SHOT Report 2018 (n=3959)

- Total components issued: 200,191
  - Number of reports: 330
  - Reports per 10,000 component issued: 16.5

- Total components issued: 57,072
  - Number of reports: 133
  - Reports per 10,000 component issued: 23.3

- Total components issued: 2,029,453
  - Number of reports: 3307
  - Reports per 10,000 component issued: 16.3

- Total components issued: 113,017
  - Number of reports: 189
  - Reports per 10,000 component issued: 16.7
Errors 85.5%

Near miss 1359
RBRP 200
All errors

Error reports 1201 (71.8%)

Pathological reactions 442 (26.5%)
Others (CS & UCT) 28 (1.7%)

RBRP = right blood right patient; CS = cell salvage; UCT = unclassifiable complications of transfusion
Nine steps in the transfusion process

1. Request
2. Sample Taking
3. Sample Receipt
4. Testing
5. Component Selection
6. Component Labelling
7. Component Collection
8. Prescription
9. Administration

Critical points where positive patient identification is essential

Critical points in the laboratory

Note: Once a decision to transfuse is made, the authorisation or prescription may be written at variable times during this sequence, but must be checked during the final stage.
Laboratory incidents and near misses by category of outcome n=740

- WCT: 47 (Laboratory errors), 59 (Laboratory near miss)
- SRNM: 111 (Laboratory errors), 72 (Laboratory near miss)
- HSE: 72 (Laboratory errors), 88 (Laboratory near miss)
- RBRP: 95 (Laboratory errors), 77 (Laboratory near miss)
- Avoidable: 10 (Laboratory errors)
- Delayed: 30 (Laboratory errors)
- Anti-D Ig: 62 (Laboratory errors), 16 (Laboratory near miss)

WCT = wrong component transfused; SRNM = specific requirements not met; HSE = handling and storage errors; RBRP = right blood right patient; Ig = immunoglobulin
SHOT laboratory incidents showing at which stage the primary error occurred

<table>
<thead>
<tr>
<th>Stage</th>
<th>Laboratory errors</th>
<th>Laboratory near miss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample receipt and registration</td>
<td>75</td>
<td>53</td>
</tr>
<tr>
<td>Testing</td>
<td>110</td>
<td>53</td>
</tr>
<tr>
<td>Component selection</td>
<td>54</td>
<td>52</td>
</tr>
<tr>
<td>Component labelling</td>
<td>173</td>
<td>149</td>
</tr>
<tr>
<td>Collection</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>18</td>
<td>18</td>
</tr>
</tbody>
</table>
Laboratory errors (n=409) showing at which stage the error occurred and the outcome.

- **Sample receipt and registration**: 7 WCT, 18 SRNM, 18 HSE, 6 RBRP, 24 Anti-D Ig
- **Testing**: 10 WCT, 63 SRNM, 8 HSE, 9 RBRP, 19 Avoidable
- **Component selection**: 24 WCT, 21 SRNM, 8 HSE
- **Component labelling**: 1 WCT, 72 SRNM, 58 HSE, 12 RBRP, 6 Anti-D Ig
- **Collection**: 3
- **Miscellaneous**: 3 WCT, 8 SRNM, 5 HSE

*WCT = wrong component transfused; SRNM = specific requirements not met; HSE = handling and storage errors; RBRP = right blood right patient; Ig = immunoglobulin*
Sample receipt and registration errors with outcome n=75

Available historical information
- WCT: 5
- SRNM: 10
- RBRP: 1
- Avoidable: 2
- Delayed: 23

Demographic data entry error
- WCT: 2
- SRNM: 17
- RBRP: 11

Missed on request form
- WCT: 8
- SRNM: 1
- RBRP: 3
- Avoidable: 1
- Delayed: 1

WCT = wrong component transfused; SRNM = specific requirements not met; RBRP = right blood right patient; Ig = immunoglobulin
Testing errors with outcome n=110

- Procedural errors: 48 (WCT), 8 (SRNM), 8 (RBRP), 8 (Avoidable), 8 (Delayed), 8 (Anti-D Ig)
- Interpretation errors: 4 (WCT), 6 (SRNM), 6 (RBRP)
- Transcription errors: 2 (WCT), 4 (SRNM), 1 (RBRP), 5
- Technical errors: 1 (WCT), 5 (SRNM), 1

WCT = wrong component transfused; SRNM = specific requirements not met; RBRP = right blood right patient; Ig = immunoglobulin
Right blood right patient n=200

Clinical: 123
Laboratory: 77

Patient identification errors n=115
- Clinical: 86
- Laboratory: 29

Prescription errors n=37
- Clinical: 37

Labelling errors n=48
- Clinical: 48
Incorrect blood component transfused n=307 (100%)

- Clinical: 149 (48.5%)
- Laboratory: 158 (51.5%)

Wrong component transfused n=82
- Clinical: 35 (42.7%)
- Laboratory: 47 (57.3%)

Specific requirements not met n=225
- Clinical: 114 (50.7%)
- Laboratory: 111 (49.3%)
Point in the process where the first mistake occurred leading to wrong component transfusion (WCT) or specific requirements not met (SRNM)
Laboratory errors resulting in wrong component transfused n=47

- ABO-incompatible platelets: 1
- ABO non-identical: 2
- Wrong patient: 1
- Wrong component: 11 (Component selection: 11, Miscellaneous: 3)
- ABO-incompatible FFP: 1 (Sample receipt and registration: 1, Testing: 1, Component selection: 2)
- D-mismatch: 1 (Sample receipt and registration: 1, Testing: 5, Component selection: 6, Miscellaneous: 2)
- Wrong ABO/D to HSCT patient: 1 (Sample receipt and registration: 5, Testing: 1, Component selection: 4, Miscellaneous: 1)

FFP=fresh frozen plasma; HSCT=haemopoietic stem cell transplant
Laboratory errors leading to specific requirements not being met n=111

- Blood warmer: 1
- Washed platelets: 1
- K-negative: 4
- HEV-screened: 1
- Incorrect phenotype: 57 (5 Sample receipt and registration, 5 Component selection, 5 Component labelling)
- Methylene-blue treated: 5
- Irradiated: 6 (3 Sample receipt and registration, 1 Component selection)
- HLA-matched: 2
- CMV-screened: 1
- Apheresis platelets: 1
- Sampling errors: 6

HEV=hepatitis E virus; HLA=human leucocyte antigen; CMV=cytomegalovirus