4.8: Collection of blood components and delivery to clinical areas

Errors in collection are a frequent root cause of wrong blood into patient events. All staff responsible for collecting blood from the transfusion laboratory or satellite refrigerators must be trained and competency assessed according to local policies. Manual documentation of collection, such as a ‘transfusion register’, has been traditionally used but the process can be strengthened by the use of electronic ‘blood-tracking’ systems.

- Staff collecting blood must carry documentation, such as a blood collection slip or the transfusion prescription, which contains the minimum patient identifiers. This must be checked against the details on the laboratory-generated label attached to the blood component pack.
- Computerised blood-tracking systems using barcodes can check (and record) the identity and accreditation of the person collecting or returning the blood (e.g. by scanning a barcode on their ID badge), ensure that the details on the collection documents match those on the selected blood pack and that the blood is within its expiry time and date. Computer-controlled satellite blood refrigerators are also now available that will only allow access to blood components compatible with the appropriate patient. These are ideal for ‘remote issue’ of blood components at locations without an on-site transfusion laboratory.
- The Blood Safety and Quality Regulations (BSQR) require that the time a component is out of a controlled temperature environment is recorded and ‘cold chain’ data must be kept for 15 years. Red cells that have been out of controlled refrigeration for more than 30 minutes must not be reissued for transfusion. (The rationale for the ‘30-minute rule’ is often questioned as it is based on studies carried out many years ago on very different blood components. Recent research shows that red cells show no impairment of function up to 60 minutes out of controlled refrigeration but evidence of bacterial safety is needed before a change in policy can be recommended.)
- Emergency group O stock in the blood refrigerator must be clearly identified and separated from units labelled for specific patients. The laboratory must be informed immediately when emergency stock is removed so that it can be replenished and an audit trail maintained.