Newsletter of the National Children's Center for Rural and Agricultural Health and Safety Winter 2018 Vol 22 Issue 2

In the news 2018 Child Ag Injuries Fact Sheet updated

Fatality rates of young workers, ages 15 - 17

Fatality Rate per 100,000 FTE		
Year	Agricultural Production	All Other Industries combined
2001	9.16	2.57
2002	10.44	1.93
2003	25.31	2.15
2004	26.54	1.81
2005	38.40	2.13
2006	21.89	1.50
2007	24.89	1.52
2008	15.97	2.12
2009	22.38	1.13
2010	47.07	1.34
2011	18.19	1.24
2012	18.20	0.88
2013	23.27	0.41
2014	29.65	1.09
2015	28.21	0.63

Since 2009, the number of youth worker fatalities in agriculture has been higher than in all other industries combined. And young workers are 44.8 times more likely to be fatally injured in agriculture when compared to all other industries as a whole (28.21 fatality rate per 100,000 full-time equivalent workers). These data are part of the 2018 Child Agricultural Injury Fact Sheet, the most cited resource of the National Children's Center. The leading sources of fatalities for working and non-working youth are machinery (25%), motor vehicles/ ATVs (17%) and drowning (16%).



"The National Children's Center for Rural and Agricultural Health and Safety strives to enhance the health and safety of all children exposed to hazards associated with agricultural work and rural environments."

Protecting the future of agriculture Children's Center hosts first in series of national workshops

Nur¥ure

Farm organizations, insurance companies, healthcare systems, Extension, government agencies, media and agribusinesses sent representatives to the inaugural Child Agricultural Injury Prevention Workshop, Aug. 14-15, 2018, in Marshfield, Wisconsin. The interactive workshop drew 30 participants from across North America. Sponsors included John Deere, ProVision Partners and the National Farm Medicine Center.

"By working with other organizations we can get the information and resources to farmers and ranchers, enabling them to implement safety strategies," said Marsha Salzwedel, workshop director.

Participants were offered the option of submitting proposals for safety grants of up to \$5,000 to enable them to





continue work that they started during the workshop. Six grants were awarded. Project titles and project leaders are:

- "Bilingual Child and Youth Farm Safety Videos," Liz Binversie, Brown County, WI, Extension.
- "Initiating the Conversation: Developing Educational Resources Supporting Rural Families," Jana Davidson, Progressive Agriculture Foundation.
- "Stop the Bleed Program in the Granton Area Amish Community," Liz Kracht, Marshfield Medical Center.
- "Partnering with CFHC to Integrate Children's Agricultural Health and Safety Standards in Medical Practice," Knesha Rose-Davison, AgriSafe Network.
- "Needs Assessment of Latino Farmworker/Farmers for Children's Farm Safety in the Pacific Northwest," Maria Tchong-French, University of Washington.
- "Analyzing Rural Youth Safety Education," Rebecca Wirkus, Stratford (Wisconsin) FFA.

Participants already report implementing workshop content, including requests for cobranding of resources. Additional activities and outcomes from this project include presentations and exhibits, participation in external organizations' steering committees and advisory boards, and press releases, media interviews and newsletter publications.

Westfield announces sponsorship

Westfield Insurance of Ohio has announced a sponsorship that will assist the National Children's Center in offering three more workshops during the coming year. One of the workshops will be co-located with the International Society for Agricultural Safety and Health (ISASH) meeting, June 24-27, 2019, in Des Moines, Iowa. The other two workshops are scheduled for Pennsylvania and Kentucky.



Three mini-grants awarded

The National Children's Center's federal award provides annual funding for mini-grants that support small-scale projects and pilot studies addressing prevention of childhood agricultural injury and disease. Since 2002, 59 projects have been funded from \$5,000 to \$20,000. Grants awarded for fiscal 2019:

- "Augmented Reality Intervention for Safety Education (ARISE): A Pilot Study of AR Farm Safety Education Program for Farm Parents and Children," Kang Namkoong, Ph.D., University of Maryland.
- "Summarizing Child-related Issues around Manure Storage and Handling Facilities and Equipment," Mahmoud M. Nour, Purdue University.
- "Backup Visibility Awareness: A Novel Intervention for the Prevention of Rural Trauma in Anabaptist Youth," Eric Bradburn, D.O., Lancaster General Hospital.



From left: Rachael Rol; Josie Rudolphi, Ph.D.; Barbara Marlenga, Ph.D.; and Zengyan Wang.

Children's Center scientists mentor summer students

This past summer, National Children's Center scientists mentored two of 11 students in the Marshfield Clinic Research Institute summer research internship program, offered since 1974.

- Rachael Rol, University of Wisconsin-Madison (mentor Josie Rudolphi, Ph.D.): "Beliefs and Practices of Farm Parents to Prevent Child Injury." Rol gathered data by conducting four focus groups with farm parents in central Wisconsin. Rol concluded that the parents had a low sense of perceived child injury threat, which may be a barrier to implementing safety practices on farms.
- Zengyan Wang, University of Georgia (mentor Barbara Marlenga, Ph.D.): "An Alternative Way of Characterizing Injury to Youth on Farms." Wang used machine learning to compare the similarities and differences in the nature, mechanism, and pattern of injuries to youth on farms with those occurring elsewhere. Wang demonstrated that predictive patterns can be identified in farm injury data using an algorithm called "extreme gradient boosting."



CHS invests in Ag Youth Work Guidelines

CHS, a leading global agribusiness owned by farmers, ranchers and

cooperatives across the United States, has made a financial commitment to help the National Children's Center finalize an additional 20 Agricultural Youth Work Guidelines and translate all the guidelines into French and Spanish. The newly updated, mobile-friendly guidelines can help parents and supervisors determine which tasks youth can perform safely, and they include information on related topics such as supervision. The new versions of the guidelines will be used to update the popular Community Garden booklet and the Farm Equipment booklet.

Childhood Agricultural Safety Network

Approximately 40 organizations participated in the Childhood Agricultural Safety Network (CASN) annual meeting, June 25, 2018, in Halifax, Nova Scotia, during the International Society for Agricultural Safety and Health conference. Marsha Salzwedel facilitated a discussion regarding the emergent topic of "babies on tractors," and how CASN members can best address the issue. The meeting also covered the 2020 Vision for Child Ag Injury Prevention, mini-grant program administration and the future of injury surveillance. The CASN group continues to grow and diversify, and welcomes new members. For more information, contact the National Children's Center at **800-662-6900** or **nccrahs@marshfieldresearch.org**.



AgInjuryNews still growing

AgInjuryNews.org now has more than 500 registered users. The team, led by Bryan Weichelt, Ph.D., continues to migrate data to the newly designed system and anticipates launching the new site this winter. AIN has yielded three peer-reviewed publications so far in 2018 and others are under review. Its most recent paper was published in the Journal of Agromedicine, titled: "Agricultural Youth Injuries Involving Skid Steers and a Call for Intervention and Translational Research" (DOI: 10.1080/1059924X.2018.1501455). Funding from the Agricultural Safety and Health Council of America has helped the AgInjuryNews.org initiative grow.

Children's Center teams with Progressive Ag at Farm Tech Days

The National Children's Center was part of the largest safety demonstration ever held at Wisconsin Farm Technology, July 10-



From left: Barbara Lee, Brian Kuhl, Bernard Geschke, Emily Redmond, Marsha Salzwedel.

12, 2018, near Marshfield, Wisconsin. An interactive safe play area was featured along with tractor rollovers, tractor rollover rescues and grain rescues.

Furthermore

The National Children's Center joined safety and health colleagues from across the country Oct. 23-26 at the 91st National FFA Convention in Indianapolis. **Melissa Ploeckelman** and **Scott Heiberger** ran a game of "Safety Jeopardy!" to test the farm safety knowledge of hundreds of career and technical education students and educators ... Heiberger has been voted president-elect of the International Society for Agricultural Safety and Health ... **Marsha Salzwedel** is serving on the AgriSafe Board of Directors ... **Bryan Weichelt** is a board member of the Ag Health and Safety Alliance ... Salzwedel delivered a webinar on Sept. 19 during National Farm Safety and Health Week, that was turned into feature stories by several news organizations. Salzwedel addressed the myths associated with children and tractors.







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