

# Using Community-Based Prevention Marketing to Improve Farm Worker Safety



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## ABSTRACT

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Community-based prevention marketing (CBPM) combines a powerful planning framework, social marketing, with community organization principles to design behavior change programs. In southwest Florida, a coalition comprised of citrus workers and their employers, health providers, and academic researchers is using CBPM to identify occupational health issues among agricultural laborers, conduct community-based participatory research, and design culturally appropriate interventions. This article describes how this coalition was able to apply CBPM successfully to develop and implement an occupational safety program to prevent eye injuries among migrant farm workers. Lessons learned from this project and implications for designing and disseminating occupational safety programs for other agricultural workers are discussed.

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## Introduction

The safety and health of United States farm workers have received increased attention since the publication of the groundbreaking occupational study by Merchant, Kross, Donham, and Pratt (1989) entitled *Agriculture at Risk: A Report to the Nation*. However, research continues to document numerous challenges to reducing risks and protecting agricultural workers (Donham and Storm 2002; Earle-Richardson and Jennings 2001). Most jobs are low-skilled ones. Moreover, workers are paid by piece rate, supervision is limited, and safety technologies and personal protective equipment are inadequate and, in some cases, not readily available. When injuries occur, agricultural workers often are deterred by complicated reporting procedures, expensive treatment, reliance on crew

leaders and subcontractors to facilitate access to health services, and the lack of health insurance. In rural areas, health service utilization is further compromised by access barriers, cultural differences, language limitations, and for undocumented workers who comprise a large proportion of agricultural labor crews, fear of arrest and deportation.

Community-based prevention marketing (CBPM) is a relatively new program-planning framework ideally suited to address many of these barriers. Its strength lies in the combination of a data-based strategic planning model with the use of diverse community members' wisdom, skills, experience, and understanding of local culture and network ties (Bryant et al. 2000). In this article, we describe how the nine steps in the CBPM planning process were used to design and evaluate a program to increase use of safety glasses among Florida citrus workers. We also discuss the lessons learned from this project and their implications for designing and disseminating occupational safety programs for other agricultural workers.

### Foundations of CBPM

CBPM is a program-planning framework that relies on social marketing techniques and community organization principles to design, implement, evaluate, and disseminate public health interventions (Bryant et al. 2000). Community members are trained to use marketing's conceptual framework to develop a comprehensive strategic plan based on five key concepts: *product* (the protective behavior and equipment being promoted) and its *competition* (the risk behavior currently practiced); *price* (social, psychological, emotional, and monetary costs exchanged for the product's benefits); *place* (where exchanges take place and/or where the target behavior is practiced); and *promotion* (activities used to facilitate the exchange). Community members work with university-based faculty and students to conduct consumer (i.e., marketing) research, segment and select target audiences, and develop a marketing plan to achieve program goals. Promotional materials and tactics are market-tested to determine their feasibility and ensure customer acceptance. Effective interventions are branded and marketing plans are developed to enhance their dissemination.

CBPM recognizes the need for integrated interventions at the individual and environmental levels (Green and Raeburn 1990). Through community participation, a community develops competence in making evidence-based marketing decisions, enhances its sense of power, and enables favorable health outcomes (Minkler and Wallerstein 1997; Syme 1990). Community ownership of problems and solutions fosters development of culturally acceptable and politically feasible

interventions (Gerstein and Green 1993). Participation in research and demonstration activities also facilitates development of interventions that become integrated with existing structures, making them more sustainable after outside funding ceases (Bracht 1990; Bryant et al. 2007; Israel et al. 1998).

### Steps of CBPM

The CBPM process follows eight steps: (1) mobilize the community, (2) develop a community profile, (3) prioritize and select target behavior, (4) build community capacity, (5) conduct formative research, (6) develop marketing plan, (7) develop program materials, (8) implement program, and (9) monitor and evaluate. These steps are described below in relation to how they were used to design a program to promote use of safety glasses among citrus workers.

#### Step 1. Mobilize the community

CBPM's initial task is to develop an advisory board from the local community to guide the planning process. This board includes representatives of key groups and agencies, members of the target community, and health care providers. The board is encouraged to develop guidelines or bylaws and a leadership structure. University faculty members train community members in the marketing perspective that is used throughout the project.

Faculty and staff of the Florida Prevention Research Center (FPRC) collaborated with the Farm Worker Association of Florida (FWAF) to develop the *community advisory board*. The board was comprised of citrus harvesters, citrus industry supervisors (health and safety officers and human resources personnel), health department staff, and other local stakeholders. To our knowledge, this project was the first to bring citrus workers, supervisors, and advocates to work together toward a common goal. Members voted to name the board and ensuing project the *Partnership for Citrus Worker Health (PCWH)*.

Board meetings were held during the evenings after harvesters returned from the groves. PCWH board members established guidelines for the partners to work together and made the key project decisions described below. Board members helped constituent organizations establish relationships that improved their ability to serve the migrant worker population.

#### Lessons learned

The *a priori* selection of the FWAF as the lead agency in mobilizing citrus harvesters created problems recruiting managerial staff from citrus companies. Citrus growers were reluctant to serve on the board because they feared the

FWAF would attempt to unionize workers. Fortunately, one occupational safety supervisor received permission from management to attend board meetings, and after learning more about project goals and the CBPM framework, this supervisor helped recruit other industry representatives for the board.

It was challenging to overcome the longstanding mistrust among harvesters, their advocates, and managerial representatives. To establish trust, a dinner was held before each meeting so members could socialize. The formal agenda was often limited by the need to adjourn in time for members to return to homes an hour or more away and the time required to translate among English, Spanish, and Haitian Creole. FPRC staff also worked outside of board meetings (e.g., co-authoring grant applications) with organizations represented on the board to enhance the trust and collaborative spirit.

### **Step 2. Develop a community profile**

In the next CBPM step, a community profile is created. University personnel and community partners use available demographic, epidemiological, and behavioral data to discuss and prioritize health and safety issues (U.S. Department of Health and Human Services 1995), and to assess community capacity (Kretzmann and McKnight 1993).

When the PCWH began, data describing citrus worker health problems were lacking in governmental and other datasets, and few studies had examined problems in this community. To improve understanding of community problems and assets, FPRC personnel trained selected board members to be community researchers and assisted them in collecting data from citrus workers, industry representatives, and community organizations. Working closely with FPRC personnel, board members conducted participant observations, individual interviews, and surveys of citrus harvesters.

### ***Lessons learned***

The university housing the FPRC and its partner community were separated by a distance of 165 miles, complicating the task of working together. To foster the technical assistance provided to community researchers, one FPRC researcher resided in the community. His continuous presence helped expedite community profile development and facilitated the transfer of skills to community researchers. By having regular access to project partners, the FPRC researcher was able to be more effective identifying training needs, transferring skills, and resolving problems.

This project also provided insights into the role board members can play in community-based participatory research. In contrast to citrus companies' prior

refusal to admit researchers to the groves or camps, industry board members saw the value of research and granted FPRC researchers access to workers in their groves and facilitated both interviews and observations. Unfortunately, industry representatives could not provide detailed injury data to assist the community profile and baseline measures, as such injury data are not recorded in a manner that enables easy analysis. Finally, board members vary in skills and interest they bring to research activities. Thus, only a few community members could be trained to work on research with FPRC personnel.

### Step 3. Select target behavior

During the third step, the community-university partnership prioritizes community problems, and the board selects the issue and associated behaviors of interest. These choices guide subsequent formative research, intervention activities, and the outcome variables for monitoring and evaluation (Bryant et al. 2007). The decision-making process used by the board is critical because it can affect trust among members and the likelihood of short-term and long-term successes.

This task was especially critical for the PCWH because of the differences between workers' and managers' priorities. The citrus harvesters and FWAF advocates were most concerned about pesticide exposure and wanted to select it as a focus area. Other citrus industry representatives strongly opposed the selection of pesticides as a priority issue, arguing that the chemicals and precautions used minimize any associated pesticide dangers. Moreover, they feared selection of pesticides as a focus would elevate the importance of an emotionally laden issue, attract unwanted media attention, and foster lawsuits.

The board met several times to discuss worker problems and determine the criteria and process to be used to prioritize problems and reach a final decision about the project's focus. After eight months, board members became more comfortable working together and agreed upon an acceptable selection process. In the end, a voting procedure was adopted that identified problems all board members felt worthy of addressing. Known as the *fist to five* method, it required members to raise five fingers for issues they supported the most, fewer fingers to indicate less support, and a fist to demonstrate clear opposition (Bryant et al. in press). This approach enabled the group to reach consensus about the problem of concern—the prevention of eye injuries. Eye injury is not uncommon among citrus workers because of contact with foreign objects and various irritants such as dust, mildew, fungus, sand, citrus flowers, pesticide-contaminated water droplets, and insects. Additionally, more serious traumas can occur when branches recoil and cause puncture wounds

or leaf edges lacerate the unprotected eye. Consequently, the choice of this particular problem to solve was both popular and logical.

### ***Lessons learned***

Problem selection is critical to CBPM, requiring time and careful negotiation to allow community members to prioritize problems and determine a selection process. Balancing the needs and priorities of community board members and avoiding issues that alienate some members and threaten the formation of strong partnerships are especially important. Multiple criteria must be considered and a voting system developed for making decisions. A voting method should be employed that facilitates consensus rather than selection of a problem that some members are unwilling to address.

### **Step 4. Build community capacity**

In contrast to other CBPM projects (Bryant et al. 2007, in press), relatively few board members expressed desire to learn more about social marketing or demonstrated the uptake of basic marketing principles and techniques. Important exceptions included health department personnel who attended the Social Marketing in Public Health conference to learn more about the marketing approach and later used social marketing for planning other interventions.

The PCWH project has fostered other collaborations among board members who had not worked together previously. For instance, the health department has partnered with the FWAF on local outreach activities and has collaborated with citrus companies to offer health screenings for workers. Enhanced community capacity also is evident in the chartering of a Lions Club by PCWH board members. This largely Hispanic group has decided to address chronic disease issues prevalent in the immigrant community and likely will become the advisory group to sustain the PCWH after external funding is withdrawn.

### ***Lessons learned***

Board members from disenfranchised communities may be unlikely to apply social marketing principles and practices. However, the inclusion of public health professionals and other social service personnel enhance the likelihood that marketing skills will be transferred into the community. CBPM also fosters valuable partnerships that enhance the community's capacity to undertake other challenges.

### **Step 5. Conduct formative research**

Whenever possible, existing information (e.g., best practices, published literature, and board members' ideas) is used to generate initial ideas for addressing the

target problem. However, original data also may be needed for insight about local perceptions of product benefits, costs, and other factors that must be addressed in a comprehensive marketing intervention. Board members and key informants provide advice and oversight and approve research methods and protocols. Workers with interest and time to participate in data collection and analysis are trained by FPRC personnel.

In the PCWH project, an eye injury prevention program developed by Forst et al. (2004) was identified – the *Great Lakes Partnership for Agricultural Safety and Health* (GLPASH) – that appeared promising. Although implemented in a different agricultural community, this program used peers as community health workers (CHWs) to promote safety glasses. The CHWs modeled use of safety glasses, provided education on eye health, and performed basic first aid for their peers. Funds were obtained to work with the PCWH to tailor program materials and activities for use among Florida's citrus harvesters.

GLPASH was piloted as part of the formative research process to determine how this program would need to be tailored for the citrus worker community. Collaborating with FWAf community organizers, a field coordinator recruited and trained six citrus harvesters to work as CHWs on their respective crews. The CHWs' duties included: attend training sessions; wear safety glasses at all times during harvesting; distribute safety glasses to members of their harvesting crew; encourage eyewear use; conduct and document four health education sessions with crew members; train every crew member-participant at least once during the season on the topics of eye safety and the benefits of eyewear; meet with the project coordinator once per week; administer eye washings or other first aid to crew members when needed; and record every incident or encounter. These CHWs were paid for 10 hours/week and compensated \$10/hour.

As part of the GLPASH pilot test, FPRC researchers also worked with several community health workers to test commercially available safety glasses and identify features that make them suitable for use in the groves. The Radians Revelations brand of safety glasses was identified as the best option because it was lightweight with low distortion and high quality optics, had frameless lenses elevated off the face to relieve heat, a soft nosepiece for comfort, and a gap in the top of the frame to provide ventilation thereby reducing fogging. The workers also identified the need for a headband to keep the glasses from getting entangled in tree branches.

In addition to the pilot test, FPRC personnel trained FWAf community organizers to conduct formative research to understand experience with eye injuries and perceptions of safety eyewear use. FPRC and community researchers

conducted participant observation research in the groves, harvesting side-by-side with other workers, conducted 8 focus groups, and surveyed over 100 citrus harvesters. Results revealed that workers were aware of their injury risk and recognized the protection that safety glasses could provide them, particularly against the dangers of foreign objects and other trauma. In many instances, workers had been given safety glasses by their employers. However, most had lost them within a short period of time, usually without trying them because they considered safety glasses incompatible with the demands of harvesting fruit in a hot, humid climate. Almost all workers expected the glasses to be uncomfortable. Those who had tried safety glasses briefly in other jobs or when picking citrus reported the lenses required frequent cleaning to remove dirt, sweat, and condensation. Because of these problems, most workers expected the glasses to impede their productivity, and because they are paid by piece-rate, they expected the glasses to reduce their income.

### ***Lessons learned***

Community-based participatory research is a key element of CBPM. However, agricultural workers have limited time to participate in research, and little interest was shown in learning how to collect or interpret data. Consequently, FWAF community organizers were trained as researchers, whereas citrus harvesters serving on the board helped recruit other harvesters for the study, provided recommendations for conducting research in their community, and helped interpret findings.

The methods that proved most valuable in this project were participant observation in groves and camps and focus groups conducted in workers' homes. These methods placed minimal demand on workers' time, while giving researchers insights into the environmental context in which eye injuries and use of safety glasses take place.

The simultaneous pilot testing of an existing intervention, while collecting primary data for creating a marketing plan to guide implementation, had several advantages. First, whereas workers' perceptions of safety glasses were initially unfavorable, with perceived costs far outweighing perceived benefits, the pilot test was surprisingly successful, suggesting that barriers could be overcome. As citrus harvesters tested the intervention, they were able to provide insights for modifying or tailoring the program for compatibility with their occupational demands. Finally, considerable time was saved by drawing on GLPASH's experience and success in a similar occupational community – a benefit of critical concern to many program planners.



### Step 6. Develop a marketing strategy

Drawing on research results, a comprehensive strategic plan is developed by the community board using marketing's conceptual framework (Kotler and Lee 2008). This plan outlines the project goals, the audience segments to be targeted, specific behaviors that will be promoted within each segment, and strategies for addressing the factors influencing target behaviors, including a product, pricing, placement, and promotional strategy. University-based researchers also develop an evaluation plan for assessing the intervention's impact on behavior.

FPRC personnel worked with the PCWH board to translate research findings into a systematic marketing plan for reducing eye injuries. The marketing plan, summarized below, was developed to tailor the CHW approach for use in promoting safety glasses to citrus harvesters and guide its implementation.

- *Product Strategy:* Ask workers to wear safety glasses when picking fruit (the actual product) so they can harvest without fear of injury (core benefit); recommend the *Radians Revelation* model brand of safety glasses (augmented product) for optimal results in Florida's hot, humid groves.
- *Pricing Strategy:* Recommend the *Radians Revelation* brand of safety glasses to minimize the discomfort of heat during warmer months and to make glasses more comfortable, and use a sports band-style strap to prevent glasses from falling off; use a medium tint to protect against UV rays but allow workers to see well; search for a new lens coating or brand of glasses that minimize the amount of time workers must devote to removing perspiration and dirt from lenses.
- *Placement Strategy:* Recruit and train highly productive, respected workers to serve as health promoters (i.e., CHWs); teach promoters to serve as role models, distribute glasses, and encourage their use.
- *Promotional Strategy:* Create a manual for training citrus harvesters to serve as community health workers; develop training materials and exercises that reinforce the product and pricing strategies; encourage crew leaders to support injury reporting and treatment, employers and supervisors to provide glasses at no cost to workers, and company policies that reinforce their use.

### Lessons learned

Whereas GLPASH provided a powerful model for promoting health and safety behavior to farm workers, a marketing plan was still needed to guide tailoring and implementation. The marketing plan provided a blueprint to ensure that future program modifications stayed "on strategy" by specifying the benefits to be promised, the barriers that must be lowered, partners that could reinforce behavior change,

and the promotional activities required to achieve program goals. The CBPM model was flexible enough to incorporate the CHW model of peer-educators into the goals of prevention marketing, and it provided an ideal means of reaching the target audience where they most needed the product: in the citrus groves.

### **Step 7. Program development**

In this step, intervention materials and tactics are developed and pretested. The board helps mobilize resources for the intervention and community researchers work with university faculty to pilot test program materials and tactics. Academic and community researchers also begin working together on an evaluation plan.

In the PCWH project, the marketing plan was used to tailor the CHW training manual and promotional techniques for use in the citrus industry (Luque et al. 2007). These materials were made more interactive and visual, using educational training posters that allowed easier understanding by participants with lower levels of literacy. The curriculum was expanded to include a full-day first aid and CPR class that CHWs had requested, and a training manual ([http://publichealth.usf.edu/prc/citrus\\_worker](http://publichealth.usf.edu/prc/citrus_worker)) was developed to improve continuity in how training materials were used and the program was implemented.

### **Lessons learned**

Despite a previous pilot test of the GLPASH program, pretesting the tailored intervention and materials proved valuable, revealing two important findings. First, workers who wore the glasses were less likely than others to believe safety eyewear would reduce their productivity and earning capacity. Second, workers with safety glasses reported that their eyes were less irritated by dust, sand, insects, and chemicals, suggesting that the reduction of daily irritation should be added to the product “benefits” promised in future promotions. Consequently, the product strategy was modified from the original promise to *pick without fear of injury* to the more competitively attractive position – *pick rapidly without fear of injury or daily irritation*. Also, company policies and incentives were recommended to persuade workers to wear glasses during a trial period. Thus, whereas tailoring an existing intervention saves time in the planning process, it does not negate the need for this or any other step in the CBPM framework.

### **Step 8. Program implementation**

This phase involves implementation on a limited scale to allow close monitoring and coordination among partners. University researchers work closely with community members to ensure that the data collected are pertinent for revising

materials and strategies. Community partners help mobilize resources needed to implement program activities and work together to reinforce the institutional foundation upon which the intervention must be sustained.

The PCWH project was implemented for three additional harvest seasons (December through May) among a relatively small number of crews (i.e.,  $\leq 13$ ). Each year, FPRC personnel and community researchers worked with the CHWs to enhance lessons learned the previous year and identify program improvements.

Concurrently, the PCWH board initiated other health promotion activities, working with local organizations to screen farm workers for visual problems and chronic diseases, and teach first aid, STD prevention, and other health topics to workers living in nearby camps.

### ***Lessons learned***

The PCWH board, like most community groups, can become impatient with the time required to tailor an intervention using CBPM. By allowing the board to branch out into other health-related projects, the project maintained a sense of momentum and accomplishment, without sacrificing the benefits of an evidence-based tailoring approach to the CHW intervention.

The PCWH project also illustrated the challenges associated with implementing a program for migrant farm workers and value of a CBPM approach. Without support of managerial representatives of the citrus industry, it would have been impossible to gain access to workers in the groves or camps. Without support from FWAF advocates on the board, it would have been difficult to recruit citrus workers and maintain trust needed to work with them over the harvest season. Sometimes employer policies and harvesters' needs worked at cross-purposes of project goals and delayed timely implementation of training, distribution of glasses, or treatment for injuries. Patience and compromise were usually required to reach successful conclusions.

### **Step 9. Tracking and evaluation**

The last CBPM task actually begins as soon as the marketing plan has been developed and overlaps with program implementation. Academic and community researchers assess program context and begin to monitor program processes and impact. Results are used to improve the program further and determine if it has achieved its objectives.

The PCHW project evaluation focused on process and behavioral impact. The process evaluation was conducted by the field supervisor and a team

comprised of community partners who monitored and kept records of the CHW implementation, from the training stage onward throughout the harvest season. Additionally, process evaluation was provided by the CHWs themselves, who were encouraged to provide program feedback about the glasses during the weekly supervisory meetings and, at season's end, in a focus group format.

The program's impact on use of safety glasses was evaluated intensively during the December 2006 to May 2007 harvest season. Nine crews from two citrus companies received the CHW intervention and four crews acted as control groups. The control groups were provided with glasses (an industry standard), but crews did not have access to a CHW promoting their use. Observations began two months before the CHW intervention began and continued throughout the harvesting season, with a total of three baseline and three postintervention observation points. During each unannounced observation, researchers walked through the groves where workers were picking and counted the number of crew members wearing safety glasses. Each worker was observed between two and four times during the day because climatic conditions (e.g., humidity, temperature) were expected to affect use.

Results revealed a significant increase in safety glass use among workers exposed to the intervention and relatively little change among controls. Table 1 summarizes the average percentage of use for each observation period between control and

TABLE 1

### Group Percentage of Person-Usage of Eye Glasses at Baseline Observations (Obs) and Postintervention Observations

GROUP		BASELINE				POST					
		Obs1	Obs2	Obs3	Average			Obs4	Obs5	Obs6	Average
Control	Mean	0.004	0.024	0.000	0.024	Mean	0.008	0.048	0.017	0.026	
	SE	0.020	0.017	0.013	0.009	SE	0.012	0.043	0.016	0.023	
	N†	288	205	218	711	N	265	336	241	842	
Intervention	Mean	0.094	0.110	0.147	0.111	Mean	0.162	0.323	0.355	0.275	
	SE	0.032	0.057	0.054	0.039	SE	0.046	0.045	0.078	0.050	
	N	777	446	416	1639	N	856	767	746	2369	

<sup>a</sup>N = Total number of person-time occurring during the corresponding observation times.

intervention crews. In the controls, the overall person-time use rate did not change significantly, from 2.4% (SE = 0.09%) during the three baseline observations to 2.6% (SE = 2.3%) postintervention. In the intervention group, the average percentage of use increased significantly throughout the postintervention period, rising steadily to 16.2% (SE = 4.6%), 32.3% (SE = 4.5%), and 35.5% (SE = 7.8%).

To test the intervention's effect on use of glasses, the difference in intervention crews' average percentages of use pre- and postintervention (11.1% vs. 27.5%) were compared. Because crew members shared common work and social environments, their behavior of using glasses may have mutual influence, resulting in so-called spatial data clustering or intra crew clustering. Additionally, the observed proportions of crew members using glasses on the same crew over different observation points and times also could be temporally clustered. To avoid erroneous comparisons, this data clustering was accounted for in calculating the variance of the difference in the two percentages. This approach resulted in a generalized t-statistic of 4.55 ( $p < 0.00001$ ), indicating a highly significant improvement in using glasses among the intervention crews. Using the same procedure to compare the percentages of use among the control crews, pre- and postintervention, we obtained a t-statistic of 0.11 ( $p = 0.46$ ), indicating the lack of change in the control crews' behavior.

### **Lessons learned**

Evaluation of safety programs for migrant farm workers is fraught with challenges. Migrant worker turnover during the harvest season is high and undocumented immigrants are reluctant to provide their names, making it difficult to track individuals. Citrus harvesters work independently in groves, requiring researchers to walk long distances through sandy rows to observe them. The risk of social desirability response bias among migrant workers makes self-reporting a poor substitute for more time-intensive observations.

### **Discussion**

The CBPM framework recognizes the need for integrated interventions at the individual worker, organizational, and environmental levels. The model encourages worker ownership of problems and solutions and helps ensure that interventions are culturally acceptable and politically feasible (Gerstein and Green 1993). Workers' participation in research and demonstration activities also facilitates the development of interventions that are better integrated into existing community structures and more easily sustainable after outside funding ceases (Bracht 1990). The focus on behavior as a product of social marketing helps keep

program planners on track by setting behavioral objectives for program interventions and designing strategies that address the critical barriers that prevent the audience from adopting a behavior (Middlestadt, Schechter, Peyton, and Tjugum 1997). Because extensive research is used to obtain input from workers and key stakeholders who the program is intended to reach, program design reflects feedback from members of the audience who may have neither time nor interest in participating directly in program planning. Marketing's conceptual framework, audience segmentation, and close monitoring of program progress all lead to improved program outcomes.

Incorporating the target audience in the design, implementation, and evaluation of health interventions such as the PCWH eye safety program is not without drawbacks. The collaborative team learned many lessons. Promoting safety from the crew level means a limited number of crew members are available as candidates for training. They have limited free time and various limitations due to the power structure of the crew, levels of literacy, and even cultural differences within crews. Crews are subject to high rates of turnover, meaning that some workers or CHWs will leave the crew after completing training. Despite the drawbacks, using members of the target audience of citrus harvesters as the spokespersons and role models for a safety intervention is the most efficient way to change behavior. CHWs require frequent supervision, retraining, and support to perform their roles, but we have not found a better way to reduce eye injuries in the citrus groves.

### About the Authors

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