

According to the national laboratory notification system, 2006 saw 24,866 confirmed cases of chlamydia (oculogenital infection caused by *Chlamydia trachomatis*). This corresponds to an annual incidence of 458 per 10⁵ (441 per 10⁵ in 2005). From 1994 to 2004, 260,000-300,000 analyses were performed annually, and chlamydia was detected in approximately 5.5% of those investigated. The corresponding figures for 2006 were 324,660 and 7.7%, [Table 1](#).

Table 1. Analyses and laboratory confirmed chlamydia cases, 1994-2006. Percentage of positives in ()

Year	Analyses	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)
2000	268,471	14,735	(5.5)
2001	280,694	15,150	(5.4)
2002	275,447	16,203	(5.9)
2003	268,008	18,406	(6.9)
2004	296,979	21,624	(7.3)
2005	316,119	23,854	(7.5)
2006	324,660	24,866	(7.7)

Among males, 82% were aged 15-29 years, while 89% of females belonged to this age group. This distribution remained stable compared with 2005, [Table 2](#).

Table 2. Age specific incidence of chlamydia for the 24,841 cases in which both age and gender was stated, 2006

Year	Males		Females	
	No.	Per 10 ³	No.	Per 10 ³
<1	40	122	39	123
1-4	0	0	0	0
5-9	0	0	1	1
10-14	21	12	155	91
15-19	2,172	1,345	6,254	4,095
20-24	3,530	2,391	5,416	3,768
25-29	1,866	1,114	2,216	1,335
30-34	850	439	915	477
35-39	384	188	370	187
40-44	194	93	165	82
45-49	76	40	62	34
50+	66	7	49	5
Total	9,199	343	15,642	571

Males constituted 37% of the diagnosed cases. The male proportion increased steadily from 23% in 1994 to 36% in 2005. The incidence among males and females was 6% and 3% higher than in 2005, respectively. The M/F ratio was below the

CHLAMYDIA 2006

national average in nine counties and under 0.5 in one county (Roskilde), [Table 3](#).

Table 3. Laboratory confirmed chlamydia incidence per 10⁵ by county, gender, and M/F ratio, 2006

County	No. per 10 ⁵		M/F ratio
	M	F	
Cph. & Frb.			
Municipalities	596	828	0.72
Cph. County	305	480	0.64
Frederiksborg	247	414	0.60
Roskilde	210	494	0.43
West Zealand	256	500	0.51
Storstroem	265	467	0.57
Bornholm	309	443	0.70
Funen	336	578	0.58
South Jutland	263	470	0.56
Ribe	342	541	0.63
Vejle	310	587	0.53
Ringkoebing	307	530	0.58
Aarhus	409	646	0.63
Viborg	275	473	0.58
North Jutland	361	658	0.55
Total	343	571	0.60

Diagnosis

All Danish laboratories now employ DNA amplification methods for chlamydia diagnosis. Chlamydia was detected in urine samples in 27% of the cases as opposed to 23% in 2005. Male samples constituted 94% of the positive urine samples (96% in 2005). Urine was used as sample material in 70% of the male chlamydia cases (60% in 2005). Urine sample analyses were reported from 16 of the 17 laboratories; two more than in 2005. Among these, the proportion of patients with chlamydia who were diagnosed by urine samples varied between 9% and 58% (14-54% in 2005). One county had two diagnosing laboratories, and one laboratory received specimens from the entire country. The proportion of patients with chlamydia diagnosed by urine samples varied between counties from 10% to 35% (2-35% in 2005). Rectal chlamydia was detected in nine males.

Chlamydia in children

Chlamydia was detected in 257 children under the age of 15 years. Among these, 80 (31%) were under 1 year old, of whom 78 had conjunctivitis. Among 36 children ≤ 1 year with conjunctivitis, for whom age had been stated in months, 35 were younger than one month and one child was one month old. Urogenital chlamydia was detected in 15

thirteen-year-old and 137 fourteen-year-old girls and in 20 fourteen-year-old boys. On suspicion of sexual abuse of children as well as adults, a DNA amplification technique as well as culture should be used to examine for Chlamydia. The specimen taking method and dispatch should be agreed beforehand with the relevant laboratory.

Commentary

The number of chlamydia analyses increased by 3% from 2005 to 2006. The number of diagnosed cases continues the increasing trend; 4% higher than in 2005.

The age-specific incidence increased for males and females in the age groups 15-19, 20-24 and 25-29 years. Among females, however, the increase in the two last-mentioned age groups was modest, while the incidence among 15-19-year-old females was higher than that observed among 20-24-year-old females, as was the case in 2005. It is not known, if this reflects a real increase in the incidence or increased examination efforts in this age group.

Males constituted the most substantial proportion of the detected cases observed to date (37%). Urine samples accounted for an increased share of the positive tests, but it is not known if they also constitute an increasing proportion of all samples tested, as gender and age distribution is only known for positive tests. (S. Hoffmann, DBMP)

CHLAMYDIA TRACHOMATIS MUTANT

In the Swedish province of Halland, a decrease was observed in the proportion of positive findings among samples tested for Chlamydia trachomatis (CT) in the late summer of 2006. This tendency was caused by a particular CT variant, whose plasmid DNA has mutated in such a manner it cannot be detected by some commercially available diagnostic kits. In some areas of Sweden, the mutated strain currently constitutes nearly 60% of diagnosed cases. Furthermore, the strain has been detected in Norway. Statens Serum Institut examined approximately 2,000 samples in the period October 2006 – March 2007 and detected the mutant in a single sample in March 2007. Consequently, the prevalence of the mutant in Denmark is not fully known at present.

(J.S. Jensen, DBMP)

Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2007 figures are preliminary)

Table 1	Week 18 2007	Cum. 2007 ¹⁾	Cum. 2006 ¹⁾
AIDS	3	22	14
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	0	0
Creutzfeldt-Jakob	0	3	4
Diphtheria	0	0	0
Food-borne diseases	7	164	119
of these, infected abroad	0	28	31
Gonorrhoea	1	121	151
Haemorrhagic fever	0	0	0
Hepatitis A	0	11	5
of these, infected abroad	0	4	1
Hepatitis B (acute)	0	7	9
Hepatitis B (chronic)	2	88	166
Hepatitis C (acute)	0	2	5
Hepatitis C (chronic)	2	101	264
HIV	7	103	74
Legionella pneumonia	0	30	27
of these, infected abroad	0	4	5
Leprosy	0	0	0
Leptospirosis	1	6	3
Measles	0	2	18
Meningococcal disease	0	13	35
of these, group B	0	6	18
of these, group C	0	6	6
of these, unspec. + other	0	1	11
Mumps	0	4	8
Neuroborreliosis	0	26	13
Ornithosis	0	1	6
Pertussis (children < 2 years)	0	28	22
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	1	1
Listeria monocytogenes	0	5	4
Streptococcus pneumoniae	0	29	38
Other aethiology	0	3	2
Unknown aethiology	0	3	9
Under registration	3	41	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	1	20	22
of these, infected abroad	0	11	20
Syphilis	0	30	27
Tetanus	0	0	0
Tuberculosis	13	137	126
Typhoid/paratyphoid fever	0	5	11
of these, infected abroad	0	5	11
Typhus exanthematicus	0	1	0
VTEC/HUS	1	56	40
of these, infected abroad	0	19	10

¹⁾ Cumulative number 2007 and in corresponding period 2006

Selected laboratory diagnosed infections

Number of specimens, isolates, and/or notifications received in SSI laboratories

Table 2	Week 18 2007	Cum. 2007 ²⁾	Cum. 2006 ²⁾
Bordetella pertussis (all ages)	1	47	93
Gonococci	3	111	152
of these, females	0	15	29
of these, males	3	96	123
Listeria monocytogenes	2	19	11
Mycoplasma pneumoniae			
Resp. specimens ³⁾	2	223	209
Serum specimens ⁴⁾	0	249	184
Streptococci ⁵⁾			
Group A streptococci	3	55	70
Group B streptococci	0	31	36
Group C streptococci	0	7	7
Group G streptococci	0	43	44
S. pneumoniae	17	487	491
Table 3	Week 16 2007	Cum. 2007 ²⁾	Cum. 2006 ²⁾
Pathogenic int. bacteria ⁶⁾			
Campylobacter	40	672	500
S. Enteritidis	13	96	88
S. Typhimurium	8	92	83
Other zoon. salmonella	23	167	137
Yersinia enterocolitica	7	88	49
Verocytotoxin-producing E. coli	2	59	37
Enteropathogenic E. coli	2	44	62
Enterotoxigenic E. coli	9	49	59

²⁾ Cumulative number 2007 and in corresponding period 2006

³⁾ Resp. specimens with positive PCR

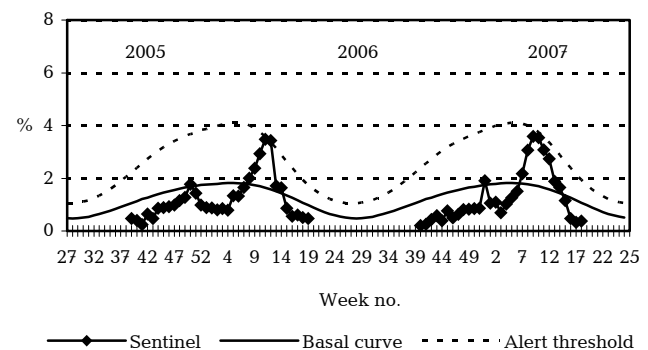
⁴⁾ Serum specimens with pos. complement fixation test

⁵⁾ Isolated in blood or spinal fluid

⁶⁾ See also www.germ.dk

Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2005/2006/2007



Sentinel: Influenza consultations (as percentage of total consultations)

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

Alert threshold: Possible incipient epidemic