

# Sharps Safety and Neutral Zone Implementation in the OR Environment

Dr. Stephen B. Lober, MD

## 1. Background

The majority of surgical “sharps” injuries occur during the act of passing instruments such as scalpels, skin hook retractors, and hypodermic needles from one operative personnel to another. Statistically, the operating surgeon is at highest risk for such injuries, which can allow for the transmission of HIV, HBV, and HCV pathogens.

## 2. Discussion

To help reduce the incidence of such injuries, it has become common practice to incorporate the hands free transfer (HFT) of such instruments utilizing a designated area referred to as the “neutral zone”. This is intended to help avoid the inadvertent sharps injuries that can occur when passing sharp instruments by way of hand-to-hand.

Numerous embodiments of the neutral zone have been devised in an attempt promote HFT's. A common method is to arbitrarily designate an area of the mayo stand as being the neutral zone. This somewhat ‘imaginary’ neutral zone is often poorly delineated, and subject to variation throughout a single case due to changes in scrub tech personnel. Trays (such as emesis basins) have been used as neutral zones that can be used as mobile platforms for passing sharp instruments back and forth, but such devices are often perceived by the operating surgeon as being both cumbersome and bothersome, and do not completely circumvent the potential dangers of what is still a form of a hand-to-hand transfer. Finally, the *soffzone*<sup>®</sup> neutral zone tray has been designed to clearly designate a true neutral zone on the mayo stand to facilitate HFT's and maximize acceptance by all operating personnel, including the operating surgeon.

## 3. Recommendations

The *soffzone*<sup>®</sup> neutral zone tray has been designed to:

- clearly delineate a true neutral zone for sharps placement and HFT's.
- fit perfectly on the MAYO stand (sized 6”x9”)
- provide high visibility of sharps instrumentation via low profile design.
- maximize cost-effectiveness / minimize biowaste production with reusable silicone.

Furthermore, the *soffzone*<sup>®</sup> tray has been designed to be unobtrusive to the operating surgeon, providing for a high rate of acceptance and actual utilization.

### Resources:

Statement on Sharps Safety, American College of Surgeons, online October 1, 2007.

OSHA-AORN Sharps Injury Prevention Program. May 2009.

Sharps Safety Tool Kit. AORN. [www.aorn.org](http://www.aorn.org).

Practical strategies to prevent surgical sharps injuries. Guglielmi, Ogg. American Nurse Today. Sept 2012, Vol. 7, No. 9.