

Date: \_\_\_\_\_

### Sharps Evaluation of the Septodent Ultra Safety Plus XL Safety Syringe

*(The Needlestick Safety and Prevention Act requires an annual review of any new technology that may make handling sharps more safely. This is a review of the only safety syringe that is readily available. Please review and discuss this with others in the office and file in OSHA notebook to satisfy the annual review requirements. You may also want to evaluate safety scalpels, blunt suture needles, etc.)*

Dental supply representatives have indicated that the only syringe that is still widely available is the Septodent Ultra Safety Plus XL Safety Syringe, so that's what was evaluated.

The syringe comes with an illustrated instruction sheet. Instructions can also be gotten from the internet or an instructional DVD.

The syringe is made of plastic, is reusable and accepts standard carpules. It has a sheath that fits over the needle after the injection is completed which easily locks into place (and it's easy to tell when the safety feature was engaged) and the entire needle apparatus can be removed in one piece with the sheath intact so the needle stays covered, which reduces the risk of a stick.

Here are the advantages of the ultra safety syringe over a regular syringe, **according to the manufacturer:** the protective sheath is part of the apparatus; providing an engineering control "makes incorrect needle recapping less likely"

Evaluators didn't really think that was an advantage over a traditional syringe recapped with a one handed recapping method; none of them had ever experienced "incorrect needle recapping" and since starting to use a one handed recapping method in the early 1990s, none had reported a stick injury from a needle (several reported minor injuries with a bur or a solid instrument over the past decade)

The evaluators agree that the device did not appear to increase patient discomfort, the safety device on the syringe was easy to recognize and use, the instructions given by the company were easy to understand, and the product could have been used without too much additional training (although the dental supply reps indicated that there is a learning curve and prior studies have indicated that dentists are more likely to be stuck during that time)

Here are the **disadvantages** according to the evaluators: the syringe was plastic and felt "flimsy" and "unstable" while using and loading with anesthetic carpules. All of the users felt that changing carpules was much more difficult than changing them on a traditional syringe. Some users with large hands didn't feel the syringe was comfortable. Seeing aspirated blood was more difficult through the protective sheath. The hub and sheath were large and difficult to see around, and depending on the angle of the practitioner, the needle tip and site of injection weren't always visible, especially in a smaller mouth or one with an active tongue; breath also fogged up the sheath, making it harder to see. Out of fourteen syringes, the sheath was accidentally placed from the holding position to the locked position on two of them and we had to get a new syringe.

**Conclusion:** The evaluators all agreed that device does not meet their clinical needs. After extensive discussion, evaluators agreed that the traditional syringe and a one handed recapping method was safer than using a safety syringe because of the lack of visibility and difficulty in loading and use. Previous studies have shown that most needle injuries occur among inexperienced practitioners; experienced practitioners do not find the "safety" syringes to be safer and do not intend to use them. Members of the dental team who break down traditional syringes are trained in methods to minimize exposure and do not report needlesticks (transport only sheathed needles and break down syringes where sharps containers are located)

Names of evaluators (doctors/hygienists/assistants):

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