EPI-NEWS

NATIONAL SURVEILLANCE OF COMMUNICABLE DISEASES

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No. 34, 2005

According to the national laboratory notification system, 2004 saw a total of 21,624 confirmed cases of chlamydial infection (oculo-genital infection caused by Chlamydia trachomatis). This corresponds to an annual incidence of 401 per 10^5 (342 per 10^5 in 2003). From 1994 to 2003, 260,000-280,000 analyses were performed annually, and chlamydia was detected in about 5% of those investigated. Corresponding figures in 2004: 296,979 and 7.3%, table 1.

Table 1. Analyses and laboratory diagnosed chlamydia cases, 1994-2004. Percent 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)

Age distribution in 2004 was largely unchanged relative to the preceding years, with 80% of the males and 88% of the females being in the age group 15-29 years, table 2.

Table 2. Age-specific incidence of chlamydia for those cases where both age and sex were stated, 2004

	Males		Females	
Yrs	No.	per 10^5	No.	per 10^5
<1	30	90	34	107
1-4	0	0	0	0
5-9	0	0	1	1
10-14	7	4	127	77
15-19	1,429	944	4,831	3,361
20-24	3,008	1,966	5,210	3,526
25-29	1,755	978	2,278	1,284
30-34	805	415	883	465
35-39	347	160	367	176
40-44	163	82	128	66
45-49	54	29	35	19
50+	59	7	32	3
Total	1,465	287	1,607	511

Males made up 35% of the diagnosed cases. In the period 1994-2003, this proportion increased steadily from 23% to 32%.
At national level, the M/F ratio of incidence was 0.56, table 3. In 2003, it was 0.49. The M/F ratio was increasing in all counties except Viborg, where it was unchanged.

Diagnosis

In 99.5% (96% in 2003) of the cases, the diagnosis was made by nucleic acid amplification methods, in 0.4% by direct immunofluorescence microscopy and in 0.1% by culture. Analysis of urine samples was reported from 13 out of the 17 laboratories. Among these, the proportion of patients with chlamydia who were diagnosed by urine samples varied between 2% and 57%. 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 county to county, between 0.3% and 32%. Rectal chlamydia was detected in nine males.

Table 3. Incidence per 10^5 of laboratory confirmed chlamydia cases by county, sex, and M/F ratio, 2004

	No. per 10^5		M/F
County	M	K	ratio
Cph & Frb			
Municipalities	570	816	0.70
Copenhagen	287	454	0.59
Frederiksborg	219	384	0.57
Roskilde	196	454	0.43
West Zealand	230	438	0.52
Storstrøm	184	397	0.46
Bornholm	84	329	0.25
Funen	241	498	0.48
South Jutland	234	547	0.43
Ribe	288	544	0.53
Vejle	241	468	0.52
Ringkøbing	223	413	0.54
Aarhus	348	541	0.64
Viborg	241	464	0.52
North Jutland	261	505	0.52
Total	287	511	0.56

Chlamydia in children

Chlamydia was detected in 199 children under the age of 15 years. Of these, 64 (32%) were under 1 year old, all with conjunctivitis. Among 42 children under the age of 1 year with conjunctivitis, where the age was stated in months, 83% were aged less than 1 month and 17% were aged 1-2 months. Chlamydia was detected in the vagina of an 8-year-old and an 11-year-old girl. Urogenital chlamydia was also detected in 12 girls aged 13, 114 girls aged 14 and seven boys aged 13-14.
On suspicion of sexual abuse of children or adults, culture is recommended as an investigation method for chlamydia in addition to nucleic acid amplification, as the reliability of the positive test result in this situation is particularly important. For specimen-taking, chlamydia swab for urogenital specimens and chlamydia transport medium should be used.

Comments

The number of chlamydia analyses performed in 2004 was 11% higher than in 2003 and 9% higher than the average for the last ten years. The number of laboratory confirmed cases of chlamydia was 17% higher than in 2003 and 10% higher than the average for the last ten years. For both males and females, the incidence increased most in the age group 15-19 years.
The now very widespread use of nucleic acid amplification methods can partially explain the increase, but there is hardly any doubt that there is also a real increase in incidence of chlamydia. Increased contact tracing and an altered age and sex distribution among those investigated may play a role. However, further light cannot be shed on the latter relationship, as the mandatory laboratory notification system for chlamydia applies exclusively to patients with positive samples.
The proportion of males with confirmed chlamydia has increased slightly, possibly as a result of an increased use of urine as specimen material.
(S. Hoffmann, Department of Bacteriology, Mycology and Parasitology)

CHLAMYDIA CAMPAIGN

This week, the National Board of Health will focus on the many chlamydia infections among young people. The themes are: "Use a condom, when you have sexual intercourse", "Get examined for chlamydia, if you don't have safe sex on a consistant basis", and "Let your partner know, if you are infected"
While young people must learn to use condoms and be tested for chlamydia, in a recently published guide, physicians are encouraged to use the completely painless urine test – where it has been introduced – when investigating males for chlamydia. They are also asked to encourage the infected young people to trace their partners and get them tested.
Awareness-raising advertisements are being placed in magazines, radio, TV and cinemas. In addition, the National Board of Health has prepared information material to young people in the form of a leaflet, and created the website www.klamydia.dk. The leaflet is distributed by general practitioners.
In addition, the Board of Health has provided material and support to local contact people who will enter into dialogue with young people at local level in educational institutions.
(National Board of Health)

24 August 2005

Individually notifiable diseases

Number of notifications received in the Department of Epidemiology, SSI (2005 figures are preliminary)

Table 1	Week 33 2005	Cum. 2005 [1]	Cum. 2004 [1]
AIDS	0	37	31
Anthrax	0	0	0
Botulism	0	0	0
Cholera	0	0	0
Creutzfeldt-Jakob	0	2	7
Diphtheria	0	0	0
Food-borne diseases	19	303	369
of these, infected abroad	5	69	56
Gonorrhoea	21	330	225
Haemorrhagic fever	0	0	0
Hepatitis A	1	42	136
of these, infected abroad	0	10	32
Hepatitis B (acute)	0	23	27
Hepatitis B (chronic)	0	89	90
Hepatitis C (acute)	0	1	2
Hepatitis C (chronic)	1	204	211
HIV	0	189	191
Legionella pneumonia	4	65	53
of these, infected abroad	1	21	15
Leprosy	0	0	0
Leptospirosis	0	9	1
Measles	0	2	0
Meningococcal disease	1	63	68
of these, group B	0	33	40
of these, group C	1	14	9
of these, unspec. + other	0	16	19
Mumps	0	5	1
Neuroborreliosis	3	37	64
Ornithosis	0	12	4
Pertussis (children < 2 years)	1	101	115
Plague	0	0	0
Polio	0	0	0
Purulent meningitis			
Haemophilus influenzae	0	1	3
Listeria monocytogenes	0	1	1
Streptococcus pneumoniae	0	74	73
Other aethiology	0	11	6
Unknown aethiology	0	11	12
Under registration	4	20	-
Rabies	0	0	0
Rubella (congenital)	0	0	0
Rubella (during pregnancy)	0	0	0
Shigellosis	3	68	46
of these, infected abroad	2	57	36
Syphilis	5	80	100
Tetanus	0	2	0
Tuberculosis	11	280	272
Typhoid/paratyphoid fever	3	22	11
of these, infected abroad	1	17	9
Typhus exanthematicus	0	0	0
VTEC/HUS	3	96	92
of these, infected abroad	0	36	15

[1] *Cumulative number 2005 and in corresponding period 2004*

Selected laboratory diagnosed infections

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

Table 2	Week 33 2005	Cum. 2005 [2]	Cum. 2004 [2]
Bordetella pertussis			
(all ages)	12	344	535
Gonococci	6	290	235
of these, females	0	30	31
of these, males	6	260	204
Listeria monocytogenes	0	18	26
Mycoplasma pneumoniae			
Resp. specimens [3]	13	648	101
Serum specimens [4]	5	536	237
Streptococci [5]			
Group A streptococci	1	80	88
Group B streptococci	5	51	54
Group C streptococci	0	15	14
Group G streptococci	0	76	70
S. pneumoniae	8	774	868
Table 3	**Week 31 2005**	**Cum. 2005 [2]**	**Cum. 2004 [2]**
Pathogenic int. bacteria [6]			
Campylobacter	167	2,008	1,934
S. Enteritidis	35	333	275
S. Typhimurium	17	286	240
Other zoon. salmonella	16	309	263
Yersinia enterocolitica	6	142	120

[2] *Cumulative number 2005 and in corresponding period 2004*

[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*

Patients with laboratory diagnosed chlamydia by county and gender, 1st quarter 2005

	2005			2004
County	M	F	Total	Total
Cph. + Frb. Municip.	360	571	932 *	981
Copenhagen	188	323	512 *	563
Frederiksborg	100	155	260 *	245
Roskilde	55	116	171	139
West Zealand	70	170	240	223
Storstrøm	85	161	246	171
Bornholm	7	16	23	23
Funen	148	290	438	421
South Jutland	81	148	229	255
Ribe	81	133	214	233
Vejle	108	212	321 *	282
Ringkøbing	80	100	181 *	220
Aarhus	267	429	697 *	648
Viborg	67	135	202	196
North Jutland	158	301	460 *	412
Whole country	1,855	3,260	5,126 *	5,012

* *Gender unknown in a few cases*