Human Health:
Pathogens and Contaminants in Livestock Operations

May 15, 2020

2:30 pm (eastern), 1:30 pm (central), 12:30 pm (mountain), 11:30 am (pacific)

Livestock operations take great care to maintain the health of their animals. Attention to the health of the people working with the livestock should also be a part of the day-to-day operations. Pathogens such as E.Coli 0157:H7, Salmonella, and Listeria can infect humans. Dust, whether from manure, feeding, or field operations can also impact human health. Dust is often overlooked as being just a part of agriculture, but small particulate matter (PM_{10} and $PM_{2.5}$) can seriously impact people with respiratory issues. This webinar will provide practical guidance on reducing pathogen and inhalation exposures in livestock operations and identify ways to protect human health and those we love. *An application for continuing education credit for Certified Crop Advisors (CCAs) and members of the American Registry of Professional Animal Scientists (ARPAS) will be submitted.*

Dr. Renée Anthony is a Professor of Occupational and Environmental Health, professionally certified in industrial hygiene (CIH) and safety (CSP). She has conducted field investigations of occupational fatalities in the Iowa FACE program. Her research has included investigated human aspiration of particles, sampler design and performance, and field investigations to improve the air quality of swine production buildings. She currently directs the Great Plains Center for Agricultural Health (GPCAH), a NIOSH-funded center that focuses on reducing the illness and injury among farmers in the Midwest. Email: renee-anthony@uiowa.edu

Dr. Michael Pate is an associate professor of agricultural systems technology at Utah State University. From 2017-2019, Dr. Pate held the Nationwide Endowed Professorship for Agricultural Safety and Health at Penn State University. His research efforts have encompassed innovative and proven intervention techniques that influence engineering safety practices, knowledge, and attitudes of agricultural workers, particularly within communities of vulnerable workers such as adolescents, Native Americans, and minority farm workers. An important component of this effort is determining the appropriate language, literacy level, and medium (e.g., website, texting, displays) for the target audience. Email: Michael.pate@usu.edu

Dr. Matthew Nonnenmann is an Associate Professor in the Department of Occupational and Environmental Health in the College of Public Health at the University of Iowa. He is professionally certified in industrial hygiene (CIH). His research includes using novel methods to characterize and determine concentrations of bioaerosol hazards in healthcare and agricultural settings. Recently his work has focused on the development and evaluation of engineering controls designed to reduce worker and patient exposure to bioaerosols. He also has experience assessing barriers to use of personal protective equipment among agricultural workers. Email: matthew-nonnenmann@uiowa.edu

How Do I Participate?

On the day of the webinar, go to lpelc.org/live-webinar-information/ to download the speaker's power point presentations and connect to the virtual meeting room. First time viewers should also follow the steps at: lpelc.org/how-do-i-participate-in-a-webcast/.

The LPELC network depends on the sharing of both questions and answers!
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The LPE Learning Community is a project dedicated to the vision that individuals involved in public policy issues, animal production, and delivery of technical services for confined animal systems should have on-demand access to the nation's best science-based resources. See our website at: lpelc.org.