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Congress and Publications

2021/01

Realized by Priscila Malanski at 11/02/2021

Congress

International Symposium on Work in Agriculture - New dates : March 29th - April 1rst, 2021

Because many people may not be able to travel as a result of the pandemic Covid 19 or of its economic impact, the 2nd ISWA Symposium on Work in Agriculture is going to a totally virtual Symposium. Making the Symposium more accessible helps our underlying mission to elaborate and advance in multidisciplinary approaches on work in agriculture and to expand our capacity of thinking the future of work.

Going to totally virtual is a radical change. We loose the advantages of direct relationships, of direct professional interactions and networking. The participants won't discover the nice landscapes of Auvergne, the old city of Clermont Ferrand and won't have the opportunity to visit french farms. The good news are i) that we can hope to reach to a larger audience and ii) that the virtual conference will be very close to the technical content we scheduled, the sessions being adapted in order to favor interactions (during and after) and to shorten their duration. The workshops will undergo with the same contents of oral presentations, posters and interactive discussions. The round table and the tool bazaar will be maintained as well.

Registration will still be compulsory to access to the Symposium, and will offer the possibility of a reserved access to the papers and posters before and after the Symposium dates. Registration will open in 2021.

Registrations are open from January 14th to March 14th, 2021

Links : https://symposium.inrae.fr/workinagriculture-iswa/

Farm Business Options Webinar - The Farm: feeding the mind and body - Teagasc

This webinar on Tuesday, **15th December at 11am** will focus on:

The Farm: feeding the mind and body

Health and mental wellbeing have never been as much of a priority as they are currently among the public. This webinar aims to demonstrate how two farms have diversified their enterprises with one focusing on providing high quality, healthy organic dishes from the lands that surround the diners, while the other hopes to use nature, the environment and art therapy to provide mindfulness and wellbeing to its customers.

Links : https://www.teagasc.ie/news--events/national-events/events/fbowebinarmindbody.php

Tags : Health and decent work

Call for Papers

Labour Economics

The recent pandemic has disrupted lives and businesses. Such changes have brought to light many issues in how to measure the performance of an economy, even during normal times. Such issues include: How do large disruptions affect seasonal adjustment? This problem recently caught the eye of the U.S. Bureau of Labor Statistics leading to a change in how seasonal factors are applied. Are hours of work properly measured given the large number of people now working remotely? Are measures of unemployment revealing the underlying nature of the state of the economy? Other issues include inequality, discrimination, job search and the rewards going to labour.

This special issue of Labour Economics will focus on data and theory to better understand market conditions and offer possible policy perspectives. The papers will be peer-reviewed and will keep within the standards imposed for regular issues.

Submission open: 21 December 2020

Submission deadline: 1 April 2021

Links : https://www.journals.elsevier.com/labour-economics/call-for-papers/call-for-papers-measurement-issues-in-labour-economics

European Association of Labour Economists

Call for Papers EALE Annual Conference Padua Italy 16-18 September 2021.

Paper submission deadline is March 1, 2021.

In case Covid-19 prevents us from organizing a normal conference we will organize it on-line. All other information will be available at https://t.co/2B3yTEkesz. https://t.co/AFWC8aG0aS

Links : http://www.eale.nl/

Gérer le travail, protéger les salariés en situation de pandémie : effets sur l'emploi, le travail, les conditions de travail et les relations professionnelles

À travers cet appel à contribution, la revue Chroniques du Travail entend interroger un certain nombre de transformations touchant au travail, à son organisation et sa régulation, consécutives à l'avènement de la crise sanitaire. Les questions énoncées ici sont nombreuses, mais elles ne constituent que des suggestions. Elles ne doivent en aucun cas brider les auteurs dans leurs intentions, dès lors qu'ils orientent leurs analyses sur les enjeux, la mise en œuvre et les effets des mesures qui permettent d'assurer la continuité d'activité en période de pandémie. Des contributions sont ainsi attendues sur la question des rôles des divers acteurs de la prévention des risques professionnels, sur les changements dans les relations professionnelles… mais aussi sur les conditions du travail modifiées et leurs conséquences en la matière.

Links : https://calenda.org/822557

Publications

Why and how farmers manage mixed cattle-sheep farming systems and cope with economic, climatic and workforce-related hazards

Combining cattle and sheep on the same farm can be a promising way for farmers to face uncertainties and produce in an agroecological manner. Previous studies showed benefits of mixed-species grazing on animal health and pasture use. However, few studies have examined how farmers truly manage the two species on their farms and why. The purpose of this study was to explore this issue by surveying 37 farmers who combined meat sheep and beef or dairy cattle on their farms. We chose a systemic and comprehensive approach to the functioning of mixed-species livestock farming systems (MSLF) by considering all dimensions of the system influenced by mixing species (i.e., system configuration, grazing, marketing of products, work and adaptive capacity) and by considering the farmers' viewpoints. The benefits of mixing species that farmers mentioned concerned economic stability and optimal use of grassland resources. Although farmers usually mentioned workload as a disadvantage, the facts are not so clear, and mixing species also benefits work. Farmers cited the pleasure of varied work and the flexibility of work organization. We identified four types of combining cattle and sheep on pasture that express a gradient of the interaction between the two species (from no to high interaction) and are influenced by field configuration (grouped or scattered) and cattle production (dairy or beef). Regarding work organization, ways to combine the two species concern distribution of work required for each species among workers (versatility or specialization) and over the year. Three modes of temporal organization of the work required for each species, which corresponded to different strategies for organizing animal-production cycles, the availability of labor and the willingness to use resources, were identified. To adapt their farm to climatic, economic and workforce-related hazards, farmers used mechanisms related to the combination of the two species: modifying the ewe/cow ratio, breeding periods, worker versatility, grazing management and allocation of resources between species. Our study showed the interest of a systemic and comprehensive approach to MSLF that are promising for the agroecological transition but poorly documented. In particular, it highlighted the need to consider work as part of the system to be configured, managed and adjusted along with the other parts and not simply as a set of constraints.

Links : https://www.cambridge.org/core/journals/renewable-agriculture-and-food-systems/article/why-and-how-farmers-manage-mixed-cattlesheep-farming-systems-and-cope-with-economic-climatic-and-workforcerelated-hazards/393C108F571C02429D4AF3AF1176A419

Tags : Work organisation

Enhancing the ability of agriculture to cope with major crises or disasters: What the experience of COVID-19 teaches us

The COVID-19 outbreak was an unprecedented situation that uncovered forgotten interconnections and interdependencies between agriculture, society, and economy, whereas it also brought to the fore the vulnerability of agrifood production to external disturbances. Building upon the ongoing experience of the

COVID-19 pandemic, in this short communication, we discuss three potential mechanisms that, in our opinion, can mitigate the impacts of major crises or disasters in agriculture: resilience-promoting policies, community marketing schemes, and smart farming technology. We argue that resilience-promoting policies should focus on the development of crisis management plans and enhance farmers' capacity to cope with external disturbances. We also stress the need to promote community marketing conduits that ensure an income floor for farmers while in parallel facilitating consumer access to agrifood products when mainstream distribution channels under-serve them. Finally, we discuss some issues that need to be solved to ensure that smart technology and big data can help farmers overcome external shocks.

Links : https://www.sciencedirect.com/science/article/pii/S0308521X20308842?dgcid=raven_sd_aip_email

Multi-level impacts of the COVID-19 lockdown on agricultural systems in India: The case of Uttar Pradesh

When on March 24, 2020 the Government of India ordered a complete lockdown of the country as a response to the COVID-19 pandemic, it had serious unwanted implications for farmers and the supply chains for agricultural produce. This was magnified by the fact that, as typically in developing countries, India's economy is strongly based on farming, industrialization of its agricultural systems being only modest. This paper reports on the various consequences of the COVID-19 lockdown for farming systems in India, including the economy, taking into account the associated emergency responses of state and national governments. Combining quantitative and qualitative sources of information with a focus on the Indian state of Uttar Pradesh, including expert elicitation and a survey of farmers, the paper identifies and analyzes the different factors that contributed to the severe disruption of farming systems and the agricultural sector as a whole following the lockdown. Among other issues, our study finds that the lack of migrant labor in some regions and a surplus of workers in others greatly affected the April harvest, leading to a decline in agricultural wages in some communities and an increase in others, as well as to critical losses of produce. Moreover, the partial closure of rural markets and procurement options, combined with the insufficient supply of products, led to shortages of food supplies and dramatically increased prices, which particularly affected urban dwellers and the poor. We argue that the lessons learned from the COVID-19 crisis could fuel the development of new sustainable agro-policies and decision-making in response not only to future pandemics but also to the sustainable development of agricultural systems in India and in developing countries in general.

Links : https://www.sciencedirect.com/science/article/pii/S0308521X2030888X?dgcid=raven_sd_aip_email

Tags : Rural Employment, Health and decent work

COVID-19 and the agri-food system in the United States and Canada

Agri-food supply chains in North America have become remarkably efficient, supplying an unprecedented variety of items at the lowest possible cost. However, the initial stages of the COVID-19 pandemic and the near-total temporary loss of the foodservice distribution channel, exposed a vulnerability that many found surprising. Instead of continued shortages, however, the agri-food sector has since moved back to near normal conditions with prices and production levels similar to those typically observed in years prior to the pandemic. Ironically, the specialization in most food supply chains designed for “just-in-time” delivery to specific customers with no reserve capacity, which led to the initial disruptions, may have also been

responsible for its rapid rebound. A common theme in assessing the impacts across the six commodities examined is the growing importance of understanding the whole supply chain.

Over the longer term, a continuation of the pandemic could push the supply chain toward greater consolidation of firms and diversification of products given the increasing option value of maintaining flexibility. Other structural changes will be felt through input markets, most notably labour, as the trend toward greater automation will continue to accelerate as a response to meeting concerns about a consistent supply of healthy and productive workers. The economic fall out from the pandemic may lead to greater concentration in the sector as some firms are not able to survive the downturn and changes in consumer food buying behaviour, including movement toward online shopping and enhanced demand for attributes associated with resiliency, such as local. On the other hand, online shopping may provide opportunities for small producers and processors to shorten supply chains and reach customers directly. In the long term, COVID-19 impacts on global commerce and developing country production are more uncertain and could influence poverty reduction. While COVID-19's impacts on North American agriculture should have minimal effect on the Sustainable Development Goals (SDGs) through food prices, the ongoing global trends in trade and agribusiness accelerated by the pandemic are relevant for achievement of the SDGs.

Links : https://www.sciencedirect.com/science/article/pii/S0308521X20309008

Tags : Health and decent work, Value chains

Exploring farmers' decisions to engage in grass measurement on dairy farms in Ireland

Purpose

Employing a theoretical model of human behaviour (COM-B), the current study explores the factors influencing farmers' engagement with grass measurement on Irish dairy farms.

Methodology

The current study employed a qualitative research design. One-to-one semi-structured interviews were carried out with 21 dairy farmers.

Findings

Factors inhibiting farmers from engaging in grass measurement included a high perceived task effort, a lack of skill and self-efficacy to carry out the task, uncertainty over personal value of engagement, a lack of tangible support, and a confidence in, and preference for, existing intuition-based decision-making.

Practical implications

Recommendations for communication, extension, education and technology development are offered to tackle the 'high task effort' associated with grass measurement by farmers and to support skill development and self-efficacy of dairy farmers.

Theoretical implications

The study proves value in moving from behavioural frameworks which focus solely on individual constructs as 'barriers to adoption' towards using frameworks which also account for the important role of factors external to the individual such as their social and physical surroundings.

Value

A comprehensive theoretical framework is offered for understanding dairy farmers' engagement with grass measurement along with evidence-based suggestions for communication, extension, education and technology development.

Links : https://www.tandfonline.com/doi/full/10.1080/1389224X.2020.1858892?af=R

Tags : Skills and training

"You treat them right, They'll treat you right": Understanding beekeepers' scale management decisions within the context of bee values

The United States (U.S.) has seen a growing interest in small-to medium-scale beekeeping within the last decade. This phenomenon is likely due to the increasing awareness of the threats facing honey bees (Apis mellifera) as evidenced through recent widespread media coverage on Colony Collapse Disorder. Within the last decade, the number of beekeepers in Maine has increased by over 140%, with the majority consisting of small "backyard or hobby beekeepers." Drawing upon qualitative interviews (n = 22) with small- and medium-sized beekeepers across Maine, we explore factors informing beekeepers' scale management decisions related to the size and scope of their operations and the ways in which beekeepers value their bees. We see that a broad beekeeper-bee relation emerges, impacting some scale management decisions. These findings can help inform outreach, education and public policies directed at supporting the sustainable maintenance and growth of small and medium-scale beekeeping operations in Maine and around the globe

Links : https://www.sciencedirect.com/science/article/pii/S0743016720317101?dgcid=rss_sd_all

Tags : Work organisation

The Effects of COVID-19 on Fruit and Vegetable Production

COVID-19 has had unprecedented effects on the US economy, in large part because of its effects on workers. Within food and agriculture, these effects pose the greatest threat to the production of labor-intensive commodities—in particular, fruits and vegetables, the production of which tends to require large numbers of workers for harvesting and packing. We econometrically estimate the effects of COVID-19 on fruit and vegetable production as the US agricultural labor supply is adversely affected by this pandemic. The major crop losses include $16 million in lettuce, $5 million in apples, and $4 million in grapes.

Links : https://onlinelibrary.wiley.com/doi/10.1002/aepp.13107

Tags : Rural Employment

What Does Gender Yield Gap Tell Us about Smallholder Farming in Developing Countries?

This study examines the extent of the productivity gap between male and female bean producers, its discriminatory nature and implications for the policymakers in agriculture in Tanzania. Generally, women are distinctively "invisible" in agriculture, due to social norms and even from the national agricultural

policy perspective. Their discrimination arises from uncounted and unaccounted for farm work, and their productivity is reduced by triple roles, limited access to education, having triple effects on access to technology, training and land rights. In research, issues of concern to them such as nutritious food crops, varietal selection on important attributes, household food security, convenient home storage and small-scale processing are widely ignored through unfavourable policy design. Given the above discriminatory issues surrounding women in agriculture, they are hypothesised to be less productive and often lag behind male counterparts in crop production. To test the above hypothesis, a three-stage stratified sampling method was used to collect cross-sectional data in 2016 across four regions of Tanzania. Then, an Oaxaca-Blinder decomposition method (at means) was used to apportion the sources of the difference between men and women into explained and unexplained variations. Further improvements through the newly developed Re-Centered Influence Functions (RIFs) remarkably improved outcomes as the differences were analysed through unconditional partial effects on quantiles. Using a counterfactual approach and correcting for selection bias, the model provided consistent estimates for easy comparison of the two groups. Besides this, it emerged that interventions such as providing improved bean seed varieties and training farmers on good agricultural practices reduced the gender yield gap and provided a potential avenue for addressing the discrimination observed in productivity among males and females. Controlling for selection bias also improved the model, but the real discrimination was observed at the 50th percentile, where the majority of the respondents lay within. However, if a female's age, family size, additional years of schooling and discretion to spend income from beans were taken away, they would be worse off. Our study finds that females comprised 25 percent of the sample, had 6 percent lower productivity, provided 64.70 percent on-farm labour and had 0.32 hectares less land compared to males, ceteris paribus. Access to improved varieties contributed to a 35.4 percent improved productivity compared to growing indigenous/local varieties. The implication is that the gender yield gap can be reduced significantly if efforts are focused on preventing or correcting factors causing discrimination against women.

Links : https://www.mdpi.com/2071-1050/13/1/77

Tags : Gender

Pesticide Label Safety Information in Spanish and English: In Your Hand, Anytime & Anywhere

Purpose: The Etiquetas bilingües de pesticidas, or Bilingual Pesticide Safety project, aims to put pesticide label health, safety, and environmental protection information directly into the hands of end-users – pesticide handlers and managers. These mobile applications provide producers a risk management tool for minimizing health, safety, environmental, fiscal, and reputational risks associated with pesticide use. The initial spark for the project occurred in 2006 when formative research on pesticide safety needs for Washington State (WA) identified a significant safety barrier: pesticide labels are in English, while Spanish is the primary language of most agricultural workers.

Methods: As smart phones and mobile devices have become essential work and personal tools, they were selected as the delivery platform to put this safety information into the hands of end-users. This bilingual app features the English label content and true, accessible Spanish translations; easy iaccess through a menu; and full-function offline for use on remote farms lacking connectivity. Research for this translation project has three phases. Phase 1 (2016): First generation pilot app (pome fruit) for proof-of-concept. Phase 2 (2018): Second generation ß-app for expansion (tree fruit). Phase 3 (2020–2022): Product upgrades (WA specialty crops), added features, and distribution through app stores. Each phase includes end users evaluating app function, usability, and translations.

Results: The pilot and ß-apps demonstrated that the design and user-friendly interface was appropriate, the translations were excellent ("[They're] like the translations I use"), and stakeholders were eager for full product availability. Similar results were obtained from the first user tests for Phase 3. Stakeholders, including producers, industry organizations, state agencies, and end-users, are now partners in support of Phase 3 currently underway.

Discussion and Conclusion: With strong industry support, two apps are now funded for WA. ¡Etiquetas de pesticides, ahora!/Pesticide Labels, Now! with safety information from 40 labels used in apple and pear production will be released in Winter 2020. The PestiSeguro™/PestiSafe™ app covers labels for WA specialty crops with a 3-year staged release starting in 2020. Initially this app will be available without charge as we develop a roadmap for future growth and financial sustainability and build partnerships for these endeavors.

Links : https://www.tandfonline.com/doi/abs/10.1080/1059924X.2020.1763736

Tags : Health and decent work

Compliance with Recommended Safety Standards among High-Risk Farm Equipment

Purpose: Tractor rollovers, machine entanglements, and falls have consistently resulted in high rates of fatal and nonfatal injury on farms. While rates continue to be high, we know very little about how compliant machinery and equipment are with recommended safety standards. This study examined compliance with recommended safety standards among 31 farms in Iowa.

Methods: We developed a hazard assessment tool to evaluate agricultural injury hazards on farms. We enrolled 31 row crop farms in Iowa between August and October, 2019. Data collection included an interview with the farm owner or operator and an environmental assessment of safety hazards. We graded various hazards associated with tractors, entanglements, and falls using measures of compliance to recommended safety standards. We also examined the prevalence of injury to owners or operators, family members, contract farmworkers, and hired farm hands.

Results/Findings: More than half (52%) of the farm workers experienced an injury that resulted in medical attention. Among the 31 farms enrolled, there were three fatalities related to farm work, all of which occurred among owners or operators. We found that 87% of farms were compliant with roll-over protective structures (ROPS), and 71% of farms had a seatbelt in good working condition. For power take-off (PTO) powered implements, 16% of farms were compliant with PTO guards. For fixed implements, such as augers, grain dryers, and bench grinders, 48% of farms were compliant with recommended safety standards. Approximately two-thirds of farms were compliant with ladder safety, and 45% were compliant with having handrails at working elevations.

Practical Application: Many of the tractors and other hazardous equipment were present and mostly compliant with recommended safety standards. However, there is clearly a need for improved compliance with recommended safety standards among specific hazardous equipment on the farm. Our hazard assessment tool provides farmers and other stakeholders with an opportunity to systematically and comprehensively evaluate compliance to recommended safety standards.

Links : https://www.tandfonline.com/doi/abs/10.1080/1059924X.2020.1763733

Tags : Health and decent work

Dairy Safety Kit: An Innovative Online Based Training and Outreach Solution

Purpose: Developed in partnership with Washington State Dairy Federation, Washington State University, and University of Washington, the e-learning Dairy Safety Kit (DSK) platform provides curated content and an interactive learning experience tailored to Washington dairy workers. The DSK is organized as a series of interactive modules targeting training topics identified through survey of Pacific Northwest dairy producers.

Methods: Moderators, recruited by the Dairy Federation of Washington, interact with e-learners, answer subject-specific questions, and provide guidance on implementing on-farm training using module materials. Registered e-learners can self-guide their way through the DSK content, access and download materials, ask questions, and provide feedback on material effectiveness and ease of use. This is a flexible and bilingual platform that also allows for dissemination of emerging issues, changes in regulations, and other critical information.

Practical application: Evaluation of the DSK will be conducted through REDCap, a secure web application for building and managing online surveys and databases. Evaluation will capture user experience as well as usage frequency and number of employees trained using these tools. Evaluation metrics developed as part of this project will be used to refine and inform future training delivery approaches within this industry.

Links : https://www.tandfonline.com/doi/abs/10.1080/1059924X.2020.1763724

Tags : Health and decent work, Skills and training

Describing the Burden of Injuries in the Cattle Feeding Industry

Introduction: Few research projects have addressed health and safety issues in the cattle feeding industry. The Central States Center for Agricultural Safety and Health (CS-CASH) is ideally located to conduct such research, as half of the feedlots in the US are located in the Center's region. CS-CASH has funded several pilot projects addressing the safety and health of livestock workers, and the research team has experience in developing, implementing, and evaluating interventions. In addition, CS-CASH hosted a roundtable discussion of major stakeholders regarding the prevention of injuries and illnesses in the feedlot industry. This project is the first step in investigating and describing the burden of injuries in the cattle feeding industry.

Purpose: The long-term goal of this project is to reduce the burden of injuries and illnesses among feedlot workers.

Methods: The research team conducted a systematic review of the literature and available sources related to counts, rates, severity, lost time, cost, and indirect consequences of injury and illness. Multiple sources of information were used to quantify the burden of injury and illness in the cattle feeding industry. The burden of injury was evaluated using collected injury incidence and characteristics data. Workers Compensation sources provide data for direct costs: paid benefits and medical expenses. Indirect cost estimation methods were reviewed regarding their applicability to the cattle feeding industry.

Results/Findings: Initial findings from 2014 include an occupational fatality rate of 116 fatalities/100,000 workers in the beef cattle ranching and farming industries (including feedyards). This rate was four times higher than the rate in the agriculture, forestry, and fishing sector overall (24.9/100,000) and 34 times higher than the rate in all industries combined (3.4/100,000). The cattle feedyard subsector also has exceptionally high non-fatal injury and illness rates. In 2013, hired workers in the beef cattle ranching and

farming (including feedyards) had a “days away from work” rate of 258.8/10,000 while the rate for all industries combined was 99.9/10,000.

Practical Application: Investigating and describing the burden of injuries in the cattle feeding industry is the first step in developing research and education priorities for that industry. The findings from this study will be used to guide the development of injury mitigation interventions and educational programs for the cattle feeding industry.

Links : https://www.tandfonline.com/doi/abs/10.1080/1059924X.2020.1763723

Tags : Health and decent work

Development of Safety Scores for Selected Greenhouse Production Facilities in North America

Purpose: Greenhouse crop production is increasing as consumer demand increases, specifically in areas where the natural climate is more hostile to the desired production. However, no formal scientific assessment of the sustainability of existing facilities currently exists, and there is sufficient consumer demand for assessing this from seed to shelf. The primary objective of this study was to assess the sustainability of current systems in North America. This was accomplished through the development of various sustainability, or S-score, equations. This paper specifically focuses on greenhouse safety practices observed at facilities as well as follow-up telephone surveys.

Methods: There were 22 greenhouse facilities in the private sector that volunteered to provide data for these equations. Each facility was assigned a region: Florida (n = 3), Northeast (n = 7), Midwest (n = 5), and Southwest (n = 6). Key parameters were organized according to five general categories based on safety aspects and techniques and applied techniques. Each category was assigned a weight. Each weight was then incorporated into the master sustainability equation as coefficients. The final value was an “S-score” for each facility. Descriptive statistics were analyzed to determine parameter dominance and statistical significance. The facilities ranged in size from a small, seasonal greenhouse to large facilities ranking in the top 100 in terms of size. Additionally, facilities with either or both vegetable and ornamental production participated in this study.

Results/Findings: Overall, greenhouse facilities were found to have a range of S-scores from 4.1 to 8.4. Larger greenhouses tended to have safer working environments and higher S-scores due to liability and production concerns. Additionally, these facilities were more likely to have professional safety personnel and more financial resources to invest in safety-specific training.

Practical Application: Greenhouse managers and owner-operators will be able to better assess their own properties for safety problems as well as track and monitor various criteria for a more sustainable operation.

Links : https://www.tandfonline.com/doi/abs/10.1080/1059924X.2020.1765605

Tags : Skills and training

Knowledge of Heat-Related Illness First Aid in Migrant Farmworkers: A Pilot Study

Purpose: The last 5 years have been the hottest years on record during the modern era. Due to increasing temperatures, outdoor workers are exposed to hotter working conditions and are at increasing risk for

suffering from heat-related illness, heat stroke, and death. Unfortunately, a migrant farmworker died from heat stoke during 2018 in Southern Georgia, precipitating the need to understand baseline knowledge of heat-illness among farmworkers in Georgia, in partnership with the Farmworker Family Health Program.

Methods: Migrant farmworkers (n = 60), mean age of 28.75 years, 81.7% born male/identified as male, were surveyed to assess knowledge of heat-related illness first-aid. The survey used in this study was adapted from the Questionnaire for Heat-related Illness among Migrant Farmworker Populations in Southern Georgia, and the pilot questions on heat-related illness first aid were developed using the NIOSH Criteria for a Recommended Standard: Occupational Exposure to Heat and Hot Environments.

Results: Most knowledge-focused questions of heat-related illness were answered incorrectly by more than 50% of workers. Only 26.7% of workers identified the period of time to acclimatization, 0% of workers were able to identify the ten symptoms of heat-illness, and 45% of workers were able to correctly identify that if someone was sweating they could still be experiencing heat stroke. Of the workers, 50% knew that 9-1-1 was the emergency assistance number, only 20% of workers were able to identify the time between symptom onset and calling 9-1-1, and 0% of workers were able to correctly identify the anatomical locations to help cool a person experiencing heat stroke.

Conclusions: Farmworkers lack the appropriate level of knowledge to provide sufficient first-aid to a co-worker experiencing heat illness. The results of this study highlight the need to empower migrant farmworkers and employers in Southern Georgia through additional training so they can gain the first-aid knowledge necessary to prevent morbidity and mortality in high-heat conditions.

Links : https://www.tandfonline.com/doi/full/10.1080/1059924X.2020.1765592?af=R

Tags : Migration, Health and decent work, Skills and training

Chronic Farm Stress and Its Connection to Health and Safety

Purpose: Impacts of long term, chronic stress cause concern among farm operators, workers, and their family members. The team involved with this work has built partnerships and program collaborations that connect the issue of chronic farm stress with high rates of workplace injury and occupational health problems common in the agricultural industry. Acute and chronic stress contribute often to distraction while performing work activity and feelings of being overwhelmed, and they complicate a farm operator's or employee's ability to make optimal operational and financial decisions. Our farm stress educational and technical support programs have focused on the biology and physiology of chronic stress, stress management practices and behaviors, communication, and taking control of one's financial future.

Methods: A team of approximately 30 educators, researchers, and partner personnel created a comprehensive web-based resource center focused on interventions connected to chronic farm stress, suicide prevention, communication, and financial tools that help guide farmers and ranchers through difficult financial conditions and decisions. These efforts have also focused on teaching farmers, ranchers, agricultural service providers, and other allied community professionals about linkages between chronic stress, high injury rates (resulting from fatigue, distraction, and error rates), and disease (cardiovascular, type 2 diabetes, infection, etc.).

Findings: The work is ongoing and has been led by a cross-disciplinary team with member expertise including agricultural health and safety, financial management, farm family relationships, program evaluation, and human health and well-being. An intervention evaluation "question bank" has been created that contains specific program evaluation questions developed for 16 different program curricula/series including those developed by the team or by other partner organizations.

Translation to practical application by agricultural industry: It is our goal that this work on prevention and intervention on farm and ranch stress will impact on agricultural safety and health for farmers, farm workers, and family members. The program evaluation information will prove useful as participants and readers consider similar efforts within their respective organizations, states, companies, etc., and as they develop appropriate anticipated outcomes and impacts and associated evaluation tools.

Links : https://www.tandfonline.com/doi/full/10.1080/1059924X.2020.1765590?af=R

Tags : Hired work, Health and decent work

Does the Use of a Nasal Lavage Intervention Improve Pulmonary Function for Dairy Workers?

Purpose: Dairy workers are at the frontline of exposure to bioaerosols, which typically contain bacteria and associated pro-inflammatory constituents (e.g., endotoxin). As such, dairy workers are at an increased risk for respiratory illness, most likely mediated through a strong proinflammatory response. Very few studies have systematically evaluated control strategies to reduce exposure and improve health. Given the challenges and limitations of implementing engineering controls, we propose the use of a low-cost and low-burden intervention. Hypertonic saline (HTS) was recently shown to attenuate inflammation in trauma patients. Here, we conducted an intervention to administer HTS in a nasal lavage to determine if the inflammatory response was mitigated and if the airway function improved among dairy workers.

Methods: Ten participants were recruited from a large herd dairy and randomly assigned to treatment (n = 5) and control groups (n = 5). Each participant received normotonic saline (308 mOsm) nasal lavage (NL) before their shift over 5 consecutive days. After each shift, the treatment group received HTS, while the control group received normotonic saline. All samples were analyzed for 10 different cytokines using a multiplex assay. Spirometry was performed pre- and post-shift to examine forced expiratory volume in one second, forced vital capacity and the subsequent ratio, and peak expiratory flow rate (PEFR). Personal breathing zone samples for inhalable bioaerosols were collected across the work shift; mass concentrations and endotoxin abundance were determined by gravimetry and a fluorescent assay, respectively. Statistical analyses and models were performed using SAS.

Results/Findings: Differences in pro-inflammatory cytokines were observed. There was an interaction effect on IL-10 between treatment, day, and time of day, indicating promotion of anti-inflammatory effect. The treatment group experienced an increase in PEFR change (0.76 L, $p = 0.12$) near statistical significance; no statistically significant differences were observed in the other spirometry measures. Both groups of dairy workers in this study experienced less of a decline in cross-shift pulmonary function when compared to other studies.

Practical Application: The HTS nasal lavage is designed as a low-cost intervention that can be self-administered before and after every shift across other agricultural operations. This study was limited by small sample size and warrants further investigation.

Links : https://www.tandfonline.com/doi/abs/10.1080/1059924X.2020.1765587

Tags : Health and decent work

The Next Generation of Agricultural Youth Work Guidelines: Process and Outcomes

Purpose: The goal of this project was to update the 1999 evidence-based North American Guidelines for Children's Agricultural Tasks (NAGCAT) into a mobile-friendly resource that could be widely disseminated and customized for specific populations. Research conducted from 2000 to 2014 confirmed the value of work guidelines in reducing the risk of preventable injuries for youth working on farms. However, concerns were raised that few farm owners/parents were aware of this resource. These guidelines help supervisors and farm parents assign work that matches a youth's abilities with the hazards of the job.

Methods: A steering committee consisting of farm parents, supervisors, safety professionals, and representatives from agribusiness and farm organizations met in-person and via teleconference over a 2-year period to guide the updates. They provided advice on topics, assessed "practicality vs. science" issues, addressed cultural relevancy, and guided the overall design/format of the mobile-friendly resource. Content specialists with expertise in various areas were drawn from across the United States and used a job hazard analysis template to update/develop content, based upon the most relevant, scientifically sound evidence. A pile sort was employed to determine categories for the guidelines. A core team ensured recommendations were implemented and work was completed.

Results/Findings: This next generation of guidelines, known as Agricultural Youth Work Guidelines (AYWG) accounts for (a) evidence-based recommendations; (b) current child agricultural injury/fatality data; (c) changes in production agriculture; (d) lessons learned about consensus development; (e) information technology and health communications theory/practice; and (f) priority topics. A mobile-friendly website was developed to house 54 guidelines in multiple formats (interactive, read, print), in three languages (English, Spanish, French) and allow for choice of skin tones and equipment colors. Additional content on the benefits of farm work for youth, child development, supervision, and communication was created and/or updated. Dissemination of the guidelines is ongoing. Lessons learned include the value of steering committees and stakeholder engagement, challenges in identifying and employing content consultants and staff, and the amount of time needed to complete the process.

Practical Application: The use of the AYWGs will help supervisors of working youth assign age/ability appropriate work, which in turn will reduce injuries and fatalities.

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Tags : Youth, Health and decent work, Extension, Innovation

Identifying Future Areas of Focus for the Grain Handling Safety Coalition

Purpose: Moving grain into and out of storage is recognized as highly hazardous, resulting in hundreds of injuries and deaths. The Grain Handling Safety Coalition (GHSC) has been providing safety and health training to agricultural workers and farmers since 2010. As the agricultural industry evolves and changes, so do the agricultural safety and health training needs. In response, the GHSC is conducting a formal needs assessment of training end users to identify the current and projected agricultural safety and health training needs in the agricultural industry.

Methods: A needs assessment protocol was developed to identify: 1) ways to further engage and serve the following stakeholder groups; youth, industry, farmers, and extension/education; 2) geographic areas or regions to expand GHSC's reach; and 3) opportunities to expand GHSC's capacity for training. A survey was developed to inform the first two objectives. The survey is being pilot tested among representatives of the four stakeholder groups and will be administered in late spring. Survey sections include attitudes towards safety trainings, barriers to offering safety training, and preferred topics and modalities of

training. Three focus groups will be held of different audiences with representatives whom the end users trust for information to include 1) industry (commercial & agribusiness, insurance, safety managers, etc.); 2) youth; and 3) agricultural industry.

Findings: Results are pending. The findings will discuss the needs assessment methodology, results from focus groups, and preliminary survey results.

Translation to Practice: Needs assessments are important to providing relevant and practical information and training to end users. Our findings will inform needs assessment protocol for the agricultural industry and agricultural safety and health programming. The goal is to help identify and build a network of trainers that is accessible to employers, producers, and ag safety and health professionals across the nation.

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Tags : Youth, Health and decent work, Extension, Skills and training

Protecting and Promoting the Health of Young Agricultural Workers through Supervisor Training

Purpose: Young workers in agriculture (under 25-years-old) are at increased risk for occupational injuries. In addition to traditional workplace hazards, fatigue, substance use, and distracted behaviors are risk factors for injury. While supervisors can play an active role in protecting young workers, there are currently no interventions targeting this group. An online training for supervisors was developed using a Total Worker Health™ framework. The training was evaluated among those who hire, teach, or supervise young agricultural workers.

Methods: People who hire, teach, or supervise young workers were invited to participate in the online training and research study via email, conference handout, or word-of-mouth. Participants were asked to complete a 1-hour training and surveys at baseline, directly following the training, and 3 months after the training. Demographics, workplace factors, and knowledge of training topics were assessed at all three time points.

Results/Findings: To date, 102 participants completed the training and 3-month follow up, representing 22 states and 2 U.S. territories. Over half (58%) were agricultural educators; the remainder were farmers/producers, agricultural supervisors, and health and safety professionals. Two-thirds (69%) had supervised young workers for 5 or more years. Knowledge scores were high, and at the conclusion of the study, over half (61%) of participants indicated they would definitely recommend the training to others. When asked to indicate how the training most helped them, 29% of participants cited using a method of training young workers called “Teach Back.”

Practical Application: The majority of participants would recommend the training to others and found training contents applicable to their work. All training materials are available for use in online and classroom-based formats. The training is available in Spanish and English.

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Tags : Health and decent work, Skills and training, Innovation

Increasing Efficiency and Reliability of Agricultural Injury and Fatality Coding with Standard Operating Procedures: Lessons Learned from AgInjuryNews.org

Purpose: News media reports of agricultural injuries can be useful to better inform safety and health stakeholders and prevention efforts. These data are particularly useful for youth incidents, since the National Institute of Occupational Safety and Health discontinued their survey-based agriculture surveillance program in 2015, leaving a gap in reliable, consistent data on both youth and adult agricultural injuries and fatalities. In this study we describe how coding data derived from news reports, with a detailed Standard Operating Procedure (SOP) and refined inclusion/exclusion criteria, can lead to more efficient workflows to capture and code agricultural injury data.

Methods: To capture quality data and improve inter-rater reliability we employ a multi-coder process. The first coder enters primary data into the Case Report Form (CRF), and a second coder reviews these data points for agreement. While reviewing for agreement, the second coder diverges into two other occupational/agricultural injury coding schemas (Occupational Illness and Injury Classification System [OIICS] and Farm and Agricultural Injury Classification [FAIC]) and employs an additional multi-coder and interrater reliability process, adding to the multifaceted workflow and detailed data output. This secondary coding schema and reliability ratings are discussed in a separate manuscript. Any discrepancies from the initial review are then discussed and settled between first and second coders. All CRFs are sent to another team member who reviews >10% and publishes the reports for public use on AgInjuryNews.org. International cases endure a similar process, but without OIICS or FAIC coding. In partnership with the Canadian Agricultural Safety Association, our team began Canadian injury report capture and coding in the fall of 2019.

Findings: We developed a structured and detailed SOP for coding agricultural data obtained from news reports. Use of the SOP and refined inclusion/exclusion criteria were crucial when: 1) onboarding additional coders; 2) employing multiple coders; 3) refining search terms in data collection; 4) coding of emerging technologies and trends; and 5) improving the efficiency and quality of the data.

Translation: Coders' ability to reference a thoroughly vetted SOP and inclusion/exclusion criteria may lead to improved data coding for agricultural injuries and fatalities.

Links : https://www.tandfonline.com/doi/full/10.1080/1059924X.2020.1765579?af=R

Tags : Youth, Health and decent work

Telling the Story – Using Storytelling to Disseminate Agricultural Safety and Health Messaging

Purpose: Narrative is perhaps the most basic mode of human interaction and a fundamental way of delivering knowledge. Narratives influence attitudes and change behaviors. NIOSH-funded agricultural safety and health centers including the Great Plains Center for Agricultural Health (GPCAH), the Upper Midwest Agricultural Safety and Health Center (UMASH), the Central States Center for Agricultural Safety and Health (CS-CASH), and the National Farm Medicine Center are collaborating on a translation activity to convey the story of agricultural safety. While statistics and numbers are important to identify injury trends and emerging issues related to workplace health and safety, the Telling the Story Project (TTS) takes a closer look, creating injury prevention messages that highlight personal stories based on first-hand experiences.

Methods: Research indicates that farmers are more open to safety messages after reading about a traumatic farm incident, and farmers generally consider other farmers and agricultural publications to be trusted sources of information. Telling the Story Project provides a platform for agricultural workers, and those impacted by fatal and non-fatal agricultural workplace injuries (workers, family, and community members), to share their stories. Told in their own words, these experiences teach about what went wrong and how to prevent or avoid similar incidents.

Results: A website was created and serves as a platform for the personal narratives www.tellingthestoryproject.org. A monthly rural radio program has emerged from this project as another means to deliver this content effectively. Links to safety and health information provide resources for those visiting the website. Evaluation of stakeholder impact is ongoing.

Practical Application: To further the reach of these stories, teachers' guides have been created as additions to the curriculum for FFA and agricultural safety instructors.

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Tags : Health and decent work

Digital Migration: Will Digital Technologies Transform Hazard Risk Assessment among an Emerging Agricultural Workforce?

Purpose: This presentation focuses on implementation of digital technologies and mobile devices to transform hazard risk assessment among agricultural workers. Many hazard risk assessments have traditionally been paper-based. Often these instruments require instruction and practice to effectively use them. SaferFarm.org website was launched to assist those working in and around production agricultural worksites with properly identifying and assessing injury risks using digital media accessible through mobile devices. Moving assessment tools to a digital platform signals advancement in safety and health management tools. However, an emerging workforce, who are often referred to as digital natives, may ultimately hold insights into the functionality and accessibility of the mobile friendly hazard assessment tool.

Methods: An informational presentation was developed by the authors and delivered to youth engaged in FFA and 4 H. Participants were from Pennsylvania and Utah. After the presentation, participants were recruited to register for the SaferFarm.org tool. Students practice the functions of the tool assessing one tractor, one PTO-powered machine, and one agricultural structure. Participants then completed a user experience survey.

Results/Findings: Preliminary results showed that nearly one-half of participants (46%) indicated "it's okay" when asked if the resource was interesting to use. Only 28% of participants indicated they were able to add the names of tractors, machines, and structures very easily. Fewer than a quarter of participants (16%) indicated that the prompts were very useful in helping them understand what to do. Almost half of participants (48%) indicated the features and components worked at an average speed.

Practical application: This tool is valuable and addresses the need for relevant and real-time risk assessment on farms among new, young, less experienced workers. Incentives or intrinsic motivation to use the tool should be considered by management personnel. Connecting risk assessment/management and successful agricultural careers will provide practical methods for improving worksite safety.

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Tags : Youth, Migration, Health and decent work

Source Attribution of MRSA Exposure and Carriage among Dairy Workers

Purpose: Dairy farmers experience a heavy burden of bioaerosol-related respiratory ailments. Bioaerosols are known to contain inflammagens (specifically endotoxin), and a diverse bacterial community that is associated with upper respiratory inflammation and pulmonary decrement among workers. However, identifying casual agents (beyond endotoxin) is still an area that warrants further research. Industrialization and modernization of the dairy industry has led to dramatic changes in production, work organization, and tasks. Consequently, exposure patterns have been altered. Recently, we demonstrated that the mass of dairy bioaerosols is predominantly present in particle size ranges that span 10–100 μm in aerodynamic diameter; these are known to deposit in the upper respiratory system (i.e., the nasopharyngeal region). The nose contains complex bacterial communities, and this microbiome may play a role in the inflammatory response to bioaerosols. Recently, the nasal microbiome in dairy farmers was shown to contain over two times the bacterial diversity (and abundance) as compared to non-farmers. It is believed that this diversity is protective against the colonization of methicillin-resistant Staphylococcus aureus (MRSA). In contrast, persistent nasal carriage of MRSA, specifically livestock-associated strain, has been demonstrated in swine production workers. Recent evidence shows an increase in soft tissue infections caused by livestock associated (LA)-MRSA among at risk populations. The objective of this research was to characterize the presence and carriage of Staphylococcus spp. with a focus on LA-MRSA in the nose of dairy workers.

Methods: We collected nasal lavage samples before and after each shift across 5 consecutive days. The presence of MRSA in each sample was evaluated using culture-based methods, specifically tryptic soy agar, mannitol salt agar, Chromagar Staph Aureus, and Chromagar MRSA II. Antibiotic sensitivity was conducted using Kirby Disc Diffusion method using tetracycline, vancomycin, and cefoxitin. Further genetic MRSA confirmation is to be accomplished using PCR and MALDI-TOF.

Results/Findings: To date, up to 4% of participants were identified to be carriers of MRSA, and up to 16% of participants were identified to be carriers of Staphylococcus aureus. Based on the results from selective media, the MRSA is attributed to mixed sources, including livestock. Confirmation of these isolates will be conducted using matrix-assisted laser desorption/ionization time-of-flight and polymerase chain reaction methods.

Practical application: Based on previous pilot studies and initial results, further investigation into LA-MRSA prevalence among dairy workers is needed to help inform control strategies.

Links : https://www.tandfonline.com/doi/abs/10.1080/1059924X.2020.1763753

Tags : Health and decent work

Improving Safety and Health in the Cattle Feedyard Industry

Introduction: In 2014, the occupational fatality rate was 116 fatalities/100,000 workers in the beef cattle ranching and farming industries (including feedyards). This rate was four times higher than the rate in the agriculture, forestry, and fishing sector overall (24.9/100,000) and 34 times higher than the rate in all industries combined (3.4/100,000). The cattle feedyard subsector also has exceptionally high non-fatal injury and illness rates. In 2013, hired workers in the beef cattle ranching and farming (including feedyards) had a “days away from work” rate of 258.8/10,000, while the rate for all industries combined was 99.9/10,000. The Central States Center for Agricultural Safety and Health (CS-CASH) is ideally located to conduct such research, as half of the feedyards in the United States are located in the Center’s region.

Purpose: The propose of this project is to reduce the burden of injuries and illnesses among feedyard workers by developing, implementing, and evaluating a comprehensive feedyard safety and health training program.

Methods (if applicable): The Specific Aims of this project are to develop and implement a comprehensive feedyard safety and health training program and evaluate the efficacy of the comprehensive feedyard safety and health training program.

Results/Findings: This project is research in progress. A portion of the comprehensive feedyard safety and health training program, known as the Feedyard 15, have been created, and trainings with the Feedyard 15 materials have begun at several feedyards in the CS-CASH region.

Practical Application: This project is developing high-quality safety and health materials through a consensus process that involves stakeholders from the feedyard industry. Once tested in a subset of the industry, they will be available industry wide.

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Tags : Health and decent work, Skills and training

Developing a Social Marketing Intervention for Heat Safety among Florida Tomato Harvesters: Preliminary Findings of Formative Research

Purpose: Despite recent improvements in the quality and availability of educational materials to promote heat safety in agriculture, success in addressing the factors that inhibit the adoption of self-protective practices among farmworkers remains limited. Social marketing interventions can address gaps between safety knowledge and implementation by targeting segmented audiences with tailored behavioral products that compete with comfortable yet potentially harmful alternatives. The purpose of this study was to collect preliminary biological and survey data during a 5-day period in the spring of 2019 to identify hydration levels, perceptions, attitudes, knowledge, and behaviors associated with the prevention of heat-related illness (HRI) among 29 tomato harvesters in southwest Florida.

Methods: Urine samples were collected before and at the end of each workday. Survey data were collected at baseline and at the end of each workday. Reagent strips were used to assess urine specific gravity, a measurement of hydration status. Descriptive statistics, relative frequency distributions, and bivariate correlation analysis were used to summarize the data.

Results/Findings: Results showed that a majority of study participants were slightly or not at all concerned about becoming ill from the heat while working despite the wide prevalence of HRI symptoms. On average, participants were hypohydrated both at the start and end of each workday. Certain cooling practices, such as consumption of electrolyte drinks, tended to be implemented at the onset of HRI symptoms. More than 75% of the harvesters typically avoided taking any rest breaks. Yet all had received some form of heat safety training; knowledge test scores averaged 78%. Findings suggest safety behaviors had more to do with the amelioration of HRI symptoms than with training and knowledge.

Practical application: To effectively encourage heat safety among Florida tomato harvesters, social marketing efforts must shift current behaviors from a reactive to a preventive orientation.

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Tags : Health and decent work, Skills and training

Health & Safety Education in Swedish Agricultural Schools

Purpose: Agriculture and forestry is still one of the sectors with the highest rate of work-related injuries, and it is essential that future farmers and employees in the agricultural sector, at an early stage, gain knowledge and insight into the importance of the work environment for safe, secure, and good working conditions in order to create an improved safety culture. The purpose of this study was to survey and analyze the occupational health and safety education provided at Swedish agricultural high schools (16–19 years-of-age).

Method: All 29 schools with agricultural programs received surveys, with slightly different content for principals, operating managers, teachers, and instructors with questions about education, teaching materials, communication, and related issues.

Results/Findings: The results (response rate 33%) showed that the agricultural high schools had a high standard of safety awareness and well-established procedures for injuries and incidents, and this was well known and perceived as well-functioning procedures by the staff in this study, with a tendency for the instructors to be less satisfied with the follow-ups and actions taken. The basic work environment education placed within the general course “Natural resources management” showed a varying amount of lessons due to the lack of specified minimum teaching time and difficulties in finding adequate teaching material. The widely differing backgrounds of the teachers and their sometimes low motivation for owning initiatives to develop this subject give further argument to the need for relevant and coherent literature. Altogether the results also indicated that teaching in the subject courses (such as “Farm animals” and “Agricultural mechanization”) generally did not take into account the evolving role to be played regarding work environment issues, according to the syllabus’s objective description and central content. Possible explanations could be teaching materials lacking connection and update to current course objectives, individual teachers’ interest in the matter, and/or ambiguities about what is to be taught in the actual course. The insight into how important the instructors or trainers in the practical farming at schools are as role models should lead to increased focus on training them further in health & safety issues.

Practical application: The results of this study show that the education regarding health & safety at agricultural schools has some problems regarding the amount and quality of the content. There is a need for improvements and it needs to be further prioritized in the agricultural schools which often form the basic knowledge for the future of our farmers.

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Tags : Health and decent work, Skills and training

Respiratory Exposures and Diseases among Agricultural Workers in the Central States Region of the United States

Purpose: The Central States Center for Agricultural Safety and Health (CS-CASH) conducts surveillance to characterize occupational injury and illness frequencies, exposures, and preventive practices among farm and ranch operators in the central United States. This report focuses on respiratory diseases and associated exposures and preventive factors.

Methods: The CS-CASH Farm and Ranch Health and Safety Survey was sent to randomly selected farmers and ranchers with an email address and farm sales exceeding 5000 per year; 22,440 by email (online survey) and 16,826 by mail (hardcopy form). The survey region consisted of Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, and South Dakota. Risk factors for respiratory disease (all combined, except chronic obstructive pulmonary disease) were evaluated using logistic regression.

Results: A total of 3,277 usable responses (response rate 19.47%) were received. The prevalence of respiratory diseases diagnosed by a physician were: asthma, 4.22%; farmer's lung, 2.22%; sinus disease (sinusitis), 4.75%; nasal inflammation/runny nose (rhinitis), 5.25%; and environmental allergies, 8.27%. The following exposures significantly increased the odds of having a respiratory disease: exposure to grain/feed/hay dust (Odds Ratio (OR): 2.15); animal confinement dust (OR: 1.57); road dust (OR: 2.03); manure and silage gasses (OR: 1.64), anhydrous ammonia (OR: 1.47); fuels/solvents/paints (OR: 1.82); having cow/calf operation (OR: 1.26); growing wheat (OR: 1.28); and growing canola (OR: 1.70).

Practical Application: These findings demonstrate the need for effective methods to control dust and gas exposures to reduce the risk of respiratory diseases among farmers and ranchers.

Links : https://www.tandfonline.com/doi/abs/10.1080/1059924X.2020.1763748

Tags : Health and decent work

OSHA and AG: An Industry Training Program for Agricultural Workers and Supervisors

Purpose: An OSHA 10-hour General Industry program, taught by OSHA Outreach Instructors, was developed at OSU with application to agricultural environments. As a voluntary program, the course teaches the workforce, as well as owners and supervisors, best management practices regardless of their agricultural or small business exemption status with the Department of Labor. Upon completion, participants receive a DOL recognized certificate, before going towards other specific training, i.e., respiratory fit testing and confined space permit entry. This course is also appealing to OSHA Outreach trainers working in agriculture as a model training program for replication in their geographic region.

Results/Findings: The course was developed in 2013 to enhance agricultural collegiate students' understanding of safety and health principles. It provided a training certificate beyond their credits earned towards graduation. The OSU Ag Safety resident instruction course has an annual enrollment between 45 and 65 students, involving both graduate and undergraduate students.

Pilot tested under a sponsored USDA-NIFA initiative, the Safety in Agriculture for Youth project enabled the course to transcend into secondary schools both online and in-person. Nearly 200 teen workers received their OSHA industry cards through classroom. The curriculum is a modified version of the collegiate course, based on age-appropriate tasks and occupational exposures for teen workers.

The community-based OSHA and AG program provides adult outreach education with the same 10-hr certification. This program is designed for owners, operators and supervisors to increase their understanding of basic occupational principles with best management practices. More than an injury prevention program, this course provides employers with strategies to make efficient and targeted changes to how they approach occupational safety decisions with their employees using administrative controls, engineering practices and education.

Practical Application: Using a combination of topics approved in the OSHA Outreach course, there is an opportunity to teach producers about occupational risks while creating a culture for safety. Likewise, the course satisfies the training requirements imposed by OSHA on those non-exempt production agricultural farms, grain handling facilities, orchards and vegetable operations. As a wholistic training program for employees and managers, agricultural producers understand their role in hazard identification and injury prevention practices.

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Tags : Youth, Health and decent work, Skills and training

CS-CASH Pilot Grant: Improving Agricultural Worker Health and Safety Awareness through Multimodal, Case-Based Physician Assistant Education

Purpose: Agricultural workers, especially those who farm full-time, are at substantial risk for developing long-term health problems related to occupational dust, chemical, and vibratory noise exposures. There is clear evidence of risk factors for acute agricultural injury; however, literature regarding risk factors for long-term occupational health problems, including noise-induced hearing loss (NIHL), agricultural chemical exposure (ACE), and inhalation injury, is more limited. The literature poses conflicting information on agricultural workers and personal protective equipment (PPE); agricultural workers understand the importance of PPE use, yet the lack of PPE use is pervasive in agricultural workers across numerous studies. Education of agricultural workers on the role of PPE in chronic disease prevention has shown promise.

Methods: Our research seeks to identify a replicable model of Physician Assistant (PA) student education on agricultural worker health and safety, including patient education and disease prevention. This model will equip future health-care providers with the knowledge and skills to provide patient education on farming-associated, preventable chronic diseases, as it is a documented tool for increasing PPE use. Didactic curriculum objectives include agriculturally related respiratory health issues, chemical exposure, and noise-induced hearing loss. Curricular content delivery includes traditional classroom learning as well as adjunctive small group and simulation activities. Upon completion of the didactic phase, students complete a 15-month clinical learning phase, including a 12-week primary care rotation in a rural setting, serving many agricultural workers throughout the Midwest. Student logs of patient encounters track diagnoses related to agricultural exposure, as well as monitor agricultural patient treatment modalities, including patient education on PPE use. Distribution of patient education and PPE materials occurs through clinical site visits to primary care rotation sites.

Practical Application: Our educational model intends to improve health outcomes of patients in the rural Midwest. Our ongoing research will collect data on agriculturally related diagnoses in the Midwest and patient-provider communication, ideally enhancing patient awareness of risk factors and compliance with treatment plans, as well as decreasing chronic disease severity. The measured effects of this educational intervention will serve as a basis for future research and health-care provider education.

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Tags : Health and decent work, Skills and training

Yves Clot, La fonction psychologique du travail

Professeur de psychologie du travail au Conservatoire national des arts et métiers, auteur en 1995 d'un ouvrage remarqué : Le travail sans l'homme ?1, Yves Clot nous soumet ici à la fois une synthèse de sa riche expérience personnelle et un bilan raisonné de la psychologie du travail2.

2Par son titre, l'ouvrage se place d'emblée sous le patronage d'Ignace Meyerson. Dans un article qui introduisait en 1955 un numéro spécial du Journal de psychologie normale et pathologique, auquel contribuaient notamment Georges Friedmann et Pierre Naville, I. Meyerson développait en effet la thèse du « Travail, fonction psychologique ». La psychologie du travail s'ouvrait ainsi sur l'histoire de longue période chère à l'École des Annales, laquelle marqua également si fortement G. Friedmann. Si le psychologue pouvait étudier le travail, c'était, selon I. Meyerson, au terme du long procès socio-historique

qui a constitué à partir du xixe siècle le travail en « fait social », au sens durkheimien du terme. Psychologie et sociologie du travail se trouvaient ainsi étroitement nouées.

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