



HEPATITIS B SCREENING OF PREGNANT WOMEN

From 1 November 2005, general screening of pregnant women for hepatitis B virus (HBV) infection is being introduced as a 2-year experimental scheme. The objective is to ensure that all neonates born to women with chronic HBV infection are vaccinated against hepatitis B at birth. Transmission of infection from mother to child at birth is effectively prevented if specific immunoglobulin and hepatitis B vaccination are given, followed by a further three vaccinations when the child is one, two and 12 months old, respectively. Several studies have shown that the current selective screening is deficient, and it is judged that only approx. 50-70% of women from the risk groups are tested in pregnancy. In addition, there are problems with follow-up vaccination of the newborn. General screening will mean that virtually all pregnant women with chronic HBV infection are identified, and it will also mean greater simplicity for healthcare staff.

General screening will be carried out within existing routines and laboratory facilities. Investigation for HBV infection is associated with the investigation of blood type and irregular antibodies that every pregnant woman undergoes at the first prenatal check-up with her own doctor. As before, the doctor will submit the blood sample to the local blood bank, where it will also be tested for HBV (HBsAg).

In connection with the 2-year experimental scheme, the Danish National Board of Health will prepare a special guide for the country's doctors. This supplements the National Board of Health's guide to the prophylaxis of viral hepatitis, June 2002, which also deals with the investigation and vaccination of families of pregnant women with chronic HBV infection.

The experimental scheme will be monitored in collaboration between the blood banks, Statens Serum Institut and the National Board of Health. This will provide better data about the occurrence of HBV infection among pregnant women in Denmark. After the first year, the National Board of Health will prepare an overall evaluation and assess whether to recommend that the scheme be made permanent. (Danish National Board of Health)

AVIAN INFLUENZA - STATUS

The outbreak of avian influenza A virus (H5N1) has previously been discussed in EPI-NEWS 10/05. The following is an update.

Occurrence among birds

In 2005, there were reports of an outbreak of avian influenza A virus (H5N1) in poultry in Cambodia, Indonesia, Kazakhstan, China, Russia (Novosibirsk), Republic of Korea, Thailand and Vietnam.

In addition, avian influenza A virus (H5N1) was found in January in a dead migratory bird in Hong Kong, and in April in 519 dead migratory birds in central China. In August, there have been reports of avian influenza A virus in 80 dead migratory birds in Mongolia, sub-type not yet available.

Information about outbreaks in birds can be found on www.oie.int.

Occurrence in humans

Since the first cases in January 2004, there have been reports of a total of 112 cases of infection with avian influenza virus A (H5N1) in humans, including 57 deaths.

Most cases occurred in Vietnam, with 90 patients, and of these, 40 died. The most recent case was reported in August 2005. The remaining cases were in Thailand, with 17 patients, including 12 dead, and in Cambodia, with 4 patients, all dead. From Indonesia, the first case of infection in humans with avian influenza virus A (H5N1) has been reported: a 38-year old man died in July 2005. Two of the man's daughters died after having symptoms consistent with avian influenza; laboratory confirmation of the diagnosis is to come. The other family members and 300 possible contact persons are all well. The health authorities are currently investigating possible sources of infection. Information about occurrence among humans can be found on www.who.int.

Comments

Avian influenza A virus (H5N1) has so far not mutated in such a way as to be able to cause a pandemic. However, continuing reports of infection in poultry and migratory birds, as well as the current deaths, confirm the risk, however little, of infection from birds to humans. There are currently no restrictions on travel to the affected countries. However, travellers are advised to avoid con-

tact with poultry, e.g. from markets where live animals are sold. There is no risk associated with eating thoroughly cooked poultry.

(S. Glismann, Department of Epidemiology)

OUTBREAK OF INFECTION WITH STREPTOCOCCUS SUIS IN CHINA

The WHO has reported an unusually high number of cases of infection caused by the bacteria *Streptococcus suis* in humans in the eastern province of Sichuan in China since the end of June.

The patients are mainly farmers who have slaughtered or handled pigs. Up to 3 August, a total of 206 persons have been infected, and of these, 38 died, giving a mortality of almost 20%. The patients' symptoms have been fever, nausea and vomiting, followed in severe cases by meningitis, cutaneous haemorrhages, toxic shock and coma.

Streptococcus suis causes usually only disease in pigs. Humans are infected in rare cases by direct contact with infected pigs. The risk of infection increases if there are cracks or sores on the skin. Infection gives rise to a skin infection, which in severe cases can spread and result in sepsis, meningitis or endocarditis.

The first cases of infection with *Streptococcus suis* in humans were described in Denmark in 1968 by Dr. Beate Perch, working at Statens Serum Institut. Since then, less than 200 cases in humans have been described worldwide, especially among abattoir workers and pig-breeders. In Denmark, on average, less than one case is diagnosed per year.

Comments

An outbreak of *Streptococcus suis* of this magnitude in humans is unusual. There are many unanswered questions concerning the current outbreak. Possible explanations may be that there is a new strain of the bacterium, or that those affected have been subject to particularly intense exposure to the infectious agent. Finally, there may be more than one cause of the outbreak. Further investigation of the outbreak is awaited.

There are at present no restrictions on travel to China.

(T. G. Krause, Department of Epidemiology)

Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2005 figures are preliminary)

| Table 1 | Week 31 2005 | Cum. 2005 ¹⁾ | Cum. 2004 ¹⁾ |
|--------------------------------|-----------------|----------------------------|----------------------------|
| AIDS | 1 | 37 | 29 |
| Anthrax | 0 | 0 | 0 |
| Botulism | 0 | 0 | 0 |
| Cholera | 0 | 0 | 0 |
| Creutzfeldt-Jakob | 0 | 2 | 7 |
| Diphtheria | 0 | 0 | 0 |
| Food-borne diseases | 12 | 268 | 330 |
| of these, infected abroad | 2 | 58 | 47 |
| Gonorrhoea | 4 | 306 | 208 |
| Haemorrhagic fever | 0 | 0 | 0 |
| Hepatitis A | 0 | 41 | 111 |
| of these, infected abroad | 0 | 10 | 19 |
| Hepatitis B (acute) | 0 | 23 | 23 |
| Hepatitis B (chronic) | 0 | 86 | 89 |
| Hepatitis C (acute) | 0 | 1 | 2 |
| Hepatitis C (chronic) | 0 | 198 | 208 |
| HIV | 4 | 190 | 183 |
| Legionella pneumonia | 5 | 60 | 48 |
| of these, infected abroad | 0 | 9 | 13 |
| Leprosy | 0 | 0 | 0 |
| Leptospirosis | 0 | 9 | 1 |
| Measles | 0 | 2 | 0 |
| Meningococcal disease | 0 | 60 | 67 |
| of these, group B | 0 | 32 | 39 |
| of these, group C | 0 | 13 | 9 |
| of these, unspec. + other | 0 | 15 | 19 |
| Mumps | 0 | 5 | 1 |
| Neuroborreliosis | 5 | 32 | 62 |
| Ornithosis | 0 | 12 | 4 |
| Pertussis (children < 2 years) | 3 | 100 | 108 |
| Plague | 0 | 0 | 0 |
| Polio | 0 | 0 | 0 |
| Purulent meningitis | | | |
| Haemophilus influenzae | 0 | 1 | 3 |
| Listeria monocytogenes | 0 | 1 | 1 |
| Streptococcus pneumoniae | 0 | 74 | 72 |
| Other aethiology | 1 | 11 | 5 |
| Unknown aethiology | 0 | 11 | 11 |
| Under registration | 1 | 16 | - |
| Rabies | 0 | 0 | 0 |
| Rubella (congenital) | 0 | 0 | 0 |
| Rubella (during pregnancy) | 0 | 0 | 0 |
| Shigellosis | 1 | 62 | 44 |
| of these, infected abroad | 1 | 55 | 36 |
| Syphilis | 2 | 75 | 92 |
| Tetanus | 0 | 2 | 0 |
| Tuberculosis | 3 | 262 | 259 |
| Typhoid/paratyphoid fever | 1 | 16 | 11 |
| of these, infected abroad | 0 | 14 | 9 |
| Thyfus | 0 | 0 | 0 |
| VTEC/HUS | 3 | 91 | 84 |
| of these, infected abroad | 0 | 34 | 13 |

¹⁾ Cumulative number 2005 and in corresponding period 2004

Selected laboratory diagnosed infections

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

| Table 2 | Week 31 2005 | Cum. 2005 ²⁾ | Cum. 2004 ²⁾ |
|--|-----------------|----------------------------|----------------------------|
| Bordetella pertussis (all ages) | 9 | 327 | 486 |
| Gonococci | 11 | 273 | 216 |
| of these, females | 0 | 30 | 28 |
| of these, males | 11 | 243 | 188 |
| Listeria monocytogenes | 1 | 17 | 22 |
| Mycoplasma pneumoniae | | | |
| Resp. specimens ³⁾ | 3 | 627 | 93 |
| Serum specimens ⁴⁾ | 2 | 524 | 225 |
| Streptococci ⁵⁾ | | | |
| Group A streptococci | 0 | 76 | 86 |
| Group B streptococci | 0 | 32 | 46 |
| Group C streptococci | 0 | 10 | 13 |
| Group G streptococci | 0 | 69 | 66 |
| S. pneumoniae | 14 | 763 | 853 |
| Table 3 | Week 29 2005 | Cum. 2005 ²⁾ | Cum. 2004 ²⁾ |
| Pathogenic int. bacteria ⁶⁾ | | | |
| Campylobacter | 105 | 1704 | 1721 |
| S. Enteritidis | 28 | 270 | 222 |
| S. Typhimurium | 12 | 257 | 214 |
| Other zoon. salmonella | 13 | 280 | 242 |
| Yersinia enterocolitica | 3 | 131 | 110 |

²⁾ Cumulative number 2005 and in corresponding period 2004

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