



6th ISW-TBE Newsletter

March 2008

Dear colleague,

we are very proud to present to you the 6th 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:

- 1) **10th ISW-TBE conference 2008 and follow-up materials**
- 2) **ISW-TBE press workshop**
- 3) **New Tools: TBE endemic maps available**
- 4) **New internet appearance**

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,

A handwritten signature in black ink that reads "Dr. Ursula Kunze". The signature is written in a cursive, flowing style.

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1) **10th International Meeting of the ISW-TBE,
Baden, January 31st – February 1st**

“Combating TBE: Vaccination Rates on the Rise”

On the 31st January till the 1st February 2008, the 10th Annual Meeting of the International Scientific Working Group on Tick-Borne Encephalitis (ISW-TBE) was held in the Grand Hotel Sauerhof, Baden, Austria. Basically this has been classified a “historic TBE place” due to the fact that the first tick-borne disease symposium of Prof. Christian Kunz, co-inventor of the vaccine was held there in 1979.

This year’s meeting was entitled “*Combating TBE: Vaccination Rates on the Rise*” and was dedicated to the following topics:

- Endemic situation in 2007
- Latest development on TBE cases and vaccination status in 2007
- Climate change
- New projects and topics
- New clinical trials
- New publications
- TBE & the traveler
- Clinical issues and challenges

80 highly recognized experts from 20 countries attended this conference including for the first time participants from Canada, India, Russia, Kazakhstan, China and Japan.



Fig.1: Group picture ISW-TBE



Some highlights of the conference:

Over the past three decades, TBE has become a growing public health problem in Europe and other parts of the world, with an increasing number of more than 13,000 cases of TBE requiring hospitalization every year. Moreover TBE is endemic in regions of 27 European countries and the risk areas are spreading every year. The geographical focus of the TBE Virus is on central Europe, the Baltic States, and the Russian Federation with a trend towards both an expansion of risk areas and an increase in incidence.

TBE case development in Europe

Number of reported cases of TBE from various European countries and Russia																		
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Austria	89	128	84	102	178	109	128	99	62	41	60	54	60	82	54	100	84	45
Croatia	23	60	27	76	87	59	57	25	24	26	18	27	30	36	38	28	20	12*
Czech Republic	193	356	338	629	613	744	571	415	422	490	719	411	647	606	507	648	1029	542*
Denmark									1	4	3	1	1	4	8	4	0	2*
Estonia	37	68	163	166	177	175	177	404	387	185	272	215	90	237	182	164	171	140*
Finland	9		14	25	16	23	10	19	17	12	41	33	38	16	31	17	18	20*
France	2	1	2	5	4	6	1	1	2	5	0	0	2	6	7	0	6	
Germany		44	142	118	306	226	114	211	148	115	133	253	226	278	274	431	546	236*
Hungary	222	288	206	329	258	234	224	99	84	51	45	76	80	114	78	53	115	170*
Italy			2	2	8	6	8	8	11	5	15	19	6	14	23	22	14	
Latvia	122	227	287	791	1,366	1,341	716	874	1,029	350	544	303	153	365	251	142	171	171*
Lithuania	9	14	17	198	284	426	309	645	548	171	419	298	168	763	425	243	462	234*
Norway									1	1	2	1	2	1	3	0	5	12*
Poland	8	4	8	249	181	267	257	201	209	101	170	205	126	339	262	174	316	233*
Russia	5,486	5,225	6,301	7,893	5,596	5,982	9,548	6,539	6,987	9,955	5,931	6,339	5,150	4,770	4,235	4,551	3,510	3,098
Slovak Republic	14	24	16	51	60	89	101	76	54	57	92	76	62	74	70	50	91	46*
Slovenia	235	245	210	194	762	260	406	274	136	150	190	260	262	275	204	297	445	196*
Sweden	54	75	83	51	116	68	44	76	64	53	133	128	105	105	160	130	163	190*
Switzerland	26	37	66	44	97	60	62	123	68	112	91	107	53	116	132	207	259	113

Table 1: Number of reported cases of TBE from various European countries and Russia

The table lists the number of TBE infections in those European countries, in which the disease poses a major problem to public health and/or such figures have been known for a long time. In many of those countries, morbidity has been continually increasing for years.

Furthermore approximately 60 million times people from EU member states are traveling into TBE endemic countries. Since the latest extension of the EU borders the number of tourists from Western Europe traveling into these countries has substantially risen. Moreover almost half a million travelers are visiting this year's major sport event, the European Soccer Championship – the EURO 2008.



Climate change

Climate change especially in Central Europe means that many areas will have higher average temperatures and more precipitation. Higher precipitation is a favorable factor for vector ticks. As a consequence the risk of getting an infectious tick bite will rise in many areas. Furthermore ticks are moving. Ticks have moved northwards and can be found in mountainous areas 1,000 meters above sea level. This movement is an additional sign for ecological changes in the environment. As a matter of fact ticks need a humidity rate of >85 percent and an air temperature of >7°C. According to prognosis there will be a further increase in temperature by >1.2°C in the period 2001 to 2055. It can be stated that days with the temperature >25°C has increased while numbers of days with the temperature <0°C has increased. Even rainfall is risen annually by 9 percent.

The Austrian success story

An excellent example of the social marketing of a vaccine is the Austrian tick-borne encephalitis (TBE) vaccination campaign. Since 1981, Austria has witnessed the remarkable success story of TBE vaccination: An organized mass vaccination program performed over the past 26 years has made it possible to largely contain this severe disease.

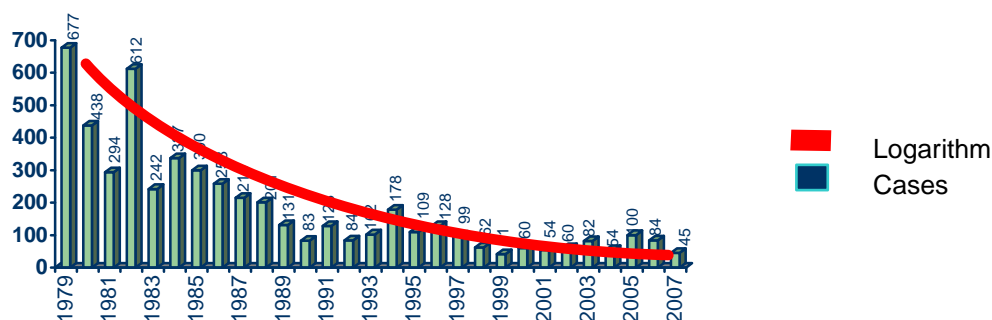


Figure 2: TBE cases in Austria between 1979 – 2007

This success has been the result of two basic elements: a highly effective vaccine with a protection rate of 99% and a long-term continuous social marketing program. The ISW-TBE provides the scientific background to public health recommendations on various topics, such as TBE in children, TBE and the golden agers, or TBE and the travelers. One of the main future challenges will be to change the general perception of TBE vaccination from being a measure for people living in endemic regions to general vaccination of the entire population especially among people traveling from non-endemic countries to endemic areas because there is still a lack of awareness on the disease.



The following ISW-TBE reference materials from the 10th Annual Meeting will be available very soon:

- ISW-TBE report
- CD Rom with all presentations
- Full publication

It would give us a great pleasure, if you get in touch with us, in case you are interested in one of these material.

2) ISW-TBE press workshop

A press workshop prior to this meeting organized by the ISW-TBE stressed the need for raising public awareness on TBE and for informing journalists appropriately about the effectiveness of vaccination against this dangerous disease. Chairman Prof. Michael Kunze – Institute of Social Medicine, University of Vienna/Austria – discussed together with other TBE experts and journalists from various European countries how the ISW-TBE can offer the optimal support to raise TBE awareness amongst the general public.




Prof. Jochen Süß – Friedrich-Loeffler-Institute, National Reference Laboratory for Tick-borne Diseases Jena/Germany – presented “*What makes ticks tick?*”


The necessity of ticks are three basic requirements, humidity rate, air temperature and a large number of blood delivering hosts and for well being, ticks are moving and as a consequence TBE risk areas are changing. The number of TBE cases in all European countries (except Austria with a vaccination rate of 88%) are increasing and most surprisingly TBE increased in Czech Republic, Poland, Switzerland and Germany by 137.5% between 2002 and 2006.



Prof. Michael Kunze – Institute for Social Medicine, Vienna/Austria – presented “*The importance of social marketing campaigns & the Austrian way*”. A mass vaccination program made it possible to largely force back this severe disease. This success is the result of two elements: Firstly a high effective vaccination and secondly a long term continuous social marketing program.



DDr. Martin Haditsch – Institute for Hygiene, Microbiology and Tropical Medicine, Elisabethinen Hospital/Linz and TravelMedCenter Leonding/Austria – presented “*Event tourism & tick-borne encephalitis*”. Many parts of the world and especially Europe were extremely popular for tourists during the last years. Nowadays tourism industry is growing and some European countries are endemic of TBE and unfortunately there is still a big lack of awareness in the public about the potential risk when traveling in endemic areas. Due to this fact official institutions like the International Scientific Working Group on Tick-borne Encephalitis (ISW-TBE), the WHO or the CDC are recommending that everybody – whoever is traveling to endemic areas – undergoes vaccination.



Prof. Franz X. Heinz – Institute for Virology, Medical University of Vienna/Austria – presented “*Fighting TBE - an Austrian Story of Success*”. Austria has the highest vaccination rate in Europe, 88%, whereas only 58% are within the recommended vaccination schedule. As a matter of fact it was shown by a recently published study that TBE vaccination has a very high protective effectiveness of about 99%. Humans are only accidental hosts and the virus doesn't depend on humans for survival.

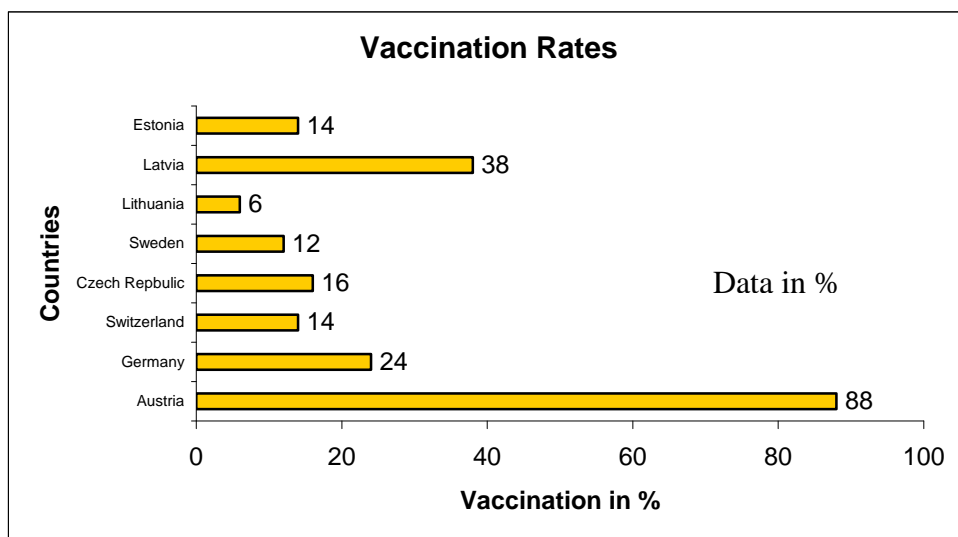


Fig.3: Vaccination Coverage (at least 1 vaccination) TBE vaccination 2007



Prof. Uta Meyding-Lamadé – Head of the Department of Neurology, Frankfurt, Krankenhaus Nordwest, Head of Neuroinfectiology, OMZ, University of Heidelberg/Germany – presented “*Symptoms of the tick-borne encephalitis patient*”. 40 to 60% of the patients recall a tick bite 4 to 28 days prior to evolving symptoms. Those symptoms are characterized by low fever, headache, fatigue and muscle pain preceding onset symptoms with high fever, neck stiffness and disturbances of consciousness. Diagnostics procedures and clinical knowledge are getting more experienced by now – nevertheless there are still missing data with respect to all rare but typical manifestations.



Ms. Christine Freund – TBE Patient Advocacy Group, “Selbsthilfegruppe Zeckenopfer”, Austria – presented the strive of giving direct support to patients and their relatives in times of need. Some family members need 24 hour medical care and attention and it appears nearly impossible to find time to contact authorities or institutions and submit applications. Another focus of this organisation is to inform citizens of effective disease prevention such as presentations, information days and fairs. In countries where the awareness of the risk to get TBE is already high, stories or case reports about patients or well-known testimonials can hit the target. Moreover it is absolutely necessary to report on the threat from ticks every years and thus that endemic areas are shifting, therefore an annual update of endemic maps must be provided.

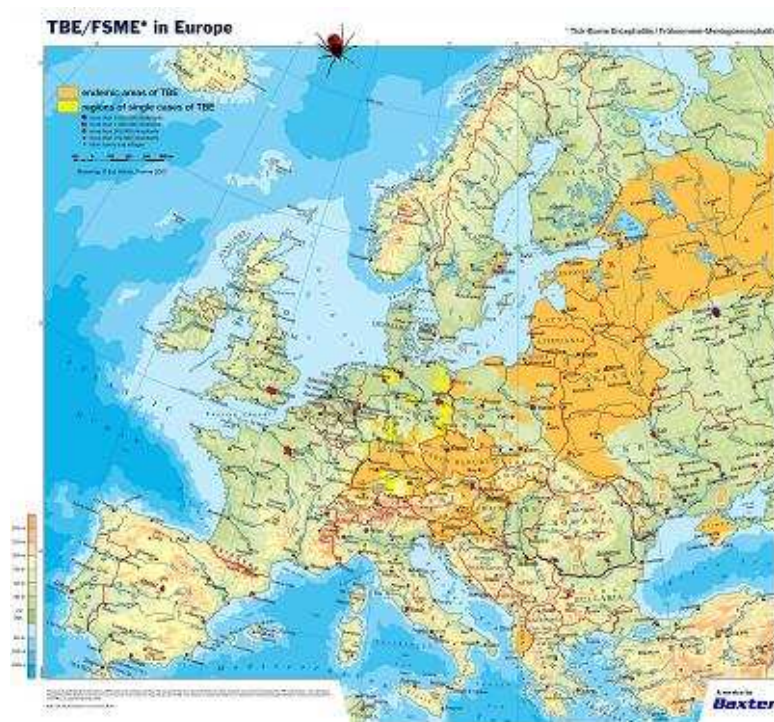


Fig.4/5: Photographs from the press workshop participants and speakers



3) New Tools: New Endemic maps available

The new endemic map is available now:



The extent of epidemiological assessment of TBE cases varies between countries. The data presented here may not therefore be entirely complete and it cannot be excluded that TBE viral infection – with subsequent development of the disease – won't occur in new areas.

This map is based on documented cases of TBE virus infection as reported by WHO and as published in the Epidemiologisches Bulletin 15/2007 (including Annex) of the RKI.



-  Regions of TBE risk
-  Regions of single cases of TBE

Fig. 4: Endemic areas on tick-borne encephalitis (TBE/FSME)

4) New internet appearance

We are proud to announce the new look and feel of the websites, namely from the: www.tbe-prevention.info, and www.tick-victims.info as well as from the website of the International Scientific Working Group on tick-borne encephalitis – www.ISW-TBE.info. The ISW-TBE website shows a new menu navigation in order to guarantee an easier managing. Additionally the “Log-in area” has gained an user-friendly construction, reasonably to avoid long and intricately applications.

During the 10th Annual ISW-TBE Meeting we received new portrait photos of some experts which are attached to our experts` list. Furthermore we created the menu “Congresses” with a listing on ongoing events.

The tick victims and the TBE prevention websites obtain a similar menu navigation but the context with the 16 different languages remains. Moreover on the prevention website a listing of TBE vaccination centres has been introduced. In case you would like to your vaccination center to be a part of this list, please contact Andrea Hartl (andrea_hartl@baxter.com).