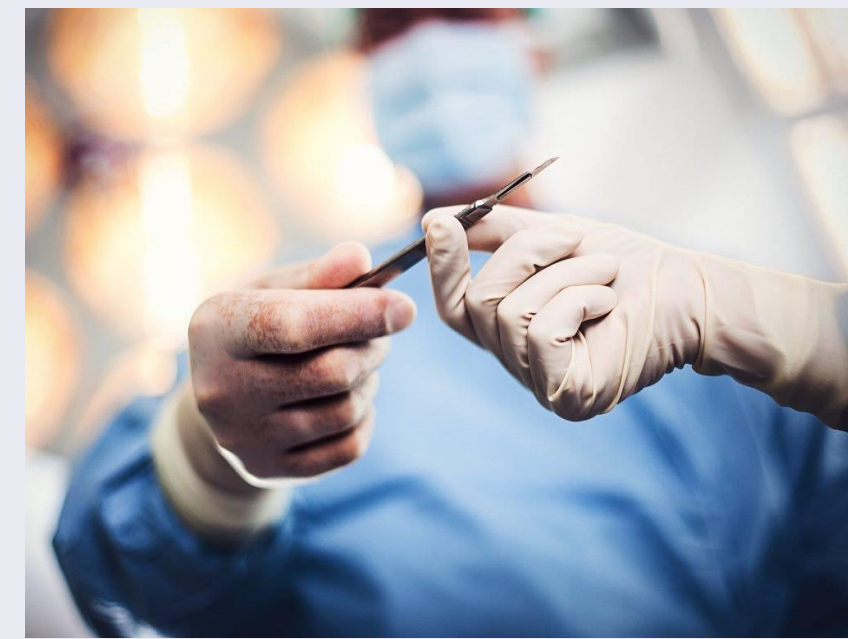


## Background and Significance

- Healthcare workers are at risk for needlestick and sharp injuries, especially those who work in fast-paced environments such as the operating room (OR) where the handling of sharp instruments and devices is prevalent.
- In the past two years, the Santa Monica Main OR has experienced an increased number of needlestick injuries which highlighted the need for an intervention.
- Association of periOperative Registered Nurses (AORN) reports 40.6% of needlestick and sharps injuries occur in perioperative areas (Kyle, 2023).
- Needlestick injuries are one of the most common occupational hazards faced by healthcare workers, despite the highest-risk environment being within the OR. (DAĞCI & YAZICI SAYIN, 2021).
- A survey was conducted in January 2025 to determine the underlying cause of sharp injuries in the OR. The majority of respondents stated the lack of communication and unprotected suture needles were the main cause.



**High-Risk Environment for Needlestick & Sharps injuries**

### Purpose

- Current practice does not have designated safety zone for handling sharps, lack of communication amongst surgical teams, and high volume of incidents with improper handling of sharps.
- The purpose of this initiative is to decrease needlestick injuries in the Santa Monica Main Operating Room.

### PICOT Question

Among operating room staff handling sharps, does the use of a safety zone/tool as compared to not using a safety zone/tool affect the prevention of needlestick injuries?

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Santa Monica Main Operating Room Unit Practice Council

- Kate Shitara, MSN, RN, CNOR, Unit Director
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- Jeff Guevara, CST

## Synthesis of Evidence

- Collective evidence summarized by the AORN designates that a safety zone needs to be implemented to effectively reduce sharps/needlestick injuries (Kyle, 2023).
- Safe handling of sharps and reducing the risk of blood-borne pathogen transmission requires strict adherence to universal precautions for the handling and disposal of sharps, with active engagement and accountability from all members of the surgical team (Kugelman et al., 2022).
- The hands-free technique for example, along with the use of visual training materials, has proven effective in decreasing incidences (DAĞCI & YAZICI SAYIN, 2021).

### Goal

To reduce needle stick injuries among operating room staff by 25% within 6 months through the implementation and consistent use of a designated safety zone/tool for passing sharps, compared to current practices without a safety zone/tool.



## Change of Implementation

- Staff education on best sharp safety practices.
- Standardize a Safety Zone for proper sharps handling in all procedure that is feasible for use.

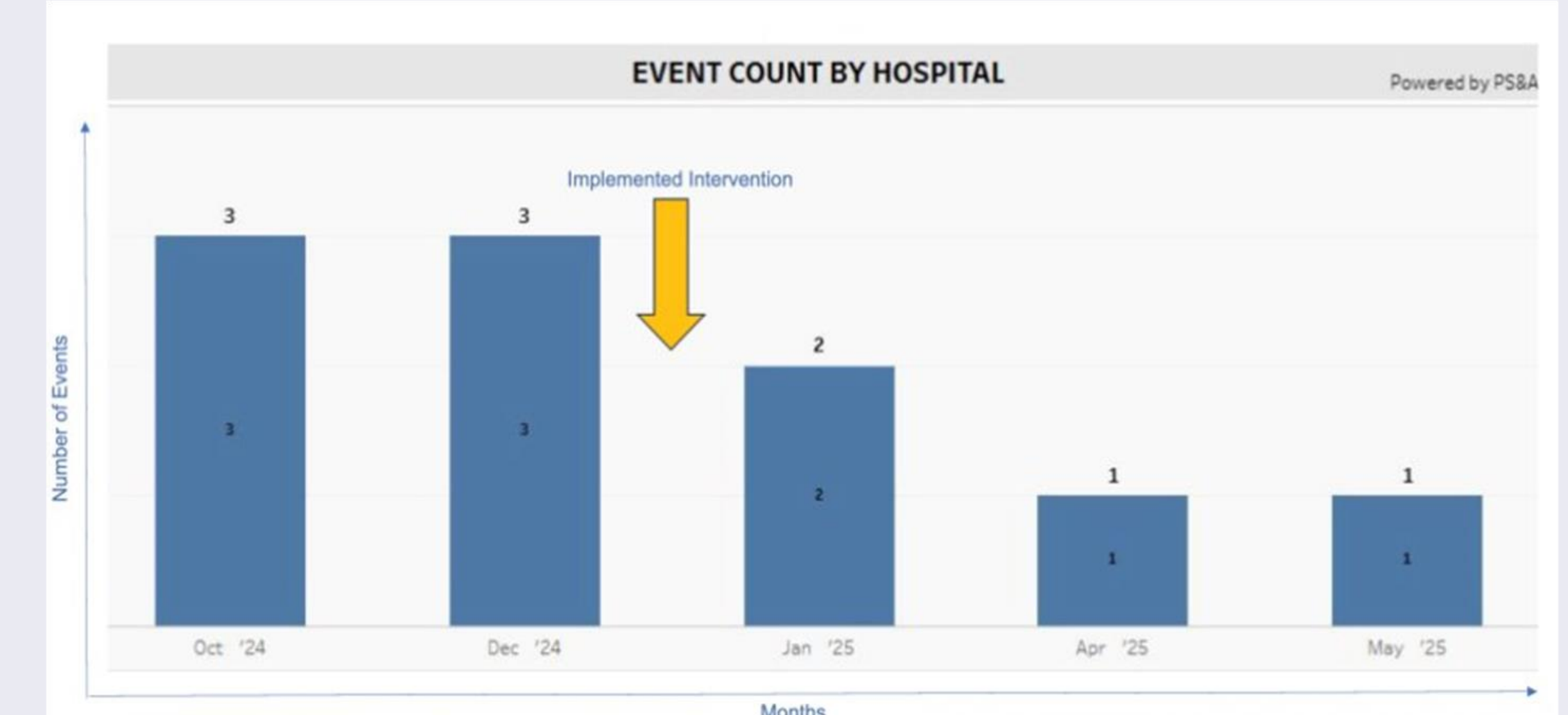


## Improvement Plan



## Results

- Since implementing the change with using the Safety Zone in early of January 2025, by the end of May 2025, there was a 66.6% reduction in accidental needlestick/sharp injuries.



## Impact/ Conclusion

- Decrease in number of needlestick injuries in the surgical department.
- Minimize resource waste resulting from needlestick incidents.
- Reduce operational disruptions from needlestick incidents.



## Recommendations

- Engage and Empower Staff for Long-Term Support.
- Maintain and Expand the Use of the "Safety Zone" in the operating room.
- Share Findings and Collaborate for improvement
- Integrate Safety Practices into Policy, incorporate the "Safety Zone" device as a standard practice in the UCLA Neutral Zone and No-Touch Technique policy (OR-HS 140).
- Integrate Safety Practice to other procedural areas.

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