



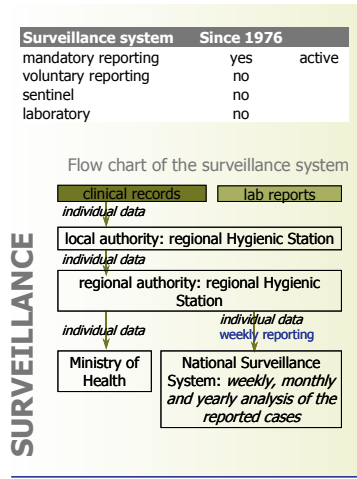
# Surveillance, epidemiology and prevention of Hepatitis B in the Czech Republic

Results of the EUROHEP.NET feasibility survey

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## OBJECTIVES and METHODS

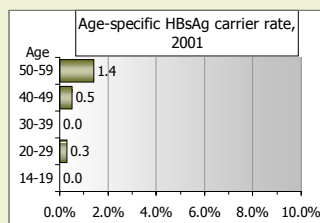
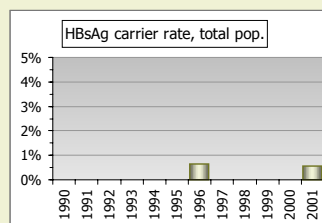
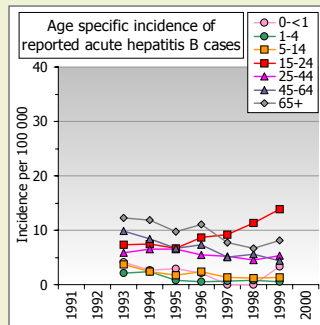
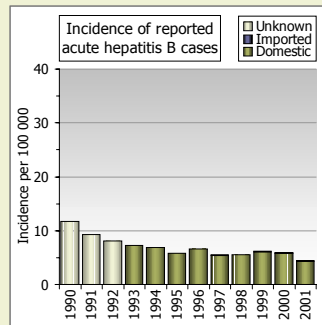
The EUROHEP.NET project is a concerted action, supported by the Quality of Life Programme of the fifth framework of the European Community for research. This project addresses issues related to surveillance and prevention of hepatitis A and B in the EU countries, Associated States and Israel. The overall 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.

## CASE DEFINITION

- EC Hepatitis B case definition is used:
- 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).

## EPIDEMIOLOGY



## BURDEN OF DISEASE<sup>1</sup>

Hepatitis B	1997	1998	1999	2000	2001
Acute hepatitis B: Hospitalised cases/100000	5.4	5.9	6.2	5.9	4.4
Acute hepatitis B: Hospitalisation days per case	35	35	35	35	35
Chronic hepatitis B: Hospitalised cases/100000					
Chronic hepatitis B: Hospitalisation days per case					
Total: Hospitalised cases/100000					
Total: Hospitalisation days per case	35	35	35	35	35
Deaths	2	7	10	2	2
Mortality (total number of deaths per 100 000)	0.02	0.07	0.10	0.02	0.02
Cirrhosis cases					
Total number of patients with hepatocellular cancer					
Total number of liver transplants not hep B specific					

## COMMENTS

- Surveillance is active for hepatitis B.
- EC case definition is used for surveillance purposes.
- A seroepidemiological study is conducted in 2001: multipurpose serological survey in the Czech Republic 2001-2003, Zprávy Centra epidemiologie a mikrobiologie, 12, 2003, 7-8 Suppl. Serological survey of the antibodies against selected infectious diseases in the Czech Republic, 2001, European Journal of Public Health Vol 11 (JHEM vol.47) Dec. 2003 supplement, ISSN 1210/7778
- Hepatitis B is low endemic in the Czech Republic with low carrier rates of HBsAg.
- There is universal mandatory vaccination of infants and adolescents at 12 years of age in place. Risk group vaccination programmes are recommended for several subpopulations.
- Cost of hepatitis B vaccine: public pediatric use: 10€ (Engerix B), 27€ (Twinrix)

## PREVENTION by active immunisation

Universal programme	starting in	starting at age	schedule	coverage rate <sup>2</sup>
universal screening policy for pregnant women	1987			
vaccination of infants*	2001	9 weeks	0.1.6	97%
vaccination of adolescents*	2001	12	0.1.6	96.50%

\* mandatory vaccination

Risk group programmes	available (since)	booster	reimbursed
injecting drug users	1995		yes
men who have sex with men			
attendees of STI clinics			
dialysis patients*	1985	yes	yes
groups with occupational risk*	1984	yes	yes
household contacts of known hepatitis B carriers*	1990		yes
hospitalised patients			
neonates born to HBsAg positive mothers*	1987	yes	yes
other risk groups			

\* mandatory vaccination

## FOOTNOTES

- Data on hospitalization consider only acute cases. The average duration of hospitalization is approximately 35 days, no precise data are available. The total number of hospitalised cases and the total number of reported cases for hepatitis B are the same. Source for hospital admissions is the mandatory reporting system. Source for mortality data is the Czech Statistical Office through MOH. These data are related to acute hepatitis B.
- Vaccination coverage control is organised at a central level and is covering a sample of population of vaccinated children from all regions.