



## CHANGES IN THE BIOCHEMICAL SCREENING OF NEONATES

On the basis of the December 2008 report "Biochemical screening for congenital disease in the neonate" published by the Danish National Board of Health, two important changes have been introduced as from 2 February 2009 in connection with the blood sample taken from all neonates:

- Routine screening now comprises 15 diseases as opposed to the previous 2.

- The sample is drawn 48-72 hours after delivery, whereas previously it was drawn 5-7 days after delivery. The tests for lowered congenital metabolism and phenylketonuria are still performed. Among the 13 new diseases now comprised by the routine test, ten were selected from the analysis package "extensive screening", which has been an optional service of the SSI for the last eight years. The last three diseases (hyper-tyrosinaemia, biotinidase deficiency and congenital adrenal hyperplasia) are new screening targets. The 15 diseases now routinely included in the screening have a total incidence in Danish neonates of approx. 1:1,400. It is expected that approx. 45

new cases will be detected annually. The sampling was advanced to 48-72 hours after delivery because this interval is optimal for the detection of these 15 diseases and because it is essential to initiate treatment early. For further information and an overview of the 15 diseases, please see [www.ssi.dk/nyfoedte](http://www.ssi.dk/nyfoedte) (in Danish?).

(D.M. Hougaard, Neonatal Screening Lab, Dept. of Clinical Biochemistry)

## TWO SALMONELLA OUTBREAKS

Denmark has recently been exposed to two separate, but comparable salmonella outbreaks.

### Salmonella Typhimurium U288

In October-November 2008, 37 cases of *S. Typhimurium* phage type U288 with the same DNA profile were detected using the MLVA typing method. The majority of the cases lived in Zealand. The outbreak strain was found in a swine farm and in pork and a range of pork products (including raw pork sausage) from several companies, which all formed part of the same chain of delivery. Four patients died. It is uncertain to which extent the salmonella infections caused these deaths: the deceased were all above the age of 75 years and had underlying diseases.

Part of the contaminated pork had been sold to Sweden and in shops situated near the Norwegian border. Eleven cases were verified in Norway and two in Sweden.

### Salmonella Typhimurium U312

Since December 2008, a total of 42 cases of *Salmonella Typhimurium* phage type U312 have so far been registered. This outbreak will probably be traced back to a single slaughterhouse in Jutland and to the swine farms supplying it. The source of the outbreak may be fresh pork as well as processed pork products. This hypothesis is supported by interviews with the affected patients. The slaughterhouse is being monitored by the Danish Food Authorities and the outbreak is now receding.

## Commentary

The two *S. Typhimurium* outbreaks are similar in that they were both caused by Danish pork. In both outbreaks, pork products were traced back to specific swine farms and slaughter houses, processing or refinement plants. The findings were supported by typing results. The *S. Typhimurium* U288 outbreak was extraordinary as it spread to other Scandinavian countries. This stresses the importance of Nordic cooperation.

It is estimated that no direct link exists between the two outbreaks described above and the major outbreak of *Salmonella Typhimurium* U292, EPI-NEWS 49/08, which now counts 1,271 cases. The number of new weekly cases in this outbreak has dropped considerably in comparison with the summer and autumn of 2008.

(Department of Epidemiology on behalf of the Joint Outbreak Group)

## OUTBREAK OF LEGIONNAIRES' DISEASE IN CONNECTION WITH THE WORLD HANDBALL CHAMPIONSHIP IN CROATIA

In the period 16 January to 1 February 2009, the World Handball Championship was held in Croatia. Subsequently EWGLINET (European working group for travel associated legionnaires' disease) has received seven notifications of Legionella pneumonia among the spectators. The initial five cases reported were four Norwegians and a Dane; four males and a female aged 24-60 years. The remaining cases were a 63-year old Croatian male and a 49-year old Swedish male. All cases had disease onset 23-26 January 2009

and the diagnosis was confirmed by detection of Legionella antigens in the urine (LUT).

The travellers had stayed in the town of Porec, where many of the matches took place. Initially, their hotels were suspected as the source of infection. However, the travellers had stayed at four different hotels and one lodged privately. Consequently, a single hotel was an unlikely source of infection and the Croatian health authorities are currently looking for another common source of infection, including the sports centre which hosted the matches as the source of infection.

The incubation period for legionnaires' disease is up to ten days. The final matches in Porec took place on 27 January, and therefore the outbreak is not expected to produce further cases.

(S. Uldum, DBMP, G. St-Martin, Dept. of Epidemiology)

## COWPOX OUTBREAK IN FRANCE AND GERMANY

The French and German authorities have reported approx. 40 human cowpox cases. The majority are (word foreslår: majorities are?) young persons with contact to pet rats, and it is probable that such rats have caused the outbreak. This is supported by the detection of virus in rats and cowpox sequence analysis (identical genotype in the cases of both countries). The cases have been traced back to a single rat breeder in the Czech Republic. The rats have not been marketed in Denmark. Cowpox is caused by an orthopox virus related to smallpox virus and smallpox vaccine virus. Rodents such as mice and rats are hosts, but the infection is transferred to humans from cats and a range of other animal species. Human-to-human transmission does not occur. The infection frequently presents as solitary skin elements which develop into vesicles and possibly ulcers with subsequent crust formation and local lymphadenopathy. Eruptions are situated at the infection entry area. Sporadic cases have previously been observed in Denmark. The cowpox diagnosis is made at the SSI using PCR on vesicle fluid and possibly specific serology, and should be suspected when cases display compatible symptoms, particularly in young adults with no smallpox vaccination. (K. Mølbak, Dept. of Epidemiology)

## Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2009 figures are preliminary)

Table 1	Week 8 2009	Cum. 2009 <sup>1)</sup>	Cum. 2008 <sup>1)</sup>
AIDS	0	4	8
Cholera	0	0	0
Creutzfeldt-Jakob	0	1	1
Food-borne diseases	6	56	39
of these, infected abroad	0	6	10
Gonorrhoea	11	86	46
Hepatitis A	1	5	12
of these, infected abroad	0	2	5
Hepatitis B (acute)	0	3	2
Hepatitis B (chronic)	6	14	30
Hepatitis C (acute)	0	3	3
Hepatitis C (chronic)	5	42	51
HIV	8	42	32
Legionella pneumonia	2	19	18
of these, infected abroad	0	2	10
Leptospirosis	0	0	1
Measles	2	8	2
Meningococcal disease	2	13	15
of these, group B	0	6	6
of these, group C	2	5	2
of these, unspec. + other	0	2	7
Mumps	1	1	9
Neuroborreliosis	0	2	14
Ornithosis	0	0	1
Pertussis (children < 2 years)	2	9	13
Purulent meningitis			
Haemophilus influenzae	0	2	0
Listeria monocytogenes	0	1	0
Streptococcus pneumoniae	5	19	18
Other aethiology	0	1	9
Unknown aethiology	0	1	7
Under registration	0	11	-
Rubella (during pregnancy)	0	0	0
Rubella (congenital)	0	0	0
Shigellosis	0	15	12
of these, infected abroad	0	15	10
Syphilis	4	34	22
Tetanus	0	0	0
Tuberculosis	10	59	58
Typhoid/paratyphoid fever	0	3	5
of these, infected abroad	0	0	4
VTEC/HUS	3	16	19
of these, infected abroad	0	4	5

Table 1, comments

In 2009, none of the following have been reported:  
Anthrax, botulism, cholera, diphtheria, haemorrhagic fever, leprosy, plague, polio, rabies, typhus exanthematicus

1) Cumulative no. 2009 and corresponding period 2008

## Selected laboratory diagnosed infections

Number of specimens, isolates, and/or notifications received at Statens Serum Institut

Table 2	Week 8 2009	Cum. 2009 <sup>2)</sup>	Cum. 2008 <sup>2)</sup>
Bordetella pertussis (all ages)	4	21	19
Gonococci	5	62	55
of these, females	0	12	9
of these, males	5	50	46
Listeria monocytogenes	1	12	2
Mycoplasma pneumoniae			
Resp. specimens 3)	0	17	28
Serum specimens 4)	7	27	29
Streptococci 5)			
Group A streptococci	6	40	24
Group B streptococci	0	14	18
Group C streptococci	0	5	3
Group G streptococci	3	23	23
S. pneumoniae	32	286	236

Table 3	Week 6 2009	Cum. 2009 <sup>2)</sup>	Cum. 2008 <sup>2)</sup>
MRSA	9	96	59
Pathogenic int. bacteria <sup>6)</sup>			
Campylobacter	27	159	170
S. Enteritidis	2	26	30
S. Typhimurium	9	128	36
Other zoon. salmonella	8	66	80
Yersinia enterocolitica	3	18	27
Verocytotoxin-prod. E.coli	3	10	11
Enteropathogenic E. coli	5	18	9
Enterotoxigenic E. coli	4	16	37

Tables 2 & 3, comments

2) Cumulative no. 2009 and corresponding period 2008

3) Respiratory specimens with positive PCR

4) Serum specimens with pos. complement fixation test

5) Isolated in blood or spinal fluid

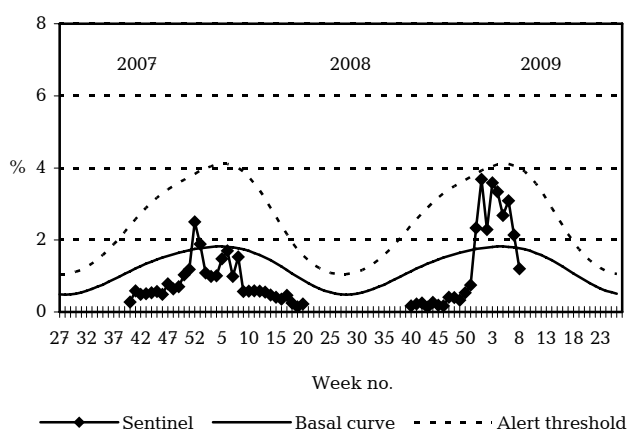
6) See also www.germ.dk

## Erratum, Creutzfeldt-Jakob (CJD), Table 1

In the beginning of 2009, unfortunately an error occurred in the CDJ reporting. The correct numbers are presented in Table 1.

## Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2007/2008/2009



Sentinel: Influenza consultations (as percentage of total consultations)

Basal curve: Expected frequency of consultations under non-epidemic conditions

Alert threshold: Possible incipient epidemic