

# C5 Blood-borne viruses

## Key Points

### Hepatitis B Virus

#### Overview of hepatitis B virus

- In 2003, the number of new hepatitis B virus (HBV) diagnoses among persons for whom injecting drug use was indicated as a risk factor was 22. (Table C5.1)

#### 5 year trends – 1999 to 2003

- Overall, the number of those infected remained stable at around 342. The number of new hepatitis B infected drug users (IDU's) in 1999 was 115, since then there has been a steady decline in the number of cases: 89 in 2000, 69 in 2001, 37 in 2002 and 22 in 2003. (Table C5.1)

#### Geographical profile

- Reports of new hepatitis B IDU's were not concentrated in one area. Of the 22 reports in 2003, 68 per cent were resident in Greater Glasgow (15 reports), 14 per cent (three reports) in Grampian and 9 per cent in both Argyll & Clyde and Lanarkshire (two reports in each). (Table C5.1)

### Hepatitis C Virus

#### Overview of hepatitis C virus

- In 2003 1 030 IDU's were diagnosed with hepatitis C virus (HCV), IDU's accounted for 58 per cent of the 1 779 HCV cases diagnosed in this time period. (Table C5.2)
- The total number of IDU's known to be infected with the HCV virus is 11 010, over eight times the number of HIV diagnoses amongst this group. (Table C5.2 and Table C5.4)
- Of the IDU's with a diagnosis of HCV, whose gender was recorded, 71 per cent were male. (Table C5.3)
- The majority of IDU's with a diagnosis of HCV were aged in the 20-35 age group (71% of the 10 831 individuals with age recorded). Five per cent were aged under 20 years. (Table C5.3)

#### 5 year trends – 1999 to 2003

- Overall since 1999, there has been a decrease in the number of HCV cases reported each year, from 1 961 in 1999 to 1 779 in 2003. For those identified as IDU's, there has also been an overall decrease from 1 314 to 1 030. (Table C5.2)

#### Geographical profile

- For HCV infected IDU's, 38 per cent of the 11 010 reports were from Greater Glasgow, a further 16 per cent Grampian, 14 per cent Lothian and seven per cent Tayside. (Table C5.2)

### Human Immunodeficiency Virus and AIDS

#### Overview of HIV infection and AIDS

- In 2003, there were 12 new cases of HIV infection amongst the IDU population. (Table C5.4)
- Five of the 12 new cases were aged 25-29 years, eight were male, and the median age was 29 years. (Table C5.6)
- The cumulative total (to 31 December 2003) of HIV infected reports in IDU's is 1 291. (Table C5.4)

- Seventy per cent of the cumulative total of HIV reports in IDU's are male, compared to 74 per cent male for all transmission categories (also includes transmission by sexual contact, body piercings/tattoo, needlestick and blood transfusion). (Table C5.4)
- In 2003, there were eight new cases of AIDS registered. The cumulative total (to 31 December 2003) of AIDS registrations in IDU's is 427. (Table C5.4)

### 5 year trends – 1999 to 2003

- Since 1990 there has been a decline in reported HIV infection amongst the IDU population: from 38 in 1990, 22 in 1999 to 12 in 2003. (Table C5.4)
- There has been a shift in the median age at diagnosis of HIV from 25 in 1990 to 31 in 1999, which continued to rise to 37 in 2002, however in 2003 this dropped to 29. (Table C5.6)
- The number of AIDS cases registered has remained relatively low since 1990 (25 cases), this has continued to fall to 14 cases in 1999 and eight cases in 2003, the lowest annual total since records began. (Table C5.4)
- There has been a drop in the numbers of infected IDU's receiving clinical care - 382 in 2003 compared to 433 in 1999. (Table C5.7)

### Geographical profile

- Of the 12 new HIV reports in 2003, three were in Lothian and another three were in Greater Glasgow; the remainder were reported in Borders (one), Fife (two), Grampian (one) and Tayside (two). (Table C5.5)

## Background information

### Hepatitis B Virus

The Scottish Centre for Infection and Environmental Health (SCIEH) receives notification of positive hepatitis B Virus (HBV) tests from all laboratories located in the 15 NHS Board areas. At present no standard exists for the reporting of HBV infection and the amount of information provided by the different laboratories varies significantly. Information on risk factors, clinical history and status of HBV markers is frequently missing, thus it is difficult to determine whether cases are acute or chronic and to estimate the true incidence and prevalence of the virus. SCIEH are currently working towards developing an enhanced surveillance system for HBV in order to improve the quality of data that they receive.

### Hepatitis C Virus

SCIEH, in association with Scotland's principal HCV testing laboratories (the West of Scotland Specialist Virus Centre at Gartnavel General Hospital, Glasgow, the East of Scotland Specialist Virus Centre at the Edinburgh Royal Infirmary, the Department of Microbiology at Ninewells Hospital, Dundee, and the Department of Microbiology at Aberdeen Royal Infirmary) collates information on all cases of HCV known to have been acquired in Scotland. There is no dedicated HCV request form and information is limited to what is available on standard virological test request forms that accompany blood specimens.

It is likely that the number of IDU's diagnosed with HCV is approximately one third the total number of infected IDU's in Scotland<sup>1</sup>; estimates suggest that around 43,000 past and current IDU's are HCV antibody positive. Evidence suggests that the virus continues to be transmitted among this population; a SCIEH community-wide cross-sectional survey of IDU's in Glasgow who commenced their injecting post 1996 - during the era of well established harm reduction interventions - revealed an annual incidence of 29 per 100 years of injecting<sup>2</sup>.

## Human Immunodeficiency Virus

Voluntary case reporting of HIV and AIDS forms the basis for surveillance in Scotland; this provides information only on diagnosed infections. Data collected by SCIEH includes limited patient identifiers (initials, soundex code of surname, date of birth, gender and first part of postcode), risk exposure. Follow-up information such as all AIDS indicator diseases present at the time of the AIDS diagnosis, immunological (CD4 count which is testing to assess the immunological status and thus the stage of HIV disease has reached) monitoring and antiretroviral treatment are linked to cases where relevant. The number of individuals undergoing CD4 count monitoring is a good indicator of the number receiving clinical care.

## References

1. Hutchinson SJ, Goldberg DJ, King M, et al. hepatitis C virus among childbearing women in Scotland; prevalence, deprivation, and diagnosis. *Gut* 2004; 53:593-598.
2. Health Protection Agency, SCIEH, National Public Health Service for Wales, CDSC Northern Ireland, CRDHB, and the UASSG. Shooting Up; Infections among injecting drug users in the United Kingdom 2003. London: Health Protections Agency, October 2004.