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Safe Patient Lifting

Maintain Patient Dignity

Reduce Costs

Protect Workers

Reduce the Risk of Musculoskeletal Disorders

Key Benefits of Lifting Cushions

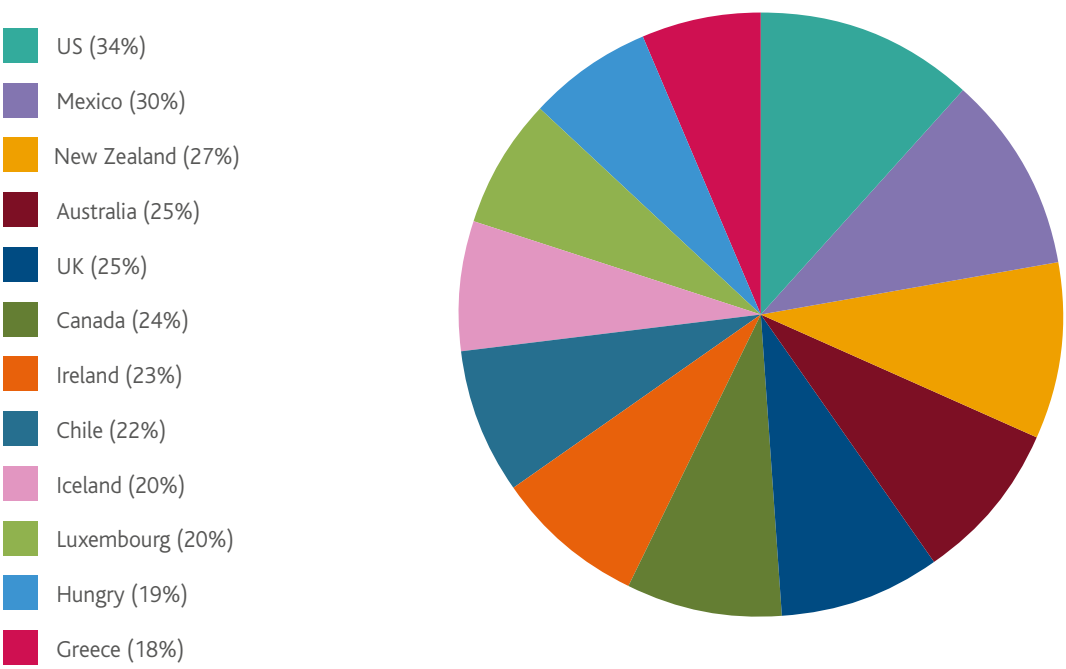
- **Reduced** risk of musculoskeletal injuries to workers and the associated costs including:
  - Litigation and compensation claims
  - Agency staff to cover absenteeism
  - Recruitment costs through staff loss

- **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.

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

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.

Obesity Worldwide 2013 (In Millions)



World Obesity Statistics 2010

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Falls Among Older Adults: How big is the problem?

Each year, millions of adults in the US aged 65 and older fall. Falls can cause moderate to severe injuries, such as hip fractures and head traumas, and can increase the risk of early death.

- **One out of three** older adults (those aged 65 or older) fall each year
- **Among older adults,** falls are the leading cause of both fatal and nonfatal injuries.
- **In 2012,** 2.4 million nonfatal falls among older adults were treated in emergency departments and more than 722,000 of these patients were hospitalized.
- **In 2012,** the direct medical costs of falls, adjusted for inflation, were $30 billion.
- **People aged 75** and older who fall are four to five times more likely than those age 65 to 74 to be admitted to a long-term care facility for a year or longer.
- **Many people who fall,** even if they are not injured, develop a fear of falling. This fear may cause them to limit their activities, which leads to reduced mobility and loss of physical fitness, and in turn increases their actual risk of falling.

Ref: Centers for Disease Control and Infection

Musculoskeletal Disorders

Musculoskeletal Disorders are conditions that affect people of all ages and fitness levels, limiting normal activity due to pain. They can be caused by one major trauma, or many mini traumas (repetitive strain injury), such as bad posture or repeated tasks. Major traumas can be avoided, but it is often the repetitive strain injuries caused by, seemingly safe, repeated actions that creep up on people. The more you use any mechanical object the quicker it 'wears and tears'; the same principle can be applied to our bodies.

As the body repairs itself the scar tissue reduces the effectiveness of the body's supporting tissues which eventually leads to more damage and pain. It is always best to avoid unnecessary loading by modifying techniques and using as much assistive lifting equipment as possible, reducing unnecessary damage for optimum long term health.

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.

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)

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	Richmond Ambulance
Bield Housing	Department of Veteran Affairs
Chislehurst Care	NRS Healthcare
Fivestar Retirement Living	Brandon Trust
Fremington Homes	The Pluss Organisation
Prism Medical	All UK Ambulance Service Trusts

Mangar won the JEMS Hot Product Award in 2014