Mucocutaneous Eye Exposure Risk on the Rise

Amber Hogan Mitchell, DrPH, MPH, CPH
President | Executive Director, International Safety Center

Background

- Workers who care for patients with infectious disease are at risk for acquiring occupational infection or illness.
- Occupational risk is elevated today more than ever due to globally emerging and re-emerging disease threats.
- Compared to sharp and needlestick injuries, risks associated with mucocutaneous blood/ body fluid exposures are underrepresented in the occupational and scientific community.

Methods

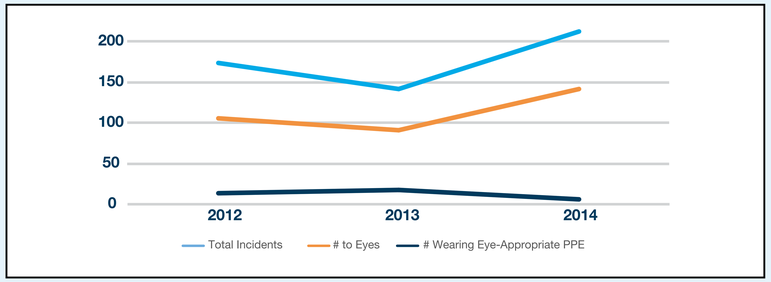
- The occupational incident surveillance study quantifies mucocutaneous exposures, especially those to the highest-risk body location: eyes and conjunctiva.
- It describes the International Safety Center's Exposure Prevention Information Network (EPINet®) Blood and Body Fluid Exposure surveillance data in 30 U.S. hospitals and compares exposure incidents over three years (2012-2014).

Results

Figure 1: EPINet Report for Blood and Body Fluid Exposures, Eye Incidents

Year	Total Incidents Reported	# to Eyes	% to Eyes	# Wearing Eye-Appropriate PPE	% Wearing Eye-Appropriate PPE
2012	174	105	60.0	14	8.0
2013	141	91	64.5	18	12.8
2014	213	142	65.7	6	2.8

Figure 2: Blood & Body Fluid Exposures, Eyes, PPE Use 2012-2014



Discussion

- Eye and conjunctiva exposure is on the rise.
- PPE compliance (use of goggles and faceshields designed to protect healthcare workers from infection and illness risk) is on the decline.
- The data illustrates the exacerbation of overall occupational risk in a time where emerging infectious disease threats are high.
- Changing trends in exposure and PPE use illustrate an opportunity to improve compliance, decrease exposures, and reduce overall occupational illness.

Conclusion

- U.S. hospital workers may be unnecessarily at risk due to infectious disease exposures to the unprotected eye.
- Occupational health professionals need to pay careful attention to where and how blood and body fluid incidents are occurring so they can lead efforts to adequately increase the use of exposure-appropriate PPE.