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NATIONAL SURVEILLANCE OF COMMUNICABLE DISEASES

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NEW EXECUTIVE ORDER ABOUT FREE VACCINATION AGAINST HEPATITIS

As per 1 August 2006 a new executive order about free vaccination against viral hepatitis for particularly exposed groups entered into force.
The new executive order grants people living with or having a steady sexual relationship with an individual with chronic hepatitis B infection the right to have a free vaccination against hepatitis B. For persons <18 years, the vaccination is given as a combined hepatitis A/B-vaccine to afford young people protection also against hepatitis A.
The rationale of this approach lies in the fact that in Denmark HBV infection mainly spreads from persons with chronic HBV infection who are having unsafe sex and horizontally via long-term, close contact, i.e. between people living together.
The widening of the offer of free vaccination is particularly relevant in connection with medical examination of immigrants from geographical areas with a high prevalence of HBV infection and in connection with the general screening for HBV infection among pregnant women, because close relatives may now also be offered free vaccination.
The executive order also includes free vaccination for persons who have been diagnosed with hepatitis C infection. Vaccination is given as a combined hepatitis A/B vaccine, because those who have been infected with hepatitis C are at risk of developing serious hepatic disease if they are also infected with hepatitis A.
A third, new group is children living in communities with known cases of hepatitis B infection, in particular neighbourhoods with many injection drug addicts. Free vaccination against hepatitis B (hepatitis A/B vaccine) can be given following assessment of a particular neighbourhood if recommended by the Danish National Board of Health.
The executive order continues to offer free hepatitis A/B vaccination to injection drug addicts who have not been infected with hepatitis B, EPI-NEWS 12-13/05, and free hepatitis B vaccination is offered to children in day care centres attended by a preschool child with chronic HBV infection, EPI-NEWS 23/99.
Vaccines may be ordered free of charge from the Statens Serum Institut. The GP's fee is set as specified in the agreement with the GPO.
(The Danish National Board of Health)

CHIKUNGUNYA FEVER

Chikungunya fever is caused by the chikungunya virus, which is an RNA virus belonging to the Togaviridae family. There are three genetic groups of vira located in West Africa, Central-Eastern Africa and Asia.

Prevalence

The chikungunya virus was first isolated in Tanzania and Uganda in 1952 and periodic outbreaks have been seen in Africa and Asia. During 1957-1974 there were outbreaks of chikungunya fever in several countries in South-Eastern Africa, and the most recent outbreaks have been observed in Central and Western Africa. In Asia the chikungunya virus has been observed mainly in the Philippines, Malaysia, Cambodia, Pakistan and Southern India.

Current outbreaks

March 2005 saw a major outbreak of chikungunya fever, caused by a virus related to the Central-East African type, in the Indian Ocean on the islands of Comora, Mauritius, Mayotte and Reunion. In this area, the outbreak subsided during February 2006 and the incidence is estimated to have reached 266,000 cases. The outbreak also included the Seychelles, Madagascar and Malaysia and Southern India, where the incidence has been estimated to exceed 900,000 cases.
During 2005 and 2006, several cases of chikungunya fever have been diagnosed in Europe. Infected individuals have mainly been adults who have been tourists to areas with a high prevalence of the virus.
In Denmark, chikungunya fever has so far been diagnosed in three adults in 2006 following visits to Mauritius and India. All cases presented with classical symptoms and were hospitalized for a short period.

Mode of infection

In man, chikungunya virus is transmitted by the Aedes mosquito (Aegypti, Albopictus and Polynesiensis), which bites during the daytime. During the present epidemic at the Reunion, the virus genome has mutated, which has accelerated the propagation of the virus in the mosquito. In rare cases infection takes place via infected blood, e.g. during blood sampling. Vertical infection has been reported among newborns of mothers infected within 48 hours before delivery.
In Africa monkeys constitute a natural virus reservoir, but other species may also be infected.

Disease course

After four to seven days, the symptoms presents with influenza-like symptoms in the form of high fever, headache, low back ache and arthralgia; sensitivity to light and a maculopapulous rash may appear in the early stages. Arthralgia may persist for a protracted period. The disease often runs a mild course with spontaneous recovery after 3-5 days. Serious cases are rare; particular risk factors include high age and/or other concomitant disease. About 0.01 per cent of the patients develop meningoencephalitis, endocarditis or fulminant hepatitis. Overall mortality is low.

Diagnosis

Chikungunya virus may be demonstrated with PCR during its brief viraemic period (2-6 days), and/or by demonstration of specific IgG and, in particular, IgM antibodies. It is recommended that both tests be performed.
IgM antibodies may be found for up to 2-3 months and may cross-react with Nyong, Sindbis and Ross River viruses.

Treatment and prophylaxis

Treatment of chikungunya fever is symptomatic. There is no vaccine against this disease, and prophylactic measures include protection against mosquito bites and fighting mosquito formation.

Commentary

No restrictions apply to travels to areas with chikungunya virus. Travellers are recommended to use mosquito repellants and to cover their skin in the best possible way.
It is currently being investigated whether the Aedes albopictus mosquito in Southern Europe constitutes an infection risk. The European Centre for Disease Prevention and Control (ECDC) has estimated that a potential risk of infection in Europe will be limited to small geographical areas in particular countries. Please see www.eurosurveillance.org.
(A. Fomsgaard, Department of Virology, S. Glismann, Department of Epidemiology).

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Individually notifiable diseases

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

Table 1	Week 32 2006	Cum. 2006 [1]	Cum. 2005 [1]
AIDS	0	27	38
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	0	0
Creutzfeldt-Jakob	0	15	2
Diphtheria	0	0	0
Foodborne diseases	21	300	289
of these, infected abroad	1	68	64
Gonorrhoea	7	269	316
Haemorrhagic fever	0	0	0
Hepatitis A	0	13	42
of these, infected abroad	0	4	10
Hepatitis B (acute)	0	12	23
Hepatitis B (chronic)	7	223	89
Hepatitis C (acute)	0	6	1
Hepatitis C (chronic)	21	352	204
HIV	2	129	175
Legionella pneumonia	1	69	62
of these, infected abroad	0	15	21
Leprosy	0	0	0
Leptospirosis	0	4	10
Measles	1	27	2
Meningococcal disease	0	41	68
of these, group B	0	21	35
of these, group C	0	5	14
of these, unspec. + other	0	15	18
Mumps	1	10	5
Neuroborreliosis	2	26	35
Ornithosis	0	8	12
Pertussis (children < 2 years)	3	35	100
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	1	1
Listeria monocytogenes	0	4	1
Streptococcus pneumoniae	0	44	81
Other aethiology	0	1	12
Unknown aethiology	0	7	12
Under registration	4	53	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	0	32	65
of these, infected abroad	0	26	55
Syphilis	1	46	77
Tetanus	0	2	2
Tuberculosis	11	255	260
Typhoid/paratyphoid fever	0	16	19
of these, infected abroad	0	16	18
Typhus exanthematicus	0	0	0
VTEC/HUS	9	77	97
of these, infected abroad	4	20	36

[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 32 2006	Cum. 2006 [2]	Cum. 2005 [2]
Bordetella pertussis			
(all ages)	1	132	332
Gonococci	8	271	284
of these, females	3	49	30
of these, males	5	222	254
Listeria monocytogenes	3	26	18
Mycoplasma pneumoniae			
Resp. specimens [3]	5	269	635
Serum specimens [4]	3	234	531
Streptococci [5]			
Group A streptococci	0	96	79
Group B streptococci	0	58	46
Group C streptococci	0	15	15
Group G streptococci	0	85	76
S. pneumoniae	3	688	766

Table 3	Week 30 2006	Cum. 2006 [2]	Cum. 2005 [2]
Pathogenic int. bacteria [6]			
Campylobacter	137	1355	1845
S. Enteritidis	24	239	296
S. Typhimurium	9	195	269
Other zoon. salmonella	20	329	296
Yersinia enterocolitica	3	106	136
Verocytotoxin-producing E. coli	2	70	82
Enteropathogenic E. coli	16	126	135
Enterotoxigenic E. coli	5	124	176

[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*

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