



# CENTRAL STATES CENTER FOR AGRICULTURAL SAFETY & HEALTH



## MISSION

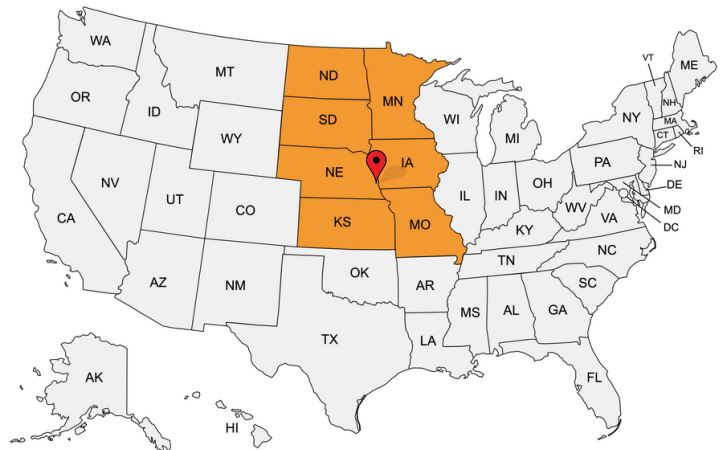
Our mission is to work with the agricultural community in the Central States and beyond, conducting research, intervention, education, and outreach activities, which aim to discover the mechanisms of injury and illness, and to develop, implement, and evaluate prevention strategies that measurably improve the health and safety of members of the agricultural community

## VISION

We envision a vibrant agricultural sector in our region and the United States where health and safety is highly valued and work-related injuries and illnesses are rare.

## REGIONS SERVED

Our center serves a region that includes Kansas, Missouri, Nebraska, Iowa, South Dakota, North Dakota and Minnesota. Our headquarters is located in the College of Public Health at the University of Nebraska Medical Center in Omaha.



## GET IN TOUCH

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# PROGRAM/PROJECT HIGHLIGHTS

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## **Improving Safety Climate and Safety Culture in the Cattle Feedyard Industry** | PI: Aaron Yoder, PhD

52.2% of U.S. feedyards are located in the Central States Region. Feedyard workers experience injuries at high rates. The objective of this project is to improve safety climate and safety culture on cattle feedyards through the adoption of a comprehensive feedyard safety and health training and commendation program. The project will identify: the motivators and barriers to conducting safety trainings on cattle feedyards; develop and implement a new safety climate and safety culture survey tool for cattle feedyards; and develop, disseminate, and evaluate an open source Feedyard 15 online commendation program.

## **Health and Safety among Immigrant Cattle and Feedyard Workers** | PI: Athena Ramos, MBA, PhD

3 of the top 5 cattle feeding states are located in the Central States region. About half of the cattle feedyard workforce is made up of Latino immigrants with limited resources or trainings available in the appropriate language. This project will examine the relationships of severe stress and injuries; investigate risk and protective factors; explore the relationship between stress, injuries, and overall health; and develop evidence-based bilingual safety materials.

## **The Exposome and Organic Dust-Induced Lung Injury** | PI: Todd Wyatt, PhD

Building on the Center's previous research, the purpose of this project is to determine whether exposome-altered innate lung defense caused by organic dust inhalation negatively impacts susceptibility and pathogenesis of bacterial pneumonia, placing individuals with COVID-19 exposure, alcohol use disorders (AUD), or zinc deficiency particularly in harm's way.

## **Establishing a Community-Based Training Network to Enhance the Safety of Bison Herd Workers on Tribal Lands** |

PI: Mystera Samuelson, PhD

The Center works with the InterTribal Buffalo Council and their 76 member tribes to conduct much needed research regarding best practices for bison herd management practices, provide applied worker safety training, and facilitate herd management training and peer mentorship for managers. Trainings and mentorship will be conducted from within the indigenous community to ensure that the proposed interventions are culturally appropriate, and reflect the Tribes' goals for bison production and management programs.

## **Evaluating the Safety of Agricultural Vehicle Ingress/Egress for Aging Producers** | PI: Bethany Lowndes, PhD

Falls from agricultural vehicles for aging producers may result in serious, potentially career-ending, injuries. This research leverages novel observational techniques and an assessment of strength, balance, and ingress/egress performance to design user-centered interventions for the reduction of producer fall and injury.

## **Surveillance of Agricultural Injuries** | PI: Risto Rautiainen, PhD

The CS-CASH Surveillance research fills major gaps in existing national surveillance. Surveillance surveys sent throughout the Center's 7-states provide injury and illness counts, rates, characteristics, risk factors, and associated costs for self-employed farmers and ranchers that are currently excluded from national surveillance. The data support rigorous epidemiological studies and the development of well-focused interventions to reduce injuries, illnesses, and related costs in agriculture.

## **Pilot/Feasibility Projects & Emerging Issues Program** | PI: Eleanor Rogan, PhD

The Pilot/Feasibility Projects and Emerging Issues Program, which will allow investigators to collect preliminary data to support the submission of grant applications for longer-term, larger projects related to agricultural safety and health. The projects supported by this program must address critical issues in agricultural safety and health and lead to future, more extensive studies. The rate of return in grant funding has been 1597% over the past 11 years.

## **Outreach Program** | PI: Debra Romberger, PhD

The Center uses the information from its research, evaluation, and pilot projects to create resources to share with ag producers and workers, vulnerable worker populations, young and beginning farmers, aging workers, and health care providers who serve the ag workforce. Outreach includes trainings and educational programming - most at no charge - such as our annual grain handling safety trainings, tractor and equipment safety course, and Agricultural Health and Safety Course for Medical and Safety Professionals.

## **Evaluation and Planning Core** | PIs: Cheryl Beseler, PhD & Risto Rautiainen, PhD

The Evaluation and Planning Core is the foundation of all Center activities, and oversees: strategic planning, coordination, evaluation, community outreach, professional development, fiscal and resource management, records maintenance, and Center reports.