# **EPI-NEWS**

NATIONAL SURVEILLANCE OF COMMUNICABLE DISEASES

Dept. of Epidemiology Statens Serum Institut • 5 Artillerivej • DK 2300 Copenhagen S Tel.: +45 3268 3268 • Fax: +45 3268 3874 www.ssi.dk • epinews@ssi.dk • ISSN: 1396-4798



According to the National Laboratory Notification system, 23.854 cases of Chlamydia (oculo-genital infection caused by Chlamydia trachomatis) were diagnosed in 2005. This corresponds to an annual incidence of 441 per 10<sup>5</sup> (401 per 10<sup>5</sup> in 2004).

From 1994 to 2004, 260,000-300,000 analyses were performed annually, of which Chlamydia was demonstrated in approximately 5%. In 2005, the corresponding figures were 316,119 and 7.5%, <u>Table 1</u>.

# Table 1. Analyses and laboratorydiagnosed chlamydia cases 1994-2005. Percentage positive 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)

The male age distribution changed in 2005 when 83% were 15-29 years of age compared with the previous years' approximately 80%, while 89% of females were in that age group, <u>Table 2</u>.

#### Table 2: Age-specific incidence of chlamydia for the 23,805 cases for whom both age and gender were stated, 2005

	Men		Won	Women	
Year	No.	Per 10 <sup>5</sup>	No.	Per 10 <sup>5</sup>	
<1	44	133	31	98	
1-4	2	1	0	0	
5-9	0	0	0	0	
10-14	17	10	152	90	
15-19	1,943	1,243	5,766	3,891	
20-24	3,349	2,264	5,379	3,720	
25-29	1,892	1,089	2,274	1,322	
30-34	746	385	912	478	
35-39	354	168	389	191	
40-44	176	86	159	80	
45-49	77	41	44	24	
50+	66	7	33	3	
Total	8,666	324	15,139	554	

Males accounted for 36% of the cases diagnosed in 2005. This proportion has been steadily increasing from 23% in 1994 to 35% in 2004. In 2005, the M/F ratio for incidence was below 0.50 only in Bornholm and South Jutland, <u>Table 3</u>. In 2004, this also applied to Roskilde, Storstrom and Funen.

# **CHLAMYDIA 2005**

Table 3. Laboratory-confirmed chlamydia incidence per  $10^5$  by county, gender and M/F ratio, 2005

	Number per 10 <sup>5</sup>		M/F
County	М	F	ratio
Cph/Frb Mun.	586	855	0.69
Copenhagen	307	471	0.65
Frederiksborg	223	378	0.59
Roskilde	227	452	0.50
West Zealand	247	494	0.50
Storstrom	254	487	0.52
Bornholm	187	400	0.47
Funen	304	560	0.54
South Jutland	273	551	0.49
Ribe	338	582	0.58
Vejle	309	531	0.58
Ringkobing	262	454	0.58
Aarhus	367	608	0.60
Viborg	262	470	0.56
North Jutland	309	588	0.53
Total	324	554	0.58

## Diagnosis

All Danish laboratories use DNA amplification methods for chlamydia diagnosis. One laboratory also performs culture, and one laboratory stopped using direct immunofluorescence microscopy during the first quarter of 2005. Chlamydia was detected in urine samples in 5,420 cases (23% in 2005 compared with 18% in 2004). Male samples constituted 96% of the positive urine samples. Urine sample analyses were reported from 14 of the 17 laboratories, i.e. one more than in 2004. Among these, the proportion of patients with chlamydia who were diagnosed by urine samples varied between 14% and 54% (2 to 57% in 2004). One county had two diagnosing laboratories, and one laboratory received specimens from the whole country. The proportion of patients with chlamydia diagnosed by urine samples varied from 2 to 35% between counties (0.3 to 32% in 2004). Rectal chlamydia was detected in 12 males.

## Chlamydia in children

Chlamydia was detected in 276 children under the age of 15 years. Of these, 76 (28%) were <1 year old, and 75 of them had conjunctivitis; in one case the anatomical site sampled was not stated. Among 51 children <1 year with conjunctivitis for whom the age was stated in months, 88% were <1 month and 12% were aged 1 month. Urogenital Chlamydia was detected in 18 13-year-old and 125 14-year-old girls as well as in one 12year-old, one 13-year-old, and 14 14year-old boys. On suspicion of sexual abuse of children or adults, the

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validity of positive test results is particularly important. In such cases, the DNA amplification techniques used to diagnose chlamydia should be confirmed by culture. For specimen taking, chlamydia swabs for urogenital specimens and chlamydia transport medium should be used. Sampling method and dispatch should be agreed beforehand with the relevant laboratory.

#### Comments

The number of chlamydia analyses performed in 2005 was 6% higher than in 2004 and 15% higher than the average for the last ten years. The number of diagnosed chlamydia cases continued an upward trend, exceeding 2004 levels with 10%. The age specific incidence increased for males and females in the age groups 15-19, 20-24 and 25-29 years. For females the increase was rather modest in the two last-mentioned age groups. For the first time ever, the incidence among females aged 15-19 years exceeded the incidence among females aged 20-24 years. The share of males among the diagnosed cases (36%) is the largest share recorded to date. Urine samples accounted for an increasing share of the positive tests, but it is unknown if urine samples also constitute an increasing share of all samples tested. Gender and age distributions for the tested patients are also unknown. (S. Hoffmann, Department of Bacteriology, Mycology and Parasitology)

#### PREVENTION OF CHLAMYDIA

As from the third week of May, The National Board of Health resumes a television campaign promoting the use of condoms to prevent chlamydia infection. Adolescents engaging in risk behaviour are also encouraged to be tested and treated by their GP. Reference is made to the guidelines "Klamydia-infektioner" from 2005, published (in Danish) at www.klamydia.dk. GPs who request chlamydia tests via WebReg now have the opportunity to print out chlamydia prevention information directly for their patients.

(Danish National Board of Health)

#### ASCENSION DAY

Unless special circumstances arise, EPI-NEWS will not be published in week 21, the week of 22 May. (Department of Epidemiology) 17 May 2006

# Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2006 figures are preliminary)

Table 1	Week 19	Cum.	Cum.
	2006	2006 1)	2005 1)
AIDS	0	14	29
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	0	0
Creutzfeldt-Jakob	0	6	2
Diphtheria	0	0	0
Foodborne diseases	5	122	111
of these, infected abroad	1	31	21
Gonorrhoea	16	166	209
Haemorrhagic fever	0	0	0
Hepatitis A	0	5	35
of these, infected abroad	0	1	9
Hepatitis B (acute)	1	10	19
Hepatitis B (chronic)	12	174	53
Hepatitis C (acute)	0	5	1
Hepatitis C (chronic)	6	268	107
HIV	3	76	113
Legionella pneumonia	3	29	28
of these, infected abroad	0	4	5
Leprosy	0	0	0
Leptospirosis	0	3	9
Measles	1	19	1
Meningococcal disease	0	27	45
of these, group B	0	15	26
of these, group C	0	2	8
of these, unspec. + other	0	10	11
Mumps	0	8	3
Neuroborreliosis	0	15	16
Ornithosis	0	6	7
Pertussis (children < 2 years)	1	23	74
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	1	0
Listeria monocytogenes	0	3	1
Streptococcus pneumoniae	0	29	59
Other aethiology	0	1	4
Unknown aethiology	0	6	10
Under registration	7	27	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	0	22	36
of these, infected abroad	0	20	33
Syphilis	0	28	40
Tetanus	0	0	2
Tuberculosis	3	141	154
Typhoid/paratyphoid fever	1	12	11
of these, infected abroad	1	12	10
Typhus exanthematicus	0	0	0
VTEC/HUS	2	42	57
of these, infected abroad	0	10	25
<sup>1)</sup> Cumulative number 2006 and in corresponding period 2005			

# Selected laboratory diagnosed infections

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

<b>T</b> 11 0	Week 19	Cum.	Cum.
Table 2	2006	2006 <sup>2)</sup>	2005 2)
Bordetella pertussis			
(all ages)	3	96	246
Gonococci	10	162	160
of these, females	3	32	24
of these, males	7	130	136
Listeria monocytogenes	0	11	11
Mycoplasma pneumoniae			
Resp. specimens <sup>3)</sup>	5	214	568
Serum specimens <sup>4)</sup>	4	188	457
Streptococci 5)			
Group A streptococci	4	74	58
Group B streptococci	1	37	22
Group C streptococci	1	8	8
Group G streptococci	3	47	51
S. pneumoniae	16	507	578
Table 3	Week 17	Cum.	Cum.
	2006	2006 <sup>2)</sup>	2005 <sup>2)</sup>
Pathogenic int. bacteria <sup>6)</sup>			
Campylobacter	25	504	669
S. Enteritidis	11	99	120
S. Typhimurium	2	83	103
Other zoon. salmonella	12	147	155
Yersinia enterocolitica	1	49	71
Verocytotoxin-			
producing E. coli	1	37	42
Enteropathogenic E. coli	5	68	69
Enterotoxigenic E. coli	8	67	76

<sup>2)</sup> Cumulative number 2006 and in corresponding period 2005

<sup>3)</sup> Resp. specimens with positive PCR

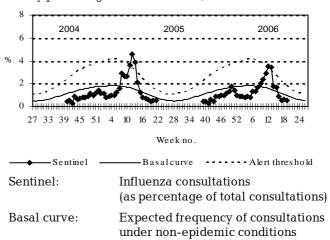
<sup>4)</sup> Serum specimens with pos. complement fixation test

<sup>5)</sup> Isolated in blood or spinal fluid

<sup>6)</sup> See also www.germ.dk

# Sentinel surveillance of the influenza activity

Weekly percentage of consultations, 2004/2005/2006



Alert threshold: Possible incipient epidemic