

## VTEC OUTBREAK - UPDATE

In an attempt to find the source of the outbreak of verocytotoxin-producing *E. coli* O157, EPI-NEWS 12/04, which has caused a total of 25 cases of disease, 11 patients who have become ill since 15 January and 55 control persons have been interviewed. Eight of the 11 patients are probably primary cases, while three may be secondary cases. Of the eight primary patients, seven had bought goods in a certain supermarket chain, matched odds ratio (mOR) 7.7; 95% CI 0.9-65. No other chain of shops was associated with increased risk of infection. On the basis of the interviews, milk from a certain dairy was the only foodstuff that was linked with an increased risk of infection. Five of the eight primary patients had drunk milk from the dairy in question, compared with five of 39 control persons, mOR 8.7; 95% CI 1.6-48. The last three primary patients did not remember that they had drunk milk from this dairy.

## Comments

The outbreak was to a high level of certainty caused by a foodstuff that is sold in a certain supermarket chain with a large sale of a special milk product from the dairy mentioned. There is reason to suspect that it is milk with a very low contamination of VTEC that is the cause of the outbreak. The Danish Veterinary and Food Administration issued a press release on 26 March stating that production of milk from the dairy mentioned would be stopped temporarily and that the plant would be inspected. Follow-up investigation will be able to clarify whether milk from this dairy was the cause of the outbreak. In the current situation, all cultures for enteropathogenic bacteria, especially from patients with stomach cramps and diarrhoea with or without blood in the stools, should still be extended to include VTEC O157. (K. Mølbak, Dept. of Epidemiology)

## TRICHINOSIS

Trichinosis is caused by infection with cysts of the nematode *Trichinella spiralis* and other *Trichinella* species from raw or inadequately heated meat from carnivorous animals. The disease is usually linked to meat from wild boar or other pigs, but is also frequent in the Arctic, where it is found in species including polar bears and walrus. Salting and smoking do not kill the trichinosis larvae. The Arctic variant, *Trichinella nativa*, is also resistant to freez-

ing. Meat inspection has virtually eliminated the disease in Denmark and the rest of Western Europe, except Finland and Spain. In the 1980s, there were outbreaks in France, where the source of infection was raw horsemeat; horses are fed with meat-containing fodder. In the United States, outbreaks among Southeast Asians have underlined the risk of illegal import of meat. In this event, and when for example pork and other meat are unexpectedly mixed, the diagnosis will not be immediately obvious. In Turkey in 2004, there was an outbreak involving 48 patients. The source of infection was a local delicacy prepared from raw veal, with which pork was mixed. In Denmark there have been cases among immigrants, probably because of ingestion of infected meat from abroad. In Greenland during the first half of the last century, there were major epidemics of trichinosis, but nowadays only occasional outbreaks are seen.

## Symptoms and treatment

Primary symptoms consist of general malaise and abdominal symptoms caused by the adult worm. After a few weeks, when the larvae have migrated to the musculature, periorbital oedema, fever, muscle pains and possibly rash, sometimes petechial, occur. The chronic illness is characterised by fatigue, muscle pains and a tendency to sweating. Eosinophilia is typical. In severe infections, pericardial effusion, myocardial injury and CNS symptoms may occur, and the infection may be fatal. Conversely, mild cases may be asymptomatic. The diagnosis is made serologically and by microscopy of muscle tissue. If the diagnosis is made in the early phase, before the larvae manage to encyst in the muscles, treatment with albendazole will probably be efficacious. This should be introduced with simultaneous treatment with steroids, as a severe allergic reaction may be provoked when the larvae disintegrate. Albendazole is not registered in Denmark, and the treatment should always be carried out by a specialist in infectious diseases. The symptoms usually disappear gradually, but may last for many years. The most important prophylaxis consists of effective inspection of meat. The consumption of raw meat should be avoided. In countries with insecure meat inspection, all meat must be considered to be a potential infection hazard. (J. Kurtzhals, G. Gomme, Depart-

ment of Clinical Microbiology, Copenhagen University Hospital)

## OUTBREAK OF TRICHINOSIS

In the second half of February, an outbreak of trichinosis in seven patients was confirmed. Those affected had in the course of the week beginning 5 January eaten from a smoked sausage brought home from Romania. The meat originated from a home-slaughtered pig. There was nothing left of the sausage. The index patient, an otherwise well 44-year old man, was admitted acutely with myalgia, periorbital oedema and a three-week history of diarrhoea, stomach pains and intermittent fever. He had pronounced eosinophilia and an elevated creatine kinase level. It was stated that contacts in Romania were treated for trichinosis after eating meat from the same pig. A total of eight persons had eaten from the sausage in Denmark. One was asymptomatic, with normal laboratory results. The other patients all had the same symptoms as the index patient. The seven patients were treated with albendazole and steroids for four weeks. In a muscle biopsy from the index patient, there was eosinophilic inflammation without demonstrable *Trichinella* cysts. Up to the week beginning 22 March, there has been serological confirmation of antibodies to *Trichinella* in four of the patients. All of the patients are still being followed by specialists in infectious diseases.

(R. B. M. Hansen, L. Hagelskjær Kristensen, Department of Medicine, J. Prag, Department of Clinical Microbiology, Viborg Hospital)

## MMR ARTICLE RETRACTED

Ten out of thirteen authors to an article in the *Lancet* in 1998 now acknowledge that they then postulated an association between MMR vaccination and autism that is not supported by the data they presented for this. The doctors have therefore issued a retraction of the article. The main author, Dr Andrew Wakefield, is among the authors who have not signed the retraction. The article caused much uncertainty among parents and caused a dramatic decline in the uptake of MMR in several countries, EPI-NEWS 49/97.

A large Danish study in 2002 found no basis for an association between MMR vaccination and autism. (S. Glismann, Dept. of Epidemiology)

## Patients with laboratory-diagnosed RSV and rotavirus infections

4th quarter of 2003 compared with the corresponding period in 2002

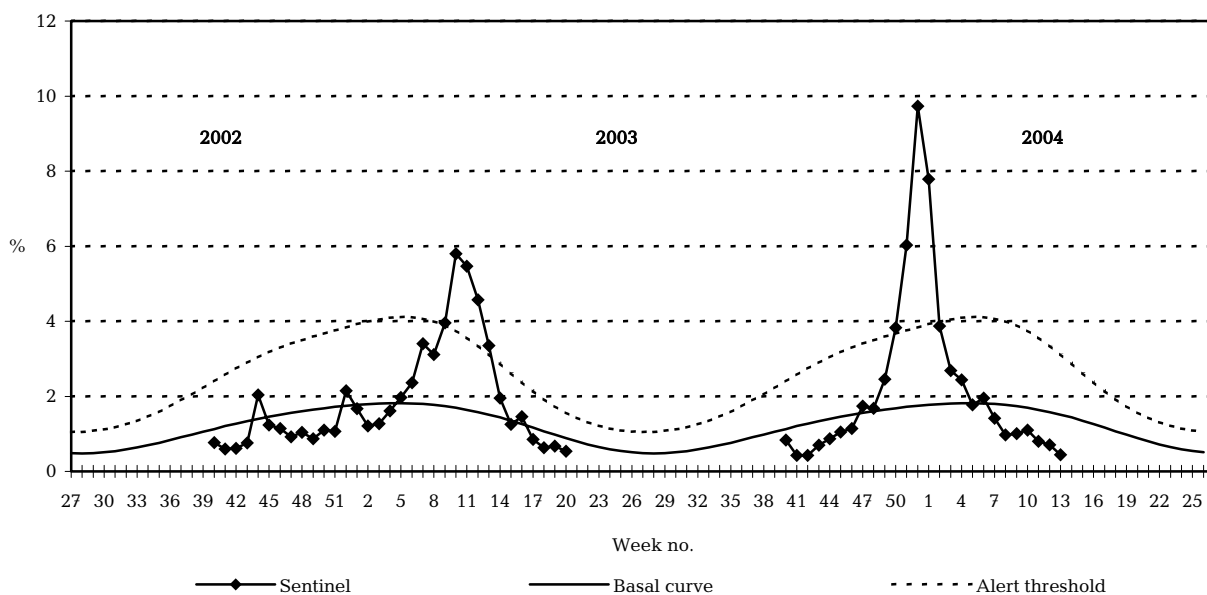
	RSV		Rotavirus	
	2003	2002	2003	2002
October	9	4	17	11
November	14	29	4	21
December	39	201	8	21
<b>Total</b>	<b>62</b>	<b>234</b>	<b>29</b>	<b>53</b>

Reported from the following Clinical Microbiology departments:

Aalborg Hospital (South), Aarhus Municipal Hospital, Herning Central Hospital, Hvidovre Hospital, Odense University Hospital, Slagelse Central Hospital, Viborg Hospital, Dept. of Virology, SSI.

## Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2002/2003/2004



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

(Dept. of Epidemiology)