PRESS INFORMATION

"8th Meeting of the International Scientific Working Group on TBE (TBE: Tick Borne Encephalitis)"
"TBE a European Health Challenge"
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The increasing incidence of TBE in Europe, hypotheses on the causes and on the consequences for its control

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In all countries with a TBE risk the TBE incidence has increased significantly over the past 30 years independently of the countries' risk level and for largely unknown reasons. The average increase in the eleven most important TBE countries was approx. 400 %. This trend seems to continue with Germany showing the strongest increase of 156 %, if we compare the years 2004/2005. Other countries showing a strong increase are Switzerland with 149 % and the Czech Republic with 127 %. However, this development is only partially the result of a real increase of the TBE incidence, e.g. caused by the often accused global warming. In addition to this climate change there are other biological/ecological and non-biological factors which contribute to this trend. A stronger awareness of the risks and a more profound knowledge, improved diagnostics, more extensive travelling and political and social overthrows have changed the epidemiology of TBE and other vector-borne diseases. The increased exposition rate of the population in the Baltic states and in Russia caused by an increased use of natural resources (forest), which has been discussed as a possible reason for the past few years, now also seems to manifest itself in the industrial countries. Thus, the exploding prices of fossil fuels have caused a return to domestic wood which automatically leads to an increased exposition to ticks.

The most successful and effective way to slow down this process is the prophylactic vaccination against TBE. The best example is the often described situation in Austria, where approx. 90 % of the population are immunized against TBE and where on average only 70 human TBE cases per year were registered between 2001 and 2005. In contrast, the average number of human TBE cases registered per year in the comparative time period from 1976 to 1980 was 426. In Germany, 427 cases were registered in 2005, which is the highest value since TBE cases were first registered officially in the early 1970s. Based on established data, recent - so far unpublished - investigations have shown that only 11 to 20 % of the population of Germany's high risk areas have a complete basic immunisation, in the non-risk areas only 6 to 10 %. An improvement of this situation is urgently required.

For scientific reasons and to achieve a more reliable risk assessment and a science-based application of the vaccines TBE epidemiology must to a significantly larger extent be based on standardised scientific/molecular biological methods (exact case definition, standardised diagnostics, virus prevalence measurements, immunological data, investigations on vectors and competent hosts). The necessity to extend the epidemiological investigations is underlined by the results of a current research project in Saxony-Anhalt: unusually high virus prevalences were found in nonengorged ticks of various developmental stages in a so far non-risk area, which puts our present definition of a risk area into question.

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