

# Scalpel Injuries in the Operating Theatre:

*What can you do?*



## What is a scalpel injury and why should we care?

A scalpel injury is a type of sharps injury where a scalpel injures a healthcare worker, resulting in the skin being broken. The World Health Organization (WHO) estimates that healthcare professionals around the world experience a combined 3 million sharps injuries each year-- making sharps injuries the second largest occupational risk for healthcare workers.

In the 2000's, many countries began to introduce sharps safety legislation in response to the call for stronger infection controls. The response to legislation was effective in reducing sharps injuries outside the Operating Theatre, yet research has reported an increase in sharps injuries in surgical settings.

Scalpel injuries account for 17% of reported sharps injuries in the Operating Theatre, behind only suture needles (43%). Scalpel injuries pose a significant burden to healthcare institutions and their employees, yet many of these costs are often overlooked.

### IMMEDIATE COSTS

*The immediate costs are those associated with treatment of the scalpel injury, which may vary based on if it is an uncomplicated injury, or if the injury requires surgery and/or results in a bloodborne infection. Immediate costs are often considered by hospitals.*



#### Uncomplicated Injury Treatment

Post-exposure management for an uncomplicated injury has been estimated to cost US\$ 500-3,000



#### Injury Requiring Surgery Treatment

The estimated cost for a complicated injury where surgery is required is US\$ 1,300-15,818



#### Blood-borne Infection Treatment

WHO estimates that that sharps injuries cause 66 000 HBV, 16 000 HCV and 200-5000 HIV infections among healthcare professionals each year

### HIDDEN COSTS

*The hidden costs of a scalpel injury are associated with the "run-on" effects of a scalpel injury, and the risks hospitals face without a compliant sharps policy. Hidden costs are often overlooked by hospitals.*



#### Fines and Lawsuits

In the US, a sharps injury lawsuit resulted in an award for US\$ 12,200,000. In 2010, a UK hospital was fined £20,000 due to a sharps injury



#### Workers Compensation

Between 2012 and 2017, 1,213 successful claims for sharps injuries costed the NHS in the UK £4,077,441.



#### Non-Compliance

International standards on scalpel blade removal include EU Council Directive 2010/32/EU, OSHA standards and Australia/NZ standard AS/NZS 3825:1998



#### Social Costs- To Hospital

A sharps injury can lead to: high turnover, delayed service delivery, loss of key staff and poor functioning teams.



#### Social Costs- To Workers

Suffering a sharps injury can mean: reduced capacity for work, need for redeployment, need for re-training, lower staff morale.



#### Psychological Costs

A sharps injury can cause substantial and sustained psychological distress, including depression or PTSD.

## What can be done to prevent scalpel injuries and save money?

Prevention may require an upfront investment, but the savings add up when compared to the costs of a scalpel injury.

Early responses from industry to clinical and political concerns about sharps injuries were active safety-engineered devices, where the safety mechanism must be activated manually by the user. These have since proven to have poor activation rates and thus are not safe for users or a smart prevention method. In a 2015 study in one hospital, “safety scalpels” were involved in 60% of scalpel injuries.

With the increase of sharps injuries in the Operating Theatre, it is clear that current methods of scalpel blade removal including forceps, needle holder, or active devices are not working. The good news is that the current situation can be addressed by the introduction of a “scalpel safety” program with a single-handed, passive blade removal policy.

**Qlicksmart’s passive safety products were innovated by healthcare professionals to meet the unique needs of scalpel blade removal in different environments.**



### STERILE SOLUTIONS

*Qlicksmart’s sterile range of single-handed scalpel blade removers were developed with the needs of different procedures in mind.*

- BladeCASSETTE: safely removes and contains 3 scalpel blades, perfect for standard procedures
- BladeSINGLE: safely removes and contains a single scalpel blade, which is more economical for smaller procedures.
- BladeNeedleSYSTEM: combines a high quality needle counter with the safe scalpel blade remover, working within current practice.

*Qlicksmart’s patented blade-removal cartridge has the advantage of an audible “click” sound to indicate that the blades are securely contained, and are transparent for an easy count.*

### NON-STERILE SOLUTIONS

Qlicksmart’s patented BladeFLASK was the world’s first single-handed scalpel blade remover.

With an easy push, “click”, pull action, blade removal outside the Operating Theatre is made easy and safe.

The BladeFLASK is a certified sharps container with an automatic shut-off after 100 blades to prevent overfilling, and count-down indicator to remind users when the device will need replacing.



## Implementing a scalpel safety program

Single-handed scalpel safety programs are already making a difference in clinical settings outside of the Operating Room. The Qlicksmart BladeFLASK is currently helping healthcare professionals around the world safely remove more than 8 million scalpel blades each year.

It is now time for Operating Rooms to implement effective injury prevention strategies. Research suggests that the combination of a Qlicksmart scalpel blade remover and a hands-free passing technique can eliminate up to 50% of scalpel injuries in the Operating Room.

### CUSTOMER STORY

In 2015, Bacchus Marsh and Melton Regional Hospital (in Australia) had a Blood and Body Fluids exposure in the Operating Theatre, which they found was in part the fault of the needle counter being used.

In response, the hospital researched and tested safety devices to find which devices would best prevent injuries from needles and scalpel blades in the operating theatre.

Qlicksmart's BladeCASSETTE was ultimately implemented as the blade removal system for their operating theatres.

The Unit Nurse Manager at the time, Linda Aykens, stated:

*“The uniqueness of the BladeCASSETTE is that it offers the safest method of removing used blades as the blade remover is single-handed and contains the blade inside the cartridge immediately after removal. The BladeCASSETTE eliminates the risk of contact with the contaminated blades, providing the best practice for Occupation Health & Safety and Infection Control.”*


#### Qlicksmart devices can be seamlessly integrated into current practice because:

- ✓ Surgeons continue using standard scalpels, which they prefer
- ✓ Scalpel blade removal can be completed on-site
- ✓ They are compatible with most scalpel blades and handles
- ✓ Automatic containment of used scalpel blades ensures that downstream staff are protected from injury
- ✓ We work with local distributors who have proven that they support hospitals with training, have a dedication to quality, and share our passion for safety.

#### Find out more at:

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