Surveillance, epidemiology and prevention of Hepatitis A in England and Wales

Results of the EUROHEP.NET feasibility survey

N.S. Crowcroft[1] , EUROHEP.NET team[2]

[1] Communicable Disease Surveillance Centre, London

[2] University of Antwerp, Belgium

COUNTRY CHARACTERISTICS[1]

- Total population: 59,068,000
- GDP per capita (Intl $, 2001): 26,273
- Life expectancy at birth m/f (years): 75.8/80.5
- Health expenditure/capita (Intl $, 2001): 1,989
- Health expenditure as % of GDP (2001): 7.6

OBJECTIVES and METHODS

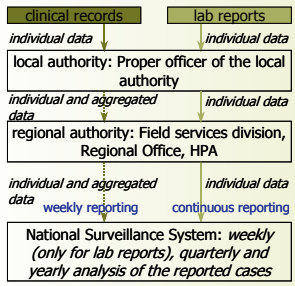
The EUROHEP.NET project is a EU concerted action, supported by the Quality of Life Programme of the fifth framework of the European Community for research. This project addresses issues related to surveillance and prevention of hepatitis A and B in the EU countries, Associated States and Israel. The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

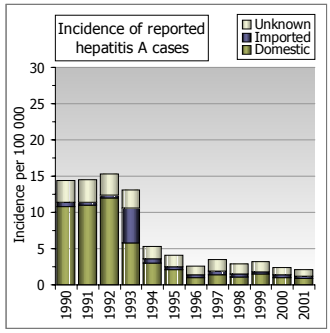
SURVEILLANCE

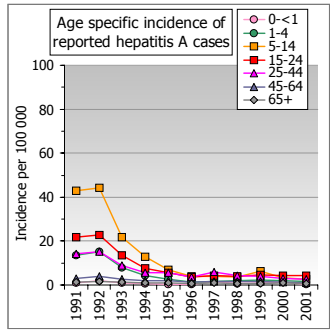
Surveillance system	Since 1988	
mandatory reporting	yes	passive
voluntary reporting	yes	passive
sentinel	no	
laboratory	yes	passive

Flow chart of the surveillance system



EPIDEMIOLOGY[2]





CASE DEFINITION

- There is no case definition of hepatitis A
  The England and Wales definition for a statutary notification of viral hepatitis is a suspected case of acute viral hepatitis. This applies to all the viral hepatitides as they are notified under viral hepatitis. This is subdivided into A, B, C, other and unknown based solely on a clinical diagnosis. Laboratory confirmed: A patient who is found to be confirmed HAV IgM positive based on a positive RIA IgM. There is no strict definition for a hepatitis A notification.

- Definition of an **outbreak**: Two or more cases linked in time, place or person.

BURDEN OF DISEASE[3,4]

Acute hepatitis A	1997	1998	1999	2000	2001
Hospitalised cases/100 000 inhabitants		0.71	0.74	0.73	0.72
Hospitalisation days per case		4.8	3.7	5.3	5.8
Deaths	2	0	4	1	6
Mortality (total number of deaths per 100 000)	0.004	0.000	0.008	0.002	0.011
Total number of liver transplants not hep A specific	470	465	505	510	
Proportion of liver transplants due to hepatitis A	0.0%	0.2%	0.0%	0.0%	0.0%

Outbreaks of hepatitis A: 1997-2001: Data on Hepatitis A outbreaks are not routinely surveyed although being 'part of an outbreak' is sometimes documented for individual cases. Thus, it is difficult to estimate the number of outbreaks as we do hear of some but are aware that many outbreaks do not come to our attention.

PREVENTION by active immunisation

Risk group programmes	Available since
injecting drug users	no
men who have sex with men	no
international travellers to endemic areas	1992
chronic liver disease patients	1996
clotting factors disorder patients	1996
medical and paramedical personnel in hospitals including kitchen staff and cleaners	no
people residing in areas of extended community outbreaks	1996
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	1996
children of migrants visiting an endemic country of origin	1992
other risk groups	no

COMMENTS

- Surveillance for hepatitis A is passive and both clinical and laboratory based.
- Laboratory reports provide the most complete and reliable data of all available systems. Notifications based on clinical diagnosis will not distinguish reliably between viral and non-viral causes and also not between hepatitis A, B, C & E. However, notifications occur earlier giving more time for the appropriate action to be taken, whereas lab reports may be somewhat delayed. Therefore, both are used to support further health policy.
- Hepatitis A is not considered an endemic disease in the UK.
- References to publications of sero-epidemiological surveys:

1) Morris MC, Gay NJ, Hesketh LM, Morgan-Capner P, Miller E: The changing pattern of hepatitis A in England and Wales. Epidemiol Infect 2002 Jun; 128(3): 457-63.

2) Crowcroft N, Walsh B, Davison KL, Gungabissoon U on behalf of PHLS Advisory Committee on Vaccination and Immunisation: Guidelines for the control of hepatitis A virus infection. Communicable Disease and Public Health 2001 Sep; 4(3): 213-27.

FOOTNOTES

1. Country characteristics: www.who.int/country/en/
   Figures are for 2002 unless indicated. Source: the World health report 2003 (derived April 2004).
2. Sources of epidemiological data are official reports.
3. The Office for National Statistics (ONS) provides data on deaths while Hospital Episode Statistics (HES) provides data on admissions and deaths but they are not timely. The Department of Health compiles hospital episode statistics from all patient-based records for NHS finished consultant episodes (ordinary admissions and day cases) by diagnosis, operation and speciality from NHS hospitals in England. Data are adjusted to allow for incomplete recording and episodes without a valid diagnosis. The Office for National Statistics (ONS) compiles mortality statistics which are based on registrations of deaths. The presentation of deaths by cause alters from time to time with the introduction of a revised International Classification of Diseases (ICD): implemented in mortality data in January 2001: ICD 10.
4. Data for disease burden refer to financial years: April to March.