

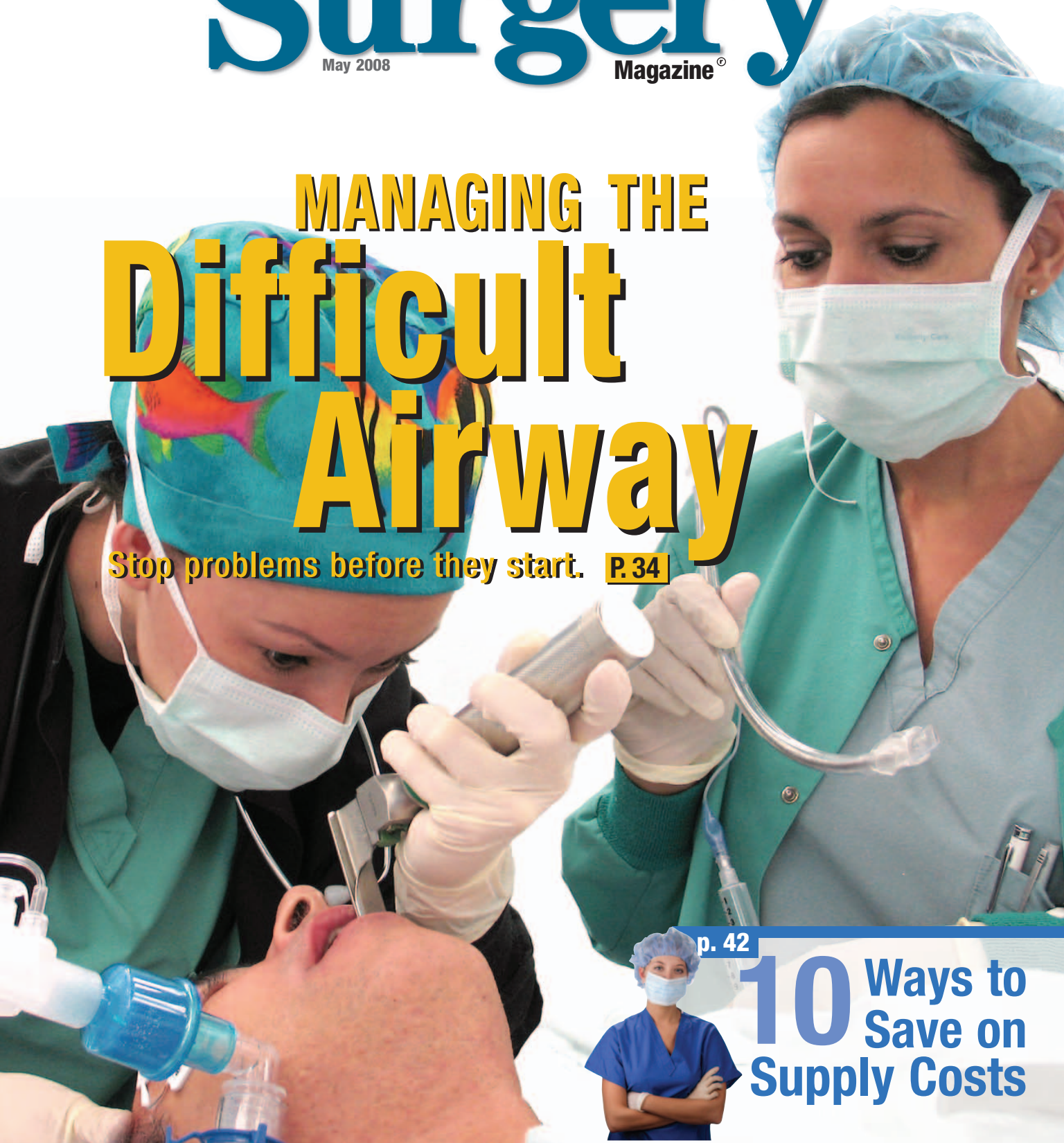
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# Outpatient Surgery

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## MANAGING THE Difficult Airway

Stop problems before they start. **P.34**



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## 10 Ways to Save on Supply Costs

If your surgeons are still using conventional blades rather than switching to safety scalpels, there's still much you can do to prevent sharps injuries and bloodborne pathogen exposure in your ORs. Your next line of defense consists of scalpel blade removers (we highlight several on page 70), neutral zones and passing trays.

### Inside the mind of a surgeon

In terms of sharps injuries, scalpel blade accidents are among the main offenders, second only to needlesticks but usually more severe in the damage they inflict. It doesn't matter how careful clinicians think they're being: Scalpels are razor-sharp blades attached to often-slippery handles. Accidents happen and the potential risk of injury and of bloodborne pathogen infection from a contaminated blade is high.

So why don't more surgeons use safety scalpels? There are a number of entrenched objections. Some argue that safety scalpels feel too light, don't fit in their hands well and feel clumsy to use. Others note that their retractable shields and other safety mechanisms obstruct the view of the blade and make them unsuitable for deeper incisions. While safety scalpel design has advanced beyond the

early, box-cutter-like models, for many physicians there's no substitute for conventional blades.

Another frequent

objection is the fact that safety scalpels are active devices, meaning that a clinician has to consciously activate the products' safety features. Unlike the passive blood collection devices, whose spring-loaded mechanisms simply require needle insertion to automatically activate the retracting feature, safety scalpels require the proactive retracting or shielding of the blade between uses. This adds steps to a surgical procedure, and some surgeons even fear injuries may accidentally occur while the steps are taken.

The ongoing development of safety-engineered scalpels is essential, but I don't foresee the creation of a passive safety scalpel — one that doesn't require the active participation of the clinician to activate its safeguard features — anytime soon.

### Safety in perspective

Even if your surgeons do accept safety scalpels into their ORs, that's not a 100 percent guarantee they'll make your facility safer. According to one study, researchers found that the safety features of many active safety devices were inconsistently activated and therefore ultimately had an uncertain rate of protection.<sup>1</sup>

A research paper by Fuentes et al., examined the 137 scalpel injuries reported by the staff of a 700-bed tertiary referral hospital between 1987 and

# Making Your Scalpels Safer

Consider these alternatives if your surgeons are resisting the switch to safety scalpels.

Ron Stoker | South Jordan, Utah



2003.<sup>2</sup> Of the 137 injuries, 72 of them — three suffered while the scalpel was being loaded, 24 during passing, 18 during blade removal, 14 during disposal, seven during cleaning and six during handling by downstream workers — were preventable, the paper says. The remaining 65 injuries occurred during use, when the blade could not by necessity be protected, and were classified unpreventable.

Fuentes and colleagues also reviewed strategies that might have helped surgical team members avoid the above-mentioned preventable scalpel injuries. In essence, they compared safety scalpels to scalpel safety. The use of a neutral zone or passing tray in tandem with a scalpel blade remover, they found, compared favorably to the use of safety-engineered scalpels in that both strategies had the potential to prevent a large number of the injuries.<sup>2</sup> Further, their study suggested, the more passive transfer and removal safety methods represented more effective interventions than safety scalpels' required user activations.

As a work practice control for preventing sharps injuries, a no-hands passing protocol is a concept gaining in popularity. Many surgical suites have designated "no-passing zones" or "neutral zones" in which instruments are laid down by one team member and picked up by another. Others have mandated the use of passing trays — some generic instrument trays, some magnetic pads or mats — to do the job and have found them to be as effective.

Either way, what's important is that there be no hand-to-hand passing of scalpels or other sharps in the OR, where eyes are usually focused on the surgical site above all else. One study indicates that the use of passing trays in the OR can reduce sharps injuries by as much as 65 percent.<sup>3</sup>

In their study, Fuentes and colleagues note that, among preventable scalpel injuries, blade removal is second only to hand-to-hand passing as a potential hazard. Indeed, the removal of conventional scalpels' blades by hand or with forceps is an antiquated and dangerous practice. The use of a scalpel blade remover, on the other hand, is an effective method of significantly reducing injuries and the threat of contracting bloodborne pathogens if incorporated into a facility's sharps handling protocols.

OSHA has indicated that, in situations where an employer has demonstrated that the use of a scalpel with a reusable handle is required, that blade removal must be accomplished through the use of a mechanical device or a one-handed technique,<sup>4</sup> and there are several blade remover products currently available.

Each blade remover operates with slight differences. One common method involves holding an open blade remover in one hand and placing the scalpel into the remover with the other. You then click the device shut and withdraw the bladeless scalpel handle. Single-hand blade removers work with the simplicity of plugging the scalpel into a slot in the remover and pulling it out.

## Decision's Edge

OSHA requires that front-line workers participate in the identification, evaluation and implementation of safety products that will best meet the needs of both patients and staff. You can help to coordinate their review, but can't impose a decision based on budgetary or other concerns. For this to be effective, clinicians will need to know what options are available for their use in order to make the choice that only they are qualified to make. You can assist by arranging vendor visits, product trials and specification comparisons. **OSM**

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## References

1. A comprehensive approach to percutaneous injury prevention during phlebotomy: results of a multicentre study, 1993-1995. *Infection Control and Hospital Epidemiology* 2003; 24(2):97-104.
2. Fuentes H, Collier J, Whitby M, Sinnott M. "Scalpel Safety": modeling the effectiveness of different safety devices' ability to reduce scalpel blade injuries. Submitted for publication to *The International Journal of Risk & Safety in Medicine*.
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4. OSHA. Use of passing trays and single-handed scalpel blade remover in a surgical setting. [www.osha.gov/pls/oshaweb/owadisp.show\\_document?p\\_table=INTERPRETATIONS&p\\_id=25339](http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=25339)

## Scalpel Blade Removers

— Compiled by David Bernard

### DeRoyal

#### Blade Remover

(800) 251-9864

www.deroyal.com

**Price:** \$0.50 each

**FYI:** DeRoyal's

blade remover safely removes blades of all sizes from standard metal scalpel handles and contains them for disposal in sharps containers. Made of clear plastic, it allows for easy blade counts at the ends of procedures, says the company. It is operated by placing it open on a flat surface, placing the blade end of the scalpel inside, closing and locking it. Pulling the scalpel while holding the remover captures the blade.



### Feather Safety Razor Co.

(Distributed in U.S. by Graham-Field Health Products)

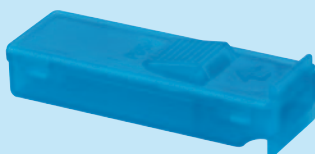
#### Blade Remover and Blade Remover Sterilized

(800) 347-5678

www.grahamfield.com/channels/home.aspx

**Price:** \$2.50 each

**FYI:** The Feather blade remover, also available as a sterile, single-use device, enables the safe and easy removal of used disposable blades from any size or type of scalpel handles, improving safety and hygiene by eliminating direct contact with blades, says the company.



### Miltex

#### Blade-Safe 4-100

(866) 854-8300

www.miltex.com

**Price:** \$17.27 each

**FYI:** Miltex's Blade-Safe blade remover protects hands against accidental cuts and punctures for the safe removal of scalpel blades from any handle in any type of practice, the company says. Easy to use, the stainless steel device is autoclavable for reuse.



### Qlicksmart

#### Flask and Cassette 3in1

mjs@qlicksmart.com

www.qlicksmart.com

**Price:** Flask, \$29; Cassette 3in1, \$3.25

**FYI:** Qlicksmart's Flask is a scalpel blade remover and sharps container able to hold 100 blades. The wall- and bench-mountable device enables single-handed removal, and the company notes that it costs less than 100 safety scalpels. The Cassette 3in1 is a disposable, single-use, sterile-packaged device that can remove and contain three blades with single-handed operation.



### Ribbel International

#### Disposable Blade Remover

(917) 338-7255

www.ribbel.com

**Price:** \$5 each

**FYI:** Ribbel's disposable blade remover works efficiently with #3 and #4 scalpel handles to remove blades sized from #10 to #25. Its lid will not close if the blade is improperly placed into the removal slot. While it is designed as a disposable item, the company says it is steam autoclavable and gas sterilizable. It is available non-sterile, in boxes of 50 removers, or sterile, in boxes of 25 individually-wrapped removers.



### Swann-Morton

#### Single-use Sterile Blade Remover

+44 114 2344231 4

www.swann-morton.com

**Price:** Box of 50, \$9

**FYI:** This sterile blade remover can be taken into the OR and used during a procedure, says the company. The device safely removes a contaminated sharp, which is encapsulated within the unit. The remover's transparency assists in the blade count before final disposal in a sharps container.

