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Quantifying Occupational Risk in the OR from Blood and Body Fluid Splashes

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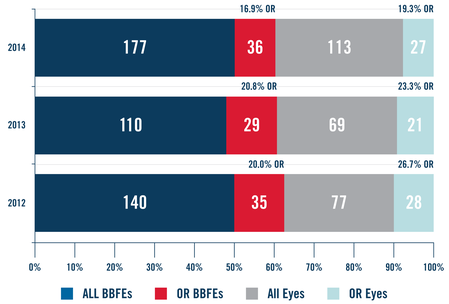
INTRODUCTION

- Vitality of the OR is a balance of managing patients with known or suspected infectious disease and the occupational risks associated with those potential exposures.
- With the globalization of travel and emerging and re-emerging infectious disease trends, measuring, analyzing, and preventing exposures to bloodborne and infectious pathogens are more important today than ever.
- Discussion about occupational risks in the OR associated with mucocutaneous blood/body fluid exposures (BBFEs) compared to sharps injuries and needlesticks are often underrepresented.

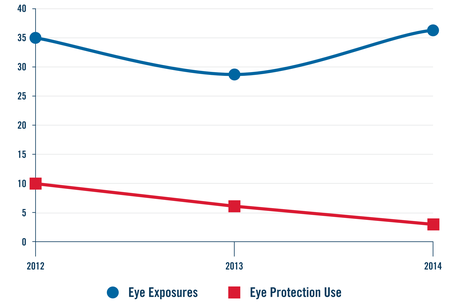
METHODS

- Occupational incident surveillance data is captured by the International Safety Center's Exposure Prevention Information Network (EPINet®) surveillance system from nearly 30 US health systems (hospital-based).
- This study quantifies splashes and splatters of blood and body fluids, especially those BBFEs with the highest risk—to eyes and conjunctiva—over a three-year period (2012-2014).
- The study also illustrates differences between exposures and eye-protection use across all hospital departments compared to the OR only.

BBFEs & Eye Exposures in All Non-OR Departments Compared to OR Only



Number of Eye Exposures & Eye Protection Use in the OR Only by Year



RESULTS

- During the data collection period (2012-2014), there were increasing numbers of all BBFEs in all departments of the reporting hospitals.
- There were increasing eye exposures in the OR (35 in 2012, 29 in 2013, 36 in 2014).
- There was subsequent decreasing use of eye protection in the OR (28.6% in 2012, 20.7% in 2013, 8.4% in 2014).
- However, as a percentage of total facility exposures, those in the OR are declining for all BBFEs and for eyes only.

DISCUSSION

- Based on the data, eye and conjunctiva exposures are on the rise, but PPE use and compliance are on the decline.
- The data illustrates the exacerbation of overall occupational risk at a time when emerging infectious disease threats are high.
- It also showcases the ability for health systems to learn from strategies implemented in the OR, so that they may build safer environments throughout the facility.

ACKNOWLEDGEMENT

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