

2018 YEAR IN REVIEWS

CULTIVATING COLLABORATION

The National Farm Medicine Center, and our National Children's Center for Rural and Agricultural Health and Safety (funded by the National Institute for Occupational Safety and Health), partner with many individuals and organizations to improve the health and safety of adults and children living, working and visiting agricultural settings.



BARBARA LEE, Ph.D. Director, National Farm Medicine Center

Examples of this synergy in 2018 included:

- Collaborating with fire departments to organize the Farm Safety and Rescue Area at Wisconsin Farm Technology Days.
- Leveraging our partnership with the University of Wisconsin and Wisconsin Infant Study Cohort to provide unique, rural data on respiratory illnesses, allergic diseases and child health to the National Institutes of Health-funded Children's Respiratory and Environmental Workgroup.
- Hosting the first national Child Agricultural Injury Prevention Workshop. John Deere and Westfield Insurance will sponsor workshops in 2019.
- Responding to concerns for farmers' well-being by dedicating Auction of Champions dollars toward mental health first aid programs.

We'd like to say "thank you" to our funding agencies, friends, supporters and colleagues with whom we cultivate such productive collaborations.

Barbara Lee, Ph.D. **Director, National Farm Medicine Center**

NATIONAL FARM MEDICINE CENTER TEAM

Barbara Lee, Ph.D. Director, National Farm Medicine Center Director. National Children's Center for Rural and Agricultural Health and Safety

Barbara Marlenga, Ph.D. Research scientist – Injury prevention

Casper Bendixsen, Ph.D. Associate research scientist – Cultural anthropologist

Josie Rudolphi, Ph.D. Associate research scientist – Agricultural safety and health

Bryan Weichelt, Ph.D. Associate research scientist - Informatics

Kathrine Barnes, M.P.H. Research specialist

Marie Fleisner Editorial specialist

Scott Heiberger, M.S. Communications manager

Kyle Koshalek Associate research coordinator

Melissa Ploeckelman Outreach specialist

Emily Redmond Research coordinator

Marsha Salzwedel, M.S. Agricultural youth safety specialist

Dixie Schroeder Center research administrator

Kathleen Smith Research asst. manager

Erin Teague Administrative secretary

FINDING A COMMON PATH

We are offering workshops to provide networking opportunities to female beginning organic farmers.

Spring Valley, Wisconsin learn more on page 6



1 Spi

5 Mar

NORTHWOODS PROJECT

We are researching substance abuse in rural areas in partnership with the HOPE Consortium.

7

Omaha, Nebraska 🔞

5 Des Moines,

2 Northern Wisconsin learn more on page 10

CHILDREN'S AGRICULTURE SAFETY EDUCATION

Salinas, California

We provided a mini-grant to train 50 aspiring and limited-resource farmers on best practices to reduce safety risks to children.

• Salinas, California, *learn more about* mini-grants on pages 8-9

CHILD AGRICULTURAL INJURY PREVENTION

We will provide workshops around the nation to prevent agriculture injuries to children.

5 Marshfield, Wisconsin; Hershey, Pennsylvania; Des Moines, Iowa; and Lexington, Kentucky learn more on page 7

MIGRANT CLINICIANS NETWORK

6 Austin, Texa

We work with Migrant Clinicians Network to provide safe places for children while their parents work.

• Austin, Texas and Salisbury, Maryland learn more on page 9

OUR NATIONAL REACH

TRAINING FOLKS WHOM FARMERS TRUST

We are training firefighters how to deliver agricultural safety and health throughout the U.S.

3 Elbridge, New York learn more on page 4

6



We are finding ways to make feedlots safer for all employees.

Salisbury, Marvland

6

⁸ Omaha, Nebraska learn about our other projects on page 14

THE POWER OF A STORY

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We conducted the first "Telling the Story" panel discussion at the Midwest Rural and Agricultural Safety and Health Conference.

Council Bluffs, Iowa, funded by the Upper Midsest Ag Safety and Health Center (UMASH) of Minneapolis, Minnesota, *learn more on page 5*



HIGHLIGHT

2020 VISION FOR CHILD AGRICULTURAL INJURY PREVENTION

The National Children's Center and its strategic partnerships are seen as the primary drivers that will facilitate future work on childhood agricultural injury prevention in this country, according to the "2020 Vision" report. Sara Lindberg, Ph.D., and Andrea Raygor, M.S., University of Wisconsin Population Health Institute, interviewed 31 nationally-known external key informants, as well as 10 Children's Center staff. Lindberg and Raygor evaluated the progress, outcomes and impacts of the National Children's Center, offering recommendations on future directions in their report: "In Pursuit of a 2020 Vision." Key recommended areas of focus include: strengthening research, focusing on impact and strengthening partnerships. Policy reform is also seen as an important, although challenging, part of the long-term reduction in injuries.

TRAINING FOLKS WHOM FARMERS TRUST

Rural communities take pride in the agricultural work with which they are often deeply connected. This includes the men and women who respond to medical emergencies that occur on farms and ranches far too often. For me, rural emergency responders have great potential to be advocates for safer and healthier communities. They see the worst of the injuries and illness their neighbors endure, and they wholeheartedly agree that prevention is better than rescue, or worse, recovery.

Farmers and firefighters have a high level of mutual trust and respect, and we believe firefighters want to be a part of lowering injury and fatality rates in agricultural work.

This year was a productive year for the "Rural Firefighters Delivering Agricultural Safety and Health" project (RF-DASH). This project educates rural emergency responders, mostly volunteer firefighters, about how they can influence farmers to make safer decisions about their agricultural operations. Farmers and firefighters have a high level of mutual trust and respect, and we believe firefighters want to be a part of lowering injury and fatality rates in agricultural work. The enthusiastic reception and collaborative efforts from the fire and EMS community this year is very encouraging.

In late 2017 and throughout 2018, more than 40 rural emergency responders were trained in the RF-DASH curriculum. This is more than twice as many as we had hoped! Our master trainers

traveled from Washington state, central Wisconsin and Pennsylvania to conduct trainings in Wausau and Menomonie, Wisconsin, as well as Elbridge, New York. Each training had 12-16 participants, representing rural communities in Minnesota, Wisconsin, New York and Massachusetts. Many of them were either farmers or in a farming family. A few were also firefighting and/or agricultural instructors in regional technical colleges. Elbridge Fire Department requested the training, but we did not have grant funding for travel to another region. They were very driven and helped support its funding and promotion. Departments in Ohio and Michigan have made similar requests.

Rather than inviting as many people as possible, we asked departments to send us their "aggiest" people, the one or two individuals who care a lot about the well-being of their aggie neighbors. These trainees engaged intently with our 8-hour course, driving multiple hours and braving icy roads or giving up beautiful Saturdays. They dedicated themselves to returning to their departments ready to make a difference. These departments have already started to implement their own training and programs. In 2019, our research team will be tracking and measuring how the trainings impact other fire departments and the farms in the coverage area.

~CASPER BENDIXSEN, PH.D.

THE POWER OF A STORY

"All of us learn to write in the second grade," said former Indiana University basketball coach Bob Knight. "Most of us go on to greater things."

I made a living as a sports writer for 13 years. I used Knight's comment as motivational "bulletin-board material," and resolved to be more than a typist.

Narratives are increasingly common in health communications, which helps explain the success of our, "Telling the Story Project" -- and why an ex-sportswriter is employed by the National Farm Medicine Center. In "Telling the Story," we insert prevention messages into farmers' first-hand stories about close calls and fatalities. We package the stories in multi-media format at www.tellingthestoryproject.org. Visitors tell us they relate to the story-tellers and settings. The story-tellers say, "We don't want this to happen to anyone else."

Media professionals relate to the format, too. Several years ago we surveyed 150 agricultural editors and reporters and asked them why they didn't run more articles about safety. They told us safety ranked low in reader surveys. "It's hard to deliver a prevention message without a scary accident," they said. So we intertwined their feedback with theories of narrative and health behavior.

We launched "Telling the Story" last June at the International Society for Agricultural Safety and Health meeting. Media requests for interviews followed immediately. In November, we presented a panel discussion that was well-received by agriculture safety colleagues at the Midwest Rural Agricultural Safety and Health Conference.

HIGHLIGHT

A NATIONAL APPROACH TO FARM SAFETY

Farm Medicine scientists and staff hold key leadership/advisory positions with organizations addressing agricultural safety and health on a national level. Among them are: Casper Bendixsen, Ph.D., appointed to a Congressionally-mandated advisory board for a national Veterans Affairs agri-therapy pilot program; Scott Heiberger, M.S., president-elect, International Society for Agricultural Safety and Health; Marsha Salzwedel, M.S., Board of Directors, AgriSafe; Bryan Weichelt, Ph.D., Board of Directors, Ag Health and Safety Alliance; and Barbara Lee, Ph.D., Board of Directors, Agricultural Safety and Health Council of America.

Although rooted in the Midwest, plans call for exporting the Telling the Story model nationwide. Farm Medicine currently collaborates with three Midwest ag safety centers on the project. Funding for Telling the Story comes from the National Institute for Occupational Safety and Health (NIOSH) through the Upper Midwest Agricultural Safety and Health Center (University of Minnesota).

Written or spoken, stories can change safety behaviors. I remember my grandmother describing why the neighbor, a man named Les, had a hook instead of a hand. I never again stuck my hand near machinery.

"Telling the Story" is raising safety awareness, and hopefully providing a vehicle by which survivors can channel their sense of loss. This must be what Coach Knight meant by, "going on to greater things."

~SCOTT HEIBERGER, M.S.







FINDING A COMMON PATH

Research often begins in the lab but ends in the community. In this sense, researchers and the communities they hope to influence travel together and set the course cooperatively. We test interventions for efficacy, but ultimately they should be interventions that are easy and well-suited to the farm community. Whether we are offering rollover protection structure (ROPS) rebates, discovering the immunological benefits of farm exposures through the Wisconsin Infant Study Cohort (WISC), or disseminating information and tactics to reduce the risk of childhood agricultural injury, National Farm Medicine Center and National Children's Center for Rural and Agricultural Health and Safety (NCCRAHS) seeks community collaboration in almost all of our work.

In fact, NCCRAHS has partnered with the Midwest Organic and Sustainable Education Service (MOSES) for close to five years in pursuit of the latter goal. Lisa Kivirst organizes MOSES' In Her Boots workshops that provide

networking opportunities and guidance to female beginning organic farmers. Together with NCCRAHS, the MOSES In Her Boots project has provided opportunities to expose this beginning women farmer audience to safety information. In turn, we seek to identify unmet needs and explore ways materials can be adapted or discover further areas of research. This communication requires a two-way street: honesty, mutual understanding and the ability for both parties to think creatively towards solutions.

The work with MOSES is but one example of community partnerships within Farm Medicine/NCCRAHS. Partnerships between research and the target community can be similar to a bus ride. We may have different destinations, but through adaptation and the fuel of desire to help our farmers, we find a common path to travel together.

~KATHRINE BARNES, M.S., CASPER BENDIXSEN, PH.D., JOSIE RUDOLPHI, PH.D., AND LISA KIVIRST



CHILD AGRICULTURAL INJURY PREVENTION

When I started at Farm Medicine, I was excited to be able to work in a career with two of my favorite things - children and agriculture. My first few months were eye opening, as I soon discovered that the injuries my family experienced on the farm, which I had thought were rare and unusual accidents, were all too common. There were injury reports coming across my desk every week - and during planting and harvesting season, they'd appear daily. I soon realized how lucky my family was; the injuries we experienced might have caused some emergency room visits and scars, but at least we still had our family.

Tragically, many of the reports foreshadowed holiday celebrations without a loved one. A closer look at the reports revealed that most of the incidents could have been prevented. But, like me before I started at Farm Medicine, many farm parents are unaware of the dangers or don't know how these "accidents" can be prevented. Worse yet, is the misconception many parents have that "these things happen to other people." Any parent who lost a child will tell you they also thought that, until it happened to them.

How do I explain this to farm parents? Reaching them is a challenge. If they don't know about the problem, they aren't looking for information. What's the best way to reach them? Who will they listen to? Do others care, and will they help?

Out of these questions, the Child Agricultural Injury Prevention Workshop was born. More than 30 people attended, including insurers, FFA advisors, Extension, health care providers, safety professionals and media. These participants are reaching out to educate their customers, clients and patients. The workshop was a huge success, and I am very grateful to our participants and the workshop sponsors, John Deere and ProVision.

I am also excited that we will continue to reach out to farm parents since Westfield Insurance and John Deere are sponsoring three workshops in 2019. By working together to educate farm parents, hopefully more farm families will celebrate the holidays with everyone around the table.

~MARSHA SALZWEDEL, M.S.

HIGHLIGHT

WISCONSIN FARM TECHNOLOGY DAYS

In July, our longtime friends, the Sternweis and Heiman families and Nasonville Dairy hosted the state's largest outdoor farm show, Wisconsin Farm Technology Days. Rescue demonstrations for grain entrapment and tractor rollovers were especially popular, drawing more than 4,500 people. Pittsville Fire Department Chief Jerry Minor organized and led five local fire departments in these activities. Alongside the rescue demonstrations were injury and illness prevention demonstrations, including a power take-off entanglement and a life-sized tractor rollover demonstration.

This successful collaboration was built on quality connections with local farm families, rural fire departments and other partnerships that Farm Medicine cultivates. Farm Medicine staff provided families with handson demonstrations of safe play areas, agricultural youth work guidelines and general safety for rural homes in the Future Generations area. These demonstrations disseminated evidence-based practices developed in the National Children's Center for Rural and Agricultural Health and Safety (a CDC Center of Excellence housed in Farm Medicine).



HIGHLIGHT

FILLING GAPS IN CHILD AGRICULTURAL INJURY DATA

There is no central repository of childhood agricultural injuries, and so it is important to glean the most information possible from existing databases. A key aim of this study is to assess the value of adapting a child health behavior survey to include location of residence (farm) and occupation to explore individual and contextual factors that influence injury in farm children. To that end, Barbara Marlenga, Ph.D., and collaborators have used the Health Behaviors in School-Aged Children (Canada) survey for analyses examining social environments, risk-taking and injury in farm adolescents; the association between a culture of risk-taking and health and wellbeing among farm adolescents; the profile of mental health of girls from farms; and sleep in farm adolescents. Thus, we are showing the value in adding a farm variable to national child health behavior surveys, as it provides a window into the cause of injury that has not previously been explored among farm children.



Cultivating Collaboration

The National Farm Medicine Center (and National Children's Center for Rural and Agricultural Health and Safety) work through many individuals and organizations to improve the health and safety of adults and children living, working and visiting agricultural settings across the country. Here are a few...



A coalition of organizations, facilitated by the National Children's Center for Rural and Agricultural Health and Safety, working together to help keep children

AgrAbility of Wisconsin promotes success in agriculture for farmers with disabilities and their families. Farm Medicine hosts the biennial AgrAbility of Wisconsin Summit, and scientist Bryan Weichelt is a current member of the AgrAbility Advisory Council.

Migrant Clinicians Network and Amy K. Liebman have been part of the National Children's Center for years. MCN works with clinicians in Federally Qualified Health Centers and other health care delivery sites to provide quality health care that increases access and reduces disparities for migrant farmworkers and other mobile

An industry-driven, not-for-profit organization that pursues national strategies to create a lesshazardous agricultural work environment. Farm Medicine served as an incubator for ASHCA from 2007 to 2016, when administrative functions were moved to Washington, D.C. Barbara Lee. ASHCA's first administrative director, and her Farm Medicine staff are currently working with ASHCA to plan the 2020 North American Agricultural Safety Summit in Las Vegas, Nevada



Christine Seroogy, M.D., and James Gern, M.D., UW School of Medicine and Public Health, work with Casper Bendixsen and his Marshfield-based team on the Wisconsin Infant Study Cohort (WISC), which is identifying how childhood exposure to the farm environment strengthens the immune system.



John Shutske, Ph.D., and Cheryl Skjolaas, College of Agricultural and Life Sciences, are natural partners for Farm Medicine through their Cooperative Extension work.



Andrea Raygor and Sara Lindberg, Ph.D., UW Population Health Institute, evaluate the progress, outcomes and impacts of the National Children's Center, offering recommendations on future directions in their report: "In Pursuit of a 2020 Vision.'



HIGHLIGHT

JOURNAL OF AGROMEDICINE The Journal of Agromedicine, edited

by the National Farm

Medicine Center since 2004, is more accessible than ever and available to 2,600 institutions worldwide. The journal received a record 17,158 article downloads during the past year, and also benefitted from Farm Medicine promotion via social and traditional media. It all added up to the journal's best-ever impact factor of 1.322, reflecting an increase in the number of times other journals cited Journal of Agromedicine articles. The mostdownloaded articles featured the dairy industry, anxiety and depression among farmers, the socio-ecological model of public health as applied to agriculture and the role of news reports in child agricultural injury prevention. The journal is the world's leading source of peer-reviewed agricultural safety and health information. The core editorial team includes Matthew Keifer, M.D., (editorin-chief); Barbara Lee, Ph.D., (senior associate editor); Scott Heiberger, M.S. (managing editor); and Marie Fleisner (editorial specialist).

NORTHWOODS PROJECT

Nearly 64,000 Americans died from drug overdoses in 2016, which, for perspective, is roughly equivalent to the number of people lost in the wars in Vietnam, Iraq and Afghanistan combined.

Nearly 64,000 Americans died from drug overdoses in 2016

No state has been spared from this current reality and Wisconsin, particularly rural Wisconsin, is no exception. Despite improved recognition of substance abuse as a significant rural problem, most of what we know about the scope of the problem and how to address it continues to come from urban areas.

Serving five counties and three tribal communities in Wisconsin's Northwoods, the Heroin, Opioid, Prevention and Education (HOPE) Consortium receives state funding to support substance use disorder treatment and recovery services throughout the region. Recognizing the need for research specific to substance abuse in rural areas to further inform HOPE Consortium efforts. Project Manager Rachel Stankowski (Family Health Center of Marshfield, a division of Marshfield Clinic Health System) convened anthropologists from the National Farm Medicine Center, Kathrine Barnes and Casper Bendixsen, to develop a novel pilot project.

This project utilizes ethnography to identify opportunities for the Health System and its partners to improve rural substance use disorder prevention, treatment and recovery

support services. By connecting with those directly affected by substance use, ethnography will translate their stories and voices to actionable research, policy and service delivery and help to build regional capacity around the issue.

This project has a home in Farm Medicine not just because of the ethnographic expertise within the department, but also because substance abuse and overdose is a problem with an increasing impact on farms and rural, agricultural communities. As the average age of farmers increases, farmers enter a demographic more likely to be prescribed prescription pain killers, which is a leading contributor to the current opioid epidemic.

This makes safe use, storage and prevention services an important topic for Farm Medicine to address. Similarly, ongoing and emerging issues related to alcohol or stimulant (e.g., methamphetamine) abuse arguably grows out of a nationwide neglect for our rural and farming communities with significant impact on the farm workforce and its susceptibility to injury.

While the Northwoods Substance Abuse and Treatment ethnographic project is in its infancy, we hope to contribute to growing efforts throughout the Health System and the state to address the rural substance abuse epidemic.

~KATHRINE BARNES, M.S.

VISITORS





Christine Seroogy, M.D., associate professor at the University of Wisconsin-Madison





Sheila Harsdorf, Wisconsin Secretary of Ag at DATCP, Madison, WI



Hank Weiss, Ph.D., recently retired from Wisconsin Department of Health Services



Amy Liebman, M.P.A., director of environmental and occupational health at the Mid Atlantic Office Migrant Clinicians Network, Maryland

PDPW (Professional Dairy Producers of Wisconsin), Madison, WI

Cassandra Strupp, program manager Barb Lee, Ph.D.,

Farm Medicine director Shelly Mayer, executive director

Amy Bonomie, manager of partnerships and public outreach

Dave Robertson, Quadbar Industries, Australia. Tony Evers, Governor of Wisconsin and at the time, Wisconsin State Superintendent of Public Instruction. John Shutske, Ph.D., professor and extension specialist and Cheryl Skjolaas, agricultural safety specialist, Madison, Wisconsin.



Matthew Nonnenmann, Ph.D., assistant professor in the Department of Occupational and Environmental Health. University of Iowa



Trevor Durbin, Ph.D., cultural anthropologist and assistant professor in the Department of Sociology, Anthropology, and Social Work at Kansas State University





Stacey Pereira, Ph.D., assistant professor in the Center for Medical Ethics and Health Policy at Baylor College of Medicine

SUPPORTING FARM FAMILIES

through Marshfield Clinic Health System Foundation



Look for the high-five icon on the projects page 14 and 15. The high-five indicates National Farm Medicine Center projects made possible by donors such as you.

Farmers work hard each day to support people like you and your family.

That's why the National Farm Medicine Center is dedicated to helping farmers stay safe and healthy. And they cannot do it without you.

You make Farm Medicine's work possible. Through Marshfield Clinic Health System Foundation, your gifts provide vital funding for Farm Medicine's agricultural health and safety research, including:

- → Integrated pediatric primary care and child farm safety
- → Wisconsin Rollover Protective Structure (ROPS) Rebate Program
- → Microbiome studies
- → Skin cancer screenings
- → Veterans to Farmers
- → Wisconsin Infant Study Cohort (WISC)
- → Gas Monitor Rebate Program → Summer research internship program ... and much more.
- **Auction of Champions raised \$256,000** to benefit farmer health and safety.

NEW (THANKS TO YOU!) IN 2019: FARMER MENTAL HEALTH FIRST AID PROGRAM

Because of your support, the farmer mental health first aid program will kick off with three trainings in 2019. Funds raised at the 2018 Auction of Champions gala made this program possible.

The farmer mental health first aid program will educate farm communities to recognize, react to and prevent mental health emergencies. The initial three trainings will provide education for 50 individuals on risk factors and warning signs for a range of mental health issues, as well as a five-step action plan to help people in crisis connect with appropriate professional help.



53 fund-a-need donors supported the program



Fund-a-need donors raised O O \$51,000 for the farmer mental health first aid program

2018 **Total Donations:**

\$551.935

For information regarding how to

support the important work of the

National Farm Medicine Center.

please contact Tiffany Halan at

715-387-9189 or

halan.tiffany@marshfieldclinic.org

AUCTION OF CHAMPIONS

Each year, dedicated supporters come together at the Auction of Champions to raise awareness and funds for the National Farm Medicine Center. The 2018 gala, hosted by Marshfield Clinic Health System Foundation, raised \$256,000 to benefit farmer health and safety.

Support for this year's fund-a-need reached a record \$51,000 for a new farmer mental health first aid program. The program's mission is to increase awareness, reduce stigma, assist individuals in crisis and train community members in mental health first aid. Donations from the fund-a-need will fund three mental health first aid courses in central Wisconsin. Because of generous supporters, more individuals will know how to respond to those who are struggling to stay positive in the farming industry.

> Support for this year's fund-aneed reached a record \$51,000.



At the 2018 Auction of Champions (from left): Casper Bendixsen, Barbara Lee, Melissa Ploeckelman, Bryan Weichelt, Barbara Marlenga, Josie Rudolphi, Scott Heiberger, Marsha Salzwedel, Kathrine Barnes, Amit Acharya, Emily Redmond and Kathie Smith.

3 mental health first aid courses offered in central Wisconsin thanks to the fund-a-need

50 individuals will be trained in mental health first aid

29% of farmers suffer from depression

35% of farmers suffer from anxiety

1 in 5 adults experiences mental illness

PROJECTS

Given its location, community support, and scientific staff, the National Farm Medicine Center is the place where translational research about agricultural and rural populations thrive!

High-five icon indicates National Farm Medicine Center projects made possible by donors!

These colors coordinate with the additional information about the projects to the right.



National Children's Center for Rural and Agricultural Health and Safety (NCCRAHS)

Advanced Knowledge Mobilization and E-Communication (AKME)

Childhood Agricultural Safety Network (CASN)

Filling Gaps in Child Agricultural Injury Data

Grain Handling Safety Coalition via CASN

AgInjuryNews.org

Enhancing Supervisors' Skills and Employer Policies to Promote and Protect the Health of Young Agricultural Workers

Integrating Safety into Agritourism

Intervention through Inquiry: Understanding Beginning Farmers and Ranchers

Mini-Grants

Ag Youth Work Guidelines

Protecting Children While Parents Work

Strengthening Organizational Capacity

National Farm Medicine Center (NFMC)

- Biadasz Gas Monitor Rebate Program
- Journal of Agromedicine Mental Health First Aid

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- Agricultural Microbiome Repository
- Skin Cancer Screening
- Understanding and Addressing the Disparity in Vaccination Coverage Among U.S. Adolescents Living in Rural Versus Urban Areas.
- Veterans to Farmers
- Wisconsin Infant Study Cohort (WISC)
- Wisconsin Rollover Protective Structure (ROPS) Rebate Program

Upper Midwest Agricultural Safety and Health Center (UMASH)

Quality of Life with Robotic Milking Systems

Rural Firefighters Delivering Agricultural Safety and Health (**RF-DASH**)

Seguridad en Las Lecherias (Safety in Dairies)

Telling the Story of Agricultural Safety

Tickborne Disease Risk for Agricultural Workers and their Families in the Midwest

Central States Center for Agriculture Safety and Health (CS-CASH)

Farm Mapping to Assist, Protect and Prepare Emergency Responders (Farm MAPPER)

> Identifying the Sources of Stress and Prevalence of Anxiety and Depression Symptoms Among Young Farmers and Ranchers in the Midwest

Improving Safety and Health in the Cattle Feed Yard Industry

ROPS Rebate Program

- 94 farmers enrolled in program at Farm Technology Days
 38 tractors retrofitted
- in 2018, for a total of **239** since 2013

NEWS

Advanced Knowledge Mobilization and

E-Communication

- 10 peer-reviewed
- publications
- 18 press releases written

Rural Firefighters Delivering Agricultural Safety and Health

- 50 people trained
- 3 states
- **400** hours of training

Wisconsin Infant Study Cohort

- **108** farm families
- 130 non-farm families
- **3,000** physical samples

Ag Youth Work Guidelines

- 30 work guidelines available
 20 guidelines in
- development
- 5 developmental
- guidelines for tractors

Journal of Agromedicine • 17.158 article downloads in 2018 2.607 institutions worldwide with access to the iournal • 1.322 Impact Factor (best ever) AgInjuryNews • 17,714 page views from **43** countries • 623 injury reports loaded, totaling > **31,000** data points • 4 peer-reviewed manuscripts published Childhood Agricultural **Safety Network** • 117 members • 70 organizations Farm Technology Days • 16 live demonstrations • 4,500 people in demo audience • **43,200** total show visitors Childhood

Agricultural Injury Prevention Workshop

- **34** participants
- 6 grants awarded
- Funding for
 3 future workshops
- 532 screened for skin cancer

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ACKNOWLEDGMENTS

The National Farm Medicine Center expresses its appreciation to the organizations and individuals that enable NFMC to stay ahead of evolving health and safety concerns in agriculture.

The following federal grants provided programmatic support in 2017. National Institute for Occupational Safety and Health (CDC/NIOSH) provided NCCRAHS Award U540H009568; UMASH Award U540H010170; CS-CASH Award U54 0H010162. National Institute of Health provided WISC 5u19A1140317/UG3 OD023282 and CREW 4U19A104317-04/UG3 OD023282

