

# Inoculum

## Inoculum: advocating vaccination for all

Welcome to the 14th edition of *Inoculum*, the official newsletter of the Central European Vaccination Awareness Group (CEVAG). A collaboration between medical colleagues throughout Central Europe, this newsletter highlights the latest developments in infectious disease prevention strategies, focusing on vaccination. This issue describes topics discussed at the 17th CEVAG meeting held in Istanbul, Turkey, on 2–3 November 2012.

### Contributing CEVAG members

Prof. Roman Prymula (Chairman; Czech Republic), Dr Francis André (Belgium), Dr Atanas Mangarov (Bulgaria), Dr Darko Richter (Croatia), Prof. Roman Chlibek (Czech Republic), Dr Eda Tamm (Estonia), Prof. Zsófia Mészner (Hungary), Dr Dace Zavadzka (Latvia), Prof. Vytautas Usonis (Lithuania), Prof. Jacek Wysocki (Poland), Prof. Ioana Anca (Romania), Dr Ingrid Urbančíková (Slovakia), Dr Pavol Šimurka (Slovakia), Prof. Milan Čížman (Slovenia), Dr Marko Pokorn (Slovenia), Prof. Mustafa Bakir (Turkey), Prof. Nuran Salman (Turkey).



### The evolving epidemiology of meningococcal disease

*Neisseria meningitidis* is recognised as a leading cause of bacterial meningitis and sepsis, and is a significant public health problem in most countries. The incidence of meningococcal disease differs in various parts of the world, ranging from 0.5 to 1,000 cases per 100,000 individuals each year. In the developed world, cases of meningococcal disease are low compared to other diseases, however, this disease receives a great deal of public attention due to the very high case fatality rate.

Meningococcal disease is more common in children <5 years old, adolescents and young adults aged 15–24 years. Outbreaks can appear in groups exposed in close environments, e.g. colleges or military units.

Diagnosis of meningococcal disease can be challenging because early symptoms are non-specific. Early recognition and prompt treatment are necessary to prevent serious complications or death from invasive meningococcal disease (IMD). Most untreated cases of meningococcal meningitis and/or septicaemia are fatal.

At least 13 different serogroups of *N. meningitidis* have been identified, however, 6 serogroups (Men A, B, C, X, Y, W-135) cause the majority of IMD. Global serogroup distribution varies with geography and over time. In Europe, Men B and Men C together contribute to around 85% of cases with Men B the most prevalent.

Meningococcal disease epidemiology is also influenced by immunisation programmes. Meningococcal vaccines have been available for over 30 years, starting with polysaccharide vaccines, followed by conjugate vaccines against group C and against groups A, C, Y and W-135. Following the introduction of the Men C conjugate vaccine, the incidence of Men C infections declined. Ten years after immunisation introduction, Men B is the most prevalent serogroup. More recently, vaccines are being developed against Men B.

In CEVAG countries, there are common patterns of disease with relatively similar epidemiology; however there are clear gaps in some countries regarding delayed antimicrobial treatment and admission to intensive care. A future CEVAG manuscript will be prepared focusing on the burden of meningococcal disease in each country.

### Emerging and re-emerging viral diseases: old and new enemies

Viral diseases, previously considered tropical are now appearing in Central Europe due to the spread of infected mosquitoes, ticks and rodents. These include chikungunya, a non-fatal debilitating fever; West Nile disease, which results in severe fever, meningitis, encephalitis and death; and dengue fever, all of which are spread by infected mosquitoes. Also on the increase in Europe are hantavirus, carried in rodent faeces, and Crimean Congo haemorrhagic fever transmitted by bites from infected ticks. The Central European region could soon become an endemic region for these haemorrhagic fever syndromes if climate changes continue. Monitoring of emerging and re-emerging diseases and their vectors is essential. Control measures include encouraging people to avoid mosquito/tick bites and limit opportunities for mice to colonise around the house.

### Talks from sponsors

CEVAG sponsor presentations focused on vaccinating against pneumococcal and meningococcal disease. Updated surveillance data were presented showing efficacy and effectiveness data on invasive pneumococcal disease from various countries for the 10-valent and 13-valent PCV. GSK also presented data on the new licensed meningococcal group A, C, W-135, Y conjugate vaccine, which is already available in some CEVAG countries. Pfizer presented clinical data on the Men B vaccine and their novel approach to vaccine development.

### Vaccine news

In November 2012, the WHO published an updated position paper on influenza vaccination. This article, which replaces the corresponding 2005 document, covers vaccines and vaccination against seasonal influenza. It includes a brief mention of pandemic influenza as evidence to support seasonal influenza vaccination of specific populations at risk of severe infection.

### CEVAG in press

The CEVAG 'Recommendations for tick-borne encephalitis vaccination' paper was accepted on 3 November 2012 to be published in volume 9 issue 2 of *Human Vaccines & Immunotherapeutics*.

## Adult Vaccination Group attendees

Prof. Roman Chlibek (Chairman, Czech Republic), Dr Lyubomir Kirov (Bulgaria), Prof. Endre Ludwig (Hungary), Assoc. Prof. Ligita Jančorienė (Lithuania), Prof. Amanda Radulescu (Romania), Dr Iveta Vaverková (Slovakia), Prof. Serhat Ünal (Turkey).



## The first Adult Vaccination Group meeting

New vaccines are being registered in Europe for adults and the elderly e.g. pneumococcal, herpes zoster, and general practitioners are increasingly calling for advice, recommendations or more detailed information on adult vaccination. To address this need, a group of experts specialising in adult vaccination was established.

### The main aims for the Adult Vaccination Group are to:

1. promote adult vaccination in the 12 CEVAG member countries. This includes the elderly as this population is increasing in number
2. share information and epidemiological data between CEVAG countries in order to optimise adult vaccination programmes in member countries

The 17th CEVAG meeting saw the first official session of the Adult Vaccination Group. This group of experts will focus on adult vaccination activities in CEVAG countries. The first meeting discussed specific existing vaccine recommendations in each country and country-specific issues in adult vaccination, explored strategies, programmes and campaigns to reach those needed vaccination, and identified key needs and priorities.

Moving forward, the group agreed that it would be beneficial to establish a single CEVAG platform to include both paediatrician and adult experts

## CEVAG website

The CEVAG website (<http://www.cevag.org>) is a resource for healthcare professionals and key decision makers. The site includes informative and up-to-

date vaccine information for the Central European region and contains links to disease resources, statistics and advocacy documents; a journal club for discussion of recently published materials; and recent vaccine and disease outbreak news. The website also has a section oriented towards the public, which includes information on vaccine-preventable diseases, more detailed information, disease advocacy documents and frequently asked questions.

Past *Inoculum* newsletters can be downloaded as PDFs from the website. Past meeting reports and PowerPoint presentations are also available to all CEVAG members.

## Next CEVAG meeting

The 18th CEVAG meeting will be held on 24–25 March 2013 in Prague, Czech Republic

## The CEVAG association

CEVAG is an established voluntary association of national representatives and legal entities, which share an interest in promoting immunisation in Central Europe. CEVAG is organisationally independent of state administration and self-administration bodies, political parties and other civic associations and initiatives. The association does, however, cooperate with these groups to realize and promote common plans and interests. Currently, 12 countries are represented (Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia and Turkey). The CEVAG association was supported by an unrestricted grant from GlaxoSmithKline, Novartis and Pfizer in 2012.