

Medina Hardware, Medina

Intervention Key Words: Stair Climber, Hand Truck, PowerMate

Industrial Key Words: Retail, Other: Hardware, Appliance

Risk Factor(s): Awkward Posture- Back deviations, Shoulder deviations, Squatting/Kneeling, Manual Handling- Lifting/Carrying, Pushing/Pulling

Situation:

Medina Hardware is a retail hardware and appliance store servicing the general public and light industry. The store also offers appliance delivery and removal. After being in business for 126 years they have decided to break into the refrigerator sales. The size and weight of the products poses an increasing threat of CTD injuries, especially during deliveries. Workers, who are all in excess of 50 years old, use a standard pickup truck and hand dolly to deliver appliances. CTD risks arise from the heavy lifting and awkward postures used to move the bulky items not only in and out of the delivery truck but also into and out of customer's homes.

Solution:

In order to assist with appliance transport and reduce CTD risks, Medina Hardware purchased a "PowerMate" motorized electric hand truck. The truck has a 40" lift height, giving workers the ability to not only climb stairs but also lift appliances into the back of the delivery truck, eliminating the need for a costly mechanical lift gate. It is small enough to maneuver easily through tight hallways and has a load limit of 650 lbs. The new hand truck only weighs 100 lbs. Total cost for the intervention was \$3,007. Medina Hardware received \$2,268 in assistance from SafetyGrant\$ to offset the costs.



Results:

- CTD, Restricted Day, Lost Day and Employee Turnover rates (standardized per 200,000 hours worked) were at 0 for the year prior to the intervention and remained at 0 for 2 years following.
- CTD Risk Factor scores decreased 55% following the intervention.