Childhood agricultural injury rates continue to decline

The rate of childhood injury on farms and ranches has declined by nearly 60 percent since 1998, an encouraging sign that research and public awareness efforts are making an impact in one of the nation’s most hazardous industries.

“This marked decline is a testament to the dedicated efforts of many individuals, organizations and agribusiness sponsors, along with federal agency leadership,” said Barbara Lee, Ph.D., director of the National Children’s Center for Rural and Agricultural Health and Safety, Marshfield, Wis. “Injuries and deaths affecting children on farms are no longer viewed as unavoidable accidents, but rather as predictable and preventable events.”

The rate of injuries fell 59 percent, from 16.6 to 6.8 per 1,000 farms (includes all children who live on, visit, or are hired to work on farms), during the period 1998-2009. Injury rates calculated for just youth who live on farms also showed a significant decline, from 18.8 to 9.9 per 1,000 farms, or 47.3 percent, according to a scientific survey conducted by the USDA National Agricultural Statistics Service for the National Institute for Occupational Safety and Health (NIOSH).

Total number of injuries to youth ages 19-and-under dropped from 37,774 to 15,011, while the number of youth living on farms dropped from 1.46 million to 1.03 million.

Rate of injury is the most meaningful method for judging progress, Dr. Lee said, because it takes into account the reduced number of farms and the fewer numbers of children who live on, visit or are hired to work on farms.

The data were released September 9.

Dr. Lee attributes the progress to factors including:


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Owners of a North Carolina farm not only have incorporated Agritourism Health and Safety Guidelines for Children into their operation, they are doing all they can to make it easier for others to adopt the guidelines (www.marshfieldclinic.org/agritourism).

Tami and David Thompson, operators of Lazy O Farms in Johnson County, in the southeast part of the state, co-hosted an open house and workshop in August with the NC Agromedicine Institute. The event was attended by more than 40 farmers, insurance agents, university faculty, Cooperative Extension agents, and staff from the Agritourism Office, NC Department of Agriculture and Consumer Services, that also provides administrative oversight for the NC Agritourism Networking Association.

It all started with a mini-grant from the National Children’s Center, secured by Principal Investigator Robin Tutor of the NC Agromedicine Institute. Working with Tutor and the Institute, the Thompsons began to think through issues that could affect the health and safety of more than 4,000 children visiting their farm each year. Using the Agritourism Health and Safety Guidelines for Children, along with the companion guides, Policies and Procedures and Worksite, the Thompsons identified items that needed to be improved or corrected.

Much to their surprise, many items necessary to make improvements were already on the farm but needed to be put into use or re-arranged. Similarly, many health and safety practices were already in place but not formally documented as policies and procedures or included as part of employee training. The Thompsons also learned about many free resources available in the community and state. Most importantly, Tami says that the project, “has helped us to think differently about health and safety.”

Workshop participants were treated to a health and safety walkabout led by the Thompsons. Participants were challenged to identify items in the Policies and Procedures and Worksite guides that had or had not been corrected. Findings as well as what participants liked best or least on the walkabout were shared after lunch. All agreed that there was something they could take away that could be used to help improve child health and safety on their own farms or on the farms with which they worked.

Child ag injury prevention takes world stage

Safety 2010, the 10th World Conference on Injury Prevention and Safety Promotion, held September 21–24 in London, featured presentations and posters dedicated to childhood agricultural injury prevention. They included:

• “Convergence between father and youth reports of high risk safety behaviors on the farm,” Z Stoneman, H Jinnah-Ghelani.

• “Role of paternal risk-taking orientation in predicting youth risk-taking and youth tractor-related unsafe behaviors on farms in United States,” H Jinnah-Ghelani, Z Stoneman.

• “Short- and long-term consequences of agricultural injuries among children/youth and impact on agricultural operations: a case-control study,” BH Alexander, SG Gerberich, AD Ryan, CM Renier, TR Church, A Masten, PM McGovern, SJ Mongin.

• “Animal-related activities as risk factors for injuries among youths on agricultural operations,” AD Ryan, SG Gerberich, BH Alexander, CM Renier.

• “Animal-related injuries in dairy farms in-depth interviews with farmers,” C Lindahl, P Lundqvist.


Among National Children’s Center scientific advisors and collaborators participating were Susan Gerberich, Lorann Stallones, Ted Miller, Ed Zaloshnja, William Pickett, Barbara Lee and Susan Gallagher. Abstracts are available in Volume 16, Supplement 1 of Injury Prevention (http://injuryprevention.bmj.com).
Safety Zone returns to AG CONNECT

One goal of AG CONNECT Expo, January 8–10, is to encourage all in the agriculture industry to stay safe. Progressive Agriculture Safety Day® program staff and volunteers are working with AEM to coordinate a Safety Zone in one area of the Georgia World Congress Center, Atlanta. Free exhibit space is available for safety-related non-profit, university and government organizations. Please contact Susan Reynolds for more information, 1-888-257-3529, sreynolds@progressiveag.org.

NECAS to give away rescue tube

The National Education Center for Agricultural Safety (NECAS) has a new mobile grain engulfment simulator that is being used to teach grain safety as well as grain bin rescue, said Dan Neenan, NECAS manager. The equipment was featured in an article by Cheryl Tevis in the October issue of Successful Farming magazine. If you’d like your rescue team to be considered to receive training and a free rescue tube, send or e-mail a one-page nomination to NECAS to arrive before December 17, 2010. To read the article and submit a nomination, go to www.necasag.org.

Childhood agricultural injury rates

• Congressional approval and funding of the National Action Plan for Childhood Agricultural Injury Prevention, facilitated by Congressman David Obey in 1996.
• Leadership and funding provided by NIOSH.
• High-quality research that provided evidence of strengths and limitations of various interventions and policies.
• Significant levels of private donations to organizations such as Farm Safety 4 Just Kids and Progressive Agriculture Foundation for community-based safety programs.
• “Keep Kids away from Tractors” and other campaigns supported by media coverage.
• National Children’s Center initiatives to establish consensus-driven guidelines, most notably the North American Guidelines for Children’s Agricultural Tasks (NAGCAT) and Creating Safe Play Areas on Farms.
• A willingness of farm owners and parents to bury unsafe traditions and adopt new practices involving children and young workers.

Beneath the overall declining non-fatal injury rates, however, challenges remain, such as higher relative injury rates for all-terrain-vehicles (ATVs) and horses. An in-depth analysis of 2006 data revealed a mixture of work and non-work exposures, including ATVs and horses, that likely contribute to the higher injury rates seen in farm household children ages 10-15 relative to other age groups. For youth younger than 10, the majority of injuries were nonworking injuries.

“Although this injury information helps us maintain momentum and target future interventions, we do not have timely data regarding fatalities, thus it is not clear whether deaths to children on farms are decreasing,” Dr. Lee said.

The data are based on a telephone survey of 50,000 randomly selected farms. Farm operators were asked questions about injuries to youth less than 20 years of age that occurred on their farm during the survey year. An injury was defined as any condition occurring on the farm operation resulting in at least 4 hours of restricted activity.

For general information regarding childhood safety on farms, contact the National Children’s Center, nccrahs@mcrf.mfldclin.edu, or 1-800-662-6900.

For NIOSH-NASS childhood agricultural injury data, check the NIOSH website, www.cdc.gov/niosh/childag.
Job opportunity at National Children’s Center: project scientist

The National Children’s Center is conducting a search for a Project Scientist to serve as a key staff member with excellent opportunities for career growth. The Project Scientist will be responsible for directing and managing selected projects affiliated with NCCRAHS.

The Project Scientist will work closely with the Principal Investigator regarding Center priorities and will acquire additional leadership responsibilities over time. The position requires a Ph.D. or equivalent degree in public health, education, agricultural safety or a related field with an emphasis in child development, occupational safety, program evaluation and/or behavioral epidemiology. For more information, go to www.marshfieldclinic.jobs

Schedule of upcoming events

November 30, 2010
Online hearing conservation workshop
(continuing education available)
Contact Janet Ehlers, jje0@cdc.gov

January 7, 2011
Agricultural Safety and Health Council of America 2011 Workshop
Atlanta, Georgia, www.ashca.com

January 7-10, 2011
AG CONNECT Expo

June 12-15, 2011
American Society of Safety Engineers
Chicago, Illinois
www.asse.org

June 26-30, 2011
National Institute for Farm Safety

August 7-10, 2011
American Society of Agricultural and Biological Engineers

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Contact the National Children’s Center for Rural and Agricultural Health and Safety, Marshfield Clinic, 1000 North Oak Ave., Marshfield, WI 54449-5790; phone 1-800-662-6900 or 715-389-4999; fax 715-389-4996.


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