



# Surveillance, epidemiology and prevention of Hepatitis A in the Netherlands

## Results of the EUROHEP.NET feasibility survey

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### COUNTRY CHARACTERISTICS<sup>1</sup>

- Total population: 16,067,000
- GDP per capita (Int\$, 2001): 29,231
- Life expectancy at birth m/f (years): 76.0/81.8
- Health expenditure/capita (Int\$, 2001): 2612
- Health expenditure as % of GDP(2001): 8.9

### OBJECTIVES and METHODS

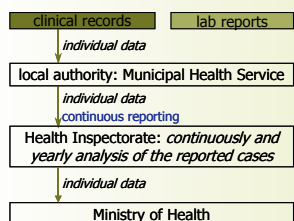
The EUROHEP.NET project is a EU concerted action, supported by the Quality of Life Programme of the fifth framework of the European Community for research. This project addresses issues related to surveillance and prevention of hepatitis A and B in the EU countries, Associated States and Israel. The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

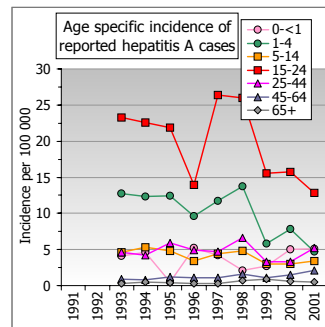
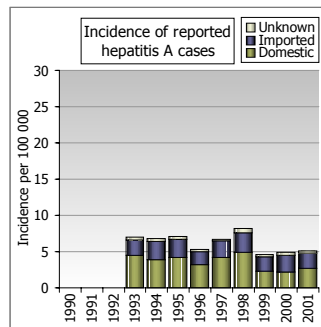
## SURVEILLANCE

Surveillance system	Since 1988	
mandatory reporting	yes	active
voluntary reporting	no	
sentinel	no	
laboratory	yes	active

Flow chart of the surveillance system



## EPIDEMIOLOGY



### CASE DEFINITION

The diagnosis of hepatitis A infection is based on the detection of Hepatitis A-specific IgM antibodies. These tests are usually carried out as radio immunoassays (RIA) of enzyme immunoassays (EIA). Epidemiologically-associated cases can be diagnosed on clinical ground, provided the diagnoses of the index case was serologically confirmed.

•Definition of an **outbreak**: two and more epidemiologically linked cases in place/time. The number of outbreaks is decreasing in the period 1999-2003, especially in 2002, in schools and households. In the homosexual scene, outbreaks occur approximately once every three years. Overall: 218 outbreaks in 1999; 242 in 2000; 259 in 2001 and 140 in 2002.

## BURDEN OF DISEASE

Acute hepatitis A	1997	1998	1999	2000	2001
Hospitalised cases/100 000 inhabitants	0.000	0.006	0.197	0.183	0.200
Hospitalisation days per case	?	?	?	?	?
Deaths	0	0	1	2	1
Mortality (total number of deaths per 100 000)	0.00	0.00	0.01	0.01	0.01
Total number of liver transplants	?	?	?	?	?

## COMMENTS

- The Netherlands are considered as a low endemic country for hepatitis A.
- Surveillance is active. Underreporting is estimated 60% because of asymptomatic cases at young age and underreporting of related cases.

## PREVENTION

Risk group programmes	Available since
IVDU	no
MSM	no
international travellers to endemic areas	yes
chronic liver disease patients	yes
clotting factors disorder patients	no
medical and paramedical personnel in hospitals including kitchen staff and cleaners	no
persons residing in areas of extended community outbreaks	no
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)	no
refugees residing in temporary camps	no
food-service establishment workers/food handlers	no
household contacts of infected persons	yes
children of migrants before visiting their parents' home country	yes
other risk groups	no

## FOOTNOTES

1. Country characteristics: [www.who.int/country/en/](http://www.who.int/country/en/)  
Figures are for 2002 unless indicated. Source: The world health report 2003 (derived April 2004).
2. During the period 1993-2002, mean age of hepatitis A cases, has increased. It is important to be aware of the increasing lethality of hepatitis A in the elderly. (Eerden LJM van der, Bosman A, Duynhoven Y. Surveillance of hepatitis A in the Netherlands, 1993-2002. 2004 Nederlands Tijdschrift voor Geneeskunde, 10 Juli, 148(28): 1390-4)