



UNIVERSITY OF CALIFORNIA
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Nutrition Policy Institute

Background on Local Health Department Reporting of CalFresh Healthy Living Programs in the Program Evaluation and Reporting System, FFY 2020

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Prepared by:

Nutrition Education and Obesity Prevention Research and Evaluation Unit,
Nutrition Policy Institute, University of California, Division of Agriculture &
Natural Resources

Authors:

Christina Becker
Evan Talmage
Janice Kao, MPH
Carolyn D. Rider, MA

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Introduction

USDA's Supplemental Nutrition Assistance Program-Education (SNAP-Ed) is an evidence-based program that helps low-income individuals live healthier lives through education; social marketing; and policy, systems, and environment (PSE) changes that support healthy living. Known as CalFresh Healthy Living (CFHL) in California, SNAP-Ed is overseen by California Department of Social Services and implemented by four State Implementing Agencies and the Local Implementing Agencies (LIAs) that they fund. The California Department of Public Health (CDPH) is one of four State Implementing Agencies and funds 60 local health departments (LHDs).

Beginning in FFY 2018, California's LIAs use the Program Evaluation and Reporting System (PEARS) to report their CFHL activities and interventions. This brief presents the background, definitions, and methods used by CDPH and its funded local health departments for reporting CFHL interventions implemented throughout California during Federal Fiscal Year (FFY) 2020 (October 1, 2019 – September 30, 2020). Local health departments reported their CFHL activities implemented during FFY 2020 between October 16, 2019 – October 15, 2020.

How can LHDs use PEARS data?

- Track progress in the same sites or settings over time
- Measure progress against Integrated Work Plans (IWPs)
- Use the "Unit Snapshot" under the Analyze menu to see summary stats and download charts and graphs. This is currently only available for Program Activities but more will be coming!

PEARS users were offered comprehensive training to ensure consistency in reporting, and the NPI evaluation team implemented quality assurance processes throughout the reporting year to help LHDs improve their entries before the reporting year ended.

Additionally, at the end of the reporting year the evaluation team conducted final data-

cleaning within PEARS, rather than relying on post-hoc data cleaning. This multi-pronged approach to ensuring data quality is intended to help LHDs build capacity in reporting SNAP-Ed activities, as well as to ensure that data are accurate within the PEARS system for use in automated data summary and analysis features and year-over-year comparisons.

PEARS data entry relies on unique site IDs, wherein each site approved for CFHL activities is automatically assigned a numeric ID upon its addition to PEARS. This facilitates geocoding of CFHL interventions and is advantageous in allowing evaluators to link multiple activities reported at a single site within

PEARS, as well as with other site-based evaluations that take advantage of these PEARS IDs.

PEARS is organized by module, into which LIAs report their CFHL activities by type. LHDs report their CFHL activities into PSE Site Activities, Program Activities, Indirect Activities, Partnership, Coalition, and Success Stories modules. This report describes definitions and data collection methods used for data reported in all modules.

Definitions and Methods by PEARS Module

PSE Site Activities

There is currently no universally accepted, clear and specific definition of PSE. In order to provide consistent guidance to California local health departments, NPI has devised the following “working definition” to guide data cleaning processes, specifically to determine what to include and exclude from the PSE changes adopted dataset.

CA LHD definition of PSE change:

Policy, Systems, and Environment (PSE) changes help create conditions that enable (make it possible or easier for) SNAP-eligible populations to make healthy choices. Education (direct or indirect) may complement and strengthen the impact of PSE changes, but in some cases no education is needed (i.e., where the healthy choice is the only or default choice and no conscious decision making is required). Therefore, the focus of PSEs is on increasing access, usually by making the healthy choice an easier, more appealing, cheaper, or default option.

Each entry, also known as a “report” in the PSE module represents all the nutrition- and/or physical activity-related PSE activities carried out for a given population at a single site. This is referred to as a site-setting combination, further described below, along with additional definitions and explanations of how PSE data are collected in PEARS:

Sites and Settings. A single site may have more than one possible setting to choose from. The setting chosen depends on the target population of the PSE activities. For example, an elementary school may also be the site of an afterschool program. If a local health department is implementing a physical activity curriculum at the afterschool program, the setting should be “Before and after-school programs.” If there are also PSE activities that target the general school population, an additional report should be created with the school setting. For this site, one report should be created for all activities in the school setting and one report should be created for all activities in the before and after-school setting.

Organization-level vs. site-level. PSE site activities can be implemented at an organization, an entity that governs sites, or directly at sites. For example, improving a district's wellness policy with language about the use of a PE curriculum is considered an organization-level activity because the school district (the organization) governs schools (the sites) and the activity is implemented at the district. If the schools in the district implement the wellness policy by adopting a PE curriculum, this is considered a site-level activity and should be included in a PSE report for each school that uses the curriculum. Organization-level activities are usually limited to policy-related and zoning changes adopted, since other changes are implemented directly at sites.

Stage of Implementation. For any given site, a local health department can be in various stages of implementation depending on how many changes are in progress. For example, an LHD could be working with a school to assess what changes are needed for the school meal program, while supporting PE teachers on improving the quality of PE, and at the same time conducting follow-up assessments on the impact of the new water stations they installed the previous year. In this example, there would be three stages of implementation reported for this site.

Reach. LHDs are instructed to provide actual reach for each site that is in the implementation or maintenance stage of their PSE work. Reach for sites still in the planning stages of PSE work is not reported. In some instances, reach is unavailable and is reported as "unknown."

Changes Adopted. Changes adopted refers to PSE changes that were implemented, improved, expanded or actively maintained with SNAP-Ed support at a site. Similar to *Reach*, LHDs are instructed during trainings and quality assurance processes to enter changes adopted for sites in the implementation or maintenance stage of their PSE work. Because the field is not required for sites in the implementation or maintenance stages, there is likely under-reporting in this section. Changes are not reported for sites that are only in the planning stages of PSE work. When possible, "other change" write-ins are recategorized into existing options during the quality assurance and/or data-cleaning processes but are not otherwise coded or included in data analysis.

Number of sites. There are several sections of the PSE module that reflect optional activities and/or are optional to complete. There is likely some amount of under-reporting in these sections.

- Optional to complete: barriers and facilitators, COVID impact, sustainability, changes adopted
- Data may be unknown or unavailable: reach
- Optional activities: needs and readiness assessments, individual effectiveness assessments, media/award recognition

Program Activities

Direct education takes place when a participant is actively engaged in the learning process with an educator and/or interactive media within an evidence-based intervention.¹ Local health departments typically conduct direct education in the form of single classes or series-based lessons, which are selected from a menu of curricula approved by CFHL State Implementing Agencies for this purpose.

Direct education is reported in the Program Activities module of PEARS. Each Program Activity entry represents an evidence-based intervention delivered to a specific audience at a site, using one curriculum or set of curricula. Individual demographics are collected during direct education events and reported in aggregate for each intervention. Only age is mandatory; sex, race, and ethnicity are optional. Participants can enter more than one race; therefore, for each activity, race is calculated as the sum of each race present during the event and the sum of races can be more than the total participants. For schools, demographic information is typically calculated automatically within PEARS using California Department of Education data.

How are PEARS data being used?

Nationally, over 30 states report their obesity prevention activities into PEARS, collectively demonstrating the reach and impact of the USDA-funded SNAP-Ed program.

In CA, NPI aggregates and combines PEARS data from all the LHDs to create variables that represent the strength and reach (also known as exposure) of direct education, indirect education, PSE implementation, and combined overall. Having these variables let us answer questions like:

- Do we see relationships between higher CFHL exposure and improved diet (IOE data), improved policies and practices (SLAQ data), and/or improved BMI (Fitnessgram data)?
- Are there certain combinations of CFHL activities that are related to better outcomes?

NPI has already started answering these questions. A recent study found that students from schools with CDPH-CFHL physical activity interventions had better aerobic capacity and lower BMI compared to students in control schools.

Thompson, H. R., Hewawitharana, S. C., Kao, J., Rider, C., Talmage, E., Gosliner, W., ... Woodward-Lopez, G. (2020). SNAP-Ed physical activity interventions in low-income schools are associated with greater cardiovascular fitness among 5th and 7th grade students in California. *Preventive Medicine Reports*, 20, 101222. <https://doi.org/10.1016/j.pmedr.2020.101222>

Reach is collected with each activity and reported into 4 age groups: less than 5, 5-17, 18-59, and 60+ years. Detailed target audience data is collected in an optional drop-down menu consisting of common SNAP-Ed audiences, e.g. 3rd–5th graders, parents or guardians of older children, 6-12th grade/teens.

Direct Education involves both one-time classes and multi-session classes. Each session is captured in PEARS and reported by date and time, length of session, and reach.

Indirect Activities

CalFresh Healthy Living defines indirect education as the distribution or display of information, educational materials, and/or resources without a participant being actively engaged with an educator or interactive multimedia. Indirect education activities must take place within an evidence-based intervention.¹ Each indirect education activity entered into PEARS is classified by intervention group (similar to setting) and intervention channel used for message delivery.

Unique vs. New Reach PEARS users are asked to report both “unique” and “new” reach for an indirect activity. “Unique” reach refers to the unduplicated number of individuals reached by the activity, regardless of exposure to other SNAP-Ed programming. “New” reach refers to the number of individuals reached by the indirect activity that have not yet been exposed to other SNAP-Ed activities, such as a Program Activity or PSE Site Activity.

Indirect activities do not require sites in PEARS. Some activities do not have physical locations to report, for example radio and tv interviews containing CFHL messaging. Some activities that do not have physical locations will report on the site that the CFHL messaging recipients were recruited from. An example of this is an elementary school receiving CFHL electronic messaging through their school portal. While the school portal is not a physical address and CFHL participants can access the material anywhere, participants that received the messaging were targeted and chosen from a the CFHL eligible elementary school.

Partnership

According to the SNAP-Ed Evaluation Framework, partners are entities that offer sites or services for conducting SNAP-Ed activities with or without SNAP-Ed funding.² SNAP-Ed programs are asked to track active partnerships in SNAP-Ed qualified sites and organizations that regularly meet, exchange information, and identify and implement mutually reinforcing activities that are anticipated to contribute to adoption of one or more organizational changes, policies, or other environmental supports; some LHDs also track partnerships that contribute to direct or indirect education. Each partnership is reported with one site that benefits from the partnership, the type of partner, and the ways in which each partner contributes assistance to the partnership.

Coalition

A coalition is a group of individuals and organizations that commit to joint action, typically for a longer term, in adopting nutrition or physical activity practices, supports and/or standards. Coalitions are characterized by shared leadership, definition of roles, and generation of new resources.² Like partnerships, a coalition is reported with the assistance received from and provided to the coalition. Additionally, coalition members are reported, including the sector of influence of each member. Site information for coalition members can be entered optionally. PEARS users are directed only to enter site information for a member when the member represents a site that has been approved to receive CFHL interventions.

Sectors of Influence		
Agriculture	Education	Media
Commercial marketing	Food industry	Public health and health care
Community design	Government	Public safety

Success Stories

Success stories are narrative summaries of impacts made in the lives of people and the communities in which they live. Success story narratives describe a problem, what has been done to solve it, and what outcomes this work has had. Each LHD must submit at least one PSE-related success story annually and may submit as many additional success stories as they wish. Success stories submitted by LHDs are reviewed by their CDPH Project Officer; because of their qualitative nature, no systematic data cleaning is performed.

Challenges and Recommendations for PEARS Reporting

PEARS data quality continues to improve every year for several reasons. These include the administration of state-wide training by CDSS, improvements to data reviewing and cleaning processes, ongoing collaboration between SIAs to create aids for PEARS users, and more. However, there is still room for improvement and the NPI evaluation team has identified new and ongoing issues to address for improved data quality. The table below details those issues, as well as our recommendations to address them.

Topic	Issue	Impacts	Recommendations
LHD staff turnover and redirection to COVID-19 response	<ul style="list-style-type: none"> Staff turnover at LHDs is common and large numbers of LHD staff were redirected for COVID-19 response from March through September of 2020. 	<ul style="list-style-type: none"> PEARS users cannot be contacted to correct their PEARS entries. In some cases, the NPI evaluation team must make decisions on behalf of the LHD to correct issues that have not been addressed by the end of the fiscal year. This sometimes results in less comprehensive reporting. New LHD staff cannot always access training before entering activities in PEARS and consequently have more errors in their reports. Overall, staff turnover leads to reduced data quality and more resources spent towards data quality assurance. 	<ul style="list-style-type: none"> CDSS should continue state-wide training efforts so that new LHD staff may be trained on an as-needed basis. A virtual training that can be accessed year-round is in progress and will address most gaps in training access. LHD staff should identify other staff to be responsible for entries if they are unable to respond to quality assurance requests. Each PEARS user should grant editing permissions to at least one supervisor or PEARS user from their LHD.

Topic	Issue	Impacts	Recommendations
PEARS system issues	<ul style="list-style-type: none"> • Responses are not required for some important PEARS questions. Specifically: PSE changes adopted and site for indirect education • While local agencies have been directed not to add sites to PEARS, the system still allows users to add incorrect or duplicate sites. 	<ul style="list-style-type: none"> • Information needed for data analysis is often missing. PSE entries often have no changes adopted reported, despite being in the implementation stage. The reverse is also true, with entries reporting adopting changes before starting the implementation of changes. • Data cleaning and validation proved difficult because of an increase in duplicate sites added to PEARS in FFY20. Duplicate sites also create challenges for analysis, particularly for linking together site-based data from multiple evaluation projects. 	<ul style="list-style-type: none"> • During training and technical assistance, emphasize that while the field is technically optional, sites that have started implementing PSE changes should complete the changes adopted field. • Adding skip logic for changes adopted based on stage of implementation has been recommended to KSU. However, some states report changes adopted before they are implemented, and the skip logic cannot be added without consensus among states. • Reinforce training on the process to have sites entered in PEARS
Underreporting and overreporting	<ul style="list-style-type: none"> • Discrepancy between submitted SLAQs and PSE reports suggests PSE activities in the Learn settings were underreported by 10%. • Eleven LHDs had no PSE reports for FFY20. • Discrepancy between submitted PSE reports and Partnership reports suggests partnerships were 	<ul style="list-style-type: none"> • Partnerships and PSE activities are likely higher than what is reflected in PEARS. • Reach in Shop settings and in “parks and open spaces” is likely inflated. 	<ul style="list-style-type: none"> • Reinforce training on when PSE activities and Partnerships should be reported in PEARS, and how to report site-level vs. organization-level PSE activities. • Work with KSU to add a field that asks PEARS users to indicate if a PSE activity is implemented at the site level or organizational level. This

Topic	Issue	Impacts	Recommendations
	<p>underreported by at least 43%. 21 LHDs (35%) reported more PSE sites than partnerships, by a total of 288 sites.</p> <ul style="list-style-type: none"> • Multiple site-level PSE activities were reported under one organization-level report instead of one report for each site. • PSE reach reported in Shop settings, such as stores or farmers markets, as well as “park and open spaces” can be unusually high. 		<p>will allow data reviewing and cleaning protocols to flag organization-level PSE activities that should instead be reported at individual sites.</p> <ul style="list-style-type: none"> • Work with KSU to create automated Partnership entries when a new PSE report is created. • Create comprehensive and explicit guidance for calculating PSE reach in each setting
COVID-19	<ul style="list-style-type: none"> • New COVID-19 impact field was added mid-year and is optional. Guidance provided to LHDs about how to report COVID-19 impact lagged behind reporting. • Redirected staff may have never completed reporting of activities occurring prior to COVID-19. • Virtual collection of participant demographics was possible but challenging for educators. • Virtual surveys were possible to support evaluation of virtual education but often 	<ul style="list-style-type: none"> • Some PEARS users misused or inappropriately skipped the COVID-19 impact field, resulting in less accurate data on how COVID-19 impacted CFHL efforts. • CFHL activities that started before staff were redirected may not have been captured in the FFY 2020 data if not marked complete. • When switching to online collection of demographics, educators had to use new data collection methods and perform data cleaning 	<ul style="list-style-type: none"> • Reinforce guidance to PEARS users to always provide a response to the COVID-19 impact field. • LHD staff should grant editing permissions to at least one supervisor or coworker to ensure incomplete reports can be completed in their absence. • Work with CDSS and KSU to reduce burden of demographic data collection on educators. • With the addition of new features, including pictures in surveys, CDSS and SIAs

Topic	Issue	Impacts	Recommendations
	departed from validated survey methods.	<p>processes in Excel that many were unfamiliar with. This resulted in increased time reporting demographics and more chances for errors in reporting.</p> <ul style="list-style-type: none"><li data-bbox="978 462 1428 566">• Individual survey data was collected using non-validated methods.	can ensure that surveys in PEARS follow validated methods.

References

1. USDA. *EARS Glossary*, 2020.
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2. U.S. Department of Agriculture, Food and Nutrition Service. *The Supplemental Nutrition Assistance Program Education (SNAP-Ed) Evaluation Framework: Nutrition, Physical Activity, and Obesity Prevention Indicators: Interpretive Guide to the SNAP-Ed Evaluation Framework*. Arlington, VA: USDA; 2016. Interactive version available at <https://snapedtoolkit.org/framework/index/>