

## The Electrodrive healthcare range

### Bed movers



**Gzunda GZS**  
Move up to 600 kg, push-button hitching, no under-bed clearance required.



**Gzunda GZ10SL**  
Move up to 500 kg, push-button hitching, suitable for tight spaces.

### Linen movers



**Gzunda linen mover**  
Tow up to 500 kg, push-button hitching.



**Tug Compact linen mover**  
Tow up to 500 kg, push-button hitching, small footprint.

### Meal delivery systems



**Transpak trolley + your meal delivery system**  
Tow up to 500 kg. (Compatible with Burlodge, Socamel and Versigen meal delivery systems.)



**Tug Compact + your meal delivery pod**  
Tow up to 500 kg, customised hitching to suit all mobile meal delivery systems.

### Waste handling

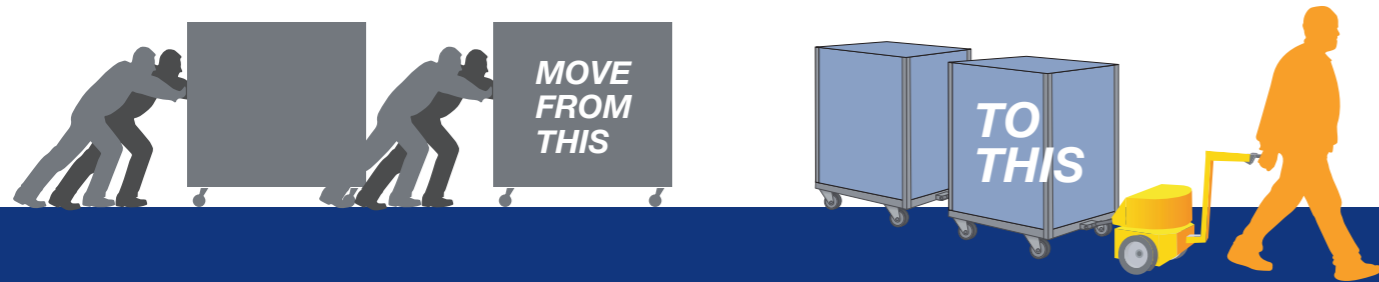


**Universal bin lifter**  
Lifts up to 250 kg wheelie bins. Simple and safe push-button operation with lockable safety door.



**Simplicity Plus bin lifter**  
Lifts up to 150 kg wheelie bins. Simple and safe push-button operation.

## Let us help you...



### Electrodrive Pty Ltd – Powered Materials Handling

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**Victoria**  
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Sunshine North Vic 3020



# 60%

## of workplace injuries

in the healthcare industry are directly associated with pushing & pulling trolleys, beds and wheelchairs, and lifting & assisting patients.

**Are your staff at risk?**

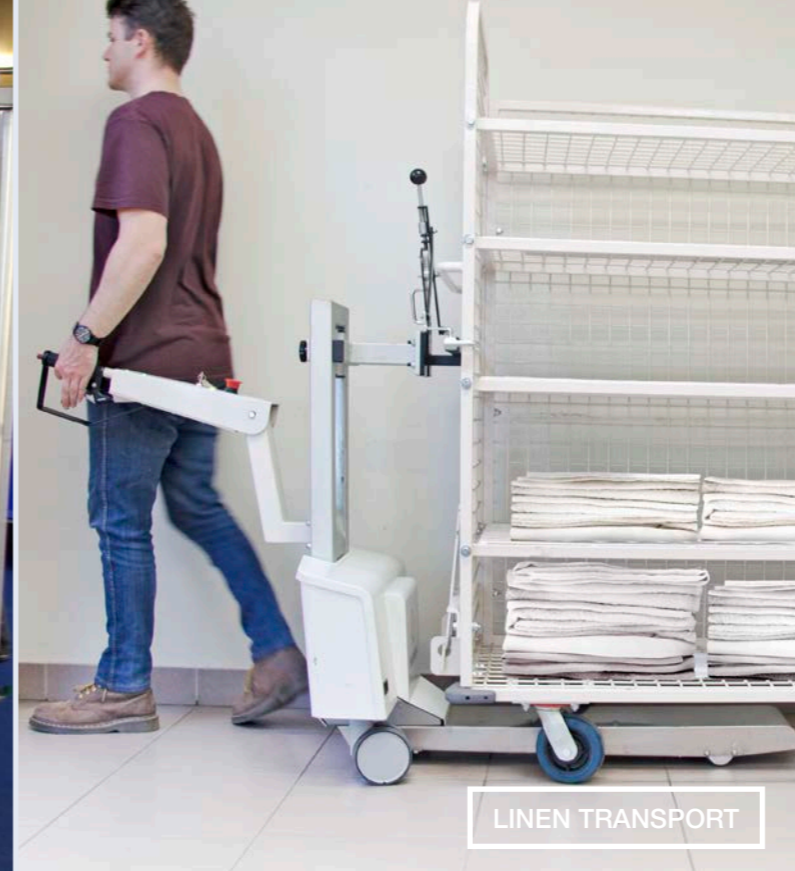




BED MOVERS



MEAL DELIVERY



LINEN TRANSPORT



WASTE HANDLING

## Your move-safe solution in healthcare

Whether you're moving beds, linen, food or waste, Electrodrive can help your staff to stay safe and demonstrate compliance with the *Hazardous Manual Tasks, Work Health and Safety Code of Practice*.

### Electrodrive are experts in mindful moving

We work with Healthcare facilities to improve safety outcomes in their push-pull processes and patient safety.

We are a single-source solution provider in mobile applications with intelligently simple, smart product design.

We have a branch network in Brisbane, Sydney, Melbourne and Perth and an Australia-wide service network to support our rock-solid warranty and offer preventative maintenance programs.

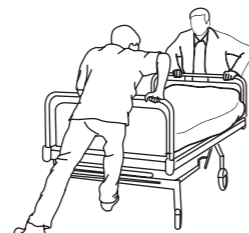
We have solutions to prevent push/pull injuries effecting the shoulder, back, neck, arm, forearm/wrist, knee, and hand and fingers.

### The cost of doing nothing is huge

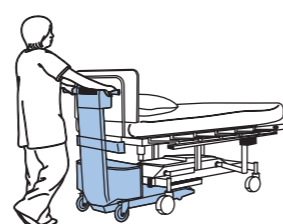
The Healthcare & Social Assistance industry suffers more than 17,000 musculoskeletal injuries a year, according to *Safe Work Australia (Australian Workers' Compensation Statistics, 2012-13)*. The median cost of a push/pull injury is \$9,700 with 6 weeks lost. With an annual incidence rate of 12.5 per 1000 employees suffering serious injuries related to injury & musculoskeletal disorders, the cost to a Healthcare facility can be enormous. And of course the personal cost to an injured worker can be devastating.

### Reducing push/pull injuries is easy...

... If you work with the experts to redesign your work processes.



MOVE FROM THIS



TO THIS

The *Hazardous Manual Tasks, Work Health & Safety Code of Practice*, and the related State Government Industry Guideline publications can be so broad that they tell you what the problem is, but offer only vague solutions.

For example, WorkSafe Victoria in their publication *Injury Hotspots Health & Aged Care Services* directs "when pushing and pulling trolleys and wheelchairs, provide equipment that is fit for the purpose and maintained in accordance with manufacturer's specifications"...

But what to do next? We can help you go from knowing what the problem is... to actually doing something to fix it! Electrodrive offers actionable solutions with industry best-practice equipment.

Acceptable frequencies for sustained straight line pushing of wheeled equipment over various distances, handle height 890 mm (Snook and Ciriello 1991)

Distance	2.1 m	7.6 m	15.2 m	30.5 m	45.7 m	61 m
Sustained force	Frequency—75% of female workforce may push wheeled equipment over stated distance once every:					
6 kg or less	6 sec	15 sec	25 sec	1 min	1 min	2 min
7 kg	6 sec	15 sec	25 sec	1 min	1 min	30 min
8 kg	6 sec	15 sec	35 sec	1 min	2 min	8 hr
9 kg	12 sec	15 sec	1 min	2 min	30 min	8 hr
10 kg	12 sec	22 sec	2 min	30 min	8 hr	Not acceptable
11 kg	12 sec	1 min	5 min	8 hr	8 hr	Not acceptable
12 kg	1 min	5 min	8 hr	8 hr	8 hr	Not acceptable

### Known injury risk factors

High forces when manoeuvring wheeled equipment increase the risk of musculoskeletal disorders. Our best state of knowledge on pushing and pulling is based on the work of Snook and Ciriello\*. Snook investigated a large number of tasks in which workers had been injured in order to establish the relationship between perceived risk and actual injury occurrence.

Snook's maximum acceptable forces are set out in the table above which describes how frequently a worker can push wheeled equipment based on the distance travelled and weight pushed. So for example, a heavy trolley with 11 kg of sustained push effort can be pushed short distances (7.6 m) every 1 minute; but if you have moderate distances to travel (30.5 m) it is only safe to do this once every 8 hours; and very long distances (61 m+) are not acceptable.

These benchmarks for safe push/pull forces have been adopted as benchmarks within Australia's regulatory environment. But many Australian work places ask staff to push hospital beds or catering and linen trolleys with push effort well above 11kg for distances and frequencies well above these published government guidelines.

### The bottom line

Published Government guidelines, developed from evidence-based analysis of injuries in the Healthcare sector due to pushing and pulling mobile equipment, mandate that pushing a bed, linen cart or meal delivery system is a two-person job unless a motorised solution is utilised.

Complying with the *Hazardous Manual Tasks, Work Health and Safety Code of Practice* makes good business sense as well as being the right thing to do.

\* Source: A guide to designing workplaces for safer handling of people for health, aged care, rehabilitation and disability facilities—3rd edition, September 2007—Public Sector and Community Services