MEAT PROCESSING LINE-SPEEDS & WORKER HEALTH

WHAT IS THE SWINE PROCESSING LINE SPEED STUDY (PULSE)?

- The USDA Food Safety and Inspection Service (FSIS) contracted with a research team from the University of California, San Francisco, (UCSF) to **study the impact of evisceration line speed on worker safety in swine processing establishments**.

AMAN'S EXPERIENCE ON PULSE

- **Aman Mehrotra** was a graduate student studying **Human Factors and Ergonomics (HFE)** when he was brought on to PULSE as a researcher.
- Aman receives support through a **National Institute for Occupational Safety and Health (NIOSH)** training grant. "You go to these sites and get to talk to people, you have the ability to improve [the work conditions]," said Aman about the PULSE project. He spoke about seeing **workers whose hands were locked up** as a result of their work conditions.

WHAT WAS FOUND

- **46%** of of evaluated workers across all establishments were at **high risk for musculoskeletal disorders (MSDs)**.
- **Piece rate**, i.e., the number of hog parts handled per minute by a worker, **was associated with MSD risk**.
- **Over 42% of workers** across all establishments **reported moderate to severe upper extremity pain** during the 12 months prior to the site visit.

WHAT CAN BE DONE?

- **Implement established meat packing best practices to reduce hand exertion force** to achieve a PFI-TLV score of ≤1.0.
- **Implement medical management best practices**, including early reporting of MSD symptoms, delivery of appropriate and timely care beyond first aid, and the use of medical monitoring to identify ongoing hazards.

AMAN MEHROTRA

Aman was a part of the study team that evaluated the **impact of evisceration line speed on work-related musculoskeletal disorders (MSDs) and antimicrobial-related respiratory symptoms.**

The study team **enrolled 574 workers** and conducted surveys, medical interviews, and measurements of ergonomic exposure and airborne peracetic acid (PAA) concentrations at six establishments. The establishments operated at over a range of evisceration line speeds (Head Per Hour, HPH).

FOR MORE INFO

COEH

Scan the QR code for more information on our Research

For questions, contact coeh@berkeley.edu

WANT TO LEARN MORE? CHECK OUT THE WORK OF AMAN MEHROTRA, DR. HARRIS, AND THE RESEARCH TEAM THAT HAS BEEN PUBLISHED SO FAR! CLICK HERE