



SA|LK

SALZBURGER LANDESKLINIKEN

Needlestick directive Implementation and practical experience

Vienna, 16.04.2013

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Figures from SALK 2011

approx. 6,000 workers

approx. 4,300 working in the clinical field

1,812 in-patient beds

107,757 in-patients

319,375 outpatient cases

695,895 outpatient visits

1,446,816 used needles

136 sharps injuries



What already happens:

- Workplace evaluation
 - Identification and assessment of risks
 - Definition of measures
- Hepatitis B vaccination
- Instruction
- Internal reporting system
- Training courses
- Waste plan
- Sometimes: replacement with safety products



Safety products

- 2008 Microgripper (for piercing port-a-cuts)
- 2008 “Safety butterfly” – HIV clinic
- 2010 Haemolance safety lancets



Separates Lanzettengerät
wird nicht benötigt

Durch die Schutzkappe
bleibt die Nadel steril



Automatischer
Nadelrückzug

Kontrollierbare
Einstichtiefe
von 1,8 mm



What the changeover has achieved -

■ Sharps injuries:

	2007	2008	2009	2010	2011	2012
Softclix	10	14	9	3	-	-
Haemolance	-	-	-	-	0	0
Lancets	8	6	2	1	1	1

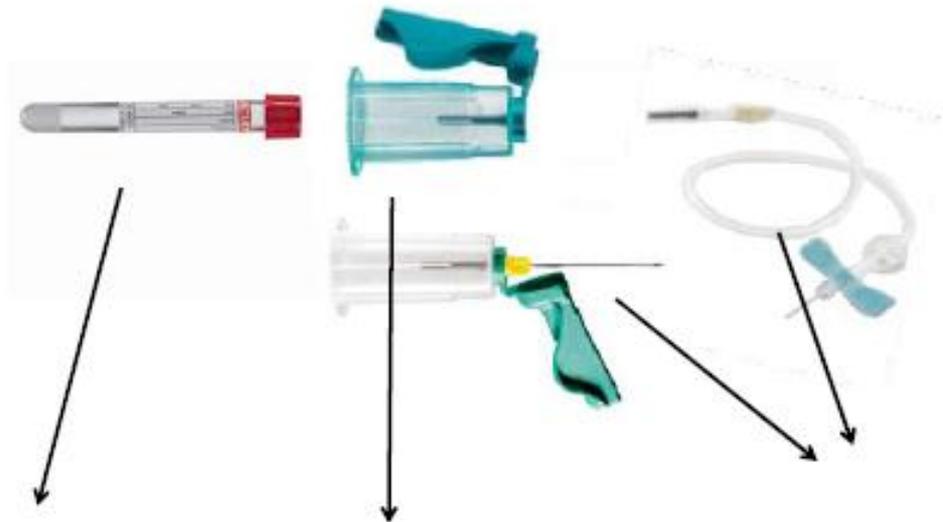


Safety products

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- 2011 Blood collection system



Vacurette System Bestandteile



Vacurette Röhrchen

QuickShieldhalter

Nadel oder Butterfly



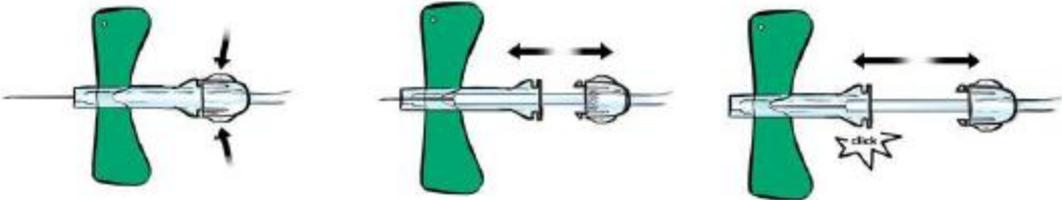
Umstellung Blutabnahmesystem - Produktschulung



Sicherheitsblutentnahmeset „Sicherheitsbutterfly“

„Sicherheitsbutterfly“

- Nach Aktivierung kein Kontakt mit kontaminierter Nadel.
- ➔ Keine Nadelstichverletzung möglich





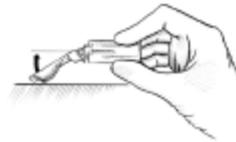
QUICKSHIELD

Quickshield Sicherheitsröhrchenhalter



Die Aktivierung der Sicherheitskappe mit einer Hand nach der Blutentnahme.

Mittels Zuhilfenahme einer stabilen Auflagefläche oder Daumen.





Costs/labour involved

- Expert team
- Tendering
- Product presentations
- Pre-introduction training courses
 - 40 hours
 - 500 people
- On-site training during the changeover phase

Umstellung neues Blutabnahmesystem im LKH - ABLAUF

WAS

WANN

WER

- Angabe des Monatsbedarfs mittels ausgesendeter Liste
Bitte teilen sie dem Einkauf mit, falls Sie eine solche Liste nicht bekommen haben sollten

Retournierung bis
spätestens
17.02.2011

Station / Ambula

- Anlieferung des Monatsbedarfs an die jeweiligen Kostenstellen

7.3.-16.3.2011

Depot

- Die neuen Produkte werden auf Vollständigkeit kontrolliert und bis zur Umstellung auf der Station/Ambulanz zwischengelagert

Station / Ambula

- Das alte System wird am Abend vor dem Umstellungstag zusammengetragen (Röhrchen, Adapter, Nadeln, Butterfly – VENFLONS BLEIBEN)

16.3.2011

Station / Ambula

- Am Tag der Umstellung kommt die Fa. Greiner und stellt die Station offiziell um

17.3.2011

Fa. Greiner

- Ab dem 17.3.2011 soll nur noch das „neue“ System verwendet werden. Die Uhrzeit der Umstellung ist der jeweiligen Station / Ambulanz überlassen.

Station / Ambula

- Das „alte“ System wird bei der nächsten Depotlieferung, zusammen mit einem im Vorfeld ausgehändigten Formular, ans Depot zurückgeschickt.

je nach üblichem
Anlieferungstag und
Verfügbarkeit eines
Gitterwagens

Station / Ambula
/ Depot

- Anwesenheit durch die Fa. Greiner für im Anschluss auftretende Fragen

18.3.-21.3.2011

Station / Ambula
/ Depot



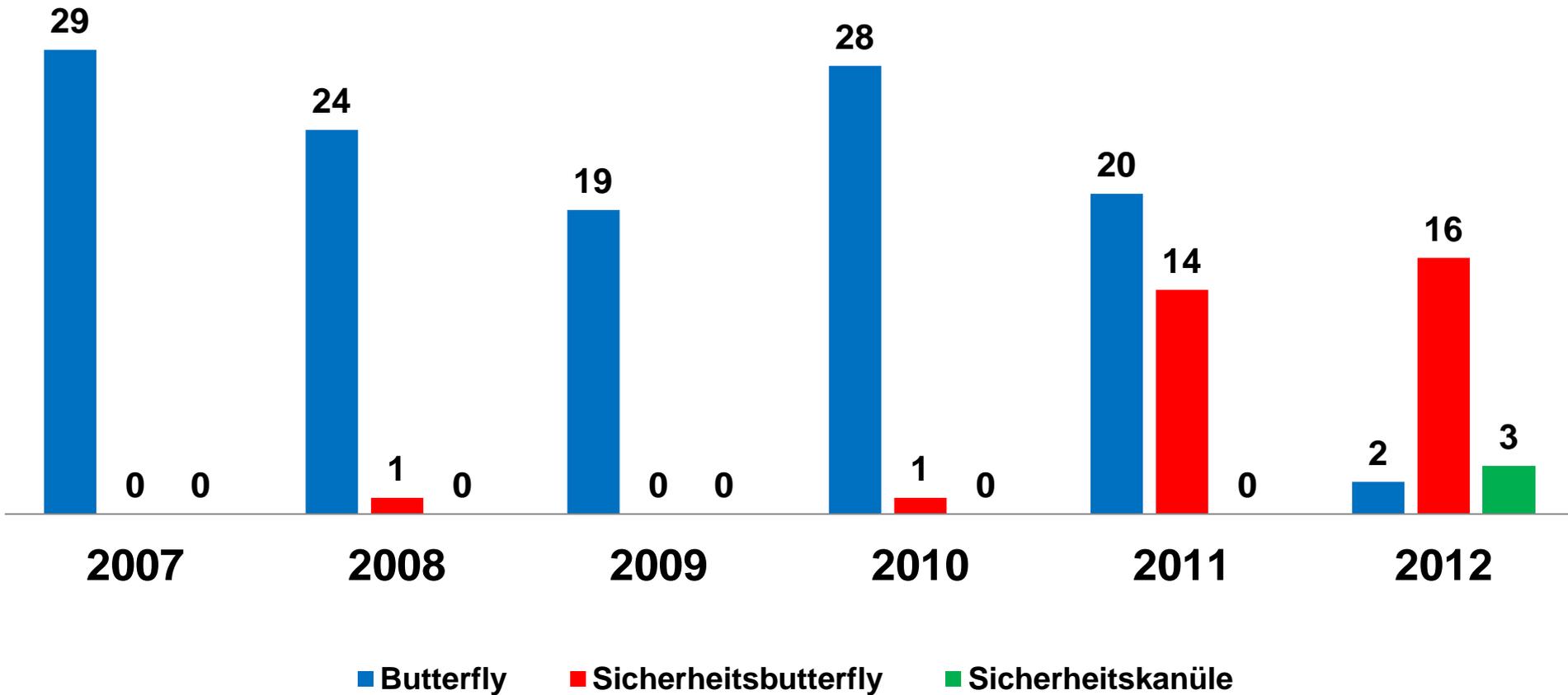
What the changeover has achieved -

■ Sharps injuries :

	2007	2008	2009	2010	2011	2012
Butterfly	29	24	19	28	20	2
Butterfly - safety system		1	0	1	14	16
Needles - safety system						3



Sharps injuries per blood collection system





“Arguments against”

- laborious
- complicated
- expensive
- safety device gets in the way
- you don't know whether you are in the vein – no blood return visible – this results in increased use of wing cannulas (butterfly) for collecting blood, which in turn leads to
 - increased quantity of waste
 - increased costs



Consumption of disposal containers

	2008	2009	2010	2011
Number	20,237	23,899	20,739	26,292
Cost			approx.	56,000,--



Safety products

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- 2010 Haemolance safety lancets
- 2011 Blood collection system
- 2012 Safety venflon



Costs/labour involved

- Training: November 2012: “Train the trainer”
- Costs: approx. 30% more
- Waste: no significant increase expected



Internal reporting system

- Standardised procedure after injury since 1994
- Own laboratory form
 - (details of time, place, type of injury)
- Testing within 2 hours (Hep B, Hep C, HIV)
- Notifying those affected
- Gathering information on activity, object, part of body
- Follow-up care for up to a year
- Documentation of measures
- Reporting as an accident at work to the accident insurance company
 - (statutory notification in the event of more than 3 days incapacity for work)



Sharps injury statistics 2011

- 277 Sharps injuries

- during use 204

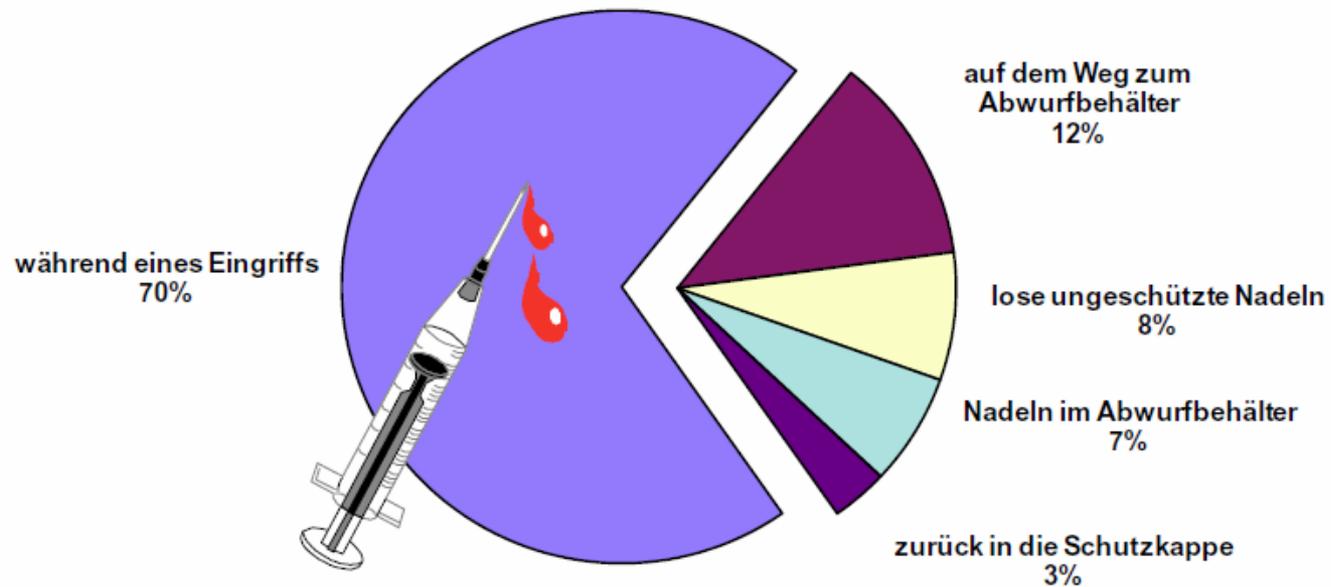
- during disposal 73



Entsorgungsfehler Grafik

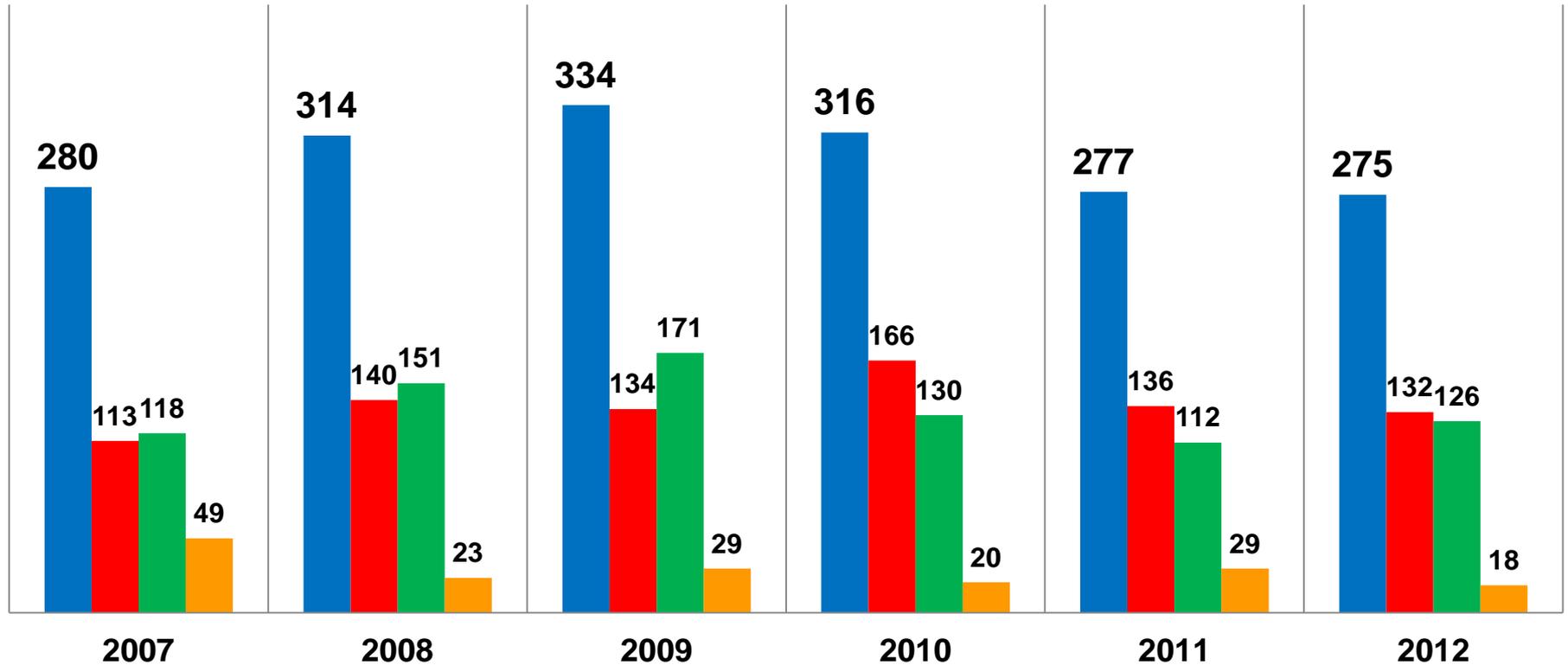
Unfallstatistik LKH 2011

Mind. 30% der Stichverletzungen sind vermeidbar!





Sharps injury statistics



■ gesamt ■ mit Hohlraum ■ ohne Hohlraum ■ unbekannt



Sharps injuries involving objects **with** a cavity

	2011	2012
Butterfly	20	2
Butterfly safety	13	16
Pre-filled syringe s.c.	17	18
Pre-filled safety syringe s.c.	-	-
Insulin pen	14	17
Needle	66	57
Needle safety system	-	3
Venflon	13	11



Causes of injury – safety butterfly

- 12 x restless patient
- 3 x unsteadiness (new staff)
- 1 x lack of concentration on the task

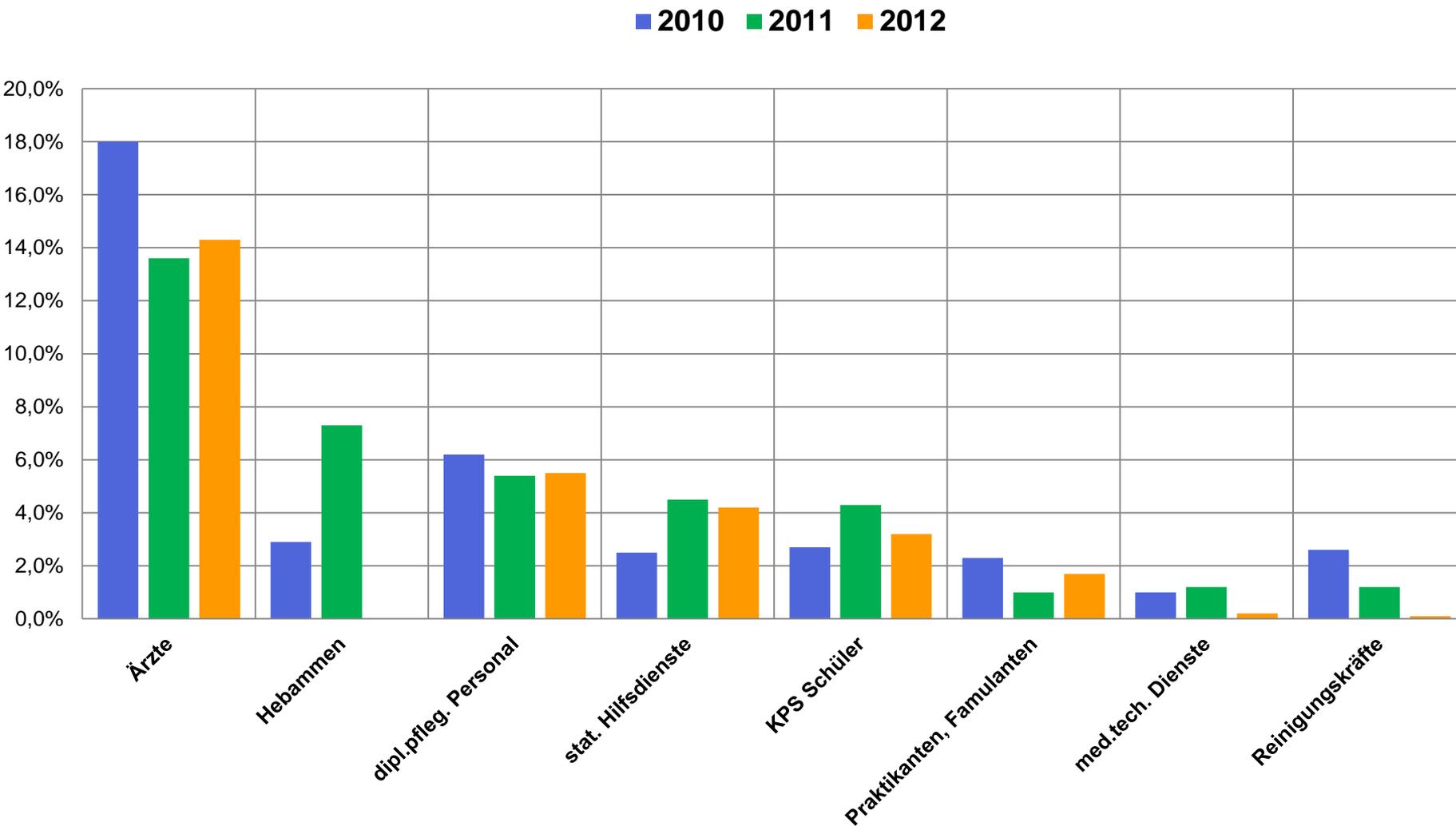


Sharps injuries involving objects **without** a cavity

	2011	2012
Sewing needle	57	55
Scalpel	21	14
Safety lancet	0	0
Lancet	1	1
Forceps	4	5

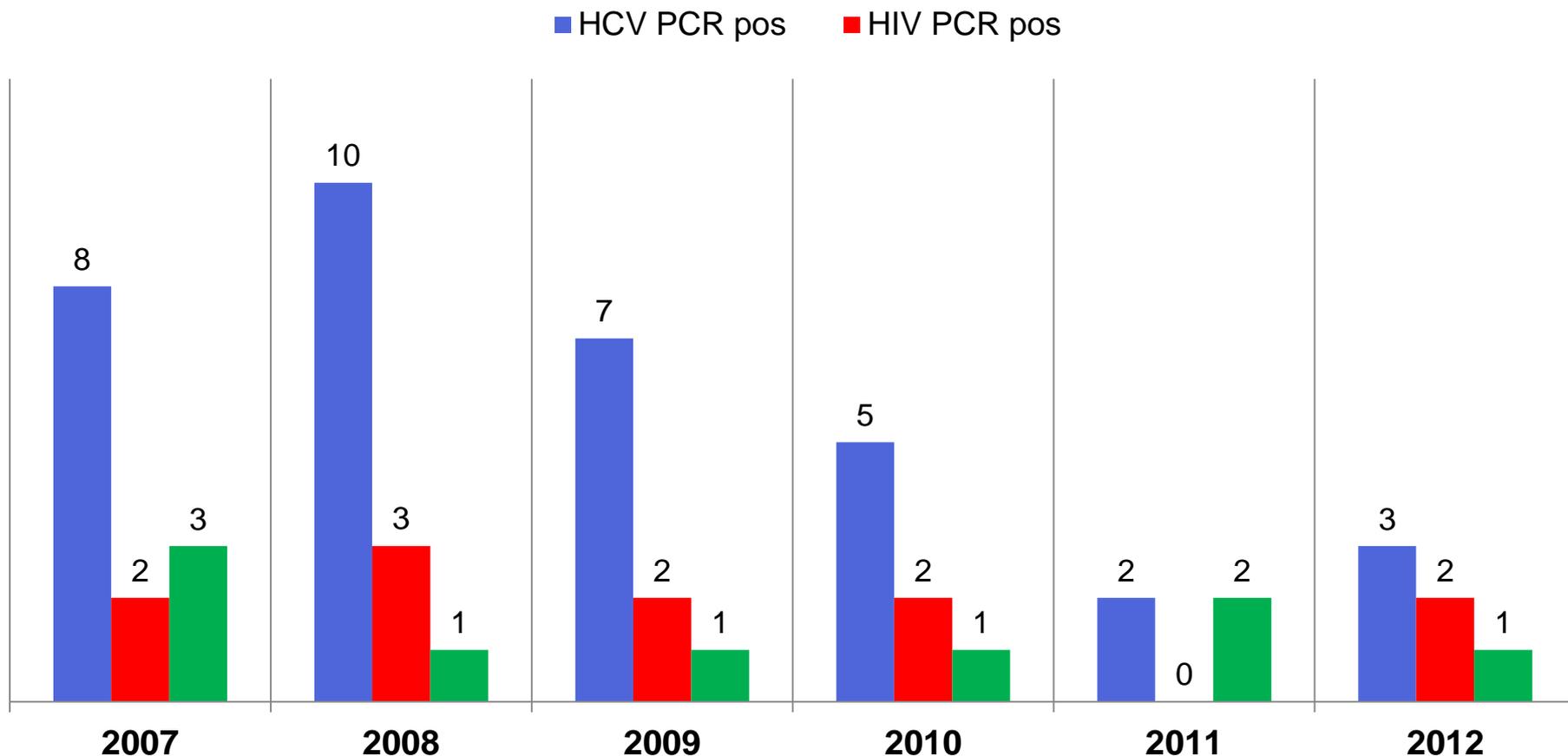


Sharps injuries by occupational group in %





Sharps injuries involving positive patients





Contamination from positive patients 2011

Hepatitis B: 2 (disposal of pre-filled syringe, needle disposal)

Hepatitis C: 2 (1x eye contamination)

Laboratory costs per injury: 162,50

Annual program Hep. C approx. 500.—

Annual program HIV approx. 600.—

Since 1994 no infections from sharps injuries



Costs of sharps injuries 2011

For 277 sharps injuries

Lab. costs (initial testing) - total: 44,957.00

Safety hollow needles only (165): - 26,779.00 lab. costs
22,178.00

Additional costs of safety products: approx. 100,000.—

Additional costs of disposal containers 2011 10,511.—

Waste dump costs??



Ratio of needle use to sharps injuries

	2008	2009	2010
Total	0.0182%	0.0192%	0.0196%
HIV pos.P.	0.00013%	0.00013%	0.00012%
HCV pos.P.	0.00047%	0.00019%	0.00019%
HBV pos.P.	0.00000%	0.00006%	0.00006%
Sharps injuries:			
HIV	2	2	2
HCV	7	3	3
HBV	0	1	1



" MUSTS "

- Hepatitis B vaccination
- Gloves
- Skin protection
- Disposal facilities on-site
- Training
- Enable staff to work calmly
 - no time pressure
 - enough staff
- Experienced people in risky situations



Thank you for listening