Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

Report on Hepatitis B Notifications in Q2 2007

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 minority of chronic cases.

Results

There were 221 notifications of hepatitis B in Q2 2007. This was similar to the updated number of cases for the previous quarter (n=215) and a decrease compared to the number of notifications for Q2 2006 (n=235) (figure 1).

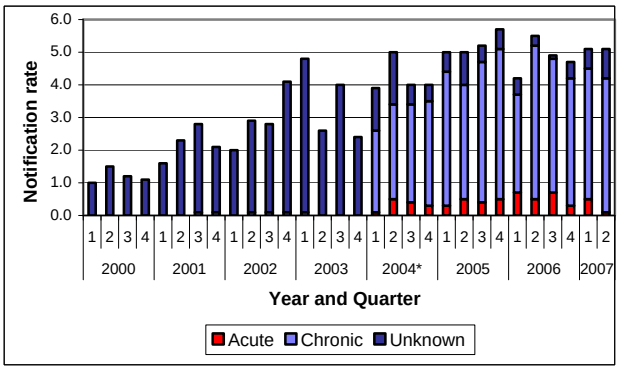

Figure 1. Crude notification rates for hepatitis B per quarter, Q1 2000-Q2 2007
*case definitions and mandatory laboratory reporting introduced in January 2004

Acute/chronic status

Eighty two percent (n=181) of notifications of hepatitis B in Q2 contained information on the acute/chronic status of the case. Seventy nine percent (n=175) of cases were chronic, 3% (n=6) were acute and the status was unknown for 18% (n=40).

Geographic distribution

The rates per 100,000 population for Q2, by HSE area and acute/chronic status, are shown in figure 2. The highest rates were in the HSE-E, which reported 59% (n=131) of the Q2 cases (8.7 per 100,000 population).

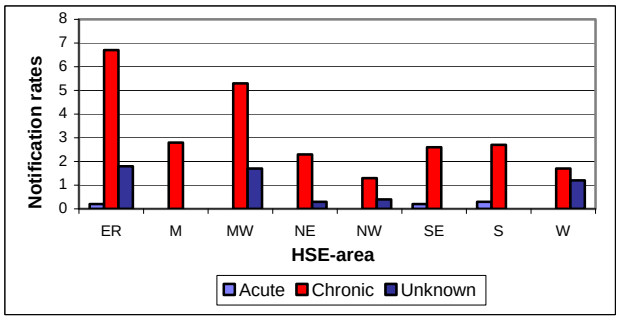

Figure 2. Rates per 100,000 population for hepatitis B cases notified in Q2 2007 by acute/chronic status and HSE area

Age and sex

The age and sex specific rates for acute and chronic cases of hepatitis B in Q2 are shown in figures 3a and 3b, respectively. Five of the six acute cases were male. Five cases were in adults and there was one case in a child under five years.

The sex distribution of the chronic cases was more even. Forty eight percent of cases were male (n=84), 46% were female (n=81) and sex was not specified for 10 cases. The age distribution for males was slightly older than that for females. Eighty seven percent (n=153) of all chronic cases notified in Q2 were aged between 20 and 54 years.

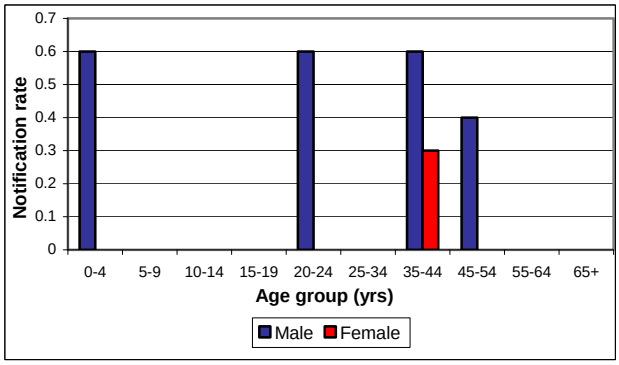

Figure 3a. Age and sex specific rates per 100,000 population for acute cases of hepatitis B notified in Q2 2007

All data contained in this report are provisional (CIDR accessed 3rd Sept 2007)

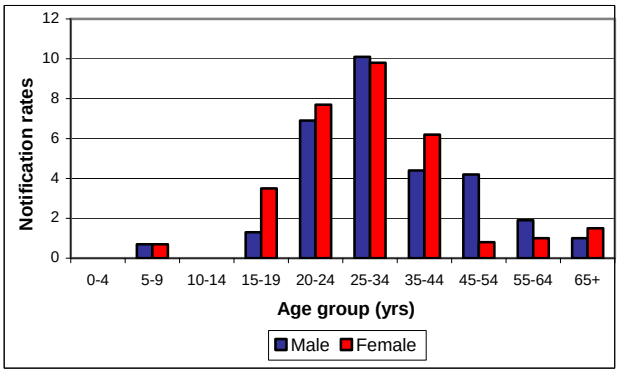

Figure 3b. Age and sex specific rates per 100,000 population for chronic cases of hepatitis B notified in Q2 2007

Risk factors

Some enhanced surveillance data were entered on CIDR for five of the six acute cases and 28% of chronic cases (n=49) in Q2.

Risk factor information was provided for all of the adult acute cases and all were likely to have been associated with sexual exposure. One case reported sexual contact with a partner known to be positive for hepatitis B and four additional cases indicated that they could have acquired the infection sexually.

County of birth was specified for five acute cases and all were born in Ireland. The reason for testing was also identified for five cases, all of whom were tested because they experienced symptoms.

The number of chronic cases for whom risk information was available was very limited. Data on asylum seeker status or country of birth were available for 49 cases, 80% of whom were asylum seekers or were born in a country with high (≥8%) or intermediate (2-7%) hepatitis B endemicity. The most common regions of birth were Sub-Saharan Africa (33%, n=16) and Eastern and Central Europe (27%, n=13). Eight chronic cases were born in Ireland.

The reason for testing was identified for 44 chronic cases. Twenty one percent (n=9) were identified through antenatal screening, 18% (n=8) were identified through asylum seeker screening and 16% (n=7) were asymptomatic contacts of a known case.

Discussion

Where acute/chronic status was known, 97% of hepatitis B notifications in Q2 were chronic. The limited data that were available indicate that most chronic cases were asylum seekers or other immigrants from countries of intermediate or high hepatitis B endemicity. However, the proportion of chronic patients for whom this information was available was low and data may not be representative.

The number of acute cases was very low and sexual acquisition was the predominant mode of transmission. However, the acute/chronic status was not available for 40 cases, so the actual number of acute cases may have been substantially higher. Where data were available, all acute cases were born in Ireland.

Fields for entry of enhanced hepatitis B data such as risk factors, reason for testing and country of birth, were put on CIDR in December 2006. Data completeness was poor for the first quarter of 2007, but has improved significantly since then.

Acknowledgements

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

Report by Niamh Murphy & Dr Lelia Thornton, 21st September 2007

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.