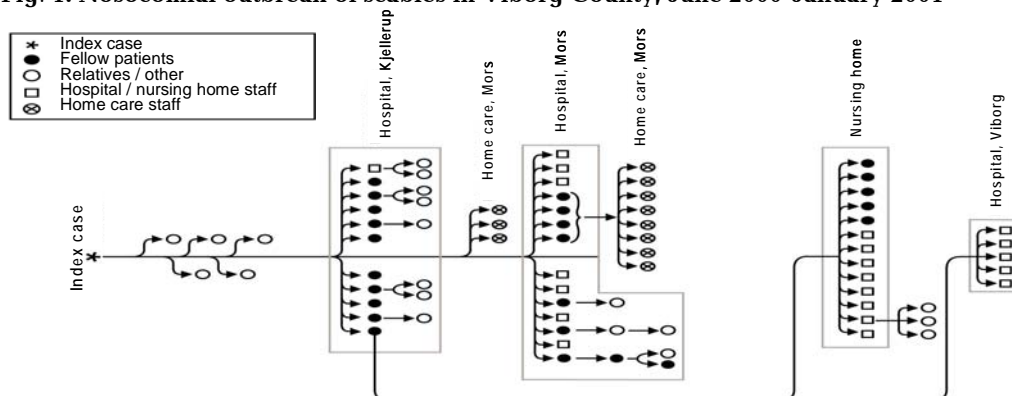


## NOSOCOMIAL OUTBREAK OF SCABIES IN VIBORG COUNTY

No. 7, 2001

Fig. 1. Nosocomial outbreak of scabies in Viborg County, June 2000-January 2001



In the second week of October 2000 a sizeable nosocomial outbreak of scabies was noted at Nykøbing Mors Hospital. The spread was presumably from a patient (the index case) admitted to a medical ward in mid-July. This patient died 10 days later from a malignancy, and scabies was not suspected during the admission. In mid-June the patient had spent three weeks on the dermatology ward at Kjellerup Hospital, where he had been treated with systemic glucocorticoid for a serious skin disease. In March the patient had been treated for itching by a dermatologist who had not found scabies. His wife and daughter, who had also suffered from severe itching for several months, were treated by the dermatologist without having scabies diagnosed. In August another dermatologist was consulted, who did find scabies. The index patient's three brothers were also infected and treated. The family had received a visitor from Africa during Christmas 1999. This person had severe itching but was not examined for scabies. It later became apparent that the index patient had infected 10 patients on the dermatology ward plus one of the nurses, who together had transmitted scabies to eight relatives, Fig. 1. A fellow patient from a nursing home infected eight employees and five residents at the home, and during a subsequent admission to Viborg Hospital infected five of the nursing staff. At Nykøbing Hospital seven patients connected with the index patient's care group had scabies diagnosed in the period September 2000 to January 2001. None of these had had direct skin contact with the

index case, who never left his single room. Several of these patients passed the infestation on, Fig. 1. Seven employees were infected. Nearly all the patients who were infected at the hospital during July-August were getting home nursing or lived in a nursing home. A total of 11 employees in six home-care districts were infected.

#### Action taken

In October, when the epidemic had only been recognized at a single hospital, guidelines on the prevention of scabies-spread at the hospital and nursing homes were drawn up in collaboration with the Medical Officer of Health. All general practitioners in the area and dermatologists in the county were informed, as well as the local newspapers. In November, when it became clear that the epidemic was more widespread, the Medical Officer of Health sent information to all the county's dermatologists, medical practices, hospitals, nursing homes, the home help and home nursing services, as well as to dermatologists and Medical Officers of Health in neighbouring counties, this being followed by a press statement. The administration of Viborg-Kjellerup Hospital wrote to inform all patients and staff categories that had been exposed. Patients were treated to good effect with two applications of permethrin at an interval of one week. Asymptomatic persons who had had skin contact were treated with a single application.

#### Summing up

From June 2000 to January 2001 a total of 77 persons were recorded as

having scabies as part of an unbroken chain of infection: the index case, 24 fellow patients, 19 relatives, 13 hospital employees, eight nursing-home employees, 11 home care assistants and one other. The index case and two fellow patients had scabies *norvegica*, in which the number of scabies mites in the skin is many times greater than in ordinary scabies. The mite can burrow under the skin within a few minutes, which may explain why staff were infected despite conventional hand hygiene. Staff without symptoms could have passed on the infection to other patients at an interval shorter than the shortest known incubation period of two weeks. Elderly persons with reduced mobility and immunity are more susceptible to scabies. Some were tentatively treated with agents containing steroids, which promote the development of scabies and can lead to scabies *norvegica*. Although the condition is well known, it was initially misdiagnosed, and infected staff did not always report this immediately at their place of work, which also contributed to the delay in recognizing the spread of infection. This relatively innocuous but resource-consuming epidemic revealed weaknesses in hygienic procedures, but the experience gathered will be put to future use, e.g. in the new Danish Standard for Infection-related Hygiene in the Health Sector. (E. Pettersson, nurse, J. Prag, Dept. of Clin. Microbiol., J. Juul, Dept. of Medicine, Nykøbing Hosp., T. Terowitz, Dept. of Dermatol., Kjelleruposp., J. Misfeldt, MOH, Viborg)

## Patients with laboratory-diagnosed chlamydia, by sex and county

3rd quarter 2000

County	Chlamydia, 3rd quarter			1999
	M	F	Total	
Cph. and Frb. Municip.	211	432	643	611
Copenhagen	66	231	297	285
Frederiksborg	57	118	175	183
Roskilde	40	95	135	121
West Zealand	64	150	215 <sup>1)</sup>	176
Storstrøm	33	81	115 <sup>1)</sup>	108
Bornholm	6	16	22	16
Funen	91	214	305	358
South Jutland	51	149	200	145
Ribe	42	86	128	136
Vejle	56	175	231	- <sup>2)</sup>
Ringkøbing	53	133	186	177
Aarhus	175	377	552	589
Viborg	36	88	124	45
North Jutland	81	259	342 <sup>1)</sup>	339
Whole Country	1062	2604	3670	3289

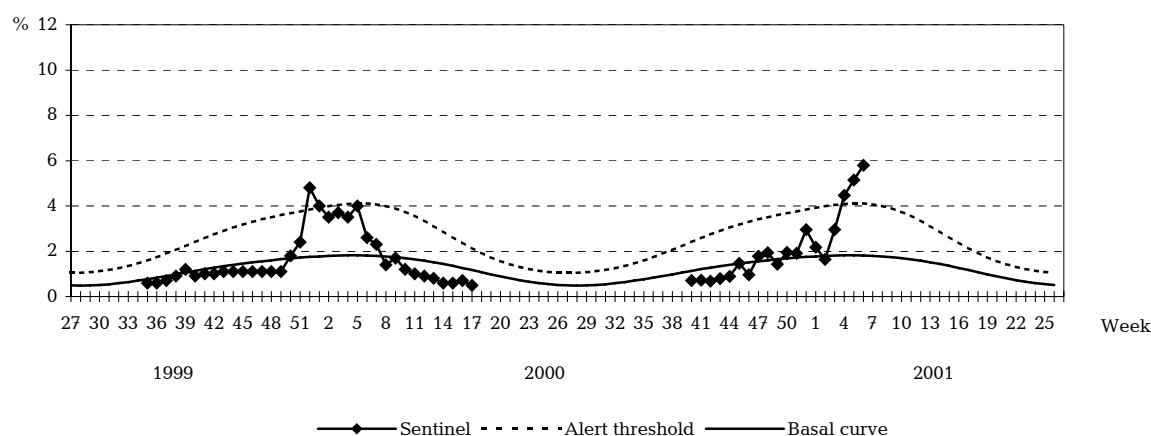
<sup>1)</sup> Sex not stated in some cases

<sup>2)</sup> Figures cover the whole country except from Vejle County

(Dept. of Respiratory Infections, Meningitis and STI's)

## Sentinel surveillance of influenza activity

Weekly percentage of consultations, 1999/2000/2001



**Sentinel:** Influenza consultations as % of total consultations

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

**Alert threshold:** Possible incipient epidemic

Sentinel surveillance is now indicating an epidemic incidence of influenza. The figures apply to the country as a whole and it is not possible to assess any difference in incidence between counties.

The situation in the rest of Europe can be seen on [www.eiss.org](http://www.eiss.org).

(Dept. of Epidemiology)