

Report on Hepatitis B Notifications in Quarters 1 & 2, 2009

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 200 notifications of hepatitis B in Q1 2009 and 247 in Q2. These correspond to crude notification rates of 4.7 and 5.8 per 100,000 population. Quarterly trends since Q1 2004 are shown in figure 1.

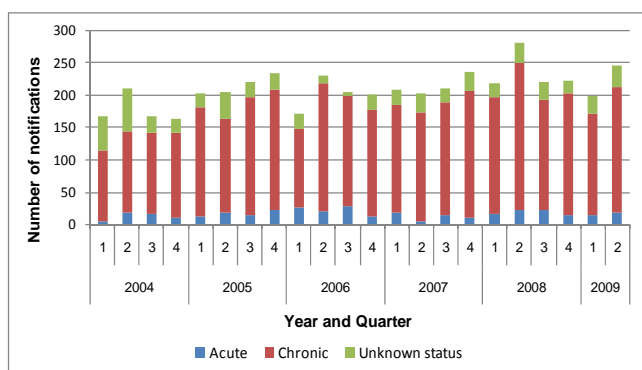


Figure 1. Number of cases of hepatitis B notified, by acute/chronic status, Q1 2004-Q2 2009

Geographic distribution

The highest notification rates were in the HSE-East, which reported 62% of Q1 notifications (n=124, 8.3 per 100,000 population) and 58% of Q2 notifications (n=143, 9.5 per 100,000 population) (figure 2).

Acute/chronic status

Eighty six percent (n=386) of hepatitis B notifications in Q1 & Q2 contained information on the acute/chronic status of the case. Of these, 91% (n=351) of cases were chronically infected (long-term infection) and 9% (n=35) were acutely infected (recent infection).

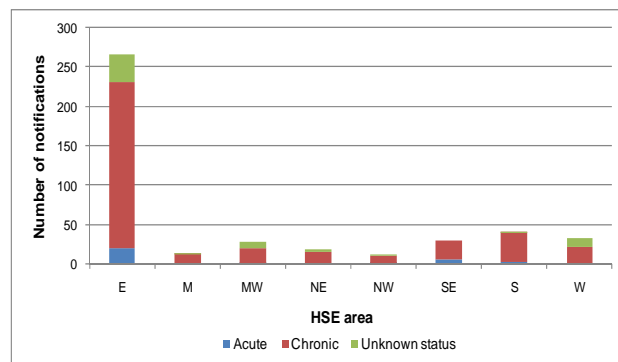


Figure 2. Number of hepatitis B notifications, by HSE area and acute/chronic status, Q1 & Q2 2009

Acute cases

Age and sex

The mean quarterly age and sex specific notification rates for acute cases of hepatitis B in Q1 and Q2 2009 are shown in figure 3. Of the 35 acute cases, 27 (77%) were male, seven (20%) were female and sex was not known for one. Eighty percent (n=28) of acute cases were aged between 25 and 54 years and the median age at notification was 36 years.

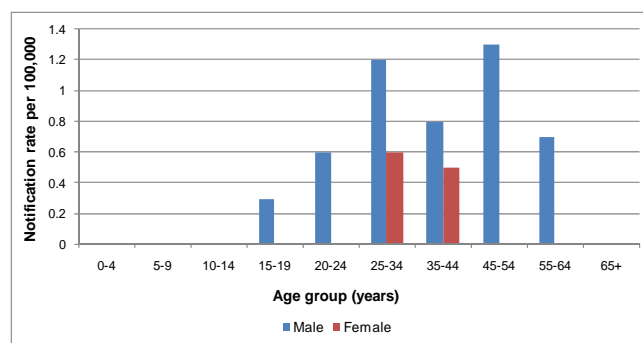


Figure 3. Mean quarterly age and sex specific rates per 100,000 population for acute cases of hepatitis B, Q1 & Q2 2009

Risk factor and other enhanced data

Some risk factor data were entered on CIDR for 66% of acute cases in Q1 and Q2 2009 (n=23). Of these, 65% (n=15) reported that their most likely risk factor was sexual exposure. Nine were heterosexual, five were men who have sex with

men (MSM) and sexual orientation was not known for the remaining sexually acquired case.

Country of infection was known for 20 acute cases. Of these, 14 were infected in Ireland (70%) and 4 were infected in Thailand (20%) Three of the nine cases infected through heterosexual sex were infected in Thailand.

Country of birth was specified for 25 acute cases. Twenty two (88%) were born in Ireland. Where reason for testing was known (n=28), 71% (n=20) of acute cases were tested because they were symptomatic.

Chronic cases

Age and sex

The mean quarterly age and sex specific notification rates for chronic cases of hepatitis B in Q1 and Q2 2009 are shown in figure 4. Of the 351 chronic cases, 179 (51%) were male, 157 (45%) were female and the sex was not known for 15. The median age at notification for males (33 years) was higher than that for females (27 years). Eighty four percent (n=294) of chronic cases notified in Q1 and Q2 were aged between 20 and 44 years.

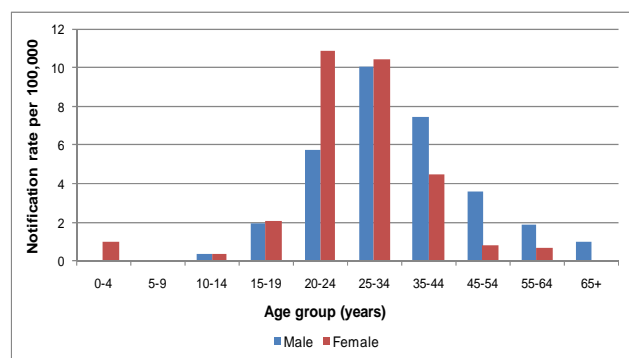


Figure 4. Mean quarterly age and sex specific rates per 100,000 population for chronic cases of hepatitis B, Q1 & Q2 2009

Risk factor and other enhanced data

Some risk factor data were available for 45% (n=157) of the chronic cases notified in Q1 and Q2. Of these, 89% (n=139) were born in hepatitis B endemic countries (hepatitis B surface antigen prevalence $\geq 2\%$) or were classified as asylum seekers. A further 5% (n=8) were injecting drug users. Region of birth was known for 122 chronic cases. The most common regions were Eastern and Central Europe (n=44), South and East Asia (n=33) and Sub-Saharan Africa (n=29). Eleven chronic cases were born in Ireland.

The reason for testing was known for 175 chronic cases. Forty percent (n=70) were identified through antenatal screening programmes, 17% (n=30) were identified through asylum seeker screening programmes and 13% (n=22) were diagnosed in STI settings.

Discussion

The number of cases of hepatitis B notified in the first two quarters of 2009 was similar to that for the last two quarters in 2008.

Where enhanced data were available, most acute cases were males who were born in Ireland. Sexual exposure was the most commonly reported risk factor. Enhanced data were more limited for chronic cases, but the majority were born in hepatitis B endemic countries and were infected outside of Ireland.

Acknowledgements

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Report by Niamh Murphy & Dr Lelia Thornton, 21st September 2009

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.