## Key facts about hepatitis C

- It is estimated that about 200,000 people in the general population in England are chronically infected with hepatitis C.<sup>1</sup> Incidence data are not available as acute hepatitis C infection is usually asymptomatic and there are no laboratory assays to detect acute infections.
- England's estimated 0.5% rate of hepatitis C infection<sup>2</sup> is low in global terms and compares with 1.2% in France, 1.6% in the United States and 3% in Italy; prevalence is much higher in some parts of the Middle East, Asia and Africa.
- Around 60,000 hepatitis C laboratory diagnoses have been reported cumulatively to the end of 2007. However, recent evidence suggests that there may be significant under-reporting of laboratory diagnoses perhaps by as much as 50%. Therefore, around 100,000 may have undiagnosed chronic hepatitis C infection.
- The highest risk groups are current and past injecting drug users (prevalence is around 35-40% in injecting drug users in contact with services), those who received blood products before 1986 and recipients of blood transfusions before 1991 (blood products have been treated to inactivate blood-borne viruses since 1985, and screening of all blood donations for hepatitis C began in 1991); these latter two groups are small in comparison to current and past injecting drug users.
- Other less common routes of transmission are:
  - o from an infected mother to baby at birth;
  - by unprotected sexual intercourse with an infected person;
  - medical or dental treatment abroad in countries where hepatitis C is common and infection control is inadequate;
  - o by skin piercing and tattooing when sterile equipment is not used.
- Theoretically, household spread is also possible via the sharing of blood contaminated toothbrushes and razors. Before the viral inactivation of blood products in 1986, and before 1991 when the screening of blood donors was introduced, some recipients of blood and blood products were inadvertently infected.

<sup>&</sup>lt;sup>1</sup> The Health Protection Agency has estimated through mathematical modelling that about 142,000 people in England aged 15-59 had chronic hepatitis C infection in England in 2003.

<sup>&</sup>lt;sup>2</sup> This refers to prevalence of antibody to hepatitis C virus which is a marker of previous hepatitis C infection. As around 20% of infected individuals would be expected to clear the infection naturally, this suggests that around 0.4% of the population in England is chronically infected, i.e. 200,000 individuals.

- About 60-80% of those infected with hepatitis C develop chronic infection; if left untreated, 5-20% of chronically infected people may develop cirrhosis after about 20 years; a small proportion of these may develop primary liver cancer.
- Most people with diagnosed hepatitis C are men aged between 25 and 45 years, reflecting the fact that men are more likely to be injecting drug users than women.
- Factors associated with more rapid progression of disease are male gender, infection when older (over 40 years) and alcohol consumption.
- Deaths in England from end stage liver disease (ESLD)<sup>3</sup> or hepatocellular carcinoma with any mention of hepatitis C on the death certificate are continuing to rise. The number of deaths registered has increased from 81 in 1996 to 211 in 2007 the latter showing a rise of 18 deaths on the total from 2006. The majority of these deaths continue to be seen in men.
- First liver transplants performed for patients with hepatitis C-related disease increased from 36 in 1996 to 64 in 2007 (10 per cent and 13 per cent of the total number of transplants respectively). In addition, the number of first liver transplants carried out for patients with HCV-related HCC has also increased from 6 in 1996 to 27 in 2007. Nevertheless, the majority of liver transplants performed in England are not due to hepatitis C infection.
- There is NICE-recommended drug therapy to treat chronic hepatitis C infection. The aims of treatment are to prevent progression to serious liver disease (cirrhosis and primary liver cancer). There is evidence that the treatment can clear the virus in between 45% to 85% of patients, depending on the virus strain (genotype). The overall treatment success rate (i.e. all genotypes) is up to 55%.
- Many people who are unknowingly infected will not be aware that reducing or stopping alcohol intake could help minimise the liver damage from hepatitis C infection; and they also risk spreading the infection to others and may miss out on effective drug treatments.
- There is currently no vaccine to protect against hepatitis C infection, and one is unlikely in the near future. The virus is known to mutate (leading to a change in molecular structure) at a particularly rapid rate, which makes the development of an effective vaccine difficult. However, a number of centres around the world are involved in vaccine research.

<sup>&</sup>lt;sup>3</sup> Defined by codes or text entries for ascites, varices, or hepatic encephalopathy / failure.