EPI-NEWS NATIONAL SURVEILLANCE OF COMMUNICABLE DISEASES

100%

75%

50%

25%

0% 1994

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CHLAMYDIA 1999

■ PCR

■LCR

□ELISA

■IF Culture

■ ELISA+LCR/PCR

1995

No. 38, 2000

Fig. 1. Proportion of different methods used for chlamydia diagnosis in Denmark, 1994-1999

1996

According to the nation-wide laboratory reporting system, 13,930 cases of chlamydia (oculogenital C. trachomatis infection) were diagnosed in 1999. This corresponds to an annual incidence of 262 per 100,000. Since 1994, about 260-280 thousand tests have been performed per year, with positive findings in about 5% of those examined, Table 1.

Table 1. Chlamydia 1994-1999: No. of tests and no. (%) of laboratory-diagnosed chlamydia cases

1	9	<i>1</i>	
Year	Tests	Cases	(%)
1994	277,464	13,869	(5.0)
1995	271,555	13,038	(4.8)
1996	281,579	13,369	(4.7)
1997	271,652	13,596	(5.0)
1998	272,920	12,831	(4.7)
1999	262,131	13,930	(5.3)

In 1999 the age distribution remained unchanged from previous years, 81% of male and 89% of female cases falling within the 15-29year age range, Table 2. 29% of patients diagnosed as having chlamydia in 1999 were men.

Table 2. Age-specific occurrence of chlamydia in cases where both age and sex were stated, 1999

	Men		Women		
-	per			per	
Age	No.	100,000	No.	100,000	
<1	43	126	32	100	
1-4	0	0	2	1	
5-9	1	1	3	2	
10-14	2	1	33	23	
15-19	551	376	2,764	1,962	
20-24	1,686	950	4,273	2,477	
25-29	1,002	515	1,712	910	
30-34	385	177	605	293	
35-39	170	85	270	141	
40-44	85	49	97	53	
45-49	28	15	34	19	
50+	47	6	33	3	
Total	4,000	153	9,858	367	

Diagnosis

The proportion of cases diagnosed by DNA methods (PCR/LCR) was 58% in 1999, <u>Fig. 1</u>. This represents the average for the whole year, but as several laboratories changed to the DNA methods during the course of the year, the proportion was still higher by the end of 1999. Other things being equal, the change to a more sensitive test method should

increase the proportion of positive test results. As the DNA methods are more sensitive than ELISA, the rise in the number of chlamydia cases by about 1000 from 1998 to 1999 could be due to the very fact that many laboratories introduced PCR/LCR in 1999. It should be noted that culture is the only method that is 100% specific and should therefore be used for children and in cases of suspected sexual abuse. To ensure that the specimen is adequate for culture, the swab should make good contact with the mucous membrane and should be sent to Statens Serum Institut in the chlamydia transport medium (SSI). Urine is unsuitable for testing by culture.

Chlamydia in children

In 1999 chlamydia was found in 129 children under 15 years of age. Of 88 children under 1 year, 80 had eye infections (conjunctivitis), 91% of which were in neonates.

Testing of men

In 1999 the diagnosis of chlamydia was made from urethral swabs from 3468 men. 60% of these were tested by PCR/LCR. 370 of 4021 men with chlamydia were diagnosed by urine testing and 328 of these cases were tested by a DNA method.

There are still considerable geographical differences in the M/F ratio for chlamydia cases, <u>Table 3</u>. This varies from 0.32 in Bornholm County to 0.55 in Aarhus County.

Comments

The number of patients with laboratory-diagnosed chlamydia is still high in Denmark, and the number of

Table 3. Incidence of laboratorydiagnosed chlamydia by county and sex, 1999

1998

1999

1997

	No. p	er 100	,000
County	M	F	M/F
Cph. and Frb.			
Municipalities	242	567	0.43
Cph. County	103	297	0.35
Frederiksborg	98	261	0.38
Roskilde	83	247	0.33
West Zealand	135	335	0.41
Storstrøm	95	226	0.42
Bornholm	82	258	0.32
Funen	168	413	0.41
South Jutland	150	378	0.4
Ribe	170	312	0.54
Vejle	115	337	0.34
Ringkøbing	127	358	0.35
Aarhus	265	480	0.55
Viborg	77	217	0.35
North Jutland	145	383	0.38
Total	153	367	0.42

patients, e.g. partners, who are treated without prior testing, is unknown. The figures suggest that far too few men are being tested, and this is probably because contact tracing is being carried out on an all too inadequate scale. The increasing availability of urine testing should encourage more men to allow themselves to be tested. Greater importance should be given to testing more persons in the age group with the highest frequency of infection, i.e. men and women in the 15-29-year age range. (Mette Bennedsen, Neisseria Unit,

Inge Holm, Biostatistics Unit)

20 September 2000

Monthly no. of serum specimens positive for Mycoplasma pneumoniae by complement fixation test, 2000

No. of positive findings at Statens Serum Institut

-	April	May	June	
Positive specimens 2000	39	33	21	
Positive specimens 1999	44	51	50	
Average for the preceding 5 years	55	45	48	

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