

Agriculture, Forestry, Fishing, Safety & Health



NIOSH Agricultural Center Initiative Evaluation Project January 2011

Prepared by High Plains Intermountain Center for Agricultural Health and Safety



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Agricultural Centers: A History

Based upon statistics available, the Agricultural Occupational Sector (which now includes farming, ranching, forestry, logging, and fishing) continues to rank among the most hazardous industries in the United States. Particularly in modern farming and ranching, the owner/operators of these outfits may be a family, an industrialized operation, or an association of those components who are all at risk for occupational injury or disease. Workers in this sector have continually had higher fatality and injury rates than U.S. workers in all other sectors. Until the early 1990s there was no organized approach to reduce the occupational injury and disease for this agricultural sector.

In 1990, the National Institute for Occupational Safety and Health responded to Public Law 101-517 and developed a funding program to establish extramural centers for Agricultural Disease and Injury Research, Education, and Prevention. Over the next twelve years, Centers were established in diverse regions across the country via a competitive application process. In 1995 an external evaluation was completed of the Centers and has become known as the Kennedy Report. In response to this report, one Center proposed the establishment of a team consisting of representatives from each Center to design and develop a multisite approach to the evaluation of all the Centers as an Initiative: The Agricultural Center Evaluation (ACE) Project.

Representatives from each Center met during a series of workshops between the years 1997—1999 to develop evaluation research questions and define indicators to measure the work of the Centers overall. The lead Center then developed a database that allowed each Center to collect their own data in a standardized and consistent manner. The lead Center is responsible for the aggregation of all Centers' data into one database. The first pilot report was published in 1999 and reports have continued almost every year since with interruptions due to funding issues. There are several keys to the longevity and success of the ACE team that deserve acknowledgment.

- The continued support of NIOSH as the team has developed and revised their approach
- The multidisciplinary nature of the team which provides expertise in a variety of disciplines and topics which are useful to the whole
- A collaborative spirit that began the process and has continued with each year and report.

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with

D. Perez

High Plains Intermountain Center for Agricultural Health & Safety

NIOSH Agricultural Center Initiative Evaluation Project Fiscal Year 2010

EXECUTIVE SUMMARY

NIOSH Agricultural Center Initiative Evaluation Report - FY 2010

As previously outlined, the Agricultural Health and Safety Center Initiative began with the development of two Centers in 1990 funded by the National Institute for Occupational Safety and Health (NIOSH). Due to the vast regional differences in agriculture production and practices across the United States, NIOSH chose to add additional Centers roughly corresponding to Public Health Service Regions. In FY 2010, the Initiative consisted of seven Agricultural Centers mandated to undertake research, develop prevention and education programs and provide consultation to constituents across the United States in an expanded North American Industry Classification System (NAICS), occupational sub code 11, Agriculture, Forestry, Fishing and Hunting.

The mission of the Initiative is to reduce injury and disease in three of the most hazardous occupations in the United States, agriculture, forestry and fishing. This mission is to be accomplished by addressing the following objectives:

- 1. Conduct research related to the prevention of occupational disease and injury among producers, workers and their families.
- 2. Develop, implement and evaluate educational and outreach programs for promoting health and safety for production agriculture/forestry/fishing including farmers, workers and their families. This would include providing consultation and/or training to researchers, health and safety professionals, graduate/ professional students, and agricultural extension agents and others in a position to improve the health and safety of workers.
- 3. Develop, implement and evaluate model programs for the prevention of illness and injury among agriculture/forestry/fishing producers, workers and their families.
- 4. Develop linkages and communication with other governmental and non-governmental bodies involved in health and safety with special emphasis on communications with other agricultural/forestry/fishing health and safety programs (PAR-06-057).

Initiative accomplishments FY 2010 – Program monitoring

Seven Centers provided data on 134 projects into a copy of the ACCESS[™] database which was forwarded to HICAHS for aggregating and reporting. The FY 2010 Initiative data combines the productivity of all Centers to provide the necessary results to address eleven evaluation questions; the results of three of these questions are presented here, the reader is encouraged to review the full report for the remaining responses and discussion related to these outcome measures.

What were the target populations or audience contacts by specific activities by the Center Initiative during FY 2010?

The Agricultural Center Initiative had a broad range of target groups during FY 2010. Just over 500,000 contacts were reported and the top five reported target groups account for 90% of the total contact counts. The activities of the Initiative have been divided into direct and indirect (product distribution) contact with constituents. Of the 122,439 direct activities reported the top ten included media interviews, material distribution, presentations at conferences, outreach education and training. Indirect contacts totaled 378,739 and the reported products included published articles, newsletters, curriculum, CD-ROMs and power point presentations for distribution. The vast majority of all efforts targeted either agricultural owners and operators or more than one group within the agricultural community.





What products by type were produced by the Center Initiative during FY 2010?

A total of 389 products were developed during the 2010 monitoring period. The majority of the efforts reported (63%) were attempts to disseminate information and educational materials. Based upon the variety of product types, it is reasonable to expect that the information and education produced by the Center Initiative is reaching a variety of audiences.



Number of products produced by category (N=389)



Which NORA goals were addressed by Center research during FY 2010?

For the last two reporting years, the ACE team has reported research projects under the NORA II categorizations. FY 2010 saw at least one project addressing all nine NORA II strategic goals. Strategic goal 3 – outreach, communications, and partnerships – had the most reported projects with 57. Strategic goal 2 – vulnerable workers – had the second most projects reported with 51.

Aggregate report for current funding cycle FY 2007-2010



The second section of the report provides an overview of the work of the Center Initiative for the years 2007 through 2010, the first four years of the current five year funding cycle. The information provided responds to a selection of the overall aggregate evaluation questions to illustrate the cumulative accomplishments of Center personnel related to research, outreach, products, and additions to the knowledge base related to agriculture/forestry/fishing health and safety.

For what disciplines were degrees awarded by Centers between FYs 2007-2010?

The Center Initiative clearly responds to the needs related to agricultural/forestry/fishing for occupational health and safety by providing educational opportunities for multiple disciplines that can continue to provide research, outreach and services to this occupational sector. Over the past four year period 133 students have graduated in a variety of disciplines that have been supported the Center Initiative.



How many research (including pilot/feasibility) projects by NORA II goals were supported by the Center Initiative during FYs 2007-2010?

It is important to identify the move from NORA I to NORA II as a framework within which research projects can be categorized. When the sector based framework was adopted at the end of 2008, the ACE team responded by re-categorizing those projects that had been funded since 2007. In this report a special effort was made to re-categorize all feasibility/pilot projects funded by the Centers. All nine strategic goals are addressed by at least one project; a considerable accomplishment as Forestry and Fishing (Goals 6-9) were not part of the charge to the Centers when the funding cycle began.





What was the reported monetary value leveraged (beyond NIOSH support) by the Center Initiative (in dollars and in-kind) between 2007 and 2010?

In FYs 2007 and 2008, just under a million dollars were leveraged each year by the Initiative. Just over \$2,000,000 dollars were leveraged in 2009 and fiscal year 2010 saw the most leveraged dollars with just over \$3.1 million. A total of \$5,122,347 has been reported leveraged over the four year span of this report, adding considerable additional funding from sources other than NIOSH to support the work of the Centers.



Project Success Stories—Research to Practice

This year's ACE report again includes a section presenting a project r2p (Research to practice) "success story" from each Center. These short reports represent multiple approaches to translation of projects to practice accomplished through the efforts of Initiative personnel.

Discussion

The 2010 fiscal year report represents the work and accomplishments of the staff, collaborators, and partners of the seven reporting Agricultural Centers undertaking research, prevention and education on behalf of those working in agricultural, forestry and fishing occupations across the United States.

NIOSH provided supplemental funding support to each participating Center to acknowledge the time and effort that individual team members put into the ACE data collection process; and the Centers are most appreciative of the funding provided.

The Centers which make up the Agriculture/Forestry/Fishing Initiative provided data in the ACCESS[™] database to HICAHS for aggregation. A number of limitations to this monitoring process are presented in the report and represent some of the methodological limitations of all multisite evaluation efforts.

Summary and Recommendations

The ACE team has now completed four full years of program monitoring under the current funding cycle. The results presented in the report describe a broad range of activities across diverse regions of the country during fiscal year 2010 as well as cumulative accomplishments over the current funding cycle.

The ACE project began as a response to an external evaluation review of the Center Initiative (Kennedy 1995). The National Academy of Science evaluation completed in 2008 also encouraged the Centers to work together with NIOSH to approach evaluation collaboratively. The ACE team, with support from NIOSH, has provided a multisite approach to monitoring and documenting the research activities, products, outreach, and translation efforts of Initiative projects.

• The primary recommendation of this ACE report is to build upon the experience, knowledge and collaboration the ACE process has provided and continue to pursue a multi-site approach to evaluation with the new funding cycle which begins with fiscal year 2012 (9/15/11-9/14/16).



Back Row (left to right): Susan Ackerman, Allen Robison, Sandy Freeland, Karen Gilmore, Teresa Donovan, Sara Shepherd, Patricia Ramstad/Front Row (left to right): Marcy Harrington, Vicky Buchan, Diana Perez, Kristin Danhoff

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