

***NAWTEC14 Speaker Abstract***  
***An Approach to Reducing Strain and Sprain Injuries***

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Strain and sprain injuries (a.k.a. cumulative trauma, soft tissue injuries) continue to account for the largest percentage of injuries in U.S. industry representing over 40% of all injuries by type. The body of literature on how to prevent and reduce these types of injuries is limited at best and in some cases contradictory. Moreover, there does not appear to be an established and proven method for preventing and reducing strains and sprains in industry. Based on an analysis of our injury history, which considered injury frequency and severity, we recognized that in order to improve and sustain superior safety performance we needed to address our strains and sprains dilemma. In late 2004, we launched an aggressive and in some ways experimental effort to reduce these types of injuries. The first phase of our approach consisted of the ErgoPower™ program which included an assessment of the strain and sprain risk factors in our facilities including employee surveys and task analysis. From this we developed a custom training video and workshop which included lecture, video, and practical components. Once all employees were trained we focused on follow-through in order to put into practice what we learned and to drive results. We knew that training alone was not sufficient to address a problem of this magnitude. The follow-through phase included a job observation process consisting regular evaluations of the tasks we perform and a focus on proper body position. We also implemented an employee stretching program. To further characterize risk and monitor progress we measured each employee's range of motion. While early the results to date include the implementation of numerous engineering controls which were identified in the body position job observations, 71% improvement in employee range of motion based on established targets, a reduction in strain and sprain related workers' compensation cases of 67%, a reduction in strain and sprain OSHA recordable injuries of 50%, and a significant reduction in workers' compensation costs per case.

Bobby Greene currently serves as a Regional Safety Administrator at Covanta Energy. Prior to Covanta Energy, Bobby served in a variety of safety and health roles in private consulting and the electric utility industry. Bobby is a published author and regular speaker in the safety and health field. Bobby received a BS and MS in Environmental Health from the University of Georgia.