

Report on Hepatitis B Notifications in Quarter 2 2010

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 175 notifications of hepatitis B in Q2 2010. This corresponds to a crude notification rate of 4.1 per 100,000 population. Quarterly trends since Q1 2005 are shown in figure 1.

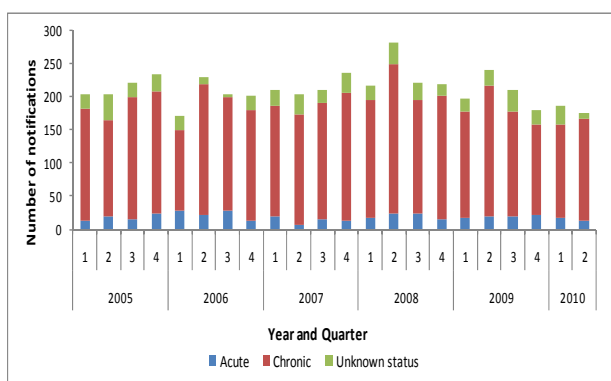


Figure 1. Number of cases of hepatitis B notified, by acute/chronic status, Q1 2005 to Q2 2010

Geographic distribution

The highest notification rates were in the HSE-East, which reported 62% of Q2 notifications (n=108, 7.2 per 100,000 population) (figure 2).

Acute/chronic status

Ninety six percent (n=168) of hepatitis B notifications in Q2 contained information on the acute/chronic status of the case. Of these, 92% (n=154) of cases were chronically infected (long-term infection) and 8% (n=14) were acutely infected (recent infection).

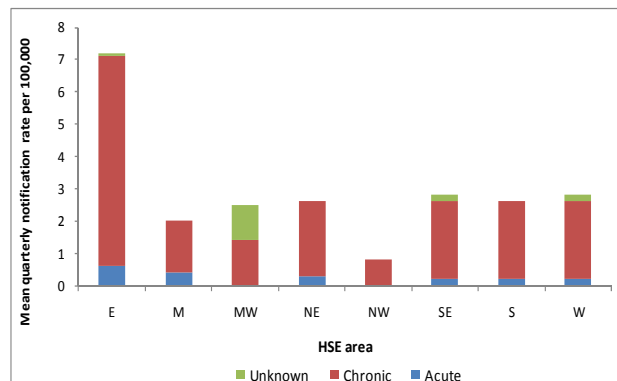


Figure 2. Number of hepatitis B notifications, by HSE area and acute/chronic status, Q2 2010

Acute cases

Age and sex

The age and sex specific notification rates for acute cases of hepatitis B in Q2 2010 are shown in figure 3. Of the 14 acute cases, 13 (93%) were male, and only one (7%) was female. Sixty four percent (n=9) of acute cases were aged between 20 and 44 years and the median age at notification was 35.5 years.

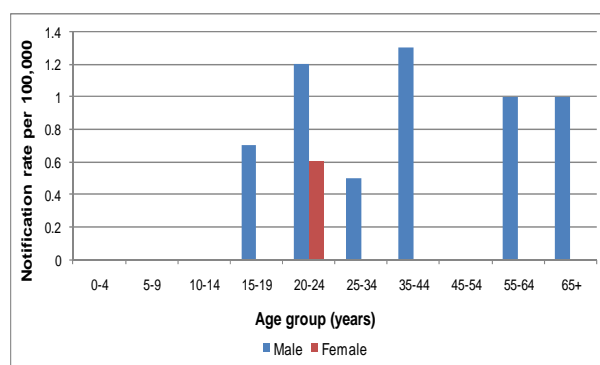


Figure 3. Age and sex specific rates per 100,000 population for acute cases of hepatitis B, Q2 2010

Risk factor and other enhanced data

Risk factor data were available for 64% of acute cases in Q2 2010 (n=9). Of these, 67% (n=6) reported that their most likely risk factor was sexual exposure. Four were men who have sex with men (MSM) and sexual orientation was not known for the remaining two cases.

Country of infection was known for 10 acute cases (71%) and they were all infected in Ireland.

Country of birth was specified for all 14 acute cases. Ten (71%) were born in Ireland. Other countries of birth included Romania, Italy and Poland. Where reason for testing was known (n=13), 69% (n=9) of acute cases were tested because they were symptomatic and 31% (n=4) 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 Q2 2010 are shown in figure 4. Of the 154 chronic cases, 79 (51%) were female, 73 (47%) were male and the sex was not known for two cases. The median age at notification for males (34 years) was higher than that for females (28 years). Eighty three percent (n=128) of chronic cases notified in Q2 were aged between 20 and 44 years.

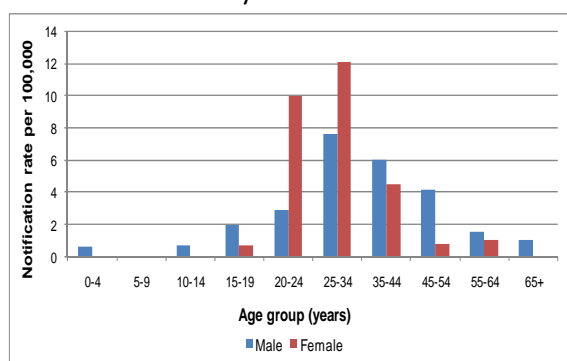


Figure 4. Age and sex specific rates per 100,000 population for chronic cases of hepatitis B, Q2 2010

Risk factor and other enhanced data

Some risk factor and other enhanced data were available for 46% (n=71) of the chronic cases notified in Q2 2010. Of these, 69% (n=49) were born in hepatitis B endemic countries (hepatitis B

surface antigen prevalence $\geq 2\%$) or were classified as asylum seekers. For a further 17% (n=12), risk factor for infection was recorded as possible sexual exposure. Region of birth was known for 61 chronic cases (40%). The most common regions were South and East Asia (n=19), Sub-Saharan Africa (n=18) and Eastern and Central Europe (n=17). Six chronic cases were born in Ireland.

The reason for testing was known for sixty four percent of chronic cases (n=99). Of these, thirty eight percent (n=38) were identified through antenatal screening programmes, 16% (n=16) were identified through asylum seeker screening programmes and 13% (n=13) were diagnosed in STI settings.

Discussion

The number of cases of hepatitis B notified in the second quarter of 2010 was similar to that for Q1 2010 (n=181). Where enhanced data were available, 93% (n=13) of acute cases were males. Sixty four percent of acute cases were symptomatic (n=9) and 28% (n=4) were identified through STI screens. Sexual exposure was the most commonly reported risk factor, of which 66% were MSM. Enhanced data were more limited for chronic cases, but where data were available, the majority (69%) were born in hepatitis B endemic countries and were most likely to have been infected outside of 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, 16th September 2010

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.