



National Institute for  
Occupational Safety and Health  
Centers for Disease Control  
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April 7, 2014

The Honorable Alfred V. Almanza  
Administrator, Food Safety and Inspection Service  
U.S. Department of Agriculture  
1400 Independence Ave., S.W.  
Washington, D.C. 20250

Dear Mr. Almanza:

I am writing to express a concern of the National Institute for Occupational Safety and Health (NIOSH) about misinterpretations by the U.S. Department of Agriculture (USDA), Food Safety and Inspection Service (FSIS), of findings from a NIOSH evaluation of a poultry processing plant.<sup>1</sup>

At the request of USDA/FSIS, NIOSH agreed to evaluate the effects of waivers of line speed restrictions on employee health, with a focus on musculoskeletal disorders and acute traumatic injuries. USDA/FSIS required that establishments that were to be granted waivers for regulatory line speeds under the *Salmonella Initiative Program* (SIP) cooperate with a NIOSH investigation.<sup>2</sup>

The July 13, 2011 Federal Register Notice announcing the SIP stated in pertinent part:

“FSIS also recognizes that evaluation of the effects of line speed on food safety should include the effects of line speed on establishment employee safety. To obtain preliminary data on this matter, FSIS has asked the National Institute for Occupational Safety and Health (NIOSH) to evaluate the effects of increased line speed as part of the SIP waiver program. NIOSH has stated its willingness to evaluate the effects of increased production volume on employee health, with a focus on musculoskeletal disorders and acute traumatic injuries. NIOSH's activities may ultimately include observation of work processes and practices; collection of company payroll,

<sup>1</sup> Musolin K et al. Evaluation of Musculoskeletal Disorders and Traumatic Injuries Among Employees at a Poultry Processing Plant. Available at <http://www.cdc.gov/niosh/hhe/reports/pdfs/2012-0125-3204.pdf>

<sup>2</sup> 76 Federal Register 41186 (July 13, 2011) See <https://www.federalregister.gov/articles/2011/07/13/2011-17625/salmonella-verification-sampling-program-response-to-comments-on-new-agency-policies-and>

personnel, and injury and illness records; interviews with plant managers, supervisors, and employees; health surveys of employees; and videotaping and measurement of specific aspects of job tasks. NIOSH will prepare a report based on its findings of short-, intermediate-, and long-term effects from the process modifications. NIOSH will make recommendations as needed. FSIS will use any available data from NIOSH activities to inform its decisions as it moves forward with planned regulatory reform. FSIS will require that establishments granted waivers for regulatory line speeds under SIP cooperate with NIOSH.”

Based on USDA/FSIS’ stated concern about the effect of waivers of line speed restrictions on employee safety, NIOSH agreed to conduct an evaluation through its Health Hazard Evaluation (HHE) Program when it received a request from an establishment in response to the SIP.

The first poultry processing plant to request an evaluation from NIOSH based on the SIP was a poultry processing plant in South Carolina. In its evaluation of the plant before any production line speed changes had occurred, NIOSH investigators found an alarming 42% prevalence of carpal tunnel syndrome (CTS) in exposed workers. The CTS risk, confirmed by a nerve conduction study, was not unexpected considering the repetitive and forceful motions required by exposed workers to process poultry. In addition to noting the alarming prevalence of CTS in exposed workers, NIOSH made 31 health and safety recommendations to prevent CTS, other musculoskeletal disorders, and traumatic injuries in new workers, and to limit further physical damage to those workers who were already affected by CTS.

When NIOSH returned to the plant only a short time after modification of the plant’s production lines, NIOSH observed a continuing high prevalence of musculoskeletal symptoms. Given what NIOSH observed upon its second visit relative to changes made to the production lines, NIOSH would not have expected to find an increase or a decrease in musculoskeletal symptom prevalence.

First, the amount of intervening time (10 months) between the first and second visits was not sufficient to result in a change in health status. Second, as NIOSH discovered during the second visit, the manner in which the plant had modified the production lines resulted in no change in exposure to repetitive and forceful motions for any individual worker. Third, NIOSH also found that most of its 31 recommendations, including NIOSH’s primary recommendation to redesign the jobs to reduce the risk of CTS due to forceful and repetitive motions, and to address the alarming prevalence of CTS found on its first visit, had not been implemented.

NIOSH was quite surprised by the FSIS/USDA Administrator’s blog entry of March 27, 2014.<sup>3</sup>

First, the FSIS Administrator’s blog entry stated that NIOSH “...made several recommendations to improve worker safety at this facility, but slowing the evisceration line speed was not among them.” This statement is misleading. Line speed affects the periodicity of repetitive and

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<sup>3</sup> See <http://blogs.usda.gov/2014/03/26/food-safety-and-worker-safety-can-improve-in-poultry-facilities/#more-50820>

forceful movements, which are key causes of musculoskeletal disorders. Many of the NIOSH recommendations address the design of job tasks to minimize these factors.

Second, the Administrator's blog entry of March 27, 2014 stated that NIOSH found that "...the increase in evisceration line speed was not a significant factor in worker safety." The truth of the matter is that the HHE Report draws no such conclusion. In fact, NIOSH investigators found during their second visit that the changes made by the plant to production line speed did not result in an increase in production volume for the individual worker or the plant, but actually resulted in a *reduction* of the number of birds processed from 180 to 175 birds per minute. Therefore, no conclusion can be drawn regarding the effect of line speed changes and health status.

Third, the Administrator's blog entry of March 27, 2014 generalized the findings from the plant to the poultry industry as a whole even though the NIOSH HHE Report states that "[T]his plant may not be representative of other poultry processing plants."

In sum, no conclusion can be drawn from this one HHE regarding the effect of line speed changes on worker health.

NIOSH regrets that USDA/FSIS did not provide NIOSH with an opportunity to review and comment on the Administrator's blog entry prior to its posting. A NIOSH review could have assisted USDA/FSIS in better understanding the findings from the HHE at the South Carolina poultry processing plant.

NIOSH conducts health hazard evaluations with the aim of improving the health and safety of American workers. NIOSH supports USDA/FSIS' recognition "that evaluation of the effects of line speed on food safety should include the effects of line speed on establishment employee safety."

NIOSH would be pleased to assist USDA/FSIS in accurately characterizing the results of the HHE conducted at a poultry processing plant in South Carolina. Please contact the NIOSH Chief of Staff, Frank Hearl, at 202.245.0625 if NIOSH can be of assistance.

Thank you.

Sincerely,



John Howard  
Director

Cc: Adam Tarr, Chief of Staff, FSIS, USDA  
Frank Hearl, Chief of Staff, NIOSH, CDC, HHS  
Lucero Ortiz, Chief of Staff, OSHA, DOL