



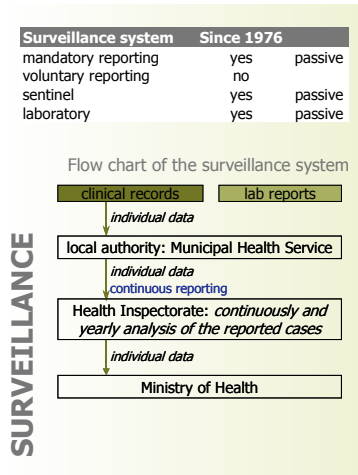
Surveillance, epidemiology and prevention of Hepatitis B in the Netherlands

Results of the EUROHEP.NET feasibility survey

H. de Melker¹, M.G. van Veen¹, Eurohep.net team²

¹ National Institute of Public Health and the Environment

² University of Antwerp, Belgium



CASE DEFINITION

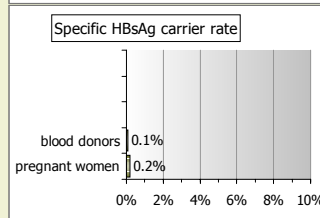
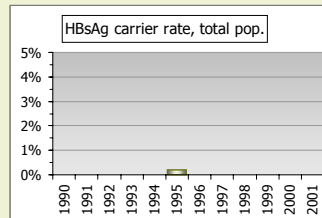
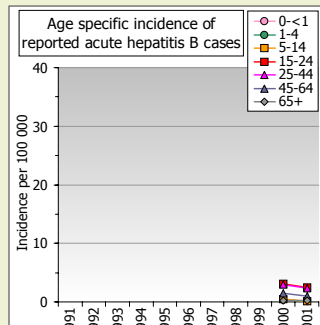
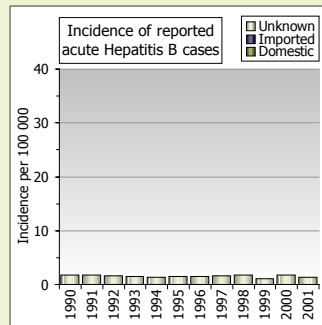
- EC Hepatitis B case definition is used, however no strict distinction is made between confirmed and probable cases. Asymptomatic cases with laboratory confirmation are included in the notifications since 1999.
- Probable:** clinical picture compatible with hepatitis (e.g. discrete onset of symptoms and jaundice or elevated serum aminotransferase levels) and HBsAg positive.
- Confirmed:** clinical case definition and laboratory confirmation (IgM antibody to antiHBc or HBV nucleic acid in serum).

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

	1997	1998	1999	2000	2001
Acute hepatitis B: Hospitalised cases/100000					
Acute hepatitis B: Hospitalisation days per case					
Chronic hepatitis B: Hospitalised cases/100000					
Chronic hepatitis B: Hospitalisation days per case					
Total: Hospitalised cases/100000				3.89	3.46
Total: Hospitalisation days per case				5.2	4.8
Deaths	33	50	49	49	71
Mortality (total number of deaths per 100 000)	0.21	0.32	0.31	0.31	0.44
Cirrhosis cases				2651	2841
Total number of patients with hepatocellular cancer					
Total number of liver transplants not hep B specific					

COMMENTS

- Surveillance is passive for hepatitis B.
- Notifications are the most reliable source for surveillance, with further research projects as supporting tools.
- Laboratories do not have the obligation to report hepatitis B cases.
- Hepatitis B is a low endemic infection in the Netherlands. The RIVM performed a sero-prevalence study from October 1995 to December 1996, in a population based survey (n= 7395 individuals) called Pienter Project, (overall sero-prevalence was 2.1% (95% CI: 1.6-2.7%). The seroprevalence of HBsAg as a marker of HBV infectiousness was 6.9% among anti-HBc positive individuals and was 0.2% when extrapolated to the general Dutch population. (ref: Marrewijk van C.J. et al. RIVM report 243680001, february 1999).

PREVENTION by active immunisation

Universal programme	starting in	starting at age	schedule	coverage rate
universal screening policy for pregnant women	1989			
vaccination of infants				
vaccination of adolescents				

Risk group programmes	available (since)	booster	reimbursed
injecting drug users	2003		
men who have sex with men	2003		
attendees of STI clinics	2003		
dialysis patients	yes		
groups with occupational risk	yes		
household contacts of known hepatitis B carriers	yes		
hospitalised patients			
neonates born to HBsAg positive mothers	1989		
other risk groups ³	2003		

FOOTNOTES

- All data on hospitalisation are related to viral hepatitis and not only hepatitis B. The source for hospitalisation days per case and hospitalised cases is Prisma. Data on death and mortality are also related to all hepatitis, and the source is the Central Bureau for Statistics, CBS)
- Prevalence of HBsAg carrier rate in 1995: 0.2%. Pienter project 1995-1996 (RIVM report 243680001).
- Children residing in the Netherlands of whom the parents are born in an endemic country, are vaccinated since 2003.