

Velcro

Q. Why are Hook and Loop fasteners e.g. Velcro® used in medical devices?

A. Hook and Loop (H&L) is a powerful yet simple 'system' used to retain fabric in position. A simple internet search (December 2006), including www.velcro.com, clearly illustrates that H&L is widely used in healthcare applications from clothing to medical devices. Most healthcare facilities will have at least one, if not many applications that routinely utilise H&L for example:

- Blood pressure cuffs – Limb compression garments – Tourniquets
- Hoist slings – Ventricular Assist Device straps – Obstetric Cardiotocography

Q. Does the nature of H&L pose an *additional* risk of cross contamination?

A. Given the lack of any firm evidence that H&L poses an *additional* risk, it is fair to conclude that the answer is '**no more so than any other fabric that comes into contact with patients**'. If H&L posed a *specific* risk of transmitting infectious disease it would have become apparent before now, with the high focus on Healthcare Acquired Infection.

H&L systems have been designed so that they can be:

- a) **laundered** at the required temperatures for **thermal disinfection**
- b) are compliant with a number of different disinfectant agents and
- c) can be dry-cleaned.

So, even where visible fibre/debris is picked up, this will be dealt with during the decontamination process.

The greatest risk of cross infection is from reusing any device between patients without cleaning first; irrespective of whether there is an H&L component or not: hence the emergence of disposable products.

Q. Why does Huntleigh use Hook & Loop in some mattresses?

A. For every device, a risk/benefit analysis is undertaken and in the case of H&L the benefits are considered to outweigh any potential risk.

Benefit: To **optimise mattress performance** the cover must fit loosely over the inflating/deflating cells of a pressure redistributing mattress otherwise a ‘hammocking-effect’ occurs across the surface and reduces the benefit.

To **keep the cover in place**, without creating a tight box, H&L provides a strong and simple retention system.

The H&L system is **robust, low maintenance and easy to use**.

Risk: Hypothetically could increase the risk of cross-contamination.

Mitigating the risk: Both the cover *and* the mattress base are designed to be laundered between patients at temperatures appropriate for thermal disinfection; unlike many other systems.

The H&L component is not in direct contact with patient during normal use.

Not all mattress covers require securing in the same way. New and innovative technologies will increasingly enable covers to be fitted without the need for physical attachments (of any type) while still avoiding the detrimental ‘hammock’ effect.

We believe the concerns occasionally raised about the use of H&L are largely unfounded and, provided the mattresses are used and cleaned in accordance with the User Guide, the benefits strongly outweigh the risk.

These FAQ’s have been developed to answer common questions which arise during clinical practice and in the market place when clinical evidence is scarce. It is important to consider the holistic care of the patient and use clinical judgement making decisions based on the answers. If you cannot find an answer for which you are looking, please email karen.milton@arjohuntleigh.com with your question(s) and we will endeavour to answer it/them and make it/them available to help educate others.