

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 227 notifications of hepatitis B in quarter four 2008 (5.4 per 100,000 population) (figure 1).

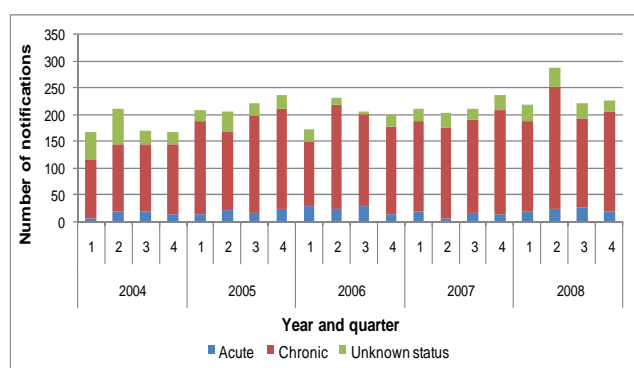


Figure 1. Number of cases of hepatitis B notified, by acute/chronic status, Q1 2004-Q4 2008

Geographic distribution

The highest notification rate was in the HSE-East, which reported 59% of Q4 notifications (n=134, 8.9 per 100,000 population) (figure 2).

Acute/chronic status

Ninety percent (n=205) of hepatitis B notifications in Q4 contained information on the acute/chronic status of the case. Of these, 92% (n=188) were chronic and 8% (n=17) were acute.

Acute cases

Age and sex

Age and sex specific notification rates for acute cases of hepatitis B are shown in figure 3. All of the 17 acute cases were male and all were adults. The age range was 18 to 63 years and the median age at notification was 31 years.

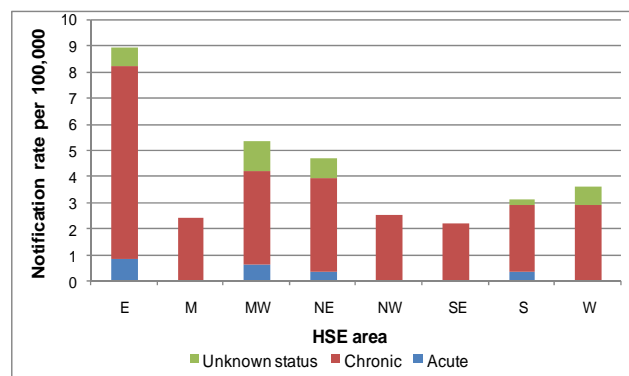


Figure 2. Hepatitis B notification rates per 100,000 population, by HSE area, Q4 2008

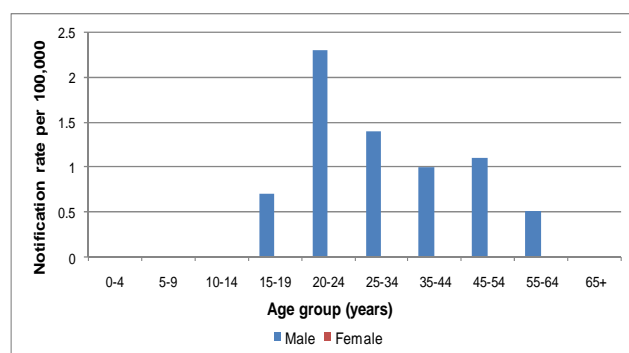


Figure 3. Age and sex specific rates per 100,000 population for acute cases of hepatitis B notified in Q4 2008

Risk factor and other enhanced data

Some risk factor data were entered on CIDR for 76% of acute cases (n=13). Of these, 54% (n=7) were reported to have been sexually acquired. Four of these were heterosexual and three were men who have sex with men (MSM). Five of the remaining acute cases with data were reported as having no known risk factor.

Country of birth was specified for thirteen of the acute cases. Twelve (92%) were born in Ireland. Where reason for testing was known (n=13), 85% (n=11) 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 Q4, 44% of chronic cases were male (n=83), 48% were female (n=90) and sex was not specified for 8% (n=15). The median age at notification for males (35 years) was higher than that for females

(29 years). Eighty one percent (n=152) of chronic cases notified in Q4 were aged between 20 and 44 years.

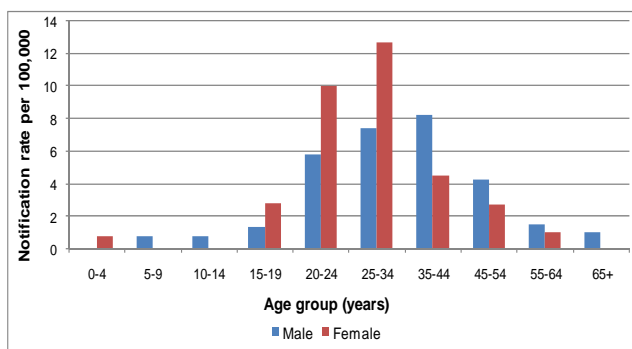


Figure 4. Age and sex specific rates per 100,000 population for chronic cases of hepatitis B notified in Q4 2008

Risk factor and other enhanced data

Enhanced data were more limited for chronic cases. Some data were available for 47% (n=88). Of these, 94% (n=83) 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, 33%) and Sub-Saharan Africa (n=20, 27%). Five chronic cases were born in Ireland.

The reason for testing was known for 106 chronic cases. Thirty eight percent (n=40) were identified through antenatal screening programmes and 29% (n=31) were identified through asylum seeker screening programmes.

2008 summary (provisional)

Hepatitis B data for 2008 have not yet been fully validated. However, provisional data show an increase in the annual number of hepatitis B notifications, with 954 cases notified compared to 863 cases in 2007. This is the highest annual number of hepatitis B notifications received to date. Where acute chronic status was available, 90% of cases notified in 2008 were chronic. The notification rates for acute and chronic cases were 2 and 18 per 100,000 population, respectively.

Fifty seven percent of all 2008 cases were notified by the HSE-E.

Acute cases

The number of acute cases of hepatitis B increased in 2008 (n=84) compared to 2007 (n=52), but remained lower than the number reported in 2006 (n=93). Eighty five percent of acute cases were male (n=71), 14% were female (n=12) and sex was not known for 1 case. The median age at notification was 29 for females and 32 for males. Risk factor data were available for 82% of acute cases. Of these, 64% (n=44) were likely to have been sexually acquired. Where data on sexual orientation were provided, 66% of sexually acquired cases were in men who have sex with men (n=27).

Chronic

The number of notifications of chronic cases of hepatitis B also increased in 2008 (n=755) compared to 2007 (n=708). Fifty one percent of chronic cases were male (n=383), 45% were female (n=336) and sex was not known for 36 cases. The median age at notification was 29.5 for females and 33 for males. Where data were available (n=335), 87% of chronic cases were born in a country of intermediate or high hepatitis B endemicity or were classified as asylum seekers.

Discussion

The number of acute and chronic cases of hepatitis B increased in 2008 compared to 2007. Where risk factor data were available for acute cases, sexually acquisition, particularly in MSM, predominated. Most chronic cases were born in hepatitis B endemic countries and infection was acquired outside of Ireland.

Acknowledgements

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Report by Niamh Murphy & Dr Lelia Thornton, 25th
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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.