ANNEX C

HEPATITIS C

1. There are many uncertainties about hepatitis C but in terms of the numbers infected, the proposed look-back in patients who may have received blood from an infected donor will only be the tip of the iceberg.

Number of hepatitis C patients

2. The short answer to the number of HCV infected patients is we do not know. Perhaps only 10% of those who become infected with hepatitis C develop jaundice and hence acquisition is most often not detected. Unlike hepatitis B where, when infection is acquired in adults, only 2-10% fail to eliminate the virus after a year, it is now thought that a persisting viraemia occurs in around 80% of those infected with hepatitis C.

Seroprevalence

3. There have been no large population seroprevalence studies in the UK. It is understood this may well be a point made in the forthcoming 'Panorama' programme, though criticism may be levelled at PHLS rather than at the Department. Currently there is no simple test to detect antigen in the blood and tests for anti-HCV would not distinguished between those with past and those with current infection, but any results would obviously be helpful in assessing the magnitude of the problem.

Data from blood donations

4. In the first two months after routine blood screening for hepatitis C was introduced, 24 of 36,843 (0.06%) donations at the North London Blood Transfusion Centre were confirmed as anti-HCV positive (a further 44 (0.12%) were indeterminate). In the first four months of screening Trent found 40 of 69,473 (0.058%) of all donors were anti-HCV positive, and in the first year of screening 16 or 25346 (0.063%) new donors were anti-HCV positive. In the N London and Trent studies 46% and 53% respectively of HCV infected blood donors reported previous use of injected drugs which was felt to be the likely route of transmission. It was the largest single risk factor.

5. Because of requests for voluntary self exclusion, primarily for HIV risk activities but also because of hepatitis, blood donors are a group who are less likely to have injected drugs than the general population. Further, as some other groups who are at risk of hepatitis C will not donate blood (eg those on dialysis or those in receipt of blood or blood products) the overall prevalence of anti-HCV in the population is likely to be greater than the 0.06% indicated in the two small transfusion studies.

Injecting drug misusers

6. The largest group at risk of carrying hepatitis C will be injecting drug users, both current users and those who may have injected drugs in the past, sometimes the distant past and only for a short period. There is evidence to suggest that perhaps between 50-80% of intravenous drug users will test positive for anti-HCV. Rates vary with geographical area.

7. The Advisory Council on the Misuse of Drugs (ACMD) are taking an active interest in HCV in injecting drug users with some of its members pressing for testing for all past and present users. They are asking DH to arrange a days workshop so that the issues can be fully discussed. Although the number of injecting drug users (both past and present) is not known, one ACMD member, who has been active in organising a survey of test results performed by drug treatment agencies in various parts of the country and who is pressing for more treatment for those found positive, laid before ACMD a paper which estimated that the number of intravenous drug users that may have been infected with HCV in the UK could be around 400,000-500,000. How this figure was derived was not explained.

8. The Health of the Nation Key Area Handbook: *HIV/AIDS and Sexual Health* states in para 4.1.4, "The preliminary results of the National Survey of Sexual Attitudes and Lifestyles show that less than 1% of the population reported having injected drugs (other than those medically prescribed) in the last five years - a total of roughly 100,000 in England and Wales. More than half of these reported sharing equipment." These figures are only for the last five years and will not include those who may have injected 10-15 years ago when sharing of equipment may have been higher before needle exchange schemes existed and before the risks of HIV transmission were appreciated.

9. Whichever way this is looked at there may be well over 100,000 intravenous drug users infected with HCV with increasing pressure for testing of this group and referral for treatment. The survey referred to above showed there was difficulty in obtaining tests in some areas and of the onward referral for treatment of many of those found to be positive. Look-back testing and treatment of blood recipients will raise expectations amongst those pressing for testing and treatment of drug misusers. Intravenous drug users would place the heaviest burden on resources for testing and treatment. One ACMD member has called for ring fenced monies to treat HCV in drug misusers.

Haemodialysis units

10. The prevalence of anti-HCV is raised in those undergoing renal haemodialysis with rates varying between 4% and 47% in studies around the world. Higher figures relate to countries where the underlying prevalence of hepatitis C in the population is high and where infection control procedures may not be good. Accuracy of some data may be questioned because insensitive assays were used. Most studies show a relationship

between HCV seropositivity and previous blood transfusion but intra-unit spread is also known to occur and prevalence rates can alter considerably over time even now blood is screened for anti-HCV.

11. In one UK unit 9 of 66 (14%) patients on maintenance haemodialysis were found to be anti-HCV positive and in two cases seroconversion was documented by examination of earlier sera. Many had had previous blood transfusion (median number of eight units). The question of the 'duty of care' for those infected as a result of intra-unit spread might be seen as similar to that for those infected as a result of blood transfusion.

Health care workers

12. Health care workers will be at occupational risk of acquiring HCV from infected patients. The risk appears to lie intermediate between the high risk of acquiring hepatitis B and the low risk of HIV. It will be higher among certain health care workers such as surgeons, dentists etc where the risk of exposure is greater. There has been little work on individual groups in the UK. Again the NHS may be seen as having a 'duty of care' for those infected in its service.

Sexual, household and vertical transmission

13. In general perinatal, sexual and household transmission are relatively less efficient modes of transmission. Transmission may depend upon the concentrations of circulating virus which are generally thought to be low in infected people. Overall perinatal transmission may be around 5% (this compares with around 90-95% transmission from hepatitis B e-antigen positive mothers to their babies that would occur in the absence of prophylactic therapy). Screening of sera derived from GUM clinics show low seroprevalence rates usually only in the order of 1-2%. Homosexuals, and heterosexuals with multiple partners may be at increased risk of acquiring HCV. Transmission may occur through sharing razor blades etc and has been reported after tattooing etc.

Overall numbers

14. Precise numbers for those infected with HCV are not known and estimates difficult. I believe the British Liver Trust suggest prevalence rates of between 0.1 to 1.0% and these are the figures that are likely to be quoted on the 'Panorama' programme. Whilst the 'true figure' might be expected to be nearer the 0.1 end, the uncertainty about the number of iv drug abusers who may have become infected over the last twenty or so years means it could be considerably higher.