V&I News

Bi-weekly Newsletter on Vaccines and Immunization

number 1 – 28th June 2006

Editor's Note

Dear readers, the Unit of Scientific Advice at the ECDC is pleased to introduce to you the first publication of the bi-weekly newsletter on Vaccines and Immunization (V&I News). The aim of this publication is to provide regular news and brief highlights of activities and programs in the area of vaccine preventable diseases in Europe. It will be available only in electronic format on the ECDC web site. We thank all of our contributors and look forward to hear of the latest developments, news, comments, and best practices in your countries.

News from European Networks

VENICE.net

The VENICE (Vaccine European New Integrated Collaboration Effort) is a DG Sanco funded project whose aim is to encourage collection and dissemination of knowledge and best practice relating to vaccination and to further develop collaboration and partnership between member states (MS).
Specific objectives of the project are:

1. To create an EU vaccination network able to collect and collate information on vaccination programs in each MS.
2. To create a resource able to provide advice and support to single member states by integrating available tools and knowledge on various vaccine-related issues
3. To create a network able to provide support in the development of preparedness strategies (including immunization programs)
4. To define common indicators for monitoring, in a comparable way, the immunization programs across MSs and their constituent regions.
5. To encourage a rational approach to vaccination policy decision-making processes by providing standardized tools.
6. To provide MSs with the necessary information regarding safe vaccination and support capacity building in areas dealing with contraindication and the management of Adverse Events following vaccination.

VENICE is operational since January 2006 and major news on VENICE deliverables will be highlighted in the V&I News bulletin via http://www.ecdc.eu.int/. A VENICE web site is currently accessible by designated national gatekeepers; however, it will soon be made available for use by the general public.

EUVAC.net

The complete report from the 4th Annual Meeting (Malta, 7-8 April 2006) is available on the EUVAC web site. The meeting addressed mostly issues relating to measles and rubella as these diseases are targeted for elimination from Europe. EUVAC.NET has been directly involved in the discussions on vaccine-preventable diseases (VPD) with the ECDC's revision of the European Union (EU) case definitions, case classification, and data variables for reporting. Outbreak presentations from six countries are also available in the report.
NB: EUVAC.net regularly updates information on national schedule of the 29 members of the network, easily available on its website.

News from Eurosurveillance

Mumps outbreak affecting adolescents and young adults in Austria, 2006 - *D Schmid et al.*

Measles vaccination advised before travel to World Cup in Germany, but risk of measles infection low - *G Krause et al.*

QFLU: new influenza monitoring in UK primary care to support pandemic influenza planning - *J Hippisley-Cox et al.*

News from EU Countries – Lithuania
Parents' View on Rotavirus Gastroenteritis

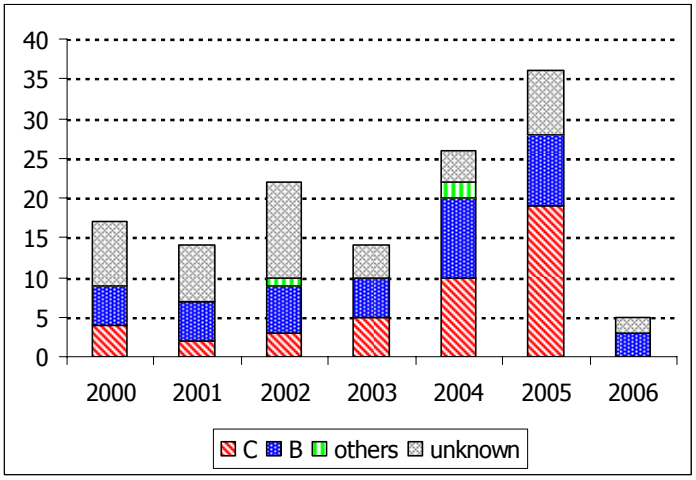
During March and April of 2006, a survey was conducted, at the Centre of Paediatric, Vilnius University Children's Hospital, among parents whose children were suffering from acute gastroenteritis. The purpose of the survey was to find out if parents understand the health hazard caused to their children by RG. Seventy participants were randomly selected to answer a standardized questionnaire about RG.
Results obtained by questioning relatives of hospitalized children cannot represent all problems faced by families with children suffering from RG, but even such a small-scale survey can reveal some tendencies. Results have revealed that 78.6% of parents had heard about RG before their children got sick. The vast majority of surveyed parents got information from mass media, friends and acquaintances whose children had had RG. Only 8.8% learnt about the infection from their family doctors or paediatricians. All the respondents had insufficient or incorrect understanding about transmission of rotavirus, the possibility to be repeatedly infected with this virus and principles for the treatment of the infection. Prior to hospitalization, many parents did not realise that rotavirus could cause serious health disorders to their child and harm the quality of their family life.
After their children were treated in hospital, 87.1% of the surveyed parents thought of RG as a serious illness and 65.7% of the respondents thought that it had harmed the quality of their normal family life. After they had got information about RG and the possibility to prevent it, 91.4% of surveyed parents stated that they would vaccinate their children and 68.8% would choose vaccination even if they needed to pay for the vaccine.
Rotavirus gastroenteritis (RG) is a major personal and public health issue. Health care providers (family doctors, paediatricians, infectious disease specialists etc.) understand this problem perfectly well; however, many families with small children aren't aware of this infection.

Reported by: V. Usonis, I. Ališauskienė, B. Stankūnienė, I. Sidaravičiūtė, I. Audickaitė
Centre of Paediatric, Vilnius University Children's Hospital, Lithuania

News from EU Countries - Italy

Meningococcal C vaccination campaign following an increasing number of reported meningitis cases in Tuscany

Figure 1. Reported meningococcal meningitis cases in Tuscany- from 2000 to first trimester 2006- by serotype.



In Tuscany, a region of Central Italy with 3.5 million inhabitants (new births ca. 30,000/year), notified meningococcal meningitis cases during the first trimesters of the following years were: 1 case in 2003, 11 cases in 2004 and 22 cases in 2005. In 2004, the age group 1-4 years was that with the highest incidence (8.7/100,000) with a peak of 14 cases/100,000 in the 2nd year of life. Out of the 6 cases occurring in subjects aged ≤4 years, 5 of which were positively identified as group C meningococci and caused 2 of the 3 fatalities and the remaining case, also fatal, was not determined. In 2005, 9 cases of invasive meningococcal disease also involved individuals ≥65 years, 4 of which were due to group C meningococci. In March 2005, Regional Health Authorities approved a policy of active offer of meningococcal C conjugate vaccine to all newborns at 3, 5 and 13 months of age, to be administered concomitantly or separately from the standard hexavalent vaccine, and a catch-up until age 6 with a single dose.

Preliminary data collected in April 2006 show that about 80.000 doses of meningococcal C conjugate vaccine were used in 2005 (program implemented since late March). Incidence of invasive meningococcal disease dropped to 5 cases in the first trimester of 2006, with no case due to *N. meningitidis* group C detected to date (3 cases due to group B meningoccci and 2 not determined). Although a cyclic reduction of invasive meningococcal disease has certainly contributed to this result (overall cases of meningococcal disease have decreased this winter in Italy, possibly also due to the very mild influenza season), the lack of isolation of any group C meningococci is suggestive of the impact of this vaccination policy on the disease in all age groups.

Reported by: P. Bonanni, A. Bechini, S. Boccalini (Dept. of Public Health, University of Florence), L. Pecori, G. Graziani, E. Balocchini (Regional Health Authority, Tuscany Region, Italy)

News from Scientific Literature

Assessment of nine candidate DTP-vaccines with reduced amount of antigen and/or without adjuvant as a fourth (booster-) dose in the second year of life.

Knuf M et al. Vaccine. 2006 Jul 7; 24: 5627-36. Read the abstract here.

Authors present the results from a double-blinded clinical trial including 1,820 (phase I: safety and immunogenicity) plus 4,869 (phase II: safety) healthy children aged 15-27 months at the time of the booster vaccination. Study participants received one of nine different candidate DTaP vaccines containing reduced amount of antigen and/or adjuvant in the first phase study. Three out of nine candidate vaccines (one with a reduced amount of diphtheria antigen; one with reduced amounts of all antigens; and one with a fifth dose of the reference vaccine) were then selected to be administered in the phase II study.

Phase I results: As a general rule, vaccines with less antigen induced fewer reactions, although there was no strict dose-response effect and the difference, e.g. between a one-tenth and a one-fifth DTaP

dose (DTaP 1/5; DTaP 1/10) was not clinically relevant. Separate injections of Td and aP caused fewer general reactions than the respective TdaP combination and local reactions were higher at the aP than at the Td injection site. Again, as a general rule, reduced amounts of antigen induced lower antibody concentrations, although all vaccines induced "protective" anti-tetanus and anti-diphtheria antibody responses. A total of 92-100% of children showed seroresponses to pertussis antigens even when vaccinated with reduced amounts of the respective pertussis antigen.
Phase II results: all three vaccines evaluated were safe and had an acceptable reactogenicity profile.
Conclusions: Local reactions due to DTaP booster doses in the second year of life can be reduced by reducing the amount of antigen in the respective vaccine while an adequate immunogenicity is maintained. Aluminum-free vaccines induced local reactions and fever most commonly.

Factors that are associated with parental acceptance of human papillomavirus vaccines: a randomized intervention study of written information about HPV.
Dempsey AF et al. Pediatrics. 2006 May; 117(5): 1486-93. Read the abstract here.
A randomized intervention study within a cross-sectional survey was conducted in order to: (1) determine the overall acceptance of HPV vaccines for preadolescent children by parents, (2) evaluate the influence of written educational information about HPV on parental acceptability of HPV vaccines, and (3) identify independent predictors associated with HPV vaccine acceptability by parents.
Parents who received the HPV information sheet had higher mean scores on the HPV knowledge assessment tool than the control group. However, despite this apparent improvement in knowledge, there was not a statistically significant difference in HPV vaccine acceptability between the 2 groups.

Events

3rd CEE Expert Meeting – 22/23 June 2006, Wien

The third Central-Eastern Europe Expert Meeting has been held in Wien last week. Eleven countries were represented in the meeting, chaired by Prof. M. Kunze, from the Institute of Social Medicine of University of Vienna. Central point in the debate was the need for a common vaccination schedule in the CEE countries. At this purpose, an interesting exercise has been performed during the two days meeting: in spite of heated discussion and initially different opinions, an "ideal" common immunization schedule has been designed by the attending experts. This could represent a first attempt to agree on best evidence about vaccination schedules in EU.

News from European Vaccine Manufacturers – EVM
Influenza Vaccines supply for 2006/7: possible delivery delays

The European Vaccine Manufacturers are encountering delays in their production of influenza vaccines for the coming season due to the low manufacturing yield of one of the recommended strains (H3N2) for inclusion in the 2006/7 flu vaccine. In collaboration with European and national regulatory authorities, solutions are put in place to improve the situation. Furthermore, vaccine manufacturers are also extending the production campaign in order to supply the requested quantities. As a result of this issue, the supply of flu vaccines in the European market should start at approximately the same time as originally planned, but it is likely that fewer doses will be initially available and that supply will be spread over a longer period of time.
The EVM members suggest that public health authorities consider a flexible start to their 2006/7 influenza vaccination campaigns, in close collaboration with their suppliers, and extend their vaccination programs through to the end of the year to cover the recommended population in each EU country.

Read the full statement here.

News from WHO

Global Immunization News (GIN) June issue is available on WHO web site. Among all, a brief report from "***Polio Strategic Vision Meeting***" held from 1-2 June 2006 at ECDC – Stockholm.
The 27 participants were experts from Universities and laboratories: ECDC, US CDC, USAID, UNICEF and WHO.
Key recommendations were issued to the European Polio Eradication Program, including:

- Develop a new, comprehensive regional strategy to sustain Europe's polio-free status, assisting member states to strengthen acute flaccid paralysis surveillance, focusing on identifying high risk sub-populations and ensuring high quality immunization and surveillance of these populations.
- Strengthen advocacy and partnerships and consider using European Immunization Week as an opportunity for political advocacy as well as public education and motivation.

A letter from UNICEF

UNICEF/CEE/CIS/ 2004/00100/Pirozzi©

We are glad to publish this letter received from UNICEF:
"UNICEF is a global leader in vaccine supply, reaching 40 percent of the world's children. Immunization is a central part of our commitment to protecting the world's most vulnerable children. Through its country offices, UNICEF provides support to Immunization and Child Survival programs in 22 countries of Central and Eastern Europe and the Commonwealth of Independent States. UNICEF works in close collaboration with WHO EURO and the Global Alliance for Vaccine and Immunization (GAVI).

And we look forward to partnering with other organizations active in the same geographic area.
UNICEF […] will provide inputs from the field for forthcoming issues of the *V&I News*."

More on UNICEF immunization activities in the region can be read here.

ECDC Editorial Team:
- Johan Giesecke (Chief Scientist ECDC) - Responsible editor
- Pierluigi Lopalco (Unit for Scientific Advice) – Project leader
- Amada Ozin (Unit for Scientific Advice) – Editorial advisor
- Bernadette Gergonne (Unit for Surveillance and Communication) – Editorial advisor
- Paula Vasconcelos (Unit for Preparedness and Response) – Editorial advisor

Acknowledgements:
Many thanks to the country contact points that have to date supported the initiation of this newsletter and for the commitment to provide relevant information for the users.
We hope the following list will grow more and more:
Lucia Pastore Celentano (Venice.net), Mark Muscat (Euvac.net), Alexandra Eriksson (UNICEF), Borislav Aleraj (Croatia), Berit Feiring (Norway), Rose-Marie Carlsson (Sweden), Gratiana Chicin (Romania), Suzanne Cotter (Ireland), Ira Gjenero-Margan (Croatia), Chrystalla Hadjianastassiou (Cyprus), Bernard Kaic (Croatia), Alenka Kraigher (Slovenia), Bohumir Kriz (Czech Republic), Nerija Kupreviciene (Lithuania), Kuulo Kutsar (Estonia), Daniel Lévy-Bruhl (France), Eva Maderova (Slovak Republic), Márta Melles (Hungary), Zsuzsanna Molnár (Hungary), Hanne Nøkleby (Norway), Richard Pebody (UK), Anette Siedler (Germany), Pawel Stefanoff (Poland), Pierre Van Damme (Belgium)

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