

Safety Engineered Devices: Use and activation in Australia

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Publication Healthcare Infection Journal 2014;19 (3):
95-100. <http://dx.doi.org/10.1071/HI14009>

“It is disturbing that 75.5% of hollow-bore needles were either capped or naked, indicating a high proportion of Australian healthcare personnel are unnecessarily at risk of sharps injuries while handling sharps. The high non-use of SED and non-activation of SED needs researching. Widespread SED adoption (automatic and semi-automatic SED wherever possible), repetitive competency training and safety ownership is needed to protect healthcare personnel.” - Authors

What was the study?

Sharps injuries (SI) among healthcare personnel in Australia are alarmingly high. The use of safety engineered devices (SED) can reduce SI incidents, but the extent of SED use in Australia is unknown.

This study, **‘Frequency of use and activation of safety-engineered sharps devices: a sharps container audit in five Australian capital cities’** took a sampling of sharps containers from 27 hospitals in 5 cities. Contents were decanted, categorised and counted to identify the proportion of hollowbore SED among the sharps present, and the proportion of SED correctly activated.

What were the results?

1,212 litres of sharps (167.9 kg) from 102 sharps containers from 27 hospitals in Sydney, Melbourne, Brisbane, Perth and Adelaide were audited. Many devices were blood-contaminated. Results showed:

- Of the 9,651 hollow-bore needles, 30.4% were SED
- Of the SED, 19.4% were either not activated, or only partially activated
- Of the 6,718 non-SED, 30.6% were capped needles/needle-syringes
- Overall, 54.2% of devices were discarded ‘sharp’

What does this mean for you?

- The results show SED alone are insufficient in preventing Sharps Injuries. A safe sharps containment system is an essential part of Sharps Injury prevention.
- The high incidence of Sharps Injuries may be related to low SED use and needle-capping.
- To reduce Sharps Injuries, hospitals need to use SED more extensively and additional training is required to ensure SED are used correctly, and needles are discarded uncapped.

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