EPI-NEWS

NATIONAL SURVEILLANCE OF COMMUNICABLE DISEASES

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UNIVERSAL HBV SCREENING DURING PREGNANCY

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As from 1 November 2007, universal screening of pregnant women for hepatitis B virus (HBV) infection will be made permanent, following a 2-year trial phase, EPI-NEWS 25-32/05.

The objective of the screening is to ensure that all neonates born to women with HBV infection are vaccinated against hepatitis B at birth. Mother-to-child transmission at birth is effectively prevented if specific immunoglobulin and hepatitis B vaccinations are given, followed by a further three vaccinations when the child is one, two and 12 months old, respectively.

The screening forms part of the initial prenatal check-up at the patient's GP and is performed in connection with routine examination of blood type and irregular antibodies. Until further notice, the screening will be performed in accordance with the guideline on universal screening of pregnant women for hepatitis B virus infection, published by the National Board of Health, December 2005. The guideline has previously been sent to all Danish blood banks, places of birth, the GP organization and any relevant medical organizations, and is also available at www.sst.dk (Danish language).

(National Board of Health)

MONITORING OF THE UNIVERSAL SCREENING OF PREGNANT WOMEN FOR HEPATITIS B TO CEASE BY 1 NOVEMBER 2007

In future, the Department of Epidemiology will not send reminders to GPs or places of birth concerning the finding of HBsAg in pregnant women. It is now the sole responsibility of the blood banks to inform the GP when hepatitis B infection is detected in a pregnant woman.

In this context we draw attention to the primary procedures of the universal screening:

The GP's tasks:

- In connection with the initial prenatal check-up, a blood sample from the pregnant woman is submitted for HBsAg testing. The majority of blood banks will perform this test on the blood sample employed for blood type determination.
- If a patient tests positive for HBsAg, the result is communicated to the patient along with information on hepatitis B infection, and referral to a specialist department is discussed.
- The maternity ward is informed and the result is entered into the pregnancy journal.
- The pregnant woman's household is checked for hepatitis B infection, and follow-up vaccinations are given to any sero-negative persons.
- Vaccination of the infant at one month (in connection with the 5-week check-up), two months and 12 months of age.

The hepatitis B vaccine may be given concurrently with the vaccines of the childhood vaccination programme.

- Notification of the pregnant woman and any HBsAg-positive household members using form 1515.

Tasks of the maternity ward:

- Check the information entered into the pregnancy record concerning hepatitis B screening of the woman in question.
- Ensure that the maternity ward journal clearly states so if a woman has tested positive for HBsAg.
- Ensure that neonates of HBsAg-positive mothers are administered hepatitis B immunoglobulin as well as the initial dose of hepatitis B vaccine immediately after birth.
- Ensure that information concerning the initiated vaccination series is submitted to the GP.

(S. Cowan, K. Qureshi, Department of Epidemiology)

FOOD POISONING AT LEDREBORG CASTLE

A minimum of 100 persons among approximately 550 participants at a corporation's employee day held at Ledreborg Castle on 18 September 2007, came down with transient diarrhoea. Statens Serum Institut and Food Inspectorate Region East have performed an epidemiological cohort analysis using a web-based questionnaire.

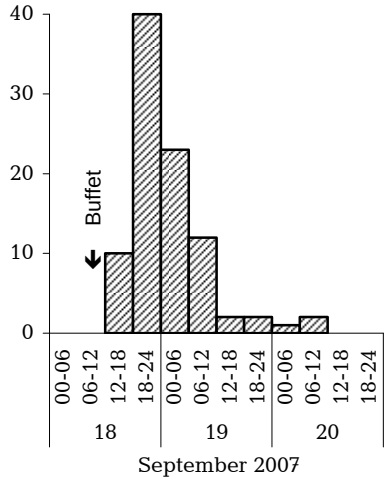
The median incubation period was 10.5 hours and the duration of illness was less than 24 hours in 74% of cases. Nearly all the affected subjects (99%) reported diarrhoea, Figure 1.

Other symptoms included abdominal pain (63%) and nausea (30%), while vomiting (7%) and fever (5%) were rare. Only three persons handed in stool samples, which were all negative.

Lunch was served as a buffet with a range of dishes. The only dish significantly associated with an increased disease risk was the chicken sauté with rice pilau (RR=2.4, p=0.008). Half of the employees who had tried this dish fell ill.

The buffet food was delivered by a North Jutland inn, which was inspected by Food Inspectorate Region North. The buffet dishes had been prepared one day in advance.

Figure 1. Diarrhoea cases following a buffet at Ledreborg castle on 18 September 2007, relative to time of disease onset



Due to the large quantities of food handled and insufficient cooling facilities, the cooling to below +10 dregree Celsius probably exceeded the recommended three hours. Furthermore, it is suspected that reheating prior to serving the food was insufficient because of a faulty oven. No leftovers of chicken sauté with rice pilau remained from the buffet, and therefore no microbiological analysis could be performed.

Commentary

The brief average incubation time, the relatively mild symptoms and the disease duration point to either Bacillus cereus or Clostridium perfringens as possible outbreak causes. Both bacteria occur naturally at low concentrations in some foods, without causing disease. Pathogenic colony counts may be reached by the reproduction, which may occur in heat-treated foods when the cooling time is excessive and/or re-heating is insufficient – as was probably the case in this outbreak. To facilitate microbiological diagnosis in connection with similar future outbreaks, it is essential that treating physicians request that patients hand in stool samples and specifically request that the DCM tests for B. cereus and C. perfringens.

(G. Falkenhorst, J. Bagdonaite, Department of Epidemiology, M. Lisby, S.B. Madsen, Food Inspectorate Region East and S. Frandsen, Food Inspectorate Region North)

24 October 2007

Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2007 figures are preliminary)

Table 1	Week 42 2007	Cum. 2007 [1]	Cum. 2006 [1]
AIDS	0	43	38
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	0	0
Creutzfeldt-Jakob	0	6	17
Diphtheria	0	0	0
Food-borne diseases	15	531	464
of these, infected abroad	2	101	116
Gonorrhoea	9	293	350
Haemorrhagic fever	0	0	0
Hepatitis A	0	20	33
of these, infected abroad	0	9	18
Hepatitis B (acute)	1	24	15
Hepatitis B (chronic)	9	274	264
Hepatitis C (acute)	1	6	7
Hepatitis C (chronic)	23	516	401
HIV	7	251	193
Legionella pneumonia	5	91	100
of these, infected abroad	0	20	28
Leprosy	0	0	0
Leptospirosis	0	13	8
Measles	1	3	27
Meningococcal disease	0	57	67
of these, group B	0	32	35
of these, group C	0	18	14
of these, unspec. + other	0	7	18
Mumps	0	6	16
Neuroborreliosis	3	78	63
Ornithosis	1	8	10
Pertussis (children < 2 years)	2	65	37
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	2	4
Listeria monocytogenes	1	9	7
Streptococcus pneumoniae	1	83	71
Other aethiology	0	12	10
Unknown aethiology	0	12	17
Under registration	2	6	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	6	187	50
of these, infected abroad	1	37	43
Syphilis	4	83	53
Tetanus	0	2	2
Tuberculosis	13	331	304
Typhoid/paratyphoid fever	0	18	25
of these, infected abroad	0	17	24
Typhus exanthematicus	0	2	0
VTEC/HUS	2	132	115
of these, infected abroad	2	44	41

[1] *Cumulative number 2007 and in corresponding period 2006*

Selected laboratory diagnosed infections

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

Table 2	Week 42 2007	Cum. 2007 [2]	Cum. 2006 [2]
Bordetella pertussis			
(all ages)	5	170	172
Gonococci	9	293	341
of these, females	1	46	61
of these, males	8	247	280
Listeria monocytogenes	3	48	42
Mycoplasma pneumoniae			
Resp. specimens [3]	5	295	344
Serum specimens [4]	11	356	301
Streptococci [5]			
Group A streptococci	2	92	119
Group B streptococci	2	77	77
Group C streptococci	1	18	19
Group G streptococci	2	101	115
S. pneumoniae	21	829	771
Table 3	**Week 40 2007**	**Cum. 2007 [2]**	**Cum. 2006 [2]**
MRSA	14	475	-
Pathogenic int. bacteria [6]			
Campylobacter	79	3206	2484
S. Enteritidis	17	445	480
S. Typhimurium	7	284	318
Other zoon. salmonella	13	581	557
Yersinia enterocolitica	2	213	145
Verocytotoxin-producing E. coli	2	130	116
Enteropathogenic E. coli	3	148	227
Enterotoxigenic E. coli	7	239	197

[2] *Cumulative number 2007 and in corresponding period 2006*

[3] *Resp. specimens with positive PCR*

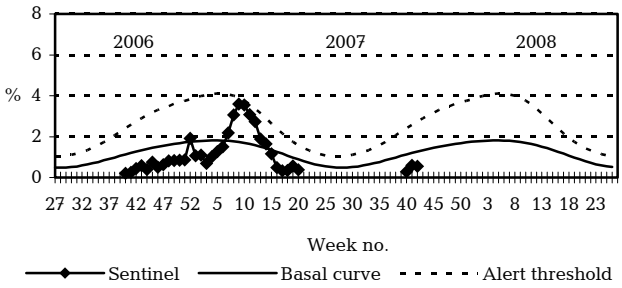
[4] *Serum specimens with pos. complement fixation test*

[5] *Isolated in blood or spinal fluid*

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

Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2006/2007/2008



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

24 October 2007