

## Annual SHOT Report 2017 – Supplementary information

### Chapter 3: Headline Data

#### Additional tables – not included in the main 2017 SHOT Annual Report

**Table 1: Comparison of report types 1996-2017**

Year/ category	IBCT	ADU	HSE	Anti-D	ATR	HTR	Allo	TRALI <sup>‡</sup>	TACO	TAD	PTP	UCT	TA- GvHD	TTI <sup>†</sup>	CS
2017	307	225	243	426	284	42	0	3	92	20	0	11	0	1	17
2016	331	246	192	409	253	35	0	0	86	10	0	9	0	1	9
2015	280	241	254	350	296	59	236	3	89	3	2	14	0	6	20
2014	278	185	188	359	343	46	151	4	91	7	1	5	0	3	16
2013	247	161	193	354	320	49	114	5	96	6	3	6	0	0	12
2012	252	145	316	313	372	42	69	7	82	19	1	8	1	3	11
2011	247	149	325	249	587	40	54	1	71	35	2	2	0	4	42
2010	200	110	239	241	510	33	25	4	40	35	1	0	0	0	15
2009	282	92	196	186	400	47	0	9	34	4	0	0	0	3	14
2008	262	76	139	137	300	55	0	5	18	1	1	0	0	6	28
2007	164	50	118	63	114	23	0	11	0	0	2	0	0	3	0
2006	198	51	74	77	85	34	0	3	0	0	0	0	0	2	0
2005	252	67	79	87	68	28	0	7	0	0	2	0	0	4	0
2004	262	56	54	67	34	43	0	14	0	0	0	0	0	1	0
2003	252	29	43	24	39	25	0	24	0	0	1	0	0	5	0
2001/2002*	303	0	0	43	48	47	0	33	0	0	2	0	0	3	0
2000/2001	173	0	0	17	31	39	0	13	0	0	3	0	1	5	0
1999/2000	188	0	0	12	33	24	0	18	0	0	5	0	2	9	0
1998/1999**	131	0	0	5	34	30	0	16	0	0	10	0	3	8	0
1997/1998	107	0	0	3	24	25	0	14	0	0	9	0	3	5	0
1996/1997	63	0	0	0	24	23	0	9	0	0	11	0	4	18	0
<b>Total</b>	<b>4779</b>	<b>1883</b>	<b>2653</b>	<b>3422</b>	<b>4199</b>	<b>789</b>	<b>649</b>	<b>203</b>	<b>699</b>	<b>140</b>	<b>56</b>	<b>55</b>	<b>14</b>	<b>90</b>	<b>184</b>

\*2001/2002 figures covered a 15-month period. \*\*Total excludes 7 cases that were not classified  
CS=cell salvage autologous transfusion

‡ The number of TRALI reports have been amended (back to 2003) to reflect the revised acceptance criteria adopted in 2016

† The number of TTIs have been updated to reflect the same number of reports as those investigated and confirmed by the PHE Epidemiology Unit

**Table 2: Cumulative mortality/morbidity data 1996-2017**

	Total	IBCT	ADU	HSE	Anti-D	ATR	HTR	Allo	TRALI	TACO	TAD	PTP	UCT	TA-GvHD	TTI	CS
Death in which the transfusion reaction was causal or contributory	<b>262</b>	24	45	0	1	24	20	0	39	65	8	3	7	14	12	0
Major morbidity attributed to the transfusion reaction	<b>1449</b>	149	41	0	27	649	114	0	139	225	23	14	9	0	53	6
Minor or no morbidity as a result of the transfusion reaction (including unknown outcomes)	<b>18104</b>	4606	1797	2653	3394	3526	655	649	25	409	109	39	39	0	25	178
<b>TOTAL **</b>	<b>19815</b>	<b>4779</b>	<b>1883</b>	<b>2653</b>	<b>3422</b>	<b>4199</b>	<b>789</b>	<b>649</b>	<b>203</b>	<b>699</b>	<b>140</b>	<b>56</b>	<b>55</b>	<b>14</b>	<b>90</b>	<b>184</b>

*\*\*Total excludes 7 cases from 1998-1999 that were not classified*

*The totals for IBCT may also include some ADU, HSE and ANTI-D up until 2008 where these cannot be identified and split out*

*TACO, TAD and autologous are new since 2008, and HSE and ADU were separated from IBCT in 2008.*

*Alloimmunisation is included since 2010 (separated from HTR) and is no longer collected since 2015*

*Cases with potential for major morbidity are included in minor or no morbidity*

*CS=cell salvage autologous transfusion*

**Table 3: Mortality and morbidity data 2017**

	Total	IBCT	ADU	HSE	Anti-D	ATR	HTR	Allo	TRALI	TACO	TAD	PTP	UCT	TA-GvHD	TTI	CS
Death in which the transfusion reaction was causal or contributory	21	0	8	0	0	0	1	0	0	7	5	0	0	0	0	0
Major morbidity attributed to the transfusion reaction	112	3	2	0	2	71	7	0	1	20	4	0	1	0	1	0
Minor or no morbidity as a result of the transfusion reaction (including unknown outcomes)	1538	304	215	243	424	213	34	0	2	65	11	0	10	0	0	17
<b>TOTAL</b>	<b>1671</b>	<b>307</b>	<b>225</b>	<b>243</b>	<b>426</b>	<b>284</b>	<b>42</b>	<b>0</b>	<b>3</b>	<b>92</b>	<b>20</b>	<b>0</b>	<b>11</b>	<b>0</b>	<b>1</b>	<b>17</b>

*Cases with potential for major morbidity are included in minor or no morbidity*

*CS=cell salvage autologous transfusion*

**Chapter 3: Sources for Risk data:**

Office for National Statistics

<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/deathregistrationsummarytablesenglandandwalesreferencetables> [accessed 16 February 2018]

Number of persons killed in aviation accidents in 2010-2015, UK n=92 2010-2016 = 15 p.a.

<http://ec.europa.eu/eurostat/data/database> (online data code: tran\_sf\_aviaca, tran\_sf\_aviaaw, tran\_sf\_aviagah, tran\_sf\_aviagal) [accessed 10 February 2018]

Road deaths all users 2013 1713 = 1 in 37,000

<https://www.gov.uk/government/publications/annual-road-fatalities> [accessed 10 February 2018]

Smoking-related deaths

<https://www.gov.uk/government/statistics/statistics-on-smoking-england-2017> [accessed 10 February 2018]

Shojania KG, Dixon-Woods M. Estimating deaths due to medical error: the ongoing controversy and why it matters. *BMJ Qual Saf* 2017;**26**(5):423-8. Epub 2016/10/14.

Deaths due to medical error, 3.5%. Based on these figures the reviewers estimated that almost 12,000 (11,859) adult deaths would have been preventable in England during 2009.

<https://www.nhs.uk/news/medical-practice/one-in-20-hospital-deaths-preventable/> [accessed 10 February 2018]

Deaths from drowning 2016, UK n=300 (or 233 from ONS data)

<https://nationalwatersafety.wordpress.com/> [accessed 10 February 2018]

Alcohol-related deaths 2016: UK office for national statistics

<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/datasets/alcoholrelateddeathsintheunitedkingdomreferencetable1> [accessed 16 February 2018]

Elsom DM, Webb JDC. Deaths and injuries from lightning in the UK, 1988–2012 link to paper in Weather 2014 69 (8) [http://www.torro.org.uk/lightning\\_info.php#2](http://www.torro.org.uk/lightning_info.php#2) [accessed 10 February 2018]

Ainley LI and Hewitt PE. Haematology patients and the risk of transfusion-transmitted infection. *Br J Haematol* 2018;**180**:473-483.

Deaths reported in ISTARÉ

Politis C, Wiersum JC, Richardson C, et al. The International Haemovigilance Network Database for the Surveillance of Adverse Reactions and Events in Donors and Recipients of Blood Components: technical issues and results. *Vox sang*. 2016;**111**(4):409-17.

The idea for this figure was after Carson: Carson JL, Grossman BJ, Kleinman S et al. Red blood cell transfusion: a clinical practice guideline from the AABB\*. *Ann Int Med* 2012;**157**(1):49-58.