

TUBERCULOSIS 2002, PART II

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TB treatment 2000/2001

Voluntary monitoring of tuberculosis (TB) treatment was established in Denmark at the beginning of 2000, to which purpose a standard form is sent to the Department of Epidemiology. For 2000, the department received only 203 forms out of 548 possible (37%), and for 2001 only approximately 200 out of 511 (39%). In spring 2003, a reminder was sent for more than 300 missing forms for 2001. This brought the total feedback range for 2001 up to 83% (426/511). Consequently, this report is based on treatment results for 37% and 83% of the notified patients for 2000 and 2001, respectively, EPI-NEWS 43/01 and 48/02.

For 2001, there was a significant regional variation, as reporting for two counties was under 33%, for three counties under 70%, for one county under 82% and for the remaining 10 counties at least 89%. Four counties had 100% reporting, but constituted only 4% (18/511) of notified cases. TB treatment is long-lasting, normally 6 months. In connection with the above, this has meant that the treatment outcome for 2000 and 2001 has not been available until now.

Treatment outcome

The possible outcomes of TB treatment are: 1) Cured, 2) Completed, 3) Died, 4) Failed, 5) Defaulted, 6) Transfer (patients who leave Denmark during treatment) and 7) Other. The sum of 1) and 2) constitutes the outcome "Treatment success".

The outcome "Cured" is only used for patients with culture-positive pulmonary TB and requires two negative control cultures. For this group, the requirements for the outcome "Completed treatment" are also different from patients with culture-negative pulmonary TB and all other forms of TB, since there must be at least one negative control culture.

WHO's global target is that at least 85% of patients with culture-positive pulmonary TB be treated with success. Received treatment results for all types of TB patients and for patients with culture-positive pulmonary TB, classified by place of origin, are shown in [table 1](#) and [table 2](#). For 2000 and 2001, the proportion of all patients with TB who were treated with success was 87% and 88%, respectively. In both years, 4% died during treatment.

Table 1. Received treatment outcomes for patients with tuberculosis, regardless of localisation, 2000 (203/548) and 2001 (426/511)

Treatment outcome	2000				2001					
	Da-nes	Immi-grants	To-tal	%	Da-nes	%	Immi-grants	%	To-tal	%
Cured	35	29	64	32	60	41	80	29	140	33
Treatm. compl.	31	82	113	56	63	43	170	61	233	55
Treatm. success	66	111	177	87	123	83	250	90	373	88
Death	7	1	8	4	12	8	4	1	16	4
Treatm. failure	1	0	1	0	2	1	0	0	2	0
Treatm. interrupt.	2	2	4	2	4	3	3	1	7	2
Transfer	0	1	1	0	3	2	8	3	11	3
Other	5	7	12	6	4	3	13	5	17	4
Total	81	122	203	100	148	100	278	100	426	100

Table 2. Received treatment outcomes for patients with culture-positive pulmonary tuberculosis, 2000 (137/313) and 2001 (213/254)

Treatment outcome	2000				2001					
	Da-nes	Immi-grants	To-tal	%	Da-nes	%	Immi-grants	%	To-tal	%
Cured	33	23	56	41	50	52	58	50	108	51
Treatm. compl.	22	39	61	45	32	33	45	38	77	36
Treatm. success	55	62	117	85	82	85	103	88	185	87
Death	7	0	7	5	6	6	1	1	7	3
Treatm. failure	1	0	1	1	1	1	0	0	1	0
Treatm. interrupt.	2	0	2	1	2	2	1	1	3	1
Transfer	0	1	1	1	2	2	4	3	6	3
Other	3	6	9	7	3	3	8	7	11	5
Total	68	69	137	100	96	100	117	100	213	100

The higher mortality among Danish cases may be explained by these being elderly persons. For example, in 2002, the proportion of Danes over 64 years with TB was 23%, against 4% among immigrants. Treatment failure was only reported in three cases. A total of 11 patients interrupted treatment (for more than eight consecutive weeks in six months). Twelve patients left the country during treatment.

Comments

WHO's success criteria were fulfilled both years. However, the figure for 2000 in particular must be considered with reservation. The calculation of the Danish treatment results are based on only a little more than a third of notified cases in 2000 and 4/5 of notified cases in 2001. The missing data would most probably have a negative effect on the result. Monitoring of TB treatment, and especially of infectious patients, is an important aspect of TB control, so a primary feedback rate close to 100% is desirable. The missing data for 2001 are still being retrieved. Comments to part I to follow in part III. (P. Andersen, Dept. of Epidemiology)

YERSINIA OUTBREAK IN JUTLAND

In August-September 2003, there was a cluster of 14 cases of *Yersinia enterocolitica* infection in North Jutland. Eight cases were closely investigated in a case-control study with two matched controls per case. Six of the patients were ≤ 5 years of age, one was 16 and one was 41 years old. All had gastroenteritis with diarrhoea.

Several also had fever, nausea, vomiting and stomach pains and one had bloody stools. The study showed that the *Yersinia* infections were associated with the consumption of meat bought from a particular butcher (OR 11.7). The type of meat was probably sausages. *Yersinia* infections are most common in children < 5 years of age. The incidence is low in adults who often develop reactive arthritis 1-8 weeks after symptoms of gastroenteritis. The natural reservoir is pigs, and pork is thought to be the most significant source of infection. This has not previously been proven, partly because outbreaks caused by *Yersinia* are very rare.

(MOH North Jutland, Clinical Microbiology Dept. Aalborg, Danish Zoonosis Centre, DBMP, SSI)

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Patients with confirmed *Listeria monocytogenes* infection

3rd quarter of 2003 compared with the corresponding period in 2002, and 2002, whole year

	3rd quarter 2003	3rd quarter 2002	Total 2002
Mother/child infection	2	-	2
Septicaemia	7	8	19
Meningitis	3	4	5
Other	1 ¹⁾	2 ²⁾	3
Total	13	14	29

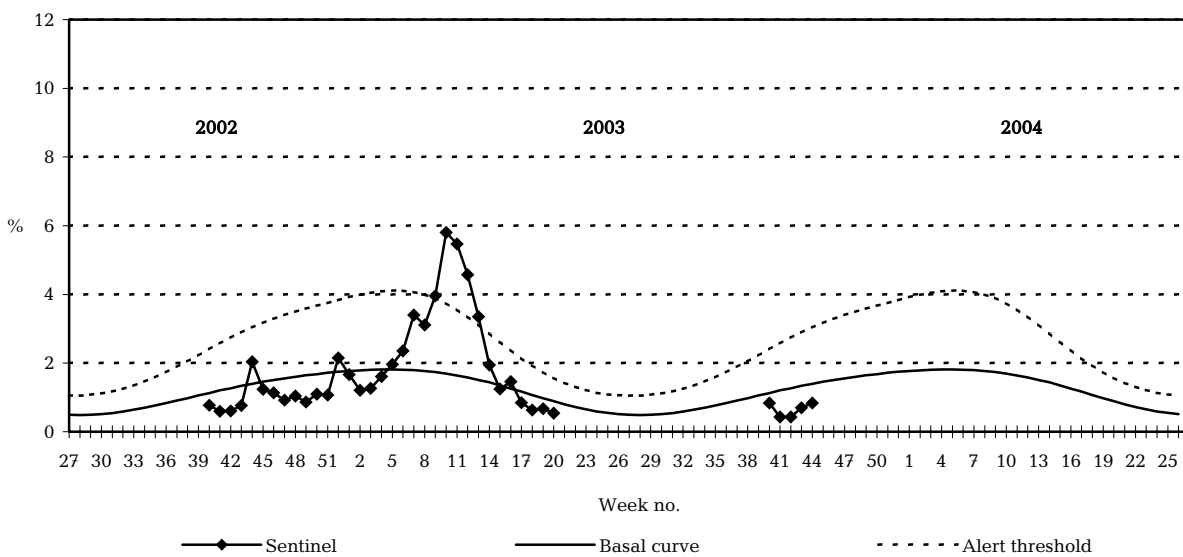
¹⁾ Peritoneal fluid

²⁾ Synovia, urine

(Dept. of Bacteriology, Mycology & Parasitology)

Sentinel surveillance of 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)