

Jersey Safety Syringe System for Dental and Medical Syringes

Background

As per OSHA estimates, 5.6 million workers in the health care industry are at risk of exposure to bloodborne pathogens, including human immunodeficiency virus (HIV), hepatitis B virus (HBV), hepatitis C virus (HCV) due to needlestick injuries. About 600,000 to 800,000 needlestick injuries occur annually among healthcare workers and this remains an important concern and represents significant financial burden to healthcare. A large number of these injuries can be prevented by engineering syringe safety mechanisms. **The current invention provides a disposable safety syringe system that eliminates the need for hand activation of the safety mechanism thereby reducing the potential for needle stick injuries to the dental care provider during use.**

Description of the Technology

UMDNJ inventors have designed a safety syringe system for the prevention of sharps injury involving needle devices during dental procedures. The design of the safety system prevents the dentist's hands from coming in contact with the needle during dental procedures as well as setup and breakdown. Additionally, the design of the safety mechanism allows the dentist to access hard to reach areas of the patient's mouth. The safety mechanism can be activated and deactivated with ease unlimited number of times during dental procedures. The current invention also has a locking needle sheath to prevent accidental needle sticks during the assembly and disassembly process.

Advantages

- Disposable
- Prevents needle stick to dental care providers and the safety mechanism activator is hands free
- Slick design reduces cost of biohazard disposal.
- Design is easily adaptable to medical syringe
- Fits standard metal dental syringe.

Applications

- For use as a safety mechanism for dental syringes for sharps injury protection

Deliverables

- Design of the safety system
- Method of using the system

Patent Status

- United States patent application filed.
- Patent application published on October 7, 2004 (Publication No.: US/2004/0199124 A1)

Licensing Opportunity

- This technology is available for non-exclusive or exclusive license.

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