



EPA Report Out on Farmworker and Clinician Training Recommendations

Pesticide Programs Dialogue Committee

Spring Meeting - May 2022

Outline of Presentation

- Roster
- Charge Questions
- Background
- Farmworker Training Recommendations
 - Summary of recommendations
 - EPA progress and considerations to address recommendations
- Clinician Training Recommendations
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 - EPA progress and considerations to address recommendations
- PRIA 5
- PPDC Feedback/Questions
- Appendix
 - PRIA 4 Background
 - PPDC Workgroup October 2021 recommendations

Workgroup Roster

- **Mily Treviño-Sauceda**, Alianza Nacional de Campesinas (Co-chair)
- **Stephen Schaible**, EPA/OPP (Co-chair)
- **Carolyn Schroeder**, EPA/OPP/CWPB (Co-chair)
- **Africa Dórame-Avalos**, Inter-Tribal Council of Arizona, Inc.
- **Allison Crittenden**, American Farm Bureau Federation (AFBF)
- **Amy Liebman**, Migrant Clinicians Network
- **Dominica Navarro**, Northwest Center for Alternatives to Pesticides
- **Emma Torres**, Campesinos Sin Fronteras
- **Iris Figueroa**, Farmworker Justice
- **Jeannie Economos**, Farm Workers Association of Florida
- **Kaci Buhl**, Oregon State University, Department of Environmental & Molecular Toxicology
- **Katie Karberg, M.D. Ph.D.**, Bayer Crop Science
- **Melanie Forti Roggenhofer**, Association of Farmworker Opportunity Programs (AFOP)
- **Patsy Laird**, Syngenta Crop Protection
- **Ricardo Davalos**, Florida Department of Agriculture and Consumer Services (FDACS)
- **Ruben Arroyo**, California Agricultural Commissioners and Sealers Association (CACASA)
- **Walter Alarcon**, The National Institute for Occupational Safety and Health (CDC-NIOSH)

Charge Questions

How should EPA go about addressing new reporting requirements specified in PRIA 4 for PRIA set-asides for farmworker protection activities?

1. How should EPA evaluate appropriateness and effectiveness of farmworker protection activities?
2. How should EPA engage stakeholders in decisions to fund such farmworker protection activities?
3. How and when should EPA reach out to stakeholders, including farmworker community-based organizations, in their development of analyses on appropriateness and effectiveness of such activities?

Background of PRIA set asides

Worker Protection - Cooperative Agreements

- National Farmworker Training Program (AFOP)
- Pesticide Resource Education Collaborative (PERC)
- Health Care Initiative (PERC-Med)

Partnership Grant - Cooperative Agreement

- National Pesticide Information Center (NPIC)

Pesticide Safety Education Program (PSEP) - Cooperative Agreement

- Powered-Up An Advanced Pesticide Safety Education Funds Management Program (also known as “PSEP funds”)

Progress



EPA has carefully reviewed the recommendations and evaluated how some of them are being addressed in part by:

Providing more opportunities to receive farmworker/farmworker organization perspectives (*other rec. #2*)

Recurring meetings with farmworker organizations

- The OCSPP Assistant Administrator and the Office of Pesticide Programs (OPP) meet quarterly with farmworker advocacy groups
- Listening sessions with Ag Advisor
- PRIA 5 related discussions with NGOs

Educational Events

- National Hispanic Heritage Month
- Farmworker Awareness Week
- Virtual Farmworker Florida Community Visit Mini-Series
- Lunch 'n' learn farmworker series has had 100+ attendees for each of the following topics:
 - Heat stress and Pesticide Exposure
 - Pesticide Exposure and Farmworker Children
 - Reproductive Health Hazards for farmworker women
 - Need for WPS enforcement improvement

Progress, con't.



Cooperative agreements

- Evaluation of performance - use of pre/post training knowledge checks (as an example of evidence-based approaches to training evaluation) (*rec. #2*)
- Seeking feedback of from farmworkers/farmworker orgs. (*rec. #1*)
- Consideration of target audience - Materials developed in diverse languages (*rec. #3*)
- Latest Request for Applications includes subaward requirements for Agricultural Community-based Projects (*rec. #1 & other rec. #3*)

Progress, con't.



Reiterating and improving communication of key WPS messaging to stakeholders (rec. #6 & other rec. #7)

- **Emphasizing training requirements in outreach materials**
- **Reiterating WPS requirements on delivery of pesticide safety training**
 - 40 CFR 170.401(c): Pesticide safety training must be presented to workers
 - at a location that is reasonably free from distraction and conducive to training
 - presented in a manner that the workers can understand, such as through a translator.
 - Trainers must remain present during training sessions to respond to questions

Future Considerations



➤ **Development of future RFAs - considering how to incorporate:**

- Engagement with and intentional outreach to underserved communities and/or populations (*rec. #1*)
- Seeking greater inclusion of perspectives not previously or routinely incorporated into projects (*rec. #1*)
- Ongoing evaluation of the effectiveness and appropriateness of activities

➤ **Some examples of potential projects under consideration:**

- Improve visibility and accessibility of funding opportunities to stakeholders (*other rec. #3*)
- Applying needs assessments in future RFA development (*recs. #4 & #5*)
- Outreach to employers/farmers on key WPS protections such as WPS training requirements (*rec. #6*)

➤ **EPA will continue to explore opportunities to address the recommendations provided by the workgroup while navigating resource constraints**

- Continue efforts to prioritize actions to address the recommendations based on impact and feasibility considerations

Progress



EPA has carefully reviewed the recommendations and evaluated how some of them are being addressed in part by the Health Care Initiative grant through:

- Collaboration with a variety of health care providers (HCPs) including: public health educators, rural health nurses, tribal community partners, physician assistants, primary care clinicians, nurse practitioners, poison center professionals, occupational health practitioners, etc. (*rec. #2*)
- Partnership with professional organizations to facilitate, support, and promote accredited courses for HCPs with continuing medical education (CME) credits (*recs. #4 & #8*)
- Development of a coding “cheat sheet” for clinicians to report pesticide illness/injury and an interactive map with state specific reporting requirements/contact info (*rec. #5*)
- Providing training for and collaborated with Federally Qualified Health Centers (*rec. #6*)
- Calls for project ideas with stakeholders and key informant interviews were used and evaluated by Advisory Board for determining priorities (*rec. #7*)

Future Considerations



➤ Future plans and considerations of current grant:

- Increase outreach to tribal-serving medical professionals (*rec. #2*)
- Pilot a champions network for recruiting clinicians and hire a clinician scientist to develop health care provider training curriculum (*rec. #4*)
- Continue to build strategic partnerships with national medical organizations to distribute health care provider focused articles and other resources (*rec. #8*)
- Develop Community Health Worker/Promotoras training concept/online course (*rec. #9*)

➤ Some other examples of potential projects under consideration:

- EPA providing funding for CDC/NIOSH Sentinel Event Notification System for Occupational Risks (SENSOR) Pesticides Program (*rec. #1*)
- Update and/or translate the Recognition and Management of Pesticide Poisonings: 6th Edition manual (*rec. #3*)
- Develop new Health Care Initiative (HCI) RFA to provide additional funding opportunities for frontline organizations and require investment in needs-assessments (*recs. #7 & #9*)

➤ EPA will continue to explore opportunities to address the recommendations provided by the workgroup while navigating resource constraints

PRIA 5

- PRIA 4 runs through FY2023
- EPA was approached by the PRIA Coalition, a group of industry and NGO stakeholders, about seeking reauthorization of PRIA a year early, in calendar year 2022
- As part of technical assistance in support of this PRIA 5 effort, EPA has been engaging with the farmworker advocacy groups, as well as other environmental NGOs
- This offers an additional opportunity to address some of the PPDC workgroup recommendations for both worker safety and clinician training

Feedback and Questions?





PPDC Spring Meeting 2022

Farmworker and Clinician Training Workgroup

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Appendix

Background – PRIA 4 Reporting Requirements

- Description of the amount and use of PRIA set-aside funds to:
 - Carry out activities related to worker protection;
 - Award partnership grants; and
 - Carry out pesticide safety education program.
- Evaluation of appropriateness and effectiveness of activities, grants, and program;
- Description of how stakeholders are engaged in decisions to fund such activities, grants, and program; and
- With respect to worker protection activities, a summary of analyses provided by stakeholders, including from worker community-based organizations, on appropriateness and effectiveness of such activities.

Background – PRIA 4 Set-asides (details)

- **Worker Protection Activities ≥ \$1M (i.e., 1/17 of the amount in the Fund but not < \$1M)**
 - National Farmworker Training Program: Association of Farmworker Opportunity cooperative agreement
 - Pesticide Resources: Pesticide Resource Education Collaborative (PERC); UC Davis in collaboration with Oregon State cooperative agreement
 - Health Care Initiative: PERC-Med; UC Davis in collaboration with Oregon State cooperative agreement
- **Partnership Grant \$500K**
 - National Pesticide Information Center (NPIC); Oregon State cooperative agreement
- **Pesticide Safety Education Program (PSEP) \$500K**
 - Powered-Up - An Advanced Pesticide Safety Education Funds Management Program (also known as "PSEP funds"); eXtension Foundation cooperative agreement

Farmworker Training Highest Priority Recommendations (as [submitted to PPDC in Oct. 2021](#))

1. Involve farmworkers, farmworker organizations, and WPS trainers in EPA-funded projects that design, develop, review, and evaluate WPS training materials. This includes membership on advisory committees.
2. Incorporate evidence-based approaches to design and evaluate effective training.
3. Require that farmworker training be provided in an appropriate and engaging format and that it be culturally and geographically relevant. This should result in better retention of the material being presented. Revising the funding mechanism to support the development of varied training materials for diverse crop systems and farmworker communities could help achieve these goals:
 - a. Training is provided in a language the workers understand. (already a requirement)
 - b. Training method considers the literacy level of the workers. If necessary, training uses more images and fewer words.
 - c. Training acknowledges the reality of some farmworker situations (e.g., where water, toilets, and emergency help might not be close by).
 - d. Training incorporates relevant crops, pesticides, and types of application instead of a one-size-fits-all approach.
 - e. Training takes into account cultural characteristics of the workers that might make them disregard some of the training recommendations.
4. Conduct a pre-training needs assessment (and follow up on any earlier needs assessments) prior to developing requests for proposals (RFPs).
5. Include farmworkers, farmworker organizations, and WPS trainers in needs assessments.
6. Test effectiveness of different methods of communicating to employers the benefits of WPS training for them and their workers.

Farmworker Training Other Recommendations (as submitted to PPDC in Oct. 2021)

1. If EPA-funded programs focused on serving farmworker communities have advisory boards, EPA should consider requiring those programs to save 25-50% of advisory board seats for farmworkers – and should provide adequate support to facilitate their full participation.
2. Commit to continuing regular, quarterly meetings with farmworker organizations to receive feedback on farmworker issues related to WPS training.
3. Target farmworker groups when RFPs for WPS training materials go out.
4. Require transparency from funded programs in the development of training materials. (For example, when recommendations from different farmworker communities conflict, transparency in final decisions is important to assure stakeholders that their voices were heard.)
5. Require programs that serve farmworkers to have farmworkers evaluate their activities.
6. Encourage or require refresher training for non-licensed trainers.
7. Emphasize that: 1. training is to be conducted where workers are comfortable, and 2. questions and discussions are to be encouraged during training.
8. Increase WPS training for pesticide inspectors so that they are better equipped for enforcement.
9. Assess the level of compliance with WPS training (on-going but possibly out of scope for this workgroup).

Clinician Training (i.e., Health Care Provider) Recommendations (as [submitted to PPDC in Oct. 2021](#))

Recommendation 1: Implement a national pesticide incident reporting system.

- Action item: Invest in collaborations to expand and improve incident-reporting in a uniform system/defined way. Encourage/initiate inter-agency collaboration between EPA and CDC to accomplish this goal for environmental justice. Evaluate PRIA agreements with respect to the increased reporting observed.
- Related to the overarching charge question 1: High-quality data are essential to inform and evaluate worker protection activities. This requires collaboration with grass-roots organizations, and a standardized case-classification/definition system.
- Nearer term, high priority recommendation: establish a standardized case definition for acute pesticide poisoning incidents.
 - o This definition could improve/facilitate treatment for individuals who experience pesticide poisoning. Treatments are often reliant upon formal case definitions.
 - o Consider adapting the current SENSOR-Pesticides program standardized case definition for an acute pesticide-related illness and injury case. This case definition is available from: Case Definition for Acute Pesticide-Related Illness and Injury Cases Reportable to the National Public Health Surveillance System <https://www.cdc.gov/niosh/topics/pesticides/pdfs/casedef.pdf>
- Longer term, high priority recommendation: once standardized case definitions established, can be used to implement a national incident reporting system. o Request for EPA to support national incident reporting system, building upon the state-based SENSOR programs, expanded to all states, to include contributing factors to negative outcomes.

Recommendation 2: Target a wide range of clinicians with outreach related to pesticides. “Clinician” should be defined broadly inclusive of direct healthcare providers (physicians, nurse practitioners, physician assistants, etc.), staff involved in triage (e.g., front desk intake personnel), social workers, community health workers etc. Essentially, for the purposes of this workgroup, “clinician” includes any person that may be involved along the path of a person seeking medical care for a pesticide-related health concern. While context matters for different types of pesticides exposure (farmworker vs. others, e.g., pesticide exposures from hospitality industry), what are commonalities of pesticide exposures that are relevant from clinician lens? And can that inform clinician training for all pesticide exposures?

- Action item: Evaluate PRIA-funded activities as to the range of clinicians targeted/reached.
- Related to Charge question 2 and 3 (engaging stakeholders)

Recommendation 3: Emphasize the importance of occupation (parental occupation in pediatric cases) in the recognition and management of pesticide poisonings. Farmworkers (both agricultural workers and pesticide handlers) are among the most overexposed occupational group. Other occupational groups are also at risk. Identifying occupation can be a key component in a differential diagnosis by raising the index of suspicion based on a recognition of occupational risk. Pesticide training for clinicians should include a discussion of occupational and environmental screening and history taking.

- Action item: Evaluate PRIA-funded activities related to clinician training as to the occupational emphasis included (e.g., emphasize case studies for inclusion in clinician training, provide materials, update management of pesticide poisoning, create app with pesticide-specific trainings).

Clinician Training Recommendations, con't.

(as submitted to PPDC in Oct. 2021)

Recommendation 4: Seek and include clinician input, including pilot testing materials and trainings, when designing and evaluating interventions (i.e. training programs and/or materials) Consider demands on clinicians' own time and other challenges. What sources do clinicians currently use? What is an effective educational material?

- Action item: Evaluate PRIA-funded activities as to the steps taken to involve clinicians in each stage of development and review
- Related to Charge questions 1, 2, and 3

Recommendation 5: Increase support, coordination, and outreach to promote awareness of pesticide illness/injury reporting among clinicians.

- Action item: Evaluate PRIA-funded activities as to the extent of outreach, coordination & support for clinicians in understanding and using reporting systems/requirements.
- Related to the overarching charge question.
- E.g., ensuring trainings/EHR systems include education on current ICD codes, needs for expanded codes.

Recommendation 6: Ensure clinicians and staff in federally qualified health centers are targeted and incentivized to receive training and resources on pesticide-related health issues. Federally qualified health centers are important providers of health care to farmworkers (both agricultural workers and pesticide handlers), one of the most overexposed worker populations to pesticides. They are often the only healthcare providers serving farmworkers and their families. Yet the clinicians and staff at these facilities are not well prepared to recognize and manage pesticide exposure.

- Action item: Evaluate PRIA-funded activities as to the increased inclusion of clinicians and staff in pesticide trainings, an increase in pesticide-related knowledge and improved clinical practices to address to recognize and manage pesticide exposures.

Recommendation 7: Invest in needs-assessment activities related to clinicians' pesticide related knowledge, competence, and/or training opportunities.

- Action item: Evaluate PRIA-funded activities as to their potential to increase clinicians' pesticide-related knowledge, competence, and/or training opportunities.
- Related to Charge question 1.

Recommendation 8: Partner with professional societies/organizations that clinicians belong to (examples: National Association of Community Health Centers, AAFP, AANP, ACMT) - to help promote pesticide reporting and recognition/management of pesticide-related illness/injury.

- Action item: Evaluate PRIA-funded activities as to their potential to increase clinicians' pesticide-related knowledge, competence, and/or training opportunities.
- Related to Charge question 3.
- Need buy-in of clinical systems, making it relevant to the clinician.
- Emphasize and incentivize the trainings.

Recommendation 9: Specify in cooperative agreements that EPA include groups that have more front-line relationships, expertise, and grounding (e.g., nonprofits, community-based organizations) with clinicians, especially those who work with farmworkers and other people with regular occupational exposures to pesticides.

- Action item: Evaluate PRIA-funded activities as to whether their activities include more front-line relationships, expertise, and grounding with clinicians, especially those who work with farmworkers and other people with regular occupational exposure to pesticides.
- Related to the overarching charge question and, in part, question 1.