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European Travel and Tropical Medicine Network of the
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European Centre for Disease Prevention and Control
Collaborative Network for Travel and Tropical Medicine



EUROTRAVNET SCIENCE WATCH : APRIL 2010

Scientific Advances – The 2010 FIFA World Cup: Communicable Disease Risks and Advice for Visitors to South Africa. Blumberg LH, et al. *J Travel Med.* 2010; 17: 150-152.

Scientific Advances – Schistosomiasis among Recreational Users of Upper Nile River, Uganda, 2007. Morgan OW, et al. *Emerg Infect Dis.* 2010 16: 866-868.

Scientific Advances – Tick-borne encephalitis among U.S. travelers to Europe and Asia - 2000-2009. Centers for Disease Control and Prevention (CDC). *MMWR Morb Mortal Wkly Rep.* 2010 Mar 26;59(11):335-8.

Scientific Advances – Illness in children after international travel: analysis from the GeoSentinel Surveillance Network. Hagmann S, et al. *Pediatrics.* 2010;125(5):e1072-80.

Scientific Advances – Dengue type 3 virusinfections in European Travellers returning from the Comoros and Zanzibar, February-April 2010. P Gautret, et al. *Eurosurveillance.* 15 April 2010.

Scientific Advances - Review paper – The 2010 FIFA World Cup: Communicable Disease Risks and Advice for Visitors to South Africa

Blumberg LH, de Frey A, Frean J, Mendelson M.

J Travel Med. 2010; 17: 150-152

Link to the article: <http://www.wiley.com/bw/journal.asp?ref=1195-1982>

Description: The FIFA World Cup is to be held on the African continent for the first time in 2010. In excess of 350,000 visitors and participants are expected for the event, which will take place in eight cities around South Africa during June and July 2010. There is potential for transmission of imported or endemic communicable diseases, especially those that have an increased transmission rate as a result of close proximity of multiple potential carriers, eg, seasonal influenza. The 2010 southern hemisphere influenza vaccine will include pandemic influenza A (H1N1) as part of the triple formulation and is expected to be available from March 2010 in South Africa. FIFA has issued strong recommendations for team participants to be vaccinated timeously. The author review here risk for travellers during this event.

ECDC comment: 2010-05-05

Although South Africa may be perceived as an exotic locale for many intending World Cup visitors, the likely communicable disease risks will differ little from those affecting mass events elsewhere. Pretravel preparation and appropriate vaccinations will ensure an illness-free event for the majority of football fans. All travelers should consult their travel-health practitioner concerning immunization against vaccine-preventable diseases, including influenza and measles.

Keywords : Prevention – South Africa – FIFA World Cup

This paper has been selected by Dr Philippe GAUTRET (philippe.gautret@club-internet.fr) from Marseille, France.

Scientific Advances – Schistosomiasis among Recreational Users of Upper Nile River, Uganda, 2007

Morgan OW, Brunette G, Kapella BK, McAuliffe I, Katongole-Mbidde E, Li W, Marano N, Okware S, Olsen SJ, W. Secor E, Tappero JW, Wilkins PP, Montgomery SP.

Emerg Infect Dis 2010 16: 866-868

Description: After recreational exposure to river water in Uganda, 12 (17%) of 69 persons had evidence of schistosome infection. Eighteen percent self-medicated with praziquantel prophylaxis immediately after exposure, which was not appropriate.

Link to the article:

<http://www.cdc.gov/eid/content/16/5/866.htm>

ECDC comment: 2010-05-05

Praziquantel acts against mature schistosome parasites and thus is most effective if taken after the parasite has developed to the adult stage, which is 4–6 weeks after infection. Many travelers do not follow advice to avoid freshwater activities in schistosomiasis-endemic countries. Travelers should be made aware that white-water exposure presents a risk for schistosomiasis and that treatment with praziquantel should be at least 4–6 weeks after last exposure, preferably under the direction of a travel medicine physician.

Keywords : Schistosomiasis – Praziquantel post-exposure prophylaxis - Uganda -

This paper has been selected by Dr Philippe GAUTRET (philippe.gautret@club-internet.fr) from Marseille, France.

Scientific Advances – Tick-borne encephalitis among U.S. travelers to Europe and Asia - 2000-2009.

Centers for Disease Control and Prevention (CDC).

MMWR Morb Mortal Wkly Rep. 2010 Mar 26;59(11):335-8.

Description: Before 2000, two cases of TBE in North American travellers to Europe were reported. State health officials or clinicians send specimens from patients with unexplained encephalitis to CDC as part of routine surveillance and diagnostic testing. CDC recently reviewed all 2000-2009 laboratory records to identify cases of TBE among U.S. travelers; the five cases identified are summarized in this report. All five cases had TBEV or Powassan virus (POWV) immunoglobulin M (IgM) antibodies in serum and were confirmed as acute TBE cases by plaque-reduction neutralization tests against both viruses. All four patients who had travelled to Europe or Russia had biphasic illnesses (a common feature of TBE) and made nearly complete recoveries. The fifth patient, the first reported case of TBE in a U.S. traveler to China, had a monophasic illness with severe encephalitis and neurologic sequelae.

Link to the article:

<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5911a3.htm>

ECDC comment: 2010-05-05

Tick-borne encephalitis virus (TBEV) is the most common arbovirus transmitted by ticks in Europe. Approximately 10,000 cases of tick-borne encephalitis (TBE) are reported annually in Europe and Russia. Although TBE is endemic in parts of China, information regarding its incidence is limited. TBEV is closely related to Powassan virus (POWV), another tick-borne flavivirus that is a rare cause of encephalitis in North America and Russia; TBEV and POWV can cross-react in serologic tests. Health-care providers should be aware of TBE, should counsel travelers about measures to reduce exposure to tick bites, and should consider the diagnosis of TBE in travelers returning from TBE-endemic countries with meningitis or encephalitis.

Keywords : TBE - Europe - USA -

This paper has been selected by Dr Philippe GAUTRET (philippe.gautret@club-internet.fr) from Marseille, France.

Scientific Advances - Sex and gender differences in travel-associated disease.

Schlagenhauf P, Chen LH, Wilson ME, Freedman DO, Tcheng D, Schwartz E, Pandey P, Weber R, Nadal D, Berger C, von Sonnenburg F, Keystone J, Leder K; GeoSentinel Surveillance Network.

Clin Infect Dis. 2010 Mar 15;50(6):826-32.

Description: Travel and tropical medicine GeoSentinel clinics worldwide contributed prospective, standardized data on 58,908 patients with travel-associated illness to a central database from 1 March 1997 through 31 October 2007. The authors evaluated sex and gender differences in health outcomes and in demographic characteristics, and found statistically significant differences in morbidity by sex. Ill returned women are proportionately more likely than men to present with acute diarrhea, irritable bowel syndrome, upper respiratory tract infection; urinary tract infection, psychological stressors, oral and dental conditions, or adverse reactions to medication. Ill returned women are proportionately less likely to have febrile illnesses; vector-borne diseases, such as malaria, leishmaniasis, or rickettsioses; sexually transmitted infections; viral hepatitis; or noninfectious problems, including cardiovascular disease, acute mountain sickness, and frostbite.

Link to the article:

http://www.journals.uchicago.edu/doi/abs/10.1086/650575?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%3dncbi.nlm.nih.gov

ECDC comment: 2010-05-10

The conclusions of this paper suggest that the need for a subtle change in the approach to travel medicine, particularly, in the pre-travel setting. Travellers, (and there are more than 900 million international arrivals each year) need to be viewed not just en masse but also as women and men. The paper highlights the increasingly important sex differences in health and susceptibility to infection.

Keywords: sex, gender, travel associated illness

This paper has been selected by Dr Patricia Schlagenhauf (pat@ifspm.uzh.ch) from Zürich, Switzerland.

Scientific Advances - Illness in children after international travel: analysis from the GeoSentinel Surveillance Network.

Hagmann S, Neugebauer R, Schwartz E, Perret C, Castelli F, Barnett ED, Stauffer WM; GeoSentinel Surveillance Network.

Pediatrics. 2010;125:e1072-80.

Link to the article:

<http://pediatrics.aappublications.org/cgi/content/full/125/5/e1072>

Description:

By using a large, multicenter database, the authors investigated the characteristics and morbidities of 1591 ill children returning from 218 global destinations and presenting for care in 19 countries. Compared with adults, children disproportionately presented within 7 days after return, required hospitalization, lacked pretravel health advice, and had traveled for the purpose of visiting friends and relatives. Diarrhea, dermatologic conditions, systemic febrile illnesses, and respiratory disorders accounted for the majority of diagnoses reported for children. Proportionate morbidity is also reported by region visited.

ECDC comment: 2010-05-10

This paper highlights the different profiles of travel associated illness in children according to pediatric age groups and compared to adults. The study also shows that children, although they are more likely to become ill, they are proportionately less likely to have pre-travel advice.

Keywords: children, travel associated illness

This paper has been selected by Dr Patricia Schlagenhauf (pat@ifspm.uzh.ch) from Zürich, Switzerland.

Scientific Advances – DENGUE TYPE 3 VIRUS INFECTIONS IN EUROPEAN TRAVELLERS RETURNING FROM THE COMOROS AND ZANZIBAR, FEBRUARY-APRIL 2010

Eurosurveillance, Volume 15, Issue 15, 15 April 2010

P Gautret, F. Simon, H Hervius Askling, O Bouchaud, I Leparco-Goffart, L Ninove, P Parola, for EuroTravNet

Description:

In late February-early April 2010, five cases of dengue fever were diagnosed in returning travellers in Europe in EurotravNet sites in Sweden and France in patients with travel history to the Comoros and/or Zanzibar, Tanzania. Four cases were non-complicated dengue fever and one case dengue hemorrhagic fever. Three patients were viraemic at the time of diagnosis and infected with Dengue type 3 virus.

Link to the article:

<http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=19541>

ECDC comment: 2010-05-10

This report confirms that returning travellers may serve as sentinels for local outbreaks of dengue fever in endemic areas, as they allowed here to identify the circulation of Den 3 virus in Indian Ocean Islands. The case presenting exclusively with fever and without additional symptoms commonly associated with dengue fever, illustrates that dengue fever should be included early in the differential diagnosis in febrile travellers particularly when returning from areas with potential transmission of the disease. Indeed, The establishment of *A. albopictus*, the vector for dengue and chikungunya viruses, in the south of Europe and the presence of viraemic imported cases of dengue fever in these regions could lead to autochthonous transmission

Keywords

This paper has been selected by Philippe PAROLA from Marseille.