Report on Hepatitis B Notifications in Quarter 3 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 174 notifications of hepatitis B in Q3 2010. This corresponds to a crude notification rate of 4.1 per 100,000 population. Quarterly trends since Q1 2006 are shown are in figure 1.

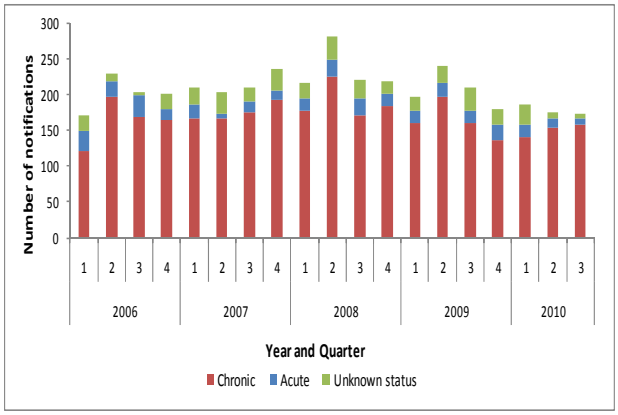

Figure 1. Number of cases of hepatitis B notified, by acute/chronic status, Q1 2006 to Q3 2010

Geographic distribution

The highest notification rates were in the HSE-East, which reported 60% of Q3 notifications (n=105, 7 per 100,000 population) (figure 2).

Acute/chronic status

Ninety six percent (n=167) of hepatitis B notifications in Q3 contained information on the acute/chronic status of the case. Of these, 95% (n=159) of cases were chronically infected (long-term infection) and 5% (n=8) were acutely infected (recent infection).

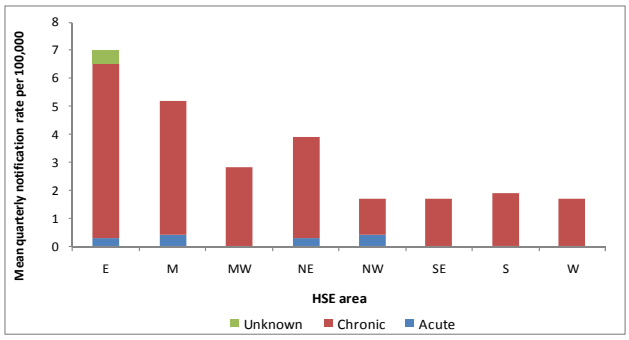

Figure 2. Notification rates of hepatitis B by HSE area and acute/chronic status, Q3 2010

Acute cases

Age and sex

Of eight acute cases, six (75%) were male, and two (25%) were female. Four acute cases were aged between 20 and 44 years.

Risk factor and other enhanced data

Risk factor data was available for 63% of acute cases in Q3 2010 (n=5). All of these cases reported that their most likely risk factor was sexual exposure.

Country of infection was known for six acute cases (75%). Five cases were infected in Ireland and one was infected in the UK.

Country of birth was specified for six acute cases (75%) and they were all born in Ireland. Where reason for testing was known (n=6), 67% (n=4) of acute cases were tested because they were symptomatic and 33% (n=2) 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 Q3 2010 are shown in figure 4. Of the 159 chronic cases, 73 (46%) were female, 84 (53%) were male and the sex was not known for two cases. The median age at notification for males (31.5 years) was higher than that for females (27 years). Eighty six

percent (n=136) of chronic cases notified in Q3 were aged between 20 and 44 years.

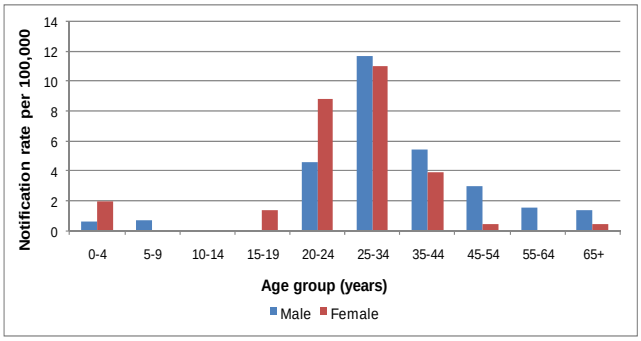

Figure 4. Age and sex specific rates per 100,000 population for chronic cases of hepatitis B, Q3 2010

Risk factor and other enhanced data

Some risk factor and other enhanced data were available for 58% (n=92) of the chronic cases notified in Q3 2010. Of these, 73% (n=67) were born in hepatitis B endemic countries (hepatitis B surface antigen prevalence ≥2%) or were classified as asylum seekers. For a further 12% (n=11), risk factor for infection was recorded as possible sexual exposure. Region of birth was known for 81 chronic cases (51%). The most common regions were Sub-Saharan Africa (n=27), South and East Asia (n=25), and Eastern and Central Europe (n=20). Six chronic cases were born in Ireland.

The reason for testing was known for sixty percent of chronic cases (n=95). Of these, thirty eight percent (n=36) were identified through antenatal screening programmes, 14% (n=13) were identified through asylum seeker screening programmes, 14% (n=13) were diagnosed in STI settings and 14% (n=13) were found through routine health screens. Other cases were symptomatic (n=4) and some were already known to public health (n=7).

Discussion

The number of cases of hepatitis B notified in the third quarter of 2010 was almost the same as that for Q2 2010 (n=175). Where enhanced data were available, 75% of acute cases were males. Sixty seven percent of acute cases were symptomatic and 33% were identified through STI screens. Sexual exposure was the most commonly reported risk factor. The majority (73%) of chronically infected cases were born in hepatitis B endemic countries and were most likely to have been infected outside of Ireland. Where reason for testing was known, 38% of chronic cases were identified through antenatal screening programmes. There has been a significant improvement in risk factor data specifically for chronic hepatitis B cases. Risk factor data were available for 58% of chronic cases in the third quarter compared with 46% in the second quarter.

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, 10th December 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.