

# 5.1 Hepatitis B

## Summary

Number of cases, 2008: 949  
 Crude notification rate, 2008: 22.4/100,000 population  
 Number of cases, 2007:863

Hepatitis B is a vaccine preventable disease which is transmitted through percutaneous or mucocutaneous contact with the blood or body fluids of an infected person. The main routes of transmission are through sexual contact, from mother to baby and through injecting drug use.

Over 90% of people infected as adults clear the virus within a year of infection, but there is a high probability of developing chronic infection if hepatitis B is acquired in infancy (90%) or early childhood (25-50%). A proportion of people with chronic infection develop progressive fibrosis which can lead to cirrhosis, liver failure and hepatocellular carcinoma (liver cancer).

The prevalence of hepatitis B in the general population in Ireland is low (less than 1%) and most cases are in well defined risk groups such as people with multiple sexual partners, household or sexual partners of known cases, babies of positive mothers, injecting drug users and people who were born in hepatitis B endemic countries.

The number of hepatitis B cases reported in Ireland increased by 10% in 2008, with 949 cases (22.4/100,000 population) notified compared to 863 in 2007 (figure 1). Fifty seven percent (n=540) of notifications were from the HSE-E, corresponding to a notification rate of 36/100,000 population.

All cases were laboratory confirmed. Eighty nine percent contained information on acute/chronic status. Where status was known, 90% of cases were chronic (n=765) and 10% were acute (n=82).

### Acute cases (recent infections)

Of the 82 acute cases notified in 2008, 84% (n=69) were male, 14% (n=12) were female and sex was not known for one case. The highest notification rates were in young to middle aged adults. Ninety percent (n=74) of acute cases were aged between 20 and 54 years (figure

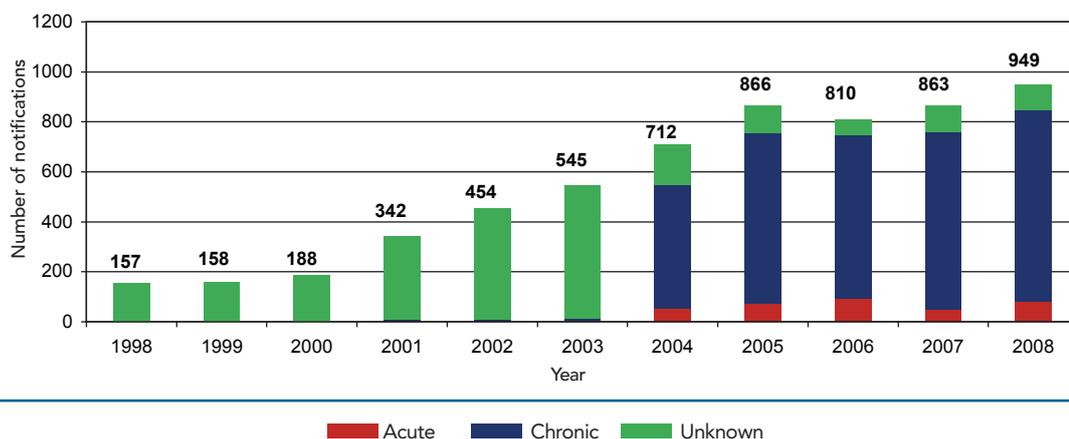


Figure 1. Number of hepatitis B notifications by acute/chronic status, 1998-2008

2). Female cases were younger than males overall, with a median age of 29.5 years compared to 33 years for males.

Information on risk factor was available for 89% (n=73) of acute cases. Of these, 66% (n=48) were likely to have been sexually acquired. Twenty nine were men who have sex with men, eighteen were heterosexual and sexual orientation was not known for one case. A further nine cases (12%) were born in a hepatitis B endemic country (hepatitis B surface antigen prevalence  $\geq$  2%). No risk factors were identified for eight cases (11%) despite follow up being carried out.

Country of birth was known for 85% of acute cases. Sixty six percent (n=56) were born in Ireland and 10% were born in Eastern or Central European countries. Where country of infection was known, 72% (n=38) of acute cases were infected in Ireland and 11% (n=6) were infected in Thailand. Information on reason for testing was available for 73 acute cases. Most were identified because they were symptomatic (69%, n=50) or through STI services (11%, n=8).

### Chronic cases (long-term infections)

Of the 765 chronic cases notified in 2008, 51% (n=389) were male, 45% (n=343) were female and sex was not known for 4% (n=33). Ninety one percent of chronic cases were aged between 20 and 54 years when notified (figure 2). The median age for female cases was 29 years and the median age for males was 32 years. Some enhanced data were available for 56% (n=428) of chronic cases. Of these, 86% (n=369) were born in hepatitis B endemic countries or were identified as asylum seekers. Data on country of birth was available for 45% (n=345). The most common regions of birth were Eastern or Central Europe (30%, n=104), Sub-Saharan Africa (30%, n=102) and Asia (26%, n=89). Thirty seven chronic cases were known to have been born in Ireland.

Reason for testing was known for 60% (n=456) of chronic cases. Thirty three percent (n=149) were identified through antenatal screening programmes, 23% (n=103) were identified through asylum seeker screening programmes and 11% (n=51) were tested in STI settings.

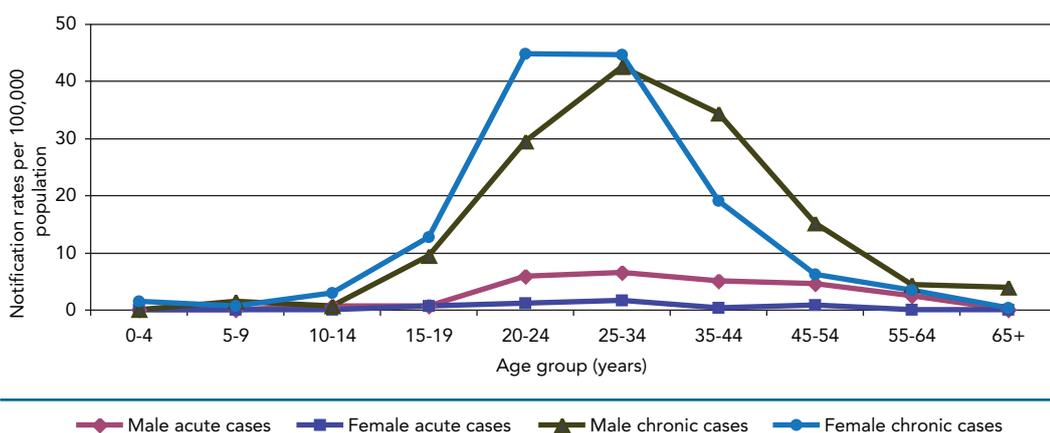


Figure 2. Age and sex-specific notification rates/100,000 population for hepatitis B by acute/chronic status, 2008

A further 3% (n=13) of chronic cases were residents of intellectual disability institutions. Most were diagnosed as a result of routine screening and may have been infected for some time. Their ages ranged from 34 to 57 years and all were born in Ireland.

Notification rates for hepatitis B in Ireland have increased dramatically over the past decade. This is mostly due to increasing immigration from countries with intermediate or high hepatitis B endemicity and increases in sexually transmitted hepatitis B in Ireland.

Although the age at notification was similar for acute and chronic cases, this reflects age when tested and most of those who acquired their infection in endemic countries are likely to have been infected as infants or in early childhood and have now been infected for decades. This has implications for the likely future burden of disease due to hepatitis B in Ireland.

The figures presented in this summary are based on data extracted from the Computerised Infectious Disease Reporting (CIDR) System on 7<sup>th</sup> August 2009. These figures may differ from those published previously due to ongoing updating of notification data on CIDR.