



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

Report on Hepatitis B Notifications in Q1 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 213 notifications of hepatitis B in Q1 2007. This was similar to the updated number of cases for the previous quarter (n=207) and an increase compared to the number of notifications for Q1 2006 (n=176) (figure 1).

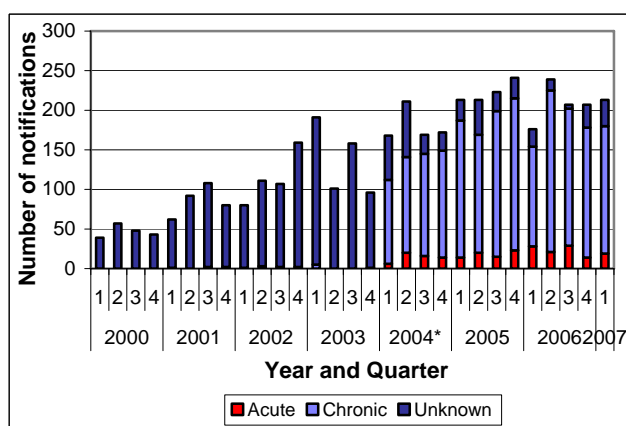


Figure 1. Number of notifications of hepatitis B per quarter, Q1 2000-Q1 2007

*case definitions and mandatory laboratory reporting introduced in January 2004

Acute/chronic status

Eighty-five percent (n=180) of notifications of hepatitis B in Q1 contained information on the acute/chronic status of the case. Seventy-six percent (n=161) of cases were reported as chronic, 9% (n=19) as acute and the status was unknown for 15% (n=33).

Geographic distribution

The rates per 100,000 population for Q1, by HSE area and acute/chronic status, are shown in figure 2. Sixty-four percent (n=136) of cases in Q1 were notified by the HSE-E (9.1 per 100,000 population).

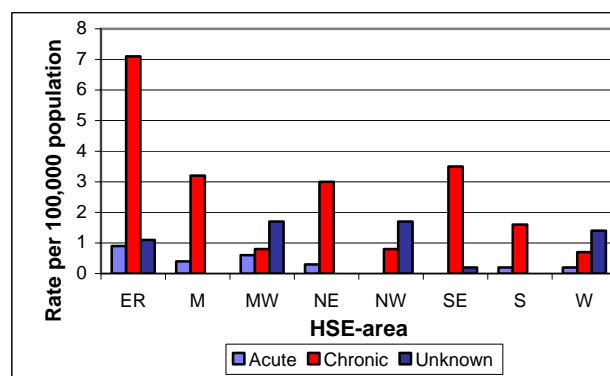


Figure 2. Rate per 100,000 population for hepatitis B cases notified in Q1 2007 by acute/chronic status and HSE area

Age and sex

The age and sex specific rates for acute and chronic cases of hepatitis B in Q1 are shown in figures 3a and 3b, respectively. Sixty-three percent (n=12) of acute cases were male, 32% were female (n=6) and sex was not known for 1 case. All were adults and 84% were aged between 20 and 54 years.

The sex distribution of the chronic cases was more even. Forty-nine percent of cases were male (n=79), 42% were female (n=68) and sex was not specified for 14 cases. The age distribution for males was slightly older than that for females. Ninety-one percent (n=147) of all chronic cases notified in Q1 were aged between 20 and 54 years.

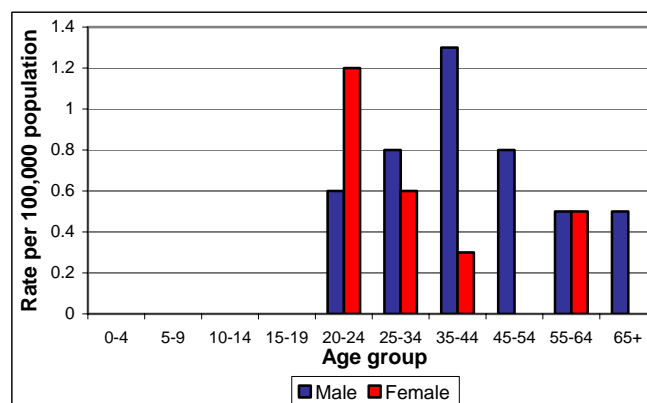


Figure 3a. Age and sex specific rates per 100,000 population for acute cases of hepatitis B notified in Q1 2007

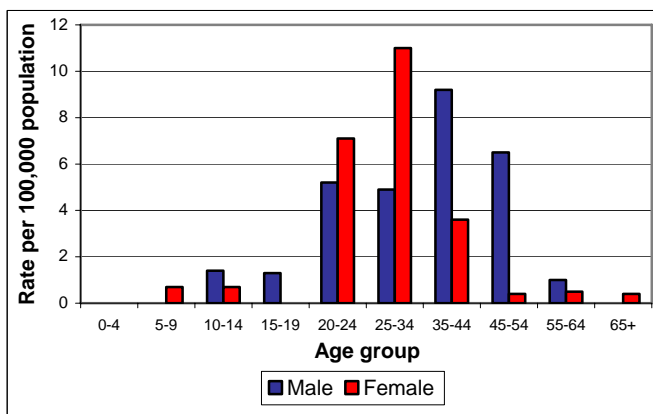


Figure 3b. Age and sex specific rates per 100,000 population for chronic cases of hepatitis B notified in Q1 2007

Risk factors

HPSC received enhanced surveillance data for 42% of acute cases (n=8) and 21% of chronic cases (n=31) in Q1. This represents a decrease in data completeness for acute cases compared to 2006 as a whole. In 2006, some enhanced data were received for 64% of acute cases and 20% of chronic cases.

Where risk factor information was provided for acute cases (n=7), 86% were associated with sexual exposure. Three cases were in men who have sex with men and sexual orientation was not identified for the remaining two cases.

Where country of birth was specified (n=7), seventy-one percent (n=5) were born in Ireland. The reason for testing was identified for eight acute cases, six of whom were tested because they experienced symptoms.

The number of chronic cases for whom risk information was available was very limited. Where information was available (n=34/161), 88% (n=30) of chronic cases were born in a country with high ($\geq 8\%$) or intermediate (2-7%) hepatitis B endemicity. Where country of birth was specified, 29% (n=10) of cases were born in Central or Eastern Europe, 29% (n=10) were born in Sub-Saharan Africa and 21% (n=7) were born in East Asia or The Pacific. Only 6%

(n=2) of the chronic cases, where country of birth was identified, were born in Ireland.

The reason for testing was identified for 25 chronic cases. Fifty-two percent (n=13) of these were identified through antenatal screening and 12% (n=3) were identified through asylum seeker screening.

Discussion

Where acute/chronic status was known, 89% of hepatitis B notifications in Q1 were chronic. The limited data that were available indicate that most chronic cases were asylum seekers or economic migrants from countries of intermediate or high hepatitis B endemicity. However, the proportion of chronic patients for whom country of birth was known was low and data may not be representative.

The number of acute cases remained low and sexual acquisition was the predominant mode of transmission. Where data were available, the majority of acute cases were born in Ireland and acquired the infection 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 decreased for acute cases in Q1 compared to 2006 as a whole. However, this may be due to delays in entering enhanced data and data completeness will probably improve.

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, 17th May 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.