

# Safe Patient Lifting

Maintain Patient Dignity



Reduce Costs

Protect Workers



Reduce the Risk of  
Musculoskeletal Disorders



## Safe patient lifting

The rate of non-fatal injuries among EMTs and paramedics was found to be 34.6 per 100 full-time workers per year, a rate more than five times higher than the national average for all workers in the US. The 2013 Strategy for a National EMS Culture of Safety highlights that a service designed to help can cause unintentional risk or even preventable harm to three groups:

- EMS personnel

---

- Patients

---

- Members of the community

A key goal for the strategy is to create improvements in patient safety and to protect EMTs and paramedics from injury.

The Mangar lifting cushions, ELK and Camel are practical, efficient manual handling products used by emergency services professionals across the world. Compact and portable, the lifting cushions can be easily stored in an ambulance and can be used anywhere, even in confined spaces.

---

### Easy to use

They are simple to set up and inflate at the touch of a button, using a battery powered Airflo Plus compressor. The ELK lifts up to 1,000 lbs and the Camel 700 lbs.

---

### Easy to clean

Lifting cushions can be cleaned using a detergent solution or alcohol impregnated wipe.

---

### Easy to transport

Lifting cushions are durable and lightweight, making them easy to transport. They are easily stored in an ambulance and compressors can be charged from inside the vehicle.



## Key Benefits of Lifting Cushions

- **Reduced** risk of musculoskeletal injuries to workers and the associated costs including:

- Litigation and compensation claims
- Agency staff to cover absenteeism
- Recruitment costs through staff loss

---

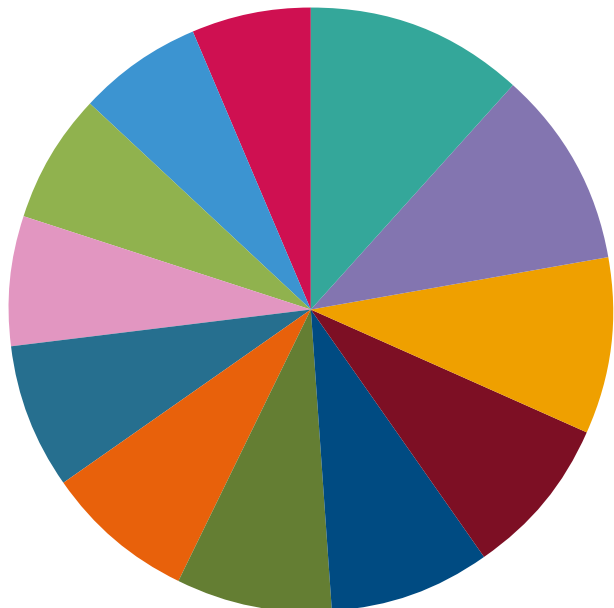
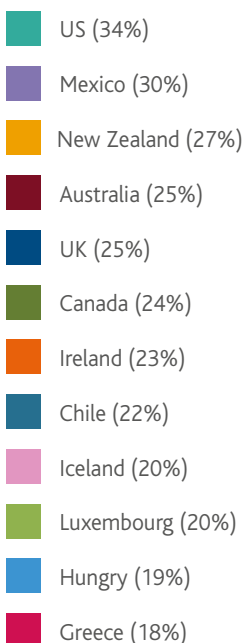
- **Improved productivity:**

- One piece of equipment that can pick up anyone, from the most fragile to plus size people up to 1,000 lbs.
- Only two EMS workers needed to respond to fallen plus size or bariatric patients.
- Using lifting cushions reduces the need for multiple crews and vehicles to attend fallen patients. This improves productivity levels and helps services to achieve response targets.

The US has the largest rate of obesity in developed countries. Lifting plus size patients manually will potentially injure the EMS professional, but also the patient if the person is dropped or pulled incorrectly. Lifting cushions give a controlled safe lift up to 1,000 lbs, protecting both patient and professional.

Employers' annual healthcare costs for paramedics is circa \$60,000 per 100 full time workers

## Obesity Worldwide 2013 (In Millions)



# Using a lifting cushion

## Assess

The lifting cushions can be used once you have established the fallen patient is uninjured but needs help to return to their feet. Please follow your organization's manual handling guidelines when lifting a fallen person.

## Position

Depending on whether you are using the ELK or the Camel, positioning will vary slightly.

**Camel:** In many cases, the patient is able to shuffle backwards onto the Camel independently. If this is not possible, from the recovery position, the caregiver places the Camel directly behind the person with the Camel badge in line with their head. The caregiver should then position a slidesheet lengthways under the person to enable them to be easily maneuvered onto the Camel. The slidesheet is then removed.

**ELK:** From the recovery position, the ELK is folded under itself and positioned parallel with the person's belt line. The person is then rolled onto their back and the ELK is unfolded so that it is lying flat underneath them. If the person is able to sit, the ELK is folded under itself and the patient asked to lean to one side while the cushion is positioned under them. They then lean in the other direction and the ELK is unfolded, ready for inflating.

On the ELK, the person is encouraged to sit up and can be assisted using recognized moving and handling techniques if required. The person needs to be sitting centrally on the ELK, as close to the back as possible. Once the person is in the seated position, and with arms folded, the caregiver gives support from behind for the duration of the lift.

## Inflate

Simple to set up, lifting cushions inflate at the touch of a button using an Airflo Plus compressor. The four colored and numbered airlines are simply connected to each section of the lifting cushion.

The handset is operated by pressing and holding numbered buttons in sequence. The Airflo will stop automatically once each section is fully inflated.

Three sections will usually be sufficient to enable transfer, but a taller person may need all four.

## Transfer

The patient can be helped to a stand or side transferred to a chair once the lift is completed.



## ELK Lifting Cushion

The Mangar ELK is a lifting cushion designed to lift the frailest individual to a plus size or bariatric patient from the floor in a safe and dignified manner.



### Key Benefits

- **Reduce** the risk of musculoskeletal injuries and the associated costs
- **Provides a safe, dignified lift**
- **Ideal for confined spaces**, such as bathrooms or hallways
- **Can be used inside or out**
- **Lifts** up to 1,000 lbs
- **Easy to use**
- **Battery powered** and portable
- **Easy** to store
- **Easy** to clean

Maximum user weight	1,000 lbs
Maximum height	22"
Minimum height	Flat
Seat depth	20"
Width	22.5"
Cushion weight	8 lbs
Compressor weight	13 lbs

### Accessories

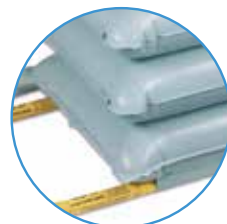
#### Slide Sheets

There will be times a patient is unable to help themselves transfer onto a lifting cushion and a slide sheet is required to help maneuver the individual to the correct position. The slide sheets are a tubular shape and have handles to help when moving the patient. The surface of the material allows the patients to be moved easily in any direction.



#### ELK Stretcher Bars

The ELK is often used by paramedics to lift a patient from the floor to an ambulance cot or stretcher. The ELK's stability bars are removed and replaced with stretcher bars for this type of lift. Using a spinal board or scoop stretcher in conjunction with the ELK, the patient is lifted supine from the ground and onto an ambulance cot or stretcher.



# Camel Lifting Cushion

With a built in backrest, the Mangar Camel is a lifting cushion that offers a fully supportive lift for a person up to 700 lbs with minimal moving and handling requirements.



## Key Benefits

- **Reduce** the risk of musculoskeletal injuries and the associated costs.
- **Provides a safe, dignified lift**
- **Lifts** up to 700 lbs
- **Suitable for** plus size or bariatric patients
- **Can be used inside or out**
- **Easy to use**
- **Battery powered** and portable
- **Packs** away into a compact bag

Maximum user weight	700 lbs
Maximum height	22"
Minimum height	Flat
Seat depth	18.5"
Back/headrest length	32"
Total length	44"
Width	27.5"
Cushion weight	14 lbs
Compressor weight	13 lbs

## Stowage Board and In Vehicle Charger

A stowage board is fixed inside an ambulance, often out of sight in a compartment and allows the Airflo Plus compressor to be charged when not in use. The charger is used to change the 12v of an ambulance into 24v required to charge the compressor, and can be hard wired into the electrical system of an ambulance.

The stowage board secures the Airflo Plus in place and protects it when the vehicle is on the move. Using a stowage board also means ambulance crews can quickly locate the Airflo Plus in an emergency situation.

The Airflo Plus, Stowage Board and Charger are CEN tested.  
(Tested in line with European standards)



## Who uses Mangar Lifting Cushions

The ELK and Camel have been used for more than 10 years in a range of settings, such as paramedics emergency services, care homes, housing associations, hospitals, telecare response teams, and in the community. The Mangar lifting cushions reduce the risk of injury to healthcare professionals including care assistants, nurses, occupational therapists, and physiotherapists.

The controlled, safe and dignified lift provided by the lifting cushion means it is particularly useful for lifting fallen people in the following environments:

- **Emergency Services**
- **Elderly Care**
- **EMI nursing and care homes**
- **Rehabilitation facilities**
- **Dementia Care**
- **Bariatric Care**
- **In the home**

By 2030 the number of over 65s are predicted to rise by 19% (Dept of Health and Human Services)



## What our customers say

### Richmond Ambulance

During trials, Richmond Ambulance returned a 95% satisfaction rate from patients lifted from the ground with a Mangar Lifting Cushion.

95% of workers agreed or strongly agreed that the lifting cushions are advantageous to patient care and that using the equipment was less strenuous than manual lifting.

Rob Lawrence, COO

### Pisces Healthcare Solutions

"Our customers find the Camel and ELK lifting cushions to be unique and easy to use products. Furthermore, these products have greatly helped them avoid injuries associated with lifting fallen patients.

Harry J Sanchez, CFO

### Heritage Property Management

We purchased our first Camels in May 2009 at a time when we were experiencing 'higher than desired' expenses in staff injuries. Since introducing the lifting cushions and new staff training, workers compensation pay outs have dropped by 80%.

Kathleen Sharkey,  
Director of Operations



## Some of our clients

ARV Independent Living

Bield Housing

Chislehurst Care

Fivestar Retirement Living

Fremington Homes

Prism Medical

Richmond Ambulance

Department of Veteran Affairs

NRS Healthcare

Brandon Trust

The Pluss Organisation

All UK Ambulance Service Trusts

**Mangar won the JEMS Hot Product Award in 2014**

