



Feidhmeannacht na Seirbhíse Sláinte  
Health Service Executive

# Quarterly Report Hepatitis B Notifications Q2, 2005



## Health Protection Surveillance Centre

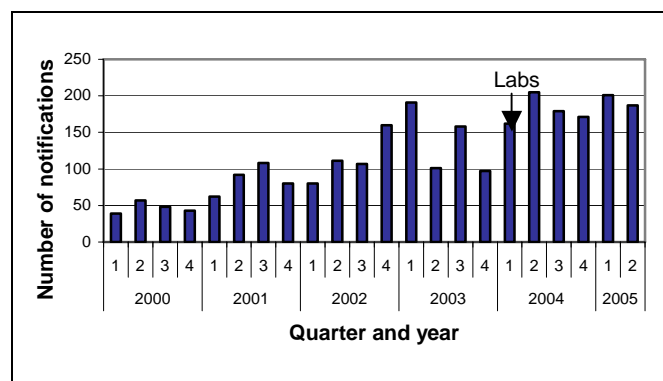
### Introduction

Hepatitis B is a notifiable disease under the Infectious Diseases Regulations 1981. Both acute and chronic cases are notifiable. An amendment to the regulations implemented on 1<sup>st</sup> January 2004 (S.I. 707 of 2003) introduced case definitions, and differentiated between notifications of acute hepatitis B and chronic hepatitis B for the first time. In addition, this amendment required laboratory directors to report cases of notifiable diseases identified by their laboratory. These changes have had a positive impact on the quality of information available on hepatitis B in Ireland. This is a summary of the notifications of hepatitis B made to the HPSC by the HSE regions in the second quarter of 2005.

Departments of Public Health in conjunction with the HPSC have introduced enhanced surveillance of acute cases of hepatitis B since the beginning of 2005. This has resulted in improved data, particularly in relation to risk factor information. Some risk factor information is also available for a minority of chronic cases.

### Results

There were 187 notifications of hepatitis B in the second quarter of 2005. This was a decrease on the number of cases notified in the previous quarter (n=201).



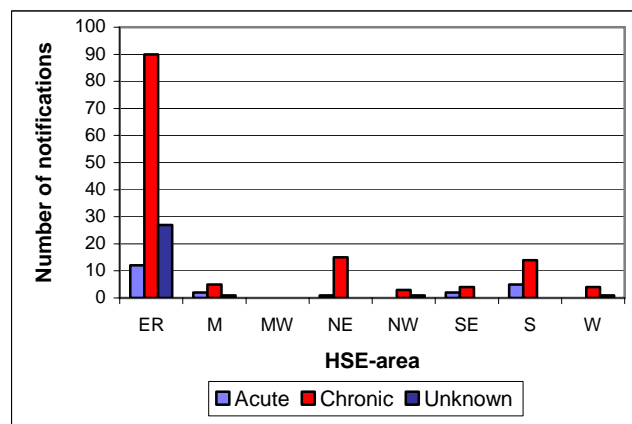
**Figure 1.** Number of notifications of hepatitis B per quarter, Q1 2000-Q2 2005

### Acute/chronic status

Eighty-four percent of notifications (n=157) contained information on acute/chronic status. Most of these (72%) were chronic cases of hepatitis B (n=135). Twenty-two cases of acute hepatitis B were reported.

### Geographic distribution

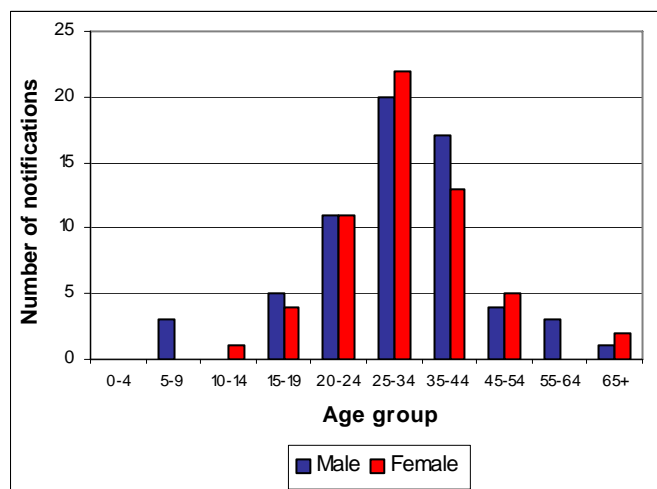
The number of hepatitis B cases notified by each region by acute and chronic status is displayed in table 1. Sixty-nine percent of cases in Q2 were notified by the HSE-ER.



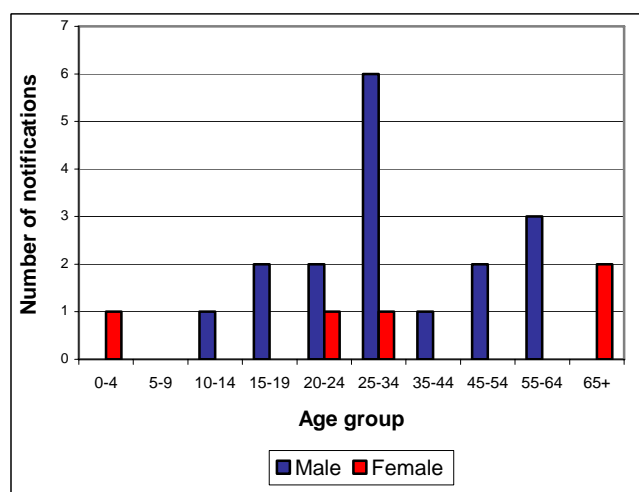
**Figure 2.** Number of hepatitis B cases notified in Q2, 2005 by acute/chronic status and HSE region

### Age and sex

The age and sex breakdown of chronic and acute notifications can be seen in figure 3a and b, respectively. Seventy-seven percent of acute cases in Q2 were male and 35% of males were aged between 25 and 34 years. By contrast, the proportions of male (52%) and female (48%) chronic hepatitis B cases were similar. The age breakdown was also similar for males and females and 77% of chronic cases were aged between 20 and 44 years.



**Figure 3a.** Age and sex breakdown of chronic cases notified in Q2, 2005



**Figure 3b.** Age and sex breakdown of acute cases notified in Q2, 2005

### Risk factors

In Q2 2005 HPSC received risk factor information for 59% of acute cases (n=13) and 25% of chronic cases (n=34). The main risk factors for acute hepatitis B related to sexual exposure, with five cases being men who have sex with men and a further four cases

indicating that they were likely to have acquired the infection sexually. Other risk factors given included household contact with a known case, tattooing/body piercing and travel abroad.

Where information was available, 25 out of 34 chronic cases were described as either asylum seekers or having been born in a country where hepatitis B is endemic. Where region of birth was reported (n=17), 65% of chronic cases were born in Sub-Saharan Africa, 18% were born in East Asia, 12% were born in Eastern Europe and only 6% were born in Western Europe. Risk factors given for chronic cases included household contact with a known case, injecting drug use, sexual transmission and being a resident in an institution for the intellectually disabled. However the number of chronic cases for which enhanced information was available was limited.

## Discussion

Enhanced surveillance of hepatitis B has improved, particularly for acute cases. Recent data clearly illustrate the differences between the epidemiology of acute and chronic hepatitis B in Ireland.

Good quality surveillance data are essential to fully describe the epidemiology of hepatitis B in Ireland. A range of demographic, clinical, laboratory and risk factor data is necessary in order to inform prevention and control strategies. This is particularly important in relation to the current debate about the most appropriate hepatitis B vaccination policy for Ireland.

## 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 and Dr Lelia Thornton, 5 Oct 2005.

### Case definition for hepatitis B (acute and chronic)<sup>1</sup>

**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.