‘Infrequently Asked Questions’
A Learning Tool for Transfusion Practitioners

Q1. What are the current figures for the risk of a patient receiving the wrong blood?

A. Response from Serious Hazards of Transfusion, 1st July 2014:

a) Risk of ABO-incompatible red cells = 3.3 per million components
b) Total Incorrect Blood Component Transfused (IBCT) = 89.5 per million
c) Wrong Component is Transfused = 20.7 per million
d) Specific Requirements Not Met = 68.9 per million

Q2. Where is it written that the rate of transfusion should be slower during the first fifteen minutes?

A. Response from senior member of the PBM Team:
The practice of slowly administering blood components in the first 15 minutes as a ‘test dose’ is long established but not well documented in guidelines or textbooks – there are however, references in guidance from a number of respected institutions around the world including;

Australian Red Cross Transfusion guidelines;
Proceed with the transfusion no faster than 5 mL/min for the first 15 minutes, unless otherwise indicated by the patient’s clinical condition. The rate of the transfusion will depend on the clinical context, age and cardiac status of the patient.

Oregon State University Hospital guidelines;

Melbourne Children's Hospital Guidelines;

Perinatology.com cryoprecipitate guidelines;

Sink BLS. Administration of Blood Components. In Roback JD et al eds. American Association of Blood Banks (AABB) Technical Manual; 16th edition (July 8, 2008) p 620

From the Canadian 'Bloody Easy' Handbook of Transfusion Medicine.

Q3. How long does anti-D circulate in the body for?

A. Response from a specialist in SHOT:

For practical purposes, the half-life of injected anti-D is about six weeks (hence the advice to give every six weeks with continuous bleeds), but you should also check with the manufacturers as BPL claim it is a little longer (12 weeks).

There are reports that immune anti-D from mum may still be detectable in the baby for up to six months as it is known to sequester in the spleen and be released slowly.

Q4. Can perfusionists check and administer blood components? They are not state registered, however, they have a postgraduate diploma or MSc in clinical perfusion science.

A. Response from the BCSH writing group:
Only registered healthcare professionals should administer blood components, as they are professionally accountable. The guidelines on administration for blood components state 'must' be administered by a registered healthcare professional, rather than 'should'.
Checking is a different matter but it is still the final responsibility of the registered person doing the actual administration.

Response from Regional Lead, PBM Team.
BCSH are planning to review the blood administration guidelines.

Q5. What sources of data provide details of bacterial and other infection rates of platelets?

A. Response from Regional Lead, PBM Team:
General epidemiology data is available in the 'Will I need a Platelet Transfusion?' leaflet at: http://hospital.blood.co.uk/patient-services/patient-blood-management-resources/patient-information-leaflets/
The very latest figures are available from the Public Health England at:
http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/BIBD/EpidemiologicalData/bibd005SurveillanceofInfectionsinBloodDonors/
Bacterial infection: SHOT is the best source of data to reference. Details can be found at: http://www.shotuk.org/home/

Q6. Can a patient who was born after 1996 and receives MB/non-uk sourced plasma transfusion donate blood?

A. Response from a Senior Nurse Practitioner in Blood Donation.

Unfortunately if donors have had a transfusion after 1980 then they are not eligible to donate.
Further details are available at: http://www.transfusionguidelines.org.uk/red-book/chapter-3-care-and-selection-of-whole-blood-and-component-donors-including-donors-of-pre-deposit-autologous-blood/3-13-prion-associated-diseases-including-sporadic-creutzfeldt-jakob-disease-cjd-and-variant-cjd-vcjd

Q7. We are updating our patient information and would like to know if there is any recent data on risk of HTLV transmission by transfusion please?

A. Response from NHSBT Consultant in Transfusion Medicine/Clinical Transfusion Microbiology:

The risk is very low and probably much lower than for the other viruses. We don't quote a risk for HTLV because it is not possible to make any sort of calculation.

There is no evidence of any definite transmissions of HTLV since we started leucodepleting blood (in 1998), even before we started HTLV antibody screening of blood donations (in 2002). We have carried out some lookbacks (very few) when we have had evidence of an infected donor not picked up by screening tests, but have never observed a transmission.

Q8. We have adult emergency group O negative red blood cell units selected as suitable for large volume neonatal transfusions. How should we request these in the future as we select HT neg? Is this likely to be an issue if using in neonates?

A. Response from senior member of the PBM Team:
The option to request HT neg for adult red cells will be removed from OBOS, but LVT units and other neonatal components are HT neg by Red Book specification.
If LVTs are ordered, they should be on standby only for up to 5 days from collection and should be used on adults if not used for neonates in time (to avoid expiry).
LVTs were never designed to be kept as emergency stock, but only for high volume use in cases such as cardiac surgery or ECMO. Feedback from specialist units indicate that neonatal resuscitation is carried out at around 15ml/Kg.
The draft 2015 revision of the BCSH guidelines on neonatal and paediatric transfusion suggest that for emergency resuscitation purposes, hospitals should allocate one or two O neg paedipack segments that may be frequently rotated back into laboratory stock to keep them as fresh as possible.

Q9. How can we wash red cells if the potassium level is found to be high?

A. Response from Consultant Paediatric Haematologist:
Paediatric cardiac units often 'wash' the red cells in the bypass circuit in some way before attaching to the patient e.g. by ultrafiltration, in order to make sure that the bypass fluid electrolytes are physiological. This does not count as activity of a blood establishment as it occurs exclusively in the clinical area.

All questions in this learning tool have been sent to the NHSBT Patient Blood Management Practitioner Team.

Answers have been sourced from NHSBT Consultant Haematologists and other transfusion experts and are generally agreed good practice advice.
However, we do not accept any legal responsibility for any errors or omissions.