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Injury Reduction in Truck Driver/Dockworkers Through Physical Capability New Hire Screening

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The purpose of this study was to determine the effectiveness of a physical capability new hire evaluation on the incidence of injury and to determine differences in strength and physical characteristics between new hire applicants who were recommended (REC) versus not recommended (N-REC) for a truck driver/dockworker position. New hire (NH) data collected from 11/98 through 8/99 was compared to Historical (HI) data collected from 11/97 through 8/99. Both groups were matched on length of employment. For the NH group, 365 applicants underwent an isokinetic evaluation consisting of knee and shoulder flexion and extension. The raw data to include peak torque; right and left and agonist and antagonist ratio scores; and force curve normality rating were mathematically analyzed to generate a Department of Labor Dictionary of Occupational Title strength rating. The rating was matched against the job requirement (heavy) and recommendation for hire was based on a correct match. Of the 365 applicants, 276 were REC for hire and 89 were N-REC. The REC group weighed less (199 lbs. vs. 243 lbs., $p < .05$) but generated more absolute torque (581-ft. lbs. vs. 472-ft. lbs., $p < .05$) than the N-REC group. The body symmetry scores were significantly ($p < .05$) higher for the REC group. The incidence rate of overexertion injuries to the knees, shoulders and back decreased from 16.7 to 1.04 for the NH group REC in comparison to the HI group. Fitting the worker to the job through an isokinetic new hire screening will result in a substantial decrease in overexertion injuries.