

ISSN 1188-4169

Canada Communicable Disease Report

Date of Publication: October 2000

Volume 26S6

Supplement

1998/1999 Canadian Sexually Transmitted Diseases (STD) Surveillance Report



Health
Canada

Santé
Canada

Canada

***Our mission is to help the people of Canada
maintain and improve their health.***

Health Canada

This publication was produced by the Document Dissemination Division, Population and Public Health Branch, Health Canada.

To obtain additional copies or subscribe to the Canada Communicable Disease Report, please contact the Member Service Centre, Canadian Medical Association, 1867 Alta Vista Drive, Ottawa ON, Canada K1G 3Y6. Tel.: (613) 731-8610, ext. 2307; 888-855-2555 (toll free in Canada and U.S.) or by FAX: (613) 236-8864.

This publication can also be accessed electronically via Internet using a Web browser at <http://www.hc-sc.gc.ca/hpb/lcdc>

1998/1999
Canadian Sexually
Transmitted Diseases (STD)
Surveillance Report

Division of STD Prevention and Control
Bureau of HIV/AIDS, STD and TB
Centre for Infectious Disease Prevention
Health Canada
October 2000

Foreword

The Division of STD Prevention and Control at Health Canada is pleased to provide you with this 1998/1999 Canadian Sexually Transmitted Diseases (STD) Surveillance Report. Please note that although the data for 1998 have been finalized, the 1999 STD data are still considered preliminary.

The Canadian STD Surveillance Report⁽¹⁾ includes statistics on diseases that are transmitted predominantly through sexual contact *and* that are nationally reportable to Health Canada and thus part of the National Disease Reporting System. This national surveillance system includes data for genital chlamydia, gonorrhoea, and syphilis, and the STD Surveillance Report is produced as soon as possible once these data have been finalized. Hence, although the numbers for 1999 are being reported, they are preliminary and expected to change. The reporting of STD data for Nunavut commenced on April 1, 1999, following the creation of the new Territory.

Surveillance of sexually transmitted diseases in Canada, as in other countries, is a challenging task. The Division of STD Prevention and Control is currently involved in projects designed to enhance existing national data, but limitations in the current data pose difficulties in understanding and reporting the true incidence and prevalence of these diseases. Among these limitations are the following:

- absence, from some provinces/territories, of variables other than age and gender
- differences among provinces/territories in the variables collected, and methods of data collection, reporting, and transmission to the national centre
- reporting delay from time of diagnosis to national reporting
- aggregation of STD data with ensuing loss of detail

Information from surveillance can identify public health priorities and intervention strategies, and can contribute to the evaluation of programs implemented. Medical practitioners and health agencies need timely and reliable information for use in designing and implementing their programs and to be able to respond to shifts in sexually transmitted disease epidemiology. The Division of STD Prevention and Control is committed to continual improvements in the collection, analysis, reporting, and dissemination of national STD data. We are currently attempting to strengthen and enhance our surveillance data through negotiations with the provinces and territories. It is our hope that assisting them in improving their surveillance systems will, in turn, enhance the national surveillance data.

Data for this report come from several sources, and we gratefully acknowledge them. The Division of Disease Surveillance at Health Canada maintains the National Disease Reporting

System, which houses the bacterial STD data. The National Laboratory for STD, in Winnipeg, provides data on penicillin-resistant gonorrhoea and has contributed sections to this report. Most of all, we are grateful to the provinces/territories for the timely manner in which they provide data to Health Canada, their willingness to participate in our *ad hoc* surveys, such as the Nucleic Acid Amplification Techniques survey, and their continued expert contributions to our program.

Robbi Jordan, BA
Surveillance Analyst
Division of STD Prevention and Control
Bureau of HIV/AIDS, STD and TB

Thomas Wong, MD, MPH, CCFP, FRCPC
Chief
Division of STD Prevention and Control
Bureau of HIV/AIDS, STD and TB

Donald Sutherland, MD, MCommH, MSc
Director
Bureau of HIV/AIDS, STD and TB
Health Canada

We also acknowledge Mme Christine Robitaille for her assistance in translation of this document, and the Document Dissemination Division for a final revision.

Table of Contents

Introduction	1
Genital Chlamydia (<i>Chlamydia trachomatis</i>)	2
Gonorrhea (<i>Neisseria gonorrhoeae</i>)	7
Infectious Syphilis (<i>Treponema pallidum</i>)	12
Human Papillomavirus (HPV)	15
A Final Word: STD and HIV Co-infection	16
References	17
Appendix 1	18
Appendix 2	36

List of Figures

1.	STD in Canada as a proportion of all notifiable diseases, 1999	1
2.	Reported genital chlamydia rates in Canada, 1991 to 1999	2
3.	Reported male genital chlamydia rates in Canada by age group, 1997 to 1999	3
4.	Reported female genital chlamydia rates in Canada by age group, 1997 to 1999	3
5.	Reported male genital chlamydia rates in Canada by province/territory, 1997 to 1999	4
6.	Reported female genital chlamydia rates in Canada by province/territory, 1997 to 1999	5
7.	Reported gonorrhoea rates in Canada, 1980 to 1999	7
8.	Reported male gonorrhoea rates in Canada by age group, 1997 to 1999	8
9.	Reported female gonorrhoea rates in Canada by age group, 1997 to 1999	8
10.	Reported male gonorrhoea rates in Canada by province/territory, 1997 to 1999	9
11.	Reported female gonorrhoea rates in Canada by province/territory, 1997 to 1999	10
12.	Infectious syphilis in Canada — average annual cases from 1997 to 1999	12
13.	Reported infectious syphilis rates in Canada, 1993 to 1999	13
14.	Reported infectious syphilis rates in Canada by age group, 1993 to 1999	13

List of Tables

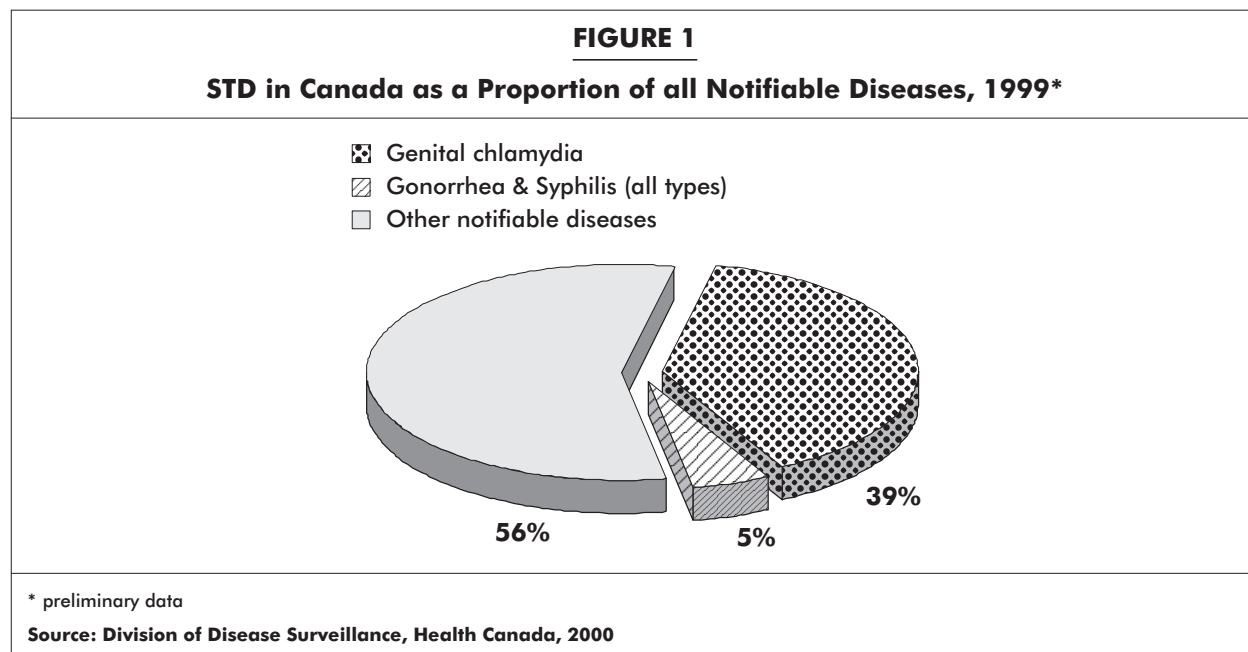
1.	Hospitalizations for pelvic inflammatory disease (PID) in Canada: cases and rates from 1983/84 to 1996/97	6
2.	Antimicrobial susceptibility of <i>N. gonorrhoeae</i> strains tested in Canada in 1998.....	11

Introduction

Since the previous Canadian STD annual report⁽¹⁾ there have been some notable changes in the trends of STD in Canada. In 1998 there were increases in all the national notifiable STDs — genital chlamydia, gonorrhoea, and infectious syphilis.

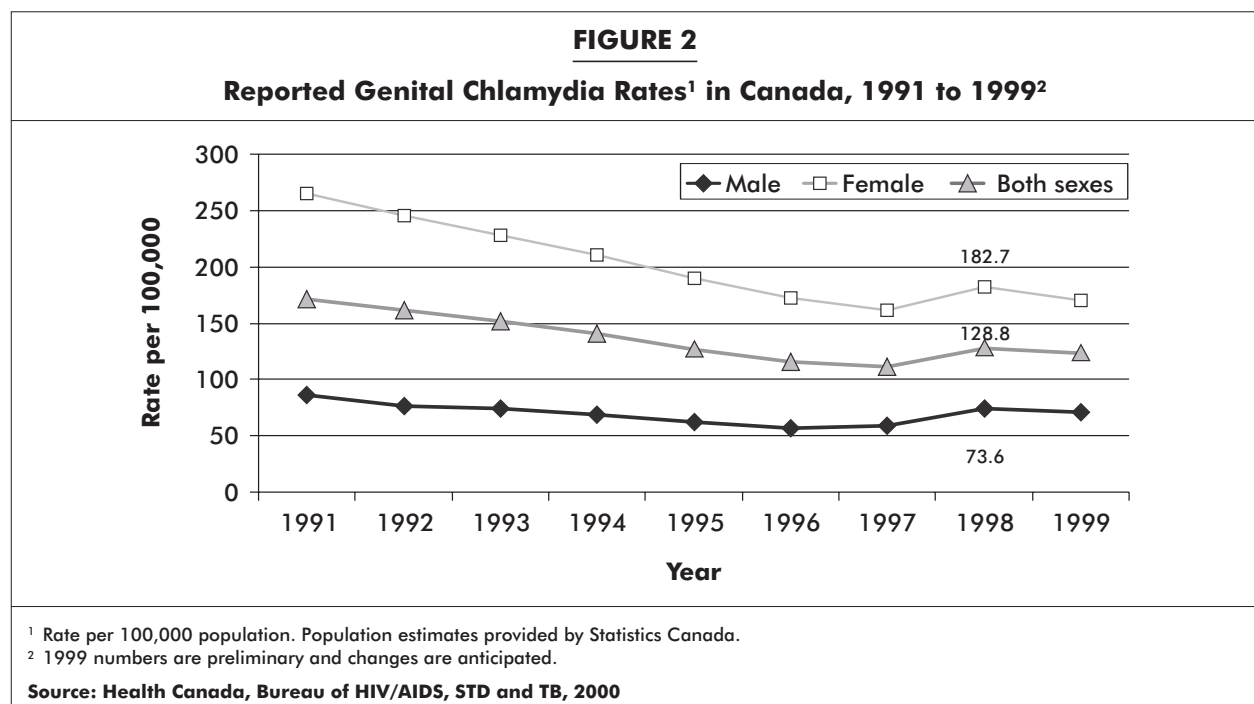
The use of nucleic acid amplification techniques (NAAT) for testing for chlamydia and gonorrhoea has become widespread in Canada over the last 2 years. Since 1997, all provinces/territories except one used NAAT at least sometimes for testing for chlamydia, and all but three for gonorrhoea. It was anticipated that widespread use of NAAT would increase case-finding of STD, especially among males, and this appears to be the case.

In 1999, reported chlamydia, gonococcal and infectious syphilis cases accounted for 44% of all notifiable diseases reported to Health Canada (Figure 1).



Genital Chlamydia (*Chlamydia trachomatis*)

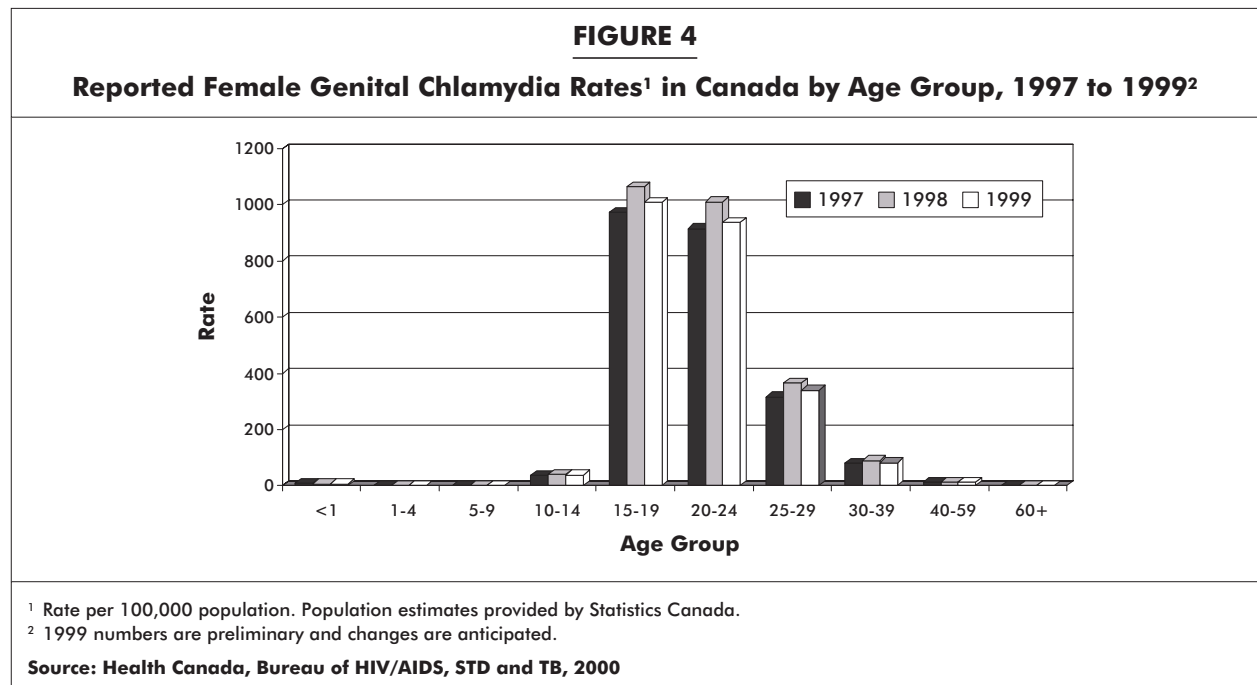
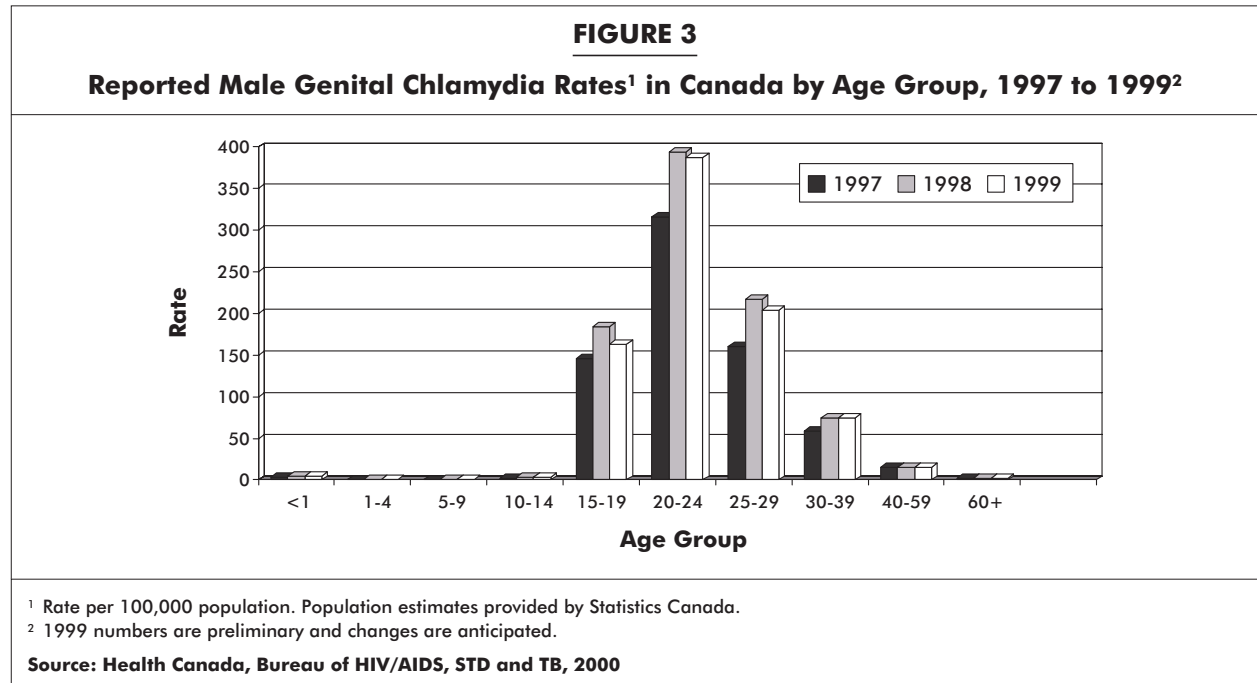
Although the number of reported chlamydia cases in Canada steadily declined from 1992 (when it first became nationally notifiable) to 1997 inclusive, this trend seems to have stopped (Appendix 1.1A and Figure 2) The overall increase in the number of chlamydia cases from 1997 to 1998 was 14%; the proportion among males increased by 27% and among females by 10% over this period. The introduction of NAAT is believed to be a factor in these increases, especially for the males. The overall rate among both sexes increased from 112.7 per 100,000 in 1997 to 128.8 per 100,000 in 1998, making the national goal, of less than 80 cases per 100,000 population by the year 2000⁽²⁾, less attainable.



Age group distribution

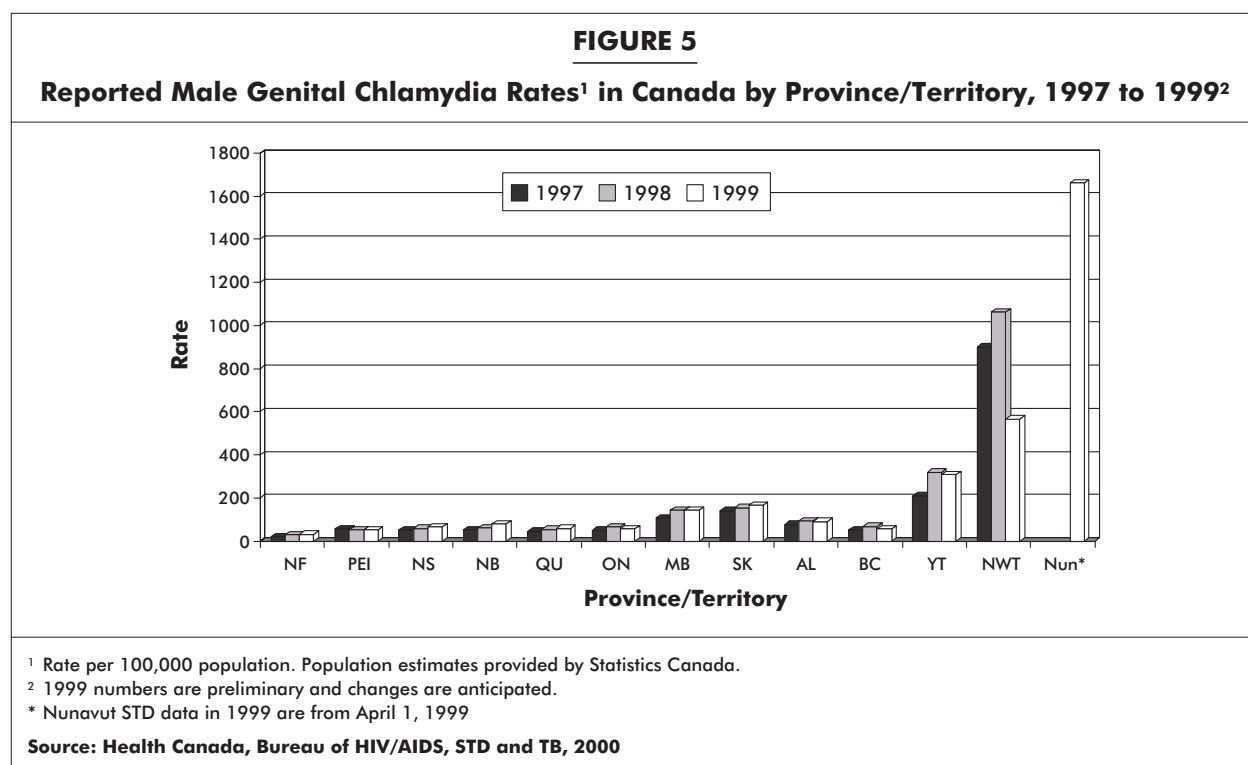
The number of cases within each age group as a proportion of the total number of cases changed little from 1992 to 1998, even with the recent increases in chlamydia. Rather, the increase in chlamydial infections in 1998 was spread fairly evenly among all age groups in both sexes, as shown in Figures 3 and 4. However, the 1998 increase among males in each age group was substantially larger than the increase among females in each age group. Among males, the

highest rates in 1998 were in the 20-24 year age group (394.1/100,000), representing 37% of all male cases, while among females the rates in the 15-19 age group represented 38% of all female cases (1063.4/100,000). Since chlamydia became nationally notifiable, females have traditionally accounted for approximately 75% of all reported cases, which is attributed at least in part to better screening and case-finding among females rather than reflecting a true female:male distribution.



Geographic distribution

Similar to the age group distribution, the regional distribution of the 1998 increase in chlamydia cases is fairly even. Figures 5 and 6 show the provincial/territorial distribution of reported chlamydia rates per 100,000 population from 1997 to 1999 among males and females respectively. Among males, there was an increase in all provinces/territories in 1998, with the exception of Prince Edward Island. Prince Edward Island, having initiated the use of NAAT exclusively for chlamydia in 1996, reported a subsequent increase in the number of cases in 1997, which tapered off in 1998. Proportionately, New Brunswick had the highest increase among females (18% from 1997 to 1998, 625 to 735 cases), and the Yukon Territory had the highest increase among males from 1997 to 1998 (56%, 34 and 53 cases respectively). The latter is particularly interesting as Yukon Territory is the only region that has never introduced NAAT for chlamydia; however, the numbers are too low to draw any conclusions. Almost every province that has introduced NAAT to test for chlamydia has shown a subsequent increase in the number of cases within the following year.

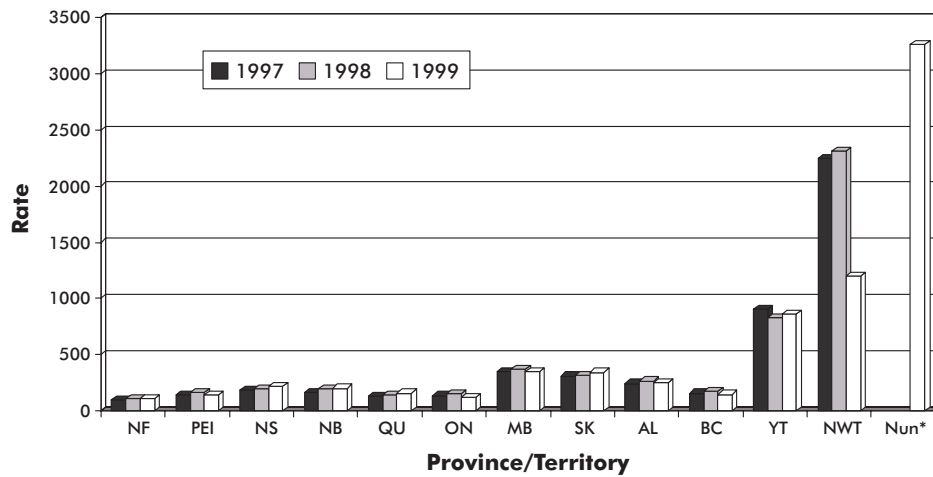


Chlamydia and pelvic inflammatory disease

The many cases of genital chlamydia in females that remain undetected also, for the most part, remain untreated. Untreated chlamydial infections in women can progress to pelvic inflammatory disease (PID) — a painful, sometimes even debilitating, syndrome. It is estimated that 20% to 40% of chlamydia infections progress to PID⁽³⁾. National data on PID incidence are currently limited to hospitalization separation data. Table 1 presents data on known hospitalizations of women of child-bearing age for PID from 1983/84 to 1996/97. It is believed these data represent an underestimation of the true number of cases of PID, most of which are treated on an ambulatory basis.

FIGURE 6

Reported Female Genital Chlamydia Rates¹ in Canada by Province/Territory, 1997 to 1999²



¹ Rate per 100,000 population. Population estimates provided by Statistics Canada.

² 1999 numbers are preliminary and changes are anticipated.

* Nunavut STD data in 1999 are from April 1, 1999

Source: Health Canada, Bureau of HIV/AIDS, STD and TB, 2000

Discussion

Of real concern is the unknown number of asymptomatic cases of chlamydia. Estimates of asymptomatic chlamydial infection range from 40% to 70%, indicating that the true number of chlamydia cases may be much higher than reported. We have seen an increase in cases due partly to the use of newer, non-invasive technology (NAAT); this test is much more acceptable to males than its predecessor, the penile swab. At the same time, NAAT is both more specific and more sensitive than culture. It follows that even more cases will be found if this technology is implemented in widespread screening initiatives. The next step is to broadly promote screening using NAAT among not only high-risk females but asymptomatic high-risk males as well. With widespread testing, we will move towards a clearer picture of the true incidence of genital chlamydia in Canada. Increased screening for both males and females, especially in high-risk groups, is the most efficient way of finding cases in both asymptomatic and high-risk groups.

Table 1
Hospitalizations for Pelvic Inflammatory Disease (PID) in Canada:
Cases and Rates* from 1983/84 to 1996/97

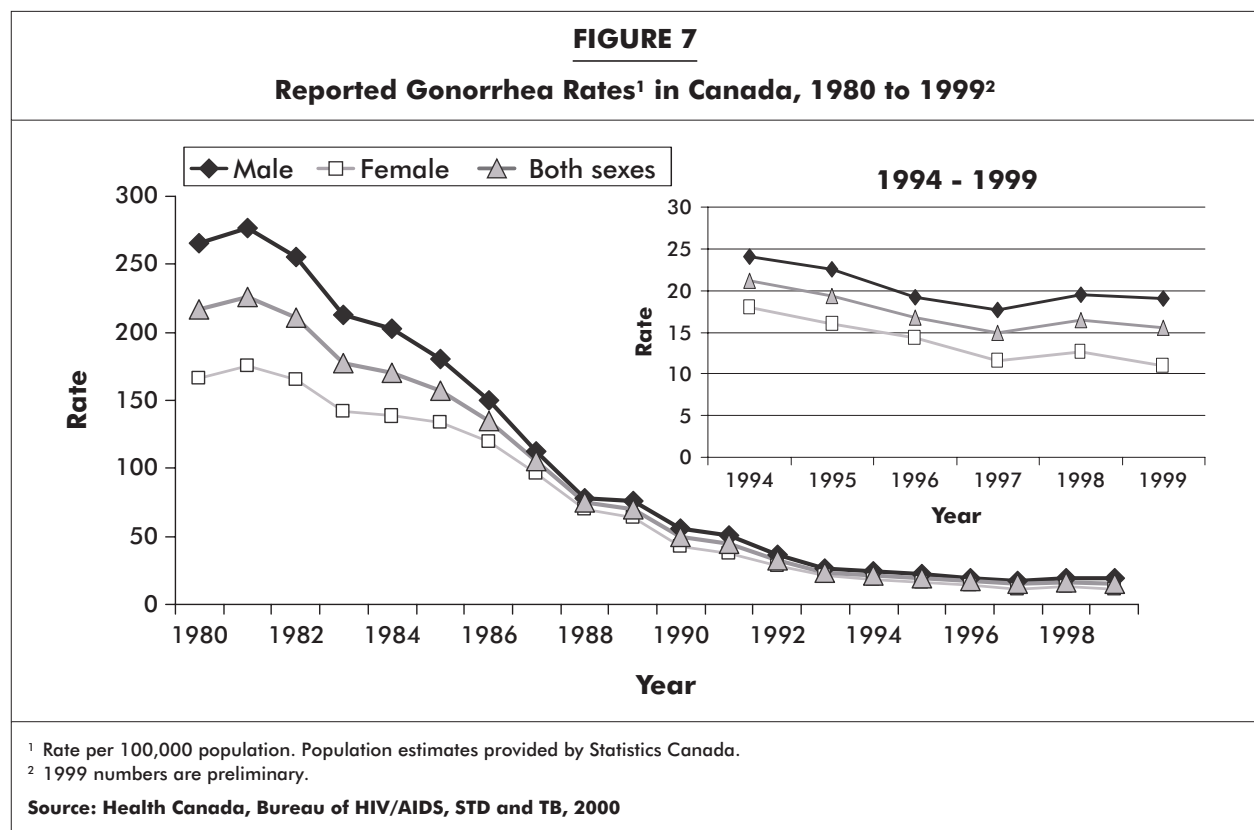
Year		Age group				
		15-19	20-24	25-34	35-44	15-44 (Total)
1983/84	Cases	2,891	4,802	7,269	2,552	17,514
	Rate	269.6	386.0	323.1	154.7	281.8
1984/85	Cases	2,868	4,797	7,320	2,664	17,649
	Rate	280.2	385.9	319.5	155.0	281.2
1985/86	Cases	2,634	4,607	7,143	2,711	17,095
	Rate	267.2	373.4	306.0	151.9	269.7
1986/87	Cases	2,650	4,243	7,101	2,735	16,729
	Rate	273.1	351.5	298.5	147.8	261.1
1987/88	Cases	2,368	3,723	6,951	2,710	15,752
	Rate	247.2	319.7	286.3	140.9	243.3
1988/89	Cases	2,249	3,197	6,246	2,604	14,296
	Rate	236.2	286.8	252.8	130.4	218.8
1989/90	Cases	1,993	2,660	5,721	2,275	12,649
	Rate	210.0	245.3	226.6	109.2	190.5
1990/91	Cases	1,803	2,319	5,359	2,609	12,090
	Rate	190.5	219.3	210.5	120.4	180.0
1991/92	Cases	1,567	2,046	4,881	2,591	11,085
	Rate	166.5	196.4	192.7	116.0	164.3
1992/93	Cases	1,387	1,778	4,343	2,616	10,124
	Rate	147.0	171.6	172.1	114.5	149.2
1993/94	Cases	1,049	1,465	3,732	2,377	8,623
	Rate	110.5	142.3	149.2	101.5	126.4
1994/95	Cases	940	1,225	3,090	2,315	7,570
	Rate	98.2	120.7	125.5	96.6	110.8
1995/96	Cases	712	984	2,497	1,943	6,136
	Rate	73.7	97.6	102.7	79.1	89.4
1996/97	Cases	617	797	2,075	1,955	5,444
	Rate	63.2	79.4	86.4	77.6	78.9

* Rate per 100,000 women.

Population estimates provided by Statistics Canada

Gonorrhoea (*Neisseria gonorrhoeae*)

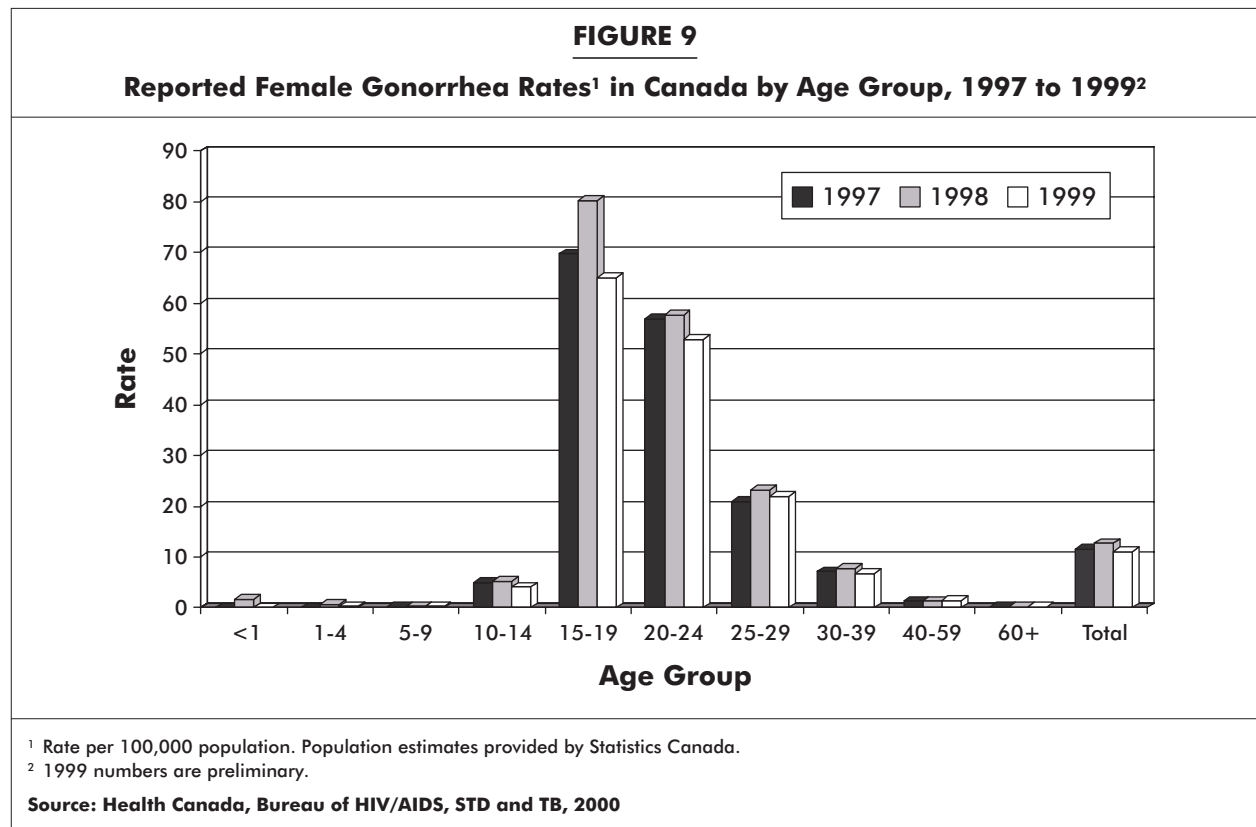
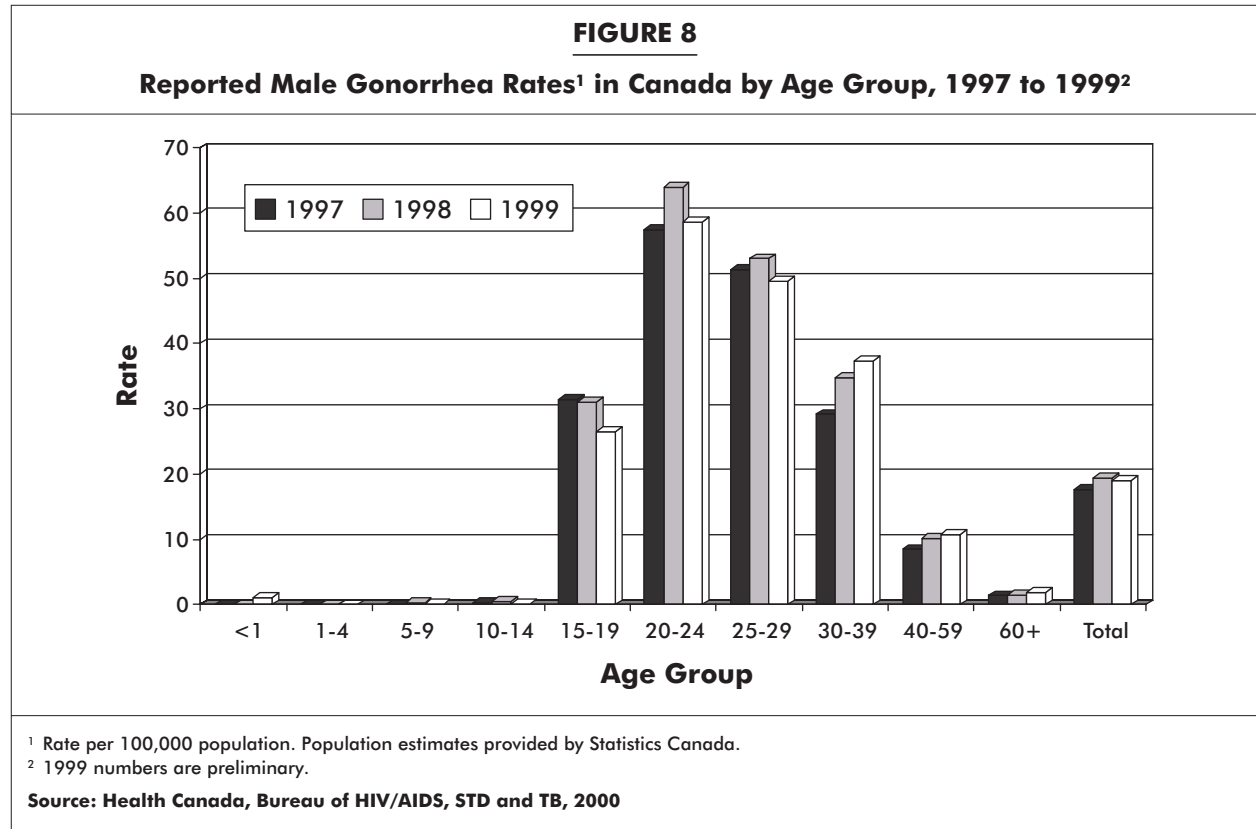
After a steady decline in cases in Canada over the past two decades, the reported gonorrhoea rates increased in 1998 to 16.4 per 100,000 from 14.9 per 100,000 in 1997 (Figure 7). Unlike chlamydia, gonococcal infection rates among males have traditionally been higher than among females. From 1997 to 1998, reported gonorrhoea cases increased by 8% (346 cases): 10% among males and 5% among females.



Age group distribution

The overall age distribution of gonorrhoea in 1998 has remained unchanged from other years, with the highest concentrations in 15-19-year-old females (80.2 per 100,000) and 20-24-year-old males (64.0 per 100,000) (Figures 8 and 9). In 1998, females 15-19 years old accounted for 41% of all female cases; just over half (54%) of all male cases were in the 15-29 age range (15-19, 11%; 20-24, 23%; 25-29, 20%). Male cases of gonorrhoea tend to be more evenly spread among the 5-year age groups between 20 and 39, while female cases tend to cluster in the 15-24 age range.

Among males, the age group that showed the greatest increase from 1997 to 1998 was the 40-59 group, with 20% more cases, followed by the 30-39 year group, with a 16% increase.



Geographic distribution

Increases in the number of cases of gonorrhoea from 1997 to 1998 occurred in the following provinces/territories: Alberta, Ontario, British Columbia, Yukon Territory, and Northwest Territory (former territorial boundary). The greatest increase in the number of cases was in Ontario, with 353 more cases in 1998 than in 1997 (from 16.8/100,000 in 1997 to 19.9/100,000 in 1998) (Figures 10 and 11).

Regionally, the largest decrease in reported gonorrhoea cases was in Manitoba from 1997 to 1998 (518 cases in 1997, 424 cases in 1998, 45.2 and 37.2 per 100,000 respectively). The male:female ratio of reported gonorrhoea cases differs geographically throughout Canada as well. Quebec had the largest male to female ratio (3.3:1) followed by British Columbia (2.5:1). The male to female ratio for Ontario in 1998 was 1.5:1.

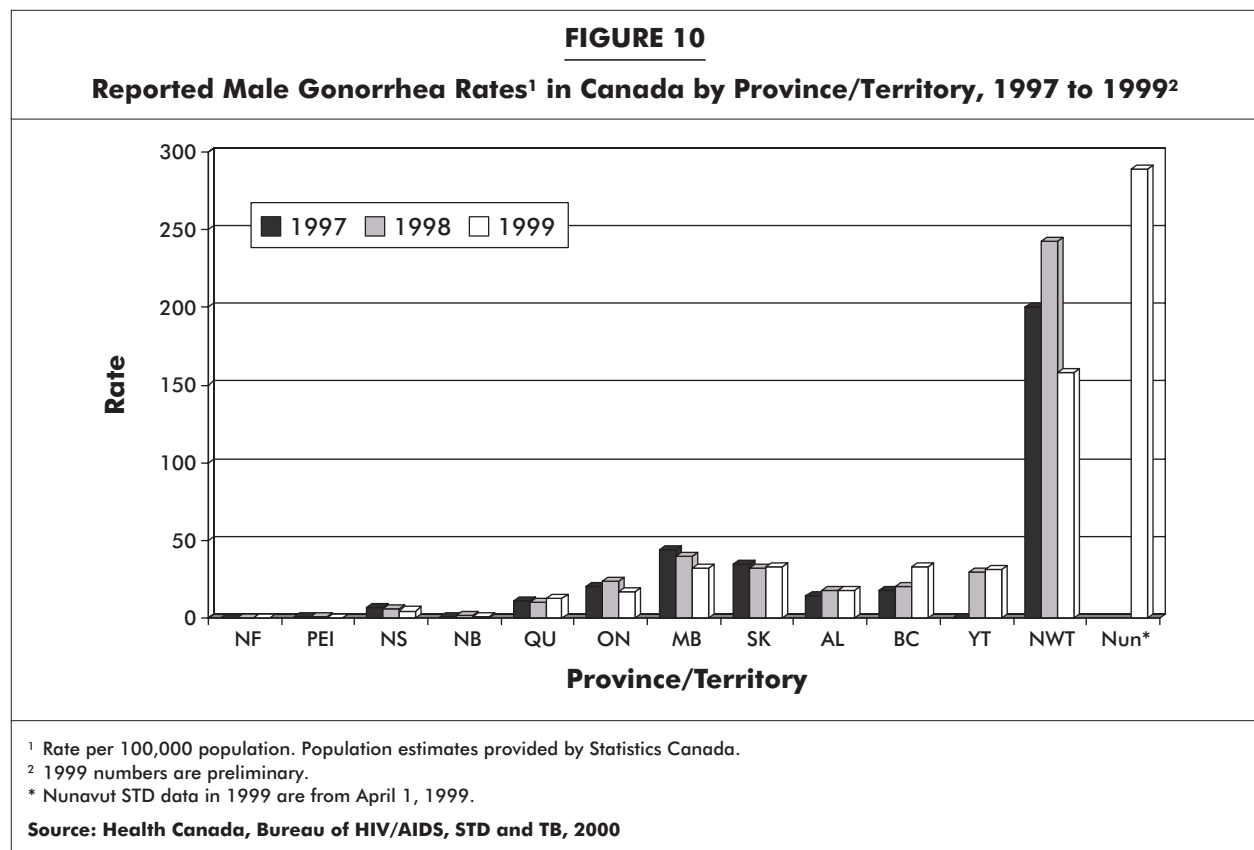
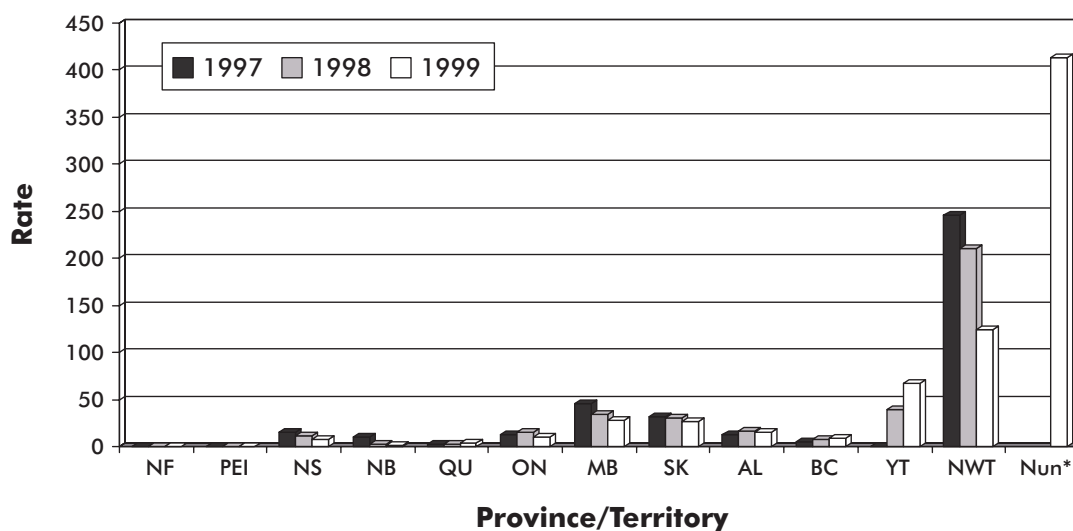


FIGURE 11**Reported Female Gonorrhoea Rates¹ in Canada by Province/Territory, 1997 to 1999²**

¹ Rate per 100,000 population. Population estimates provided by Statistics Canada.

² 1999 numbers are preliminary.

* Nunavut STD data in 1999 are from April 1, 1999.

Source: Health Canada, Bureau of HIV/AIDS, STD and TB, 2000

Discussion

Annual declines in the 20% range during the early 1990s have tapered to 12% in 1996 and 10% in 1997, and have changed to an increase of 8% in 1998. The end of the declining trend and the older ages of incident cases classify gonorrhoea as in the decline phase of STD epidemics, according to Wasserheit and Aral's dynamic topology⁽⁴⁾. As gonococcal cases are becoming less common, any case is often an indicator that the person is within a core group network, or has engaged in a high-risk behaviour (sex or drugs), thus providing a "bridge" with a core group member. Blanchard et al found that in Winnipeg, core area members "more often had co-infection with chlamydia and gonorrhoea and more often reported repeated infection within 12 months, supporting the notion that core areas contain a higher proportion of core group members"⁽⁵⁾. Wasserheit et al found that prevention efforts such as mass media campaigns begin to lose their effect when a disease shifts to the decline phase. In this phase, intervention strategies need to move from large-scale campaign dominance to targeted, community-level strategies aimed at the core group subpopulations. Recommended strategies include targeted health promotion, screening, and treatment services delivered in outreach formats (e.g. mobile vans or urine screening in storefronts and parking lots), peer risk-reduction counselling, health department-assisted partner notification, and sustainable community-level behavioural interventions to change sexual and health care seeking behaviours.

The phase of the disease often affects surveillance strategies as well. In the decline phase, surveillance needs to shift from general case counting to investigation of specific aspects. It becomes increasingly more valuable to survey specific variables such as behavioural risk factors and resistance to penicillins. Another indicator that gains importance in this phase is the site of infection: male rectal gonorrhoea is an indicator that the infection was acquired through

male-to-male sex. The national goal set for gonorrhoea elimination by 2010 is still attainable with the application of new, targeted, community-level phase-specific strategies together with more specific surveillance activities. Whatever the scale, usefulness rather than novelty is the main test of public health policy; thus any successful intervention program needs to be sustained.

Resistant *Neisseria gonorrhoeae*

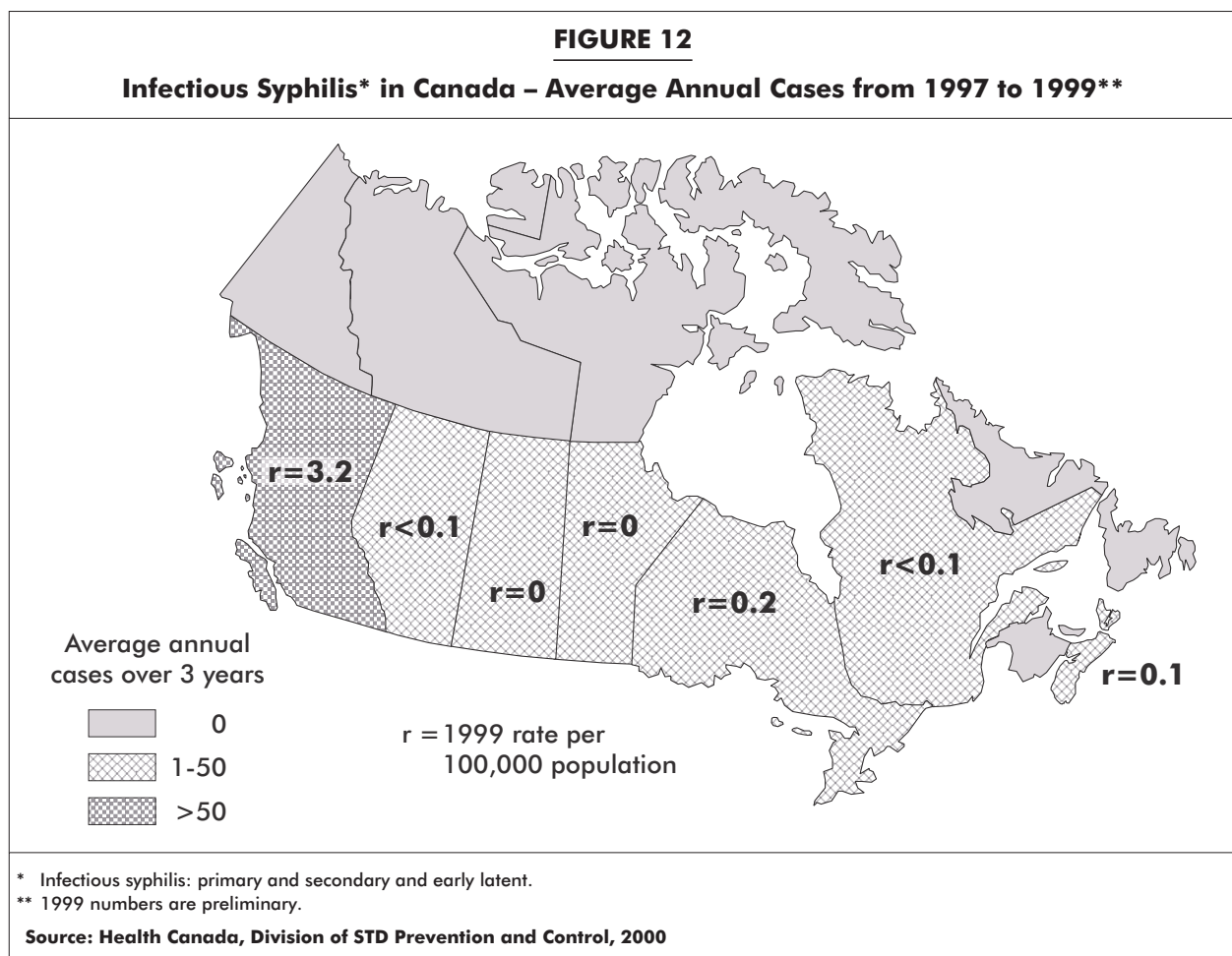
The National Laboratory for Sexually Transmitted Diseases receives all resistant strains of gonorrhoea from the provinces. Table 2 shows the distribution of antibiotic resistance of the strains received and tested in 1998. Some strains have chromosomally mediated multiple resistance to the antibiotics tested, e.g. chromosomal resistance to penicillin/tetracycline/erythromycin represents 3.2% (128) of the 4,001 strains tested. Rising ciprofloxacin resistance is associated with importation from Asia. Emergence of cephalosporin resistance is likely just around the corner.

Table 2		
Antimicrobial susceptibility of <i>N. gonorrhoeae</i> strains tested in Canada in 1998		
Antibiotic	Number of strains resistant to antibiotics	Resistance (%) of all cultured strains in Canada n = 4,001*
Penicillin	441	11.0
Tetracycline	954	23.8
Erythromycin	381	9.5
Spectinomycin	2	0.05
Ciprofloxacin	44	1.1
Azithromycin	25	0.6

* 4,001 strains were tested by the Canadian *Neisseria gonorrhoeae* Antimicrobial Susceptibility Surveillance Network for 1998. The network is listed in Appendix 2.

Infectious Syphilis (*Treponema pallidum*)

Syphilis is a disease that has been notifiable since the 1940s in Canada. Infectious (primary, secondary, and early latent) syphilis rates have declined steadily to the point of near elimination, and it is possible to label many regions in Canada as “syphilis-free”, having had 3 or more years with no cases (Figure 12). An outbreak in British Columbia increased the Canadian rate in 1998 to 0.5 per 100,000 from 0.4 per 100,000 in 1996 (Figure 13).

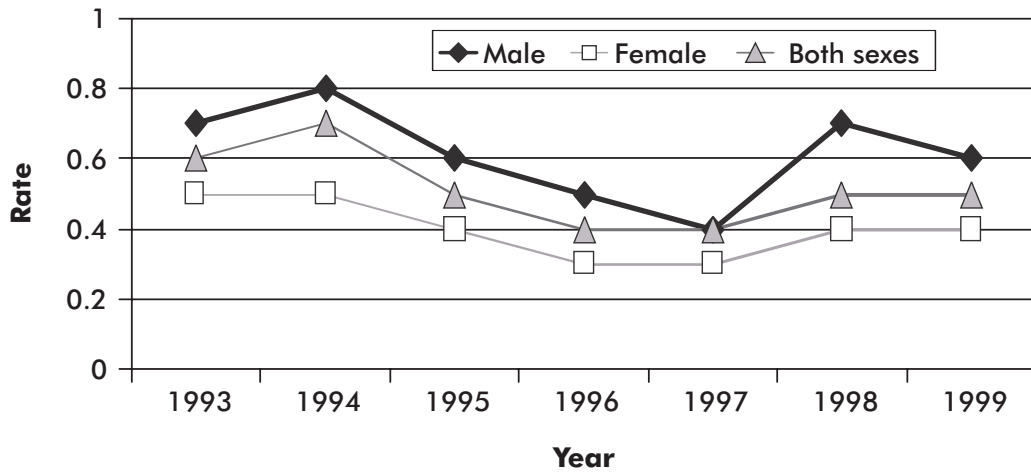


From 1993 to 1996, the highest incidence of infectious syphilis was predominantly found in the under-30 age group for both males and females (Figure 14). In 1997, the highest incidence was found in the older, 30-39 year, age group. Thus, we have seen the incidence of infectious syphilis shift from a younger (15-29) to an older (30-49) age group over the past 8 years.

There were two reported cases of congenital syphilis in Canada in 1998 (Appendix 1.3C).

FIGURE 13

Reported Infectious Syphilis¹ Rates² in Canada, 1993 to 1999³



¹ Infectious syphilis: early symptomatic (primary & secondary) + early latent syphilis.

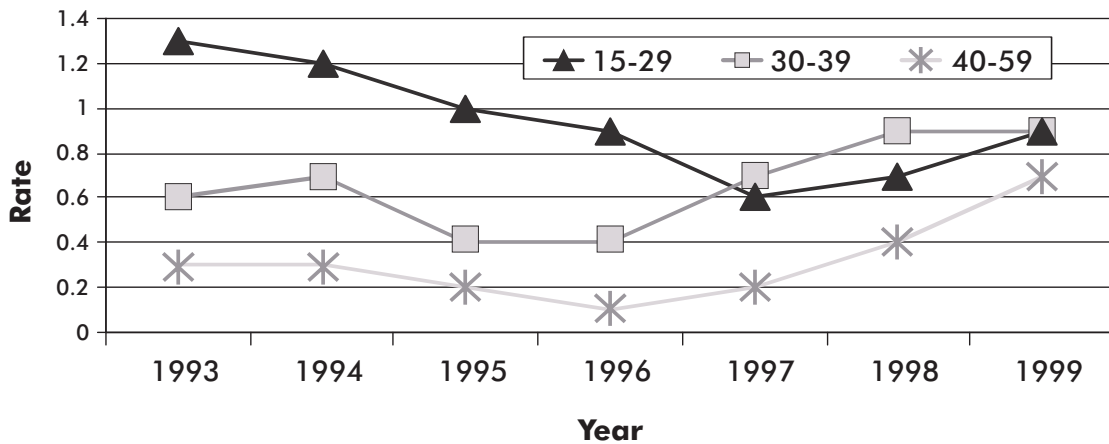
² Rate per 100,000 population. Population estimates provided by Statistics Canada.

³ 1999 numbers are preliminary.

Source: Health Canada, Bureau of HIV/AIDS, STD and TB, 2000

FIGURE 14

Reported Infectious Syphilis¹ Rates² in Canada by Age Group, 1993 to 1999³



¹ Infectious syphilis includes early symptomatic and early latent syphilis.

² Rate per 100,000 population. Population estimates provided by Statistics Canada.

³ 1999 numbers are preliminary.

Source: Health Canada, Bureau of HIV/AIDS, STD and TB, 2000

Discussion

The rise in infectious syphilis incidence since 1996 is predominantly due to the Vancouver outbreak, which is characterized by complex interactions between sex and drug use/trade in a geographically limited area. The endemic population of this area is generally of disadvantaged socio-economic status and often “hard to reach”. There are extensive gaps in our knowledge of these groups and in our ability to provide health care to them. Targeted surveillance is extremely important in order to identify the gaps and needs in this marginalized population. More information will lead to better intervention opportunities for public health care workers.

Very low incidence with sporadic outbreaks seems to be typical of syphilis epidemiology in Canada in the late 1990s. On a large-scale basis, syphilis has declined to a point very close to elimination. On a small-scale basis, low syphilis incidence rates are interrupted by outbreaks and ongoing regional epidemics. The identification of “syphilis-free” zones in Canada to denote areas that have had a minimum of three consecutive years with no new infectious syphilis cases is useful in geographically delineating these sporadic eruptions.

The Division of STD Prevention and Control is actively working to intensify syphilis control in Canada. Current issues and strategies include enhanced surveillance of incident cases, rapid outbreak response, mapping of social and sexual syphilis networks, and identification of imported cases. At the Joint HIV/AIDS/STD Epidemiology and Surveillance Meeting in November 1999, the Division of STD Prevention and Control received strong support from provincial and territorial epidemiologists for additional resources to be committed to syphilis elimination. Although elimination of endemic syphilis in Canada is now our intended goal, in the meantime it is imperative that we remain vigilant in syphilis prevention and control while improving existing capacity to respond to outbreaks quickly.

Human Papillomavirus (HPV)

Human papillomavirus (HPV) has never been nationally notifiable in Canada, even though its link with cervical cancer has been well established. Eighty-five strains of HPV have now been typed and more are anticipated with the newly developed primer systems, which have been shown to give better amplification of HPV genotypes.

Recommendations from the HPV Infections and Cervical Cancer 2000 Conference⁽⁶⁾, held in February 2000, of which Health Canada was a sponsor, include using liquid-based cytology for Pap smear testing in order to improve the sensitivity of this test. Another recommendation involves the use of HPV DNA testing as a screening tool in selected situations. Health Canada is studying all the recommendations put forward at that Conference and has established an inter-branch HPV Working Group.

Because of the fluctuating ability of the virus to clear itself from the patient, HPV incidence is extremely difficult to determine. Prevalence studies have found that some populations have a higher risk of HPV infection than others. A study at McGill University in Montreal found that the overall HPV prevalence was 22% in a cohort of 489 female students⁽⁷⁾. In a study in Manitoba, 33% of HIV-infected women from an ethnically mixed, predominantly low-income area were found to have some type of HPV⁽⁸⁾. Health Canada has made inroads into establishing the prevalence of the virus in certain populations in Canada by funding prevalence studies in the north and in Ontario, with plans to expand these to other regions in the future.

A Final Word: STD and HIV Co-infection

The relation between sexually transmitted diseases (STD) and HIV is complex. To date, what is known about STD and HIV synergy is that STD infections and HIV infections often coexist; that STDs likely increase the efficacy of transmission of HIV and increase the susceptibility to infection; and that preventing STD has, in some cases, been shown to prevent HIV infection.

The HIV epidemic in Canada closely parallels STD incidence in terms of highest risk groups and trends in incidence. Co-infections of STD and HIV represent a potential incidence reservoir and thus an intervention opportunity. If being diagnosed and thereby treated for an STD actually leads to a decrease in HIV incidence, the diagnosis of STD has moved to the forefront in public health importance. In terms of public policy, implementing STD prevention and control strategies to help prevent HIV makes good sense because of the common risk factors and behaviours. Health Canada needs to develop strong linkages between STD and HIV testing and prevention programs. STD prevention and control needs to be a major weapon in any HIV prevention arsenal.

References

1. Health Canada. *Sexually transmitted diseases in Canada: 1996 surveillance report*. CCDR:1999;25S1.
2. Health Canada. *National goals for the prevention and control of sexually transmitted diseases in Canada*. CCDR:1997;23S6.
3. Cates W, Wasserheit JN. *Genital chlamydial infections: epidemiology and reproductive sequelae*. Am J Obstet Gynecol 1991;164:1771-81.
4. Wasserheit JN, Aral SO. *The dynamic topology of sexually transmitted disease epidemics: implications for prevention strategies*. J Infect Dis 1996;174(suppl 2):S201-S213.
5. Blanchard JF, Moses S, Greenaway C, et al. *The evolving epidemiology of chlamydia and gonococcal infections in response to control programs in Winnipeg, Canada*. Am J Public Health 1998;88(10):1496-1502.
6. HPV and the Cervical Health Society. *HPV Infections and Cervical Cancer 2000: a national public conference on the current and emerging issues in the management of HPV infections and cervical cancer: summary recommendations*. Toronto: Elliott Mackintosh & Associates Ltd., February 2000.
7. Richardson H, Franco E, Pintos J, et al. *Determinants of low-risk and high-risk cervical human papillomavirus infections in Montreal University students*. Sex Transm Dis 2000;27(2):79-86.
8. Hankins C, Coutlee F, Lapointe N, et al. *Prevalence of risk factors associated with human papillomavirus infection in women living with HIV*. Can Med Assoc J 1999;160(2):185-91.

Appendix 1

Appendix 1.1A

Reported Genital Chlamydia Cases and Rates¹ in Canada by Age Group and Sex, 1991 - 1999²

Year	Cases	Total	Age Group (years)												60+	NS
			0 < 1	1-4	5-9	10-14	15-19	20-24	25-29	30-39	40-59	60+				
1991	Male	11,544	11	5	2	39	2257	4,731	2,469	1,566	426	38	0			
	Female	36,740	37	19	13	663	14,109	13,543	5,136	2,633	526	61	0			
	Unspecified	0	0	0	0	0	0	0	0	0	0	0	0			
	Total	48,284	48	24	15	702	16,366	18,274	7,605	4,199	952	99	0			
1992	Rate*	85.8	5.4	0.6	0.2	4.1	235.5	480.2	208.8	66.0	13.6	2.0	0			
	Female	265.4	19.3	2.6	1.4	72.4	1,550.0	1,386.7	430.5	109.5	16.8	2.5	0			
	Total	171.7	11.9	1.5	0.8	36.7	849.7	866.3	300.7	84.9	14.9	2.2	0			
	Cases	10,811	24	7	3	32	2,047	4,290	2,122	1,423	400	34	429			
1993	Female	35,363	23	16	14	605	13,235	12,466	4,550	2,407	526	58	1,463			
	Unspecified	191	0	1	0	0	9	18	6	3	0	1	153			
	Total	46,365	47	24	17	637	15,291	16,774	6,678	3,833	926	93	2,045			
	Rate	76.4	11.6	0.9	0.3	3.2	207.2	403.0	169.2	55.8	12.1	1.7	0			
1994	Female	245.7	11.7	2.1	1.5	64.1	1,403.3	1,203.5	373.3	95.8	16.0	2.3	0			
	Total	162.4	11.7	1.5	0.9	32.9	791.8	798.8	270.0	75.7	14.0	2.1	0			
	Cases	10,621	9	4	6	51	2,077	4,132	2,250	1,490	451	27	124			
	Female	33,379	18	11	11	600	12,744	12,012	4,558	2,542	500	40	343			
1995	Unspecified	22	0	0	0	0	4	1	2	3	0	0	12			
	Total	44,022	27	15	17	651	14,825	16,145	6,810	4,035	951	67	479			
	Rate	74.0	4.5	0.5	0.6	5.1	208.6	390.1	185.5	57.1	13.2	1.3	0			
	Female	228.7	9.5	1.4	1.1	62.6	1,342.1	1,166.9	385.9	99.1	14.7	1.5	0			
1996	Total	152.1	6.9	0.9	0.9	33.2	762.2	773.0	284.4	78.0	14.0	1.5	0			
	Cases	10,006	20	2	4	33	1,914	3,859	2,022	1,544	460	38	110			
	Female	31,176	27	13	13	577	11,567	11,282	4,165	2,669	589	40	234			
	Unspecified	53	0	0	0	0	5	16	9	5	0	0	18			
1997	Total	41,235	47	15	17	610	13,486	15,157	6,196	4,218	1,049	78	362			
	Rate	69.0	10.1	0.2	0.4	3.2	190.4	369.8	173.7	58.5	13.0	1.8	0			
	Female	211.3	14.3	1.6	1.3	59.5	1,208.4	1,111.5	366.0	103.1	16.7	1.5	0			
	Total	141.0	12.1	0.9	0.9	30.7	687.2	736.2	269.2	80.7	14.9	1.7	0			
1998	Cases	9,085	24	6	3	21	1,721	3,478	1,848	1,484	398	33	69			
	Female	28,451	32	5	10	466	10,704	10,496	3,745	2,312	459	31	191			
	Unspecified	15	0	0	0	2	2	2	1	0	1	0	9			
	Total	37,551	56	11	13	487	12,427	13,976	5,594	3,796	858	64	269			
1999	Rate	61.9	12.2	0.7	0.3	2.0	169.6	335.6	163.1	55.7	10.9	1.6	0			
	Female	190.4	17.2	0.6	1.0	47.6	1,109.1	1,041.7	336.8	88.5	12.6	1.2	0			
	Total	126.8	14.7	0.7	0.7	24.3	627.6	683.7	249.2	72.0	11.8	1.3	0			

¹ Rate per 100,000 population. Population estimates provided by Statistics Canada

² 1999 cases are incomplete and changes are anticipated

Source: Division of STD Prevention and Control, Bureau of HIV/AIDS, STD and TB, Health Canada, 2000

(continued)

Appendix 1.1A (continued)														
Reported Genital Chlamydia Cases and Rates ¹ in Canada by Age Group and Sex, 1991-1999 ²														
Year		Total	Age Group (years)											NS
			0<1	1-4	5-9	10-14	15-19	20-24	25-29	30-39	40-59	60+		
1996	Cases	8,317	9	1	0	23	1,524	3,128	1,745	1,372	436	22	57	
	Female	26,062	14	9	14	435	9,752	9,439	3,549	2,134	530	26	160	
	Unspecified	20	0	0	0	6	5	1	2	0	0	0	6	
	Total	34,399	23	10	14	458	11,282	12,572	5,295	3,508	966	48	217	
Rate	Male	56.0	4.8	0.1	0.0	2.2	148.5	302.7	155.6	51.2	11.5	1.0		
	Female	172.4	7.8	1.2	1.4	44.0	998.6	941.2	322.0	81.5	14.0	1.0		
	Total	114.8	6.2	0.6	0.7	22.7	563.3	617.4	238.1	66.2	12.8	1.0		
1997	Cases	8,714	7	0	0	18	1,510	3,260	1,783	1,559	484	21	72	
	Female	25,406	15	3	10	378	9,588	9,170	3,458	2,103	512	33	136	
	Unspecified	24	1	0	0	4	4	4	1	0	1	0	13	
	Total	34,144	23	3	10	396	11,102	12,434	5,242	3,662	997	54	221	
Rate	Male	58.1	3.8	0.0	0.0	1.7	145.6	315.9	160.6	58.5	12.4	1.0		
	Female	166.2	8.5	0.4	1.0	38.1	971.6	914.9	316.5	80.7	13.1	1.2		
	Total	112.7	6.3	0.2	0.5	19.5	548.5	611.2	237.9	69.5	12.7	1.1		
1998	Cases	11,041	8	0	3	36	1,934	4,094	2,338	1,934	609	32	53	
	Female	27,956	12	7	12	413	10,599	10,087	3,857	2,299	509	29	132	
	Unspecified	37	1	0	0	4	4	4	4	2	0	0	22	
	Total	39,034	21	7	15	449	12,537	14,185	6,199	4,235	1,118	61	207	
Rate	Male	73.6	4.4	0.0	0.3	3.5	184.0	394.1	217.2	75.0	15.2	1.5		
	Female	182.9	7.0	0.9	1.2	42.0	1,063.4	1,011.0	366.3	90.4	12.6	1.0		
	Total	128.8	5.9	0.5	0.7	22.2	612.2	696.5	291.1	82.7	13.9	1.2		
1999	Cases	10,624	9	1	3	28	1,730	4,080	2,178	1,887	614	49	45	
	Female	26,235	12	5	9	388	10,112	9,454	3,550	2,056	506	26	117	
	Unspecified	880	0	0	0	3	3	3	1	0	0	0	873	
	Total	37,739	21	6	12	416	11,846	13,537	5,729	3,943	1,120	75	1,035	
Rate	Male	70.3	5.2	0.1	0.3	2.7	163.4	387.8	203.6	74.2	14.9	2.2		
	Female	170.5	7.3	0.7	0.9	39.4	1,007.7	938.3	340.2	82.3	12.2	0.9		
	Total	123.8	6.2	0.4	0.6	20.5	574.4	657.2	271.1	78.2	13.5	1.5		

¹ Rate per 100,000 population. Population estimates provided by Statistics Canada

² 1999 cases are incomplete and changes are anticipated

Source: Division of STD Prevention and Control, Bureau of HIV/AIDS, STD and TB, Health Canada, 2000

Appendix 1.1B

Reported Genital Chlamydia Cases and Rates¹ in Canada by Province/Territory and Sex, 1991-1999²

Year		Total*	Province/Territory													Nunavut ³
			NF	PEI	NS	NB	QU	ON	MB	SK	AL	BC	YT	NWT		
1991	Cases	11,544	74	22	395	0	3,461	0	1,213	903	0	0	0	54	272	
	Female	36,740	518	73	1,832	0	9,830	0	3,338	2,388	0	0	0	141	776	
	Total	48,284	594	96	2,230	0	13,329	13,669	4,551	3,291	0	0	0	195	1,048	
1991	Rate	85.8	25.4	34.0	87.1	0.0	99.2	0.0	219.6	180.0	0.0	0.0	0.0	354.4	849.5	
	Female	265.4	179.2	110.5	394.3	0.0	273.7	0.0	595.9	473.3	0.0	0.0	0.0	1,013.7	2,649.7	
	Total	171.7	102.4	73.4	242.9	0.0	188.2	130.5	409.1	327.0	0.0	0.0	0.0	669.0	1,709.5	
1992	Cases	10,811	32	43	325	230	2,737	2,905	865	594	1,431	1,386	46	217		
	Female	35,363	417	148	1,321	1,109	7,595	9,915	2,425	1,814	4,881	4,910	146	682		
	Total	46,365	450	204	1,646	1,339	10,361	12,830	3,290	2,408	6,312	6,434	192	899		
1992	Rate	76.4	10.9	66.1	71.2	61.6	77.5	55.2	155.9	118.2	107.3	80.2	291.7	664.0		
	Female	245.7	143.7	222.3	282.2	292.1	209.2	184.2	430.8	358.8	371.7	280.9	1,006.9	2,282.6		
	Total	162.4	77.1	155.0	178.0	177.8	144.7	120.5	294.4	238.9	238.5	185.1	634.3	1,437.1		
1993	Cases	10,621	51	24	324	179	2,513	3,504	859	644	1,190	1,051	36	246		
	Female	33,379	412	110	1,134	887	7,129	10,529	2,400	1,665	4,006	4,251	130	726		
	Total	44,022	463	139	1,459	1,066	9,647	14,041	3,259	2,309	5,199	5,302	166	972		
1993	Rate	74.0	17.4	36.4	70.5	47.8	70.4	65.5	154.0	127.9	88.0	59.2	227.2	742.1		
	Female	228.7	141.8	163.5	240.8	232.8	194.3	192.5	423.8	328.3	300.3	236.5	890.5	2,379.5		
	Total	152.1	79.3	104.4	156.8	141.1	133.3	129.8	289.9	228.4	193.6	148.2	545.3	1,526.8		
1994	Cases	10,006	60	22	392	174	2,043	3,257	815	665	1,164	1,126	37	251		
	Female	31,176	296	85	1,052	743	5,783	10,196	2,260	1,832	3,845	4,217	116	751		
	Total	41,235	356	109	1,446	917	7,837	13,465	3,075	2,497	5,010	5,368	153	1,002		
1994	Rate	69.0	20.6	33.1	85.1	46.3	56.9	60.3	145.5	132.1	85.2	61.7	242.4	746.4		
	Female	211.3	102.2	124.9	222.4	194.4	156.5	184.3	397.0	360.2	285.3	228.6	803.5	2,417.5		
	Total	141.0	61.3	81.0	154.8	121.0	107.5	123.1	272.2	246.7	184.5	146.3	515.1	1,548.8		
1995	Cases	9,085	45	27	282	164	1,759	2,931	782	612	1,167	1,057	34	225		
	Female	28,451	227	85	884	598	5,278	9,157	2,226	1,737	3,851	3,602	122	689		
	Total	37,551	272	112	1,167	762	7,048	12,090	3,008	2,344	5,018	4,660	156	914		
1995	Rate	62.0	15.6	40.1	61.0	43.5	48.7	53.5	138.6	121.2	84.4	56.5	222.6	659.6		
	Female	190.4	79.1	123.4	186.1	155.9	141.9	163.0	388.2	340.0	282.4	190.2	821.8	2,172.5		
	Total	126.8	47.5	82.3	124.4	94.7	96.1	109.0	264.4	230.8	182.7	123.7	518.0	1,388.5		

¹ Rate per 100,000 population. Population estimates provided by Statistics Canada

² 1999 cases are incomplete and changes are anticipated

³ Nunavut STD data in 1999 are from April 1, 1999

* Total includes cases not specified for sex.

Source: Division of STD Prevention and Control, Bureau of HIV/AIDS, STD and TB, Health Canada, 2000

(continued)

Appendix 1.1B (continued)

Reported Genital Chlamydia Cases and Rates¹ in Canada by Province/Territory and Sex, 1991-1999²

Year		Province/Territory													Nunavut ³
		Total*	NF	PEI	NS	NB	QU	ON	MB	SK	AL	BC	YT	NWT	
1996	Cases	8,317	60	34	200	168	1,640	2,578	598	659	1,183	917	39	241	
	Female	26,062	219	97	873	665	5,006	8,025	1,961	1,577	3,685	3,191	105	658	
	Total	34,399	279	131	1,074	833	6,655	10,605	2,559	2,236	4,868	4,116	144	899	
1996	Rate	56.0	21.0	50.3	43.0	44.5	45.0	46.3	105.7	130.1	84.2	47.8	241.9	694.5	
	Female	172.4	76.7	140.2	182.5	172.8	133.6	140.9	341.2	307.4	265.6	164.5	687.4	2,047.1	
	Total	114.8	48.8	95.8	113.9	109.3	90.1	94.2	224.4	219.3	174.3	106.7	458.6	1,344.9	
1997	Cases	8,714	57	39	241	191	1,608	2,807	601	716	1,101	1,002	34	317	
	Female	25,406	278	100	885	625	4,758	7,750	1,986	1,601	3,446	3,110	139	728	
	Total	34,144	335	139	1,127	819	6,380	10,559	2,587	2,317	4,547	4,116	173	1,045	
1997	Rate	58.1	20.3	57.5	51.6	50.7	44.0	49.8	105.8	140.9	76.9	51.3	208.7	905.2	
	Female	166.2	98.5	144.0	183.9	162.3	126.5	134.3	343.9	310.8	243.6	157.1	906.0	2,239.4	
	Total	112.7	59.4	101.3	118.9	107.5	86.0	92.6	225.9	226.4	159.7	104.6	546.9	1,547.5	
1998	Cases	11,041	81	34	271	224	1,982	3,727	804	787	1,361	1,340	53	377	
	Female	27,956	294	110	938	735	5,268	8,724	2,148	1,612	3,834	3,422	124	747	
	Total	39,034	375	144	1,216	959	7,264	12,458	2,954	2,399	5,195	4,769	177	1,124	
1998	Rate	73.6	30.0	50.6	59.1	60.1	54.8	66.3	142.2	154.2	92.7	67.1	319.5	1,061.3	
	Female	182.9	107.5	159.4	196.4	193.8	141.7	150.8	373.2	312.8	265.2	169.6	827.7	2,308.5	
	Total	128.8	69.0	105.7	129.9	127.5	99.0	109.2	258.7	233.9	178.3	118.8	560.6	1,655.9	
1999	Cases	10,624	85	36	296	293	2,130	3,233	807	845	1,347	1,145	49	122	236
	Female	26,235	298	96	1,055	759	5,817	7,013	2,024	1,766	3,657	2,964	127	240	419
	Total	37,739	383	132	1,364	1,052	7,947	11,110	2,833	2,611	5,004	4,110	176	362	655
1999	Rate	70.3	31.7	53.0	64.2	78.3	58.8	56.9	142.2	165.4	89.9	57.3	308.6	566.1	1,661.5
	Female	170.5	109.2	136.9	220.3	199.2	156.3	120.2	351.3	341.7	249.3	146.5	860.7	1,196.7	3,264.5
	Total	123.8	70.8	95.7	145.1	139.3	108.2	96.5	247.7	254.0	168.8	102.2	574.5	870.1	2,422.4

¹ Rate per 100,000 population. Population estimates provided by Statistics Canada

² 1999 cases are incomplete and changes are anticipated

³ Nunavut STD data in 1999 are from April 1, 1999

* Total includes cases not specified for sex.

Source: Division of STD Prevention and Control, Bureau of HIV/AIDS, STD and TB, Health Canada, 2000

Appendix 1.2A

Reported Gonorrhoea Cases and Rates¹ in Canada by Age Group and Sex, 1980-1999²

Year		Total	Age Group (years)													60+	NS
			0<1	1-4	5-9	10-14	15-19	20-24	25-29	30-39	40-59	60+	NS				
1980	Cases	32,555	10	0	6	43	3,921	10,821	7,505	6,542	2,241	173	1,293				
	Female	20,485	18	36	34	193	6,075	7,234	3,280	1,962	436	31	1,186				
	Unspecified	231	0	0	0	1	0	0	1	0	0	0	229				
	Total	53,271	28	36	40	236	9,997	18,055	10,786	8,504	2,677	204	2,708				
	Rate	265.6	5.3	0.0	0.6	4.2	316.3	876.5	674.3	354.1	89.2	12.0	646				
	Female	166.1	10.1	5.2	3.8	20.1	510.8	598.2	297.3	109.7	17.4	1.7	501				
	Total	216.6	7.7	2.5	2.2	12.0	411.6	738.8	486.6	233.9	53.3	6.3	122				
	Cases	34,337	5	5	8	54	4,435	11,991	7,906	6,959	2,179	149	646				
1981	Female	21,863	10	28	33	219	6,932	8,034	3,487	2,110	476	33	501				
	Unspecified	130	0	0	0	2	3	2	1	0	0	0	122				
	Total	56,330	15	33	41	273	11,369	20,028	11,395	9,070	2,655	182	1,269				
	Rate	276.9	2.7	0.7	0.9	5.4	364.6	949.7	696.1	364.4	85.6	10.0	697				
1982	Female	174.9	5.6	4.0	3.8	23.2	596.1	649.3	309.7	113.6	18.8	1.8	536				
	Total	226.2	4.1	2.3	2.3	14.1	477.8	801.1	503.8	240.8	52.2	5.4	96				
	Cases	32,078	5	3	1	46	4,063	11,239	7,309	6,399	2,169	147	697				
	Female	20,893	8	22	32	211	6,563	7,816	3,363	1,899	422	21	536				
1983	Unspecified	101	0	0	0	0	3	2	0	0	0	0	96				
	Total	53,072	13	25	33	257	10,626	19,058	10,674	8,298	2,591	168	1,329				
	Rate	255.7	2.6	0.4	0.1	4.7	344.1	882.3	623.7	324.6	84.1	9.6	697				
	Female	165.0	4.4	3.1	3.7	22.7	584.3	629.2	289.2	98.7	16.5	1.1	536				
1984	Total	210.6	3.5	1.7	1.8	13.4	461.2	757.5	457.2	213.1	50.4	4.8	96				
	Cases	27,006	10	2	3	32	3,223	9,455	6,186	5,592	1,801	116	586				
	Female	18,148	6	19	31	185	5,469	6,904	2,934	1,719	414	25	442				
	Unspecified	111	0	0	0	0	5	2	0	2	0	0	104				
1984	Total	45,265	16	21	34	217	8,692	16,364	9,120	7,311	2,217	141	1,132				
	Rate	213.3	5.3	0.3	0.3	3.3	285.1	736.0	514.7	276.4	68.8	7.4	553				
	Female	141.9	3.3	2.7	3.5	20.1	509.9	555.0	246.4	86.7	15.9	1.2	442				
	Total	177.8	4.3	1.4	1.9	11.5	394.6	647.1	381.2	182.5	42.5	3.9	1,086				
1984	Cases	25,852	7	2	3	51	3,094	9,024	5,966	5,226	1,828	98	553				
	Female	17,924	4	22	26	240	5,501	6,832	2,792	1,677	365	23	442				
	Unspecified	98	0	0	0	4	2	0	1	0	0	0	91				
	Total	43,874	11	24	29	291	8,599	15,858	8,758	6,904	2,193	121	1,086				
1984	Rate	202.3	3.7	0.3	0.3	5.3	286.3	697.6	487.8	251.5	68.7	6.1	553				
	Female	138.7	2.2	3.1	2.9	26.4	537.5	549.6	231.3	81.9	13.8	1.1	442				
	Total	170.7	3.0	1.6	1.6	15.6	408.7	625.1	360.4	167.4	41.4	3.3	1,086				

¹ Rate per 100,000 population. Population estimates provided by Statistics Canada

² 1999 cases are incomplete and changes are anticipated

Source: Division of STD Prevention and Control, Bureau of HIV/AIDS, STD and TB, Health Canada, 2000

(continued)

Appendix 1.2A (continued)

Reported Gonorrhoea Cases and Rates¹ in Canada by Age Group and Sex, 1980-1999²

Year	Cases	Total	Age Group (years)													NS
			0 < 1	1-4	5-9	10-14	15-19	20-24	25-29	30-39	40-59	60+				
1985	Male	23,277	8	1	4	41	2,804	8,545	5,091	4,484	1,522	88	689			
	Female	17,399	5	19	26	207	5,448	6,445	2,666	1,598	349	18	618			
	Unspecified	61	0	0	0	2	3	1	0	0	0	0	55			
	Total	40,737	13	20	30	248	8,254	14,993	7,758	6,082	1,871	106	1,362			
Rate	Male	180.6	4.2	0.1	0.4	4.3	269.0	662.4	410.4	209.6	56.3	5.3				
	Female	133.3	2.8	2.6	2.9	23.0	552.7	522.4	219.0	75.6	13.0	0.8				
	Total	157.0	3.5	1.4	1.6	13.4	407.0	594.1	315.6	143.0	34.8	2.8				
1986	Male	19,458	7	1	6	34	2,715	7,042	4,542	3,413	1,164	100	434			
	Female	15,744	7	23	21	227	5,128	5,690	2,513	1,394	320	28	393			
	Unspecified	85	0	0	0	0	0	0	3	1	0	0	81			
	Total	35,287	14	24	27	261	7,843	12,732	7,058	4,808	1,484	128	908			
Rate	Male	149.5	3.7	0.1	0.6	3.7	264.8	555.8	359.2	155.5	42.2	5.9				
	Female	119.4	3.9	3.2	2.4	25.5	528.5	471.4	204.1	64.1	11.7	1.3				
	Total	134.7	3.8	1.6	1.5	14.4	393.1	514.6	282.8	110.0	27.0	3.3				
1987	Male	14,755	3	7	4	35	2,288	5,361	3,307	2,447	897	74	332			
	Female	12,923	6	18	30	195	4,357	4,578	2,017	1,084	298	17	323			
	Unspecified	240	0	0	0	0	1	0	0	0	0	0	239			
	Total	27,918	9	25	34	230	6,646	9,939	5,324	3,531	1,195	91	894			
Rate	Male	112.0	1.6	0.9	0.4	3.8	227.1	438.2	256.5	109.0	31.5	4.3				
	Female	96.7	3.3	2.5	3.3	21.9	454.8	393.1	161.7	48.8	10.6	0.8				
	Total	105.2	2.4	1.7	1.8	12.6	338.1	416.2	209.9	79.1	21.1	2.3				
1988	Male	10,381	2	1	4	26	1,558	3,604	2,395	1,840	667	48	236			
	Female	9,501	5	11	25	139	3,209	3,293	1,531	828	220	14	226			
	Unspecified	220	0	0	0	0	0	0	0	0	0	0	220			
	Total	20,102	7	12	29	165	4,767	6,897	3,926	2,668	887	62	682			
Rate	Male	77.8	1.1	0.1	0.4	2.8	156.2	309.3	183.1	80.1	22.7	2.7				
	Female	70.1	2.8	1.5	2.7	15.5	337.0	295.4	121.1	36.4	7.6	0.6				
	Total	74.7	1.9	0.8	1.5	9.0	244.5	302.5	152.6	58.3	15.2	1.5				
1989	Male	10,278	7	1	2	26	1,503	3,355	2,345	2,009	735	54	241			
	Female	8,778	3	22	18	144	3,083	2,850	1,445	822	221	10	160			
	Unspecified	54	0	1	0	0	1	3	2	2	0	0	45			
	Total	19,110	10	24	20	170	4,587	6,208	3,792	2,833	956	64	446			
Rate	Male	75.7	3.6	0.1	0.2	2.7	151.6	298.8	176.4	84.7	24.3	3.0				
	Female	63.6	1.6	3.0	1.9	15.8	324.8	262.8	112.3	35.1	7.4	0.4				
	Total	69.8	2.6	1.6	1.0	9.1	236.4	281.2	144.9	60.1	15.9	1.5				

¹ Rate per 100,000 population. Population estimates provided by Statistics Canada

² 1999 cases are incomplete and changes are anticipated

Source: Division of STD Prevention and Control, Bureau of HIV/AIDS, STD and TB, Health Canada, 2000

(continued)

Appendix 1.2A (continued)

Reported Gonorrhoea Cases and Rates¹ in Canada by Age Group and Sex, 1980-1999²

Year		Total	Age Group (years)													NS
			0<1	1-4	5-9	10-14	15-19	20-24	25-29	30-39	40-59	60+				
1990	Cases	7,681	5	1	3	21	1,140	2,373	1,791	1,553	553	57	184			
	Female	6,024	9	13	9	139	2,168	1,911	918	564	176	10	107			
	Unspecified	117	1	0	0	0	3	7	1	4	0	0	101			
	Total	13,822	15	14	12	160	3,311	4,291	2,710	2,121	729	67	392			
Rate	Male	55.7	2.4	0.1	0.3	2.2	115.3	217.9	135.4	63.8	17.7	3.0				
	Female	43.0	4.6	1.7	1.0	15.1	229.0	180.7	71.5	23.4	5.7	0.4				
	Total	49.7	3.7	0.9	0.6	8.5	171.1	199.9	104.0	43.8	11.8	1.6				
1991	Cases	7,086	4	0	0	22	576	1,141	897	831	344	41	3,230			
	Female	5,352	2	12	3	109	1,082	958	454	319	93	5	2,315			
	Unspecified	19	0	0	0	0	1	1	0	0	0	0	18			
	Total	12,457	6	12	3	131	1,658	2,100	1,351	1,150	437	46	5,563			
Rate	Male	50.8	1.9	0.0	0.0	2.2	58.5	106.8	69.9	33.4	10.7	2.1				
	Female	37.7	1.0	1.6	0.3	11.7	115.0	92.0	36.4	13.0	2.9	0.2				
	Total	44.3	1.5	0.8	0.2	6.8	86.1	99.6	53.4	23.3	6.8	1.0				
1992	Cases	5,148	8	0	1	19	781	1,485	1,175	1,138	428	51	62			
	Female	4,093	7	9	6	140	1,644	1,195	582	381	85	12	32			
	Unspecified	12	0	0	0	0	2	2	4	1	1	0	2			
	Total	9,253	15	9	7	159	2,427	2,682	1,761	1,520	514	63	96			
Rate	Male	36.4	3.9	0.0	0.1	1.9	79.0	139.5	93.7	44.6	12.9	2.6				
	Female	28.4	3.6	1.2	0.6	14.8	174.3	115.4	47.7	15.2	2.6	0.5				
	Total	32.4	3.7	0.6	0.4	8.2	125.7	127.7	71.2	30.0	7.8	1.4				
1993	Cases	3,738	1	1	3	8	596	1,013	884	845	323	26	38			
	Female	3,086	0	11	3	88	1,185	997	402	298	79	4	19			
	Unspecified	8	0	0	1	1	2	0	0	0	0	1	3			
	Total	6,832	1	12	7	97	1,783	2,010	1,286	1,143	402	31	60			
Rate	Male	26.0	0.5	0.1	0.3	0.8	59.9	95.6	72.9	32.4	9.5	1.3				
	Female	21.1	0.0	1.4	0.3	9.2	124.8	96.8	34.0	11.6	2.3	0.2				
	Total	23.6	0.3	0.7	0.4	4.9	91.7	96.2	53.7	22.1	5.9	0.7				
1994	Cases	3,478	3	0	1	10	433	796	821	971	386	34	23			
	Female	2,645	1	4	3	83	947	817	363	293	92	7	35			
	Unspecified	44	0	0	0	0	2	2	1	4	0	0	35			
	Total	6,167	4	4	4	93	1,382	1,615	1,185	1,268	478	41	93			
Rate	Male	24.0	1.5	0.0	0.1	1.0	43.1	76.3	70.5	36.8	10.9	1.6				
	Female	17.9	0.5	0.5	0.3	8.6	98.9	80.5	31.9	11.3	2.6	0.3				
	Total	21.1	1.0	0.2	0.2	4.7	70.4	78.4	51.5	24.2	6.8	0.9				

¹ Rate per 100,000 population. Population estimates provided by Statistics Canada

² 1999 cases are incomplete and changes are anticipated

Source: Division of STD Prevention and Control, Bureau of HIV/AIDS, STD and TB, Health Canada, 2000

(continued)

Appendix 1.2A (continued)

Reported Gonorrhoea Cases and Rates¹ in Canada by Age Group and Sex, 1980-1999²

Year		Total	Age Group (years)													NS		
			0 < 1	1-4	5-9	10-14	15-19	20-24	25-29	30-39	40-59	60+						
1995	Cases	3,322	3	2	0	9	425	769	710	980	360	36	28					
	Female	2,385	1	4	2	75	888	761	347	243	51	1	12					
	Unspecified	8	0	0	0	2	0	0	2	1	1	0	2					
	Total	5,715	4	6	2	84	1,315	1,530	1,059	1,224	412	37	42					
	Rate	22.6	1.5	0.2	0.0	0.9	74.1	62.5	36.7	9.9	1.7							
	Female	16.0	0.5	0.5	0.2	7.7	91.9	75.4	31.2	9.3	1.4	0.0						
	Total	19.3	1.1	0.4	0.1	4.2	66.4	74.8	47.1	23.2	5.6	0.8						
	Cases	2,845	1	2	1	5	345	688	614	820	320	26	23					
1996	Female	2,168	2	3	2	64	844	652	320	210	60	2	9					
	Unspecified	10	0	0	0	0	0	1	0	4	0	0	5					
	Total	5,023	3	5	3	69	1,189	1,341	934	1,034	380	28	37					
	Rate	19.2	0.5	0.3	0.1	0.5	33.6	66.6	54.8	30.6	8.5	1.2						
	Female	14.3	1.1	0.4	0.2	6.5	86.4	65.0	29.0	8.0	1.6	0.1						
	Total	16.8	0.8	0.3	0.2	3.4	59.4	65.9	42.0	19.5	5.0	0.6						
	Cases	2,657	0	0	0	2	333	594	570	777	338	25	18					
	Female	1,855	0	0	1	54	725	588	242	194	43	4	4					
1997	Unspecified	10	0	0	0	0	0	2	0	1	0	1	6					
	Total	4,522	0	0	1	56	1,058	1,184	812	972	381	30	28					
	Rate	17.7	0.0	0.0	0.0	0.3	31.5	57.4	51.4	29.2	8.5	1.4						
	Female	11.6	0.0	0.0	0.1	5.0	69.7	56.9	21.0	7.1	1.3	0.1						
	Total	14.9	0.0	0.0	0.0	2.8	52.3	58.2	36.9	18.4	4.9	0.6						
	Cases	2,921	0	0	3	5	327	665	571	898	406	32	14					
	Female	1,938	3	5	3	51	799	575	245	196	53	5	3					
	Unspecified	9	0	0	0	0	0	2	0	0	0	0	7					
1998	Total	4,868	3	5	6	56	1,126	1,242	816	1,094	459	37	24					
	Rate	19.5	0.0	0.0	0.3	0.5	31.1	64.0	53.0	34.8	10.2	1.5						
	Female	12.7	1.7	0.7	0.3	5.2	80.2	57.6	23.3	7.7	1.3	0.2						
	Total	16.4	0.8	0.3	0.3	2.8	55.0	60.9	38.3	21.4	5.7	0.7						
	Cases	2,879	2	0	1	1	280	618	530	952	446	43	6					
	Female	1,691	0	2	3	40	652	533	230	167	59	2	3					
	Unspecified	196	0	0	0	0	0	0	0	0	0	0	196					
	Total	4,766	2	2	4	41	932	1,151	760	1,119	505	45	205					
1999	Rate	19.1	1.1	0.0	0.1	0.1	26.5	58.7	49.6	37.4	10.8	1.9						
	Female	11.0	0.0	0.3	0.3	4.1	65.0	52.9	22.0	6.7	1.4	0.1						
	Total	15.6	0.6	0.1	0.2	2.0	45.2	55.9	36.0	22.2	6.1	0.9						

¹ Rate per 100,000 population. Population estimates provided by Statistics Canada

² 1999 cases are incomplete and changes are anticipated

Source: Division of STD Prevention and Control, Bureau of HIV/AIDS, STD and TB, Health Canada, 2000

Appendix 1.2B

Reported Gonorrhoea Cases and Rates¹ in Canada by Province/Territory and Sex, 1980-1999²

Year	Cases	Total*	Province/Territory													Nunavut ³
			NF	PEI	NS	NB	QU	ON	MB	SK	AL	BC	YT	NWT		
1980	Male	32,555	476	0	692	222	2,645	9,953	2,253	1,692	7,025	6,470	215	912		
	Female	20,485	276	0	753	101	1,936	6,093	1,831	909	4,451	3,513	128	494		
	Total	53,271	792	108	1,528	323	4,581	16,046	4,084	2,601	11,476	9,983	343	1,406		
1980	Rate	265.6	163.9	0.0	162.8	62.7	81.8	229.1	438.5	346.4	622.8	468.8	1,652.2	3,704.8		
	Female	166.0	97.2	0.0	175.3	28.5	58.8	137.7	350.2	188.9	414.8	255.4	1,116.3	2,241.9		
	Total	216.6	137.9	87.1	178.8	45.6	70.2	183.0	393.9	268.2	521.4	362.3	1,401.2	3,013.8		
1981	Male	34,337	485	0	635	165	3,540	10,549	2,617	1,704	7,234	5,939	291	1,178		
	Female	21,863	307	0	668	98	2,690	6,651	2,054	991	4,453	3,168	158	625		
	Total	56,330	813	92	1,320	263	6,230	17,200	4,671	2,695	11,687	9,107	449	1,803		
1981	Rate	276.9	166.7	0.0	149.4	46.7	108.9	241.3	509.2	346.2	611.7	418.4	2,283.2	1,663.7		
	Female	174.9	107.5	0.0	154.9	27.6	81.1	148.9	391.5	203.9	397.1	223.6	1,396.6	2,757.3		
	Total	226.2	141.0	74.2	154.1	37.1	94.9	194.6	449.8	275.5	507.3	321.1	1,866.3	3,762.0		
1982	Male	32,078	496	0	631	106	3,251	10,013	2,575	1,577	6,717	5,403	150	1,159		
	Female	20,893	257	0	626	84	2,372	6,371	2,033	889	4,349	3,223	108	581		
	Total	53,072	777	59	1,275	190	5,623	16,384	4,608	2,466	11,066	8,626	258	1,740		
1982	Rate	255.7	170.7	0.0	147.5	29.9	99.6	226.1	495.9	316.9	552.1	374.4	1,149.2	4,399.8		
	Female	165.0	89.9	0.0	144.2	23.6	71.1	140.9	383.8	180.6	374.7	223.3	931.0	2,461.0		
	Total	210.6	134.8	117.9	147.9	26.7	85.2	183.0	439.3	249.1	465.4	298.9	1,046.5	3,483.5		
1983	Male	27,006	394	0	564	61	3,542	9,412	2,152	1,295	4,623	3,774	89	1,100		
	Female	18,148	279	0	594	59	2,360	6,183	1,609	734	3,398	2,315	58	559		
	Total	45,265	685	87	1,170	120	5,902	15,595	3,761	2,029	8,021	6,089	147	1,659		
1983	Rate	213.3	134.6	0.0	130.4	17.1	108.2	209.6	408.7	256.6	377.6	258.8	706.0	4,045.8		
	Female	141.9	96.7	0.0	135.3	16.4	70.4	134.9	299.8	146.8	289.2	158.4	517.0	2,297.3		
	Total	177.8	117.9	69.2	134.3	16.7	89.1	171.9	353.7	201.9	334.3	208.6	617.0	3,220.0		
1984	Male	25,852	383	0	643	139	4,197	9,119	1,897	1,198	3,897	3,334	114	931		
	Female	17,924	218	0	684	115	2,793	6,554	1,453	614	2,815	2,131	77	470		
	Total	43,874	617	67	1,342	254	6,990	15,673	3,350	1,812	6,712	5,465	191	1,401		
1984	Rate	202.3	130.9	0.0	147.3	38.6	127.6	200.2	356.5	234.4	319.4	225.7	892.7	3,318.7		
	Female	138.7	75.4	0.0	154.4	31.7	83.0	140.9	268.1	121.0	238.9	143.7	676.8	1,874.6		
	Total	170.7	106.0	52.8	152.6	35.1	105.0	170.2	311.9	177.9	279.8	184.6	791.0	2,637.2		

¹ Rate per 100,000 population. Population estimates provided by Statistics Canada

² 1999 cases are incomplete and changes are anticipated

³ Nunavut STD data in 1999 are from April 1, 1999

* Total includes cases not specified for sex.

Source: Division of STD Prevention and Control, Bureau of HIV/AIDS, STD and TB, Health Canada, 2000

(continued)

Appendix 1.2B (continued)

Reported Gonorrhoea Cases and Rates¹ in Canada by Province/Territory and Sex, 1980-1999²

Year		Total*	Province/Territory												
			NF	PEI	NS	NB	QU	ON	MB	SK	AL	BC	YT	NWT	Nunavut ³
1985	Cases	23,277	357	0	506	243	3,749	8,462	1,813	1,209	3,175	2,819	115	829	
	Female	17,399	201	0	677	264	2,678	6,445	1,373	689	2,515	2,103	76	378	
	Total	40,737	568	49	1,185	507	6,427	14,907	3,186	1,898	5,690	4,922	191	1,207	
1985	Rate	180.6	122.3	0.0	114.9	67.3	113.5	183.2	337.3	234.4	259.7	189.1	883.7	2,851.1	
	Female	133.3	69.5	0.0	151.4	72.3	79.1	136.7	251.0	134.3	211.6	140.3	654.7	1,456.6	
	Total	157.0	97.8	38.3	133.5	69.8	96.1	159.7	293.8	184.5	236.0	164.6	775.7	2,193.5	
1986	Cases	19,458	250	0	389	263	3,322	6,872	1,715	1,073	2,588	1,984	118	884	
	Female	15,744	171	0	563	241	2,522	5,771	1,314	664	2,294	1,586	68	550	
	Total	35,287	435	67	952	506	5,844	12,643	3,029	1,737	4,882	3,570	186	1,436	
1986	Rate	149.5	86.2	0.0	87.9	72.7	99.9	146.5	316.2	207.4	209.9	131.9	902.1	3,019.3	
	Female	119.4	59.4	0.0	125.3	65.9	74.0	120.6	238.2	128.8	190.3	104.6	582.1	2,107.5	
	Total	134.7	75.2	52.0	106.7	69.5	86.8	133.4	276.9	168.2	200.2	118.2	751.2	2,593.5	
1987	Cases	14,755	152	13	251	268	1,973	5,077	1,585	968	2,158	1,565	68	677	
	Female	12,923	102	20	356	203	1,697	4,596	1,306	816	1,949	1,355	57	466	
	Total	27,918	258	39	609	471	3,897	9,673	2,891	1,784	4,107	2,920	125	1,144	
1987	Rate	112.0	52.5	20.3	56.5	73.8	58.7	106.0	290.4	186.6	174.8	102.5	496.5	2,306.1	
	Female	96.7	35.5	30.8	78.8	55.2	49.2	93.9	235.4	157.6	161.2	88.1	464.0	1,771.7	
	Total	105.2	44.8	30.2	67.9	64.5	57.3	99.9	262.7	172.1	168.1	95.3	481.1	2,055.4	
1988	Cases	10,381	89	10	197	104	1,342	4,149	1,115	669	1,285	1,119	62	240	
	Female	9,501	59	13	346	139	1,227	3,680	903	601	1,272	1,015	38	208	
	Total	20,102	151	23	543	243	2,785	7,829	2,018	1,270	2,557	2,135	100	448	
1988	Rate	77.8	30.8	15.5	44.2	28.6	39.7	84.9	203.5	129.7	103.3	71.8	438.3	810.7	
	Female	70.1	20.6	19.9	76.2	37.7	35.3	73.7	162.2	116.5	104.3	64.6	298.2	780.3	
	Total	74.7	26.2	17.7	60.3	33.1	40.6	79.2	182.7	123.1	103.8	68.3	371.9	796.3	
1989	Cases	10,278	41	5	156	61	948	5,169	819	551	1,015	781	62	670	
	Female	8,778	37	10	295	87	694	4,081	721	449	962	712	35	695	
	Total	19,110	80	15	451	148	1,694	9,250	1,540	1,000	1,977	1,493	97	1,365	
1989	Rate	75.7	14.2	7.7	34.8	16.6	27.2	103.0	149.2	107.8	80.3	48.9	431.4	2,218.6	
	Female	63.6	12.9	15.2	64.4	23.4	19.7	79.5	129.4	87.7	77.6	44.2	269.1	2,542.7	
	Total	69.8	13.9	11.5	49.7	20.1	24.4	91.1	139.2	97.8	78.9	46.5	354.3	2,372.6	

¹ Rate per 100,000 population. Population estimates provided by Statistics Canada

² 1999 cases are incomplete and changes are anticipated

³ Nunavut STD data in 1999 are from April 1, 1999

* Total includes cases not specified for sex.

Source: Division of STD Prevention and Control, Bureau of HIV/AIDS, STD and TB, Health Canada, 2000

(continued)

Appendix 1.2B (continued)

Reported Gonorrhoea Cases and Rates¹ in Canada by Province/Territory and Sex, 1980-1999²

Year		Total*	Province/Territory													Nunavut ³
			NF	PEI	NS	NB	QU	ON	MB	SK	AL	BC	YT	NWT		
1990	Cases	7,681	27	6	120	36	1,182	3,569	571	448	625	818	48	231		
	Female	6,024	22	3	190	26	695	2,552	508	455	630	682	37	224		
	Total	13,822	49	10	310	62	1,966	6,148	1,079	903	1,255	1,500	85	455		
1990	Rate	55.7	9.3	9.2	26.6	9.8	34.2	69.8	103.8	88.8	48.5	49.8	326.9	743.2		
	Female	43.0	7.6	4.5	41.2	6.9	19.5	48.8	91.0	89.9	49.7	41.2	277.3	792.2		
	Total	49.7	8.5	7.6	34.0	8.3	28.0	59.5	97.3	89.3	49.1	45.5	303.3	766.6		
1991	Cases	7,086	10	3	105	32	953	3,100	697	442	757	744	44	199		
	Female	5,352	15	3	189	21	417	2,274	598	404	630	584	33	184		
	Total	12,457	25	6	294	53	1,380	5,381	1,295	846	1,387	1,330	77	383		
1991	Rate	50.8	3.4	4.6	23.2	8.6	27.3	59.9	126.2	88.1	57.7	44.2	288.7	621.5		
	Female	37.7	5.2	4.5	40.7	5.6	11.6	42.9	106.8	80.1	48.9	34.4	237.2	628.3		
	Total	44.3	4.3	4.6	32.0	7.1	19.5	51.4	116.4	84.1	53.3	39.4	264.2	624.8		
1992	Cases	5,148	9	2	69	15	618	2,188	702	360	456	8	123			
	Female	4,093	4	1	126	9	264	1,707	557	357	576	5	151			
	Total	9,253	13	3	196	24	891	3,897	1,259	717	1,174	792	13	274		
1992	Rate	36.4	3.1	3.1	15.1	4.0	17.5	41.6	126.6	71.7	44.8	26.4	50.7	376.4		
	Female	28.4	1.4	1.5	26.9	2.4	7.3	31.7	99.0	70.6	43.9	19.2	34.5	505.4		
	Total	32.4	2.2	2.3	21.2	3.2	12.4	36.6	112.7	71.1	44.4	22.8	42.9	438.0		
1993	Cases	3,738	2	0	29	6	458	1,691	487	247	427	312	9	70		
	Female	3,086	1	0	61	2	217	1,341	436	243	404	254	14	113		
	Total	6,832	3	0	90	8	680	3,035	923	490	831	566	23	183		
1993	Rate	26.0	0.7	0.0	6.3	1.6	12.8	31.6	87.3	49.0	31.6	17.6	56.8	211.2		
	Female	21.1	0.3	0.0	13.0	0.5	5.9	24.5	77.0	47.9	30.3	14.1	95.9	370.3		
	Total	23.6	0.5	0.0	9.7	1.1	9.4	27.1	82.1	48.5	30.9	15.8	75.6	287.4		
1994	Cases	3,478	1	0	13	6	504	1,760	394	188	266	298	7	41		
	Female	2,645	2	0	22	7	225	1,328	335	189	240	189	6	102		
	Total	6,167	3	0	35	13	735	3,123	729	377	506	490	13	143		
1994	Rate	24.0	0.3	0.0	2.8	1.6	14.0	32.6	70.3	37.3	19.5	16.3	45.9	121.9		
	Female	17.9	0.7	0.0	4.7	1.8	6.1	24.0	58.8	37.2	17.8	10.2	41.6	328.3		
	Total	21.1	0.5	0.0	3.7	1.7	10.1	28.6	64.5	37.2	18.6	13.4	43.8	221.0		

¹ Rate per 100,000 population. Population estimates provided by Statistics Canada

² 1999 cases are incomplete and changes are anticipated

³ Nunavut STD data in 1999 are from April 1, 1999

* Total includes cases not specified for sex.

Source: Division of STD Prevention and Control, Bureau of HIV/AIDS, STD and TB, Health Canada, 2000

(continued)

Appendix 1.2B (continued)															
Reported Gonorrhoea Cases and Rates ¹ in Canada by Province/Territory and Sex, 1980-1999 ²															
Year		Total*	Province/Territory												
			NF	PEI	NS	NB	QU	ON	MB	SK	AL	BC	YT	NWT	Nunavut ³
1995	Cases	3,322	2	0	15	7	425	1,719	376	208	223	296	11	40	
	Female	2,385	2	0	23	7	165	1,264	282	178	177	193	9	85	
	Total	5,715	4	0	38	14	595	2,983	658	386	400	492	20	125	
1996	Rate	22.6	0.7	0.0	3.2	1.9	11.8	31.4	66.7	41.2	16.1	15.8	72.0	117.3	
	Female	16.0	0.7	0.0	4.8	1.8	4.4	22.5	49.2	34.8	13.0	10.2	60.6	268.0	
	Total	19.3	0.7	0.0	4.1	1.8	8.1	26.9	57.9	38.0	14.6	13.1	66.4	189.9	
1997	Cases	2,845	2	1	30	10	325	1,304	305	216	247	354	3	48	
	Female	2,168	0	0	67	31	144	1,008	249	188	225	172	7	77	
	Total	5,023	2	1	97	41	478	2,312	554	404	472	527	10	125	
1998	Rate	19.2	0.7	1.5	6.5	2.7	8.9	23.5	53.8	42.5	17.6	18.5	18.6	138.5	
	Female	14.3	0.0	0.0	14.0	8.0	3.8	17.7	43.2	36.5	16.2	8.9	45.7	241.2	
	Total	16.8	0.4	0.7	10.3	5.4	6.5	20.5	48.4	39.5	16.9	13.7	31.8	187.8	
1999	Cases	2,657	2	1	33	4	408	1,143	249	176	216	355	0	70	
	Female	1,855	1	0	75	43	136	775	269	166	190	120	0	80	
	Total	4,522	3	1	108	47	551	1,919	518	342	406	477	0	150	
1999	Rate	17.7	0.7	1.5	7.1	1.1	11.2	20.3	43.9	34.6	15.1	18.2	0.0	199.9	
	Female	12.1	0.4	0.0	15.6	11.2	3.6	13.4	46.6	32.2	13.4	6.1	0.0	246.1	
	Total	14.9	0.5	0.7	11.4	6.2	7.3	16.8	45.2	33.4	14.3	12.1	0.0	222.1	
1999	Cases	2,921	2	1	29	7	370	1,355	225	167	268	406	5	86	
	Female	1,938	0	0	55	10	112	917	198	159	250	163	6	68	
	Total	4,868	2	1	84	17	490	2,272	424	326	518	569	11	154	
1999	Rate	19.5	0.7	1.5	6.3	1.9	10.2	24.1	39.8	32.7	18.3	20.3	30.1	242.1	
	Female	12.7	0.0	0.0	11.5	2.6	3.0	15.9	34.4	30.9	17.3	8.1	40.0	210.1	
	Total	16.4	0.4	0.7	9.0	2.3	6.7	19.9	37.2	31.8	17.8	14.2	34.8	226.9	
1999	Cases	2,879	1	0	23	5	485	1,002	182	171	266	664	5	34	41
	Female	1,691	0	0	39	5	144	673	162	139	239	202	10	25	53
	Total	4,766	1	0	63	10	629	1,870	344	310	505	866	15	59	94
1999	Rate	19.1	0.4	0.0	5.0	1.3	13.4	17.6	32.1	33.5	17.8	33.2	31.5	157.8	288.7
	Female	11.0	0.0	0.0	8.1	1.3	3.9	11.5	28.1	26.9	16.3	10	67.8	124.7	412.9
	Total	15.6	0.2	0.0	6.7	1.3	8.6	16.2	30.1	30.2	17.0	21.5	49.0	141.8	347.6

¹ Rate per 100,000 population. Population estimates provided by Statistics Canada

² 1999 cases are incomplete and changes are anticipated

³ Nunavut STD data in 1999 are from April 1, 1999

* Total includes cases not specified for sex.

Source: Division of STD Prevention and Control, Bureau of HIV/AIDS, STD and TB, Health Canada, 2000

Appendix 1.3A

Reported Infectious Syphilis¹ Cases and Rates² in Canada by Age Group and Sex, 1993-1999³

Year		Total*	Age Group (years)													NS
			0<1	1-4	5-9	10-14	15-19	20-24	25-29	30-39	40-59	60+				
1993	Cases	104	0	0	0	0	3	19	17	26	30	5	4			
	Female	79	1	0	0	0	11	23	12	15	10	5	2			
	Unspecified	5	0	0	0	1	0	0	0	0	0	0	4			
	Total	188	1	0	0	0	15	42	29	41	40	10	10			
Rate	Male	0.7	0.0	0.0	0.0	0.3	1.8	1.4	1.0	0.9	0.2					
	Female	0.5	0.0	0.0	0.0	1.2	2.2	1.0	0.6	0.3	0.2					
	Total	0.6	0.3	0.0	0.0	0.8	2.0	1.2	0.8	0.6	0.2					
1994	Cases	112	1	0	0	0	2	14	21	31	12	0	0			
	Female	73	0	0	0	0	10	17	12	17	5	0	0			
	Unspecified	6	0	0	0	0	1	1	1	1	1	2	2			
	Total	191	1	0	0	0	12	32	34	49	43	18	2			
Rate	Male	0.8	0.5	0.0	0.0	0.2	1.3	1.8	1.2	0.9	0.6					
	Female	0.5	0.0	0.0	0.0	1.0	1.7	1.1	0.7	0.3	0.2					
	Total	0.6	0.3	0.0	0.0	0.6	1.6	1.5	0.9	0.6	0.4					
1995	Cases	90	0	0	0	0	2	14	14	30	5	2	2			
	Female	55	0	0	0	0	11	12	12	11	0	0	0			
	Unspecified	0	0	0	0	0	0	0	0	0	0	0	0			
	Total	145	0	0	0	0	13	26	26	41	33	5	2			
Rate	Male	0.6	0.0	0.0	0.0	0.2	1.4	1.2	1.1	0.7	0.2					
	Female	0.4	0.0	0.0	0.0	1.0	1.2	1.1	0.4	0.2	0.0					
	Total	0.5	0.0	0.0	0.0	0.6	1.3	1.2	0.8	0.5	0.1					
1996	Cases	74	0	0	0	0	3	7	13	27	2	1	1			
	Female	49	0	0	0	0	9	9	14	11	1	0	0			
	Unspecified	0	0	0	0	0	0	0	0	0	0	0	0			
	Total	123	0	0	0	0	12	16	27	38	26	3	1			
Rate	Male	0.5	0.0	0.0	0.0	0.3	0.7	1.2	1.0	0.6	0.1					
	Female	0.3	0.0	0.0	0.0	0.9	0.9	1.3	0.4	0.1	0.0					
	Total	0.4	0.0	0.0	0.0	0.6	0.8	1.2	0.7	0.3	0.1					

¹ Infectious syphilis: early symptomatic (primary and secondary) syphilis + early latent syphilis

² Rate per 100,000 population. Population estimates provided by Statistics Canada

³ 1999 cases are incomplete and changes are anticipated

* Totals include cases not specified for sex.

Source: Division of STD Prevention and Control, Bureau of HIV/AIDS, STD and TB, Health Canada, 2000

(continued)

Appendix 1.3A (continued)														
Reported Infectious Syphilis ¹ Cases and Rates ² in Canada by Age Group and Sex, 1993-1999 ³														
Year		Total*	Age Group (years)											NS
			0<1	1-4	5-9	10-14	15-19	20-24	25-29	30-39	40-59	60+		
1997	Cases	67	0	0	0	0	0	1	4	8	27	26	1	0
	Female	49	0	0	0	0	2	6	14	18	7	2	0	0
	Unspecified	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	116	0	0	0	0	3	10	22	45	33	3	0	0
Rate	Male	0.4	0.0	0.0	0.0	0.1	0.4	0.7	1.0	0.7	0.7	0.0	0.0	0.0
	Female	0.3	0.0	0.0	0.0	0.2	0.6	1.3	0.7	0.7	0.2	0.1	0.1	0.0
	Total	0.4	0.0	0.0	0.0	0.1	0.5	1.0	0.9	0.9	0.4	0.1	0.1	0.0
1998	Cases	100	0	0	0	0	2	4	10	41	32	11	0	0
	Female	66	0	0	0	0	5	10	11	25	12	2	1	1
	Unspecified	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	166	0	0	0	0	7	14	21	66	44	13	1	1
Rate	Male	0.7	0.0	0.0	0.0	0.2	0.4	0.9	1.6	1.6	0.8	0.5	0.5	0.0
	Female	0.4	0.0	0.0	0.0	0.5	1.0	1.0	1.0	1.0	0.3	0.1	0.1	0.0
	Total	0.5	0.0	0.0	0.0	0.3	0.7	1.0	1.3	1.3	0.5	0.3	0.3	0.0
1999	Cases	94	0	0	0	0	0	10	10	28	39	7	0	0
	Female	65	0	0	0	0	9	10	14	15	15	2	0	0
	Unspecified	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	159	0	0	0	0	9	20	24	43	54	9	0	0
Rate	Male	0.6	0.0	0.0	0.0	0.0	1.0	1.0	0.9	1.1	0.9	0.3	0.3	0.0
	Female	0.4	0.0	0.0	0.0	0.9	1.0	1.3	1.3	0.6	0.4	0.1	0.1	0.0
	Total	0.5	0.0	0.0	0.0	0.4	1.0	1.1	1.1	0.9	0.7	0.2	0.2	0.0

¹ Infectious syphilis: early symptomatic (primary and secondary) syphilis + early latent syphilis

² Rate per 100,000 population. Population estimates provided by Statistics Canada

³ 1999 cases are incomplete and changes are anticipated

* Totals include cases not specified for sex.

Source: Division of STD Prevention and Control, Bureau of HIV/AIDS, STD and TB, Health Canada, 2000

Appendix 1.3B

Reported Infectious Syphilis¹ Cases and Rates² in Canada by Province/Territory and Sex, 1993-1999³

Year		Total*	Province/Territory													Nunavut ⁴
			NF	PEI	NS	NB	QU	ON	MB	SK	AL	BC	YT	NWT		
1993	Cases	104	0	0	6	0	13	65	2	3	5	8	0	0	0	0
	Female	79	0	0	9	0	7	55	1	2	1	3	0	0	0	0
	Total	188	0	0	15	0	20	125	3	5	6	11	0	0	0	0
1993	Rate	0.7	0.0	0.0	1.3	0.0	0.4	1.2	0.4	0.6	0.4	0.5	0.0	0.0	0.0	0.0
	Female	0.5	0.0	0.0	1.9	0.0	0.2	1.0	0.2	0.4	0.1	0.2	0.0	0.0	0.0	0.0
	Total	0.6	0.0	0.0	1.6	0.0	0.3	1.2	0.3	0.5	0.2	0.3	0.0	0.0	0.0	0.0
1994	Cases	115	0	0	11	3	18	55	3	11	5	9	0	0	0	0
	Female	71	1	1	13	4	2	35	1	7	3	3	1	0	0	0
	Total	191	1	1	24	7	20	93	4	18	8	14	1	0	0	0
1994	Rate	0.8	0.0	0.0	2.4	0.8	0.5	1.0	0.5	2.2	0.4	0.5	0.0	0.0	0.0	0.0
	Female	0.5	0.3	0.3	2.7	1.0	0.1	0.6	0.2	1.4	0.2	0.2	6.9	0.0	0.0	0.0
	Total	0.7	0.2	0.2	2.6	0.9	0.3	0.9	0.4	1.8	0.3	0.4	3.4	0.0	0.0	0.0
1995	Cases	90	1	0	1	1	6	58	3	9	3	8	0	0	0	0
	Female	55	0	0	0	0	7	34	1	10	1	2	0	0	0	0
	Total	145	1	0	1	1	13	92	4	19	4	10	0	0	0	0
1995	Rate	0.6	0.3	0.0	0.2	0.3	0.2	1.1	0.5	1.8	0.2	0.4	0.0	0.0	0.0	0.0
	Female	0.4	0.0	0.0	0.0	0.0	0.2	0.6	0.2	2.0	0.1	0.1	0.0	0.0	0.0	0.0
	Total	0.5	0.2	0.0	0.1	0.1	0.2	0.8	0.4	1.9	0.1	0.3	0.0	0.0	0.0	0.0
1996	Cases	74	0	0	1	0	11	41	1	4	0	16	0	0	0	0
	Female	49	0	0	2	0	1	37	0	6	0	3	0	0	0	0
	Total	123	0	0	3	0	12	78	1	10	0	19	0	0	0	0
1996	Rate	0.5	0.0	0.0	0.2	0.0	0.3	0.7	0.2	0.8	0.0	0.8	0.0	0.0	0.0	0.0
	Female	0.3	0.0	0.0	0.4	0.0	0.0	0.7	0.0	1.2	0.0	0.2	0.0	0.0	0.0	0.0
	Total	0.4	0.0	0.0	0.3	0.0	0.2	0.7	0.1	1.0	0.0	0.5	0.0	0.0	0.0	0.0
1997	Cases	67	0	0	0	0	4	29	0	1	4	29	0	0	0	0
	Female	49	0	0	1	0	4	20	0	1	4	19	0	0	0	0
	Total	116	0	0	1	0	8	49	0	2	8	48	0	0	0	0
1997	Rate	0.4	0.0	0.0	0.0	0.0	0.1	0.5	0.0	0.2	0.3	1.5	0.0	0.0	0.0	0.0
	Female	0.3	0.0	0.0	0.2	0.0	0.1	0.3	0.0	0.2	0.3	1	0.0	0.0	0.0	0.0
	Total	0.4	0.0	0.0	0.0	0.0	0.1	0.4	0.0	0.2	0.3	1.2	0.0	0.0	0.0	0.0

¹ Infectious syphilis: early symptomatic (primary and secondary) syphilis + early latent syphilis

² Rate per 100,000 population. Population estimates provided by Statistics Canada

³ 1999 cases are incomplete and changes are anticipated

⁴ Nunavut STD data in 1999 are from April 1, 1999

* Totals include cases not specified for sex.

Source: Division of STD Prevention and Control, Bureau of HIV/AIDS, STD and TB, Health Canada, 2000

(continued)

Appendix 1.3B (continued)														
Reported Infectious Syphilis ¹ Cases and Rates ² in Canada by Province/Territory and Sex, 1993-1999 ³														
Year	Cases	Total*	Province/Territory											
			NF	PEI	NS	NB	QU	ON	MB	SK	AL	BC	YT	NWT
1998	Male	101	0	0	1	0	3	22	2	0	6	67	0	0
	Female	66	0	0	1	0	1	18	1	0	0	45	0	0
	Total	167	0	0	2	0	4	40	3	0	6	112	0	0
Rate	Male	0.7	0.0	0.0	0.2	0.0	0.1	0.4	0.4	0.0	0.4	3.4	0.0	0.0
	Female	0.4	0.0	0.0	0.2	0.0	0.0	0.3	0.2	0.0	0.0	2.2	0.0	0.0
	Total	0.5	0.0	0.0	0.2	0.0	0.1	0.4	0.3	0.0	0.2	2.8	0.0	0.0
1999	Male	94	0	0	1	0	1	19	0	0	1	72	0	0
	Female	65	0	0	0	0	2	8	0	0	0	55	0	0
	Total	159	0	0	1	0	3	27	0	0	1	127	0	0
Rate	Male	0.6	0.0	0.0	0.2	0.0	0.0	0.3	0.0	0.0	0.1	3.6	0.0	0.0
	Female	0.4	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	2.7	0.0	0.0
	Total	0.5	0.0	0.0	0.1	0.0	<0.1	0.2	0.0	0.0	0.0	3.2	0.0	0.0

¹ Infectious syphilis: early symptomatic (primary and secondary) syphilis + early latent syphilis

² Rate per 100,000 population. Population estimates provided by Statistics Canada

³ 1999 cases are incomplete and changes are anticipated

⁴ Nunavut STD data in 1999 are from April 1, 1999

* Totals include cases not specified for sex.

Source: Division of STD Prevention and Control, Bureau of HIV/AIDS, STD and TB, Health Canada, 2000

Appendix 1.3C

Reported Congenital Syphilis Cases in Canada by Province/Territory and Sex, 1992-1999¹

Year	Total Cases	Rate ²	Province/Territory														
			NF	PEI	NS	NB	QU	ON	MB	SK	AL	BC	YT	NWT	Nun ³		
1992	4	1.01	0	0	0	0	1	3	0	0	0	0	0	0	0	0	
1993	4	1.03	0	0	0	0	2	2	0	0	0	0	0	0	0	0	
1994	3	0.78	0	0	0	0	0	2	0	0	0	1	0	0	0	0	
1995	2	0.53	0	0	0	0	0	2	0	0	0	0	0	0	0	0	
1996	1	0.27	0	0	0	0	0	0	0	0	0	1	0	0	0	0	
1997	2	0.55	0	0	0	0	0	0	0	0	0	0	2	0	0	0	
1998	2	0.56	0	0	0	0	0	2	0	0	0	0	0	0	0	0	
1999	0	0.00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

¹ 1999 cases are incomplete and changes are anticipated

² Rate per 100,000 population. Population estimates provided by Statistics Canada

³ Nunavut STD data in 1999 are from April 1, 1999

Source: Division of STD Prevention and Control, Bureau of HIV/AIDS, STD and TB, Health Canada, 2000

Appendix 2

The Canadian *Neisseria gonorrhoeae* Antimicrobial Susceptibility Surveillance Network includes the following:

- British Columbia Centre for Disease Control, Vancouver, British Columbia
- Provincial Laboratory of Public Health for Northern Alberta, Edmonton, Alberta
- Provincial Laboratory of Public Health for Southern Alberta, Calgary, Alberta
- Laboratory and Disease Control Services Branch, Regina, Saskatchewan
- Cadham Provincial Laboratory, Winnipeg, Manitoba
- Laboratory Services Branch, Etobicoke, Ontario
- Laboratoire de santé publique du Québec, Ste-Anne-de-Bellevue, Quebec
- QE II Health Sciences, Halifax, Nova Scotia
- Saint John Regional Hospital, Saint John, New Brunswick
- Provincial Health Laboratory, Charlottetown, Prince Edward Island
- Newfoundland Public Health Laboratories, St. John's, Newfoundland
- Department of Health and Social Services, Whitehorse, Yukon
- Health Promotion and Protection Office, Yellowknife, Northwest Territories
- Department of Health and Social Services, Keewatin, Nunavut
- National Laboratory for Sexually Transmitted Diseases, Winnipeg, Manitoba