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

Results of the EUROHEP.NET feasibility survey

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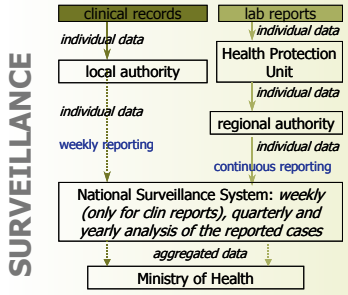
Surveillance system	Since 1975	
mandatory reporting	yes	passive
voluntary reporting	yes	passive
sentinel	no	
laboratory	yes	passive

Flow chart of the surveillance system



CASE DEFINITION

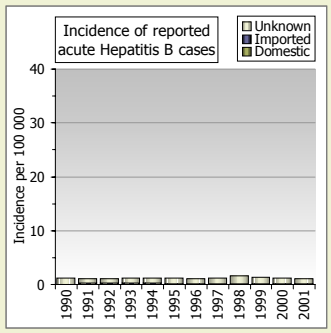
- EC Hepatitis B case definition is used.
- Probable: clinical picture compatible with hepatitis (e.g. discrete onset of symptoms and jaundice or elevated serum aminotransferase levels) and HBsAg positive.
- Confirmed: clinical case definition and laboratory confirmation (IgM antibody to antiHBc or HBV nucleic acid in serum).

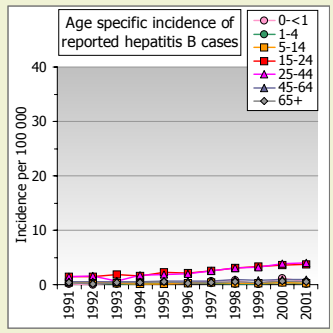
OBJECTIVES and METHODS

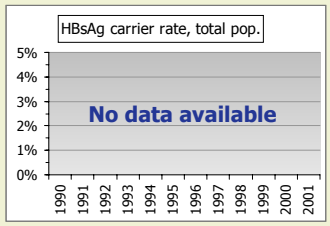
The EUROHEP.NET project is a concerted action, supported by the Quality of Life Programme of the fifth framework of the European Community for research. This project addresses issues related to surveillance and prevention of hepatitis A and B in the EU countries, Associated States and Israel. The overall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

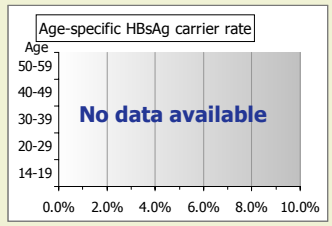
Early 2003, EUROHEP.NET sent a feasibility survey to all participating countries to take stock of the country-specific surveillance and prevention activities for hepatitis A and B. The first achievement of this EU concerted action is to provide in a standardized/comparative way an overview of the different surveillance systems, epidemiology, burden of disease and prevention programmes for these infectious diseases.

EPIDEMIOLOGY[1]









BURDEN OF DISEASE[2]

Hepatitis B	1997	1998	1999	2000	2001
Acute hepatitis B: Hospitalised cases/100000					
Acute hepatitis B: Hospitalisation days per case					
Chronic hepatitis B: Hospitalised cases/100000					
Chronic hepatitis B: Hospitalisation days per case					
Total: Hospitalised cases/100000					
Total: Hospitalisation days per case					
Deaths	64	57	65	57	54
Mortality (total number of deaths per 100 000)	0.12	0.11	0.12	0.11	0.10
Cirrhosis cases					
Total number of patients with hepatocellular cancer					
Total number of liver transplants not hep B specific	470	465	505	510	
Proportion of liver transplants due to hepatitis B	4%	4%	5%	4%	

PREVENTION by active immunisation

Universal programme	starting in	starting at age	schedule	coverage rate
universal screening policy for pregnant women	2000			
vaccination of infants				
vaccination of adolescents				

Risk group programmes	available (since)	booster	reimbursed
injecting drug users	<1988		yes
men who have sex with men	<1988		yes
attendees of STI clinics	yes		yes
dialysis patients	<1984		yes
groups with occupational risk	<1984		yes
household contacts of known hepatitis B carriers	<1984		yes
hospitalised patients	no		no
neonates born to HBsAg positive mothers	<1988		yes
other risk groups[3]	<1984		

COMMENTS

- Laboratory Reporting is for 80% complete for acute hepatitis B.
- The UK is a low prevalence country for hepatitis B infection.
- Booster: If the individual from whatever high risk group is considered to be at risk after a number of years (normally 5 years) since the primary hepatitis B immunisation then a booster dose will be given. The decision is made at the local level on an individual basis.

FOOTNOTES

1. Sources of epidemiological data are computerised national data (England and Wales) , laboratory reports and statutary notifications. Computerised national data is dissaggregate data provided to CDSC that has been obtained from Hospital Episode Statistics (HES).
2. Considering laboratory reports, coding difficulties make distinction of acute and chronic infection versus incidental re-coding of status very difficult. 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 (http://www.doh.gov.uk/hes/).
   The Office for National Statistics (ONS) complies mortality statistics which are based on registrations of deaths. These registrations are made by local registrars of births and deaths, and in most cases are reported within five days of the death occurrence. (http://www.statistics.gov.uk/CCI/nscl.asp?ID=6444).
   Registrars supply details of all deaths to ONS each week. ONS processes and tabulates the data, publishing figures weekly, monthly, quarterly and annually. The presentation of deaths by cause alters from time to time with the introduction of a revised International Classification of Diseases (ICD). The Ninth Revision which has been in use since 1979. The Tenth revision was implemented in mortality data in January 2001.
3. Residents in institutions for those with learning difficulties are considered an extra risk group for vaccination. The recommendation that vaccine should be offered to people who change sexual partner frequently (gay and bisexual men and commercial sex workers are specifically mentioned) has been in place since before 1988. It is not specifically recommended for all STI clinic attendees but has been recommended for all gay men attending STI clinics since 2002.