

Cumulative Report

Needlesticks and Sharp-Object Injuries

Belgium, 1 June 2003 - 31 December 2009,

72 general hospitals (sites or fusions)



Total NI cases = 4819

JOB CATEGORY	N	%	WHEN INJURY OCCURED	N	%	INJURED WORKER ORIGINAL USER OF ITEM?	N	%
MEDICAL DOCTORS			DURING PREPARATION OF ITEM	72	1.55	ORIGINAL USER OF ITEM?		
Medical doctor	191	3.99	DURING USE OF ITEM			Yes	2591	57.5
Dentist	25	0.52	During use of item	765	16.5	No	1779	39.4
Doctor (In specialised training)	151	3.15	Restraining patient	88	1.90	Unknown	135	3.00
NURSES			Between steps of multistep procedure	267	5.76			
Nurse	3016	62.9	DURING WITHDRAWING OF ITEM					
Midwife	112	2.34	Withdrawing from resistant material	104	2.24			
Perfusionist	3	0.06	Disassembling device	144	3.11			
CARE ASSISTANTS			In preparation for reuse of reusable instruments	127	2.74			
Care assistant	289	6.03	Recapping	338	7.30			
Logistic assistant	0	0	After use, before disposal	1096	23.6			
Dental assistant	0	0	DURING DISPOSAL OF ITEM					
PARAMEDICS			Item left on or near disposal container	86	1.86			
Clinical laboratory worker	167	3.49	Device left on floor, table, bed or other inappropriate place	449	9.69			
Physiotherapist	5	0.10	Putting item into disposal container	305	6.58			
Occupational therapist	3	0.06	Stuck by item protruding from the opening of disposal container	114	2.46			
Dietician	0	0	Stuck by item piercing side of disposal container	18	0.39			
SERVICE STAFF			Stuck by item protruding from trash bag or waste container	209	4.51			
Cleaning personnel	342	7.14	OTHER	451	9.73			
Laundry	6	0.13						
Transport/waste	25	0.52	DEVICE CAUSING INJURY					
Technician	17	0.35	NEEDLES					
Stretcher-bearer	7	0.15	IV, IM, SC, ID (with syringe)	1291	29.3			
STUDENTS			Port-a-cath needle	113	2.57			
Medical student	93	1.94	Winged steel needle	298	6.78			
Dental student	0	0	IV catheter (stylet)	434	9.87			
Nursing student	138	2.88	Vacuum tube blood collection needle	375	8.53			
Other students	24	0.50	Spinal/epidural catheter introducer	14	0.32			
OTHERS	157	3.28	Arterial catheter introducer needle	57	1.30			
			Fill needle	70	1.59			
			Intra-articular needle	7	0.16			
			Needle, unknown type	212	4.82			
			Other	475	10.8			
			SHARP INSTRUMENTS					
			Surgical scalpel (disposal)	194	4.41			
			Surgical scalpel (reusable)	61	1.39			
			Lancet	95	2.16			
			Bovie electrocautery device	17	0.39			
			Razor	22	0.50			
			Microtome blade	14	0.32			
			Scissors	27	0.61			
			Trocar	18	0.41			
			Towel clip, tweezers	24	0.55			
			Skin/bone hooks, retractors	14	0.32			
			Pin	24	0.55			
			Suture needle	242	5.51			
			Staples, steel sutures	7	0.16			
			Wire	7	0.16			
			Tooth	32	0.73			
			Finger nails	14	0.32			
			Other	142	3.23			
			GLASS / PLASTIC					
			Ampoule	14	0.32			
			Plastic vacuum tube	2	0.05			
			Glass vacuum tube	5	0.11			
			Glass Slide	5	0.11			
			Pipette	6	0.14			
			Plastic specimen/test tube	2	0.05			
			Glass specimen/test tube	3	0.07			
			Capillary tube	5	0.11			
			Glass item, unknown type	16	0.36			
			Other glass item	38	0.86			
WHERE INJURY OCCURED	N	%	DEPTH OF INJURY	N	%	BODY PARTS INJURED	N	%
Patient room	1795	38.9	Superficial (little/no bleeding)	1434	32.2	Face/head	70	2.01
Outside patient room	489	10.5	Moderate (skin punctured, some bleeding)	2829	63.5	Back	0	0
Emergency department	285	6.12	Severe (deep stick/cut, profuse bleeding)	191	4.29	Front	24	0.69
Intensive/critical care unit	157	3.37				Arm	104	2.99
Operating room/recovery	783	16.8				Hand, left	1509	43.3
Outpatient clinic/office	181	3.89				Hand, right	1701	48.9
Dialysis facility	82	1.76				Leg	43	1.23
Radiology/ECG/etc	119	2.56				Foot	27	0.78
Clinical laboratories	141	3.03						
Service/utility area	73	1.57						
Labor and delivery	65	1.40						
Psychiatric department	34	0.73						
Other	450	9.66						
ORIGINAL PURPOSE OF SHARP ITEM	N	%	WAS NEEDLE A SAFETY DESIGN?	N	%	GLOVES – DID ITEM PENETRATED?	N	%
Unknown / not applicable	335	7.56	Yes	177	5.34	Single pair of gloves	1583	37.5
ADMINISTRATION OF FLUIDS			No	2426	73.2	Double pair of gloves	90	2.14
IV injection	265	5.98	Unknown	711	21.4	No gloves	2540	60.2
Via I.V. line	100	2.26						
IM, SC, ID injection	1089	24.5						
PLACING OF								
Intra venous line	380	8.58						
Intra-arterial or central line	76	1.72						
DRAWING OF								
Arterial blood	119	2.69						
Venous blood	633	14.2						
Finger stick / Heel stick	249	5.62						
Other body fluids	69	1.56						
CUTTING								
Cutting	324	7.31						
Electro-surgery	18	0.41						
SUTURING								
Suturing	302	6.82						
Placing staples, steel sutures	18	0.41						
OTHER								
Obtain tissue sample	40	0.90						
Drill	11	0.25						
Contain specimen/ pharmaceutical	12	0.27						
Other	391	8.82						

Cumulative Report

Blood and Body Fluid Exposure

Belgium, 1 June 2003 - 31 December 2009,

54 general hospitals (sites)

Total BBF cases = 715



JOB CATEGORY	N	%	EXPOSED PART(S) (more than one item can be checked) †	N	%	AMOUNT OF BBF THAT CAME IN CONTACT WITH SKIN OR MUCOUS MEMBRANES	N	%
MEDICAL DOCTORS			Intact skin	114	28.8	Small amount (up to 5 cc)	288	89.7
Doctor	35	4.90	Non-intact skin	78	19.7	Moderate amount (up to 50cc)	29	9.03
Dentist	26	3.64	Eyes (conjunctiva)	235	59.4	Large amount (> 50 cc)	4	2.25
Doctor (in specialised training)	63	8.81	Nose (mucosa)	17	4.30			
NURSES			Mouth (mucosa)	38	9.62			
Nurse	414	57.9	Other exposed parts	26	6.91			
Midwife	30	4.20						
Perfusionist	0	0						
CARE ASSISTANTS			DID THE BLOOD OR BODY FLUID (more than one item can be checked) †	N	%	EXPOSURE LOCATION	N	%
Care assistant	24	3.36	Touch unprotected skin	275	73.1	LARGEST EXPOSURE		
Logistic assistant	0	0				Face/head	176	57.5
Dental assistant	0	0				Back	0	0
PARAMEDICS						Front	5	2.02
Clinical laboratory worker	26	3.64	Touch skin through gap between protective garments	14	3.72	Arm	3	6.06
Physiotherapist	3	0.42				Hand, left	1	0
Occupational therapist	0	0	Soak through protective garments	12	3.19	Hand, right	74	33.3
Dietician	0	0	Soak through clothing	12	3.19	Leg	0	0
SERVICE STAFF						Foot	2	1.01
Cleaning personnel	25	3.50	BARRIER ITEMS WORN AT TIME OF EXPOSURE (more than one item can be checked) †	N	%	MEDIUM-SIZED EXPOSURE	N	%
Laundry	0	0	Single pair gloves	184	48.9	Face/head	57	57.6
Transport/waste	6	0.84	Double pair gloves	0	0	Back	0	0
Technician	1	0.14	Goggles	3	0.80	Front	2	2.02
Stretcher-bearer	1	0.14	Eyeglasses (not protective)	25	6.65	Arm	6	6.06
STUDENTS			Faceshield	0	0	Hand, left	0	0
Medical student	25	3.50	Surgical mask	81	21.5	Hand, right	33	33.3
Dental student	0	0	Permeable clothing/apron	0	0	Leg	0	0
Nursing student	20	2.80	Semi-permeable clothing/apron	45	11.9	Foot	1	1.01
Other students	8	1.12	Not permeable clothing/apron	58	15.4			
OTHERS	14	1.96	Other	12	3.19	SMALLEST-SIZED EXPOSURE	N	%
						Face/head	6	18.1
WHERE EXPOSURE OCCURED	N	%	CAUSE OF EXPOSURE	N	%	Back	0	0
Patient room	228	32.9	Direct patient contact	116	33.1	Front	1	3.03
Outside patient room	43	6.21	Specimen container leaked/spilled	72	20.5	Arm	4	12.1
Emergency departement	35	5.06	Specimen container broke	34	0.29	Hand, left	14	0
Intensive/critical care unit	48	6.94	IV tubing/bag/pump leaked	33	9.71	Hand, right	0	42.4
Operating room/recovery	166	23.9	Other body fluid container spilled/leaked	2	9.43	Leg	0	0
Outpatient clinic/office	23	3.22	Touched contaminated equipment/surface	1	0.57	Foot	4	12.1
Dialysis facility	15	2.17	Touched contaminated drapes/sheets, gown	14	0.29			
Radiology/ECG/etc	26	3.76	Feeding/ventilator/other tube separated/leaked/spilled	76	4.00	SOURCE PATIENT IDENTIFIABLE ?	N	%
Clinical laboratories	21	3.03				Yes	609	87.3
Service/utility area	7	1.01				No	69	9.90
Labor and delivery	26	3.76				Unknown	19	2.73
Psychiatric departement	3	0.43				SOURCE PATIENT CONTAMINATED?	N	%
Other	50	7.23				Yes	173	28.6
						No	181	29.9
						Unknown	251	41.4
BBF † INVOLVED IN EXPOSURE (more than one item can be checked) ‡	N	%	LENGTH OF TIME BBF IN CONTACT WITH SKIN OR MUCOUS MEMBRANES	N	%			
Blood or blood products	234	59.4	Less than 5 minutes	232	84.1			
Vomit	5	1.27	5 – 14 minutes	28	11.1			
Sputum	27	6.84	15 minutes – 1 hour	13	4.71			
Saliva	19	50.5	More than 1 hour	3	1.09			
Cerebro-spinal fluid	2	0.53						
Peritoneal fluid	3	0.80						
Pleural fluid	0	0						
Amniotic fluid	8	2.13						
Urine	20	5.06						
Other body fluid	39	10.3						
WAS THE BODY FLUID, OTHER THAN BLOOD, VISIBLY CONTAMINATED WITH BLOOD?	N	%						
Yes	231	71.5						
No	57	17.6						
Unknown	35	10.8						

† BBF = blood or body fluids

‡ Because more than one item can be checked in this category, percentages total more than 100%