Sexually Transmitted Diseases Services

Quarterly Surveillance Report

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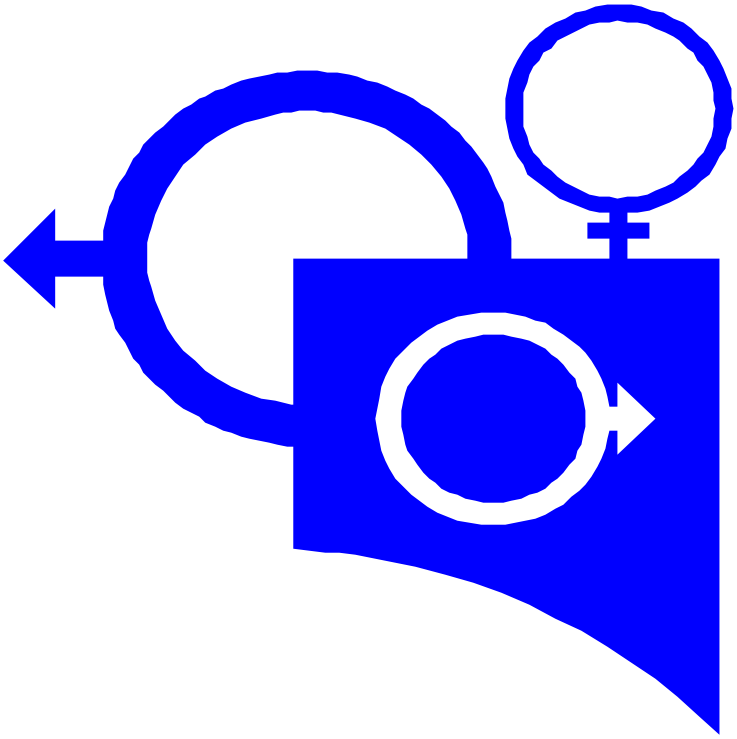

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In this quarterly report a review of genital chlamydial data collected in South Australia over a decade highlights the impact of developments in medical technology during the period. These data demonstrate the usefulness of monitoring testing practices as a component of routine surveillance of sexually transmitted diseases.

Genital chlamydial infection in South Australia: review of testing and notification data for the period 1991-2000.

Introduction

Since the early 1970s, *Chlamydia trachomatis* (immunotypes D through to K) has been recognised as a genital pathogen.[1] In men, genital chlamydial infection commonly causes urethritis with possible complications of epididymitis, infertility and Reiters syndrome. In women, infection may produce a cervicitis with the potential sequelae of salpingitis and subsequent risk of infertility, ectopic pregnancy or chronic pelvic pain.[2] Asymptomatic infection is common in both sexes.

Genital chlamydial infection is sexually transmitted, usually through vaginal intercourse. Occasionally it is transmitted by oral and anal sex. Chlamydia can be transmitted from mother to child during birth, causing conjunctivitis or pneumonia in the neonate. Genital chlamydial infections are prevalent worldwide.

Notification of genital chlamydial infection

Since 1988, genital chlamydial infection has been designated a notifiable disease under the South Australian Public and Environmental Health Act, making laboratory and medical reporting of cases to Sexually Transmitted Diseases (STD) Services a legal requirement.

Incidence and prevalence

During the decade 1991 to 2000, STD Services received 9376 notifications of genital chlamydial infection; 3669 (39%) cases occurred in males and 5707 (61%) in females. In 1996 an increase in reported cases coincided with the introduction of DNA amplification technologies such as polymerase and ligase chain reactions (PCR, LCR). Since 1996 the reported incidence has remained stable, with a range of 1001 to 1050 cases per year (Figure 1).

The true prevalence of genital chlamydial infection in South Australia is unknown. Available data are likely to underestimate the actual prevalence as many infections are asymptomatic and may go undiagnosed. Sentinel data are available from Clinic 275, the South Australian STD clinic, where all clients are offerred testing for genital chlamydial infection. Between 1991 and 2000, of 18206 males and 11864 females tested during their first clinic attendance, *Chlamydia trachomatis* was detected in 4.3% of men and 4.8% of women (Table 1). However, clinic attendees may not be typical of the Adelaide metropolitan population.

In the Anangu Pitjantjatjara Lands in the far North-West of South Australia, the Nganampa Health Council conducts annual, community-wide screening programs for STDs. In the year 2000, 71% of the population aged between 12 and 40 years were screened, with 3.9% of participants testing positive for *Chlamydia trachomatis*.[3]

Figure 1. Genital chlamydial infection in South Australia, 1991 - 2000. Year of diagnosis by sex

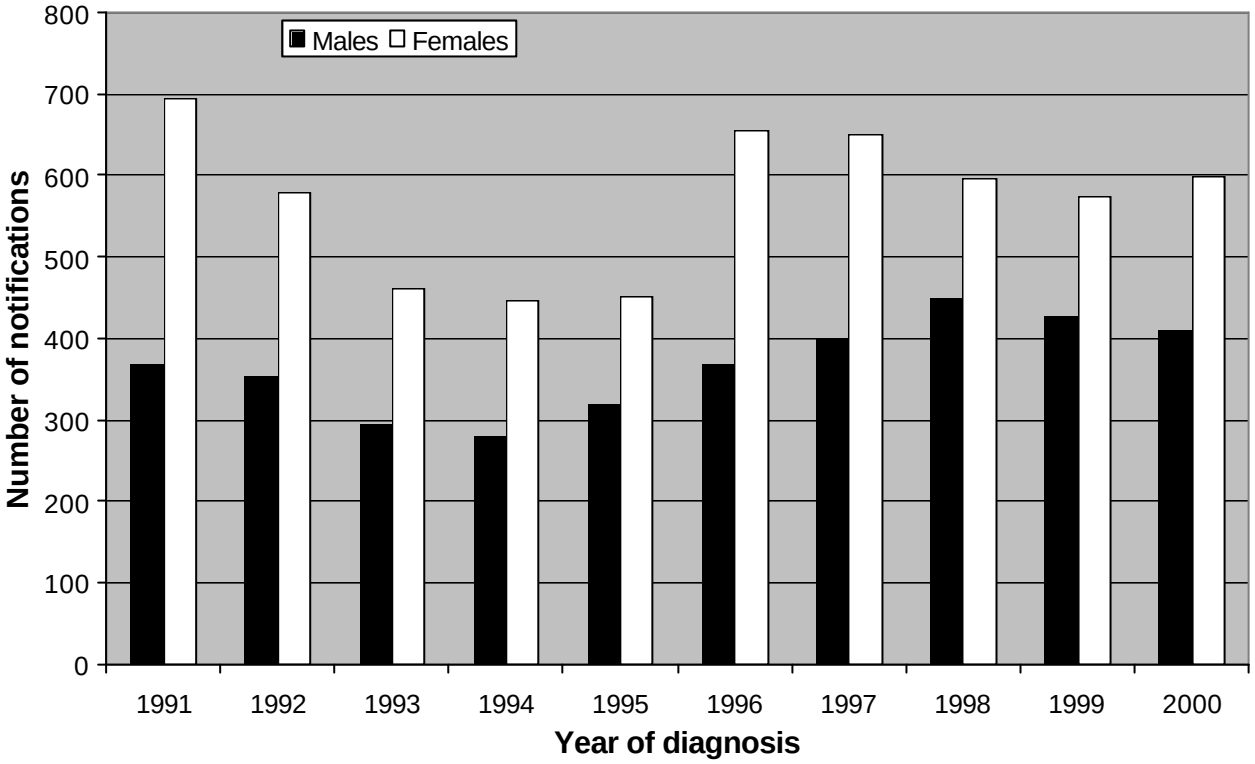


Table 1. Chlamydia yields in first time attendees at Clinic 275. Annual number of tests performed, cases diagnosed and percentage yield of positive tests, by sex.

Year	Males			Females		
	No. tests	Pos. tests	Percent pos. yield	No. tests	Pos. tests	Percent pos. yield
1991	2206	110	5.0	1120	75	6.7
1992	2162	91	4.2	1185	53	4.5
1993	2439	71	2.9	1591	74	4.7
1994	1969	75	3.8	1302	48	3.7
1995	1719	67	3.9	1242	50	4.0
1996	1640	54	3.3	1163	43	3.7
1997	1677	78	4.7	1150	42	3.7
1998	1753	113	6.5	1214	80	6.6
1999	1416	74	5.2	1044	55	5.3
2000	1225	53	4.3	853	53	6.2
Total	18206	786	4.3	11864	573	4.8

Trends in testing and diagnosis of *Chlamydia trachomatis*.

Genital chlamydial infection is best diagnosed from a urethral swab in males or a cervical swab in females. Since the introduction of PCR testing, detection of *Chlamydia trachomatis* in urine specimens has facilitated diagnosis of infection in asymptomatic males and in females where collection of a cervical swab is impractical.

PCR technology is suitable for the testing of specimens collected some distance from laboratory facilities and permits less invasive methods of specimen collection such as urine testing. Between 1995 and 2000, the proportion of females diagnosed by PCR testing of urine specimens rose from 4% to 27% of cases. In males, diagnosis by detection of *Chlamydia trachomatis* in urine increased from 25% to 60% of cases for the same time period.

A high proportion of tests continue to be performed on women (Table 2).[4] The female to male ratio of tests performed fell from 4.1:1 in 1995 to 3.1:1 in 1996, and has decreased only slightly since 1996 (Table 2). The female to male ratio of cases diagnosed has remained constant since 1991 with an average ratio for the decade of 1.6:1 (Table 2).

Between 1991 and 1995, the number of notified cases of genital chlamydial infection in females equated to 2% of tests performed. For the period 1996 to 2000 this proportion rose to 2.7%. The yield in males has remained stable over the decade with notified infections equating to an average of 5.1% of tests performed (Table 2).

Table 2. Laboratory testing for genital chlamydial infection. Annual number of tests performed, cases diagnosed and percentage of positive tests by sex, and, annual female to male testing ratio and case ratio.

Year	Males			Females			Testing ratio F:M	Case ratio F:M
	Tests	Cases	Percent pos. tests	Tests	Cases	Percent pos. tests		
1991	6560	368	5.6	28870	695	2.4	4.4 : 1	1.9 : 1
1992	6741	354	5.3	27407	579	2.1	4.1 : 1	1.6 : 1
1993	6984	293	4.2	26066	461	1.8	3.7 : 1	1.6 : 1
1994	5868	280	4.8	24821	446	1.8	4.2 : 1	1.6 : 1
1995	5848	318	5.4	24261	451	1.9	4.1 : 1	1.4 : 1
1996	7662	369	4.8	23654	656	2.8	3.1 : 1	1.8 : 1
1997	7675	400	5.2	21433	650	3.0	2.8 : 1	1.6 : 1
1998	8178	450	5.5	23798	597	2.5	2.9 : 1	1.3 : 1
1999	8145	427	5.2	22835	574	2.5	2.8 : 1	1.3 : 1
2000	7813	410	5.2	21570	598	2.8	2.8 : 1	1.5 : 1

** These percentages are not adjusted for the fact that some clients may have had more than one positive test.*

Source of notification

During 1995 and 1996, female cases of genital chlamydial infection diagnosed by general practitioners (GPs) increased from 246 to 436 per year. Since 1996, this number has declined marginally, with GPs diagnosing about two thirds of all female cases each year (Figure 2). In males, the number of cases diagnosed by GPs also rose in 1996, with a further slight increase in the latter half of the decade (Figure 3).

Figure 2 Genital chlamydial infection in females.
Annual notifications by source of notification, 1991 - 2000

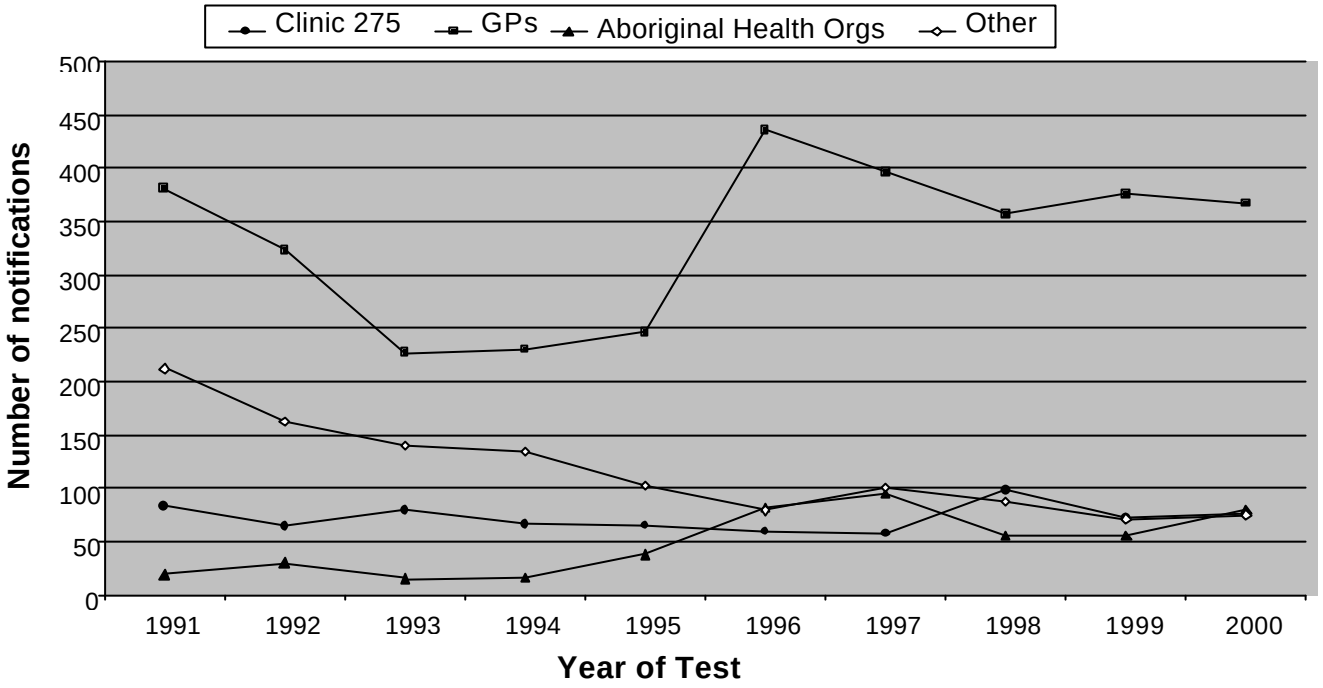
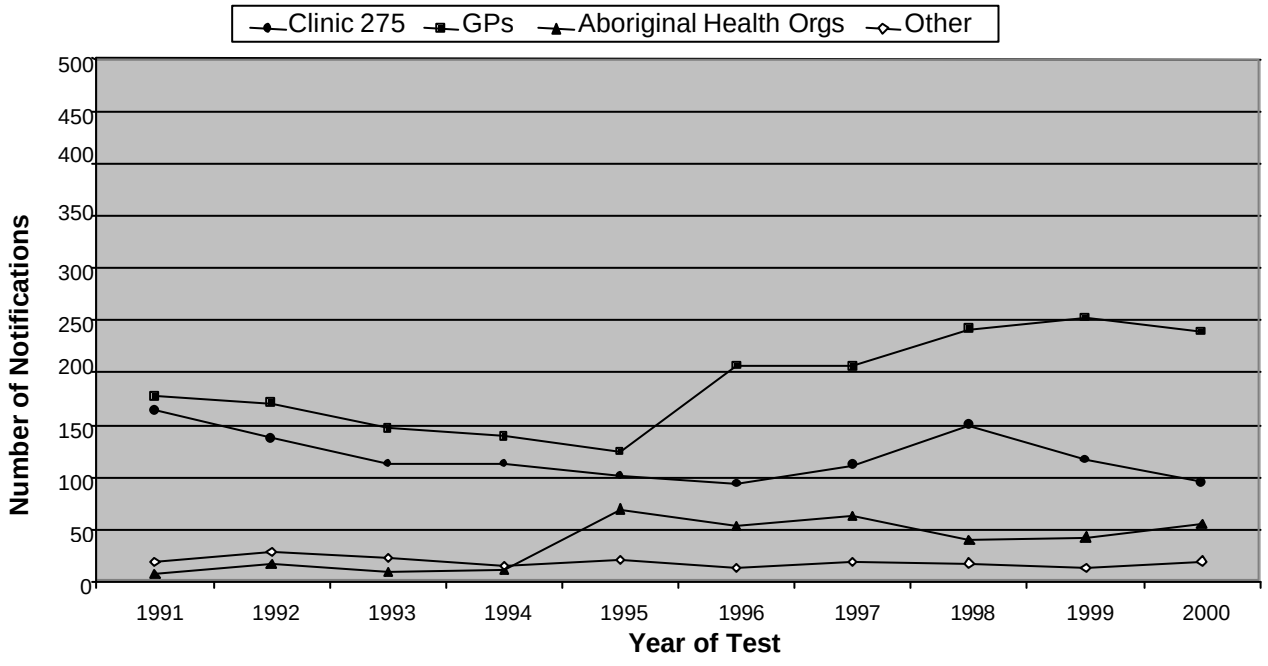


Figure 3. Genital chlamydial infection in males.
Annual notifications by notification source, 1991-2000.



An increase in notifications from the Nganampa Health Council of the Anangu Pitjantjatjara lands in 1996 coincided with the introduction of annual STD screening programs (Figures 2 & 3). In the year 2000 program, the Nganampa Health Council trialed the use of self-collected vaginal swabs by one community of women within the Anangu Pitjantjatjara lands.

Demographic Characteristics

The characteristics of age, racial origin and likely location of infection have remained stable throughout the decade.

Persons under twenty five years represented between 47-55% of male cases, and 69-76% of female cases per annum (Table 3). Surveillance data on rates of disease in specific age groups supports the view that genital chlamydia is more prevalent in young adults. However, this data is likely to be affected by testing biases such as the current testing ratio of 2.8 females to every male, and variation in the likelihood of being tested amongst different age groups (Table 4).

Between 1991 and 2000, 82% of notified cases were Caucasian (Table 3). The proportion of cases assigned to each racial group is a reflection of varying testing practices within these groups. For all racial groups, the annual number of notifications increased after the introduction of PCR testing, then remained stable between 1996 and 2000.

Eighty six percent of men and ninety two percent of women acquired the infection in South Australia (Table 3).

Table 3. Summary statistics: notifications of genital chlamydial infection, South Australia 1991 to 2000.

	Male		Female		Total	
Cases	3669	39%	5707	61%	9376	
Age (years)*						
< 20	503	14%	1920	34%	2423	26%
20-24	1361	37%	2170	38%	3531	38%
25 - 29	894	24%	889	16%	1783	19%
30 - 34	413	11%	384	7%	797	8%
35 - 39	231	6%	197	3%	428	5%
40 - 44	133	4%	91	2%	224	2%
45 - 49	68	2%	31	-	99	1%
> 49	60	2%	25	-	85	1%
Race						
Caucasian	3008	82%	4697	82%	7705	82%
Aboriginal	493	14%	737	13%	1230	13%
Asian	116	3%	225	4%	341	4%
Other / unknown	52	1%	48	1%	100	1%
Location#						
South Australia	3123	86%	5223	92%	8346	89%
Interstate	262	7%	282	5%	544	6%
Overseas	260	7%	172	3%	432	5%

** Age not recorded for 6 cases*

 # Location is not recorded for 54 cases, 13 of which were reported from Central Australia

Table 4. Genital chlamydial infection, 1/1/2000 - 31/12/2000. Rate per 100,000 population, by age group and sex.

Age Group (years)	Males			Females		
	Cases	Population*	Rate/100,000	Cases	Population*	Rate/100,000
15-19	48	50,075	96	191	47,914	399
20-24	136	53,989	253	228	51,401	444
25-29	103	55,022	187	95	53,355	178
30-34	53	56,268	94	50	56,380	89
35-39	24	58,131	41	18	58,317	31
40-44	20	54,114	37	7	54,859	13
45-49	13	52,953	25	7	52,970	13
49-69	13	136,201	10	-	-	-

** Australian Bureau of Statistics 1996 census data.* [6]

Symptomatology

The association between genital chlamydial infection and clinical symptoms is often unclear. Many clients present with asymptomatic infection or, their apparent symptomatology may be caused by other factors such as co-infections.

Sentinel data is available on cases diagnosed at Clinic 275. Of 830 females and 1243 males identified as having genital chlamydial infection between 1991 and 2000, 270 (33%) females and 565 (45%) males were noted to have discharge and / or dysuria.

Repeat infections

Between 1991 and 2000, 220 (6%) males and 363 (6.3%) females were notified with two episodes of genital chlamydial infection. Ninety people (1%) were notified with more than two infections.

Summary

Throughout the decade 1991 to 2000, surveillance of genital chlamydial infection in South Australia has been affected by changes of testing practices by both laboratories and medical officers. In particular, the introduction of PCR testing, capable of detecting *Chlamydia trachomatis* in both genital swabs and urine specimens, may have been responsible for an increase in the annual number of notifications in 1996. These testing procedures have facilitated screening of persons living in remote areas, and are likely to have brought about increased testing amongst the male population.

These data do not support changes in the actual incidence or prevalence of genital chlamydial infection in South Australia between 1991 and 2000. Demographic data including age, racial origin and likely location of infection have remained stable throughout the decade.

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September 2001.

HIV INFECTION IN SOUTH AUSTRALIA

HIV Infection 1985 - 30/06/01

In South Australia, 780 individuals have been diagnosed with HIV infection, 711 (91%) males and 69 (9%) females. Of the males, 541 (76%) reported male-to-male sexual contact, 56 (8%) reported injecting drug use and 30 (4%) reported both risk factors. Heterosexual transmission was reported by 40 (58%) females diagnosed with HIV infection, 23 (33%) females reported injecting drug use (Table 1.1).

HIV Infection 01/04/01 - 30/06/01

Seven individuals (5 male, 2 female) were diagnosed with HIV infection during the second quarter (Table 1.2). Three men reported male-to-male sexual contact as their risk factor. Two women and two men were from countries where HIV infection is transmitted predominantly by heterosexual contact.

Laboratory Screening For HIV Infection 01/04/01 - 30/06/01

During the second quarter of 2001, 19000 screening tests were performed, 8171 (43%) on males, 10702 (56%) on females and 127 tests on individuals whose sex was unknown (Table 1.4).

Table 1.1 HIV infection detected in South Australia, 1985 - 30/06/2001. Exposure category by sex.

Exposure category	Male		Female		Total	
	No.	%	No.	%	No.	%
Homosexual contact	541	76	na		541	69
Homosexual contact/IDU	30	4	na		30	4
Heterosexual contact	45	6	40	58	85	11
IDU	56	8	23	33	79	10
Blood products	7	1	2	3	9	1
Other	4	1	3	5	7	1
Unknown	28	4	1	1	29	4
Total	711		69		780	

na not applicable

Table 1.2 HIV infection detected in South Australia, 01/04/01 - 30/06/01 and year to date. Exposure category by sex.

Exposure category	2nd Quarter 01/04/01 - 30/06/01		Year to date 01/01/01 - 30/06/01	
	Male	Female	Male	Female
Homosexual	3	na	10	na
Heterosexual/IDU	-	-	1	-
Heterosexual contact	2	2	3	4
Total	5	2	14	4

Table 1.3 HIV infection detected in South Australia, 01/04/01 - 30/06/01 and year to date. Testing history by age at diagnosis.

Testing history	2nd Quarter 01/04/01 - 30/06/01 Age group (years)		Year to date 01/01/01 - 30/06/01 Age group (years)	
	<25	25 - 39	<25	25 - 39
No previous test	-	1	*1	5
Negative ≤12 months	-	1	1	4
Negative >12 months	-	*3	1	*5
Known positive overseas	-	2	-	2
Total	-	7	2	16

*includes females

Table 1.4 Summary of HIV antibody tests, 01/04/01 - 30/06/01 and year to date. Laboratory by sex.

Laboratory	2nd Quarter 01/04/01 - 30/06/01			Year to date 01/01/01 - 30/06/01			
	Male	Female	Unknown	Male	Female	Unknown	Total
Public	4436	5875	127	9150	11861	245	21256
Private	3735	4827	-	7503	9993	-	17496
Total	8171	10702	127	16653	21854	245	38752

HEPATITIS C SURVEILLANCE IN SOUTH AUSTRALIA

Hepatitis C Medical Notification 01/04/01 - 30/06/01

In the second quarter of 2001, medical notifications of hepatitis C infection were received for 234 individuals, 161 (63%) males and 95 (37%) females.

Among the notifications, 26 cases were reported as having an earlier positive test (pre-1995), whilst 76 individuals had never been tested before for hepatitis C infection. In a further 94 cases the testing history was unknown. Of 38 individuals with a previous negative test, 23 were tested more than 12 months earlier and 15 were tested within the last year. In 146 (70%) instances, past or present injecting drug use was reported as a likely transmission route for hepatitis C virus (Table 2.1).

At the time of diagnosis, the majority of males (62%) were aged between 20 and 39 years, while most females (77%) were in the 20 - 49 year age range (Table 2.2). Of two males and 11 females aged less than twenty years (13 cases), 11 had a history of injecting drug use.

Newly acquired infections - Incident Cases

Incident cases are infections acquired in the last 12 months, and are identified by recent seroconversion for hepatitis C antibodies or a positive test accompanied by acute clinical illness not ascribed to other causes.

Seventeen incident cases were identified during the quarter, 15 had negative serology in the preceding 12 months and two were clinical diagnoses. The incident cases comprised 12 males and five females. In 16 cases the likely mode of transmission for hepatitis C virus was injecting drug use, and the transmission route is not yet known in one case (Table 2.3). At the time of diagnosis most (76%) were less than 30 years of age (Table 2.4).

Collated laboratory data for hepatitis C antibody tests performed during the quarter are shown in Table 2.5.

Table 2.1 Hepatitis C infection, new diagnoses 01/04/01 - 30/06/01 and year to date. Exposure category by sex.

Exposure category	2nd Quarter 01/04/01 - 30/06/01		Year to date 01/01/01 - 30/06/01		
	Male	Female	Male	Female	Total
IDU[1]	92	54	227	109	336
Blood transfusion/ products	4	5	9	15	24
Tattoos	9	5	18	5	23
Other[2]	3	2	7	9	16
High prevalence country[3]	8	6	19	8	27
Unknown	12	8	26	14	40
Total	128	80	306	160	466

1 Includes IDU in combination with other categories.
2 Residence/medical treatment in a high prevalence country.
3 Includes occupational exposure; household, perinatal & sexual transmission; body piercing/ acupunture.

Table 2.2 Hepatitis C infection, new diagnoses 01/04/01 - 30/06/01 and year to date. Age group by sex.

Age group (years)	2nd Quarter 01/04/01 - 30/06/01		Year to date 01/01/01 - 30/06/01		
	Male	Female	Male	Female	Total
10 - 19	2	11	6	19	25
20 - 29	38	29	100	55	155
30 - 39	41	15	87	40	127
40 - 49	35	18	85	30	115
≥ 50	12	7	28	16	44
Total	128	80	306	106	466

Table 2.3 Newly acquired infections (Incident cases*) of hepatitis C infection, 01/04/01 - 30/06/01 and year to date. Exposure category by sex.

Exposure category	2nd Quarter 01/04/01 - 30/06/01		Year to date 01/01/01 - 30/06/01		
	Male	Female	Male	Female	Total
IDU	11	5	29	11	40
Not identified	-	-	-	2	2
Unknown	1	-	1	-	1
Total	12	5	30	13	43

* Incident cases are newly acquired infections, see text.

Table 2.4 Newly acquired infections (Incident cases*) of hepatitis C infection, 01/04/01 - 30/06/01 and year to date. Age group by sex.

Age group (years)	2nd Quarter 01/04/01 - 30/06/01		Year to date 01/01/01 - 30/06/01		
	Male	Female	Male	Female	Total
15 - 19	1	1	4	3	7
20 - 29	7	4	16	8	24
30 - 39	4	-	9	2	11
≥ 40	-	-	1	-	1
Total	12	5	30	13	43

* Incident cases are newly acquired infections, see text.

Table 2.5 Summary of laboratory tests for hepatitis C antibodies, 01/04/01 - 30/06/01 and year to date. Laboratory by sex.

Laboratory	2nd Quarter 01/04/01 - 30/06/01			Year to date 01/01/01 - 30/06/01			
	Male	Female	Unknown	Male	Female	Unknown	Total
Public	5228	6005	-	10879	11976	-	22855
Private	3715	3593	41	7478	7642	81	15201
Total	8943	9598	41	18357	19618	81	38056

HEPATITIS B SURVEILLANCE IN SOUTH AUSTRALIA

Hepatitis B Medical Notification 01/04/01 - 30/06/01

During the second quarter of 2001, 70 hepatitis B medical notifications were received. Of these, three were acute clinical cases of hepatitis B infection (Tables 3.1, 3.2). A further eight were reports of chronic carriers of greater than twelve months duration, who had been previously diagnosed, but not notified (Table 3.3). Reports of antigen positivity of uncertain duration accounted for 59 cases (Table 3.3).

Exposure categories identified for the acute clinical cases were injecting drug use (1), heterosexual contact (1), and unknown risk factors (1) (Table 3.1).

Of the 59 reports of antigen positivity of uncertain duration, 37 tested surface antigen positive for the first time this quarter, one had a previous negative test and the testing history was unknown for the 21 remaining cases. Among the 37 individuals who tested surface antigen positive for the first time, but were not acute cases, the racial origin of 26 (70%) was reported as Asian (Table 3.4).

The number of hepatitis B surface antigen tests performed by laboratories for this quarter is shown in Table 3.5.

Table 3.1 Acute hepatitis B infection, 01/04/01 - 30/06/01 and year to date. Exposure category by sex.

Exposure category	2nd Quarter 01/04/01 - 30/06/01		Year to date 01/01/01 - 30/06/01		
	Male	Female	Male	Female	Total
IDU	1	-	2	-	2
Heterosexual Contact	-	1	1	4	5
Overseas travel	-	-	1	-	1
Social/Family	-	-	1	-	1
None identified	-	1	1	3	4
Total	1	2	6	7	13

Table 3.2 Acute hepatitis B infection, 01/04/01 - 30/06/01 and year to date. Age group by sex.

Age group (years)	2nd Quarter 01/04/01 - 30/06/01		Year to date 01/01/01 - 30/06/01		
	Male	Female	Male	Female	Total
10 - 19	-	1	2	3	5
20 - 29	-	1	-	3	3
30 - 39	1	-	2	-	2
40 - 49	-	-	1	-	1
≥ 50	-	-	1	1	2
Total	1	2	6	7	13

Table 3.3 Hepatitis B infection, 01/04/01 - 30/06/01 and year to date. Case category by sex.

Case category	2nd Quarter 01/04/01 - 30/06/01		Year to date 01/01/01 - 30/06/01		
	Male	Female	Male	Female	Total
Acute Infection	1	2	6	7	13
Antigen positive <12months duration	-	-	2	-	2
Antigen positive - uncertain duration	37	22	68	39	107
Chronic carriers - >12 months duration	2	6	17	13	30
Total	40	30	93	59	152

Table 3.4 Individuals who tested hepatitis B surface antigen positive for the first time, 01/04/01 - 30/06/01 and year to date. Race by sex.

Racial origin	2nd Quarter 01/04/01 - 30/06/01		Year to date 01/01/01 - 30/06/01		
	Male	Female	Male	Female	Total
Aboriginal	1	-	6	-	6
Asian	15	11	27	17	44
Caucasian	5	2	11	5	16
Other/Unknown	2	1	2	2	4
Total	23	14	46	24	70

Table 3.5 Summary of hepatitis B surface antigen tests, 01/04/01 - 30/06/01 and year to date. Laboratory by sex.

Laboratory	2nd Quarter 01/04/01 - 30/06/01			Year to date 01/01/01 - 30/06/01			
	Male	Female	Unknown	Male	Female	Unknown	Total
Public	4431	6725	36	8979	13644	79	22702
Private	2927	4250	-	6480	9568	-	16048
Total	7358	10975	36	15459	23212	79	38750

GENITAL CHLAMYDIAL INFECTION IN SOUTH AUSTRALIA

Genital chlamydial Infection 01/04/01 - 30/06/01

Between 1 April and 30 June 2001, STD Services received 365 notifications of genital chlamydial infection. This compares with a range of 241 to 330 cases for the same period 1996 to 2000. A greater than expected number of reports were received from Clinic 275 and other metropolitan medical officers. One hundred and forty seven cases (40%) occurred in males and 218 (60%) in females (Table 4.1).

Seventy six percent of cases in males occurred in men aged less than 30 years, with a peak incidence in the age group 20 to 24 years. In females, women aged less than 25 years accounted for 72% of cases. (Table 4.1). The racial origin of 286 cases (78%) was reported as Caucasian (Table 4.2). Infection was acquired in South Australia in 310 cases (92%). Data for this quarter on the age group and racial origin of affected persons, and the likely location of disease acquisition, is consistent with data for the years 1996 to 2000.

Four males (3%) with urethral chlamydial infection reported male-to-male sex. Additionally, *chlamydia trachomatis* was detected by PCR testing of rectal swabs in six males reporting male sexual partners. The sensitivity and specificity of PCR testing of rectal swabs for *chlamydia trachomatis* has not been validated.

The number of laboratory tests for genital chlamydia performed during this quarter is shown in Table 4.3.

Table 4.1 Genital chlamydial infection in South Australia, 01/04/01 - 30/06/01 and year to date. Age group by sex.

Age group (years)	2nd Quarter 01/04/01 - 30/06/01		Year to date 01/01/01 - 30/06/01		
	Male	Female	Male	Female	Total
< 20	25	76	46	154	200
20 - 24	63	80	115	158	273
25 - 29	23	27	71	58	129
30 - 34	19	18	36	32	68
35 - 39	7	8	17	13	30
≥ 40	10	9	20	11	31
Total	147	218	305	426	731

Table 4.2 Genital chlamydial infection, 01/04/01 - 30/06/01 and year to date. Race by sex.

Racial origin	2nd Quarter 01/04/01 - 30/06/01		Year to date 01/01/01 - 30/06/01		
	Male	Female	Male	Female	Total
Aboriginal	12	25	31	47	78
Asian	10	19	18	29	47
Caucasian	119	167	246	337	583
Other/unknown	6	7	10	13	23
Total	147	218	305	426	731

Table 4.3 Summary of laboratory tests for genital chlamydia, 01/04/01 - 30/06/01 and year to date. Laboratory by sex.

Laboratory	2nd Quarter 01/04/01 - 30/06/01		Year to date 01/01/01 - 30/06/01		
	Male	Female	Male	Female	Total
Public	1457	3579	2891	7068	9959
Private	744	2051	1448	4351	5799
Total	2201	5630	4339	11419	15758

GONOCOCCAL INFECTION IN SOUTH AUSTRALIA

Gonococcal Infection 01/04/01 - 30/06/01

Between 1 April and 30 June 2001, STD Services received 54 notifications of gonococcal infection (Table 5.1). This compares with a range of 49 to 96 infections per quarter during the year 2000.

Thirty-five cases (65%) occurred in males, and 19 (35%) in females (Table 5.1). Gonococcal infection in males occurred in a wide age range with 12 cases (34%) occurring in 20-24 year old men. In females, 84 % of cases occurred in women aged less than 25 years (Table 5.1).

The racial origin was reported as Aboriginal for 15 female cases (79%). In males, 15 cases (43%) were Aboriginal and 18 (51%) were Caucasian. The proportion of males with gonococcal infection reporting male-to-male sexual contact was 31%.

Thirty-one cases (57%) were diagnosed in residents of South Australian communities in Central Australia. Of the remaining 23 cases, the majority (78%) acquired infection in South Australia.

Table 5.1 Gonococcal infection detected in South Australia, 01/04/01 - 30/06/01 and year to date. Age group by sex.

Age group (years)	2nd Quarter 01/04/01 - 30/06/01		Year to date 01/01/01 - 30/06/01		
	Male	Female	Male	Female	Total
< 20	4	10	9	15	24
20 - 24	12	6	19	14	33
25 - 29	5	2	17	10	27
30 - 34	7	-	21	6	27
35 - 39	5	-	14	3	17
≥ 40	2	1	10	3	13
Total	35	19	90	51	141

CLINIC 275 ACTIVITY REPORT

Table 6.1 Clinic 275 - Summary Statistics

Diagnosis	2nd Quarter 01/04/01 - 30/06/01		Year to date 01/01/01 - 30/06/01		
	Male	Female	Male	Female	Total
No illness	431	309	773	574	1347
HIV	1	-	2	1	3
Gonorrhoea	7	2	21	3	24
Syphilis	1	-	2	1	3
Herpes	20	11	38	27	65
Chlamydia	53	31	88	59	147
NSU	32	na	53	na	53
Warts	157	77	251	128	379
Trichomoniasis	-	-	-	4	4
Candida vaginitis	na	71	na	123	123
Crabs	22	3	28	4	32
Scabies	-	-	1	-	1
Molluscum	28	14	47	21	68
Bacterial vaginosis	na	37	na	69	69
Hepatitis B antigen positive - acute	1	-	1	-	1
carrier	3	2	4	7	11
Hepatitis C infection - incident	1	1	2	1	3
new	4	2	6	2	8
known	13	9	21	20	41
Urethral irritation	42	na	69	na	69
Balanitis	43	na	75	na	75
Non STD illness	86	45	160	73	233
Post coital contraception	na	47	na	80	80
Abnormal Pap smear	na	44	na	65	65
Other/Uncertain	21	19	33	36	69
Clinic attendances	964	686	1931	1417	3348
Episodes of care	914	625	1582	1137	2719
Individual clients	877	595	1519	1088	2607

na not applicable

Note: A client may have more than one diagnosis for an episode of care. An individual client may have several episodes of care each requiring one or more attendances. Data on episodes of care and individual clients are from the computerised casenotes system based on date of first visit for an episode of care. Clinic attendances were obtained from the daybook for the time period covered by this report.

Table 6.2 Males diagnosed with chlamydia, gonorrhoea or syphilis at C275, 01/04/01 - 30/06/01. Exposure category by infection.

Exposure category	No.	Chlamydia	Gonorrhoea	Syphilis
Homosexual	164	6	3	-
Homosexual, IDU	22	1	-	-
Heterosexual, IDU	86	7	-	1
Heterosexual, O/S#	61	6	-	-
Heterosexual	501	33	4	-
Total		53	7	1

Overseas contact in the previous three months.

Table 6.3 Males diagnosed with hepatitis C, hepatitis B or HIV infection at C275, 01/04/01 – 30/06/01. Exposure category by infection.

Exposure category		Hepatitis C			Hepatitis B		HIV
	No.	Incident cases	New diagnosis	Known	**Previous exposure	Carrier	
Homosexual	155	1	-	1	12	-	-
Homosexual IDU	23	-	-	-	2	-	1
Bisexual	28	-	-	-	2	-	-
Heterosexual, IDU	85	-	2	9	2	-	-
Heterosexual, O/S#	61	-	-	-	6	-	-
Heterosexual	495	-	1	1	11	1	-
Other	31	-	1	2	2	2	-
Total		1	4	13	37	3	1

** Previous exposure to hepatitis B refers to previous infection and now surface antibody positive

Overseas contact in the previous three months.

Table 6.4 Females diagnosed with chlamydia, gonorrhoea or syphilis* at C275, 01/04/01 - 30/06/01. Exposure category by infection.

Exposure category	No.	Chlamydia	Gonorrhoea
Heterosexual, IDU	41	1	-
Heterosexual, O/S#	54	4	1
Heterosexual	42 3	26	1
Total		31	2

Overseas contact in the previous three months.

* No case of syphilis diagnosed during the quarter.

Table 6.5 Females diagnosed with hepatitis C, hepatitis B or HIV* infection at C275, 01/04/01 - 31/06/01. Exposure category by infection.

Exposure category		Hepatitis C			Hepatitis B	
	No.	Incident	New Diagnoses	Known	**Previous exposure	Carrier
Heterosexual, IDU	41	1	-	4	1	-
Heterosexual, O/S#	57	-	-	-	1	1
Heterosexual	44	-	-	-	4	1
	8					
Sex worker	20	-	-	1	1	-
Sex worker,	9	-	-	1	-	-
Other/Unknown	40	-	2	3	2	-
Total		1	2	9	9	2

* No new cases of HIV or acute Hepatitis B in females during this quarter.
** Previous exposure to hepatitis B refers to previous infection and now surface antibody positive.
# Overseas contact in the previous three months.

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All data in this report are provisional and subject to future revision.