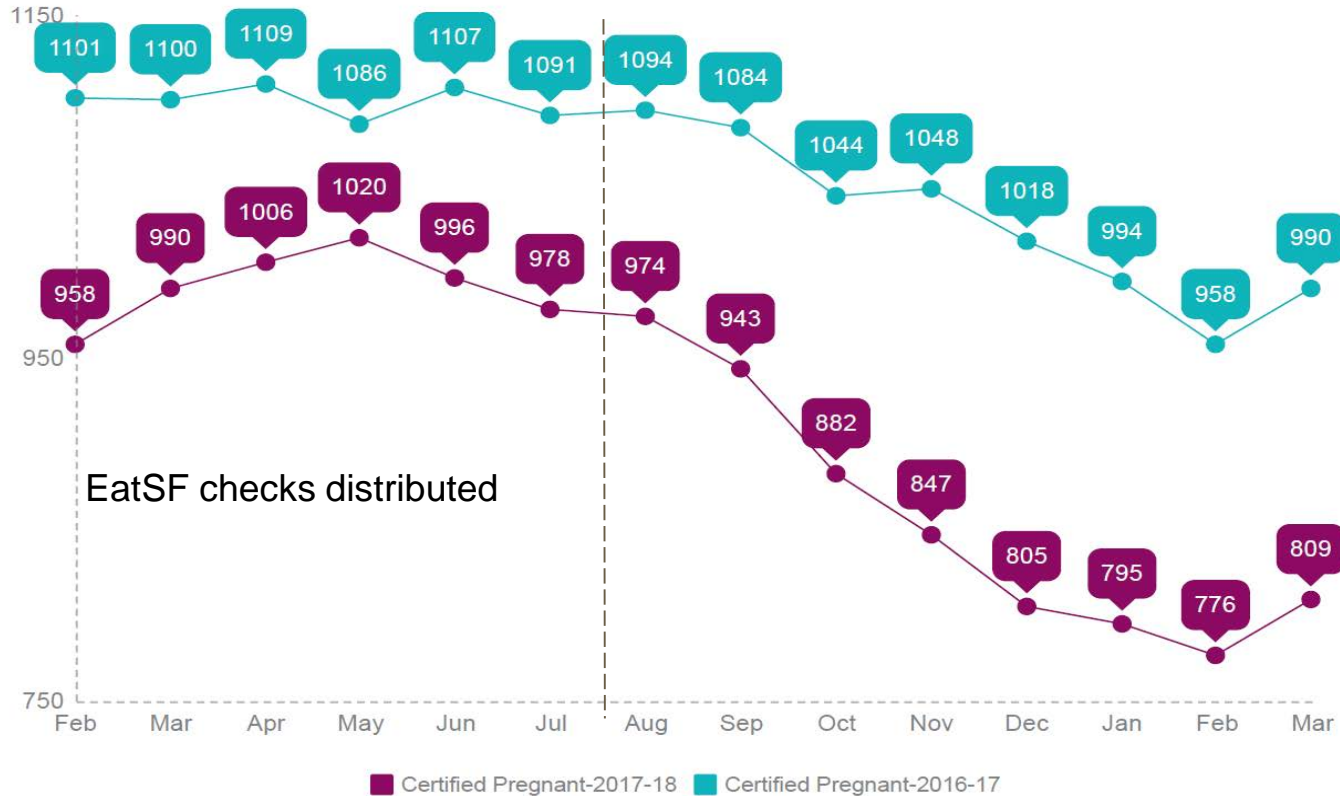
For FY 17-18

- Results from pre/post surveys indicate that food security rates among EatSF WIC participants increased 15% from 38% to 53%.
- Participant retention was 96% and participants redeemed 81% of distributed vouchers.

Total amount redeemed since February 2017- \$161,090



# Did it Help with Recruitment and Retention?





# Food Insecurity Among Infants

- Women in food insecure households are more likely to stop breastfeeding earlier
- San Francisco's breastfeeding rates:
  - Intention of breastfeeding before birth-94%
  - Any breastfeeding in the hospital- 97%
  - Exclusive breastfeeding in the hospital- 80%
  - Exclusive breastfeeding at 1 month- 45%
  - Exclusive breastfeeding at 3 months- 35%
  - For WIC moms- exclusive breastfeeding at 1 month- 27%
  - White infants on WIC are 3.5 times more likely than Asian infants and 2 times more likely than African American infants to be exclusively breastfed at 1 month.

## In dosing-

- Due to high cost of living (including housing) food insecurity among households with children aged 0-5 years is of great concern in San Francisco.
- Food insecurity rates are high even among households that participate in WIC.
- Non- participation in safety net programs such as WIC and CalFresh exacerbates this issue.
- Nutritional needs of children that do not qualify for WIC or CalFresh or those that may choose not to participate due to recent immigration concerns need be to considered.