



National Institute for
Occupational Safety and Health
Centers for Disease Control
and Prevention (CDC)
395 E Street, SW
Washington, DC 20201

March 11, 2011

Nancy J. Leppink
Deputy Administrator
Wage and Hour Division
Department of Labor
Frances Perkins Building, Room S-3504
200 Constitution Avenue, NW
Washington, DC 20210

Dear Deputy Administrator Leppink:

In response to your letter dated October 21, 2010 requesting assistance in determining under what circumstances or conditions, if any, 16- and 17-year old employees can safely operate or assist in the operation of power-driven patient lifts, the National Institute for Occupational Safety and Health (NIOSH) explored available data, reviewed the relevant scientific literature, and conducted a biomechanical analysis (enclosed), and offers the following assessment for your consideration:

Based on the review of the relevant scientific literature and biomechanical analyses, NIOSH has determined that many 16- and 17-year-old employees cannot safely operate power-driven patient lifts to lift and transfer patients *by themselves*, although they may be able to safely work as part of a team to assist another experienced caregiver who is 18 years of age or older to transfer or move a patient/resident. Independent use of power-driven hoists by 16- and 17-year olds would put them at risk for serious musculoskeletal injuries. The biomechanical analyses indicated that many 16- and 17-year-old workers do not have the physical strength required to 1) independently manipulate patients/residents when placing slings under them, and 2) safely push, pull, or rotate a portable hoist on wheels when loaded with a patient/resident. The scientific literature also indicates that working youth greatly underestimate the dangers associated with tasks known to be hazardous. NIOSH has also concluded that specific training alone is not sufficient to protect young workers from patient-lifting related injuries.

Research conducted by NIOSH and others has demonstrated that comprehensive safe patient handling and movement programs that incorporate power-driven patient lifts have made an enormous difference in reducing musculoskeletal disorders among health care workers in the United States. Although this NIOSH assessment has determined that many 16- and 17-year old employees cannot safely operate power-driven patient lifts to lift and transfer patients by themselves, Federal child labor laws should also not permit

Page 2 – Nancy J. Leppink

working youth to manually lift residents. Manual patient handling has been shown to have a greater risk for low back disorders than the use of power-driven hoists for patient lifts. Consequently, NIOSH encourages the Wage and Hour Division to consider regulations prohibiting youth less than 18 years of age from manually lifting residents who cannot bear weight or assist when being transferred.

The safety of youth assisting in the operation of patient lifting devices is complex. We hope that our assessment is useful to the Wage and Hour Division in addressing this issue. Please do not hesitate to contact Dr. Jim Collins (JCollins1@cdc.gov; 304-285-5998) if you have technical questions.

Sincerely,

A handwritten signature in black ink, appearing to read "John Howard", with a long horizontal flourish extending to the right.

John Howard, M.D.
Director

Enclosure