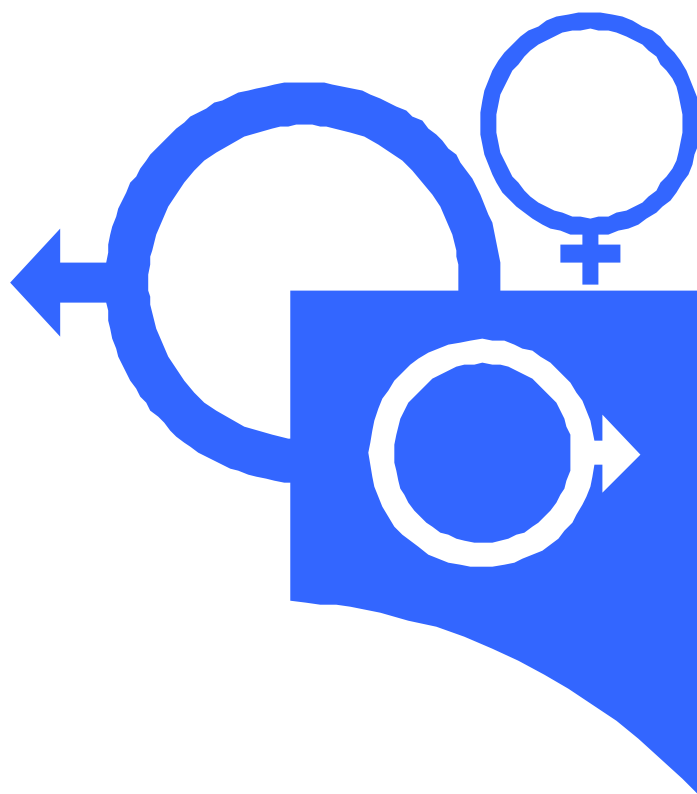


Sexually Transmitted Diseases Services Quarterly Surveillance Report

ISSN 1328-0090

No. 21 July - September 2001

Issued December 2001



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Public Health Association Media Award

External recognition of services provided by STD Services motivates further efforts to continue to extend our current programs. In September 2001 STD Services won a media award from the Public Health Association for our recently upgraded web site. Expansion of stdservices.on.net incorporated new content which focussed on the public health activities of STD Services, and extended sexual health information suitable for clients of the clinic and students. The website allows prompt dissemination of information about changes in current treatments, based on public health surveillance data. Web publication of STD Services reports provides timely data on the number of sexually transmitted infections, trends in disease activity and describes high risk exposures for notifiable STD in South Australia. The award is a tribute to the work of Dr Chris Miller, inaugural webmaster at STD Services.

Attendance at conferences allows clinicians to refresh and update aspects of research and development in STD, and review activities away from the usual distractions of the workplace. The International Congress of Sexually Transmitted Diseases is a major biennial conference, whose venue alternates between Europe and America.

International Congress of the Sexually Transmitted Diseases, Berlin 2001

The 2001 biennial International Congress of the Sexually Transmitted Diseases was held in Berlin at the Haus am Kollnischen Park, a former High School for the Communist Party of East Germany. The organisers were the International Union against the Sexually Transmitted Infections (IUSTI) and the International Society for STD Research. Other sponsors included CDC, Atlanta and the American Social Health Association. In addition to the formal scientific program of plenary sessions followed by a choice of symposia or proffered paper sessions, there were daily, lighthearted debates on topical issues. The theme of many posters was the re-emergence of gonorrhoea in Europe and USA, where there is evidence for increases in rates in both heterosexual and homosexual populations.

An early session included an "Update on nucleic acid amplification tests (NAAT) for detection of *Chlamydia trachomatis* and *Neisseria gonorrhoeae*", described a new assay system. In the discussion, to the question "Can *Chlamydia trachomatis* be eradicated?" was the answer, "only if we have better tests". This was based on the premise that the sensitivity and specificity of current chlamydia tests has been over-rated because of dependence on discrepant analysis. The estimate of the sensitivity and specificity of NAAT was 85% and 89% respectively. The Aptima assay, when assessed without discrepant analysis, reported a sensitivity and specificity of 97% and 99% respectively. In further discussion on the role of NAAT in the diagnosis of gonorrhoea, Dr Edward Hook III stated the sensitivity of culture to be 90% in men, with a specificity of 100%. He also considered NAAT on urine to be equivalent to urethral culture for men.

Another symposium was "Women's Health: New perspectives in chlamydia testing" where Sweden's chlamydia program was outlined. After a plateau of cases in the late 1990's, a 30% increase in positives occurred in 2000-01. A Roche health economist argued that polymerase chain reaction (PCR) is efficacious and effective in screening programs and that the more control effective a program is, the less cost effective it becomes. He argued for a new area of modeling to investigate the use of screening techniques in low prevalence populations.

One debate topic was the proposition that "Gonorrhoea will be an Untreatable Disease in 10 years time". Catherine Ison, a UK hospital scientist presented the no case. Her argument was that we have the technology to overcome any resistance to antibiotics by developing new tests and new antibiotics. Joanne Dillon, a research scientist presented the yes case. She took a broader view of untreatable and emphasised that not only are the antibiotics failing, but also our strategies for control.

In the industrialised world gonorrhoea may be struggling, but in the developing world it is thriving. Hong Kong data show 70% of strains have quinolone resistance and China has reported a ceftriaxone resistant strain. There was a plea to develop more interventions, along with more basic and applied research. An increase was noted in strains associated with asymptomatic infections (proline, citrilline, uracil dependent strains), which will make control efforts more difficult. While new antibiotic products are being marketed by pharmaceutical companies, these are modified, old classes of antibiotics.

In a major plenary entitled "*Chlamydia trachomatis* – the persistent pathogen", Dr Walter Stamm was one of the presenters. Key points included:

- There is no differential transmission between male and female if a NAAT is used
- chlamydial persistence can be demonstrated in cell culture and animal models of tubal infertility
- PCR cannot differentiate between re-infection and recurrence; culture and comparison of strains is needed to do this
- persistence may occur in vivo, but seems to be rare.

We may fail to detect antibiotic resistance as few laboratories culture chlamydia; resistance occurs infrequently and is partial rather than absolute. Dr Stamm referred to heterotypic chlamydial strains containing mixed populations of resistant and sensitive cells, which may be more biologically fit to persist. A reported increase in asymptomatic infections may also promote persistence. PCR testing is considered better than culture for detecting infection in men with low polymorph counts on urethral smear.

In a plenary on Mathematical Modelling, Dr Roy Anderson pointed out that eventual decline in incidence with time is the natural dynamic of epidemics regardless of interventions. Models have a long way to go to predict all the reality, and this means more research on understanding networks and intervention effects. Dr Anderson described the use of mathematical models in understanding the dynamics of CD4 lymphocyte levels over time. Lymphocytes can be viewed as a population at risk, with an incidence and prevalence of infection over time. Hence, epidemic equation models may provide some insight to better understand the basic biology of viral dynamics in vivo. Noting that less than 85% adherence leads to HIV treatment failure, such models may help answer questions about the value of drug holidays and more specifically their impact on the development of mutations.

One symposium focussed on chronic genital conditions, including recurrent vulvo vaginitis and chronic prostatitis. Dr J Sorbel made some interesting points:-

- Recurrent vulvo-vaginitis (defined by greater than four proven episodes of Candida vaginitis), not colonization, occurs in 5-7% of adult women,
- there is much self-diagnosis and use of over-the-counter preparations, but one study showed only 39% of women purchasing these preparations for thrush had Candida
- part of the problem is that all currently available drugs are fungistatic.

Dr Galuzzi Grax outlined the NIH classification of prostatitis, which now only contains acute and chronic bacterial prostatitis plus chronic pelvic pain with or without evidence of inflammation. Prostatic massage and urine tests have never been properly validated and should not be performed. The aetiology of chronic pelvic pain is unknown and low rates of specific infections have been reported. Discussion covered neuromuscular theory which hypothesises that reflux of secretions into the prostate cause a chemical prostatitis, if this is correct then α blocker treatment should assist. Unfortunately there are no randomised clinical trials (RCTs) to answer the question. A cytokine theory for the aetiology of the pain was also discussed, but a mechanism for the initial production of cytokines remains obscure. The few RCTs on treatment all have high placebo response rates and current therapies are ineffective.

Another plenary was an overview of STI and Cancer by Dr Harald Hausen, where the only STI discussed was the human papilloma virus (HPV). Cervical cancer is monoclonal and only a small proportion of HPV-infected women develop cancer, so HPV is necessary but not sufficient cause. The discussion covered a variety of additional risk factors e.g. hormones, other infections, smoking, genetics and immunosuppression. There is good evidence that oestrogen plays a role in cancer formation and this may explain fewer HPV related cancers in men. Dr Hausen emphasized the complicated immunology and immunochemistry of the HPV-human cell interaction.

At a symposium on RCTs, Anne Buve from Belgium posed the question "How relevant are RCT to behavioural strategies for STD Control?" In her view an intervention may have an impact but not one being measured, and careful scrutiny of both trial design and measurement of effect is required. A second point was that the results of many trials could not be generalized to other populations. An excellent presentation by Dr Peterman from CDC entitled "Warning: a good RCT will answer your question!" followed up on Dr Buve's point about measurement of effect. He emphasized the need to pay close attention to the study question. As an example, the Muanza and Raki studies each had different questions but neither was designed to answer the question "Does STD control reduce HIV incidence?". Richard Hayes from the Muanza Team reiterated the message, stressing the need for careful design to measure the impact of an intervention. He noted that surrogate end points can be misleading and RCTs with a community focus require specific statistical techniques for analysis.

During a Mathematic modeling, Sexual networks and STI Control symposium, Geoff Garnett addressed the issue of persisting low prevalence of STD in industrialized countries where heterogeneity and long-lived asymptomatic infections fail to explain persistence. In low prevalence communities mating tends to be random rather than assortative and reintroduction of infection does not explain maintenance of infection, nor does drug resistance or the existence of a core group. A likely explanation is the structure of sexual networks, with large networks likely to prevent extinction. Hence the past focus on sexual networks should be enhanced by more emphasis on social network research. In one contact tracing study, 31% of chlamydia cases were detected in the social network as opposed to the sexual network. Similarly, in the past decade geographical and network analysis in the USA has used area of residence of the network, but the venue may be more important.

On the final day, HIV related presentations in the major plenary focused on Public Health aspects of HAART. Dr Anne Johnson outlined conflicting views: treatment allows an increased duration of infection which may lead to increased prevalence and increased resistance to treatments. Alternatively, good therapeutic strategies will reduce infectiousness but this in turn may promote an increase in partner change rates, more frequent unprotected sex and an increase in STI's. She emphasized that prevention efforts should focus on those who are infected, as life-long strategies to prevent transmission to others are needed.

Dr Mike Cohen's main thrust was that HAART is an underutilized prevention strategy. He cited data showing the increased proportion of STI in HIV positives was attributed to those with HIV, who were previously unaware of their HIV status. Dr Ward Cates promoted the concept of preventing HIV by targeting HIV prevention counseling to those who were infected. The aim is to promote testing so that everyone knows their status allowing HIV-positives to enter into health care sooner rather than later. This raises the issue of whether to treat earlier to lower transmission, knowing that people will be exposed to drugs for longer periods potentially increasing serious or life threatening side effects.

The conference was a timely update on the latest trends in research and a review of currently accepted dogma and Berlin was a marvellous city in which to spend mid-summer.

Russell Waddell
November 2001

HIV INFECTION IN SOUTH AUSTRALIA

HIV Infection 1985 - 30/09/01

In South Australia, 792 individuals have been diagnosed with HIV infection, 720 (91%) males and 72 (9%) females. Of the males, 548 (76%) reported male-to-male sexual contact, 57 (8%) reported injecting drug use and 30 (4%) reported both risk factors. Heterosexual transmission was reported by 42 (58%) females diagnosed with HIV infection, 24 (33%) females reported injecting drug use (Table 1.1).

HIV Infection 01/07/01 - 30/09/01

Thirteen individuals (10 male, 3 female) were diagnosed with HIV infection during the third quarter (Table 1.2). Seven men reported male-to-male sexual contact as their risk factor. Three males were from countries where HIV infection is transmitted predominantly by heterosexual contact and a further two males were already known positive from overseas (Table 1.3). Two males and one female were likely to have acquired their infection in the preceding 12 months (Table 1.3).

Laboratory Screening For HIV Infection 01/07/01 - 30/09/01

During the third quarter of 2001, 18,566 tests were performed, 7,983 (43%) on males, 10,483 (56%) on females and 100 tests on individuals whose sex was unknown (Table 1.4).

**Table 1.1 HIV infection detected in South Australia, 1985 - 30/09/2001.
Exposure category by sex.**

Exposure category	Male		Female		Total	
	No.	%	No.	%	No.	%
Homosexual contact	548	76	n.a.		548	69
Homosexual contact/IDU	30	4	n.a.		30	4
Heterosexual contact	46	6	42	58	88	11
IDU	57	8	24	33	81	10
Blood products	7	1	2	3	9	1
Other	4	1	3	4	7	1
Unknown	28	4	1	1	29	4
Total	720		72		792	

na not applicable

Table 1.2 HIV infection detected in South Australia, 01/07/01 - 30/09/01 and year to date. Exposure category by sex.

Exposure category	3rd Quarter		Year to date	
	01/07/01 - 30/09/01		01/01/01 - 30/09/01	
	Male	Female	Male	Female
Homosexual	7	n.a	16	n.a
Heterosexual/IDU	1	1	2	1
Heterosexual contact	2	2	5	6
Total	10	3	23	7

n.a. not applicable

Table 1.3 HIV infection detected in South Australia, 01/07/01 - 30/09/01 and year to date. Testing history by age at diagnosis.

Testing history	3rd Quarter			Year to date		
	01/07/01 - 30/09/01			01/01/01 - 30/09/01		
	Age group (years)			Age group (years)		
	<25	25 - 39	>39	<25	25 - 39	>39
Negative £12 months	-	1*	2	-	5*	2
Negative > 12 = 24 months	-	-	-	-	1	-
Negative > 24 months	-	2	1	1	6*	1
No previous test	-	2*	3*	1	7*	3*
Known positive overseas	-	2	-	-	3	-
Total	-	7	6	2	22	6

*includes females

Table 1.4 Summary of HIV antibody tests, 01/07/01 - 30/09/01* and year to date. Laboratory by sex.

Laboratory	3rd Quarter			Year to date			Total
	01/07/01 - 30/09/01			01/01/01 - 30/09/01			
	Male	Female	Unknown	Male	Female	Unknown	
Public	4479	5600	88	13629	17461	333	31423
Private	3504	4883	12	11007	14876	12	25895
Total	7983	10483	100	24636	32337	345	57318

*incomplete data for this quarter

HEPATITIS C SURVEILLANCE IN SOUTH AUSTRALIA

Hepatitis C Medical Notification 01/07/01 - 30/09/01

In the third quarter of 2001, medical notifications of hepatitis C infection were received for 246 individuals, 156 (63%) males and 90 (37%) females, consistent with previous quarters.

Among the notifications, 38 cases were reported as having an earlier positive test (pre-1995) whilst 108 individuals had never been tested before for hepatitis C infection. In a further 69 cases the testing history was unknown. Of 31 individuals with a previous negative test, 20 were tested more than 12 months earlier and 11 were tested within the last year. In 148 (71%) 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 cases (85%) were aged between 20 and 49 years, (116 males, 59 females) (Table 2.2). Of five males and five females aged less than twenty years (10 cases), nine 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 hepatitis not ascribed to other causes.

Fifteen incident cases were identified during the quarter, 11 had negative serology in the preceding 12 months and four were clinical diagnoses. The incident cases comprised eight males and seven females. In 14 cases the likely mode of transmission for hepatitis C virus was injecting drug use, occupational exposure was likely in one further case (Table 2.3). At the time of diagnosis most incident cases (73%) 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 01/07/01 - 30/09/01 and year to date. Exposure category by sex.

Exposure category	3rd Quarter		Year to date		
	01/07/01 - 30/09/01		01/01/01 - 30/09/01		
	Male	Female	Male	Female	Total
IDU ¹	98	50	326	160	486
Blood transfusion/ products	6	3	15	19	34
Tattoos	5	4	24	9	33
High prevalence country ²	9	6	28	14	42
Other ³	6	6	12	14	26
Unknown	10	5	37	20	57
Total	134	74	442	236	678

¹ Includes IDU in combination with other categories.

² Residence/medical treatment in a high prevalence overseas country.

³ Includes occupational exposure; household, perinatal & sexual transmission; body piercing/ acupuncture.

Table 2.2 Hepatitis C infection, new diagnoses 01/07/01 - 30/09/01 and year to date. Age group by sex.

Age group (years)	3rd Quarter		Year to date		
	01/07/01 - 30/09/01		01/01/01 - 30/09/01		
	Male	Female	Male	Female	Total
10 - 19	5	5	11	24	35
20 - 29	38	25	138	80	218
30 - 39	46	17	135	59	194
40 - 49	32	17	117	47	164
≥ 50	13	10	41	26	67
Total	134	74	442	236	678

Table 2.3 Newly acquired infections (Incident cases*) of hepatitis C infection, 01/07/01 - 30/09/01 and year to date. Exposure category by sex.

Exposure category	3rd Quarter		Year to date		
	01/07/01 - 30/09/01		01/01/01 - 30/09/01		
	Male	Female	Male	Female	Total
IDU	7	6	34	15	49
IDU/tattoos	-	1	-	1	1
Occupational exposure	1	-	1	-	1
Not identified	-	-	-	2	2
Total	8	7	35	18	53

* Incident cases are newly acquired infections, see text.

Table 2.4 Newly acquired infections (Incident cases*) of hepatitis C infection, 01/07/01 - 30/09/01 and year to date. Age group by sex.

Age group (years)	3rd Quarter		Year to date		
	01/07/01 - 30/09/01		01/01/01 - 30/09/01		
	Male	Female	Male	Female	Total
15 - 19	2	1	5	4	9
20 - 29	5	3	20	10	30
30 - 39	1	3	9	4	13
≥ 40	-	-	1	-	1
Total	8	7	35	18	53

* Incident cases are newly acquired infections, see text.

Table 2.5 Summary of laboratory tests for hepatitis C antibodies, 01/07/01 - 30/09/01* and year to date. Laboratory by sex.

Laboratory	3rd Quarter 01/07/01 - 30/09/01			Year to date 01/01/01 - 30/09/01			Total
	Male	Female	Unknown	Male	Female	Unknown	
Public	5166	5806	42	16045	17782	123	33950
Private	3521	3621	-	10999	11263	-	22262
Total	8687	9427	42	27044	29045	123	56212

*incomplete data for this quarter

HEPATITIS B SURVEILLANCE IN SOUTH AUSTRALIA

Hepatitis B Medical Notification 01/07/01 - 30/09/01

During the third quarter of 2001, 79 hepatitis B medical notifications were received. Of these, 2 were acute clinical cases of hepatitis B infection (Tables 3.1, 3.2). A further 17 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). There was one report of antigen positivity of less than 12 months duration (defined by a negative surface antigen test in the 12 months prior to diagnosis) (Table 3.3).

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

Of the 59 reports of antigen positivity of uncertain duration, 33 tested surface antigen positive for the first time this quarter, two had a previous negative test and the testing history was unknown for the remaining 24 cases. Among the 33 individuals who tested surface antigen positive for the first time, but were not acute cases, the racial origin of 21 (64%) 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, 01/07/01 - 30/09/01 and year to date. Exposure category by sex.

Exposure category	3rd Quarter		Year to date		
	01/07/01 - 30/09/01		01/01/01 - 30/09/01		
	Male	Female	Male	Female	Total
IDU	-	-	2	-	2
Heterosexual contact	-	1	1	5	6
Overseas travel	-	-	1	-	1
Social/family	-	-	1	-	1
None identified	-	1	1	4	5
Total	-	2	6	9	15

Table 3.2 Acute hepatitis B infection, 01/07/01 - 30/09/01 and year to date. Age group by sex.

Age group (years)	3rd Quarter		Year to date		
	01/07/01 - 30/09/01		01/01/01 - 30/09/01		
	Male	Female	Male	Female	Total
10 – 19	-	1	2	4	6
20 – 29	-	-	-	3	3
30 – 39	-	-	2	-	2
40 – 49	-	-	1	-	1
≥ 50	-	1	1	2	3
Total	-	2	6	9	15

Table 3.3 Hepatitis B infection, 01/07/01 - 30/09/01 and year to date. Case category by sex.

Case category	3rd Quarter		Year to date		
	01/07/01 - 30/09/01		01/01/01 - 30/09/01		
	Male	Female	Male	Female	Total
Acute infection	-	2	6	9	15
Antigen positive - <12months duration	-	1	2	1	3
Antigen positive - uncertain duration	35	24	106	62	168
Chronic carriers - >12 months duration	12	5	31	19	50
Total	47	32	145	91	230

Table 3.4 Individuals who tested hepatitis B surface antigen positive for the first time, 01/07/01 - 30/09/01 and year to date. Race by sex.

Racial origin	3rd Quarter		Year to date		
	01/07/01 - 30/09/01		01/01/01 - 30/09/01		
	Male	Female	Male	Female	Total
Aboriginal	3	-	11	-	11
Asian	11	10	38	27	65
Caucasian	5	1	16	6	22
Other/unknown	1	2	3	4	7
Total	20	13	68	37	105

Table 3.5 Summary of hepatitis B surface antigen tests, 01/07/01 - 30/09/01* and year to date. Laboratory by sex.

Laboratory	3rd Quarter			Year to date			Total
	01/07/01 - 30/09/01			01/01/01 - 30/09/01			
	Male	Female	Unknown	Male	Female	Unknown	
Public	4449	6301	44	13428	19945	123	33496
Private	2479	3962	-	8959	13530	-	22489
Total	6928	10263	44	22387	33475	123	55985

*incomplete data for this quarter

GENITAL CHLAMYDIAL INFECTION IN SOUTH AUSTRALIA

Genital chlamydial Infection 01/07/01 - 30/09/01

Between 1 July and 30 September 2001, STD Services received 345 notifications of genital chlamydial infection. This compares with a range of 225 to 247 cases for the same period 1996 to 2000. Greater than the expected number of reports were received from Clinic 275 and other metropolitan medical officers for each quarter in 2001. In the third quarter, 139 cases (40%) occurred in males and 206 (60%) in females (Table 4.1).

Eighty seven percent of cases in males occurred in men aged less than 35 years. In females, women aged less than 30 years accounted for 95% of cases. For both sexes, incidence peaked in the age group 20 to 24 years (46% of males, 44% of females) (Table 4.1). The racial origin of 283 cases (82%) was reported as Caucasian (Table 4.2). Infection was acquired in South Australia in 301 cases (87%). 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. Nine males (6%) with urethral chlamydial infection reported male-to-male sex.

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, 01/07/01 - 30/09/01 and year to date. Age group by sex.

Age group (years)	3rd Quarter 01/07/01 - 30/09/01		Year to date 01/01/01 - 30/09/01		
	Male	Female	Male	Female	Total
< 20	19	61	66	218	284
20 - 24	64	90	183	250	433
25 - 29	20	45	91	103	194
30 - 34	18	7	54	39	93
35 - 39	7	3	26	16	42
≥ 40	11	-	32	11	43
Total	139	206	452	637	1089

Table 4.2 Genital chlamydial infection, 01/07/01 - 30/09/01 and year to date. Race by sex.

Racial origin	3rd Quarter		Year to date		
	01/07/01 - 30/09/01		01/01/01 - 30/09/01		
	Male	Female	Male	Female	Total
Aboriginal	9	21	43	70	113
Asian	3	12	21	41	62
Caucasian	116	167	365	507	872
Other/unknown	11	6	23	19	42
Total	139	206	452	637	1089

Table 4.3 Summary of laboratory tests for genital chlamydia, 01/07/01 - 30/09/01* and year to date. Laboratory by sex.

Laboratory	3rd Quarter		Year to date		
	01/07/01 - 30/09/01		01/01/01 - 30/09/01		
	Male	Female	Male	Female	Total
Public	1451	3404	4342	10472	14814
Private	746	2069	2194	6420	8614
Total	2197	5473	6536	16892	23428

*incomplete data for this quarter

GONOCOCCAL INFECTION IN SOUTH AUSTRALIA

Gonococcal Infection 01/07/01 - 30/09/01

Between 1 July and 30 September 2001, STD Services received 47 notifications of gonococcal infection (Table 5.1). This compares with a range of 49 to 96 infections per quarter during the year 2000.

Twenty-four cases (53%) occurred in males, and 23 (49%) in females (Table 5.1). Gonococcal infection in males occurred in a wide age range with seven cases (29%) occurring in males less than 20 years of age and six cases (25%) in men aged forty years and over. In females, 70% of cases occurred in women aged less than 30 years (Table 5.1).

The racial origin was reported as Aboriginal for 19 cases in women (95% of females whose racial origin is recorded). In males, 11 cases (46%) were Aboriginal and 12 (50%) were Caucasian. The proportion of males with gonococcal infection reporting male-to-male sexual contact was 63%.

The likely location of acquiring infection is known for 36 cases. Of these, 31 cases (86%) acquired infection in South Australia with 3 cases infected interstate and 2 overseas.

Table 5.1 Gonococcal infection detected in South Australia, 01/07/01 - 30/09/01 and year to date. Age group by sex.

Age group (years)	3rd Quarter		Year to date		
	01/07/01 - 30/09/01		01/01/01 - 30/09/01		Total
	Male	Female	Male	Female	
< 20	7	8	16	23	39
20 - 24	3	3	22	17	39
25 - 29	1	5	19	15	34
30 - 34	2	3	22	9	31
35 - 39	5	3	18	6	24
≥ 40	6	1	15	4	19
Total	24	23	112	74	186

Table 6.2 Males diagnosed with chlamydia, gonorrhoea or *syphilis at C275, 01/07/01 - 30/09/01. Exposure category by infection.

Exposure category	No.	Chlamydia	Gonorrhoea
Homosexual	139	5	2
Bisexual	28	1	-
Bisexual, IDU	5	-	1
Heterosexual IDU	79	7	-
Heterosexual, O/S [#]	85	9	1
Heterosexual	532	33	-
Total		55	4

* No case of syphilis diagnosed during quarter

Overseas contact in the previous three months.

Table 6.3 Males diagnosed with hepatitis C, hepatitis B or HIV infection at C275, 01/07/01 – 30/09/01. Exposure category by infection.

Exposure category	Hepatitis C				Hepatitis B		HIV
	No.	Incident cases	New diagnosis	Known	** Previous exposure	Carrier	
Homosexual	139	-	-	-	5	-	-
Homosexual, IDU	17	1	-	1	-	-	-
Bisexual	28	-	-	-	3	-	2
Heterosexual, IDU	79	1	2	14	7	-	1
Heterosexual, O/S [#]	85	-	-	-	1	3	-
Heterosexual	532	-	1	2	8	1	-
Other/unknown	26	-	-	2	1	-	-
Total		2	3	19	25	4	3

** 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, 01/07/01 - 30/09/01. Exposure category by infection.

Exposure category	No.	Chlamydia	Syphilis
Heterosexual, IDU	71	1	-
Heterosexual, O/S [#]	45	7	1
Heterosexual	517	19	-
Other/unknown	45	1	-
Total		28	1

* No case of gonorrhoea diagnosed during the quarter.

Overseas contact in the previous three months.

Table 6.5 Females diagnosed with hepatitis C, hepatitis B or HIV* infection at C275, 01/07/01 - 31/09/01. Exposure category by infection.

Exposure category	Hepatitis C		Hepatitis B**
	No	Known	Previous Exposure
Heterosexual, IDU	71	2	1
Heterosexual, O/S#	45	-	4
Heterosexual	517	-	7
Sex worker	18	4	1
Other/unknown	45	-	1
Total		6	14

* No case of HIV diagnosed during the quarter.

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

Overseas contact in the previous three months.

STD Services Quarterly Surveillance Report is produced by STD Services, Internal Medicine Service, Royal Adelaide Hospital. ISSN 1328-0090

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