



Emerging Epidemics 2011

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Compounding the crisis *Vivax* Malaria in Greece



Greece reports six cases of *Plasmodium vivax* infection in Evrotas, Lakonia, Peloponnese region, and Chalkida in Evoia since June 2011. The main risk related to the current event is to persons living in, visiting and working in the particular area of Evrotas in the district of Lakonia (and potentially Chalkida in Evoia, though more information is needed) in Greece. The local transmission of *P. vivax* malaria to humans is believed to have occurred here over the last three years and is likely to continue producing annual clusters of human cases. However, the risk for further extension of malaria transmission into the EU related to this event is considered low at present.



Areas of Greece with Malaria: There is ongoing evidence of malaria transmission in Laconia district. Very limited transmission has been reported in the districts of Evia/Euboea, Eastern Attiki, Voitia, and Larissa. For more information about these recently identified cases of malaria in Greece, see the outbreak notice [New Malaria Recommendations for Greece](#). (Updated October 25, 2011) ([more information](#))

If you will be visiting an area of Greece with malaria, you will need to discuss with your doctor the best ways for you to avoid getting sick with malaria. Ways to prevent malaria include the following:

- Taking a prescription antimalarial drug
- Using insect repellent and wearing long pants and sleeves to prevent mosquito bites
- Sleeping in air-conditioned or well-screened rooms or using bednets

It is particularly important when traveling to Greece that you have detailed information of where you are going within this country, because malaria prevention recommendations vary depending on where you go within the country.

There are some areas in Greece where the risk of malaria is low, and taking an antimalarial drug is not recommended. For areas in Greece where an antimalarial is recommended, primaquine is a good option for an antimalarial drug (only after G6PD testing). Atovaquone-proguanil, chloroquine, doxycycline, or mefloquine can also be used instead. For detailed information about each of these drugs, see [Table 3-11: Drugs used in the prophylaxis of malaria](#). For information that can help you and your doctor decide which of these drugs would be best for you, please see [Choosing a Drug to Prevent Malaria](#).

To find out more information on malaria throughout the world, you can use the [interactive CDC malaria map](#). You can search or browse countries, cities, and place names for more specific malaria risk information and the recommended prevention medicines for that area.

TABLE

Reported *Plasmodium vivax* infections by district of residence, Greece, May–September 2011 (n=36)

District (region)	Number of cases
Lakonia (Peloponnese)	30 ^a
Eastern Attiki (Attiki)	2
Evoia (Sterea Ellada)	2
Viotia (Sterea Ellada)	1
Larissa (Thessalia)	1
Total	36 ^a

^a This figure includes 16 cases in migrant workers from endemic countries residing in Evrotas area, Lakonia. The remaining cases are in Greek citizens without reported travel history to a malaria-endemic country.

FIGURE 1

Place of residence of reported malaria cases, Greece, May–September 2011 (n=36)



West Nile Virus in Europe



In the ongoing 2011 West Nile virus transmission season, cases have been reported from newly affected geographical areas. This was not entirely unexpected since areas with favourable ecological parameters for the interaction between migratory birds, resident birds, competent mosquito vectors and humans are known to be at risk for the establishment of active and efficient transmission of the virus to humans. Further geographical extension of affected areas is therefore likely in the coming years.

Multi-sectoral collaboration and intensified surveillance made it possible to detect West Nile virus in new areas and identify WNV lineage 1 and lineage 2, which are now both circulating in Europe.

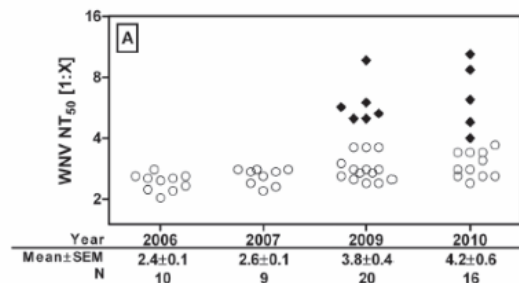
EU Member States are responding to this situation with the implementation of preventive measures, including the safeguarding of blood supplies. However, important gaps remain in our current knowledge of West Nile virus epidemiology, and further research and studies are needed in this context.

Figure: Reported human cases of West Nile fever for the EU and neighbouring countries, as of 15 September 2011



FIGURE 1

West Nile virus and tick-borne encephalitis virus neutralisation by intravenous immunoglobulin lots produced from plasma collected in Austria, Germany and the Czech Republic (N=55)



Eurosurveillance, Volume 16, Issue 10, 10 March 2011

Report of the West Nile Disease Outbreaks in European Union and Bordering Countries

Country	Year	Species Involved/Clinical Symptoms		
		Human	Equine	Birds
Algeria	1994	Yes		
Austria	2008			NK
Croatia	2001-2002		No	
Czech Republic [*]	1997	Yes		
	2004-2006			No
France [*]	2000		Yes	
	2003-2004-2006	Yes	Yes	
Greece	1970-1980		No	
Hungary	2003-2008	Yes		
Israel	1998-1999		Yes	Yes
	2000	Yes		
Italy [*]	1998	No	Yes	No
	2008-2009	Yes	Yes	No
Morocco	1996-2003		Yes	
Poland	2006			No
Portugal	1971 [*]			
	2004 [*]	Yes		
Romania	From 1996	Yes	Yes	Yes
Russia	1999-2005-2006	Yes		
	2003-2005			No
Spain	2004	Yes		
Tunisia	1997	Yes		

Yes: presence of clinical symptoms; No: absence of clinical symptoms; NK: not known.

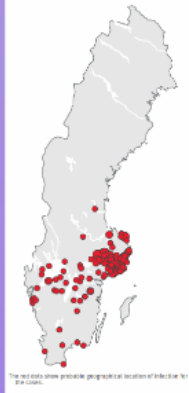
^{*}WNV detected in mosquitoes.

Open Virol J. 2010; 4: 29-37

Tick borne encephalitis in Europe



Location of tick borne encephalitis cases in Sweden, 2011



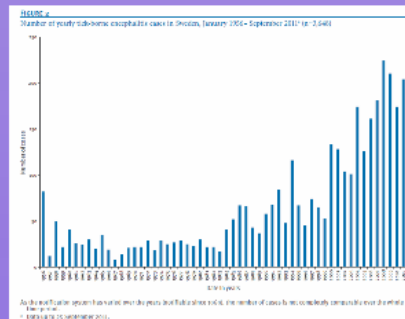
Euro Surveill. 2011;16(39)

Areas of known occurrence of tick-borne encephalitis in Europe, 2010



Data of each country surveyed were transferred to the geographical map of Europe with red showing known TBE virus-endemic areas. Data from the Crimea peninsula [31, 32] and from Albania [33, 34] were taken from older maps and the literature, and are not based on our survey data.

Euro Surveill. 2011;16(39)



Euro Surveill. 2011;16(39)

In 2011, Sweden has seen an increase in notification of TBE cases up to 25 September that amounts to numbers amongst the highest recorded. Normally, additional cases are also reported in October, indicating that 2011 may be a record year concerning TBE in Sweden. In our opinion, a potential explanation for the increase of TBE cases in Sweden during the last years is a general increase of the tick population (T Jaenson, personal communication, 26 September 2011), although human behaviour and contact with wildlife could also have contributed.

Euro Surveill. 2011;16(39)

... Some recent reports from single countries provide good data and strong evidence for a change (expansion) in geographical distribution of TBE ...

Euro Surveill. 2011;16(39)

Source: Eurosurveillance, Volume 16, Issue 44, [abridged & edited]
<http://www.eurosurveillance.org/ViewArticle.aspx?ArticleId=20003>

Tick-borne encephalitis in 2 Dutch travellers returning from Austria, Netherlands, July and August 2011 (By: Reusken C, Reimerink J, Varduin C, Sabbe L, Cleton N, and Koopmans M.)

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New tick borne disease in Sweden: Neo disease



Photo: Alfried H/Wikipedia (File)

New tick-borne disease discovered in Sweden

Published: 25 Oct 11 07:31 CET | Double click on a word to get a [translation](#)

 Share

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Swedish researchers have discovered a new tick-borne illness that can cause blood clots in the legs and lungs, with three cases having been reported in Sweden.

The illness, which researchers call "neo disease" after the bacterium that causes it, *Candidatus Neoehrlichia mikurensis*, also brings about flu-like symptoms with long-lasting high fevers, coughing, and aches. The disease can be treated with antibiotics.

The 1st case was discovered in the summer of 2009 after a 77-year-old man from Gothenburg came down with a high fever and lost consciousness. During his treatment, doctors discovered blood clots in his leg and lungs. The man's fever returned several times and doctors eventually found traces of an unknown bacterium in his blood. The disease, which is transmitted by ticks, had never before been reported in Sweden and it was unclear what caused the disease in humans. The 2 additional Swedes who have become ill due to the bacteria are in their 60s and 70s.

Imported Chagas disease in Europe

Euro Surveill. 2011;16(37):pii=19966



TABLE

Demographic data and characteristics of *Trypanosoma cruzi*-infected patients detected through EuroTravNet, 2008–2009 (n=124)

Item	Data	Number of patients (%) ^a
EuroTravNet core site visited (also the place of diagnosis)	Madrid, Spain	121 (97.6)
	Geneva, Switzerland	3 (2.4)
Sex	Female	81 (65.3)
	Male	43 (34.7)
Median age in years (Q1–Q3)	35 (29–45)	124
Median number of months of residence ^b (Q1–Q3)	38 (26–55)	123 ^c
	Bolivia	119 (96.0)
Country of birth (also the probable country of exposure)	Argentina	2 (1.6)
	Paraguay	2 (1.6)
	Ecuador	1 (0.8)
	Cochabamba	40 (32.3)
Probable area of exposure (all in Bolivia, where known)	Santa Cruz	37 (29.8)
	Sucre	5 (4.0)
	Tarija	4 (3.2)
	Guayaquil	1 (0.8)
	Santa Fe	1 (0.8)
	Not reported	36 (29.0)
	Clinical setting	Migrant healthcare
	Seen after travel	1 (0.8)
Patient type	Outpatient	123 (99.2)
	Inpatient	1 (0.8)
Diagnosis	Chronic Chagas disease	124 (100.0)
	Screening (while asymptomatic)	115 (92.7)
Reason for presentation	Abnormal laboratory test ^d and screening (while asymptomatic)	3 (2.4)
	Musculoskeletal symptoms	2 (1.6)
	Abnormal laboratory test ^d and gastrointestinal symptoms	1 (0.8)
	Gastrointestinal symptoms	1 (0.8)
	Ophthalmological symptoms	1 (0.8)

The majority of *T. cruzi* infected people outside Latin America are actively working, asymptomatic migrant adults, 18–49 years, with chronic infection [13,14,25]. Most will have been infected during childhood and therefore, based on the natural course of the disease, these migrants would now be at an age when the first manifestations of visceral involvement may be expected to appear. Furthermore, the high number of women among Latin American migrants means that congenital transmission of *T. cruzi* may be a cause for concern [26]. It has been estimated that the rate of mother-to-child transmission of *T. cruzi* in this population is about 7% [25]. Physicians in non-endemic countries should therefore be aware during their routine clinical practice of the existence or even the potential transmission of this disease.

Dengue in Africa

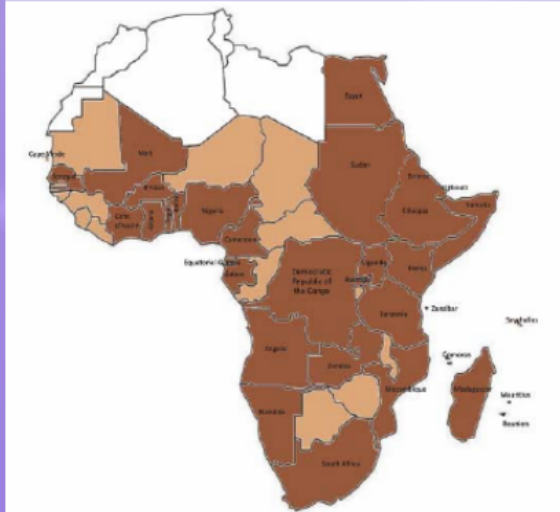


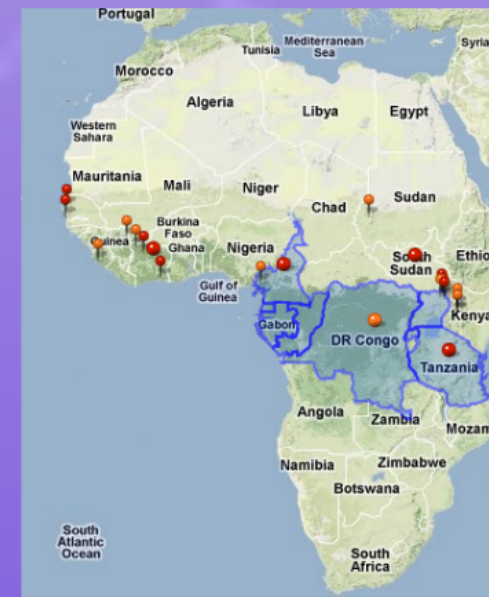
Figure. Dengue and *Aedes aegypti* mosquitoes in Africa. Brown indicates 34 countries in which dengue has been reported, including dengue reported only in travelers, and *Ae. aegypti* mosquitoes. Light brown indicates 13 countries (Mauritania, The Gambia, Guinea-Bissau, Guinea, Sierra Leone, Liberia, Niger, Chad, Central African Republic, Republic of the Congo, Malawi, Zimbabwe, and Botswana) in which dengue has not been reported but that have *Ae. aegypti* mosquitoes. White indicates 5 countries (Western Sahara, Morocco, Algeria, Tunisia, and Libya) for which data for dengue and *Ae. aegypti* mosquitoes are not available.

Underrecognition of Dengue in Africa

In regions to which malaria is endemic, >70% of febrile illnesses are treated as presumptive malaria, often without proper medical examination and a laboratory diagnosis (20,21). In a setting where diagnostic testing is conducted, such as the GeoSentinel Surveillance Network, malaria was found to be the predominant cause of systemic febrile illness among travelers returning from sub-Saharan Africa (622/1,000 patients) compared with dengue (7/1,000) (11). This finding is not unexpected because malaria is more endemic to Africa than other febrile illnesses. However, overdiagnosis of malaria in areas of low transmission is well documented, and overestimation by clinical diagnosis is ≈61% (20,21). Many patients in Africa with fever are designated as having fever of unknown origin or malaria and remain without a diagnosis even if they fail to respond to antimalarial drugs. Under these prevailing practices, there is a real potential of misdiagnosing dengue as malaria.

Yellow fever in Africa

ProMed Reported cases & outbreaks: 2010 - 2011



Yellow fever in Africa

ProMed Reported
cases & outbreaks:
2010 - 2011



www.healthmap.org

Japanese Encephalitis



www.healthmap.org

The best way to prevent mosquito-borne diseases, including JE, is to avoid mosquito bites

Indications for Use of JE Vaccine for Travelers

When making recommendations regarding the use of JE vaccine for travelers, clinicians must weigh the overall low risk of travel-associated JEV disease, the high rate of death and disability when JE occurs, the low probability of serious adverse events after immunization, and the cost of the vaccine. Evaluation of an individual traveler's risk should take into account the planned itinerary, including travel location, duration, activities, and seasonal patterns of disease in the areas to be visited (see [Table 3-08](#)). The data in the table should be interpreted cautiously, because JEV transmission activity varies within countries and from year to year.

The Advisory Committee on Immunization Practices recommends JE vaccine for travelers who plan to spend ≥ 1 month in endemic areas during the JEV transmission season. This includes long-term travelers, recurrent travelers, or expatriates who will be based in urban areas but are likely to visit endemic rural or agricultural areas during a high-risk period of JEV transmission. Vaccine should also be considered for the following:

- Short-term (<1 month) travelers to endemic areas during the JEV transmission season, if they plan to travel outside an urban area and their activities will increase the risk of JEV exposure. Examples of higher-risk activities or itineraries include: 1) spending substantial time outdoors in rural or agricultural areas, especially during the evening or night; 2) participating in extensive outdoor activities (such as camping, hiking, trekking, biking, fishing, hunting, or farming); and 3) staying in accommodations without air conditioning, screens, or bed nets.
- Travelers to an area with an ongoing JE outbreak.
- Travelers to endemic areas who are uncertain of specific destinations, activities, or duration of travel.

JE vaccine is not recommended for short-term travelers whose visits will be restricted to urban areas or times outside a well-defined JEV transmission season.

India	Human cases reported from all states except Dadra, Daman, Diu, Gujarat, Himachal Pradesh, Jammu, Kashmir, Lakshadweep, Meghalaya, Nagaland, Haveli, Punjab, Rajasthan, and Sikkim	Most human cases reported May–October, especially in northern India; the season may be extended or year-round in some areas, especially in southern India	Highest rates of human disease reported from the states of Andhra Pradesh, Assam, Bihar, Goa, Haryana, Karnataka, Kerala, Tamil Nadu, Uttar Pradesh, and West Bengal
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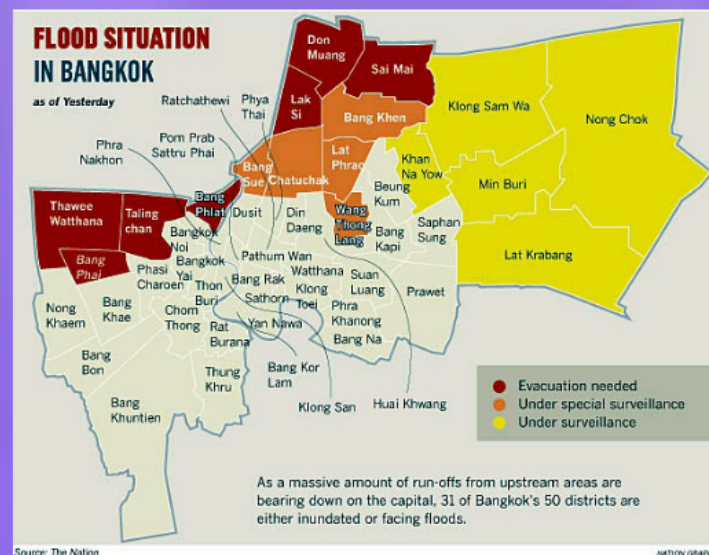
Water borne diseases

Sent: woensdag 9 november 2011 15:12
To: promed-ahead-edr@promedmail.org
Subject: PRO/AH/EDR> Leptospirosis - Thailand: flood related

LEPTOSPIROSIS - THAILAND: FLOOD RELATED

The Public Health Ministry's Department of Medical Sciences yesterday [7 Nov 2011] warned of possible leptospirosis in flooded areas and against consuming ice and iced drinks from unknown production sources. In a recent survey, 21 food samples, collected in 4 flooded provinces including Bangkok, yielded food poisoning manifestations, while 17 out of 57 samples of drinking water possessed germs which caused diarrhoea.

The minister reported one leptospirosis case in Khon Kaen and 20 suspected cases. The bacterial disease, which is found usually in flooded areas up to 3 weeks after a flood recedes, is potentially fatal if not properly treated.



Rabies



Officially, there have been 148 human rabies deaths in Bali since November 2008. The outbreak still smolders on despite systematic efforts to control canine rabies in the island.

Measles

Don't forget the basics!



WHO: "...as of 20 Sep 2011, 40 of 53 Member States in the WHO European Region have reported 26.025 confirmed measles cases for the period January - July 2011..."

