Annual SHOT Report 2015 – Supplementary Information

Chapter 8: Near Miss Reporting (NM)

Sub categorisation of total near miss errors n=1243

Table 8.4: Numbers of near misses originating in clinical or laboratory areas

Category of incidents	Number of cases	Percentage of cases
Clinical errors	956	76.9%
Laboratory errors	287	23.1%
Total	**1243**	**100%**

Near miss clinical errors n=956

Table 8.5: Clinical errors according to category

Category of clinical errors	Number of cases	Percentage of cases
Sample errors - Wrong blood in tube (WBIT)*	780	81.6%
Other sample labelling errors	45	4.7%
Request errors	61	6.4%
Component collection/administration errors	45	4.7%
Cold chain errors	24	2.5%
Anti-D immunoglobulin errors, e.g. requests for: incorrect volume, D-positive woman, woman with immune anti-D	1	0.1%
Total	**956**	**100%**

**Includes 2 full blood count (FBC) wrong blood in tube errors where transfusions nearly took place based on the incorrect results*

Wrong blood in tube (WBIT) n=780

Definition of wrong blood in tube incidents:

- Blood is taken from the wrong patient and is labelled with the intended patient's details
- Blood is taken from the intended patient, but labelled with another patient's details

Table 8.6: Staff responsible for wrong blood in tube incidents

Staff responsible for taking sample	Number of cases	Percentage of cases
Doctor	273	35.0%
Nurse	165	21.1%
Midwife	165	21.1%
Healthcare assistant	57	7.3%
Phlebotomist	48	6.2%
Medical student	6	0.8%
Other/unknown	66	8.5%
Total	**780**	**100%**

Year on year, doctors remain the staff group most likely to be responsible for wrong blood in tube errors, accounting for 35.0% (273/780) in 2015.

Table 8.7: Practices leading to wrong blood in tube

Practices leading to wrong blood in tube	Number of cases	Percentage of cases
Sample not labelled at patient's (bed)side	331	42.4%
Patient not identified correctly	271	34.8%
Sample not labelled by person taking blood	63	8.1%
Pre-labelled sample used	14	1.8%
Identity fraud	3	0.4%
IT auto merge	1	0.1%
Unknown	97	12.4%
Total	**780**	**100%**

Table 8.8: Circumstances leading to the detection of wrong blood in tube

How wrong blood in tube error was detected		Number of cases	Percentage of cases
Detected before laboratory procedures started (n=145)	Sample taker realised	61	7.8%
	Laboratory vigilance	54	6.9%
	Results from non-transfusion samples (e.g. FBC)	12	1.5%
	Other colleaguesrealised sampling error	18	2.3%
Detected during laboratory procedures (n=594)	During testing	278	35.6%
	At authorisation	260	33.3%
	Further sample differed	56	7.2%
Detected after laboratory procedures completed (n=41)	Other colleague realised sampling error	21	2.7%
	Sample taker realised	14	1.8%
	Results from non-transfusion samples (e.g. FBC)	3	0.4%
	Pre-administration checks	3	0.4%
	Patient realised the error	1	0.1%
Total		**780**	**100%**

Request errors n=45

Table 8.9: Categories of request errors

Request errors		Number of cases	Percentage of cases
Specific requirements not requested (n=36)	Irradiated	29	64.5%
	Red cell phenotype	1	2.2%
	CMV negative	2	4.4%
	Group for HSCT patient	3	6.7%
	Pathogen inactivation	1	2.2%
Request for incorrect patient		7	15.6%
Request based on erroneous test results		2	4.4%
Total		**45**	**100%**

CMV=cytomegalovirus; HSCT=haemopoietic stem cell transplant

Table 8.10: Mode of detection of request errors

Mode of detection	Number of cases	Percentage of cases
In laboratory	12	26.7%
Bedside pre-administration check	23	51.1%
Other	10	22.2%
Total	**45**	**100%**

Component collection/administration errors n=61

Table 8.11: Component collection/administration errors

Collection/administration errors	Number of cases	Percentage of cases
Incorrect units collected by ward staff/porters	34	55.8%
Attempted administration to incorrect patient	19	31.1%
Unit expired on ward	7	11.5%
Wrong details on collection slip	1	1.6%
Total	**61**	**100%**

Errors related to management of the cold chain n=45

Table 8.12: Errors related to management of the cold chain

Cold chain errors	Number of cases	Percentage of cases
Components stored inappropriately*	27	60.0%
Incorrect transport/packing of units	11	24.5%
Returned to stock after out of temperature controlled environment >30 minutes	6	13.3%
Part used unit returned to blood refrigerator	1	2.2%
Total	**45**	**100%**

**Includes a case of anti-D immunoglobulin in a freezer*

Anti D Immunoglobulin (Ig) errors n=1

Only a single case related to anti-D immunoglobulin errors, included in Table 8.12 above.

Near miss laboratory errors n=287

The near miss laboratory errors reflect those discussed in Chapter 5, Laboratory Errors and MHRA Serious Adverse Events.

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Table 8.13: Categories of laboratory errors made

Near miss laboratory categories	Total	Percentage	Chapter					
			IBCT	SRNM	HSE	RBRP	ANTI-D	ADU
Sample receipt and registration	33	11.5%	4	7	0	21	1	0
Testing	31	10.8%	8	16	0	0	7	0
Component selection	86	30.0%	24	39	15	0	8	0
Component labelling, availability, handling and storage	136	47.4%	12	1	31	86	6	0
Other	1	0.3%	0	0	0	0	0	1
Total	**287**	**100%**	**48**	**63**	**46**	**107**	**22**	**1**

Sample registration and receipt n=33

Table 8.14: Sample receipt and registration errors

Sample receipt and registration errors	Number of cases	Percentage of cases
Incorrect identifiers entered onto LIMS	22	66.7%
Specific requirements not met	7	21.2%
Sample booked under incorrect record	3	9.1%
Incorrect patient merge in LIMS/PAS	1	3.0%
Total	**33**	**100%**

LIMS=laboratory information management system; PAS=patient administration system

Testing n=31

Table 8.15: Testing errors

Testing errors	Number of cases	Percentage of cases
Incomplete testing	14	45.2%
Interpretation	1	3.2%
Sample used outside BCSH validity guidelines	4	12.9%
Equipment failure/testing problem	3	9.7%
Manual grouping errors	3	9.7%
Anti-D grouping error of mum/baby	6	19.3%
Total	**31**	**100%**

BCSH=British Committee for Standards in Haematology

Component selection n=86

Table 8.16: Component selection errors

Component requirement or specification missed		Number of cases	Percentage of cases
Time expired component selected		15	17.4%
Incorrect D type selected		14	16.3%
Incorrect ABO type selected		8	9.3%
Incorrect component type selected		7	8.1%
Specific requirements not met (n=39)	Irradiated	17	19.8%
	Red cell phenotype	11	12.8%
	CMV	6	7.0%
	Pathogen inactivated (MB/SD)	4	4.6%
	Washed cells	1	1.2%
Anti-D Ig selection errors (n=3)	Anti-D Ig issued to woman with immune anti-D	2	2.3%
	Anti-D Ig issued to mother of D-negative baby	1	1.2%
Total		**86**	**100%**

**MB=methylene blue-treated; SD=solvent detergent-treated*

Component labelling, availability, and handling and storage errors (HSE) n=136

Table 8.17: Component labelling, availability, and handling and storage errors (HSE)

Component errors	Number of cases	Percentage of cases
Component labels transposed	58	42.7%
Incorrect patient information on label	39	28.7%
Cold chain errors	12	8.8%
Time expired component available	12	8.8%
Exceeded BCSH (Milkins et al. 2012) sample timing guidelines	6	4.4%
Incorrect component sent to ward	8	5.9%
Other = thawing temp led to deposits in SD-FFP	1	0.7%
Total	**136**	**100%**