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/

Phase 4: Evaluate Safer Medical Devices

Facility Profile

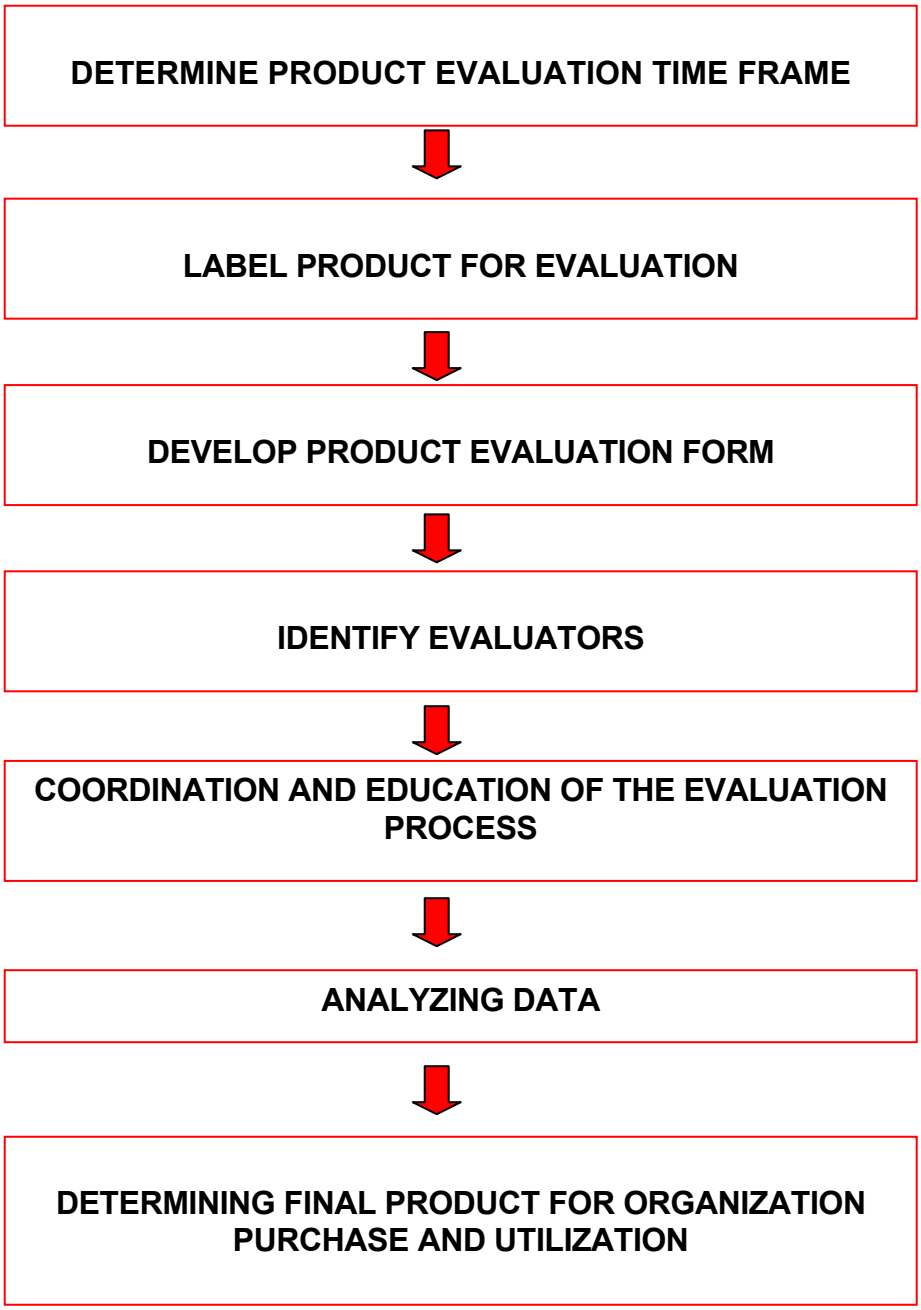
Privately owned long term care organization that includes nine facilities with census total of 800 beds. Each facility is unique in that they offer skilled, rehabilitation and intermediate nursing care services as well as services for the mentally retarded.

In Phase 3 " Identify and Screen Safer Medical Devices", the safe medical device team determined the devices the direct care staff would evaluate. These devices were determined upon the goal: Identify safer medical devices that will have the greatest impact on preventing occupational exposure.

Determined Devices for Screening:

1. Syringes (all sizes)
2. Lancets (blood glucose monitoring)
3. Sharps Disposal Containers (all sizes)

PROCESS: EVALUATION OF SAFER MEDICAL DEVICES



DETERMINE PRODUCT EVALUATION TIME FRAME

The Safe Medical Device Committee determined the time frame for the evaluation of safer medical devices. The Committee determined that the evaluation for each product would consist of 30 days for each product evaluated. No two products would be evaluated during the same 30-day time frame.

LABEL PRODUCT FOR EVALUATION

Products for evaluation were labeled with the product number and facility location. No product names were used in the evaluation process. For example: Syringe product # 111-A = the product code being evaluated and the name of facility evaluating.

DEVELOP PRODUCT EVALUATION FORM

An evaluation form accompanied each product evaluated. The Product Evaluation Form included:

1. Consistent format throughout evaluation process
2. Identification of facility and product number
3. Circling of the most appropriate answer for each question.
4. Consistent scale of 1 through 5 (agree…disagree) and N/A (not applicable)
5. Training needs
6. Direction for return of the product evaluation form
   - see attached examples of product evaluation forms

IDENTIFY EVALUATORS

All facilities were included in the evaluation of products. Nurses with direct care contact from each shift were chosen as evaluators.

COORDINATION AND EDUCATION OF THE EVALUATION PROCESS

Evaluation, coordination and education direction for the Evaluation of Safer Medical Devices was provided by each facility's Staff Development Educator prior to implementing the product evaluation.

The Staff Development Educator also provided procedure education, controlled product distribution and collected the product evaluation forms for return to the Safe Medical Device Committee.

ANALYZING DATA

The Safe Medical Device Committee analyzed the data received from the evaluation forms. Products were analyzed and rated according to the scale provided on the evaluation form.

DETERMINING FINAL PRODUCT FOR ORGANIZATION PURCHASE AND UTILIZATION

Those products rated as 4 or 5 were eliminated from product consideration. Those products rated as 1, 2, or 3 were considered for product purchase and utilization. Those products that rated cumulatively closer to 1 were chosen as the appropriate device for organization purchase and utilization.
* see attached examples of product evaluation forms

Recommendations and Lessons Learned

After reviewing and analyzing this process, the Safe Medical Device Committee identified the following problems during the process of Evaluating Safer Medical Devices.

1. Procedures for product use were distributed during the initial education of the evaluation process by each facility Staff Development Educator. Some Staff Development Educators provided product procedure reference manuals on the unit. Others depended on the nurse to keep the copy of the procedure that was distributed during the initial education. Those facilities that had the product procedure reference manual on the unit had fewer questions about the process and product. This resulted in 95% of product evaluation form return. Those facilities that depended upon nurses referring to initial education materials had more questions and 50% compliance with product evaluation form return.

2. The Safe Medical Device Committee determined that nurses would be the product evaluators for the evaluation of sharps containers. During the evaluation process, it was determined that it would have been beneficial to include the housekeeping department in the education and evaluation for this product. According to organization policies, housekeepers are responsible for sharps container disposal and sharps container replacement in brackets at various locations throughout the unit. This lack of education was identified early in the process and corrected.

3. The final decision for organization product purchase and utilization was made by the Safe Medical Device Committee. The committee neglected to communicate the final decision to the general staff and began the implementation and monitoring phase. Staff Development Educators reported that the general staff requested statistical information regarding the evaluation process and why product choices were determined. This step has now been included in the process with product analysis reports and final decisions posted for the general staff.

To date all phases of the project for Selecting and Evaluating Safer Medical Devices are complete. The primary committee team continues to meet quarterly. The continued monitoring and evaluation of the plan is ongoing. The secondary subcommittee meets bi-annually. They continue to report outcomes to the primary committee.

Staffing Hours (approximate)

Type of Staff	**Hours Spent on Phase 4** **Evaluate Safer Medical Devices**
Management	2 hour = Phase 4 meeting 3 hour= Staff Development Educators Facility direct care staff education for each product within each 30 day evaluation time frame *Education of Process provided on all shifts
Administrative	10 hours = Preparation for educational materials labeling of product samples and development of evaluation forms 4 hours = Analyzing Data
Front Line	1 hour = Education of Evaluation Process and procedure information x Each direct care staff evaluator for each product within each 30 day evaluation time frame
Total	16 hours Management and Administrative 3 hours Staff Development Educators for each facility for each product evaluated. 1 hour for each nurse participating in the evaluation process for each product evaluated.

Other, non-labor items

Office supplies