



*Exposure Prevention Information Network*

## 2003 U.S. EPINet Needlestick and Sharp Object Injury Report

International Healthcare Worker Safety Center, University of Virginia

Total hospitals contributing data = 48

Total cases: 1,728

Total average daily census: 7,239

JOB CATEGORY		
M.D. (attending/staff)	182	10.6%
M.D. (intern/resident/fellow)	195	11.4%
Medical student	17	1.0%
Nurse RN/LPN/NP/CRNA/Midwife	649	37.8%
Nursing student	9	0.5%
Respiratory therapist	31	1.8%
Surgery attendant	156	9.1%
Other attendant	39	2.3%
Phlebotomist/Venipuncture/I.V. team	92	5.4%
Clinical laboratory worker	42	2.4%
Technologist (non-lab)	80	4.7%
Dentist	2	0.1%
Dental hygienist	1	0.1%
Housekeeper	43	2.5%
Laundry worker	3	0.2%
Paramedic	2	0.1%
CNA/HHA	33	1.9%
Security	2	0.1%
Other student	25	1.5%
Other	112	6.5%
(1,715 records)		

<b>PLACE OF OCCURRENCE</b>		
<i>Where did the injury occur in the institution?</i>		
Patient room/Ward	463	26.9%
Outside patient room	17	1.0%
Emergency department	173	10.1%
Intensive/Critical care unit	92	5.4%
Operating room/Recovery	576	33.5%
Outpatient clinic/office	78	4.5%
Blood bank	2	0.1%
Venipuncture center	20	1.2%
Dialysis facility	5	0.3%
Procedure room	89	5.2%
Clinical laboratories	27	1.6%
Autopsy/Pathology	15	0.9%
Service/Utility area	25	1.5%
Labor and delivery	53	3.1%
Home-care	6	0.3%
Other	78	4.5%
(1,719 records)		

<b>SOURCE PATIENT</b>		
<i>Was the source patient known/identifiable?</i>		
Yes	1,575	91.9%
No	99	5.8%
Unknown	31	1.8%
N/A	8	0.5%
(1,713 records)		

<b>ORIGINAL USER</b>		
<i>Was the injured worker the original user of the sharp item?</i>		
Yes	1,016	59.7%
No	638	37.5%
Unknown	19	1.1%
N/A	28	1.6%
(1,701 records)		

<b>CONTAMINATION</b>		
<i>Was the sharp item:</i>		
Contaminated	1,559	91.2%
Uncontaminated	34	2.0%
Unknown	116	6.8%
(1,709 records)		

<b>ORIGINAL PURPOSE</b>		
<i>For what purpose was the sharp item originally used?</i>		
Unknown, N/A	84	4.9%
Injection, IM/Subcutaneous	358	20.9%
Heparin or saline flush	14	0.8%
Other injection into IV site or port	51	3.0%
Connect IV line	3	0.2%
Start IV or heparin lock	87	5.1%
Draw venous blood sample	253	14.7%
Draw arterial blood sample	50	2.9%
Obtain body fluid/tissue sample	34	2.0%
Fingerstick/heel stick	29	1.7%
Suturing	357	20.8%
Cutting (surgery)	156	9.1%
Electrocautery	13	0.8%
Contain specimen/pharmaceutical	14	0.8%
Place arterial line	33	1.9%
Fingernails/teeth	0	0.0%
Drilling	11	0.6%
Other	169	9.8%
(1,716 records)		

<b>HOW INJURY OCCURRED</b>		
<i>Did the injury occur:</i>		
Before use	20	1.2%
During use	634	37%

Between steps	229	13.4%
Disassembling	50	2.9%
Preparing for reuse	21	1.2%
Recapping	57	3.3%
Withdrawing from resistant material	34	2.0%
Other after use, before disposal	292	17.0%
Item left on disposal container	4	0.2%
Putting item into disposal container	94	5.5%
After disposal, item protruding from disposal container	24	1.4%
Pierced side of disposal container	4	0.2%
Pierced trash/side of inappropriate disposal container	31	1.8%
Restraining patient	14	0.8%
Device left on floor/bed/table/inappropriate place	101	5.9%
Other	104	6.1%
(1,713 records)		

<b>DEVICE</b>		
<i>What device or item caused the injury?</i>		
Disposable syringe	530	31.7%
Pre-filled cartridge syringe	25	1.5%
Blood gas syringe	21	1.3%
Syringe, other type or not sure which	19	1.1%
Needle on IV line/tubing	7	0.4%
Winged needle IV set	127	7.6%
IV catheter (stylet)	71	4.3%
Vacuum tube blood collection needle/holder	64	3.8%
Spinal or epidural needle	6	0.4%
Unattached hypodermic needle	9	0.5%
Arterial catheter introducer needle	7	0.4%
Central line catheter introducer needle	8	0.5%
Drum catheter needle	3	0.2%
Other vascular catheter needle	4	0.2%
Other non-vascular catheter needle	1	0.1%
Needle, not sure what kind	16	1.0%
Other needle	40	2.4%
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Lancet	24	1.4%
Suture needle	347	20.8%
Scalpel, reusable	67	4.0%
Razor	8	0.5%

Pipette (plastic)	0	0.0%
Scissors	13	0.8%
Bovie electrocautery device	14	0.8%
Bone cutter	3	0.2%
Bone chip	4	0.2%
Towel clip	4	0.2%
Microtome blade	1	0.1%
Trocar	8	0.5%
Vacuum tube, plastic	0	0.0%
Specimen/test tube, plastic	0	0.0%
Fingernails/teeth	13	0.8%
Scalpel, disposable	67	4.0%
Retractor, skin/bone hooks	14	0.8%
Staples/steel sutures	6	0.4%
Wire	15	0.9%
Pin	9	0.5%
Drill bit/bur	2	0.1%
Pickups/forceps/hemostats/clamps	6	0.4%
Sharp item, not sure what kind	18	1.1%
Other item	43	2.6%
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Medication ampule	3	0.2%
Medication vial (small)	0	0.0%
Pipette, glass	1	0.1%
Vacuum tube, glass	5	0.3%
Specimen/test tube, glass	7	0.4%
Capillary tube	0	0.0%
Glass slide	5	0.3%
Glass item, not sure what kind	0	0.0%
Other glass item	5	0.3%
(1,670 records)		

#### SAFETY DESIGN

<i>If the item causing the injury was a needle, was it a safety design with a shielded, recessed, or retractable needle?</i>		
Yes	519	31.6%
No	936	56.9%
Unknown	189	11.5%
(1,644 records)		

<b>IF SAFETY DESIGN:</b>		
<i>If the item causing the injury was a safety design with a shielded, recessed, or retractable needle, was the safety mechanism activated?</i>		
Yes, fully	44	9.0%
Yes, partially	100	20.5%
No	344	70.5%
(488 records)		

<b>IF SAFETY DESIGN:</b>		
<i>If the item causing the injury was a safety design with a shielded, recessed, or retractable needle, did the injury happen?</i>		
Before activation	285	63.3%
During activation	104	23.1%
After activation	61	13.6%
(450 records)		

<b>SEVERITY OF INJURY</b>		
<i>Was the injury:</i>		
Superficial	974	57.3%
Moderate	675	39.7%
Severe	52	3.1%
(1,701 records)		

<b>BODY PART</b>	
Right hand	631
Left hand	960
Arm	50
Face/Head	1
Chest/Front	5
Back	1
Leg	34
Foot and ankle	7
(1,689 records)	