

## REVISION OF VACCINATION RECOMMENDATIONS FOR TRAVELS ABROAD No. 21/22, 2006

Since 1985, Statens Serum Institut has published an annual overview detailing vaccination recommendations for travellers going abroad. To ensure continued and full national consensus on the Danish recommendations, SSI set up a working group of representatives from a range of scientific societies in the spring of 2005.

The working group's participants include Mads Buhl and Eskild Petersen, Danish Society of Travel Medicine, Søren Thybo, Danish Infectious Diseases Society, Jørgen Kurtzhals, Danish Society for Clinical Microbiology, Niels Erik Møller, Danish College of General Practitioners, Lasse Vestergaard, Danish Society of Tropical Medicine and International Health, Kjeld Gade, Danish Paediatric Society, and Peter Henrik Andersen, SSI.

The revised country-specific recommendations will be published in a future edition of EPI-NEWS. Travellers are still divided into four groups. The following considerations are of particular importance:

### General considerations

In accordance with the guidelines of the National Board of Health, the vaccinee should remain in the surgery 10-15 min. after the vaccination.

### Diphtheria and tetanus

All travellers should be protected against diphtheria and tetanus from the outset. These two vaccinations are therefore not included in the overview. Following primary vaccination with three doses, EPI-NEWS 7/04, revaccination should take place after 5 years and subsequently every 10 years.

### Typhoid fever

Vaccination is recommended to all immigrants planning to visit family or friends in non-industrialised countries where sanitary and hygienic conditions are generally poor, regardless of the duration of the stay (group 4). Furthermore, vaccination is recommended to all travellers who plan to stay in said areas for a longer period of time. Other travellers (groups 1-3) are generally not recommended for typhoid vaccination.

As the infection risk is greatest on the Indian subcontinent, vaccination is recommended to all travellers visiting India, Sri Lanka, Bangladesh, Nepal, Bhutan, Pakistan or Afghanistan for more than two weeks, i.e. groups (2), 3 and 4.

### Meningococcal disease

Vaccination is recommended to those at special risk, i.e. persons with

asplenia/no splenic function or known complement defect. Furthermore, it is recommended to health care workers who will be stationed in densely populated refugee camps where the risk of a meningitis epidemic is non-negligible. Besides, vaccination is recommended for the following groups of travellers:

- Pilgrims travelling to Mecca (ACY-W135 vaccination is required)
- Travellers (apart from group 1) entering the African meningitis belt (Sahel). The risk peaks during the dry season from December to July. Normally, AC vaccine is given. On specific knowledge of W135, ACY-W135 vaccine is given; see [www.ssi.dk/rejser](http://www.ssi.dk/rejser) (in Danish).
- Travellers (apart from group 1) to areas with current non-B meningitis epidemics. The vaccination type depends on the detected serogroup.
- Travellers spending more than 6 months in or travelling frequently (group 4) to areas where non-B meningitis epidemics have been observed within the past 2 years, i.e. predominantly in Africa, excluding Sahel, and Asia.

### Influenza

Influenza is a risk factor when visiting the Southern Hemisphere during the summer (i.e. their winter) and when travelling to the tropics throughout the year. Travellers belonging to a risk group who normally receive influenza vaccination should also be protected by vaccination during travels. If the traveller received vaccination during the preceding Danish winter, he or she will be protected for a period of 6 months from the time of the vaccination, provided the influenza antigens circulating at the destination concord with the composition of the vaccine. Otherwise, vaccination for the Southern Hemisphere should be offered to such travellers.

For 2006, the vaccine composition for the Southern Hemisphere is different from the vaccine used in Denmark during the winter 2005-2006. SSI keeps a limited stock of influenza vaccine for the Southern Hemisphere. Travellers who are not normally offered influenza vaccination may choose to be vaccinated during the Danish influenza season to reduce their risk of becoming infected with influenza when travelling.

### Tuberculosis

BCG vaccination is recommended to immigrant children visiting their families in areas with a high TB incidence and to all children and adolescents who are expected to have close contact with the local population for an

extended period of time (group 4). Vaccination of other groups may be considered, for instance vaccination of health care workers who will have close contact with the local population for an extended period of time (group 4), if necessary preceded by a Mantoux test. Vaccination should be administered intradermally and should be given 6-8 weeks before departure.

### Hepatitis A

Vaccination is recommended to all travellers (including group 1) to areas with a moderate or high hepatitis A incidence, see [www.ssi.dk/rejser](http://www.ssi.dk/rejser) (in Danish). This also applies to ordinary tourist travels to Turkey.

Gammaglobulin currently has a limited field of application for pregnant women and e.g. elderly people who are only planning to travel once.

### Hepatitis B

Recommendations remain unchanged (groups 3 and 4). For further information on global prevalence, see [www.ssi.dk/rejser](http://www.ssi.dk/rejser) (in Danish). Hepatitis B vaccination can often be combined with hepatitis A vaccination.

### Japanese encephalitis

Vaccination is normally only recommended for stays exceeding 1 month in rural areas within the JE transmission zone, see [www.ssi.dk/rejser](http://www.ssi.dk/rejser) (in Danish). In the overview table, all capital Js have therefore been changed to lower case js. Data from the Danish Medicines Agency on reported adverse effects following JE vaccination during the period 1999-2004 show that the previously reported allergic reactions, EPI-NEWS 3/97, have almost disappeared. Consequently, there is no basis for maintaining the previous recommendation that the second vaccination be given no later than 10 days before departure.

### Yellow fever

In the future, lower case g will be used in the overview table to mark countries in which yellow fever is present, but only in part of the country, e.g. Brazil. Please refer to [www.ssi.dk/rejser](http://www.ssi.dk/rejser) (in Danish) for a map detailing yellow fever transmission areas. Vaccination must be given no later than 10 days before departure.

### TBE/Central European encephalitis

Recommendations remain unchanged. For further information on prevalence, see [www.ssi.dk/rejser](http://www.ssi.dk/rejser) (in Danish). (The working group mentioned in the text)

## Individually notifiable diseases

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

Table 1	Week 21 2006	Cum. 2006 <sup>1)</sup>	Cum. 2005 <sup>1)</sup>
AIDS	2	17	30
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	0	0
Creutzfeldt-Jakob	1	7	2
Diphtheria	0	0	0
Foodborne diseases	9	142	130
of these, infected abroad	3	36	31
Gonorrhoea	12	186	230
Haemorrhagic fever	0	0	0
Hepatitis A	2	7	36
of these, infected abroad	0	1	9
Hepatitis B (acute)	0	10	21
Hepatitis B (chronic)	3	178	56
Hepatitis C (acute)	0	5	1
Hepatitis C (chronic)	5	278	132
HIV	4	83	130
Legionella pneumonia	1	30	32
of these, infected abroad	0	5	6
Leprosy	0	0	0
Leptospirosis	0	4	9
Measles	0	20	1
Meningococcal disease	0	29	47
of these, group B	0	15	27
of these, group C	0	3	9
of these, unspec. + other	0	11	11
Mumps	0	8	4
Neuroborreliosis	0	16	17
Ornithosis	1	7	9
Pertussis (children < 2 years)	0	24	80
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	1	0
Listeria monocytogenes	0	4	1
Streptococcus pneumoniae	0	32	66
Other aethiology	0	1	6
Unknown aethiology	0	7	10
Under registration	5	30	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	0	22	37
of these, infected abroad	0	20	34
Syphilis	0	28	47
Tetanus	0	0	2
Tuberculosis	8	157	171
Typhoid/paratyphoid fever	0	13	11
of these, infected abroad	0	13	10
Typhus exanthematicus	0	0	0
VTEC/HUS	1	45	65
of these, infected abroad	0	10	26

<sup>1)</sup> 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 21 2006	Cum. 2006 <sup>2)</sup>	Cum. 2005 <sup>2)</sup>
Bordetella pertussis (all ages)	3	103	266
Gonococci	3	176	180
of these, females	0	33	25
of these, males	3	143	155
Listeria monocytogenes	0	11	12
Mycoplasma pneumoniae			
Resp. specimens <sup>3)</sup>	4	219	571
Serum specimens <sup>4)</sup>	6	197	474
Streptococci <sup>5)</sup>			
Group A streptococci	1	82	67
Group B streptococci	1	39	24
Group C streptococci	0	9	8
Group G streptococci	3	53	58
S. pneumoniae	23	549	636
Table 3	Week 19 2006	Cum. 2006 <sup>2)</sup>	Cum. 2005 <sup>2)</sup>
Pathogenic int. bacteria <sup>6)</sup>			
Campylobacter	22	572	764
S. Enteritidis	3	109	129
S. Typhimurium	4	96	121
Other zoon. salmonella	8	160	176
Yersinia enterocolitica	2	52	85
Verocytotoxin-producing E. coli	3	45	49
Enteropathogenic E. coli	3	71	81
Enterotoxigenic E. coli	2	70	88

<sup>2)</sup> Cumulative number 2006 and in corresponding period 2005

<sup>3)</sup> Resp. specimens with positive PCR

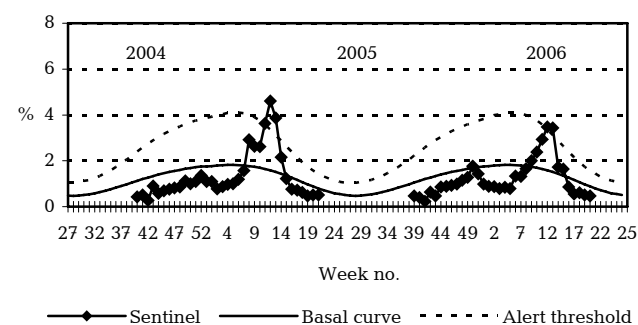
<sup>4)</sup> Serum specimens with pos. complement fixation test

<sup>5)</sup> Isolated in blood or spinal fluid

<sup>6)</sup> See also [www.germ.dk](http://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