



## International Scientific Working group on Tick-Borne Encephalitis (ISW-TBE)



We are very proud to present to you the fourth edition of our international TBE newsletter which you will hopefully enjoy while reading. The newsletter will cover an update on the latest activities of the International Scientific Working Group on TBE (ISW-TBE). In this edition you will find a summary on:

- **Follow-up Materials from the 9<sup>th</sup> ISW-TBE conference 2007**
- **International Congresses - TBE Highlights**
- **Travelers TBE-News Website**
- **Latest TBE Information Material for 2007**

Please feel free and come back to us in case of comments, further suggestions and ideas for this newsletter that we will certainly try to incorporate in one of our next editions.

Best regards,

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### **9<sup>th</sup> Annual Meeting of the International Scientific Working Group on Tick-Borne Encephalitis (ISW-TBE) January 25-26, 2007**

**The 9<sup>th</sup> Meeting of the ISW-TBE was taking place in Vienna, Hotel Bristol and was dealing with the topic: From Epidemiology to Vaccination Recommendations in 2007: New Issues – Best Practices**

The **following issues** were addressed:

- latest developments on TBE cases & vaccination status in 2006
- new TBE projects & studies
- new publications & recommendations
- TBE travel initiatives
- clinical issues & challenges

The **following materials** cover the content mentioned in different ways:

- abstract booklet from presentations
- CD-Rom with all presentations (slide format) and impressions on the 9th ISWTBE meeting
- ISW-TBE publication in WMW (Wiener Medizinische Wochenschrift), June 2006

If you are interested in these materials, please come back to us.

E-mail: [info@publichealth.at](mailto:info@publichealth.at)

## European Society of Pediatric Infectious Diseases, ESPID 2007, Porto

With a total number of 2172 attendees, this year's ESPID in Porto experienced the highest participation ever.

Focusing on new aspects on tick-borne encephalitis, the satellite symposium chaired by Prof. U. Heininger and titled 'Recent Developments in Vaccination against Meningitis and Encephalitis' was held during the 25th Annual Meeting of the European Society for Paediatric Infectious Diseases (ESPID), which took place in Porto, Portugal, from 2–4 May 2007.

The first part of the symposium was dedicated to the combat of tick-borne encephalitis in children, with special emphasis on the benefits related to TBE vaccination. **F.X. Heinz** presented his new, unpublished data on the field effectiveness of FSME-IMMUN in Austria and **Werner Zenz** focused on the clinical symptoms of TBE and the Austrian success story in the fight against TBE.



Prof. U. Heininger



from left to right: Prof. F.X. Heinz, Prof. W. Zenz, Dr. S. de Greeff, Prof. J. Southern

Prof. Zenz opened the symposium with a presentation on the successful Austrian campaign in the prevention of tick-borne encephalitis in children.

- In children, the disease generally takes a milder course than in adults. However, even in young patients, the illness can be severe. Between 10–60% of children with TBE will develop encephalitis, and up to 3% will suffer longterm neurologic sequelae.
- Professor Zenz went on to present a review of TBE cases in Austrian, German, and Slovenian children reported in the scientific literature between 1959 and 2000. Of the 774 patients for whom follow-up was reported, 2.2% suffered neurologic sequelae, 0.9% of which severe.
- As next point, Professor Zenz showed follow-up results of a population-based cohort study he and his colleagues from the Medical University of Graz, Styria, had undertaken among children in Styria, which has traditionally been a TBE hotspot (>>>ESPID poster, 2007). In view of the potentially serious consequences of TBE, **every case prevented is a medical success**.
- Professor Zenz closed on an encouraging note, giving an estimate of how many cases of TBE in Styria were prevented by vaccination **between 1990 and 2006**. Looking at both adults and children, **more than 5100 cases of TBE and more than 510 cases suffering long-term sequelae – were prevented**.

At the end of his presentation Professor Zenz invited all participants to the ESPID 2008 in Graz.

**Prof. Heinz** presented his new, unpublished data on the field effectiveness of FSMEIMMUN.

In Austria, representative surveys are carried out annually to determine the number of persons who

- were not vaccinated

- were vaccinated within the regular vaccination schedule
- were outside the regular schedule
- had received the first 2 of a series of 3 shots that are part of the primary vaccination schedule.

Assessments of the field effectiveness of vaccines are generally based on the proportion of breakthroughs, or vaccination failures, in those vaccinated.

Professor Heinz now presented a recent follow-up analysis he and his team had performed for the years 2000–2006 (submitted to *Vaccine*, May 2007). Data on the vaccination status were related to the documented numbers of hospitalized cases of TBE. All TBE cases registered in the Austrian surveillance system, which is based on mandatory case notification, were divided into those who

- had not been vaccinated against TBE
- had adhered to the regular vaccination schedule
- had a history of vaccination but were outside the regular schedule.

Between 2000 and 2006, the field effectiveness of TBE vaccination for all age groups within the regular vaccination schedule was 99.3% in a best case scenario and 98.7% in a worst case scenario.

Reassuringly, the investigators also found that the field effectiveness of TBE vaccination within one year after the first 2 vaccinations, i.e., before the third vaccination, was 100% and 98.7%. “Based on our data,” Professor Heinz said, “an astounding 2,800 Austrian cases of TBE were prevented by vaccination between 2000 and 2006.”

**10<sup>th</sup> Conference of the International Society of Travel Medicine (CISTM),  
Vancouver, Canada,  
May 20 - 24, 2007**



With a total number of more than 2000 participants from all continents the last international travel medicine congress taking place in Vancouver was one of the largest ever.

In an oral presentation Prof. Jochen Süß was talking about ticks and TBE. His presentation was called: “What makes ticks tick?”

Prof. Jochen Süß talked about the spreading of TBE across Europe, the identification of new endemic regions and the most likely consequences like the average temperature increase over the years, the humidity changes as well as the global warming issues.

- Results showed that the average temp. in TBE risk areas in Germany increased by >0.6 to 1.5°C between 1951 and 2000 and that is likely to increase by another >1.2°C between 2001-2055.
- There has been an annual increase of rainfall of 9% (90mm).
- Due to environmental and agricultural changes, the amount of hosts for ticks has increased and it is likely that the number of life cycles of ticks will increase even more within the next few years, affecting a larger part of population.
- The TBE incidence rate of all EU- “TBE-countries” (with the exception of Austria, where the vaccination rate is 90%) has increased by 400% in the period 1974-2002.

- Even more surprising, is that countries like **Czech Rep., Switzerland, Poland and Germany** reported a **further increase in TBE by 137,5% in the period 2002-2006.**
- **In Czech Rep. only, approx. 500 incidences out of more than 1000 reported cases in 2006, have been acquired between Sep.-Dec.**

## TRAVELERS TBE-NEWS WEBSITE

A new Travelers TBE-News website was created especially for travelers visiting endemic regions. The content again is available in 16 different European languages.

Please refer lay public questions to the new website: <http://www.tbe-prevention.info/>

Questions from TBE patients should be referred to <http://www.tick-victim.info/>

## NEW TBE INFORMATION MATERIAL NOW AVAILABLE

It would give us a great pleasure, if you get in touch with us, in case you are interested in the new TBE Information Material for 2007.

- 9th ISW-TBE Meeting, CD-Rom



- Endemic Map (42,1 x 59,4 cm or 100 x 70 cm)



- TBE Info Folder



- TBE Waiting Room Poster (42,1 cm x 59,4 cm)



- Mailing Package - containing:  
ISW Info Folder, TBE Poster, Tick Remover Card

For ordering, please refer to our contact e-mail address: [info@publichealth.at](mailto:info@publichealth.at)

Last but not least, we do invite you to our own website ([www.ISW-TBE.info](http://www.ISW-TBE.info)) and to participate in our new TBE Quiz . You can also find some additional content in the password protected, member log in.

Finally we would like to wish all of you a good and recreational , “tick-free” summer holiday time.

This email is intended merely to highlight issues and not to be comprehensive, nor to provide medical advice. Should you have any questions on issues reported here, please contact Prof. Ursula Kunze ([ursula.kunze@meduniwien.ac.at](mailto:ursula.kunze@meduniwien.ac.at)). We hold your email address, which we use to send you this electronic news update on TBE and on the activities of the ISW-TBE group. We use your details for our own internal purposes only. If any of your details are incorrect or if you no longer wish to receive emails from us, please let us know by emailing us at [ursula.kunze@meduniwien.ac.at](mailto:ursula.kunze@meduniwien.ac.at).