



INFLUENZA SEASON 2003-2004

Sentinel surveillance of influenza was activated in the week beginning 29 September, 2003. An average of 123 GP's has reported every week. This is the same high level as in the last two seasons, which is very satisfying. We would thus like to take this opportunity to thank the participating sentinel doctors for their efforts.

In the whole of Europe, influenza activity started early, with incipient influenza activity in Denmark in the week beginning 17 November. After this, activity increased evenly, with greatest activity in the week beginning 22 December 2003, corresponding to an epidemic. The incidence subsequently declined week by week and ceased after the week beginning 26 January 2004. Reporting continued up to 17 May.

In the same period, the Influenza Laboratory has investigated 564 secretion samples for influenza virus. Of these, 219 were submitted by the sentinel doctors as spot tests. Positive findings appear in [table 1](#).

Table 1. Number of influenza viruses detected, by source, and virus strain, season 2003-2004

	Virus strain		
	A (H1N2)	A (H3N2)	B
Sentinel	0	54	1
Other	1	30	0
Total	1	84	1

The first A (H3N2) strain was detected in the week beginning 17 November and typed as A/Fujian/411/02-like virus, which was also the case for the other A (H3N2) strains. The last A (H3N2) strain was isolated in the week beginning 1 March. As in the previous season, one influenza A (H1N2) strain was also found. One influenza B strain was detected by PCR in the week beginning 15 March.

Influenza vaccine 2004-2005

The influenza A strains that have circulated in Denmark have, as in neighbouring countries, been less closely related to the strains that were used in the vaccine for the 2003-2004 season than might be desired. Consequently, WHO decided in February 2004 to alter the composition of the vaccine for the next season (2004-2005) to the following:

- A/New Caledonia/20/99(H1N1)-like virus
- A/Fujian/411/2002(H3N2)-like virus

- B/Shanghai/361/2002-like virus.

Influenza A (H1N2) was isolated in Europe for the first time in the 2001-2002 season. The H component is very similar to that which is contained in the previous H1N1 strains, and the N component is very similar to that in the H3N2 strains. Consequently, persons who have been infected with the influenza A strains of recent years will have a certain immunity, just as persons vaccinated with the vaccine for the 2003-2004 season were protected against A (H1N2) strains.

Vaccination coverage

A report from the Ministry of the Interior and Health shows that barely 47% of persons over the age of 65 have availed of the facility for free influenza vaccination in autumn 2003. In comparison, a total of 30% availed of the facility for vaccination in autumn 2002.

There was great variation between counties. Coverage was highest in the County of Aarhus (67%) and in the City of Copenhagen (65%), and lowest in Ringkøbing County (33%). The scheme will also apply for autumn 2004, and conditions will be the same as in 2003.

(S. Samuelsson, A. H. Christiansen, Dept. Epidemiology, P. Grauballe, Influenza Laboratory)

INFLUENZA VACCINE: INVESTIGATION OF THE EFFECT

Influenza A/Fujian/411/02/(H3N2) has been the predominant virus in the preceding season. As this virus was not included in the year's vaccine, the Serum Institute considered it relevant to study the effectiveness of the vaccine, and the possibility of conducting such a study within a sentinel surveillance programme. Consequently, a pilot case-control study was conducted. A case was defined as a person over the age of 25 with a nasal swab positive for A/Fujian virus. Per case four controls matched on age groups were selected from clients of the sentinel practitioners, who reported cases. 24 cases were identified, and 19 case-control sets were analysed. Of 19 cases and 73 controls, 2 and 11 respectively had been vaccinated. The vaccine effectiveness corrected for chronic diseases was 33% (95% CI [0-88]). At the end of the season, participating sentinel practitioners were asked for their evaluation of the pilot study. Most by far found the design and time consumption satisfactory and

wished to participate in a similar study again.

Comments

Because of the small sample size in the study, the vaccine effectiveness estimate cannot be used without great reservations. The pilot study was discussed and positively received in the European Influenza Surveillance Scheme (EISS). By expanding the study to more countries, it could be possible to provide a vaccine effectiveness estimate earlier in the season and for different age groups.
(A. Mazick, Dept. of Epidemiology)

TBE AND VACCINATION

Press coverage of studies conducted on deer has led to many enquiries about indications for vaccination against tick-borne encephalitis (TBE) in Denmark. As a result, SSI takes this opportunity to state that vaccination against TBE in Denmark can still only be recommended for persons with an association with Bornholm.

TBE is caused by a flavivirus and is transmitted by tick bites. Typical virus hosts are mice and deer. In Denmark, viruses are only known in connection with tick bites on the island of Bornholm.

As a guideline, vaccination is recommended for persons who are living permanently or have a fixed summer residence on Bornholm and who regularly leave the path in woods and scrubland. It is not usually recommended to vaccinate short-term tourists staying for some weeks. This applies, for example, for stays at school camps. However, in cases of behaviour with a particularly great risk of infection, such as forestry work, or where the woods are the fixed location for play, sport or hobby activities, vaccination can be considered on exposure of a few weeks' duration. One vaccine has been registered for children under the age of 16, and one for adults.

As side effects of the vaccine are relatively minor, there will seldom be reason to advise against vaccination, if there is an express wish for vaccination, EPI-NEWS 17/01 or www.ssi.dk. (Department of Epidemiology)

YELLOW FEVER

Yellow fever map, see back page. There are no alterations relative to 2002.

YELLOW FEVER 2003

