



Surveillance, epidemiology and prevention of Hepatitis A in Germany

Results of the EUROHEP.NET feasibility survey

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COUNTRY CHARACTERISTICS¹

- Total population: 82,414,000
- GDP per capita (Intl \$, 2001): 26,205
- Life expectancy at birth m/f (years): 75.6/81.6
- Health expenditure/capita (Intl \$, 2001): 2,82
- Health expenditure as % of GDP (2001): 10.8

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.

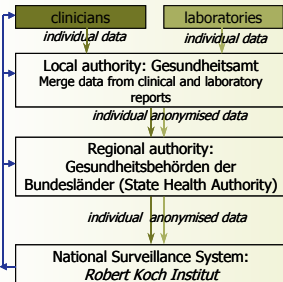
Early 2003, EUROHEP.NET sent a feasibility survey to all participating countries to take stock of the country-specific surveillance and prevention activities for hepatitis A and B. The first achievement of this EU concerted action is to provide in a standardized/comparative way an overview of the different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

SURVEILLANCE

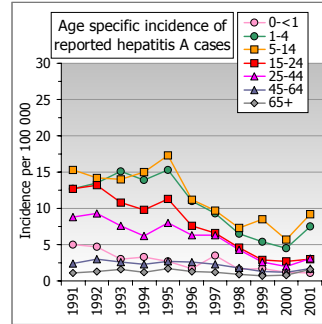
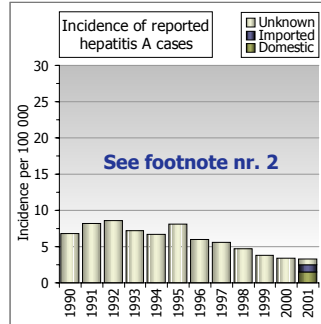
Surveillance system	Since 1980 (West), 1983 (East)	
mandatory reporting	yes	passive
voluntary reporting	no	
sentinel	no	
laboratory	yes	passive

Flow chart of the surveillance system

Some continuously, most weekly reporting



EPIDEMIOLOGY²



CASE DEFINITION (as of January 2004)⁴

- A clinical case will have to fulfill one of these criteria: jaundice, fever, abdominal discomfort or high transaminases. For a case to be laboratory confirmed: either detection of nucleic acids in serum or stool (PCR) or detection of antigen in stool (ELISA) or detection of IgM-antibodies or a significant rise in IgG-titer between paired sera. For epidemiological confirmation a case has to have either an epidemiological link to a laboratory confirmed infected person by person to person-transmission, or by consumption of the same implicated food, or the case has to have consumed food in leftovers in which HAV is detected.
- Only clinical cases with laboratory or epidemiological confirmation as well as laboratory confirmed asymptomatic infections or laboratory confirmed infections with unknown symptoms are reported to RKI via the health authorities of each Bundesland.
- Definition of an **outbreak**: 2 or more epidemiologically linked cases, with at least one case laboratory confirmed.

BURDEN OF DISEASE

Acute hepatitis A	1997	1998	1999	2000	2001
Hospitalised cases/100000 inhabitants ⁵	NA	NA	NA	1.62	1.95
Hospitalisation days ⁵	NA	NA	NA	8.8	8.8
Deaths ⁵	NA	9	13	11	17
Mortality (total number of deaths per 100000) ⁵	NA	0.01	0.02	0.01	0.02
Total number of liver transplants, not hep A specific	762	722	757	780	757
Proportion of liver transplants due to hepatitis A	NA	NA	NA	NA	NA

NA = not available

Outbreak related cases of HAV infection, 2001-2003⁶

- 2001: 96 outbreaks involving 229 cases
- 2002: 93 outbreaks involving 272 cases
- 2003: 92 outbreaks involving 288 cases

COMMENTS

- Surveillance in Germany is passive.
- Missing information is actively retrieved by the local health department.
- Since 1/01/2001, surveillance is regulated by the new Protection against Infection Act ('Infektionsschutzgesetz'). The responsibility for centralisation, interpretation and publication of the data lies within the Robert Koch Institut. Case definitions for reportable diseases are applied since then.
- Germany is considered of low endemicity for hepatitis A: local transmission of hepatitis A does occur in Germany.
- There is no mandatory vaccination in Germany.
- Official recommendations are issued by the standing vaccination commission at the RKI (STIKO) with yearly updates.

PREVENTION by active immunisation

Risk group programmes	Available since
injecting drug users	no
men who have sex with men	1993
international travellers to endemic areas	1993
chronic liver disease patients	1997
clotting factors disorder patients	1997
medical and paramedical personnel in hospitals including kitchen staff and cleaners	1993
people residing in areas of extended community outbreaks	no
pre-school children attending day care centres	no
day care centre personnel	1993
residents and staff of closed communities (Psychiatric Institutions and Institutions for mentally disabled)	1993
refugees residing in temporary camps	no
food-service establishment workers/food handlers	no
household contacts of infected persons	1995
children of migrants visiting an endemic country of origin	no
other risk groups ⁷	1993

FOOTNOTES

- Country characteristics: www.who.int/country/en/ Figures are for 2002 unless indicated. Source: the World health report 2003 (derived April 2004).
- Sources (epidemiological data): 1990-2000: Statistisches Bundesamt. (1990: Sum of notifications former east and west Germany). 2001: Robert Koch Institut, reference date 4/03/2003. The data from 2001 onwards include symptomatic cases according to the reference definition. In addition, laboratory confirmed cases without (information on) clinical signs are reported but not published regularly.
- Results are published on the internet (www.rki.de/SurvStat/), in the weekly 'Epidemiologisches Bulletin', and in the yearly 'Infektionsepidemiologisches Jahrbuch meldepflichtiger Krankheiten'.
- Bundesgesundheitsblatt-Gesundheitsforschung- Gesundheitsschutz 2004: 47: 165-206.
- Source: National Bureau of Statistics RKI, reference date 1/03/2004
- RKI, reference date 1/03/2004
- Other risk groups: workers at sewage water system and sewage water treatment plant who have contact with waste water; laboratory personnel.