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.

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/
Our agency is the largest Community Mental Health/Retardation Center in the United States. The agency provides an array of services for eligible residents of this county in the form of mental health/mental retardation services, early childhood intervention services, crises stabilization, psychiatric emergency services, forensic psychiatry, residential programs, psychiatric rehabilitation services and community outreach. Services for adults, adolescents and children are provided in outpatient clinics, inpatient/residential programs and group homes and in natural environments within the community. Approximately 30,000 consumers are served annually within the various programs and services of this agency.

- **Setting our goal and priorities:**

  Our goal is to have zero (0) needlesticks at our facilities. To reach that goal, safer medical devices are available for our nurses. We solicit their input in determining which safety sharps and phlebotomy devices have the greatest impact on preventing occupational exposures in our facilities.

  Our priorities:
  1. For our nurses to use safer medical devices.
  2. To educate nurses on needlestick injury prevention.
  3. To have nurses report needlestick injuries immediately and obtain follow-up as instructed by our workers’ compensation provider.
  4. To include nurses in the product evaluation of the different types of safer medical devices that the Sharps Injury Prevention Team (SIPT) determines would have the greatest impact on preventing needlestick injuries.
  5. To focus on the following safer medical devices:
     - Phlebotomy needles especially safer butterfly blood collection sets;
     - Vacutainer Holders;
     - Safety syringes.

1. **List the type of information used by your facility to determine priorities for implementing safer medical devices. Indicate why each type of information was collected and how the information was obtained.**

   - **Incident Reports.**
     The Project Coordinator is the Infection Control Professional for the agency and receives all incident reports dealing with needlestick injuries and potential exposures to Blood-Borne Pathogens and other communicable diseases. Given the size of our agency we have had a proportionately small number of needlesticks incidents since the beginning of the 2004 fiscal year on September 1, 2003. On investigation, these incidents involved the use of butterfly blood collection sets in which the nurses: did not activate the safety features; used non-safety butterfly blood collection sets; did not use a vacutainer holder and were stuck with the transfer needle.
**Phase 2 Identify Priorities**

- **Sharps Injury Prevention Team Meetings (SIPT).**
  Primary Team Members were asked to bring to the SIPT meeting samples of sharps being used on their units for both phlebotomy and injections. The team members and administration became aware at the SIPT meeting that Safety sharps were not being used consistently for injections in all units. Nurses were provided safety butterfly phlebotomy blood collection sets, but it was questioned how consistently the safety features are being activated.

- **Literature/Internet Search:**
  - We used the Needlestick Alert from the National Institute for Occupational Safety and Health (NIOSH) as a resource and training tool.
  - The SIPT found several Internet sites that provided the team with valuable information on needlestick injury prevention, safer medical devices, safety sharps evaluation tools, and statistics about needlestick injuries.
  - Each team member presented the information they found at the SIPT meetings.

Links to the following sites were found:
http://www.med.virginia.edu/medcntr/centers/epinet/cdcestim.html
http://www.med.virginia.edu/medcntr/centers/epinet/estimates.html
http://www.med.virginia.edu/medcntr/centers/epinet/products.html
http://www.isips.org
http://www.terumomedical.com/safety
http://www.osha-slc.gov/needlesticks/needlefaq.html
http://www.premierinc.com
http://immunize.org/genr.d/needle.htm
http://www.napssi.org/needlestick.html


ANA Needlestick Safety and Prevention Independent Study Module:
www.nursingworld.org/mods/mod600/cend06.htm

http://www.emedicine.com/emerg/topic333.htm
http://www.needlestickforum.net/
Phase 2 Identify Priorities

NZNO Library Resources for Information about Needlestick injuries:
http://www.isips.org

Sharps Injury Prevention Workbook from the CDC:
http://www.cdc.gov/sharpssafety/appendixA.html

www.texasnurses.org

- **Safety Sharps Audit of Facilities:**

  A Safety Sharps Survey Tool was developed by the Project Coordinator to address the following questions:
  - What types of sharps were being used at the different facilities, i.e., safety or non-safety?
  - Were the vacutainer holders being reused?
  - Were safety sharps being used for phlebotomy procedures?
  - Were sharps stored in a locked cabinet?
  - Were sharps containers positioned within easy access to user?
  - Were the Nursing areas locked when nurses are out of area?

2. **What Lessons were learned during the process of identifying priorities and developing priorities for intervention? Describe the difficulties encountered and the way problems were resolved.**

- In the past, our nurses were provided with safer medical devices for injections and were instructed how to use them. The nurses complained that these devices were difficult to use. The consumers complained of increased discomfort during and after the injections. Due to the complaints, the lead nurses who order their unit nursing supplies from our contract supplier began ordering sharps that lacked the safety features.
  - Lead nurses were having difficulty ordering supplies.
  - Sharps containers were not within easy access to users.
  - Vacutainer holders were being reused in some units.
  - We needed a tool to assist in evaluating blood-borne pathogen exposures.

- **To Reach our Priorities the following steps were taken:**

  1. The safety sharps audits were conducted on our thirteen units, by the Project Coordinator, and confirmed that safety sharps were not being used consistently. Safety concerns were addressed with each unit during the audits.
  2. Our Internet search provided several forms to evaluate for use in the event of an occupational exposure to blood borne pathogens.
  3. Revision of our Infection Control Program to include more in-depth training for nurses on needlestick injury prevention.
4. Meetings with Lead Nurses to resolve the problems in ordering nursing supplies.

3. What would you do differently if you were to begin this process again?
   - Provide education about OSHA Guidelines and Laws concerning using safer medical devices.
   - Involve the lead nurses earlier in identifying the potential problems involved in switching to safer medical devices.
   - Provide on-going training for nurses on needlestick injury prevention.

4. What advice would you offer a similar facility that is just starting this process?
   - Find out what sharps your nurses currently use through audits and observation.
   - Develop and implement a training program on needlestick injury prevention that provides nurses education on this topic.
   - Identify the critical junctures when this training would be provided i.e.: new employee orientation, after exposure, and at least annually.
   - Review and update your facility exposure control plan at least yearly to reflect changes in guidelines/laws.
   - Develop a systematic process for intervening, analyzing, and reporting each needlestick incident. This process could contain a needlestick injury postmortem.
   - Look for systems’ problems and have units submit plan of correction.

5. What role did your Sharps injury prevention team play in this process?
   - Identified through audits, observation and reports that safer medical devices were not being used consistently on all units.
   - Identified need for more in-depth training of nurses on needlestick injury prevention.
   - Identified the lack of consistency between units.
   - Provided input into the development and distribution of a Nursing Handbook that provided nursing practice guidelines and consistent information.
   - Identified that needlestick injury prevention needs to be a standing agenda item at nursing meetings.
### Staff Hours:

<table>
<thead>
<tr>
<th>Type of Staff</th>
<th>Hours Spent on Phase 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management</td>
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<tr>
<td>Administrative</td>
<td>63 hours</td>
</tr>
<tr>
<td>Front-line</td>
<td>15 hours</td>
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<tr>
<td>Total</td>
<td>78 hours</td>
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</table>

### Other, non-labor items:

<table>
<thead>
<tr>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Copies for meetings</td>
</tr>
<tr>
<td>2. Food for meetings</td>
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</tbody>
</table>
## Attachment

### Safety Sharps Unit Survey Tool

<table>
<thead>
<tr>
<th>Unit ___________</th>
<th>Date Surveyed___________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sharps</td>
<td>Yes</td>
</tr>
<tr>
<td>Safety</td>
<td></td>
</tr>
<tr>
<td>Non safety</td>
<td></td>
</tr>
<tr>
<td>Sharps container within easy access</td>
<td></td>
</tr>
<tr>
<td>Sharps kept in locked cabinet</td>
<td></td>
</tr>
<tr>
<td>Nursing area locked when nurses out of office</td>
<td></td>
</tr>
<tr>
<td>Are safety sharps being used for Phlebotomy</td>
<td></td>
</tr>
<tr>
<td>Are Vacutainers being reused</td>
<td></td>
</tr>
<tr>
<td>Training Scheduled</td>
<td></td>
</tr>
<tr>
<td>Training Done</td>
<td></td>
</tr>
<tr>
<td>Eating/drinking in nursing area</td>
<td></td>
</tr>
<tr>
<td>Nurse interviewed</td>
<td></td>
</tr>
</tbody>
</table>
