ENVIRONMENTAL SCAN OF SEXUAL AND REPRODUCTIVE HEALTH IN THE ATLANTIC PROVINCES

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EXECUTIVE SUMMARY

This scan of sexual and reproductive health in the Atlantic provinces is an overview of information gathered to support implementation of Health Canada's *A Report from Consultations on a Framework for Sexual and Reproductive Health.* A population health approach to sexual and reproductive health underlies the organization and analysis of the information in the report.

The scan examines epidemiological data on six health problems as well as information on the activities of 52 organizations in the Atlantic provinces working on sexual and reproductive health issues.

What are the Sexual and Reproductive Health Issues?

- Adolescents in the Atlantic provinces have a high level of unprotected sexual activity, placing them at risk for sexually transmitted infections (including HIV), and unintended pregnancies. Unprotected sex can be due to young women's lack of choice and safety in their relationships.

Sexually Transmitted Infections (STIs)

- STIs are less frequent in the Atlantic provinces than in the rest of Canada, except in Nova Scotia, where the rate of chlamydia infections was higher than the national rate (113 per 100,000 population) in 1997.

- Chlamydia and gonorrhea have been increasing steadily in all four Atlantic provinces in recent years.

- Chlamydia infections are reported three to five times more often among women than among men in the Atlantic provinces; young people under 25 are at greatest risk.

Teenage Pregnancies

- Rates of reported teenage pregnancies in the four Atlantic provinces have declined somewhat in the past decade, especially in Newfoundland, and are lower, overall, than in the rest of Canada.

- However, the incidence of teenage pregnancies in Nova Scotia and New Brunswick in 1994 was close to the national rate of 49 per 1,000 population.

- Live births to teenagers is a more accurate measure for estimating adolescent pregnancies, because other pregnancy outcomes (especially abortion) are difficult to track. In 1994, approximately 2,600 teenagers gave birth in the Atlantic provinces.

HIV/AIDS

- Positive test reports for HIV in the Atlantic provinces underestimate actual levels of infection due to the effect of migration: many Atlantic Canadians with HIV are tested elsewhere but return to their home province for treatment and care.

- Men who have sex with men make up the largest proportion of HIV/AIDS cases in the Atlantic provinces, but new HIV infections are declining in this group, except among young men.

- The fastest growing risk category for HIV infection in the Atlantic provinces is heterosexual contact, particularly in Newfoundland and New Brunswick. HIV infection is rising among women and injection drug users in the region.

Aboriginal HIV/AIDS

- According to those who work with Aboriginal people, levels of HIV infection and AIDS are high among the region's Aboriginal people, but there are no statistics to quantify Aboriginal HIV.

- There seems to be a trend for Aboriginal people who test positive for HIV in other parts of the country to return to their reserves in the Atlantic provinces to receive care.

- Frequent unprotected sex signaled by apparently high rates of STIs and teenage pregnancy among Aboriginal youth, together with proportionately large numbers of youth in the Aboriginal population, are early warning signs for the future spread of HIV infection among Aboriginal people in the Atlantic provinces.

- Spread of HIV through heterosexual contact and injection drug use is an even greater problem for Aboriginal people than the population as a whole. Aboriginal women are among those with the highest risk of contracting HIV.

Sexual Violence

- Reported sexual assaults are substantially higher in the Atlantic provinces than in Canada as a whole, although incidence of reported assaults declined between 1992 and 1997. In 1997 there were approximately 3,100 sexual assaults reported to police in the Atlantic provinces.

- Newfoundland has many more reported sexual assaults, proportionately, than the other Atlantic provinces, and 150% more reported sexual assaults than Canada as a whole.

- Only a small fraction of all sexual assaults are reported. Of sexual assaults that are reported, children and youth are the victims in three-quarters of the cases.

The Critical Sexual Health Issues

- The most critical sexual and reproductive health problems are those with irreversible, lifelong consequences, especially for children.

- Underlying most sexual and reproductive health problems are inequities due to poverty, social isolation, lack of education and support, and the marginalization of Aboriginal people and others.

- High levels of unprotected sex among youth in the region pose risks for STIs, unintended pregnancies and exposure to HIV.

- In the Atlantic provinces, the major sexual and reproductive health issues are those affecting children and youth exposed to social and economic risk conditions: sexual assaults, teenage pregnancies and STIs. The latter two are also indicators of risk behaviours that increase exposure to HIV.

- Also critical are sexual health problems affecting adults, particularly women: high overall rates of sexual assaults and the growing spread of HIV through heterosexual contact and injection drug use are serious problems.

What is Being Done About these Issues in the Atlantic Provinces?

Fifty-two organizations across the region were surveyed about their work to address sexual and reproductive health problems; efforts were made to obtain a reasonable selection of major initiatives in sexual and reproductive health promotion and prevention.

Addressing the Critical Issues

- The most critical problems are receiving the greatest attention. The majority of organizations in the scan are dealing with multiple issues, but across these organizations, sexual violence and HIV/AIDS are given high priority.

- Many of the organizations surveyed are working across the life span, but the largest concentration of effort is aimed at youth, and nearly as much at adults. Children and seniors are not overlooked, but they are not the primary targets of most prevention and promotion.

- The critical problems with HIV/AIDS and sexual violence in the region have resulted in highly organized approaches to these issues in some provinces. Multi-faceted, inter-sectoral initiatives have been mounted (particularly in Newfoundland and Nova Scotia) that can be models for action elsewhere.

Population Health Focus on the Issues

- The majority of surveyed organizations are familiar with population health and determinants of health, and explicitly or implicitly apply a population health approach in their work.

- These organizations use a variety of mechanisms to achieve their aims, from providing services and education, to training, capacity building, research and policy development. Most organizations are collaborating within sectors, and some across sectors.

- Population health strategies for sexual and reproductive health range from actions directed at individuals to collective factors; from efforts to enhance personal skills and capacities, to activities to influence families, communities, access to services, societal values and social and economic conditions. Organizations in the scan focus most of their attention on strategies to influence individuals' personal health practices, skills and capacities.

What are the Challenges for Population Health Approaches to Sexual and Reproductive Health in the Atlantic Provinces?

- There is a lack of reliable information about the sexual health status of marginalized groups in the Atlantic provinces, especially Aboriginal people. This key obstacle to implementing population health-based action must be overcome to improve sexual and reproductive health in these groups.

- Most sexual and reproductive health initiatives in the scan are based in cities, even though conditions in rural and remote areas of the Atlantic provinces limit opportunities for optimal sexual and reproductive health. Improving the sexual and reproductive health status of rural Atlantic Canadians is another important population health challenge.

- Most non-governmental sexual and reproductive health organizations exist with difficulty on project funding. An important challenge is to develop options for sustaining and building the population health activities of these organizations.

- Relatively little effort is given currently to "upstream" population health (i.e., focus on starting points in the causal processes determining health status, rather than end points). Adopting an upstream focus is the greatest challenge for implementing a population health approach to sexual and reproductive health. It will require commitment and support at all levels.

1. INTRODUCTION

The World Health Organization defines "sexual health" as, "... the integration of the physical, emotional, intellectual and social aspects of sexual being in ways that are positively enriching and that enhance personality, communication and love ... [sexual health involves] a capacity to enjoy and control sexual and reproductive behaviour in accordance with a social and personal ethic ... freedom from fear, shame, guilt, false beliefs and other psychological factors inhibiting sexual response and impairing sexual relationships ... and freedom from organic disorders, diseases and deficiencies that interfere with sexual and reproductive function."[1]

The Health Canada paper *A Report from Consultations on a Framework for Sexual and Reproductive Health*[2] is a strategic foundation document that presents a framework for action by partners inside and outside of government to maintain, protect and promote sexual health among Canadians. To support implementation of the *Framework* document in the Atlantic region, Health Canada commissioned this scan of sexual and reproductive health in the Atlantic Provinces.

1.1 Population Health Framework for Sexual and Reproductive Health Scan

According to *A Report from Consultations on a Framework for Sexual and Reproductive Health*, although there have been improvements in reproductive health over the past 20 years, Canada still has unacceptably high levels of sexual critical health problems. The *Framework* identifies six aspects of sexual and reproductive health status as key issues to be addressed through prevention: HIV/AIDS, sexually transmitted infections (STIs),[3] low birth weight, teenage pregnancy, infertility and sexual violence.

The *Framework* is based on a population health approach, a perspective that recognizes the primary importance of broad social and economic influences as determinants of health and well- being. The six issues above are major health outcomes associated with sexuality and reproductive capacity at various life stages that result from decisions and choices that individuals make (or are denied) about sexual activity and reproduction. Individuals' sexual expression is influenced by an array of interrelated determinants, including social and economic conditions (such as education, income and social supports); physical environment factors; access to health services; gender roles and culture; personal health practices, capacities and coping skills; and the attitudes and values held by families, communities and society. The tools for influencing these determinants are research, information and public policy, developed through collaboration among many sectors.

Sexual health status is determined by these forces that affect entire populations. Within a population health framework, variations in sexual and reproductive health can be linked to population health factors like poverty, lack of education, homelessness, unsupportive families and communities, as we will see below. A population health framework for sexual and reproductive health is illustrated in Figure 1.

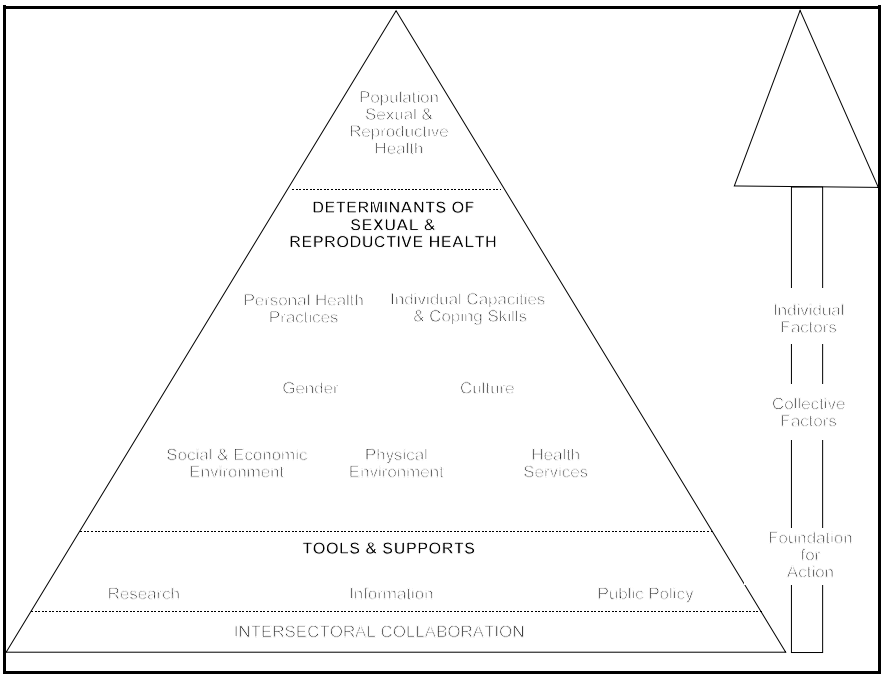

Figure 1: Population Health Framework for Sexual and Reproductive Health

Adapted from *Strategies for Population Health: Investing in the Health of Canadians (1994)* [4]

1.2 Approach and Layout of the Report

This environmental scan -- a broad survey and analysis of existing data and collection of new information -- is designed to obtain information on sexual health status and programming initiatives across the Atlantic provinces by gathering epidemiological data on key sexual and reproductive health outcomes, and by collecting descriptive information on programs and activities. The epidemiological data provide a broad-brush statistical portrait of the status of these sexual health issues in the provinces and indicate which health problems merit closer examination., Explaining the trends and identifying provincial priorities will require further in-depth study, in collaboration with provincial stakeholders. The analysis of program information highlights existing strengths and identifies opportunities for partnership and action, in accordance with the *Framework* document.

This report is intended more as a source of information for reflection and discussion than a comprehensive reference piece on sexual and reproductive health. It is organized in three sections. Section 1, this introduction, discusses the population health approach to sexual and reproductive health. Section 2 presents statistical information for the Atlantic provinces on six key sexual and reproductive health outcomes. In Section 3, program information gathered from around the Atlantic provinces is presented. Ongoing activities are discussed in terms of the principles and strategic directions in the *Framework* report. It includes a discussion of program strengths and challenges for implementing the *Framework.* Section 4 offers concluding comments.

2. SEXUAL AND REPRODUCTIVE HEALTH

This section presents statistical information for the Atlantic provinces on six key sexual health outcomes identified in the *Framework* document. It begins with a discussion of sources of epidemiological information on the sexual and reproductive health issues: HIV/AIDS, STIs (chlamydia, gonorrhea, syphilis), teenage pregnancy, low birth weight, sexual violence and infertility. Because an overview of health status in the four Atlantic provinces involves provincial and national comparisons, it is important to consider some of the difficulties in making such comparisons, and these are addressed in the discussion below.

In the sub-sections for each of the six issues, information is provided on national trends, measurement issues are considered, and risk factors are identified. In most instances, knowledge about risk factors and conditions is based on research conducted nationally, or outside of the Atlantic region. The same risks apply in the Atlantic provinces, although they may vary in degree from other parts of Canada (e.g., size of youth populations, levels of low income, education, unemployment, substance abuse, homelessness, etc.). Sketches of the sexual health status of each of the Atlantic provinces are provided below. Section 2 concludes by suggesting criteria for identifying critical sexual health problems and highlighting the most critical Atlantic region issues.

2.1 Measuring Sexual and Reproductive Health Status

Describing the sexual and reproductive health status of the Atlantic provinces involves gathering epidemiological information on the six outcomes mentioned above. The quality and availability of information obviously play an important role in the completeness of the description, and the conclusions that can be drawn from the data.

This scan relies heavily on information collected nationally so that comparisons can be made among the four Atlantic provinces and with Canada as a whole.[5] In this scan, information on four of the outcomes was available from national health data bases (HIV/AIDS, STIs, teen pregnancy and low birth weight). These outcomes are subject to national surveillance by the Laboratory Centre for Disease Control (LCDC) of Health Canada. Information from hospital and public health records collected in each province is provided to Health Canada. Although there may be differences in the way hospitals, public health authorities and provinces document information, such differences are in most instances minor. In general, information from province to province is relatively comparable, and comparisons can be made among provinces and with the country as a whole.

Even for reportable health outcomes, however, reliable information is not routinely gathered on affected sub-populations. For groups that are marginalized within our society -- ethnic minorities, the disabled, gays and lesbians, the homeless, etc. -- health information gathering systems often do not include them. Many of these marginalized groups are at much greater risk for sexual and reproductive (and many other) health problems than average Canadians, due to inequities that deny them full participation in the social and economic benefits of society. Despite their increased risk levels, those on the margins usually are not counted separately. They remain invisible in statistical reports, making it impossible to quantify their health status accurately without undertaking costly

special investigations. Interest groups may gather systematic information on these groups, but such data are usually national in scope. For the time being, and for this overview of the Atlantic provinces, most information on sexual and reproductive health among marginalized groups is anecdotal.

For the remaining two outcomes (sexual violence and infertility), estimating health status poses more significant challenges. Even though *A Report from Consultations on a Framework for Sexual and Reproductive Health* considers sexual violence to be a *health* outcome, measurement of sexual violence is done not with a health lens but with the lens of criminal justice definitions, procedures and crime reporting. Instances of sexual violence, if they are reported at all, are recorded as crime statistics. A more detailed discussion of measurement issues with respect to sexual violence is offered in Section 2.6.

Infertility poses still other measurement challenges, which will be discussed in Section 2.7.

2.2 Sexually Transmitted Infections

Sexually transmitted infections (STIs) are bacterial or viral infections spread through sexual contact. The most common bacterial STIs are chlamydia, gonorrhea and syphilis. Viral STIs include genital herpes, human papilloma virus (HPV), and blood-borne viruses HIV and Hepatitis B. Chlamydia, gonorrhea and syphilis are subject to national surveillance, since public health authorities are required to report and record diagnosed cases. Thus, reasonably good information is available on these infections, at least for diagnosed cases.[6]

With the exception of HIV and Hepatitis B, viral STIs are not uniformly reported by public health authorities across Canada. Because they last for long periods, can be diagnosed at any point in their life cycle, and because adequate diagnoses are often not available, HPV and genital herpes are difficult to quantify, and so the value of report data is limited.

Sexually transmitted infections have declined in Canada over the past 20 years as detection and treatment have improved. Nevertheless, STIs continue to be an important public health concern because their impacts on sexual and reproductive health can be far-reaching and long-lasting. Complications arising from STIs include pelvic inflammatory disease (PID), tubal infertility, ectopic pregnancy, spontaneous abortion and stillbirth, premature delivery, infection of infants born to infected mothers, and cancer of the cervix.[7] Recent evidence suggests that chlamydia can cause heart disease.[8]

In addition to these complications, research suggests that people with STIs face a two- to five-fold increase in risk of contracting HIV, especially those with STIs that cause ulceration, like genital herpes and syphilis.[9] The costs of treating STIs and their consequences are estimated to be in the hundreds of millions of dollars annually in Canada.[10]

The primary risk factors for contracting STIs are previous STI infection, poverty, youth (under age 25), homelessness, working in the sex trade, living in cities, limited access to health services, being incarcerated, substance abuse and sexual abuse.[11]

2.2.1 Chlamydia

Chlamydia is both the most prevalent STI and the most commonly reported communicable disease in North America.[12] Although the rate in Canada dropped by 30% between 1991 and 1995, the 1995 annual case (i.e., diagnosed) rate of 129 per 100,000 population greatly underestimates actual infection rates.[13] Among Canadian women aged 15-19, the incidence of chlamydia in 1995 was 1,109 per 100,000 population.[14]

Since many cases of the infection are mild and without symptoms, they are never detected or reported. In comparison with women, men are much less likely to undergo routine, reproductive health screening (e.g., annual pap tests) that may result in detection and treatment of chlamydia. Thus, chlamydia infections among men often remain undetected and untreated.

The principal at-risk population for chlamydia infection is people under 25. It is estimated that 79% of Nova Scotia youth aged 14 to 24 are sexually active: 60% have had sexual intercourse by the age of 16. Of those who are sexually active, 57% of them do not always use protection from pregnancy or STIs.[15] Rates of sexual activity are likely to be even higher among youth who are outside the education system, low-income youth and street-involved youth. These trends apply in the other Atlantic provinces as well: adolescents have a high level of unprotected sexual activity, placing them at risk not only for STIs, but also for HIV and unwanted pregnancies.[16] Adolescent health workers point out that frequently, young women have little choice about using protection because they are in "unsafe" relationships. Thus, many young women view the consequences of not using protection as less serious than the potential reactions of uncooperative partners with a penchant for violence.

Other groups with a high risk of being infected with chlamydia are those with multiple sex partners (especially sex-trade workers), injection drug users, street-involved youth, and those practicing unprotected sex. Groups such as injection drug users and street-involved youth, who do not receive routine medical care, are particularly at risk of having undetected, untreated chlamydia infections.[17]

In the Atlantic provinces in 1995, the case rates for chlamydia were close to, or lower than, the country as a whole. Figure 2 shows the infection rates for the four Atlantic provinces and Canada from 1995 to 1997.[18] Newfoundland has the lowest infection rates, but the incidence of chlamydia nearly doubled in that province between 1996 and 1997, going from 275 to 336 reported cases. National rates dropped slightly during the same period.. Incidence of chlamydia in Prince Edward Island increased steadily over the three years, reaching 139 reported cases in 1997, while New Brunswick saw a slight drop from 1996 to 1997 (833 to 819 reported cases). Nova Scotia, with the highest rates in the region, also had a higher rate of chlamydia infections in 1997 (1127 reported cases) than in the previous year. The 1997 rate in Nova Scotia was higher than the rate for Canada as a whole.

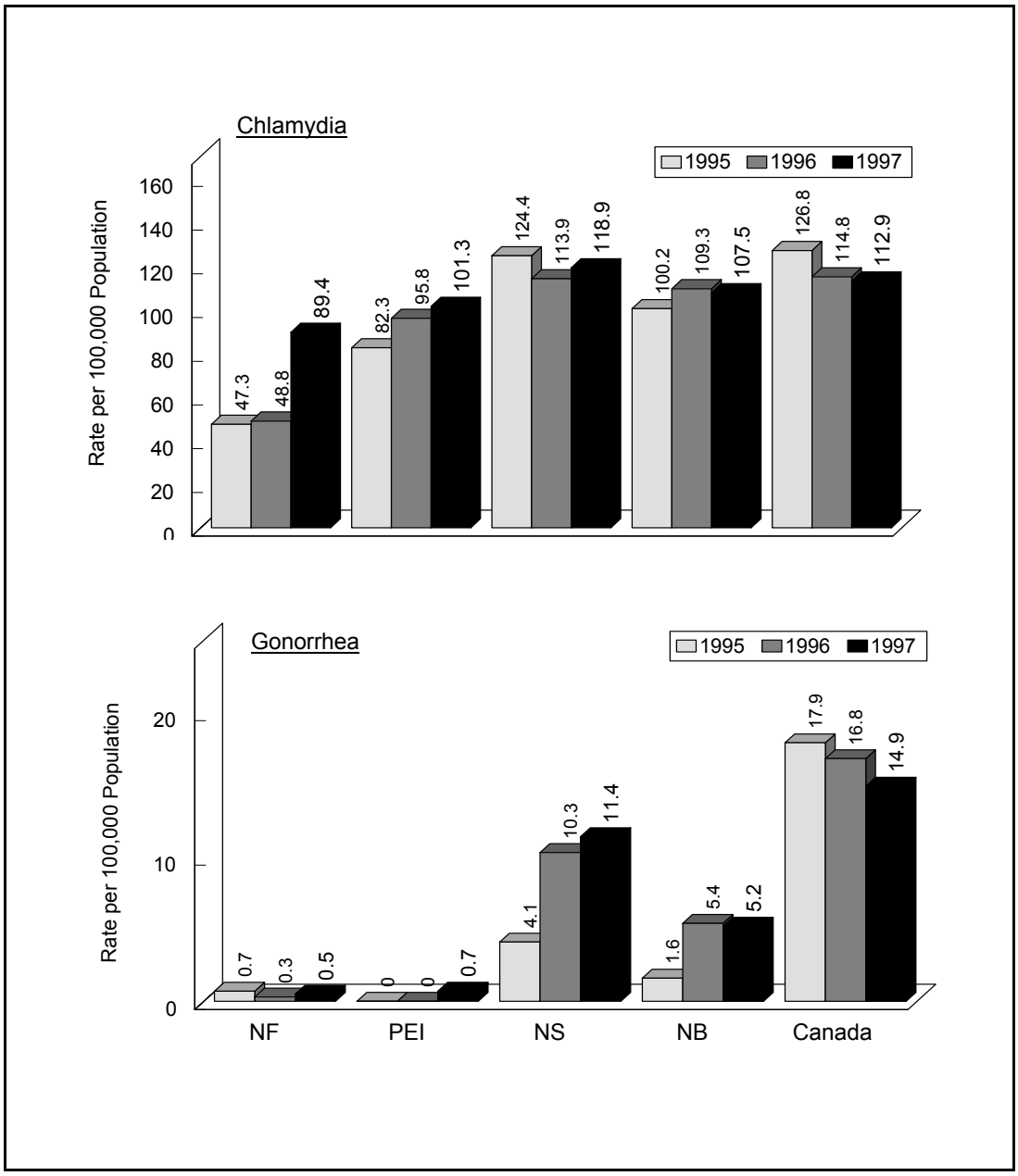

Figure 2: Rates of Chlamydia and Gonorrhea in the Atlantic Provinces and Canada, 1995 to1997

Source: Laboratory Centre for Disease Control

Consistent with the national trend, women in the Atlantic provinces are reported to be affected by chlamydia three to five times as often as men. The large majority of reported chlamydia infections in the region are among women, aged 15 to 25.

2.2.2 Gonorrhea

Reported cases of gonorrhea infection have been steadily declining in Canada and elsewhere, for more than two decades. In 1995, the national rate of reported infections was 17.9 per 100,000 population. The groups at highest risk are women and men aged 15-25, with infection rates four times higher than overall rates.[19]

After showing consistent declines during the 1980s and early 1990s rates of gonorrhea in the Atlantic provinces started to climb again in 1995. Figure 2 shows gonorrheal infection rates in the four Atlantic provinces and Canada from 1995 to 1997. While the incidence dropped steadily in Canada over the three-year period, it rose substantially in Nova Scotia and New Brunswick from 1995 to 1996, and remained high in 1997. Prince Edward Island and Newfoundland both showed increases in gonorrhea from 1996 to 1997. Again, rates are highest in Nova Scotia where 108 cases were reported in 1997. Prince Edward Island had one reported gonorrheal infection in 1997 and Newfoundland three. New Brunswick's rate of 5.2 per 100,000 represented 47 reported cases.

Overall, men are somewhat more likely than women to be infected with gonorrhea, but in the Atlantic provinces, incidence among women aged 15 to 25 is two to three times the incidence in men.

2.2.3 Syphilis

Even more than gonorrhea, syphilis is fast becoming history. The national rate in 1995 was 0.5 cases per 100,000 population. Incidence is highest among 20 to 29 year olds. There is evidence from the United States that those at greatest risk are young persons who exchange sex for drugs, but this has not been confirmed in Canada.[20]

In 1997 there was one reported case of infectious syphilis in the four Atlantic provinces (in Nova Scotia), and only six cases were reported across the region in the preceding two years.[21]

2.3 Teenage Pregnancy

In 1994, nearly 25,000 pregnancies of mothers aged 15 to 19 resulted in live births. It is estimated that nearly as many pregnancies among adolescents terminated in abortions, and a small percentage in miscarriages and stillbirths.[22] Tracking outcomes other than live births makes it difficult to obtain accurate estimates of adolescent pregnancies. Lack of accurate information on out-of-province and clinic abortions creates data gaps in many provinces that limit the ability of health officials to estimate teenage pregnancies. For this reason, some provinces (e.g., New Brunswick) are moving away from estimating teenage pregnancies in favour of using “performance measurement” indicators, i.e., accurate, reliable measures such as live births to teenagers.

Although the estimated teenage pregnancy rate in Canada is lower than it was 20 years ago, the decline in pregnancies among adolescents that began in the late 1970s has leveled off over the past decade. Among developed countries, Canada’s rate of teenage pregnancies is high relative to the Netherlands, Finland and Sweden.[23] Those most vulnerable to becoming pregnant in adolescence are low-income teenagers, especially Aboriginal youth. Public health officials have observed that

often it is not lack of knowledge that keeps young women practicing unprotected sex, but fear (sometimes well grounded) of consequences from uncooperative partners.

Pregnancy of women under the age of 19 is associated with increased risk of premature birth, certain congenital conditions and low birth weight. In addition, for most teenage mothers, lost education and employment opportunities usually result in low socio-economic status and dependence on social assistance. The likelihood is high that children born to teenage mothers will be raised in poverty.

In 1994, pregnancy rates among older teens (18 to 19 year olds) were twice as high as for younger teens (15 to 17 years old). Among older teens in Canada, the rate was 76 per 1,000 in 1994. For younger teens, the rate was 30 per 1,000. The vast majority of teenage mothers are unmarried.[24]

The rates of teenage pregnancies for younger and older teenagers in the four Atlantic provinces are presented in Figure 3, which shows the change in pregnancy rates and outcomes for teenagers in the Atlantic provinces between 1984 and 1994.

As Figure 3 demonstrates, rates of teenage pregnancies in the Atlantic provinces were lower overall than in the rest of Canada in 1994. Nova Scotia had the highest rates and Prince Edward Island the lowest. The most dramatic decline in teenage pregnancies between 1984 and 1994 occurred in Newfoundland -- a drop of nearly 15 percentage points (representing a 30% decrease). Prince Edward Island experienced a smaller, but marked drop -- almost eight percentage points (19%).

In contrast, during the same ten-year period the rate increased by about four percentage points (11%) in New Brunswick and remained nearly unchanged in Nova Scotia. Since 1994, however, the rate in New Brunswick has declined steadily, to 25.4/1000 in 1997.[25] The other provinces also report that live births to teenage mothers have decreased somewhat since 1994.

During the period from 1984 to 1994, the rate of live births among 15 to 19 year olds dropped in Newfoundland and Prince Edward Island, but remained virtually unchanged in Nova Scotia and New Brunswick. The rate of live births to teenagers in the Atlantic provinces was lower in 1994 than in Canada. And while the rate of hospital abortions for teenagers in the four Atlantic provinces was less than one-quarter the national rate, the regional and national rates of stillbirths and miscarriages were similar.

Because clinic abortions became more accessible in three of the four provinces during that 10 year period between 1984 and 1994, hospital abortion rates probably underestimate the overall rate of abortions among teenagers in Atlantic Canada. The decline in live births, miscarriages and stillbirths among teenagers may be attributable to more teenage pregnancies terminating in abortion, but accurate information to support this conclusion is not available.

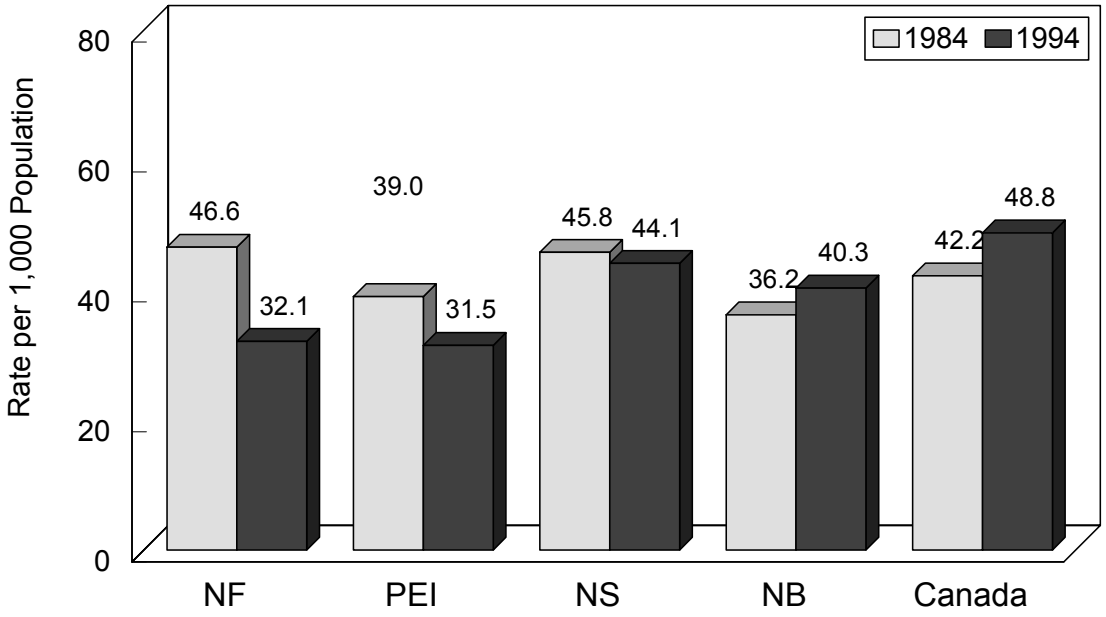

Figure 3: Pregnancy Rate among 15-19 Year Olds in the Atlantic Provinces and Canada, 1984 and 1994

Source: Statistics Canada

Given the profound, lifelong consequences of teenage pregnancies that end in live births, there is no reason for complacency about the rates outlined here. Although teenage pregnancies in the Atlantic provinces have declined over the past 10 to 15 years, the regional live birth rate in 1994 of 29.5 per 1,000 for mothers aged 15 to 19 represents approximately 2,600 teenage mothers and 2,600 children born into marginal circumstances in a single year.

2.4 Low Birth Weight

Birth weight is one of the best indicators of an infant's chances of survival.[26] National averages of birth weights are used by the United Nations as an indicator of the health status of a country's population. Infants born weighing less than 2,500 grams have a lower likelihood of survival and greater risk of health problems throughout their lives than other babies. Five per cent of infants born in Canada have low birth weight; this figure is somewhat higher than 15 to 20 years ago.[27]

Progress in prenatal care has meant that many pregnancies that previously might have ended in miscarriage or stillbirth now result in low birth weight live births. This partially explains why low birth weights in Canada have not declined over the past 10 to 15 years. The proportionate rise in younger (under 20) and older (over 40) mothers also has contributed to the increase in low birth weights. Low birth weight is associated with several risk factors including low income,[28] being firstborn, maternal smoking, lack of prenatal care, low educational attainment and poverty.[29]

The proportion of live births between 1985 and 1995 that resulted in low birth weight in Nova Scotia and Newfoundland was close to the Canadian rate (5.8%). Prince Edward Island and New Brunswick were one-fifth lower, and in fact had the lowest rates in Canada for 1995. In the Maritimes (Newfoundland data for 1985 were unavailable), only Nova Scotia failed to see a decline in low birth weight live births between 1985 and 1995.[30]

2.5 HIV/AIDS

Magnitude of the Problem

HIV/AIDS infection is a health problem of major proportions in Canada. The first case of AIDS was reported in 1982. Since that time, nearly 16,000 people have been diagnosed with AIDS in Canada, and roughly 42,000 have tested positive for HIV, the virus that causes AIDS.[31] Because not all HIV infected persons have been tested for the virus, the actual prevalence of HIV infection in Canada is even higher. The annual cost of treating persons with AIDS has been estimated to be more than $200 million nationally. The cost of HIV infection to society, in terms of lost productivity, insurance settlements and services may amount to billions of dollars annually in Canada.[32]

Risk Conditions

The patterns of risk of HIV infection have changed somewhat in the past decade. Although the *overall numbers* of AIDS cases and deaths from AIDS have declined in the past five years (due to improvements in treatment that delay the onset of AIDS), the *incidence of HIV infection in certain groups* has been rising. Across the population as a whole, the greatest proportion of AIDS cases is still among men who have sex with men. New HIV cases are declining in this group. Between 1985 and 1994, men who have sex with men made up three-quarters of HIV-positive reports. In 1997, they accounted for 34%. However, a significant segment of this sub-population -- young men aged 16 to 30 -- continue to engage in casual, unprotected anal sex. Thus, young gay men remain an important target for prevention efforts.[33]

Heterosexual contact is nearly three times more likely to lead to infection today than it was five to ten years ago.[34] Overall, HIV infection among women is increasing, raising concerns about transmission to infants. Another significant trend is the increase of HIV among injection drug users.[35] Injection drug use is a more common method of transmitting the virus for women than for men.

Historically, men have had a higher incidence of AIDS than women. However, for nearly a decade, the proportion of AIDS cases among women has been increasing. The same is true for HIV-positive test reports. In 1997, women accounted for 14% of annual AIDS diagnoses in Canada, up from 4% in 1990.[36] In the first six months of 1998, 20% of HIV positive test reports were among women, nearly double the rate of the period from 1985 to 1994.[37]

HIV Risk for Aboriginal People

Statistics on HIV infection among Aboriginal people are limited. Nevertheless, we know that the risk of HIV infection is high for many Aboriginal people. Over the past decade, Aboriginal AIDS cases have risen dramatically, from 2% of all diagnoses before 1989, to more than 10% (255 cases nationally) in 1996/97. Reported rates underestimate actual incidence in Aboriginal communities because of variations among the provinces in reporting ethnic status. Aboriginal AIDS cases are younger on average than non-Aboriginal cases, and Aboriginal women are more likely than non-Aboriginal women to contract AIDS (although men who have sex with men make up the greatest proportion of Aboriginal AIDS cases [59%]). Injection drug use is a much greater risk factor for Aboriginal people than for non-Aboriginal people: three times as many Aboriginal AIDS cases are attributable to injection drug use.[38]

It is difficult to quantify HIV infections among Aboriginal people. In the Atlantic provinces, HIV cases are not identified by ethnic status. Therefore, there are no reliable quantitative estimates of HIV/AIDS incidence among Aboriginal people in the region. Those involved with Aboriginal AIDS issues, however, have noticed patterns in the spread of HIV among Aboriginal people in the Atlantic provinces (who live mainly on reserves, although they are a highly mobile population). One emerging trend is persons with HIV/AIDS returning home to their reserves after living away, in order receive care. Atlantic Aboriginal people also are starting to see increases in HIV infection rates among women and increased IV drug use on reserves, although the feeling is that these trends are not yet as pronounced as in some other areas of the country. Some have speculated that the stigma of HIV (especially in connection with "two-spirited" -- i.e., homosexual -- contact) may be responsible for some portion of the frequent, often unexplained, suicides among Aboriginal people on reserves in the region.

Aboriginal health service organizations are particularly concerned about the high rates of teenage pregnancy and STIs among Aboriginal young people because they are indicative of unprotected sex and increased risk of exposure to HIV infection. There is a sense that increasing adolescent pregnancies and STIs on reserves, together with an expanding Aboriginal youth population, foretell a rise in HIV infection among Aboriginals in the region. Also of concern are significant numbers of Aboriginal people living in the region's cities, because they are a somewhat "invisible" population and therefore difficult to monitor and reach.[39]

Another major problem in containing the spread of AIDS among Aboriginal people in the region, according to health officials, is the difficulty of getting those at risk tested for HIV. Those most at risk seem to be the least likely to seek testing for HIV.

Spread of HIV/AIDS in the Atlantic Provinces

Table 1 presents the numbers of positive HIV test reports for each year between 1995 and 1997. Since 1985, a total of 999 cases of HIV infection had been diagnosed in the Atlantic region.[40] This is a conservative estimate of the actual level of HIV infections in the region. An important factor in HIV infection estimates in the Atlantic provinces is migration. In all four provinces, health officials have observed that significant numbers of people go (or happen to be living) out of province when they are tested for HIV. They show up as positive test reports in other provinces, but frequently return home after being diagnosed. This means that official estimates, based on HIV test reports, are low.

The numbers show a gradual decline in new HIV infections since 1995, except in Newfoundland and New Brunswick, where cases declined in 1997 then nearly doubled again in 1998.

The ratio men to women infected with HIV is half as great in Newfoundland (4:1) as in Nova Scotia and New Brunswick (8:1 respectively).[41]

Rates of AIDS infection in the Atlantic provinces are well below the national rate. Newfoundland has one-fifth the incidence of AIDS as Canada, while the AIDS rate in Nova Scotia is one-half the rest of the country. The overall numbers of AIDS cases reported in the Atlantic provinces has been steadily declining among both men and women.

	Year of Test					
	up to 1994	**1995**	**1996**	**1997**	**1998**	**Total**
NFLD	**157**	**7**	**10**	**7**	**13**	**194**
PEI	**30**	**2**	**0**	**3**	**1**	**36**
NS	**405**	**39**	**34**	**33**	**26**	**538**
NB	**189**	**11**	**12**	**6**	**13**	**231**
Region	**781**	**59**	**56**	**49**	**53**	**999**
Canada	**32,747**	**3,000**	**2,784**	**2,556**	**877***	**41,964**

Table 1: Number of Positive HIV Test Reports and Year of Test, 1982-1998

Source: Laboratory Centre for Disease Control; NS DOH; PEI DOH; Nfld. DHCS[42]

* This figure represents the number of positive HIV test reports to June 30 only.

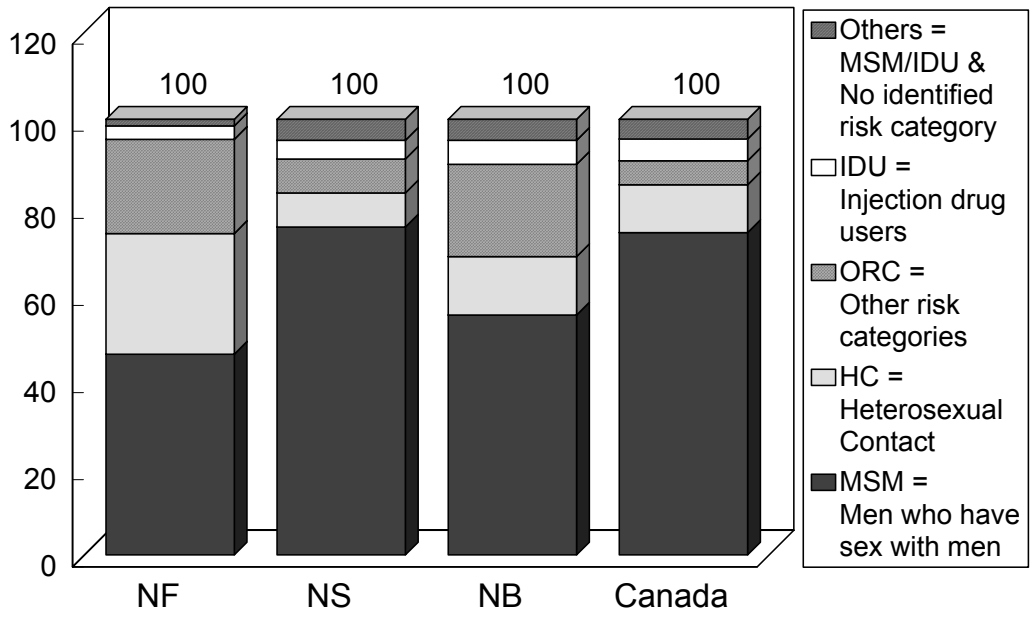

Figure 4: Percentage of all AIDS Cases in the Atlantic Provinces* and Canada to June 30, 1998 by Exposure Category

Source: Laboratory Centre for Disease Control
* Exposure data not available for PEI

Figure 4 shows exposure categories for all AIDS cases diagnosed since 1982.[43] Men who have sex with men (MSM) have had the highest rates of AIDS illness. This group accounted for the highest proportion of AIDS cases (76.8%) in Nova Scotia, and the lowest (46.2%) in Newfoundland, where a high proportion of cases resulted from heterosexual contact. Nationally, three-quarters of diagnosed AIDS cases are men who have sex with men. Generally, the Atlantic provinces are now seeing a decline in new HIV infections resulting from men having sex with men, except among youth.

The next highest risk category is heterosexual contact (HC), which makes up 11% of AIDS cases across Canada and 12.8% in the Atlantic region. In Newfoundland, where 65 cases of AIDS had been diagnosed up to June 1998, close to three times as many cases resulted from heterosexual contact as in the rest of Canada. Recent rates of new HIV infections from heterosexual contact have risen sharply in Newfoundland, and more gradually in the other provinces.

The spread of HIV/AIDS through needle use is a growing concern. Injection drug use (IDU) by itself, MSM and injection drug use combined (MSM/IDU) and "other risk categories" (ORC) each accounted for five to six per cent of AIDS cases nationally. In the Atlantic region, substance abuse is a growing problem, especially in the port cities which are entry points for narcotics. In the past,

injection drug use has been more of a factor in AIDS infections in New Brunswick (particularly St. John) than in the other provinces. Recently, however, officials in Nova Scotia report a jump in HIV infections from needle use.

In the Atlantic region, more than twice as many AIDS illnesses as in Canada as a whole were due to "other risk categories," which include occupational exposure, receipt of infected blood/blood products, perinatal transmission and no identifiable risk.[44]

HIV/AIDS infections in the Atlantic provinces tend to be clustered in certain "hot spots" -- Halifax and Sydney areas in Nova Scotia; St. John, Moncton and Fredericton in New Brunswick; and St. John's and Conception Bay North in Newfoundland. It is not surprising that reported cases are concentrated in cities (especially the port cities, where [injection] drug abuse is more prevalent): street-involved youth and gay men tend to congregate in cities, and anonymity is easier to achieve, especially in terms of anonymous HIV testing. In contrast, the well-known cluster in Conception Bay North is a dramatic demonstration that the growing risk of HIV infection from heterosexual contact is *not* limited to cities.

Because of the small numbers of reported cases, it is difficult to make inferences about risk. Also, cumulative AIDS cases present a historical picture -- of risk behaviour up to 10 years ago. Trends in risk factors for recent HIV infections (e.g., past two years) may be more useful in understanding current risk exposure patterns. Again, however, small numbers of cases and under-reporting due to migration limit the ability to generalize.

2.6 Sexual Violence

Magnitude of the Problem

Sexual violence covers a broad spectrum of outcomes, including sexual abuse of children, intimate partner violence and marital rape, sexual harassment in the workplace, forced prostitution, date rape, sexual assault by strangers, sexual victimization of children and youth (especially street-involved youth and the disabled), homophobic violence and sexual assaults on gays and lesbians.

In Canada, sexual violence is widespread. Those most at risk are women, children (boys as well as girls) and Aboriginal people.[45] By one estimate, 51% of all Canadian women had experienced at least one instance of sexual violence since the age of 16.[46] A large proportion of sexual violence is directed at children and youth. In a national survey on child sexual abuse, half of adult women and nearly one-third of adult men said they had been sexually abused as children,[47] and in Nova Scotia 33% of youth aged 14-24 reported having sexual experience forced on them.[48] According to police reports, sexual assaults accounted for 16% of all violence incidents against youth (12-19 years old) in Canada in1994, and nearly half (46%) of reported violence against children (under 12) was sexual assaults.[49]

Risk Conditions

Three-quarters of reported sexual violence offences (74%) involve children and youth, and reported incidents are just the tip of the iceberg in terms of prevalence.[50] The vast majority of reported

sexual violence incidents against children and youth are attributable to family, friends and acquaintances. Only one-quarter of reported sexual abuse of children and youth is perpetrated by strangers, although youths (especially boys) are more likely than children under 12 to be victimized by strangers, by a margin of nearly two to one. Risk factors for child abuse within the family include poverty, unemployment, disability, marital violence, drug and alcohol abuse, young parents, poor parenting skills, premature birth and poor health of the child.[51]

Aboriginal women are over-represented among victims of sexual assaults. Although they make up 3% of women in the Canadian population, Aboriginal women comprise 8% of reported sexual assault victims in Canada.

Measuring Sexual Violence

Statistics on sexual assaults and child sexual abuse offences are kept by police agencies through Uniform Crime Reporting (UCR) surveys, which are gathered and maintained as national data bases by the Canadian Centre for Justice Statistics of Statistics Canada. Provincial child welfare authorities keep track of all reported incidents of child abuse, sexual or otherwise, but differences in definitions, reporting and procedures for recording sexual violence statistics across jurisdictions make comparisons of child welfare information from province to province difficult.

An extensive system of record keeping by police departments across Canada provides ongoing national surveillance of sexual violence in terms of offences under the *Criminal Code*. These include three levels of sexual offences that increase in severity: sexual assault (Level I), sexual assault with a weapon or causing bodily harm (Level II) and aggravated sexual assault (Level III). Offences of child sexual abuse make up the category "other sexual offences" which includes sexual interference, invitation to sexual touching, sexual exploitation and incest. Together, these offences are meant to capture the full spectrum of sexual violence, and to emphasize the assaultive rather than the sexual nature of the crimes.[52]

Because sexual violence is often not reported, especially by children (the General Social Survey estimated that only 10% of all sexual assaults are reported), estimates obtained from "criminal victimization" studies such as the Violence Against Women Survey are thought to provide a fuller picture of the scope of sexual violence in our society than police or child welfare records taken alone.[53]

Information on child abuse gathered by child welfare authorities varies widely from province to province. Overall, 25% of investigations of child maltreatment by child welfare and law enforcement agencies involve child sexual abuse.[54] Because the consequences of child sexual abuse are so profound and lifelong, this issue is receiving increasing attention and considerable resources are being committed to efforts to monitor and stem child sexual abuse. A recent federal-provincial initiative to study the incidence of child abuse and neglect is paving the way for a national surveillance system to document child sexual abuse in a uniform manner and permit comparisons across Canada. This system is expected to be in place early in 2000.[55]

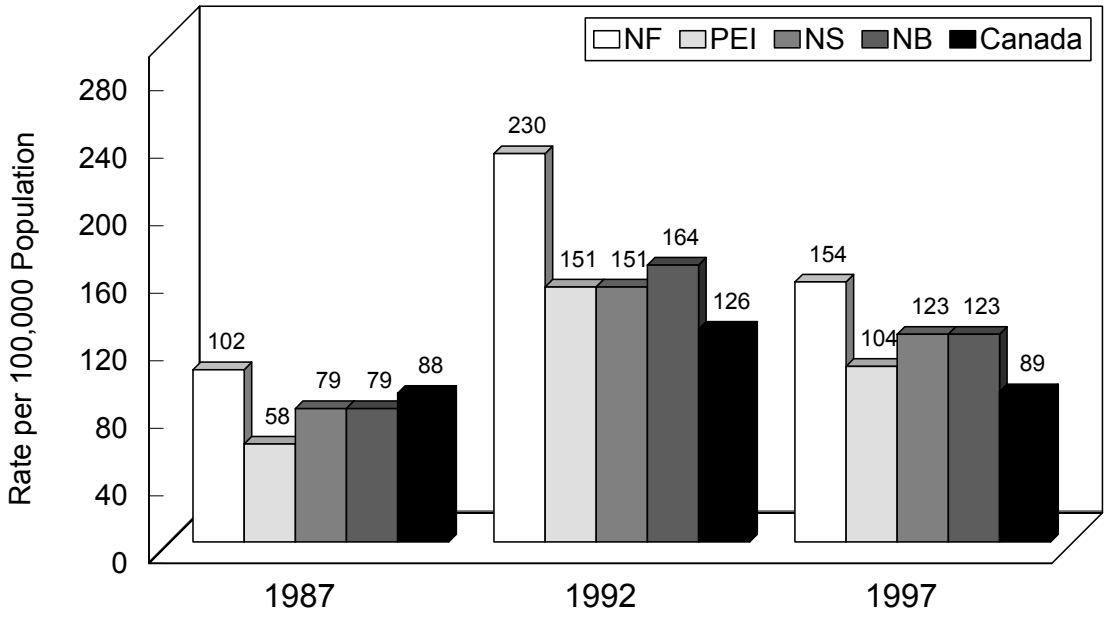

Figure 5: Sexual Assaults in the Atlantic Provinces and Canada 1987 - 1997

Source: Canadian Centre for Justice Statistics

Atlantic Provinces Trends

In the Atlantic provinces, the best available data on sexual violence are still criminal justice statistics, although within each province, child welfare statistics and special studies (e.g., much of the research from the Muriel McQueen Fergusson Centre for Family Violence, located in New Brunswick) may supplement and expand upon police reports. Figure 5 presents incidence of total sexual assaults (Levels I-III) in 1987, 1992 and 1997.[56]

Between 1987 and 1992, population rates of sexual assaults increased considerably in all four provinces and to a lesser extent, in Canada as a whole. In Newfoundland, Prince Edward Island and New Brunswick, sexual assault rates increased over the five year period by more than 100%.

By 1997, rates of sexual assaults had declined again in the four Atlantic provinces, but not to 1987 levels, as had the Canadian rate. Nova Scotia and New Brunswick showed smaller proportional declines than Newfoundland and Prince Edward Island. Newfoundland's rate of 154 per 100,000 was substantially higher than the rates in the other three provinces. The 1997 regional average rate of 126 per 100,000 represents 3,100 sexual assault charges in a single year.[57]

More than one-quarter of sexual assault offenses (28%) in Canada involve children under 12, while upwards of one-third (36%) involve youth, aged 12-19. In addition, 80% of "other sexual offenses" (182 such offenses were reported in the Atlantic provinces in 1997) are against children and youth.[58] Taken together, this means that in 1997, close to 2,100 children in the four Atlantic provinces were victims of *reported* sexual violence. If this number represents only 10% of all sexual violence, as has been suggested, then the possibility exists that in 1997, as many as 21,000 children and youth in the Atlantic region were subjected to some form of sexual violence.

2.7 Infertility

Infertility is defined as the inability to conceive after two years of trying without contraception.[59] Having choices about childbearing -- whether and when to have children-- is a fundamental aspect of sexual and reproductive health. Over the past two decades, the issue of not having the choice to bear children because of infertility has become a matter of increasing concern to Canadians. The Royal Commission on New Reproductive Technologies estimated that at any given time, 250,000 couples (7% of Canadians of child-bearing age) are experiencing infertility. In 1995 the General Social Survey found that more than twice as many women as men were sterile from natural causes.[60]

The causes of infertility are complex and not yet well understood. There is good evidence that biological infertility can be a consequence of sexually transmitted infections and pelvic inflammatory disease. Approximately 20% of infertility in Canada is attributed to sexually transmitted infections. Other factors suspected of causing infertility include smoking and drug use, exposure to chemicals in the environment, occupational exposure to chemicals and many types of radiation, and the widespread presence of artificial hormones in the environment.[61]

Treatment of infertility has led to a growth in reproductive technologies and raised a host of ethical, social, legal and economic issues (that were addressed by the Royal Commission on New Reproductive Technologies). The costs of treating infertility are partially funded through provincial health plans in several provinces, but for procedures not covered by provincial health plans, ability to pay for procedures at private clinics may determine who receives treatment. Those in lower socio-economic groups may be more at risk of infertility due to a higher likelihood of experiencing STIs, higher rates of smoking and drug abuse and greater occupational exposure to chemicals and radiation; they are also less likely than to have access to the full range of infertility treatments.

There are no national systems for recording infertility data. Infertility is not subject to routine surveillance by Health Canada or provincial public health officials. Health officials consider the best estimates of infertility prevalence to be the ones developed for the Royal Commission on New Reproductive Technologies. These national and regional estimates were obtained through three national surveys undertaken for the Royal Commission.

Like sexual violence, infertility estimates probably underestimate the true extent of population infertility. Existing infertility estimates are based on prevalence among couples trying to conceive in the early 1990s. Infertile single women and couples who had stopped (or not yet started) trying to conceive were not included in those estimates. [62]

Data on infertility in the Atlantic provinces are available at the regional level. The two-year infertility rate in the Atlantic region was the same as the national rate (7.0 per 100,000). These estimates are based on responses to three national surveys conducted in 1991 and 1992 for the Royal Commission on New Reproductive Technologies (because of small sample sizes, the four Atlantic provinces were combined for analysis of the survey results), and have not been updated.

2.8 Provincial Sexual Health Profiles

Another way to consider sexual health status in the Atlantic region is to look at the key sexual health indicators by province. The following provincial profiles suggest that in many respects, the sexual and reproductive health of Atlantic Canadians is as good as or better than that of Canadians as a whole, with the exception of sexual violence. On the other hand, these sketches also show that no province has room for complacency about sexual health status. The sexual health status of each province is summarized below.

2.8.1 Newfoundland

In Newfoundland, the most striking information is that reported sexual assaults are nearly twice as frequent in that province as in the rest of the country, even though the rate fell by a third between 1992 and 1997. The magnitude of the difference suggests that further attention should be paid to discovering if this is simply a reporting effect (i.e., a greater tendency to report sexual assaults than elsewhere, perhaps due to raised awareness as a result of the Mount Cashel experience), or if the actual incidence of sexual assaults is truly higher in Newfoundland (possibly because of profound social and economic disruption due to the Cod Moratorium).

Another notable finding in Newfoundland is that although the province has the lowest incidence of chlamydia in the region, there has been a large jump in reported infections since 1995. About one-third of these are clustered in St. John's, but Newfoundland health officials point out that rates remain high in Labrador (where most of the province's Aboriginal population is concentrated) and to a lesser extent, in the cental region of the province.

Newfoundland appears to have experienced the greatest percentage decline (31%) of the four Atlantic provinces in teenage pregnancies since the mid 1980s, although public health officials report that Labrador rates remain high relative to the rest of the province.

Newfoundland also has the lowest rate of AIDS cases in the Atlantic provinces, a rate nearly five times lower than the Canadian rate. Recently, however, HIV infection reports have increased sharply, particularly among women, with most of the increase due to exposure from heterosexual contact in Conception Bay North. A high percentage of Newfoundlanders with AIDS relative to other Canadians contracted the virus through exposure to other risk conditions, such as donated blood or blood products.

2.8.2 Prince Edward Island

In contrast to Newfoundland, Prince Edward Island has the lowest rate of sexual assault offences in the Atlantic provinces. Incidence of reported sexual assaults declined by nearly one third between 1992 and 1997. Nevertheless, the 1997 rate was still close to 20% higher than the national rate.

Reported chlamydia infections have increased steadily in Prince Edward Island in recent years, to a level approaching the rate for Canada as a whole (which has been declining steadily).

Like Newfoundland, Prince Edward Island has rates of STIs and teenage pregnancy that are well below national and regional levels. In 1994, Prince Edward Island, despite having the largest youth population proportionately in the region, had the lowest estimated incidence of teenage pregnancies (but not live births to teenagers[63]), and in 1995, the lowest incidence of low birth weights, in Canada. Prince Edward Island also appears to have the lowest rate of abortions among teenagers (or any age group), but because abortions are not available in Prince Edward Island there are no sources of data on actual abortion rates among Island teenagers. Thus, we cannot draw conclusions about abortions, or about overall teenage pregnancies (which are estimates that include pregnancies ending in abortion) in Prince Edward Island.

The rate of AIDS cases in Prince Edward Island is less than one-third the national rate. Of the 36 HIV cases diagnosed between 1985 and 1998, 72% were among men who have sex with men.[64] This is similar to the proportion of AIDS cases due to homosexual contact both in Nova Scotia and nationally. However, due to migration, an unknown number of Island residents who are HIV-positive were tested elsewhere, so they do not show up in Prince Edward Island HIV case reports.

2.8.3 Nova Scotia

Among the Atlantic provinces, Nova Scotia stands out in terms of sexual and reproductive health problems, with the highest reported incidence of STIs, teenage pregnancies, low birth weights and HIV and AIDS cases. [65]

Although the incidence of HIV and AIDS is well below the national level, Nova Scotia is similar to Canada in the level of teenage pregnancies and incidence of low birth weights. Chlamydia is more prevalent in Nova Scotia than in other Atlantic provinces or Canada as a whole, and has not shown a consistent decline over time. Gonorrhea infections are also more common in Nova Scotia than in the rest of the region, and have been increasing in recent years.

Halifax tends to have the highest incidence of HIV cases in the province, although Sydney also has high numbers of HIV infections relative to the rest of Nova Scotia.[66] Anonymous HIV testing (introduced in 1994) makes it easier to be tested for HIV in Nova Scotia than in the past. Since 1994, more than 2,100 people (nearly equal numbers of men and women) have been tested anonymously for HIV.[67]

Teenage pregnancies in Nova Scotia are a rural, as well as an urban phenomenon, with the highest rates in the Annapolis Valley, followed by Halifax. Nova Scotia has fewer teenage (hospital) abortions than Canada as a whole, although adolescents represent the largest proportion of

therapeutic abortions performed in Nova Scotia, and the Nova Scotia rate is the highest in the region.[68]

In Nova Scotia, men who have sex with men make up a higher proportion of AIDS cases than in the other Atlantic provinces, and this proportion is similar to AIDS cases nationally attributable to men who have sex with men. Exposure from intravenous drug use is also similar in Nova Scotia to the national level. In Nova Scotia, relative to the rest of Canada, a high proportion of AIDS cases is due to exposure to HIV through other risk conditions such as receipt of infected blood or blood products.

Nova Scotia has a 38% higher incidence of reported sexual assaults than the country as a whole, although sexual assaults declined nearly 20% between 1992 and 1995.

2.8.4 New Brunswick

New Brunswick compares favourably with Canada in most aspects of sexual and reproductive health. Sexually transmitted disease rates are below national rates, but recent surges in reported chlamydia and gonorrhea infections in New Brunswick make it clear that these remain significant sexual and reproductive health problems in the province.

New Brunswick has lower reported rates of teenage pregnancy than the country as a whole, and although pregnancies increased between 1984 and 1994, the number of live births to teenage mothers in New Brunswick has been steadily declining since 1994.[69] Incidence of low birth weight births in New Brunswick is among the lowest in Canada.

New Brunswick has experienced a recent surge in HIV infections, with one-third of the new cases in 1998 among women. In the past, intravenous drug use has been a significant risk factor for AIDS in New Brunswick, with St. John, Moncton and Fredericton identified as locations where drug use is concentrated. Sources of exposure for new HIV infections in New Brunswick need to be examined.

Reported sexual assaults in New Brunswick are at the same level as in Nova Scotia. Between 1992 and 1997, reported sexual assaults dropped by one-quarter.

2.9 Determining the Critical Issues

Given this broad overview of sexual and reproductive health indicators in the Atlantic provinces, including comparisons with national trends, how do we determine what are the most critical sexual issues for Atlantic Canadians? Because chlamydia rates are relatively low in Newfoundland relative to the rest of the country, should chlamydia be near the bottom of Newfoundland=s list of sexual health priorities? Do the relatively low rates of teenage pregnancies in Prince Edward Island and Newfoundland reflect successful interventions with school health curricula and sexual health promotion, or are they a result of youth leaving to take up residence in neighbouring provinces and elsewhere? Are pregnant adolescents leaving their homes and support networks, perhaps to obtain abortions, or to escape conservative attitudes in small communities? What is the most critical problem: sexual activity? pregnancy? lack of accessibility to abortions? conservative values and attitudes?

In this section, criteria are suggested for detecting significant patterns in the epidemiological data. The Atlantic provinces statistics presented above do not refer specifically to health determinants. Still, it is reasonable to speculate about links between the epidemiological findings and health determinants. Evidence-based knowledge about risk conditions (presented above) and anecdotal information from those who work in the field of sexual and reproductive health supports such speculation. Patterns that suggest the most critical sexual and reproductive health issues for the Atlantic provinces are identified below.

Provinces Must Prioritize Issues

Prioritizing sexual health problems in each province and explaining their origins is beyond the scope of this scan. From the scan, we cannot tell whether differences in observed rates (over time or across provinces) are related to aspects of reporting or information systems, level of effort to detect certain outcomes, interventions that have been made or the distribution of at-risk groups in a population. Each province must determine its own sexual health priorities, based on the statistical indicators in combination with deep knowledge of the unique conditions in that province, including regional differences, culture, quality of information systems, existing clinical practices, ongoing programs and interventions.

Explaining the Findings

Likewise, this overview was not intended to discover the causes of sexual and reproductive health findings. Observed patterns in the statistical data for the Atlantic provinces do not allow us to draw conclusions about causal relationships with broad health determinants. They do, however, suggest questions about such links. Apart from the obvious need to determine if trends are due simply to changes or differences in reporting or detection practices, the findings can be the starting point for uncovering explanations. Evidence was presented earlier on known risk factors and conditions for each of the key sexual and reproductive health problems. Such evidence provides the basis for population health questions that may link statistical findings to health determinants with further investigation. Some of these questions are posed below.

What Do the Statistics Mean?

There are a number of criteria, which taken together, are useful for reflecting further on the statistical indicators. *Magnitude* of observed effects refers to the size of differences. Apparently large differences (e.g., 50-100% or more) -- either between jurisdictions or over time -- need to be addressed. In this scan, effects of significant magnitude include the difference in sexual assault rates in Newfoundland, compared with other provinces, and in the region compared with Canada as whole; recent sharp increases in chlamydia rates in Newfoundland; and HIV cases in Newfoundland and New Brunswick.

Trends are patterns of increase or decrease over time. Rates which rise or fall steadily need to be carefully examined. Important trends identified in the scan include the increasing rates of STIs in the region in recent years and increasing exposure to HIV from heterosexual contact and injection drug use.

The *consequences* of particular problems are their long term physical and psychological effects. Consequences play an important role in determining the significance of health problems. The more profound the consequences, the more critical the issues are. Problems that have curable or reversible consequences are less significant than those which have incurable or *irreversible consequences*. *Lifelong consequences*, especially consequences for children and youth are of more significance than consequences that are short-lived (e.g., treated STIs). Even relatively low rates of problems with profound consequences are usually unacceptable. The most profound consequences for problems identified in this scan are associated with HIV/AIDS, sexual assaults (especially on children), teenage pregnancies and untreated STIs.

Prevalence, which refers to the overall number of those affected by a particular problem, needs to be considered in determining significance. Problems that are widespread, particularly if they have profound consequences, are considered more critical than problems affecting a small proportion of the population (e.g., infertility). Problems with widespread prevalence in the Atlantic provinces are sexual assaults, teenage pregnancies and chlamydia.

Because the foundations for sexual expression and sexual health throughout life are laid in childhood, and because sexuality is closely linked to self-image and self-esteem which also develop early, the consequences of sexual health problems for children and youth are usually severe and enduring. Viewed in this light, almost any level of pregnancy, sexual violence and other irreversible outcomes is unacceptable among children and youth.

These criteria can be applied to the information in this scan. While in and of itself the statistical information is not sufficient to identify provincial priorities, patterns observed in the six sexual health outcomes suggest possibilities, and point the way for further exploration of population health links.

The Population Health Focus

Population health focuses attention on inequalities in health status and their determinants. Rather than concentrating on disease end points, however, population health looks "upstream," at the starting points in the "causal stream" where inequalities originate: social and economic inequities, harmful physical environment conditions, social injustice, discrimination, etc.[70] Ideally, this focus leads to "reverse" causal thinking -- expanding attention to include the factors that protect against disease and promote health: resilience, capacity, meaningful participation in society and social cohesion.[71] An upstream focus assumes that information, research and policy are the most effective tools to eliminate inequalities and maximize population-wide benefits to health.

It can be argued that the most critical sexual health issues in the region are broad population health issues: depressed economies, chronic unemployment, low education levels and high illiteracy -- all of which influence coping skills and personal health practices and limit individuals' abilities to make healthy choices about sexual and reproductive health. Choices about contraception, engaging in safe (or any) sexual practices, outcomes of unwanted pregnancies, receiving treatment for infections or reducing harm, etc., are hardly choices at all for people in this region who have little control over their lives and/or live on the margins of society.

The preceding broad overview of sexual and reproductive health indicators in the Atlantic provinces presented data on some of the sexual health *end points* in a causal chain that begins with the broad determinants of health. Given a population health focus, criteria for reflecting on statistical patterns and information about certain end points -- HIV/AIDS, STIs, teenage pregnancy, low birth weight, infertility and sexual violence -- what seem to be the most critical sexual health problems?

The Critical Issues in Atlantic Canada

In terms of magnitude, significant trends, consequences and prevalence, a picture emerges of the most critical sexual health problems in the Atlantic provinces.

- High levels of unprotected sex among youth in the region increase risks for STIs, HIV/AIDS, teenage pregnancy and infertility. Young gay men and Aboriginal youth seem to be particularly prone to risk behaviours that have profound consequences.

- Sexual violence is a widespread problem in the region, with profound consequences. Proportionately, there are many more sexual assaults in the Atlantic provinces than in Canada as a whole. This difference is greatest for Newfoundland. Research has shown that the majority of sexual violence victims are children and youth; among adults, women are almost always the victims.

- HIV infections from heterosexual exposure and injection drug use have been increasing in recent years (especially among women). Newfoundland and New Brunswick have had substantial jumps in reported HIV infections in the past year. The consequences of HIV/AIDS are profound and irreversible.

- Reported cases of chlamydia and gonorrhea in the Atlantic provinces have been increasing steadily in recent years. STIs resulting from unprotected sex among youth are a widespread problem, with consequences that can include infertility. Risk behaviours that result in STIs also lead to HIV exposure.

- Teenage pregnancies, another outcome of unprotected sex among youth, are widespread in the Atlantic provinces. The irreversible, lifelong consequences for mothers and children when adolescent pregnancies result in live births make teenage pregnancies unacceptably high at any level.

Sexual assaults, adolescent pregnancies and STIs are critical sexual and reproductive health problems for children and youth in the Atlantic provinces. Sexual assaults and the growing spread of HIV through heterosexual contact and injection drug use are critical sexual health issues for adults, particularly women and Aboriginal people. (The possibility was suggested by a public health worker in the region that many physicians in private practice are not aware that women are at risk for HIV, so some women find it difficult to obtain testing. This possibility makes the issue of HIV among women even more critical.)

Most of these problems are especially troublesome in Atlantic cities (especially the larger ones), where certain marginalized groups congregate. However, because much of the Atlantic region is

rural, these problems also exist in rural and remote areas, in some cases to a greater extent than in cities (e.g., adolescent pregnancies in the Annapolis Valley region and Labrador, HIV infections in Conception Bay North). They exist especially among Aboriginal people (who have proportionately larger youth populations) living on reserves, in remote communities and in cities, and among other marginalized groups such as injection drug users and women.

Population Health Questions Arising from the Critical Issues

Although observed patterns in the statistical data on the Atlantic provinces do not allow us to draw conclusions about causal relationships with broad health determinants, they do suggest questions about such links.

For most of the problems discussed, the risks are well known. Youth, poverty, minimal education, homelessness, being Aboriginal, gay and/or a women, and lack of access to routine medical care are collective factors that have been shown to increase risks for most sexual and reproductive health problems. At the individual level, unprotected sexual activity, substance abuse and having multiple, casual sex partners are also documented risk factors. They relate to the personal health practices and ineffective coping skills that commonly develop among those whose life choices have been limited by social and economic inequities.

When we examine the statistical data for the Atlantic provinces, a population health focus directs our attention to patterns relating to health determinants. With increasing rates of STIs in most provinces, for instance, we need to consider whether certain vulnerable sub-populations are growing, or if risk conditions are changing, and if so, why. Are there more street-involved youth, sex trade workers, vulnerable young women (who have the highest infection rates) and their male partners (whose infections frequently go undetected), contributing to an escalating cycle of infection and re-infection? Or, are unsafe sexual health practices becoming more common among youth in general?

High rates of teenage pregnancy and sexual violence also raise questions about what is going on with risk conditions. What are the economic and social pressures on young women in areas in the region (e.g., Annapolis Valley, Labrador) where adolescent pregnancy rates are high? Where sexual violence is especially high (e.g., Newfoundland), what is happening with incomes, unemployment and education levels? What are the pressures on vulnerable sub-populations, including young parents, Aboriginal people, gays and lesbians, and physically and mentally disabled persons? What changes are needed to protect against sexual problems and promote sexual health in the region?

These are some important questions raised by viewing the statistical information in this scan with a population health lens. It remains for future, in-depth investigations to answer these questions. In the meantime, the findings from the scan of epidemiological information suggest the most critical problems to examine further.

Evidence tells us that underlying the critical problems are conditions of inequity resulting in uneven distribution of health risks. These problems demonstrate the need for population health-based initiatives in the Atlantic provinces to support and maintain healthy sexual development by improving individual capacities and coping skills, reducing social and economic risk conditions,

strengthening families and communities, reducing environmental risks, making services accessible and promoting positive values and attitudes about sexuality in society. The remainder of the report deals with such initiatives.

3. SEXUAL AND REPRODUCTIVE HEALTH INITIATIVES

"Sexual health is a major aspect of personal health that affects people at all ages and stages of their lives. In recognition of this fact, health promotion programs across Canada focus on enhancing sexual health and reducing sexual problems for various groups in our society ... HIV/AIDS, STD, teen pregnancy, sexual abuse, sexual harassment, sexual assault, and other such personal and societal problems are continuing reminders of the need to prevent circumstances harmful to health."[72]

This section presents information on sexual and reproductive health initiatives gathered from around the Atlantic provinces. Ongoing health promotion and prevention activities are discussed in terms of population health and the principles and strategic directions in *A Report on Consultations for a Framework on Sexual and Reproductive Health*. The section concludes with a discussion of program gaps, strengths and challenges for implementing the *Framework.*

Principles and Strategic Directions

The *Framework* report lays out fundamental principles to guide action on sexual health, and presents a number of *strategic directions* which identify key areas where action can be taken. These strategies are consistent with knowledge about the broad determinants of health, and are meant as a guide for applying the population health framework to improve sexual health status.

Underlying the strategic directions are *principles* concerning positive sexuality, individual autonomy and responsibility, prevention and promotion, use of evidence-based, appropriate and least invasive interventions, equitable access to services, social support and protection from environmental hazards. Guided by the principles and armed with information on sexual health status, stakeholders can implement population health approaches by following the strategic directions laid out in the *Framework*. Efforts can be targeted towards personal choices, societal values, access to services, physical environment factors, families and communities, social and economic conditions and/or obtaining further information through research and evaluation.

Knowing the relative strengths of existing programs in terms of the principles and strategic directions of the *Framework* can help us determine where to place new efforts and resources**.** Using a conceptual map based on the principles and strategic directions from *A Report on Consultations for a Framework on Sexual and Reproductive Health*, the scan of major initiatives identifies opportunities and challenges for action in sexual health prevention and promotion in the Atlantic provinces.

3.1 Scan of Programs and Initiatives in the Atlantic Provinces

The scan of major initiatives identifies program and process strengths in sexual and reproductive health promotion and prevention, based on information provided by selected organizations in each of the four Atlantic provinces. This section reviews the process employed to gather information from these organizations.

Data Gathering

Information was gathered between late December 1998 and March 1999, using questionnaire interviews**.** Health promotion specialists from the Community Health Promotion Network Atlantic (CHPNA), based in each province, identified candidate organizations and arranged for interview questionnaires to be completed. Questionnaires were either self-administered or completed by the interviewers over the telephone, according to the respondent's choice. Candidate organizations were identified by the interviewers through their provincial networks. The target was to collect 12 completed interviews in each province.

Selection Criteria

Organizations were selected for the scan using criteria for categorizing major initiatives in sexual and reproductive health developed by the author in consultation with Health Canada. Candidate organizations were included if they met criteria a. to c., and, d. or e. below. Efforts were made to ensure that 30-50% of the organizations chosen in each province also met f.

a. addresses determinants of health explicitly or implicitly;
b. deals with two or more strategic directions from the *Framework* report;
c. work demonstrates at least three of the following characteristics -- prevention/promotion focus, province-wide scope, innovative approaches, inter-sectoral collaboration;
d. addresses two or more of HIV/AIDS, teenage pregnancy, STIs;
e. addresses one of sexual violence, infertility, low birth weight;
f. deals with at least one of Aboriginal people, persons with disabilities, injection drug users, street-involved youth, gay youth, men who have sex with men, women or visible minorities.

Limitations of the Data

Applying the selection criteria was challenging at times. Often, the interviewers found that obtaining sufficient information to apply the selection criteria meant asking nearly all of the questions on the interview questionnaire. For this reason, when there were questions about eligibility, respondents were included rather than excluded, and determining which were major initiatives became part of the analysis. Thus, a few of the respondents to the survey do not necessarily meet the original selection criteria.

The sampling of sexual and reproductive health initiatives was not random, so caution must be used in generalizing from this scan of organizations. Given the selection criteria and the networking strength of the provincial interviewers, these 52 organizations offer an approximation of major initiatives in sexual and reproductive health promotion and prevention in the Atlantic provinces. Nevertheless, because this is a convenience sample rather than a statistical sample, these

organizations should not be considered representative in a statistical sense of all sexual and reproductive health programs in the four provinces, nor of all major initiatives. Some programs that would have qualified as major initiatives may not have been approached to participate, or were among the 38 organizations which were approached but did not complete the questionnaire for one reason or another.

Another limitation to keep in mind while considering the results of the scan is that the nature of the data (self-reported, questionnaire responses) may make it subject to incompleteness and self-reporting bias. No doubt those responding to the survey wanted to portray their organizations' accomplishments in the best light possible. On the other hand, individuals vary in their tolerance for questionnaires, so the level of detail provided in a given questionnaire may or may not accurately reflect the range of an organization's activities. In many cases, respondents provided print materials (brochures, terms of reference, mission statements, etc.), which were used to cross-check and supplement responses to questionnaire items. When such materials were not available, however, responses to questionnaire items were taken at face value.

It seems likely that the information about organizations in the scan reflects the response biases of those who completed the questionnaires. Whether such biases resulted in snapshots that are more or less favourable overall is difficult to know.

Survey Sample

The list of organizations that completed the questionnaire is presented in Appendix 1. In total, 90 organizations in the four Atlantic provinces were contacted in connection with the scan. Of these, 52 completed and returned questionnaires -- 12 from Newfoundland, 10 from Prince Edward Island, 19 from Nova Scotia and 11 from New Brunswick.

The organizations surveyed include government departments and agencies, publicly funded health care programs, non-government, non-profit organizations and a private consultant. They cover a variety of sectors, including health, education, heritage and housing. Their principal focus ranges from sexual and reproductive health to broader issues of particular groups, including the disabled, Aboriginal people, francophones, injection drug users, immigrants, gays, lesbians and bisexuals, and persons involved with the criminal justice system. A few are single issue organizations, but most are dealing with more than one sexual and reproductive health issue. The majority of these organizations are based in Atlantic cities and tend to serve those cities and surrounding areas. The organizations that are province-wide are generally government departments or agencies.

The determinants of health focus underlying the *Framework* report places limited emphasis on a range of medical services associated with sexual and reproductive health (provided largely by physicians in private practice). Although they are a necessary and important component of the continuum of sexual and reproductive health care, physician services were not the focus of this scan.

Finally, there are certain organizations/programs which exist in most provinces (some of them affiliates of national organizations) but were captured in only one or two of the provincial samples in the scan (i.e., Reproductive Care programs, Community Action Projects for Children [CAPC], provincial public health services, provincial departments of education, family resource centres,

youth health centres, Planned Parenthood, Canadian Paraplegic Association, VON). Although their operations and programing may vary somewhat from province to province, the missions and many of the activities of these organizations will be similar across the provinces.

The analysis that follows is based on responses from the 52 completed questionnaires.

3.2 Analysis of Sexual and Reproductive Health Activities

To determine the strengths and weaknesses of initiatives in the scan using a population health lens, the *content* of actions directed at sexual health problems and the *mechanisms* and *strategies* for achieving stated goals need to be considered. In other words, the "what" and the "how" of organizations' activities must be examined in light of the principles and strategies in *A Report on Consultations for a Framework on Sexual and Reproductive Health*. Through this examination, opportunities and challenges in dealing with sexual and reproductive health in the Atlantic provinces can be identified.

Examining the content of initiatives related to sexual and reproductive health in Atlantic Canada involves observing patterns in work on the six key sexual health problems discussed in Section 2. Which problems are receiving the greatest attention in each of the provinces? Is there some correspondence between known population health links to these problems and the efforts made by initiatives in the scan? Answers to these questions will help to identify gaps in existing efforts.

The following analysis of sexual and reproductive health activities begins in Section 3.3 with a review of activities directed at the critical sexual health problems discussed in Section 2 above, i.e., the "what." The priority issues in terms of overall attention, level of effort in each province and efforts targeted at particular life stages are summarized.

The second part of the analysis of activities, beginning in Section 3.4, is an examination of the sexual and reproductive health initiatives surveyed in light of the population health strategies outlined in *A Report on Consultations for a Framework on Sexual and Reproductive Health*, in other words, the "how."

These analyses draw attention to the strengths and weaknesses of existing initiatives and highlight opportunities and challenges for sexual and reproductive health prevention and promotion in the Atlantic provinces.

3.3 Problems Addressed by Organizations in the Scan

In terms of *what* is being addressed, the vast majority of organizations surveyed are dealing with multiple sexual and reproductive health issues, even the organizations that are not primarily involved with health. Most have prevention of sexual and reproductive health problems and/or promotion of positive sexual and reproductive health as their purpose, although harm reduction is the goal of one or two organizations dealing with injection drug users. Many are directing their efforts at more than one life stage, but overall, the largest amount of effort is directed at youth, followed by adults and children. Although many organizations have a "life span" approach to their work, very few organizations in this scan directly address sexual health issues in later life.

Earlier, the most critical sexual and reproductive health issues in the Atlantic provinces were identified: sexual violence against children, youth and adults; teenage pregnancies; unprotected sex among youth resulting in STIs and spread of HIV; and exposure to HIV through heterosexual contact and injection drug use, and among Aboriginal youth and young gay men. To what extent are these issues being addressed by organizations in the scan? Figure 6 deals with this question by providing a breakdown of the surveyed organizations according to the six key sexual and reproductive health outcomes from the *Framework* document.

	Children	Youth	Adult	Later Life	Lifespan
HIV/AIDS	********** ****	********** ********** **********	********** ********** ****		********** *
STIs	**********	********** ********** *	********** *********		*********
Teenage pregnancy	****** **	********** ********** **********	**********		****
Low birth weight	*****	********** ****	**********		**
Sexual violence	********** ********	********** ********** ****	********** ********** *********	**	********** *******
Infertility	***	********** *	********** *****		**
Other issues - Seniors' sexual health				*****	

Figure 6: Sexual Health Outcomes and Life Stages Addressed by Organizations in the Scan

It appears that the most critical issues in the Atlantic region are also the critical issues for most of these organizations. The number of organizations dealing with sexual violence is striking, as is the fact that considerable efforts are directed at this problem at all life stages.

Also striking is the amount of attention that HIV/AIDS issues receive from organizations in this scan. Like work on sexual violence issues, HIV/AIDS interventions are directed across the life span, but a large concentration of effort is aimed at youth. More than one-third of these organizations are targeting young gay men -- a significant at-risk group. On the other hand, women and injection drug users, other growing risk groups, are receiving relatively little attention, except from a handful of organizations dedicated to working with needle users and/or women at risk of contracting HIV.

Teenage pregnancies and STIs among youth also are the focus of considerable efforts by the organizations surveyed. Relatively few interventions to prevent teenage pregnancies and the spread of STIs appear to be aimed at children, however.

Sexual Violence

Overall, sexual violence is the issue receiving the most attention from the organizations in this scan. The vast majority of the organizations surveyed indicated that their work addresses sexual violence (underlining the fact that sexual violence frequently has sexual health consequences: STIs, pregnancy, HIV). Their activities are comprehensive and well-established.

A large portion of this effort is devoted to providing support and services to victims of sexual violence: crisis intervention, counselling, support groups, court support and emergency shelter are some of the common services. Some organizations target their services at vulnerable sub-groups (e.g., street-involved women -- Coverdale Centre; youth -- Adolescent Health Counselling Service; Aboriginal people -- St. John's Native Friendship Centre Association; and lesbians -- Lesbian, Gay and Bisexual Youth Project). Considerable effort is also dedicated to education to prevent violence, including public education, customized education programs for particular groups, peer education, and education of individuals (including school age children and youth) and families. As well, many organizations do training with professionals, criminal justice officials, educators, etc.

In certain provinces, highly organized, intersectoral initiatives have been mounted to combat violence through multi-faceted means that usually include capacity building, research and public policy. A number of these organizations deal with sexual violence issues across all life stages, and several deal almost exclusively with violence issues (e.g, Avalon Sexual Assault Centre, Women's Health Network of Newfoundland and Labrador, Coalition Against Abusive Relationships, Provincial Strategy Against Violence, Provincial Association Against Family Violence).

In New Brunswick and Nova Scotia, nearly all of the organizations surveyed are dealing with sexual violence issues in some way. Three-quarters of the organizations surveyed in Newfoundland and nearly two-thirds of those in Prince Edward Island are addressing sexual violence in their work.

A large majority of these activities focus on women. In all provinces, somewhat more effort around sexual violence is directed at adults and youths than towards children and seniors. This is largely in terms of services for victims of sexual violence. Three-quarters of these organizations deal with sexual violence against youth, and nearly two-thirds with sexual violence against adults. Children are the focus of sexual violence prevention or support to victims by slightly more than one-third of the organizations surveyed; only a handful address sexual violence against seniors.

Marginalized groups that are most at risk for sexual violence (Aboriginals and the disabled) each receive attention from a few organizations in every province, mostly as services available to all victims of violence rather than support targeted to their needs (except for organizations dedicated to these groups [e.g., Mi'kmaq Family Resource Centre, Canadian Paraplegic Association]). However, major initiatives to influence policy and prevent violence in Newfoundland (Provincial Strategy Against Violence, Provincial Association Against Family Violence) and New Brunswick (Coalition Against Abusive Relationships) do include these vulnerable sub-populations in their mandates.

HIV/AIDS

HIV/AIDS infection is the next most significant sexual health issue in terms of the attention being given by the organizations in the scan. Nearly three-quarters of the organizations completing the survey indicated that their work addresses HIV/AIDS. More than one-quarter of these are working at all life stages to prevent the spread of HIV/AIDS and/or improve the quality of life for persons living with HIV/AIDS and their families and friends. Several organizations are part of the network of AIDS community-based organizations that exist in each province. They also deal with other sexual and reproductive health issues of persons living with AIDS or HIV infection, usually STIs and sexual violence (e.g., Atlantic First Nations AIDS Task Force, AIDS PEI Community Support Group, Newfoundland and Labrador AIDS Committee, SIDA/AIDS Moncton).

As in the case of sexual violence, concern about HIV/AIDS has resulted in well developed inter-sectoral strategies in some provinces. Multi-faceted, province-wide initiatives to prevent HIV mounted in Newfoundland (Department of Health and Community Services - Comprehensive HIV/AIDS Strategy) and Nova Scotia (Nova Scotia Advisory Commission on AIDS) are examples of population health approaches to this key sexual health issue.

In terms of vulnerable sub-populations, roughly one-third of these organizations target gay youth, while more than half are concerned about the spread of HIV among women. Street-involved youth and needle users are targeted by less than one-quarter. A few of these organizations focus their efforts on injection drug users, providing needles or other services to reduce harm in this sub-group (Mainline Needle Exchange). Some target young, street-involved women living with HIV/AIDS, including needle users (Coverdale Centre, Naomi Centre for Women).

Across the provinces, the level of effort devoted to HIV/AIDS seems to be consistent with the magnitude of the problem. New Brunswick and Nova Scotia have the highest proportion of organizations in this scan addressing HIV/AIDS issues in their respective provinces, followed by Newfoundland and Prince Edward Island.

Sexually Transmitted Infections

In the Atlantic region, Nova Scotia and Prince Edward Island have the highest percentages of surveyed organizations involved in efforts to reduce, detect or treat STIs. In New Brunswick and Newfoundland, somewhat less attention is being given to STIs by organizations in this scan.

Most organizations dealing with HIV/AIDS also address STIs, recognizing that risk behaviours that result in STIs also increase the probability of exposure to HIV. Much of the effort with STIs involves education and health promotion directed at youth to influence individuals' sexual health practices, encouraging the use of appropriate protection against infection. Health fairs, summer camp programs, interactive games and plays are examples of activities designed to maximize communication with youth about STIs and other sexual health risks.

Education directed at youth also seeks to provide information about services for STI testing and treatment. Making such services accessible reflects a major thrust in efforts on STIs. Youth-focused health services (e.g., Cape Breton Youth Health Centres, Inner City Youth Connection, Cumberland Family Planning, Planned Parenthood) are designed to provide youth-positive settings offering a range of services, including testing, treatment, counselling and follow-up of STIs.

The spread of STIs among certain marginalized groups, especially street-involved youth, gay youth and Aboriginal youth, is a particular concern to organizations that reach out to those groups (e.g., Inner City Youth Connection, Planned Parenthood, Lesbian, Gay and Bisexual Youth Project, Atlantic First Nations AIDS Task Force). In general, however, the interventions of most organizations surveyed appear to be aimed at youth in the mainstream.

Teenage Pregnancy

The issue of pregnancy among adolescents is a matter of concern to a majority of the organizations surveyed. Many of the same organizations that deal with STIs also offer pregnancy prevention programs and services to support pregnant teenagers and ensure healthy birth outcomes for those choosing to bring their pregnancies to term.

Prince Edward Island has the highest proportion of surveyed organizations with teenage pregnancy in their mandate, followed by Nova Scotia, Newfoundland and New Brunswick. In all four provinces, the majority of effort around teenage pregnancies is being directed at adolescents (although provincial health education curricula and organizations such as Planned Parenthood deliver sexual health education and promotion to school children, with pregnancy prevention as one goal).

While adolescent pregnancies are probably more frequent among Aboriginal people than the population at large, only a handful of organizations in the scan is addressing this particular problem.

Infertility

Fewer than one-third of the organizations surveyed are involved in activities to reduce infertility. In general, those that indicated they are dealing with infertility are engaged in prevention of infertility through activities to reduce STIs and their long-term consequence. (However, nearly half of the organizations dealing with STIs do not include infertility in their mandates.) Most of this effort is directed at adults and youth.

Only one organization in the scan is involved with treatment of infertility (Clinique de Reproduction), although several organizations said they make referrals for treatment.

Nearly half of the Nova Scotia organizations in this scan are addressing infertility. Three organizations surveyed in each of New Brunswick and Newfoundland, and one in Prince Edward Island, deal with infertility.

Low Birth Weight

Like infertility, low birth weight is not at the top of the agenda for most of the organizations surveyed. One organization in three from this scan has a mandate that includes prevention of low birth weight. Those that do are most likely to be dealing with low birth weight as part of multi-faceted efforts to improve the sexual health of adolescents and reduce teenage pregnancies. There are organizations, however, which do focus on prenatal and perinatal care with the explicit goal of improving birth outcomes, including birth weight, and child health (Reproductive Care programs, Prenatal Nutrition Intervention Program, Brighter Futures Coalition).

Half of the programs surveyed in Prince Edward Island are addressing the problem of low birth weight. This contrasts with about one in three in Nova Scotia and New Brunswick. Fewer Newfoundland organizations in the scan have low birth weight on their agendas.

Other Issues

Although the outcomes above are the key sexual and reproductive health issues identified in *A Report on Consultations for a Framework on Sexual and Reproductive Health*, the organizations on the front lines of sexual and reproductive health prevention and promotion in the Atlantic provinces are dealing with many more than the six problem areas discussed in Section 3.3. Appendix 2 presents the "other issues" addressed in their work.

Several of the "other issues" relate to common themes and can be clustered according to these themes: *sexual health in later life* including menopause, reproductive cancers and seniors' sexuality; *personal health practices and coping skills* including addictions, anger management, body image, eating disorders, healthy relationships, IV drug use, PMS, self-esteem, sexual identity and suicide prevention; and *societal values* including gay and lesbian issues, heterosexism, homophobia and sexual identity.

Although not classified among the most critical sexual health problems in the *Framework* report, the latter two groups of issues are clearly upstream issues in terms of determinants of health, and demonstrate that some organizations have internalized a population health approach to sexual and reproductive health.

3.4 Application of Population Health Principles by Organizations in the Scan

To organize the *how* aspect of the analysis, a matrix was developed consisting of the strategic directions in *A Report on Consultations for a Framework on Sexual and Reproductive Health*, and common means for implementing health promotion and prevention. In the matrix, presented in Figure 7, *Strategic Directions* (which provide the focus for organizations' activities) range from actions directed at individuals to the level of collective influences on entire populations.

		MECHANISMS					
		Programs			*Intersectoral Processes*		
	STRATEGIC DIRECTION	*Providing Support/ Services*	*Education*	*Training*	*Building Community Capacity*	*Advancing Knowledge*	*Influencing Public Policy*
Population	*Social and Economic Conditions*						
	Physical Environment			*Upstream*	*Activities*		
	Societal Values						
	Access to Services						
Individual	*Families and Communities*						
	Personal Choices						

Figure 7: Analytic Framework for Scan of Sexual and Reproductive Health Initiatives

Mechanisms, on the horizontal axis, are the array of interventions, processes and approaches describing the means of implementing strategies for improving sexual and reproductive health status.[73] Mechanisms range from programs aimed at changing individuals, to processes for influencing broad populations. Moving along the continuum from Programs to Processes, the likelihood increases that strategies will be pursued through collaboration across sectors.

The shaded area in Figure 7 represents upstream population health activities: programs and processes for intervening at the earliest points in the causal stream. Developing capacity, advancing knowledge and building healthy public policies (the darkest area) usually involve processes that have the broadest, population-wide impacts, while providing services (lightest shaded areas), most often involve programs that impact on the lives of individuals. Education and training programs (medium shaded area) represent the middle ground: interventions targeted at individuals that can have wide impacts.

Overall, the cells where Strategic Directions and Mechanisms intersect portray *activities*. Each cell represents a shorthand description for certain types of activities, i.e., how organizations in the scan are addressing the sexual and reproductive health problems discussed above. Organizations are located within the matrix based on information obtained about their activities through the survey interviews.

Figure 8 provides an overview of the activities addressing sexual and reproductive health in the Atlantic provinces. Organizations in the scan have been located in the cells describing their activities. Because the work of many organizations involves more than one Strategic Direction, and most organizations employ more than one Mechanism, some organizations may be entered in several cells. For this reason, the "conceptual map" of activities shown in Figure 8 has more than 52 entries, and approximates the total effort spent on prevention and promotion activities by these organizations.

3.4.1 Overview of Activities

This section reviews activities according to the strategies from the *Framework* document and the population health mechanisms, as depicted in Figures 7 and 8.

Personal Choices

By far the greatest proportion of effort in addressing sexual and reproductive health in all four provinces is being spent to increase individuals' personal health practices, coping skills and capacities for making healthy decisions about sexuality and reproduction. In every province, the full range of mechanisms to implement population health is being used to strengthen individuals' personal health practices and coping skills. Examples include health education in schools and other settings (e.g., well women clinics, youth drop-in centres, women's resource centres, Native Friendship centres, immigrant service centres, etc.), clinical diagnosis and follow-up, counselling, support with social services and the criminal justice system, training in safe sex practices and contraception, building service capacity in communities by training volunteers and establishing partnerships, gathering information on service needs, and planning and advocacy to influence policies that support programs and services.

Strategic Directions for Action on Sexual and Reproductive Health

Personal Choices: Increasing opportunities for individuals to develop knowledge, capacities, skills and behaviours to make healthy choices about sexuality and reproduction

Societal Values: Promoting sexuality positive societal values and attitudes to enable and support healthy personal choices throughout life.

Access to Services: Facilitating equitable, effective prevention, promotion and treatment by removing physical, attitudinal and psychological barriers to promoting, protecting and restoring sexual and reproductive health.

Physical Environment: Reducing risks and conditions in the physical environment that are harmful to sexual and reproductive health.

Families and Communities: Strengthening the capacity of families and communities to maintain and improve sexual and reproductive health.

Social and Economic Conditions: Reducing social and economic risk conditions, especially poverty and discrimination, which limit opportunities to achieve sexual and reproductive health.

Research, Evaluation and Information: Supporting research and evaluation on factors and interventions that enhance sexual and reproductive health throughout life, and ensuring availability of information for policy, planning and programming.

Source: A Report on Consultations for a Framework on Sexual and Reproductive Health. Health Canada, 1998

Mechanisms for Implementing Action on Sexual and Reproductive Health

Provision of Services/Support: Delivering health interventions to individuals to prevent, diagnose or treat sexual and/or reproductive problems, reduce harm and/or restore and maintain sexual and reproductive health.

Education: Providing information to individuals and groups to increase their knowledge about healthy sexuality and reproduction and about resources for making sound decisions regarding sexual and reproductive health.

Training: Teaching individuals personal skills and practices for making sound decisions regarding sexual and reproductive health; teaching individuals and groups the skills for developing resources and building capacity.

Community Capacity Building: Targeting resources within communities that enable them to create and sustain structures and processes that support the promotion of sexual and reproductive health and the prevention of sexual and reproductive health problems.

Advancing Knowledge: Initiating, engaging in and/or supporting research and evaluation to inform public policy about factors and interventions that enhance sexual and reproductive health throughout life.

Influencing Policy: Through planning or advocacy, ensuring the creation and adoption of public policies in all sectors that promote and enhance sexual and reproductive health throughout life.

		MECHANISM					
		Programs			*Intersectoral Processes*		
Population Individual	**STRATEGIC DIRECTION**	**Providing Support/ Services**	**Education**	**Training**	**Building Community Capacity**	**Advancing Knowledge**	**Influencing Public Policy**
	Social and Economic Conditions	****	**				***
	Physical Environment						
	Societal Values	**	**** **	***		*	***
	Access to Services	**** **** **** **	**** ****	***	***	****	***
	Families and Communities	**** **** **** ****	**** **** **** ***	**** **** *	**** ***	****	**** ****
	Personal Choices	**** **** **** *****	**** **** **** *****	**** **** **** ****	**** **** ****	**** **** **** ***	**** **** ****

Figure 8: Overview of Activities Addressing Sexual and Reproductive Health in the Atlantic Provinces

Families and Communities

The next greatest level of effort is devoted to strengthening the capacities of families and communities to maintain and improve sexual and reproductive health. Again, all available mechanisms are being used, but there is more emphasis on support and education programs. Examples of activities to strengthen families include nurse visits and parenting education for teenage mothers, counselling and support groups for families of gays and lesbians and persons living with HIV/AIDS, workshops on parenting adolescents, and "growing together" programs to improve communication between parents and adolescents.

Paradoxically, capacity building (i.e., explicitly developing resources in communities to sustain actions that support families and the community) is one of the least utilized mechanisms for strengthening families and communities. There are relatively few examples of resources being targeted to build structures or processes in communities. Exceptions that were noted among these organizations include the development of local youth health centres, leadership skills development for adolescent peer health workers, training of law enforcement officials to deal with sexual violence and development of best practices in reproductive care.

As well, considerably less effort is being placed on advancing knowledge about how to influence families and communities than on how to influence individuals. A notable exception, however, is a major initiative for healthy adolescent sexuality based in Amherst, Nova Scotia, which involves a partnership between universities and local communities to conduct action research on capacity building.

Access to Services

Access to services involves making services available to all by removing physical, attitudinal and psychological barriers to receiving service. In the Atlantic provinces, many of the organizations in the scan are working to make services accessible. A majority in New Brunswick and Prince Edward Island, and up to one-third of Newfoundland and Nova Scotia organizations, are providing services and supports to improve access. Examples include youth drop-in centres where adolescents can access services on their own terms, community outreach to injection drug users to ensure awareness about needle exchanges, networking among service providers for effective and appropriate referrals, wheelchair accessibility of service locations, video resources for hearing-impaired clients, anonymous HIV testing, regionalization of reproductive care best practices and workshops for high school students on sexual orientation.

Upstream Issues

In general, the broad underlying causes of these problems -- inequities that preclude full participation in social and economic benefits -- are not being addressed systematically by most of the organizations in the scan. Recognizing the influence of broad health determinants, but often powerless to affect them, most organizations are aiming to minimize population health impacts rather than prevent them.

Specifically, few organizations are attempting to reduce the social and economic conditions that limit opportunities to achieve sexual and reproductive health. The handful that are doing so use support/services, education and public advocacy as ways of influencing social and economic conditions that impact on their clients. Such efforts include supporting and encouraging individuals to upgrade their education, providing supportive housing and lobbying governments concerning social assistance policies and policies that affect women.

Similarly, most of these organizations are not pursuing a strategy of promoting sexuality-positive societal values. Except for Newfoundland and Nova Scotia, where education programs are used by several organizations to engender positive attitudes towards sexuality, few systematic attempts are being made to influence attitudes and values. Those that are trying to do so tend to be organizations dealing with gay and lesbian issues that are engaged in education to eliminate homophobia and heterosexism.

None of the 52 organizations surveyed across the Atlantic provinces is actively involved in reducing physical environment risks and conditions that are harmful to sexual and reproductive health.

Detailed provincial profiles of the work of organizations in the scan are presented in Appendix 3. The provincial profiles review the strategies used by organizations in each province, the areas where activities are occurring, which life stages are addressed, the extent to which an upstream focus prevails, whether the needs of marginalized groups are addressed and the attention given to the critical sexual health problems.

3.5 Gaps in Activities Surveyed

Despite the depth and breadth of the work of these 52 organizations, there are a few things they are not doing that could be considered gaps in terms of the *A Report on Consultations for a Framework on Sexual and Reproductive Health.*[74]

Marginalized Groups

Population health approaches recognize that certain sub-populations are at greater risk than the population as a whole, due to conditions that limit their options and place them on the margins of society. In this scan, information was gathered on efforts made with certain marginalized groups whose risks of developing critical sexual and reproductive health problems are greater than the general public: women, Aboriginal people, street-involved youth, injection drug users, the disabled, men who have sex with men, gays and lesbians and visible minorities. Many of the surveyed organizations target their efforts at one or more of these groups, recognizing their special vulnerability, and a few organizations dedicate their efforts toward a particular marginalized group. This is particularly true for women, gays and lesbians, and to a lesser extent, Aboriginal people and street-involved youth.

Certain of these groups on the margins seem to be falling through the cracks, however. Except for the work of the Canadian Paraplegic Association in Newfoundland and Labrador and a video for deaf youth created by Cumberland County Family Planning, few activities are targeted at the disabled by the organizations in the scan. Organizations in the scan seem to have few resources for the deaf and visually impaired or the physically and mentally handicapped. Given the high risk of sexual abuse faced by the disabled generally, this appears to be a significant gap.

Another group that seems to be overlooked is visible minorities. Atlantic Canadians of African and Asian heritage and recent immigrants, for example, are not targeted for sexual and reproductive health interventions by most of these organizations, despite the fact that certain economic and cultural disadvantages may increase their risks of sexual and reproductive health problems (the Multicultural Association of the Greater Moncton Area is clearly an exception). Information on their sexual health status and on the capacity to address the sexual health problems of visible minorities is not readily available.

Lack of information about, and targeted attention to, Aboriginal people is another gap. Aboriginal people are targeted mainly by Aboriginal organizations. Otherwise, about one in four of the organizations surveyed reach out to Aboriginal people, even though they are among the most vulnerable of all sub-populations. There are no reliable statistics on sexual and reproductive health problems among Aboriginal people, although those who work with Aboriginal people on reserves and in cities express concern about high levels of adolescent pregnancy, STIs and HIV infections.

Organizations dedicated to Aboriginal health issues (e.g., Atlantic First Nations AIDS Task Force) tend to incorporate Aboriginal models of wellness and spirituality which may make them more effective at dealing with Aboriginal health issues than mainstream organizations. They can be an important resource for mainstream organizations working with Aboriginal people with sexual and reproductive health problems.

Social and Economic Conditions/Societal Values

Relatively few of the organizations surveyed gave explicit priority to promoting sexuality-positive values or to social and economic conditions, although exceptions have been noted. In a population health framework, these are the broadest level conditions that influence health outcomes. Intervening at this level involves understanding what conditions must be changed to improve (sexual and reproductive) health (e.g., homelessness, poverty, homophobia, etc.). Then, strategies must be developed that will impact on the health of the population (e.g., building more transition housing, creating jobs and changing public attitudes through education and social marketing), or at least short-circuit the impact of these conditions on health (e.g., provide street-involved youth with coping skills and social support, offer job skills training and placement services to adolescent mothers, offer peer support groups for gay and lesbian youth).

In the Atlantic provinces, there is a good understanding of what broad conditions must change to affect sexual and reproductive health status. So far, however, action on those broad conditions for the purpose of improving sexual and reproductive health has been limited.

Advancing Knowledge

In comparison with the degree of effort devoted to more downstream activities by organizations in this scan, developing knowledge for public policy is a relatively neglected area. Together with public policy, information and research to assist the development of public policy are fundamental tools for influencing the determinants of health.

The evidence base for population health is developed not only through specific research on issues relevant to policy, but also through on-the-ground learning about “what works” and “what is needed.” The monitoring and evaluation of program outcomes are critical for developing the latter kind of

knowledge. Yet among organizations in this scan (with one or two notable exceptions), relatively little effort is being spent in the Atlantic provinces to build the evidence base necessary for developing public policy options. Very few organization are involved in research designed to inform public policy.

This scan suggests certain knowledge gaps in the Atlantic provinces that need to be addressed by research. Most significant is the absence of information about vulnerable sub-populations in the region. Little is known about sexual and reproductive health problems in certain marginalized groups (Aboriginal people, injection drug users, young gay men, the disabled and visible minorities), or the capacity for dealing with them. Are current outreach efforts successful? How can urban Aboriginal people be reached? Are key sexual health issues the same or different among cultural and racial minorities in the region?

Another significant knowledge gap relates to the serious sexual violence problem in the region. What accounts for consistently high levels of sexual assaults in the Atlantic region relative to the country as a whole? Why, despite well-established, comprehensive and multi-sectoral efforts to combat violence, does sexual violence remain widespread? Research to answer this question can provide direction for population health interventions.

The other apparent gap in information that can benefit policy to improve sexual and reproductive health is the lack of detailed knowledge about capacity to address sexual health problems in rural communities. Rural areas are characterized by many of the conditions that embody population health risks: economic decline, social isolation, conservative values, lack of access to health services and generally limited options. Yet, from this scan, there appears to be relatively little in the way of population health-based sexual and reproductive health promotion and prevention in rural communities (apart from province-wide public health services and a few major initiatives located in certain rural areas of Nova Scotia). Given the rural character of a large portion of the Atlantic region (and a dramatic example from Conception Bay North of how sexual health problems can spread in rural communities), an important policy research question concerns the capacity in the region's rural areas for population health approaches to sexual and reproductive health.

Having noted these research gaps, it is important also to note that relevant research is being done by organizations in the scan and others not included in the scan. In addition to the notable efforts of the Amherst Association for Healthy Adolescent Sexuality and the Women's Health Network of Newfoundland and Labrador, for example, policy-relevant research (not included in this scan) on sexual and reproductive health is being sponsored by governments and undertaken in partnership with many universities across the region. Two examples are research on dating violence by the Muriel McQueen Fergusson Centre for Family Violence Research and the extensive Adolescent Drug Use Surveys (which include questions about sexual activity) sponsored by the provincial health departments of the four Atlantic provinces in partnership with universities.

In terms of on-the-ground learning, many organizations in the scan indicated that they evaluate the outcomes of their work. In fact, however, true evaluation of outcomes (e.g., reduced incidence of STIs, teenage pregnancies, sexual assaults, etc.) is rare. What most organizations are evaluating is user satisfaction with particular programs rather than the ultimate impacts of those programs. Given the difficulty of establishing causal links between programs (or processes) and outcomes, this is not surprising. Nevertheless, the kind of knowledge that well-designed outcome evaluation provides is critical if policy makers are to make informed decisions about allocating scarce resources.

Building Capacity

Like other activities in the upper right quadrant of Figure 7, upstream capacity building is relatively underutilized by many of the organizations surveyed. Examples of targeting resources to develop sustainable community structures and processes to improve broad determinants (i.e., social and economic conditions, societal values, etc.) are rare.

There are examples, however, of capacity building to improve access to health services and to enhance the capacities of individuals to make healthy sexual and reproductive choices. A notable example exists in Newfoundland, where partnerships among governments, non-governmental organizations and local communities have achieved widespread community mobilization to regionalize HIV/AIDS prevention, education, testing, treatment, care and home support. This inter-sectoral collaboration, supported by provincial and federal government funding, may have lessons for other provinces concerned about services in rural areas.

Other examples of building capacity include the work of Planned Parenthood, Cape Breton, which encourages clients to take responsibility for program delivery, project development and publicity. In New Brunswick, the Beausejour Family Crisis Resource Centre is active in mobilizing the community around family violence; they created and distribute a kit on "How to Develop a Community Organization." Several organizations contribute to capacity building by participating in government-sponsored committees and task forces such as the Nova Scotia Roundtable on Youth Sexual Health and the Provincial Strategy Against Violence in Newfoundland.

It is not surprising, perhaps, that the broadest level of population health intervention is not practiced routinely by the organizations in the scan. Social and economic conditions are not easily influenced, except by broad-based interventions. Nevertheless, there are activities among these organizations that stand out: initiatives which target attitudes and values about gays and lesbians (e.g., Lesbian, Gay and Bisexual Youth Project and Parents and Families of Lesbians and Gays) and youth sexuality (Nova Scotia Roundtable on Youth Sexual Health), and initiatives to improve the employment prospects of those who are vulnerable to sexual health problems (e.g., AIDS PEI Community Support Group, Canadian Paraplegic Association, Newfoundland and Labrador AIDS Committee) are notable examples of population of efforts to influence the broad conditions that determine health.

Public Policy

Another gap observed in the activities of these organizations, many of which are major initiatives in sexual and reproductive health, is the relative absence of work on sexual health policy. Practitioners in the scan remarked on the need for policy (mandated sexual health guidelines, standards of practice and targets for the reduction of sexual and reproductive health problems) to lend weight to their efforts. Clearly, policy is an important entry point for action. To have an impact on the sexual and reproductive health status of broad populations and the conditions that determine health, however, the scope of policy intervention needs to extend well beyond the health arena, encompassing economic, social, employment, justice and heritage sectors, among others.

Physical Environment

The organizations in the scan are not addressing physical environment conditions that pose risks to sexual and reproductive health. The kinds of risks and conditions that might be addressed are

relatively undefined in *A Report on Consultations for a Framework on Sexual and Reproductive Health*, although safety of contraceptive devices and exposure to toxic chemicals are mentioned as examples. Numerous organizations exist in the Atlantic provinces to deal with environmental conditions that pose risk to broad populations, including risks associated with sexual and reproductive health (e.g., radiation exposure, second-hand tobacco smoke, synthetic hormones, etc.). The work of these (largely) "environmental" organizations could be considered to be population health; however, none of these initiatives were included in the scan. Similarly, risks associated with contraceptive devices, pharmaceutical products, etc. are usually the purview of consumer protection organizations which also were not included in the scan.

3.6 Strengths in Activities Surveyed

The organizations in this scan cover a broad spectrum of action on sexual and reproductive health and display a number of strengths. In every province there are major initiatives engaged in innovative health prevention and promotion, grounded in population health, addressing critical sexual and reproductive health problems, serving entire provinces, yet targeting the needs of the most vulnerable, and accomplishing their objectives through inter-sectoral collaboration. A number of these organizations have been involved with sexual and reproductive health prevention and promotion for many years and have developed deep knowledge of the problems and how best to address them.

There is a strong correspondence between the critical sexual and reproductive health issues and the activities of these organizations. The major issues (sexual violence against children, youth and adults; teenage pregnancies; STIs among youth; and the spread of HIV especially through heterosexual contact and injection drug use) are at the forefront of the work being carried on by most of the organizations in the scan.

Focus on Youth

One of the most obvious strengths among the organizations surveyed is a strong focus on youth and children. Youth, many of whom engage in unprotected sex, are at greatest risk for the most critical sexual health problems, especially STIs, teenage pregnancies and sexual violence. In the Atlantic provinces, several initiatives in this scan have a strong focus on youth, including several that develop capacity by involving youth in planning and decision making (Adolescent Health Counselling Service, Inner City Youth Connection, Amherst Association for Healthy Adolescent Sexuality, Department of Education curriculum for sexual health education, Lesbian, Gay and Bisexual Youth Project, Nova Scotia Roundtable on Youth Sexual Health, Cape Breton Youth Health Centres and the VON Lifestyle Education for Adolescent Parents Program).

Examples of innovative approaches to addressing youth sexual health include programs to build self-esteem (e.g., self-esteem summer camp program for girls created by Cumberland County Family Planning), to empower youth to be active participants in their communities by providing safe, supportive settings for them to develop leadership skills (e.g., Lesbian, Gay and Bisexual Youth Project), to develop coping skills such as anger management and how to have healthy relationships (Cape Breton Youth Health Centres) and to create community receptivity to youth sexual health ("Just Loosen Up and Keep Talking" Kit, Nova Scotia Roundtable on Youth Sexual Health). These provide a strong base for building population health approaches to youth sexual health.

Collaboration

Another strength observed in ongoing efforts is the high degree of collaboration and partnership that exists -- from organizations referring clients to service providers in other sectors, to skills training across organizations, to organizations building coalitions within their communities, to agencies and task forces made up of representatives from many sectors. Virtually none of the organizations surveyed works in isolation. Most seem to be using all the networking and capacity building resources at their disposal to establish partnerships that will help to sustain their efforts.

Having said this, most collaboration still appears to be within the health sector, between governments and non-governmental organizations. Partnerships across sectors are few. Those working to eliminate (sexual) violence offer some of the best examples of inter-sectoral collaboration. Their partnerships with the criminal justice sector and law enforcement officials are well established. Among organizations working on youth sexual health, there are examples of partnerships with the education sector. Collaboration with the social service sector also is evident, especially among organizations that deal frequently with marginalized groups.

Given the level of collaborative effort, there is surprisingly little collaboration with the private sector. Where such collaboration exists among the organizations in this scan, the principal point of contact with the private sector is employment initiatives. Organizations that are working with employers, such as the AIDS PEI Community Support Group and the Canadian Paraplegic Association (Newfoundland and Labrador), for example, may have lessons to share with others about collaboration with the private sector on this important upstream population health issue.

Networking

A related strength demonstrated by the organizations in the scan is the highly developed networks and networking capacities among many of the organizations in the Atlantic provinces. Regional networks of service providers (especially among AIDS community-based organizations such as the Atlantic First Nations AIDS Task Force, SIDA/AIDS Moncton, AIDS PEI Community Support Group and Newfoundland and Labrador AIDS Committee), provincial networks (in particular Planned Parenthood Nova Scotia and its local affiliates and the Newfoundland and Labrador Women's Health Network) and the public health reproductive health programs in each province, all contribute to capacity for long-term collaborative action on sexual and reproductive health in the region.

Training Capacity

One of the assets of many of the organizations surveyed is their training capacity. Numerous organizations have paid or volunteer staff who routinely train other practitioners, professionals and community groups. For example, some of these are training trainers; a number are training youth to be peer educators on sexual health, violence and healthy relationships. Many offer training in various life skills and personal health practices (e.g., CPR, first aid, babysitting, leadership, holistic health practices, birth control, condom use) or coping skills (e.g., anger and stress management, smoking cessation, personal empowerment). Several organizations have developed training kits and offer training to government employees and service providers. Sexual violence initiatives are particularly advanced in this respect. The transfer of skills and knowledge builds capacity. The potential to build capacity in sexual and reproductive health by using the existing training capability of these organizations seems to be high.

Familiarity with Population Health

A majority of the organizations in this survey are familiar with the population health approach; many know Health Canada's *A Report on Consultations for a Framework on Sexual and Reproductive Health* (some were involved in the consultation that led to the *Framework*). Most of the organizations which are aware of the population health approach are applying it in their work. The widespread buy-in to the population health approach among these organizations represents a large head start in implementing *A Report on Consultations for a Framework on Sexual and Reproductive Health* in the Atlantic provinces.

Sexual Health Education in Schools

One of the gaps perceived by some sexual and reproductive health practitioners is the absence of policy and mandated guidelines to support action on sexual and reproductive health. A notable exception are mandated provincial curricula for sexual health education, which exemplify a broad population approach to the prevention of sexual and reproductive health problems. In Nova Scotia, for instance, children are introduced to sexuality-positive attitudes, and these are interwoven with development of self-esteem beginning in grade primary, and continuing through high school. As these messages are internalized, norms and behaviours change.[75] The potential for influencing societal values as well as personal capacities and coping skills, through mandated provincial education curricula, is an opportunity that should be maximized.

Supporting provincial curricula are special programs and workshops designed by several organizations (e.g., Planned Parenthood, Lesbian, Gay and Bisexual Youth Project) to be presented to school children and teachers. These organizations actively seek partnerships with the education sector; in turn, education officials collaborate on intersectoral initiatives like the Nova Scotia Roundtable for Youth Sexual Health. A related resource is the expertise of sexual health specialists, particularly public health nurses, as educators and trainers.

3.7 Challenges for Population Health Action

In addition to filling the gaps identified in section 3.5 above, there are certain challenges suggested by the findings from this scan of sexual and reproductive health initiatives.

Adopting an Upstream Focus

In the current climate of health reform and diminishing resources, the demand to do more with less is nearly universal. The challenge for many organizations in Atlantic Canada is to move toward evidence-based intervention strategies that build capacity in individuals, families, communities and society to create and sustain opportunities that foster health. Many of the organizations in this survey have not yet adopted the "upstream" focus that underlies population health activities, i.e., intervention at the earliest points in the "causal stream" to provide the greatest benefits for the largest number of people.

The upstream focus can be applied across the entire range of potential interventions, from prevention, promotion and protection, to health services emphasizing wellness and enhancing factors that protect against disease. Examples exist in every province of innovative, upstream population health approaches that maximize resources by developing and mobilizing human potential and community

resources. In the absence of stable funding, moving towards upstream approaches is the key to stretching scarce resources. To be successful, the shift to higher levels in the causal chain must include monitoring and evaluation to identify strategies that work, and collaboration to transfer lessons learned. The difficulty of moving in this direction should not be underestimated, however. Most organizations probably will need considerable support to make such a shift.

Funding

A related challenge concerns funding. The large majority of these initiatives are non-governmental organizations; most are local, although a few are affiliates of national organizations (e.g., Planned Parenthood, Canadian Paraplegic Association). They depend on government and donor support to survive. Several remarked on the difficulty of sustaining activities with project funding. A few mentioned staff layoffs and curtailment of activities resulting from loss of funding. Options need to be developed to sustain these organizations in their population health activities.

Reaching Rural Areas

Another challenge for sexual and reproductive health organizations is to address the needs of those living in rural and remote areas, which make up a significant portion of the Atlantic region. Declining rural economic conditions and social isolation limit options and increase health risks for rural residents. The systemic factors underlying rural decline must be addressed, but in addition, efforts can be made to build capacity in rural areas to provide sexual and reproductive health resources.

Most initiatives in this scan are based in cities and their reach (except by telephone) seldom extends beyond the regions around those cities. Resources that are readily available in cities (e.g., clinical services, skills training, social support) are often absent in rural areas. Again, the tension between pressing needs and limited resources is a key factor to be reckoned with. Nevertheless, rural development initiatives may present opportunities for city-based organizations to extend their reach and build rural capacity, as in the case of the Newfoundland and Labrador AIDS Committee, which does training of trainers workshops for rural development projects.

Preparing for Population Aging

Finally, because population health must be forward-looking, it is important to recognize trends and anticipate changes in the conditions that determine health. An important demographic trend that is gradually changing the shape of Canadian society is population aging. Seniors currently make up 12% of Atlantic Canada's population and within 20 to 30 years, their numbers will double. The key sexual and reproductive health issues for seniors are different than the issues at earlier life stages: menopause, reproductive cancers, myths about seniors' sexuality, impotence, breast cancer, self-image and breast surgery, incontinence and disability, loss of sex partners, etc., are issues related to sexual and reproductive health that primarily affect older adults. Because of the focus on youth sexual health, these issues are mostly overlooked. A few organizations have begun to address seniors' sexual health issues, but the challenge is to get these issues on the agendas of many organizations.

4. CONCLUSION

A Report on Consultations for a Framework on Sexual and Reproductive Health offers a vision for those working in the area of sexual and reproductive health: healthy sexuality throughout life, based on development of personal capacities and coping skills, self-esteem and opportunities for individuals to make life-affirming choices about sexual experiences and reproduction; supportive family networks and communities; positive societal values and attitudes about sexuality and reproduction; economic, educational and occupational opportunities; and a healthy physical environment. To be realized, the vision requires healthy public policies, and programs and initiatives that impact broad populations across the entire range of risk factors and conditions that determine sexual and reproductive health. Action to develop this supportive framework must be based on collaboration by all levels of government and private organizations across Canada.

In a world of limited resources, few organizations have the capacity to cover the full spectrum of population health activities, nor it is practical for them to do so. Instead, strategic targeting of resources and expertise based on the principles and directions laid out in *A Report on Consultations for a Framework on Sexual and Reproductive Health* and collaboration with a range of partners inside and outside of government is the optimal approach for achieving the population health agenda for sexual and reproductive health.

In the Atlantic provinces, there already exist widespread understanding and adoption of the population health approach, and considerable capacity for addressing the most critical sexual health problems -- sexual violence, HIV/AIDS, STIs, teenage pregnancies. In every province there are innovative efforts, especially in HIV/AIDS prevention (e.g., PEI AIDS Service Committee, AIDS Committee of Newfoundland and Labrador) and harm reduction (Mainline Needle Exchange, Coverdale Centre); cutting edge initiatives with youth (e.g., Lesbian, Gay and Bisexual Youth Project); action research in building community capacity (e.g., Amherst Association for Healthy Adolescent Sexuality); and inter-sectoral processes to tackle major problems and promote health (Nova Scotia Roundtable on Youth Sexual Health, Provincial Strategy Against Violence, Provincial Association Against Family Violence, Coalition Against Abusive Relationships, Amherst Association for Healthy Adolescent Sexuality and Cape Breton Youth Health Centres).

Inter-sectoral processes provide strategic entry points for program planning, evaluation and policy development. Established inter-sectoral processes provided opportunities for implementing *A Report on Consultations for a Framework on Sexual and Reproductive Health,* especially with respect to sexual violence and youth sexual health. Resources for implementation include education curricula, stakeholder networks and training capacity.

The biggest challenge for implementing the *Framework* is to move towards action on the upstream conditions that determine the sexual and reproductive health of broad populations: income, education, employment, social status, values and attitudes, etc. The foundation is laid: most organizations know and understand the population health approach. Building the structure will require making the most of existing resources as well as targeting new resources to support activities with demonstrable population health impacts.

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1. World Health Organization (1975).

2. Health Canada (1998). *A report from consultations on a framework for sexual and reproductive health.*

3. For many of those working in the field of sexual and reproductive health, the term "sexually transmitted disease" is not just a clinical designation, but also implies judgement and is value laden and stigmatizing. The term, "sexually transmitted infection," is considered to be more neutral, and conducive to sexuality-positive attitudes. For this reason, the term “sexually transmitted infections” (STI) rather than “sexually transmitted diseases” (STD) is used throughout the report.

4. Federal/Provincial/Territorial Advisory Committee on Population Health (1994).

5. Tables are based on information from the most recent year for which most of the figures were available for all four provinces. In certain cases, more recent data were available from some provinces but could not be compared with the other provinces for one reason or another. Methods of data collection may vary from province to province, and in some provinces certain data are not collected (e.g., pregnancies ending in abortion in Prince Edward Island).

6. STIs can be reported only if they are tested for. It is not uncommon for doctors to treat suspected STIs on clinical grounds, without actually testing and reporting. As well, test results (and therefore, reported cases) are influenced by sampling and laboratory techniques. The significance of these factors is difficult to estimate, but they should be borne in mind when interpreting results.

7. Health Canada (1998). *STD Epi Update.*

8. Bachmaier *et. al.* (1999).

9. MacDonald *et. al.* (1998).

10. Patrick (1997).

11. Health Canada (1995). *Sexually transmitted disease surveillance in Canada.*

12. Patrick (1997).

13. Health Canada (1995). *Ibid.*

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16. Atlantic Student Drug Surveys: Poulin and Wilbur (1996), New Brunswick Department of Health and Community Services and Department of Education (1996), Prince Edward Island Department of Health and Social Services (1996), Newfoundland Department of Health (1996).

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31. Health Canada (1998). *HIV and AIDS among Canadians*.

32. Frank (1996).

33. Health Canada (1998). *HIV and AIDS among men who have sex with men.*

34. *Ibid.*

35. Health Canada (1998). *HIV and AIDS among injection drug users in Canada*.

36. Health Canada (1998). *HIV and AIDS among women in Canada.*

37. Health Canada (1998). *HIV and AIDS in Canada. Surveillance report.*

38. Health Canada (1998). *HIV and AIDS among Aboriginal people in Canada*.

39. Atlantic First Nations AIDS Task Force (1999). Personal communication.

40. Health Canada (1998). *HIV and AIDS in Canada. Surveillance report*.

41. *Ibid.*

42. *Ibid.*; Nova Scotia Department of Health (1999); Newfoundland Department of Health and Community Services (1999); Prince Edward Island Department of Health and Community Service (1999).

43. Due to lags in reporting from the provinces, full year data for Canada as a whole in 1998 were not available at the time this report was being written.

44. Health Canada (1998) *Ibid.*

45. Status of Women Canada (1998).

46. Statistics Canada (1994). *The Violence Against Women Survey.*

47. National Clearinghouse on Family Violence (1997).

48. Nova Scotia Department of Health (1996).

49. Johnson (1995).

50. *Ibid.*

51. *Ibid.*

52. Statistics Canada (1994).

53. Johnson (1996).

54. Johnson (1995).

55. Health Canada (1999). *The Canadian incidence study of reported child abuse*.

56. Statistics Canada (1997). *Canadian crime statistics.*

57. *Ibid.*

58. Johnson (1995).

59. Royal Commission on New Reproductive Technologies (1993).

60. Belanger (1998).

61. McDonald (1998).

62. As well, there are no estimates of infertility among lesbians (although lesbians may have been included in the Royal Commission surveys, which targeted "cohabiting women" between the ages of 18 and 44) or other sub-groups in the population.

63. Wadhera and Miller (1997).

64. Prince Edward Island Department of Health and Social Services (1999).

65. The high rates of AIDS, STIs, and teenage pregnancies and abortions in Nova Scotia, relative to the other Atlantic provinces, may be due in part to some spillover of youth and other at-risk migrants from neighbouring provinces. Youth from outside and within the province are drawn to Halifax, particularly, in search of employment opportunities, a variety of services, and the youth culture and anonymity that a large city provides.

66. Nova Scotia Department of Health (1994).

67. Nova Scotia Department of Health (1998).

68. Nova Scotia Department of Health (1994).

69. New Brunswick Department of Health and Community Services (1998).

70. Health Canada (1999). *Taking action on population health.*

71. Edwards (1999).

72. Health Canada (1994). *Guidelines for sexual health education.*

73. These mechanisms, while not explicitly identified in the *Framework* document (with the exception of Advancing Knowledge), are frequently used means of achieving population health objectives. Advancing Knowledge (thorough research and information) and Public Policy are fundamental population health tools.

74. In considering what may be missing from the activities in the scan, it is important to remember that this survey involves a *selection* of organizations in the Atlantic provinces. Some of the gaps identified in this discussion may not be gaps in the larger picture because organizations that are not included in the scan may be addressing these particular issues.

75. The fact that there has been a dramatic drop in adolescent pregnancies in one Newfoundland community over the past few years is attributed by health officials to

sexual health education which has changed norms among youth about "safe sex."

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APPENDIX 1:
ORGANIZATIONS IN THE SCAN AND THE ISSUES THEY ADDRESS

	Organizations	Sexual and Reproductive Health Outcomes					
Nova Scotia							
NS1	Planned Parenthood Nova Scotia	H	S	P			V+
NS2	Youth Health Centres - Cape Breton	H	S	P			V+
NS3	Association des Acadiennes de la Nouvelle-Écosse						V
NS4	Atlantic First Nations AIDS Task Force	H	S	P			V+
NS5	Amherst Association for Healthy Adolescent Sexuality	H	S	P	L	I	V+
NS6	Planned Parenthood Bridgewater	H	S	P		I	V+
NS7	Cumberland Family Planning	H	S	P		I	V+
NS8	Mainline Needle Exchange	H	S				+
NS9	Public Health Services - Northern Regional Health Board	H	S	P	L	I	V
NS10	Lesbian, Gay and Bisexual Youth Project	H					V
NS11	Reproductive Care Program of Nova Scotia			P	L		
NS12	Planned Parenthood Pictou County	H	S	P	L	I	V+
NS13	Antigonish Women's Resource Centre			P			V+
NS14	N.S. Advisory Commission on AIDS	H	S				V+
NS15	Avalon Sexual Assault Centre						V
NS16	Planned Parenthood Cape Breton	H	S	P		I	V
NS17	N.S. Department of Education	H	S	P	L	I	V+
NS18	Planned Parenthood Metro Clinic	H	S	P		I	V
NS19	N.S. Roundtable on Youth Sexual Health	H	S	P	L	I	V+
Prince Edward Island							
PEI1	Mi' kmaq Family Resource Centre		S	P	L		V
PEI2	Evangeline Community Health Centre	H	S	P			+
PEI3	Department of Health and Social Services - Health Promotion and Protection Div.	H	S	P	L	I	
PEI4	Inner City Youth Connection	H	S	P			V+
PEI5	R.B.S. Consulting	H	S	P			V
PEI6	AIDS P.E.I. Community Support Group	H	S	P			V+
PEI7	PMS/Menopause Self-Help Resource						+
PEI8	East Prince Women's Information Centre			P	L		V+
PEI9	Department of Health and Social Services - Prenatal Nutrition Intervention Program			L			+
PEI10	Reproductive Care Program	H	S	P	L		V+

	Organizations	Sexual and Reproductive Health Outcomes					
Newfoundland and Labrador							
NF1	St. John's Native Friendship Centre Association	H	S				V
NF2	Newfoundland and Labrador AIDS Committee	H	S				
NF3	Provincial Strategy Against Violence			P			V+
NF4	The Provincial Association Against Family Violence	H					V
NF5	Care Centre for Women	H	S	P			+
NF6	Planned Parenthood of Newfoundland and Labrador	H	S	P		I	+
NF7	Canadian Paraplegic Association (Newfoundland and Labrador) Inc.	H	S				V
NF8	Naomi Centre for Women	H	S	P			V
NF9	Brighter Futures Coalition			P	L	I	V+
NF10	Health and Community Services H	S	P	L	I	V+	
NF11	Adolescent Health Counselling Service	H	S	P			V+
NF12	Women's Health Network, Newfoundland and Labrador						V+
New Brunswick							
NB1	People Helping People	H	S				V
NB2	VON New Brunswick Lifestyle Education for Adolescent Parents (LEAP) Program	H	S	P	L		V
NB3	Coverdale Centre	H	S				V
NB4	SIDA/AIDS Moncton	H	S				V
NB5	Beausejour Family Crisis Resource Centre			P			V
NB6	Multicultural Association of the Greater Moncton Area	H	S	P	L	I	V+
NB7	Parents and Families of Lesbians and Gays	H					V
NB8	Clinique de Reproduction	H				I	
NB9	New Brunswick Public Health Sexual Health Program	H	S				
NB10	Coalition Against Abusive Relationships						V
NB11	Planned Parenthood Fredericton	H	S	P		I	+

H = HIV/AIDS **L = low birth weight**
S = STIs **I = infertility** **+ = "other issues"**
P = teenage pregnancy **V = sexual violence**

APPENDIX 2:
"OTHER ISSUES" ADDRESSED BY ORGANIZATIONS IN THE SCAN

Sexual Health in Later Life

- menopause
- reproductive cancers
- seniors' sexuality

Societal Values

- gay and lesbian issues
- heterosexism
- homophobia
- sexual identity

Coping Skills

- addictions
- anger management
- body image
- eating disorders
- healthy relationships
- IV drug use
- PMS
- self-esteem
- sexual identity
- suicide prevention.

Other

- abortion
- birth control
- chastity
- failure to thrive
- Hepatitis A,B,C,D
- IV drug use
- natural family planning
- parenting teens
- post-abortion counselling
- premature birth

APPENDIX 3:
PROVINCIAL ACTIVITY PROFILES

NEWFOUNDLAND AND LABRADOR

Activities

In Newfoundland, three-quarters of the organizations surveyed are engaged in activities to influence personal capacities using education, and more than half are providing support or services. Many do training, and one in three are working on public policy or research. A few organizations (for instance, the Newfoundland and Labrador AIDS Committee, the Provincial Strategy Against Violence and the Provincial Association Against Violence) use the full spectrum of mechanisms for addressing sexual and reproductive health, with activities ranging from counselling people living with HIV/AIDS and their families, to training rural trainers, to addressing policies that discriminate against gay men and lesbians, and developing a policy framework on violence.

More than half of organizations surveyed in Newfoundland are involved activities to improve access to services through public policy means. Several also provide support and services aimed at improving access. A major, multi-sectoral initiative begun in the early 1990s builds capacity in regional organizations to offer services and respond to HIV/AIDS in rural communities. This initiative (led by the Department of Health and Community Services, the Newfoundland and Labrador AIDS Committee and others) is a good example of an inter-sectoral process to improve access to services.

Many Newfoundland organizations are working to strengthen families and communities, using the range of mechanisms available. Another significant activity by organizations in the scan involves providing support and services to reduce social and economic risk conditions. The work of the Naomi Centre for Women exemplifies this activity. The Centre offers information and educational presentations on pregnancy prevention and STIs in connection with the provision of supportive housing for homeless women.

Areas

Most of the organizations surveyed in Newfoundland provide services in St. John's and the surrounding areas, although they accept referrals from elsewhere in the province. A few of these organizations serve the entire province. Major, province-wide initiatives include the Provincial Association Against Family Violence, the Provincial Strategy Against Violence, the Newfoundland and Labrador AIDS Committee and the reproductive health program of the Department of Health and Community Services. In practical terms, access to the services of most organizations in the scan is limited to the region around St. John's.

Life Stages

The greatest amount of effort in Newfoundland is directed at youth and women. Services and supports to youth include counselling victims of sexual abuse, testing and treatment for STIs and HIV, pregnancy testing, developing and distributing self-care tools for women and providing peer support to adolescent mothers. One major initiative aimed at children (Brighter Futures Coalition) is a CAPC project that works to improve outcomes for children aged 0-6, by providing support and education to

parents, especially in low-income families. A number of organizations target Aboriginal people in their work, especially the province-wide activities of the Department of Health and Community Services. One organization deals exclusively with Aboriginal issues.

Upstream Focus

The organizations working on public policy are the Newfoundland and Labrador AIDS Committee, the Department of Health and Community Services, the Provincial Association Against Family Violence, the Provincial Strategy Against Violence and the Women's Health Network of Newfoundland and Labrador. These organizations are actively working to influence or create public policies in areas such as family violence, housing, social services and health care. A third of the organizations also are participating in or leading activities to advance knowledge about how to influence individuals' capacities to make healthy choices. The Women's Health Network of Newfoundland and Labrador is an example of these efforts.

Marginalized Groups

Newfoundland organizations that deal exclusively with vulnerable sub-groups are the Canadian Paraplegic Association (disabled), the Provincial Association Against Family Violence (women), Care Centre for Women, Naomi Centre for Women (e.g., young, street-involved) and the Women's Health Network of Newfoundland and Labrador. With the exception of the Care Centre for Women (which deals largely with issues surrounding unplanned pregnancies), all of these organizations have sexual violence close to the top of their agendas.

Critical Problems

In the first part of the report, information was presented on high rates of sexual assaults in Newfoundland and recent increases in HIV infections. These critical problems are already high on the agenda of health providers in Newfoundland, judging from major, province-wide strategies and upstream activities in place to deal with each.

Recent increases in chlamydia suggest that new population health strategies aimed at youth may be required to reduce unprotected sex among young people in Newfoundland.

PRINCE EDWARD ISLAND

Activities

In Prince Edward Island, nearly all of the organizations surveyed focus their efforts at individuals, with activities to improve personal health practices and individuals' capacities. Half or more of the organizations surveyed in Prince Edward Island use every mechanism except community capacity building to achieve their aims in terms of individuals' skills, capacities and behaviours.

Half of the Prince Edward Island organizations surveyed also place emphasis on strategies involving families and communities and access to services, using support services as the principal means of implementing these strategies. In general, these organizations in Prince Edward Island do not direct

attention at collective factors such as societal values, physical environment and social and economic inequities, with the exception of the AIDS PEI Community Support Group. This province-wide initiative addresses social and economic conditions of persons living with HIV/AIDS by working with employers on policies for employees with HIV/AIDS and advocates for income and social support for clients.

Areas

The majority of Prince Edward Island organizations surveyed are based in Charlettown, though they serve the entire province. Exceptions are the East Prince Women's Information Centre located in Summerside, serving Prince County, the Evangeline Community Health Centre which serves francophone areas of the province, and the Inner City Youth Connection which serves just the Charlottetown area.

Life Stages

The lion's share of activity devoted to influencing personal capacities is directed at youth in Prince Edward Island. Two major, province-wide initiatives (Prince Edward Island Reproductive Care Program and the Prenatal Nutrition Intervention Program) are aimed at improving early child health outcomes, and the AIDS PEI Community Support Group targets education and capacity building at children as well as youth and adults. The Inner City Youth Connection is a major youth-led initiative for street-involved youth based in Charlottetown. It provides support and skills development training to 13 to18 year olds, with the goal of helping them to reach their maximum potential.

Upstream Focus

Several organizations in Prince Edward Island engage in planning (e.g., Reproductive Care Program - developing guidelines for HIV screening of pregnant women) and lobbying (e.g., East Prince Women's Health Centre - presenting briefs to provincial politicians regarding women's health policies) to influence public policy regarding opportunities for individuals to make healthy choices.

The AIDS PEI Community Support Group creates partnerships with church groups, schools and community organizations to build capacity for supporting persons with HIV/AIDS. Otherwise, public policy, capacity building and advancing knowledge are generally not used by these Prince Edward Island organizations as mechanisms for achieving sexual and reproductive health goals.

Marginalized Groups

Prince Edward Island groups dedicated to the needs of vulnerable sub-groups in the population include the East Prince Women's Resource Centre, PMS/Menopause Self-Help Resource (women), Inner City Youth Connection (street-involved youth), Mi'kmaq Family Resource Centre (Aboriginal people) and Evangeline Community Health Centre (francophones).

Critical Problems

Prince Edward Island, like the other Atlantic provinces has high rates of sexual violence. The organizations surveyed almost all include violence in their mandates, but none are comprehensive or work upstream to eliminate violence.

It is difficult to know whether HIV and teenage pregnancies are increasing or decreasing in Prince Edward Island, given available information, but chlamydia has been rising steadily in recent years. This may indicate changes in unprotected sexual activity that would increase risks for other sexual health problems. On the other hand, it may signify changes in detection or reporting practices. It will be difficult to understand and address these issues without more attention to advancing knowledge in these areas.

NOVA SCOTIA

Activities

Following the pattern of the other provinces, Nova Scotia organizations also focus the largest portion of their efforts on influencing personal health practices, capacities and coping skills. Nearly two-thirds of organizations provide support/services and more than half offer education to improve individuals' capacities. Several are engaged in training activities, research and/or the influencing of public policy. Access to services is the next most significant direction for Nova Scotia organizations, with less attention being given to strategies involving families and communities, and only a few organizations explicitly addressing societal values.

Areas

Nova Scotia initiatives in the scan are spread across the province, with a high concentration of activity located in Halifax and the northern counties of Cumberland, Pictou and Antigonish. Eight of the organizations serve the entire province. Planned Parenthood Nova Scotia, a provincial organization, has five local affiliates around Nova Scotia. Cape Breton has a range of organizations, including youth health centres, Planned Parenthood and AIDS community-based organizations. The area least represented by organizations in the scan is southwestern Nova Scotia.

Life Stages

A majority of Nova Scotia organizations have a youth and/or adult focus. Somewhat less emphasis is placed on children, or child health in families. Nevertheless, in this scan, a major public policy initiative directed at children in Nova Scotia is the provincial education curriculum involving health (Gr. P-12), personal development and relationships (Gr. 7-9), and career and life management education (Gr. 11), mandated by the Department of Education and Culture. Another major initiative directed at youth (Amherst Association for Healthy Adolescent Sexuality) has the goal of enhancing community resources by building capacity to improve the sexual, physical and emotional health of adolescents.

Upstream Focus

Several Nova Scotia organizations are engaged in activities to influence the broad causes of sexual and reproductive health problems. Those involved in influencing policy, for example, are lobbying governments about social assistance policies, working on interagency committees to improve services to sexually abused women and advocating with school boards for policies sensitive to gay and lesbian issues.

Capacity building and influencing values are also important themes. The Atlantic First Nations AIDS Task Force trains service providers to be sensitive to the needs of Aboriginal clients with HIV/AIDS. The Nova Scotia Roundtable on Youth Sexual Health is an inter-sectoral initiative which aims to influence attitudes and make communities more receptive to youth sexuality by developing community capacity. Likewise, the Lesbian, Gay and Bisexual Youth Project also works to change values and attitudes. They have created interactive workshops to reduce homophobia which they offer to schools, group homes, universities and law enforcement personnel. To date, they have conducted over 600 workshops.

Marginalized Groups

Nova Scotia also has strong representation of organizations in this scan dedicated to the needs of certain vulnerable sub-groups, in particular, Aboriginals (Atlantic First Nations AIDS Task Force -- a regional initiative based in Halifax), injection drug users (Mainline Needle Exchange), gay and lesbian youth (Lesbian, Gay and Bisexual Youth Project), women (Antigonish Women's Resource Centre, Avalon Sexual Assault Centre) and francophones (Association des Acadiennes de la Nouvelle-Écosse). Notably absent among these initiatives are organizations addressing the sexual and reproductive health needs of Nova Scotians of African descent, who constitute an important cultural minority group in the province.

Critical Problems

In Nova Scotia, rates of teenage pregnancies, STIs, HIV and AIDS infections are higher than in the other Atlantic provinces. The youth focus of most Nova Scotia initiatives in the scan and the level of attention to vulnerable sub-populations is consistent with these problems. Given the extent of the problems, however, more resources may need to be devoted to population health strategies for reducing unprotected sexual activity that results in STIs, HIV and adolescent pregnancy. The same can be said for eliminating the use of contaminated needles.

The high rate of sexual assaults in Nova Scotia, relative to the rest of the country, calls for a more comprehensive, strategic approach to violence reduction than exists currently in the province.

NEW BRUNSWICK

Activities

Among the Atlantic provinces, the surveyed organizations in New Brunswick stand out for the level of effort and the range of mechanisms devoted to strengthening the capacity of families and communities to maintain and improve sexual and reproductive health. Half or more of the New Brunswick organizations in the scan work to influence families and communities by providing support/services, education and training; nearly one-third have activities to improve personal health practices and capacities by building community capacity. In addition, a few of the New Brunswick organizations in the scan use advancing knowledge and policy means to achieve their aims with families and communities.

Less attention is given to strategies involving personal health practices and access to services by New Brunswick organizations than in other provinces. In contrast, more effort is spent promoting sexuality-positive societal values. Additionally, four major initiatives are actively engaged in influencing policy, either through planning or advocacy: the Coverdale Centre, SIDA/AIDS Moncton, VON New Brunswick and the Coalition Against Abusive Relationships.

Areas

Most of the New Brunswick organizations surveyed are not province-wide. Rather, they serve the areas where they are located, with the exception of the New Brunswick Public Health Sexual Health Program (with nine Sexual Health Centres around the province), the Clinique de Reproduction and Parents and Families of Lesbians and Gays, which have province-wide mandates. In general, New Brunswick organizations in the scan are located in the cities of Moncton, St. John and Fredericton, and serve the southern and southeastern regions of the province, especially the southern Acadian shore. The northern counties are not served by most of these organizations. At least one organization, the Clinique de Reproduction, includes Prince Edward Island in its scope.

Life Stages

Like the other provinces, organizations surveyed in New Brunswick devote considerable attention to issues of youth and children, but the focus is much more on supporting families than in the other provinces. Organizations such as Parents and Families of Lesbians and Gays, the Beausejour Family Crisis Resource Centre, the VON Lifestyle Education for Adolescent Parents Program and the New Brunswick Public Health Sexual Health Program all provide support/services, education and training with a focus on youth and/or children in families.

Upstream Focus

In New Brunswick, the organizations surveyed are not currently directing their efforts at policy or advancing knowledge. In terms of community capacity, however, the Beausejour Family Crisis Resource Centre is one of several local partners in a province-wide "Caring Partnerships" campaign to eliminate family (including sexual) violence. Their efforts in community mobilization include using the Internet to distribute a kit on developing community organizations.

Marginalized Groups

New Brunswick organizations dedicated to working with vulnerable sub-groups in the population include Parents and Families of Lesbians and Gays, Coverdale Center (women involved with the justice system) and the Multicultural Association of the Greater Moncton Area (immigrants).

Critical Problems

Given data that show a substantial increase in HIV infections in New Brunswick in the past year, as well as historically high risk of exposure from injection drug use, there is a clear need for a comprehensive strategy to address HIV/AIDS in the province. The recent introduction of anonymous HIV testing, a network of AIDS community-based organizations and provincial sexual health centres will be key to such a strategy. High levels of sexual assaults are being addressed by the work of most organizations, which includes upstream capacity building and research to advance knowledge about

sexual violence.