



Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive



2006

EPIDEMIOLOGY OF HEPATITIS C IN IRELAND



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Further information:

<http://www.ndsc.ie/hpsc/A-Z/HepatitisHIVAIDSandSTIs/HepatitisC/>

<http://www.who.int/topics/hepatitis/en/>

<http://www.cdc.gov/ncidod/diseases/hepatitis/c/index.htm>

Summary

2006

Number of cases:	1,226
Age-standardised incidence rate:	28.6/100,000 population

2005

Number of cases:	1,434
Age-standardised incidence rate:	33.5/100,000 population

Introduction

The hepatitis C virus (HCV) was first identified in 1989. The WHO estimates that about 170 million people worldwide are chronically infected with HCV.^{1,2}

HCV is transmitted primarily via exposure to contaminated blood or blood products and the main causes of infection are sharing infected needles or other drug paraphernalia and the receipt of unscreened blood or blood products. Occupational exposure to infected blood, mother-to-baby and sexual transmission also occur but are less common. In developed countries, it is estimated that 90% of people with chronic hepatitis C are current or former injecting drug users or have received unscreened blood or blood products.^{1,2}

Over 90% of cases are asymptomatic in the acute phase of the disease but between 50 and 80% progress to chronic infection. Of those chronically infected, about 10-20% develop cirrhosis and between 1 and 5% develop hepatocellular carcinoma over a period of 20-30 years. There is currently no vaccine available for hepatitis C.^{1,2}

Case Definitions

Hepatitis C ³

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.

Laboratory criteria for diagnosis

One of the following:

Detection of hepatitis C virus (HCV) specific antibodies

Detection of HCV nucleic acid from clinical samples

Case classification

Possible: N/A

Probable: N/A

Confirmed: A case that is laboratory confirmed.

Materials and Methods

Hepatitis C became a notifiable disease under the Infectious Diseases Amendment Regulations introduced on the 1st January 2004 (S.I. 707 of 2003).³ Previously hepatitis C could be notified under the category “viral hepatitis, type unspecified”, but was not a notifiable disease in its own right.

Data for this report were extracted from CIDR on 3rd September 2007. These figures may differ from those published previously due to ongoing updating of notification data on CIDR. All rates were calculated using 2006 census data.

Results

Hepatitis C became a notifiable disease in 2004 and the number of cases notified each year since then has been high. Notifications decreased by 15% to 1,226 in 2006, compared to 1,434 in 2005. This corresponds to an age-standardised notification rate of 28.6/100,000 population (table 1). Seventy five percent of cases (n=924) were reported by the HSE-E, giving an age-standardised notification rate of 56.7/100,000 population in this area (figure 1).

Table 1. *Number of hepatitis C notifications and age-standardised notification rates, 2004-2006*

Year	Number of notifications	Age-standardised notification rates/100,000 population
2004	1131	25.5
2005	1434	33.5
2006	1226	28.6

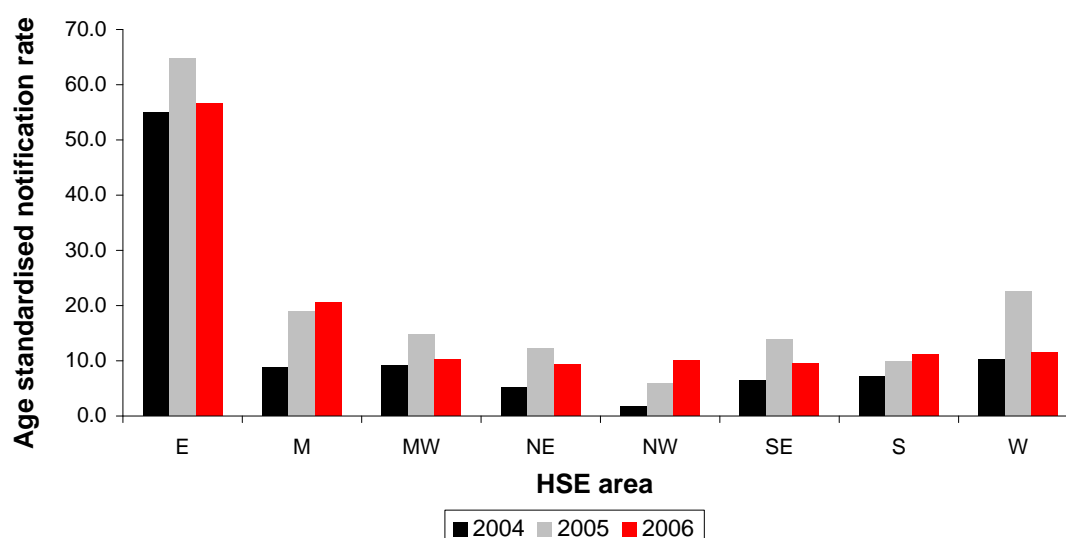


Figure 1. *Age standardised notification rates for hepatitis C per 100,000 population by HSE area, 2004-2006*

There were significantly more male cases than female. Sixty four percent of cases were male (n=790), 34% were female (n=416) and sex was not known for 20 cases. The age profile was very similar for males and females, with the highest notification rates in young adults. Seventy one percent of cases were aged between 25 and 44 years (n=870) and 93% of cases (n=1,134) were aged between 20 and 54 years (figure 2).

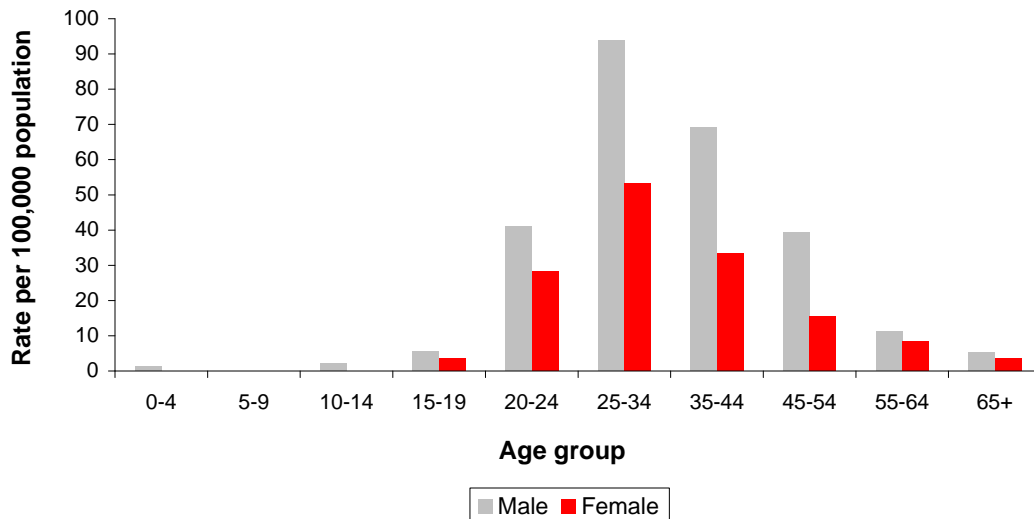


Figure 2. Age and sex-specific notification rates/100,000 population for hepatitis C, 2006

Discussion

Although the number of cases of hepatitis C reported in Ireland in 2006 decreased compared to 2005, notifications of hepatitis C fluctuate a lot from quarter to quarter and this is often due more to changes in testing and reporting practices than genuine trends in incidence. Infection is frequently asymptomatic initially and cases are often diagnosed as a result of opportunistic or routine screening of people considered to be at risk. Therefore cases may have been infected for some time before they are diagnosed and notification trends may not accurately reflect incidence.

Risk factor information was not routinely available for cases of hepatitis C in 2006. However studies in Irish settings and anecdotal evidence indicate that the majority of newly diagnosed cases are occurring in injecting drug users and the observed age and sex profile of cases supports this.^{5,6,7}

Prior to 2004, there was very little routine information available to describe the epidemiology of hepatitis C in Ireland. Data since 2004 indicate that the rate of hepatitis C is high and that the geographic distribution is skewed towards the HSE-E. Data published in the first ECDC communicable disease report shows that in 2005 Ireland had the highest rate of reported cases of hepatitis C (33.5 per 100,000 population) of all the EU and EEA/EFTA member states who provided data.⁴ Sweden and the United Kingdom had the next highest rates at 29 and 17.5 per 100,000 population, respectively. However, most cases of hepatitis C are chronic and asymptomatic in the early stages and are not detected without active screening of populations at risk. Data between countries are not truly comparable as there are significant differences in national surveillance systems for hepatitis C and some countries only report cases with evidence of acute infection.

An enhanced surveillance system for hepatitis C was implemented in early 2007 and it is hoped that this will help in identifying populations at risk and planning public health intervention strategies.

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