

Farm families ALIVE & WELL

News from Iowa's Center for Agricultural Safety and Health (I-CASH) & the Great Plains Center for Agricultural Health

Vol. 10, Issue 3 - 2004

Certified Safe Farm Kicks Off Expanded Program

Recruitment has begun for an expanded research program entitled "Certified Safe Farm(CSF): Evaluating Health Insurance Claims." Farmers are being recruited initially around Spencer, Iowa, and then in the areas of Dubuque, Ida Grove, Keosauqua, and Oskaloosa.

The program's goal is to reduce illnesses and injuries in farmers who volunteer to participate. A previous 5-year CSF study, conducted in Northwest Iowa, tracked illness and injury rates, behavioral health changes, and farm safety improvements. Data collection tools included occupational health history questionnaires, an on-farm safety review scoresheet, and quarterly phone calls. In the new program, information will again be gathered through self-reported questionnaires, but health insurance claims data will also be obtained from farmers insured by Wellmark Inc. These data will allow comparisons of the costs and rates of illness and injury between CSF and non-CSF groups of farmers. The CSF groups will receive the three primary CSF services—occupational health screening, individualized and group education, and an on-farm safety review—every other year at no cost. The study will continue through 2007.

CSF is a collaboration of several organizations, including Iowa's Center for Agricultural Safety and



Education and fit testing of various types of respiratory personal protective equipment are part of the Certified Safe Farm program.

Health (I-CASH), the National Institute for Occupational Safety and Health (NIOSH), the AgriSafe Network, and Wellmark Inc. Industry support also comes from Monsanto and Pioneer Hi-Bred International Inc.

"This is a significant step in the CSF program," said Kelley J. Donham, director of I-CASH. "It brings us closer to our vision of an incentive-based agricultural safety and health program sustained by agribusinesses and insurers."

To learn more about the expanded CSF program, contact Sara Schneiders at 319/335-4065 or sara-schneiders@uiowa.edu.

Let's have a dialogue on "megatrends" in agriculture. Each year I present the "State of I-CASH" at the I-CASH Spring Meeting, and this year I reviewed for the meeting participants the "Megatrends in Agriculture" identified by "Doane's Agricultural Report" (January 30, 2004).

Briefly, those trends are 1) the continued consolidation of agriculture--new global markets and technological developments; 2) the development of niche markets (e.g., organic or exotic crops); 3) the power of the consumer (as in the low-carb diet trend); 4) jobs development in rural areas; 5) capital/financial pressures; 6) emerging diseases such as mad cow; and

finally, 7) much more public scrutiny of ag policy. We can expect debates over increasing governmental regulation, animal welfare and food safety; environmental stewardship, antibiotic resistance, and child and worker safety.

How do these trends positively or negatively affect people in agricultural communities? What can I-CASH do to help control the negative effects? Please send us your thoughts and ideas (email meggan-harrington@uiowa.edu). That will give us input for future newsletters and e-bulletins



Kelley J. Donham
MS, DVM,
DACMPM

(continued on page 3)

The Whole Blood Assay as a Biomarker of Exposure, Effect and Susceptibility in Workers Exposed to Organic Dust

Linda Mueller-Anneling, MS; Peter S. Thorne, PhD; Joel N. Kline, MD; Sigurdur T. Sigurdarson, MD; Janet Watt, RRT, BA, CCRC

Agricultural workers are routinely exposed to organic dusts containing high concentrations of endotoxin. Invasive procedures such as nasal or bronchial lavage or induced sputum are often used to study inflammation resulting from such exposures. The whole blood assay (WBA) is a less invasive approach that may serve as a biomarker for assessing susceptibility and responsiveness to inhaled inflammatory agents in organic dust. This laboratory blood test measures cytokine production of circulating leukocytes after stimulation of whole blood with endotoxin.

We have previously validated the WBA in mice. In the current study, livestock farmers, concentrated animal feeding operation (CAFO) workers, grain workers, and previously unexposed adults are exposed to a nebulized solution of purified endotoxin at the University of Iowa Clinical Exposure Facility. We are using pulmonary function testing (PFT), symptom questionnaires and a WBA to evaluate differences in pre- and post-exposure responses. We hypothesize that exposure to endotoxin will amplify the WBA response. Furthermore, we hope to determine differences in WBA cytokine concentrations between workers and previously unexposed adults. It is possible that workers, tolerized to endotoxin through their work exposures, will have a diminished response in the WBA compared to control subjects.

Of the intended 30 subjects (15 workers and 15 controls), 18 have so far completed the study (3 workers and 15 controls). Intensive efforts are underway to recruit more livestock farmers/animal facility workers.

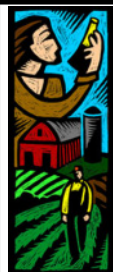
For more information, please contact Linda Anneling at (319) 335-4223 or linda-anneling@uiowa.edu

Locate a **2004 Progressive Farmer Farm Safety Day Camp®** in your area and find out more information about hosting a camp in 2005. This is an excellent opportunity to host a farm safety day camp in your community, receive farm safety camp training, develop a network of peers interested in farm safety, and participate in a nationally successful program. **Applications for 2005 camps are due by July 15, 2004.** For more information about the program visit <http://farmsafetyday.ae.iastate.edu/> To obtain a 2005 camp application visit http://kea.ae.iastate.edu/about027_2005%20Application.pdf

Farm Family Incentive Grants - For the 10th year, "Successful Farming" magazine is partnering with Farm Safety 4 Just Kids to offer 10 grants of up to \$250 for safety improvements that keep rural kids safe and healthy! **The entry deadline is September 1, 2004.** To apply for a Farm Safety Incentive Grant, send a one-page written request explaining your safety improvement and a cost estimate. A second grant category is for community safety projects. Selections of the 2004 grants will be made prior to National Farm Safety and Health Week, September 19-26, 2004. Additional information is available at: www.fs4jk.org/farmfamily.html

Abstracts for research and outreach presentations are now being accepted for this fall's **Midwest Rural and Agricultural Safety and Health Forum**. The 2004 Forum will be Nov. 18-19 at the Hampton Inn in Coralville, Iowa, and its focus is "Creating Partnerships for Agricultural Health and Safety Policy." Application forms for abstracts are available at www.public-health.uiowa.edu/icash/2004MidwestForum/CallForAbstracts.htm or from 319/335-4141 or 800/551-9029. The deadline for abstracts is July 15. Sponsorship and exhibit opportunities are also available.

NIOSH recently published two **Youth Safety brochures** based on sponsored research. The publications available on the Internet are: NIOSH Publication No. 2004-117: Injuries to Youth on Minority Farm Operations at www.cdc.gov/niosh/docs/2004-117/ and NIOSH Publication No. 2004-118: Asthma among Household Youth on Minority Farm Operations at www.cdc.gov/niosh/docs/2004-118/



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❖ Iowa Department of Public Health
❖ Iowa Department of Agriculture and Land Stewardship

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www.public-health.uiowa.edu/icash
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and also guide our programming and activities.

Besides presenting megatrends, I made the point in my State of I-CASH presentation that I have never before, in my 14 years of directing I-CASH, seen so much proactive participation by our partners as I have this year. Of note is the newly developed Producers Committee, chaired by Jeris Peterson. This committee, including Brent Halling, Chris Peterson, and Marilyn Adams, has actively directed us toward rural roadway safety.

Two important initiatives still challenge us: 1) Tractor Risk Abatement and Control and 2) reactivating the SPRAINS agricultural injuries and illnesses surveillance project. We need to put our attention on tractor-related incidents to achieve the major goal of I-CASH, as listed in Healthy Iowans 2010, to reduce farm-related deaths by 25% by the year 2010. And we'll need a surveillance system to tell us if

we're achieving our goal. We must develop a system that effectively integrates data from numerous sources, including the State's Trauma Registry, newspaper clipping services, the Certified Safe Farm program, and others.

An important area where partners have carried the weight is the I-CASH Endowment Campaign, an effort being led by Wendy Wintersteen, Senior Associate Dean of the ISU College of Agriculture. This \$2 million campaign, to be launched this summer as a joint effort between the UI and ISU Foundations, will raise funds for grants to communities and I-CASH partners for outreach and prevention activities. The success of this fund raising will have a direct and lasting impact on farm safety and benefit our greatest farm asset—people.

Dr. Kelley Donham is the director of Iowa's Center for Agricultural Safety and Health (I-CASH) and the Associate Department Head for Agricultural Medicine in the Department of Occupational and Environmental Health.

calendar

June 20-24

"Creating Partnerships Across Multiple Disciplines" 2004 National Symposium in Agricultural Health and Safety

Keystone Resort, Colorado

www.ag.ohio-state.edu/~agsafety/NIFS/meetings2004.htm

August 12-22

Iowa State Fair

Des Moines, Iowa

www.iowastatefair.org/home.html

August 26-28

Iowa Farm & Field Fest

Ames/Boone, IA

<http://farmshows.com/Iowa/index.shtm>

August 31- September 2

2004 Farm Progress Show

Alleman, Iowa

www.farmprogressshow.com/ME2/Audiences/default.asp

September 19-26

National Farm Safety and Health Week

November 6-10

The American Public Health Association's 132nd Annual Meeting and Exposition: Public Health and the Environment

Washington, D.C.

www.apha.org/meetings

November 18-19

Midwest Rural and Agricultural Safety and Health Forum

Hampton Inn

Coralville, Iowa

319/335-4438

www.public-health.uiowa.edu/icash

December 2-4

Canadian Agricultural Safety Association Annual Conference

Quebec City, Quebec, Canada

www.casa-acsa.ca/english/

Abstract submission deadline: June 30

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Nominations are being accepted for the **2004 Agricultural Safety and Health Hall of Fame Award**, which recognizes individuals and/or organizations in Iowa who have made substantial contributions to the health and safety of Iowa's agricultural community. Nominees should have played a leadership role in agricultural safety and health prevention activities for 5+ years. The recipient will receive a \$100 cash award at a ceremony during National Farm Safety & Health Week. Nomination forms are available from Eileen Fisher, eileen-fisher@uiowa.edu (319/335-4224) or www.public-health.uiowa.edu/ICASH/HallofFameAward.html



Mark Your Calendars

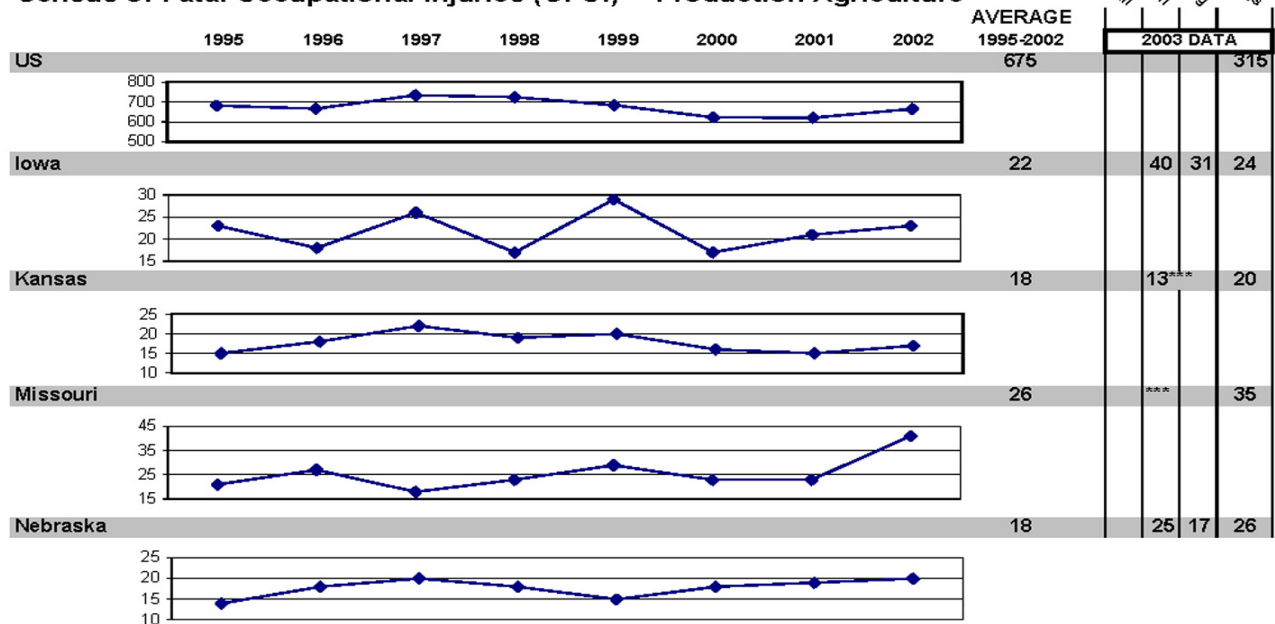
Midwest Rural Agricultural Safety and Health Forum

November 18-19, 2004

I-CASH is partnering with the Great Plains Center for Agricultural Health and other safety and health specialists from Iowa, Illinois and Wisconsin to organize a fall conference focused on "Creating Partnerships for Agricultural Health and Safety Policy." Presenters will be asked to describe the policy implication of their research, education, and outreach. Participants will hear examples of policy change and receive training in advocacy for agricultural safety and health. Mark your calendars for November 18-19, 2004. Check the I-CASH web site at www.public-health.uiowa.edu/icash for details on registration and the **Call for Abstracts**.

+++++It All Adds Up

Census of Fatal Occupational Injuries (CFOI) -- Production Agriculture*



GPCA Press Clippings
 **FACE - Production Ag
 Cooperative Extension
 CFOI not available until Fall

* Production Agriculture includes crops, livestock, and agricultural services sectors of the Agriculture, Forestry, and Fishing industry.
 ** Fatality Assessment and Control Evaluation is a NIOSH program in which 15 states investigate select occupational fatalities.
 ***Kansas Cooperative Extension gets their farm fatality number from Kansas Farm Bureau. Missouri farm fatality count not available until July.

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