

2003 ANNUAL REPORT

*Helping Farmers Stay
Alive & Well*



A partnership of

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

HCASH

UI ♦ ISU ♦ IDPH ♦ IDALS

Iowa's Center for Agricultural Safety and Health

THE
UNIVERSITY
OF IOWA

IOWA'S CENTER FOR AGRICULTURAL SAFETY AND HEALTH

2003 Annual Report



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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.

2003 I-CASH Annual Report

Editor: Kay Mohling

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Opening Thoughts From The Director



Doing more with less is the theme of most farming and ranching enterprises these days. Since the 1970's agricultural producers have had to expand their acreages and animal units to keep more dollars coming in, while paying out more dollars for services and supplies. The squeeze gets tighter every year, resulting in increased stress and injuries.

Doing more with less is the order of the day for many other private and public institutions as well. I-CASH took another 2.5% cut along with the other regent institutions, making our budget significantly less (when accounting for inflation), than when I-CASH began in 1990.

However, we have created new and stronger collaborations to create efficiency and synergy in our agricultural health and safety programs at the

University of Iowa. We have formed the Agricultural Medicine Core group that consists of I-CASH, The Great Plains Center for Agricultural Health, and faculty and staff from other centers. The new *Farm Families Alive and Well* newsletter is an example of that collaboration. We have brought in new money from a variety of sources to keep helping farm families stay alive and well. Our Certified Safe Farm program is an example, as funding is coming from new partnerships with farm organizations, insurance companies, agribusinesses, and the National Institute for Occupational Safety and Health. We look forward to building this program into the business fabric of the agricultural community and watching it progress to a new level of activity after five years of service. Our goal is to have the agricultural community own and run Certified Safe Farm, in conjunction with I-CASH and the AgriSafe Network.

Doing more with less means the agricultural health and safety community can not necessarily rely on governmental sources and contributions from the private sector, as much as in the past. Finding the value added position of health and safety on the farm, and building that into win-win business partnerships is the vision of Certified Safe Farm. This concept provides leadership, but turns the responsibility and sustainability over to the agricultural community. Should we accomplish this, we will be doing even more with less to help the farm community stay alive and well in agriculture.

Kelley J. Donham, MS, DVM
Director, Iowa's Center for Agricultural Safety and Health

I-CASH Partner Programs

The following are brief descriptions of major activities of the four I-CASH state institutional 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

The Iowa Department of Agriculture and Land Stewardship (IDALS) in cooperation with the Iowa State University (ISU) Extension and the US Environmental Protection Agency (EPA) conducts the pesticide applicator certification program. Private pesticide applicators are certified to apply Restricted Use Pesticides and Commercial Pesticide Applicators are certified to apply General and Restricted Use Pesticides. As of June 30, 2003, Iowa had 11,565 certified commercial applicators, 498 certified commercial handlers, and 28,162 certified private applicators. Approximately 180 private and 255 commercial continuing instruction certification training sessions will be offered in fiscal year 2004.

Worker Protection Standard

The Worker Protection Standard (WPS) for agricultural pesticides is a regulation issued by the US Environmental Protection Agency (EPA). The WPS emphasizes educating agricultural employers on farms, forests, nurseries, and greenhouses of the need to train their workers and pesticide handlers regarding the safe use of pesticides. With matching funds from EPA and IDALS, ISU Extension developed and distributed WPS training materials and held presentations for agricultural employers concerning their responsibilities to their employees. ISU Extension distributed 140 of the updated WPS video packets to the Iowa Greenhouse Growers Association, Iowa Fruit & Vegetable Growers Association, and Grape Growers Association. ISU Extension also developed a self-assessment quiz to be used with the WPS Train-the-trainer video. IDALS continues to provide the EPA's

fifth edition of the *Recognition and Management of Pesticide Poisonings* manuals to I-CASH for distribution to health care providers in Iowa.

www.agriculture.state.ia.us

Iowa Department of Public Health

Agricultural Injury Registry

The Iowa SPRAINS program has provided valuable insight into Iowa's agricultural-related morbidity and mortality since its inception in 1990. The definition of injury is defined as being "incurred on a farm, by a farmer, farm worker, farm family member, or other individual or off the farm injuries related to producing, transporting, handling, processing, or warehousing farm commodities."

Agricultural injury surveillance has four objectives:

- 1) provide descriptive epidemiologic associations for contemporary agricultural injury;
- 2) identify high-risk groups and high-risk circumstances for injury;
- 3) identify potential educational, regulatory, and engineering intervention strategies to prevent farm injury; and



- 4) evaluate effectiveness of established intervention control measures.

These data continue to be used by injury prevention specialists to make the case for specific injury prevention measures in grant proposals. They are used to focus data-driven interventions on specific high-risk groups.

www.idph.state.ia.us

Iowa State University

Farm Safety Program

The activities of the Iowa State University Extension farm safety program are directed toward the major goals identified by the I-CASH Board of Directors. These activities include the following:

- The Safe Farm radio program produced and distributed 52 weeks of broadcast-quality one-minute messages to 68 radio stations
- ISU Extension organized articles on farm safety issues by involved partners (FaRM, FS4JK, ICASH, IDPH, IFSC, ISU, NECAS, NSC, and SHAUN) and distributed them to Iowa's newspapers during the National Farm Safety and Health Week September 15-21, 2002
- ISU Extension staff in 8 counties offered tractor safety training courses to 65 youth (age 14 -15) during 2003
- Extension staff conducted safety day camps throughout the state. A total of 33 counties participated, reaching 3,498 youth with their educational messages
- A total of 23 county extension offices provided an in-school farm safety program that delivered safety materials and education to 8,073 children
- Non-youth safety meetings that reached 2,367 adults were conducted in 8 counties by extension staff

- A monthly electronic farm safety newsletter was produced and distributed to 116 educators
- The World Wide Web home pages that provide valuable farm safety resources were maintained

www.abe.iastate.edu/safety

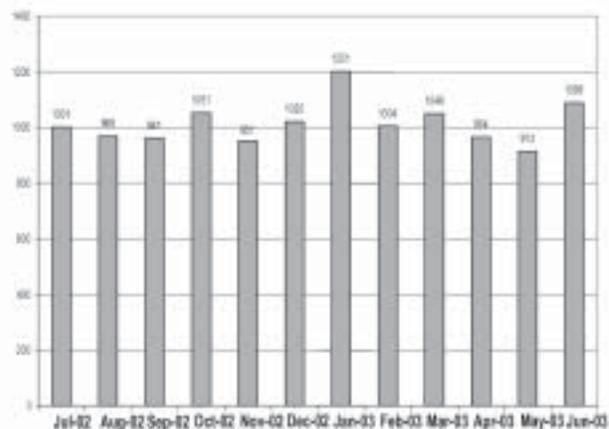
www.tmvc.iastate.edu

Iowa Concern Hotline

Iowa Concern is a part of Iowa State University Extension and offers information and referral, stress counseling, and legal education. The Iowa Concern Hotline received 12,171 calls from July 2002 through June 2003, which was nearly 2500 more calls than received the year before. Approximately 25% of the calls were from farm and rural families. This year, the number of farm calls increased during the summer months.

The calls demonstrated that families were concerned with their financial condition. Some of the rural and farm families had lost a second or third job that helped support their farm operation and/or paid for insurance benefits. These families were struggling to make decisions about whether to stay on the farm or to leave. Many were dealing with family conflicts on an intergenerational farm, and issues of who would leave

Iowa Concern Calls by Month
July 2002 - June 2003



the farm operation or who would make farm decisions. Other situations encountered on the hotline included legal problems with divorce, child custody issues, the Iowa fence law, contracts, and landlord/ lease cases.

Again this year, Iowa Concern was fortunate to have access to two different funds to help farmers and rural families access behavioral health counseling. The *Rural Mental Health* grant, from SAMHSA and CMHS, provided one-on-one assistance to families through area based extension/citizen/provider supported teams. Rural families could access their area health clinics (up to five visits) for behavior health counseling. This two year grant expired August 1, 2003. Screening evaluations have indicated that participants were very satisfied with the counseling experiences they received and the sessions were beneficial for families. More results of the survey are listed on the “families” web site under mental health project at www.extension.iastate.edu. The *Sowing the Seeds of Hope* grant is part of a seven state project that is available for farm families. Vouchers are issued through the Iowa Concern Hotline for families to take to providers for up to five counseling sessions. This grant is funded through the US Department of Health and Human Services Office of Rural Health Policy, and the Bureau of Primary Health Care. Funds will be available through 2004.

Iowa Concern updated their web site last year and continues to receive 6,000-7,000 visits each month. The site has many of the FAQ’s that people might ask on the phone, features success stories, and a “Live Person” link.

www.extension.iastate.edu/iowaconcern

Private Pesticide Applicator Statewide Training Program

Federal and state laws require that people who purchase and apply restricted use pesticides be certified according to established standards. Iowa State University Extension develops and delivers training programs each year for private pesticide applicators. The participants in the programs are primarily farmers.

The topics for training include laws, calibration and drift, the Agricultural Health Study, crop pest topics, and accidental pesticide poisoning of livestock. Statewide, 333 meetings were conducted with 19,392 participants during FY 2003.

To determine if there was an impact on the participants, a post-training evaluation assessed behavioral changes toward safer pesticide-use practices. After receiving information on reducing spray drift, 40% of the respondents indicated that they would now use a wind meter, reduce sprayer pressure, or increase nozzle size to reduce spray drift.

In addition, the evaluation examined if participants had successfully implemented new pesticide safety activities as a result of the previous years’ training. Eighty-nine percent of the respondents now maintain pesticide records that meet the restricted-use record keeping requirements. In addition, 83% of respondents maintain that they review the storage and disposal section of the pesticide label prior to pesticide use.

The University of Iowa

Projects led by I-CASH core faculty and staff

Agricultural Occupational Health Training

The I-CASH Agricultural Occupational Health Training was held May 14-16 and June 18-20, 2003. Forty-one health care professionals from Iowa, Wisconsin, Nebraska, and Canada were trained on topics such as agricultural toxicology, zoonotic diseases, agricultural trauma, respiratory issues, behavioral health, occupational hearing impairment, personal protective equipment, skin cancer, and ergonomics. This year the course was offered for 3 hours of graduate credit from the College of Public Health, and also new this year, the University of Iowa Physician Assistant students completed Session 1 as a web-based course. The next training sessions are May 19-21 and June 9-11, 2004.

Certified Safe Farm



The voluntary, incentive-based Certified Safe Farm (CSF) project in Northwest Iowa was officially completed August 1, 2003. Since 1998, approximately 130 farmers from a nine-county area in Northwest Iowa have received CSF services on a yearly basis. In all, over 250 Iowa farmers have taken part in the program.

Primary efforts this past year have focused on securing state and federal funding to continue the CSF program beyond 2003, and to build the business infrastructure that will sustain the program on a long-term basis.

Some key activities that occurred this past year included the following:

- Farmer focus groups were held August 19th, 2002 in Spencer, Iowa. A total of 13 CSF farmers attended, along with 9 CSF service providers. We discussed the effectiveness of the program, focusing on how to improve the various components.
- In April 2003, a farm safety review training was held in Iowa City, Iowa to train participants how to assess on-farm safety.
- In June 2003, a grant application was submitted to the National Institute of Occupational Safety and Health (NIOSH) to request additional funding to implement a larger Certified Safe Farm program in Iowa.
- The second year of the Certified Safe Dairy Farm in the Dubuque, Iowa area was completed. This project will continue for a total of five years. The Great Plains Center for Agricultural Health received funding from NIOSH to provide this program to 25 farmers in that area of the state.

Farm Safety Youth Grants

Each year I-CASH designates funds for community grants targeted at the prevention of farm-related injury in young people (less than 19 years of age). This year grant funds were distributed to the following:

- ISU Extension/Floyd Valley Hospital's AgriSafe Clinic – to provide an innovative Farm Safety Day Camp that includes parents.
- Mitchell County 4-H & Youth Development – to offer a Farm Safety Day Camp for youth in grades 1-5.
- Farm Safety 4 Just Kids – to train youth in farm safety and farm safety resources to present programs and training in their communities.
- ISU Howard County Extension – to provide a 4-H Farm Safety Day Camp for youth age 7-13 and their parents.
- Butler County Public Health/AgriSafe Rural Neighbors – to present a Farm Safety Day Camp featuring “sun safety.”
- Horn Memorial Hospital AgriSafe Clinic – to implement a Farm Safety Event for children ages 4-7 at the Ida County Fair.
- AgriSafe (Spencer) – to collaborate with area Driver's Education instructors to teach young drivers about roadway dangers involving farm equipment.

I-CASH congratulates these recipients and we look forward to the success of their projects.



Participants at the Butler County Public Health/AgriSafe Rural Neighbors Farm Safety Day Camp sun station.

Hall of Fame Award

Two Iowans were selected as the first-ever recipients of the I-CASH Agricultural Safety and Health Hall of Fame Award. This award was created to recognize individuals or organizations that have made a significant contribution to agricultural safety and health. The judges were unanimous in their selection based on the substantial and long-term contribution and dedication of the awardees to the agricultural safety and health community.

Marilyn Adams, founder and president of Farm Safety 4 Just Kids, and L. W. (Pete) Knapp, Jr., professor emeritus of Occupational and Environmental Health in the UI College of Public Health, were honored at a ceremony on September 7, 2002, at the Clay County Fair in Spencer, Iowa. Governor Tom Vilsack presented the awards and signed a proclamation declaring the week of September 15-21 as Iowa Farm Safety and Health Week.



Governor Tom Vilsack presents Marilyn Adams with the I-CASH Agricultural Safety and Health Hall of Fame Award. L.W. (Pete) Knapp, Jr. also received the Hall of Fame Award on September 7, 2002 at the Clay County Fair, Spencer, Iowa.

Agricultural health projects at other University of Iowa research centers:

Agricultural Health Study in Iowa



The Agricultural Health Study is a prospective cohort study of agricultural exposures and chronic disease (especially cancer) in Iowa and North Carolina, primarily funded by

The National Cancer Institute. This is the eleventh year of the study, which involves commercial and private pesticide applicators, and spouses of private applicators. The first five years were devoted mainly to enrolling eligible subjects; 89,658 subjects were enrolled in the two states. In Iowa, 58,564 subjects were enrolled, exceeding our goal of 50,000. Since 1997, we have linked annually cohort members to Iowa mortality and incidence databases. As of Spring 2003, 1,413 deaths and 1,916 incident malignant cancers had been identified after enrollment.

Since 1998, our primary activity has been attempting to recontact each cohort member to 1) conduct a computer-assisted telephone interview to update exposure information (this has been completed with 38,022 private applicators and their spouses), 2) obtain dietary health questionnaire data (this has been completed with 24,405 private applicators and their spouses), and 3) obtain buccal cells (this has been completed with 23,791 private applicators and their spouses). For the next several months we will be performing these same tasks with commercial applicators.

There are also several completed/ongoing/planned special studies that involve cohort members. More information about these studies, publications, and the Agricultural Health Study in general can be found on the website.

www.aghealth.org

Center for Health Effects of Environmental Contamination

The University of Iowa Center for Health Effects of Environmental Contamination (CHEEC) supports and conducts research to identify, measure and prevent adverse health outcomes related to exposure to environmental toxins. CHEEC was established through the 1987 Iowa Groundwater Protection Act and has focused its efforts to date mainly on water contaminants. A primary activity of CHEEC involves environmental database design and development and systems support for environmental health research being conducted at the University. The CHEEC Data Management Center is involved in a variety of epidemiologic studies of rural and urban populations in Iowa.

Since the fall of 1988, the CHEEC Seed Grant Program has funded more than seventy pilot studies in a wide range of environmental research areas, including biodegradation of toxic substances and bioremediation of contaminated environments, laboratory measurement, sampling methods, design and on-site monitoring, database development, health survey design and statistical analyses of environmental exposures, and chronic health outcomes. The program also funds environmental health programs of interest to Iowans. Ongoing educational programs take advantage of cooperative relationships CHEEC has established with Iowa state agencies and other University research centers to sponsor seminars and conferences on a variety of environmental health issues.

www.cheec.uiowa.edu



Center for International Rural and Environmental Health

In June 2003, CIREH's Fogarty International Center training program, which has focused on providing training for public, occupational and environmental health researchers, successfully used video-conferencing technology to enhance its second annual Summer Institute for Rural and Environmental Health. Although the Summer Institute took place at Trnava University in Slovakia, the 43 participants were able to see, hear, and interact with faculty from a University of Iowa classroom nearly 5000 miles and seven time zones away.

Participating Iowa faculty and topics included Dr. James Merchant (Keokuk County Rural Health Study), Dr. Craig Zwerling (injury and injury prevention in rural settings), Mr. David Osterberg (Environmental Justice), Dr. Larry Robertson (PCB Toxicity), and Dr. Keri Hornbuckle from the College of Engineering (Risk Assessment). In addition, Dr. Gerry Rushton traveled to Slovakia and spoke about the use of Global Information Systems (GIS) in public health, connecting to his GIS lab in Iowa to demonstrate the technology. CIREH director, Dr. Thomas Cook, said the video-conferencing technology allowed for a broader scope of expertise along with interactive discussion. "By connecting international collaborators and sharing expertise, health professionals can reach a higher level of understanding about environmental issues that are common to rural areas worldwide."

www.public-health.uiowa.edu/cireh

Environmental Health Sciences Research Center



The mission of The University of Iowa Environmental Health Sciences Research Center (EHSRC) is to continually advance knowledge and awareness of environmental health science that improves the quality of life among rural and agricultural populations. The EHSRC is funded by the National



Institute of Environmental Health Sciences (NIEHS), and is the only center to focus on rural environmental exposures, related injuries, and diseases. Health concerns such as pesticide-induced cancers and birth defects, community and occupational exposures to airborne hazards from concentrated livestock feeding operations, asthma among rural children, and the remediation of rural hazardous waste sites are among the issues being studied by the multidisciplinary team of investigators in the EHSRC. Through community outreach programs, the center disseminates research findings to the public and serves as a technical resource for legislative bodies, grassroots community organizations, and populations with special needs.

www.ehsrc.uiowa.edu

Great Plains Center for Agricultural Health

The Great Plains Center for Agricultural Health (GPCAH) is dedicated to promoting and helping to protect the health and safety of farmers, farm workers, their families, and the agricultural community. The Center is one of 10 NIOSH-funded agricultural health



and safety centers, including the National Children's Center for Rural and Agricultural Health and Safety. The GPCAH serves the Midwest, especially Iowa, Missouri, Kansas, and Nebraska (Federal Region VII). The GPCAH is structured into four core areas.

Administrative Core

In addition to the three feasibility projects initiated last year (press clipping surveillance of farm and agricultural injuries, national agricultural safety and health status and needs assessment report, and a regional behavioral health conference) GPCAH is currently funding the following additional feasibility projects:

- Prevalence of Musculoskeletal Symptoms and Disability Among Iowa Dairy Farmers
- Pilot Study of Neurological and Neurobehavioral Outcomes Among Farm Workers
- Evaluation of Ammonia Absorption to Particles
- The Whole Blood Assay as a Biomarker of Exposure, Effect and Susceptibility in Workers Exposed To Organic Dust
- Safety and Health Needs of the Hispanic Population Involved in Agriculturally-Related Occupations in Nebraska and Western Iowa

Research Core

Four projects build on our experience addressing important agricultural health and safety needs. The Keokuk County Rural Health Study and organic dust project are ongoing, the other two in the final stages.

- The Keokuk County Rural Health Study (KCRHS): The Epidemiology of Disease and Injuries in an Agricultural County
- New Methods for Evaluation of Organic Dust Aerosols
- Health Tracking of Musculoskeletal Disorders Among Iowa Farmers
- Genetic Studies in Non-Atopic, Non-Smoking Farmers with Airway Obstruction

Education and Outreach Core

The Education and Outreach Core provides structure and content for a full range of agricultural safety and health educational training. This core supports a number of outreach activities, such as newsletters, presentations and articles, as well as a formalized curriculum that provides a specialty emphasis in

agricultural safety and health with courses for MS and PhD candidates.

Prevention and Intervention Core

The Prevention Core includes one project to reduce injuries and illnesses with a modified Certified Safe Farm (CSF) program for dairy farmers. This is important work as we continue to improve the basic CSF program, making it more comprehensive and adaptable.

www.public-health.uiowa.edu/gpcah

Injury Prevention Research Center



Since 1990, the University of Iowa Injury Prevention Research Center (UI IPRC) has been a national leader in identifying ways to reduce the

high number of preventable injuries that occur in rural communities. Faculty and staff from sixteen departments within the Colleges of Public Health, Medicine, Engineering, and Liberal Arts participate on research in the Center.

In addition to supporting research, the UI IPRC also serves as a national resource for rural injury prevention. The Center provides information, educational programs, and multi-disciplinary training to injury control advocates and programs across the Midwest.

Large research studies currently underway at the UI IPRC include:

- 1) evaluating emergency medical services within Iowa;
- 2) comparing the effectiveness of various types of smoke detectors in rural homes;
- 3) examining risk-taking behavior of children using a bicycle simulator; and
- 4) studying the driving abilities of persons with sleep apnea syndrome.

www.public-health.uiowa.edu/iprc

Iowa Fatality Assessment and Control Evaluation Program



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. The FACE program identifies all occupational fatalities in the state and conducts in-depth investigations of specific incidents. The FACE Program investigators develop recommendations aimed at preventing similar occupational injuries.

Fatal injuries while on the job remain a serious public health concern in Iowa as well as the entire country. During calendar year 2002, sixty-six Iowans were killed while at work. Workers in agriculture and construction continue to experience a high number of fatal injuries in Iowa. Approximately one-third of the victims were employed in agriculture and over 20% were in the construction trade.

www.public-health.uiowa.edu/face



I-CASH Affiliate 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 enhancing the health and safety of Iowa's agricultural community.

AgriSafe Network



The AgriSafe Network is a diverse group of over twenty rurally-based hospitals, health clinics, and county health departments that provide preventive occupational health services to Iowa farmers. AgriSafe clinics are staffed by nurses who have completed advanced training offered by I-CASH. The AgriSafe clinics serve as an early point of entry into the health care system before serious health conditions develop. Chronic health conditions (such as diabetes, and skin cancer) have been averted in farmers as a result of referrals made by AgriSafe nurses. These conditions, if left untreated, can greatly diminish quality and length of life.

The Network collaborates with researchers and national safety organizations to assist AgriSafe clinics in the development of effective agricultural health and safety services. Research institutions as well as other rural health and safety organizations may benefit from collaborative partnerships with the Network. Organizations that are interested in developing an AgriSafe clinic are encouraged to visit our website. www.agrisafe.org



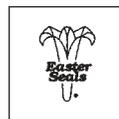
AgriWellness, Inc.



AgriWellness, Inc. provides administrative support and technical assistance to *Sowing the Seeds of Hope* partners in Iowa, Kansas, Minnesota, Nebraska, North Dakota, South Dakota and Wisconsin to build behavioral health supports for the agricultural population. During the past year 6,514 persons attended outreach events, 1,424 persons participated in community education programs, 922 farm residents received mental health services, 163 persons participated in educational retreats and support groups and 753 physicians, mental health professionals, clergy and allied personnel participated in provider training programs. AgriWellness linked with the State Public Policy Group, Iowa State University Extension Service, the National Rural Health Association and several other sponsors to hold a first-of-its-kind conference, "The Clock is Ticking for Rural America: A Behavioral Health and Safety Conference." Plans include continuing our work and a research project investigating the effectiveness of farm crisis services.

www.agriwellness.org

Easter Seals Rural Solutions



Creating solutions. changing lives.

The Easter Seals Rural Solutions Program was developed in 1986 to address the technological and psychological needs of farm families affected by a disability. The Rural Solutions Program provides on-site rehabilitation services that promote the return to farming and the community, and increased independence. Annually, nearly 150 farm family members are served through this program. Services offered include providing adaptive equipment,

modifications to the farm and home, secondary injury prevention education, equipment loan, and peer support.

Easter Seals collaborates with Iowa State University Extension through the AgrAbility Project, and the Division of Vocational Rehabilitation Services to assist farm family members to remain in farming after a disability.

<http://ia.easter-seals.org>

Farm Safety 4 Just Kids



In 2003, FS4JK chapters hosted 8 Regional workshops across the United States and Canada. I-CASH funding allowed for a youth training component to the chapter workshop held in LeMars, Iowa. The FS4JK

Chapter network has reached over 700,000 children.

In addition, FS4JK was proud to be involved in the following programs in 2003:

- Generations of Safe and Healthy Farmers- addressing the older farmer and young child's risk factors through storytelling and facilitation funded through the USDA-RMA
- Farm Family Incentive Grants: Successful Farming® sponsored grants to farm families to make safety improvements
- Buckle Up or Eat Glass- Iowa GTSB funded 18 sites in Iowa as well as a youth speaker's bureau
- Kids Are Key- FS4JK staff traveled 1,000 miles to see over 1,000 kids during National Farm Safety and Health week-14 sites in 10 states hosted "Kids Are Key" awareness walks
- University of Kentucky- the final year of the evaluation of farm safety day camps

New Educational Resources:

- Machinery Safety Packet
- Cawshus the Crow Farmstead Safety Brochure

- New and Improved Farm Safety Walkabout
- *Keep It Safe On the Farm* Activity Book
- *Rhythm of the Seasons...A journey beyond loss* video

www.fs4jk.org

Iowa Farm Safety Council



2003 marks the 60th anniversary of the Iowa Farm Safety Council's voluntary efforts to make rural Iowa a safer place to live, work, and raise a family. The

Council is a grass roots effort supported by a network of professionals in agricultural production, education, insurance, industry, and government.

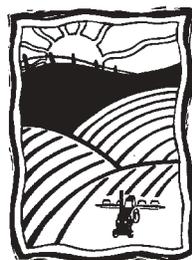
Thousands of children across Iowa participated in the Council's Fire Prevention Education Program. The Council provides this educational program for the children of Iowa with support from the State Fire Marshall, Iowa Firemen's Associations, and many industry and insurance leaders.

This year, the Council's ongoing efforts to promote good safety and health practices resulted in a visible presence at both the Iowa State Fair and the Iowa Power Farming and Machinery Show. In September 2002, the Council also coordinated the safety and health exhibits at the Farm Progress Show.

www.abe.iastate.edu/safety/ifsc.htm

National Education Center for Agricultural Safety

THE NATIONAL
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CENTER
FOR AGRICULTURAL SAFETY

Located in eastern Iowa, approximately 10 miles west of Dubuque, The National Education Center for Agricultural Safety (NECAS) is a partnership between Northeast Iowa Community College and The National Safety Council. NECAS offers education and interactive safety training opportunities for farmers and their families, rural

EMS and fire services, and agribusinesses. Farm organizations and commodity groups can also utilize the NECAS facility for leadership development and business meetings.

Some examples of current programs include:

- Ag Families USA
- Hunter Safety
- Fall Harvest Safety Days for FFA students
- Progressive Agriculture Foundation Safety Day Camps
- Surviving Summer Safely Field Trips
- Combine/Silo/Grain Bin Rescue Training
- Forklift Train the Trainer Class
- Construction Flagger Training
- Health Screenings for Farmers
- Farm Family Safety Day
- CPR/First Aid for Agriculture

Ongoing collaborative projects include:

- Certified Safe Farm
- ATV Institute Training
- Sun Safety Project with Ohio State
- Development of Chemical Safety Training Site with GROWMARK
- NOISE Abatement Project with the NIOSH-funded Great Lakes Center
- Progressive Agriculture Foundation Safety Day Camp Coordinator Training
- Tractor Certification for the HOOA
- Preceptor Site for Occupational Health Professionals

www.nsc.org/necas.htm



Proteus, Inc. is a not-for-profit organization that since 1990 has operated the BPHC-funded Migrant Health Project in the state of Iowa. From offices located in Des Moines, Fort Dodge, and Muscatine, Proteus provides outreach, home visits, and clinics around the state where migrant and seasonal farm workers are found.

After farm worker families are certified as eligible,

Migrant Health Aides conduct health histories, then the families are seen by the PA, volunteer providers or contracted providers. Proteus conducts clinics, and educational activities at sites such as migrant camps, employer sites, motels and other living sites. Between 1,000 to 2,000 migrant farm workers come to Iowa each year to perform work including seed corn detasseling and harvesting, walking beans, and working with other crops such as flowers, apples, cucumbers, potatoes, and melons. Generally, the entire family travels together and many of the family members work together.

Iowa is also home to as many as 10,000 low income seasonal farm workers. These individuals reside in Iowa throughout the year and perform seasonal agricultural work for other farmers, work in hog confinement operations, sweet corn processing, egg production, or are employed as general farmhands.

<http://showcase.netins.net/web/proteus>

Sharing Help Awareness United Network



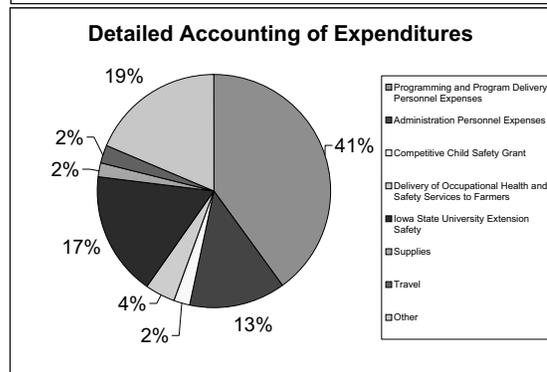
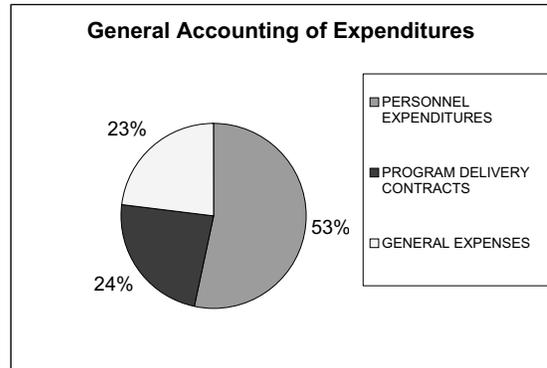
Sharing Help Awareness United Network (SHAUN) leaders and outreach workers continue to provide support to farmers, farm workers, and their families who have experienced a death, disability, or loss in farming. Educational resources, referrals, and peer support help families cope with financial, emotional, health, spiritual, and grief issues. SHAUN staff attended Rural Advocacy 2003 meetings, served on the Iowa Disaster Human Resource Council, participated in the national Farm Aid training in natural disaster relief, and supported the National Workplace Safety Summits. SHAUN continues to be involved as a farm safety advocate working with Extension in tractor safety courses, farm safety day camps, and providing speakers at conferences promoting safety and health care. SHAUN strives to promote safe and ethical farming and livestock practices.

www.shaunnetwork.org

Financial Report

The I-CASH budget consists of state funds, (\$259,957 FY 2003) plus competitive grant and contract funds, (\$2,003,817 for the period 1999-2006). The following table and graphs depict the state appropriated fund expenditures. 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% | 116,895 | 103,856 |
| Administration | 25% | 38,965 | 34,619 |
| Total | | 155,860 | 138,475 |
| PROGRAM DELIVERY CONTRACTS | | | |
| Competitive Child Safety Grant | | 5,000 | 5,742 |
| Delivery of Occupational Health and Safety Services to Farmers | | 11,000 | 11,000 |
| Iowa State University Extension Safety | | 45,000 | 45,000 |
| Total | | 61,000 | 61,742 |
| GENERAL EXPENSES | | | |
| Supplies | | 1,000 | 4,853 |
| Travel | | 3,000 | 6,396 |
| Other: Includes computer system support, required semiannual meetings, outreach materials, annual report, telephone and newsletters | | 39,097 | 48,491 |
| Total General Expenditures | | 43,097 | 59,740 |
| TOTAL BUDGET | | 259,957 | 259,957 |



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

| | |
|--|-----------------------------|
| Ag. Ed. and Outreach Components of the Great Plains Center (CDC, NIOSH) | \$ 482,706 (2001 - 2006) |
| Certified Safe Farm Dairy Project (CDC, NIOSH) | 227,910 (2001 - 2006) |
| Certified Safe Farms (CDC, NIOSH, Iowa Pork Producers, Pioneer) | 540,070 (1999 - 2003) |
| Comprehensive Assessment of Rural Health in Iowa (CDC, IDPH) | 504,000 (2002 - 2003) |
| New Frontiers: Certified Safe Farm Expansion (Wellmark) | 48,919 (2001 - 2003) |
| Ag. Occupational Safety and Health Training (CDC, NIOSH) | 105,088 (2001 - 2003) |
| (Component of the Heartland Center for Occupational Health and Safety) | |
| Physicians Assistant Training Grant (Bureau of Health Professions) | <u>95,124 (2001 - 2003)</u> |
| Total: | \$ 2,003,817 |

Appendix A

I-CASH Presentations/ Educational Activities/ Newspaper Publications

July 2002

Agricultural safety display and booth at Johnson County Fair. I-CASH Staff. July 20-25; Iowa City, IA.

Emergency Rescue Technician class. LaMar Grafft. July 31; Kirkwood Community College, Cedar Rapids, IA.

“Farmers face large insurance costs: Survey.” NW Edition Iowa Farmer Today, July 13, 2002.

August 2002

“Agricultural injuries and occupational diseases in agriculture in Finland: Cost, length of disability and preventive effect of a no-claims bonus.” R Rautiainen, C Zwerling, K Donham, L Burmeister, N Sprince, R Ohsfeldt, S Reynolds, E Eskola, P Saarimaki, T Siitonen. Nordic Meeting on Agricultural Occupational Health. August 25; Kuopio, Finland.

Agricultural safety display in the University of Iowa booth, Iowa State Fair. I-CASH Staff. Aug 8-18; Des Moines, IA.

Agricultural safety presentation at Monsanto STAR award (IOSHA). LaMar Grafft. August 16; Boone, IA.

“Majority of Iowa farm accidents occur in the fall.” MH Hanna and CV Schwab. Iowa Farm Bureau Spokesman, August 31, 2002.

“Pork, politics, science, and the environment: An update on the research, recommendations, and regulations in regards to livestock production.” Kelley Donham. 43rd George A. Young Swine Health and Management Conference. August 16; Lincoln, NE.

September 2002

Agricultural safety presentation at Monsanto STAR award (IOSHA). LaMar Grafft. September 5; Beaman, IA.

“Entrapment in grain is among top causes of death in farm accidents.” CV Schwab, Avoca Journal-Herald, September 5, 2002.

Health & Safety tent at Farm Progress Show. LaMar Grafft. September 23-27; Alleman, IA.

October 2002

Certified Safe Farm presentation. Murray Madsen. National Safety Congress. October 6; San Diego, CA.

“Partners networking to promote agricultural health and safety.” Natalie Roy. 2002 Rural Health Network Grantees Conference. October 2002; Washington, DC.

November 2002

“Advances in the development of the AgriSafe Network.” Natalie Roy. Presentation at the Midwest Agricultural Safety & Health Forum. November 13-14; Amana, IA.



“Advocating sun safety at the Farm Progress Show 2002.” Jan Stone. Presentation at the Midwest Agricultural Safety & Health Forum. November 13-14; Amana, IA.

“Confined animal feeding operations and public health.” Kelley Donham. Presentation at the Midwest Agricultural Safety & Health Forum. November 13-14; Amana, IA.

“Coping with stress: Individual remedies, social support, and advocacy.” Carol Hodne. Presentation at the Midwest Agricultural Safety & Health Forum. November 13-14; Amana, IA.

“Directions in agricultural health and safety research.” Kelley Donham. Presentation at the Midwest Agricultural Safety & Health Forum. November 13-14; Amana, IA.

“Farm stress: Causes and prevention.” Carol Hodne. Training for Rural Life Associates, Passages Program, National Catholic Rural Life Conference. Nov 23; Des Moines, IA.

“Injuries in the Certified Safe Farm study.” Risto Rautiainen. Presentation at the Midwest Agricultural Safety & Health Forum. November 13-14; Amana, IA.

“Iowa Fatality Assessment and Control Evaluation (FACE) program investigations for 2001.” Risto Rautiainen and Wayne Johnson. Presentation at the Midwest Agricultural Safety & Health Forum. November 13-14; Amana, IA.

“Modifications made by Certified Safe Farm participants.” LaMar Grafft. Presentation at the Midwest Agricultural Safety & Health Forum. November 13-14; Amana, IA.

“Respiratory symptoms, pulmonary function and respirator use among Certified Safe Farm participants.” Kelley Donham. Presentation at the Midwest Agricultural Safety & Health Forum. November 13-14; Amana, IA.

“Sharing Midwest roads with farm equipment.” Murray Madsen. Presentation at the Iowa Governor’s Safety Conference. November 2; Des Moines, IA.



“Sharing Midwest roads with farm equipment.” Murray Madsen. Presentation at the Midwest Agricultural Safety & Health Forum. November 13-14; Amana, IA.

“Strategic health planning to benefit Iowa farmers.” Kristi Fisher. Presentation at the Midwest Agricultural Safety & Health Forum. November 13-14; Amana, IA.

“Using clinical audiometric results to assess hearing loss in Certified Safe Farm (CSF) farmers.” Sara Schneiders and Kelley Donham. Presentation at the Midwest Agricultural Safety & Health Forum. November 13-14; Amana, IA.

“Zoonoses.” Kelley Donham. Presentation at Broadlawns Medical Center. November 21; Des Moines, IA.

December 2002

“Skin diseases of Iowa farmers.” Kelley Donham. Presentation at Iowa Lutheran Hospital. December 18; Des Moines, IA.

January 2003

“Agricultural trauma.” LaMar Grafft. Presentation at Muscatine Community College. January 28; Muscatine, IA.

February 2003

“An overview and status of the Tractor Risk Abatement and Control Program.” Kelley Donham. Presentation at NIOSH Program. February 13-14; Pittsburgh, PA.

Presentation at the Iowa Rural Health Association Legislative Breakfast. Eileen Fisher. February 12; Des Moines, IA.

March 2003

“Development of the farm stressors scale.” Carol Hodne and Kelley Donham. Poster presentation for Research Week, Carver College of Medicine and College of Public Health, The University of Iowa. March 28; Iowa City, IA.

“Making family farms safer.” Tom Rowley. The Rural Monitor, Volume 9, No. 4, Spring 2003.

Presentation at the Iowa Public Health Conference. Eileen Fisher and Sara Schneiders. March 25-26; Ames, IA.

April 2003

“Agricultural rescue.” LaMar Grafft. Presentation at the LaPorte City Fire Department. April 5-6; LaPorte City, IA.

Agricultural safety display at the Occupational Health Symposium. I-CASH Staff. University of Iowa. April 3; Iowa City, IA.

Certified Safe Farm on-farm safety review training. LaMar Grafft, Risto Rautiainen, Sara Schneiders, Kelley Donham. The University of Iowa. April 10-11; Iowa City, IA.

“Update on Certified Safe Farm.” Murray Madsen. Presentation at the I-CASH Spring Meeting. April 11; Ames, IA.



May 2003

“Agricultural trauma.” LaMar Grafft. Agricultural Occupational Health Training Program, The University of Iowa. May 14-16; Iowa City, IA.

“Skin diseases of Iowa farmers” and “Community health concerns in agriculture: From hog lots to water pollution.” Kelley Donham. Broadlawns Hospital. May 5; Des Moines, IA.

“Socio-economic and health effects of confined animal feeding operations.” Carol Hodne. Presentation at the Iowa State Association of Counties. May 30; Des Moines, IA.

“Veterinary pharmaceuticals, biologicals and antibiotics,” “Zoonotic diseases,” “Skin diseases,” “Cancer in the farm environment,” “Rural health problems,” “Agricultural respiratory diseases.” Kelley Donham. Agricultural Occupational Health Training Program, The University of Iowa. May 14-16; Iowa City, IA.

June 2003

“Farm dealership and local farm tour.” LaMar Grafft and Risto Rautiainen. Agricultural Occupational Health Training Program, The University of Iowa. June 18-19; Iowa City, IA.

“Injuries in the Iowa Certified Safe Farm study. Risto Rautiainen. Presentation at the National Institute for Farm Safety International Conference. June 21-24; Windsor, Canada.

“Pre-professional’s perceptions of agricultural hazards and practiced safety behaviors at Iowa State University.” Charles Schwab. Presentation at the National Institute for Farm Safety International Conference. June 21-24; Windsor, Canada.

“Respiratory symptoms, pulmonary function, and respirator use among Certified Safe Farm participants.” Kelley Donham. Presentation at the National Institute for Farm Safety International Conference. June 23; Windsor, Canada.

“Skin diseases of farmers.” Kelley Donham. Sioux Land Medical Foundation. June 24; Sioux City, IA.

Appendix B

I-CASH Publications

- Freeman SA, CV Schwab, and T Pollard. 2003. Assessment of Iowa farmers' perceptions about auger safety. *ASAE Journal Agricultural Safety and Health*, 9(1):61-74.
- Hodne CJ. Rural environmental health and industrial agriculture: A case example of concentrated animal feeding operations. N Glasgow, LW Morton, N Johnson, editors. *Critical Issues in Rural Health*. Ames, IA: Iowa State Press, in press.
- Humann M, K Donham, M Jones, C Atchison, B Smith. Qualitative and quantitative noise exposure in large scale swine confinement facilities. *Journal of American Industrial Hygiene Association, AIHJ*, submitted.
- Lee JA, KJ Donham, C Hodne, et. al. Neighbor exposures to particulates and gases from confined animal feeding operations. *Journal of Agricultural Safety and Health*, 2003, in press.
- Miller LJ, L Graham, and CV Schwab. 2002. A developmental approach to keep children safe on farms. *Agricultural Communicators in Education*, August 17-21, 2002 Savannah, Georgia.
- Murty S, C Peek-Asa, C Zwerling, A Stromquist, LF Burmeister, J Merchant. 2003. Physical and emotional partner abuse reported by men and women in a rural community. *Am J Pub Hlth*, 93(7):1073-1075.
- Nonnenmann M, K Donham, R Rautiainen, P O'Shaughnessy, L Burmeister, S Reynolds. 2003. Vegetable oil sprinkling as a dust reduction method in swine confinement. *Journal of Agricultural Safety and Health*, in press.
- North Central Region 197 Committee on Agricultural Safety and Health. 2003. National land grant research and extension agenda for agricultural safety and health. ISU Reference No. EDC-292. 18 pp. Ames, Iowa: Iowa State University.
- Radon K, E Monso, C Weber, B Danuser, M Iverson, U Opravil, K Donham, J Hartung, S Pedersen, S Garz, D Blainey, U Rabe, D Nowak. 2003. Prevalence and risk factors for airway diseases in farmers-summary of results of the European Farmers' Project. *Annals of Agricultural & Environmental Medicine*, 9(2):207-213.
- Rautiainen RH, JL Lange, CJ Hodne, S Schneiders, KJ Donham. Injuries in the Iowa Certified Safe Farm study. *Journal of Agricultural Safety and Health*, in press.
- Reynolds SJ, PS Thorne, KJ Donham, EA Croteau, KM Kelly, D Lewis, M Whitmer, DJJ Heerderik, J Douwes, I Connaughton, S Koch, P Malmberg, BM Larsson, DK Milton. 2002. Comparison of endotoxin assays using agricultural dusts. *AIHA Journal*, 63:430-438.
- Young T, J Torner, K Sihler, F Hansen, C Peek-Asa, C Zwerling. 2003. Factors associated with mode of transport to acute care hospitals in rural communities. *J Em Med*. 24(2):189-198.

