Room 7 - Trends in sharp injuries among nurses in Massachusetts hospitals

Download

Session: Round Table: Worksite Wellness & Health Promotion

Program: Occupational Health and Safety

Abstract

Background: Sharps injuries (SIs) continue to be an outstanding occupational health hazard for healthcare workers due to the potential exposure to bloodborne infectious diseases. Nurses, especially, are at a high risk of SIs due to the frequent use of sharps devices. Previous research has estimated that 11% of nurses experienced an SI within a 12-24 month time period, while 64% of all nurses experienced at least one SI during their career.

Methods: Occupational incident surveillance data among nurses from 2002-2018 from the Massachusetts Sharps Injury Surveillance system were analyzed. Injuries were grouped into three categories for comparison based on the year in which the SI occurred. Chi-squared and Cochran-Armitage trend tests were used to compare SIs between the three time periods and assess trends.

Results: In 2002-2004, 2009-2011, and 2016-2018, a total of 10,400 SIs (38% of all reported SIs) were sustained by nurses. Across all 3-year categories, nurses were most often injured in inpatient units, excluding Intensive Care Units (40-43%), injured by hypodermic needle/syringes (45-55%), and injured by devices used for injections, (36-49%), specifically through subcutaneous injections (45-81%). SIs with devices associated with injection procedures have increased 14% while SIs with devices associated with blood procedures have decreased 8%, $P < 0.01$. Within injection procedures, SIs occurring through “activating sharps injury protection feature” and “patient moved and jarred device” increased from 2002-2004 by 12%, and 6%, respectively, $P< 0.01$. From 2002-2004 to 2016-2018, the number of SIs with devices without an engineered sharps injury protection (SESIP) mechanism have decreased by 20%, $P< 0.01$.

Conclusions: Nurses are at an increased risk of experiencing a SI due to the frequent procedures involving sharps devices. Understanding the specific factors that contribute to SIs will enable the development of targeted interventions aimed at preventing SIs.

Authors

Michelle Reid

Massachusetts Department of Public Health

Presenter

Angela K. Laramie

Massachusetts Department of Public Health

Authors

Emily Sparer-Fine

Massachusetts Department of Public Health

Learning Areas

Keyword(s)

Surveillance, Nurses/Nursing

Please Login for access to recordings.

I agree to comply with the American Public Health Association Conflict of Interest and Commercial Support Guidelines, and to disclose to the participants any off-label or experimental uses of a commercial product or service discussed in my presentation