

Report on Hepatitis B Notifications in Q3 2008

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 221 notifications of hepatitis B in quarter three 2008 (5.2 per 100,000 population). This was similar to Q1 and a 23% decrease on the number of cases for Q2 (figure 1).

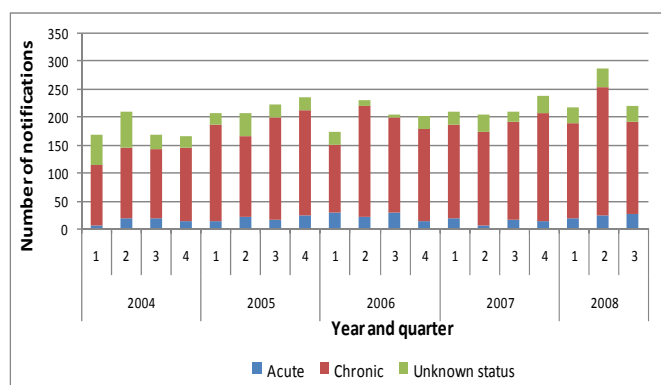


Figure 1. Number of cases of hepatitis B notified, by acute/chronic status, Q1 2004-Q3 2008

Geographic distribution

The highest notification rate was in the HSE-East, which reported 58% of Q3 notifications (n=161, 8.5 per 100,000 population) (figure 2).

Acute/chronic status

Eighty six percent (n=191) of hepatitis B notifications in Q3 contained information on the acute/chronic status of the case. Of these, 87% (n=166) were chronic and 13% (n=25) were acute. The number of acute cases notified in the first three quarters of 2008 (n=67) was higher

than the number notified for the same period in 2007 (n=40), but lower than in 2006 (n=79).

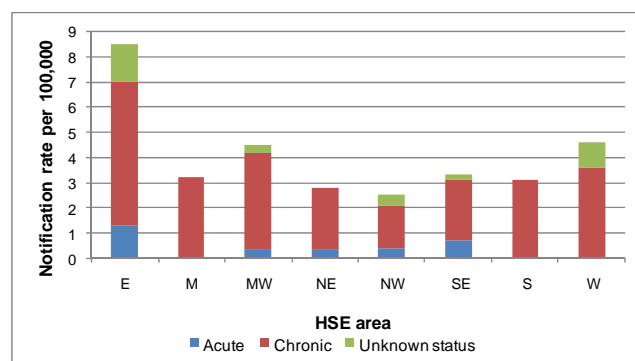


Figure 2. Hepatitis B notification rates per 100,000 population, by HSE area, Q3 2008

Acute cases

Age and sex

Age and sex specific notification rates for acute cases of hepatitis B are shown in figure 3. Of the 25 acute cases, 19 (76%) were male and six (24%) were female. All were adults, with ages ranging from 16 to 54 years. The median age at notification was 31 years.

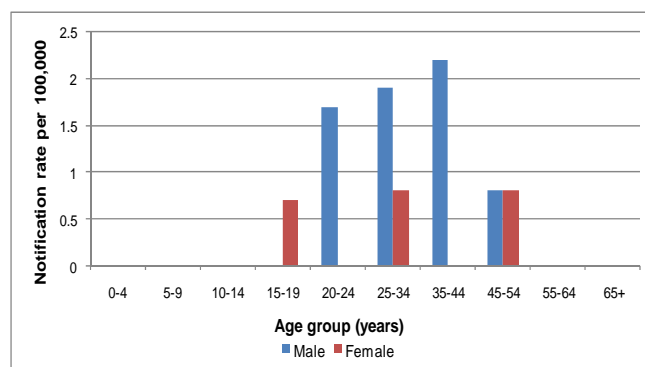


Figure 3. Age and sex specific rates per 100,000 population for acute cases of hepatitis B notified in Q3 2008

Risk factor and other enhanced data

Some risk factor data were entered on CIDR for 88% of acute cases (n=22). Of these, 64% (n=14) were reported to have been sexually acquired. Ten of these were men who have sex with men (MSM), three were heterosexual and

sexual orientation was not known for the remaining case. In the first three quarters of 2008 there were 33 sexually acquired acute cases of hepatitis B compared to 16 for the same period in 2007. The increase was most marked in MSM, with 24 acute MSM cases notified up to the end of Q3 2008 compared to eight for the same period in 2007.

Country of birth was specified for twenty of the acute cases. Eleven (55%) were born in Ireland. Where reason for testing was known (n=21), 76% (n=16) of acute cases were tested because they were symptomatic.

Chronic cases

Age and sex

Age and sex specific notification rates for chronic cases of hepatitis B are shown in figure 4. In Q3, 58% of chronic cases were male (n=97), 38% were female (n=63) and sex was not specified for 4%. The median age at notification for males (32 years) was slightly higher than that for females (29 years). Eighty seven percent (n=145) of chronic cases notified in Q3 were aged between 20 and 44 years.

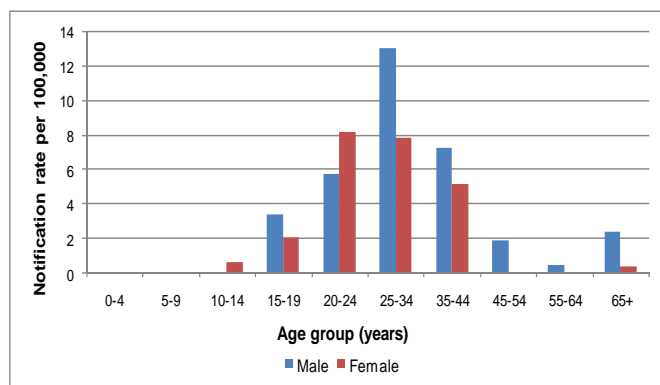


Figure 4. Age and sex specific rates per 100,000 population for chronic cases of hepatitis B notified in Q3 2008

Risk factor and other enhanced data

Enhanced data were more limited for chronic cases. Some data were available for 54% (n=89). Of these, 89% (n=79) were born in hepatitis B endemic countries or were classified as asylum seekers. Region of birth was known for 75 chronic cases and the most common regions of birth were Eastern and Central Europe (n=25) and Sub-Saharan Africa (n=24). Seven chronic cases were born in Ireland.

The reason for testing was known for 95 chronic cases. Thirty percent (n=28) were identified through antenatal screening programmes, 21% (n=20) were identified through asylum seeker screening programmes and 11% (n=10) were diagnosed in STI settings.

Discussion

The number of acute cases of hepatitis B increased in the first three quarters of 2008 compared to 2007, but remained lower than the number of cases reported for the same time period in 2006.

Where risk factor data were available, sexually acquired cases, particularly in MSM, predominated. However, risk factor trends for acute cases are difficult to interpret as the number of acute cases notified is generally low and sexual risk factors may be under-reported.

Acknowledgements

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Report by Niamh Murphy & Dr Lelia Thornton,
9th January 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.