

# Travel safety

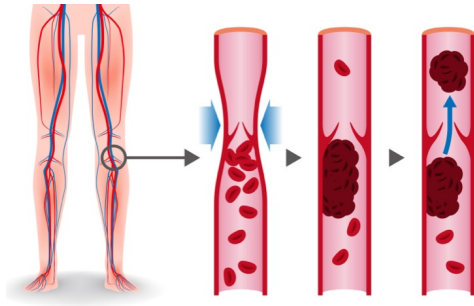
## The dangers of DVT and how to avoid it

ISO  
BAR

CUSTOM FIT  
COMPRESSION  
GARMENTS

### What is deep-vein thrombosis (DVT)?

- A blood clot forming within a vein, often the leg
- Symptoms include leg swelling, pain and a high temperature
- If a clot travels to the lungs it can cause a life-threatening pulmonary embolism (PE)



### How many people does it effect?

- 1.5/1000 adults per year
  - 67,000 per year in the UK
  - 1 in 25 flyers develop an asymptomatic DVT
- At post-mortem
- 60,000 deaths/year in the UK
  - 70% of PEs missed by clinicians

### Are my employees at risk?

- Sitting still for >90 minutes means the calf pump is inactive causing blood to pool
- Coach and air travel worst
- On flights, many employees sleep
- Long haul and frequency increase risk
- 4-10% of people taking two eight-hour flights within a month have asymptomatic DVTs
- >4 flights increases the risk by seven times
- Certain factors increase the risk (contraceptive pill, pregnancy, height, weight)

### What's the impact of DVT?

- Companies are increasingly facing litigation
- 2 weeks – 3 months off work
- Unable to fly for 3-6 months
- 50% suffer long-term damage:
  - Aching and heaviness of the leg
  - Itching
  - Oedema (swelling) of the leg
  - Varicose veins
  - Brownish discolouration at the ankle
  - Venous ulcer

### What's the problem with shop-bought socks?

- 98% failed to achieve acceptable pressure (a difference of +/- 20%)
- 54% had reversed gradients at times
- High-pressure bands cause swelling

“To reduce the risk of DVT, the compression profile of the sock needs to be at least 20mmHg. Most available flight socks provide much lower levels of pressure, so are considerably less effective than they should be.”

*Professor Charles McCollum, MB ChB FRCS MD.  
Professor of Surgery and Head of Academic  
Surgery, University of Manchester*

“Having measured a number of 'off the shelf' compression garments (Hill et al 2015) we had found that, despite using the correct sizes from the manufacturers charts, there was a huge range of pressures exerted at various points on the body. For example, from 10.3mmHg to 25.0mmHg as measured at the point of maximum girth.”

*Dr Jessica Hill, St Mary's University*

### What can we do to protect employees?

Wearing well-designed and custom-fit compression socks, along with calf muscle exercises, almost entirely eliminates the risk of DVT in travel. (*Scurr et al 2001*)

“It's vital that compression stockings are measured and worn correctly. Ill-fitting stockings could further increase the risk of DVT.”

*NHS Choices*

“The duty of an employer is to take reasonable care for the safety of its employees, including the means by which they travel to places where they have to work. A review of the evidence appears to demonstrate a sizeable increase in the risk of DVT in passengers undertaking frequent or long-haul flights. As such, an employer would have a duty of care/to assess and ameliorate such a risk.”

*David Platt QC, Crown Office Chambers*

# Travel safety

## The Isobar Compression system



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### Why you should wear flight socks

Meta-analysis by the Cochrane Centre has shown that flight socks cut the risk of blood clots by 90%. DVT can kill and is a significant risk for frequent and long-haul travellers. The analysis demonstrated a stronger link between the risk of developing DVT and long-haul flying than had been previously thought.

### The benefits of Isobar Compression

Isobar compression socks are clinically proven to increase blood return, which reduces the risks of DVT. Our customers quote reduced travel fatigue when travelling in our compression socks.

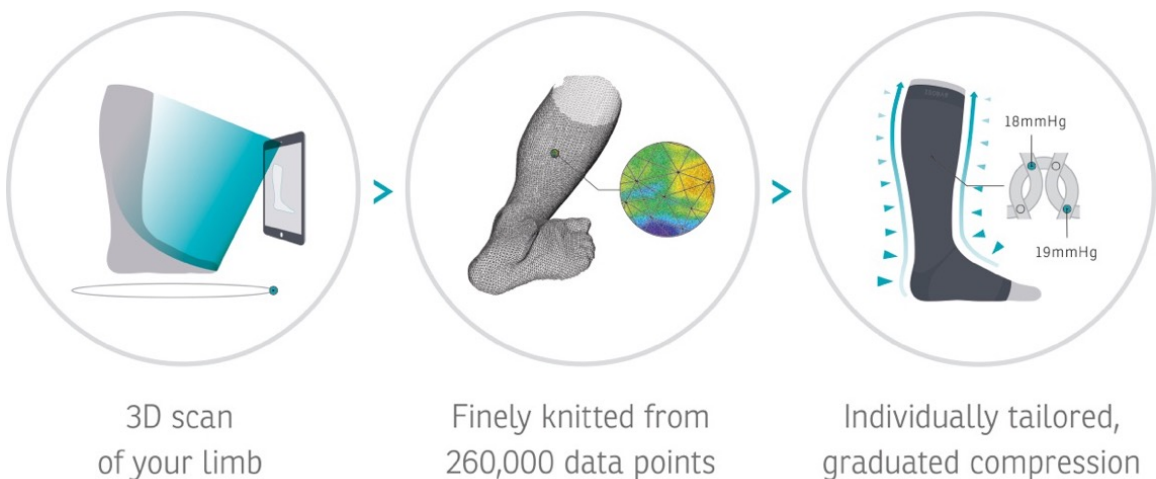
Based on a precise 3D scan of the leg and engineered for each customer, Isobar garments fit exactly. The pressure profile for each garment is based on clinical research that demonstrates the optimal level of compression for travel, so improving blood flow. Our patented technology ensures that the exact pressure profile is then delivered stitch by stitch.

### Simple scanning and ordering

- Portable scanner
- 30-second scan per limb
- All shapes and sizes
- Uploaded immediately to production unit
- Knitted within 10 working days

Our promise	The Isobar difference
Premium service	Custom-made for each individual from a 3D scan
	Scan employees at your office
	Help identify 'at-risk' employees
	Travel briefing workshop with Isobar medical advisor
Effective protection	Increases blood flow (venous transit times) to reduce blood clotting
	Provides accurate pressure
	Fits people of all shapes and sizes
Value for money	No drop in pressure over time
	Lasts 100 machine washes

Sources: Prof McCollum et al, Venous Transit Times study, University of Manchester  
Clarke M, Welsh Wound Innovation Centre, 2017  
Surgical Materials Testing Laboratory, Princess of Wales Hospital, Bridgend, 2017



# The Isobar difference

## Testimonials



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“We recently trialed the use of the Isobar Compression socks across a number of our Executive team who spend a significant amount of time travelling across our global network. The feedback has been universally positive, with users commenting favourably on how comfortable and effective the products were, particularly in comparison with “off the shelf” alternatives. DVT is a serious issue and we are committed to supporting and protecting our people, so we are now rolling out the products to other frequent flyers within our business. I would not hesitate to recommend this product.”

**Jonathan Bond, Director of HR at global 100 law firm Pinsent Masons**

“We train and race all over the world, which involves a massive amount of flying. Coming from a medical family, we know the chance of getting a DVT is not worth the risk and could end our careers. Isobar compression socks fit perfectly and are comfortable enough to wear all day whilst travelling.”

**Alistair Brownlee, double Olympic triathlon champion**

“I’ve worn the socks now on 2 nine-hour flights and 2 three-hour flights and a four-hour flight and they are my favourite socks. I prefer them to my normal socks. They are super comfy and stay in place. When I got off my first long flight I forgot to take them off they were that comfy.”

**Steve McNulty, Vistage Regional Chair**

“As a truly global business many of my colleagues fly on a very frequent basis. As part of our wider safety agenda we viewed providing tailored flight socks for frequent flyers as equivalent to the personal protection equipment (PPE) we would expect any employee to wear while carry out any activity that has an element of personal risk. As a company the safety of all our employees is a priority and in this instance, it was for frequent flyers.”

**Jim Devine, Group HR Director, Spirax Sarco**

“I have had very positive feedback from my team on the product itself. My own personal experience is that the Isobar product is fantastic not only for long haul flights but for recovery after exercise.”

**Andrew Ambrose, Group Chief Executive, A-GAS**

“My socks had their first outing a month ago on a trip to Dubai and then to Jo'burg. They were fantastic, thank you. Super comfortable; different league to over the counter products.”

**Richard Foley Senior Partner for Pinsent Masons LLP**

“I was diagnosed with a blood condition that meant I was susceptible to blood clots and had led to several DVTs in my legs leaving me with venous reflux and associated problems such as fluid retention. I now wear my Isobar compression stockings when on my feet all day and certainly when flying safe in the knowledge that the risk of recurrence is mitigated. Isobar stockings are comfortable to wear, provide precisely the correct pressure where needed and are extremely effective at preventing swelling and discomfort. I wouldn't be without them.”

**Chris Neal, Director Sirius Petroleum, ex-player Harlequins and Bath**