

## SHOT Recommendations of the Year

Target	Recommendation	Compliance	Notes/Action
<p><b>NBTC, JRCPTB (Joint Royal Colleges of Physicians Training Board), Royal Colleges of; Physicians, Paediatrics, Pathologists, Anaesthetists, Surgeons, Obstetricians and Gynaecologists, the Academy Postgraduate Education Committee.</b></p>	<p><b>Inclusion of transfusion medicine in core curriculum for junior doctors:</b> In this SHOT report there are two fatalities arising from decision making when prescribing components. In addition there are numerous cases of inappropriate transfusion and incorrect specifications of blood components given. As recommended in the 2002 report, it is imperative that the curricula of junior doctors in training in all hospital-based specialities include transfusion medicine. This must go beyond safe practice in patient ID and blood administration, and include core knowledge, clinical assessment and decision making when considering transfusion therapy. This cannot be delivered by competency testing alone, but requires that transfusion medicine is integrated into training in relevant specialities. A sufficient number of subspecialty trained transfusion consultants must be maintained to lead on education and training.</p>		
<p><b>Hospital CEOs, SHOT, Consultants with responsibility for transfusion together with HTC and HTT.</b></p>	<p><b>Comprehensive reporting to SHOT by all hospitals:</b> Whilst the number of SHOT reports have increased year-on-year, this year has seen a slight downturn in numbers of reports. This is likely to be the effect of the implementation of the new system for reporting adverse incidents under the Blood Safety and Quality Regulations. However, SHOT reporting, although 'voluntary' in statutory terms, is not voluntary in professional terms, and is a requirement for Clinical Pathology Accreditation (CPA) and the NHS clinical governance framework. Reporting to MHRA does not include the breadth of incident categories or detail of data reportable to SHOT and does not provide analysis and feedback to hospitals on adverse events. The joint SABRE web-based reporting system facilitates reporting to both MHRA and SHOT to fulfil both legislative and professional requirements.</p>		
<p><b>Hospitals CEO's, National Transfusion Laboratory Collaborative, BBT network, RCN, BBTS</b></p>	<p><b>Speciality accredited laboratory and clinical staff in all hospitals:</b> In the 2001 report SHOT recommended an ongoing programme of education and training of all staff involved in transfusion and this is reiterated this year. The NSPA safer practice notice 14 requires documented training of all relevant personnel, and competency assessments based around blood sampling, collection and administration practice. This is underway in many hospitals. However, all transfusion practitioners and a quorum of hospital transfusion laboratory staff must be trained to a higher level, and should be encouraged to achieve BBTS certification for laboratory practice or as transfusion practitioners. Hospital transfusion laboratories should ensure that an accredited transfusion specialist is available at all times.</p>		

**CMO's National Blood Transfusion Committee & counterparts in Scotland, Wales and N. Ireland**

Target	Recommendation	Compliance	Notes/Action
<p><b>The CMO's NBTC and its counterparts in Scotland, Wales, and Northern Ireland.</b></p>	<p>In line with recommendations made in the BCSH Guidelines consideration should be given to issuing antibodies cards or similar information to all patients with clinically significant red cell antibodies. These should be accompanied by patient information leaflets, explaining the significance of the antibody and impressing that the card should be shown in the event of a hospital admission or being cross matched for surgery. Laboratories should be informed when patients carrying antibody cards are admitted.</p>		

**Recommendations from the 2006 Serious Hazards of Transfusion Annual Report**

**Hospital Transfusion Laboratories & Blood Service Reference Laboratories**

Target	Recommendation	Compliance	Notes/Action
<b>Hospital transfusion laboratories</b>	Group identical platelets should be selected whenever possible, with group O being the last choice for non group O recipients. Where children are concerned the Amendments and Corrections to the BCSH guidelines 'Transfusion Guidelines for Neonates and Older Children', should be followed.		
<b>Hospital transfusion laboratories and Blood services reference laboratories</b>	Investigation of a suspected HTR should include retesting of the pre-transfusion sample (where still available) by different or more sensitive techniques. Consideration should also be given to requesting clotted samples for investigation of suspected HTRs and using polyspecific AHG. Where hospital resources are limited, this will require referral to a reference centre.		
<b>Hospital transfusion laboratories and Blood services reference laboratories</b>	(Carried over from 2005) All cases of suspected AHTR and DHTR should be appropriately investigated, and ideally referred to a reference laboratory. Referring hospitals should make it clear to reference laboratories that they are investigation a DHTR to ensure that timely, appropriately tests are undertaken. Clinical details should be completed on the requests forms and the donation numbers of the units transfused should be included, so that their phenotype can be determined.		
<b>Blood services reference laboratories</b>	Reference laboratories should ensure that investigation of DHTRs includes testing an eluate made from the patient's red cells when the DAT is positive		

## Consultant Haematologists & Hospital Transfusion Teams

Target	Recommendation	Compliance	Notes/Action
<p><b>Consultant haematologists with responsibility for transfusion</b></p>	<p>All prescriptions for blood components must be clinically justified and in line with current guidelines to ensure that the benefits exceed the risks. Consultant haematologists with responsibility for transfusion should ensure that BCSH guidelines are incorporated into local protocols</p>		
<p><b>(see SHOT Recommendations of the Year )</b></p>	<p>Junior doctors should be educated, trained and competency assessed in transfusion medicine before being permitted to prescribe</p>		
<p><b>Consultant haematologists with responsibility for transfusion</b></p>	<p>All serious transfusion reactions must be investigated. Bacterial cultures must be taken in a febrile reaction when the rise in temperature exceeds 1.5 C or the reaction is otherwise sufficiently severe to merit discontinuing the transfusion. An update of BCSH guidelines is in progress. Consultant haematologists with responsibility for transfusion should implement current best practice.</p>		
<p><b>Hospital Transfusion Teams</b></p>	<p>Anaphylactic/anaphylactoid reactions may occur at any stage during the transfusion, emphasising the need to keep all patients receiving a transfusion visible and accessible to nursing staff. Out-of-hours transfusions should be avoided unless essential.</p>		

**Recommendations from the 2006 Serious Hazards of Transfusion Annual Report**

<p><b>Hospital Transfusion Teams</b></p>	<p>Hospital staff should continue to be aware of TRALI and report possible cases to the local BTS to facilitate investigation. Detailed clinical information is needed to allow clinical assessment of these cases. Blood samples (clotted and EDTA) from affected patients should be sent for laboratory investigation early. Continued education of all relevant staff about this condition is encouraged</p>		
<p><b>Hospital Transfusion Teams</b></p>	<p>Hospitals should continue to report and investigate all possible incidents of post-transfusion infection appropriately and adequately, both to MHRA and the blood services. Guidance for hospitals can be found on the NBS hospitals website: <a href="http://www.blood.co.uk/hospitals/library/request_forms/aer">http://www.blood.co.uk/hospitals/library/request_forms/aer</a>. Other services need to be discussed with the supplying blood centre.</p>		
<p><b>Hospital Transfusion Teams</b></p>	<p>Hospitals should consult the blood services about the investigation of transfusion reactions suspected to be due to bacteria. Attention should be paid to sampling and storage of implicated units or their residues and packs returned to blood services for testing. The case reported via MHRA that did not reach the blood service highlighted the need for laboratory reports within each hospital to be clearly marked as part of a suspected transfusion reaction and copied to the HTT. See; <a href="http://www.transfusionguidelines.org.uk/index.asp?Publication=REGS&amp;Section=23pageid=789">http://www.transfusionguidelines.org.uk/index.asp?Publication=REGS&amp;Section=23pageid=789</a></p>		
<p><b>Clinical users of blood and Consultant haematologists with responsibility for transfusion</b></p>	<p>Cases of suspected TRALI should be evaluated early by the consultant(s) involved and prompt discussion with the BTS is helpful. A team approach is recommended, with expertise included from the haematologist and chest physician and/or ITU consultant</p>		

**Recommendations from the 2006 Serious Hazards of Transfusion Annual Report**

<p><b>Clinical users of blood and Consultant haematologists with responsibility for transfusion</b></p>	<p>Clinicians need to maintain awareness and a high index of suspicion of Post Transfusion Purpura, a rare but treatable complication of transfusion. When PTP is suspected there should be referral to a platelet reference laboratory for relevant investigation.</p>		
<p><b>Clinical users of blood and Consultant haematologists with responsibility for transfusion. Hospital Transfusion Teams</b></p>	<p>Gamma or X-ray irradiation to 25 Gy of blood components for those at risk of GVHD remains essential. BCSH Blood Transfusion Task Force Guidelines define groups requiring this prophylaxis. New chemo or immune-therapeutic regimens must be evaluated for their potential to predispose individuals to TA-GVHD. New guidelines are in preparation from the BCSH. Awareness of groups at risk of this condition and knowledge of the risk factors, symptoms and signs must be maintained by all involved in the transfusion process. Good communication is required in all cases but particularly when patient care is shared between different hospitals. Hospitals must have clear protocols to ensure accurate information relating to this risk is communicated in a timely manner. Utilisation of a patient card and leaflet are recommended: an example is the BCSH/NBS leaflet available from NBS Hospital Liaison or via the NBS hospitals website.</p>		

### Professional Bodies

Target	Recommendation	Compliance	Notes/Action
<b>BBTS &amp; BCSH</b>	There is a need for a review, co-ordinated by a professional national body, of how long specimens should be kept post-transfusion. The review needs to consider the relative risks and benefits of storing specimens beyond the time that they are suitable for use in further cross matching tests		

## UK Blood Services

Target	Recommendation	Compliance	Notes/Action
<p><b>UK Blood Services</b></p>	<p>UK Blood Services should continue to investigate and apply methods to reduce the continuing risk of TRALI associated with apheresis donations, reducing the number of female donors on the panel, and testing those remaining for HLA antibodies.</p>		
<p><b>UK Blood Services</b></p>	<p>Despite good donor selection guidelines, some donors with infections might go on to donate, as in the case of the donor with undiagnosed diverticular disease included in this year's report. This is rare. Surveillance of testing blood donors for viral infections shows that a tiny proportion of donors have viral infections. It is important for UK Blood Service collection teams to remain vigilant for signs of symptoms of disease and risk factors for infects in potential donors and ensure that guidelines are adhered to, in order to reduce the risk of transmission of blood-borne infections.</p>		