

## WHO PROTECTS THE TRAVELLERS ?

Victor Luyasu<sup>1</sup>, Geneviève Ducoffre<sup>2</sup>, Paul Heyman<sup>3</sup>.

<sup>1</sup> Reference Center, Research and Information group on Tick-Borne Diseases (RILY asbl); Travel Clinic, Clinique Saint-Pierre, Ottignies-Louvain-la-Neuve, Belgium.

<sup>2</sup> Scientific Institute of Public Health, Epidemiology Unit, Brussels, Belgium.

<sup>3</sup> National Reference Center for vector-borne diseases, Queen Astrid Military Hospital, Brussels, Belgium.

The Tick-Borne-Encephalitis (TBE) is an infection caused by a virus called *Flavivirus* transmitted to man by a tick bite. Though no case were to date identified in some Western countries such as Belgium, the epidemiological surveillance of this infection does remain essential because of the potential risks to which travellers are exposed in endemic zones of Central and Eastern Europe as well as in some parts of Northern Europe. Travellers should remain cautious and aware of the fact that there is no curative treatment for sequelae once the disease has broken out. For this reason, only immunisation using a specific vaccine within the scope of prophylactic travel medicine will provide a permanent protection on the long run. On the other hand, common preventive measures i.e. wearing long pants, long sleeves shirt and applying repellents on the skin are still useful in avoiding tick bites and other potential diseases, such as Lyme disease and anaplasmosis. These two infections may also be prevented by a rapid tick removal, which is not the case for TBE because the transmission of flavivirus may occur soon after a tick bite. Another route of contamination for TBE concerns a digestive route when people consume fresh cheese or a non-pasteurized milk whilst visiting an endemic area.

As regards prevention and vaccination for TBE, the travellers at risk from Belgium are provided with useful recommendations and information by the Institute of Tropical Medicine of Antwerp throughout a series of booklets and internet, [www.itg.be](http://www.itg.be), by the travel clinics and by any practitioner involved in the problematic prevention of TBE and other tick-borne diseases. A new leaflet on TBE is under preparation for availability on the web site of the Epidemiology Unit, Scientific Institute of Public Health: [www.iph.fgov.be/epidemioloabo](http://www.iph.fgov.be/epidemioloabo).

After the traveller has returned from an endemic area, fever, paralysis and any other condition involving the central nervous system should require prompt attention from the medical practitioner, particularly when the patient has not been immunized against TBE.

In Belgium, TBE is subject to a mandatory report to health authorities. Thanks to a network between the laboratory of the national reference center for vector-borne diseases, the medical inspector in charge of alert system for infectious diseases within each province and the Scientific Institute of Public Health, any suspected case can be confirmed and followed up in terms of diagnostic criteria and epidemiological surveillance.

It remains to emphasize that one assists in Europe, since the opening of the borders, with a constant and significant increase in the number of travellers through the endemic zones with like corollary an increase in the risks of exposure and contamination by the TBE virus. In these same areas, the number of patients suffering from TBE and recorded each year underwent a remarkable rise since it was multiplied by an average factor of 4 since 1995. Consequently, it is highly recommended that the travellers having to go in areas at risks are correctly and actively protected by a specific vaccine administered either by a medical practitioner, or by a travel clinic, or by any system of health in force in the country of origin. The example given in this presentation was that of Belgium.