



**National Children's Center**  
for Rural and Agricultural Health and Safety

**ANNUAL REPORT**

**September 30, 2015 – September 29, 2016**

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## SECTION I: Center Overview

### Center's Summary

The National Children's Center for Rural and Agricultural Health and Safety (NCCRAHS) was established in 1997 and has a long history of developing, testing and sustaining projects associated with children who live on, work on, and visit farms and ranches across the U.S. Unlike the regional NIOSH Agricultural Centers, this Center has a national focus with a national network of partners and project collaborators. The Center's major emphasis is on national leadership and knowledge mobilization.

### Relevance

Injury data collected by National Institute for Occupational Safety and Health (NIOSH) from 1998 to 2014 revealed demographic and injury details, as well as trends over time. While overall numbers of farm injuries are declining, injuries to household youth have held steady since 2009. Injury rates for household youth 10-19 years increased in 2014 and non-working children comprised 60% of all household youth injuries. Hired youth and visiting youth also sustained farm injuries in 2014. Among workers younger than 16 years, the number of worker fatalities in agriculture remains consistently higher than all non-agricultural industries combined.

The Center's work continues to be highly relevant as we build upon scientific evidence regarding the most preventable injuries and the most effective interventions. A core issue with which we deal is the "culture" of agriculture and the prevalence of injuries among hard to reach populations such as Anabaptist communities, children of immigrant workers, and beginning farmers and ranchers who were not raised on farms.

Our Center's theme is "strengthening public-private partnerships to address childhood agricultural injury prevention." With a modified Socio-Ecologic Model as our guide, our projects are striving to engage the organizations and businesses that influence the business of farming. The higher "sphere of influence" is likely to influence adults' decisions and social norms associated with children's roles and presence in agricultural settings.

### Key Personnel:

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Center Web Link: <http://marshfieldclinic.org/nccrahs/>

## **SECTION II: Highlights of Projects with High Impact**

### **Center: National Leadership and Continuous Improvement**

Since its establishment 18 years ago, NCCRAHS has evolved and matured to become the leading program addressing childhood agricultural injury prevention in the U.S. NCCRAHS has been a catalyst for positive change leading to a notable reduction in non-fatal injuries. NCCRAHS provides direction for national initiatives and guidance for efforts undertaken by other organizations. Center leaders serve on multiple national steering committees and participate in all NIOSH Agricultural Center cross-center activities.

Our Center remains the hub for safety guidelines associated with youth working on family farms, youth employed in agricultural work, children playing on farms, safe agritourism operations, and media/journalist relations. Additionally, the Center is the home base for public awareness campaigns to Keep Kids Away from Tractors and operate ATVs safely. Furthermore, the Center has been responsive to the needs of vulnerable populations including migrant/immigrant/ seasonal workers with language limitations, Anabaptists, African Americans, native Americans and Hmong populations. More recently, we are proactively involving other youth-related organizations, agricultural insurance companies, bankers and the media in promoting childhood agricultural safety.

While NCCRAHS's external reach and influence continues to expand, our internal systems are continually refined to increase efficiencies and reduce costs. The longevity of core leaders, combined with junior staff ensures we build upon past successes and focus on only the most pressing issues, while testing new approaches and mentoring future leaders. Another internal improvement addresses the financial perspective. NCCRAHS is able to access resources, services and staff expertise across other programs within and external to Marshfield Clinic Research Foundation, enabling cost-sharing from several private sector funding sources.

With many creative and cutting-edge features now underway, our robust leadership team, committed staff and solid infrastructure supports the Center's theme of *strengthening public-private partnerships to address childhood agricultural injury prevention*.

### **Administrative and Planning Core**

P.I. – B. Lee, B. Marlenga, M. Salzwedel, M. Stueland

The goal for the Administrative and Planning Core of the National Children's Center for Rural and Agricultural Health and Safety is to set strategic directions and provide a framework that will support, guide, and monitor the progress of four core areas: 1) Evaluation; 2) Outreach, Education and Translation; 3) Prevention, Intervention and Translation; and 4) Research. Guidance for administrative efforts is provided at multiple levels. The Internal Advisory team includes core leaders, principal investigators, and Marshfield Clinic Research Foundation (MCRF) administrative leaders. The Center stays on track scientifically and theoretically via external scientific advisors linked with each project. Comprehensive evaluation is ensured by the UW-Madison evaluation team, while pragmatic recommendations come from colleagues in the Childhood Agricultural Safety Network, the Agricultural Safety and Health Council of America, and the NORA Agricultural, Forestry, and Fishing Sector Council. NIOSH advisors keep our activities connected with relevant NIOSH intramural and extramural endeavors.

Over the past year, NCCRAHS Administration convened monthly staff meetings and conducted budget reviews to ensure projects are on track for timely completion. Staff has continued to participate in meetings with external advisors, other NIOSH Agricultural Center Directors, and ASHCA, NORA and ISASH meetings. Staff members have also participated as advisors and in coalitions to help the Center keep abreast of new developments and emerging trends in the field, disseminate new research findings and resources, and to expand partnership opportunities. Examples include:

- Barbara Lee represents NCCRAHS on two national initiatives: the Safety in Agriculture for Youth (SAY) USDA-funded initiative and the National Tractor Safety Coalition, partially funded by NIOSH. She also chairs the national Task Force to develop a National Agricultural Safety and Health Hall of Fame. Another national-level activity involves keeping U.S. Senators and Representatives apprised of the

importance of NIOSH funding for its AgFF program. Letters and in-person contacts have been made with key staff of Wis. Senators and Representatives. She also serves as Senior Associate Editor for Journal of Agromedicine. Most recently she joined the Scientific Advisors committee for the newly established NIOSH Agricultural Center at U of Florida.

- Casper Bendixsen is on the Advisory Group for Wisconsin AgrAbility, an Executive Board Member for the Wisconsin 2018 Farm Technology Days and an Associate Editor for the Journal of Agromedicine.
- Marsha Salzwedel is a Certified Safe Farm Board member and led the development of the Education Module. She is a member of the Professional Improvement Committee for the International Society of Agricultural Safety and Health (ISASH), became a member of NCERA-197 Committee, and continues to serve as an Ex-Officio board member for the Wisconsin Agricultural Tourism Association. In addition, she continues to contribute/advise the North American Farm Direct Marketing Association, participates as a member of the Grain Handling Safety Coalition, and serves as a reviewer for the Journal of Agromedicine.
- Scott Heiberger continues to serve on the Board of Directors of the International Society for Agricultural Safety and Health (ISASH) and is Managing Editor for the Journal of Agromedicine.
- Tammy Ellis is the Co-Chair for the ISASH Membership Committee
- Kate Barnes is part of the Wisconsin's Department of Health Services' Occupational Surveillance Advisory Group



NCCRAHS Scientific Advisors' Meeting This meeting was held in April 2016 in Marshfield, WI with 22 participants, including internal and external staff and scientific advisors. The meeting agenda addressed information about each of the projects and promoted opportunities to work together.

#### Childhood Agricultural Safety Network (CASN)

Updates, including child agricultural injury notifications, continue to be sent via email to CASN. This year we increased the number of organizations participating in CASN and continue to diversify the membership. Frank Gasperini, the Vice President of the National Council of Agricultural Employers, attended and spoke at the in-person CASN meeting, held in Lexington, Kentucky. The opportunity for him to share his knowledge and network with members of CASN was valued by all the CASN members and a highlight of the meeting.

Mini-Grants We received and processed the six-month reports and invoices from the FY16 mini-grants. We also issued the call for the FY17 mini-grant proposals, performed a review of 12 grant applications, and funded three new mini-grants.

Administrative Matters Center Administrative Manager, Marlene Stueland handled all administrative matters with great efficiency this year. Budgets were on track and contractual services were completed. One staffing change included the departure of Dr. Matt Keifer in June. His role on the internal leadership team was assumed by Dr. Bryan Weichelt and his role as P.I. of the AKME project has tentatively been assumed by Dr. Barbara Lee.

#### Advanced Knowledge Mobilization and E-Communication

P.I.s – M. Keifer (through June), B. Weichelt, S. Heiberger, T. Ellis, Y. Ninco-Sanchez

The "Advanced Knowledge Mobilization and E-communications (AKME)" project is a centerpiece for the overall Children's Center because the AKME health communications, marketing, and technology specialists facilitate messaging, packaging and dissemination of information into, out of, and across all projects. This team collaborates with Center-wide and external partners to identify, design, utilize and evaluate appropriate communication approaches for their multiple purposes. With cutting-edge technologies, this project facilitates

timely and culturally-appropriate communication strategies, including social media, virtual meetings, and mobile applications.

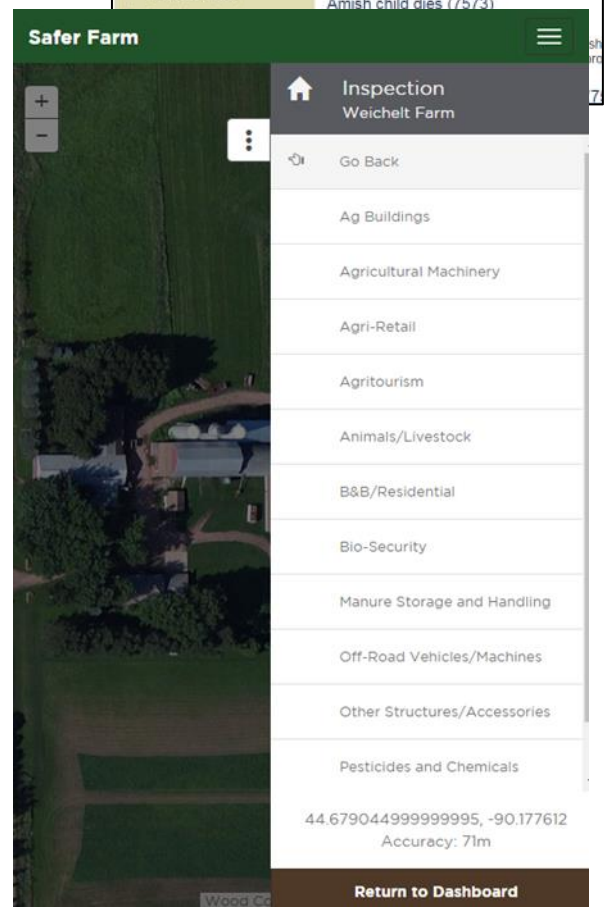
Over the past year, the AKME project has been very active in numerous domains. The following sections highlight the most prominent activities of this project.

**Website Content and Redesign:** The National Children’s Center hosts five websites that are continuously upgraded to provide relevant information. The general site gives an overview of many program initiatives and provides downloadable public education resources and professional reports ([www.marshfieldclinic.org/nccrahs](http://www.marshfieldclinic.org/nccrahs)). The NAGCAT site ([www.nagcat.org](http://www.nagcat.org)) is the primary means for disseminating all resources related exclusively to youth working on farms. The Childhood Agricultural Safety Network (CASN) also has a dedicated website ([www.childagsafety.org](http://www.childagsafety.org)) managed by our staff to host campaigns to Keep Kids Away from Tractors and promote ATV safety. Our fourth website was built for agritourism operators and hosts health and safety walkthrough information, signs and resources for operators to keep visiting children safe ([www.safeagritourism.com/](http://www.safeagritourism.com/)). Cultivate Safety ([cultivatesafety.org/](http://cultivatesafety.org/)) is our newest site, built for farm parents, with injury prevention information, work guidelines, prevention briefs and safe play area guidance for parents with children ages 0-17 years. Our websites experience continual growth in content and a steady increase in visitors from all over the world. Over the past year, the AKME project has worked on these sites:

1. *Integrating Safety into Agritourism* - Redesigned the website to include new layouts, a mobile-friendly design, checklists and virtual walkthroughs
2. *Cultivate Safety* - The site is now mobile friendly and will soon include a resource and mobile app library
3. *National Children’s Center for Rural and Agricultural Health and Safety* – Updated, refreshed and published this website
4. *AgInjuryNews.org* - Enhanced the functionality of this website, including search and filters, and back-end data entry efficiencies. Bryan Weichelt, a recipient of a 2015 NCCRAHS mini-grant, is moving the AgInjuryNews system forward. Working with the AKME team, Prevention Briefs have been developed that will be linked to individual articles in the AgInjuryNews.org system. A recent commitment from the Bureau of Labor Statistics has moved this project toward further investigations of user needs and preferences – specifically users interested in the news clippings data
5. *Facebook* - Wrote 120 unique posts ([www.facebook.com/nccrahs/](http://www.facebook.com/nccrahs/))

**FARM-HAT:** Project staff organized a technical team to update the FARM-HAT application in support of the SAY project. The FARM-HAT project has subsequently evolved to merge with Farm MAPPER, creating a geospatial web-based platform capable of housing several farm safety inspection modules under one suite. AKME is playing a key role in facilitating this project’s progression and development, linking together efforts from several ag centers, and it has already been utilized in a submitted ag center project proposal. The prototype is available at [www.SaferFarm.org](http://www.SaferFarm.org).

**Ag Chats:** #AgChat takes place monthly on various agricultural topics. Project staff partnered with Nationwide Insurance (the nation’s largest insurer of farms) to produce a record-breaking Twitter #AgChat on Feb. 23. The moderated Twitter conversation was dedicated to grain bin safety. It reached 722,627 Twitter



accounts and tallied more than 22.5 million Impressions. "This is the first time we've partnered with an organization for an #AgChat, and the experience with NFMC was great," said Steve Ferreira, Nationwide Agribusiness.

Support for the Next Generation of Agricultural Work Guidelines project: AKME is providing support and direction for this project related to design and development, moving from the current legacy products to a newly designed, refreshed and mobile-responsive system.

Survey of services provided: Project staff surveyed Children's Center Principal Investigators and their support staff to determine if AKME has met/is meeting/will meet their needs. Overall feedback showed that AKME has been meeting the needs of the PIs.

Ag Media Summit: Project staff attended this summit, networked, and exhibited. The Ag Media Summit is a joint meeting of the American Agricultural Editors' Association, the Livestock Publications Council and the American Business Media Agri-Council. This annual get-together is the largest meeting in the United States of the ag industry's top writers, editors, photographers, publishers and ag communicator specialists. This industry-wide gathering of agricultural communicators offers one of the best opportunities for professional improvement and industry networking.

## **Strengthening Organizational Capacity to Prevent Childhood Agricultural Injuries**

P.I. – B. Lee, M. Salzwedel

"Strengthening Organization Capacity to Prevent Childhood Agricultural Injuries" uses marketing approaches and principles of corporate social responsibility. The project takes advantage of current relationships with organization executives to reach into networks of leaders across domains of youth serving organizations, insurance companies, agricultural media, and agricultural bankers. The goal of the project is to increase the number and spectrum of groups that incorporate a focus on childhood farm safety into their ongoing systems, policies and communications with constituents. The primary focus of this project has been re-directed for this year to the Next Generation Agricultural Work Guidelines (NGAWG) project which is described in the next section.

For the main "Strengthening Organizational Capacity" project, we developed and disseminated an insurance brochure based on the results from the National Association of Mutual Insurance Companies (NAMIC) survey conducted last summer at their Agricultural Risk Inspection School. The brochure includes: a) a graphic developed to share information on the issues associated with child ag injuries (explains the problem); b) a section with graphs that display significant survey results (including potential motivators); and c) a page that showcases NCCRAHS resources that can be utilized by insurance companies to address the priority issues they identified and an order form they can use to request resources. This report was shared with the members of NAMIC group who participated in the survey, and we have had numerous requests for resources and information from insurance personnel. We continue to work with the NAMIC organization, presenting at the 2016 NAMIC Ag Risk Inspection School, and again conducting a survey of the participants on their knowledge and use of child agricultural safety strategies. Because most the participants in the 2016 conference had not attended the 2015 conference, the NAMIC staff helped facilitate an online survey sent back to the 2015 participants. The surveys were conducted with a self-generated ID code, which will allow for matching respondents and measuring change from 2015 to 2016. Analysis of the data is in the beginning stages.

A valuable outcome of the 2016 NAMIC presentation was an invitation to participate in the Grinnell Farm Safety Academy in August. At the academy, we presented to approximately 50 insurance personnel and a few



policy holders (farmers). Through the use of the Turning Point (audience response system) we collected information on the current and potential use of agricultural safety resources. Numerous resources were also distributed at this conference to the attendees. The organizers of the Academy have promised to provide access to these same attendees next year, if we wish to re-survey them to assess change. In the past year, we have also begun or continued work with other insurance companies, such as Rural Mutual, Nationwide, Wausau Insurance and Country Financial.

A version of the NCCRAHS resource chart was customized specifically for Progressive Ag Foundation (PAF) to display NCCRAHS resources and links in the most “usable” format. At their request, this chart was updated and shared with PAF, who then shared this chart with over 500 safety coordinators.

We have begun working closely with youth organizations or those with close ties to youth organizations (e.g. WI Fairs Board: 4-H, FFA groups) ahead of schedule. We are developing and updating resources of interest to these groups, including the Next Generation of Agricultural Work Guidelines (more information in next section) and the Stand TALL curriculum, developed in partnership with the Grain Handling Safety Coalition. The first module of the grain safety curriculum was submitted to the SAY Clearinghouse and is in “High Alignment” with AFNR standards. The curriculum is now listed on the SAY website with a link to it. Information and links for the curriculum were also emailed to a national FFA representative who subsequently shared it with state FFA leaders, instructing them to distribute the information within their states. Two additional curriculum modules were also developed, and are under review at OSHA.

### **Next Generation of Youth Agricultural Work Guidelines**

M. Salzwedel, B. Lee, T. Ellis, S. Heiberger

The overall goal of this initiative is to help young people work safely in agriculture. Safe and appropriate work is inherently good for children, and agriculture offers many opportunities for them to develop work skills while gaining an appreciation for farming and related industries.

This next generation of guidelines will account for: a) evidence-based recommendations for activities and issues germane to child development (physical, social, intellectual, emotional); b) current child ag injury/fatality data; c) changes in production agriculture; d) proposed changes in child labor regulations; e) lessons learned about the consensus development process; f) information technology and health communications theory/practice; g) updated recommendations for adults; and h) priority topics. In the Fall 2015, NIOSH approved a request by the Children’s Center to redirect funds from the SOC project to a project for updating work guidelines for youth. Updating this material is needed so that we have relevant, mobile-friendly resources as we work with youth organizations such as National FFA and 4-H.

Over the past year, much has been achieved. Three working groups were formed: the Internal Team, the Technology Team and the Steering Committee. Almost everyone who was approached to join one of the working groups was willing to join. We were able to recruit people to join the Steering Committee with whom we have not previously been involved, in addition to several “veterans”. The mix of “seasoned” and new members adds richness to the process. In addition, the Steering Committee also enabled us to improve some relationships, such as with the American Farm Bureau Federation (AFBF), who opposed the proposed updates to the child labor in agriculture laws in 2012. When initially approached, they were reluctant to join the project, but further clarification on the voluntary nature of these guidelines elicited their agreement to participate, and they have been a valuable addition to the committee.

The Internal Team and Steering Committee are providing great information and guidance, and the Technology Team is progressing well on developing the design of the mobile platform. The first guidelines to be updated have been identified, as well as content consultants for topics. The timeline has been established and communicated to all working groups, and private funding was secured.

**Guideline Content** We are working on updating the content for 11 work guidelines and creating a new one for UTV. More than half of the guidelines have completed content updates (both the “Job Hazard Analysis” charts and the Checklists). The UTV content is also completed. Of the topics not yet finalized, all but one have content currently being reviewed and updated by content experts.

Graphics and Templates The new versions of the graphics have been drafted and the first round of edits completed. The second round is ready to be shared with the Steering Committee. The second version of the poster template was reviewed by the Steering Committee and recommended changes will be incorporated. An initial draft of a document template is also under development.

Website The initial pages from the website wireframe have been incorporated into the Cultivate Safety website. Content is under development on supervision, child development, benefits of farm life, working outdoors and a communication plan. Once approved by the Internal Team and Steering Committee, these web pages will be added to the website. Programmers have begun work on building the interactive guideline framework for the website.

In-Person Steering Committee Meeting A meeting was held August 24, 2016 with 15 people attending, including Dr. David Hard from NIOSH. The attendees discussed the current status of the project and generated recommendations on the graphics, poster template, website design, pilot testing and promotion and dissemination. A follow-up evaluation with attendees indicated they felt a) their input was valued; b) good information was generated on “next steps” for the project; and c) the meeting was a good use of their time. The members of the Steering Committee have also committed to assisting with promotion of the guidelines when complete.



Overall, the project has been progressing well. We were initially delayed somewhat by the need for the “Resource Library” to be in place before being able to program the website and by the lack of programmer time dedicated to this project. Both issues have been resolved.

### **Protecting Children While Parents Work**

P.I.s – A. Liebman and B. Lee, J. Simmons, M. Salzwedel

This project aims to increase the engagement of agribusiness leaders in facilitating availability of and access to off-farm childcare services for migrant and immigrant agricultural workers with children younger than 12 years. It is based upon the successful RCMA (Redlands Christian Migrant Association) model in Florida and has confirmed the participation of the RCMA Executive Director, the Executive VP of National Association of Agricultural Employers and the federal Director of the National Migrant and Seasonal Head Start Program.

During the past year, our project continued to focus on information gathering and relationship building among all three stakeholder groups of interest: industry leaders, childcare providers, and farmworker parents. One of our greatest successes has been the data we gathered through our industry surveys. This information will inform future messaging as well as our approach to coalition building. The team was able to present at the ISASH Conference and reach a number of agricultural employers. At the February 2016 NCAE meeting, four agricultural employers approached the P.I. with comments about the importance of childcare services for employees. This is a key step forward from previous interactions with the same group. The “We’re All In” report was available at the display table and approximately 25 were picked up by attendees (employers).

We successfully presented at the National Migrant and Seasonal Head Start Association Conference which allowed us to establish new relationships with various childcare organizations nationwide. There was great interest among childcare providers in building relationships with local growers, and learning how these relationships can benefit the parents they serve. As our project continues to evolve, we have also been able to expand our relationships with some





individual childcare provider organizations. For example, a project team member conducted a site visit to Community Action Partnership of San Luis Obispo County in April of 2015. When she presented at the NMSHSA Conference in February 2016, she reconnected with representatives from this organization who are interested in furthering their relationship with the project. Additionally, we presented at the MAFO Conference in 4/2016 and were able to reach an audience of key service providers for farmworker parents, including childcare providers.

We have also successfully partnered with the Farmworker Association of Florida (FAF) to implement our parent survey among farmworker parent populations. This partnership has been especially beneficial as it allows us to connect with parents who may not be already connected with childcare resources, which is an extremely hard group of parents to reach. Interviews were conducted with 122 farmworker parents via a contract with FAF. This data will be analyzed and used to better understand barriers to childcare for this population, as well as what motivates farmworker parents to choose a particular childcare provider.

The project team used the time spent together at the Scientific Advisors meeting in Marshfield, WI to review progress on the project and discuss future directions. The team came together and revised the project's specific aims and logic model so that future efforts can be productive.

### **Beginning Farmers and Ranchers**

P.I. – C. Bendixsen, K. Barnes

The Beginning Farmers and Ranchers project strives to understand the attitudes of the millennial generation, non-traditional family farmers whose livelihood has been launched by USDA-funded support. The team is comparing and contrasting demographics and practices of African Americans, Native Americans, Hispanics and other unique groups in order to guide future culturally relevant interventions addressing children and farm safety.

Over the past year, our partnership with Midwest Organic and Sustainable Education Services (MOSES) has been very active. Project staff attended the annual conference held in February, an important venue for investing in face-to-face relationship building with partners. Staff conducted 24 interviews with beginning farmers and ranchers at the conference and did one presentation. The research team has also been tapped to deliver child safety talks at MOSES field days. In addition, one of the project staff has developed a flourishing partnership with a group of MOSES, *In Her Boots*. She is attending a series of *In Her Boots* classes around the Midwest that provide information to young beginning farmers and ranchers on key topics, including incorporating family onto farms. Thus far, she has handed out resources, led a small breakout session on child agricultural safety, done participant observation, conducted interviews with participants with the goal of better understanding: a) how mother-farmers incorporate children onto their farm; b) what activities distinguish them as a good spouse or partner, good mother, and good farmer; and c) their health and safety needs. The research team also used a survey to poll attendees on their attitudes and beliefs about farm safety and children on farms. Seventy-seven surveys were returned for a 46% response rate. Overall, the *In Her Boots* events provided an ideal opportunity to personally engage farmers on the topic of integrating family safely onto farms. Many of these women have young children or are considering starting a family, so we are able to engage with them early while they are planning their farms so they can incorporate additions such as safe play areas beginning at the inception of their farm.

The research team has also developed a relationship with the Wisconsin Farm Bureau Federation (WFBF), a large organization representing many farmers across the state. We have successfully networked at the county and regional levels, and connections to leadership at the state level show promise. We helped spur and plan a regional Wisconsin Farm Bureau Federation Young Farmers and Agriculturalists farm tour day. The group was welcoming of NFMC/NCCRAHS speakers who discussed Hispanic workers, agritourism, ROPS, and child safety at the various stops during the tour.

Project staff have also maintained their relationship with the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) which is distributing their wild-ricing safety pamphlet proudly, and is applying for an ASHCA grant to continue work with chainsaw safety. The Commission is also interested in doing another project around child safety including sugar-bushing and hunters' education. The P.I. has also reached out to the chief warden as a community advisory board member on behalf of the Center for Human Genetics.

Early in the project, the research team developed a relationship with the Georgia Women in Agriculture (GWIA) group in Athens, Georgia, and completed a week of participation-observation fieldwork among African American urban gardeners. More recently, we have not been in contact with any of the Georgia constituents as our key gatekeeper contact is transitioning to a new organization. We have learned that working with non-profits can be difficult. Their funding and staffing can be mercurial, as can community support for the organization. We hope to re-engage with GWIA, and this Georgia constituent participates on the Next Generation work guidelines advisory board.

Overall, our project collaborations and relationships have deepened in important ways. These new connections have the potential to expand dissemination of our resources to new stakeholders. We continue to look for new ways of engaging with groups located outside the state of Wisconsin. Conference acceptances also reflect a wider audience for our findings than previously anticipated, demonstrating the interest of others in our field in the work of the project.

### **SAY National Clearinghouse**

P.I. – Dennis Murphy, Dave Hill

The goal of the Safety in Agricultural Youth (SAY) Clearinghouse project is to operationalize an infrastructure that ensures public access to an evidence-based and technologically appropriate safety and health curriculum for youth working in agriculture. This project is evaluating the roll-out of the SAY Clearinghouse at a regional level, then, based upon results, generating recommendations for SAY's modification, termination or long term sustainability.

The SAY Project has made great strides over the past year in enhancing the National Clearinghouse and promoting its existence and purpose during this period. The project finalized an update of the SAY Curriculum Alignment & Submission Tool (CAST) to reflect changes in the updated AFNR standards. The CAST is now being used to align new curricula and other supporting resources for inclusion on the SAY Clearinghouse. We have also enhanced the National Clearinghouse website with the development of a system to search the products on our clearinghouse. The system enables people that visit our Clearinghouse to search for specific curriculum and other supporting resources by category (either subject matter, by AFNR alignment, and/or by English or Spanish). We are continuing to develop the search function by learning how teachers and other educators search for safety-related materials that they can use with youth in their educational programs.

Project staff are involved in assessing the new FARM HAT mobile friendly website that is being developed by the Marshfield Clinic staff. We pilot tested the new website tool and provided suggestions that will lead to a more user friendly tool as development progresses.

We are continually seeking new educational resources that can be added to the SAY National Clearinghouse. For example, we identified three separate programs dealing with Agricultural Pesticide Safety and worked with the developer of these materials to have them aligned with our CAST tool. We provided information to the developer of a grain safety curriculum for alignment and inclusion in the Clearinghouse. We've also identified several youth safety educational resources created by Farm Safety for Just Kids and Progressive Agriculture that we feel are appropriate for educators to use in their formal and informal educational efforts.

We are planning to do more evaluation work in the next year that should help the SAY National Steering Committee with deciding how best to market the Clearinghouse, which will ultimately lead to more curricula and educational resources available on the clearinghouse as well as more educators accessing the Clearinghouse for these resources.

We held six meetings of our National Steering Committee, one which was a face-to-face meeting. The synergy within the Committee is very powerful and continued engagement of committee members is critical to the sustainment of this effort. For example, the Committee was important in the development, refinement, and ultimate adoption of the SAY Belief Statements and Guiding Principles document which is a guide for promoting safety for working youth. The Committee also created a marketing plan for the document which was completed in early June and unveiled at the ISASH conference in Lexington KY. This document has had good impact on promoting the SAY Project, SAY National Clearinghouse as well as the National Children's Center. The document has also resulted in the expansion of our collaborative relationships with organizations (national, multi-state, or state) that want to be listed as a 'supporting organization' of the Belief Statements and Guiding

Principles. As of the end of September 2016, we have 27 supporting organizations. We continue to approach statewide, multi-state, regional and national organizations for additional support, and with a strong effort put forth at the upcoming National FFA Convention and Expo.

The SAY project is organizing a major youth safety emphasis at the 2016 FFA Exposition in Indianapolis. To accomplish this, we needed to bring together all identified exhibitors that currently attended the expo that emphasized safety and encourage them to join a cohesive effort. We then offered this effort to others within our circle to join this effort. This has resulted in us having a significant (50' x 50') area with 7 separate exhibitors: SAY, Ohio State, AgrAbility, National Children's Center, AgriSafe, CareerSafe, and GHSC. Each entity will have a safety related activity that will engage FFA'ers and they (students) will be encouraged to sign a safety pledge as part of a National Young Worker Ag Safety Day that we are hoping to receive endorsement from both the U.S. Secretary of Labor and of Agriculture.



Overall, people are very interested and supportive of the SAY project, and we continue to see more people wanting to be kept informed of the SAY activities.

### **Filling Gaps in Child Agricultural Injury Data**

P.I. – B. Marlenga, R. Berg

This project aims to explore the most promising, existing public health surveillance systems to determine their utility for assessing the health and safety of children in agricultural settings. The focus of the project is on determining how these existing surveillance systems can help to “fill in the gaps” by identifying injury events missed by other methods and/or providing more details about risks, activities, and circumstances surrounding child agricultural injury events. This information, in turn, can help to guide our prevention efforts.

Over the past year, project staff have made good progress in understanding and analyzing the *Health Behaviors in School-Aged Children (Canada) Data Set (HBSC)*. Numerous conference calls have been devoted to working through the analyses of social contexts, overt risk-taking, and injury among farm and rural children. This work has resulted in a manuscript entitled “Social environments, risk-taking and injury in farm adolescents” which was submitted to the journal *Injury Prevention*. Project staff has also been analyzing the HBSC data related to the mental health of young people on farms, and have generated data summaries of key HBSC mental health indicators. The project is collaborating with two clinical psychologists on developing a manuscript on this topic.

Project staff also made good progress exploring the *National Trauma Database (NTDB)*, the *National Electronic Injury Surveillance System-All Injury Program (NEISS-AIP)*, and the *National Emergency Medical Services Information System (NEMSIS)*. Data summaries have been generated from these data sets. However, a recurring theme with national datasets is that they lack substantive information about the circumstances of injury, thus limiting their utility for prevention. Neither the NTDB nor the NEISS-AIP contain descriptions of the circumstance of injury. Although sometimes narrative data are collected at the local level, those data often are either not submitted to the national dataset or are not available due to rules of nondisclosure and confidentiality. There may be opportunities to work with individual states to access some narrative data to learn more about the circumstances of injury. For example, the project developed a promising relationship with the Wisconsin Division of Public Health, EMS and Trauma Registry Epidemiologist, and recently secured EMS and Trauma Registry narratives from the state of Wisconsin, although the narratives are not as detailed as hoped.

Dissemination efforts related to child ag injury continue. Project staff wrote and submitted a manuscript about newspaper clippings and their role in child agricultural injury prevention. In addition, a 2016 Child Ag Injury Fact Sheet was published and continues to get press coverage in agricultural and mainstream media.

## **Enhancing Supervisors' Skills and Employer Policies: Young Agricultural Workers**

P.I. – D. Rohlman, S. Campo, M. TePoel

The goal of this project is to develop, evaluate, and disseminate an online training for supervisors of young agricultural workers. This project, which includes a randomized controlled trial, blends the elements of Total Worker Health® with agricultural safety. Content on substance abuse, fatigue and cell-phone use will augment existing safety resources and a model policy for employers. Results will inform its impact on both English- and Spanish-speaking supervisors.

Over the past year, the Young Workers project has been revising the online training and developing case studies for use in the training. Part of this work has been in response to the NIOSH revision in the definition of Total Worker Health. Project staff conducted a comparative look at NAGCAT, SAGHAF, Youth Operating Farm Equipment Guidelines, and the literature to determine overlapping and complementary supervisor skill recommendations. The project has also been investigating common core skills needed by supervisors across agricultural industries and tasks. The advisory board meeting brought together agricultural safety and health experts from around the country that provided valuable feedback on the project and training.

The Young Workers project is now collaborating with the Next Generation of Agricultural Work Guidelines (NGAWG) project which is updating and creating an interactive, mobile responsive website with the NAGCAT guidelines. We are working collaboratively to see how these activities can be designed to maximize both projects. The Project Coordinator for this project has joined the NGAWG advisory board, and the NGAWG Project Manager has joined our project advisory board to facilitate these efforts.

### Examples of the project's impact thus far are as follows

1. Through our nationally disseminated Agricultural Medicine course offered by the Great Plains Center, we have developed training materials addressing youth in agriculture. These materials incorporate guidelines and examples developed by the National Children's Center. These materials are available to our partners in other states to use within their training.
2. We hosted an occupational safety and health conference in collaboration with the Great Plains Center for Agricultural Health, the Healthier Workforce Center for Excellence and the Heartland Education and Research Center. The conference focused primarily on student research. The keynote speaker, Dr. David Douphrate, a national expert on health and safety in the dairy industry presented on the challenges of new and immigrant workers and the need for training.
3. Young worker safety in agriculture was showcased in the Iowa Farmer Today publication. The article directs readers to the Iowa's Center for Agricultural Safety and Health (I-CASH) website which contains resources, including those from the National Children's Center.

## **Evaluation**

P.I. – S. Lindberg, L. Scholl, R. Lecoanet-Moskowitz, J. Hogle

The goal of the Evaluation Core at the NCCRAHS is to guide documentation and analysis of the success of the center and its projects in achieving objectives for research, education, and public service. Evaluation data provide empirically-driven feedback to guide decision-making, policy formulation, and improvements at the center, all of which are dedicated to improving the safety and health of children who live on, work for, or visit agricultural settings.

Over the past year, the evaluation team has worked with the NCCRAHS leadership to improve the quarterly tracking and reporting processes across the projects. A Filemaker Pro tracking database, adapted from a PNASH database, was initially used to track progress toward projects' goals; however, this database was ultimately replaced with a more user-friendly quarterly reporting process. Revisions to the reporting format include an emphasis on 1) the activities in which projects are engaged and 2) directors' and staff' assessment of progress and challenges, 3) development and expansion of partnerships, and 4) stories of impact and success. In addition, quarterly reports now prompt projects to update an inventory of their presentations and development of other materials. With these revisions, the quality of the quarterly reports has improved substantially. Projects have also reviewed and updated their logic models and specific aims to incorporate the evolving goals and objectives of their initiatives.

The evaluation team visited the Center in Marshfield and met with each project to discuss the evolution of their projects. These face-to-face visits, which ideally are held four times per year, are critical in maintaining integration of the evaluation activities with the overall center. Throughout the five-year grant cycle, evaluators will continue to check in with PIs and staff about changes/evolutions in the projects' logic models, goals and indicators.

The evaluation team remains available to PIs and staff to assist with supplementary evaluations. For example, the evaluation team sent out a survey to the Scientific Advisors following the April meeting in Marshfield. Responses were collected and a report sent to NCCRAHS leadership in early May. Evaluators have also begun discussions with the Marshfield group about developing and using reports from a technical assistance database used by the Center to track contacts with stakeholders and requests for resources. Similarly, the evaluation team will be conducting a cross-project analysis looking at common themes and project developments.

**NCCRAHS RESOURCES, PRESENTATIONS, and MATERIALS DEVELOPED in GRANT YEAR TWO**

| Type of Resource                | Core                | Title   | Date    | Notes                                       |
|---------------------------------|---------------------|---|---------|---|
| Curricula                       | Admin Core          | 1. Falls & Dust Hazards<br>2. Other Hazards, Child Labor Laws and PPE | 5/2016  | For H.S. ag classes and community groups    |
| Document                        | SAY                 | SAY Belief Statements   | 6/2016  | ISASH Conference                            |
| Fact Sheet                      | Filling the Gaps    | Child Ag Injury Fact Sheet  | 6/2016  |   |
| Flyer                           | Admin Core          | NCCRAHS Promotional Flyer   | 2/2016  |   |
| Handout                         | SAY                 | Promotional handout about SAY Clearinghouse                           | 10/2016 |   |
| Interview for newspaper article | AKME                | From digging to grain bins, farmers faced varied dangers              | 8/2016  | Fargo Forum, North Dakota                   |
| Interview for newspaper article | AKME                | Article: Farm children safer, but die too often in accidents          | 7/2016  | Marshfield News Herald; USA Today           |
| Interview for newspaper article | AKME                | Article: Marking farm safety a priority                               | 7/2016  | Hub City Times, Marshfield, WI              |
| Interview for newspaper article | AKME                | Grain bin safety and children   | 9/2016  | Illinois Farmer Today                       |
| Interview for radio program     | AKME                | Child Ag Safety   | 8/2016  | Rural route radio                           |
| News Story                      | Young Workers       | Safety Watch: Keep new, young employees safe on the farm this season. | 6/2016  | Story on Young Workers in Iowa Farmer Today |
| Newsletter                      | SAY                 | Informational Update  | 3/2016  | Sent to Listserve                           |
| Newspaper article               | Protecting Children | Childcare for Farmworkers' children studied                           | 2/2016  | Capital Press                               |

|   |                     |   |        |  |
|---|---------------------|---|--------|--|
| <b>Panel Presentations (facilitation)</b> | AKME                | 1. Algorithmically Presenting Prevention Briefs on AgInjuryNews.org<br>2. Emerging Software Applications in Agricultural Health and Safety;<br>3. Alternative Agriculture: Opportunities for Adapting and Using Agricultural Safety Resources | 6/2016 | International Society for Agricultural Safety and Health (ISASH)   |
| <b>Poster Presentation</b>                | SAY                 | SAY Belief Statements   | 6/2016 | ISASH Conference   |
| <b>Poster Presentation</b>                | Young Workers       | Protecting and Promoting the Health of Young Agricultural Workers Through Supervisor Training   | 6/2016 | International Society of Agricultural Safety and Health Conference |
| <b>Presentation</b>                       | Protecting Children | Agricultural Employers' Barriers and Motivators for Providing Childcare Services  | 6/2016 | ISASH Conference   |
| <b>Presentation</b>                       | SOC                 | Child and Youth Safety on the Farm  | 8/2016 | 2016 Grinnell Farm Safety Academy                                  |
| <b>Presentation</b>                       | BFR                 | On Her Farm: Child Farm Safety Among New Women Farmers  | 8/2016 | Nordic Meeting on Agricultural Occupational Health & Safety 2016   |
| <b>Presentation</b>                       | SOC                 | Emergency Preparation and Planning  | 2/2016 | Wisconsin Agricultural Tourism Assn Summit                         |
| <b>Presentation</b>                       | Admin Core/<br>SOC  | Integrating Family Safety on the Farm   | 2/2016 | Midwest Organic & Sustainable Education Service                    |
| <b>Presentation</b>                       | AKME                | Integrating Safety into Agritourism   | 2/2016 | Wisconsin Agricultural Tourism Association (WATA) Summit           |
| <b>Presentation</b>                       | AKME                | Child Safety on the Farm  | 2/2016 | Midwest Organic and Sustainable Education Service (MOSES)          |
| <b>Presentation</b>                       | AKME                | Grain Bin Safety  | 2/2016 | AgChat   |
| <b>Presentation</b>                       | SOC                 | Emergency Preparation and Planning  | 2/2016 | Wisconsin Agricultural Tourism Assn Summit*                        |
| <b>Presentation</b>                       | Protecting Children | Strengthening Partnerships to Improve Child Safety: Coalition building among parents, providers, and employers  | 2/2016 | National Migrant and Seasonal Head Start Association Conference    |
| <b>Presentation</b>                       | Protecting Children | Protecting Children While Parents Work  | 4/2016 | MAFO Conference  |
| <b>Presentation</b>                       | Admin Core/<br>SOC  | Animal/Patron Safety  | 1/2016 | Wisconsin Fairs Board Conference                                   |
| <b>Presentation</b>                       | SOC                 | Farm Festivals and Special Events   | 7/2016 | 2016 NAMIC Ag Risk Inspection School                               |
| <b>Presentation</b>                       | Admin Core          | 1. Stand TALL: Be Empowered<br>2. Exploding Dust, Who Knew?   | 6/2016 | WI State FFA Convention  |
| <b>Presentation</b>                       | Admin Core          | Employer Survey Presentation  | 6/2016 | ISASH Conference   |

|                   |                     |   |         |  |
|-------------------|---------------------|---|---------|--|
| Presentation      | SOC                 | 1. Stand TALL: Be Empowered   | 6/2016  | WI State FFA Convention*   |
| Presentation      | SOC                 | 2. Exploding Dust, Who Knew?  | 6/2016  | WI State FFA Convention*   |
| Presentation      | BFR                 | "When this breaks down, it's black gold": Gendered food production as liberation                        | 6/2016  | Portuguese Anthropological Association Congress                                |
| Presentation      | SAY                 | SAY Update  | 6/2016  | OH Teachers Summer Conference  |
| Presentation      | BFR                 | Despite the Risks: agrarian ethics, lives, and limbs  | 3/2016  | Annual Mtg of Society for Applied Anthropology                                 |
| Presentation      | BFR                 | Race, Gender, and Safety: Intersections in the Changing Landscape of Agricultural Health and Safety     | 3/2016  | Annual Mtg of Society for Applied Anthropology                                 |
| Presentation      | SAY                 | Connecting the Pieces: A national effort in agricultural safety and health programming for youth poster | 5/2016  | American Association for Agricultural Education Conference in Kansas City, MO. |
| Presentation      | SAY                 | SAE Safety in Agriculture for Youth   | 9/2016  | The National Council for Agricultural Education (NCAE)                         |
| Presentation      | SAY                 | SAY Project Overview  | 11/2015 | NAAE Annual Conference   |
| Questionnaire     | Protecting Children | Parent Questionnaire  | 8/2016  | Farmworker Association of Florida  |
| Report            | Protecting Children | We're All In  | 11/2015 |  |
| Report            | SOC                 | Insurance Report  |         |  |
| Survey Instrument | SOC                 | Insurance Companies, Children (0-18 years) and Agricultural Safety                                      | 7/2016  | NAMIC Ag Risk Inspection School – 2016 Attendees                               |
| Survey Instrument | SOC                 | Insurance Companies, Children (0-18 years) and Agricultural Safety                                      | 8/2016  | Online –2015 NAMIC Ag Risk Inspection School Attendees                         |
| Website redesign  | AKME                | Integrating Safety into Agritourism   | 2/2016  |  |
| Website update    | AKME                | NCCRAHS   | 2/2016  |  |
| Website update    | SAY                 | SAY National Clearinghouse  | 10/2015 | Curriculum Alignment Submission Tool and Searchable Capabilities               |
| Wikipedia article | AKME                | NCCRAHS   | 2/2016  |  |
| Wikipedia article | AKME                | NCCRAHS Director, Barbara Lee   | 2/2016  |  |