



Surveillance, epidemiology and prevention of Hepatitis A in Norway

Results of the EUROHEP.NET feasibility survey

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COUNTRY CHARACTERISTICS¹

- Total population: 4514000
- GDP per capita (Intl \$, 2001): 36,460
- Life expectancy at birth m/f (years): 76.4-81.7
- Health expenditure/capita (Intl \$, 2001): 2,92
- Health expenditure as % of GDP (2001): 8.0

OBJECTIVES and METHODS

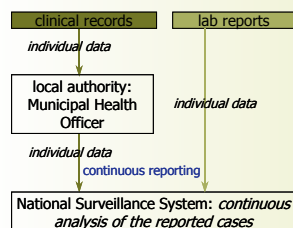
The EUROHEP.NET project is a EU concerted action, supported by the Quality of Life Programme of the fifth framework of the European Community for research. This project addresses issues related to surveillance and prevention of hepatitis A and B in the EU countries, Associated States and Israel. The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

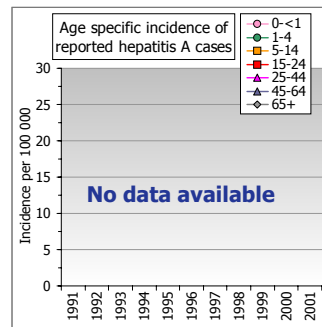
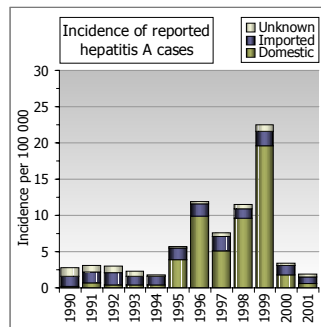
SURVEILLANCE

Surveillance system	Since 1975	
mandatory reporting	yes	passive
voluntary reporting	no	
sentinel	no	
laboratory	yes	passive

Flow chart of the surveillance system



EPIDEMIOLOGY²



CASE DEFINITION

An own case definition is used nation wide:

- laboratory confirmed case with detection of antibodies compatible with recent infection or clinical picture compatible with hepatitis in persons epidemiologically linked to a laboratory confirmed case.
- Norway is in process of changing the case definitions for notifiable diseases in accordance with EC definitions.
- Definition of an **outbreak**: 2 or more epidemiologically linked cases or unexpected number of reported cases among risk groups.

BURDEN OF DISEASE³

Acute hepatitis A	1997	1998	1999	2000	2001
Hospitalised cases/100 000 inhabitants					
Hospitalisation days per case					
Deaths					
Mortality (total number of deaths per 100 000)					
Total number of liver transplants not hep A specific					

Outbreaks of hepatitis A: 1997-2001: a major nationwide outbreak occurred among drug users between 1995-2000.

COMMENTS

- Norway is considered a low endemic country for hepatitis A, although in the late 1990's the disease is considered endemic among drug users. A prevalence study among drug users in Oslo carried out in 2003 showed anti-HAV IgG in 61% of the tested.
- Surveillance is passive.
- Immunoglobulins alone are given for individual post exposure prophylaxis. Both immunoglobulins and vaccination are used for post exposure outbreak control.
- There is no universal vaccination program against hepatitis A.

PREVENTION by active immunisation⁴

Risk group programmes	Available since
injecting drug users	1999
men who have sex with men	no
international travellers to endemic areas	yes
chronic liver disease patients	1994
clotting factors disorder patients	1994
medical and paramedical personnel in hospitals including kitchen staff and cleaners	no
people 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	no
children of migrants visiting an endemic country of origin	yes
other risk groups	no

FOOTNOTES

- Country characteristics: www.who.int/country/en/
Figures are for 2002 unless indicated. Source: the World health report 2003, derived April 2004.
- Age specific incidences are not available but could be analysed
- Data on hospital admission and hepatitis A related mortality are not available. The amount of liver transplantations that are performed is unknown.
- Specific risk groups (drug users, chronic liver disease patients and clotting factor disorder patients) are offered free vaccination regardless of an outbreak. During outbreaks, defined risk groups (e.g. men who have sex with men) are offered vaccination free of charge.