

Enhancing Rural Nursing Practice through Distance Learning

Nurse Scholar Program Course Offerings 2020

Agriculture production provides a spectrum of risks for farmers and agricultural workers. Due to the depth of coursework in nursing colleges, and advanced practice programs, there is limited opportunity for practitioners in rural communities to access agriculture specific healthcare training.

The AgriSafe Nurse Scholar program is a distance learning opportunity available to rural nurses. Distance education (a total of 18 hours), provided by experienced health & safety educators, will enable rural nurses to increase their knowledge base in prevention, identification and assessment of diseases related to agricultural work exposures. Classes are in the form of webinars that can be viewed OnDemand (your own time).

Training Topics

- At Risk Populations- youth, older adults, women, veterans, mobile work force
- Injury Prevention
- Zoonotic Diseases
- Hearing Conservation
- Chemical Exposures
- Respiratory Health

- Ergonomics
- Personal Protective Equipment
- Skin Diseases
- Heat Related Illnesses
- Behavioral Health
- Farmworker Health
- Emerging Issues

Increasing the Use of Hearing Protection Among Farmers: Best Practices





Marjorie McCullagh, PhD, RN, PHNA-BC, COHN-S, FAAOHN, FAAN Professor and Occupational Health Nursing Program Director, University of Michigan School of Nursing

Objectives

- 1. Discuss several risk factors for noise-induced health problems common among farmers.
- 2. Describe major features of interventions shown to be effective in influencing farmers' use of hearing protection.
- 3. Discuss best practices for clinical application of farm noise mitigation effectiveness research.



Health and Safety Issues of the Aging Farmer

- 1. Determine the difference between "normal" and "abnormal" aging processes.
- 2. Apply a skill set to determine the health needs of the aging farmer.
- 3. Identify resources and make appropriate referrals to assist aging farmers in their activities.
- 4. Utilize new knowledge to guide and assist family units in making good health behavior decisions.



Deborah B. Reed, MSPH, PhD, RN, FAAOHN, FAANProfessor, College of Nursing and Department of
Preventive Medicine and Environmental Health,
University of Kentucky

Prevention of Heat-Related Illnesses in Agriculture





Charlotte Halverson, RN, BSN, COHN-S Nurse Scholar Program Coordinator and Lead Instructor, Clinical Director, AgriSafe Network

Objectives

- 1. Explain the pathophysiology of heat related illnesses and identify heat stroke, heat exhaustion, syncope, heat rash, and heat cramps.
- 2. Recognize the dangers of a minimum of three pre-existing health conditions that contribute to heat related illnesses.
- 3. Identify at least three medications contraindicated while working in extreme heat conditions.
- 4. Identify action steps to prevent heat stress and locate evidence based resources recommended to use in patient/client teaching.



Respiratory Health of Agricultural Producers in Clinical Practice

- 1. Review Rural Healthcare Challenges for Providers.
- 2. Identify the importance of an occupational health history and a respiratory specific health assessment tool.
- 3. Discuss the respiratory hazards and symptoms associated with agricultural activities.
- 4. Implement the respiratory health assessment tool.



Sarah Hunt, MSN, APRN, FNP-BC Sanford Center for Digestive Health



Identification of Skin Diseases Common to the Agricultural Industry



Kelley J. Donham, MS, DVM, DACVPM
Consultant in Agricultural
Medicine and the Rural Health
Clinic of Eastern Iowa

Objectives

- 1. Identify at least 3 signs of potential skin cancer
- 2. Recognize at least 2 symptoms of dermatological responses to chemical exposures
- 3. Recognize a minimum of four dermatological symptoms of exposure to animals and vegetation common in agricultural areas
- 4. Locate a minimum of four evidence based resources for use in clinical practice and patient education.
- 5. Integrate knowledge gained into identification, patient education, and treatment modalities for skin diseases common to the agricultural industry.

Musculoskeletal Disorders and Ergonomics: Case Study



Diane Rohlman, PhD

Director, Agricultural Safety
and Health Program,
University of Iowa

- 1. Identify a minimum of three work site hazards and potential resulting musculoskeletal injuries.
- 2. Recognize the role of the clinician in preventing disabling and lost time incidents.
- 3. Discuss the value of an occupational health history and a minimum of two action steps to reduce risk.
- 4. Locate at least three evidence based reference and patient/client education resources for use in rural practice
- 5. Integrate at least two assessment strategies into health history information and patient education protocol.



Nate Fethke, PhD, CPE

Associate Professor Occupational &
Environmental Health, University of Iowa

The Opioid Crisis: Evolution, Impact on Workers, Mitigation Strategies





Rupali Das, MD, MPH, FACOEM
Senior Vice President, California Medical
Director, Zenith Insurance Company, and
Associate Clinical Professor, Division of
Occupational and Environmental Medicine,
University of California San Francisco

Objectives

- 1. Describe what the opioid crisis means.
- 2. Understand the recent history leading to the current opioid crisis.
- 3. List 3 health consequences of opioid use and ways to reduce the likelihood of opioid dependence.
- 4. Recognize the difference between physical dependence and addiction.



Integration of Behavioral Health for Rural Practice

Objectives

- 1. Identify a minimum of three common stressors prevalent among agricultural producers.

Christine Chasek, LIMHP, LADC, LPC
Associate Professor /
Department of Counseling & School Psychology

University of Nebraska-Kearney

- 2. Describe at least four signs and symptoms of depression and anxiety.
- 3. Describe a minimum of four population based and individual based behavioral health interventions
- 4. Locate three current evidenced based resources in the field of agricultural behavioral health.

Charlotte Halverson, RN, BSN, COHN-S Nurse Scholar Program Coordinator and Lead Instructor, Clinical Director, AgriSafe Network



Allergic and Non- Allergic Respiratory Disease in Farmers



Jill Poole, MD

Professor of Medicine Section Chief and Medical Director of Allergy Nebraska Medical Center University of Nebraska Medical Center Pulmonary, Critical Care, Sleep & Allergy Division Department of Medicine

Objectives

- 1. Recognize and determine allergic respiratory disease and discuss relevance with on farming community.
- 2. Discuss the diagnostic evaluation of occupational induced asthma.
- Recognize the common causes of non-allergic respiratory disease among farmers including chronic obstructive pulmonary disease, organic dust toxic syndrome, and hypersensitivity pneumonitis.
- 4. Discuss treatment options for respiratory disease in farmers.

Respiratory Protective Equipment Selection for Agricultural Producers



Network

Charlotte Halverson, RN, BSN, COHN-S Nurse Scholar Program Coordinator and Lead Instructor, Clinical Director, AgriSafe

- 1. List a minimum of four major agricultural workplace hazards
- 2. Describe at least two major respiratory illnesses caused by agricultural workplace exposures
- 3. Identify and describe a minimum of three types of respiratory protection used in the agricultural workplace.
- 4. Integrate four evidence based resources used in personal protective equipment education for clinicians and patient/client information.

Zoonoses: Infectious Diseases We Share with Animals in the Farm Environment





Kelley J. Donham, MS, DVM, DACVPM Consultant in Agricultural Medicine and the Rural Health Clinic of

Objectives

- 1. Understand where would you go, who would you call, what references would you use to get factual information on suspected zoonotic infections in a client or patient
- 2. Recognize which zoonotic infections would you expect a risk in a dairy operation
- 3. Recognize which zoonotic infection would you expect a risk in a swine operation
- 4. Know general recommendations for prevention of zoonotic infections in a livestock production operation.

Objectives

Eastern Iowa

- 1. List a minimum of four factors related to women's health and safety in agriculture.
- 2. Discuss a minimum of three potential solutions that would address the unique safety and health challenges to women engaged in agriculture.
- 3. Locate a minimum of three recommended clinical and community health resources that address women's agricultural health and safety program development and education needs.

Prevention Strategies to Protect Women Working in Agriculture



Knesha Rose-Davison, MPH
Health Communications
Director



Linda Emanuel, RN Community Health Nurse

Safeguarding Children Who Live and Work on Farms: A Clinician's Guide





Barbara C. Lee, RN, MSN, PhD
Director and Senior Research Scientist,
National Farm Medicine Center,
Marshfield Clinic Health Systems, and
Director, National Children's Center for
Rural and Agricultural Health and Safety

Objectives

- 1. List the five most common hazards leading to serious injuries and fatalities of children on farms.
- 2. Describe at least four risk factors for injury exposures to children on farms.
- 3. Respond to parent/farm owners' requests for take-home resources with safety strategies.
- 4. Understand rural clinicians' options for advocating for safer conditions for children on farms.

Health and Well-Being of Immigrant and Migrant Farmworkers

- 1. Define who are migrant and immigrant farmworkers in the U.S.
- 2. Understand some of the physical, behavioral, and social health challenges found among migrant and immigrant farmworkers.
- 3. Locate resources to serve migrant and immigrant farmworkers.



Athena Ramos, PhD, MBA, MS, CPM Community Health Program Manager/Instructor, Center for Reducing Health Disparities/Department of Health Promotion, Social, and Behavioral Health, University of Nebraska Medical Center

Head to Toe Personal Protective Equipment



Charlotte Halverson, RN, BSN, COHN-S Nurse Scholar Program Coordinator and Lead Instructor, Clinical Director, AgriSafe Network

Objectives

- 1. Identify and describe multiple types of personal protective equipment appropriate for agricultural workers
- 2. Identify work scenarios where personal protective equipment is important.
- 3. Review evidence based resource material for use in clinical and community education settings.

Chemical / Pesticide Exposures and Health Effects in Agricultural Communities



Objectives

- 1. Identify major types of pesticides used in agriculture in the U.S.
- 2. Discuss exposure pathways and interventions to prevent exposure in susceptible populations.
- 3. Integrate the use of biomarkers to identify exposure and health effects in agricultural research
- 4. 4. Discuss the nurses role in pesticide safety education with emphasis on the protection of vulnerable populations.



Diana R. Simmes, MPH

Pesticide Medical Education Director University of California Davis Continuing & Professional Education and Courtesy Assistant Professor of Practice Oregon State University