

I-CASH

Iowa's Center for Agricultural Safety and Health



2000
ANNUAL REPORT
10th Anniversary



I-CASH
Iowa Center for Agricultural Safety and Health

A partnership of:

The University of Iowa • Iowa State University • Iowa Department of Public Health
Iowa Department of Agriculture and Land Stewardship

IOWA'S CENTER FOR AGRICULTURAL SAFETY AND HEALTH

2000 Annual Report
and Compendium of Agricultural Health
and Safety Activities in Iowa



Iowa's Center for Agricultural Safety and Health
Department of Occupational and Environmental Health
College of Public Health
100 Oakdale Campus, #124 IREH
The University of Iowa
Iowa City, IA 52242-5000

Telephone: 319-335-4438 FAX: 319-335-4225

Website: www.public-health.uiowa.edu/icash

Iowa's Center for Agricultural Safety and Health

Vision Statement

To make Iowa the world's healthiest and safest agricultural environment in which to live and work through creative leadership and collaboration among I-CASH, its partners and Iowa's agricultural community.

Mission Statement

The Mission of I-CASH is to enhance the health and safety of Iowa's agricultural community by establishing and coordinating prevention and education programs.

2000 I-CASH Annual Report

Editor: Kay Mohling

Table of Contents

Opening Thoughts From The Director	4
History of Iowa’s Center for Agricultural Safety and Health: The First Decade	5
I-CASH Affiliate Projects	
<i>Iowa Department of Agriculture and Land Stewardship:</i>	
Pesticide Applicator Certification	8
Worker Protection Efforts in Iowa	8
Worker Protection Standard	8
<i>Iowa Department of Public Health:</i>	
Sentinel Project Researching Agricultural Injury Notification System (SPRAINS)	10
<i>Iowa State University:</i>	
Iowa State University Extension Farm Safety Program	10
Iowa Concern Hotline	12
<i>The University of Iowa (projects led by I-CASH core faculty and staff):</i>	
AgriSafe Network	12
Certified Safe Farm Project	13
Farm Safety Youth Grant	14
Promoting Community Acceptable Pork Production.. ..	14
Tractor Risk Abatement and Control (TRAC): Saving 2000 Lives by the Year 2010	15
<i>The University of Iowa (projects at other UI research centers):</i>	
Agricultural Health Study	16
Center for Health Effects of Environmental Contamination (CHEEC)	17
Center for International Rural and Environmental Health (CIREH)	17
Environmental Health Sciences Research Center (EHSRC)	18
Fatality Assessment and Control Evaluation (FACE)	18
Great Plains Center for Agricultural Health (GPCAH)	18
Injury Prevention Research Center (IPRC)	19
Keokuk County Rural Health Study	20
I-CASH Committee Member Programs	
Easter Seals FaRM program	21
Farm Safety 4 Just Kids (FS4JK)	21
Iowa Farm Safety Council	22
National Education Center for Agricultural Safety (NECAS)	22
Proteus	23
Sharing Help Awareness United Network (SHAUN)	23
Financial Report	24
Appendix A: I-CASH Presentations / Newspaper Publications	26
Appendix B: I-CASH Member Publications	29
Appendix C: AgriSafe Network Directory	31
Appendix D: I-CASH Committees	32
Appendix E: I-CASH Partners and Associates Directory	34

Opening Thoughts From The Director

By Kelley J. Donham, DVM



This is the tenth anniversary of Iowa's Center for Agricultural Safety and Health. Since 1990, there have been many changes in Iowa agriculture. In 1990, we were coming out of the economic crisis of the mid 1980's. Land prices were coming back, interest rates were down, and pork prices were up. However, the globalization of our economy was set, and consolidation in pork production was increasing rapidly, enhanced by the ripple effects of the extremely rapid shift towards the industrialization and integration of pork production in North Carolina. These effects resulted in lower pork prices, a loss of many of our independent producers, and an influx of new farm and agricultural processing labor into the state. In many of our communities across Iowa it is now nearly as common to hear Spanish spoken as it is English. Meanwhile, our traditional family farms are still the heart and soul of Iowa agriculture, but those living and working on these farms are getting older.

These changes have brought new challenges in agricultural health and safety. Stress and mental health issues are recognized as major concerns in our rural areas, and they increase the risk for other injuries and illnesses. Taking care of our new agricultural workers is a challenge. Just finding out where they are, how many there are, and what they do, is difficult. Caring for our elderly farmers is as difficult a problem as taking care of the youth on our farms. Challenges are changing, and I-CASH is changing to meet the new demands. We are facilitating the new organization Sharing Help Awareness United Network (SHAUN) to help address mental health issues. We are also working with Farm Safety 4 Just Kids, and Easter Seals in a new concept of linking elderly and youth in communities for injury prevention, and we are seeking ways to make farming a safe value added commodity through our Certified Safe Farm Program.

All these new activities and meeting new demands takes even more collaboration, communication, and joint project planning. To help enhance this, we have been undergoing a major strategic planning effort starting in March of this past year. We have redesigned how we will manage the center, how we work together better to plan, to communicate, and collaborate. The major output will be a new I-CASH Handbook, that will direct and facilitate how we work together in this state to reduce the health and safety hazards of our farm population.

Meeting these new demands this past year has been a challenge because we had an unusual circumstance where five staff left for other opportunities: Kendall Thu, former Associate Director left for a faculty position at the University of Northern Illinois; Natalie Roy, former Program Assistant left for Maryland with her newly graduated husband; Judy Thirtyacre, our secretary of eight years left for new opportunities; Julia Venzke, our newsletter, annual report, and web master left for a full time librarian job; and Kristie Fisher, who helped coordinate our training programs left to work with the AgriSafe Program in Spencer. We are happy to report that we have hired excellent people to replace those who have left. Eileen Fisher Ph.D. is our new Associate Director. Kay Mohling is our relatively new writer, and education program person, Brenda Countryman is our new secretary, and Sara Schneiders is our new research program person. We are most happy to have been able to attract such excellent people. They are doing a great job, and I am proud of them all.

The purpose of this annual report is as follows:

- To serve as a compendium of the many activities and programs in agricultural health and safety ongoing in the state.
- To facilitate and link people in the state who have common interests and concerns.
- To serve as a directory for people and programs in agricultural health and safety in the state.
- To report on the state of the health and safety of the farming community in Iowa.
- To report on physical matters of the center.

A History of Iowa's Center for Agricultural Safety and Health: The First Decade

By Kelley J. Donham, I-CASH Director

This year of the new millennium, Iowa's Center for Agricultural Safety and Health (I-CASH) celebrates its first 10 years of existence. This article will trace the history of the organization from the original thoughts, the early existence, and the major accomplishments. Finally, I will look into the crystal ball for possible future directions.

Ancient History

Since 1955, there has been an Institute of Agricultural Medicine (IAM) at The University of Iowa, (now called the Institute for Rural and Environmental Health). The IAM was founded with the mission of identifying and preventing health and injury problems in our agriculture population. The IAM was initiated as a research organization within The College of Medicine. In 1973 the focus was expanded to include training and outreach in agricultural medicine. From 1947 through 1986 the position of Extension Safety Specialist existed at Iowa State University to generate information programs, and extend them throughout the state via the network of regional and county offices. The missions of The University of Iowa and Iowa State University were common in their concern for the welfare of the farmer. However, they differed in that The University of Iowa stressed research and health professional training in agricultural illnesses, while Iowa State University emphasized safety education to the farm population. Geographic separation and the difference in focus resulted in little interaction between the two institutions in this area. Unfortunately, the Safety Specialist left Iowa State University in 1986 and the position was not filled until 1990. Additionally, the lack of state or national policy regarding agricultural health and safety in agriculture resulted in little funding for research and training at The University of Iowa. Therefore, activities remained at a relatively low level.

In 1984–1985, I had the opportunity to spend a sabbatical year in Sweden, working with the health organization called Lantbrukshälsan (Farmer's Health). These ideas came home, waiting for the right soil and moisture conditions to germinate.

The following year (1986), Representative David Osterberg (Mount Vernon) traveled to Sweden to investigate farm safety and agricultural chemical programs in that country. Excited about what he had seen, upon his return he initiated legislation to establish a model agricultural health and safety clinic in Iowa, utilizing ideas from the Swedish and Finish programs. Two such model programs were established at The University of Iowa.

An initiative to create a public health policy for agriculture in Iowa and the United States called "Agriculture at Risk" was begun in Iowa in 1988. This process ultimately led to the National Agricultural Health Program of the National Institute for Occupational Safety and Health (NIOSH).

This, now 34 million dollar annual program, has led to well over 50 important programs in many different states across the country, including Iowa. The initiative also provided the impetus that led to the legislation for I-CASH. Representatives Josephine Gruhn (D-Spirit Lake) and Wendell Pellett (R-Atlantic) were floor managers of the I-CASH bill, with co-author, David Osterberg. The legislation passed and became effective July 1, 1990. An ad hoc committee of representatives from Iowa State University, The University of Iowa, the Iowa Department of Public Health, the Iowa Agriculture Department, and other at-large representatives worked together to develop the processes that would be adopted to implement I-CASH.

Although not specified in the legislation, I-CASH was supportive in reestablishing the Agricultural Safety Extension Specialist at ISU. The Agricultural Safety Specialist was advertised and Charles V. Schwab was hired to fill that position on May 25, 1990.

In the middle ages and modern history, perhaps the major accomplishment of the I-CASH legislation was establishing a functional working collaboration between UI, ISU, the Department of Agriculture, the Department of Public Health, together with a very diverse group of private organizations, and keeping it going with the common goal of saving lives and preventing injuries to farmers. I-CASH is unique, as it is the only legislative-based collaborative agricultural health and safety organization in the world. Working among organizations with diverse cultures, funding streams, and alliances, some with inherent competition and barriers, I-CASH has done well to keep the organization functioning to meet the needs of the agricultural community.

The following are some of the major I-CASH accomplishments:

- Facilitated and promoted the development of Farm Safety 4 Just Kids.
- Promoted the continuation and advancement of the SPRAINS program of agricultural health and injury surveillance.
- Facilitated and promoted the development of Sharing Help Awareness United Network (SHAUN).
- Development of the AgriSafe Network, a group of some 24 hospitals, health clinics, and county health departments that provide community-based preventive occupational health services for the farm community.
- Supported and fostered the development of the Farm Safety Day Camp.
- Developed the Farm Safety Walkabout Program.
- Initiated the Tractor Risk Abatement and Control program in Northeast Iowa.
- Initiated research and programming regarding occupational and community health associated with swine and poultry confinement production.
- Developed the Agricultural Occupational Health Nurse Certificate Program.
- Trained and certified approximately 90 nurses and other health care providers in agricultural occupational health.
- Led a 1995 national conference regarding the health and environmental consequences of large-scale swine production.
- Led the 1997 conference “Tractor Risk Abatement and Control: The Policy Conference”.
- Supported the development of the National Education Center for Agricultural Safety on the Peosta campus of Northeast Iowa Community College.
- Developed and initiated the Certified Safe Farm Program.
- Accomplished dissemination of \$50,000 in grants for prevention of illnesses and injuries to farm youth in over 15 communities in Iowa.
- Developed interactive hands-on training materials for agricultural youth.
- Developed web-based information dissemination packages for the agricultural population.
- Achieved incorporation of goals to reduce agricultural injuries and illness in the Healthy Iowans 2010.
- Conducted a strategic planning process 2000 for I-CASH to rejuvenate I-CASH to meet the demands of the next decade.
- Witnessed a true reduction of deaths and injuries over the past decade.

The last accomplishment is by far the most important. Figures 1 and 2 demonstrate the reductions that can partially be attributed to the totality of interventions from the state and private affiliates of I-CASH.

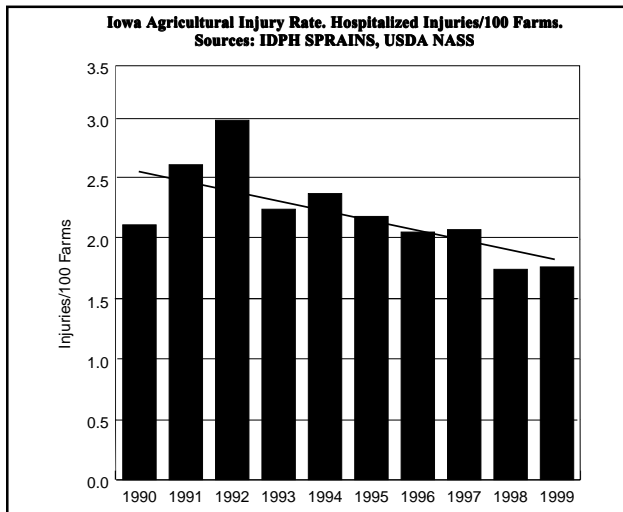


Figure 1

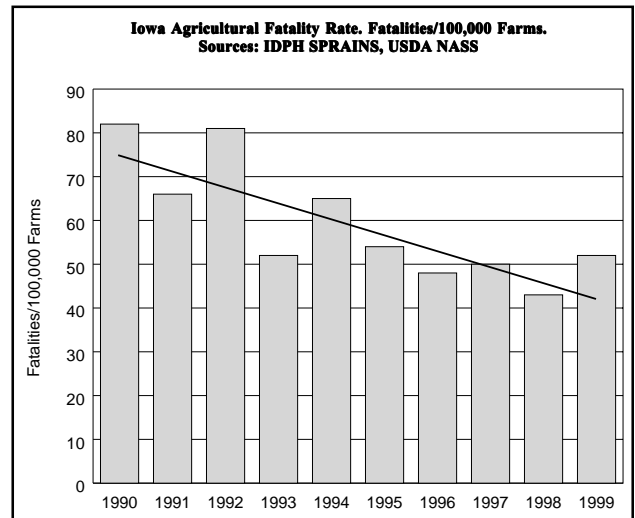


Figure 2

The Future

The goals of I-CASH, as of 1998, were to reduce fatal and non-fatal injuries and illnesses by 25%, and to decrease to zero occupational deaths in farm youth, by the year 2010. Based on the results so far, we are on track to achieve those goals. I commit the I-CASH leadership to the relentless pursuit of these goals, promoting the highest possible level of cooperative and collaborative programming among the various state affiliates and private voluntary affiliates.

The procedures of I-CASH are in the process of being renovated via the I-CASH Strategic Planning 2000 Committee. We intend these new procedures to be in place by the spring of 2001 and they will help assure accomplishment of these goals by enhancing the statewide collaborative efforts in agricultural health and safety.

I want to thank the many people across this state who have been a part of I-CASH. I look forward to the next 10 years for the opportunity to further help decrease the injuries and illnesses suffered by our agricultural population.



“I am proud of our participation in I-CASH, and I am impressed by its programs, services, and effects. I am also proud that we are engaged in such a successful cooperative public enterprise with Iowa State University, the Iowa Department of Public Health, and the Iowa Department of Agriculture and Land Stewardship.

As I look at the map that visualizes the extent of I-CASH’s outreach, I am delighted that we are able to touch literally all four corners of our state, from Waukon to Harlan, from Sioux Center to Farmington. From the Certified Safe Farm project to Farm Safety Youth Grants, I-CASH is also serving Iowans across generations. It is this comprehensive, and caring approach that makes I-CASH one of our most important service and outreach programs. The statistics that show significant reductions in farm accidents and deaths provide strong evidence that I-CASH is doing a spectacular job.”

Mary Sue Coleman, President
The University of Iowa

I-CASH Affiliate Projects

The following are brief descriptions of major activities of the four I-CASH partners (The Iowa Department of Agriculture and Land Stewardship, Iowa State University, The University of Iowa and the Iowa Department of Public Health).

Iowa Department of Agriculture and Land Stewardship

Pesticide Applicator Certification



There were 39,820 Iowans tested or trained in the safe handling and application of pesticides during fiscal year 2000. Iowa's Comprehensive Pesticide Applicator Certification Program is administered by the Iowa Department of Agriculture and Land Stewardship (IDALS), in cooperation with Iowa State University Extension (ISUE) and the U.S. Environmental Protection Agency (EPA).

Under the Certification Program, each applicator must initially pass a comprehensive written exam to receive initial certification. Those who renew their certification may either: 1) pass a written exam every third year administered by IDALS; or 2) attend certification training courses each year (including the year in which tested) conducted by ISUE or other training approved by IDALS for continuing instruction credit. There were 1,695 commercial applicators and 3,398 private applicators who passed certification exams. Approved continuing instruction sessions were attended by 26,048 private pesticide applicators and an estimated 12,048 commercial applicators in preparation for renewal of certifications expiring in December 1999, 2000, or 2001.

Those certified during FY2000 included individuals establishing a new, or renewing an expired pesticide applicator certification. Applicators making application for, or renewing certifications totaled 4,979 commercial applicators and 9,940 private applicators, to include 3,284 commercial applicators and 6,542 private applicators who renewed their certifications by attending training courses. Because certifications are valid for three years, these numbers represent approximately one-third of the certified applicators who apply restricted use pesticides, or who are involved in the business of applying pesticides commercially.

As of June 30, 2000, a total of 11,310 individuals were currently certified as commercial pesticide applicators and 31,779 were currently certified as private pesticide applicators.

Worker Protection Standard



The EPA regulates pesticides under the authority of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), which makes it unlawful for a person to use pesticide products in a manner inconsistent with its labeling. The Worker Protection Standard (WPS) for agricultural pesticides is a regulation issued by the EPA under the authority of FIFRA. IDALS administers the WPS through a Performance Partnership Grant with EPA. The WPS rule was adopted by EPA in August 1992 in order to reduce the exposure of people who work in production agriculture to the adverse effects of pesticides.

Implementation of the WPS emphasizes educating agricultural employers on farms, forests, nurseries, and greenhouses to train their employees regarding pesticides, provide personal protective equipment, and methods to prevent pesticide exposures. The EPA, IDALS, and Iowa State University Extension (ISUE) have developed WPS training materials and distributed them through ISUE, I-CASH, Iowa Department of Public Health, Iowa Department of Education, and private groups and associations.

Worker Protection Efforts in Iowa

In 1983, the EPA found that hired farm workers were not being given adequate protection under their regulations. The EPA proposed revisions to the WPS, which was contained in Part 170 of their regulations and solicited comments on the proposals. The final rule was adopted in August 1992, when it was published in the Federal Register.

The implementation of the revised WPS emphasized educating agricultural employers on farms, forests, nurseries, and greenhouses regarding the revised regulation. The EPA and the States developed and distributed WPS training materials and held presentations to raise the awareness of agricultural employers to the WPS and of their responsibilities regarding their pesticide handlers and workers. EPA also issued label amendment guidance to the pesticide manufacturers who register their products with EPA and set up a dedicated telephone line to answer WPS labeling questions. Over 2,500 label amendments were received and processed by EPA.

In 1994, federal legislation was passed that delayed certain provisions of the WPS. In 1995, EPA moved into full implementation of the WPS. Five amendments to the regulation were published, which clarified aspects of the rule regarding:

- Training provisions for workers
- Crop advisors
- Exception for certain irrigation tasks
- Exception for limited contact activities
- Shorter restricted entry intervals for lower risk pesticides

In 1996, two additional amendments were made to:

- Amend decontamination requirements
- Amend warning sign requirements

One of the difficulties for employers under the WPS is the diversity of production agriculture across the United States. States have adapted the WPS outreach programs to their particular agricultural activities. In Iowa, the state lead agency for pesticides is the Pesticide Bureau in the Iowa Department of Agriculture and Land Stewardship (IDALS). The bureau is charged with the administration and enforcement of the Iowa Pesticide Act, Chapter 206 Iowa Code, and certain aspects of FIFRA through an annual cost sharing grant with the EPA.

In order to address the WPS training complexities, the Pesticide Bureau contacted Iowa State University Extension (ISUE), who is their partner in pesticide applicator training activities. Working together, initial

contacts were made with agricultural chemical dealers. The dealers play an important role for farmers in the selection and use of pesticides, especially in row crop agriculture that is most common to Iowa. Other groups contacted were: nursery, greenhouse, fruit & vegetable, and forestry associations; corn, soybean, and seed organizations; migrant worker and agricultural advocacy groups; and agricultural chemical manufacturers. Through the cooperation of EPA Region VII, the Pesticide Bureau and ISUE were able to develop and distribute WPS training materials to the various groups for their members.

The Pesticide Bureau was also active in monitoring pesticide products for label statements on WPS. The WPS set forth a process of phasing out of the channels of trade products that did not contain the WPS label information. The EPA allowed the phased system under several Pesticide Registration Notices. All products were to be removed from retail sale by October 1996. The States assisted EPA by conducting inspections to insure that the agricultural dealers were in compliance.

The WPS outreach program expanded in 1999 to inform health care providers about pesticide poisonings and the need to report pesticide poisonings. The Pesticide Bureau, ISUE, Iowa Department of Public Health, and the University of Iowa College of Public Health presented pesticide poisoning seminars at three hospitals across Iowa and distributed copies of the new 1999 5th Edition of the EPA manual, Recognition and Management of Pesticide Poisonings. In July 2000, each of 125 hospital emergency rooms in Iowa was mailed a copy of the manual by EPA at the request of the Pesticide Bureau. The bureau has distributed over 420 copies of the manual in Iowa, as well.

Current WPS activities include continued training opportunities and the inspection of agricultural production establishments for compliance. In 1999 and 2000, compliance inspections were conducted by the Pesticide Bureau at greenhouses and seed corn production farms. Future efforts will seek to identify areas where additional training will best support the employers and employees of agricultural establishments to reduce the exposure of people to pesticides.

Sentinel Project Researching Agricultural Injury Notification System (SPRAINS)



By the end of 1999, the Sentinel Project Researching Agricultural Injury Notification Systems (SPRAINS) program completed ten years collecting data about farm-related fatal and non-fatal injuries. As the only state collecting farm-related injuries for a decade, Iowa is in a unique position to study injury trends and to develop prevention strategies.

There were 1,670 farm-related injuries in 1999 reported to the Iowa Department of Public Health. Of the 1,670 injuries, 49 were fatal. Twenty-four of the fatalities were tractor-related. The percent of persons hospitalized for their injuries was 13.2. Males sustained 1,447, or 86.6 percent of the injuries. The most frequent cause of injury was machinery, followed by animals. The number one cause of injury for females was animals. Eight children were killed, three under the age of ten. Of the five older children, two fatalities were tractor-related, two were machinery-related, and an object struck one teenager.

Injuries occurring in 2000 will be reported to the Bureau of Emergency Medical Services and included in the Trauma Registry.



Farm Safety Program



The activities of the Iowa State University Extension farm safety program are directed towards three major objectives:

1. Increasing farm safety awareness with the intent of encouraging farmers to adopt safe farming practices.
2. Reducing the number of farm-related injuries and fatalities.
3. Enhancing the efficiency of Iowa State University Extension to provide farm safety programming.

Accomplishments:

Increasing farm safety awareness with the intent of encouraging farmers to adopt safe farming practices:

- “Helping Children Understand Farm Hazards – What Would You Do?” is a new book developed and printed by Iowa State University Extension. This illustrated parent-child discussion guide was designed to help families talk about the dangers of living on a farm. Full-page illustrations present 24 real-life situations that involve common farm hazards including livestock, electricity, chemicals, grain, lawnmowers, tractors and farm machinery. This newest extension resource has received wide acceptance in Iowa and other states.



- Iowa State University Extension distributed awareness articles on farm safety issues to Iowa's newspapers. A collaborative promotional effort, organized by Iowa State University during the National Farm Safety and Health Week September 17-23, 2000, involved the Iowa Farm Safety Council, Farm Safety 4 Just Kids, Iowa Department of Public Health, National Education Center for Agricultural Safety, University of Iowa, I-CASH, and Iowa State University. This effort continues to receive tremendous visibility.
- The Safe Farm radio program uses four-minute interviews to provide 52 weeks of broadcast-quality tapes. Experts from around the state, including partners of I-CASH, are included. Tapes are distributed to 68 radio stations in Iowa.
- Safety presentations were made and educational displays were exhibited at several major events. These events include the Iowa Power Farming Show, Iowa State Fair, and National Institute for Farm Safety International conference.
- A quarterly newsletter was produced and distributed to more than 300 Iowans interested in farm safety. The newsletter provides information about timely preventive strategies and current farm safety events.
- Several journals and periodicals carried safety articles with information supplied by extension staff. Research on the conditions of augers in Iowa, auger-related injuries, and farmers' perceptions about auger safety was the primary focus of the published research articles.

Reducing the number of farm-related injuries and fatalities:

- ISU Extension staff in ten Counties offered tractor safety training courses during 2000. The course requires 20 hours of classroom activities and 4 hours of hands-on equipment-specific training. This training fulfills the federal requirement to obtain certification for youth employment. A total of 108 youth (14 and 15 year olds) participated.
- Safety day camps conducted by extension staff were held throughout the state. A total of 34 counties participated reaching 3,934 youth with their educational messages.

- A total of 25 county extension offices provided an in-school farm safety program. These programs delivered safety materials and education to 4,369 children.
- Non-youth safety meetings that reached 1,680 adults were conducted in 9 counties by extension staff.

Enhancing the efficiency of Iowa State University Extension to provide farm safety programming:

- The World Wide Web home page www.ae.iastate.edu/safety.htm on farm safety was maintained. These pages provide Iowa farm injury and fatality data (compiled by county), current listing of farm safety day camps, information on tractor and machinery certification classes, printable copies of Safe Farm publications, and other requested resources.
- The Tractor and Machinery Virtual Classroom www.tmvc.iastate.edu was maintained. Registered users or guests can use several interactive educational modules (IconMatch, Tractor Explorer, and Give Me Five). Participants learn about universal symbols accepted for agricultural controls and indicators, standardized hand signals accepted for agricultural operations, and the location and functions of the operational controls for a tractor.
- A monthly electronic newsletter was produced and distributed to more than 85 Iowa educators interested in farm safety. This newsletter provides details of current farm safety resources, grant opportunities, conferences, and other items of interest.
- Seven of the 36 single-page Safe Farm fact sheets, were updated and reprinted. Nineteen new web-based fact sheets were developed and 3 existing web-based fact sheets were revised. A new series of 12 single-page Safe Farm fact sheets were planned.

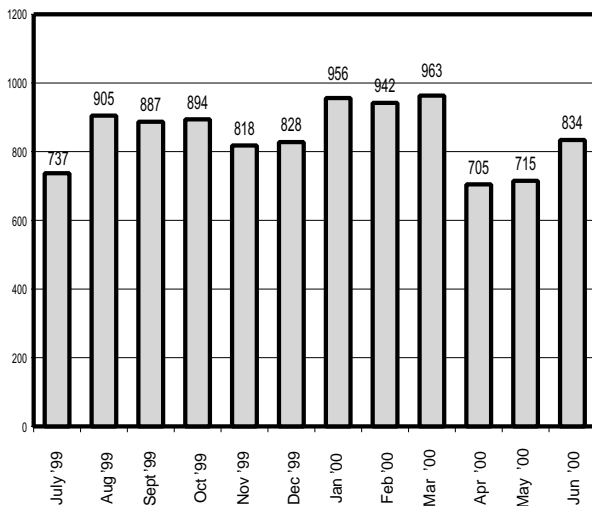


Iowa Concern Hotline



Calls at the Iowa Concern Hotline were fairly stable this past year. We received 10,184 calls from July 1999 through June 2000. This is slightly higher than the calls received last year. Iowa Concern has heard a variety of concerns this past year. Farm related topics and concerns have included: information and education on contracts, bankruptcy, estate taxes, credit information, stress related problems, health insurance issues, and financial issues. We continue to hear from farm families who are trying to adjust their living expenses and add another job or niche marketing idea to their operation. Stress is another factor that is prevalent with farm families and the hotline continues to have stress counselors available to do some stress counseling on the phone. Counselors hear about their family problems and the whole issue of not having enough time to do everything. They also hear about conflict and divorce issues. Some may be dealing with alcohol abuse and grandparenting issues. We continue to be available for resources, referrals, stress counseling & legal education.

Iowa Concern Hotline Calls
July 1999 - June 2000



The University of Iowa

Projects led by I-CASH core faculty and staff: Iowa AgriSafe Network



In the past year the Iowa Agricultural Health and Safety Network officially became known as the Iowa AgriSafe Network. The overarching goal of the Network is to measurably increase access to preventive health and safety services and increase early detection of agriculturally-related health and safety problems through clinical screenings, environmental assessments, and educational outreach programs. Network clinics throughout the state strive to meet this goal by providing various types of services in their local community and by assisting with regional and state activities.

A three-year Rural Outreach Grant that ended in August of 2000 helped to support the goals of the network. In those three years the following accomplishments have occurred:

- 79 Nurses completed Session I and Session II of the Agricultural Occupational Health Training Program offered by I-CASH
- Education was provided to over 1925 other health care providers
- 20 additional AgriSafe Network clinics were developed
- Network staff provided preliminary screenings during 174 local farm meetings and county fairs reaching 10,522 farmers
- Completed 523 full health screenings
- An estimated 14,500 farmers were reached at state events such as commodity group meetings

In year three 11 mini grants were awarded to AgriSafe affiliate clinics, totaling almost \$20,000 in funding. Activities included free pulmonary function tests, free cholinesterase screenings, farm safety day camps, and acquisition of personal protective equipment and educational materials for local presentations.

As the state network continues to grow, several network clinics have adopted objectives. These objectives are the basis for the delivery of service at the local level and the

foundation for the collaboration that is necessary to obtain self-sustainability. Key objectives are:

1. Communication and coordination between Network clinics will be maintained especially as new clinics join the Network.
2. Policies and procedures will be updated as needed and distributed to all clinics in an efficient manner.
3. The Network will enhance visibility to local farmers and agribusinesses.
4. Quality assurance among clinics will be maintained through site visits, data collection and interpretation, and continuing education.
5. All Network staff will work to improve their knowledge of agricultural health and safety.
6. Network clinics will increase partnerships with local providers in an effort to increase referrals.
7. Through active outreach strategies, preliminary screening services will be brought to farmers at the settings where they normally interact.
8. Network clinics will operate a preventive occupational health program for farm families, and other members of the agricultural community, as detailed in the AgriSafe Network Operations Manual.

Certified Safe Farm

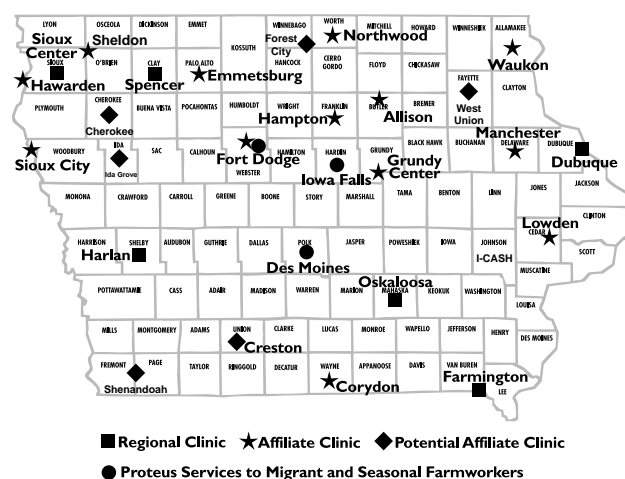


Certified Safe Farm is an innovative agricultural health and safety research project conducted by Iowa's Center for Agricultural Safety and Health (I-CASH) at the University of Iowa, and the AgriSafe Clinic of Spencer Municipal Hospital, Spencer, Iowa.

Certified Safe Farm (CSF) utilizes the expertise of professionals trained in agricultural occupational health to provide preventive services and education to specified study subjects in a nine county area near Spencer, Iowa. The model for this project was based upon the agricultural health services provided by numerous AgriSafe clinics located throughout Iowa.

One hundred forty intervention farmers receive a free yearly occupational health screening, farm safety review, and individualized preventive education. Several farm-related health issues and farm hazards are addressed at the health screening and the farm review. Cholinesterase levels, pulmonary function, hearing check, and personal protective equipment education are but a few of the items addressed at the screening. The on-farm safety review addresses potential hazards with machinery, chemical storage areas, outdoor environment, and buildings. The one-on-one interaction between the farmer and the occupational health nurse and farm safety specialist provides a unique opportunity for the farmer to learn about health and safety issues specific to his/her own farm operation. A healthy lifestyle is encouraged in an atmosphere of voluntary behavioral change. A monetary incentive to participant farmers provides an additional impetus for change. Injury and illness rates are compared between the 140 intervention farmers and 140 control farmers. The proposed outcome of this seven-year study is the reduction of illnesses and injuries in the intervention group.

Certified Safe Farm is currently in its fourth year of active research and data collection. Bi-annual meetings with intervention farmers indicate a clear interest in this type of incentive-based program. Programs like Certified Safe Farm that focus on the prevention of fatalities, injuries, and illnesses in our agricultural population are very much desired and needed.



Farm Safety Youth Grant



I-CASH Farm Safety Youth Grant funds were awarded to Mitchell County Home Health Care and the Madison County Chapter of Farm Safety 4 Just Kids. At Mitchell County Home Health Care, funds were used to staff an educational booth during “Kid’s Day” at the Mitchell County Fair. Topics included tractor and ATV/RV safety tips and learning first aid for minor injuries that occur on the farm. The Madison County Chapter of Farm Safety 4 Just Kids used their funds for “Dress for Success” Farm Safety and Health Week for Middle School. This two week program at the Earlham Middle School included a variety of educational farm safety activities. The students wore different items of clothing each day of the week to reinforce the farm safety theme of the day.



Promoting Community Acceptable Pork Production



The issue surrounding large-scale pork production in this state has been one of the most contentious issues in this state for many years. The issue is truly a double-edged sword. Pork production is extremely essential to this states agricultural economy. Iowa is the number one pork producing state by far (over 20 million produced per year) making up a 4 billion dollar industry. It has made a balanced industry for over 50% of the farms in this state for many years. However, beginning in the 1970’s the agri-

cultural economy shifted to capture the share of the world market. The results were a drive toward least cost production, translating into methods to produce more pigs with less labor, resulting in larger and fewer farms. Serious complaints began to crop up in many communities. Complaints have come from farmers, as well as non-farmers in rural areas.

It is important to provide some scientifically derived data to indicate the type of pork production that communities will accept. I-CASH staff addressed three primary questions: 1) What symptoms of illnesses are experienced by persons living in the vicinity of swine production regions with different densities of swine production? 2) What levels of hazardous emissions can be measured in the vicinity of different densities of swine production? 3) What is the relationship between disease symptoms, the level of contaminants measured, and the densities of swine in the region?

To answer these questions, three areas of study were selected: one of very high density, and industrial style production, a second of medium family-style production, and a third of very low livestock population. Within a three-mile radius all residents who agreed to participate were interviewed. Levels of ammonia, hydrogen sulfide, and dust were measured. The residents were interviewed for a battery of symptoms related to respiratory health, social health, and other physical health concerns.

We are in the process of analyzing this data. So far, we have found that hydrogen sulfide levels are in excess in the highly concentrated area, relative to the other emittants measured. The ammonia and dust did not seem different from the other sites. Thus far, we have not fully analyzed the health symptoms, nor the relations of the contaminants to health.

We conducted a smaller study of this type three years ago, and have reported on the results. We found that residents in the vicinity of large-scale swine production units had significantly higher rates of respiratory disease symptoms, and that these symptoms were similar in type and pattern to the disease symptoms seen in workers in these buildings. When we have the final results analyzed we will take these results to rural communities, and work with them and pork producers to set the parameters for community acceptable swine production.

Tractor Risk Abatement and Control (TRAC): Saving 2000 Lives by the Year 2010



In 1997, I-CASH in conjunction with the Iowa Injury Prevention Research Center, and The Great Plains Center for Agricultural Health, held a national conference on taking the I-CASH TRAC Program to the next level. Developing from a successful local intervention in Fayette and Clayton Counties, a national policy conference was held in Iowa City. A group of 34 stakeholders from the public and private sector met to establish policy recommendations to attack the number one cause of death in agriculture. There are 25 policy recommendations that came from that conference. These recommendations, a combination of incentives, education, social marketing, engineering, and regulations, are as follows:

- Develop an educational/social marketing system to create a change in social norm regarding ROPS acceptance
- Monitor tractor injuries and publish their occurrence and pertinent facts (teaching message) regarding their prevention
- Establish a tax rebate and/or subsidy to assist farmers in installing ROPS on their tractors
- Fund a research program on ROPS designs for pre ROPS tractors
- Seek ways to prevent liability risk for manufacturers from deterring ROPS development, manufacturing, and installation
- Promote the development and evaluation of safety incentive programs such as the Certified Safe Farm (CSF) program
- By July 1, 2003, tractors operated by youth or employees shall have ROPS
- By July 1, 2005, only tractors equipped with approved ROPS can be sold
- By July 1, 2005, a program will be established to provide incentives for recycling or removing tractors that cannot be fitted with a ROPS system
- By July 1, 2007, all tractors operated on public roads shall have approved ROPS installed
- By July 1, 2010, all tractors which were manufactured to accept ROPS, and for those pre ROPS tractors for which there are approved ROPS available, shall have

ROPS installed.

- By July 1, 2015, federal legislation should be implemented to mandate ROPS on all tractors
- Promote improving the visibility of farm equipment
- By the year 2005, there shall be no driving of tractors on public roads without a valid motor vehicle driver's license
- Drivers license examinations shall include questions regarding traffic safety relative to interacting with farm machinery on roadways
- Implement and evaluate an ongoing educational program targeted at the general driving public, regarding traffic safety where farm machinery may be present
- Direct the Certified Safe Farm Program or other incentive programs to assure tractor operators have the fundamental knowledge of safe tractor operation
- Implement uniform model codes for tractor lighting and marking
- Develop social marketing programs to enhance development of a social norm to prevent extra riders on tractors
- Develop an educational/social marketing program about the hazards from tractor runovers
- Promote safety devices that prevent bypass start injuries
- Promote the manufacture, sale and installation of approved extra rider seats in new tractors with new cabs
- Children must have formal tractor operator training
- Promote the social norm that parents need to closely supervise all children who are working under their direction
- Develop and disseminate guidelines for parents regarding when children normally develop the ability to perform safe tractor operation

A model has been developed that predicts the lives saved if these recommendations are enacted. We can save 2000 lives by the year 2010! We have been working with the Great Plains Center for Agricultural Health, an I-CASH partner at the University of Iowa which is funded by the National Institute of Occupational Health. For the past two years, this information has been presented at over 15 different locations, including the I-CASH meetings, the Center for Rural Health and Primary Care at the Iowa Department of Public Health, The National Institute for Farm Safety, and American Public Health Association. The basic recommendations have become a part of the

public health goals for the state, and are published in the Healthy Iowans 2010 book of goals. Attaining these objectives will take hard work and cooperation from many people and organizations, including a number of public and private organizations. It will also take some new state legislation. However, if we are to ever have a real and lasting impact on the most important cause of death in agriculture, we must start with the number one agent involved in fatal injuries, the tractor. We have applied to NIOSH, through the Great Plains Center for funds to help pursue this effort. We have the services of Melvin Myers (a nationally recognized safety specialist) committed to fill the role of the primary staff for this project. We hope to hear from NIOSH soon as to the success or failure of this proposal. It could make the difference in Iowa for lives of at least 20 farmers, including the principle operators, farm children, grandfathers, and mothers who die every year in tractor related incidents.

For the full conference report *“Tractor Risk Abatement and Control - Final Report”* see the I-CASH website. This site also has information on programs, publications, core staff, committee lists, and agricultural health and safety links.

Iowa’s
Center for Agricultural
Safety and Health
(I-CASH)

www.public-health.uiowa.edu/icash

Agricultural health projects at other University of Iowa research centers:

Agricultural Health Study



The Agricultural Health Study (AHS) is a prospective cohort study of agricultural exposures and chronic disease (especially cancer) in Iowa and North Carolina among commercial or private pesticide applicators and spouses of married private applicators. The National Cancer Institute is the primary source of funding. This is the eighth year of the study. The first five years were devoted primarily to enrolling eligible subjects; 89,658 subjects were enrolled in the two states. In Iowa, 58,564 subjects were enrolled, exceeding the goal of 50,000. In Iowa, response rates were 82.1% for private applicators and 80.3% for their spouses, again exceeding the goals of 80% and 70%, respectively. Staffs of the Iowa Department of Agriculture and Land Stewardship and the Iowa State University Extension Service assisted in enrolling subjects through Iowa’s Pesticide Certification Program.

For the last several years, the cohort members have been linked to Iowa mortality and incidence databases. Personal identifiers sufficient for linkage are available for over 99.7% of the Iowa cohort. As of February 2000, 639 deaths and 888 incident cancers had been identified since enrollment. Cohort incidence/mortality analyses are just beginning.

Currently, the primary activity consists of recontacting each cohort member to conduct a computer-assisted telephone interview to update exposure information, obtain dietary health questionnaire data, and obtain buccal cells. As of September 23, 2000 in Iowa among private applicators, 11,046 (79.2% of those approached) have completed some or all of the CATI interview, 6,893 have returned buccal cells, and 6,810 have returned the dietary health questionnaire. For spouses of private applicators, 8,911 (86.4% of those approached) have completed some or all of the CATI interview, 5,132 have returned buccal cells, and 5,317 have returned the dietary health questionnaire. We estimate it will take another two to three years to cycle through the entire cohort. There are also several completed/ongoing/planned special studies that have involved cohort members. There have been 15 publications to date.

Center for Health Effects of Environmental Contamination (CHEEC)



The Center for Health Effects of Environmental Contamination (CHEEC) was established at the University of Iowa by the 1987 Iowa Groundwater Protection Act. The Center's mission is to “*determine the levels of environmental contamination which can be specifically associated with health effects.*” To this end, CHEEC conducts and supports research on water and air contaminants and their potential impacts on human health. Research in 2000 focused on exposure assessment for drinking water disinfection by-products and nitrate in Iowa municipal water supplies. The CHEEC Data Management Center continued to provide support for the *Agricultural Health Study*, and was involved in an intensive effort to assimilate historical municipal water quality data from the 1950s through the 1970s into the CHEEC system.

Research funded through the CHEEC Seed Grant Program included studies conducted by researchers in the University of Iowa Departments of Civil and Environmental Engineering, Occupational and Environmental Health, Geography, and Chemistry, and researchers in the Department of Entomology and the Pesticide Toxicology Laboratory at Iowa State University. Educational grants were awarded to programs on risks of tobacco use and on training for public water supply operators.

A highlight of 2000 was the *International Workshop on Endocrine Disruptors and Pharmaceutically Active Compounds in Drinking Water*, which was held in Chicago in April. The three-day workshop was hosted by CHEEC and co-sponsored by the American Water Works Association Research Foundation, the Water Environment Research Foundation and the WaterReuse Foundation. Over two hundred people from Europe, Canada, Australia, Africa and the United States participated in the workshop.

Center for International Rural and Environmental Health (CIREH)



The University of Iowa Center for International Rural and Environmental Health (CIREH) was established in 1990 with funding from Pioneer Hi-Bred International, Inc., with the purpose of promoting international and interdisciplinary research and training programs. CIREH activities reflect the philosophy that health is the outcome of social, economic, political and environmental factors as they related to fundamental biological processes. Ongoing programs include:

- *CIREH Graduate and Undergraduate Global Health Research Fellowship.* These competitive scholarships offer \$5000 or \$2500 to students to conduct intermediate or beginning level health or environmental health research projects in an international setting.
- *CIREH Summer International Internship Program* offers graduate students short-term experiences in environmental, occupational, and public health institutions in Slovenia, the Czech Republic, Slovakia, Finland, or Poland.
- *Iowa-Fogarty International Training and Research in Environmental and Occupational Health Program* provides 5 ½ month training periods at the University of Iowa to receive fundamental and advanced training in special areas, to develop collaborative research projects with Iowa faculty, and to organize and conduct short-courses with Iowa faculty mentors which are team taught upon return to their home country.

In September 2000, CIREH organized a two-day conference entitled *Agriculture and Environmental Health in Central Europe: Opportunities for Research and Intervention*, that took place in Bratislava, Slovakia. About 60 invited delegates representing the ministries of health, environment and agriculture, academia, and non-governmental organizations met to discuss current research and interventions in the targeted countries of Slovakia, Czech Republic, Hungary, Poland and the Ukraine. The overall goal of the conference was to raise the level of awareness and understanding about agriculture and its relationship to rural health and environmental protection, and to develop action plans for the future.

Environmental Health Sciences Research Center (EHSRC)



The University of Iowa Environmental Health Sciences Research Center (EHSRC) is one of 17 National Institute of Environmental Health Sciences

university-based Environmental Health Science Research Core Centers. The goals of the Center are to:

- operate a multidisciplinary environmental health sciences center,
- promote research interactions between several environmental health research units,
- serve as a technical resource to the State of Iowa, the region, the nation, and international agencies—all in the area of agricultural and rural environmental health.

The emphasis on rural environmental health research at The University of Iowa is a reflection of a broad concern among Iowans about the potential adverse health effects of agricultural exposures to farmers and farm family members, to others living and working in rural areas, and to the general public who may be exposed to agricultural contaminants in their water, air, and/or food.

Fatality Assessment and Control Evaluation (FACE)



The Iowa Fatality Assessment and Control Evaluation Program (FACE) is a program carried out by the Department of Occupational and Environmental Health under a

subcontract with the Iowa Department of Public Health using funds provided by the National Institute for Occupational Safety and Health (NIOSH). The FACE program collects basic information on all occupational fatalities in the state of Iowa and performs in-depth studies of specific types of fatal injuries. The goals of these investigations are to identify workplace fatalities and to alert employers, employees, and farmers about these risks. The investigators aim to make recommendations and develop programs to prevent similar occupational injuries. In addition, the alerts generated by the Iowa FACE project have been widely disseminated throughout the nation. Descriptions of Iowa FACE investigations have been published in

a variety of popular magazines aimed at specific trades and farmers, such as *Wallace's Farmer*, *Arbor Age*, *World of Welding*, and *American Towman*.

During the twelve months from July 1, 1999 to June 30, 2000, a total of eighty occupational fatalities were recorded in Iowa. Of these, nearly 50% were agriculture-related.

Great Plains Center for Agricultural Health



During the past year, the Great Plains Center for Agricultural Health produced 102 scientific publications, 142 presentations, sponsored 8 training courses, supported 20 graduate students, sponsored 20 meetings, and contributed to 14 other products.

The Center's Training Core pro-

vided support for 3 graduate students to work on agricultural health and safety research projects. A total of 12 MS and Ph.D. students, and 5 postdoctoral students worked with GPCAH researchers on agricultural health projects.

GPCAH participated in two systematic reviews regarding agricultural health and safety intervention effectiveness research: a Systematic Review of Agricultural Safety Interventions (DeRoo and Rautiainen, 2000), and Effectiveness of Roll-Over Protective Structures in Reducing Farm Fatalities (Reynolds and Groves, 2000). The interventions review showed only moderate success in educational intervention projects, and no clear evidence was found to guide future intervention efforts. The review of ROPS effectiveness showed that in countries where the usage of ROPS is high, the tractor overturn fatalities have been nearly eliminated.

The Toxicology Core completed studies investigating the pulmonary effects of inhaled soybean white mold, *Sclerotinia sclerotiorum* (SS). Results indicated high levels of total dust during combining. Bioaerosol analysis revealed exceedingly high concentrations of bacteria, fungi, endotoxins, and glucans. Fungal speciation showed that

Cladosporium spp. and to a lesser extent *Alternaria* spp. were the predominant mold spores in the air during soybean harvest.

The Toxicology Core initiated a study assessing exposures in hoop structures. Hoop barns represent an important alternative to conventional swine confinement housing. Higher air exchange rates and reduced working time mean that exposures are possibly lower. This study includes quantification of airborne contaminant concentrations and exposure durations in hoop barns and conventional confinement barns controlling for location, season, micrometeorological conditions, animal density in the barns and other factors. Descriptive data will be generated for exposures and environmental conditions across seasons for both barn types.

New surveillance projects were initiated on injuries and fatalities. They will utilize data from the NIOSH FACE activities in the region, SPRAINS agricultural injury and fatality data from the Iowa Department of Public Health, and data from other sources in the region. The second project will focus on the relationship between parental exposure to pesticides and adverse pregnancy outcomes among Iowans enrolled in the Agricultural Health Study (AHS). Both of these surveillance projects have helped forge new collaborations that will continue to benefit the Center and the constituents in the region for many years.

A case-control study of childhood asthma was just completed within the Keokuk County Rural Health Study. The IH Core has also initiated a compost study, with assistance from DNR gathered information on all registered compost facilities in Iowa including source (agricultural, municipal), and technology used. Selected facilities are being investigated in more depth to identify and quantify occupational exposures and exposure controls.

Outreach efforts of the center included supporting the agricultural health nurse training program and promoting it in the region. A meeting was held for planning training and outreach efforts in the central states, leading to a regional conference in Kansas City on September 20-22, 2000. Numerous short courses and presentations were delivered. Collaboration with FS4JK continued; a youth safety fair was conducted in Missouri, and a safety contest was conducted in collaboration with the Successful Farming magazine.



The theme of the University of Iowa Injury Prevention Research Center (IPRC) is prevention and control of rural injuries. Based on available epidemiological data, rural populations at high risk for injury include children, the elderly, farmers and farm families. Therefore, the goal of the IPRC is to control and prevent rural injuries in these high risk populations through research, education and training, and public policy targeting rural motor vehicle injuries and farm and other occupational injuries. The specific aims of ongoing IPRC supported research projects include:

- Examining the rates and risk factors of farm-related injuries among Iowa farmers;
- Evaluating the effectiveness of trauma care in Iowa;
- Driving after head injury.

The IPRC also provides outreach information and education programs, supports multidisciplinary training in injury prevention, and promotes development of public policies to prevent and control rural injuries. The IPRC supports the Midwest Injury Prevention Consortium in order to provide an organizational mechanism to promote and advocate injury prevention in Iowa and the Midwest and to serve as a national resource for rural injury prevention. IPRC activities during the fiscal year included:

- Conducting the 1999 Iowa Child Passenger Restraint Survey and initiating the 2000 survey. Survey results indicate an increasing number of Iowans are restraining their children in motor vehicles. However rural areas continue to have significantly lower restraint usage rates when compared to urban locations within the state. Also increasing is the number of children being placed in the rear seat of motor vehicles that is considered the safest place for children to ride. The 1999 survey found over 80% of the children in the rear seat.
- Participating in the development of the Healthy Iowans 2010 report. The IPRC Deputy Director was the team leader for updating the unintentional injury chapter while the IPRC Director served on the team updating the violence and abusive behavior chapter.

- Participating in the Iowa Department of Public Health's statewide trauma plan development process.
- Sponsoring the Workplace Violence Intervention Research Workshop held April 5-7, 2000 in Washington, DC. This workshop was highly successful in bringing together key stakeholders from a wide range of disciplines. The workshop white papers and recommendations have been peer-reviewed and will be published in the February 2001 issue of the *American Journal of Preventive Medicine*. Shortly after the journal's publication a "Report to the Nation" containing the workshop findings and recommendations will also be widely disseminated in hard copy and made available on numerous websites. Funding from the National Center for Injury Prevention and Control and the National Institute for Occupational Safety and Health supported this workshop.
- Visiting the Haskell Indian Nations University in Lawrence, Kansas. The IPRC Director and Deputy Director accompanied by other representatives from the UI Department of Occupational and Environmental Health and the University of Northern Iowa College of Natural Sciences met on March 29 with representatives of the Haskell Indian Nations University. The purpose of this meeting was to develop educational and research collaborations with this 100% American Indian University.
- Working with the State of Missouri Department of Health, Center for Health Information Management and Epidemiology on a project to analyze injury patterns and risk factors within the state's urban, rural-agricultural, and rural-recreational counties.
- Awarding two IPRC-funded pilot research grants:
 1. "Addressing the Challenges of Speech-Based Interaction for In-Vehicle Computers", John Lee, PhD; The University of Iowa Department of Industrial Engineering.
 2. "Burn Prevalence Study In Selected Iowa Counties", Lucy Wibbenmeyer, MD; The University of Iowa Department of Surgery.

Keokuk County Rural Health Study

Round 2 of the Keokuk County Rural Health Study began in April 1999, continued through June 30, 2000, and will continue for two more years. Data collected in this population-based, prospective study of health status and environmental exposures have been the source of numerous presentations and several publications. Some of the topics include:

- Perinatal and early life risk factors for childhood asthma in a rural Iowa cohort
- Childhood asthma and tobacco smoke exposure in a rural cohort
- Respiratory symptoms and smoking among women in the Keokuk County Rural Health Study
- Risk factors for injury in rural Iowa: Round one of the Keokuk County Rural Health Study
- Frequency, characteristics, and child and adult risk factors for nonfatal injury among children in a rural health survey
- Risk behaviors of adults in round one of the Keokuk County Rural Health Study
- Adolescent risk behaviors in round one of the Keokuk County Rural Health Study
- Behavioral and demographic risk factors for loaded firearms in rural households
- Alcohol and mental disorder risk factors for general unintentional injury
- Environmental conditions in the homes of a rural Iowa county
- Home indoor environments in rural asthmatic children: Environmental assessment data from the Keokuk County Rural Health Study
- Comparison of a direct-reading device to gravimetric methods for evaluating organic dust aerosols in an enclosed swine production environment
- Direct data entry using a palm computer in a large epidemiological and environmental study
- The use of GPS in the Keokuk County Rural Health Study
- Prevalence of Hearing Loss and its Association with Selected Risk Factors Among Adults in a Rural Community
- Comparison of self-reported and expert-observed prevalence of working smoke alarms in rural homes

I-CASH Committee Member Programs

The following are brief descriptions of Iowa farm safety and health programs and organizations that are associated with I-CASH and its mission of improving the lives of agricultural workers across the state.

Easter Seals FaRM program



Creating solutions, changing lives.

The Easter Seals Farm Family Rehabilitation Management (FaRM) program was developed in 1986 to address the technological and psychological needs of farm families affected by physical disabilities. The FaRM program provides onsite rehabilitation services that promote the return to farming and the community, and increased independence. The services provided include adaptive equipment, modifications to the farm and home, secondary injury prevention education, equipment loan and community and peer support.

A Peer Support Technology Network enables consumers currently using assistive technology to provide support and share their experiences with consumers who are newly disabled. A second network, the Ingenuity Network, allows expert volunteers to design and fabricate needed devices and modifications. The FaRM program utilizes a Mobile Rural Assistive Technology Unit to construct on-site modifications.

Farm Safety 4 Just Kids

Farm Safety 4 Just Kids promotes a safe farm environment to prevent health hazards, injuries, and fatalities to children

Farm Safety



and youth by conducting educational and awareness programs. The headquarters develops, produces, and disseminates educational material for chapters and the public to turn the concepts of farm safety into action.

Chapter Growth

During the past year, there has been a 25% increase in FS4JK chapter growth. The idea of building a community coalition to address the ever-pressing concern about the dangers to children on farms has evolved and multiplied

into over 120 FS4JK Chapters in 29 states and 4 Canadian provinces.

Educational Initiatives/Projects

Rural Roadway Safety

Programs were conducted to increase the awareness about the dangers that exist on country roads and the importance of wearing seat belts while driving and riding there. The Governor's Traffic Safety Bureau provided a grant to conduct programs in Iowa while the National Highway Traffic Safety Administration provided funds for sites outside the state of Iowa to do similar programs.

"Farm Tasks – When Are Kids Ready?"

The theme for the 2000 Farm Safety and Health Week educational package was "Farm Tasks – When Are Kids Ready?" The educational package was developed to accompany the North American Guidelines for Children's Agricultural Tasks written by the National Children's Center. The educational package includes activities written to encourage farm families to look at their own situation and ways they assign tasks to youth. One of the items in the package includes a brochure with FS4JK's mascot "Cawshus" the Crow as a leader in the prevention of injuries to those using the rural roadway system.

101 Farm Safety Tips- "Love Our Kids" Poster and PSAs

The EMSC "Love Our Kids" License plate fund under the Iowa Department of Public Health grant allowed FS4JK to develop, produce, and disseminate posters to Extension offices, school nurses and FFA instructors. Thirty-second PSAs were produced using ten tips from the poster and were sent to Iowa radio stations for airing in the spring.

AgDare Project

Farm Safety 4 Just Kids participated with the University of Kentucky in conducting farm walkabouts on the farms of AgDare participants. The findings of the project will

help develop effective educational programs that reach the adolescent audience.

Generations of Safe Farming

Farm Safety 4 Just Kids and Iowa Easter Seals Society is continuing to seek funds to conduct an educational program that encourages youth and older farmers to stay safe on the farm. One of the outcomes of this project was the development and printing of a brochure addressing the issue of both children and the elderly staying safe on the farm. Deere and Co. helped cover the costs of this brochure.

Successful Farming Magazine Grants

2000 was the sixth year that Successful Farming has conducted a program that rewards their family readers to make safety improvements on their farm. This year \$250 was given to each winner. This year Successful Farming also conducted an additional incentive program emphasizing the importance of providing a safe play area for children on the farm. Readers were asked to either show what they had already done to provide a safe play area or come up with unique ideas for future plans to do the same. One-thousand dollar grants were awarded to ten lucky farm families.

2000 Promotional Items

Farm Safety Toy Models

The 2000 F4U Corsair airplane is the seventh in the FS4JK series. It is trimmed with blue and white checkerboards on the nose and rudder. A semi truck in red with white trailer with the message "Taking Farm Safety to Heart in 2000" rounded out the collectible items offered by FS4JK.

Band-Aids

"Be Cawshus" is the slogan on the new band-aids produced this past year. This inexpensive product is used widely as a give away item at educational programs and booths.

Iowa Farm Safety Council

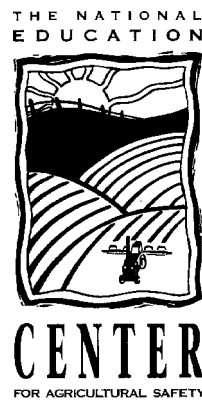
Your Iowa Farm Safety Council was once again very busy in the year 2000. Our goal was "Zero" fatalities in the year 2000. Unfortunately we were not able to achieve that goal, but we did recommit our efforts for the year to make Iowa a safer and healthier place to live.

The Council remains a grass roots effort of industry, insurance, government and education all working through a network of people for one common goal. Our group is one of the oldest privately funded groups in the country.

An accomplishment the council continues to be very proud of is the Iowa Fire Prevention Poster Contest. Each year 3-6th graders from around Iowa are asked to submit posters that warn of the dangers of fire. Hundreds of children from across Iowa participate in the program each year. We now have 2nd generation children participating in the very worthwhile program. With the Iowa Firemen's Associations help, and the help of many industry and insurance leaders, we continue to provide this education for the children of Iowa.

In addition to this event, the council supports many other activities all designed to promote good safety and health practices. As we look towards the future, we will continue to work to make rural Iowa a safer and healthy place to live.

National Education Center for Agricultural Safety (NECAS)



The National Education Center for Agricultural Safety (NECAS) is concluding its third year as a partnership program between Northeast Iowa Community College and the National Safety Council. The requests for resources and programs increases steadily each year. The National Education Center for Agricultural Safety is located in Peosta, Iowa on the campus of Northeast Iowa Community College, about 12 miles west of Dubuque on Highway 20. The Phase II building projects are nearing completion, with the chemical safety training facilities awaiting construction. Collaboration with primary, secondary, post secondary, continuing education providers, agribusinesses and community services continues to grow.

This year the NECAS sponsored and co-sponsored a variety of classes and activities. Some of the programs included:

- The Iowa Farm Chemical Awareness Program (IFCAP) for 987 Iowa fire department volunteers along with Emergency Medical Services and Law Enforcement Agencies. Collaborators included Monsanto and funding was provided by the State Fire Marshal Office.
- A health seminar was held for the Dubuque County Farm Bureau
- Ag health screenings for area farmers
- Farmedic Provider and Instructor classes
- Rural health issues classes for Clarke College
- KOEL Ag Expo at NICC in Calmar
- CPR classes and farm family night
- Meth lab, anhydrous ammonia and propane emergency classes
- Progressive Farmer Farm Safety Day Camp for 150 youth
- National Association of Mutual Insurance (NAMIC) rescue demonstration seminar
- Maquoketa Valley REC customer appreciation night and rescue demonstration
- College nursing faculty information programs
- Ag Families USA
- The state of Iowa hosted the National Institute for Farm Safety (NIFS) annual meeting in Dubuque. The NECAS staff was responsible for much of the organization and coordination of the meeting.
- Forklift training, Hunter Safety and Chainsaw Safety training
- FFA Harvest Safety Day workshop for 250 tri-state FFA students
- National Farm Safety and Health Week (NFSHW) projects
- Interior Fire Attack Simulator classes, Controlling Wild Fires class

PROTEUS

Proteus, Inc. is a not-for-profit organization that since 1990, has provided primary health care and referral to other medical providers for farm workers, both seasonal and migrant, and their dependents throughout the state of Iowa: Sioux City, Fort Dodge, Hampton, Muscatine, and Des Moines. Transportation and translation are also provided when needed. Each Proteus office is unique in its migrant traffic and the numbers of pockets of migrants in the office outreach area. Each Proteus office has at least one RN caregiver and one bilingual English/ Spanish speaking Health Aide. Proteus has recently added a motor coach to provide direct care to cli-

ents, bringing providers and agencies out to clinic populations after work, in order to better serve migrant seasonal farmworkers.

Sharing Help Awareness United Network (SHAUN)

SHAUN provides peer support and professional counseling to farmers, farm workers and their families who experience death or disability. Initially funded by seed grants from I-CASH, SHAUN offers services in Iowa. SHAUN aspires to develop a nationwide network of mental health supports for farm families using lay health care workers and trained mental health professionals.



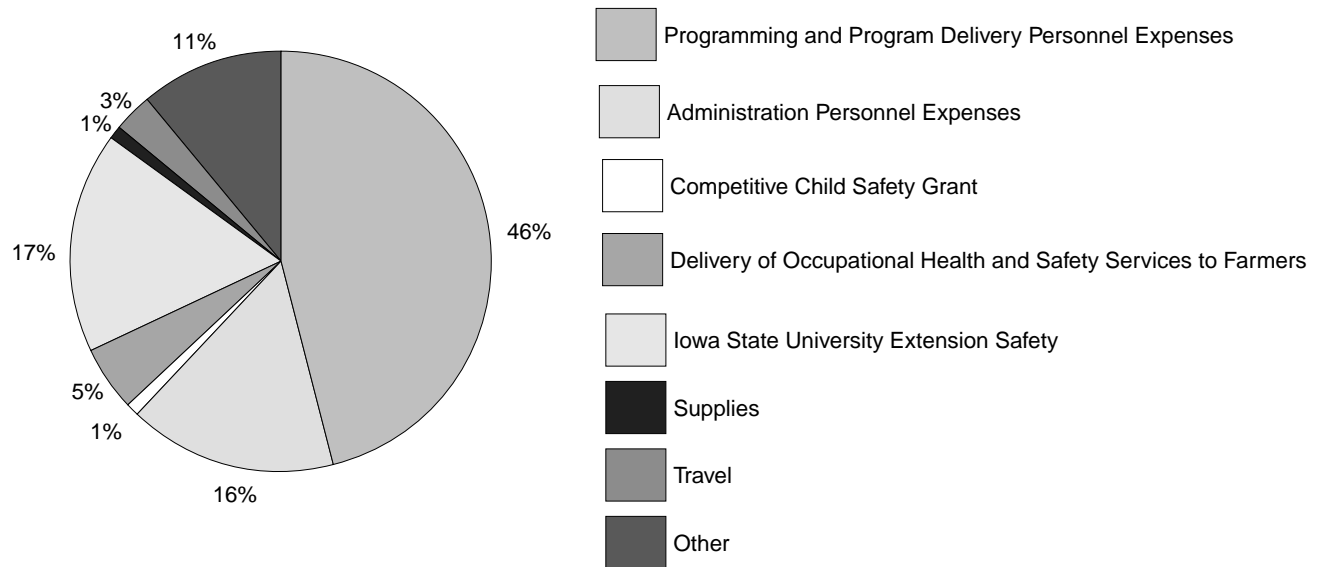
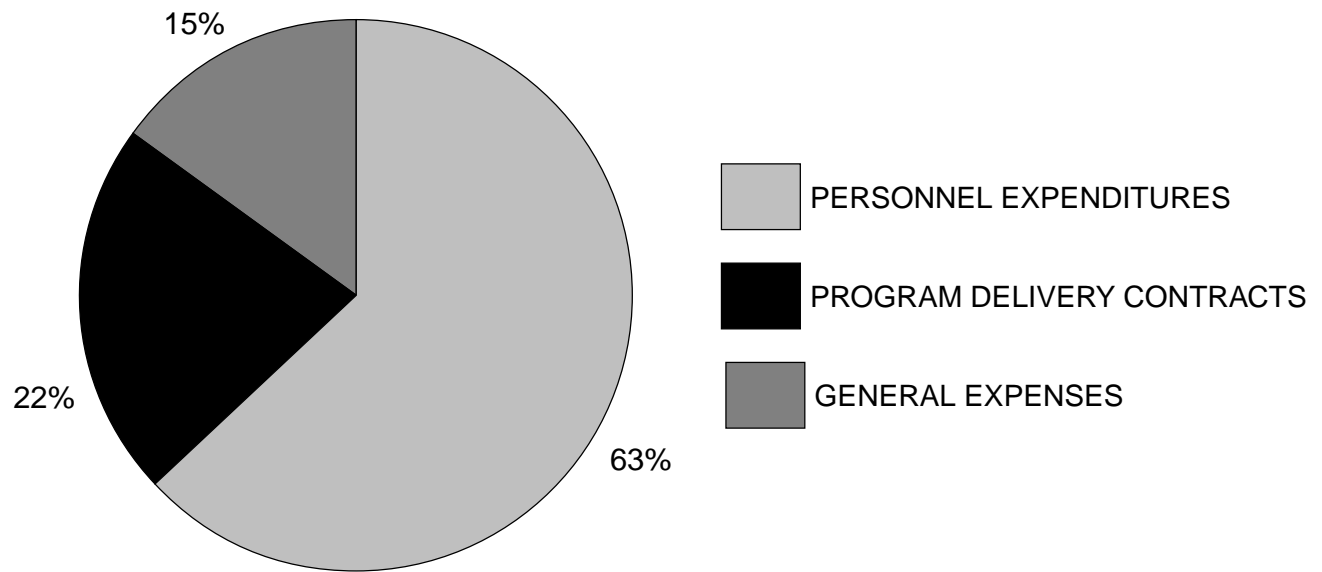
Projects include:

- Sowing the Seeds of Hope, a program providing mental health support for farm families in Iowa. Five project staff conducted 47 workshops and training sessions, reaching 1,744 persons; provided financial assistance for the provision of mental health services and/or counseling to 18 different individuals and families; offered 23 support group meetings. Iowa is one of seven states receiving funds through the Wisconsin Office of Rural Health and the Wisconsin Primary Health Care Association from the federal Health Resources Services Administration.
- Agricultural mental health training is being developed in collaboration with the National Association for Rural Mental Health, I-CASH, the Great Plains Center for Agricultural Health and the Center for Theology and Land at the University of Dubuque and Wartburg Seminars, to enable mental health professionals and primary care providers to better meet the mental health needs of America's agricultural producers. This project is partially funded by the Farm Foundation. A specialized curriculum and textbook on agricultural mental health are being developed.
- SHAUN has provided specialized assistance to farm families who have experienced a disability or fatality of a family member. Services have been provided mainly to Iowa families, but several cases have received assistance outside Iowa. SHAUN staff have helped integrate mental health services into the training of staff at Iowa's Agrisafe clinic network. The SHAUN office is located in Harlan, Iowa.

Financial Report

I-CASH budget for fiscal year 2000. Expenditures are divided into three areas: 1) personnel expenditures for programming and administration; 2) program delivery contracts; and 3) general expenditures.

PERSONNEL EXPENDITURES			
	Total I-CASH Effort	Budget Dollars	Actual Dollars
Programming and Program Delivery	75%	134,015	130,055
Administration	25%	44,672	43,352
Total		178,687	173,406
PROGRAM DELIVERY CONTRACTS			
Competitive Child Safety Grant		5,000	2,881
Delivery of Occupational Health and Safety Services to Farmers		11,000	12,553
Iowa State University Extension Safety		47,000	47,000
Total		63,000	62,434
Total Programming Expenditures		197,015	192,489
GENERAL EXPENSES			
Supplies		4,000	2,750
Travel		10,000	7,982
Other: Includes computer system support, required semiannual meetings, outreach materials, annual report, telephone, and newsletters.		22,605	31,720
Total General Expenditures		36,605	42,452
TOTAL BUDGET		278,292	278,292



The following are grants and contracts that I-CASH faculty and staff have successfully competed for to conduct intervention and research activities in Iowa:

Certified Safe Farms (CDC, NIOSH)	\$540,070 (1999 - 2003)
Certified Safe Farms (National Pork Producers)	64,000 (1998 - 2000)
Certified Safe Farms (Pioneer Hi - Bred International)	65,000 (1998 - 2000)
Rural Outreach Demonstration Project / IA-HASN Support	300,000 (1998 - 2000)
Community Acceptable Pork Production (USDA)	<u>160,000 (1998 - 2001)</u>
Total:	\$1,129,070

Appendix A

I-CASH Presentations / Newspaper Publications

July 1999

“Working with Distressed Farm and Ranch Families: Tools for Mental Health Professionals,” Michael R. Rosmann. July 6-9; Workshop presented at four Nebraska locations.

August 1999

“Sharing Help Awareness United Network of Iowa,” Michael Rosmann. Paper presented at the National Association for Rural Mental Health Conference, August 9; Minneapolis, MN.

Guest appearance on National Public Radio’s *Fresh Air* program. Mike Rosmann. August 10.

Farm safety display, LaMar Grafft. August 12-22; Iowa State Fair. Des Moines, IA.

Guest appearance on National Public Radio’s *Diane Rehm Show*; Mike Rosmann. August 19.

September 1999

“Working with Farm Families in Michigan,” Michael R. Rosmann. Workshop at Michigan State University Extension, September 27; Saginaw, MI.

Farm safety display, LaMar Grafft. September 28-30; Farm Progress Show.

October 1999

“Help in the Heartland,” Michael Rosmann. CNN Newsstand program, October 9.

“Planning for the New Millennium,” Michael R. Rosmann. Workshop presented to University of Nebraska Extension personnel. October 20; Halsey, NE.

NIOSH WorkPlace Safety and Health Training Conference, Carolyn Sheridan, Kelley Donham, Susanna VonEssen. October 24-26; St. Louis, MO.

November 1999

“Farmers’ Financial Hardship, Mental Health and Beliefs about Health and Safety.” Carol Hodne, Kelley Donham, Kendall Thu, D. Watson and Natalie Roy. Annual Meeting of Iowa’s Center for Agricultural Safety and Health. November 17; Des Moines, IA.

“Health Effects on Hogs and Farmers Shared Diseases and Dangers.” Kelley J. Donham. Presentation to Manchester Regional Medical Center, November 29; Manchester, IA.

January 2000

“Stress Management,” Michael R. Rosmann. Lecture at University of Nebraska Medical Center, Winter workshop. January 4; Omaha, NE.

Farm safety display, LaMar Grafft. January 19; Iowa Pork Congress.

Farm safety presentation, LaMar Grafft. January 27; Northwood, IA.

“Transitions in Agriculture: Implications for Mental Health,” Michael R. Rosmann. Keynote address at the Illinois Farm Crisis and Mental Health Conference, January 31; Champaign, IL.

February 2000

Farm safety display, LaMar Grafft. February 2; Iowa Power Farming Show.

“Perspectives in Agriculture,” Michael R. Rosmann. Keynote address to the South Carolina Farm Bureau Young Farmer Conference. February 4; North Myrtle Beach, SC.

“Agricultural Mental Health and Safety,” Michael R. Rosmann. Guest lecturer at University of South Dakota, February 9; Vermillion, SD.

“Test Your Knowledge of Manure Safety”. Jeff Lorimor and Charles Schwab, *Progressive Farmer* Vol. 115 No. 2 February, 2000.

March 2000

“Hats on for sun safety—Outreach programs that work.” Jan Stone, S. Gahring, and J. Smith. Presentation at Share Fair, CYFAR 2000; March 6-8; Charlotte, NC.

“Occupational Environmental and Community Health Issues around Swine Production: What’s New and What’s Not?” Kelley Donham. American Association of Swine Practitioners: March 12; Indianapolis, IN. (Full Paper presented for Proceedings)

“Caring for the Body, Mind and Spirit During the Rural Economic Crisis,” Michael R. Rosmann. Workshop at the Rural Ministry Conference, University of Dubuque and Wartburg Seminaries, March 13; Dubuque, IA.

“Farmers in Dual Occupations: Psychological Factors,” Michael R. Rosmann. Paper presented at the Second Annual Occupational Health Symposium, March 22; Iowa City, IA.

“Look Before You Leap: Preparation and Planning Key in Farm Safety”. Kristen Cage, *Farm News*, March 24; Fort Dodge, IA.

April 2000

“Health Insurance Profile of Farmers in Northwest Iowa.” Sara Scheniders and Kelley Donham. Presentation at NIOSH Agricultural Health and Safety Conference: Agricultural Safety and Health in a New Century. April 28-30, 2000, Cooperstown, NY.

“Certified Safe Farm-Experiences of the Certification Process.” Kelley Donham. Presentation at NIOSH Agricultural Health and Safety Conference: Agricultural Safety and Health in a New Century. April 28-30, 2000, Cooperstown, NY.

“Certified Safe Farm-Preliminary Injury and Health Outcome Results.” Kelley Donham. Presentation at NIOSH Agricultural Health and Safety Conference: Agricultural Safety and Health in a New Century. April 28-30, 2000, Cooperstown, NY.

May 2000

“How Shady is Your T-Shirt?” A leader guide on textiles for sun protection or adults to use with youth. Jan Stone and K. Hatch. Presented at the Priester Extension Health and Safety Conference. Denver, CO.

“An Overview of the Certified Safe Farm Project.” Sara Scheniders and Kelley Donham. Presentation at the 2000 Agricultural Occupational Health Training. May 19; Iowa City, IA.

“Acute Trauma in Farmers” LaMar Grafft. Presentation at the 2000 Agricultural Occupational Health Training. May 18; Iowa City, IA.

“Certified Safe Farm-Requirements for Certification”. Risto Rautiainen, Kelley Donham, LaMar Grafft, Sara Schneiders. Presentation at the American Industrial Hygiene Conference & Exposition, May 19-26; Orlando, FL.

June 2000

Farm safety display, LaMar Grafft. June 6; Fair, Kirksville, MO.

“A History and Overview of Agricultural Health and Safety Programs.” Kelley J. Donham, Chuck Schwab, and Sam Steel. Presentation at NIFS Summer Conference, June 16; Dubuque, IA.

“Tractor Risk Abatement and Control - The Policy Conference: Saving 2000 Lives by the year 2015.” Kelley J. Donham, Mel Meyers, Carol Lehtola, and Risto Rautiainen. Presentation at the NIFS Summer Conference, June 16; Dubuque, IA.

“Iowa Certified Safe Farm Program and Comprehensive Preventive Agricultural Occupational Health and Safety Services.” Kelley J. Donham, and Carolyn Sheridan. Presentation at the NIFS Summer Conference, June 16; Dubuque, IA.

“Tractor Risk Abatement and Control.” Kelley J. Donham, Mel Meyers, Carol Lehtola, Murray Madsen, and Barb Lee. Presentation and panel discussion at the NIFS Summer Conference, June 16; Dubuque, IA.

Farm Safety Day Camp, LaMar Grafft. June 16; Iowa City, IA.

“Certified Safe Farm: Using Health Insurance Incentives to Promote Agricultural Safety & Health.” Sara Schneiders and Kelley Donham. Presentation at the National Institute for Farm Safety. June 24; Dubuque, IA.

“Certified Safe Farm-An Overview and Results After Two Years.” Kelley Donham, Carolyn Sheridan, Risto Rautiainen, Sara Schneiders, LaMar Grafft, and Carol Hodne. Presentation at the National Institute of Farm Safety Conference, June 24-29; Dubuque, IA.

“Demonstration of the Certified Safe Farm review checklist on Palm Pilot”. Risto Rautiainen, Jeni McAnally, Kelley Donham, LaMar Grafft, and Sara

Schneiders. Professional Improvement Session at the National Institute for Farm Safety Conference, June 24-29; Dubuque, IA.

“Certified Safe Farm-Proposed Implementation Strategy.” Erkki Eskola, Risto Rautiainen, and Kelley Donham. Presentation at the Certified Safe Farm Meeting, University of Iowa, June 25; Iowa City, IA.

“The Farm Safety and Health Beliefs Scale: Relationships with Financial Stress and Depression.” Carol Hodne, Kelley Donham, Kendall Thu, D. Watson and Natalie Roy. Presentation at the National Institute for Farm Safety, June 26; Dubuque, IA.

“Mental Health Support for Farm Families in Iowa,” Jon-Michael D. Rosmann and Michael R. Rosmann. Paper presented at the National Institute for Farm Safety, June 26; Dubuque, IA.

“Iowa’s Response to the Mental Health Initiative,” Michael R. Rosmann. Plenary presentation at the National Institute for Farm Safety, June 27; Dubuque, IA.

“Incentive-based Agricultural Health and Safety Programs: A Review and Historical Development of the Certified Safe Farm Program”. Kelley Donham, Sara Schneiders, Risto Rautiainen, Carol Hodne, and LaMar Grafft. Presentation at the NIOSH Agricultural Health Centers Conference, June 27-30; Cooperstown, New York.

“Protective Headgear for Midwestern Agriculture.” Jan Stone, M. Hanna, C. Guo, and P. Imerman. Presentation at National Institute of Farm Safety. Dubuque, IA.

“New Farm Injury Stats.” Charles Schwab. National Education Center for Agricultural Safety Newsletter. May-June 2000.

Appendix B

I-CASH Publications

- Donham, Kelley J., M. Meyers, C. Lehtola, and R. Rautiainen, 2000. Tractor Risk Abatement and Control - The Policy Conference: Saving 2000 Lives by the year 2015. *Proceedings of the NIFS Summer Conference*, Dubuque, IA, June 16, 2000.
- Donham, Kelley J. Occupational Environmental and Community Health Issues around Swine Production: What's New and What's Not? American Association of Swine Practitioners. Indianapolis, Indiana, March 12, 2000. (Full Paper presented for Proceedings)
- Freeman, S. A., C. V. Schwab, and L. Miller, 2000. Keep Active Farmers Safe in Later Life. Iowa State University Extension publication Pm-1841a. ISU University Extension, Ames, IA 50011-3080.
- Greiner, T. H. and C. V. Schwab, 2000. Approaches to dealing with carbon monoxide in the living environment. Chapter 23 of *Carbon Monoxide Toxicity* by David Penney. CRC Press Boca Raton Fl 33431. Chapter pages 513-542.
- Guo, C., J.F. Stone, H.M. Stahr, and M.C. Shelley, 2000. Reduction of terbufos and tefluthrin contamination in glove materials. *Performance of Protective Clothing: Issues and Priorities for the 21st Century: Seventh Volume, ASTM STP 1386*, C. N. Nelson and N. W. Henry, Eds. American Society for Testing and Materials, West Conshohocken, PA, pp. 354-364.
- Hanna, H. M., C. V Schwab, and L. Miller, 1999. A new look for farm safety: Reflective and fluorescent tape. Iowa State University Extension publication AE-3104. ISU University Extension, Ames, IA 50011-3080
- Hodne, C.J., K. Thu, K.J. Donham, D. Watson, and N. Roy, 1999. Development of the Farm Safety and Health Beliefs Scale. *Journal of Agricultural Safety and Health* 5(4): 395-406.
- Jaspersen, J., P. List, L. Howard, D. Morgan, S. VonEssen, 1999. The Certified Safe Farm Project in Nebraska: The First Year. *Journal of Agricultural Safety and Health* 5(3): 301-307.
- Rosmann, M.R. 1999. Injury and the farm economy. *Midwest Injury Control*, Fall 1999, 1-2.
- Rosmann, M.R. 2000. Sharing Help Awareness United Network. *Rural Mental Health* 25(3): 32 - 35.
- Rosmann, M.R. 2000. Agricultural mental health. *Rural Mental Health*, 25 (3), 12.
- Schwab, C. V., S. A. Freeman, and T. Pollard, 2000. Assessment of the condition of Iowa augers and auger-related injuries and farmers' perceptions about auger-related injuries. *ASAE Journal Agricultural Safety and Health* 6(2): 117-129.
- Schwab, C. V., L. Miller, and L. Graham, 2000. What Would You Do: Helping children understand farm hazards. Iowa State University Extension, Ames, IA 50011-3080. ISBN-0-9700528-1-2. 86 pages.
- Schwab, C. V., S. Falb, and G. Harris, 1999. Reducing farm vehicle crashes. Chapter 14 of the Iowa Strategic Highway Safety Plan, Iowa Department of Transportation, Engineering Division. *Iowa Safety Management Systems*.
- Schwab, C. V., and L. Miller, 2000. 1999 Iowa farm injury and fatality data by county. Iowa State University Extension publication AE-3108. ISU University Extension, Ames, IA 50011-3080.
- Schwab, C. V., and L. Miller, 1999. 1998 Iowa farm injury and fatality data by county. Iowa State University Extension publication AE-3107. ISU University Extension, Ames, IA 50011-3080.

Schwab, C. V., and L. Miller, 1999. Hand Signals: Can you name them? Iowa State University Extension publication AE-3213. ISU University Extension, Ames, IA 50011-3080.

Schwab, C. V., and L. Miller, 1999. Hand Signals: Which one would you use (scenarios). Iowa State University Extension publication AE-3212. ISU University Extension, Ames, IA 50011-3080.

Schwab, C. V., and L. Miller, 1999. Hand signals poster. Iowa State University Extension publication AE-3211. ISU University Extension, Ames, IA 50011-3080.

Schwab, C. V., and L. Miller, 1999. Hand signals. Iowa State University Extension publication AE-3210. ISU University Extension, Ames, IA 50011-3080.

Schwab, C. V., and L. Miller, 1999. Universal Symbols exams E-H (18 items). Iowa State University Extension publication AE-3206 - 3209. ISU University Extension, Ames, IA 50011-3080.

Schwab, C. V., and L. Miller, 1999. Universal Symbols exams A-D (36 items). Iowa State University Extension publication AE-3202 - 3205. ISU University Extension, Ames, IA 50011-3080.

Schwab, C. V., and L. Miller, 1999. Building complex Universal Symbols. Iowa State University Extension publication AE-3201. ISU University Extension, Ames, IA 50011-3080.

Schwab, C. V., and L. Miller, 1999. Taking a look at Universal Symbols. Iowa State University Extension publication AE-3200. ISU University Extension, Ames, IA 50011-3080.

Stone, J., M. Hanna, C. Guo, and P. Imerman, 2000. Protective Headgear for Midwestern Agriculture. *Proceedings of the National Institute of Farm Safety*.

Stone, J., 1999. Hats for sun protection. *Journal of Family & Consumer Sciences* 91(1): 86-91.

Stone, J., 2000. Family Pesticide Safety: Understand label precautions. Iowa State University Extension publication, Pm-1663a, revised. ISU University Extension, Ames, IA 50011-3080.

Stone, J., 2000. Family Pesticide Safety: What to do when clothes are soiled with pesticide. Iowa State University Extension publication Pm-1663b, revised. ISU University Extension, Ames, IA 50011-3080.

Stone, J., 2000. Family Pesticide Safety: Wear protective gloves. Iowa State University Extension publication Pm-1663c, revised. ISU University Extension, Ames, IA 50011-3080.

Stone, J., 2000. Family Pesticide Safety: Wear coveralls and aprons. Iowa State University Extension publication Pm-1663d, revised June 2000. ISU University Extension, Ames, IA 50011-3080.

Stone, J., 2000. Family Pesticide Safety: Use eye and lung protection. Iowa State University Extension publication Pm-1663e, revised. ISU University Extension, Ames, IA 50011-3080.

VonEssen, S., and K. Donham, (BOOK CHAPTER). Respiratory Disorders in Animal Confinement Workers. *Occupational Medicine: State of the Art Review*. Rickey Langely, ed. Hanley and Belfus Inc. Philadelphia, 2000.



Appendix C

AgriSafe Network Directory

Regional Clinics

AgriSafe

Spencer Hospital / Spencer, IA
Nurse Director: Carolyn Sheridan
Ph: 712-264-6107 or 712-264-6440

Occupational Health Outreach

Myrtue Memorial Hospital / Harlan, IA
Nurse Directors: Nancy Osborn / Sue Hough
Ph: 712-755-4288

Agri Health and Safety Center

Mahaska County Hospital / Oskaloosa, IA
Nurse Director: Lynn Armstrong
Ph: 641-672-3143

Rural Health and Safety

Mercy Health Center / Dubuque, IA
Nurse Director: Charlotte Halverson
Ph: 800-637-2920 or 319-589-8111

NECAS/ Peosta, IA

Nurse Director: Charlotte Halverson
Ph: 319-556-5110 ext. 374

Ag Health and Safety Center

Van Buren County Hospital / Keosauqua, IA
Nurse Director: Laura Fields
Ph: 800-255-6548 or 319-878-4200

AgriSafe

Sioux Center Community Hospital / Sioux Center, IA
Nurse Director: Cheryl Hulstein
Ph: 712-722-8244

Affiliate Clinics

Palo Alto County Hospital / Emmetsburg, IA
Nurse Director: Mary Kay Nissen
Ph: 712-852-5469

AgriSafe Rural Neighbors

Butler County Public Health / Allison, IA
Nurse Directors: Linda Truax / Ann Brocka
Ph: 319-267-2934

Regional Medical Center / Manchester, IA

Nurse Director: Joan Deutmeyer
Ph: 319-927-7303 or 319-927-7567

AgriSafe Rural Neighbors

Franklin County Public Health / Hampton, IA
Nurse Directors: Jean Hirth / Sharon Meyer
Ph: 515-456-5820

Grundy County Health Care System / Grundy Center, IA
Nurse Directors: Elaine Lawrence / Elizabeth Ash
Ph: 319-824-5421

Health Partners / AgriHealth

Trinity Regional Hospital / Forth Dodge, IA
Nurse Director: Dorothy Griffen
Ph: 515-574-6507 or 515-574-6100

Lowden Family Medical Clinic / Lowden, IA

Nurse Directors: SuAnn Van Daele / Diane Esbaum / Teresa Franzen
Ph: 319-944-5361

Northwest Iowa Health Center / Sheldon, IA

Nurse Directors: Jean Boone / Cindy Freeman
Ph: 712-324-6402

Wayne County Public Health / Corydon, IA

Nurse Director: Teri Walker
Ph: 641-872-1167

Worth County Public Health / Northwood, IA

Nurse Director: Betty Chapin
Ph: 641-324-1741

Agri-Safe

Hawarden Community Hospital / Hawarden, IA
Nurse Directors: Dee Meerdink / Steve Liebetrau
Ph: 712-551-3127

Veterans Memorial Hospital / Waukon, IA

Nurse Directors: Diane Butikofer / Jeff Mitchel
Ph: 319-568-3411

Marion Business Health Services / Sioux City, IA

Nurse Director: Brenda Vore
Ph: 712-274-4250

Migrant and Seasonal Farm Worker Only Clinics

Proteus / Des Moines, IA

Nurse Director: Jeanne Duquette
Ph: 515-244-5694

Proteus / Fort Dodge, IA

Nurse Director: Nancy Strub
Ph: 800-798-8225

Proteus / Iowa Falls, IA

Nurse Director: Lianne Hovden
Ph: 800-213-6177

Appendix D

I-CASH Committees

Advisory Committee

Eric Fogg (Chairperson) (11/01)
Pioneer Hi-Bred International, Inc.
Ph: 515-334-6813
e-mail: foggep@phibred.com

Sandra Atkinson (11/01)
Iowa Cattlemen's Association
Ph: 712-938-2293

Rev. Sarai Schnucker Beck (11/02)
Ecumenical Ministries of Iowa
Ph: 515-255-5905
e-mail: Emofiowa@aol.com

Katherine Jewsbury Conger (11/01)
ISU Institute for Social and Behavioral Research
Ph: 515-294-4518
e-mail: kconger@iastate.edu

Jeanne Duquette (11/01)
Migrant Health Project, Proteus
Ph: 800-372-6031
e-mail: proteus@netins.net

Jan Goldsmith (11/00)
Governor's Traffic Safety Bureau
Ph: 515-281-6583
e-mail: goldsmit@dps.state.ia.us

Andrew Goodman (11/01)
Iowa-Nebraska Equipment Dealers Assn. Inc.
Ph: 515-223-5119

Jean Hirth (11/01)
Franklin County Public Health
Ph: 515-456-5829

Charles A. Jennissen, MD (11/01)
Pediatric Emergency Medicine
Blank Childrens Hospital
Ph: 515-241-6611

Dennis Keeney (11/01)
Professor, Emeritus
Iowa State University
e-mail: drkeeney@iastate.edu

Tracy Keninger (11/01)
Easter Seals FaRM program
Ph: 515-289-1933 extension 251
e-mail: essia@netins.net

Ken Kolpin (11/01)
Mutual Insurance Association of Iowa
Ph: 515-484-2787
e-mail: miai-KDK@pcpartner.net

Norm Moglestad (11/01)
Iowa Dairy Products Association
Ph: 515-965-8827

Jeris Petersen (11/01)
SHAUN
Ph: 641-322-3336

Jim Richards (11/01)
Iowa Corn Growers Association
Ph: 515-989-0080
e-mail: jrich10244@aol.com

Beverly Schnepel (11/01)
Iowa Farm Bureau Women
Ph: 712-484-3406

Carolyn Sheridan (11/00)
AgriSafe/Spencer Municipal Hospital
Ph: 712-264-6107
e-mail: agrisafe@ncn.net

Margaret VanGinkel (11/00)
Iowa Concern Hotline
Ph: 515-727-0656
e-mail: vangin@iastate.edu

Allen Weller (11/01)
Farm Bureau Insurance
Ph: 515-225-5474
e-mail: aweller@fbfs.com

Mary Yearns (11/01)
ISU Extension Housing Specialist and Iowa
AgrAbility Project Coordinator
Ph: 515-294-8520
e-mail: yearns@iastate.edu

Coordinating Committee

Kelley Donham (Director and Committee Chair)
Department of Occupational and Environmental Health
The University of Iowa
Ph: 319-335-4190
e-mail: kelley-donham@uiowa.edu

Roger Chapman (11/00)
Disability Prevention Program
Iowa Department of Public Health
Ph: 515-281-6646
e-mail: rchapman@idph.state.ia.us

Linda Santi (11/01)
Iowa Dept. of Agriculture and Land Stewardship
Ph: 515-281-7134
e-mail: linda.santi@idals.state.ia.us

Stewart Melvin (11/00)
Agricultural and Biosystems Engineering
Iowa State University
Ph: 515-294-0462
e-mail: swmelvin@iastate.edu

Janis Stone (11/00)
Textiles and Clothing
Iowa State University
Ph: 515-294-6712
e-mail: jfstone@iastate.edu

Peter Weyer (11/00)
Center for Health Effects of Environmental
Contamination (CHEEC)
The University of Iowa
Ph: 319-335-4014
e-mail: peter-weyer@uiowa.edu

Craig Zwerling (11/00)
Department of Occupational and Environmental Health
The University of Iowa
Ph: 319-335-4428
e-mail: craig-zwerling@uiowa.edu

Ad Hoc Members

Marilyn Adams
Farm Safety 4 Just Kids
Ph: 515-758-2827
e-mail: marilyna@netins.net

Charles Schwab
Agricultural and Biosystems Engineering
Iowa State University
Ph: 515-294-6360
e-mail: cvschwab@iastate.edu

Sam Steel
National Education Center for Agricultural Safety
Ph: 800-728-7367 ext. 271
e-mail: steels@nicc.cc.ia.us

Michael Rosmann
Sharing Help Awareness United Network
Ph: 712-755-1516
e-mail: mrosmann@fmctc.com

Central Administrators

Stephen Gleason
Director, Iowa Department of Public Health
Ph: 515-281-5605
E-mail: sgleason@idph.state.ia.us

Patty Judge
Secretary of Agriculture
Iowa Dept. of Agriculture and Land Stewardship
Ph: 515-281-5322
e-mail: agri@idals.state.ia.us

Derek Willard
Associate Vice President for Research
The University of Iowa
Ph: 319-335-3714
e-mail: derek-willard@uiowa.edu

Wendy Wintersteen
Executive Associate Dean, College of Agriculture
Iowa State University
Ph: 515-294-1823
e-mail: wwinters@iastate.edu

Appendix E

I-CASH Partners and Associates Directory

Ag Health & Safety Center (Regional Clinic)

Van Buren County Hospital
P.O. Box 70
Keosauqua, IA 52565
Contact: Laura Fields
Ph: 800-255-6548
FAX: 319-878-4210

Agri Health & Safety Center (Regional Clinic)

Mahaska County Hospital
1229 C Avenue East
Oskaloosa, IA 52577
Contact: Lynn Armstrong
Ph: 641-672-3143
FAX: 641-672-3366

AgriSafe (Regional Clinic)

Sioux Center Community Hospital
605 South Main Avenue
Sioux Center, IA 51250
Contact: Cheryl Hulstein
Ph: 712-722-8244
FAX: 712-722-4109

AgriSafe (Regional Clinic)

Spencer Hospital
1217 Second Avenue East
Spencer, IA 51301-4330
Contact: Carolyn Sheridan
Ph: 712-264-6440
FAX: 712-264-6482

American Lung Association

5601 Douglas Avenue
Des Moines, IA 50310
Contact: Sherie Wheeler
Ph: 800-278-5864
FAX: 515-334-9564

Center for Health Effects of Environmental Contamination

The University of Iowa
100 Oakdale Campus # N202 OH
Iowa City, IA 52242-5000
Contact: Peter Weyer
Ph: 319-335-4550
FAX: 319-335-4077
e-mail: cheec@uiowa.edu

FaRM Program

The Easter Seal Society of Iowa, Inc.
P.O. Box 4002
Des Moines, IA 50333-4002
Contact: Tracy Keninger
Ph: 515-289-1933
FAX: 515-289-1281

Farm Bureau Insurance

5400 University Ave.
West Des Moines, IA 50265
Contact: Allen Weller
Ph: 515-225-5474
FAX: 515-226-6470

Farm Safety 4 Just Kids

P.O. Box 458
Earlham, IA 50072
Contact: Marilyn Adams
Ph: 515-758-2827
FAX: 515-758-2517

Governor's Traffic Safety Bureau

629 East 2nd Street
Des Moines, IA 50319
Contact: Jan Goldsmith
Ph: 515-281-6583
FAX: 515-281-6190

Great Plains Center for Agricultural Health

100 Oakdale Campus, #124 IREH
The University of Iowa
Iowa City, IA 52242-5000
Ph: 877-611-4971
FAX: 319-335-4225
e-mail: gpcah@mail.public-health.uiowa.edu

Injury Prevention Research Center

100 Oakdale Campus, #158 IREH
The University of Iowa
Iowa City, IA 52242-5000
Contact: John Lundell
Ph: 319-335-4458
FAX: 319-335-4631

Iowa AgrAbility Project

62 LeBaron Hall
Iowa State University
Ames, IA 50011
Contact: Mary Yearn
Ph: 515-294-8520
FAX: 515-294-1908
e-mail: agrability@exnet.iastate.edu

Iowa Cattlemen's Association

22414 Hedge Avenue
Merrill, IA 51038
Contact: Sandra Atkinson
Ph: 712-938-2293

Iowa Corn Growers Association

424 288th St.
Hartford, IA 5011
Contact: Jim Richards
Ph: 515-989-0080

***Iowa Department of Agriculture and
Land Stewardship***

Henry A. Wallace Building
Des Moines, IA 50319
Contact: Brent Halling
Ph: 515-281-5323
FAX: 515-281-6236

Iowa Department of Public Health

Lucas State Office Building
Des Moines, IA 50319
Contact: Roger Chapman
Ph: 515-281-6646
FAX: 515-281-4535

Iowa FACE Program

100 Oakdale Campus, #105 IREH
The University of Iowa
Iowa City, IA 52242-5000
Ph: 800-513-0998
FAX: 319-335-4225

Iowa Farm Bureau Women

Route 1, Box 129A
McClelland, IA 51548
Contact: Beverly Schnepel
Ph: 712-484-3406
FAX: 712-484-3406

Iowa Farm Safety Council

207 Davidson Hall
Iowa State University
Ames, IA 50011-3080
Contact: Jim Polish
Ph: 800-247-5248
FAX: 319-294-9973

Iowa Farmers Union

3190 NW 142nd Ave
Polk City, IA 50226
Contact: Aaron Lehman
Ph: 800-775-5227
FAX: 515-292-6888

Iowa Pork Producers Association

638 Taylor St.
Rudd, IA 50471
Contact: Norman Schmitt
Ph: 515-395-2971
FAX: 515-375-2915

Iowa State University Extension

321 Beardshear Hall
Iowa State University
Ames, IA 50011
Contact: Stanley Johnson
Ph: 515-294-4576

Iowa-Nebraska Equipment Dealers Assn. Inc.

1311 50th St.
PO Box 65840
West Des Moines, IA 50265-0840
Contact: Andrew Goodman
Ph: 515-223-5119
FAX: 515-223-7832

Iowa Concern Hotline

2020 DMACC Blvd.
Ankeny, IA 50021
Contact: Margaret Van Ginkel
Ph: 515-727-0656
FAX: 515-727-0657

Mutual Insurance Association of Iowa

301 C. Street Apt.2A
Toledo, Iowa 52342
Contact: Ken Kolpin
Ph: 515-484-2787

***National Education Center for
Agricultural Safety*** (Regional Clinic)

Northeast Iowa Community College
10250 Sundown Road
Peosta, IA 52068
Contact: Charlotte Halverson
Ph: 319-556-5110 ext. 374
FAX: 319-557-0353

National Safety Council

1121 Spring Lake Drive
Itasca, IL 60143
Contact: Sam Steel
Ph: 800-621-7615 x 2023
FAX: 630-285-1613

Occupational Health Outreach (Regional Clinic)

Myrtue Memorial Hospital
1213 Garfield Avenue
Harlan, IA 51537
Contact: Sue Hough or Nancy Osborn
Ph: 712-755-4288
FAX: 712-755-2640

Pioneer Hi-Bred International, Inc.

400 Locust Street, Suite 800
Des Moines, IA 50309-2340
Contact: Eric Fogg
Ph: 800-247-6803 ext. 6813
FAX: 515-248-4999

Proteus

P.O. Box 10385
Des Moines, IA 50306-0385
Contact: Jeanne Duquette
Ph: 515-244-5694
FAX: 515-244-4166

Rural Health and Safety (Regional Clinic)

Mercy Health Center
250 Mercy Drive
Dubuque, IA 52001
Contact: Charlotte Halverson
Ph: 800-637-2920
FAX: 319-589-9669

Sharing Help Awareness United Network

1210 7th Street, Suite C
Harlan, IA 51537
Contact: Mike Rosmann
Ph: 712-755-1516
FAX: 712-755-1515

The Wellmark Foundation

636 Grand Avenue, Station 150
Des Moines, IA 50309
Contact: Jane Schadle
Ph: 515-245-5133
FAX: 515-248-5382