

Cultivate

Newsletter of the National Farm Medicine Center

Winter 2007

Our Mission

"To conduct high quality research addressing human health and safety associated with rural and agricultural work, life and environments."

Auction of Champions

Thank you to everyone who helped make the 2006 Auction of Champions a success, raising nearly \$210,000 to support NFMC research and outreach. "Half the proceeds will go to the Dean Emanuel Endowment," said NFMC Director Barbara Lee, Ph.D. "We want to honor Dean and add another clinician/scientist, and an endowed chair position is an effective recruitment method." The Auction was held at Best Western Clearwaters in Marshfield.



 National Farm Medicine Center.


MARSHFIELD CLINIC.
Research Foundation

'It's easier to bury a tradition than a child'

National Children's Center leads coalition to keep children younger than 12 away from tractors

A coalition of organizations and individuals, led by the National Children's Center for Rural and Agricultural Health and Safety, has launched a multi-faceted social marketing effort with a simple message: children younger than 12 years old should neither operate tractors, nor ride on tractors as passengers.

"Burying a child is one of the most awful experiences anyone could have, especially when we know that saying, 'No, you can't be on or near this tractor,' is a very simple way to protect a child," said Regina Fisher, campaign coordinator.

On average, a child dies on a farm once every 3.5 days. The biggest single cause of those deaths is something that's on practically every farm: a tractor.

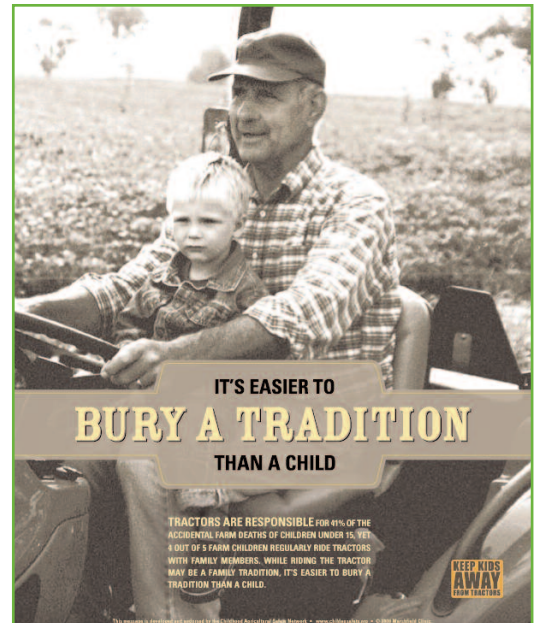
Recent additions to the Web site (www.childsafety.org) include 30- and 60-second "Keep Kids Away From Tractors" public service announcements recorded by country singer Michael Peterson, named the 1999 "Star of Tomorrow" by The



Regina Fisher discusses the national tractor safety campaign at a Farm Bureau conference in Madison, Wis.

Nashville Network. Peterson decided to lend his services after he met with Fisher at the World Dairy Expo in Madison, Wis., in October 2006.

The coalition — the Childhood Agricultural Safety Network (CASN) — includes organizations such as Farm Safety 4 Just Kids, Migrant Clinicians Network, Progressive Agricultural Foundation and Safe Kids Worldwide.



NFMC partners in new dairy waste management research center

The National Farm Medicine Center (NFMC) and Marshfield Clinic Research Foundation broke ground with three partnering organizations on Aug. 23, 2006, at the new Institute for Environmentally Integrated Dairy Management (IEIDM) in Marshfield. The IEIDM facility for scientists is being built alongside the current University of Wisconsin Agricultural Research Station, 8396 Yellowstone Dr., Marshfield.



Humberto Vidaillet, M.D., (left), director of Marshfield Clinic Research Foundation, and U.S. Senator Herb Kohl, at groundbreaking ceremonies for the Institute for Environmentally Integrated Dairy Management (IEIDM).

NFMC involvement is being led by Mark Borchardt, Ph.D., head of the NFMC's Public Health Microbiology Laboratory. Dr. Borchardt has already started working with one of the IEIDM soil scientists, Bill Jokela, on a project to measure nutrients and pathogens in surface water runoff. NFMC and Research Foundation partners in IEIDM are: the U.S. Department of Agriculture Agricultural Research Service/U.S. Dairy Forage Research Center; USDA Natural Resources Conservation Service; and the University of Wisconsin.

Agricultural engineering and policy

Women who operate, co-operate, and/or live on dairy farms in Wisconsin are important to the dairy industry and key to the survival of family farms. However, anecdotal reports indicate that some farm women experience role incongruence, extreme time pressure, sleep deprivation, lack of appreciation and respect, social isolation, absence of recreational time away from the farm, and intergenerational conflict. A new NFMC project will address, "Personal Circumstances, Concerns, and Needs of Women on Wisconsin Dairy Farms." According to Mark Purschwitz, Ph.D., the project will begin with a statewide random sample mail survey of farm women. The NFMC will publicize the results to promote and facilitate the addressing of these issues.

Agromedicine

NFMC Medical Director Steve Kirkhorn, M.D., M.P.H., secured funding to assess the prevalence of musculoskeletal disorders in central Wisconsin dairy farmers and dairy technicians. He also presented at the First International Agricultural Cohort Consortium meeting, sponsored by the National Cancer Institute, on a plan to link studies within the Marshfield Epidemiologic Study Area (MESA) Farm Cohort with international collaborators. In other research, Dr. Kirkhorn is leading the Marshfield Pediatric Asthma Study, part of a pilot investigation into the potential influence of farming and other exposures on the development of asthma and other atopic conditions among children. Preliminary results of a study involving 570 children in central and northern Wisconsin indicate that children who grow up on farms are less likely to have allergic conditions, and to a lesser degree, asthma, than their city and town counterparts.

Childhood agricultural injury prevention

- Barbara Marlenga, Ph.D., studied youth highway tractor crashes on public roads in Wisconsin for the years 1994-2003 to evaluate the effectiveness of a Wisconsin law that mandates tractor certification classes for youth ages 12-16, which allows them to operate tractors on roads without a driver's license. Results, published in the journal *Injury Prevention*, indicated no reduction in youth tractor crashes after the law was passed, and found that the tractor certification course did not cover the major factors contributing to youth tractor crashes on public roads. The bottom line, suggested Dr. Marlenga in a follow-up editorial, is that the exemption allowing unlicensed youth to operate tractors on public roads is outdated and should be abandoned.

- The National Children's Center has published a user-friendly 32-page document titled "Agritourism: Health and Safety Guidelines for Children." Authored by Michael Humann, M.S., the guidelines are intended for long-term agritourism operations, as well as farmers who might host a one-time event. The guidelines include tips on identifying and reducing hazards found on farms, such as those involving animals, water, machinery and hygiene, and recommend steps that can be taken before and during visits by agritourists. The guidelines are available at www.marshfieldclinic.org/nccrahs.



Michael Humann, M.S.

- "Children and Agriculture: Telling the Story," a National Children's Center workshop held Oct. 20 - 21, 2006, in Wenatchee, Wash., gave 10 journalists an inside look at health and safety issues facing children in the orchard region of central Washington. The workshop blended discussion, presentations and field trips in order to generate story ideas, increase the frequency of stories about children in agriculture, and to portray appropriate roles for children, said workshop director Scott Heiberger.

Public health microbiology

Aaron Lynne, Ph.D., joined the NFMC's Infectious Diseases Research Laboratory in August, 2006. He is working on projects to better understand the factors that contribute to the spread of antimicrobial resistance in Salmonella. Dr. Lynne came from Iowa State University, where he worked on the development of vaccines and diagnostic tests for *Escherichia coli*, a common pathogen in food animals and humans.



Aaron Lynne, Ph.D.

Outreach



NFMC scientists and staff volunteered at the 2006 Rotary Winter Wonderland in Marshfield. Some of the crew, from left: Tammy Ellis, Barbara Lee, Ph.D., Mark Purschwitz, Ph.D., and an apparent escapee from the cast of "The Nutcracker Suite."