

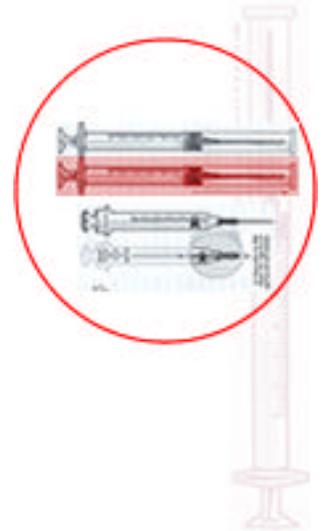
NIOSH recommends that health care facilities use safer medical devices to protect workers from needlestick and other sharps injuries. Since the passage of the Needlestick Safety and Prevention Act in 2000 and the subsequent revision of the OSHA Bloodborne Pathogen Standard, all health care facilities are required to use safer medical devices.



SAFER MEDICAL DEVICE IMPLEMENTATION IN HEALTH CARE FACILITIES

SHARING LESSONS LEARNED

NIOSH has asked a small number of health care facilities to share their experiences on how they implemented safer medical devices in their settings. These facilities have agreed to describe how each step was accomplished, and also to discuss the barriers they encountered and how they were resolved, and most importantly, lessons learned.



DISCLAIMER: Provision of this report by NIOSH does not constitute endorsement of the views expressed or recommendation for the use of any commercial product, commodity or service mentioned. The opinions and conclusions expressed are those of the authors and not necessarily those of NIOSH. More reports on Safer Medical Device Implementation in Health Care Settings can be found at <http://www.cdc.gov/niosh/topics/bbp/safer/>

Programs for Selecting and Evaluating Safer Medical Devices



Phase 5: Implement and Monitor the New Device

Description of Facility

Our hospital is a not for profit corporation. We have served this community for over ninety years. We offer a full range of general acute care, drug rehabilitation and specialized health services. We are licensed for 170 beds; we have an admission rate of approximately six thousand patients per year. Our in-patient dialysis unit provides treatment to four - six patients daily. Our facility performs approximately five thousand surgical procedures yearly. We also deliver services via five off site clinics. We provide additional services to the community through our comprehensive detoxification unit, chemical dependency unit, and HIV (Wellness Center).

Availability of the new device for implementation:

We did not experience any problems related to obtaining the new safety product. This was probably because we remained with the same company. Since they had been our supplier for conventional angio-catheters, and syringes, the decision to remain with the same company definitely worked in our favor. Our purchasing department had a good relationship with the vendors, and we received firm commitments for delivery schedules.

Determining satisfaction with new device among employees:

We devised a follow-up Safety IV Catheter Form that would serve as feedback after the Nurse/Doctor had used the device at least 10-25 times. Our main goal was to assess compliance, technique and safety device activation. We did not implement the form until the new device had been on the units for six months; we felt that the staff needed at least this much time to assess the product. We also needed to assess first-start efficiency, restarts, and possible infiltration problems related to technique.



SAFETY IV CATHETER IMPLEMENTATION FORM

	<i>Agree?</i>	<i>Yes</i>	<i>No</i>
<i>The safety device can be activated with ease.</i>			
<i>The catheter can be advanced/threaded with either 1 or 2 hands.</i>			
<i>I am able to keep my hands behind the needle during insertion.</i>			
<i>Have you noted an increase in patient discomfort or bruising at the site?</i>			
<i>Do you feel that the number of restarts is related to product /mechanism problems?</i>			
<i>Did you receive adequate training on this product?</i>			
<i>Do you feel that you need additional training?</i>			
<i>Were the posters and safety tips helpful to you?</i>			
<i>Number of uses required until comfortable (circle)</i>		10-15	16-25

Name: (Optional) _____ Dept: _____

Questions: _____

Comments: _____

Ninety percent of the responses that we received were favorable. We noted that most of the responders stated that they felt comfortable with the device after 10-15 uses. We established a time line to assess and monitor exposure rates, and also a review of after exposure incidents. If an employee sustained an injury because of failure to activate the safety device, they were to be re-instructed on proper use of the device. We would also schedule frequent direct observations which were to be conducted by the education department and the infection control practitioner.

Determining patient satisfaction with the new device:

In order to assess patient satisfaction we added a question in the employee implementation form that referred to patient comfort/discomfort. We found that it was difficult to actually assess patient satisfaction, due to many variables, such as the needle size, nurse skill and technique. Patient factors were also considered, which included, past IV experiences, small fragile veins, and extremely thin or heavy patients.



Page 3. Phase 5

Determining Management satisfaction:

The most difficult problem that we encountered was the financial aspect. The team presented documentation to the management team in order to prove that the purchase of the more costly equipment could actually result in savings. It has been proved that safety devices reduce exposures and worker follow-up, which has become more expensive with the new post exposure prophylaxis regimens for HIV. We obtained our data from the Exposure Prevention Information Network (EPINet), which profiles sharp decreases in sharps injuries after safety devices are implemented. Management agreed that though the switch to safety products has a substantial financial impact, the most important factor was employee safety. Our administrators had worked through the process with the team; their early involvement was a definite advantage.

Lessons Learned:

1. The Safety Catheter Implementation form was such a valuable tool that we decided to have an annual safe needle campaign. Some of the ideas included asking the staff to submit slogans and poems, with a prize reward for winning submissions. It was also suggested that we hang posters on the nursing units profiling 'Number of days without injury'.
2. The removal of old stock from the facility is important; we were aware that some employees would hoard the devices because of comfort and familiarity issues. It was our belief that if they did not have access to the old devices, the transition would go smoother.
3. Be prepared to offer additional training as needed. Newly hired personnel may not be familiar with the new devices. Maintain an accessible library along with training materials and videos.
4. Schedule surprise technique observation rounds. Sharps container checks are a useful tool to assure compliance and safeguard the staff.



Improving the process:

The transition went smoothly and we did not have any major problems, however there are a few things that we could have done differently. We should have solicited more support from the staff physicians. We faced a few problems and some resistance in the anesthesiology department. We feel that this was because we did not continue to solicit their support during the early planning stages. Since their department is so specialized, they had some issues with device selection. In addition, due to the part-time status of some of their staff, training periods were often extended for long periods of time.

Advice to similar facilities:

Work closely with your staff during the process, if the final product has a safety device that the employees don't understand or it is difficult to use, exposures will continue to be a threat to healthcare workers.

Staff hours and Other Costs:

<i>Management</i>	<i>50 Hours</i>
<i>Administrative</i>	<i>15</i>
<i>Staff</i>	<i>32</i>
<i>Total</i>	<i>97 Hours</i>

Materials: Copying Forms, Meeting/minutes