



Surveillance, epidemiology and prevention of Hepatitis A in Bulgaria

Results of the EUROHEP.NET feasibility survey

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COUNTRY CHARACTERISTICS¹

- Total population: 7845841
- GDP per capita (Intl \$, 2001): 4,108
- Life expectancy at birth m/f (years): 68.5/75.3
- Health expenditure/capita (Intl \$, 2001): 303
- Health expenditure as % of GDP (2001): 4.8

OBJECTIVES and METHODS

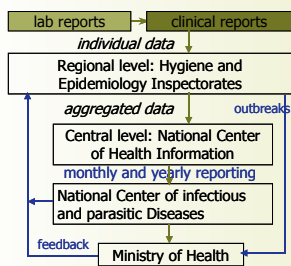
The EUROHEP.NET project is a EU concerted action, supported by the Quality of Life Programme of the fifth framework of the European Community for research. This project addresses issues related to surveillance and prevention of hepatitis A and B in the EU countries, Associated States and Israel. The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

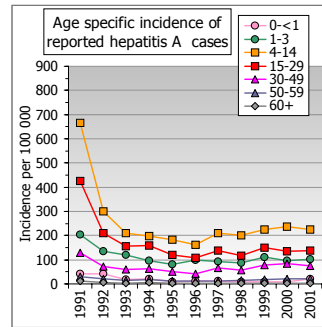
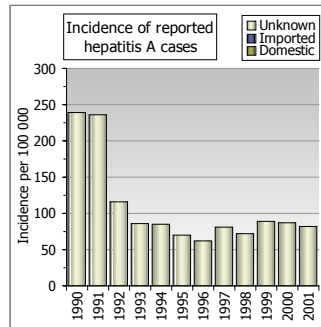
SURVEILLANCE

Surveillance system	Since 1983	
mandatory reporting	yes	passive
voluntary reporting	no	
sentinel	no	
laboratory	yes	passive

Flow chart of the surveillance system



EPIDEMIOLOGY



CASE DEFINITION

EC case definition is used:

- **Probable:** clinical picture compatible with hepatitis (e.g. discrete onset of symptoms and jaundice or elevated serum aminotransferase levels) and epidemiological link.
- **Confirmed:** clinical case definition and laboratory confirmation (IgM antibody to hepatitis A or nucleic acid in serum or antigen in stool)
- Definition of an **outbreak:** 2 and more cases in a household (day care center, classroom...) and/or data for epidemiological link between cases in a certain period on a certain territory, or presence of a common source.

BURDEN OF DISEASE

Acute hepatitis A	1997	1998	1999	2000	2001
Hospitalised cases/100 000 inhabitants ²	81.1	72.0	88.7	87.4	82.2
Hospitalisation days per case	7 to 14	7 to 14	7 to 14	7 to 14	7 to 14
Deaths ³	2	1	2	2	2
Mortality (total number of deaths per 100 000)	0.02	0.01	0.02	0.02	0.03
Total number of liver transplants	0	0	0	0	0

Outbreaks of hepatitis A: 1997-2001:

The five largest outbreaks were investigated at a central level during the last 5 years (1997-2001).

COMMENTS

- Surveillance for hepatitis A is passive in Bulgaria.
- All clinically manifested acute cases with jaundice are subject to compulsory hospitalisation for 7 to 14 days in an infectious disease unit, subsequent laboratory confirmation and mandatory notification and registration.
- EC case definition is used for surveillance purposes.
- Hepatitis A is considered to be endemic in Bulgaria because of the high incidence rates.
- There is no universal vaccination programme, there is only recommendation for risk groups to be vaccinated, without any reimbursement.

PREVENTION by active immunisation⁴

Risk group programmes	Available since
injecting drug users	2000
men who have sex with men	2000
international travellers to endemic areas	2000
chronic liver disease patients	2000
clotting factors disorder patients	2000
medical and paramedical personnel in hospitals including kitchen staff and cleaners	no
people residing in areas of extended community outbreaks	2000
pre-school children attending day care centres	no
day care centre personnel	no
residents and staff of closed communities (Psychiatric Institutions and Institutions for mentally disabled)	2000
refugees residing in temporary camps	no
food-service establishment workers/food handlers	2000
household contacts of infected persons	no
children of migrants visiting an endemic country of origin	no
other risk groups ⁴	no

FOOTNOTES

1. Country characteristics: National Statistics Institute, 2003.
2. The number of hospitalised cases coincides with the total number of acute cases because hospitalisation is compulsory in Bulgaria for 7 to 14 days. Considering that there are specialised hospital wards for communicable diseases who work in close contact with regional epidemiologists, the National Surveillance system is informed timely and precisely about the number of cases and the outcome.
3. The specialised communicable disease hospital wards have to fill in an official reporting form for cases with lethal outcome.
4. Other risk groups: laboratory personnel working with HAV; dustmen, particularly who are directly involved in waste handling