EPI-NEWS

NATIONAL SURVEILLANCE OF COMMUNICABLE DISEASES

Editor: Peter Henrik Andersen
Dept. of Epidemiology
Statens Serum Institut • 5 Artillerivej • DK 2300 Copenhagen S

Tel.: +45 3268 3268 • Fax: +45 3268 3874
www.ssi.dk • epinews@ssi.dk • ISSN: 1396-4798

MALARIA 2005 AND REVISED PROPHYLAXIS RECOMENDATIONS

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A total of 87 cases of imported malaria were notified from Danish laboratories in 2005, Table 1. Of the cases for which the presumed country of infection was stated, 81% (56/69) had been acquired during stays in Sub-Saharan Africa. The majority (77%) of the malaria cases from Africa were caused by Plasmodium falciparum, whereas no cases of P. falciparum were notified from Asia, Central and South America or Oceania. All cases of malaria imported from Asia or Central and South America were caused by P. vivax.

Table 1. Imported cases of malaria in Denmark, 2005

	Africa	Asia	Central and South America	Oceania	Not-stated*)	Total 2005	Total 2004
P. falciparum	43	0	0	0	9	52	81
P. vivax	4	8	5	0	4	21	16
P. ovale	4	0	0	0	3	7	4
P. malariae	2	0	0	0	1	3	4
Mixed	1	0	0	0	1	2	1
Not stated	2	0	0	0	0	2	0
Total	56	8	5	0	18	87	106

*) Travellers to more than one continent included

Comments

The number of imported malaria cases in 2005 was the lowest in over 20 years, which confirms the decreasing tendency observed during the past years, EPI-NEWS 19/05. The figures also confirm that, except for a few specific areas in Asia and South America, the risk of severe malaria caused by P. falciparum is mainly present during stays in Africa. This circumstance justifies a higher degree of individualisation in the recommendations of prophylaxis in the malaria areas outside of Africa, see below.

(L.S. Vestergaard, Laboratory of Parasitology, ABMP)

REVISED RECOMMENDATIONS FOR MALARIA PROPHYLAXIS

A working group of participants from relevant scientific societies has revised SSI's vaccination recommendations for travel abroad, EPI-NEWS 21-22/06, including the recommendations for malaria prophylaxis.

The traveller's risk of acquiring malaria depends on travel route, duration and form of travel. Generally, the risk of malaria is greater when staying in rural areas outside of big cities, which mainly affects rucksack tourists, persons stationed in developing countries, and immigrants visiting family. Short-term tourist or business trips to big cities, on the other hand, will only entail minor risk of malaria.

In areas with low risk of malaria prevention of mosquito bites will be adequate for many travellers. This applies to several areas in Asia and Central and South America where the risk of malaria is limited (often below 0.1% per month's journey).

A decision of whether to opt out of medicinal prophylaxis and make do with prevention of mosquito bites is a trade-off between the actual risk of malaria and the risk of adverse reactions to the malaria remedy. Where medicinal prophylaxis is not chosen and the only measure taken is prevention of mosquito bites, it is essential to inform the traveller about the estimated risk, the symptoms of malaria, and about the importance of seeking local medical assistance as soon as possible on suspicion of malaria. Whether or not medicinal prophylaxis is chosen, it is also important to inform all travellers that fever for as long as three months after returning may be due to malaria, and in that case one should be examined for malaria.

For journeys >2-3 weeks, without medicinal prophylaxis, to areas with low risk of malaria and hardly any access to quality drugs, a registered, efficient quality malaria remedy for treatment may be given to the traveller. This can be used if, through a competent medical examination, malaria is detected or suspected to be highly probable. In most cases Malarone will be appropriate. A written instruction on how to use it should be included in the package. In general, self-treatment cannot substitute medicinal prophylaxis and should only be recommended to the few travellers who do not have access to local examination and treatment within 24-48 hours.

For further information on mosquito bite prophylaxis and special risk groups, see EPI-NEWS 19/05.

Levels of prophylaxis

Malaria prophylaxis still has four levels, corresponding to WHO's classification:

I: Mosquito bite prophylaxis alone
II: Chloroquine
III: Chloroquine+ proguanil (Paludrine)
IV: Atovaquon/proguanil (Malarone), mefloquine (Lariam) or doxycycline.

The level IV preparations are considered equally efficacious. Using medicinal prophylaxis does not make mosquito bite prevention redundant.

Prophylaxis recommendations according to geography

Local variation and lack of precise data on malaria occurrence make recommendations difficult. WHO is working to improve the notification of malaria occurrence in the individual countries.

As a general rule, medicinal malaria prophylaxis is recommended for all travellers to Sub-Saharan Africa where the occurrence of P. falciparum is generally high. Selected areas, as for instance the cities Nairobi in Kenya and Harare in Zimbabwe, however, are free of malaria. The malaria occurrence is generally low in South Africa, except for Krüger National Park where medicinal prophylaxis is still recommended for overnight stays.

As opposed to Africa, the risk of malaria in Asia and in Central and South America is generally low (and in many places there is mainly vivax malaria). Thus, mosquito bite prophylaxis alone will often be adequate. In common tourist places in Thailand, at Goa in India, Ankor Wat and Phnom Pen in Cambodia, and Vientiane in Laos the risk of malaria is considered low.

It is, however, important to be aware of a number of countries and areas, also on these continents, where the risk of malaria (incl. falciparum malaria) is high, e.g., the Amazon in South America, Assam and Orissa in northeast India, parts of Laos, Cambodia, Vietnam and Papua New Guinea, Irian Jaya, the Solomon Islands and Vanuatu. When travelling to these areas, medicinal prophylaxis is recommended, also to short-term travellers.

For country specific recommendations for medicinal prophylaxis and a description of risk areas, see EPI-NEWS 23/06 and www.ssi.dk/rejser (Danish).

(The Working Group for Revision of SSI's Recommendations to Vaccination for Travel abroad, EPI-NEWS 21-22/06)

Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2006 figures are preliminary)

Table 1	Week 23 2006	Cum. 2006 [1]	Cum. 2005 [1]
AIDS	4	22	33
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	0	0
Creutzfeldt-Jakob	0	7	2
Diphtheria	0	0	0
Foodborne diseases	4	152	151
of these, infected abroad	0	37	36
Gonorrhoea	11	202	251
Haemorrhagic fever	0	0	0
Hepatitis A	1	8	38
of these, infected abroad	0	1	9
Hepatitis B (acute)	0	10	21
Hepatitis B (chronic)	3	187	64
Hepatitis C (acute)	0	5	1
Hepatitis C (chronic)	9	293	152
HIV	8	93	147
Legionella pneumonia	3	36	35
of these, infected abroad	1	7	8
Leprosy	0	0	0
Leptospirosis	0	4	10
Measles	4	24	2
Meningococcal disease	0	33	54
of these, group B	0	16	29
of these, group C	0	4	10
of these, unspec. + other	0	13	14
Mumps	0	8	4
Neuroborreliosis	0	17	18
Ornithosis	0	7	9
Pertussis (children < 2 years)	0	25	83
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	1	1
Listeria monocytogenes	0	4	1
Streptococcus pneumoniae	0	35	74
Other aethiology	0	1	9
Unknown aethiology	0	7	10
Under registration	4	29	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	1	23	39
of these, infected abroad	0	20	36
Syphilis	1	29	51
Tetanus	0	0	2
Tuberculosis	11	174	183
Typhoid/paratyphoid fever	0	13	13
of these, infected abroad	0	13	12
Typhus exanthematicus	0	0	0
VTEC/HUS	2	50	73
of these, infected abroad	0	11	27

[1] *Cumulative number 2006 and in corresponding period 2005*

Selected laboratory diagnosed infections

Number of specimens, isolates, and/or notifications received in SSI laboratories

Table 2	Week 23 2006	Cum. 2006 [2]	Cum. 2005 [2]
Bordetella pertussis (all ages)	4	110	279
Gonococci	7	199	197
of these, females	2	40	25
of these, males	5	159	172
Listeria monocytogenes	1	13	14
Mycoplasma pneumoniae			
Resp. specimens [3]	3	224	582
Serum specimens [4]	2	202	491
Streptococci [5]			
Group A streptococci	2	87	69
Group B streptococci	0	44	24
Group C streptococci	1	11	10
Group G streptococci	1	62	60
S. pneumoniae	26	589	675
Table 3	**Week 21 2006**	**Cum. 2006 [2]**	**Cum. 2005 [2]**
Pathogenic int. bacteria [6]			
Campylobacter	42	658	863
S. Enteritidis	6	122	146
S. Typhimurium	3	102	153
Other zoon. salmonella	8	177	195
Yersinia enterocolitica	6	65	96
Verocytotoxin-producing E. coli	1	46	55
Enteropathogenic E. coli	1	77	91
Enterotoxigenic E. coli	1	77	102

[2] *Cumulative number 2006 and in corresponding period 2005*

[3] *Resp. specimens with positive PCR*

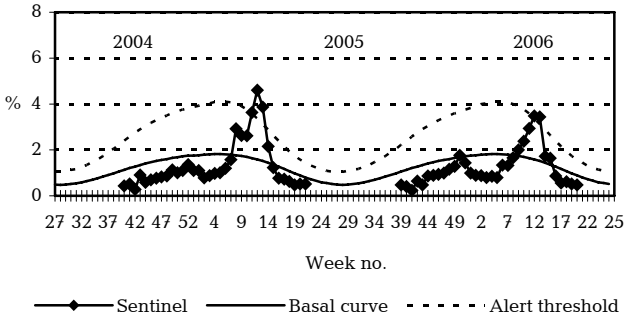
[4] *Serum specimens with pos. complement fixation test*

[5] *Isolated in blood or spinal fluid*

[6] *See also www.germ.dk*

Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2004/2005/2006



Sentinel:	Influenza consultations (as percentage of total consultations)
Basal curve:	Expected frequency of consultations under non-epidemic conditions
Alert threshold:	Possible incipient epidemic

14 June 2006