5.1 Hepatitis B

Summary

Number of cases in 2007: 863
Crude notification rate: 20.4/100,000
Number of acute cases in 2007: 52
Number of chronic cases in 2007: 705
Number of cases in 2006: 811

Hepatitis B is a vaccine preventable disease which is transmitted through contact with the blood or body fluids of an infected person. The main routes of transmission are mother to baby, sexual contact and unsafe injections. Over 90% of people infected as adults clear the virus, but there is a high probability of developing chronic infection if hepatitis B is acquired in infancy (90%) or early childhood (20-50%).

Notification rates for hepatitis B in Ireland have increased dramatically over the past decade but appear to be levelling off over the past few years. The number of cases reported increased slightly in 2007, with 863 notifications (20.4/100,000 population) compared to 811 in 2006 (figure 1). Sixty percent (n=521) of notifications were from the HSE-E, corresponding to an age-standardised notification rate of 32.6/100,000 population.

All cases were laboratory confirmed. Eighty eight percent contained information on the acute/chronic status. Where status was known, 93% of cases were chronic (n=705) and 7% were acute (n=52).

Acute cases

Seventy nine percent (n=41) of acute cases were male, 19% (n=10) were female and sex was not known for one case. The highest rates were among young to middle aged adults, with 73% of cases (n=38) aged between 20 and 44 years (figure 2).

Some risk factor data were available for 83% (n=43) of acute cases. The predominant mode of transmission was sexual, with 63% (n=27) likely to have been sexually acquired. Fifteen of these were heterosexuals, ten were men who have sex with men and sexual orientation was not available for two. A further eight cases (19%) were born in a country of intermediate (2-7%) or high (≥8%) hepatitis B endemicity. Where reason for testing was

known (n=45), 69% (n=31) were tested because they were symptomatic.

Country of birth was known for 45 acute cases and 78% (n=35) were born in Ireland. Where country of infection was known (n=41), 73% (n=30) were infected in Ireland.

Chronic cases

Fifty two percent of chronic cases were male (n=364), 43% were female (n=307) and sex was not known for 5% (n=34). Eighty one percent (n=574) were aged between 20 and 44 years. The median age for males (34) was higher than that for females (29.5) (figure 2).

Risk factor data were very limited for chronic cases, but some data were available for 42% (n=297). Of these, 85% (n=252) were identified as asylum seekers or as having been born in a country with high or intermediate hepatitis B endemicity. Where country of birth was known, 34% (n=84) were born in Sub-Saharan Africa, 25% (n=62) were born in Eastern or Central Europe and 23% (n=58) were born in Asia. Only 14% (n=34) of the chronic cases with country of birth data were born in Ireland.

Reason for testing was known for 371 chronic cases. Thirty four percent (n=127) were identified through antenatal screening programmes, 24% (n=89) were identified through asylum seeker screening programmes and 14% (n=52) were diagnosed as a result of testing in sexually transmitted infection settings.

Eight Irish-born chronic cases were residents of intellectual disability institutions. Their ages ranged from 43 to 52 years. Most were diagnosed as a result of routine screening and may have been infected for some time.

Discussion

The number of cases of hepatitis B identified is influenced by screening programmes and these have expanded over the past decade. The vast majority of hepatitis B notifications in 2007 were chronic cases. Available data indicate that most were born in countries where hepatitis B is endemic and were infected outside of Ireland. The number of acute cases notified was low and sexual acquisition was the predominant mode of transmission.

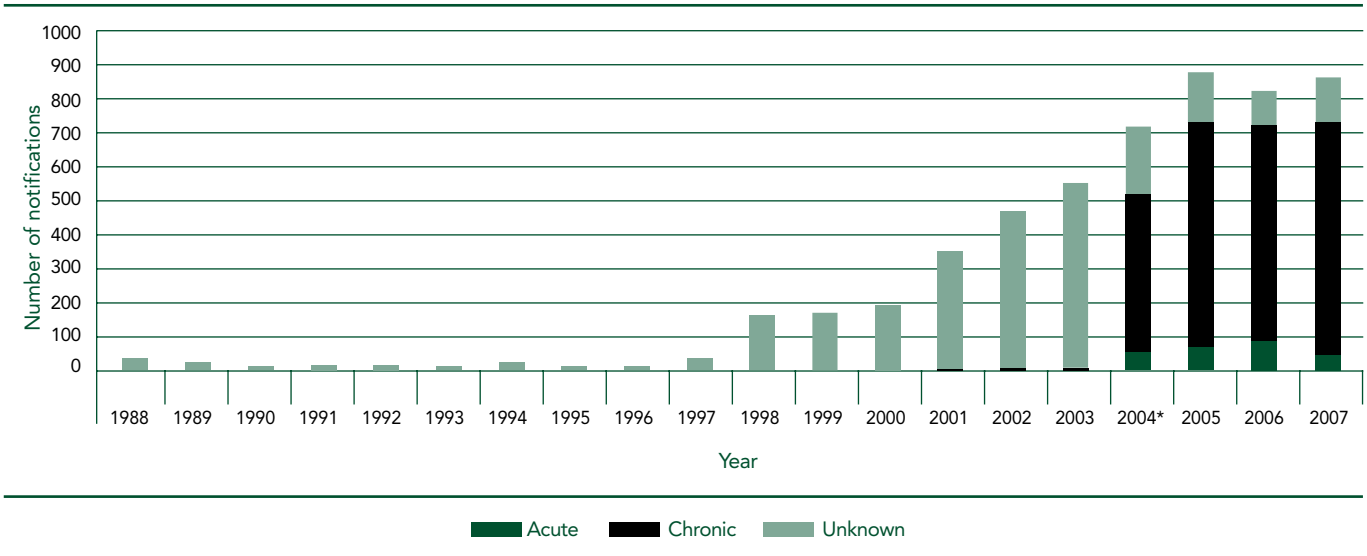

Figure 1. Number of hepatitis B notifications by accute/chronic status, 1988-2007

**Case definitions, which differentiate between acute and chronic cases of hepatitis B, and mandatory laboratory reporting of notifiable infectious diseases were introduced in 2004*

Hepatitis B vaccine was added to the routine childhood immunisation schedule in September 2008 (www.ndsc.ie/hpsc/A-Z/VaccinePreventable/Vaccination/Guidance/). This universal infant vaccination programme will be run in parallel with the pre-existing targeted immunisation programme, which recommends hepatitis B vaccination for individuals who are at increased risk of infection because of their lifestyle, occupation or other factors. This includes individuals who change sex partner frequently, injecting drug users, healthcare workers, haemophiliacs, renal dialysis patients and close contacts of cases.

Antenatal screening for hepatitis B is now carried out in all Irish maternity hospitals. Administration of hepatitis B immunoglobulin and vaccine to babies of infected mothers soon after birth can prevent infection being transmitted.

The figures presented in this summary are based on data extracted from the Computerised Infectious Disease Reporting (CIDR) System on 15th August 2008. These figures may differ slightly from those published previously due to ongoing updating of notification data on CIDR.

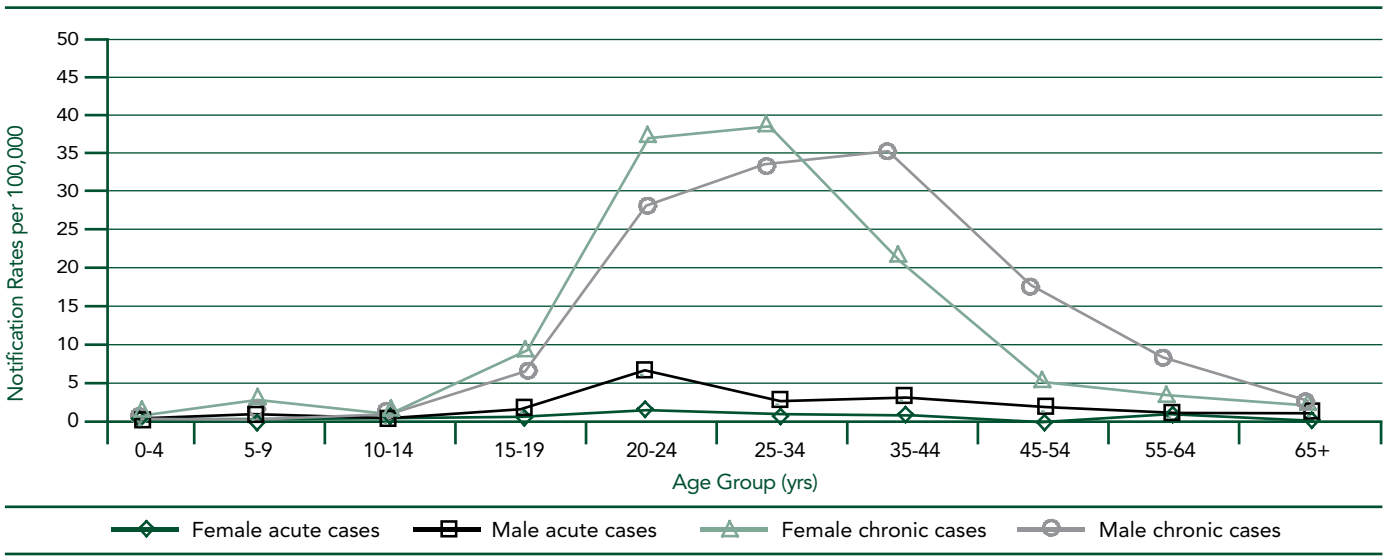

Figure 2. Age and sex-specific notification rates/100,000 population for hepatitis B by acute/chronic status, 2007