

Participation in UK Haemovigilance Reporting

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Authors: Debbi Poles and Paula Bolton-Maggs

Reporting organisations 2016

Participation in United Kingdom (UK) haemovigilance remains at 100% with all National Health Service (NHS) organisations registered to report directly, or indirectly, to SHOT. In the calendar year 2016 only one registered NHS organisation did not make any reports to SHOT. There were 20 non-NHS organisations that made reports during 2016.

Despite the fact that 2016 has seen the lowest number of non-reporting NHS organisations for a number of years, this is the first year that overall report numbers have decreased slightly. Part of this decrease can be accounted for with the end of alloimmunisation reporting, but it could be that reporting levels have reached a plateau.

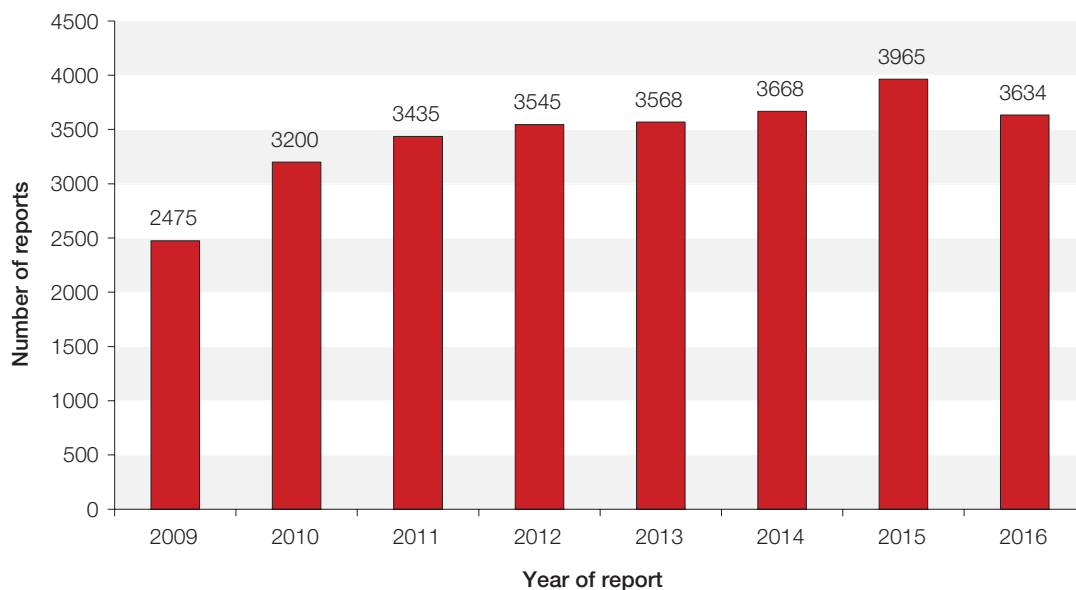


Figure 2.1:
Number of reports submitted to SHOT 2009-2016

Number of SHOT reports by UK country

A total of 3634 reports were submitted to the SHOT database in 2016 and the breakdown by country is shown below.

	2013		2014		2015		2016	
	Number	%	Number	%	Number	%	Number	%
England	2975	83.4	3119	85.0	3431	86.5	3035	83.5
Northern Ireland	129	3.6	98	2.7	100	2.5	102	2.8
Scotland	285	8.0	278	7.6	259	6.6	274	7.5
Wales	179	5.0	173	4.7	175	4.4	223	6.2
United Kingdom	3568	100	3668	100	3965	100	3634	100

Table 2.1:
Total number of reports to SHOT by UK country 2013-2016

Betsi Cadwaladr University Health Board comes under Wales rather than England from April 2016

Blood component issue data

Table 2.2:
Total issues of blood components from the UK Blood Services in calendar year 2016

	Red cells	Platelets	FFP	SD-FFP	MB-FFP	Cryo	Totals
NHS Blood & Transplant	1,532,416	262,548	180,738	83,392	7,705	38,920	2,105,719
Northern Ireland Blood Transfusion Service	47,923	8,766	5,353	3,060	329	1,352	66,783
Scottish National Blood Transfusion Service	153,976	24,310	18,345	2,730	1,270	2,113	202,744
Welsh Blood Service	83,709	11,346	9,124	3,289	0	433	107,901
Total	1,818,024	306,970	213,560	92,471	9,304	42,818	2,483,147

Paediatric/neonatal MB-FFP are expressed as single units; cryoprecipitate figures are expressed as pools and single donations as issued; all other components are adult equivalent doses

FFP=fresh frozen plasma; SD=solvent detergent-sterilised; MB=methylene blue-treated; Cryo=cryoprecipitate

SD-FFP data supplied by Octapharma

Betsi Cadwaladr University Health Board comes under Welsh Blood Service rather than NHS Blood & Transplant from April 2016

Table 2.3:
Total number of reports per 10,000 components by UK Blood Services 2013-2016

	2013	2014	2015	2016
NHS Blood & Transplant	12.7	13.7	15.5	14.4
Northern Ireland Blood Transfusion Service	18.7	14.6	15.0	15.3
Scottish National Blood Transfusion Service	11.8	12.4	12.3	13.5
Welsh Blood Service	17.2	18.2	20.1	20.7
Total (rate for all Services combined)	12.9	13.8	15.4	14.6

Analysis of the last few years' UK data for components issued indicates a marked downward trend in red cell usage, and a small decrease in overall FFP issues. However, there is little change in platelet issues.

Figure 2.2 (left):
Issue data trends for red cells, platelets and total FFP 2011-2016

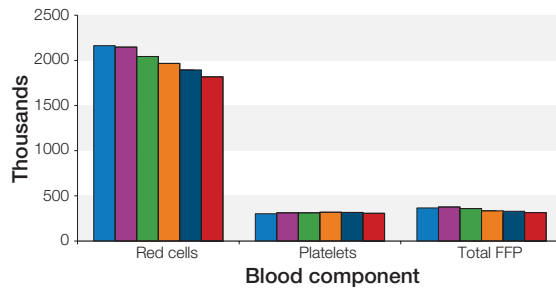
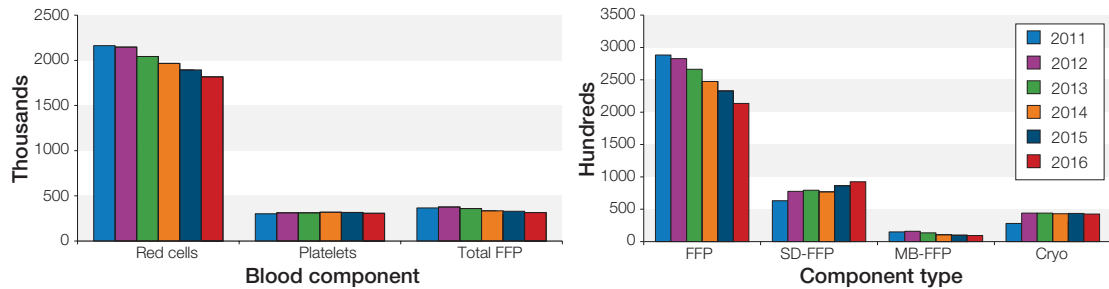


Figure 2.3 (right):
Issue data trends for FFP, SD-FFP, MB-FFP and cryoprecipitate 2011-2016



A further breakdown of FFP data demonstrates a more pronounced decrease in standard FFP, but an increase in SD-FFP.

Cases included in the 2016 Annual SHOT Report n=3091

The total number of reports analysed and included in the 2016 Annual SHOT Report is 3091. This is a decrease of 197 from the 3288 reports analysed in the 2015 Annual SHOT Report. Part of this decrease can be attributed to the cessation of alloimmunisation reporting, which accounted for 236 reports in 2015.

The overall number of errors has increased in 2016 (2688 total errors in 2016 compared to 2555 in 2015) and this, along with the reduction in reaction report numbers (due to the removal of alloimmunisations) means that the percentage of errors has increased considerably this year and now stands at 87.0% (2688/3091) of total reports.

The number of reports excluding near miss and right blood right patient (RBRP) is 1581 (1858 in 2015).

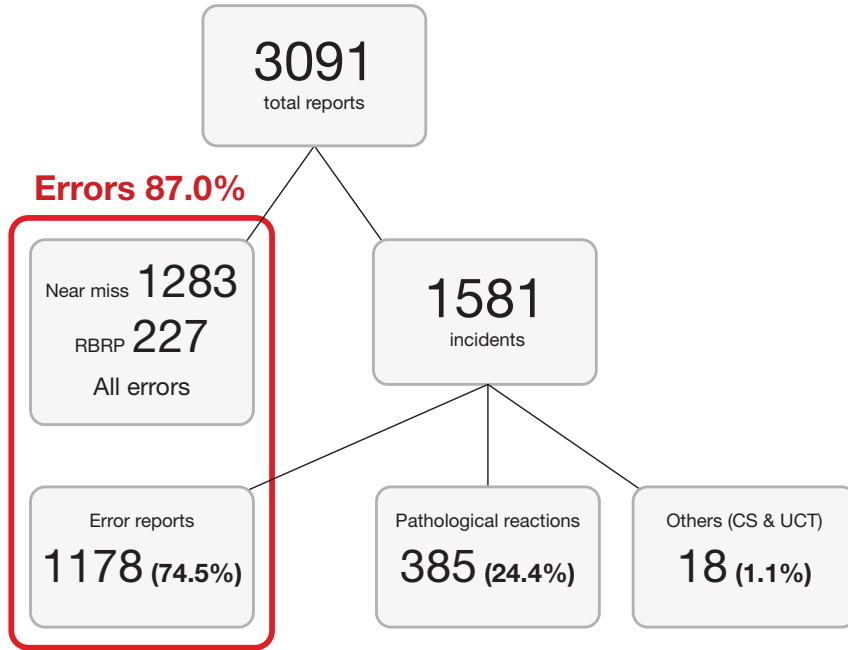


Figure 2.4: Categorisation of reports analysed in 2016

CS=cell salvage; UCT=unclassifiable complications of transfusion

Error rates by category

To understand where and why errors overall have increased, they are compared in Table 2.4 by category to the previous year. Red indicates an increase and green a decrease. Laboratory errors are described in Chapter 7, Laboratory Errors. Although there is a reduction overall, there has been an increase in testing and component selection errors in 2016 compared with 2015.

Category	2015	2016
Near miss	1243	1283 (300 L)
RBRP	187	227
HSE	254	192
Laboratory	455	378
IBCT (clinical and laboratory)	280 (148 C, 132 L)	331 (161 C, 170 L)
Anti-D immunoglobulin (Ig) errors	350	409
Avoidable transfusions	116	114
Delayed transfusions	94	101

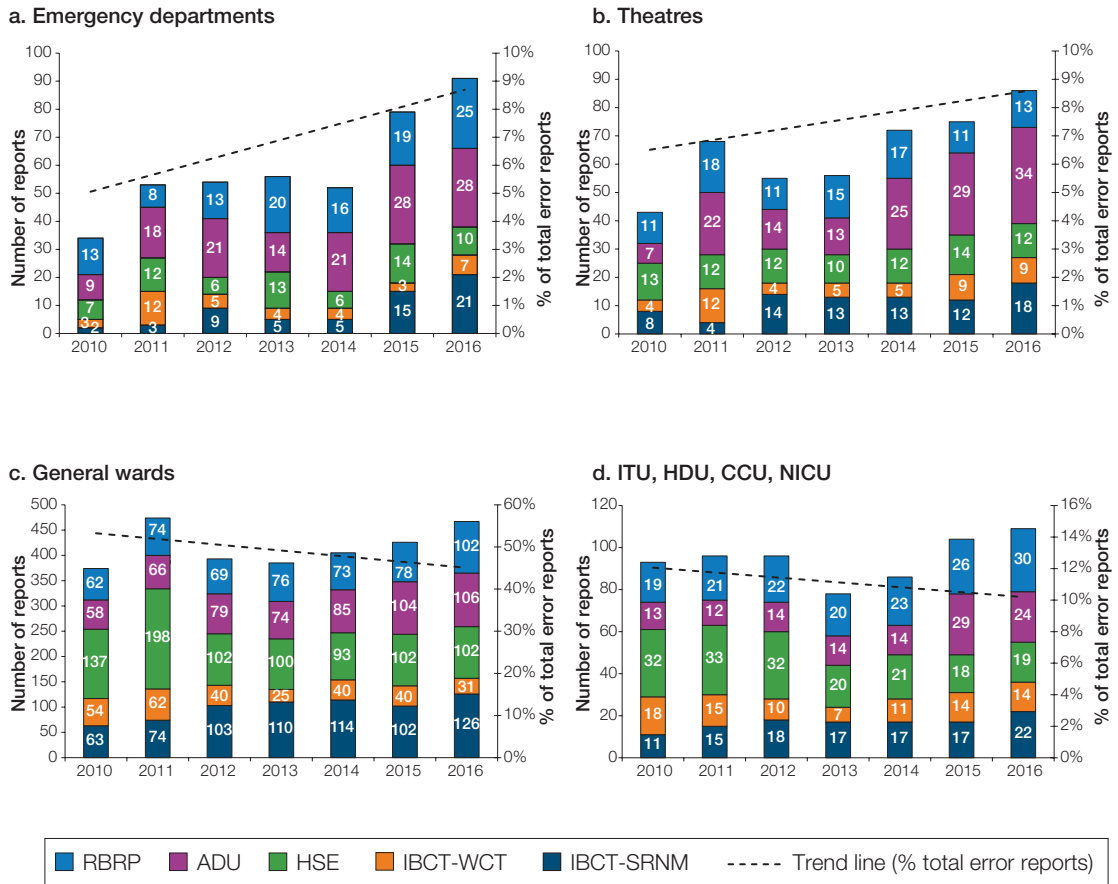
Table 2.4: Error rates 2015 and 2016 by category - red indicates an increase and green a decrease

HSE=handling and storage errors; IBCT=incorrect blood component transfused; C=clinical; L=laboratory

Analysis of errors by location

Examination of the trend of error reports by different location (Figure 2.5a-d) demonstrates some differences. The errors in emergency departments and theatres have increased year-on-year, and these errors are an increasing percentage of all reported errors, so not simply due to an increase in reporting. Most transfusions take place in wards where there has been a decrease in percentage of all error reports, but overall there has been an increase in several categories, particularly a steady increase in specific requirements not met.

Figure 2.5:
Trend of error reports from different departments



ADU=avoidable, delayed or undertransfusion; IBCT-WCT=IBCT wrong component transfused; IBCT-SRNM=IBCT specific requirements not met

ITU=intensive therapy unit; HDU=high dependency unit; CCU=coronary care unit; NICU=neonatal intensive care unit

Monthly participation data

Details of monthly participation are now published on the SHOT website for general information, and can be found at <http://www.shotuk.org/reporting/monthly-participation-data/>.

Information included here are the numbers of reports submitted to the SHOT database each month, and a running total of the number of reports completed in each SHOT category. These data are updated each month and are subject to change following review of the completed cases.