Report on Hepatitis B Notifications in Quarter 1 2011

Health Protection Surveillance Centre

Introduction

Acute and chronic cases of hepatitis B are notifiable under the Infectious Diseases Regulations 1981. Departments of Public Health, in conjunction with the HPSC, introduced enhanced surveillance of acute cases of hepatitis B from January 2005. Some enhanced data are also available for a smaller proportion of chronic cases.

Results

There were 126 notifications of hepatitis B in Q1 2011. This corresponds to a crude notification rate of 3 per 100,000 population. Quarterly trends since Q1 2006 are shown are in figure 1.

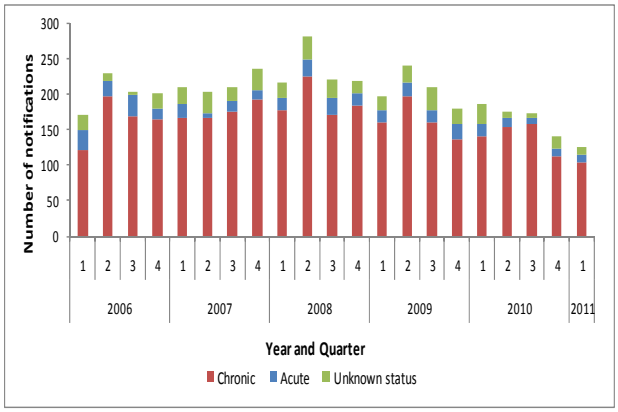

Figure 1. Number of cases of hepatitis B notified, by acute/chronic status, Q1 2006 to Q1 2011

Geographic distribution

The highest notification rates were in the HSE-East, which reported 60% of Q1 notifications (n=76, 5 per 100,000 population) (figure 2).

Acute/chronic status

Ninety five percent (n=120) of hepatitis B notifications in Q1 contained information on the acute/chronic status of the case. Of these, 91% (n=109) of cases were chronically infected (long-term infection) and 9% (n=11) were acutely infected (recent infection).

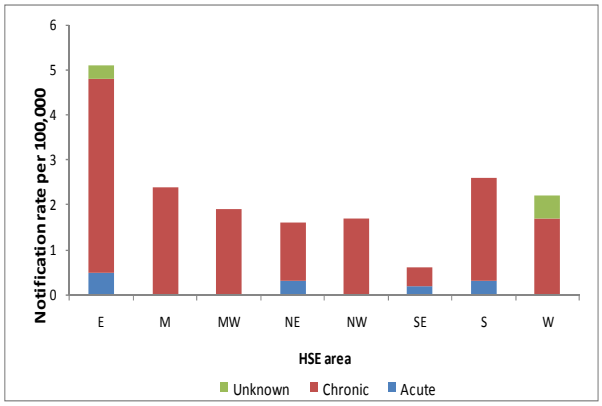

Figure 2. Hepatitis B notification rates, by HSE area and acute/chronic status, Q1 2011

Acute cases

Age and sex

The age and sex specific notification rates for acute cases of hepatitis B in Q1 2011 are shown in figure 3. Of the 11 acute cases, 9 (82%) were male, and two (18%) were female. Seventy three percent (n=9) of acute cases were aged between 20 and 44 years and the median age at notification was 27 years.

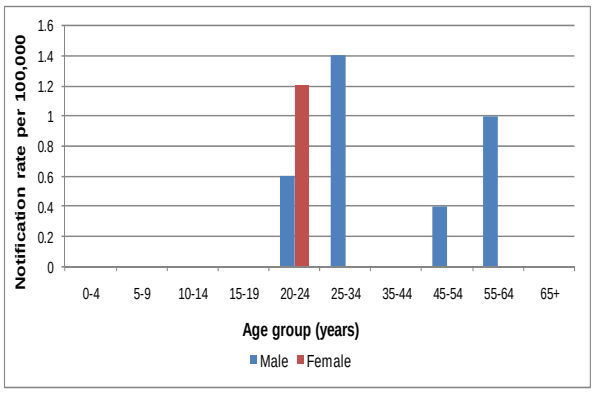

Figure 3. Age and sex specific rates per 100,000 population for acute cases of hepatitis B, Q1 2011

Risk factor and other enhanced data

Risk factor data were available for all acute cases notified in Q1 2011. The most commonly reported risk factor was sexual exposure.

Country of infection was known for 7 acute cases (64%). Four cases were infected in Ireland and the remaining three were infected in Australia, China and Latvia.

Country of birth was specified for all 11 acute cases. Nine (82%) were born in Ireland. Other countries of birth included Latvia and Nigeria. Reason for testing was known for all cases. 73% (n=8) of acute cases were tested because they were symptomatic and 27% (n=3) were tested as part of STI screening programmes.

Chronic cases

Age and sex

The age and sex specific notification rates for chronic cases of hepatitis B in Q1 2011 are shown in figure 4. Of the 109 chronic cases, 59 (54%) were female, 50 (46%) were male and the sex was not known for one case. The median age at notification for males (33 years) was slightly higher than that for females (31 years). Eighty one percent (n=88) of chronic cases notified in Q1 were aged between 20 and 44 years.

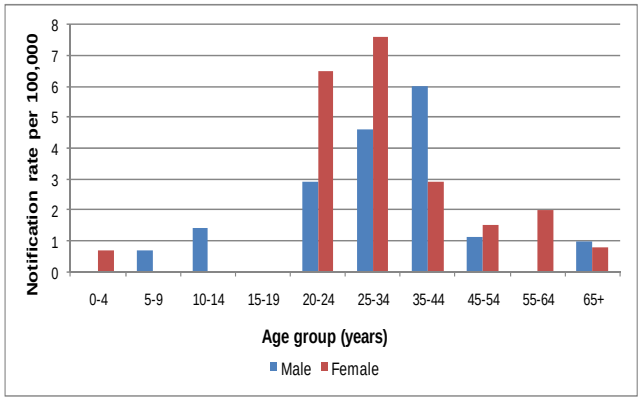

Figure 4. Age and sex specific rates per 100,000 population for chronic cases of hepatitis B, Q1 2011

Risk factor and other enhanced data

Some risk factor and other enhanced data were available for 41% (n=45) of the chronic cases notified in Q1 2011. Of these, 64% (n=29) were born in hepatitis B endemic countries (hepatitis B surface antigen prevalence ≥2%) or were classified as asylum seekers. For a further 16% (n=7), risk factor for infection was recorded as possible sexual exposure.

Region of birth was known for 38 chronic cases (37%). The most common regions were Eastern and Central Europe (n=15), South and East Asia (n=8), Sub-Saharan Africa (n=7). Four chronic cases were born in Ireland.

The reason for testing was known for seventy four percent of chronic cases (n=77). Of these, 38% (n=29) were identified through antenatal screening programmes, 22% (n=17) through routine health screens, 9% (n=7) were diagnosed in STI settings and 8% (n=6) were identified through asylum seeker screening programmes

Discussion

The number of hepatitis B notifications has continued to fall since early 2009. There was a 10% decrease in the number of cases (n=126) of hepatitis B notified in the first quarter of 2011 compared to the fourth quarter in 2010 (n=140). Where enhanced data were available, 83% (n=9) of acute cases were males. 73% of acute cases were symptomatic (n=7) and 27% (n=4) were identified through STI screening. Sexual exposure was the most commonly reported risk factor, of which 38% were MSM. Enhanced data was very limited for chronic cases, but where data were available, the majority (64%) were born in hepatitis B endemic countries and were likely to have been infected outside Ireland.

One possible reason for the continuing decline in hepatitis B notifications is the reduced level of immigration to Ireland.

Acknowledgements

HPSC would like to thank all those who provided data for this report - Departments of Public Health, laboratories and clinicians.

Report by Joanne Moran & Dr Lelia Thornton, 24th June 2011

Case definition for hepatitis B (acute and chronic)[1]

Clinical description In symptomatic cases, clinical picture compatible with hepatitis, i.e. discrete onset of symptoms and/or jaundice or elevated serum aminotransferase levels. Asymptomatic cases are common.

Hepatitis B (acute)

Laboratory criteria for diagnosis

One of the following:

- IgM antibody to hepatitis B core antigen (anti-HBc) positive
- Detection of hepatitis B virus (HBV) nucleic acid in serum

Case classification

Possible: N/A

Probable: A symptomatic case that is HBsAg positive and has a clinical picture compatible with an acute hepatitis

Confirmed: A case that is laboratory confirmed

Hepatitis B (chronic)

Laboratory criteria for diagnosis

One of the following:

- Hepatitis B surface antigen (HBsAg) positive **and** antibody to hepatitis B core antigen (anti-HBc) positive **and** IgM antibody to hepatitis B core antigen negative
- Persistence for more than 6 months of either HBsAg or HBV nucleic acid in serum.

Case classification

Possible: N/A

Probable: N/A

Confirmed: A case that is laboratory confirmed

1. Case definitions for notifiable diseases. Infectious Diseases (Amendment) (No. 3) Regulations 2003 (SI No. 707 of 2003). National Disease Surveillance Centre, February 2004.