

Wayne Hospital, Greenville

Intervention key words: Transfer mattress, air transfer

Industry: Health care, hospital

Risk factor(s): Manual handling – pushing/pulling; manual handling – lifting/carrying; awkward posture – back deviations; awkward posture – shoulder deviations

Situation: Wayne Hospital had five claims in a two-year period directly related to the positioning and transferring of patients in bed. The employees bend and reach while lifting, pushing and pulling patient, who often weigh more than 150 pounds.

Solution: Wayne Hospital purchased air-transfer mattresses. These air mattresses are placed under the patient. When transferring a patient, the mattress is rapidly inflated with air. Employees lightly pull on loops attached to the mattress. This results in a much safer and comfortable transfer for the employee and the patient. The air mattresses and the air supply cost about \$3,400 for each set. The hospital purchased 10 air supplies and 16 air mattresses.

Results

- The incident rate (standardized for 200,000 hours worked) decreased from 1.9 the two years prior to the intervention to 1 for the two years following, a 47-percent improvement.
- In the beginning, the policy stated employees only had to use air mattresses for patients weighing more than 200 pounds. This resulted in injuries when employees did not use the air mattresses. At that time, the incident rate was one. The hospital adjusted its policy, and now employee use air mattresses for all patients during transfers.
- The National Safety Council reports the average workers' compensation claim cost is \$19,382. The hospital's return on investment was 2.6 years.
- The air-transfer mattresses only require two employees to help make transfers. Prior to the intervention, three or four employees transferred moderately obese patients. By using air-transfer mattresses, patient-skin tears decreased.