



Surveillance, epidemiology and prevention of Hepatitis B in Belgium

Results of the EUROHEP.NET feasibility survey

L. De Cock¹, S. Quoilin¹, R. Vranckx¹, Eurohep.net team²

¹ Scientific Institute of Public Health, Brussels

² University of Antwerp, Belgium

Surveillance system	Since 1971	
mandatory reporting	yes	passive
voluntary reporting	no	
sentinel	no	
laboratory	yes	passive

Flow chart of the surveillance system¹

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    graph TD
      CR[clinical records] --> ID1[individual data]
      LR[lab reports] --> ID2[individual data]
      ID1 --> RA[regional authority: Brussels, Flemish and French Community]
      ID2 --> RA
      RA --> CR
      RA --> LR
      RA --> IPH[Institute of Public Health (part of the Ministry of Health): continuous analysis of the reported cases]
      IPH --> RA
      IPH --> CR
      IPH --> LR
  
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SURVEILLANCE

CASE DEFINITION

- EC Hepatitis B case definition is not used;
- An own case definition is used at the level of the Health Inspectorate.

OBJECTIVES and METHODS

The EUROHEP.NET project is a concerted action, supported by the Quality of Life Programme of the fifth framework of the European Community for research. This project addresses issues related to surveillance and prevention of hepatitis A and B in the EU countries, Associated States and Israel. The overall goal is to study the feasibility of a future network on surveillance and prevention and to facilitate the progress of these countries towards enhanced control of hepatitis A and B.

Early 2003, EUROHEP.NET sent a feasibility survey to all participating countries to take stock of the country-specific surveillance and prevention activities for hepatitis A and B. The first achievement of this EU concerted action is to provide in a standardized/comparative way an overview of the different surveillance systems, epidemiology, burden of disease and prevention programmes for these infectious diseases.

EPIDEMIOLOGY²

BURDEN OF DISEASE¹

Hepatitis B	1997	1998	1999	2000	2001
Acute hepatitis B: Hospitalised cases/100000 ²	12.32	13.55			
Acute hepatitis B: Hospitalisation days per case ²					
Chronic hepatitis B: Hospitalised cases/100000					
Chronic hepatitis B: Hospitalisation days per case					
Total: Hospitalised cases/100000					
Total: Hospitalisation days per case					
Deaths		31			
Mortality (total number of deaths per 100 000)		0.30			
Cirrhosis cases					
Total number of patients with hepatocellular cancer	397	435			
Total number of liver transplants not hep B specific		97	168	161	167
Proportion of liver transplants due to hepatitis B					

COMMENTS

- Surveillance of hepatitis B in Belgium is passive. The existing Sentinel Laboratory Network included hepatitis B until 1996. In Flanders, seroprevalence study has been used as surveillance tool to follow the prevalence of hepatitis A, B and C in the general population (prevalence studies performed in 1993 and 2003). There is no uniform case definition used.
- Hepatitis B is considered low endemic in Belgium.
- Universal vaccination is recommended in infants and adolescents. From January 2004 on, the schedule changed to 0.1.2.12 for the infant vaccination.
- Booster vaccination is only recommended for non-responders.
- Cost of hepatitis B vaccine: private pediatric dose: 15.47€ (Engerix B) and 15.47€ (HBVaxpro); public pediatric use: 4.3€ (Engerix B)

PREVENTION by active immunisation

Universal programme	starting in	starting at age	schedule	coverage rate
universal screening policy for pregnant women	1991			
vaccination of infants	1999	4 months	0,1,6	
vaccination of adolescents	1999	11-12 y.	0,1,6	

Risk group programmes	available (since)	booster	reimbursed
injecting drug users	2002		no
men who have sex with men	2002		no
attendees of STI clinics	2002		no
dialysis patients	1991		yes
groups with occupational risk	1988		yes
household contacts of known hepatitis B carriers	2002		yes
hospitalised patients	no		no
neonates born to HBsAg positive mothers	1991		yes
other risk groups ³	1985		yes

FOOTNOTES

- Hospitalisation data, liver transplantation data and mortality data are available at the level of the MOH. Source for the hospitalisation data, the liver transplants and mortality is the Ministry of Health. The source for the mortality is the clinical reporting system and the Institute of Public Health.
- The data for HBsAg carrier rate for 1993 originate from the prevalence study, the other epidemiological data from the mandatory notification system (only Flanders).
- Other risk group vaccination is performed in clotting factor disorder patients, candidates for organ/bone transplantations, patients with major thalassemia and patients with severe mental handicap. 75% of the costs are reimbursed to all eligible risk groups.