Northern Territory Government
Department of Health and Community Services

Northern Territory AIDS/STD Program Surveillance Update

Department of Health and Community Services, Vol. 5 No 1, Jan-Mar 2004 & Apr-Jun 2004

This report presents quarterly statistics for all sexually transmissible infections (STIs) and blood borne viruses (BBVs) in the Northern Territory (NT) during the periods January to March and April to June 2004. Data for this report is sourced from the Northern Territory Notifiable Diseases Surveillance System (NTNDSS), the centralised database of NT wide notifications and the AIDS/STD Program's HIV and AIDS databases.

1. Aims of the report

The aim of the report is to provide up to date information that can be used by service providers to assess the current level of infection within their district. Regular reports seek to raise the awareness of all service providers about the high rates of preventable and largely, readily curable infections and assist clinicians to plan targeted interventions.

2. Format

The report is divided into bacterial sexually transmissible infections (gonorrhoea, chlamydia, syphilis and trichomonas) and blood borne viruses (hepatitis C and human immunodeficiency virus). Donovanosis is presented separately due to the small numbers of cases.

3. Limitations to the report

This update does not provide data on complications of sexually transmitted infections such as pelvic inflammatory disease, epidydimo-orchitis or infertility which are not notifiable. The data must be interpreted with some caution as the number and rate of cases will be a function of the amount of testing done. It is known that the amount of testing, particularly for screening of asymptomatic persons, varies enormously between regions, population groups and time periods. Currently, complete NT wide data on the total numbers of tests done is not routinely available, which would allow a better understanding of the observed patterns of disease.

4. Quarterly Notifications

The comments below relate specifically to the cases and rates of infections for the quarters covered by this report in comparison to the same time period in the previous years, or where specified, the preceding six months of the last surveillance report.

4.1 Genital Chlamydia

There were 830 (821 cases per 100 000 population) cases of genital chlamydia notified in the NT between January and June 2004. This compares to 696 and 843 for the same reporting periods in 2002 and 2003 respectively. The majority of cases were diagnosed in females (61%) and Aboriginal people (66%).

Young people continued to be over-represented in the number of notified infections, with 56% of chlamydia cases diagnosed in the 15 to 24 year olds. This proportion is slightly less than the 61% reported in the same period of 2003 (tab. 1.5).

4.2 Gonorrhoea

A total of 830 (821 cases per 100 000 population) notifications for gonorrhoea were made in the first 2 quarters of 2004. This compares with 2002 and 2003 figures of 821 and 779 respectively for the same 6-month period. As for chlamydia infections, the majority of gonorrhoea cases were diagnosed in females (61%) and Aboriginal people (87%).

The 15 to 24 year age group contributed 55% of all gonorrhoea notifications in the six months to June. This is slightly less that the 58% reported in the same period in 2003. As has been the trend in previous reporting periods, over 55% of NT gonorrhoea cases are notified in the Alice Springs district (fig. 1.4). The conduct of regular, extensive community screening programs are thought to impact on this disproportionate number.

4.3 Syphilis

The total of 151 syphilis notifications for the first two quarters 2004 compare with the previous years' figure of 172 cases for the same time period. The even gender distribution of cases continues with males and females representing 49% and 51% respectively (tab. 1.2).
Cases of syphilis in Aboriginal people accounted for 92% of the total notifications for this 6-month period. This is higher than the previous two years where the proportion was 80% in 2002 and 86% in the same reporting period of 2003.

4.4 Trichomonas

Trichomonas notifications have remained around 300 cases NT wide, as has been the trend in previous reports. Over half (55%) of all trichomonas notifications originate from the Alice Springs District, which is likely to be a reflection of extensive screening campaigns conducted in the Central Australian region, in addition to the integration of trichomonas testing into routine sexual health checks.

4.5 Donovanosis

The one case of donovanosis reported in an older Aboriginal male from Alice Springs contributes to an apparent declining trend in the diagnosis of donovanosis in the NT (fig. 3.1).

4.6 Hepatitis C

New notifications of hepatitis C totalled 127 for this reporting period (tab. 4.1). This figure represents a 27% increase on the total cases for the same reporting period in 2003 and 46% higher than 2002. The apparent upward trend of hepatitis C notifications may be due to a greater community and health care provider awareness of potential 'at risk' behaviours. The notification to the NTNDSS of confirmed 'newly acquired' hepatitis C infections remains rare and while the total number of cases recorded are likely to include some newly acquired infections, the majority are a reflection of older infections that have been recently diagnosed. However, the rate of Hepatitis C in Darwin is disproportionally higher than those of other districts and the national rate, which is worth particular attention.

The Centre for Disease Control (CDC) is in the process of enhancing the list of Notifiable Diseases to include 'acute / newly acquired' and 'chronic' categories of hepatitis C infection. This will make it legal for health care providers to supply the necessary clinical and personal risk-factor information to CDC which is necessary to distinguish a likely new infection from one acquired more than 2 years previously.

4.7 Human Immunodeficiency Virus (HIV)

There was an unusually large number of new HIV cases diagnosed in NT residents during the first half of this year (tab. 5.1). As was the situation in the same period of 2002, the majority (5 of 7 cases) of HIV cases were heterosexually acquired. All cases were among non-Aboriginal people, and most were male (5 cases).

4.8 Aquired Immunodeficiency Syndrome (AIDS)

Two people presented with AIDS defining illnesses during this reporting period (tab. 5.2), their conditions included PCP and oesophageal candidiasis.

5. Trends

We have, the first time in the quarterly report, presented the annual trends of common STIs and Hepatitis C in the NT from 1991 to 2003. The figures presented provide an overall picture of the figures presented from quarter to quarter however, should be interpreted with some caution. The marked increase of chlamydia and gonorrhea rates around 1996/1997 coincides with the introduction of PCR testing and is likely to reflect greater case ascertainment due to the ease of self-administered specimen collection methods (using tampons in women and urine in men).

The discrepant chlamydia and gonorrhea rates between male and female is unlikely to be the result of males experiencing less infection, rather, a lack or delay in contact tracing males and variance in access to services, and hence, testing for males. In contrast, the similarity between female and male syphilis rates is likely to be a reflection of an equal amount of testing, usually as a screen, for syphilis in males and females.

While Aboriginal rates are consistently and substantially higher than non-Aboriginal rates for all STIs, rates of chlamydia among non-Aboriginals have been increasing in the past 5 years.

Congenital syphilis cases continue to occur specifically, among the Aboriginal population. Surveillance of congenital syphilis is heavily reliant on practitioner notification. The peak in 2001 coincides with a congenital syphilis surveillance activity undertaken in that year, however, may provide an indication of the real situation of this preventable disease in the NT.

The rates of hepatitis C for both sexes have remained stable in the past 5 years. It is worth noting that the rate of hepatitis C among Indigenous Territorians, who anecdotally have low levels of injecting drug use, show a slow but steady increasing trend over the past 4 years.

6. Consumer response

The NT AIDS/STD Program is very interested in readers' responses to this report. Please forward any comments or suggestions to:

Jiunn-yih Su / Heather Lyttle
AIDS/STD Program
Department of Health and Community Services
PO Box 40596, Casuarina
Northern Territory
Phone: (08) 89228874
Fax: (08) 8922 8809
Email: jiunn-yih.su@nt.gov.au

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

This report is downloadable in PDF format from the Department of Health and Community Services website: http://www.health.nt.gov.au/

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1. Sexually transmissible infections (STIs)

Table 1.1 Gonorrhoea, chlamydia, syphilis and trichomonas rates in the Northern Territory, January-March and April-June 2004

	Gonorrhoea		Chlamydia		Syphilis		Trichomonas	
NT Total	**Cases**	**Rate[1]**	**Cases**	**Rate[1]**	**Cases**	**Rate[1]**	**Cases**	**Rate[1]**
Quarter								
Jan-Mar 2004	379	750.5	381	754.5	67	132.7	179	354.5
Apr-Jun 2004	451	893.1	449	889.2	84	166.3	114	225.8
Jan-Jun 2004	**830**	**821.8**	**830**	**821.8**	**151**	**149.5**	**293**	**290.1**

1 Cases per 100,000 population

Figure 1.1 Gonorrhoea, chlamydia, syphilis and trichomonas rates in the Northern Territory, January-June 2004

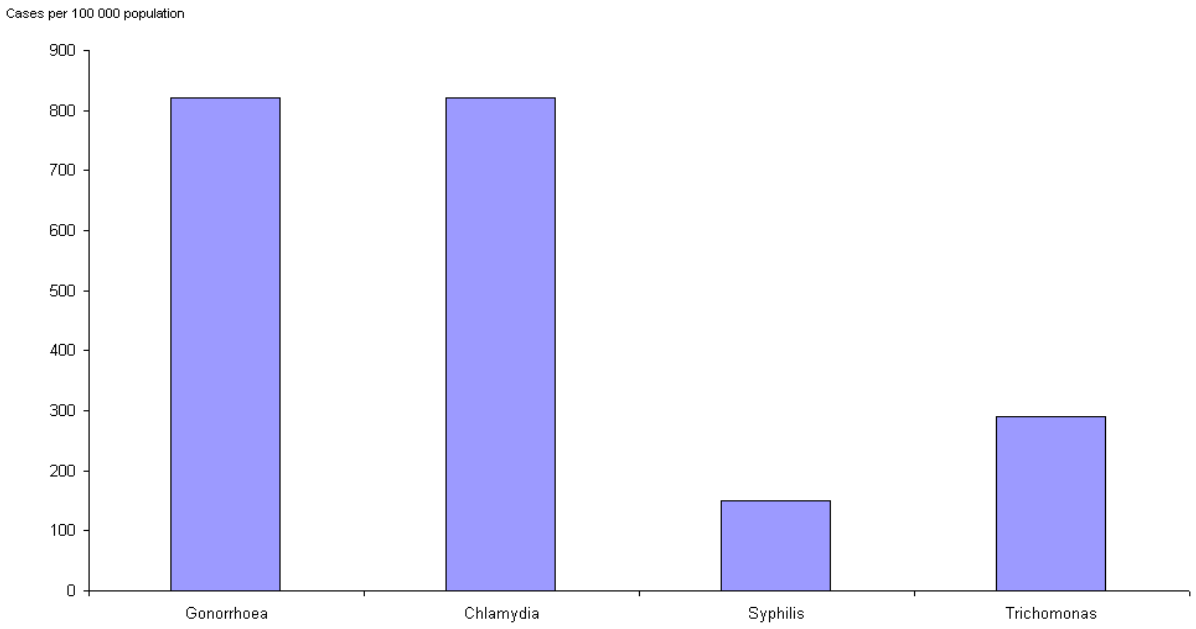


Table 1.2 Gonorrhoea, chlamydia, syphilis and trichomonas rates in the Northern Territory by gender, January-March and April-June 2004

	Gonorrhoea		Chlamydia		Syphilis		Trichomonas	
Gender	**Cases**	**Rate[1]**	**Cases**	**Rate[1]**	**Cases**	**Rate[1]**	**Cases**	**Rate[1]**
Males								
Jan-Mar 2004	170	642.0	149	562.7	37	139.7	0	0.0
Apr-Jun 2004	229	864.9	173	653.4	37	139.7	4	15.1
Total	**399**	**753.5**	**322**	**608.1**	**74**	**139.7**	**4**	**7.6**
Females								
Jan-Mar 2004	209	870.1	232	965.9	30	124.9	179	745.2
Apr-Jun 2004	222	924.3	276	1149.1	47	195.7	110	458.0
Total	**431**	**897.2**	**508**	**1057.5**	**77**	**160.3**	**289**	**601.6**
Not stated								
Jan-Mar 2004								
Apr-Jun 2004								
Total	**0**		**0**		**0**		**0**	

1 Cases per 100,000 population

Figure 1.2 Gonorrhoea, chlamydia, syphilis and trichomonas rates in the Northern Territory by gender, January-June 2004

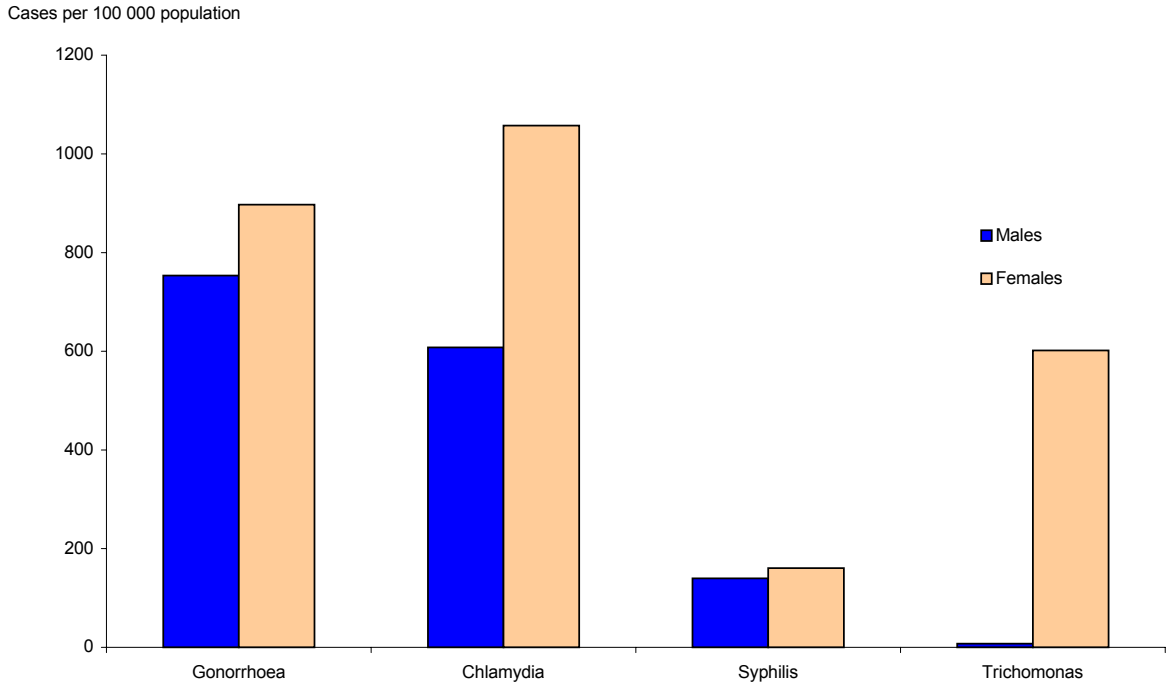


Table 1.3 Gonorrhoea, chlamydia, syphilis and trichomonas rates in the Northern Territory by Indigenous status, January-March and April-June 2004

	Gonorrhoea		Chlamydia		Syphilis		Trichomonas	
Indigenous Status	**Cases**	**Rate[1]**	**Cases**	**Rate[1]**	**Cases**	**Rate[1]**	**Cases**	**Rate[1]**
Aboriginal								
Jan-Mar 2004	336	2348.2	238	1663.3	62	433.3	172	1202.0
Apr-Jun 2004	390	2725.6	309	2159.5	77	538.1	109	761.8
Total	**726**	**2536.9**	**547**	**1911.4**	**139**	**485.7**	**281**	**981.9**
non-Aboriginal								
Jan-Mar 2004	32	88.4	117	323.3	4	11.1	4	11.1
Apr-Jun 2004	34	94.0	91	251.5	6	16.6	3	8.3
Total	**66**	**91.2**	**208**	**287.4**	**10**	**13.8**	**7**	**9.7**
Unknown I/S								
Jan-Mar 2004	11		26		1		3	
Apr-Jun 2004	27		49		1		2	
Total	**38**		**75**		**2**		**5**	

1 Cases per 100,000 population

Figure 1.3 Gonorrhoea, chlamydia, syphilis and trichomonas rates in the Northern Territory by Indigenous status, January-June 2004

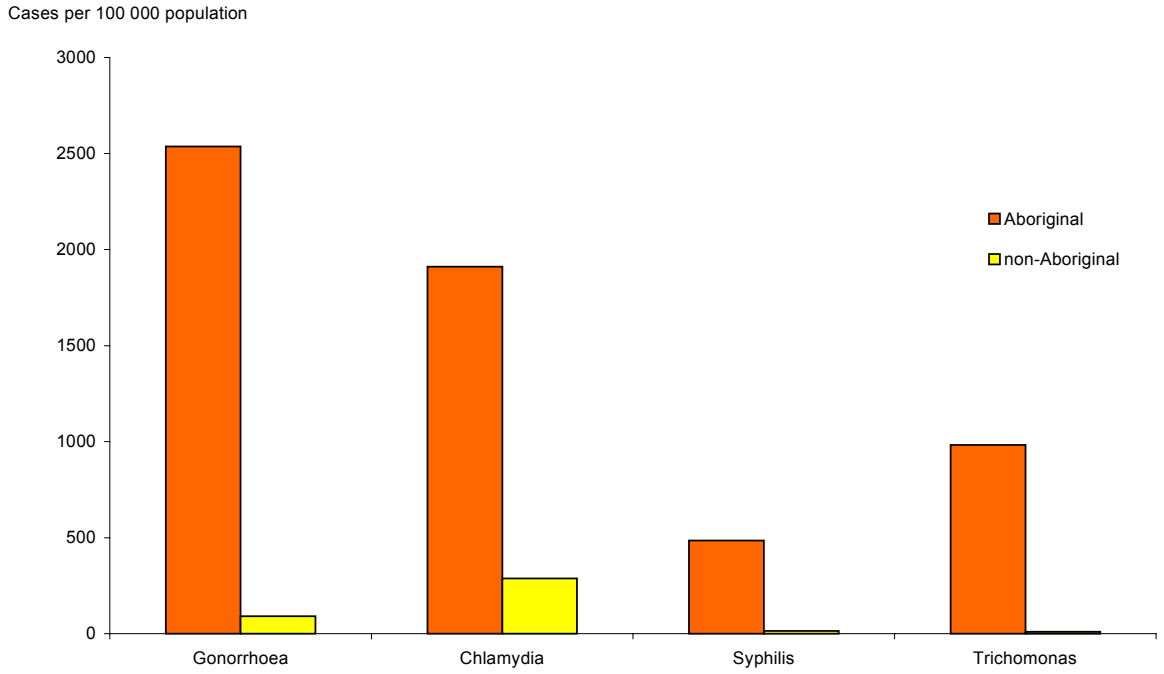


Table 1.4 Gonorrhoea, chlamydia, syphilis and trichomonas rates in the Northern Territory by district, January-March and April-June 2004

	Gonorrhoea		Chlamydia		Syphilis		Trichomonas	
District	Cases	Rate[1]	Cases	Rate[1]	Cases	Rate[1]	Cases	Rate[1]
Darwin								
Jan-Mar 2004	78	256.7	159	523.2	16	52.6	37	121.7
Apr-Jun 2004	91	299.4	143	470.5	8	26.3	24	79.0
Total	**169**	**278.0**	**302**	**496.9**	**24**	**39.5**	**61**	**100.4**
Katherine								
Jan-Mar 2004	59	1251.6	38	806.1	11	233.3	7	148.5
Apr-Jun 2004	50	1060.7	38	806.1	20	424.3	0	0.0
Total	**109**	**1156.1**	**76**	**806.1**	**31**	**328.8**	**7**	**74.2**
East Arnhem								
Jan-Mar 2004	29	826.7	25	712.7	4	114.0	26	741.2
Apr-Jun 2004	29	826.7	27	769.7	3	85.5	20	570.1
Total	**58**	**826.7**	**52**	**741.2**	**7**	**99.8**	**46**	**655.6**
Barkly								
Jan-Mar 2004	18	991.7	12	661.2	0	0.0	12	661.2
Apr-Jun 2004	15	826.4	16	881.5	0	0.0	7	385.7
Total	**33**	**909.1**	**28**	**771.3**	**0**	**0.0**	**19**	**523.4**
Alice Springs								
Jan-Mar 2004	195	1936.8	147	1460.1	36	357.6	97	963.4
Apr-Jun 2004	266	2642.0	225	2234.8	53	526.4	63	625.7
Total	**461**	**2289.4**	**372**	**1847.4**	**89**	**442.0**	**160**	**794.6**

1 Cases per 100,000 population

Figure 1.4 Gonorrhoea, chlamydia, syphilis and trichomonas rates in the Northern Territory by district, January-June 2004

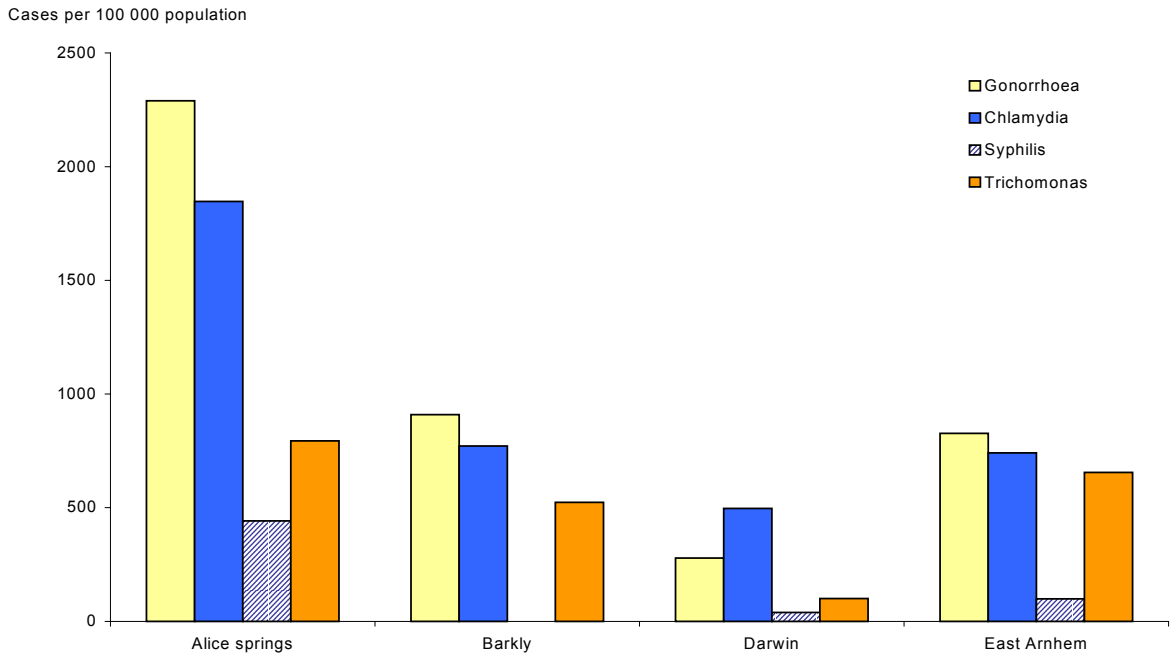
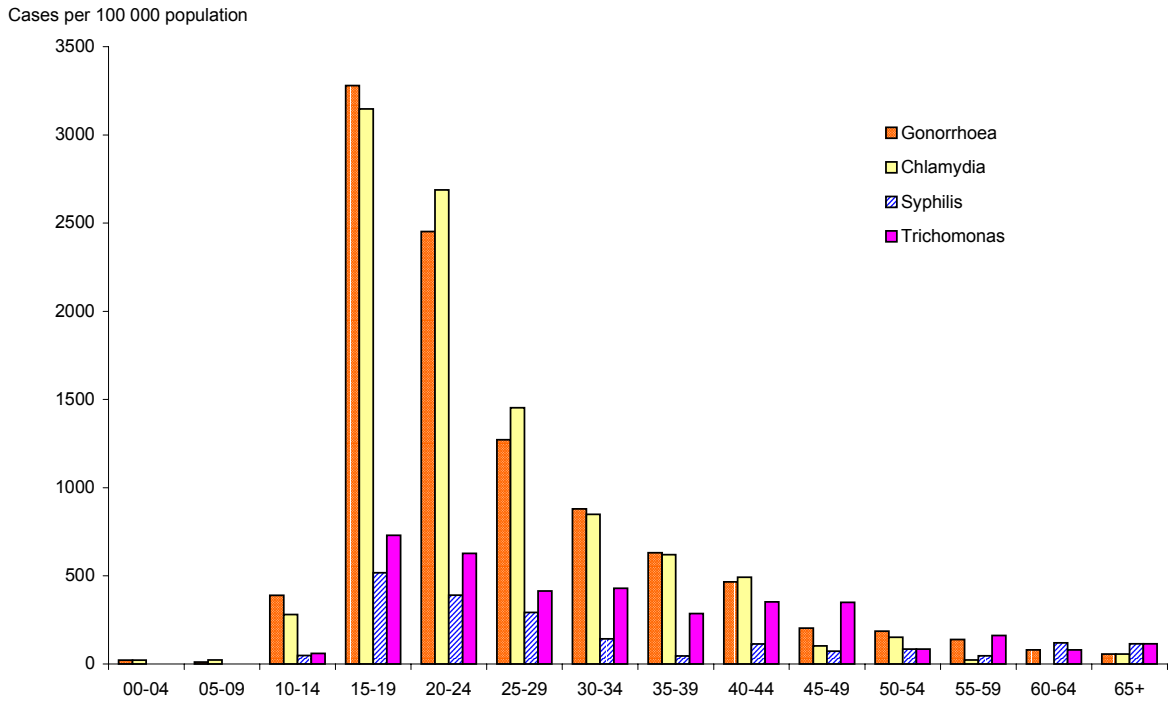


Table 1.5 Gonorrhoea, chlamydia, syphilis and trichomonas rates in the Northern Territory by five-year age group, January-June 2004

	Gonorrhoea		Chlamydia		Syphilis		Trichomonas	
Age group	**Cases**	**Rate[1]**	**Cases**	**Rate[1]**	**Cases**	**Rate[1]**	**Cases**	**Rate[1]**
Jan-Jun 2004								
00-04	2	22.8	2	22.8	0	0.0	0	0.0
05-09	1	11.5	2	23.1	0	0.0	0	0.0
10-14	32	389.9	23	280.2	4	48.7	5	60.9
15–19	247	3280.2	237	3147.4	39	517.9	55	730.4
20–24	207	2451.7	227	2688.6	33	390.9	53	627.7
25–29	126	1271.7	144	1453.4	29	292.7	41	413.8
30–34	86	880.0	83	849.3	14	143.3	42	429.8
35–39	55	631.7	54	620.2	4	45.9	25	287.1
40–44	37	466.2	39	491.4	9	113.4	28	352.8
45–49	14	204.1	7	102.0	5	72.9	24	349.8
50–54	11	186.5	9	152.6	5	84.8	5	84.8
55–59	6	139.2	1	23.2	2	46.4	7	162.4
60–64	2	80.2	0	0.0	3	120.3	2	80.2
65+	2	57.2	2	57.2	4	114.4	4	114.4
Unknown	2						2	
Total	**830**	**821.8**	**830**	**821.8**	**151**	**149.5**	**293**	**290.1**

1 Cases per 100,000 population

Figure 1.5 Gonorrhoea, chlamydia, syphilis and trichomonas rates in the Northern Territory by five-year age group, January-June 2004



2. Urban and Rural Burden of Disease

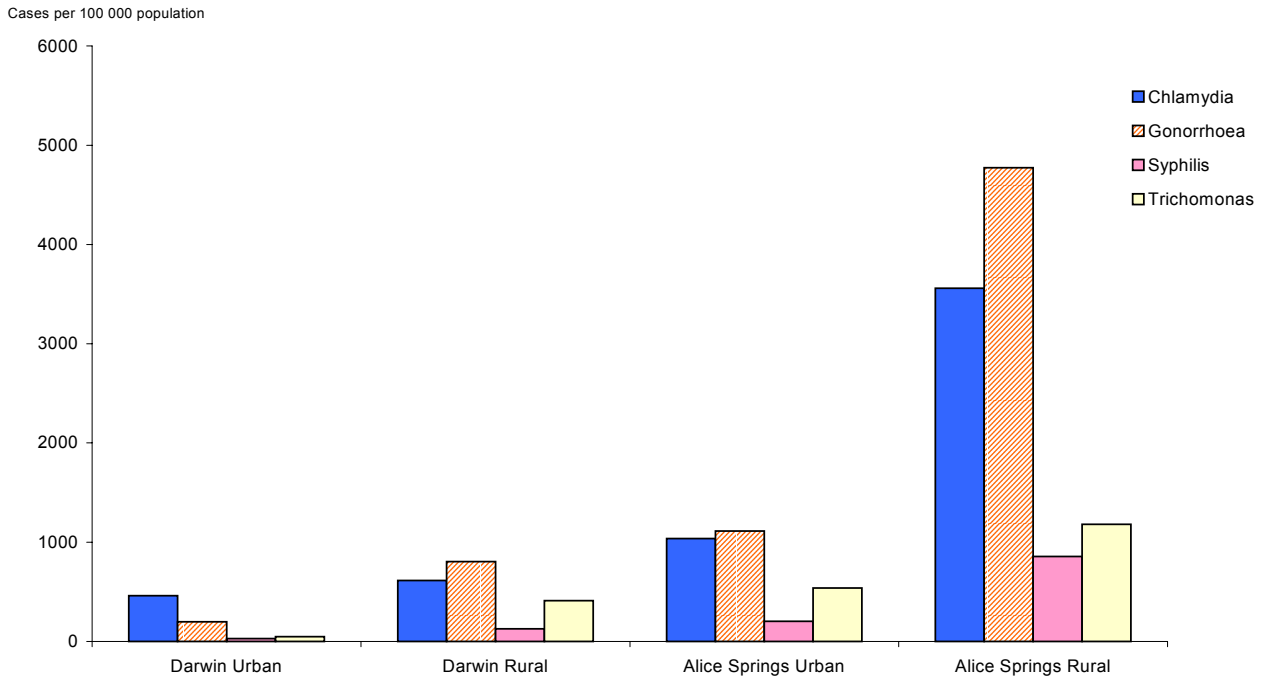
Figure 2.1 Gonorrhoea, chlamydia syphilis and trichomonas rates in the Northern Territory by urban and rural split by district, January-March and April-June 2004

	Chlamydia		Gonorrhoea		Syphilis		Trichomonas	
District#	**Cases**	**Rate[1]**	**Cases**	**Rate[1]**	**Cases**	**Rate[1]**	**Cases**	**Rate[1]**
Darwin Urban								
Jan-Mar 2004	129	473.9	46	169.0	13	47.8	17	62.4
Apr-Jun 2004	123	451.8	62	227.8	3	11.0	10	36.7
Total	**252**	**462.9**	**108**	**198.4**	**16**	**29.4**	**27**	**49.6**
Darwin Rural								
Jan-Mar 2004	22	694.2	26	820.4	2	63.1	13	410.2
Apr-Jun 2004	17	536.4	25	788.9	6	189.3	13	410.2
Total	**39**	**615.2**	**51**	**804.5**	**8**	**126.2**	**26**	**410.2**
Alice Springs Urban								
Jan-Mar 2004	78	1091.7	87	1217.6	19	265.9	42	587.8
Apr-Jun 2004	70	979.7	72	1007.7	10	140.0	35	489.9
Total	**148**	**1035.7**	**159**	**1112.7**	**29**	**202.9**	**77**	**538.8**
Alice Springs Rural								
Jan-Mar 2004	63	2155.3	92	3147.5	12	410.5	44	1505.3
Apr-Jun 2004	145	4960.7	187	6397.5	38	1300.0	25	855.3
Total	**208**	**3558.0**	**279**	**4772.5**	**50**	**855.3**	**69**	**1180.3**

1 Cases per 100,000 population

#Figures differ from District totals as excludes SA communities and interstate visitors which may be notified under Alice Springs or Darwin Districts

Figure 2.2 Gonorrhoea, chlamydia syphilis and trichomonas rates in the Northern Territory by Urban and Rural split by district, January-June 2004

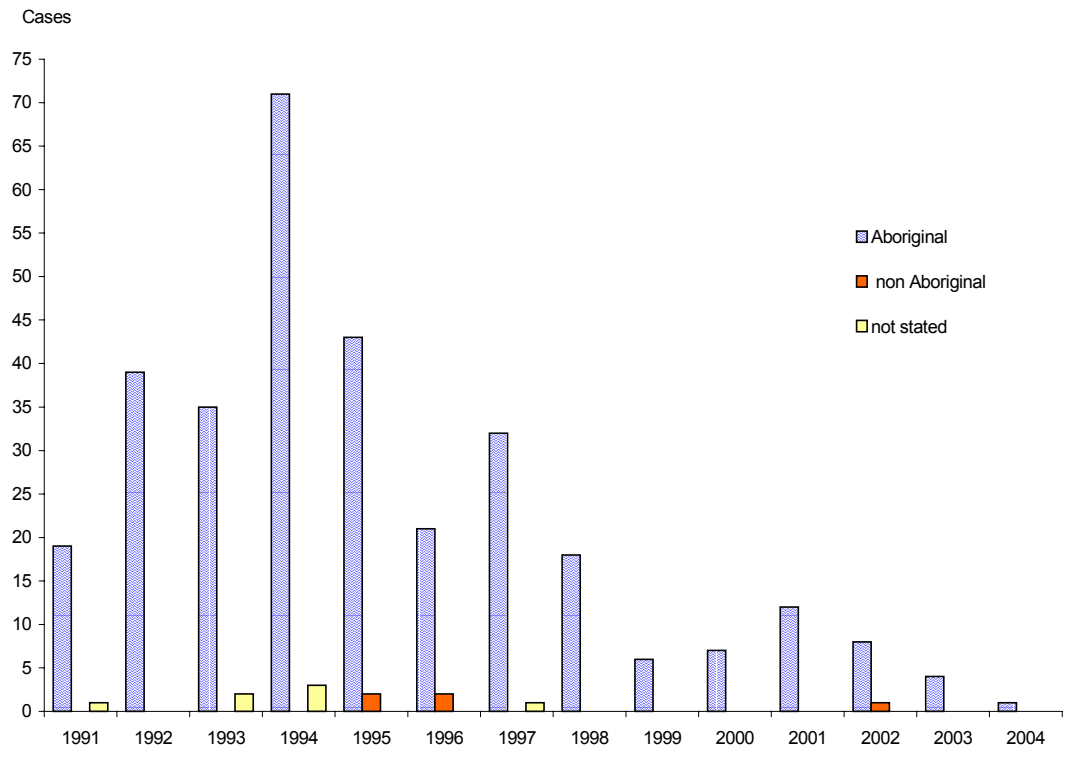


3. Donovanosis

Table 3.1 Number of cases of donovanosis diagnosed during the first two quarters of 2004 by gender, indigenous status, age and district.

Quarter	Gender	Indigenous status	Age group	District notified
Jan-Mar	Male	Aboriginal	65+	Alice Springs
Jan-Jun 2004	**Total = 1 case**			

Figure 3.1 Donovanosis cases in the NT by year and indigenous status



4. Hepatitis C

Figure 4.1 Proportions of hepatitis C cases in the Northern Territory by gender, January-June 2004

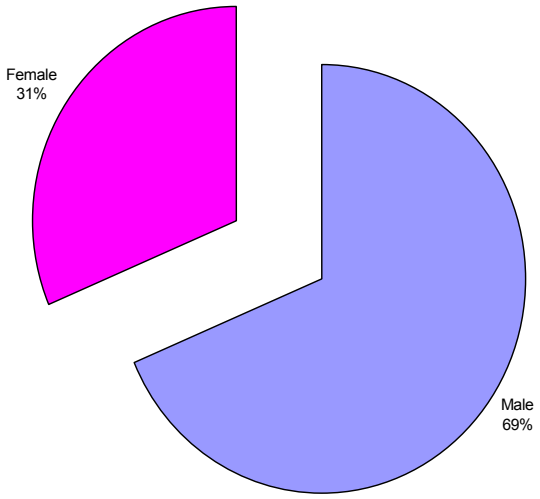


Figure 4.2 Proportions of hepatitis C cases in the Northern Territory by indigenous status, January-June 2004

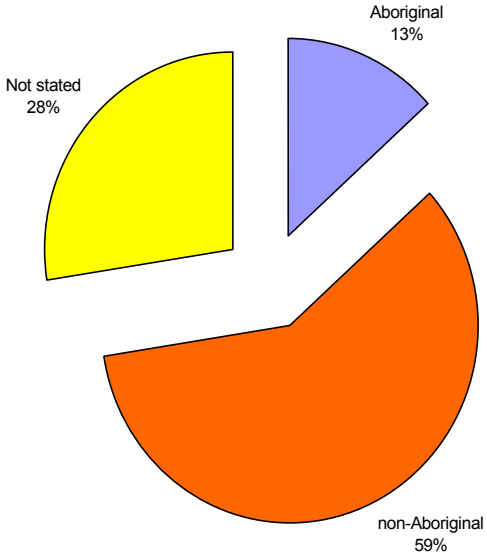


Table 4.1 Hepatitis C in the Northern Territory by district and gender, January-March and April-June 2004

	Darwin		Katherine		East Arnhem		Barkly		Alice Springs	
Gender	Cases	Rate[1]	Cases	Rate[1]	Cases	Rate[1]	Cases	Rate[1]	Cases	Rate[1]
Jan-Mar 2004										
Male	37	230.2	1	42.4	1	55.4	2	259.7	2	39.7
Female	12	83.7	0		0		0		2	42.2
Apr-Jun 2004										
Male	31	192.9	4	169.5	0		1	129.9	8	158.9
Female	22	136.9	2	95.6	0		0		2	42.2
Jan-Jun 2004	**102**	**167.7**	**7**	**78.6**	**1**	**14.4**	**3**	**102.0**	**14**	**71.6**

1 Cases per 100,000 population

Figure 4.3 Hepatitis C in the Northern Territory by district, January-June 2004

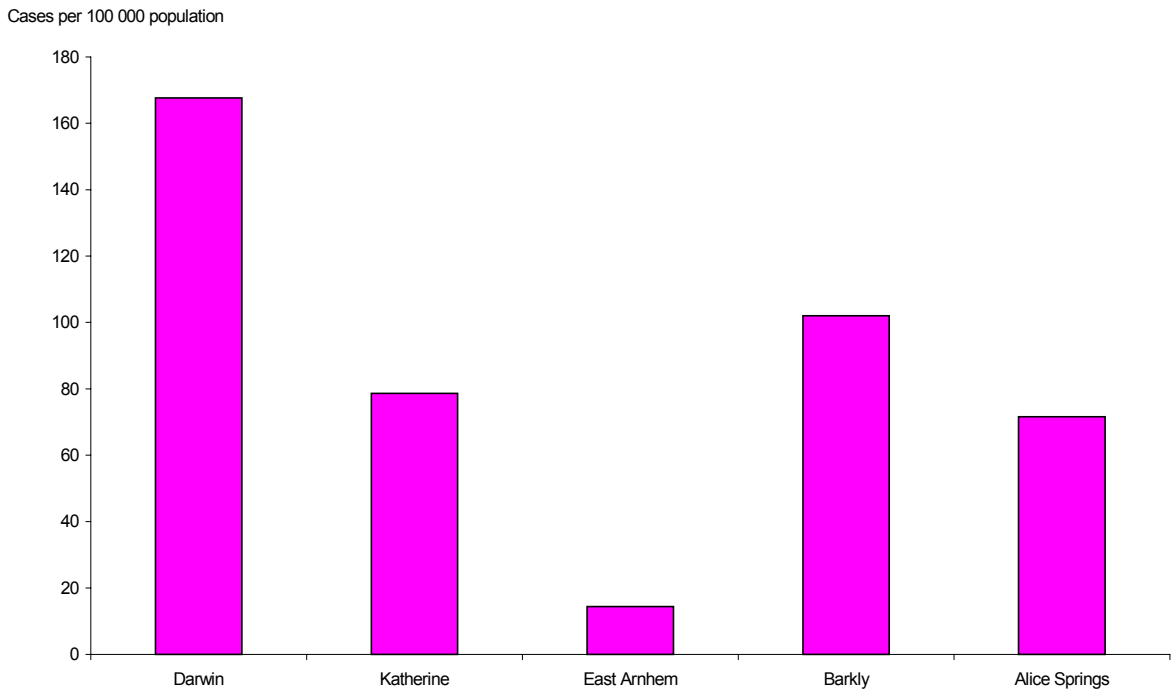
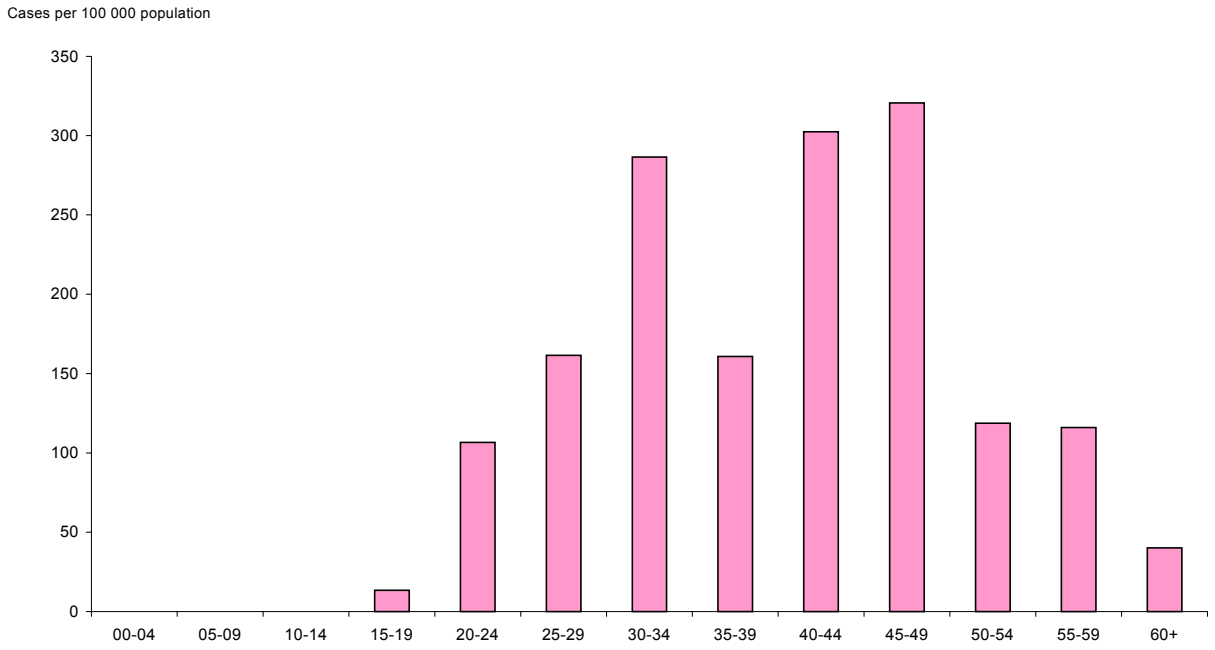


Table 4.2 Hepatitis C rates in the Northern Territory by five-year age group, January-June 2004

Hepatitis C		
Age Group	Cases	Rate [1]
Jan-Jun 2004		
00-04	0	0.0
05-09	0	0.0
10-14	0	0.0
15-19	1	13.3
20-24	9	106.6
25-29	16	161.5
30-34	28	286.5
35-39	14	160.8
40-44	24	302.4
45-49	22	320.7
50-54	7	118.7
55-59	5	116.0
60+	1	40.1
Unknown		0.0
Total	**127**	**99.0**

1 Cases per 100,000 population

Figure 4.4 Hepatitis C rates in the Northern Territory by five-year age group, January-June 2004



5. Human Immunodeficiency Virus (HIV)

Table 5.1 Number of cases of HIV in NT residents* during the first two quarters of 2004 by gender, indigenous status, age group and mode of transmission

Quarter	Gender	Indigenous status	Age group	Mode of transmission
Jan-Mar 2004	Male	non Aboriginal	35-39	Homosexual / bisexual transmission
	Male	non Aboriginal	50-54	Heterosexual transmission
	Female	non Aboriginal	40-44	Heterosexual transmission
	Male	non Aboriginal	30-34	Heterosexual transmission
	Female	non Aboriginal	35-39	Heterosexual transmission
Apr-Jun 2004	Male	non Aboriginal	35-39	Homosexual / bisexual transmission
	Male	non Aboriginal	40-44	Heterosexual transmission
Jan-Jun 2004	**Total = 7 cases**			

* Cases must have resided in the NT for >3months to be considered residents

Table 5.2 Number of AIDS cases in NT residents* during the first two quarters of 2004 by gender, indigenous status, age group and AIDS defining illness

Quarter	Gender	Indigenous status	Age group	AIDS defining illness
Apr-Jun 2004	Male	non Aboriginal	35-39	PCP
	Female	Aboriginal	50-54	Oesophageal candidiasis and HIV wasting
Jan-Jun 2004	**Total = 2 cases**			

* Cases must have resided in the NT for >3months to be considered residents

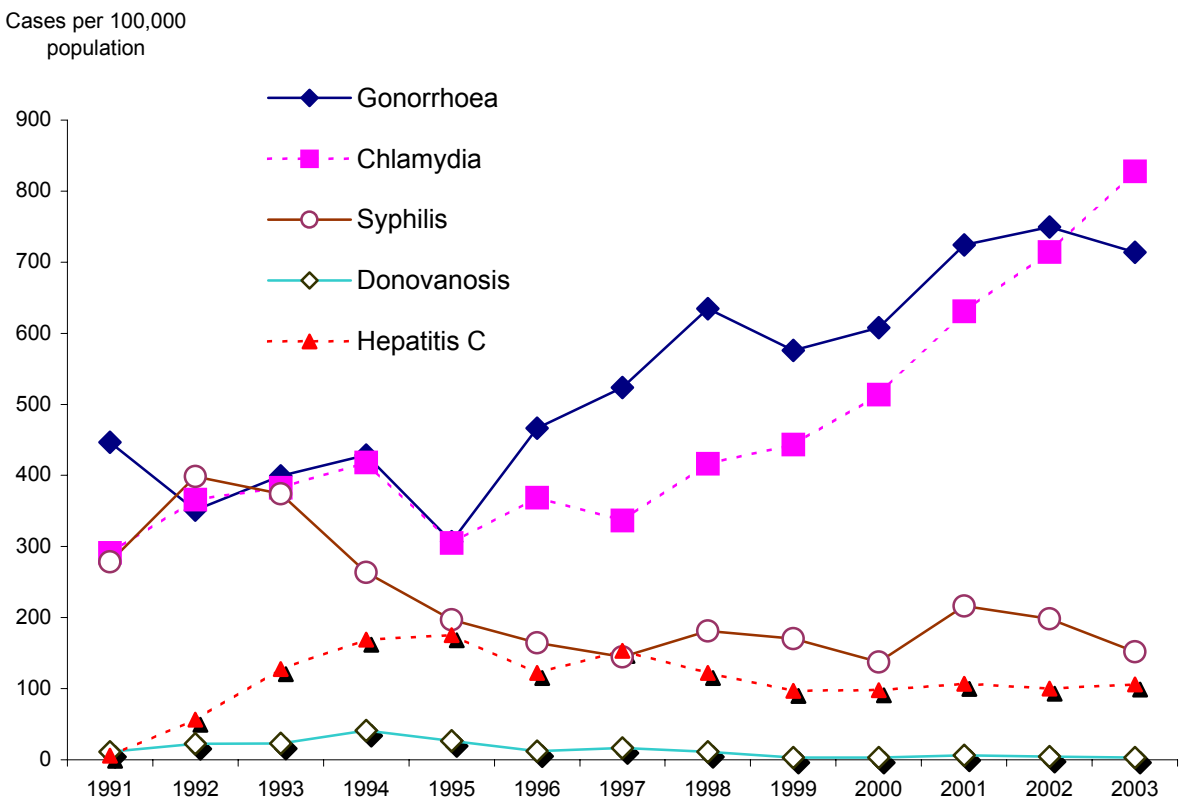
6. Trends

Table 6.1 Rates of Common STI/HCV in the Northern Territory, 1991-2003

	Gonorrhoea		Chlamydia		Syphilis		Donovanosis		Hepatitis C	
Year	Cases	Rate[1]	Cases	Rate[1]	Cases	Rate[1]	Cases	Rate[1]	Cases	Rate[1]
1991	739	446.5	482	291.2	461	278.6	19	11.5	10	6.0
1992	590	351.0	615	365.9	670	398.6	38	22.6	95	56.5
1993	682	399.4	653	382.5	639	374.3	39	22.8	218	127.7
1994	743	428.6	725	418.2	457	263.6	71	41.0	293	169.0
1995	545	306.9	542	305.3	350	197.1	47	26.5	311	175.2
1996	848	466.3	670	368.4	299	164.4	22	12.1	222	122.1
1997	979	523.8	629	336.5	270	144.5	31	16.6	286	153.0
1998	1205	634.4	791	416.4	344	181.1	21	11.1	232	122.1
1999	1110	575.9	855	443.6	328	170.2	6	3.1	187	97.0
2000	1188	607.8	1004	513.6	269	137.6	6	3.1	191	97.7
2001	1430	718.8	1252	629.3	423	212.6	15	7.5	212	107.0
2002	1514	749.5	1443	714.4	401	198.5	9	4.5	202	100.0
2003	1442	714	1672	828	307	152	6	2.97	214	106

1 Rate per 100,000 population

Fig. 6.1 NT STI/HepC Rates 1991- 2003



6-1 Chlamydia

Fig. 6.2 Chlamydia rates in the NT by year and gender

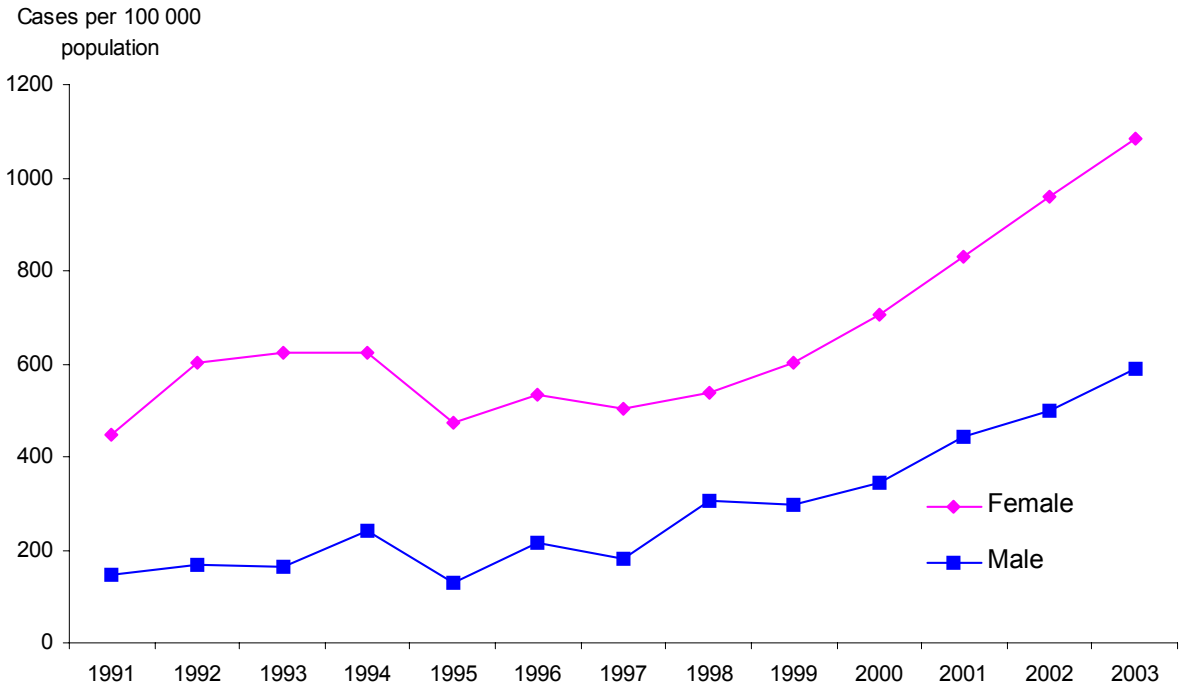
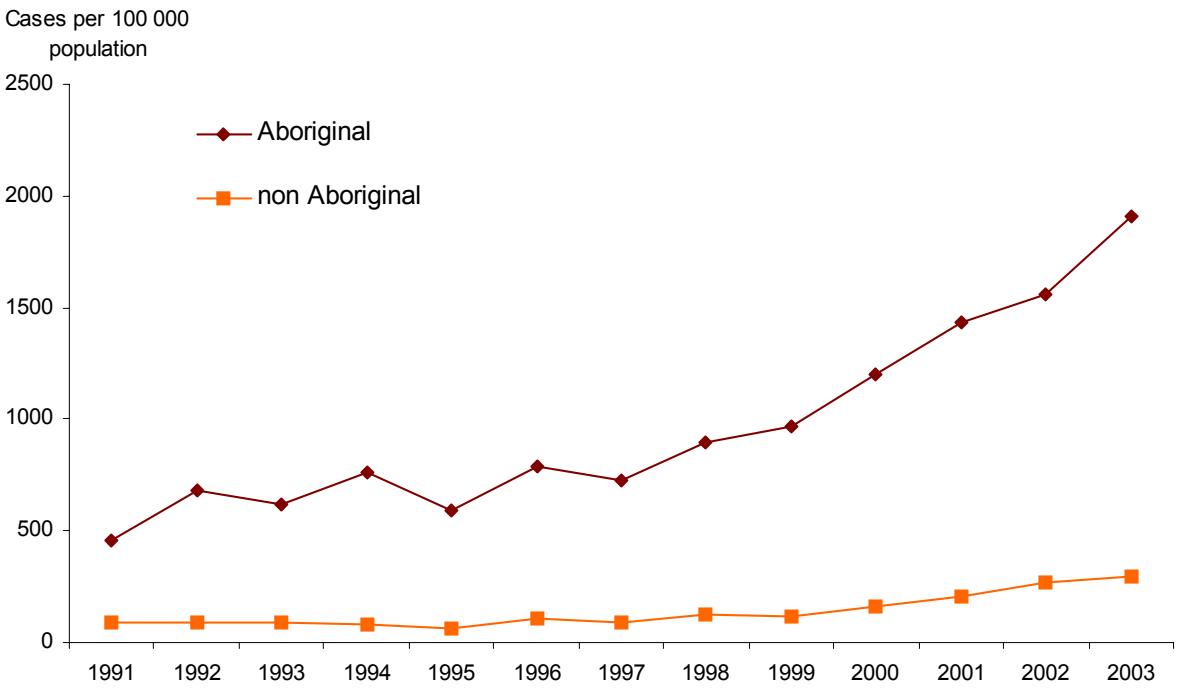


Fig. 6.3 Chlamydia rates in the NT by year and indigenous status



6-2 Gonorrhea

Fig. 6.4 Gonorrhoea rates in the NT by year and gender

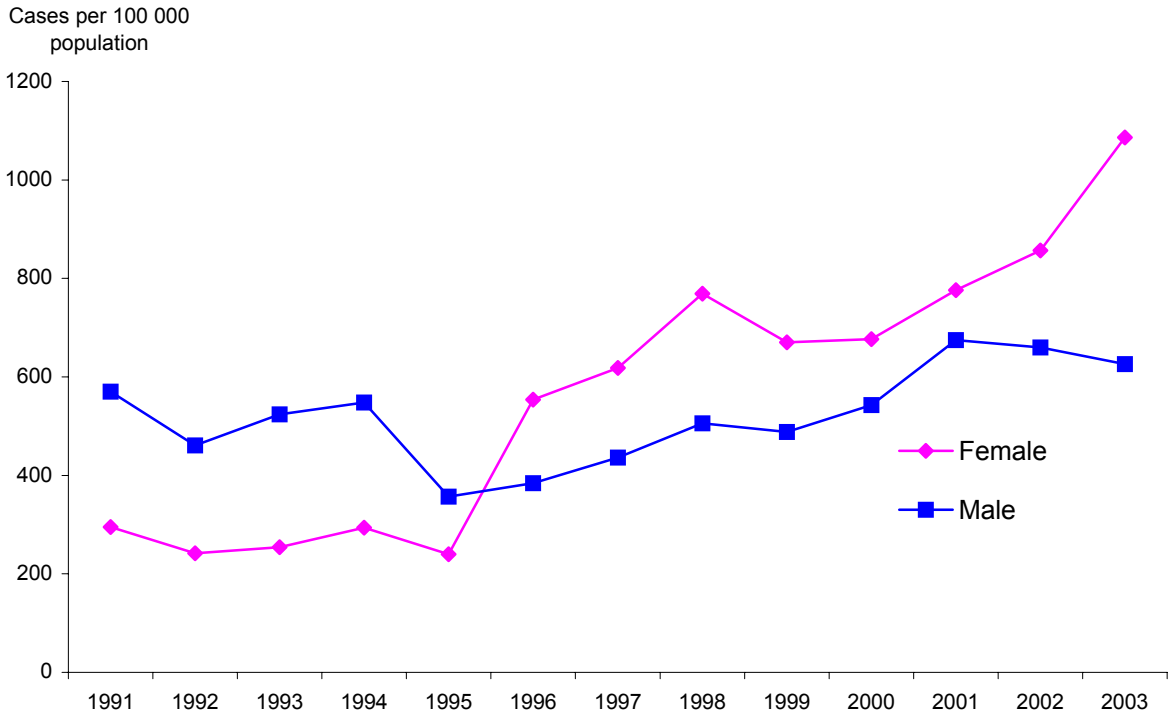
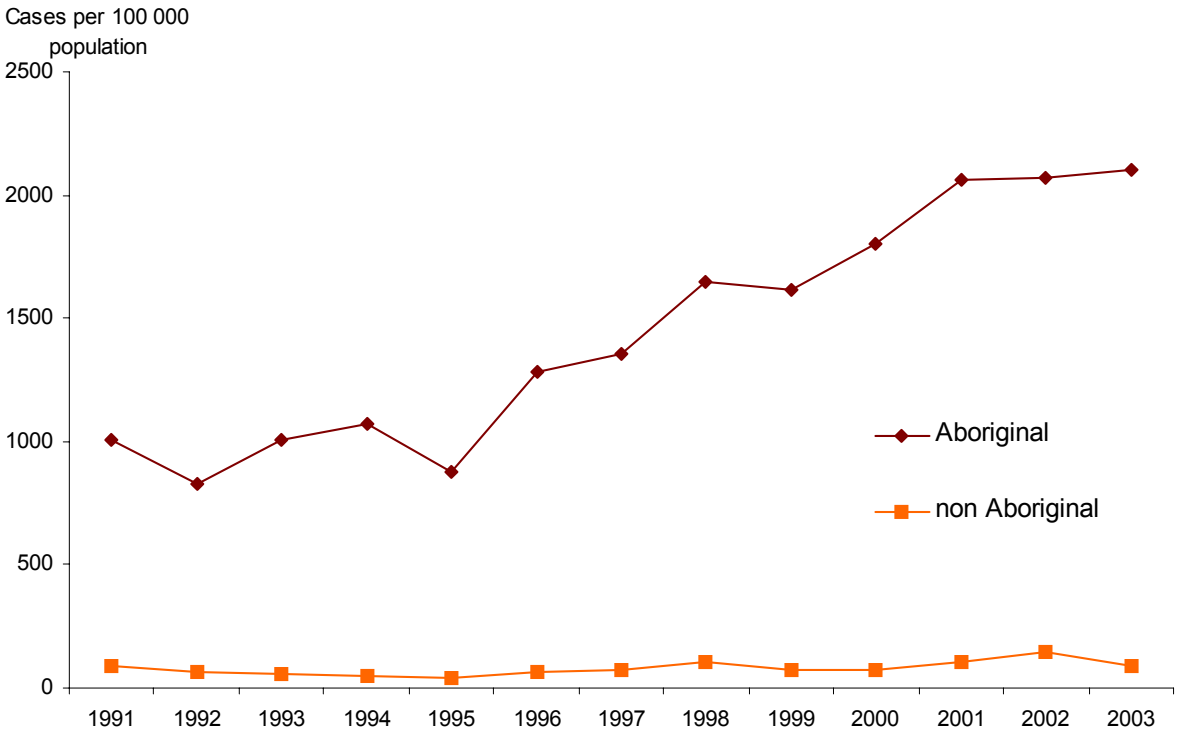


Fig. 6.5 Gonorrhoea rates in the NT by year and indigenous status



6-3 Syphilis

Fig. 6.6 Syphilis rates in the NT by year and gender

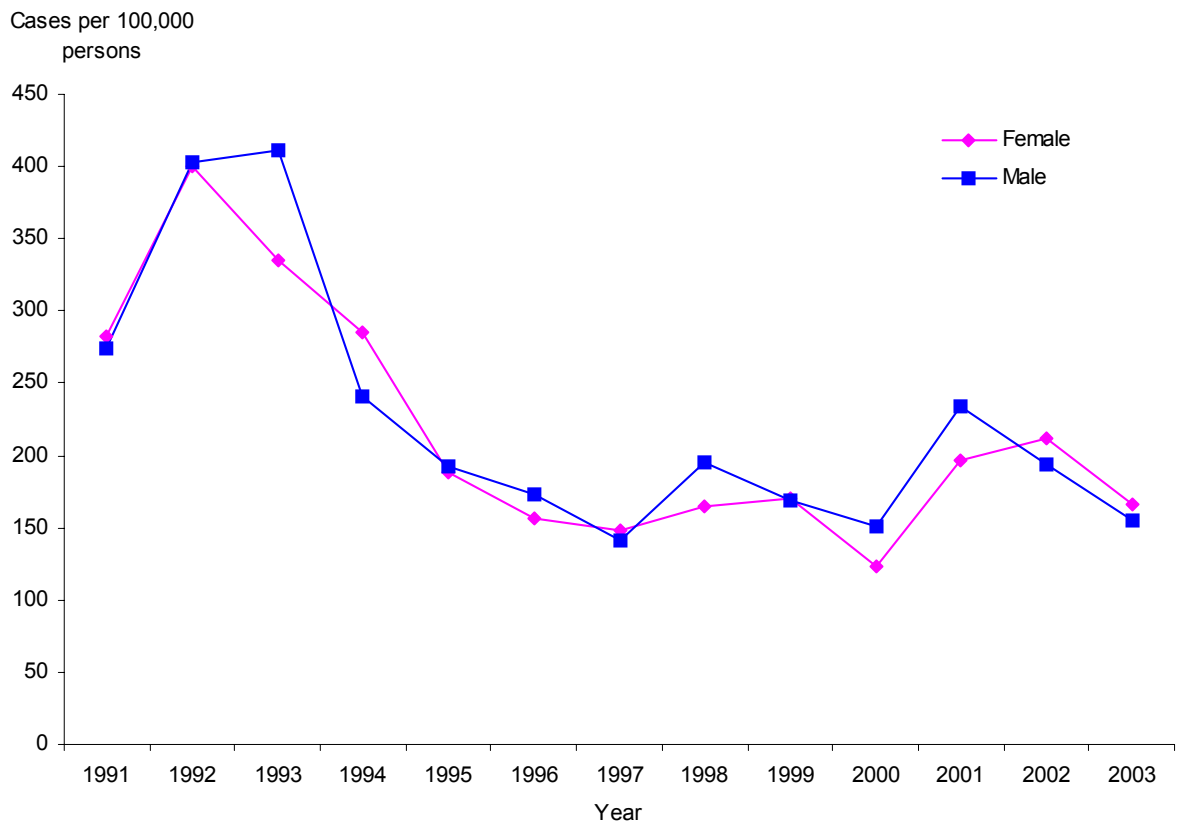
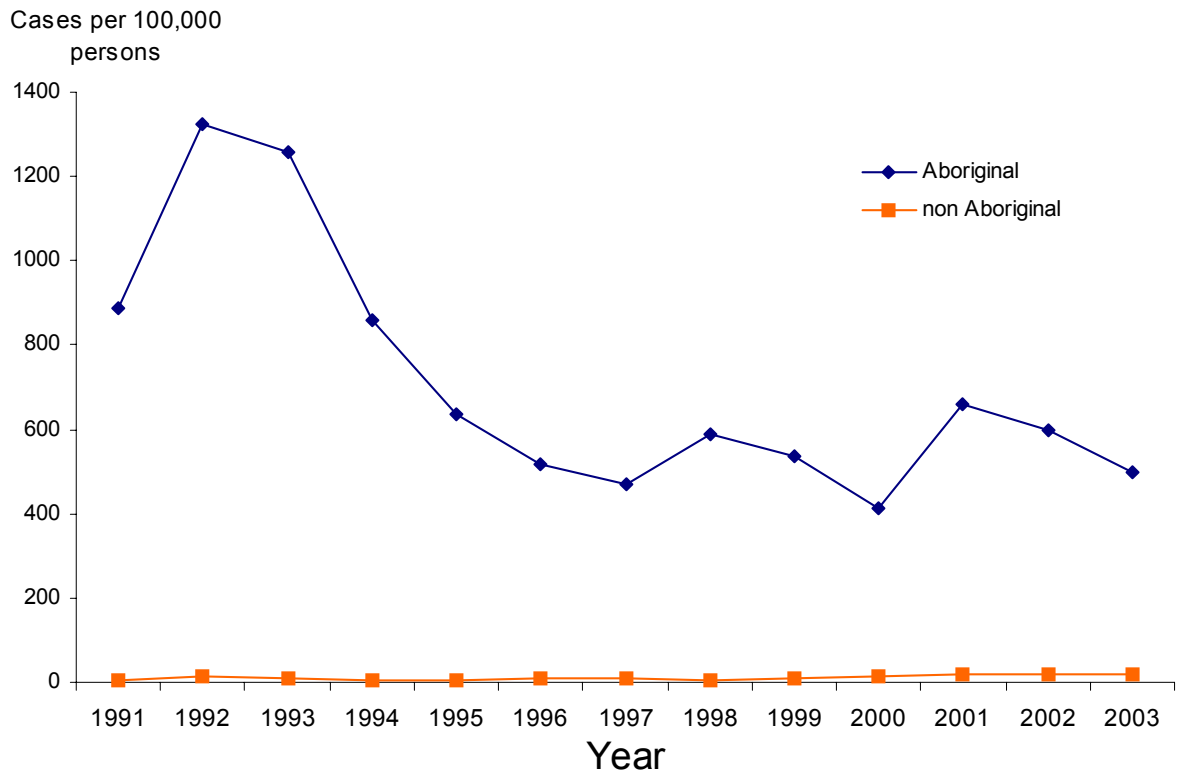
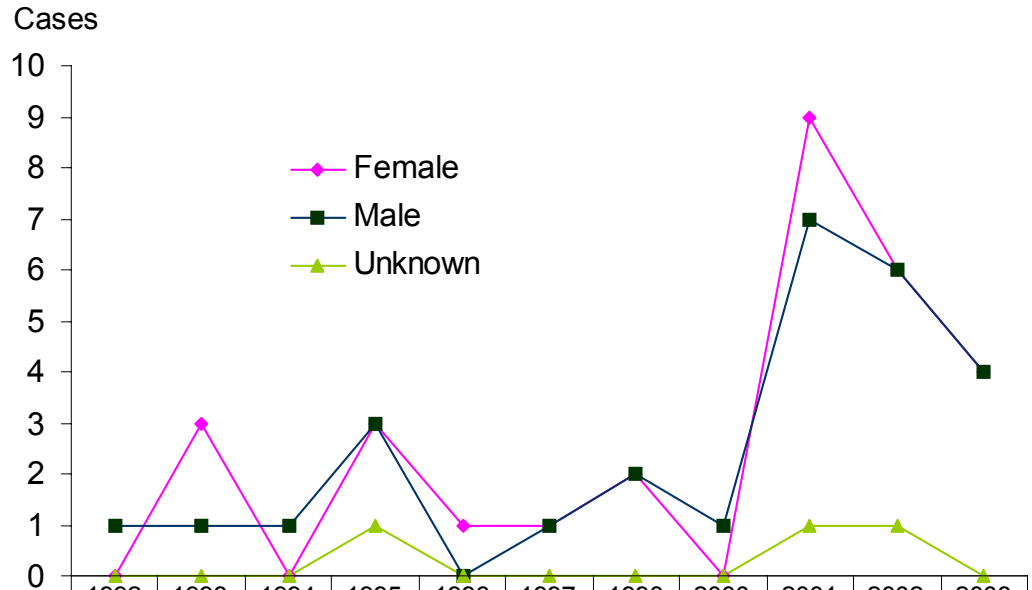


Fig. 6.7 Syphilis rates in the NT by year and indigenous status

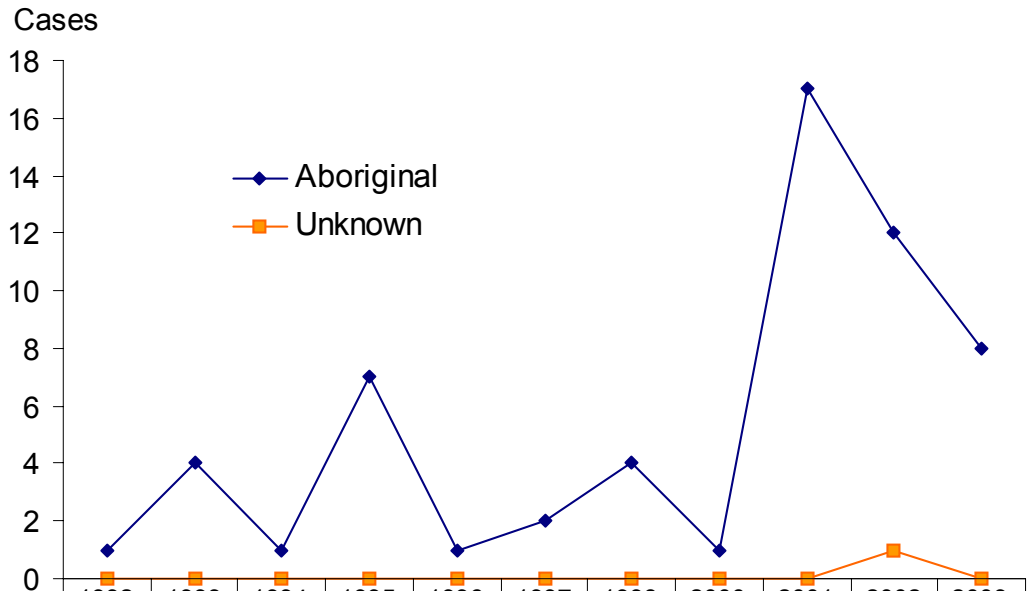


6-4 Congenital Syphilis



	1992	1993	1994	1995	1996	1997	1998	2000	2001	2002	2003
Female	0	3	0	3	1	1	2	0	9	6	4
Male	1	1	1	3	0	1	2	1	7	6	4
Unknown	0	0	0	1	0	0	0	0	1	1	0

Fig. 6.9 Congenital Syphilis in the NT by year and indigenous status



	1992	1993	1994	1995	1996	1997	1998	2000	2001	2002	2003
Aboriginal	1	4	1	7	1	2	4	1	17	12	8
Unknown	0	0	0	0	0	0	0	0	0	1	0

6-5 Hepatitis C

Fig. 6.10 Hepatitis C in the NT by year and gender

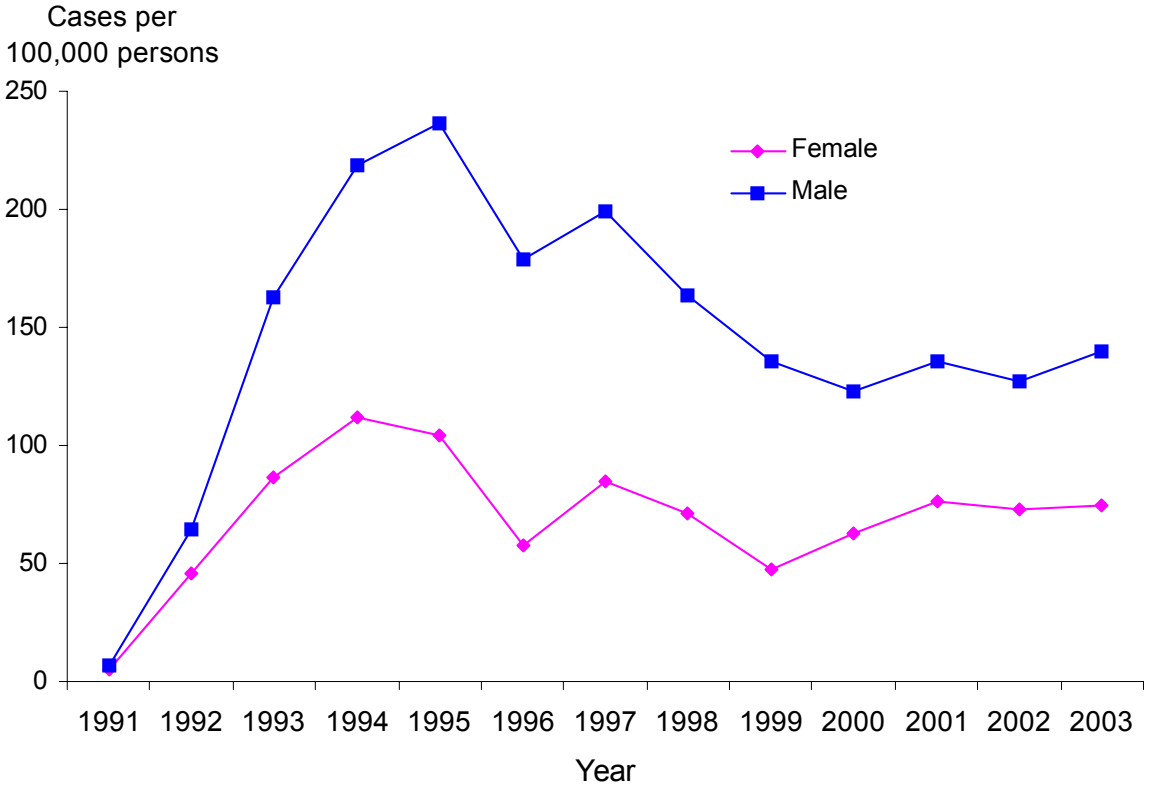
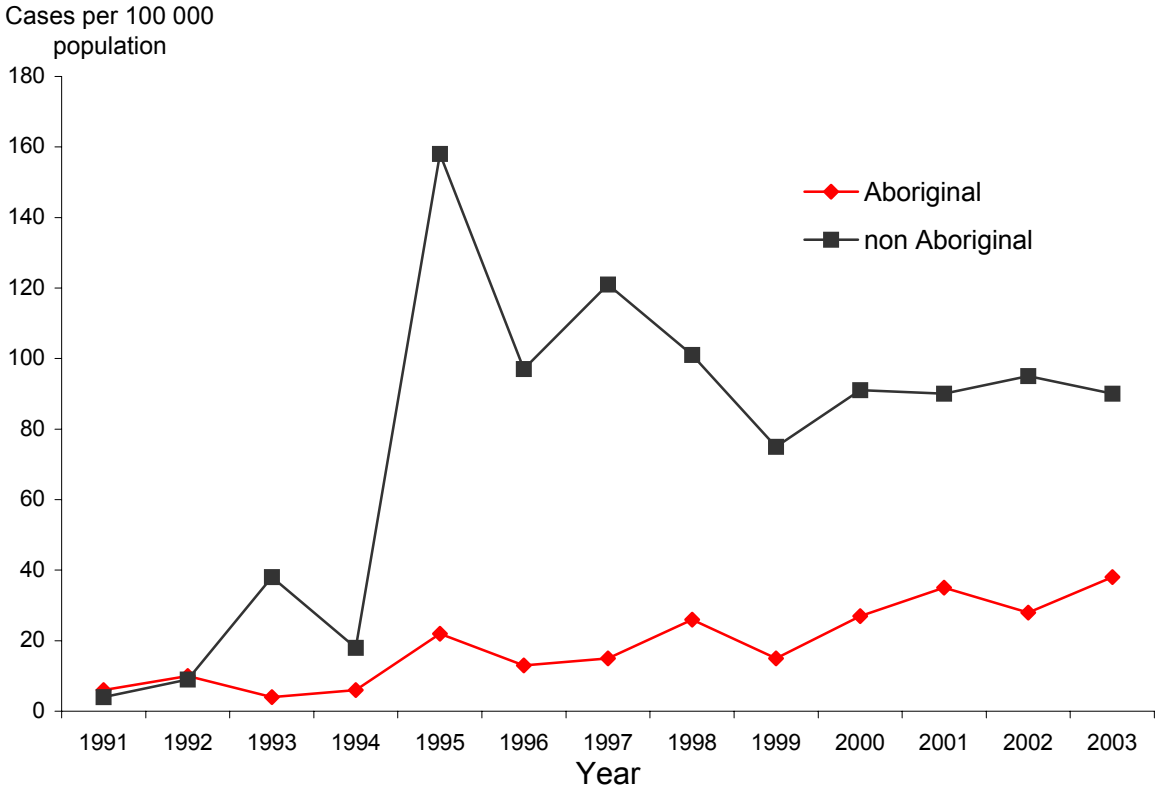



Fig. 6.11 HCV rates in the NT by indigenous status and year