Farm Equipment vs. Motor Vehicle Crash Prevention

by Murray D. Madsen

Participants from upper Midwest states with interest and expertise in “farm equipment vs. motor vehicle” crash prevention were invited to a first-of-its-kind conference March 17-18, 2009 in Des Moines, IA. Initiated by the Great Plains Center for Agricultural Health (GPCAH) on recommendation from its 14-member Regional Advisory Committee, the conference was arranged and facilitated by R. E. (Chip) Petrea (Regional Advisor from the U of IL). It was held at Nationwide’s Western Gateway Center, one of a dozen sponsoring entities for the conference. Full proceedings including a conference summary, recordings of all presentations, additional resources such as the Cooperative Extension research white paper on this topic, and state-based action plans are now available through the GPCAH website at www.public-health.uiowa.edu/GPCAH.

State-based action plans were a key deliverable from the conference and are an open opportunity for you, as individuals or as representatives of organizations, to engage in efforts in your state to reduce these crashes. Note especially two features built into this website: the opportunity to submit progress on action items, and to subscribe to a dedicated listserv for email updates. Visit the site to sign up and return often with news to share. For example, data like that on page 3 about crashes between farm equipment and motor vehicles on rural roadways in the GPCAH nine-state region will soon be shared via the listserv. Also consider sharing in this way what you contribute for National Farm Safety and Health Week since this year’s theme is “Rural Roadway Safety – Alert, Aware & Alive”.

Across the entire U.S. 2003-2007 there were, on average, ninety-four fatal crashes per year between farm equipment and motor vehicles (NHTSA FARS – Fatality Analysis Reporting System). Each of these crashes resulted in one or more fatalities. Thirty percent continued on page 3

Creating Safe Play Areas

by Eileen Fisher, PhD

Nothing can be worse than losing a child. And yet, that is exactly what happens to over 100 farm families each year in the U.S. About 43% of those fatalities are to children in the 0-9 year age group. Over one million youth live on 2.1 million farms in the U.S. and tragically too many youth die each year in a farm-related incident. Agriculture continues to be one of the most hazardous industries in our country and farms and ranches are one of the few worksites where children are present. In addition to the deaths, each year there are approximately 6,000 youth injured, with 2/3 of those happening to children who were not working at the time. Childhood injuries and deaths occur on farms and ranches when the child is with parents in a work area, helping with work, or playing. Creating safe play areas is a relatively new and promising strategy to reduce these injuries. Establishing designated play areas removes young children from hazardous work areas and provides safer environments that encourage developmentally appropriate play. continued on page 2
I-CASH is accepting nominations for its annual **Agricultural Safety and Health Hall of Fame Award**. The award recognizes Iowans who have made substantial and long-term contributions to the health and safety of the state's agricultural community. All Iowans or organizations in the public or private sector are eligible. The winner will receive a $100 cash award at a ceremony during the Iowa State Fair. The nomination deadline is July 15. Nomination forms and additional information are available at www.public-health.uiowa.edu/icash or contact Eileen Fisher at 319/335-4224 or eileen-fisher@uiowa.edu.

Abstracts are being accepted for research, education and outreach presentations at the Midwest Rural and Agricultural Safety and Health Forum, to be held Nov. 18-19, 2009 at the Stoney Creek Inn in Johnston, Iowa. This conference will provide an opportunity for researchers, practitioners, and agricultural producers to communicate on rural and agricultural needs, services, research, and methods for research to practice implementation. Information regarding sponsorship, exhibit opportunities, and abstract application forms are available at www.public-health.uiowa.edu/icash or by calling 319/335-4224. The deadline for abstracts is July 8th.

**“Keep Kids Away from Tractors”** public awareness resources are available from the Childhood Agricultural Safety Networks. The most recent addition is a 30-second TV public service announcement posting on YouTube which can be viewed at www.youtube.com/nationalfarmmedicine. Additional materials are available at www.childagsafety.org. If you have any questions on the campaign, please contact Regina Fisher at 800/662-6900 or email fisher.regina@mcrf.mfldclin.edu.

A new article in the Journal of Agromedicine, **Youths Operating All-Terrain Vehicles-Implications for Safety Education** (Burgus, Madsen, Sanderson, Rautiainen) examines all-terrain vehicle (ATV) use, particularly among youth. The authors administered a survey at a National FFA convention to identify safety-related behaviors, injuries, and effects of ATV safety training. See the full article in the *Journal of Agromedicine*, Volume 14, Issue 2 (April 2009) pages 97-104.

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The National Children’s Center for Rural and Agricultural Health and Safety (NCCRAHS) published a document in 2003 titled “Creating Safe Play Areas on Farms” which provides guidelines for building safe play areas. However, only 30% of U.S. farms with children younger than 8 years of age living on the farmstead have fenced-off play areas for children. That proportion is even lower in the Midwest - 20 percent for all farms. Parents report that lack of money, time, and knowledge are barriers to improving play areas on their farm.

A recently funded project at the University of Iowa will test two interventions to see what motivates farm families to create safe play areas on their farms. The long-term goal of this research is to decrease injuries and deaths to children living on and visiting farms. This project is a randomized controlled trial among 3 groups to evaluate the effectiveness of 2 specific interventions to motivate parents to build safe play areas. The study is a collaboration involving American Family Insurance, The National Children’s Center for Rural and Agricultural Health and Safety, and The University of Iowa in a public-private partnership that brings together the resources for implementing the interventions effectively, and the research capacity to evaluate them rigorously. When completed, this study will provide evidence on the effectiveness of two interventions in promoting safe play areas on farms. If effective, these interventions would be suitable candidates for public and private support in the future.

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Eileen Fisher, PhD, is the Associate Director of I-CASH, she can be reached at 319/335-4224 (eileen-fisher@uiowa.edu).
Youth Grant Results

I-CASH has awarded funds to seven rural roadway safety projects for 2009 through its grant program aimed at decreasing the risk of illness and injury to young people living on Iowa farms or involved in production agriculture. Since its inception in 1990 I-CASH has designated funds each year for communities to develop farm injury prevention and education programs for Iowa youth. I-CASH is pleased to announce the following recipients for 2009:

- Charles City FFA, Charles City, Iowa
- Midland FFA, Wyoming, Iowa
- Humbolt FFA, Humbolt, Iowa
- Grant 4-H, Ida Grove, Iowa
- Moscow Friendly 4-H, Moscow, Iowa
- Bluff Creek Wranglers 4-H, Pilot Mound, Iowa
- Town and Country Farm Safety 4 Just Kids, Ackley, Iowa

SAVE THE DATE

2009 Midwest Rural Agricultural Safety & Health Forum
November 18-19, 2009
Stoney Creek Inn, Johnston, IA

Dr. Leonard Syme will give the kickoff keynote on Community-based Participatory Research. Dr. Syme is Professor Emeritus of Epidemiology and Community Health at the University of California, Berkley, Co-Principal Investigator for Health Research Action, and an expert on Social Epidemiology. The forum will conclude with a keynote by Janice Hull, Deputy Director, Office of Research Technology Transfer from NIOSH on Research-to-Practice (R2P). Details at www.public-health.uiowa.edu/icash

Registration will begin in August at www.public-health.uiowa.edu/icash

Farm Equipment vs Motor Vehicle (continued from page 1)

of these 94 fatal crashes per year occurred in the nine-state GPCAH region.

Added together the three year data (2005-2007) from highway and transportation authorities in the nine GPCAH region states show an average of 1109 crashes between farm equipment and motor vehicles in our region. Of those 1109 crashes, 353 resulted in nonfatal injuries and an additional 22 involved fatalities. Because more than one injury, more than one fatality, and both fatal and nonfatal injuries can occur in a crash, there were on average 503 nonfatal injuries and 23 deaths per year in the GPCAH region each year over this three year period.

To further illustrate this problem, consider that 10% of all machinery-related fatalities reported in press clippings from across the GPCAH region in each of the last two years and about 45% of the non-fatal machinery incident clips, were about farm equipment and motor vehicles that collided. See the back page for more press clipping details.

Murray Madsen is the Associate Director of the GPCAH. He can be reached at 319/335-4481 (murray-madsen@uiowa.edu).
### Production Agriculture Injuries and Deaths Reported in Press Clippings
#### 9-State Upper Midwest Region, 2008

#### Fatal Incidents (150)
- **Tractors and Machinery**: 62.7%
  - Overturn: 28.7%
  - Runover: 22.3%
  - Crushed: 13.8%
  - Collision: 9.6%
  - Entangled: 10.6%
  - Other: 15.0%
- **Grain Storage and Handling**: 7.3%
- **Livestock Handling**: 5.3%
- **Other**: 24.7%

#### Nonfatal Incidents (196)
- **Tractors and Machinery**: 65.3%
  - Overturn: 13.3%
  - Runover: 15.6%
  - Crushed: 3.1%
  - Collision: 41.4%
  - Entangled: 13.3%
  - Other: 13.3%
- **Grain Storage and Handling**: 10.2%
- **Livestock Handling**: 5.6%
- **Other**: 18.9%

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For additional information contact Murray Madsen at 319/335-4481 or e-mail murray-madsen@uiowa.edu