National Patient Safety Agency

NEWS RELEASE

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NPSA issues – new advice for safer blood transfusions

New measures to improve the safety of blood transfusions, including photo ID cards for regular patients and electronic tracking systems for patients and blood, are announced today by the National Patient Safety Agency (NPSA).

The NPSA has worked with Serious Hazards of Transfusion (SHOT) and the Chief Medical Officer's National Blood Transfusion Committee (NBTC) on a 'Right patient, right blood' project to develop and evaluate new safety strategies.

Professor Sir John Lilleyman, Medical Director at the NPSA said: "Every year, around one million blood transfusions are carried out safely and correctly but occasionally things do go wrong. Administering the wrong blood type – also known as ABO incompatibility - is the most serious outcome of error during transfusions. Most of these incidents are due to the failure of final identity checks carried out between patients and the blood to be transfused.

"Our aim is to make transfusion safer, and also potentially benefit patients in other situations where misidentification occasionally causes serious problems such as wrong medication, wrong laboratory test results and wrong X-ray reports."

"We have focussed on two initiatives to reduce this risk, one to ensure that staff involved are properly trained and competent and the other to prevent errors with bedside patient identification checks."

The NPSA is advising all NHS organisations responsible for blood transfusions of action to take including:

- Using bar codes or other electronic identification and tracking systems for patients, samples and blood products. The NPSA has developed a standard specification for IT tracking systems which is endorsed by Connecting for Health (CfH) and Informing Healthcare in Wales.
- Introducing photo-identification cards for patients who undergo regular blood transfusions
- Adopting an additional labelling system of matching the right blood to the patient.
- Adopting national competencies developed by the NPSA and key stakeholders for all clinical staff involved in blood transfusions as well as formally assessing staff every three years
- Formally risk assessing local blood transfusion procedures
- Ensuring final blood compatibility checks are made in the presence of patients

SHOT data shows that between 1996 and 2004, five patients died as a direct result of being given ABO incompatible blood and ABO incompatibility contributed to the deaths of a further nine patients and caused serious illness in 54 patients.

In addition, the NPSA's reporting system for patient safety incidents, the National Reporting and Learning System (NRLS) received 41 reports of incidents directly relating to errors concerning blood samples taken for transfusion, collection of blood from the blood fridge and the administering of blood administration between November 2003 and April 2006. Two of these incidents resulted in the patient receiving the wrong blood.

Mike Murphy, Secretary of the NBTC said: "The NBTC has been actively involved in the development of the NPSA's *Right patient – right blood* guidance and strongly supports its recommendations to improve the safety of patients receiving blood transfusions.

"We have made recommendations on the implementation of electronic bedside and laboratory systems to ensure that patients only receive the correct blood and that regulatory requirements for full traceability of blood are met."

John Barker, blood bank manager at Queen Elizabeth Hospital, Gateshead Health NHS Foundation Trust said: “The Blood Transfusion Department of this hospital has implemented a rolling program of IT measures to improve the safety of patients receiving blood transfusions. A two dimensional bar-coded system containing all the patients’ demographics has been introduced into the trust. The blood transfusion refrigerators are now controlled by magnetic locks and a computer (BloodTrack Courier ™) only allowing access to trained and competent personnel. Staff must follow a defined procedure of identification and scanning to gain access to the correct blood.

“Using the same bar-code technology, the blood is then checked at the patient’s bedside using hand held computers (SafeTx ™) with integrated scanners. The staff can scan the patients’ wristbands and the unit of blood. The computer compares the data and either approves or rejects the unit for transfusion. These two measures along with mandatory blood transfusion training for all personnel involved in transfusion have dramatically improved blood safety within the hospital.”

The impact of this guidance will be measured using SHOT data and the NPSA will undertake a systematic review of all incidents relating to blood safety reported to its National Reporting and Learning System (NRLS).

-ENDS-

Notes for editors:

1. Professor Sir John Lilleyman and Mike Murphy are available for interview. Interview requests or any other media enquiries should be directed to Ravini Thenabadu in the NPSA communications team on 0207 927 9500.

2. The safer practice notice and associated blood safety resources are available at www.npsa.nhs.uk. Printed copies can be requested by calling the NHS response line on 08701 555455.

3. The National Patient Safety Agency (NPSA) was established in July 2001 following the recommendations of the Chief Medical Officer’s report on patient safety, *An Organisation with a Memory.* The NPSA’s role is to improve the safety of NHS patients by promoting a culture of learning and reporting from patient safety incidents, and to manage the national reporting system to support this function.

4. By collecting and analysing data on patient safety incidents, the Agency will be able to identify trends and patterns of avoidable incidents, provide feedback to organisations to enable them to change their working practices, help develop models of good practice and systems solutions at national level and support ongoing education and learning.

5. The *Quarterly National Reporting and Learning System data summary: Autumn 2006* is available on the NPSA website at http://www.npsa.nhs.uk/nrlsdata

6. Further information about the NPSA is available at www.npsa.nhs.uk. Further information about SHOT is available at www.shotuk.org and further information about the NBTC is available at www.blood.co.uk.