



Executive Science Update **no 6**

JANUARY-MARCH 2009

Hepatitis A in the EU: a re-emerging threat?

Hepatitis A infection is usually transmitted by the faecal-oral route, including person-to-person spread, via contaminated water or food products. It has also been associated with injecting drug use and outbreaks among men who have sex with men.

Three outbreaks in the EU in 2008

In 2008 three independent outbreaks of hepatitis A in the Czech Republic, Latvia and Slovakia brought attention again to this vaccine-preventable disease. A major contributing factor to these outbreaks is decreased population immunity after a reduction in circulation of hepatitis A over the last 10 years (see graph). This decreasing trend all over EU has been attributed to continued improved sanitary and living conditions, with reduced exposure to infection, especially in early childhood. In fact, in the Czech Republic and Latvia a significant proportion of cases were young adults, posing a challenge to the health authorities in the area of safety of blood and tissue donation.

A re-emerging threat?

Hepatitis A outbreaks can be self-limiting. Nonetheless, there may be a significant spread of the disease when occurring in at-risk settings or communities. This is what appears to have happened in the Czech Republic and Latvia, where outbreaks occurred among injecting drug users, and in Slovakia, where the outbreak was among Roma populations. Control measures implemented include health education, isolation of cases, vaccination of contacts, and targeted preventative vaccination to at-risk populations.

ECDC supporting control efforts

In November 2008 ECDC, in collaboration with the Latvian Public Health Agency, organised a technical meeting to review the epidemiological pattern of hepatitis A outbreaks, as well as the role of vaccination in controlling them. The meeting also discussed the role played by unvaccinated European travellers, who become infected with hepatitis A outside the EU

Key facts:

- Hepatitis A is a viral infection that can cause acute illness and liver damage. Around 20,000 cases are reported each year in the EU.
- The number of cases reported in the EU fell significantly between 1996 and 2006.
- However, outbreaks of hepatitis A in several EU countries in 2008 highlight that the threat posed by this disease is changing. Since the disease is getting rarer, the natural immunity in the population has declined in the last two decades. This means that sporadic outbreaks and even larger community outbreaks are possible.
- ECDC is examining whether there is scope to produce technical guidance on Hepatitis A control in outbreak situations.

and on return from travel may introduce infection to non-immune persons. Additionally, in January 2009, ECDC conducted a risk assessment for the potential impact of population wide outbreaks of hepatitis A on the blood safety.

Points for action

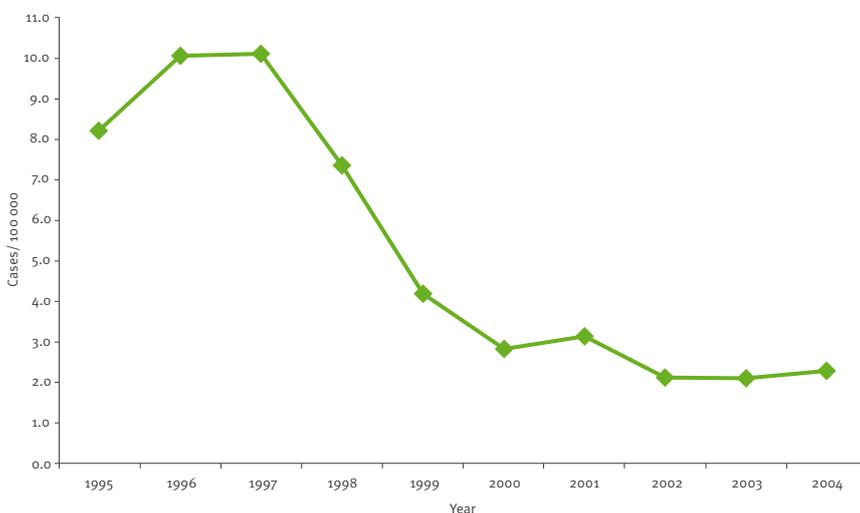
Though the total number of hepatitis A cases has decreased since the 1990s, these recent outbreaks indicate that the disease could be re-emerging to some extent. They highlight the need for increased awareness of both the risk of infection to the individual and the possibility of community outbreaks. They also highlight the need to promote vaccination of all travellers to countries where hepatitis A is endemic (for example, certain countries in Africa and Asia) to prevent return introduction. The impact of large-scale outbreaks of hepatitis A on potentially contaminating blood products was not negligible and merits further assessment.

ECDC is considering whether there may also be value in developing evidence-based guidance for hepatitis A outbreak control strategies.

For more information, please see:

Eurosurveillance article 'Hepatitis A in the European Union: responding to challenges related to new epidemiological patterns', available at www.eurosurveillance.org

Figure 1: Number of cases of hepatitis A reported in EU and EEA/EFTA countries, 1995-2004



Source: Eurostat. Data missing from Liechtenstein.

Tackling healthcare-associated infections

Healthcare-associated infections are annually responsible for approximately 37,000 deaths and are estimated to contribute to a further 110,000 deaths in the EU. The burden of these infections on healthcare systems is huge including approximately 16 million extra days of hospital stay per year, at a considerable cost and burden for Member States. Assuming an average hospital cost of EUR 334 per day, the total annual healthcare cost for the EU 27 can be estimated at EUR 5.5 billion per year, not considering indirect costs linked to loss of income, nor the intangible costs associated with the physical and emotional pain and suffering.

Healthcare-associated infections are not limited to hospitals

Healthcare-associated infections are not limited to hospitals and can affect patients in nursing homes and other care facilities. The ageing society, rising public expectations and advances in medical treatment all contribute to make these infections an important issue

for the EU. Additionally, increasing mobility of populations and the freedom to seek medical treatment outside the country of residence mean that these infections are no longer constrained by national borders.

Better hygiene and infection control procedures

It is estimated that 20–30% of healthcare-associated infections could be prevented by better hygiene and infection control procedures. Chapter 2 of ECDC's Annual Epidemiological Report provides the evidence of the scale of the problem and proposes some measures to both improve the monitoring of these infections and successfully reduce them.

Possible ways of improvements

Areas for management, control and prevention of healthcare-associated infections include improvement of structures and processes in healthcare settings that contribute to a better

Key facts:

- Annually, approximately four million people in the EU acquire a healthcare-associated infection, from which approximately 37 000 die.
- Many of these infections are caused by bacteria resistant to commonly used antibiotics, such as MRSA.
- The death toll from healthcare-associated infections is comparable to the number of people who die each year in road traffic accidents.

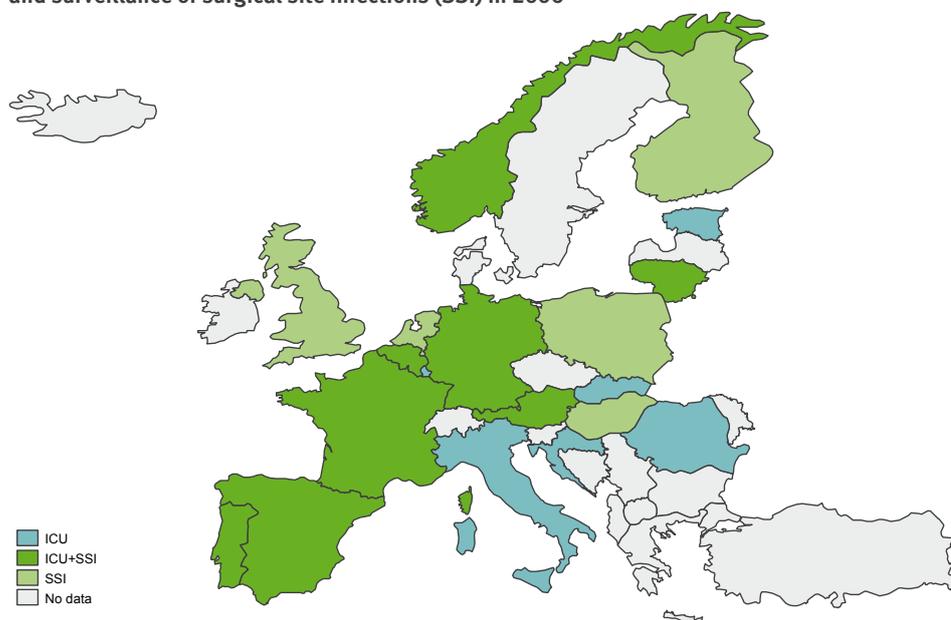
control of cross-transmission of bacteria (infection control) as well as prudent use of antibiotics. Hand hygiene has been recognised as the most important standard measure to prevent cross transmission of bacteria, including multi-resistant bacteria.

Commission's proposal for a Council recommendation on patient safety

The publication by the Commission, on 15 December 2008, of a Proposal for a Council Recommendation on patient safety, including the prevention and control of healthcare-associated infections, recognises these infections as a severe public health problem and calls on the EU Member States to take action. ECDC will work closely with the Commission and the Member States to support implementation of the Recommendation, subject to its adoption by the Council, including developing indicators for its implementation, support for infection control training and surveillance of healthcare-associated infections. ECDC will also continue to promote the European Antibiotic Awareness Day initiative, an annually recurring event to raise public awareness about prudent use of antibiotics.

For more information please see chapter 2 of ECDC's Annual Epidemiological Report at http://ecdc.europa.eu/en/Publications/AER_report.aspx

Figure 1: Countries performing surveillance of nosocomial infections in intensive care units (ICU) and surveillance of surgical site infections (SSI) in 2006



Source: *Improving Patient Safety in Europe, Technical Implementation Report, 2005-2008, November, 2008, Volume I*

ECDC Executive Science Update is a newsletter published by the European Centre for Disease Prevention and Control (ECDC), Stockholm. Any Item may be reproduced for personal use or non-commercial purposes provided the source is acknowledged.

ECDC publishes this bulletin to enhance public access to information about its scientific and technical work. Our goal is to publish accurate information. If errors are brought to our attention, we will try to correct them. However, the ECDC accepts no responsibility or liability whatsoever with regard to the information published in this bulletin.

For free subscriptions, please specify your requirements via e-mail: publications@ecdc.europa.eu

Official publisher : ECDC • Director: Z. Jakab • Editor: Prof. J. Giesecke • Printed in Belgium • ISSN: 1830-7965 • Printed on chlorine-free paper • © European Centre for Disease Prevention and Control

European Centre for Disease Prevention and Control (ECDC)

Postal address: ECDC, 171 83 Stockholm, Sweden
 Visiting address: Tomtebodavägen 11A, Solna, Sweden
 Phone +46 (0)8 58 60 1000
 Fax +46 (0)8 58 60 1001
www.ecdc.europa.eu
 An agency of the European Union
www.europa.eu