day. All components were transfused not only without any proper identification but also without any laboratory checks or audit trail.

Case Study 16

Erroneous labelling highlights an IT loophole

A unit of paediatric platelets was issued to a hospital. The label stated 'Platelets, apheresis, leucocyte depleted for neonatal use'. However the CMV status was not given on the bag. An inexperienced member of staff issued the unit and it was transfused. Subsequent investigation revealed that the unit was CMV positive and a 'loophole' in the NBS PULSE computer system allowed CMV positive units to be labelled up for neonatal use, contrary to the requirements of the UKBTS "Red Book" guide.[41]

Errors in anti D administration

Errors occurred at all points in the transfusion chain, as with blood components. These errors have been grouped together this year to give an overall picture of mistakes made in anti-D administration.
There were 17 errors in anti-D administration reported this year compared to 12 last year.
Three of these errors were due to laboratory errors in RhD typing and in one additional case it could not be ascertained whether there had been a grouping error or an error in taking the sample, as the sample was no longer available for retest. Further laboratory errors included: failure to check the RhD status of the baby prior to issuing anti-D (2 cases), issuing anti-D when anti-tetanus immunoglobulin was requested; a mistake which went unnoticed by the administering nurse, and issuing anti-D to a 'D^u positive' patient due to incorrect serological reasoning. National recommendations[7] are quite clear on this point: 'Women who have weak expression of the RhD blood group (D^u) do not form anti-D and do not therefore require prophylaxis.'

Two cases involved misidentification or no formal identification of the patient at the bedside resulting in the wrong patients being given anti-D.
Anti-D is often kept on maternity wards or in antenatal clinics. It is administered by the midwife/GP and is then entered retrospectively onto the blood bank computer. A number (6) of communication and clerical errors have arisen in this process including: administering anti-D based on a verbal blood group given by the patient (against the local, written protocol) which was found to be incorrect 5 months later; not checking the blood group prior to administration on 2 occasions; 2 cases where the RhD type of the patient had been handwritten incorrectly in the notes and a case where a 'negative' result was obtained from the laboratory computer but for an entirely different test, not the RhD status.
The final case contained multiple errors:

Case Study 17

Multiple errors resulted in inappropriate anti-D administration

250iu anti-D was requested for a patient who was stated in error to be RhD negative and had suspected abdominal trauma at 34 weeks gestation. The laboratory staff, realising that the requested dose was incorrect, issued a 500iu dose of anti-D, but failed to check the historic group of the patient which was RhD positive, and also failed to request a repeat sample.

This case contains a number of errors: 2 requesting errors (the wrong RhD type and wrong anti-D dose given on the request form); 2 laboratory errors (failure to look up an historic blood group and failure to ask for a sample for fetomaternal haemorrhage estimation (FMH) – which would have been required had the patient been RhD negative). Recommendations[7] are again clear on this point: 'For all events after 20 weeks gestation 500iu anti-D Ig should be given followed by a test to identify FMH greater than 4mL red cells; additional anti-D Ig should be given as required.'