



Evacuation Chairs Australia

Do not leave people behind!

EVAC-Sheet



EVAC-SHEET is designed for safe emergency evacuation of Bedridden persons. The base material is high quality polyurethane-coated polyester with good slip characteristics, wipe clean on face side.

Colour Red. Suitable for Hospital wash temperatures and bleach conditions and includes limited FR characteristics. Standard size 188cm x 76cm with two encompassing straps 50mm wide, made from highest quality flexible soft webbing.

Extended "ladder" handles for pulling with three pull positions. Ladder webbing material carried through full length to avoid any strain on base material. High quality, "push insert, press release" chrome steel buckles. Stowage pockets for all webbing.

Component Details and Options

Size:	188cm L x 76cm W
Buckles:	High quality, stainless steel, snap release, chrome metal
Straps:	Two; positioned at Chest and Knees. Width 10cm, Circumference 244cm
End Pull Ladders:	10cm Black Webbing, 1 pull Ladder each end.
Overall length:	76cm, 3 pull positions spaced 25cm apart
Elastic:	Elastic corner pieces from 25mm quality grade elastic, 375mm long with snap release buckle for adjustment to mattress thickness.



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The EVAC-Sheet embodies wide-ranging forward concepts for ease of deployment, safety, neatness and cleanliness and incorporates advanced mechanical handling concepts. User input in later development stages has resulted in a product very high degree of "user-friendliness". The EVAC-Sheet is unquestionably the most technically advanced and cost-effective product of its type on the market

EVAC-Sheet Development

Hospitals have been traditionally viewed as places of medical care for ill or injured persons and *"the concept of the hospital as a victim"* is generating considerable interest. (Schulz et al, 2005)

The EVAC-Sheet was designed based on a need that was identified when the designer Philomena (Phil) Lewis-Farrell commenced employment in a large Acute General Hospital in Dublin, Ireland and reviewed the equipment provided for evacuation that was then in-situ. Since then Phil based her Thesis on trialing the EVAC-Sheet.



Objectives

Evacuation of patients in the event of a fire or another type of emergency was the main concern for staff. Equipment supplied was inadequate and unsuitable and needed redesign based on legislation and ergonomic principals.



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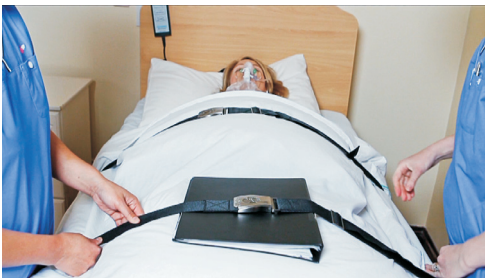
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Following on from the development of the EVAC-Sheet it was necessary to assess the time it takes to evacuate non-ambulant persons using an EVAC-Sheet in a hospital environment and document findings and making recommendations based on results.

Methodology

Based on legislation, ergonomics, BATNEEC (Best available technology not exceeding excessive cost) and infection control standards a prototype EVAC-Sheet was developed in consultation with staff and an equipment manufacturer.



Trials were carried out in two high dependency units with high staff patient ratio in the acute hospital (these were both day and night). Data was recorded and analysed.

Results

By testing four different hypotheses the results that ensued were limited and further research was recommended including Site specific fire risk assessments as a basis for evacuation procedures; Hands-on site specific training to be developed; Two step by step picture guides have been developed for checking EVAC-Sheets; Step by step picture guides for placing EVAC-Sheets correctly on beds; and Step by step picture guides for use of the EVAC-Sheets.



The first one is a users guide that shows how to place and check the EVAC-Sheet and the second one is a step by step guide that shows how to use the EVAC-Sheet during an evacuation. These posters are manufactured to withstand chlorine products up to 1000 ppm which is inline with infection control standards



Conclusions

Despite achieving an award and rigorous trials continuous audit and review is required to protect the worker and the patient in the use of evacuation equipment. Assessments should be the norm of equipment and patients having due regard to legislation, standards and ergonomic principals as Bariatric patients are presenting more frequently in emergency rooms.

Reference

Schults, Carl H. MD, FACEP; Kristi L. Koenig, MD, FACEP; Erik Auf der Heide, MD, MPH, FACEP; Robert Olson, 2005, Benchmarking for Hospital Evacuation: A Critical Data Collection Tool, Prehospital and Disaster Medicine, September-October, Volume 20, No.5
<http://pdm.medicine.wisc.edu>

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