NIOSH Finds Effective Interventions to Reduce Ergonomic Injuries in Meatpacking and Other Industries

The National Institute for Occupational Safety and Health (NIOSH) has issued a report on developing team approaches to solving ergonomic problems in the workplace. Although the study was designed to reduce ergonomic hazards in red meatpacking plants, the results are applicable to many industries.

This research effort is unique in that it was funded through a grant received during a settlement of fines imposed by the Occupational Safety and Health Administration (OSHA) against a major meatpacking company. With these funds NIOSH supported three university groups in examining the utility of participatory approaches to solve ergonomic problems in meatpacking. A participatory approach involves teams of workers formed to deal with work-related issues. The ergonomic teams used in this research effort included front line workers, supervisors, and staff from other departments working together to identify and solve ergonomic problems.

According to NIOSH Director, Dr. Linda Rosenstock, “ergonomic injury and illness are largely preventable. We must work together to alleviate the tremendous economic and health burden cumulative trauma disorders (CTDs) place not just on the meatpacking industry, but on the entire country.”

In 1906, Upton Sinclair’s *The Jungle* first brought the hazards of the meatpacking industry to the public’s attention. Until recently, the slaughtering, processing, and packaging of meat were performed with many of the same work processes and tools that were common at the turn of the century.

In the early 1980’s pressure to increase production while cutting costs increased machine pacing, job fragmentation, and the use of powered hand tools in the meatpacking industry. These new emphases brought with them an increase in CTDs. Today, workers in the meatpacking industry are often afflicted with tendinitis, carpal tunnel syndrome, and other chronic injuries and illnesses which affect the upper extremities.

In fact, the meatpacking industry’s incidence of disorders due to “repeated trauma” was nearly 75 times that of industry as a whole in the late 1980’s. While the meatpacking industry is working to correct this problem, ergonomic injuries and illnesses continue to exact a tremendous toll on meatpacking workers. Research such as the NIOSH-sponsored effort will provide guidance on how to eliminate these disabling injuries. Findings from *Participatory Ergonomic Interventions in Meatpacking Plants* are summarized on the following page. NIOSH requests assistance in disseminating this information to all who are interested in solving ergonomic problems.
“Ergonomics” is a word frequently used but often not understood. Simply defined, ergonomics is “job design with the worker in mind.” *Participatory Ergonomic Interventions in Meatpacking Plants* explores the use of the participatory approach, which is based on worker involvement, to reduce ergonomic hazards in the workplace. The box below contains valuable information on how to successfully implement this approach to solve workplace problems.

### How to Increase the Success of Participatory Interventions

- Successful participatory ergonomic programs require strong in-house direction, support, and significant staff expertise in both team building and ergonomics.

- Training programs must develop both teamwork and ergonomic skills among participants.

- Team size should be kept minimal, but should include production workers engaged in the jobs studied, area supervisors, and maintenance and engineering staff who can effect proposed job improvements.

- Effective team problem-solving requires access to injury and illness information. In addition, reports on the team’s objectives, progress, and accomplishments need to be circulated to the plant workforce to keep all parties informed about the program.

- Evaluation of results is an important component of a participatory ergonomic program. Such data will enable the teams to appraise their progress, provide feedback to affected or interested parties, and make suitable corrections where necessary to improve the overall effort.

To request a copy of *Participatory Ergonomic Interventions in Meatpacking Plants* (Publication No. 94-124) or for more information on NIOSH and other workplace concerns call:

1-800-35-NIOSH
(1-800-356-4674)