CJD Incidents Panel meeting – 7th September 2005
Recommendations to Chief Medical Officers

Other recipients of donors to vCJD cases

The CJD Incidents Panel meeting on 7th September 2005 considered what actions should be taken with respect to other recipients of blood from 'at-risk' donors to vCJD cases. The recommendations are summarised below, followed by some background information and more detailed recommendations.

Summary of recommendations

1. For cases where the number of donors is low, and the implied risk for each other recipient is well **above** 1%, the Panel in general would advise that other recipients should be traced, informed of their potential exposure to vCJD and considered as 'potentially at-risk of vCJD for public health purposes'. (Detailed recommendations 1-5)

2. For cases where the number of donors is high (say, more than ~90), and the implied risk for each other recipient falls close to or **below** 1%, the Panel requests further risk assessment and discussion on which to base decisions for each case. (Detailed recommendations 6-8)

3. The Panel's proposal for uninformed monitoring of individuals at low or uncertain increased risk of CJD should be urgently developed (by HPA) and considered (by ethics committee and CMOs) in order to provide this option for other recipients whose implied risk falls close to or clearly below 1%, and for other recipients whose transfusion details are uncertain.

Background Information

The meeting of the CJDIP on 11th May considered the implications of the ESOR risk assessment for donors to vCJD cases (the 'reverse' risk assessment), and made recommendations that were subsequently approved by the Chief Medical Officers (CMOs).

These recommendations included (recommendation no 16 from 11th May):

"It was noted that the recipients of the other donations from these donors should be already excluded from donating blood by the UKBS current donor selection guideline that excludes previously transfused individuals. The risk-classification of these recipients, the public health precautions relating to surgical instruments that should be advised for these recipients, and the potential value of monitoring this group of recipients to enhance the ascertainment of vCJD related disease should be considered in detail at the next CJDIP meeting (September 2005)."

Table 1 summarises the available information about the other donations history of the donors to the three recipients who later developed vCJD (with transfusion suspected as source of infection, but no infected donor identified) identified to date.

The 110 donors to these 3 vCJD cases have made approximately 3,000 donations. It can be estimated that approximately 3,600 components may have been issued for transfusion, and that tracing these components issued for transfusion could be expected to identify approximately 2,400 recipients, of which around 1,000 are expected to be alive in 2005. It is further estimated that confirmation of the unit transfused would be found in patients' notes of between 55% and 84% of patients.

Table 1: Summary of 'at-risk' donors and their other recipients, associated with 3 vCJD-cases where transfusion is suspected as a source of vCJD infection (by TMER study, to 26th July 2005).

vCJD case:	Number of components transfused (year of transfusion)	Total number of donations[1] by the donors to this case (year first: year last) [nos. per donor][2]	Estimated[3] and observed[4] number of blood components issued for transfusion	Estimated number of identifiable recipients[5]	Estimated number of identifiable living recipients[5]
No 1	103 (1993)	2,830 (1986:2005) [median:23; range 1--122]	Est: 3,512 Obs: NA	2,353	918
No 2	3 (1993)	20 (1988:2000) [3, 6, 11]	Est: 25 Obs: 24	17	7
No 3	4 (1994)	114 (1986:2003) [24; 28; 30; 32] 31 since 1998	Est: 65-114 Obs:1998-2004:22	44-76	17-30
Total	***110***	***2,964***	***Est:~3,600***	***~2,400***	***~950***

[1] From blood service records of "previous donations" -- based on recorded previous attendances and on self-report from donor at registration on system.
[2] See Annex 3 for full list of other donations by each donor.
[3] Based on assumptions: donation number correct; 1.7 components produced per donation, 73% of components issued for transfusion.
[4] Data from NBS/SNBTS.
[5] Based on assumptions: transfused recipients identifiable for 67% of components issued for transfusion; 39% of recipients not known to be dead at time of tracing. (i.e. ~20% of components are traceable to living recipients).
NB. Assumptions are largely based on data from English HCV lookback that started in 1995 to trace components issued 1980-1991 (i.e. 4 to 15 years previously). The estimated identifiable recipients for components issued for transfusion may be an underestimate for a vCJD lookback starting in 2006 for components issued 1 to 10 years earlier (and not including the early 1980s). The estimation of living recipients is likely to be correct as the majority of mortality is during the first 12 months post-transfusion, but maybe an over- or under-estimate if post-transfusion mortality has decreased or increased since 1991.

Recommendations and discussion

The conclusions of the CJD Incidents Panel on 7th September 2005 are summarised below. Not all issues were resolved and these recommendations therefore include further work to be done to develop the Panel's position regarding other recipients of blood from donors to vCJD cases, as well as actions to be taken forward for the cases identified to date.

Cases 2 and 3 in Table 1

1. For cases where the number of donors is low (see 9.2), such that the implied risk for each other recipient is well above 1% (even if the transmission probability is taken to be less than 1 and as low as ~0.35), the Panel wishes to review/confirm each decision individually, but in general would advise that other recipients should be traced, informed of their potential exposure to vCJD and considered as 'potentially at-risk of vCJD for public health purposes'.
Recipients of blood from donors involved in case 2 and case 3 in Table 1 are to be considered as in this category.

2. The Panel does not recommend any restriction to the tracing of blood components from 'at-risk' donors based on likelihood of successful tracing (e.g. by year of issue).

3. The Panel therefore recommends the UK Blood Services are asked to begin tracing (through their records and with collaboration of hospital blood banks and patient notes) the recipients of all components issued for transfusion from the donors (n=7) to these cases.

4. Before identified recipients are informed of their potential exposure, the Panel wishes to be assured of the correct identification of these patients. The Panel recommends this can be assured only by finding confirmation of the unit number transfused in the patient's notes. For recipients where this confirmation cannot be found, the Panel recommends the identified recipient is not informed, but is considered for uninformed monitoring (subject to approval -- see 9.1).

5. The Panel recommends that identified recipients (with confirmation of unit in notes) are notified by the UK Blood Services and the Health Protection Agency/Health Protection Scotland, in collaboration with the patient's primary carer (usually GP) and/or hospital clinician and local Health

Protection Units. The Panel advises that this notification should proceed as and when the necessary information from tracing is obtained. This should be seen as the continuation of the precautionary measures surrounding these cases that were announced on 20th July 2005.

Case 1 in Table 1

6. For cases where the number of donors is high (see 9.2), such that the implied risk for each other recipient falls close to or below 1%, the Panel wishes to see the results of further risk assessment and discuss the issues further.
Recipients of blood from donors involved in case 1 in Table 1 are to be considered as in this category.

7. The Panel wishes to review such cases individually, in the light of further risk assessment and discussion, in order to decide whether these recipients should also be traced, informed and considered as 'potentially at-risk for public health purposes' or should be entered into uninformed monitoring (subject to approval – see 9.1).

8. The Panel notes the quantity of work involved in tracing the components involved in such cases and does not recommend the tracing of these components (involved in case 1) by the UK Blood Services and hospitals at this time – pending further discussion and recommendations.

Further work

9. The Panel requests the following further work for its review prior to its final decision about case 1 and other similar cases involving large numbers of donors:

9.1 Development and implementation - after approval - of the Panel's proposal for uninformed monitoring of individuals at low or uncertain increased risk of vCJD. This should enable an option of a) long-term monitoring and enhanced ascertainment of vCJD onset for other recipients who are not considered as 'at-risk' and actively informed of their potential exposure to vCJD, and b) safe-keeping of these individuals' details for notification and/or offering of vCJD testing or treatment in future, if appropriate.

9.2 Extension of the risk assessment to look at a range of scenarios for various transmission probabilities, numbers of donors and "thresholds" (1% or otherwise) in order to disentangle the issues involved regarding the risk status of donors and their other recipients, and to guide the Panel in decisions concerning the number of donors to a vCJD case that should be considered as 'low' or 'high' with respect to management of other recipients (see 1 and 6).

9.3 Further discussion of how the use of a percentage risk threshold for assessing patients to be considered 'at-risk' relates to the balance of public health benefits, for example how the rationale for a threshold may be affected when applied to individuals who are already ineligible to donate blood, and the pros and cons of using the same threshold for everyone regardless.

Further information

In addition to this summary document, the following documents are available for further information on the background and discussion that has led to these recommendations:

- Other recipients of blood from donors to vCJD cases: implications of risk assessment and options for action. Paper for CJDIP 7th Sept 2005, including
- Further Implications of "reverse" risk assessment: quantifying potential risks to other recipients Peter Bennett, Dept of Health. August 12th 2005
- (Draft) Minutes of the 16th meeting of the CJD Incidents Panel Wednesday 7th September 2005, BMA House, London

and relating to previous recommendations concerning these donors:

- Assessing the implications for blood donors if recipients are infected with vCJD, ESOR of Department of Health, November 2004
- CJD Incidents Panel meeting – 11th May 2005 Recommendations to Chief Medical Officers.