2001 U.S. EPINet Needlestick and Sharp Object Injury Report
International Healthcare Worker Safety Center, University of Virginia

Total hospitals contributing data = 58
Total Cases: 1,929
Total Average Daily Census: 8,703

<table>
<thead>
<tr>
<th>JOB CATEGORY</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>M.D. (attending/staff)</td>
<td>152</td>
<td>8%</td>
</tr>
<tr>
<td>M.D. (intern/resident/fellow)</td>
<td>127</td>
<td>7%</td>
</tr>
<tr>
<td>Medical student</td>
<td>13</td>
<td>1%</td>
</tr>
<tr>
<td>Nurse RN/LPN</td>
<td>836</td>
<td>44%</td>
</tr>
<tr>
<td>Nursing student</td>
<td>12</td>
<td>1%</td>
</tr>
<tr>
<td>Respiratory therapist</td>
<td>30</td>
<td>2%</td>
</tr>
<tr>
<td>Surgery attendant</td>
<td>172</td>
<td>9%</td>
</tr>
<tr>
<td>Other attendant</td>
<td>27</td>
<td>1%</td>
</tr>
<tr>
<td>Phlebotomist/venipuncture/I.V. team</td>
<td>114</td>
<td>6%</td>
</tr>
<tr>
<td>Clinical laboratory worker</td>
<td>38</td>
<td>2%</td>
</tr>
<tr>
<td>Technologist (non-lab)</td>
<td>94</td>
<td>5%</td>
</tr>
<tr>
<td>Dentist</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td>Dental hygienist</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Housekeeper</td>
<td>64</td>
<td>3%</td>
</tr>
<tr>
<td>Laundry worker</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td>Paramedic</td>
<td>7</td>
<td>0%</td>
</tr>
<tr>
<td>CNA/HHA</td>
<td>48</td>
<td>3%</td>
</tr>
<tr>
<td>Security</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td>Other student</td>
<td>27</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>151</td>
<td>8%</td>
</tr>
</tbody>
</table>

(1,918 records)

<table>
<thead>
<tr>
<th>PLACE OF OCCURRENCE</th>
<th>Count</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient room</td>
<td>601</td>
<td>31%</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Location</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outside patient room</td>
<td>45</td>
<td>2%</td>
</tr>
<tr>
<td>Emergency department</td>
<td>177</td>
<td>9%</td>
</tr>
<tr>
<td>Intensive/critical care unit</td>
<td>91</td>
<td>5%</td>
</tr>
<tr>
<td>Operating room</td>
<td>564</td>
<td>29%</td>
</tr>
<tr>
<td>Outpatient clinic/office</td>
<td>92</td>
<td>5%</td>
</tr>
<tr>
<td>Blood bank</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td>Venipuncture center</td>
<td>16</td>
<td>1%</td>
</tr>
<tr>
<td>Dialysis facility</td>
<td>13</td>
<td>1%</td>
</tr>
<tr>
<td>Procedure room</td>
<td>77</td>
<td>4%</td>
</tr>
<tr>
<td>Clinical laboratories</td>
<td>38</td>
<td>2%</td>
</tr>
<tr>
<td>Autopsy/pathology</td>
<td>14</td>
<td>1%</td>
</tr>
<tr>
<td>Service/utility area</td>
<td>29</td>
<td>2%</td>
</tr>
<tr>
<td>Labor and delivery</td>
<td>38</td>
<td>2%</td>
</tr>
<tr>
<td>Home-care</td>
<td>26</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>98</td>
<td>5%</td>
</tr>
</tbody>
</table>

**SOURCE PATIENT**

Was the source patient known?

| Yes       | 1,733 | 90%   |
| No        | 124   | 7%    |
| Unknown   | 47    | 2%    |
| N/A       | 16    | 1%    |

**ORIGINAL USER**

Was the injured worker the original user of the sharp item?

| Yes       | 1,098 | 58%   |
| No        | 735   | 39%   |
| Unknown   | 35    | 2%    |
| N/A       | 31    | 2%    |

**CONTAMINATION**

Was the sharp item:

| Contaminated | 1,701 | 89% |
| Uncontaminated | 52  | 3%  |
| Unknown       | 157   | 8%  |
### ORIGINAL PURPOSE

*For what purpose was the sharp item originally used?*

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown, N/A</td>
<td>152</td>
<td>8%</td>
</tr>
<tr>
<td>Injection, IM/subcutaneous</td>
<td>396</td>
<td>21%</td>
</tr>
<tr>
<td>Heparin or saline flush</td>
<td>32</td>
<td>2%</td>
</tr>
<tr>
<td>Other injection into IV site or port</td>
<td>86</td>
<td>5%</td>
</tr>
<tr>
<td>Connect IV line</td>
<td>16</td>
<td>1%</td>
</tr>
<tr>
<td>Start IV or heparin lock</td>
<td>91</td>
<td>5%</td>
</tr>
<tr>
<td>Draw venous blood sample</td>
<td>298</td>
<td>16%</td>
</tr>
<tr>
<td>Draw arterial blood sample</td>
<td>42</td>
<td>2%</td>
</tr>
<tr>
<td>Obtain body fluid/tissue sample</td>
<td>29</td>
<td>2%</td>
</tr>
<tr>
<td>Fingerstick/heel stick</td>
<td>44</td>
<td>2%</td>
</tr>
<tr>
<td>Suturing</td>
<td>342</td>
<td>18%</td>
</tr>
<tr>
<td>Cutting (surgery)</td>
<td>145</td>
<td>8%</td>
</tr>
<tr>
<td>Electrocautery</td>
<td>9</td>
<td>0%</td>
</tr>
<tr>
<td>Contain specimen/pharmaceutical</td>
<td>11</td>
<td>1%</td>
</tr>
<tr>
<td>Place arterial line</td>
<td>24</td>
<td>1%</td>
</tr>
<tr>
<td>Fingernails/teeth</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Drilling</td>
<td>12</td>
<td>1%</td>
</tr>
<tr>
<td>Other</td>
<td>181</td>
<td>10%</td>
</tr>
</tbody>
</table>

(1,910 records)

### HOW INJURY OCCURRED

*Did the injury occur:*

<table>
<thead>
<tr>
<th>Circumstances</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before use</td>
<td>41</td>
<td>2%</td>
</tr>
<tr>
<td>During use</td>
<td>564</td>
<td>30%</td>
</tr>
<tr>
<td>Between steps</td>
<td>257</td>
<td>13%</td>
</tr>
<tr>
<td>Disassembling</td>
<td>79</td>
<td>4%</td>
</tr>
<tr>
<td>Preparing for reuse</td>
<td>36</td>
<td>2%</td>
</tr>
<tr>
<td>Recapping</td>
<td>68</td>
<td>4%</td>
</tr>
<tr>
<td>Withdrawing from resistant material</td>
<td>67</td>
<td>4%</td>
</tr>
<tr>
<td>Other after use, before disposal</td>
<td>314</td>
<td>16%</td>
</tr>
<tr>
<td>Item left on disposal container</td>
<td>12</td>
<td>1%</td>
</tr>
<tr>
<td>Putting item into disposal container</td>
<td>122</td>
<td>6%</td>
</tr>
<tr>
<td>After disposal, item protruding from disposal container</td>
<td>53</td>
<td>3%</td>
</tr>
<tr>
<td>Pierced side of disposal container</td>
<td>5</td>
<td>0%</td>
</tr>
<tr>
<td>Pierced trash/side of inappropriate disposal container</td>
<td>39</td>
<td>2%</td>
</tr>
<tr>
<td>Restraining patient</td>
<td>10</td>
<td>1%</td>
</tr>
</tbody>
</table>

(1,910 records)
<table>
<thead>
<tr>
<th>Device left on floor/bed/table/inappropriate place</th>
<th>116</th>
<th>6%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>130</td>
<td>7%</td>
</tr>
<tr>
<td>(1,913 records)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### DEVICE

**What device or item caused the injury?**

<table>
<thead>
<tr>
<th>Device</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disposable syringe</td>
<td>657</td>
<td>36%</td>
</tr>
<tr>
<td>Prefilled cartridge syringe</td>
<td>51</td>
<td>3%</td>
</tr>
<tr>
<td>Blood gas syringe</td>
<td>21</td>
<td>1%</td>
</tr>
<tr>
<td>Syringe, other type or not sure which</td>
<td>14</td>
<td>1%</td>
</tr>
<tr>
<td>Needle on IV line/tubing</td>
<td>9</td>
<td>1%</td>
</tr>
<tr>
<td>Winged needle IV set</td>
<td>121</td>
<td>7%</td>
</tr>
<tr>
<td>IV catheter (stylet)</td>
<td>66</td>
<td>4%</td>
</tr>
<tr>
<td>Vacuum tube blood collection needle/holder</td>
<td>76</td>
<td>4%</td>
</tr>
<tr>
<td>Spinal or epidural needle</td>
<td>5</td>
<td>0%</td>
</tr>
<tr>
<td>Unattached hypodermic needle</td>
<td>18</td>
<td>1%</td>
</tr>
<tr>
<td>Arterial catheter introducer needle</td>
<td>10</td>
<td>1%</td>
</tr>
<tr>
<td>Central line catheter introducer needle</td>
<td>6</td>
<td>0%</td>
</tr>
<tr>
<td>Drum catheter needle</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Other vascular catheter needle</td>
<td>4</td>
<td>0%</td>
</tr>
<tr>
<td>Other non-vascular catheter needle</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td>Needle, not sure what kind</td>
<td>42</td>
<td>2%</td>
</tr>
<tr>
<td>Other needle</td>
<td>65</td>
<td>4%</td>
</tr>
<tr>
<td>Lancet</td>
<td>41</td>
<td>2%</td>
</tr>
<tr>
<td>Suture needle</td>
<td>326</td>
<td>18%</td>
</tr>
<tr>
<td>Scalpel, reusable</td>
<td>77</td>
<td>4%</td>
</tr>
<tr>
<td>Razor</td>
<td>6</td>
<td>0%</td>
</tr>
<tr>
<td>Pipette (plastic)</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Scissors</td>
<td>14</td>
<td>1%</td>
</tr>
<tr>
<td>Bovie electrocautery device</td>
<td>9</td>
<td>1%</td>
</tr>
<tr>
<td>Bone cutter</td>
<td>6</td>
<td>0%</td>
</tr>
<tr>
<td>Bone chip</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Towel clip</td>
<td>4</td>
<td>0%</td>
</tr>
<tr>
<td>Microtome blade</td>
<td>6</td>
<td>0%</td>
</tr>
<tr>
<td>Trocar</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td>Vacuum tube, plastic</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td>Specimen/test tube, plastic</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Fingernails/teeth</td>
<td>4</td>
<td>0%</td>
</tr>
<tr>
<td>Scalpel, disposable</td>
<td>48</td>
<td>3%</td>
</tr>
<tr>
<td>Retractor, skin/bone hooks</td>
<td>14</td>
<td>1%</td>
</tr>
<tr>
<td>Staples/steel sutures</td>
<td>3</td>
<td>0%</td>
</tr>
<tr>
<td>Item</td>
<td>Count</td>
<td>Percentage</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------</td>
<td>------------</td>
</tr>
<tr>
<td>Wire</td>
<td>15</td>
<td>1%</td>
</tr>
<tr>
<td>Pin</td>
<td>11</td>
<td>1%</td>
</tr>
<tr>
<td>Drill bit/bur</td>
<td>3</td>
<td>0%</td>
</tr>
<tr>
<td>Pickups/forceps/hemostats/clamps</td>
<td>8</td>
<td>0%</td>
</tr>
<tr>
<td>Sharp item, not sure what kind</td>
<td>8</td>
<td>0%</td>
</tr>
<tr>
<td>Other item</td>
<td>45</td>
<td>2%</td>
</tr>
<tr>
<td>Medication ampule</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td>Medication vial (small)</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Pipette, glass</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Vacuum tube, glass</td>
<td>5</td>
<td>0%</td>
</tr>
<tr>
<td>Specimen/test tube, glass</td>
<td>5</td>
<td>0%</td>
</tr>
<tr>
<td>Capillary tube</td>
<td>1</td>
<td>0%</td>
</tr>
<tr>
<td>Glass slide</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td>Glass item, not sure what kind</td>
<td>2</td>
<td>0%</td>
</tr>
<tr>
<td>Other glass item</td>
<td>10</td>
<td>1%</td>
</tr>
<tr>
<td><strong>Total (1,843 records)</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### SAFETY DESIGN

*If the item causing the injury was a needle, was it a safety design with a shielded, recessed, or retractable needle?*

<table>
<thead>
<tr>
<th>Yes</th>
<th>401</th>
<th>22%</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>1,291</td>
<td>72%</td>
</tr>
<tr>
<td>Unknown</td>
<td>103</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Total (1,795 records)</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### IF SAFETY DESIGN:

*If the item causing the injury was a safety design with a shielded, recessed, or retractable needle, was the safety mechanism activated?*

<table>
<thead>
<tr>
<th>Yes, fully</th>
<th>44</th>
<th>12%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, partially</td>
<td>61</td>
<td>17%</td>
</tr>
<tr>
<td>No</td>
<td>264</td>
<td>72%</td>
</tr>
<tr>
<td><strong>Total (369 records)</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### IF SAFETY DESIGN:

*If the item causing the injury was a safety design with a shielded, recessed, or retractable needle, did the injury happen?*

<table>
<thead>
<tr>
<th>Before activation</th>
<th>187</th>
<th>58%</th>
</tr>
</thead>
<tbody>
<tr>
<td>During activation</td>
<td>84</td>
<td>26%</td>
</tr>
</tbody>
</table>
After activation 54 17%
(325 records)

<table>
<thead>
<tr>
<th>SEVERITY OF INJURY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Was the injury:</td>
</tr>
<tr>
<td>Superficial</td>
</tr>
<tr>
<td>Moderate</td>
</tr>
<tr>
<td>Severe</td>
</tr>
<tr>
<td>(1,860 records)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BODY PART</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right hand</td>
</tr>
<tr>
<td>Left hand</td>
</tr>
<tr>
<td>Arm</td>
</tr>
<tr>
<td>Face/Head</td>
</tr>
<tr>
<td>Chest/Front</td>
</tr>
<tr>
<td>Back</td>
</tr>
<tr>
<td>Leg</td>
</tr>
<tr>
<td>Foot and ankle</td>
</tr>
<tr>
<td>(1,852 records)</td>
</tr>
</tbody>
</table>