

MRASH 2016 Presentation Abstracts

Session 1: Great View Room

Title: *Comprehensive Grain Safety Training Program & Resources*

Primary Presenter: Robert A. Aherin, PhD, CSP, University of Illinois & Grain Handling Safety Coalition, raherin@gmail.com

Additional Authors: Catherine Rylatt, MS, University of Illinois & Grain Handling Safety Coalition

Abstract: The presentation will review the grain safety training programs and resources currently available through the Grain Handling Safety Coalition. This will include a description of over 10 training modules on various grain safety topics such as safe grain bin entry procedures, entanglement prevention, lockout/tagout, establishing and using a lifeline in a grain bin, fall prevention, grain safety overview etc. as well a 3 module youth grain safety program. The presentation will briefly describe the types of training sessions including demonstrations that have been developed targeted for both farm and grain operations workers and trainers. The discussion will include a review of the resources available on the grainsafety.org website as well as what possible new resources may be developed such as on line self-training if there is a need and interest.

Title: *A statistical analysis of feedback surveys from The Grain Handling Safety Coalition Train the Trainer Program to determine preferred teaching methods to grain bin safety educators*

Primary Presenter: Jaime Thissen, Graduate Research Fellow, NIOSH Trainee, University of Illinois Department of Agricultural & Biological Engineering; jaimethissen1@gmail.com

Additional Authors: Brandi Shanata; Master's in Statistics, University of California, Los Angeles (UCLA); Founder of Unraveling Data: Statistical Solutions Simplified; Grain Handling Safety Coalition

Dr. Bob Aherin; University of Illinois Urbana-Champaign, Department of Agricultural Engineering; Grain Handling Safety Coalition

Learning Objectives:

1. Participants will be able to give examples of grain bin hazards and safety measures.
2. Participants will learn techniques on organizing survey data.

Abstract: Injury events involving grain handling systems is a major safety issue. Injuries have been documented when they are both full and empty. As such, training is necessary for both preventative measures and rescue involving the grain bin environment. The Grain Handling Safety Coalition is a leader in developing new, advanced training programs for rural communities. One program is the Train the Trainer Program. This initiative trains grain safety instructors with the primary goal of reaching those who work with grain in elevators and on farms. This paper will present the current results of preferred training methods as indicated in surveys administered by the Grain Handling Safety Coalition in the Train the Trainer Program. Various statistical analyses were formed to track participant response trends utilizing Visual

Basic code. Key information categories were also developed based on data trends. Preferences for hands-on training techniques and videos were indicated. Clearly, demonstration-based teaching was desired. It was anticipated that this trend will continue as more surveys are administered and processed.

Session 1: South West Hall

Title: *R2P – Reaching Farmers with Safety and Health Resources*

Primary Presenter: Shari Burgus, MEd, EdS, Farm Safety For Just Kids, shari@farmsafetyforjustkids.org

Additional Authors: Ellen Duysen, MPH, Central States Center for Agricultural Safety and Health

Learning Objectives:

1. Identify differences in hazard perceptions among various farmer demographic groups.
2. Use non-technical, short, and concise wording when producing farm safety and health educational resources.
3. Identify which communication channels are preferred by different farmer demographic groups.

Abstract: Agricultural safety and health education is an important component of farm injury prevention. As demographics change it is imperative that agricultural health and safety professionals understand the educational needs of each farm population, create relatable, research based safety and health materials, and deliver information via acceptable methods. Four data collection methods (focus groups, surveys, face-to-face interviews, and e-mail surveys) were used with farmers in seven Midwestern states to identify hazards, injury prevention measures used, resource preferences and delivery, and preferred communication channels.

Selected findings that informed material development include:

- Farmers prefer educational information that is non-technical.
- Farmers prefer images that reflect their individual farming practices.
- Organic farmers mentioned personal protective equipment most frequently in focus groups.
- Younger farmers are more concerned about acute injuries than older farmers.
- Preference for fact sheets and article length is two pages or less.

Data were analyzed and used to develop materials for use by professionals and the public. Templates were created that are customizable with a gallery of photographs for: commodity, organic status, region, age, and lifestyle. Audio public service announcements will address issues relevant to farmers preferring radio messaging.

Title: *How rural male farmers in southwest Ontario seek health information for farm-related injury and other health issues*

Primary Presenter: Bradley Hiebert, PhD candidate, The University of Western Ontario:
bhiebert@uwo.ca

Additional Authors: Beverly Leipert, RN, PhD, The University of Western Ontario
Sandra Regan, RN, PhD, The University of Western Ontario

Learning Objectives:

1. Participants will be able to list at least three characteristics of rural male gender norms.
2. Participants will be able to give examples of methods used by male farmers to seek health information.
3. Participants will be able to identify features of rural communities that are important resources for males farmers' health.

Abstract: Rural farmers are an understudied population with high mortality, morbidity, and co-morbidities due to preventable injury, the majority of which occur on-farm. Such population health trends may indicate the strength of rural gender norms directed by a dominant but oft-unattainable cultural ideal that values rugged individualism, stoicism, and limited disclosure of personal issues. Attempts to fulfill such cultural ideals may lead men in rural communities, and particularly male farmers, to support patriarchal gender norms, pay less attention to their own and others' health needs, and strictly limit what is deemed appropriate to discuss with others. This doctoral study examines the processes by which rural male farmers in southwest Ontario seek and access information regarding farm safety-related and other health issues. Data will be collected using photographs and interviews with farmers in southwest Ontario to generate a highly nuanced understanding of how rural male farmers' seek health information, and how this process is influenced by rural cultural gender norms.

Session 1: South East Hall

Title: *It Takes a Village: Challenges and Strategies for Preventing ATV and ROV Deaths and Injuries in Rural Communities*

Primary Presenter: Gerene Denning, PhD, Emergency Medicine, University of Iowa: gerene-denning@uiowa.edu

Additional Authors: Charles Jennissen, MD, Emergency Medicine, University of Iowa

Learning Objectives:

1. Participants will be able to give examples of common unsafe riding practices and explain why they increase risk of crash or injury.
2. Participants will be able to name the three "Es" of injury prevention and give an example of each related to ATV or ROV safety.
3. Participants will be invited to be partners in injury prevention efforts and will be made aware of available tools and resources.

Abstract: Off-road vehicles such as all-terrain vehicles (ATVs) and recreational off-highway vehicles (ROVs) are valuable tools for farming and are also used for recreation in rural

communities. Unfortunately, there are a growing number of deaths and injuries from both occupational and recreational use of these vehicles. ATV and ROV injury prevention efforts in our rural communities face numerous challenges. These include widespread lack of safety training often resulting in dangerous misconceptions, high prevalence of unsafe riding practices, limited use of personal protective equipment, and lack of evidence-based safety laws or laws and ordinances that directly undermine injury prevention efforts. The presentation will briefly outline the major challenges and discuss the need to address them from both a personal user and a community-based perspective. These challenges will be framed in the context of the three “Es” of injury prevention – education, engineering and enforcement. Particular areas of focus will be dangers to our youth, roadway riders as a vulnerable user population, and consequences of not using helmets (ATVs) and seat belts (ROVs). The need for a broad coalition to expand safety training and injury prevention advocacy will also be explored.

Title: Occupational and Recreational Side-by-Side Vehicle Exposure, Safety Behaviors, and Crash Experiences of Iowa Future Farmers of America Members

Primary Presenter: Charles Jennissen, MD, University of Iowa: charles-jennissen@uiowa.edu

Additional Authors: Gerene Denning, PhD, University of Iowa Department of Emergency Medicine; Kristel Wetjen, RN, Division of Pediatric Surgery, University of Iowa Children’s Hospital; Lauren O'Donnell, BA, University of Iowa Children’s Hospital; Pam Hoogerwerf, University of Iowa Children’s Hospital

Learning Objectives:

1. Attendees will be able to list the top three agricultural work tasks for which side-by-sides are used on farms by teens.
2. Participants will be able to discuss the main safety behaviors regarding side-by side use that teens often don’t follow that may put them at particular risk for injury and death.
3. Attendees will be able to state risk factors associated with the increased likelihood of teens having had a side-by-side crash.

Abstract: Background. Side-by-sides (SxSs), including both utility-task vehicles (UTVs) and recreational off-highway vehicles (ROVs) , have become increasingly popular for performing work-related tasks and for recreation in rural areas. There have been no studies that have examined the safety issues and experiences of rural teens while operating SxSs. Study Objective. To better understand the epidemiology, safety behaviors, and crash experiences of SxS riders. Methods. Attendees of the 2015 and 2016 Iowa FFA Leadership Conference were surveyed on their SxS use at the Iowa ATV Safety Task Force booth. Demographic information was collected and side-by-side exposure determined. For those who had ridden side-by-sides, data related to their frequency of occupational and recreational use, the safety behaviors they practiced, and their crash and injury experiences were collected. The work tasks for which respondents utilized side-by-sides for agricultural purposes were also determined. Descriptive and multivariable analyses will be performed. Results: Analysis of the data will be completed prior to the conference, and results of the study will be presented.

Session 2: Great View Room

Title: *Global is Local: Developing a Multidisciplinary Mobile Health Experiential Rotation Working with Migrant and Seasonal Farmworkers in Rural Minnesota*

Primary Presenter: Jonathan Kirsch, MD. University of Minnesota Medical School:
kirsch@umn.edu

Additional Authors: Rachel Sandler, MD
Oscar Garza, PhD

Learning Objectives:

1. Describe the unique challenges of healthcare delivery for the migrant farm worker population
2. Recognize social determinants of health for a transient, migrant population in a rural context through experiential learning
3. Experience clinical medical practice in mobile units, specifically related to chronic disease management and occupational health
4. Identify a specific area of interest related to migrant farmworker health to write a scholarly publication and reflection

Abstract:

The clinical portion of this rotation took place in 4 rural communities in western and southern Minnesota (Owatonna, Glencoe, Broton, and Montgomery). Each community had a variety of work experiences for migrant workers including agricultural fieldwork, dairy work, and food processing. In this 4 week rotation, we incorporated multiple modalities for learning about the migrant and seasonal farmworker population including didactic lectures, documentary films, review and discussion of medical literature, and work site tours to provide a contextual background for this unique and underserved group. Specific topics of discussion included occupational health and safety, pesticide exposure, immigration law and policy, agricultural health, and medical homes for mobile groups. We also provided direct medical care to the migrant and seasonal farmworker population on a mobile medical unit through a community partner, Community Health Service, Inc. This rotation was collaboratively developed with multiple community partners

Residents overall felt this was a useful clinical rotation as they gained exposure to community health in a rural setting, unlike the urban ones in which they train. They also stated that they gained benefit from the discussions about providing effective care for mobile populations and insights into specific cultural challenges faced by subsets of the Latino community. Going forward, we plan to work with our community partners to strengthen ties with the local communities and build capacity within these organizations to provide more multidisciplinary educational opportunities in internal medicine and pharmacy along with other medical subspecialties, dentistry and public health while also improving access to care through the mobile units.

Title: Perceptions of Occupational Health and Safety among Latino Immigrant Hog CAFO Workers

Primary Presenter: Athena K Ramos, MS, MBA, CPM, University of Nebraska Medical Center: aramos@unmc.edu

Learning Objectives:

1. Participants will be able to understand and describe concerns of immigrant farmworkers who participated in the Health & Job Hazards of Latino CAFO Workers in Missouri (two waves of survey responses and focus group) study.
2. Participants will be able to discuss implications of these results on agricultural outreach and intervention in Midwestern communities.

Abstract: The Health & Job Hazards of Latino CAFO Workers in Missouri Study was developed to systematically understand and describe occupational risks, health status, and prevention opportunities among hog CAFO workers and members of their household. This study consisted of conducting a prospective panel study as well as a series of focus groups on job processes, barriers of PPE usage, and cultural influences that may be useful addressing the development of interventions and educational materials to use with Latino immigrant hog CAFO workers.

The final wave 1 survey sample included 40 Latino immigrant workers. Half of participants had no prior experience working with hogs either in the U.S. or in their country of origin and 85% had been employed in the industry less than three years. Wave 2 survey data will be collected during the summer of 2016. Focus groups were conducted with workers to explore perceptions of safety and risk in the workplace and opportunities for improvement between March and June 2016.

NIOSH has deemed immigrant farmworkers to be a vulnerable population. Therefore, more efforts should explore how cultural, linguistic, and socioeconomic factors impact occupational health and safety practices and outcomes among this population.

Session 2: South West Hall

Title: Training student pharmacists to become partners in agricultural health and safety

Primary Presenter: Kelly A. Cochran, PharmD, BCPS, University of Missouri-Kansas City School of Pharmacy at MU: cochranke@umkc.edu

Learning Objectives:

1. Participants will be able to recognize the potential benefits of delivery of pharmacy services in rural communities.
2. Participants will be able to give examples of how student pharmacists can be equipped with skills to become partners in agricultural health and safety.

Abstract: Community pharmacists are the most accessible health professional, available readily by phone or without an appointment at the local pharmacy. Nearly 20% of pharmacy graduates from UMKC School of Pharmacy pursue careers in rural communities. Pharm to Farm is a program that provides onsite farmstead medication assessments and rural health outreach and education. This study examines student pharmacists' self-efficacy of their skills in providing care to and communicating with rural populations, confidence in identifying potential drug-related problems that could potentially increase risk of farm injury and describes agricultural health and safety skills gained through their involvement with Pharm to Farm.

Title: *Sorting through the Spheres of Influence*

Primary Presenter: Kathrine Barnes, MS, MPH: Barnes.kate@mcrf.mfldclin.edu

Additional Authors: Casper G. Bendixsen, PhD

Learning Objectives:

1. Participants will be able to name the most trusted actors by dairy farmers.
2. Participants will be able to describe the Socioecological Model in the context of dairy farming.
3. Participants will be able to define the pile sort method, how to perform it, and its utility in social/behavioral research.

Abstract: Despite concerted efforts, agricultural health and safety initiatives lie discarded as agricultural workers continue to endure higher rates of injury and death than any other line of work. Drawing from the Socioecological Model, which positions the individual nested in rings representing the environment around an individual from interpersonal relationships (family, friends, etc) to the level of public policy, the Spheres of Influence project endeavors to describe the socially influential environment surrounding the dairy farmer. The aim of the project is to develop new modes to reach the farmer and more effectively change his/her safety behaviors. To achieve this aim, we performed pile sorts with dairy farmers (n=10), agricultural bankers (n=11), and insurance agents who write for farms (n=10). The pile sort method involves a five point Likert-like scale where participants rated 32 different actors in the agricultural community (herdsman, vet, OSHA, etc) to indicate the actors' a) integration into daily functions, b) farm safety knowledge, and c) capacity to affect behavior change. Interviews were conducted alongside the pile sorts to gather qualitative data. Nine participants performed the pile sorts again one year later to test the reliability of the tool. Full study results will be available by November.

Session 2: South East Hall

Title: *Making the Grade: Health & Safety Training for Teens*

Primary Presenter: Carolyn Sheridan, BSN, AgriSafe Network: csheridan@agrisafe.org

Learning Objectives:

Abstract: According to the Department of Labor, *Employers Guide to Young Workers*, young agricultural workers are faced with the same hazards as adults. Young adults are likely to suffer from increased rates of respiratory diseases, noise-induced hearing loss, skin disorders, chemical toxicity, and heat-related illnesses. Despite their risk, there are steps they can take to minimize or eliminate work related injuries and illness.

Young adults who perform important tasks on the farm are highly capable of following safe practices. Ensuring that safety messages are interactive, fun and practical can lead to positive behavior changes.

AgriSafe will share an innovative model of learning centered on live streaming in the high school classroom. AgriSafe uses *Prezi* software to develop presentations that align with the style of learning most commonly found among the younger generation (dynamic flow and movement through information). This year, AgriSafe in partnership with NECAS, will provide 1600 hours of training to over 800 young producers and 50 employers. Four new curriculums are offered:

1. **Cover Up!** -Ag Specific Personal Protective Equipment
2. **Taking Charge of Your Future**-Safe Farm Practices
3. **Say What?** Prevention of Hearing Loss
4. **Invest in Your Employees**-Understanding OSHA Standards as they Relate to Young Producers

Title: Safety Principles that Apply to Multiple Agricultural Tasks for Youth

Primary Presenter: Debra Erickson, Iowa State University: erickson@iastate.edu

Additional Authors: Shelly Campo, PhD, University of Iowa; Diane Rohlman, PhD, University of Iowa; Megan TePoel, MS University of Iowa

Learning Objectives:

1. Participants will be able to define three main safety principles all agricultural tasks include for youth workers.
2. Participants will be able to categorize aspects of existing practices into skill sets for youth workers.

Abstract: Young workers are more likely to have an injury on the farm than more experienced workers. Youth working in agriculture are able to work at younger ages and in more hazardous jobs than youth in other industries. Fatigue, substance use, and distracted behaviors are common risk factors that can impact safety, health and performance both on and off the job. Interventions directed towards supervisors and workplace policies can play a key role in reducing injuries and promoting health. The ultimate goal of this project is to develop a training for supervisors of young agricultural workers to keep their workers safe and healthy through better workplace training, enhanced communication and supervision, and the adoption of more workplace policies. As a first step, this project reviewed existing practice (i.e., Safety Guidelines for Hired Adolescent Farm Workers), model workplace policies (e.g., Model Policy: Youth

Employment in Agriculture), and the academic literature to look for workplace and supervisor recommendations that cut across work task. Results and recommendations from this review will be shared.

Session 3: Great View Room

Title: A summary of injuries reported at swine production companies

Primary Presenter: Jessica Evanson, DVM, MPH, Center for Animal Health and Food Safety – University of Minnesota

Additional Authors: Jeff Bender, DVM, MS, DACVPM, Center for Animal Health and Food Safety – University of Minnesota

Bruce H. Alexander PhD, Division of Environmental Health Sciences – University of Minnesota

Deirdre Green MS, Division of Environmental Health Sciences – University of Minnesota

Learning Objectives:

1. Identify the most commonly injured body parts as a result of animal interaction injuries.
2. Understand the types and distribution of insurance claims due to animal interaction injuries.
3. Review common data elements collected from swine company injury reports to improve consistency and completeness across data systems.

Abstract: Agriculture ranks among one of the most hazardous industries in the U.S., however little research has been done to characterize specific injuries in workers who raise food production animals. The objectives of this project were to characterize injury burden in swine production workers from swine production company's records and to identify opportunities and limitations of currently used data collection methods. Three commercial large swine production companies were enrolled. Analysis included a summary of claims from injuries receiving only medical treatment, injuries resulting in time-loss, and report only claims for the most common injury sources. The number of medical-only claims for Company A, B, and C were 101, 28, and 441, respectively. The number of time-loss claims was 41, 12, and 146, respectively. Time-loss claims resulted in a total reported amount of \$3,179,603 in costs. The most common source of time-loss injury was due to animal interactions (24.6%) and the most commonly injured body part was knees (28.6%). Results provide an initial assessment of the most common and costly injuries recorded at swine farms. Identification of the most costly injuries will help employers to better focus their resources when it comes to preventing these injuries.

Title: On-the-Farm Screening for Cardiovascular Risk Factors among Migrant Agricultural Workers in Southeast Minnesota

Primary Presenter: Tamim Rajjo, MD, MPH, Mayo Clinic: rajjo.tamim@mayo.edu

Additional Authors: Jennifer Rho, MD, MPH, Community Health Inc. ; M.Hassan Murad, MD, MPH, Mayo Clinic.

Learning Objectives:

1. Participants will be able to list 2 demographic characteristics of Agricultural Migrant Workers.
2. Participants will be able to list 2 challenges AMWs face for accessing health care services.
3. Participants will be able to list 2 current practices and their shortcomings.
4. Participants will be able to list 2 advantages and 2 shortcomings of the new proposed approach for health care delivery

Abstract: Accessibility to healthcare services is a major challenge facing agricultural migrant workers (AMWs) in US. We aimed to study the feasibility of implementing on-site cardiovascular risk factors screening at farms in Southeast Minnesota. **Methods:** We screened AMWs for CV risk factors at 3 farms over 6 months. We used translated and modified patient satisfaction questionnaire to evaluate general satisfaction, technical quality, interpersonal manner, communication, financial aspects, time spent with providers and accessibility/convenience. Outcomes were assessed using 5-point Likert scale and presented using descriptive statistics as means±SD (4-5 high, 3 moderate and 1-2 low acceptability). **Results:** Thirty AMWs were included in final analysis. Seventeen were active smokers, Sixteen were diabetics or pre-diabetics, six with HLD and one with hypertension. End of six months surveys showed high satisfaction rate in all but (Time spent with provider) with moderate satisfaction score. Twenty-eight participants reported the screening site was convenient and they are more aware of their health status, 20 didn't think screening interfered with their work schedule while 25 and 26 were likely to use this model and recommend it to friend farmers, respectively. Twenty-four workers didn't think this model puts them at risk of employment discrimination. **Conclusions:** This model is feasible and acceptable approach for providing healthcare to AMWs. Replication of experiment in other settings is needed

Session 3: South West Hall

Title: *Traumatic agricultural injuries in Nebraska: Exploring the use of trauma registry data for surveillance*

Primary Presenter: Ketki Patel, MD, MPH, Office of Epidemiology, Division of Public Health
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Learning Objectives:

1. Participants will be able to determine the potential of using Nebraska's Trauma Registry for surveillance of traumatic agricultural and other work-related injuries in Nebraska.
2. Participants will be able to describe outcomes of traumatic agriculture-related injuries in Nebraskans by age, gender, race, injury type.

Abstract: Background: Agriculture is one of the most hazardous industries in Nebraska. We used Nebraska's Trauma Registry to identify and describe traumatic agricultural injuries in Nebraska.

Methods: Records were selected from Nebraska's Trauma Registry and included patients aged ≥ 16 who were admitted, transferred, or dead on arrival to a designated trauma center in 2014. Using a unique case definition, traumatic agricultural injuries were identified and classified as: definite, probable and possible cases. A descriptive analysis was conducted, and injury outcomes were evaluated by patient and injury characteristics.

Results: A preliminary analysis identified 432 traumatic agricultural injuries requiring medical care in 2014: 25 (5.8%) definite, 315 (72.9%) probable and 92 (21.3%) possible cases. Out of 432 injuries, 3 (0.7%) were fatal injuries. Majority of injuries were among males (81%) and patients aged ≥ 65 (24%) and 55-64 (23%) years. The most common injury was fractures of the spine and trunk (24%), and the average length of hospital stay was 4 days.

Conclusion: Although using trauma registry data to track agricultural injuries poses unique challenges, we were able to capture traumatic agricultural injuries that occurred on and off farms in Nebraska. Evaluation of injury outcomes by injury characteristics helps determine priority areas for intervention.

Title: *Humpty Dumpty Spends a Year on the Farm*

Primary Presenter: Kathy Leinenkugel, MPA

Iowa Department of Public Health: Kathy.leinenkugel@idph.iowa.gov

Learning Objectives:

1. Participants will be able to list two of the most common events/causes of non-fatal farm injuries requiring hospitalization.
2. Participants will be able to list two of the most common events/causes of fatal farm injuries.
3. Participants will be able to describe at least one demographic disparity seen in farm injury data.

Abstract: Farmers are known for their hard work ethic and their commitment to doing what is needed to get a job done. This session will look at ag injury and fatality surveillance data to see how the risks of farming are reflected in the numbers, telling us more about those involved in farming and those whose commitment cost them everything.

The presentation will include data findings from the 2009-2013 Iowa Burden of Injury occupational health sub-report and other data analysis and case studies from the IDPH Occupational Health & Safety Surveillance Program.

Session 3: South East Hall

Title: *Health Outcomes among Beginning Farmers*

Primary Presenter: Maya Ramaswamy, MEng, University of Iowa: maya-ramaswamy@uiowa.edu

Additional Authors: Nathan B. Fethke, PhD, University of Iowa

Learning Objectives:

1. Participants will learn about who makes up the beginning farmer subset of agricultural workers, particularly through demographic information.
2. Participants will further understand areas of opportunity for future health interventions.

Abstract: Beginning farmers, agricultural workers that have 10 years or less experience operating a farm, face unique challenges in starting and sustaining their businesses. It is unknown whether they are at risk for adverse health outcomes due to their differing demographic characteristics and experiences from established farmers because little information is available on this group. Given that agriculture is one of the most hazardous industries, it is important to know whether this group is at particular risk for adverse health outcomes compared to established farmers. To address the lack of available knowledge on beginning farmers, this pilot study will characterize occupational physical and psychosocial stressors and the prevalence of adverse health outcomes among Iowa beginning farmers. Data collection for this study is ongoing. Preliminary results regarding musculoskeletal health will be presented.

Title: *Protecting Young Adults in the Agricultural Workforce*

Primary Presenter: Charlotte Halverson, BSN, COHN-S AgriSafe Network; chalverson@agrisafe.org

Learning Objectives:

1. Identify physical and psychological development factors to consider when training and employing young adults in the agricultural sector.
2. Define agricultural hazards and exposures that increase the risk of injury and illness among young workers.
3. Describe regulatory standards that can promote a safe work environment for young employees.
4. Create action steps that can reduce the rate of agricultural injury and illness.

Abstract: According to the Bureau of Labor Statistics 2015 report, 253,000 young workers (ages 16 – 24) were employed in agriculture in 2014. Migrant Clinicians Network indicates there may be half a million hired workers under the age of 18 in the U.S. Many of these young people are living and working in the Midwestern migrant stream. Employers of these young adults are held responsible for their safety and health in the workplace. Because the physical, cognitive, and emotional development in teens and young adults are still developing into their mid-twenties, employers have much to consider. The diversity of agriculture across the county can present barriers to the implementation of health and safety solutions in the workplace.

This presentation will look at some of these key developmental factors in young adult workers. Some of the many hazards and exposures that can put young workers and their employers at risk will be identified. OSHA standards and changes in Worker Protection Standards will be highlighted. Sample action plans that could reduce risk and support a safe work environment will be reviewed.