

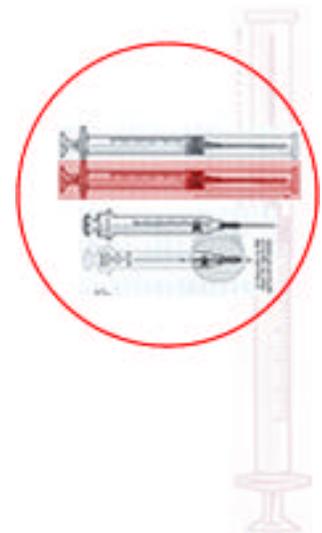
NIOSH recommends that health care facilities use safer medical devices to protect workers from needlestick and other sharps injuries. Since the passage of the Needlestick Safety and Prevention Act in 2000 and the subsequent revision of the OSHA Bloodborne Pathogen Standard, all health care facilities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

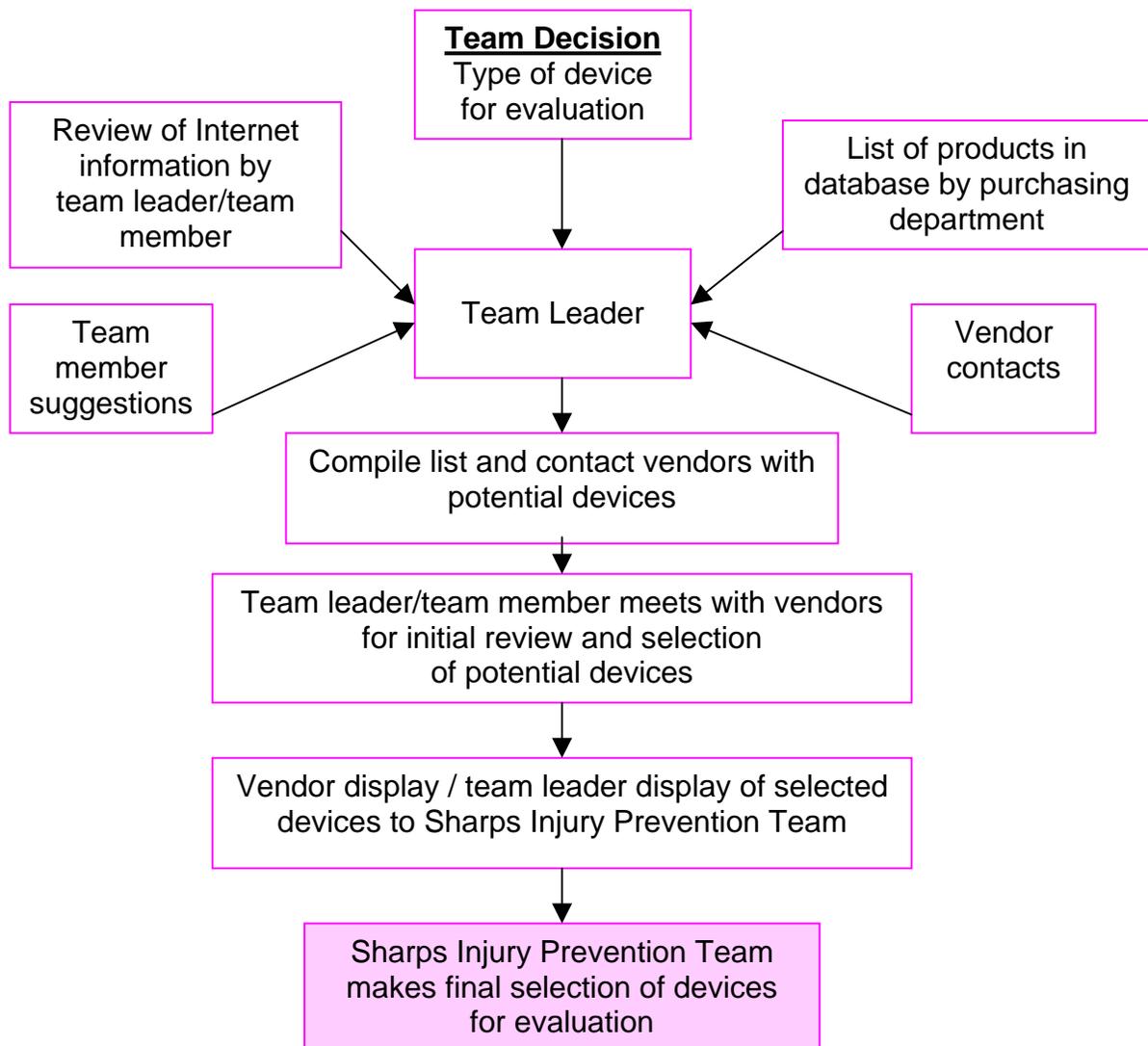
### Phase 3: Identify and Screen Safer Medical Devices

#### Facility Description:

Large private, not-for-profit, academic medical center that includes over 950 hospital beds, twelve family health centers, two ambulatory surgical centers, a research institute and an education foundation. Over 2,000,000 outpatient visits and more than 50,000 hospital admissions each year. Facility employs over 1000 physicians representing approximately 120 specialties and subspecialties, approximately 3,000 nurses and a wide range of technical and support staff. Total number of employees is approximately 13,000.

#### The process

Phase 3, identifying and screening safer medical devices, was perhaps the easiest phase for our sharps injury prevention team. Our process is outlined below.



The sharps injury prevention team determined the type of device for review. The team leader gathered information on commercially available devices. Information came from a variety of sources. These included:

- ⚡ Team leader review of various Internet web sites.
- ⚡ The purchasing department supplied information on devices available from the institution's group purchasing organization.
- ⚡ Some team members suggested devices seen at vendor fairs or through vendor contacts in their departments.
- ⚡ Some vendors solicited the team leader directly (vendors always know the name of the sharps injury prevention team leader in a large institution).

Using contact information provided by our purchasing department, the team leader contacted vendors identified by the team for an initial meeting. Depending on the type of device, selected team members were asked to attend these initial meetings with vendors. (For example, the phlebotomy team member was involved when we were looking at the multitude of phlebotomy needles and vacuum tube holders). This initial review allowed us to eliminate devices deemed inappropriate for use at our institution. The remaining devices were presented to the full team for review.

Devices were presented to the team in one of two ways. The team leader demonstrated simple devices. Vendors presented complex devices. (Note that we did ask vendors to stay within a set time limit for their presentations.) The team then discussed the pros and cons of the various devices and determined which ones would be evaluated. In general two or three companies with similar products were selected for evaluation.

### **Initial screening criteria**

The team leader had four criteria for initial selection:

1. The vendor could guarantee adequate stock to supply the device to the institution without significant backorder (many new products have difficulty meeting supply demands).
2. The company could guarantee it would provide inservice training to large numbers of people at times dictated by the institution (i.e., multiple trainers available over several weeks including weekends and off-shifts).
3. Device could be used throughout the institution. Certain types of devices must be able to work with other existing products.
4. If all factors were equal, preference was given to devices in the institution's group purchasing organization.

Once a device passed the initial screening phase it went to the team for approval.

### **Team criteria**

1. Device meets criteria outlined by NIOSH.
  - š` Needleless when possible
  - š` Safety feature is integral part of device
  - š` "Passive" action preferred (but not required) over "active" action
  - š` Indicates when activated (audible or visible)
  - š` Cannot be deactivated
2. Device appeared to be "easy to use".
3. Device was not "flimsy" with potential for breakage.
4. Device could be used throughout institution.

If all of the above criteria were met then choice was based on the following:

- š` Preference for items on institution's purchasing contract
- š` Cost
- š` Vendor ability to provide adequate training

### **Recommendations and Lessons Learned**

#### **The Internet**

There are several excellent resources on the Internet:

The International Health Care Worker Safety Center at the University of Virginia (EPINet) provides a comprehensive list of safety products along with vendor names and phone numbers.

<http://www.med.virginia.edu/medcntr/centers/epinet/products.html>

The California Department of Health Services provides detailed vendor information and has a useful search tool. <http://www.dhs.ca.gov/ohb/SHARPS/disclaim.htm>

The International Sharps Injury Prevention Society (ISIPS) has similar information to the lists above. The list does not identify all commercially available products.

<http://www.isips.org/>

The National Alliance of the Primary Prevention of Sharps Injuries (NAPPSI) has a list of devices based upon the EPINet list. The NAPPSI list places devices into primary prevention and secondary prevention categories.

<http://www.nappsi.org/safety.shtml>

**Warning: when using the Internet it is important to remember that web sites may be biased toward certain manufacturers and information may not always be current.**

**Limit Vendors**

Insist vendors make appointments. Limit the time to 20 minutes. Vendors will stretch a 20-minute session to an hour if you let them!

**Limit choices of team**

Team members may get excited over a number of potentially acceptable devices. Evaluations are complex and time consuming for more than 2 or 3 similar products. It is impossible to "try them all". Find products that have the best "fit" for all areas.

**Network with local institutions**

Network with other local institutions about products and vendors. In particular ask about level of service supplied and quality of education provided.

**Get a guarantee!**

Vendors may exaggerate product availability and their ability to provide adequate inservice education. For example, our team reviewed a promising product and selected it for evaluation. We then discovered that the product was a prototype still pending FDA approval. Another manufacturer's product was then evaluated and selected for implementation. In planning the implementation we discovered this company had limited ability to educate a large institution.

**Estimated staff hours involved to identify and screen one type of medical device**

Type of Staff	Hours Spent on Phase 3 for one type of device
Management	7
Administrative	10
Staff	6
<b>Total</b>	<b>23</b>